



March 27, 2025

Ms. Breeka Lí Goodlander, Agent
Town of Franklin Conservation Commission
355 East Central Street
Franklin, MA 02038

**Re: Louise Drive Extension
MassDEP File No. 159-1300
Notice of Intent Peer Review #4**

Dear Ms. Goodlander:

BETA Group, Inc. (BETA) has reviewed revised documents and plans for the Notice of Intent (NOI) submitted for the parcels located at **Louise Drive Extension, further identified as the Town of Franklin Assessor's Parcel IDs: Map 339, Lots 9, 13, 14, 15, and 16; and Map 349, Lot 2 in Franklin, Massachusetts** ("the Site"). This letter is provided to present BETA's findings, comments, and recommendations.

BASIS OF REVIEW

The following supplemental documents were received by BETA and will form the basis of the review:

- Letter entitled **Louise Drive Extension**; prepared by DiPrete Engineering, dated March 13, 2025.
- Plan Set (11 Sheets) entitled **NOI Submission Louise Drive Extension**; prepared by DiPrete Engineering; dated September 18, 2024, revised on November 7, 2024, January 22, 2025, and March 13, 2025; signed and stamped by Brandon D. Carr MA PE No. 51472 and Robert G Babcock MA PLS No. 49233.
- Stormwater Report entitled **Stormwater Management Report – Louise Drive**; prepared by DiPrete Engineering, September 18, 2024 revised on January 22, 2025 and March 13, 2025; signed and stamped by Brandon D Carr Ma PE No. 51472.

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

- Site visit on April 2, 2024
- **Massachusetts Wetlands Protection Act 310 CMR 10.00** effective October 24, 2014
- **Wetlands Protection Chapter 181 From the Code of the Town of Franklin**, dated August 20, 1997
- **Conservation Commission Bylaws Chapter 271 From the Code of the Town of Franklin**, dated July 11, 2019
- **Town of Franklin Conservation Commission Regulations**, dated October 3, 2019
- **Town of Franklin Best Development Practices Guidebook**, dated September 2016

PEER REVIEW UPDATE—MARCH 20, 2025

The Applicant has provided revised materials and written comment responses pursuant to BETA's February 13, 2025 peer review letter. BETA's original comments from the October 9, 2024 peer review letter are included in plain text and comment responses attributed to the Goddard Consulting, LLC (GC) November 7, 2024 letter are provided in *italics* and prefaced with "GC:". BETA reviewed the provided

revised and supplemental materials, and submitted additional comments on November 11, 2024 which are provided below in bold and prefaced with **"BETA2:"**. Comments regarding stormwater management were also provided in BETA's November 11, 2024 response letter which are provided in plain text at the end of this letter. Comment responses attributed to GC from their January 23, 2024 letter are prefaced with "GC2:", while comment response attributed to DiPrete Engineering from their January 13, 2025 letter are prefaced with "DPE:". BETA reviewed the provided responses revised and supplemental materials, and submitted additional comments on February 13, 2025 which are provided below in bold and prefaced with **"BETA3:"**. Comment response attributed to DiPrete Engineering from the March 13, 2025 letter are prefaced with "DPE2:". BETA's responses to DiPrete Engineering March 13, 2025 letter are prefaced with **"BETA4:"**.

BETA's responses in this letter identify additional information that should be provided by the Applicant to demonstrate compliance with the Act, the Bylaw, and the Massachusetts Stormwater Management Standards.

SITE AND PROJECT DESCRIPTION

The 8.9-acre Site consists of six (6) parcels identified as Map 339 Lot 9, 13, 14, 15, and 16 and Map 349 Lot 2 in Franklin, Massachusetts situated along Louise Drive Extension, a paper road associated with an approved subdivision plan. The Site is bounded to the north by residential homes and Washington Street, to the east by residential home and Byron's Way, to the west by undeveloped wooded lots, and to the south by undeveloped wooded lots and the Oak Hill Village Conservation Area. Existing improvements at the Site include a catch basin at the intersection of Byron's Way and Louise Drive and various fieldstone walls within the wooded portions of the Site. Topographic relief at the Site generally follows a south-to-north orientation.

Resource Areas boundaries at the Site have been approved by an Order of Resource Area Delineation (ORAD) issued on June 3, 2024 under DEP File #159-1290. Areas Subject to Protection and Jurisdiction under the Massachusetts Wetlands Protection Act (M.G.L. ch.131 s.40) and its implementing regulations at 310 CMR 10.00 (collectively "the Act") and the Town of Franklin Wetlands Protection Bylaw (Chapter 181) and its associated Regulations (collectively "the Bylaw") present at the Site include Bank, Bordering Vegetated Wetland (BVW), Land Under Water (LUW), Isolated Vegetated Wetland (IVW), and Buffer Zone.

The Site is not located within a Zone I, Zone II, or Interim Wellhead Protections Area, and there are no Surface Water Protection Areas (Zone A, B, or C), or Outstanding Resource Waters (ORWs). There are no Areas of Critical Environmental Concern (ACEC) present, and the most recent Natural Heritage and Endangered Species Program (NHESP) mapping does not depict any Priority Habitat of Rare Species or Estimated Habitat of Rare Wildlife at the Site. There are no NHESP-mapped Potential Vernal Pools (PVPs) or Certified Vernal Pools (CVPs) located on or within 100 feet of the Site.

According to the FEMA Flood Insurance Rate Map (FIRM) community panels number 25021C0312E dated July 17, 2012, the Site is not located within a mapped flood zone.

Natural Resource Conservation Service (NRCS) soil maps of the Site indicate the presence of Charlton-Hollis-Rock outcrop complex with a Hydrologic Soil Group (HSG) rating of D and Montauk fine sandy loam with a HSG rating of C.

The Applicant seeks approval for the construction of a private access road and cul-de-sac with an associated stream and wetland crossing, wetland replication area, and stormwater management system. The access roadway is being constructed for the eventual construction of a subdivision consisting of five

(5) individual lots. The Project is being filed under the Limited Project provision at 310 CMR 10.53(3)(e)¹. Proposed work includes the following activities (collectively referred to as the “Project”):

- Installation of erosion controls;
- Vegetation removal and grubbing;
- Site re-grading;
- Construction of a three (3)-sided, open bottom culvert that meet the Massachusetts Stream Crossing Standards;
- Filling of 2,396 square feet (sf) of BVW;
- Establishment of a 4,800-sf wetland replication area;
- Paving a total of 626± linear feet (lf) of roadway;
- Construction of a stormwater management system consisting of four (4) catch basins, a sediment forebay, a sand filter, and a detention pond; and
- Final site-wide vegetative stabilization.

The Project will result in temporary and permanent impacts to Bank, BVW, LUW, and Buffer Zone. The following Resource Area impacts are proposed:

- 2,396 sf of impacts to BVW;
- 40.5 lf of impacts to Bank;
- 4,877 sf of impacts to the 25’ Buffer Zone;
- 5,952 sf of impacts to the 50’ Buffer Zone; and
- 31,780 sf of impacts to the 100’ Buffer Zone.

BETA2: Resource Area impacts have been updated to include:

- **320 sf of impacts to LUW;**
- **335 sf of temporary impacts to BVW;**
- **505 sf of permanent impacts to BVW;**
- **4,877 sf of impacts to the 25’ Buffer Zone;**
- **5,952 sf of impacts to the 50’ Buffer Zone; and**
- **31,780 sf of impacts to the 100’ Buffer Zone.**

ADMINISTRATIVE AND PLAN COMMENTS

The plan set (as identified above) is missing information and requires additional information for clarity.

¹ The construction and maintenance of a new roadway or driveway of minimum legal and practical width acceptable to the planning board, where reasonable alternative means of access from a public way to an upland area of the same owner is unavailable. Such roadway or driveway shall be constructed in a manner which does not restrict the flow of water. Reasonable alternative means of access may include any previously or currently available alternatives such as realignment or reconfiguration of the project to conform to 310 CMR 10.54 through 10.58 or to otherwise minimize adverse impacts on resource areas. The issuing authority may require the applicant to utilize access over an adjacent parcel of land currently or formerly owned by the applicant, or in which the applicant has, or can obtain, an ownership interest. The applicant shall design the roadway or driveway according to the minimum length and width acceptable to the Planning Board, and shall present reasonable alternative means of access to the Board. The applicant shall provide replication of bordering vegetated wetlands and compensatory flood storage to the extent practicable. In the Certificate of Compliance, the issuing authority may continue a condition imposed in the Order of Conditions to prohibit further activities under 310 CMR 10.53(3)(e).

Table 1. NOI Plan

NOI Plan Requirements	Yes	No
Scale of 40'=1" or larger	✓	
North Arrow (with reference)	✓	
Topographic contours (2' intervals)	✓	
Existing Conditions Topography (with source and date of survey)	✓	
Proposed Topography	✓	
Existing and Proposed Vegetation	✓ (BETA2)	
Existing Structures and Improvements	✓	
Resource Areas and Buffer Zones labeled	✓ (BETA2)	
Location of Erosion Controls	✓	
Details of Proposed Structures	✓	
Construction Sequence and Schedule	✓ (BETA2)	
Registered PLS Stamp (Existing Condition Plans Only)	✓	
Assessors' Reference	✓	
Abutting Property Assessors' Reference	✓	
Survey Benchmark	✓	
Accurate Plan Scale	✓	

PLAN AND GENERAL COMMENTS

A1. MassDEP has not issued a file number for this Project as of this writing.

GC: Massachusetts DEP issued the file #159-1300 to the project.

BETA2: MassDEP has provided the following technical comments for the Project:

The wetland replication area is not depicted on site plans. The Applicant should submit a revised site plan to MassDEP and the Commission. The site plan should include a cross-section of the replication area, in addition to depicting its location, to demonstrate compliance with 310 CMR 10.55(4)(b)2.-5. The replication area should be constructed and sited according to the MA Inland Wetland Replacement Guidelines. The Commission may include a condition that requires a monitoring period of two years, and that the restoration area must achieve 75% survival of all planted strata to be considered in compliance for the issuance of a COC. - The Applicant should provide information related to the physical characteristics of Bank resource area prior to alteration and how it will be restored, as temporary impacts are indicated in the WPA Form 3. Additionally, the Applicant states that the proposed stream crossing will not result in impacts to the existing natural substrate of the intermittent stream, but in the section addressing performance standards associated with Bank the Applicant states that "The proposed stream crossing will impact the bottom of the intermittent stream which would reduce the length of the stream, or height of banks." How does the Applicant plan to not impact the existing natural substrate of the stream? Lastly, has the Applicant considered whether dewatering devices will be necessary during the installation of the crossing? The Applicant should provide MassDEP and the Commission with additional information regarding the crossings installation and anticipated dewatering methods. - Noting that the project appears to meet the performance standards for 310 CMR 10.54(4) and 310 CMR 10.55(4)(b), the Applicant did file as a limited project. If intended to be reviewed as a limited project, the Applicant should demonstrate compliance



with all the provisions of 310 CMR 10.53(e). - On sheet 9 of 11 of site plans, the stated SHGW elevation is 346.6 and the bottom of pond elevation is 347. The Applicant should investigate if groundwater seepage will affect the functionality and performance of the basin. The Applicant should ensure that the basin complies with planning and design consideration as outlined on pages 108-111, V.2, Ch.2, of the MA Stormwater Handbook. - The Commission may include the O&M plans as special conditions in the OOCs, if approved. - All revised materials should be submitted to MassDEP and the Commission.

GC2: Massachusetts DEP issued the filed #159-1300 to this project. The wetland replication area and a cross-sectional has been depicted on the most recent rendition of the site plan. The replication area will be constructed in accordance with the MA Inland Wetland Replacement Guidelines. The Replication Planting Plan dated September 18th, 2024 included a monitoring section. The Proposed monitoring will be two years, and that the restoration are must achieve 75% survival.

As detailed in the first Goddard Peer Review Response letter dated November 7th 2024, Loam and seed will be spread around all disturbed area at and near the wetland crossing which have not been stabilized. Apply and secure erosion control blankets to steep slopes in this area. Reseed as necessary until these areas are stabilized by vegetation.

The proposed crossing will not impact the LUW of the stream. The project is not proposing to shorten the stream. The crossing will consist of a three bottom box culvert and span 1.2 times the bankful width.

As outline in the stream crossing protocol within this document, work, shall not be performed during the wet period (i.e., March 1 to May 1) unless specified in writing by the conservation agent. Work shall be performed during low flow conditions and when the stream ius as dry as possible to limit the need for dewatering to the extent feasible. However, the submitted Stormwater Pollution and Prevention Plan (SWPPP) provides the necessary information on dewatering protocols and inspections as required by the project.

BETA2: Acknowledged.

A2. The existing conditions should include the following:

- a. Existing vegetation and individual trees/shrubs with a diameter greater than 1" proposed for removal should be shown on the Existing Conditions Plans per Bylaw Regulation Section 7.18.1.5. It is BETA's understanding that the Commission generally increases the size threshold for tree locations based on the project scope and therefore defers to the Commission on this matter; and

GC: The site plan does not depict vegetation that is 1" or greater on the existing conditions plan. Additional field survey would be needed to update the plan. Goddard suggests the minimum size threshold be increased. The plan can be updated and submitted as a special condition.

BETA2: BETA defers to the Commission on this submission requirement and whether any survey should occur prior to the issuance of the OOC.

GC2: Goddard Consulting has no additional comment. The plan can be updated and submitted as a special condition to include vegetation at a larger minimum size threshold.

- b. Buffer Zones of Resource Areas including, associated 0-25', 25-50', and 50-100' Buffer Zones as required per Section 7.18.1.8 of the Bylaw.

GC: The site plan has been updated to depict the 25, 50, and 100-foot buffer zones.

BETA2: Comment addressed; Buffer Zones are depicted on all plan sheets.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

- A3. The proposed tree line should be shown on the plans.

GC: The site plan has been updated to depict the tree line.

BETA2: Comment addressed.

GC2: Goodard Consulting has no additional comment. This comment has been addressed.

- A4. A Construction Sequence detailing the sequence of proposed activities should be depicted on the approved plan set and in the NOI application per Section 7.15 of the Bylaw.

GC: Diprete Engineering provided a detailed Construction Sequence with the original Notice of Intent filing. The Construction Sequence is found within the submitted Stormwater Pollution and Prevention Plan (SWPPP) dated 9/18/2024. The Construction Sequence breaks the project into phases, providing sequencing and estimated dates of construction activities.

BETA2: Comment addressed; the Construction Sequence has been added to the plan notes on Sheet 3.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

- A5. The Bank to intermittent stream confirmed under the ORAD should be depicted on all plan sheets with the associated SB flagging series as detailed in the narrative.

GC: The site plan has been updated to depict the Bank of intermittent stream as confirmed under the ORAD.

BETA2: Comment addressed.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

- A6. Depict impact locations on the plan. The extents, locations, and nature of impacts to Bank and BVW are not clear. Specifically, BETA provides the following comments:

- a. Based on BETA's scaled area takeoffs, the entirety of BVW within the limits of work is attributed to fill. Clarify whether portions of these impacts will be temporary.
- b. The BVW impact area quantification appears to include the footprint of the intermittent stream. Quantify impacts to LUW and revise the total permanent impacts to BVW.
- c. Depict the extents of Bank impacts on the plans.
- d. Depict the locations of Bank on the cross sections in the plan set to demonstrate that the wall and culvert will not require permanent impacts to Bank.

GC: The site plan has been updated to clarify the limits of the BVW fill, depict the extent, location and extent of Bank.

BETA2: Temporary and permanent impacts to BVW and LUW have been identified on the plans. Bank impacts should be depicted on the plans and Bank should be labeled on the cross-sections.

GC2: The temporary and permanent impacts to BVW and LUW have been identified on the plans.

BETA3: Bank impacts should be depicted on the plans. The Commission could consider including a Special Condition that requires Bank impacts to be labeled on the plans and submitted to the Commission for review prior to the commencement of work.

DPE2: The bank impact note has been added to the Wetland Crossing Plan (Sheet 10).

BETA4: Comment addressed. Bank impacts have been added to the Plans.

A7. The wetland replication area should be shown on the plans.

GC: The site plan has been updated to depict the replication area.

BETA2: Comment addressed.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

A8. On page 4 of the WPA Form 3, the Applicant should indicate that the Project involves stream crossings and identify the number of stream crossings proposed.

GC: The WPA Form 3 has been updated to indicate that the project involves stream crossings. The revised WPA Form 3, attached within this supplemental submittal, specifies that the project includes 1 new stream crossing.

BETA2: Comment addressed.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

WETLAND RESOURCE AREAS AND REGULATORY REVIEW

Resource Areas at the Site have been approved by an Order of Resource Area Delineation (ORAD) issued on June 3, 2024 under DEP File #159-1290. BETA also conducted a review of the onsite Resource Areas under the initial submission of the ORAD on April 2, 2024 confirming delineation. The Project proposes impacts to onsite areas Subject to Jurisdiction and Protection under the Act and Bylaw including, BVW, Bank of intermittent stream and the associated 0-25', 25-50' and 50-100' Buffer Zones. A variance request has been submitted for work within the Resource Areas and Buffer Zones as required by the Bylaw. The Project is subject to the MassDEP Stormwater Standards and a review of compliance with these Standards will be completed as part of the Planning Board review process. A Stormwater Pollution Prevention Plan (SWPPP) has been submitted due to the Project proposing more than one (1) acre of land disturbance. The Project is proposing a wetland replication area at a ratio of 2:1.

The proposed crossing will consist of an open-bottom arch culvert that will provide a span of at least 1.2 x the bank-full-width (average BFW = 11.76', proposed span of 14.5'), provide an openness ratio of 1.07 (which is greater than 0.82), and maintain a natural stream substrate.

The NOI application includes narrative information describing the Project and proposed mitigation. Mitigation measures include use of erosion controls, creation of a wetland replication area, and creation of a stormwater management system consisting of four (4) catch basins, a sediment forebay, a sand filter,

and a detention pond. Additional information is required to demonstrate compliance with the Bylaw and Act and further details are required regarding, impacts to Resource Areas and buffer zones, the proposed replication area, mitigation for work within Resource Areas and buffer zones and a dewater/water control plan should be submitted. Plan revisions have been included for compliance with the Bylaw and for clarity of proposed work. Special Conditions have also been suggested for use by the Conservation Commission.

BETA2: The Applicant has provided additional and revised information regarding Resource Area impacts and associated restoration, the proposed replication area, construction sequencing of the crossing, and compliance with the Act and Bylaw. In addition, the limits of work at the wetland/stream crossing have been reduced to minimize impacts while still providing sufficient space for construction activities. Where applicable, BETA has requested additional information on proposed mitigation and has recommended several Special Conditions for the Commission's consideration.

BETA3: The Applicant has provided plan updates and has partially addressed comments regarding mitigation. BETA has recommended several Special Conditions for the Commission's consideration including:

- The Commission could consider including a Special Condition that requires Bank impacts to be labeled on the plans and submitted to the Commission for review prior to the commencement of work.
- The Commission could consider including a Special Condition requiring an onsite inspection of all erosion controls and demarcated limits of work prior to the commencement of work.
- The Commission could consider including a Special Condition be included requiring submittal of a completed SWPPP prior to commencement of work.
- The Commission could consider including a Special Condition prohibiting any clearing of individual lots beyond what is depicted on the submitted plans until OOCs are issued for individual home construction.
- The Commission could consider including a Special Condition requiring the Applicant to furnish approvals from the U.S. Army Corps of Engineers (USACE) prior to the preconstruction Site meeting.
- The Commission could consider including a Special Condition requiring any invasive species inadvertently introduced to the Site within the post-development work area to be removed and monitored for successful control. This should include a preliminary preconstruction survey to document any invasive species present.
- The Commission could consider including a Special Condition that requires submission of species lists for all proposed seed mixes prior to construction.
- The Commission could consider including a Special Condition requiring the Applicant to submit a streetside planting plan once the Notices of Intent for the proposed lots are submitted so that the plan correlates with the proposed conditions along each lot.
- The Commission could consider including a Special Condition to require erosion control barriers around all proposed stockpile locations.
- The Commission could consider including a Special Condition requiring a plan set with ground water depths shown be submitted to the Conservation Commission prior to the commencement of work.
- The Commission could consider including a Special Condition requiring the Applicant to submit notification prior to the commencement of work indicating who is performing the work, their contact information, and when the proposed activity will be done.

- **The Commission could consider including a Special Condition requiring the contact information of the person or party responsible for inspecting and maintaining erosion controls be provided prior to the commencement of work.**

RESOURCE AREA AND BOUNDARY COMMENTS

BETA conducted a Site visit on April 2, 2024 pursuant to the previously filed ANRAD to assess existing conditions and review Resource Area delineations, focusing on the definitions and methodologies referenced under the Act and the Bylaw. Resource Area delineation was approved through the ORAD on June 3, 2024 under DEP File #159-1290.

CONSTRUCTION COMMENTS

- W1. Material stockpile and laydown areas should be labeled on the Project plans. Erosion controls should be depicted along all areas of work. Currently erosion controls are only present within the northern extent of the Project.

GC: The site plan has been updated to label material stockpile locations and laydown areas. Erosion controls to the south are upgradient of the working locations. Water from the site will not travel in this location so sedimentation or erosion is not predicted to be an issue.

BETA2: Stockpile locations have been provided but should be surrounded by erosion controls.

BETA agrees that erosion and sedimentation of upgradient areas is not likely; however, erosion controls or another feature should be installed to demarcate limits of work. If amenable to the Commission, orange construction fencing could be used in lieu of erosion control at appropriate locations. It is anticipated that the Conservation Agent will review and approve erosion controls prior to construction.

GC2: Orange construction fencing can be used in lieu of erosion control barriers (ECB) to demarcate the limit of work. A site walk can be conducted with the Conservation Agent and the applicant's representative prior to construction to confirm the ECBs are in the appropriate location.

BETA3: Comment addressed. BETA recommends the Commission include a Special Condition requiring an onsite inspection of all erosion controls and demarcated limits of work prior to the commencement of work.

- W2. The SWPPP that was submitted with the NOI was not completed. BETA recommends the Commission include a Special Condition that a SWPPP must be submitted to the Commission for review and approval prior to the commencement of work.

GC: Goddard Consulting agrees with this comment. The SWPPP will be completed upon contractor selection.

BETA2: Comment addressed. BETA recommends a Special Condition be included within the Order of Conditions requiring submittal of a completed SWPPP prior to commencement of work.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

- W3. Depict all existing contours to indicate how proposed grading will tie in to surrounding grades on the grading plan.

GC: The site plan has been updated to depict all existing contours. The proposed grades on the plan will tie directly into the existing grades.

BETA2: Comment addressed.

GC2: Goddard Consulting has no additional comment, This comment has been addressed.

- W4. The limit of work around the proposed crossing appears to be larger than what is required based on the grading plans. The Applicant should clearly indicate how much area is required for wall construction and revise the limits of work accordingly. Resource Area impacts should be limited to the extent feasible.

GC: The limit of work has been modified to depict only what is needed to provide access around the wall construction (10' minimum space). The updated areas are shown on Sheet 10 of the revised plans.

BETA2: The limit of work has been revised to encompass only areas necessary to complete work. The standalone figure provided on PDF Page 24 still depicts the old limits of work and should be revised.

GC2: The graphic has been revised to depict the current limit of work.

BETA3: Comment addressed; the graphic has been revised to depict the updated limits of work.

- W5. Provide a preliminary plan for water control/dewatering of surface and groundwater during the construction of the crossing.

GC: As outlined in the stream crossing protocol within this document, work, work shall not be performed during the wet period (i.e., March 1 to May 1) unless specified in writing by the conservation agent. Work shall be performed during low flow conditions and when the stream is as dry as possible to limit the need for dewatering to the extent feasible. However, the submitted Stormwater Pollution and Prevention Plan (SWPPP) provides the necessary information on dewatering protocols and inspections as required by the project.

BETA2: BETA recommends a Special Condition be included within the Order of Conditions requiring submittal of a completed SWPPP prior to commencement of work.

GC2: Goddard Consulting agrees with the recommendation of the inclusion of this special condition. A dewatering plan and protocol will be included in the SWPPP as required by the project.

- W6. It is recommended that the Commission include a Special Condition in the Order of Conditions (OOC) prohibiting any clearing of individual lots beyond what is depicted on the submitted plans until OOCs are issued for individual home construction.

GC: Goddard Consulting is agreeable with this special condition.

BETA2: No further comment required.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

- W7. It is recommended that the Commission include a Special Condition in the OOC requiring the Applicant to furnish approvals from the Planning Board and the U.S. Army Corps of Engineers (USACE) prior to the preconstruction Site meeting.

GC: No submission to the Planning Board is proposed because the subdivision is pre-existing. The wetland impact is under 5,000 sf, so no approval by the ACOE is required.

BETA2: Any impacts to Waters of the U.S. require authorization from USACE under the Section 404 Massachusetts General Permit. The Project would likely qualify as being eligible for Self-Verification due to the crossing meeting Stream Crossing Standards. BETA recommends that above-referenced Special Condition.

GC2: Goddard Consulting would agree with a special condition to submit a Self-Verification.

MITIGATION COMMENTS

W8. BETA offers the following comments on the wetland replication plan:

- a. The Applicant should provide best management practices for the contractor to limit the introduction and spread of invasive species.

GC: BMPs will be undertaken throughout the construction of the project to limit the introduction and spread of invasive species on site. The contractor will be responsible for ensuring machinery and construction equipment is cleaned prior to being brought on-site. If invasive plant species are encountered during construction, plant material and

impacted soils will be removed so as not to be reused on site.

Additionally, as outlined in the attached replication planting plan, any imported soils to be used within the replication area shall be clean fill. The project proposes two years of monitoring following construction to document the vitality and survival of the installed native plants and seedmix. During these inspections, invasive species, if present, are to be documented and removed.

BETA2: Comment addressed. BETA recommends the Commission include a Special Condition in the Order of Conditions requiring all invasive species that were not previously at the site to be documented and removed post construction. This should include a preliminary preconstruction survey to document any invasive species present.

GC2: Goddard agrees with this special condition and have no further comments.

- b. The Applicant should provide the species list for the seed mix that is intended to be used within the replication area on the plans.

GC: The project proposes to utilize New England Wetland Plants Wetmix within the proposed wetland replication area to re-establish a native wetland groundcover within the area.

As part of this supplemental submittal, Goddard has attached the species list provided by the supplier (common and scientific names) as well as wetland indicator statuses for each species found within the selected seedmix.

BETA2: The proposed seed mixes were not provided in the NOI submission. A Special Condition could be included in the Order of Conditions that requires submission of species lists prior to construction.

GC2: Goddard Consulting agrees with the recommendation of the inclusion of this special condition. The species list for the seed mixes can be submitted prior to construction.

- c. The location of the wetland replication area should be depicted on the plans.

GC: The site plan has been updated to depict the location of the wetland replication area.

BETA2: Comment addressed.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

- d. The storage area proposed in the narrative for soil and leaf litter should be shown on the plans.

GC: The site plan has been updated to depict the location for the soil and leaf litter stockpile locations.

BETA2: Comment addressed. Erosion controls should be depicted around the proposed stockpile location.

GC2: A special condition can be added to require erosion control barriers around all proposed stockpile locations.

BEAT3: BETA agrees with the suggested Special Condition.

- e. The Applicant should provide cross sections of altered and proposed replication areas, the replication plan, protocol and schedule should appear on the approved plan set and groundwater elevation data for the proposed replication area should appear on the plans (Bylaw Regulation Section 7.14.2)

GC: A detail of the proposed wetland replication area has been added to the revised site plans, prepared by Diprete Engineering. The site plan detail includes the protocols for installation, detailing the existing wetlands, the proposed erosion controls, the required excavation and fill, as well as the proposed elevation of the wetland replication area.

In addition, Goddard prepared and provided a Wetland Replication Planting Plan, dated September 18, 2024, as part of the Notice of Intent submittal. The replication plan includes proper installation procedures, protocols, and timing.

BETA2: Groundwater elevations should be shown on the provided cross section of the replication area per BETA's original comment and Bylaw Regulation Section 7.14.2.

GC2: The proposed wetland replication area is proposed to be 390. The adjacent BVW and intermittent stream has varying grades sloping north. The proposed replication evaluation was chosen to be an average of the grades of the adjacent BVW and intermittent stream. It was inferred that the ground water evaluation fluctuates as water moves down gradient. If needed, a special condition can be added to require a plan set with ground water depth shown.

BETA3: BETA agrees with the addition of a Special Condition requiring a plan set with ground water depths shown be submitted to the Conservation Commission prior to the commencement of work.

DPE2: The approximate groundwater has been shown on the Section A-A Wetlands Replication Area Detail on Grading and Drainage Plan (Sheet 7).

BETA4: Comment addressed.

- W9. The Applicant should provide a planting plan for disturbed portions of the right-of-way that are not proposed to be pavement. Specifically, areas within Buffer Zone should be prioritized for the planting of native street trees and the application of native seed mix.

GC: As seen in the Construction Sequence prepared by Diprete Engineering, all disturbed areas outside of the paved limits are to be seeded and stabilized.

Goddard has prepared a visual markup of the site plans attached with this supplemental submittal to display the limits of the proposed seedmix. The project proposes to utilize New England Wetland Plants Conservation/Wildlife Seedmix for all disturbed areas. Goddard has attached the species list provided by the supplier (common and scientific names) as well as wetland indicator statuses for each species found within the selected seedmix.

BETA2: Comment partially addressed. The proposed seeding should be depicted on the full plan set for the contractor's knowledge, and it is recommended that native woody vegetation be planted along the roadway as appropriate (e.g., street trees). The Commission could consider a Special Condition in the Order of Conditions requiring the Applicant to submit a streetside planting plan once the Notices of Intent for the proposed lots are submitted so that the plan correlates with the proposed conditions along each lot.

GC2: Goddard Consulting agrees with the proposed special condition. A planting plan can be submitted to provide native trees along the roadways once the Notice of Intent for the proposed lot are submitted.

W10. Provide a restoration plan for temporarily impacted Bank, BVW, and LUW.

GC: Goddard recommends the following protocol be conditioned and adhered to during the installation of the required stream crossing to limit temporary impacts only to the extent required to install the crossing. As seen below, the protocol includes steps to restore all areas impacted during the installation, and requires monitoring for two years following installation to ensure all protocols have been followed, and that all portions of the area are functioning as designed and approved.

Stream Crossing Protocol

1. The conservation agent shall be notified at least 72 hours (three full business days) prior to the start of work associated with the stream crossing.

2. All work associated with the stream crossing shall be performed under the direct supervision of a qualified wetland scientist.

3. Work shall not be performed during the wet period (i.e., March 1 to May 1) unless specified in writing by the conservation agent. Work shall be performed during low flow conditions and when the stream is as dry as possible.

4. The erosion control barrier at the three-sided culvert location must be installed exactly as shown on the site plan. It is intended that the erosion control barrier be located just downgradient from the inner edge of the footing on both sides of the stream. Erosion controls shall not be placed within the stream channel or BVW.

5. The vegetation within the proposed driveway location near the crossing and the culvert footprint will be cut but not grubbed. The cut debris will be removed from the site.

6. Boulders will be carefully placed outside of the BVW on both sides of the stream. Road plates will be placed on the boulders to provide safe and stable access across the stream for a small excavator. The footing for the box culvert and wingwalls north of the stream will be excavated to firm bearing soil and the footing(s) poured or installed. The excavator will be moved back across

the temporary crossing. The road plates will be removed. The boulders will be carefully removed and damaged soil areas within the culvert footprint will be repaired with loam. The footing for the box culvert and wingwalls south of the stream will be excavated to firm bearing soil and the footing(s) poured or installed. Damaged erosion controls will be replaced, as needed.

7. The box culvert and wing walls will be installed and backfilled. The area within the box culvert between the culvert and the erosion control barrier will be brought to proposed grade, compacted, and topped with rip-rap. This work is easier if the culvert were to be installed in three sections and each section backfilled and rip-rapped before the next section is installed. The rip-rap shall only be applied to the area between the erosion control barrier and the face of the culvert/wingwall as scour protection.

8. Place and compact in layers general fill and gravel fill for the driveway within and near the crossing to the grades shown.

9. Install proposed utility conduit(s) in a trench above the box culvert. Backfill and compact the fill within the utility trench. There shall be no trenching across the stream or BVW for utilities. Install the proposed guard rails.

10. Pave the proposed driveway at and near the crossing with base and top coat to the width shown on the site plan.

11. Loam and seed all disturbed areas at and near the wetland crossing which have not been stabilized. Apply and secure erosion control blankets to steep slopes in this area. Reseed as necessary until these areas are stabilized by vegetation.

12. The erosion controls at the crossing may be removed when directed to do so by the supervising wetland scientist with concurrence from the conservation agent.

13. The success of the crossing will be evaluated annually at the end of the growing season for two years after the crossing is installed to confirm that the proposed crossing, culvert, and the stream within and adjacent to the culvert is functioning per the approved design. A report, with representative photographs, shall be provided to the Commission after each inspection that details the condition of the area and any recommendation necessary to bring or keep the area in compliance with the approved plans and Order.

BETA2: BETA recommends the Commission include a Special Condition in the Order of Conditions requiring the Applicant to ensure stream crossing and restoration occurs in the sequence that is stated by the Applicant, with the following revisions:

- **Loam and seed shall be used to stabilize all upland areas, while temporarily impacted wetlands shall be restored to existing grade, top dressed with compost if deemed necessary, and seeded with a native wetland seed mixture;**
- **All temporarily disturbed Banks shall be restored to preexisting conditions; and**
- **No permanent LUW impacts shall occur within the footprint of the proposed 3-sided culvert.**

GC2: Goddard Consulting agrees with the proposed special condition.

WPA PERFORMANCE STANDARDS COMMENTS

The Project proposes impacts to onsite Resource Areas and proposes wetland replication at a ratio of at least 2:1. The Applicant has also provided a narrative describing how the Project complies with Performance Standards set forth by the Act. The Applicant is filing this Project as a limited Project under the provision at 310 CMR 10.53(3)(e).

Bank (310 CMR 10.54)

- W1. The plans do not provide the methods for restoring the temporarily impacted Banks. Provide a Bank restoration/stabilization plan for review.

GC: As seen in the stream crossing protocol outlined above, Goddard has provided a full breakdown of the steps to be adhered to during the installation of the crossing. The stream crossing protocol includes steps to restore and stabilize all temporarily impacted banks, with additional monitoring included to ensure long-term success.

BETA2: Proposed Bank restoration includes the placement of erosion control blankets on steep slopes and the application of seed. The Applicant should provide the specific seed mix that will be used on Bank.

GC2: New England Wetland Plant WetMix can be used to naturalize the Bank of the intermittent stream after the installation of the culvert.

BETA3: A detail should be included on the Grading and Drainage Plan that indicated use of the New England Wetland Plant WetMix on the disturbed Banks for restoration and the specifications of species within the seed mix should be shown on the plans. BETA recommends a Special Condition requiring a plan to be submitted to the Conservation Commission depicting the seed mix and location where seed mix will be placed for Bank restoration prior to the commencement of work.

DPE2: The New England WetMix species have been included in a detail on the Grading and Drainage Plan (Sheet 7).

BETA4: Comment addressed.

Bordering Vegetated Wetlands (310 CMR 10.55)

- W2. The Applicant appears to have provided sufficient justification for why the wetland/stream crossing is necessary for the Project. Although the reported BVW impacts will likely decrease as a result of addressing BETA's comments, BETA recommends maintaining the size of the wetland replication area in order to safeguard from areas potentially failing. The Applicant should also provide a restoration plan for temporarily impacted BVW.

GC: All disturbed BVW outside of the paved limits are to be seeded and stabilized. The seedmix will consist of New England Wetland Plants WetMix, which consists of native herbaceous wetland plants, naturalizing any BVW disturbance.

BETA2: Comment addressed.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

Land Under Water (310 CMR 10.56)

- W3. The Applicant should provide a summary of compliance with the LUW Performance Standards.

GC: Land Under Water Bodies and Waterways refers to perennial stream bodies. The intermittent stream to be crossed on-site does not meet the requirements to be considered as Land Under Waters; therefore, the project is not held to these performance standards.

In addition, the stream crossing protocol provided by Goddard outlines the procedure to install the proposed crossing and avoid impacts to the streambed. By utilizing boulders and road plates, the excavator will cross the area without disturbing the streambed.

BETA2: The boundary of LUW in the Act under 310 CMR 10.56(2)(c) is the mean annual low water level of waterbodies and waterways. As established by case law in the 2007 Final Decision In the Matter of Hoosac Wind Project (attached), "...the location of mean annual low flow level in an intermittent stream would logically vary depending on the amount of time the streambed is in fact dry...These streams would have a mean annual low flow above the thread of the stream" (14 CEPR 139).

Regardless, the Applicant has quantified temporary impacts to LUW and has noted that no permanent LUW impacts would be required. The Project is presumed to comply with the LUW Performance Standards due to meeting the Massachusetts Stream Crossing Standards.

GC2: Goddard agrees that the project meets stream crossing standards and will have no impacts to LUW.

BYLAW REGULATORY COMMENTS

- W4. Provide a Natural Heritage and Priority Habitats and Estimated Habitats Map, as required for NOI submissions to the Franklin Conservation Commission (Bylaw Section 7.17.1).

GC: Goddard has provided a supplemental map detailing the nearest mapped Natural Heritage Priority Habitats and Estimated Habitats, dated 11/04/2024.

As seen in the attached map, no Priority or Estimated Habitats of Rare Wildlife are mapped on or adjacent to the project site. The nearest mapped habitat, PH 710, is located approximately 4200 feet to the West at closest from the project site.

BETA2: Comment addressed.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

- W5. The Applicant has provided a Variance request for work within BVW, Bank and the 0-25', 25-50', and 50-100' Buffer Zones in accordance with Bylaw Regulation Section 5. An alternative analysis was submitted within the Variance request but only consists of the proposed Project and a no build alternative. BETA defers to the Commission on the approval of the Variance request and whether other alternatives should be assessed. Based on BETA's review of the Site and its surroundings, it appears that other opportunities for access to the Site are limited.

GC: Goddard Consulting has no additional comment to BETA W5.

BETA2: BETA defers to the Commission on the approval of the Variance request.

GC2: Goddard Consulting has no additional comment.

- W6. The Applicant should provide a narrative with information on the steps taken to mitigate unavoidable impacts for work proposed within the Buffer Zones (Bylaw Regulation Section 7.11.2.). Plantings do not appear to be proposed within the cleared portions of Buffer Zone.

GC: The applicant has submitted a variance request as part of the Notice of Intent submittal for the unavoidable impacts proposed within the Buffer Zones. As outlined in the variance request letter, in order to reach the associated uplands west of the BVW and intermittent stream, work within the BVW, Bank, 25, 50, and 100-Foot Buffer Zone is inevitable, requiring the proposed crossing.

The project has been filed as a Limited Project (reference section 4.3 of the Notice of Intent Cover Letter for compliance standards). The project has been designed to minimize impacts to the extent feasible to reach the suitable upland areas. A stream crossing protocol has been provided to provide BMPs for the required crossing. All disturbed areas outside of the paved roadway and stormwater infrastructure are proposed to be reseeded with New England Wetland Plants Conservation Seedmix to restore all areas to a native groundcover. Wetland replication is proposed at a 2:1 rate.

The applicant has requested a variance to allow for the required work to install the roadway and drainage as shown by the attached site plans. As only the roadway itself and the drainage system are proposed as permanent impacts, the project has been designed to minimize and avoid any further impacts. It is the opinion of Goddard that the project has been minimized to the extent feasible, and the granting of a variance will allow the project to conform with all interests outlined by the local bylaw.

BETA2: BETA defers to the Commission on the provided narrative. Per BETA Comment W9, it is recommended that woody plantings also supplement the proposed seeding within disturbed Buffer Zone.

GC2: Goddard Consulting agrees with the proposed special condition. A planting plan can be submitted to provide native trees along the roadway once the Notice of Intent for the proposed lots are submitted.

- W7. Proposed erosion controls include silt fence and haybales. Silt fence is not a permitted erosion control measure in the Town of Franklin (Pg. 13 of Town of Franklin Best Development Practices Guidebook). The Applicant should coordinate with the Conservation Commission to determine the appropriate control measures for the Site. Twelve (12)-inch diameter compost filter tubes may be an appropriate option commensurate with the scope of the Project.

GC: The proposed ECB has been updated to remove the silt fence and hay bales. A Twelve (12)-inch diameter compost filter tube is now proposed.

BETA2: Comment addressed.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

- W8. The Applicant should revise the Erosion & Sedimentation Control Plan to include contact information of the person(s) responsible for inspecting and maintaining erosion controls, the requirement to inspect erosion controls weekly or following significant rain events, and all other requirements listed in Section 7.12.1 of the Bylaw Regulations.

GC: The project's Stormwater Pollution Prevention Plan (SWPPP) dated 9/18/24, prepared by Diprete Engineering, contains all inspection requirements and protocols as listed in Section 7.12.1 of the Bylaw Regulations.

As the project is under review at this time, the contact information of the person or party responsible for inspecting and maintaining erosion controls will be provided to the Conservation Agent prior to work beginning on-site.

BETA2: BETA recommends the Commission include a Special Condition within the Order of Conditions requiring the contract information of the person or party responsible for inspecting and maintaining erosion controls be provided prior to the commencement of work.

GC2: Goddard Consulting agrees with the proposed special condition. The contact information of the person or party responsible for inspection and maintenance of erosion controls will be provided prior to the commencement of work.

- W9. BETA defers to the Commission on the approval of the Project Narrative due to several Bylaw requirements being absent from the current Project Narrative (Bylaw Regulation Section 7.9.1.) including who is performing the work and when the proposed activity will be done. This information could be submitted prior to construction as part of a Special Condition.

GC: Goddard Consulting has no comment.

BETA2: See BETA's recommended Special Condition above.

GC2: Goddard Consulting agrees with the proposed special condition above.

- W10. A Construction Sequence with all proposed construction activities should be included within the NOI and on the plan set (Bylaw Regulation Section 7.15.1). It is recommended that the Applicant also provide a standalone sequencing plan for the crossing construction.

GC: Diprete Engineering provided a detailed Construction Sequence with the original Notice of Intent filing. The Construction Sequence is found within the submitted Stormwater Pollution and Prevention Plan (SWPPP) dated 9/18/2024. The Construction Sequence breaks the project into phases, providing sequencing and estimated dates of construction activities. This has been added to Sheet 3 of the updated site plan.

BETA2: Comment addressed. The Construction Sequence has been added to the Plan notes on Page 3 of 11.

GC2: Goddard Consulting has no additional comment. This comment has been addressed.

STORMWATER MANAGEMENT

The Project proposes the construction of a proprietary separator, a series of catch basins, a sediment forebay, a sand filter and detention pond. Stormwater Best Management Practices (BMPs) are proposed to connect to each other in series to remove total suspended solids (TSS). Four catch basins are proposed to the east of the cul-de-sac within the access drive. Stormwater from these catch basins will be distributed into the associated sediment forebay, then detention pond to infiltrate.

A review of the Project's compliance with the Massachusetts Stormwater Management Standards and the applicable local Regulations is currently ongoing by Planning Board.

GC: No submission to the planning board is proposed. Goddard and DiPrete defer to BETA Group and the Franklin Conservation Commission if there are any stormwater related peer review questions.

BETA2: Understood, the previous reference to Planning Board was erroneous. BETA previously provided a scope to review the stormwater management design, but it has been requested for inclusion as part

of the Notice of Intent review due to the Project not requiring a filing with the Planning Board. BETA's comments are as follows:

GENERAL

SW1. BETA notes that the hydrologic calculations assume a subdivision consisting of four residences of various sizes with a driveway and lawn area provided for each lot. These structures and impervious areas are not illustrated on the plans and it is assumed that the actual design of the residences may vary. In the event that the actual as-built residences differ significantly from design assumptions, the stormwater management system may need to be revised to accommodate a larger flow. BETA recommends the Commission consider a suitable condition to ensure the basins are properly sized for the final subdivision layout.

DPE: Acknowledged, we have no objection to a condition for restrictions to residence sizes in the event drywells are not utilized for the rooftop drainage.

BETA3: A detail should be included on the Grading and Drainage Plan that indicated use of the New England Wetland Plant WetMix on the disturbed Banks for restoration and the specifications of species within the seed mix should be shown on the plans. BETA recommends a Special Condition requiring a plan to be submitted to the Conservation Commission depicting the seed mix and location where seed mix will be placed for Bank restoration prior to the commencement of work.

DPE2: Further annotation specifying the WetMix has been added to the Grading and Drainage Plan, with an additional species composition listing shown on this sheet (Sheet 7).

BETA4: No further comments.

SW2. Section 2.1 of the stormwater report identifies Charlton-Hollis-Rock outcrop complex as HSG D. However, the NRCS-WSS identifies this soil group as HSG B. Based upon the depth achieved in the test pits and the lack of exposed ledge shown on the plans, BETA recommends that the calculation be modified to reflect this soil classification.

DPE: The Charlton-Hollis-Rock outcrop complex soil (103D) has been switched to HSG B soil as identified on NRCS WSS.

BETA3: Comment addressed.

SW3. Consider providing a grate or similar measure at the 24" HDPE outlet (FES-11) to prohibit access by pedestrians and wildlife.

DPE: A proposed grate for the flared end has been added to FES-11 which is referenced on the Pond Complex Details plan (sheet 9 of 11). "Grating for Flared End" detail has been added to Detail Sheet (Sheet 11 of 11).

BETA3: Comment addressed.

SW4. Review HydroCAD model for Pond 121: Downstream Defender. A 15" HDPE outlet is used in the model, but a 12" HDPE outlet is proposed on the plans.

DPE: The pipe shown on the plans has been updated to be a 15" pipe to match the designed pipe network.

BETA3: Comment addressed.

SW5. Provide sizing calculations for catch basin grates.

DPE: The pipe network sizing calculations have been provided in the Stormwater report in Appendix A4.1.

BETA3: There is a significant amount of bypass at catch basins 15 & 20. The report should document that the existing downgradient stormwater management system can accommodate this flow without causing any flooding issues.

DPE2: Upon review of the captured and bypassed flow in AutoCAD, it was found that 1.2 cfs was captured and 0.8 cfs bypassed. We have added to the openings of the eastern Louise Drive catch basins to make these double-grate covers.

BETA4: No further comment.

SW6. Recommend providing fencing around the detention basin system to discourage residents from entering the basins.

DPE: A Fence has been added around the entire proposed pond complex, which is shown on sheets 6, 7, & 9 of 11.

BETA3: Fence provided. Comment addressed.

SW7. Confirm the legal right to construct drainage infrastructure, including DMH-8, within the Mass Co. Electric Easement

DPE: The Mass Electric Easement allows for passage of electric lines and poles as needed, and the property owners maintain the ability for vehicle passage and drainage improvements across the easement as evidenced by the easement crossing roadway and drainage lines elsewhere within the subdivision (Byron's Way and "Lot 2").

BETA3: Information provided. Comment addressed.

SW8. Indicate the current condition of the existing off-site detention pond to which the water quality unit will be routed.

DPE: The off-site existing detention pond has some nuisance vegetation closest to the roadway and along the downgradient berm under current conditions. There is an included additional O&M Report which is for the purpose of maintaining the off-site existing detention pond. We propose the Commission add a condition to assure the continuous maintenance of this pond per the submitted O&M Report.

BETA3: BETA defers to the Town regarding this condition.

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.

Refer to Standard 4 below for review comments related to Town treatment requirements.

SW9. Provide detail for proposed swale and method of stabilization (§153-15.A.10).

DPE: A "Riprap Swale Cross Section" Detail has been added to the plan set and riprap has been

added for stabilization, both items are shown on the Pond Complex Details plan (sheet 9 of 11).

BETA3: Comment addressed.

BEST DEVELOPMENT PRACTICES GUIDEBOOK

The project is required to comply with the requirements of the Town of Franklin Best Development Practices Guidebook (BDPG).

SW10. Indicate if proposed seed mix and plantings will reflect native vegetation, particularly near woodland areas (BDPG Page 7).

DPE: Planting notes have been added to Notes and Legend (sheet 3 of 11) of the plan set which includes the proposed seed mix.

BETA3: Comment addressed.

SW11. Confirm that landscaping plan has been designed in accordance with the planting bed and seeding guidelines outlined on Pages 14-15.

DPE: Planting bed guidelines are not applicable for our project. The seeding guidelines per the guidebook have been referenced.

BETA3: Comment addressed.

MASSDEP STORMWATER STANDARDS

The Project is subject to §153-16 and the Massachusetts Wetlands Protection Act and therefore must comply with the Massachusetts Stormwater Standards as outlined by MassDEP. Compliance with these standards is outlined below:

SW12. Provide stamp and signature on MassDEP Stormwater Checklist.

DPE: Stamp has been added to the MassDEP Stormwater Checklist.

BETA3: Comment addressed.

LOW IMPACT DEVELOPMENT (LID) TECHNIQUES

The Project does not appear to propose any substantial LID measures.

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 a new outfall which will discharge to the 50-ft buffer zone associated with the AWE-series wetlands. A riprap apron is proposed to mitigate erosion potential – **complies with standard.**

SW13. Revise riprap apron size to match the outlet protection calculations, including a minimum size of 35' long x 41' wide with a d-50 of 11 inches.

DPE: Riprap apron has been edited to mimic what is shown in the outlet protection detail. Stormwater will dissipate while flowing over the curb weir at the end of the riprap apron. The riprap apron/ FE detail on Pond Complex Details (Sheet 9 of 11) has been fixed to show the D50 of 13".

BETA3: Detail identifies D₅₀ as 10" and should be 11" per calculations. Identify thickness as needed to establish rip rap apron.

DPE2: Based on other watershed modeling updates as described below, the sizing of the riprap apron including length, width and d-50 size have been updated as shown in Section 3.2.4 of the Stormwater Report. This d-50 has been updated in the riprap apron/FE detail.

BETA4: No further comments.

SW14. Demonstrate that the swale can convey anticipated flow rates with erosion. Controls such as check dams and a riprap lined outlet may be required to prevent scour at the discharge location.

DPE: Riprap was added to the conveyance swale to prevent erosion which is a D50 of 10". The RipRap swale cross section detail is shown on Pond Complex Details (Sheet 9 of 11). The hydroCAD attachments in the Stormwater report in Appendix A5.1 have been updated to include a riprap lined swale.

BETA3: Identify thickness of rip rap layer in detail.

DPE2: Note there is a label identifying D50 10" Riprap in the RipRap Swale Cross Section detail.

BETA4: BETA recommends that the notes regarding riprap thickness and bedding requirements as shown on the riprap apron detail be added to the swale cross section detail.

SW15. The existing conditions plan identifies several stone walls located immediately downgradient of the outfall location. Demonstrate that these stone walls will not substantially impede flow discharged from the outfall.

DPE: Per field visit on January 8th 2025, it was determined that the stone walls would not substantially impede flow as the grade slopes offsite to the northeast, and there are substantial openings in the stone wall offsite, in particular at a low point which appears to presently act as a natural weir:

BETA3: BETA recommends that this low point be identified on the plans.

DPE2: The stone wall low point (spill-over location) has been identified on the Grading and Drainage Plan (Sheet 7).

BETA4: No further comments.

SW16. Recommend providing a level spreader at the outfall to mitigate potential impact of concentrated discharge onto the abutting property and the wetland resource areas.

DPE: As mentioned in Number 13, The riprap outlet apron was increased. There is a curb weir at the end of the riprap apron to mimic a level spreader, spreading out the flow over a more widespread area.

BETA3: Comment remains. Swale as shown on sheet 9 will not assist with the spreading of the flow. In addition, curb weir is not shown either on the detail or the plan view.

DPE2: The curb weir is now shown at end of rip rap apron on plan and detail views. The end of swale is now contiguous with the detention pond rip rap apron outlet behind the curb weir, in order to level the combined flows with the curb. Due to the reduction of flow from the flared end, the curb is located well within the limit of work, allowing for additional rip rap on the downgradient side of the weir for further erosion protection.

BETA4: Comment addressed.

SW17. Clarify if the “curb outlet weir” detail represents the overflow weirs for the sediment forebay and detention basin.

DPE: There is no curb outlet weir on any of the ponds. The “Curb Outlet weir” detail has been removed from the plan set.

BETA3: No further comments.

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 to mitigate increases to runoff rates via a sand filter and detention basin. Calculations indicate a decrease in peak discharge rate and peak runoff volume to all the northeast wetland.

SW18. Provide comparison or pre- and post-development peak discharge rate and runoff volume to design point 2: Ex Detention Pond. As no stormwater runoff is conveyed to this design point under existing conditions, a net increase in peak discharge rate and runoff volume is anticipated, in violation of Standard 2.

DPE: This existing detention basin was designed to manage stormwater runoff from the entirety of the future Byron’s Way and Louise Drive at the time of former approval, including the new section of roadway not built at the time and currently proposed. The applicant is diverting a majority of the new paved roadway to the new stormwater BMP in order to provide treatment via newer practices to the greatest extent practical, and therefore the design flow reaching the existing pond will, by comparison, decrease.

BETA3: Comment remains. The calculations still show no flow conditions towards the existing detention basin (DP1).

DPE2: The excess nodes with no flow have been removed from the existing conditions hydrology analysis, and areas have been updated to the existing conditions analysis to match the area total from pre to post-development conditions.

As shown within the attached 100-year HydroCAD summaries, the formerly approved Louise Drive design resulted in a built peak flow of 33.31 cfs flowing from the west into the intersection of Byron’s Way and Louise Drive. Based on the conveyance of a large majority of the flow to the new best management practices designed to meet the current stormwater regulations, the proposed peak flow to the existing detention pond from the west is 9.93 cfs. A reduction of 23.38 cfs from the original approved subdivision conditions.

Based on the improvement in water quality and flow control from the originally approved conditions in regards to flow and water quality, as well as the submittal of the Operation & Maintenance Manual for the existing pond, it is our opinion this development will meet the current standards to the greatest extent possible and improve upon existing permitted conditions to provide as much additional water quality as the physical constraints of the existing subdivision allow.

We will respectfully request that the Commission consider the constraints of the existing subdivision and major improvements the applicant is making in considering approval of this application.

BETA4: Based upon our meeting with the design engineer, all the discharge points ultimately flow to the same point, the wetlands east of Byron's Way. Accordingly, the calculations document the reduction in peak flow rate coming from the site. BETA recommends that notes be added to the drawing directing flow to the culvert along the road and at the rear of Lot 13.

- SW19. Clarify the ultimate discharge location of the offsite detention pond. BETA notes that, if the peak discharge rates from both design points are combined, then the post-development, sitewide peak discharge rates exceed the pre-development, sitewide peak discharge rates. If the ultimate discharge location is the same for both points of analysis, then an additional point of analysis should be provided representing this final location.

DPE: The ultimate destination for stormwater leaving the offsite detention pond is the wetland abutting the northeast corner of the property. As noted above the existing detention pond was previously designed factoring in the entirety of the full-build roadway, and this current project only proposes to construct that portion of roadway previously approved but not built historically. The design flow reaching the detention pond will therefore decrease via the flow captured and managed by the new stormwater BMP system. Comparing the relative change in flow at Design Point 1 from the BMP will be a conservative study, as compared to also including the relative decrease in flow from the original roadway design to smaller roadway area contributing to the existing detention pond.

BETA3: See SW18 above.

DPE2: Please see response to SW18 above.

BETA4: See SW18 above.

- SW20. Provide HydroCAD subcatchment summaries, including cover type area breakdown and time of concentration calculations, for Wpre-01 and Wpre-02.

DPE: The 100 year storm summaries have been included in the stormwater report which include Wpre-01 and Wpre-02. This is shown in Appendix A3.2.5 HydroCAD 100-Year Storm Analysis.

BETA3: For all watershed analysis, maximum flow length for sheet flow is 50'. Both existing and proposed conditions analyses should be corrected.

DPE2: The maximum sheet flow length has been revised to 50 feet for both pre and postdevelopment conditions.

BETA4: Comment addressed.

- SW21. Revise soil group for the southernmost portions of subcatchments WPre-02 and WPost-03. Based on NRCS soil mapping, this area is Hollis-Rock-outcrop-Charlton complex with HSG D.

DPE: The Hollis-Rock-outcrop-Charlton complex soil (104C) has been switched to HSG D soil as identified on NRCS WSS.

BETA3: Comment addressed.

- SW22. Confirm that the limits of the areas modelled as "grass," as depicted on the watershed plans, accurately reflect the likely limits of disturbance for each residence, accounting for grading required to construct residences along slopes.

DPE: The areas that are being graded on the watershed plans have been edited to use grass as the modeled cover type.

BETA3: Comment addressed

SW23. Clarify material to be used for drainage pond complex maintenance access and model cover type appropriately. Typically, gravel or similar stone material is used for maintenance paths.

DPE: The maintenance access paths will consist of reinforced turf, The paths have been added to the Pond Complex Details plan (sheet 9 of 11). The hatch is referenced in the Notes and Legend (sheet 3 of 11).

BETA3: The hatch is called out, but a construction detail is needed to clarify the requirements.

DPE2: A typical construction detail is provided within the plan set. See "Grasspave" detail on Sheet 11.

BETA4: No further comments.

SW24. Revise cover type used for sand filter footprint to be impervious "Water Surface" to avoid "double-counting" the infiltration that will occur in this area.

DPE: The cover type for the sand filter footprint has been revised to be a water surface which prevents the infiltration from being double counted.

BETA3: Comment addressed.

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 indicates the presence of Hollis-Rock outcrop-Charlton complex with Hydrologic Soil Group Rating (HSGR) C (low infiltration), Montauk fine sandy loam with HSGR C, and Charlton-Hollis-Rock outcrop complex with no assigned HSGR, though a rating of HSGR D has been assumed by the applicant (very low infiltration potential).

Test pits conducted at the Site indicate that subsurface soils are generally loamy sand or sandy loam. An infiltration rate of 2.41 in/hr has been utilized in the modelling of the Sand Filter, based on the Rawls Rate for loamy sand. Groundwater was identified in the test pits based on the presence of redoximorphic features at depths ranging from 22" to 34" below grade.

Groundwater recharge is proposed via a new Sand Filter. The project is expected to provide a recharge volume in excess of what is required. BETA notes that Sand Filters do not typically receive a credit for groundwater recharge; however, due to the lack of an underdrain in the proposed system, the Sand Filter is anticipated to function similarly to an infiltration basin.

Calculations have been provided indicating that the Sand Filter will drawdown within 72 hours.

SW25. Recommend a condition that an agent of the town observe native soils after excavation for basins to confirm design assumptions.

DPE: A note has been added as number 11 to the "Grading, Drainage, and Utility Notes" on the Notes and legend (sheet 3 of 11) that mentions, "An agent of the town shall observe native soils after excavation for basins to confirm design assumptions".

BETA3: Comment addressed.

SW26. The NRCS soil classification of HSG C conflicts with the loamy sand encountered in test pits near the sand filter. BETA recommends infiltration tests be conducted to verify infiltration rate.

DPE: The test pit in the sand filter was taken to determine the soils under the ground for infiltration in that exact spot. Regarding the comment number 27 below, the proposed sand filter infiltration rate will be adjusted to 2 in/hr. If there was an infiltration test conducted at this location, the infiltration rate for the sand filter would not change as the soil infiltration rate would not be taken into account in the design calculations.

BETA3: Comment addressed.

- SW27. In accordance with Volume 2, Chapter 2, page 59 of the handbook, the design infiltration rate for sand filters is 2.0 inches/hour. The design is based on a rate of 2.41 inches /hour and should be adjusted.

DPE: The infiltration rate in the sand filter node (114) has been adjusted to 2 inches/hour.

BETA3: Comment addressed.

- SW28. Test pits were completed on May 23, 2024, outside of the time of probable high groundwater elevation (November to April). (§153-15.A.9). The Sand Filter will have inadequate separation to groundwater if groundwater levels rise during the seasonal high period. Provide mounding analysis to demonstrate that the sand filter will function if the actual separation to groundwater is less than 2 feet.

DPE: Note that the soil evaluations determine the seasonal high groundwater table not through direct measurement only. The soil morphology and evidence of mottling is observed within the test pits in order to determine evidence of previous high groundwater elevation. The properties and color of the soil determine if there was historically any water at a certain elevation. The test pit is not looking only for the current presence of water but the evidence that water was previously present.

Using DTH 24-6 as an example, the current groundwater seepage depth observed at the time of excavation was 77 inches deep, however the soil morphology indicated our seasonal high groundwater table should be established at 31 inches in depth.

As described below, the average separation between the bottom of sand filter and groundwater table is approximately 3.1 feet.

BETA3: Based upon the 2 test pits 24-6 & 9, ESHGW is approximately El. 355.4. The detail for the sand filter does not indicate the depth of sand in the filter. However, in accordance with the standards, the minimum depth is 18". Thus, the bottom of the sand filter is at Elevation 357.0, which is only 1.6' above estimated seasonal high groundwater. Since the design depends upon the efficacy of the filter to meet both Standard 3 and the Town of Franklin Bylaw standards for phosphorous removal, BETA recommends that a mounding analysis be conducted to verify that the groundwater levels will not rise into the system.

DPE2: Note that the soil evaluations determine the seasonal high groundwater table not through direct measurement only. The soil morphology and evidence of mottling is observed within the test pits in order to determine evidence of previous high groundwater elevation. The properties and color of the soil determine if there was historically any water at a certain elevation. The test pit is not looking only for the current presence of water but the evidence that water was previously present.

Using DTH 24-6 as an example, the current groundwater seepage depth observed at the time of excavation was 77 inches deep, however the soil morphology indicated our seasonal high groundwater table should be established at 31 inches in depth.

As described below, the average separation between the bottom of sand filter and groundwater table is approximately 3.1 feet.

BETA4: Rather than debate the definition of Estimated Seasonal High Groundwater, BETA recommends that a cutoff trench be placed upgradient of the sand filter at invert elevation 353.0 routed into the detention basin. This will ensure that the sand filter has sufficient height above groundwater and does not need a mounding analysis.

- SW29. Provide 2' separation to groundwater from the bottom of the sand filter sand layer, rather than from the bottom of pond. The sand layer is necessary to achieve the required storage volume for water quality and therefore must remain unimpeded by groundwater during storm events. BETA notes that a seasonal high GW elevation of 354.42' is listed on the table on Sheet 9, but an elevation of 355.42' is more accurate based on test pit DTH 24-6.

DPE: The GW elevation has been corrected in the table on sheet 9 to reflect the 355.42' elevation. However, based on consistent water tables downgradient from the sand filter, this represents the MINIMUM groundwater separation, at the high side existing grade of 358. At the low side existing grade of 355, the seasonal high groundwater table is at elevation 352.42. Therefore, the separation from bottom of sand to groundwater on the low side will be 4.58 feet, and average depth to groundwater over the bottom of the system is $(4.58+1.58)/2 = 3.08$ feet.

BETA3: See SW28 above.

DPE2: See SW response above.

BETA4: See SW28 above.

- SW30. The detention basin grading includes cuts as great as 6 feet below existing grades which is greater than the 34" groundwater depth encountered in this area. Revise detention basin design such that the basin bottom is above the estimated seasonal high groundwater.

DPE: The Detention basin has been altered to bring the bottom elevation to 348.00 which is not within the groundwater table. The detention pond has been altered to recover the volume that was lost from the elevation change, and to step the bottom in order to minimize depth of excavation from existing grade and towards groundwater elevation accordingly.

BETA3: No further comments.

- SW31. Include low permeability core in embankment for sediment forebay and sand filter to prevent seepage through the berm.

DPE: The low permeability core in embankment has been added to the sediment forebay which is shown on the Pond Complex Details plan (sheet 9 of 11)

BETA3: Comment addressed.

- SW32. Revise outlet from sediment forebay to be at the bottom of the forebay to prevent permanent ponding in the forebay.

DPE: The goal of the sediment forebay is to capture coarse sediment and is expected to contain water during and after storms. The way to capture sediment is to create an outlet for the forebay

higher than where the sediments will collect and settle within the forebay. The water within the forebay will evaporate or naturally infiltrate over time leaving sediment to be removed during maintenance.

BETA3: BETA recommends that a stone check dam be used as the forebay outlet rather than form a permanent basin. This would store the sediment volume but will allow the forebay to dewater between events.

DPE2: Annotation for a stone check dam has been added to the Pond Complex BMP System on Sheet 9 as well as a typical detail.

BEAT4: No further comments.

SW33. Provide drawdown calculations for the Detention Basin to confirm that the proposed low flow outlet can fully drain the basin within 72 hours.

DPE: As per page 80 of the Stormwater Report, the outflow from the Detention Basin reaches 0 cfs (no outflow at approximately Hour 26 of the storm event.

BETA3: No further comments.

SW34. Revise drawdown calculation for Sand Filter to use a drawdown rate matching the hydroCAD model, as drawdown will be restricted by native soils rather than the proposed sand layer. Per the MA Stormwater Handbook, V2C2 Page 59, design the sand filter to drawdown within 24 hours or less.

DPE: The pond will drain down within 24 hours for the water quality storm as shown on pages 102 & 103 of the submitted stormwater report.

BETA3: No further comments.

TOTAL SUSPENDED SOLIDS (STANDARD NUMBER 4): For new development, stormwater management systems must be designed to remove 80% of the annual load of Total Suspended Solids (TSS).

The Project includes the following treatment trains:

Treatment Train	SCM 1	SCM 2	Infiltration BMP	TSS Removal %
A	Deep Sump Catch Basin	Sediment Forebay	Sand Filter	80%
B	Deep Sump Catch Basin	None	Water Quality Unit	??%

The project has been designed to provide at least 80% TSS removal for treated impervious areas within the Sand Filter catchment.

Per §153-16, the project is required to either retain the 1.0 inch water quality volume or achieve 90% TSS removal and 60% total phosphorus removal. The narrative indicates that the intent is to retain the 1.0 inch water quality volume via the proposed Sand Filter. Treatment will also be provided via the water quality unit. The sand filter has been sized to treat the required water quality volume for its catchment area. However, no calculations have been provided for the water quality unit.

A Long Term Pollution Prevention Plan is included in the O&M Plan.

SW35. Provide TSS removal calculations for both treatment trains.

DPE: The TSS removal for the site meets the proposed pond treatment requirements. The existing detention pond and Louise Drive roadway have previously been approved for the treatment requirements. Although the existing detention pond was designed to handle the full extents of the roadway, the proprietary device (WQ-DMH-17), Downstream Defender, provides additional treatment over that proposed during the originally approved pond design. The proposed pond complex and associated BMPs have been calculated to meet the TSS and phosphorus removal requirements under current regulations.

BETA3: Provide a summary of the initial subdivision design which documents the watershed area and TSS Removal rate for the original design.

DPE2: In conjunction with the Town, no original subdivision design reports were uncovered which documents the original design of the stormwater system. As described above in the SW18 and SW19 responses, the applicant proposes to capture as much stormwater is feasible and to treat in conformance with current standards, despite gaining approval for this portion of the roadway under previous less stringent standards.

We have provided an updated Operation & Maintenance manual for the existing detention basin for the purposes of ongoing maintenance, and we are open to a condition for regular reporting to the Conservation Commission at the time of yearly maintenance activities occurring.

BETA4: Since all the runoff from this portion of the subdivision will flow to the same resource area, no further comments.

SW36. Revise TSS removal worksheet to exclude pretreatment devices; the 80% TSS removal provided by the sand filter is inclusive of required pretreatment.

DPE: The TSS removal worksheet has been edited to exclude the sediment forebay, as per the Massachusetts Stormwater Handbook. The resulting calculation results in 93% TSS removal.

BETA3: The dry detention basin does not meet the design requirements for an extended dry detention basin and therefore is not entitled to a 50% TSS Removal rate. The overall rate for this treatment train is 85%. Correct the sheet accordingly.

DPE2: We have resized the bottom outlet of the detention basin to 1.5 inches from 6 inches, in order to retain the 2-year storm event for a period of 24 hours minimum. See the Hydrograph table under the 2-year storm printouts in A3.2.2 of the Stormwater Report.

BETA4: The dry detention basin does not contain the 2-year storm for 24 hours minimum. BETA recommends that the low level outlet configuration be modified to extend the retention period beyond hour 36 of the rainfall event.

SW37. Revise TSS removal worksheet to exclude the detention basin; stormwater runoff treated by the sand filter will be infiltrated into the ground and therefore additional treatment in the detention basin is not possible.

DPE: Following the diversion and infiltration of the lower flow storm events, a majority of runoff will be diverted through the detention basin. The detention basin TSS removal calculation accounts for the decrease in load following outflow from the sand filter. There will be only 15% of the sediment load remaining for the overflow from the sand filter, and the detention basin will

remove 50% of this load, for a remaining sediment load of approximately 7.5% from the beginning stormwater concentration.

BETA3: See SW36 above.

DPE2: See SW36 above.

BETA4: See SW36 above.

SW38. Provide water quality calculations for WQ-DM-17 demonstrating that it will remove at least 90% of TSS and 60% of total phosphorus (§153-16.A.1(a))

DPE: The existing detention basin was originally permitted to treat runoff associated with the contributing paved area including the entirety of Louise Drive proposed to be constructed under this application. A majority of the roadway and offsite watershed are routed to the new BMP series which will remove a minimum of 90% TSS and 60% phosphorus, with runoff unable to be routed to this BMP series due to wetland and topography constraints will tie into the existing drainage system already designed to account for this stormwater. The Downstream Defender is a “belt-and-suspenders” approach to additional treatment prior to runoff reaching the existing detention pond. The Downstream Defender has been third-party tested to remove 50% TSS. The letter stating this has been attached to the Stormwater Report in Appendix A3.4.

BETA3: See SW35 above.

DPE2: See response to SW35 above.

BETA4: By providing the new stormwater features, the applicant has essentially ensured that the flows through the existing features will remain at their current reduced levels. BETA agrees that the constraints imposed by the grades and wetlands do restrict the ability of the applicant to provide additional measures. Providing the proprietary separator will raise the treatment level provided by the applicant to 58.75%. BETA believes that this level of treatment in conjunction with the existing facilities will provide the overall treatment intended by the regulations. No further comment.

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 project includes residences and a private roadway which are not typically considered LUHPPLs – **standard not applicable.**

CRITICAL AREAS (STANDARD NUMBER 6): *Stormwater discharges to critical areas must utilize certain stormwater management BMPs approved for critical areas.*

The project is not located in a critical area – **standard not applicable.**

REDEVELOPMENT (STANDARD NUMBER 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.*

The project does not qualify as a redevelopment – **standard not applicable.**

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, a Notice of Intent will be required to file with EPA including development of a Stormwater Pollution Prevention Plan (SWPPP). Erosion control measures are depicted on the plans including compost sock, construction entrance, and inlet protection. A draft SWPPP has been provided with the submission.

SW39. Revise SWPPP to include the name, address, and telephone number of owner, civil engineer, and person responsible for implementation of the plan (§152-2.A).

DPE: The SWPPP includes the name, address, and telephone number of the owner and civil engineer. The person responsible for implementation of the plan has not yet been awarded. The following verbiage has been added to sheets 1, 3, & 4 of the SWPPP, "Contractor to fill out this section after the contract is awarded and before any construction begins."

BETA3: Comment addressed.

SW40. Provide perimeter controls along the stream near the stream crossing.

DPE: Perimeter controls have been added along the stream near the stream crossing.

BETA3: Comment addressed.

SW41. Remove silt fence from the perimeter controls section of the SWPPP. Silt fence is not permitted as a perimeter control per the Town of Franklin BDPG.

DPE: Silt fence has been removed from the perimeter controls section of the SWPPP on page 15 and straw wattle has replaced as the perimeter control default.

BETA3: In accordance with the Massachusetts erosion control standards, a 12" mulch log is required and should be used for perimeter control.

DPE2: The sediment control detail on Sheet 11 has been updated to reflect MULCH logs in particular, and language has been updated on Sheet 5 to clarify perimeter controls will be mulch logs.

BETA4: No further comments

SW42. Provide seed mix and schedule for temporary/permanent stabilization, including how soon after disturbance these measures will be implemented. The SWPPP references "site stabilization" notes in the Site Plans, but BETA could not locate the referenced notes.

DPE: The site stabilization notes have been added to the "Sequence And Estimated Dates Of Construction Activities" notes on the Notes and Legend (sheet 3 of 11)

BETA3: Comment addressed.

SW43. Provide approximate location(s) of soil/material stockpile area on plans with erosion and sedimentation control measures to limit transport of materials. Areas should be located outside of buffer zones to the extent practicable.

DPE: The soil/material stockpile area is on the plans and the erosion control has been added to the plans on the Soil Erosion Sediment Control Plan, (sheet 5 of 11).

BETA3: Comment Addressed.

SW44. Clarify location of temporary sediment basins and swales identified in the SWPPP. A reference is made to the plans in Appendix A, but no site maps have been provided. If the proposed basin,

sand filter, and sediment forebay are used as construction-period erosion controls, they must be thoroughly cleaned and restored prior to the end of construction.

DPE: The language on page 19 of the SWPPP has been altered to include. "The project is not intending to provide sediment traps or basins. In the case that construction is sequenced in such that a concentration of stormwater results from alterations, the traps may be put online as described below. SWPPP will be actively maintained by the SWPPP specialist during construction and any changes will be tracked."

BETA3: The upper watershed area which will produce runoff crossing the proposed activity area is substantial. BETA recommends that a series of berms and/or swales be installed to prevent runoff from crossing the construction area.

DPE2: As shown on the revised stormwater model, the upgradient flow reaching the construction area has been decreased substantially. A majority of this watershed will now flow through the proposed stream culvert and not run onto the construction site or contribute to the proposed stormwater system.

We have limited the run-on towards the proposed roadway to the greatest extent possible given the physical constraints of the site.

BETA4: BETA recommends that a note be added to Sheet 7 which indicates where the grades will be modified to direct runoff from the upper watershed through the culvert specifically along the edge of the right of way from Station 4+80 back to the culvert, and at the back of Lot 13.

SW45. Revise sequencing plan to exclude infrastructure not applicable to the project, such as the underground infiltration system. Ensure that the detention basin, swale, and water quality unit are included in construction sequencing.

DPE: The sequencing in the SESC has been edited to remove the underground infiltration system and include the detention basin, swale, and water quality unit. Numbers 3, 9, and 12 of Phase 1A have been edited.

BETA3: No further comments.

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.

SW46. Indicate the Owner(s) of the stormwater management system, the names, addresses, and phone number of the person(s) responsible for operation and maintenance, and the person(s) responsible for financing maintenance and emergency repairs (§153-18.A & B). The provided O&M Plan indicates that an "Owners Association" will be created upon completion of construction, but such an association would presumably require future residences to be sold and occupied. An Owner who can meet the requirements of the Maintenance Agreement outlined in §153-18 should be identified to account for the event in which an "Owners Association" cannot be immediately formed at the completion of construction.

DPE: The current owner of the land shall be the person responsible for the operation and maintenance of the properties until such time that an owners association is created. This verbiage has been added to the O&M plan on page 2.

BETA3: Comment addressed.

SW47. Provide signature of owner on the O&M Plan (§153-18.B.5).

DPE: As this signed document commits the owner to maintaining a specific stormwater system not approved at this time, this owner signature will be provided on the O&M plan following approval of the project. We agree this can be a condition of approval.

BETA3: No further comments.

SW48. Include provision in the O&M Plan requiring a documentation submittal to the DPW confirming when maintenance has been satisfactorily completed (§153-18.B.6).

DPE: At the end of each checklist in the O&M plan report, there has been a checklist item added stating, "Submission of checklist/tables to the Department of Public Works at the end of each checklist completion to confirm that maintenance has been satisfactorily completed". Can be seen on sheets 13 17, 24, 27, 32, 35, 38, & 40.

BETA3: No further comments.

SW49. Revise the "transfer of ownership" section to include the requirements outlined in §153-18.D.

DPE: The following requirements have been added into the O&M Report.

(1) "The owner(s) of the stormwater management system must notify the Director of changes in ownership or assignment of financial responsibility."

(2) "The maintenance schedule in the maintenance agreement may be amended to achieve the purposes of this bylaw by mutual agreement of the Director and the responsible parties. Amendments must be in writing and signed by all responsible parties. Responsible parties shall include owner(s), persons with financial responsibility, and persons with operational responsibility."

BETA3: No further comments.

SW50. Identify proposed snow storage areas on the plans and the O&M Exhibit.

DPE: Snow Storage areas have been added to O&M plan and the plan set on the Site Plan (sheet 6 of 11).

BETA3: No further comments.

SW51. Include operation and maintenance requirements for the conveyance swale and the stream crossing and add to maintenance checklist.

DPE: An operation and maintenance checklist has been added detailing the requirements for the conveyance swale, (Riprap-Lined Channel or Swale) and the stream crossing, (wetland crossing).

BETA3: Comment addressed.

SW52. Verify that the detention basin can be safely access by a maintenance vehicle. Proposed grading for the sediment forebay and sand filter may impede access to the basin.

DPE: There has been a reinforced turf assess path added to the plans which is shown on the Pond Complex Details plan (sheet 9 of 11)

BETA3: Access should be extended to the entire north side of the basin. Comment remains.

SW53. Clarify if a residence will be constructed on Lot 16 and evaluate the need for stormwater easements within this lot to access the pond complex.

DPE: Yes, there is the intention to have a residence constructed on Lot 16. There will be a proposed future drainage easement and reinforced turf maintenance access path for access to the pond complex. This is shown on the Site Plan (sheet 6 of 11).

BETA3: No further comment.

SW54. Clarify operation and maintenance responsibilities for the existing detention pond and whether the owners of the proposed Lot 13 will share maintenance responsibility due to the proposed pipe connection to the Byron's Way drainage system.

DPE: The HOA, not the owners of lot 13, will maintain existing and proposed BMPS. The Operation & Maintenance documents will be completed, signed and filed with the town following approval – as noted in response #47, we are in agreement of this being a condition of approval.

BETA3: No further comments.

ILLICIT DISCHARGES (STANDARD NUMBER 10): *All illicit discharges to the stormwater management system are prohibited.* An unsigned Illicit Discharge Compliance Statement was not provided with the submission. The narrative indicates that the statement will be provided prior to the discharge of any stormwater to post-construction BMPs.

SW55. BETA recommends that the signed illicit discharge compliance statement be provided during the permitting process.

DPE: The signed illicit discharge compliance statement will be provided following approval and prior to discharge of stormwater to the BMP series, as required/allowed by the MassDEP.

BETA3: BETA will defer this to the Commission.

REVIEW SUMMARY

Based on our review of the NOI submittal and Project plans, the Applicant is required to provide the Conservation Commission with additional information to describe the Site, the work, and the effect of the work on the interests identified in the Act and the Bylaw. In addition, design revisions are required to demonstrate compliance with the Massachusetts Stormwater Standards.

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

Ms. Breeka Lí Goodlander, Agent

March 27, 2025

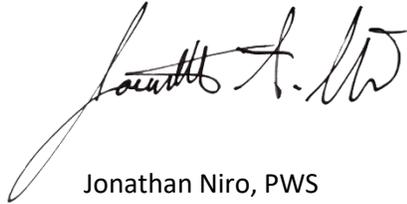
Page 35 of 35

Very truly yours,

BETA Group, Inc.



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