



April 4, 2024

Mr. Gregory Rondeau, Chairman
Franklin Planning Board
355 East Central Street
Franklin, MA 02038

**Re: Maplegate South Solar Array
Site Plan Peer Review**

Dear Mr. Rondeau:

BETA Group, Inc. is pleased to continue our engineering peer review services for the proposed project entitled **Maplegate Solar Project South** in Franklin, Massachusetts. This letter is provided to update findings, comments, and recommendations.

BASIS OF REVIEW

The following documents were received by BETA and formed the basis of the review:

- Site Plan Review Application Package, prepared by Bohler, Inc., Bedford, NH including:
 - Cover letter for Site plan Application, prepared by Bohler, dated July 20, 2023
 - Application for Approval of a Site Plan (Form P)
 - Certificate of Ownership
 - Certified Abutters List & Map
 - Copy of Fee Check
 - Truck Turn Exhibit
- Plans (38 sheets) entitled: **Proposed Site Plan Documents for Maple Street Solar, LLC** dated July 20, 2023, revised March 15, 2024, prepared by Bohler, stamped by John Kucich, PE No. 41530.
- Existing Conditions Survey (8 Sheets), dated December 23, 2023, prepared by Feldman Geospatial of Boston, MA.
- **Drainage Report – for Maple Street Solar LLC**, dated July 20, 2023, with selected revisions dated March 21, 2024, prepared by Bohler, Stamped by John Kucich, PE #41530.
- **Site Plan Peer Review Response Letters**, dated February 16, 2024 and March 22, 2024, prepared by Bohler.

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

- **Zoning Chapter 185 From the Code of the Town of Franklin**, current through March 01, 2016
- **Zoning Map of the Town of Franklin, Massachusetts**, amended July 13, 2016
- **Stormwater Management Chapter 153 From the Code of the Town of Franklin**, Adopted May 02, 2007
- **Wetlands Protection Chapter 181 From the Code of the Town of Franklin**, current through August 20, 1997
- **Subdivision Regulations Chapter 300 From the Code of the Town of Franklin**, current through January 01, 2016
- MassDEP Wetlands Program Policy 17-1: Photovoltaic System Solar Array Review, dated September 23, 2017

Compiled Review Letter Key

BETA reviewed this project previously and provided review comments in letters to the Planning Board dated September 19, 2023 and March 12, 2024 (original comments in standard text). Bohler has provided responses (*responses in italics*) and this letter includes BETA's comments on the status of each (**latest status in bold**).

INTRODUCTION

The project site is the former Maplegate Country Club which is a total lot area of 144.6± acres. Access to the site will come from the existing driveway to the golf course clubhouse from Maple Street in Bellingham. The site development associated with this proposal will be limited to Parcel 3 which is approximately 61.4± acres. The proposed development is a 5,000-kW (AC) ground mounted Photovoltaic Power System. The limit of work for this system will be approximately 44.1 acres within parcel 3. The existing site improvements within the limits of the development include golf greens, cart paths, landscaping, resource areas, and wooded areas. The site is located west of Mine Brook, Route 495 to the south, and a solar field, and Maple Street to the west. Drainage patterns at the site vary but generally flow to the south towards Mine Brook. The site is located within the Industrial Zoning District. The land west, north and south of the parcel are all within the same Industrial District. The parcels east of Mine Brook are located within the Single-Family III zone.

The project is partially within Water Resource District (MassDEP Zone II) along the eastern border adjacent to Mine Brook. The site is not in proximity to estimated habitat of rare or endangered species but there are Potential Vernal Pools located throughout the site.

The project proposes to construct approximately 37.8 acres of ground mounted solar modules, 2 separate equipment areas composed of inverters, cabinets and transformers, security fencing, and 2' wide gravel access driveway with circular turnaround areas. The access driveway will connect to an existing access drive located in the southwestern portion of the Site, associated with a series of overhead power lines, which crosses two adjacent parcels and connects to Maple Street. Additionally, the access driveway will connect to the driveway associated with Parcel 1, to be constructed under a separate permit, which connects to an existing paved driveway off Maple Street.

The proposed solar array will generally be located within areas previously used for the existing golf course. Existing impervious cart paths will be removed. New impervious areas are limited to equipment pads and the gravel driveway. No stormwater management features are proposed. The project as currently depicted will disturb in excess of one acre of land and is required to prepare a Stormwater Pollution Prevention Plan (SWPPP) and file a Notice of Intent with EPA. As currently shown, the project area will be located within the limits of the buffers to the existing wetland resource areas on site. A Notice of Intent has been filed with the Franklin Conservation Commission.

FINDINGS, COMMENTS, AND RECOMMENDATIONS

GENERAL

- G1. There is a note on the demolition plans that indicates that the fairways will be removed. An explanation should be provided which indicates what is being removed?

BOH: Callouts indicating "fairways to be removed" have been clarified to state that the fairway groundcover to be overseeded with the "New England conservation/wildlife seed mix". Landscaped areas shall be mowed twice per year as noted on the Soil Erosion and Landscape Plans.

BETA2: Information provided. The designer should evaluate if overseeding is an adequate practice to establish the desired conservation/wildlife cover. It is anticipated that either scarification or tilling of the existing fairway would be required to facilitate proper establishment.

BOH2: Tilling or scarifying areas to be converted from establish turf lawn to meadow is not recommended... Aerating the existing turf minimizes soil disturbance by opening the thatch layer and loosening soil within the pattern of closely spaced 1" diameter holes created by the aerating equipment. Overseeding drops seeds directly into the aerated holes and loose soil covers the seeds. Aerating and overseeding is a common method used to improve turf or establish a new meadow within an existing turf area.

BETA3: Information provided – the plans should be revised to indicate that fairways to be overseeded shall be aerated as described.

- G2. The proposed grading at the wetland crossing does not agree with the detail provided and should be corrected.

BOH: Acknowledged, the grading has been modified to ensure the plans match the detail provided. The headwalls that extend from the culvert have been elongated to connect to the existing slope adjacent to the stream crossing.

BETA2: Grading and details updated. Issue resolved.

ZONING

The Site is located within the industrial (I) Zoning District. The proposed use is a Large-Scale Ground-Mounted Solar Energy System, which is permitted within this district following Planning Board Site Plan Review.

SCHEDULE OF LOT, AREA, FRONTAGE, YARD, AND HEIGHT REQUIREMENTS (§185 ATTACHMENT 9)

As shown on the schedule on the Zoning table on Sheet C-301 of the set, the Site meets the requirements for lot area, depth, frontage, width, yard widths, building height, and impervious area coverage.

PARKING, LOADING AND DRIVEWAY REQUIREMENTS (§185-21)

Access to the project will come from Maple Street through the proposed solar development on Parcel 1. Gravel driveways will connect the northerly panel farm to this development. 3 cul de sacs will be provided at the end of the driveways to turn around. The gravel driveway at the westerly edge of the development will connect with the existing paved drive beneath the electric utility easement that connects to Maple Street.

The project does not propose a residential or nonresidential building; therefore, no parking is required. BETA anticipates that there is adequate space along at turnaround areas for maintenance vehicles to temporarily park without disrupting access.

- P1. BETA defers to the Town regarding the extent of the proposed access road. BETA recommends the Applicant consult with the Town of Franklin Fire Department to determine required driveway widths and the potential need for driveways around the array perimeter.

BOH: The layout has been shared with the Town of Franklin Fire Department and the layout depicts their suggestions for turnaround areas and access points to the equipment pads.

BETA2: BETA defers to the Fire Department on this issue. No further comment.

- P2. The detail for the access gravel road on sheet C-901 indicates that for the width see plans. There are no dimensions on the plan which identify the proposed gravel roadway width. These dimensions should be provided.

BOH: Dimensions have been added to the proposed gravel roadway on the Site Layout Plans. The gravel road will have a minimum width of 20' with 2' wide shoulders on either side with gravel subbase beneath the proposed topsoil/grass cover.

BETA2: Information provided – issue resolved.

- P3. There is a proposed easement identified on the plans for access through the New England Power Company to access the existing paved driveway. BETA recommends a copy of the easement be provided to the Board.

BOH: This easement has been removed from the plan. Early on in the project we were proposing a connection through the easement that was then rejected by New England Power for use.

BETA2: Information provided. Without the proposed easement the travel distance to the proposed westerly inverters will be over 5,000 feet across gravel access roads and through 5 gates. The (responding) fire department should be consulted to determine how this may affect potential emergency operations.

BOH: Comment acknowledged. Bohler is currently working with the Franklin Fire Chief to ensure adequate emergency access throughout the site has been provide. Note that the access easement through the LMP property would still be available for emergency access only.

BETA3: A letter from the Deputy Fire Chief, dated March 25, 2024, has been provided and references access through the New England Power Company property and requires said roadway to be repaired/maintained. BETA defers to the Deputy Fire Chief on this issue but recommends for the Applicant to confirm the required repair/maintenance can be performed now and into the future with the understanding that the previously requested easement was not accepted by New England Power.

- P4. Additional details should be provided to document that the existing cart paths to the isolated panel array system in the middle of the development will be adequate.

BOH: The existing paved cart path located northwest of the isolated panel array system is proposed to remain and be replaced with gravel. Smaller construction and maintenance equipment are expected to be used to access the isolated area. Vehicle access has not been provided as there are no mechanical equipment pads located in this portion of the site.

BETA2: The path scales at an approximate 9' width and is anticipated to be adequate for access with smaller vehicles or equipment. The designer should clarify if the path is to be reconstructed in accordance with the Access Gravel Road detail or if a separate detail is required.

BOH2: A new detail specifically for the aforementioned gravel path has been added to the detail sheets. Refer to Detail Sheet C-901.

BETA3: Comment addressed.

INDUSTRIAL DISTRICT PERFORMANCE CONTROLS (§185-22)

The project is located within an Industrial District and therefore must conform to these requirements. Given the nature of the project, BETA does not anticipate vibration, odor, or flashing related impacts. Based upon the proximity of the equipment to Route 495, there should be no noise issues either.

EARTH REMOVAL REGULATIONS (§185-23)

The project includes significant disturbance which may result in earth removal greater than 15 cubic yards.

E1. Indicate approximate earth removal volume to determine compliance with this section.

BOH: There is no export proposed for the project. The plans have been revised to note that no earth removal shall occur except for unsuitable construction and demolition debris, and the Contractor shall retain and stockpile existing topsoil and shall screen and reuse the material throughout the site.

BETA2: Information provided – no further comment.

FLOODPLAIN DISTRICT (§185-24)

A FEMA-mapped 100-year floodzone (Zone AE) is located along the eastern limits of the Site. No work is proposed within this area, and all proposed grading is well above the flood elevation.

SIDEWALKS (§185-28) AND CURBING (§185-29)

No sidewalks or curbing are proposed under this project. As a solar facility, pedestrian access to the Site is not required. The project proposes to retain the existing driveway entrance, located in the Town of Bellingham, rather than utilize the existing frontage along Maple Street associated with Parcel 3.

SITE PLAN AND DESIGN REVIEW (§185-31)

The project has been submitted for Site Plan Review and is required to conform to the requirements of this section. The submitted plan set appears to be in compliance with all drawing requirements and review criteria.

WATER RESOURCES DISTRICT (§185-40)

The Site is partially located within the Town of Franklin Water Resources District and a Zone II Wellhead Protection Area. The proposed work in this area is limited to a small area (1,150± sq. ft.) along the southerly edge of the limit of work at the cul de sac which includes tree clearing, grading, and fencing. The project does not include any use that would be prohibited in this district. No impervious surfaces are proposed within this area.

STORMWATER MANAGEMENT

There are no stormwater management design features proposed for this array. As previously noted, nearly all the existing cart paths will be removed. Overall, the impervious surface area will be reduced from 2.275 acres to 0.108 acres. There are at least 4 vernal pools in this area and a new wetland crossing over the intermittent stream that transects the site from north to south.

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.

- SW1. BETA recommends that the area of cart paths which will remain be shaded to identify their location and determine their runoff characteristics.

BOH: The cart paths intended to remain have been shaded on the revised plans. All cart paths within the limit of work and outside wetland areas are proposed to be removed. Apart from the proposed gravel road/culvert crossing, existing cart paths to remain will maintain existing drainage patterns and flow overland to adjacent wetland resource areas.

BETA2: Plan revised. Depict cart paths on the pre-development watershed plans so that the area of gravel in each watershed can be confirmed.

BOH2: The existing cart paths within the watershed area have been highlighted for clarity on the pre-development Existing Drainage Map.

BETA3: Drainage map revised. Issue resolved.

- SW2. Although there is a reduction in the impervious surfaces on site, compliance with the by laws regarding redevelopment should be documented. *BOH: Refer to response to comment SW10.*
BETA2: Discussion diverted to SW10. No further comment.

MASSDEP STORMWATER STANDARDS

The project is subject to the Massachusetts Stormwater Standards as outlined by MassDEP. Compliance with these standards is outlined below:

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 no new outfalls.*

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 changes to site hydrology and ground cover which will impact stormwater flow to the one analyzed design point. Stormwater runoff will be mitigated via a net decrease in impervious area. Calculations indicate a decrease in peak discharge rate and runoff volume to the design point.*

- SW3. Depict existing treeline to remain and proposed limits of clearing on the post-development watershed plan.

BOH: Acknowledged. The existing treeline to remain and proposed limit of clearing have been added to the revised post-development watershed plan.

BETA2: Plan revised. Issue resolved.

- SW4. Revise the Tc calculations in both existing and proposed conditions. The flow path shown on the watershed plans is incorrect and should not be limited to the intermittent stream alone.

BOH: The time of concentration (Tc) as calculated in the existing and proposed conditions is not limited to the intermittent stream and has been determined to be the longest path of flow in the watershed. The flow path begins at the northern edge of a bordering vegetated wetland (BVW) with 50' of sheet flow and continues for approximately 630' of shallow concentrated flow through the BVW to the south.

BETA2: The flowpath should be positioned to begin at the most hydrologically remote point in the watershed. Additionally, the flowpath should run through the solar array to demonstrate the impact that the change in cover type may have on the time of concentration, rather than assuming a “woods” cover type along the entire flowpath.

BOH2: The flowpath associated with the time of concentration has been modified to extend to a more hydrologically remote point in the watershed. The existing and proposed Drainage Area Maps and HydroCAD models have been revised accordingly. The existing and proposed runoff rates continue to meet the Stormwater Standards for the Project. Refer to Table 1 below and the revised Drainage Area Maps and HydroCAD reports included with this letter.

BETA3: Time of concentration revised. Issue resolved.

- SW5. Revise cover type for gravel driveways to be “Gravel Surface” with CN 96. The “Gravel Roads” cover type assumes a grassed shoulder is included in the contributing area.

BOH: Acknowledged. The existing and proposed HydroCAD models have been revised accordingly. The existing and proposed runoff rates remain the same for the Project. Refer to Tables 1 and 2 below and the revised HydroCAD reports included with this letter.

BETA2: Model revised. Issue resolved.

- SW6. The flow to the vernal pools should each be analyzed separately for both existing and proposed conditions.

BOH: A HydroCAD analysis has been completed for each of the four (4) existing vernal pools (VP1-4) to determine the pre- and post-development conditions for the 2-, 10-, 25- and 100-year storm events. Refer to the HydroCAD reports included with this letter as well as Tables 3 and 4 below for a summary of pre- and post-development peak rates and volumes. There are no changes in flow and volume characteristics to VP2. Both VP3 and VP4 experience a slight decrease in runoff rates and volumes in all storm events in the post-development condition, which is largely due to the replacement of gravel/paved cart paths with natural vegetated materials. VP1 experiences an increase in runoff rates and volumes in the post-development condition. LEC Environmental Consultants, Inc. is in support of the introduction of more water to VP1 given that the resource area is a standing water body with considerable vernal pool activity that is benefitting from a longer permanent pool duration.

BETA2: Model revised. Refer to Comment SW10.

- SW7. The use of HSG D soil conditions should be limited to the wetland areas alone. The NRCS WSS for the Ridgebury soils are within HSG C and not HSG D as noted in the drainage report. The CN values should be corrected.

BOH: No response provided.

BETA2: Model revised. Issue resolved.

- SW8. There are no design calculations for the proposed wetland crossing which should be provided.

BOH: No response provided.

BETA2: No calculations have been provided; however, based on BETA’s site observations the proposed culvert represents an improvement to the existing conditions. No further comment.

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 indicate the soils at the site are primarily Hydrologic Soil Group (HSG) C (low infiltration potential.) with some HSG B soil conditions closer to Mine Brook.

Soil testing has not been conducted at the Site.

The project proposes a net decrease in impervious area; therefore, post-development annual recharge is anticipated to be an improvement compared to existing conditions.

SW9. Compliance with the bylaw for 0.8" of infiltration is required for redevelopment and needs to be documented.

BOH: Refer to response to comment SW10, below.

BETA2: Discussion diverted to SW10. No further comment.

TOTAL SUSPENDED SOLIDS (STANDARD NUMBER 4): *For new development, stormwater management systems must be designed to remove 80% (90% per Town Bylaw) of the annual load of Total Suspended Solids (TSS).* No stormwater BMPs have been proposed with the capability of TSS removal.

The project is required to treat the 0.8-inch water quality volume per Town Bylaws. No infiltration or treatment BMPs are proposed to meet this requirement.

SW10. For a redevelopment Site, meet one of the following criteria (§153-16.B(2))

- a. Retain the volume of runoff equivalent to, or greater than, 0.8 inch multiplied by the total post-construction impervious surface area on the Site; and/or
- b. Remove 80% of the average annual post-construction load of TSS and 50% of the average annual load of total phosphorus.

BOH: The Project results in a reduction of over 2 acres of impervious area from the pre- to post-development condition. A total of approximately 0.11 acres of impervious area remains consisting of existing paved cart paths within wetland resource areas, a widened culvert crossing associated with the emergency access road, and concrete pads associated with proposed mechanical equipment.

A series of 2' wide by 26" deep crushed stone trenches are proposed down gradient of the mechanical equipment pads to promote infiltration of 1" over the total impervious area in the post-development condition. The trenches have been sized to accommodate the 0.8" recharge volume required per the Town of Franklin Bylaw and 1" water quality volume required for discharges within a Zone II. Refer to calculations below and a crushed stone trench detail provided on Sheet C-901.

Trench Area Calculations:

0.11ac impervious x 1" water quality vol. = 400cf vol. required

26" deep x 2' wide x (32' + 90' + 112' = 234') long x 40% voids = 406cf vol. provided

Existing cart paths to remain are anticipated to maintain existing drainage patterns via overland flow to wetland resource areas. Runoff associated with the emergency access culvert is anticipated to mimic existing drainage patterns via overland flow to wetland resource areas. Rip rap is proposed along the southern edge of the modified crossing to prevent scour and erosion and provide TSS removal prior to discharge

BETA2: The trenches will provide the storage needed for the equipment pads. The roadway surfaces at the wetland crossings are being directed to rip rap aprons and will meet the MEP definition. See additional comment A3 below.

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 is not considered a LUHPPL – **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 located within an area where there are several vernal pools. These areas are considered a critical area. The report should indicate that the site is in a critical area.

REDEVELOPMENT (STANDARD NUMBER 7): *Redevelopment of previously developed sites must meet the Stormwater Management Standards to the maximum extent practicable.* The project is considered a redevelopment under the definition of “Development, rehabilitation, expansion, and phased projects on previously developed sites, provided the redevelopment results in no net increase in impervious area.” Existing cart paths and driveways will be removed to result in a net decrease in impervious area. As such, the project need only meet certain standards to the maximum extent practicable.

SW11. BETA recommends the Applicant complete the redevelopment checklist found in Volume 3 of the MA Stormwater Handbook to document which standards are being met only to the maximum extent practicable.

BOH: A redevelopment checklist has been completed for this Project and is included with this letter.

BETA2: Checklist provided. Issue resolved.

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, it will be required to file a Notice of Intent with EPA and develop a Stormwater Pollution Prevention Plan (SWPPP). Erosion control measures are depicted on the plans include compost sock, silt fence, hay bales, inlet protection, stabilized construction entrance, dust control, erosion control blankets, filter bags for dewatering, and stockpile controls. A construction sequencing plan is included on Sheet C-608.

SW12. Provide expected date clearing will begin and estimate duration of exposure of cleared areas (§153-12.M).

BOH: Construction is anticipated to begin May 2024 and continue through the summer. Ground stabilization is expected to occur during the planting season in the fall through approximately November 2024.

BETA2: Provide estimated duration of exposure of cleared areas, including how long after disturbance an area will be stabilized.

BOH2: Disturbed areas will be temporarily stabilized, and seed mixtures will be applied per the manufactures recommended growing season. We anticipate seeding to occur in the spring and fall seasons.

BETA3: Comment addressed.

SW13. The grading at the proposed wetland crossing is shown outside the limit of work on the plans. Either correct the grading or move the proposed erosion control to include all disturbed areas.

BOH: Acknowledged. The limit of work line and proposed erosion control barrier have been revised to encompass the full limit of work proposed at the emergency access road/culvert crossing.

BETA2: Plan revised. Issue resolved.

SW14. Recommend including a note or callout prohibiting the placement of stockpiles within wetland buffer zones.

BOH: A note has been added to the Erosion & Sediment Control Plans of the revised plan set.

BETA2: Note provided – issue resolved.

SW15. The applicant is reminded that a Stormwater permit from the Franklin DPW is required based upon the size of the disturbance.

BOH: Acknowledged. Upon approval with the Planning Board a Stormwater Permit will be filed with the Franklin DPW prior to construction.

BETA2: No further comment.

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.

SW20. Provide location map of culverts to be maintained.

BOH: Acknowledged. A Wetland Crossing Exhibit has been prepared and is included with this letter.

BETA2: Map provided – issue resolved.

ILLICIT DISCHARGES (STANDARD NUMBER 10): *All illicit discharges to the stormwater management system are prohibited.* A signed Illicit Discharge Compliance Statement was provided with the submission.

WETLANDS PROTECTION

The Project proposes work within Areas Subject to Protection and Jurisdiction of the Franklin Conservation Commission, including the 100-foot Buffer Zones to a vegetated wetland, isolated land subject to flooding and vernal pools. Work within these areas includes portions of the solar array, fencing, gravel access drives, grading, tree clearing. The activities associated with the work inside the vernal pool buffers and the wetland crossing will be reviewed in greater detail. The Applicant has submitted an NOI to the Town of Franklin Conservation Commission and must obtain an Order of Conditions to complete the proposed work.

ADDITIONAL REVIEW COMMENTS

The following design comments relate to the revised submission:

A1. BETA2: Provide data for estimated seasonal high groundwater in the footprint of the infiltration trenches.

BOH2: For the infiltration trenches located on sheet C-405 based on the surrounding vernal pools and wetlands, we anticipate the seasonal high groundwater to be around elevation 214-216. The bottom of the proposing infiltration trenches are proposed at 226.5. For the infiltration trenches located on sheet C-406 the anticipated seasonal high would be around 198- 199 and the bottom of the infiltration trench is 202.5. We have geotechnical testing being completed in the first week of April. We will provide supplemental data that confirm the test boring information.

BETA3: Information provided. Provide confirmation of test boring information upon completion.

A2. BETA2: BETA recommends that the designer review the grades of the proposed gravel access roadway east of Vernal Pool #3. As shown, the roadway can divert runoff away from the pool as it follows the roadway to the south. In addition, the grading of the cul-de sac will direct runoff directly south across the access roadway. Based on the size of the cul-de sac and the straight grade downhill across the access roadway, this could become a potential problem for erosion and sediment transport into the vernal pool. BETA recommends that the designer review more positive means of collecting the runoff from this area and directing it safely towards the pool.

BOH2: Additional stone check dams have been added on the southern side of the gravel access road and the contours within the access road have been revised with a cross slope to direct the runoff toward the vernal pool instead of further down the access road toward the adjacent wetlands.

BETA3: Plans revised. Consider extending the proposed check dam along the 222 contour to provide additional protection and facilitate capture of transported sediments.

A3. BETA2: BETA recommends that a minimum cross slope of 2.0% be provided on all proposed gravel roadways and that this slope be towards the low side of the roadway edge to promote runoff flows towards the pervious vegetated areas adjacent to the roadways. This would eliminate the potential for the roadway to act as a channel for runoff and minimize the potential for erosion along the edge of the roadway.

BOH2: The proposed contours on the gravel access road have been revised to depict a minimum 2% cross slope.

BETA3: Contours revised. The proposed cross slope should be added to the details for clarity.

A4. BETA2: BETA recommends that a rip rap apron be provided just northwest of wetland flag WF#LLL4 for the runoff coming off of the roadway at this location (See Sheet C-405).

BOH2: A rip rap area has been added to the plans as noted.

BETA3: Apron provided. Comment resolved.

A5. BETA2: Include inspection and maintenance requirements for the infiltration trench in the O&M Plan and highlight on the location map.

BOH2: An updated O&M Manual has been enclosed within this resubmission. The O&M now contains language for the infiltration trench, stone check dams and rip-rap areas. The infiltration trench locations have been noted on the Proposed Conditions Drainage Area Map.

BETA3: O&M and map revised. Issue resolved.

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

Very truly yours,
BETA Group, Inc.

Mr. Gregory Rondeau, Chairman

April 4, 2024

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Gary D. James, PE
Senior Project Manager



Matthew J. Crowley, PE
Senior Project Manager

cc: Amy Love, Town Planner

Town of Franklin

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DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

DATE: April 2, 2024
TO: Franklin Planning Board
FROM: Department of Planning and Community Development
RE: Maplegate Solar South
Site Plan

The DPCD has reviewed the above referenced Site Plan Modification application for the Monday, April 8, 2024 Planning Board meeting and offers the following commentary:

General:

1. The site is accessed through Bellingham at 160 Maple St, and located in the Industrial Zoning District.
2. The proposed project includes the construction solar panels, along with drainage.
3. The Applicant has filed a NOI with the Conservation Commission.
4. DPCD refers to BETA and Town Engineer for stormwater management comments.

Comments from March 25, 2024 meeting:

1. Provide a letter from the Fire Department. Letter included in this packet.
2. Decommissioning plan should increase the inflation to 4%.
3. Waiting for Conservation Commission approval.
4. No new plans have been submitted since last meeting.

Special Conditions:

1. Applicant shall enter into a monetary agreement (PILOT) at the sole discretion of Administration and the Town of Franklin prior to commencement of construction.
2. A Surety bond in the amount of \$_____ shall be issued by a surety company acceptable to the Town of Franklin prior to commencement of construction. Bond must include tree replanting plan.
3. Parcel 2 will remain undeveloped.



FRANKLIN FIRE DEPARTMENT

To : DPCD

FROM : J. S. BARBIERI, DEPUTY FIRE CHIEF

DATE : 3 APRIL 2024

RE : MAPLEGATE SOLAR PROJECT SOUTH

We are providing you with an update from our last correspondence on March 25th. The consultant working with the proponent has informed us that they intend to repair the section of roadway that we have concerns with for the emergency access road to the South site and this would meet our requirements.

Please contact me should you have any question or require any additional information.

cc: file