

June 21, 2023

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

Re: Proposed Solar Array, Parcel 1, 160 Maple Street, Bellingham, Norfolk County, MA Site Plan Peer Review

Dear Mr. Rondeau:

BETA Group, Inc. is pleased to continue our engineering peer review services for the proposed project entitled *Proposed Solar Array, Parcel 1, 160 Maple Street, Bellingham, Norfolk County, MA* in Franklin, Massachusetts. This letter is provided to outline findings, comments, and recommendations on the revised documents submitted in response to our initial review of the project.

#### **BASIS OF REVIEW**

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

- Comment Response Letter, addressed to Mr. Gregory Rondeau, Chairman Franklin Planning board, RE: Proposed Solar array, Parcel 1, 160 Maple Street, Bellingham, Norfolk County, MA Site Plan Peer Review., dated June 09,2023 from Bohler.
- Plans (39 sheets) entitled: Proposed Site Plan Documents for Nextgrid Mescalbean LLC, Bellingham & Franklin, Norfolk County. MA dated April 13, 2023, revised June 07, 2023, prepared by Bohler, stamped by John Kucich, PE No. 41530.
- Drainage Report for Nextgrid Mescalbean, LLC, Proposed Solar Array, Parcel 1, 160 Maple Street, Bellingham, Norfolk County, MA, dated April 13,2023, revised June 07,2023, prepared by Bohler, Stamped by John Kucich, PE #41530.

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

#### **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 1 which is approximately 69.5± acres. The proposed development is a 5,000-kW ground mounted Photovoltaic Power System. The limit of work for this system will be approximately 44.0 acres within parcel 1. The existing site improvements within the limits of the development include a club house, paved driveway, parking areas, gravel and paved cart paths, golf greens, driving range, landscaping, resource areas, and wooded areas. The site is surrounded by wooded land to the north, wooded land and Mine Brook to the east, Route 495 to the south, and commercial businesses, a solar field, and Maple Street to the west. Drainage patterns at the site vary but generally flow from west to east across the site to 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 is adjacent to NHESP Potential Vernal Pools to the North and South. The project is partially within a Zone AE FEMA mapped flood zone (area of 1% chance flood) along the eastern boundary of the site with variable elevations determined by a detailed analysis of Mine Brook. NRCS soil maps indicate the soils at the site are of Montauk fine sandy loam,), and Scituate fine sandy loam. Each are rated in Hydrologic Soil Group (HSG) C (low infiltration potential).

The project proposes to develop the site with approximately 44 acres of ground mounted solar modules, 2 separate equipment areas composed of inverters, cabinets and transformers, security fencing, 20' wide gravel access driveway from the existing paved driveway into the clubhouse through the entire site with access to future development at the southern end of the array.

The proposed development will reduce the overall impervious surface area on site. Proposed impervious surfaces include the concrete pads for solar equipment and gravel access driveways. Stormwater management will deal primarily with conformance with Standard 2 for peak flow rate attenuation. Stormwater management features proposed include the construction of a stormwater detention basin along the easterly edge of the development. 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

# **G**ENERAL

G1. Recommend increasing text size of callouts to improve legibility, particularly on enlarged plans.

**Bohler:** Notes have been enlarged on the Overall Sheets to provide more clarity.

BETA2: Text size remains unchanged on enlarged plans. Additionally, the details provided on Sheets C-906 and C-907 are illegible.



G2. Revise plans to include any utility poles, overhead wires, or electrical conduit to be used for interconnection, as applicable.

**Bohler:** The utility poles proposed at the end of the existing access road for the interconnect and the additional poles proposed to bring the overhead wiring up the access road to the solar field entrance gates have been added to the plans.

BETA2: Plans have been revised showing 15 utility poles and overhead wire connecting to an existing utility pole along Maple Street. Comment addressed.

G3. Provide proposed contours for red-shaded areas to be re-graded to determine accurate limits of work, especially in those areas around the flagged wetlands where it appears that the only option available to reduce the grade is to fill the wetlands.

**Bohler:** The areas of red highlighted slope is intended to provide distinction for the racking installer to utilize extended mounting legs. We are not intending to regrade those areas, instead we will work around steeper slopes by elevating the racking accordingly. Notes have been revised on the grading plan to clarify this direction.

#### **BETA2:** Comment addressed.

G4. BETA recommends that the shaded areas, which identify areas where the existing grade exceeds 15%, be eliminated from the drawings outside the limits of work to avoid confusion.

**Bohler:** Acknowledged, we have removed the red hatching in areas that are outside our limit of work.

#### **BETA2:** Comment addressed.

G5. BETA recommends a condition that no earth material be removed from the Site except for unsuitable construction and demolition debris.

**Bohler:** Acknowledged, the earth material will remain on site to be reused. Only unsuitable construction demolition debris, asphalt material or building material will be removed from the site.

BETA2: BETA defers to the Town regarding the proposed condition. Comment addressed.

#### 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)

The project proposes to retain approximately 1,100 feet of an existing paved driveway which connects to Maple Street in the Town of Bellingham. Proposed 18' or 20' wide gravel driveways will connect to this existing driveway to provide access to equipment areas and the southern end of the solar array. Notes on the plan indicate that the gravel driveway will also provide access to future development to the south.



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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.

**Bohler:** 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 Town of Franklin Fire Department.

P2. Provide plan depicting turning moments along the access roads. Confirm that the turning radius at curves and at turnaround areas is sufficient for a Town of Franklin Fire Apparatus.

**Bohler:** Truck turning plan has been added to the set which depicts the Fire truck access through the site.

BETA2: The truck turning movements are not visible or labeled. Comment remains.

P3. Review width of existing access road to determine if two fire trucks could drive side-by-side and pass one-another if needed. This access route is fairly long and backing up to allow a vehicle to pass may be unsafe.

**Bohler:** Existing access road is approximately 20' wide. This road has serviced the active use of the golf course for many years, which currently has significantly more vehicle activity than what a solar field will experience. We have depicted two fire trucks passing on this existing drive. The space is tight as noted, however we do not believe this warrants the need to widen the existing access road to account for two vehicles passing on a road that will rarely be accessed. Truck turning plan has been added to the set which depicts the Fire truck access through the site.

BETA2: Providing the hammerhead turn around at the end of the entrance driveway and maintaining the first gravel access driveway into the parking lot will alleviate the issues associated with the driveway width. No further comment.

P4. The proposed access gate is located at the end of an 1100+ foot long driveway with little opportunity for turnaround; therefore, a vehicle which cannot access this gate will have difficulty backing out of the Site. BETA recommends providing a turnaround area near the gate or moving the gate to allow the use of the driveway as a hammerhead.

**Bohler:** We have revised the gate location and provided two gates so that the access drive itself adjacent to the primary equipment pad can accommodate an ability to turn around.

BETA2: Comment addressed; gate added to provide a hammerhead turn around at the end of the access road.

P5. Coordinate with Town Fire Department to determine means of emergency access through front gate, such as a knox box.

**Bohler:** We have added notes to the gates to provide knox box accommodations for all access gate locations.

BETA2: 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.

I1. As noted at the hearing, the inverter noise levels will be approximately 65 decibels. Based upon their proximity to the adjacent industrial building, BETA recommends that the applicant review the abatement provided by the limited vegetation remaining and if necessary provide a barrier around these units to maintain a level of 10 decibels at the property line. (See I2)

**Bohler:** The closest equipment pad is located approximately 564' feet away from the closest property that is not an adjacent solar field. The noise generation levels will not have impacts on the adjacent properties.

BETA2: The distance noted is correct; however, there is little vegetation that will remain between the noise generation and the abutting structure. BETA's review of the noise level at the abutting structure shows a level of 35db at the structure. Comment remains.

12. Provide data on anticipated sound levels for transformer and related equipment (§185-22.A) and an analysis to ensure that remnant sound levels at adjacent receptors are below ambient levels.

**Bohler:** Based on the response above, we believe the concern of impact to neighbors is remedied by the significant distance to the adjacent properties. We do not feel a noise analysis is warranted in this condition.

BETA2: See comment above.

## 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.

**Bohler:** We have added notes on the plans regarding maintaining the soil removal or disturbed top soil onsite for re-use. We are not exporting soil from the site.

**BETA2:** No further comments.

## FLOODPLAIN DISTRICT (§185-24)

A FEMA-mapped 100-year floodzone (Zone AE) is located along the northern and eastern limits of the Site (Approx. elevation 183' to 184'). 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, and therefore no new curbing is provided within the area 10' from the street lot line as required per §185-29.

## 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, pending further review by the Fire Department to determine access requirements.



## 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. Proposed work in this area includes tree clearing, grading, construction of a small section of solar panels and fencing, and construction of an infiltration basin. The project does not include any use that would be prohibited in this district. Impervious surfaces proposed within the district are limited only to the footprint of the array racking footings.

W1. Identify safeguards which will be implemented to protect against any accidental hazardous material release from the solar panels or ancillary equipment (§185-40.E.1).

**Bohler:** The panels and equipment pads do not contain hazardous material that warrants additional protection. The transformer is noted to have bio-degradable fluid. The energy storage inverters are also self-contained.

**BETA2:** No further comments.

## **STORMWATER MANAGEMENT**

The stormwater management design proposes a detention basin to capture stormwater runoff from the northeastern portion of the array. Two outfalls from this basin are proposed to convey captured stormwater runoff to the east. The remainder of the Site will generally follow pre-development flow patterns with no stormwater BMPs proposed.

## **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. Provide test pit data in the area of the proposed basin to determine Estimated Seasonal High Groundwater levels (§153-15.A(9)).

**Bohler:** Four (4) test pits are being schedule and will be conducted within the limits of the proposed stormwater management basin. The results of the testing will be shared with the Board and BETA upon completion.

BETA2: No further comments until test pit results are available.

SW2. Indicate composition of proposed "meadow seed mix." Proposed seed mix should include native vegetation to the extent practicable (BDPG Pg 6).

**Bohler:** Refer to the seed mix specifications provided on Detail Sheet C-902 for the associated seed mixes proposed onsite.

**BETA2:** No further comments.

## SUBDIVISION REGULATIONS - STORMWATER MANAGEMENT REGULATIONS (§300-11)

Additional requirements for stormwater management are outlined in §300-11 of the Town of Franklin Subdivision Regulations.

SW3. Revise proposed drainage pipe to be reinforced concrete or request waiver (§300-11.B(2.a)).

**Bohler:** Drainage piping has been revised to concrete pipe. Refer to the revised civil plans.



### **BETA2:** No further Comments.

#### 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 two new outfalls from the detention basin. Each outfall will discharge onto a new riprap apron. The northern outfall is within the 100-foot wetland buffer zone, while the southern outfall is outside all buffer zones.

SW4. Provide callouts for riprap aprons on the plans. Revise dimensions of riprap aprons in plan view to be consistent with the details.

**Bohler:** Rip rap aprons have been revised and labeled on the revised civil plans.

**BETA2:** 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 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 as well as a detention basin BMP. Calculations indicate a decrease in peak discharge rate and runoff volume to the design point.

SW5. Depict existing treeline to remain and proposed limits of clearing on the post-development watershed plan.

**Bohler:** The existing treeline to remain has been added to the Proposed Conditions Drainage Area Map (A). The proposed limits of clearing are shown on the Demolition Plans that will be removed within the limit of work line.

## **BETA2:** Comment addressed.

SW6. Revise post-development hydroCAD model to utilize a cover type of ">75% grass cover" for the array area. The establishment of meadow-like conditions in this area will be hampered by shading from the panels and length of time needed for vegetation to grow.

**Bohler:** The proposed HydroCAD model has been updated accordingly.

# **BETA2:** Comment addressed.

SW7. 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.

**Bohler:** The existing and proposed HydroCAD models have been updated accordingly.

#### **BETA2:** Comment addressed.

SW8. Review cover type area attributed to "paved parking" for subcatchment P1a; the area used is inconsistent with the area depicted on the plans, based on the portions of the access driveway and cart paths designated to remain.

**Bohler:** Onsite cart paths are proposed to be removed within the limit of work except for those located at wetland crossings. The civil plans have been revised to reflect this work.



BETA2: The demolition plans depict several cart paths to remain which do not appear to have been accounted for in the model. Confirm accuracy of demolition plans, clearly depict any cart paths to remain on the watershed plans, and revise model as necessary.

SW9. Review cover type area attributed to "gravel" for subcatchment P1a; the area used is inconsistent with the gravel driveway depicted on the plans.

**Bohler:** Onsite cart paths are proposed to be removed within the limit of work except for those located at wetland crossings. The civil plans have been revised to reflect this work.

BETA2: The demolition plans depict gravel areas to remain in the western portion of the Site outside the limits of work, which do not appear to have been accounted for in the model. Confirm accuracy of demolition plans, clearly depict any gravel areas to remain on the watershed plans, and revise model as necessary.

SW10. There are no proposed changes to the site north of the pond located northeast of the proposed entrance gate and a portion of this area will flow west towards Maple Street. BETA recommends that the drainage analysis be restricted to the area south of the northern wetlands which are impacted by the development.

**Bohler:** The Project proposes to remove cart paths in the northern portion of the site therefore it has been included in the analysis area.

BETA2: Although it is noted on the demolition plans, the limit of work as identified on the plans does not include these areas. There are no notes in the Erosion and sediment control plan either relative to this demolition and restoration either. BETA recommends that a construction detail with notes relative to time requirements for both demolition and restoration be provided on the plans.

**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 of Montauk fine sandy loam,), and Scituate fine sandy loam. Each are rated in Hydrologic Soil Group (HSG) C (low infiltration potential). A portion of the analysis area is mapped as Freetown Muck with HSG B/D (very low infiltration potential when saturated).

Soil testing has not been conducted at the Site. The project narrative indicate that this will be completed prior to construction.

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

SW11. Based on the size of the basin and proximity to wetlands, BETA recommends that soil testing be conducted in the footprint of the basin prior to approval.

**Bohler:** Four (4) test pits are being scheduled and will be conducted within the limits of the proposed stormwater management basin. The results of the testing will be shared with the Board and BETA upon completion.

BETA2: No further comments until test pit results are available.

SW12. Revise detention basin detail to remove erroneous reference to Landscape Plan and to exclude aspects which do not pertain to the project, e.g. flared end, riprap pad, and HDPE inlet pipe.

**Bohler:** The detention basin detail has been revised.



#### **BETA2:** Comment addressed.

SW13. Provide a minimum of 4 test pits in the area of the proposed detention basin to establish Estimated Seasonal High Groundwater.

**Bohler:** Four (4) test pits are being schedule and will be conducted within the limits of the proposed stormwater management basin. The results of the testing will be shared with the Board and BETA upon completion.

BETA2: No further comments until test pit results are available.

**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. As noted in the project narrative, proposed impervious areas are limited to gravel drives and existing paved roadways which will see only minimal vehicle traffic for maintenance. TSS removal will also be achieved via impervious area disconnection.

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.

SW14. 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.

**Bohler:** The detention basin and associated outlet control structures have been modified to retain and infiltrate more than the required water quality volume for impervious areas on site. Refer to the calculations provided in the revised drainage report.

BETA2: The use of the basin as an infiltration basin will be dependent on the test pit results. The detail on sheet C-902 should also be modified to show the actual outlet configuration and elevations. No further comments until test pit results are available.

SW15. Provide means of sediment control, such as a swale or berm, in areas where the proposed gravel road or paved driveway is in close proximity to wetlands (e.g. WF #285-#292, WF #181 - #191, #M Series, and #N Series).

**Bohler:** Swales and stone check dams have been added along the proposed gravel road adjacent to wetland WF #285-292. Refer to the revised civil plans. Existing gravel and/or paved areas draining to wetlands WF#181-191, #M Series, and #N Series are located outside of the proposed development limits and are expected to remain untouched. Vegetation within these areas appears well established and provides a natural buffer to the wetlands. It is our belief that impacts proposed to these areas would not be beneficial to the wetlands or their associated buffers and that these areas should remain. In addition, a reduction in sediment is anticipated since vehicular access to the site will be limited due to the proposed use.

BETA2: Provide detail of proposed level spreader and review proposed top elevation for consistency with proposed grading. Provide detail for proposed earthen berm.



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SW16. Unless required for access, consider removing existing cart paths within the western portion of the property to mitigate impacts to water quality.

**Bohler:** Onsite cart paths are proposed to be removed within the limit of work except for those located at wetland crossings. The civil plans have been revised to reflect this work.

BETA2: The demolition plans have been modified to reflect the existing cart path removal. However, the existing paved cart paths adjacent to wetland flags 284-294 are scheduled to remain. Based upon the level of construction proposed in this area, extending the erosion control to include these areas should be considered.

**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 includes stormwater discharges to a Zone II Wellhead protection area located along the eastern perimeter of the Site which is a critical area. In addition, the WF #186 – WF #203 wetlands include a vernal pool which is considered a critical area. Detention Basins are not considered recommended BMPs for use in these critical areas. At least 44% pretreatment is required before discharging to an infiltration BMP and the project is required to treat the 1-inch water quality volume (Refer to Standard 4 above). A spill presentation and response plan has been included in the submission.

SW17. Based upon the existing grades and spot shots in the existing paved access driveway adjacent to the vernal pool, it appears that the runoff from this pavement will flow south away from the pond. BETA recommends that additional spot shots along the northerly edge of the pavement adjacent to the pond be conducted to confirm this runoff pattern and if necessary proposed revisions to the driveway to ensure that untreated runoff from the pavement does not flow directly into the pond.

**Bohler:** Runoff from a small portion of the existing driveway referenced above appears to flow to the vernal pool and wetland #N series. These areas are located outside of the proposed development limits and are expected to remain untouched. Existing vegetation adjacent to the driveway appears well established and provides a natural buffer to the wetlands. It is our belief that impacts proposed to these areas would not be beneficial to the wetlands or their associated buffers and that these areas should remain.

BETA2: The N & M series wetlands are isolated until the water level exceeds Elevation 220. At that point flow would move northwest into the E series and then through the 12" culvert beneath the entrance driveway. The intent of the comment was to see if minor changes in the roadway grades could be achieved to direct runoff from the access roadway pavement into the N & M series wetlands and away from the vernal pool.

**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.



SW18. 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.

**Bohler:** Standards 3 and 4 are met to the maximum extent practicable for a redevelopment. The remaining Standards, 1-2 and 5-10, are fully met.

BETA2: Comment remains; provide the redevelopment checklist.

SW19. Show that portion of the existing access driveway that is to remain that will qualify for an LID Site Design Credit based upon the flow length to the receiving water.

**Bohler:** The site is not protected as a natural conservation area, therefore the existing driveway does not qualify for a LID Site Design Credit.

BETA2: In accordance with Volume 3, Chapter 1, page 44, the qualifying area does not need to be protected as a natural conservation area. However, the following comment addresses this issue. (See SW20).

SW20. BETA recommends that the applicant review the entrance driveway pavement area which is to remain and determine if some measure of treatment is possible to meet the definition of maximum extent possible.

**Bohler:** Under existing conditions, runoff generated across the entrance driveway flows over hundreds of linear feet of vegetated land receiving TSS removal and allowing for recharge prior to discharging to surrounding resource areas. The number of vehicles proposed to access the site after construction will be significantly reduced compared to existing conditions, ultimately improving the quality of runoff compared with the pre-development condition. It is our belief that minimizing additional impacts onsite is more beneficial to the surrounding natural environment and that additional treatment is not necessary.

BETA2: The only portion of the entrance driveway that is a concern is that portion between the gravel access driveway into the parking lot and the start of the M series wetlands. BETA agrees that all the runoff from the pavement west of this area will flow across an existing vegetated area which will provide the treatment intended by the standards. However, between the 2 entrance driveways into the gravel parking lot, the adjacent wetlands and the steep grades down from the edge of pavement limit the ability to provide any additional treatment. The area where there could be some treatment provided is the swale between the N & E series wetlands adjacent to the roadway. BETA recommends that the designer look at this area and see if some minor changes in topography could provide some treatment.

SW21. There are areas outside the limits of work where existing cart paths and gravel access roadways and parking areas will be abandoned in place. In certain areas these surfaces will be cutoff at both end of the area. BETA recommends that the applicant review these areas which are directly adjacent to the limit of work where these impervious surfaces could easily be removed and loamed and seeded.

**BOHLER:** A note has been added to the site plans indicating that loam and seed shall be proposed in all areas where gravel or paved cart paths, roadways, and parking areas have been removed / abandoned.



BETA2: BETA recommends that the note shown on Sheet C-301 relative to restoration of the cart path be expanded to include additional details on time of year, limits on exposure, etc. In addition, those cart paths which will remain should be shown on the proposed grading plans.

SW22. Provide calculations using performance curves to indicate the approximate TSS removal that will be provided by impervious area disconnection.

**Bohler:** The Project is a redevelopment and proposes to reduce impervious coverage by approximately three (3) acres as compared to the pre-development condition. As a result, TSS removal rates will be increased across the site and calculations are not required.

BETA2: BETA recognizes that the redevelopment of the site will significantly reduce the impervious surfaces on site and the water quality benefits associated with the removal. However, in accordance with the handbook, TSS Removal Calculations are required to document compliance with the standards.

**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.

SW23. Provide expected date clearing will begin and estimate duration of exposure of cleared areas (§153-12.M).

**Bohler:** 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:** No further comments.

SW24. Remove hay bales from the proposed erosion control plan (BDPG Pg. 11).

**Bohler:** Hay bales have been removed from the erosion control plan.

# **BETA2:** Comment addressed.

SW25. Recommend including a note or callout prohibiting the placement of stockpiles within wetland buffer zones.

**Bohler:** A note has been added to the erosion control sheets of the revised civil plans.

#### **BETA2: Comment addressed.**

SW26. Revise construction sequencing to exclude any steps that do not pertain to the project (e.g. buildings, curbing) and include timing of array racking, fencing, and electrical connections.

Bohler: Construction sequencing has been revised accordingly on sheet C-608 of the civil plan set.

#### **BETA2:** Comment addressed.

SW27. Revise construction sequencing to indicate timing of detention basin construction. Include a provision during restoration to remove any construction period sediment from the basin.



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Bohler: Construction sequencing has been revised accordingly on sheet C-608 of the civil plan set.

BETA2: Comment addressed.

SW28. Indicate if existing topsoil is to be retained and/or stockpiled and screened for re-use.

**Bohler:** Existing topsoil is expected to be retained and stockpiled onsite.

**BETA2:** Comment addressed.

SW29. The applicant is reminded that a Stormwater permit from the Franklin DPW is required based upon the size of the disturbance.

**Bohler:** Comment acknowledged.

BETA2: 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.

SW30. Provide owner signature (§153-18.B(5)).

**Bohler:** The Owner's signature has been provided in the revised O&M Plan.

**BETA2:** No further comments.

SW31. Include provision requiring a documentation submittal to the DPW confirming when maintenance has been satisfactory completed (§153-18.B(6)).

**Bohler:** The O&M Plan has been revised accordingly.

**BETA2:** No further comments.

SW32. Indicate the stormwater system owner(s) for the stormwater management system following construction.

**Bohler:** The responsible party has been provided.

**BETA2:** No further comments.

SW33. Indicate the party or parties responsible for maintenance.

**Bohler:** The responsible party has been provided.

**BETA2:** No further comments.

SW34. Indicate how future property owners will be notified of the presence of the stormwater management system and the need for maintenance.

**Bohler:** In the event the property is sold, the Operation and Maintenance Plan will be provided to and will be the responsibility of the new owner.

**BETA2:** No further comments.

SW35. Provide BMP location map.

**Bohler:** A BMP Location map has been provided and is included n the appendices of the revised drainage report.



Mr. Gregory Rondeau, Chairman June 21, 2023 Page 14 of 15

**BETA2:** No further comments.

SW36. Provide estimated operations and maintenance budget.

**Bohler:** Approximate maintenance budgets have been provided.

**BETA2:** No further comments.

SW37. Eliminate the reference to catch basins since there are none existing or proposed.

**Bohler:** Catch basins have been eliminated from the O&M Plan and the document has been revised accordingly.

**BETA2:** No further comments.

SW38. Revise layout of detention basin and/or perimeter fence to allow maintenance vehicle access around the perimeter of the basin at the crest of the berm.

**Bohler:** Fencing has been revised to allow vehicle access along the access berm.

**BETA2:** No further comments.

SW39. Where solar array rows are perpendicular to topography, include regular inspection and maintenance of drip edges to mitigate creation of rills and gulleys.

**Bohler:** The O&M Plan has been revised accordingly.

**BETA2:** No further comments.

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

SW40. Provide signature of owner on the illicit discharge compliance statement.

**Bohler:** The Owner's signature has been provided.

**BETA2:** No further comments.

## **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, flood plains, and vernal pools. Work within these areas includes portions of the solar array, fencing, gravel access drives, grading, tree clearing, and construction of a detention basin. Therefore, the Applicant is required to submit an NOI to the Town of Franklin Conservation Commission and must obtain an Order of Conditions to complete the proposed work.



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

Very truly yours,

BETA Group, Inc.

Gary D. James, P.E. Senior Project Engineer

cc: Amy Love, Town Planner



# Town of Franklin

355 East Central Street Franklin, Massachusetts 02038-1352



Phone: (508) 520-4907 www.franklinma.gov

#### DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

**DATE:** June 21, 2023

**TO:** Franklin Planning Board

FROM: Department of Planning and Community Development

**RE:** Maplegate Solar North

Site Plan

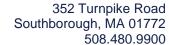
The DPCD has reviewed the above referenced Site Plan Modification application for the Monday, June 26, 2023 Planning Board meeting and offers the following commentary:

# General:

- 1. The site is accessed through Bellingham at 160 Maple St, and located in the Industrial Zoning District.
- 2. The Planning Board approved an 81-P ANR plan on January 9, 2023, combing the lots indicated on the application, into one single lot.
- 3. The proposed project includes the construction solar panels, along with drainage.
- 4. The Applicant has filed a NOI with the Conservation Commission.
- 5. Review letters will be provided from BETA, DPW and Fire.

# Comments from May 8, 2023 Meeting:

- 1. Show the abutters on the plan. Provide the distance from the inverters to the abutters.
- 2. Provide a vegetation plan. Showing pre-construction and post-construction. Provide a plan that shows what trees will be removed and what will stay.
- 3. Where does the current water come from for the golf course?
- 4. Can more vegetation be added to lot 2, since it will not be built on.
- 5. The Planning Board asked what Lot 2 will be used for. Applicant should clarify the intent of lot 2.
- 6. Will there be any public access to the site.





June 9, 2023

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

Re: Proposed Solar Array, Parcel 1, 160 Maple Street, Bellingham, Norfolk County, MA

Site Plan Peer Review

Dear Mr. Rondeau:

Bohler is in receipt of a comment letter from BETA dated May 25, 2023. On behalf of Applicant NextGrid Mescalbean, LLC., Bohler offers the following responses. For clarity, the original comments are in **italics**, while our responses are directly below in **bold** type.

## **GENERAL**

Comment G1. Recommend increasing text size of callouts to improve legibility, particularly on

enlarged plans.

Response: Notes have been enlarged on the Overall Sheets to provide more clarity.

Comment G2. Revise plans to include any utility poles, overhead wires, or electrical conduit to be

used for interconnection, as applicable.

Response: The utility poles proposed at the end of the existing access road for the

interconnect and the additional poles proposed to bring the overhead wiring up the access road to the solar field entrance gates have been added to the

plans.

Comment G3. Provide proposed contours for red-shaded areas to be re-graded to determine

accurate limits of work, especially in those areas around the flagged wetlands where it appears that the only option available to reduce the grade is to fill the

wetlands.

Response: The areas of red highlighted slope is intended to provide distinction for the

racking installer to utilize extended mounting legs. We are not intending to regrade those areas, instead we will work around steeper slopes by elevating the racking accordingly. Notes have been revised on the grading plan to

clarify this direction.

Comment G4. BETA recommends that the shaded areas, which identify areas where the existing

grade exceeds 15%, be eliminated from the drawings outside the limits of work to

avoid confusion.

Response: Acknowledged, we have removed the red hatching in areas that are outside

our limit of work.



Comment G5. BETA recommends a condition that no earth material be removed from the Site

except for unsuitable construction and demolition debris.

Response: Acknowledged, the earth material will remain on site to be reused. Only

unsuitable construction demolition debris, asphalt material or building

material will be removed from the site.

## **ZONING**

Parking, Loading and Driveway Requirements (§185-21)

Comment 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.

Response: 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.

Comment P2. Provide plan depicting turning moments along the access roads. Confirm that the

turning radius at curves and at turnaround areas is sufficient for a Town of Franklin

Fire Apparatus.

Response: Truck turning plan has been added to the set which depicts the Fire truck

access through the site.

Comment P3. Review width of existing access road to determine if two fire trucks could drive

side-by-side and pass one-another if needed. This access route is fairly long and

backing up to allow a vehicle to pass may be unsafe.

Response: Existing access road is approximately 20' wide. This road has serviced the

active use of the golf course for many years, which currently has significantly more vehicle activity than what a solar field will experience. We have depicted two fire trucks passing on this existing drive. The space is tight as noted, however we do not believe this warrants the need to widen the existing access road to account for two vehicles passing on a road that

will rarely be accessed.

Comment P4. The proposed access gate is located at the end of an 1100+ foot long driveway

with little opportunity for turnaround; therefore, a vehicle which cannot access this gate will have difficulty backing out of the Site. BETA recommends providing a turnaround area near the gate or moving the gate to allow the use of the driveway

as a hammerhead.

Response: We have revised the gate location and provided two gates so that the access

drive itself adjacent to the primary equipment pad can accommodate an

ability to turn around.

Comment P5. Coordinate with Town Fire Department to determine means of emergency access

through front gate, such as a knox box.



Response: We have added notes to the gates to provide knox box accommodations for

all access gate locations.

**Industrial District Performance Controls (§185-22)** 

Comment I1. As noted at the hearing, the inverter noise levels will be approximately 65 decibels.

Based upon their proximity to the adjacent industrial building, BETA recommends that the applicant review the abatement provided by the limited vegetation remaining and if necessary, provide a barrier around these units to maintain a level

of 10 decibels at the property line. (See I2)

Response: The closest equipment pad is located approximately 564' feet away from the

closest property that is not an adjacent solar field. The noise generation

levels will not have impacts on the adjacent properties.

Comment I2. Provide data on anticipated sound levels for transformer and related equipment

(§185-22.A) and an analysis to ensure that remnant sound levels at adjacent

receptors are below ambient are below ambient levels.

Response: Based on the response above, we believe the concern of impact to neighbors

is remedied by the significant distance to the adjacent properties. We do not

feel a noise analysis is warranted in this condition.

Earth Removal Regulations (§185-23)

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

section.

Response: We have added notes on the plans regarding maintaining the soil removal or

disturbed top soil onsite for re-use. We are not exporting soil from the site.

Water Resources District (§185-40)

Comment W1. Identify safeguards which will be implemented to protect against any accidental

hazardous material release from the solar panels or ancillary equipment (§185-

40.E.1).

Response: The panels and equipment pads do not contain hazardous material that

warrants additional protection. The transformer is noted to have bio-

degradable fluid. The energy storage inverters are also self-contained.

STORMWATER MANAGEMENT

**Stormwater Management Regulations (Chapter 153)** 

Comment SW1. Provide test pit data in the area of the proposed basin to determine Estimated

Seasonal High Groundwater levels (§153-15.A(9)).

Response: Four (4) test pits are being schedule and will be conducted within the limits

of the proposed stormwater management basin. The results of the testing

will be shared with the Board and BETA upon completion.



Comment SW2. Indicate composition of proposed "meadow seed mix." Proposed seed mix should

include native vegetation to the extent practicable (BDPG Pg 6).

Response: Refer to the seed mix specifications provided on Detail Sheet C-902 for the

associated seed mixes proposed onsite.

<u>Subdivision Regulations - Stormwater Management Regulations (§300-11)</u>

Comment SW3. Revise proposed drainage pipe to be reinforced concrete or request waiver (§300-

11.B(2.a)).

Response: Drainage piping has been revised to concrete pipe. Refer to the revised civil

plans.

No Untreated Stormwater (Standard Number 1):

Comment SW4. Provide callouts for riprap aprons on the plans. Revise dimensions of riprap

aprons in plan view to be consistent with the details.

Response: Rip rap aprons have been revised and labeled on the revised civil plans.

Post-Development Peak Discharge Rates (Standard Number 2)

Comment SW5. Depict existing treeline to remain and proposed limits of clearing on the post-

development watershed plan.

Response: The existing treeline to remain has been added to the Proposed Conditions

Drainage Area Map (A). The proposed limits of clearing are shown on the

Demolition Plans that will be removed within the limit of work line.

Comment SW6. Revise post-development hydroCAD model to utilize a cover type of ">75% grass

cover" for the array area. The establishment of meadow-like conditions in this area will be hampered by shading from the panels and length of time needed for

vegetation to grow.

Response: The proposed HydroCAD model has been updated accordingly.

Comment SW7. 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.

Response: The existing and proposed HydroCAD models have been updated

accordingly.

Comment SW8. Review cover type area attributed to "paved parking" for subcatchment P1a; the

area used is inconsistent with the area depicted on the plans, based on the portions

of the access driveway and cart paths designated to remain.

Response: Onsite cart paths are proposed to be removed within the limit of work except

for those located at wetland crossings. The civil plans have been revised to

reflect this work.



Comment SW9. Review cover type area attributed to "gravel" for subcatchment P1a; the area used

is inconsistent with the gravel driveway depicted on the plans.

Response: Onsite cart paths are proposed to be removed within the limit of work except

for those located at wetland crossings. The civil plans have been revised to

reflect this work.

Comment SW10. There are no proposed changes to the site north of the pond located northeast of

the proposed entrance gate and a portion of this area will flow west towards Maple Street. BETA recommends that the drainage analysis be restricted to the area

south of the northern wetlands which are impacted by the development.

Response: The Project proposes to remove cart paths in the northern portion of the site,

therefore it has been included in the analysis area.

**Recharge to Groundwater (Standard Number 3)** 

Comment SW11. Based on the size of the basin and proximity to wetlands, BETA recommends that

soil testing be conducted in the footprint of the basin prior to approval.

Response: Four (4) test pits are being schedule and will be conducted within the limits

of the proposed stormwater management basin. The results of the testing

will be shared with the Board and BETA upon completion.

Comment SW12. Revise detention basin detail to remove erroneous reference to Landscape Plan

and to exclude aspects which do not pertain to the project, e.g. flared end, riprap

pad, and HDPE inlet pipe.

Response: The detention basin detail has been revised.

Comment SW13. Provide a minimum of 4 test pits in the area of the proposed detention basin to

establish Estimated Seasonal High Groundwater.

Response: Four (4) test pits are being schedule and will be conducted within the limits

of the proposed stormwater management basin. The results of the testing

will be shared with the Board and BETA upon completion.

Total Suspended Solids (Standard Number 4)

Comment SW14. 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.

Response: The detention basin and associated outlet control structures have been

modified to retain and infiltrate more than the required water quality volume for impervious areas on site. Refer to the calculations provided in the revised

drainage report.



Comment SW15. Provide means of sediment control, such as a swale or berm, in areas where the

proposed gravel road or paved driveway is in close proximity to wetlands (e.g. WF

#285-#292, WF #181 - #191, #MSeries, and #N Series).

Response: Swales and stone check dams have been added along the proposed gravel

road adjacent to wetland WF #285-292. Refer to the revised civil plans. Existing gravel and/or paved areas draining to wetlands WF#181-191, #M Series, and #N Series are located outside of the proposed development limits and are expected to remain untouched. Vegetation within these areas appears well established and provides a natural buffer to the wetlands. It is our belief that impacts proposed to these areas would not be beneficial to the wetlands or their associated buffers and that these areas should remain. In addition, a reduction in sediment is anticipated since vehicular access to

the site will be limited due to the proposed use.

Comment SW16. Unless required for access, consider removing existing cart paths within the

western portion of the property to mitigate impacts to water quality.

Response: Onsite cart paths are proposed to be removed within the limit of work except

for those located at wetland crossings. The civil plans have been revised to

reflect this work.

## **Critical Areas (Standard Number 6)**

Comment SW17. Based upon the existing grades and spot shots in the existing paved access

driveway adjacent to the vernal pool, it appears that the runoff from this pavement will flow south away from the pond. BETA recommends that additional spot shots along the northerly edge of the pavement adjacent to the pond be conducted to confirm this runoff pattern and if necessary proposed revisions to the driveway to ensure that untreated runoff from the pavement does not flow directly into the pond

Response: Runoff from a small portion of the existing driveway referenced above

appears to flow to the vernal pool and wetland #N series. These areas are located outside of the proposed development limits and are expected to remain untouched. Existing vegetation adjacent to the driveway appears well established and provides a natural buffer to the wetlands. It is our belief that impacts proposed to these areas would not be beneficial to the wetlands or

their associated buffers and that these areas should remain.

## **Redevelopment (Standard Number 7)**

Comment SW18. 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.

Response: Standards 3 and 4 are met to the maximum extent practicable for a

redevelopment. The remaining Standards, 1-2 and 5-10, are fully met.

Comment SW19. Show that portion of the existing access driveway that is to remain that will qualify

for an LID Site Design Credit based upon the flow length to the receiving water.



Response: The site is not protected as a natural conservation area, therefore the

existing driveway does not qualify for a LID Site Design Credit.

Comment SW20. BETA recommends that the applicant review the entrance driveway pavement

area which is to remain and determine if some measure of treatment is possible to

meet the definition of maximum extent possible.

Response: Under existing conditions, runoff generated across the entrance driveway

flows over hundreds of linear feet of vegetated land receiving TSS removal and allowing for recharge prior to discharging to surrounding resource areas. The number of vehicles proposed to access the site after construction will be significantly reduced compared to existing conditions, ultimately improving the quality of runoff compared with the pre-development condition. It is our belief that minimizing additional impacts onsite is more beneficial to the surrounding natural environment and that additional

treatment is not necessary.

Comment SW21. There are areas outside the limits of work where existing cart paths and gravel

access roadways and parking areas will be abandoned in place. In certain areas these surfaces will be cutoff at both end of the area. BETA recommends that the applicant review these areas which are directly adjacent to the limit of work where these impervious surfaces could easily be removed and loamed and seeded.

Response: A note has been added to the site plans indicating that loam and seed shall

be proposed in all areas where gravel or paved cart paths, roadways, and

parking areas have been removed / abandoned.

Comment SW22. Provide calculations using performance curves to indicate the approximate TSS

removal that will be provided by impervious area disconnection.

Response: The Project is a redevelopment and proposes to reduce impervious coverage

by approximately three (3) acres as compared to the pre-development condition. As a result, TSS removal rates will be increased across the site

and calculations are not required.

**Erosion and Sediment Controls (Standard Number 8)** 

Comment SW23. Provide expected date clearing will begin and estimate duration of exposure of

cleared areas (§153-12.M).

Response: 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.

Comment SW24. Remove hay bales from the proposed erosion control plan (BDPG Pg. 11)

Response: Hay bales have been removed from the erosion control plan.

Comment SW25. Recommend including a note or callout prohibiting the placement of stockpiles

within wetland buffer zones.



Response: A note has been added to the erosion control sheets of the revised civil

plans.

Comment SW26. Revise construction sequencing to exclude any steps that do not pertain to the

project (e.g. buildings, curbing) and include timing of array racking, fencing, and

electrical connections.

Response: Construction sequencing has been revised accordingly on sheet C-608 of

the civil plan set.

Comment SW27. Revise construction sequencing to indicate timing of detention basin construction.

Include a provision during restoration to remove any construction period sediment

from the basin.

Response: Construction sequencing has been revised accordingly on sheet C-608 of

the civil plan set.

Comment SW28. Indicate if existing topsoil is to be retained and/or stockpiled and screened for re-

use.

Response: Existing topsoil is expected to be retained and stockpiled onsite.

Comment SW29. The applicant is reminded that a Stormwater permit from the Franklin DPW is

required based upon the size of the disturbance.

Response: Comment acknowledged.

Operations/Maintenance Plan (Standard Number 9)

Comment SW20. Provide owner signature (§153-18.B(5)).

Response: The Owner's signature has been provided in the revised O&M Plan.

Comment SW21. Include provision requiring a documentation submittal to the DPW confirming when

maintenance has been satisfactory completed (§153-18.B(6)).

Response: The O&M Plan has been revised accordingly.

Comment SW22. Indicate the stormwater system owner(s) for the stormwater management system

following construction.

Response: The responsible party has been provided.

Comment SW23. Indicate the party or parties responsible for maintenance.

Response: The responsible party has been provided.

Comment SW24. Indicate how future property owners will be notified of the presence of the

stormwater management system and the need for maintenance.

Response: In the event the property is sold, the Operation and Maintenance Plan will be

provided to and will be the responsibility of the new owner.



Comment SW25. Provide BMP location map.

Response: A BMP location map has been provided and is included in the appendices of

the revised drainage report.

Comment SW26. Provide estimated operations and maintenance budget.

Response: Approximate maintenance budgets have been provided.

Comment SW27. Eliminate the reference to catch basins since there are none existing or proposed.

Response: Catch basins have been eliminated from the O&M Plan and the document

has been revised accordingly.

Comment SW28. Revise layout of detention basin and/or perimeter fence to allow maintenance

vehicle access around the perimeter of the basin at the crest of the berm.

Response: Fencing has been revised to allow vehicle access along the access berm.

Comment SW29. Where solar array rows are perpendicular to topography, include regular inspection

and maintenance of drip edges to mitigate creation of rills and gulleys.

Response: The O&M Plan has been revised accordingly.

**Illicit Discharges (Standard Number 10)** 

Comment SW30. Provide signature of owner on the illicit discharge compliance statement.

Response: The Owner's signature has been provided.

We trust the above as well as the attached information are sufficient for your continued review of the project. Should you have any questions or require additional information, please do not hesitate to contact me at (508) 480-9900.

Sincerely,

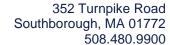
**Bohler** 

Greg DiBona

CC.

Daniel Serber, NextGrid
Aaron Culig, NextGrid
John Kucich, Bohler
Peter Brown, Brown Legal PLLC
Allison Finnell, Brown Legal PLLC
Amy Love, Town of Franklin

Gary D. James, P.E., BETA Group, Inc.





June 22, 2023

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

Re: NextGrid Mescalbean, LLC

Site Plan – Maplegate North Solar

Dear Mr. Rondeau:

Bohler Engineering is in receipt of a comment letter from Michael Maglio, dated May 3, 2023. On behalf of Applicant NextGrid Mescalbean, LLC., Bohler offers the following responses. For clarity, the original comments are in **italics**, while our responses are directly below in **bold** type.

Comment # 1 Permit applications that may need to be filed with the Franklin Department of Public Works

include (but are not necessarily limited to) a Soil Erosion and Sediment Control Plan

Certification Permit and a Trench Permit.

Response: Comment Acknowledged. Those permits will be pulled following the Planning Board

Approval and prior to construction.

Comment #2 While the Stormwater Report indicates the project will comply with the MADEP Stormwater

Standards and the Town's Stormwater Management bylaw, the report should indicate how

the project specifically meets the Town's standards criteria under 153-16.

Response: The detention basin and associated outlet control structures have been modified to

retain and infiltrate more than the required water quality volume for impervious

areas on site. Refer to the calculations provided in the revised drainage report

Comment #3 The outfall pipes for the surface basin are called out to be HDPE rather than RCP,

however they are not in areas subject to traffic.

Response: The detention basin detail has been revised.

Comment #4 The grading plan shows areas highlighted in red which are to be regraded but it doesn't

indicate how the grades will be modified or if it will impact drainage patterns.

Response: The areas of red highlighted slope is intended to provide distinction for the racking

installer to utilize extended mounting legs. We are not intending to regrade those areas, instead we will work around steeper slopes by elevating the racking accordingly. Notes have been revised on the grading plan to clarify this direction.



Comment #5 Rainfall amounts used in the calculations should be updated to reflect current NOAA Atlas

14 values.

Response: The rainfall amounts have been revised as noted.

Comment #6 The spillway elevation for the surface basin is less than 0.10ft higher than the flood

elevation for the 100 year storm event. The grading should be revised to provide additional

freeboard.

Response: Spillway elevation has been revised to provide additional freeboard above the flood

elevation.

We trust the above as well as the attached information are sufficient for your continued review of the project. Should you have any questions or require additional information, please do not hesitate to contact me at (508) 480-9900.

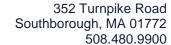
Sincerely,

**Bohler** 

Greg DiBona

CC.

Daniel Serber, NextGrid
Aaron Culig, NextGrid
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Peter Brown, Brown Legal PLLC
Allison Finnell, Brown Legal PLLC
Amy Love, Town of Franklin
Gary D. James, P.E., BETA Group, Inc.





June 22, 2023

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

Re: NextGrid Mescalbean, LLC

Maplegate Solar North Site Plan

Dear Mr. Rondeau:

Bohler Engineering is in receipt of a comment letter from The Franklin Department of Planning and Community Development, dated May 2nd, 2023. On behalf of Applicant NextGrid Mescalbean, LLC., Bohler offers the following responses. For clarity, the original comments are in **italics**, while our responses are directly below in **bold** type.

#### **GENERAL**

Comment G1. The site is accessed through Bellingham at 160 Maple St, and located in the Industrial

Zoning District.

Response: Acknowledged. The existing access drive which is located on Maple Street will be

maintained as the primary access to the Solar Array.

Comment G2. The Planning Board approved an 81-P ANR plan on January 9, 2023, combing the lots

indicated on the application, into one single lot.

Response: Acknowledged. The proposed Solar Array development is location on Parcel 1 of the

noted ANR Plan.

Comment G3. The proposed project includes the construction solar panels, along with drainage.

Response: Comment acknowledged.

Comment G4. The Applicant has filed a NOI with the Conservation Commission.

Response: Comment acknowledged.

Comment G5. Review letters will be provided from BETA, DPW and Fire.

Response: Comment acknowledged.

#### **FURTHER COMMENTS**

Comment C1. Per section §185-31.C(3)(i) – provide outdoor lighting, open space areas, snow storage

and parking areas.

Response: As discussed at the initial planning board meeting, we do not typically provide for

outdoor lighting or designated parking areas with these types of projects. The maintenance visits are limited and would only occur in daylight. The property has

abundant open lawn areas adjacent to the access drive for snow storage.



Comment C2. Per section §185-31.C(3)(j) – provide location, size and sketch of all proposed signs.

Response: An advisory sign will be posted by the entrance drive at Maple Street. This sign will

be located on the Bellingham lot and will conform to the Town of Bellingham signage requirements for posting of the Solar Array. There are no signs proposed on the

Franklin parcels.

Comment C3. Per section §185-31.C(3)(k) – provide a complete landscaping plans, including existing

vegetation and proposed plantings

Response: The Solar Array is located in the middle of the site, with wooded buffers and areas

of wetland areas that will remain along the perimeter. The landscape improvements will only entail the seed mix proposed within the solar array area. No additional

buffer plantings are proposed as the perimeter buffer to the site will remain.

Comment C4. Per section §185-31.C(3)(I) – provide a photometric plan.

Response: Site lighting is not proposed for the project.

Comment C5. The Town staff recommended providing public access, such as a walking trail around the

perimeter of the site or a park with public access.

Response: We have designated Parcel 2 as the proposed lot for public access. This lot will have

a separate gravel access drive and parking area. The use for this public space has not been defined and the applicant is open to discussing further with the Board.

We trust the above as well as the attached information are sufficient for your continued review of the project. Should you have any questions or require additional information, please do not hesitate to contact me at (508) 480-9900.

Sincerely,

**Bohler** 

Greg DiBona

CC.

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