

October 13, 2023

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

Re: 147 Pond St - Franklin, MA MassDEP File No. 159-1277 Abbreviated Notice of Resource Area Delineation Peer Review

Dear Ms. Goodlander,

BETA Group, Inc. (BETA) is pleased to provide peer review services for the Abbreviated Notice of Resource Area Delineation (ANRAD) submitted for the parcel located at **147 Pond Street**, further identified as the Town of Franklin Assessor's Parcel Number 259-004-000-000 in Franklin, Massachusetts (the Site). This letter provides BETA's peer review findings and comments as they relate to the Massachusetts Wetlands Protection Act (M.G.L. ch.131, §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 implementing regulations (collectively "the Bylaw").

BETA Wetland Scientists performed Site visits on October 3, 2023 and October 5, 2023 to review the onsite Resource Area boundaries and confirm existing conditions as they relate to the ANRAD filing.

DOCUMENTS REVIEWED

- Abbreviated Notice of Resource Area Delineation entitled *Tri-County Regional Vocational Technical High School, 147 Pond St*; prepared by Samiotes Consultants, Inc. dated August 2023.
- Plan (7 Sheet) entitled *Tri-County Regional Vocational Technical High School, Abbreviated Notice of Resource Area Delineation*; prepared by Samiotes Consultants, Inc.; dated August 2023; stamped and signed by Daniel F. Fleming, II. MA PLS No. 55476.

SCOPE SUMMARY

The Applicant is requesting that the Conservation Commission confirm the following Resource Areas boundaries, as noted in the application materials, and as delineated and depicted on the ANRAD plan:

- 2,609 linear feet (If) of Bordering Vegetated Wetland (BVW); and
- 775 If of Isolated Vegetated Wetland (IVW).

The Applicant is requesting the conformation of the following flag series:

- BVW A1 to A30;
- BVW B1 to B40;
- IVW C1 to C12;
- BVW D1 to D17;
- BVW E1 to E9;
- BVW F1 to F25; and
- IVW G1 to G13.

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ADMINISTRATIVE REQUIREMENTS

The following provides an assessment of the plans in light of generally accepted existing conditions plan standards and the applicable plan requirements under Section 7.18 of the Bylaw Regulations:

| Table 1 – | ANRAD | Plan | Requirements |
|-----------|-------|------|--------------|
|-----------|-------|------|--------------|

| Plan Requirements | Yes | No |
|--|--------------|-------------------|
| North Arrow (with reference) | \checkmark | |
| Registered PLS Stamp | \checkmark | |
| Assessors' Reference | \checkmark | |
| Abutting Property Assessors' Reference | | ✓ (Comment W1.a.) |
| Survey Benchmark | \checkmark | |
| Existing Conditions and Topography Sourced with date of survey | \checkmark | |
| Topography/Contours | \checkmark | |
| Lot Line Surveyed | | ✓(Comment W1.c.) |
| Accurate Plan Scale | \checkmark | |
| Resource Areas Identified and Labeled (including Buffer Zones) | | ✓ (Comment W1.b.) |

EXISTING CONDITIONS AND ONSITE RESOURCES

The 59.96-acre Site consists of one (1) parcel identified along the eastern side of Pond Street. The Site is bounded to the north and east by residential homes, to the west by Hilltop Road and residential homes, and to the south by commercial businesses and residential homes. The Site is currently improved by a school identified as Tri-County Regional Vocational Technical High School, paved driveways, paved parking lots, a solar array, various sports fields, and lawn areas. The remainder of the Site consists of mixed hardwood and softwoods upland vegetation, including but not limited to Eastern white pine (Pinus strobus), red maple (Acer rubrum), red oak (Quercus rubra), and black cherry (Prunus serotina). Wetland and stream complexes are present within portions of these vegetated areas. Topographic relief at the Site generally follows a west-to-east orientation.

MassGIS environmental data layers mapped within or near the Site include the following:

| Mapped Resource On or Within Proximit | y t |
|---------------------------------------|-----|
| | |

Table 3 – GIS-Mapped Areas

| Mapped Resource On or Within Proximity to the Survey Area | Yes | No |
|---|-----|--------------|
| Area of Critical Environmental Concern | | ~ |
| NHESP Certified Vernal Pool | | ~ |
| NHESP Potential Vernal Pool | | ~ |
| NHESP Estimated Habitat of Rare Wildlife | | ~ |
| NHESP Priority Habitat of Rare Species | | \checkmark |
| Outstanding Resource Waters | | ✓ |
| FEMA Floodplain | | ~ |
| Surface Water Protection Area (Zone A, B, or C) | | ~ |
| Interim Wellhead Protection Area | | ~ |
| Zone I Wellhead Protection Area | | \checkmark |
| Zone II Wellhead Protection Area | | ~ |



As depicted on the plan, and as described in the ANRAD application, the Applicant has stated that the following Jurisdictional Areas exist within 100 feet of the Site:

- Bordering Vegetated Wetland (BVW);
- Isolated Vegetated Wetland (IVW); and
- Buffer Zone.

Table 3 further details these Resource Areas.

| Resource Area | Flag Series | Act | Bylaw |
|--------------------------|-------------|--------------|-------|
| BVW / Freshwater Wetland | A1 to A30 | ~ | ✓ |
| BVW / Freshwater Wetland | B1 to B40 | ~ | ✓ |
| BVW / Freshwater Wetland | D1 to D17 | ~ | ✓ |
| BVW / Freshwater Wetland | E1 to E9 | √ | ✓ |
| BVW / Freshwater Wetland | F1 to F25 | \checkmark | ✓ |
| IVW | C1 to C12 | | ✓ |
| IVW | G1 to G13 | | ~ |

Table 3 – Resource Areas and Act/Bylaw Jurisdiction (As identified by the Applicant)

COMMENTS

- W1. BETA provides the following administrative and plan comments after conducting a review of the submitted application and plan set:
 - a. Provide Assessor's references for the abutting properties.
 - b. Clearly depict and label all Buffer Zone boundaries, including the Bylaw 25-foot No Disturb Zone and 50-foot Buffer Zones.
 - c. The plans indicate that property lines are sourced from MassGIS and do not constitute a formal boundary survey. BETA defers to the Commission on whether this is suitable for the purposes of this ANRAD filing; however, it appears to be appropriate given that a conventional topographic survey was conducted under the direction of a Professional Land Surveyor.
 - d. The Applicant should remove test pit locations from the plans, as ANRAD plans should not depict any work.
- W2. MassDEP has issued File No. 159-1277 for this ANRAD and has provided the following comments:

The Commission should confirm the location of all wetland resource areas shown on the plan, including the area labeled isolated wetland and confirm there is no hydrologic connection to the nearby wetland resource areas. Calculations should be provided to determine if the isolated wetlands shown on the plans qualify as ILSF. The Commission may want to add a special condition clarifying which resource areas are confirmed as part of the Order of Conditions and those that are not confirmed.



BETA recommends that the Applicant provide responses to these comments as part of the next submission.

W3. BETA agrees with the delineation of the A-Series BVW boundary based on the presence of hydrophytic vegetation, hydric soils, and indicators of hydrology. However, channelized flow was observed upgradient of flag A5. Hydrology associated with this channel appears to be provided by a partially buried pipe along the gravel path under the onsite electric utility corridor; however, the source of water flowing out of this pipe could not be determined. At the location of this pipe, BETA observed an area of fringe BVW consisting of sandy and depleted soils within 12 inches of the soil surface and hydrophytic vegetation including sensitive fern (*Onoclea sensibilis*), jewelweed (*Impatiens capensis*) and wrinkle-leaved goldenrod (*Solidago rugosa*).

Due to the presence of a BVW at this location, the entirety of the channel from this location downstream to flag A5 qualifies as an intermittent stream that should be delineated in the field and depicted on the plans. The above-referenced BVW should be delineated as well.

W4. BETA agrees with the delineation of the B-Series BVW with the exception of an area adjacent to flag B19. Hydric soil indicators, consisting of a depleted B-horizon with prominent redoximorphic concentrations within 12 inches of the soil surface, and hydrophytic vegetation, including poison ivy (*Toxicodendron radicans*) and sensitive fern, were observed upgradient of flag B19.

Flagging within this area should be revised to encompass the wetland indicators described above.

W5. BETA observed hydric soil indicators consisting of a depleted matrix within 12 inches of the soil surface and hydrophytic vegetation, including dense cover of sensitive fern and poison ivy, approximately 20 to 30 feet upgradient of flags C1 and C2. BETA also observed leaf staining and vegetation such as red maple (*Acer rubrum*) and arrowwood viburnum (*Viburnum dentatum*) upgradient of flags C7 and C8; however, no hydric soils were observed. The Applicant should reassess the area upgradient of flags C1 and C2 and adjust the wetland boundary as needed.

In addition, portions of this wetland are located offsite; accordingly, BETA could not confirm its status as either an Isolated or Bordering Vegetated Wetland. The Commission could consider including this as a finding in the Order of Resource Area Delineation (ORAD).

Standing water approximately three (3) inches in depth with visible iron oxide was also observed within the C-Series wetland. BETA assumes this area is too shallow to support breeding habitat of vernal pool indicator species; however, a vernal pool survey was not conducted due to the time of year and scope of the ANRAD.

- W6. BETA agrees with the delineation of the D-Series BVW boundary based on observations of hydrophytic vegetation, hydric soils, and indicators of hydrology. Leaf staining and presence of vegetative species including poison ivy and sensitive fern were observed upgradient of flag D16; however, no hydric soils were observed.
- W7. It is unclear based on the ANRAD application whether the Applicant seeks confirmation of the E-Series BVW. Although the flags are depicted on the plans, they cannot be confirmed as part of this filing unless the abutting property owner provides a signature on the ANRAD application. The Applicant should clarify if they intend to seek permission from the abutting property owner to approve this wetland boundary, or if the Commission will be required to include a finding in the ORAD stating that the boundary of the E-Series BVW is not confirmed but appears to project buffer zone and/or Buffer Zone Resource Areas onto the Site.



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- W8. BETA agrees with the delineation of the F-series BVW boundary based on observations of hydrophytic vegetation, hydric soils, and indicators of hydrology.
- W9. BETA agrees with the delineation of the G-Series IVW based on observations of hydrophytic vegetation, hydric soils, and indicators of hydrology.

A depression with standing water approximately nine (9) inches in depth was observed within the G-Series wetland. Due to the observed water depth and presence of suitable attachment sites for vernal pool species, the G-Series wetland may contain a potential vernal pool; however, a vernal pool survey was not conducted due to the time of year and scope of the ANRAD. The Commission could consider including this information as a finding in the ORAD.

- W10. BETA assessed the area within and around the solar array at the eastern extent of the Site and made the following observations, which are depicted on Attachment A – BETA Solar Field Sketch. These observations were made without the benefit of a review of the solar array development plans and permits. The Applicant should provide additional documentation to determine whether these are stormwater features that would not be considered jurisdictional under the Act. Even if determined to not be jurisdictional under the Act, the features identified in Comments W10.b., d., and e. may be considered jurisdictional under the Bylaw.
 - a. BETA observed hydric soils within a swale interior to the western fence line associated with the solar array; however, the vegetation predominately consisted of turf grass and red clover (*Trifolium pratense*). This feature does not appear to constitute an Area Subject to Protection under the Act or the Bylaw.
 - b. Numerous depressions were observed under and between panel rows with standing water with depths of three (3) to four (4) inches at the time of the Site visit. Within these areas, BETA observed hydrophytic vegetation including cattail (*Typha latifolia*), soft rush (*Juncus effusus*), and sensitive fern, as well as hydric soils consisting of a depleted matrix starting near the soil surface. These areas should be reassessed by the Applicant to determine if they meet the criteria to be considered Isolated Vegetated Wetlands and Subject to Protection under the Bylaw.
 - c. A large depression with standing water was observed within the southeastern corner of the solar field. Vegetation within this depression consisted of primarily upland species including little bluestem (*Schizachyrium scoparium*), grass-leaved-goldenrod (*Euthamia graminifolia*), bush clover (*Lespedeza virginica*) and sweet fern (*Comptonia peregrina*) and no hydric soil indicators were observed. Accordingly, this area does not appear to qualify as an Area Subject to Protection under the Act or the Bylaw.
 - d. A large depression with deep standing water was observed within the southwestern corner of the solar field. BETA observed hydric soils consisting of a depleted matrix near the soil surface, as well as hydrophytic vegetation including purple loosestrife (*Lythrum salicaria*), cattail, woolgrass (*Scirpus cyperinus*), and soft rush. During BETA's Site visit, a wood frog (*Lithobates sylvaticus*) call was heard, and a caddisfly (*Trichoptera* spp.) larvae molt was observed within the standing water. The aforementioned wetland indicators were also observed directly west of the depression and appear to form a BVW complex that drains to a swale flowing to the southwest. Due to the presence of an upgradient wetland, this swale would meet the definition of a stream per the Act and the Bylaw. The Applicant should reassess this area and delineate the BVW and Bank to stream.



The depression described above appears to be a potential vernal pool; however, BETA did not conduct a vernal pool survey due to the time of year and the scope of the ANRAD. The Commission could consider noting this as a finding in the ORAD.

- e. BETA reviewed the areas along the outside of the western, northwestern, and northern portions of the solar field fence line and observed well-established areas of wetland consisting of hydric soils and hydrophytic vegetation including cattail, purple loosestrife, white meadowsweet (*Spiraea alba*), and willow (*Salix* spp.). The Applicant should reassess this area and flag the extents of BVW/IVW.
- W11. Several streams were observed interior to the onsite wetlands, including:
 - a. Two (2) streams were observed interior to the A-series wetland.
 - b. Two (2) streams that converge into a single stream were observed interior to the B-series wetland near flag B25.
 - c. A stream was observed interior to the D-series wetland near flag D9.
 - d. A stream was observed internal to the F-series wetland.

The Applicant should determine whether these streams are perennial or intermittent. If perennial, the Mean Annual High Water marks of the streams should be delineated to determine the extent of Riverfront Area at the Site. If intermittent, the Applicant could either delineate the associated Banks or the Commission could include a finding in the ORAD stating that these streams are present but were not delineated.

W12. Along Tri County Drive off of Pond Street, a stormwater conveyance was observed on the side of the road and is vegetated with species including jewelweed, climbing nightshade (*Solanum dulcamara*) and mugwort (*Artemisia vulgaris*). This conveyance appeared to be lined with stone, underlain by upland soils, and vegetated with primarily upland species. Wetlands were not observed upgradient of, or along, this channel. Therefore, this channel would not qualify as an Area Subject to Protection under the Act or the Bylaw.

Review Summary

Based on our review of the ANRAD submittal and plan, and the existing conditions at the Site, it is BETA's opinion that the comments above should be addressed to facilitate the issuance of an accurate ORAD.

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

Very truly yours, BETA Group, Inc.

Anna Haznar Staff Scientist

Jonathan Niro Project Scientist

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