

City Planning Department



Memo

To: Cranston City Plan Commission
From: Joshua Berry, AICP, Senior Planner / Administrative Officer
Date: January 29, 2021
Re: "Natick Avenue Solar" Preliminary Plan – Major Land Development

Owner: Ronald Rossi
Applicant: Natick Solar, LLC
Location: 0 Natick Ave, AP 22-3, Lot 108 & 119
Zone: A-80 (single family dwellings on lots of minimum areas of 80,000 ft²)
FLU: Single family residential less than 1 unit/acre

This memo only covers the information since and resulting from the January 5, 2021 Plan Commission meeting.

Application materials can be found on the [City website](#).

I. NEW Documents Since January's Meeting

1. Revised Site Layout Plan (Sheet 5 of 13 of the full Preliminary Plan Set) dated 1/14/21;
2. Revised Landscape Plans dated 1/15/21 (there were also landscape plans submitted dated 1/14/21, but to avoid confusion only the most current plans will be discussed);
3. Memo from John Carter re landscaping revisions dated 1/15/21.

In addition to these materials submitted by the applicant, the City-hired Landscape Peer Reviewer Sara Bardford has submitted a memo dated 1/18/21 which responds to the revisions to the Landscape Plans.

II. Planning Analysis

A. Landscape Plans / Buffering

There were outstanding concerns regarding the landscaping plans at the conclusion of the January 5, 2021 Plan Commission meeting, particularly in regards to viewsheds from the south/southeast and the north/northwest, as well as regarding other issues such as the heights/trimming of plants, the length of the warranty, seed mixes and topsoil. The

applicant has since made revisions to the Landscape Plans as outlined in John Carter's 1/15/21 memo and as shown on the revised plans.

The Plan Commission's Peer Reviewer, Sara Bradford, RLA, reviewed the revised materials and issued a memo on 1/18/20 with her comments. The memo lists the areas of concern which, in Ms. Bradford's opinion, were remaining at the conclusion of the January 5, 2021 Plan Commission meeting and itemizes the changes while providing brief commentary. The memo concludes that *"Most concerns have been satisfactorily addressed. Only the specific questions related to areas E, F and loam depth remain plus a reminder that final planting locations and materials shall be documented in 'as built' drawings."*

It is important to note that both the applicant and Ms. Bradford believe Master Plan Condition of Approval #11¹ is untenable and cannot be adhered to. During the January meeting, abutter Drake Patten (AP 18 Lot 551 & AP 22 Lot 51) offered the name of one potential source which sold items in bulk which may meet the condition. Ms. Bradford looked into this supplier and others, and due to the fact that the seed mix must be drought & shade tolerant and only grow to a certain height, she felt that the proposed seed mixes were acceptable. Therefore, staff recommends that Master Plan Condition of Approval #11 be superseded by a new condition as discussed later in this memo.

There were concerns specifically relating to Planting Area F that were fleshed out in discussions between staff Ms. Bradford. This is reflected in "Original Condition 8" in the next section of the memo.

Staff has worked with Ms. Bradford on the wording of the recommended conditions relating to landscaping.

B. Conditions of Approval

The staff report for the January meeting included draft conditions to be considered. The applicant responded to the draft conditions in the hours just before the January meeting. There was some discussion on these conditions, but more time was needed before the language of the conditions could be fully vetted.

There were conditions incorporated into the Master Plan approval that apply to the development phase of the project and therefore could not have yet been satisfied by the applicant. Staff is proposing those conditions carry over, with one exception, Condition # 10: *"The applicant will demonstrate that they have considered testing of wells of direct abutters (with their permission) prior to any blasting activities and the blasting company (if utilized) will follow the customary procedures for pre-blasting inspections of surrounding properties."* After closer consideration, staff is concerned that this condition is problematic on several levels. It is not proper for the City to insert itself into a process where it has no jurisdiction. The condition is not clear on the standards for the testing and what should be as a result of the testing, nor is it clear that the applicant would have to do more than

¹ Master Plan Approval Condition #11: "Seed mix to be used under panels shall be organically sourced (non GMO or otherwise enhanced seeds) and consist of local seed varieties that would be found in NE meadows."

“consider” this action. For these reasons, staff is proposing that the Plan Commission acknowledge these issues and not carry over the condition.

To clearly show the progression in the conditions since January, staff will provide each condition as it was originally presented, followed by the applicant’s response, then staff analysis, and then a revised condition as applicable. New conditions will be added to the end of the previous conditions. A clean version of the conditions can be found at the end of this memo.

1. **Original condition:**

The applicant will work with the Tennessee Gas Pipeline to (TGP) to ensure that the project will be consistent with the terms and conditions of the easement.

Applicant response:

None.

Revised condition:

Condition **remains** as is.

2. **Original condition:**

In the event of ledge or rock, removal of such be mechanical to the greatest extent possible.

Applicant response:

“We cannot address the rock mechanically only.”

Analysis:

The condition was not written to nor is it intended to **prohibit** blasting; it’s intent is to encourage mechanical methods as the preferred method of ledge/boulder removal. This is admittedly a difficult condition for the City to enforce, but is important in that it clearly communicates the Plan Commission’s goal to minimize blasting and be sensitive to impacts to and concerns of the surrounding neighbors.

Revised condition:

The applicant shall use reasonable efforts to remove ledge or rock by mechanical means. Nothing herein shall prohibit the use of blasting to remove necessary ledge.

3. **Original condition:**

Onsite utilities shall be buried underground connecting to pad-mounted transformers unless evidence can be provided to the Department of Public Works and Planning Department as to why this is not a feasible option.

Applicant response:

The applicant's response in advance of the January Plan Commission meeting was "Revyty would like to remove this interconnection condition. Revyty has no jurisdiction over the utility to provide evidence on why underground is not a feasible option. In Revyty's experience with National Grid, is that their designs focus on safety and reliability and for that reason above ground is required. This condition will not be able to be met by Revyty as the design is performed by National Grid." Since that time staff has worked with the applicant on this issue as discussed in the following 'Analysis' section.

Analysis:

The Public Works Department coordinates with National Grid as they install interconnections throughout the City. Utilizing their contacts, DPW inquired into National Grid's ability to revise the interconnection plan as to underground the onsite utilities to which the reply was 'yes,' that it would be possible. However, staff acknowledges that this could be a potentially significant expense to the applicant and has the potential to set the project's timeline back, particularly due to the way solar interconnection applications are processed by National Grid. National Grid has a queue system, the applicant has expressed concern that losing their spot in the queue could cause a significant delay to the project, which in conjunction with the additional design and installation costs, would combine to constitute a significant burden. Staff has reached out to National Grid in an attempt to obtain a better understanding of the anticipated impacts to the project should the Plan Commission impose a condition to underground the onsite interconnection utilities. Verbally, some assurances were given regarding the estimated impacts of revising the interconnection plan, and staff is hopeful that some of this information may be available in writing prior to the Plan Commission meeting on February 2.

Staff prefers the onsite portion of the interconnection to be underground, but also wants to avoid conditions that impose burdens that may considerably outweigh benefits. The origin of this condition came from staff's efforts to avoid unsightly outcomes that we've experienced in the past, particularly those of the interconnections for Gold Meadow Farm Solar (Lippett Ave) and Hope Farm Solar. Both of these projects now have numerous utility poles visible from the right-of-way and/or private property. Although staff still feels that undergrounding the utilities for the Natick Avenue Solar project is preferred, staff does not anticipate that the results would be comparable. There are two main reasons for this: 1) much more detailed information regarding the interconnection is on the table for review, it is known exactly how many (five) poles will be onsite and where they will be; and 2) the physical features of the location of the poles are different. The site has a slim access road perpendicular to Natick Ave. The poles would run down the access road away

from Natick Ave similar to any given street. There is existing vegetation which would largely block the views of the poles located further away from the street.

Due to these considerations, staff is still proposing a revised condition to underground onsite utilities related to the interconnection, but if the Plan Commission feels that the expense and/or delay would be an *unnecessary* burden, one that would not outweigh the benefits of the condition, then it may consider striking this condition.

Revised condition:

For any of the project's installation of the utility interconnection safety, recording, monitoring and functionality equipment that is to be located onsite (Assessor's Plat 22-3, Lot 108), the applicant will pursue a request of National Grid to approve underground installation of said infrastructure provided that: (1) such approval is able to be issued on the applicant's existing interconnection application for the project that is currently pending before National Grid (as opposed to resubmission of a new application) without jeopardizing applicant's interconnection queue status or otherwise causing significant additional delay (more than 2-3 months) to the applicant receiving any of its final National Grid approvals for the project (including Authorization to Interconnect); and (2) such underground installation is reasonably feasible to National Grid and applicant, taking into account relative impacts to (a) public health and safety, (b) system functionality, (c) interconnection reliability, (d) the project's viability, and (e) timing of the project's achievement of operation. The applicant shall provide written correspondences to and from National Grid relating to this condition to DPW and the Planning Department.

4. **Original condition:**

The entire perimeter fencing shall provide for at least a 6-inch gap between the ground and the bottom of the fencing to provide adequate wildlife passage for smaller species consistent with the RIDEM approval.

Applicant response:

"We agree."

Revised condition:

Condition **remains** as is.

5. **Original condition:**

Planting Group D on the Landscape Plans shall be enhanced with at least one additional 10' x 50' planting group.

Applicant response:

“We agree.” The applicant has revised the plan to include the grouping, so the condition can be removed.

Revised condition:

The revisions are compliance with the condition so it can be **removed**.

6. **Original condition:**

The minimum height of trimming of Planting Area D as shown on the Landscape Plans shall be 12’.

Applicant response:

“We agree.” The applicant has revised the plan to include the grouping.

Revised condition:

The revisions are compliance with the condition so it can be **removed**.

7. **Original condition:**

A formal written agreement shall be submitted as part of the Final Plan application to preserve the existing vegetation serving as a buffer to the project site from the west/northwest of the solar project.

Applicant response:

The applicant’s response in advance of the January Plan Commission meeting was “Ron Rossi will not commit to this. We will plant 20 white pines 5’ - 6’ and maintained at a maximum of 12’.” The portion of the response relating to the plantings may be outdated by what is now reflected in the revisions to the Landscape Plans, which include Planting Area E that consists of three (3) planting groups located 25’ west of the perimeter fence.

Analysis:

Ms. Bradford’s memo states the revised plan is “an acceptable compromise” and describes that the “height limitations could allow the small trees to go untrimmed or grow to 25’ before trimming.” Staff notes that ‘Maintenance & Warranty’ Note #3 establishes a minimum planting height of 12’, so staff suggests that Planting Area E be removed from that note and a new note be added, “Planting Area E will be trimmed to a height no less than 18’.” By looking at transect lines 13 & 14, it appears that the additional height of the plantings would go a long way to obstruct the view of the panels from the residences to the northwest as the ground slopes downward away, making shorter plantings less effective.

Revised condition:

Planting Area E will be trimmed to a height no less than 18’.

8. **Original condition:**

Planting Area E as shown on the Landscape Plans shall be relocated to the edge of the lease area so that the pines may grow naturally and untrimmed. Similar plantings shall be provided in the southeast at the edge of clearing near Planting Area D.

Applicant response:

The revised plans reflect the applicant’s response to Planting Area E, which was discussed under the previous condition.

The applicant has also revised the Landscape Plan as to provide an additional planting group at the west end of Planting Group D, and the trimming height has been revised “to a height of no **less** than 12” (emphasis added). Planting Group F has been added extending north from Planting Group D and consists of 10 Eastern White Pines and 10 Eastern Red Cedars.

Analysis:

Ms. Bradford’s memo does not state any *explicit* objection to the Landscape Plan’s proposals for Planting Groups D, E or F, but it does express some dissatisfaction with Area F, stating that “the proposed planting along the fence seems to have minimal initial or long term buffer value.” Staff reached out to Ms. Bradford to clarify this issue who stated that she would like to see evergreens planted on the east of the access road at the edge of clearing as to appear more integrated/naturalized with the existing vegetation and so that the plantings could grow taller due to their distance away and downgrade from the panels. The applicant holds that the decreased elevation would render these plantings less effective considering that they would have to be trimmed to prevent shade cast. They also believe that the 600’ of vegetated wetland area provide a sufficient buffer to from the southwest (pictures of this view are found on pages 7 & 8 of the Narrative document available on the website). Ms. Bradford has expressed that the existing vegetation does provide buffering from the project from the southwest, but that the view from AP 18 Lot 551 & AP 22 Lot 51 would benefit from her proposed plantings as the clearing and solar project may be visible in winter conditions.

Revised condition:

Planting Area F shall consist of evergreens and shall be relocated to the edge of the cleared area east of the access road in the southeast corner of the site. Planting Area F shall be trimmed to a height not less than 25’.²

² It is possible that these trees may not need to be trimmed at all, but in the event that the plantings cast shade on the project, staff is proposing a 25’ minimum height.

9. **Original condition:**

The applicant shall provide a \$___(TBD)___ cash escrow to be used solely for the City's chosen landscape architect to conduct biannual inspections of the site for the next three years to monitor consistency of the installation with the approved plans, and to determine the efficacy and health and the required plantings.

Applicant response:

The applicant's response in advance of the January meeting was as follows: "Revity's landscape architect will review the installation of the plantings and monitor the consistency with the approved plans for the first year upon the project becoming operational and receiving an 'Authorized to Interconnect' (ATI) from National Grid." Since that time, the applicant has revised the one-year warranty to a three-year warranty and has been working with staff on this issue.

Analysis:

As stated by the applicant during the January meeting, the plants that would be purchased for the project come with a three-year warranty. The warranty note on the plans adequately reflect this and satisfy the issue, so the cost of replacing dead plants is not a concern.

Although the warranty issue is resolved, staff is still concerned with the inspections. Even if the applicant supplies as built drawings, City staff is not well-equipped to inspect the landscaping and believes it is necessary to have a City-hired Landscape Architect conduct the inspections, whether it be Ms. Bradford or another qualified professional. Staff concedes that biannual inspections may be excessive, but feels that three inspections would suffice; one inspection should be conducted after installation upon receipt of the as built plan followed by two annual inspections. A brief memo from the City-hired Landscape Architect to the Planning Department would suffice to document compliance with the condition. Any changes to the plans would be subject to the existing provisions as provided in the City of Cranston Subdivision and Land Regulations Section VI *Recording of Plats and Plans (B) Changes to Recorded Plats and Plans*.

The applicant is resistant to providing an escrow for the inspection costs. Staff is not overly concerned with the method of payment so long as it is clear that the applicant bears the expense of the City-selected Landscape Architect for the inspections.

Revised condition:

At the expense of the applicant, a City's chosen landscape architect shall conduct annual inspections of the site for the next three years to monitor consistency of the installation with the approved plans. Once the landscaping has been installed, the applicant shall submit 'as-built' plans to the Planning Department demonstrating the final planting locations and materials. The as-

built plans shall be accompanied by documentation itemizing any/all deviations from the final approved landscaping plans. An inspection shall be conducted by a City-hired Landscape Architect after installation of the plantings upon receipt of the as-built plan, who will submit a report on the findings of the inspection to the Planning Department. The City-hired Landscape Architect shall conduct two more annual inspections for a total of three (3) inspections.

10. **Original condition:**

Underneath the solar arrays, the applicant shall install an appropriate growing medium, either minimally disturbed topsoil or a minimum of 6” of suitable loam and seeding to provide for a strong stand of native or naturalized vegetation for both grasses and leaf species.

Applicant response:

The applicant strongly felt that 4”-6” would suffice for both the growth of the vegetation and for soil erosion. They note that their DEM plan (bottom right of page 12) was approved with this 4”-6” dimension, which is enough to achieve the desired outcome.

Analysis:

After reviewing this issue with Ms. Bradford, staff proposes to reword the condition. Ms. Bradford is specifically worried the areas which may be blasted/hammered or graded and no longer have existing subsoil, and seeks to clarify what materials are to be installed & where.

Revised condition:

The site shall have a minimum of 4”-6” of suitable seed bed material where placed on existing subsoil, and a 6” requirement where placed upon areas without existing subsoil. The character of the material as ‘plantable soil’ shall be as indicated in the planting detail. The area within the fence shall be seeded with ‘low sow growing mix’ and disturbed areas outside the fenced area (except as otherwise specified by the DEM approval) will be seeded with a more pollinator and wildlife beneficial mix designated as ‘solar surround mix’ as noted in the Landscape Plans. These requirements shall be clearly reflected in the Final Landscape Plan. This condition supersedes Master Plan Condition of Approval #11.

New Proposed Condition:

In anticipation of potential impacts regarding the interconnection, DPW has asked that the following condition be added:

The applicant shall be responsible to reinstall all street lights disturbed by the interconnection.

III. Findings

Due to outstanding issues with the Landscaping Plan, staff held off on making the required Findings of Fact in its memo for the January meeting, but did provide draft language for the findings. Considering the revisions and the correspondence from the Landscape Peer Reviewer, staff can now make the required findings. Staff has modified Finding #2 regarding compliance with Master Plan Conditions #10 & #11 as discussed in the previous sections of this memo, but the other findings remain unchanged.

Staff has reviewed this Preliminary Plan application for conformance with required standards set forth in RIGL Section 45-23-60, as well as the City of Cranston's Subdivision and Land Development Regulations and finds as follows:

1. An orderly, thorough and expeditious technical review of this Preliminary Plan has been conducted. Property owners within a 100' radius have been notified via first class mail and the meeting agenda has been properly posted and advertised.
2. The applicant has complied with all of the *viable* conditions of the Master Plan Approval. Condition #11 was deemed to be problematic in terms of feasibility, so a new condition has been proposed to address the issue which will supersede this Condition. Condition #10 is also problematic, could not yet have been complied with, and is recommended to not be carried over into the Preliminary Plan approval. Other Master Plan conditions which could not have yet been met at this time have been carried over into the Preliminary Plan conditions.

RIGL § 45-23-60. Procedure – Required findings. (a)(1) states, “The proposed development is consistent with the comprehensive community plan and/or has satisfactorily addressed the issues where there may be inconsistencies.”

3. The application is vested to the Comprehensive Plan in effect at the time the Master Plan application was certified complete. Revisions to the Comprehensive Plan since that time do not apply to the review of this Preliminary Plan Application.
4. Consistency with the Comprehensive Plan was discussed extensively during the Master Plan review process. Ultimately, albeit with a 5-4 vote, the Plan Commission approved Master Plan approval incorporating findings of consistency with the Comprehensive Plan into its decision as stated in the Master Plan Approval Letter dated 2/11/19.
5. The applicant has worked with the City-hired Landscape Architect, the Advisory Committee, Planning staff and the Conservation Commission to develop an effective screen to mitigate impacts to the visual character of Western Cranston.

RIGL § 45-23-60. Procedure – Required findings. (a)(2) states, “The proposed development is in compliance with the standards and provisions of the municipality's zoning ordinance.”

6. The application is vested to the City Code in effect at the time the Master Plan application was certified complete. Revisions to the City Code since that time do not apply to the review of this Preliminary Plan Application.

7. The proposed solar and existing agricultural uses were permitted uses by-right in the A-80 zone at the time the Master Plan was certified complete.
8. The site is comprised of two lots, merged for zoning purposes, which meet the requirements of A-80 zoning.
9. The project is consistent with items (A) Site Preparation and (B) Lighting found in City Code Section 17.24.020 Solar Power Performance Standard (this section has since been revised, but the application is vested to comply with this now outdated section). Items C-G of this section do not apply to the Preliminary Plan phase of the application.

RIGL § 45-23-60. Procedure – Required findings. (a)(3) states, “There will be no significant negative environmental impacts from the proposed development as shown on the final plan, with all required conditions for approval.”

10. This project has received an Insignificant Alteration Permit from RIDEM and will continue to be subject to all local, state and federal standards regarding environmental impacts.
11. Grading of the project has been limited to the greatest extent possible.
12. The Rhode Island November 2018 Natural Heritage map shows that there are no known rare species located on the site. The nearest known rare species locations are roughly 1,600 meters away. This information has been confirmed by David W. Gregg, Ph.D. Executive Director of the Rhode Island Natural History Survey.
13. Solar energy production has an important role in the reduction of greenhouse gas emissions contributing to climate change. There are a multitude of environmental benefits (as well as numerous other benefits) to clean renewable electricity as found by the Environmental Protection Agency in their 2018 report, “*Quantifying the Multiple Benefits of Energy Efficiency and Renewable Energy: a Guide for State and Local Governments.*”

RIGL § 45-23-60. Procedure – Required findings. (a)(4) states, “The subdivision, as proposed, will not result in the creation of individual lots with any physical constraints to development that building on those lots according to pertinent regulations and building standards would be impracticable. (See definition of Buildable lot). Lots with physical constraints to development may be created only if identified as permanent open space or permanently reserved for a public purpose on the approved, recorded plans.”

14. The project proposes lease areas, not the actual subdivision of lots. No change to the existing lot boundaries are proposed.

RIGL § 45-23-60. Procedure – Required findings. (a)(5) states, “All proposed land developments and all subdivision lots have adequate and permanent physical access to a public street. Lot frontage on a public street without physical access shall not be considered in compliance with this requirement.”

15. The property in question has adequate permanent physical access from Natick Ave, improved public roadways located within the City of Cranston.

16. The proposed use will not have a negative impact on vehicular traffic, generating only a monthly inspection once operational.

IV. Recommendation

Staff finds this proposal consistent with the standards for required Findings of Fact set forth in RIGL Section 45-23-60, the Comprehensive Plan in effect at the time of vesting of the application, as well as with the City of Cranston's Subdivision and Land Development Regulations. Therefore, staff recommend that the City Plan Commission adopt the Findings of Fact documented above and **approve** the Preliminary Plan submittal, subject to the conditions denoted below:

V. Conditions of Approval

1. The applicant will work with the Tennessee Gas Pipeline to (TGP) to ensure that the project will be consistent with the terms and conditions of the easement.
2. The applicant shall use reasonable efforts to remove ledge or rock by mechanical means. Nothing herein shall prohibit the use of blasting to remove necessary ledge.
3. For any of the project's installation of the utility interconnection safety, recording, monitoring and functionality equipment that is to be located onsite (Assessor's Plat 22-3, Lot 108), the applicant will pursue a request of National Grid to approve underground installation of said infrastructure provided that: (1) such approval is able to be issued on the applicant's existing interconnection application for the project that is currently pending before National Grid (as opposed to resubmission of a new application) without jeopardizing applicant's interconnection queue status or otherwise causing significant additional delay (more than 2-3 months) to the applicant receiving any of its final National Grid approvals for the project (including Authorization to Interconnect); and (2) such underground installation is reasonably feasible to National Grid and applicant, taking into account relative impacts to (a) public health and safety, (b) system functionality, (c) interconnection reliability, (d) the project's viability, and (e) timing of the project's achievement of operation. The applicant shall provide written correspondences to and from National Grid relating to this condition to DPW and the Planning Department.
4. The entire perimeter fencing shall provide for at least a 6-inch gap between the ground and the bottom of the fencing to provide adequate wildlife passage for smaller species consistent with the RIDEM approval.
5. Planting Area E will be trimmed to a height no less than 18'.

6. Planting Area F shall consist of evergreens and shall be relocated to the edge of the cleared area east of the access road in the southeast corner of the site. Planting Area F shall be trimmed to a height not less than 25’.
7. At the expense of the applicant, a City’s chosen landscape architect shall conduct annual inspections of the site for the next three years to monitor consistency of the installation with the approved plans. Once the landscaping has been installed, the applicant shall submit ‘as-built’ plans to the Planning Department demonstrating the final planting locations and materials. The as-built plans shall be accompanied by documentation itemizing any/all deviations from the final approved landscaping plans. An inspection shall be conducted by a City-hired Landscape Architect after installation of the plantings upon receipt of the as-built plan, who will submit a report on the findings of the inspection to the Planning Department. The City-hired Landscape Architect shall conduct two more annual inspections for a total of three (3) inspections.
8. The site shall have a minimum of 4”-6” of suitable seed bed material where placed on existing subsoil, and a 6” requirement where placed upon areas without existing subsoil. The character of the material as ‘plantable soil’ shall be as indicated in the planting detail. The area within the fence shall be seeded with ‘low sowing mix’ and disturbed areas outside the fenced area (except as otherwise specified by the DEM approval) will be seeded with a more pollinator and wildlife beneficial mix designated as ‘solar surround mix’ as noted in the Landscape Plans. These requirements shall be clearly reflected in the Final Landscape Plan. This condition supersedes Master Plan Condition of Approval #11.
9. The applicant shall be responsible to reinstall all street lights disturbed by the interconnection.