

Ms. Breeka Li Goodlander, Agent  
Town of Franklin Conservation Commission  
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Franklin MA, 02038

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Date: August 31, 2022

Re: MassDEP File No. 159-1256  
Beaver Street Interceptor Replacement & Pump Station Construction  
Notice of Intent Peer Review – Letter #2 Response

Dear Ms. Goodlander,

Arcadis U.S. Inc. (Arcadis) has reviewed the response letter provided by BETA Group, Inc. (BETA) in their review of documents for the project entitled: **Beaver Street Interceptor (BSI) Replacement & Pump Station Design** in Franklin, Massachusetts. This response letter is intended to provide a response to those findings, comments, and recommendations. The response from Arcadis can be found in italics.

## Administrative and Plan Comments

### PLAN AND GENERAL COMMENTS AND RECOMMENDATIONS

- A3. A Massachusetts Professional Land Surveyor (PLS) should stamp the existing conditions plans.

*ARCADIS: PLS stamped existing conditions plan set is provided as an attachment to this letter.*

*BETA2: BETA did not observe a PLS stamp on the revised plan set; a Special Condition requiring the submission of an existing conditions plan stamped by a PLS prior to construction is recommended.*

***ARCADIS 2: An existing conditions plan set with a PLS stamp has been submitted.***

- A5. Provide references to all relevant Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRMs) that depict the flood hazards constraining the Project Corridor.

*ARCADIS: Flood zones affecting the project area have been added to the plan set.*

*BETA 2: References to FIRM panels have not been provided, and the flood zones with established base flood elevations have not been plotted by elevation. BETA recommends a Special Condition requiring the submission of plans with accurate flood zone depictions prior to construction. In addition, BETA recommends including a finding that the boundaries of BLSF are not approved under this filing.*

***ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.***

- A6. Resource Area impacts are not depicted on the plans. BETA recommends producing Resource Area impact plans depicting, with hatching or another appropriate method, where Resource Area impacts will occur. This should include temporary and permanent impacts for all Resource Areas Subject to Protection under the Act and the Bylaw.

*ARCADIS: Resource areas have been added to the plan set.*

*BETA 2: BETA cannot verify the Project's Resource Area impacts based on the information submitted, as the Project plans do not depict the Resource Area impacts. BETA defers to the Conservation Commission on whether they wish to require revised Project plans quantifying and depicting permanent Resource Area impacts. This could be included as a Special Condition.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

- A8. The Project may require the submission of a 401 Water Quality Certification (WQC). Although a majority of impacts are temporary, there will be a temporary loss of over 5,000 square feet of BVW. BETA recommends that the Applicant consider reducing work areas and associated impacts where feasible.

*ARCADIS: Per 314 CMR 9.03 Activities Not Requiring an Application, a 401 WQC is not required. The project does not permanently impact more than 5,000 square feet of BVW, isolated vegetated wetlands, or land under water. Additionally, 314 CMR 9.03 (3) states that an application is not required for dredging and dredged material disposal of less than 100 cubic yards, provided that a Final Order of conditions has been issued and the proposed work is not subject to 314 CMR 9.04 and the work is not subject to an individual 404 permit by the Corps of Engineers.*

*BETA 2: 314 CMR 9.03 does not specify that the 5,000-square foot threshold must be permanent loss. The Project, as currently proposed, will result in 16,324 square feet of impacts to BVW. The Applicant should ensure that the supplemental/revised information has been submitted to MassDEP. BETA also recommends a Special Condition requiring the Applicant to either provide proof of 401 approval or documentation from MassDEP stating that a 401 WQC is not required prior to construction.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

## **Wetland Resource Areas and Regulatory Review**

### **RESOURCE AREA BOUNDARY COMMENTS AND RECOMMENDATIONS**

- W1. A BETA Wetland Scientist performed a site visit to assess existing conditions and review Resource Area flagging on July 22, 2022. Although numerous flags could not be located in the field, observed flagging and a comparison of the Project Plans to visual topographic observations were sufficient for BETA to determine that the flagging placed in the field appears to accurately delineate Bank/Mean Annual High Water (MAHW) and BVW along the Project Corridor. Due to missing Resource Area flagging at the time of review, BETA recommends that the Conservation Commission include a finding in the Order of Conditions (OOC) stating that the Resource Area boundaries are approved for this filing only. BETA also recommends a Special Condition requiring all Resource Area flags to be reestablished prior to construction.

*ARCADIS: See Sheet G-5, Environmental Note 1. Contractor shall delineate limit of wetlands along the project route prior to any construction activities and maintain wetlands flags throughout the duration of the project.*

*BETA2: Acknowledged.*

**ARCADIS 2: No action required.**

- W2. Although Resource Area flagging generally appeared accurate in the field, BETA noticed discrepancies with Resource Area flagging as depicted on the Project Plans, particularly along Grove Street. The

Project Plans depict the existing exposed sewer pipe within the C5 Series BVW (Sheet C-36); however, BETA observed this pipe to be located upgradient of the flagged BVW. The Applicant should clarify this discrepancy, as either the Resource Area flags or the sewer pipe may be misrepresented on the Project Plans.

*ARCADIS: This discrepancy will be addressed during re-flagging prior to construction.*

*BETA2: The potential existing conditions discrepancy has not been resolved and may result in an inaccurate depiction of the Project in this area. Accordingly, BETA cannot verify the Resource Area impacts in this location. BETA recommends including a Special Condition requiring the Applicant to submit revised plans for the Conservation Commission's/Agent's review prior to construction to determine whether the impacts have increased.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

- W4. The boundary of BLSF (the 100-year floodplain) should be depicted on all Project Plans by elevation and any Regulatory Floodways should be shown.

*ARCADIS: The boundary of the BLSF as well as Regulatory Floodways have been included on the attached Project Plans.*

*BETA2: See BETA2 response to Comment A5.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

## **CONSTRUCTION COMMENTS AND RECOMMENDATIONS**

- W8. Given the nature of a long, linear project surrounded by numerous Resource Areas, access and dewatering may be difficult and will require planning. Impacts to Resource Areas associated with access should be quantified. BETA offers the following specific comments related to access and dewatering:

- a. The stream crossing depicted on Sheet C-28 consists of wooden boards and is likely only suitable for pedestrian use. Provide a means for equipment to access this section of the Project Corridor and disclose whether additional Resource Area impacts are required. Based on existing conditions observations, temporary stream crossings may be required.

*ARCADIS: See Sheet C-28, Note 4. Where temporary access for materials and equipment is needed at existing stream and/or water course crossings, contractor shall submit a detailed plan for approval by the engineer and all authorities having jurisdiction. Detailed plan shall include, but is not limited to, method of crossing water course, design of temporary bridge and/or wetlands mats, method of maintaining existing flow, sequence of construction, method of temporary bridge and/or wetlands mats removal, and site restoration.*

*BETA2: The Applicant has included callouts for stream bypass pumping at this location and appears to have included temporary impacts resulting from temporary crossing in their assessment of Resource Area impacts. BETA recommends a Special Condition requiring a Site-specific access plan to be submitted to the Conservation Commission prior to construction for this location.*

**ARCADIS 2: Will comply. This will be handled and coordinated with the Conservation Agent moving forward.**

- b. The Applicant provided information regarding dewatering in the Project Specifications and the Project Plans. BETA recommends a Special Condition require the submission of a site-specific dewatering plan prior to construction for work within BVW.

*ARCADIS: See Sheet C-5, Environmental Note #6. Where dewatering operations is required within the limit of delineated wetlands, contractor shall submit a site specific dewatering plan for approval by the engineer and the Town of Franklin Conservation Agent.*

*BETA2: Acknowledged. BETA recommends including this as a Special Condition.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

## MITIGATION COMMENTS AND RECOMMENDATIONS

- W10. Clarify how cleared brush (both native and non-native) will be managed during sewer easement maintenance activities. The Applicant should define whether “clearing” will involve grubbing or solely mechanical removal of above-ground vegetation.

The Applicant should provide, if applicable, clear demarcation of upland areas where grubbing versus above-ground brush removal will occur. Areas of proposed grubbing should be stabilized with a native seed mixture.

*ARCADIS: See Sheet C-5 Environmental Notes #8,9,10,11, 21*

*8. Contractor shall stake out limits of selective cutting prior to starting work. Contractor shall contact the appropriate state and/or municipal agencies and the engineer for field inspection limits of selective cutting and identification of any trees to remain or be removed prior to starting any selective cutting.*

*9. Selective cutting includes the removal and disposal of trees, shrubs, vegetation and logs. Root or stump removal and soil disturbance should be minimized within regulated areas.*

*10. Where additional ground stabilization, included but not limited to addition of crushed stone, is required in regulated areas, contractor shall install geotextile fabric under crushed stone. Contractor shall restore any areas where ground stabilization is established by removal of geotextile fabric and all additional material and seed area in accordance with the contract document. No ground stabilization is permitted within limit of delineated wetlands. Contractor shall utilize wetlands mats as necessary to gain access within delineated wetlands. Wetlands mats are not to be left in place for longer than 30 days.*

*11. Contractor shall minimize any activities located within the driplines of existing trees to remain. Trees to remain shall be determined by the Town.*

*21. Where tree that remain may possibly be defaced, bruised, injured or damaged by the contractor's equipment or other operations, adequate protection shall be made around them. Monuments and markers shall be protected similarly before beginning operations near them. Any trees that are damaged shall be replaced in-kind, where directed by engineer.*

*BETA2: The Applicant has indicated that there may be potential for full removal of vegetation, including root systems. In addition, selective tree removal will likely be required at the Town's discretion. BETA*

*recommends a Special Condition requiring erosion controls to be installed downgradient of any grubbing and requiring that any area of soil disturbance be restored to existing grade and stabilized with a native seed mix as approved by the Conservation Commission and/or their Agent.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

- W11. Areas of BVW where work is proposed will result in the removal of woody species. For example, the area within BVW on Sheet C-9 will require removal of young arrowwood (*Viburnum dentatum*) and red maple (*Acer rubrum*). The Applicant should propose a restoration plan within appropriate areas of BVW. It is recommended that detritus (logs, branches, etc.) be retained to supplement plantings and application of a wetland tolerant, native seed mixture. The restoration plan should also establish a metric for successful restoration and provide a general sequencing of restoration activities.

*ARCADIS: See Sheet C-5, Environmental Notes #11 & 21*

*11. Contractor shall minimize any activities located within the driplines of existing trees to remain. Trees to remain shall be determined by the Town.*

*21. Where tree that remain may possibly be defaced, bruised, injured or damaged by the contractor's equipment or other operations, adequate protection shall be made around them. Monuments and markers shall be protected similarly before beginning operations near them. Any trees that are damaged shall be replaced in-kind, where directed by engineer.*

*BETA2: BETA recommends a Special Condition requiring all temporarily impacted BVWs to be restored in compliance with the 75% vegetative coverage requirement of 310 CMR 10.55(4)(b).*

**ARCADIS 2: Noted. This will be coordinated with the Conservation Agent moving forward.**

- W12. Provide a brief long-term vegetation maintenance plan for the sewer easement identifying methods and timing of maintenance. While exempt under the Act, it is presumed that public utility easement maintenance is not exempt under the Bylaw.

*ARCADIS Per discussions with the Conservation Agent, a vegetation maintenance plan is not required.*

**ARCADIS 2: The Town of Franklin Department of Public works has an existing vegetation maintenance plan on file for the Beaver Street Easement.**

## **WPA PERFORMANCE STANDARDS COMMENTS AND RECOMMENDATIONS**

### **Bank (310 CMR 10.54)**

- W13. The NOI application does not discuss Bank impacts; however, there will be impacts to Bank associated with work crossing intermittent and perennial streams. Quantify/qualify all Bank impacts and provide a narrative demonstrating how Performance Standards are being met, and to what degree.

*ARCADIS: WPA Performance standards have been included in the revised NOI narrative.*

*BETA2: BETA recommends a Special Condition requiring the restoration of Banks subject to temporary disturbance to existing conditions in accordance with the methods proposed by the Applicant, and in a manner that will protect the stability of Bank and the water quality of the adjacent ground/surface waters.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

- W14. The Applicant proposes to replace an 18-inch steel pipe that carries a perennial tributary to Mine Brook with an 18-inch high-density polyethylene (HDPE) pipe. This work is subject to the stream crossing replacement provisions of 310 CMR 10.53(8); therefore, the Applicant should provide a summary of compliance with the Massachusetts Stream Crossing Standards and determine if improvements can be made to this crossing. Improvements can include but are not limited to providing a larger openness ratio and installing a larger culvert with embedment. Based on recent permitting experiences, BETA understands that MassDEP expects applicants proposing culvert replacements that do not meet the Stream Crossing Standards to provide clear evidence as to why it is not possible to make improvements to the crossing.

*ARCADIS: This item is still in design. The culvert will be replaced and designed in accordance with the Massachusetts Stream Crossing Standards.*

*BETA2: Compliance with the Stream Crossing Standards cannot be assessed at this time. BETA recommends a Special Condition requiring the Applicant to submit a culvert replacement plan that meets the Stream Crossing Standards to the maximum extent practicable (in accordance with 310 CMR 10.53(8)) to the Conservation Commission prior to construction, at which point the Conservation Commission and/or their Agent may determine whether an Amended OOC is required.*

**ARCADIS 2: This item is still under design and will be submitted under separate cover.**

**Bordering Vegetated Wetland (310 CMR 10.55)**

- W17. Based on the BVW impacts provided, it appears that the Project will result in the loss of 72 square feet of BVW. Although the Project is being filed as a Limited Project, the Applicant is required to meet the Performance Standards to the extent possible. Provide BVW replication or justify why it is not feasible.

*ARCADIS: In lieu of wetlands impact replication, we propose plantings of a buffer area plant along the impacted wetlands area on Sheet C-36. Refer to Sheet C-36 Note 3.*

*Note 3 – Contractor shall install six (6) blueberry bushes along the perimeter of the existing delineated wetlands, species, size, and location of the blueberry bushes shall be approved by the Town of Franklin Conservation Commission. Blueberry bushes shall be installed during approved growing season of the approved species. Contractor shall water and maintain blueberry bushes until they have been established and the Town of Franklin Conservation Commission has approved their installation.*

*BETA2: BETA defers to the Conservation Commission on this matter, as the Issuing Authority ultimately determines whether the Applicant has justified their compliance with Performance Standards to the maximum extent practicable when proposing impacts associated with a Limited Project. BETA recommends a special condition requiring that the proposed blueberry bushes be highbush blueberry (*Vaccinium corymbosum*) and, should the Project be approved, include a finding in the OCC that documents the Site constraints that prevent full compliance with 310 CMR 10.55(4)(b).*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**



## **BYLAW REGULATORY COMMENTS AND RECOMMENDATIONS**

W24. Section 7.14 of the Bylaw Regulations requires replication of any wetland impacts at a ratio of at least 2:1. No replication plans have been provided.

*ARCADIS: In lieu of wetlands impact replication, we propose plantings of a buffer area plant along the impacted wetlands area on Sheet C-36. Refer to Sheet C-36 Note 3.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

W25. The Resource Area impacts noted on the local form do not match those provided on the WPA Form 3. Clarify the Resource Area impacts.

*ARCADIS: Resource Area impacts have been revised and updated in the WPA Form 3, shown on the Project Plans, NOI narrative, and the Resource Area Impact Summary Form.*

*BETA2: The revised impacts are now consistent with the WPA form 3. The Applicant should confirm that all revised materials and impact area quantifications have been submitted to MassDEP.*

**ARCADIS 2: Noted. All revised materials and quantifications will be submitted to MassDEP.**

## **Stormwater Management Review**

### **DEP STORMWATER STANDARDS**

**EROSION AND SEDIMENT CONTROLS (STANDARD NUMBER 8):** Erosion and sediment controls must be implemented to prevent impacts during construction or land disturbance activities. The Project is anticipated to exceed one (1) acre of disturbance and will require the filing of a NOI with the Environmental Protection Agency (EPA), which includes the preparation of a Stormwater Pollution Prevention Plan (SWPPP).

An initial SWPPP has been included with the submission and erosion controls are depicted on the plans. Proposed erosion control measures predominantly include filter sock for perimeter control and catch basin inserts for work within existing roadways.

SW3. As noted in the provided Contract Documents, the Owner will be responsible for preparing and filing the NOI and associated SWPPP with the EPA. The Commission may consider including a condition that requires confirmation of filing with EPA prior to commencing construction.

*ARCADIS: No action needed.*

*BETA2: BETA recommends that the above-referenced Special Condition be included in an OOC.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

SW5. Provide perimeter erosion controls for the proposed site clearing from SMH 21 to SMH 23 (Sheet C-9).

*ARCADIS: Work in this area is trenchless and does not require excavation. Sewer work is internal to the pipes (rehabilitation).*

Ms. Breeka Lf Goodlander, Agent  
Town of Franklin Conservation Commission  
August 31, 2022

*BETA2: BETA recommends a Special Condition to require erosion control barriers to be provided where ground disturbance occurs in areas of vegetative clearing.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

- SW6. Provide perimeter erosion controls on the downgradient limits of work from SMH 24 to SMH 27 (Sheets C-10 & C-11).

*ARCADIS: Work in this area is trenchless and does not require excavation. Sewer work is internal to the pipes (rehabilitation).*

*BETA2: BETA recommends a Special Condition requiring relocation of erosion control barriers closer to limits of work/edge of roadway and extending to the 100-foot Buffer Zone boundary at the existing gravel driveway.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

- SW7. Provide perimeter erosion controls along the downgradient limit of work from SMH 45 to SMH 52 (Sheets C-23 to C-26) when in proximity to wetland resources or drainage features.

*ARCADIS: Work in this area is trenchless and does not require excavation. Sewer work is internal to the pipes (rehabilitation).*

*BETA2: BETA recommends a Special Condition requiring any stockpile areas with erodible materials within 100 feet of Resources Areas to be surrounded by erosion controls.*

**ARCADIS 2: This will be handled and coordinated with the Conservation Agent moving forward.**

Sincerely,  
Arcadis U.S., Inc.



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