# SUTTON CONSERVATION COMMISSION

March 18, 2015 MINUTES

Approved:

Present: Daniel Moroney, Chairman, Joyce Smith, Co-Chair, Lauren Rothermich, Robert Tefft, and

William Wence

Staff: Wanda M. Bien, Secretary

Brandon Faneuf, Consultant

#### Project Update

7:00pm Waters Farm Preservation, Inc. Yearly report

Present: Ken Kelley, President, Norma Bedrosian, Director

K. Kelley read and presented the yearly report for 2014 along with their yearly check, on what the Waters Farm Preservation Inc. has accomplished for the year, and what projects they are working on at the present time.

Attachment can be viewed in the Conservation office during business hours.

J. Smith announced that the flyers for the Annual Plant Sale are on the web site and at the library and Town Hall.

# **Public Hearing (Cont.)**

7:15pm 15 W. Sutton Road

DEP#303-0796

Motion: To waive the reading of the hearing notice, by W. Wence

2nd: L. Rothermich

Vote: 5-0-0

The Public Hearing was opened at 7:15pm.

The project consists of demolition of an existing house and construction of a new single family house, driveway, septic system, grading and utilities.

Present: Paul Hutnak, Andrews Survey, Paul & Lynn Dahlin, owners

This was continued with the applicant's permission, to April 15, 2015 at 7:15pm.

Motion: To continue, with the applicant's permission, to April 15, 2015 at 7:15pm, by J. Smith

2nd: L. Rothermich

Vote: 5-0-0

# **Project Update**

7:15pm 42 Bond Hollow Road/Timothy & Shayna Fisher

DEP#303-0633

- J. Smith did not have to step down as an abutter for this update.
- T. Fisher reviewed past information with the new Board members for an Extension of their Order of Conditions, for one year.
- B. Faneuf summarized his review explaining the issues with the bridge, and stated that the site is now stable.

Motion:

To extend the Order of Conditions for one year to 2016, by W. Wence

 $2^{nd}$ :

J. Smith

Vote:

5-0-0

# **Public Hearing (Cont.)**

7:30pm 192 (AKA Lot#1 @ 208) Manchaug Road

DEP#303-0807

Motion:

To waive the reading of the hearing notice, by W. Wence

2nd:

L. Rothermich

Vote:

5-0-0

The Public Hearing was opened at 7:30pm.

The project consists of construction of a single-family house and driveway, with associated grading, septic system components, well and utilities.

Present: Lance Anderson, Heritage Design Group, Porter Stephens, owner, Mark Donahue, YMCA and Attorney Edwin Taipale

- L. Anderson reviewed the last meeting information and what they propose for mitigation. They would be taking down 24 trees on this lot. He feels that the rain garden won't be as effective as the swales, and they would use 6" organic materials to treat the runoff.
- R. Tefft doesn't see a logical solution for their mitigation, when the Bylaw reads no building within the 200' buffer zone without a permit.
- J. Smith doesn't consider bird houses a form of mitigation because they are not permanent. She suggested a Conservation Restriction be put on the first 100' from the water as mitigation for encroaching in the 200' restricted area.
- P. Stephens questioned why the Conservation did want the infiltration, and asked what the Commission wanted them to do for the mitigation.
  - B. Tefft explained he made those suggestions at the last meeting, but they didn't use any of them.
- L. Rothermich explained the Conservation Restriction on the first 100' would be so in 10 years from now the next owners couldn't file an NOI on this same 100'.
- B. Faneuf summarized his mitigation information. He read the wildlife information and agrees with a Conservation Restriction in this area.
  - E. Taipale stated he feels that the engineer has done what was asked of him for all the runoff issues.
- M. Donahue, representing the YMCA, explained they were selling the lots to allow them to keep the camp open, and asked if the Commission wants a written summary of what they are doing.

Motion:

To continue, with the applicant's permission, to April 1, 2015 at 7:20pm, by J. Smith

2nd:

L. Rothermich

Vote:

5-0-0

Public Hearing (Cont.)

7:45pm 198 (AKA Lot #2 @ 208) Manchaug Road

DEP#303-0808

Motion:

To waive the reading of the hearing notice, by W. Wence

2nd:

L. Rothermich

Vote:

5-0-0

The Public Hearing was opened at 8:10pm.

The project consists of construction of a single-family house, driveway, well, utilities, and septic system with associated grading.

Present: Lance Anderson, Heritage Design Group, Kevin & Bonnie Steele, owner,

Mark Donahue, YMCA, and Attorney Tom Wickstrom

- L. Anderson explained the erosion controls used and the area is flagged only within the 200' area.
- J. Smith read the Bylaw section 7.2 about the Conservation Restrictions and asked why they need to be within the 200' restricted area. Lance Anderson said there was no reason the proposed activity had to be as close to the pond other than that is where the applicants wanted to be.
- K. Steele reviewed R. Tefft mitigation suggestions.
- R. Tefft said that he would like to see a narrative as to how the swale would function to protect the quality of the lake.
- M. Donahue, representing the YMCA, explained that they intend to continue the camp activities but want to sell three lots to help fund other projects. He asked if there was interest in the right of first refusal for the Town of Sutton on the YMCA camp property.
- B. Faneuf explained the Conservation Restriction would allow what they have proposed now, but protect the first 100' from the lake from future alterations.

The Commission would like to see a written proposal, stating mitigation for activity within the 200' jurisdictional area.

Motion:

To continue, with the applicant's permission, to April 1, 2015 at 7:40pm, by J. Smith

2nd:

L. Rothermich

Vote:

5-0-0

## Public Hearing (New)

8:00pm 1 Ramshorn Road

DEP#303-0809

The Public Hearing was opened at 8:35pm. D. Moroney read the hearing notice as it appeared in the Millbury Sutton Chronicle.

The project consists of removal of existing house, construction of a single family house, driveway, grading, septic system, well, and utilities.

Present: Lance Anderson, Heritage Design Group, Mr. & Mrs. James Catusi, owners Ron & Lisa Alarie

L. Anderson said he had changes to do on the plans. They pulled the septic away from the lot line. A. Allen from Eco Tech did the delineation line and will address Mr. Faneuf's comments as they go along. The two sheds would come down and additional trees in the 200' buffer zone would also come down, but they didn't have a tree count yet.

B. Faneuf explained what the owner proposed to do, according to his comments being reviewed here tonight. He had sent the engineer a red lined site plan with these comments for their review before this meeting. They also need to consider a car turn-around area near the house to avoid taking down two other trees in that area.

Motion:

To continue, with the applicant's permission, to April 1, 2015 at 8:00pm, by J. Smith

2nd:

W. Wence

Vote:

5-0-0

# Public Hearing (Cont.)

8:15pm 80 Worc. Prov. Tpke. Solar Farm

DEP#303-0806

Motion:

To waive the reading of the hearing notice, by W. Wence

2nd:

L. Rothermich

Vote:

5-0-0

D. Moroney stepped down as an abutter.

The Public Hearing was opened at 9:00pm.

The project consists of construction of a Solar Farm.

Present: Norman Gamache, Guerriere & Halnon, Inc.,

Greg Carey, Clean Energy Collective

N. Gamache reviewed the information from the previous meeting with the changes from the original proposal.

See Attachment #1 Eco Tec report

B. Faneuf reviewed his comments sent to Mr. Gamache.

The Commission complemented the changes and improvements made to the plans from the original submittal and their willingness to work to develop better plans.

Motion:

To close the Public Hearing, by W. Wence

2nd:

L. Rothermich

Vote:

4-0-0

Motion:

To issue an Order of Conditions, subject to a one year site inspection, and the use of stump

grindings from the site when possible, instead of wood chips.

by W. Wence

2nd:

L. Rothermich

Vote:

4-0-0

#### **BOARD BUSINESS**

Discussions:

33 & 39 W. Millbury Road and 37 W. Millbury Road issue, There is a lot line issue created during the installation of the new drive way for the two new lots at 33 & 39 W. Millbury Road. Another site visit needs to be done to review this situation. D. Maroney

B. Faneuf explained the project using his pictures and video from his site visit. He will stop at the site to explain to the contractors that they are encroaching on the neighbor's property at 37 W. Millbury Road and they need to remove the stacked trees, and replace whatever signs that were taken down during construction of the driveway.

The Board reviewed the proposed Bylaw returned from Town Council for the Warrant.

Motion:

To accept the changes in the Bylaw, by J. Smith

 $2^{nd}$ :

L. Rothermich

Vote:

5-0-0

Motion:

To approve the minutes March 4, 2015, by J. Smith

 $2^{\text{nd}}$ :

W. Wence

Vote:

5-0-0

Create a Wetlands Pamphlet – tabled until more research has been completed.

187 W. Sutton Road/Dam – They are looking for a C of C. - D. Moroney will do a site visit.

42 Bond Hollow Road – They requested the Extension to the Order of Conditions, this was issued for 1 more year to April 2016.

No Site visits until the snow melts

The Correspondence was reviewed, and the Tracking Sheets were continued to the next meeting.

Anyone interested in purchasing the DVD for any public hearing at this meeting, please contact Pam Nichols in the Cable office or you can view the minutes and video at www.suttonma.org.

Motion:

To adjourn, by W. Wence

 $2^{nd}$ :

J. Smith

Vote:

5-0-0

Adjourned at 9:35pm.

# EcoTec, Inc.



# ENVIRONMENTAL CONSULTING SERVICES 102 Grove Street

Worcester, MA 01605-2629 508-752-9666 / Fax: 508-752-9494

# MEMORANDUM

Date: March 18, 2015

To: Brandon B. Faneuf, PWS

**Sutton Conservation Commission** 

From: Arthur Allen

Re: 80 Worcester-Providence Turnpike Notice of Intent

Via e-Mail page 1 of 3

On March 16, 2015 we received comments from Brandon Faneuf, Consultant for the Sutton Conservation Commission. Brandon's comments pertained to revised narratives and plans that we submitted, dated March 13 to March 16, 2015. I have consulted with my colleagues from Clean Energy Collective and Guerriere & Halnon, Inc. and am providing joint responses below following Brandon's original comments which are in italics.

BF Comment: The applicant has reduced the impact to the A-Series AURA by 4,320sf. There is still 6,558sf of disturbance proposed in the AURA. My comment is that, given the topography of the area and the presence of the stone wall that it would not be practical to have the temporary staging/parking area between the proposed limit of disturbance and stone wall. So with the exception of the clearing and grading needed for the widening of the driveway (no objections there), why is it necessary to disturb/clearcut the woods in the AURA between the stone wall and current limit of disturbance? If approved by the Commission, my recommendation is to keep it as a coppiced area to be cut no more than 1x/year in order to keep it in as natural a state as possible and consider it as habitat conversion as opposed to permanent disturbance. Regardless, the Bylaw requires there to be a necessary reason for disturbance, for the Commission's consideration, before an applicant can go forward with disturbance of AURA. Proponent's Response: In response to this comment a new plan was developed which is presented as a revised version of Alternative #3 (dated 3/17/2015). In addition a new plan was developed which is titled "Site Plan Showing Resource Area Impacts" (revisions dated 3/17/2015 - see attached). This new plan depicts and quantifies the impact areas by wetland and by treatment. Total impacts to the A-series AURA have been further reduced by 1,039 square feet. Coppice treatment areas (i.e., removing trees only and leaving stumps to sprout) are now specifically identified and further reduce the A-series AURA permanent impacts to 1,908 square feet. The 1,908 square foot area must be re-graded for the driveway widening and to repair the existing trench beside the driveway so that the existing utility pole can be relocated out of the widened driveway. We believe that we have reduced AURA impacts to the extent practicable in this area.

BF Comment: In regards to the Alternative #2- No-Disturbance, the extent of solar

panels in upland areas outside of the AURA seems light. In Alternative #1-Initial Proposal, and Alternative #3- Current Proposal, the extent of solar panels in the uplands is much greater than Alternative #2, even though the panels are outside of jurisdictional areas. Why is this? As it stands, the reason for the rejection of Alternative #2 is that it is not economical. It seems to me that even if you keep the panels outside of the AURA, more could be fit, thereby possibly making the project more economical than currently proposed in Alternative #2. Proponent's Response: The solar arrays have been designed to maximize the greatest amount of sunlight generated during daylight hours. Shading from trees surrounding the solar arrays, regardless of their location on the site, will significantly affect the amount of energy produced from the solar facility. Many of the existing trees on site, which are located outside of the proposed array field as shown of the project site plan, are situated in wetland resource areas. If there is a "no disturbance" requirement in the AURA it will cause a dramatic reduction in the number of panels throughout the entire project. Shading will significantly impact sunlight reaching the arrays from the east (morning), the southeast (midday) and the southwest (afternoon) resulting in a project that is not economically feasible. The proposed arrays which are located on the western edge of the site plan, for example, rely on sunlight produced throughout the entire daytime. A "no disturbance" restriction placed on all AURA areas at the property will result in shading impacts that will result in a significant reduction of solar panels, preventing the project from being developed.

BF Comment: There has been no proposed reduction to AURA disturbance associated with the B-Series BVW. Is this due to grades associated with stormwater? The need for additional light for the panels? With the importance of a main sunlight direction of south, why is it so important to have as much area east of the panels cut? As a middleground, I would propose that (pending approval by the Commission of the necessity of the alterations) with the exception of the footprint of the riprap swale and area over the stormwater chambers, keep the area in as natural a condition as possible (i.e. no grass or clover but instead plant with shrubs and allow trees to grow and coppice no more than lx/year) between the existing stone wall and currently proposed limit of disturbance. I would expect construction to disturb the area to the point where shrubs would have to be planted. Proponent's Response: AURA permanent disturbance in this area has been reduced by 3,530 square feet by providing a coppice treatment area within the inner 50 foot AURA and by eliminating all AURA disturbance to the north of the proposed drainage swale. No permanent disturbance is proposed within the inner 50 foot AURA associated with the B-series wetland. We believe that we have reduced AURA impacts to the extent practicable in this area.

BF Comment: With the exception of grassed swale that will go along the property boundary with 64-72 Worc-Prov Tnpk., keep areas in the AURA to the isolated wetland between the swale and chain-link fence in as natural a state as possible in accordance with the bullet above. Proponent's Response: The new plan implements this recommendation and reduces AURA disturbance by 4,833 square feet by providing a coppice treatment area.

BF Comment: I believe it fair to count the footprint of the replication area as mitigation for AURA because the replication area is also an old fill area. Otherwise I would not agree because replication is mitigation for wetland to be filled. This amounts to 820 sf. Further, the applicant is removing the dilapidated house and planting native plants

EcoTec Response to Comments – Clean Energy Collective, 80 Worc.-Prov. Tpk., Sutton, MA March 18, 2015
Page 3 of 4

in a 3,290sf area that could count as mitigation for AURA to be permanently disturbed. Combined, this amounts to 4,110sf. Proponent's Response: Comment acknowledged and we agree that the 4,110 square feet of replication/restoration should be counted as mitigation credit.

BF Comment: The total disturbance proposed in the AURA on-site is currently 51,949sf. I recommend the applicant examine my comments above about coppicing/ planting shrubs and retaining certain areas in the AURA as natural possible as opposed to conversion to lawn/clover. Coppiced areas, in my opinion, could be discounted from the total equation. Further, although I don't think that the Isolated wetland should be completely discounted from the Interest of Wildlife Habitat, it's value is definitely limited. If the applicant can agree not to challenge the legitimacy of the wildlife habitat interest, there could be a waiver, in full or in part, for the square footage mitigation requirement associated with the Isolated Wetland's AURA. Otherwise, there is almost 52,000sf of AURA proposed for disturbance and only a little over 4,000sf of AURA mitigation proposed. With a 48,000sf differential (this equates to  $\pm 1.1$  acres), this is too great a differential between permanent disturbance vs. mitigation for the Commission to consider for approval. It would constitute adverse impact, in my opinion. Proponent's Response: We agree with Brandon's assessment of the Isolated Wetland AURA. In addition we have further reduced Isolated Wetland AURA impacts by 4,833 square feet. We respectfully ask the Commission to consider granting a finding of limited or no significance associated with the remaining AURA to be permanently impacted. This finding would allow for a waiver from the mitigation requirements for the remainder of the 23,697 square feet of AURA impacts associated with the Isolated Wetland.

BF Comment: My final recommendation is for the applicant to try to further reduce impacts to AURA, and/or outline areas within the AURA that will remain in a natural condition (coppiced \( \leq \leq \leq \leq \leq \leq \leq \req \text{opposed to lawn/clover} \right) that can be discounted from the total equation. Then have the applicant "run the numbers" again and see if there is more equity between the permanent disturbance numbers and mitigation. Also, if there are any areas on-site that could use invasive plant eradication, add up the square feet of that. The Commission has accepted invasive plant eradication projects as appropriate mitigation for permanent impacts to AURA. Nonetheless, the applicant must justify the necessity of disturbance of AURA to the Commission's satisfaction. Proponent's Response: As a result of the most recent plan, permanent AURA impacts have been reduced to 34,138 square feet. If the Commission waives mitigation for the remaining Isolated Wetland AURA impacts then the remaining, permanent AURA impacts would be 10,441 square feet. With the exception of a small strip adjacent to the driveway, all these permanent AURA impacts are outside the 50 foot AURA associated with Bordering Vegetated Wetlands A & B. The total mitigation provided is currently 4,110 square feet which includes restoration all of the degraded areas on the site that are outside the existing driveway. The proponent has also committed to repairing/upgrading the existing culvert under the driveway to ensure hydrologic connectivity between the A and Bseries wetlands is restored. In addition the proposed screening plantings have been upgraded to provide one-hundred fifty-seven (157) saplings and shrubs representing a diversity of native species with wildlife value. It is our opinion that this proposed mitigation plan is adequate to compensate for the loss of functions and values which the outer AURA areas currently provide. In regards to invasive species management, although there are currently no significant invasive species problems on this site, we would propose to monitor the site for two years post-construction for any new invasive species, If any invasive species EcoTec Response to Comments – Clean Energy Collective, 80 Worc.-Prov. Tpk., Sutton, MA March 18, 2015
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develop on the site we would propose to remove them by hand or with the cut-and-treat method. We would also provide a report once per growing season for two years following construction regarding invasive species status. These reports would be provided along with the required seasonal reports on the status of the wetland replication and AURA restoration areas.



www.guerriereandhalnon.com Est. 1972

W-2985

1029 Providence Road Whitinsville, MA 01588-2121 Phone (508) 234-6834 Fax (508) 234-6723

Milford Office

Whitinsville Office

333 West Street P.O. Box 235 Milford, MA 01757-0235 Phone (508) 473-6630

> Fax (508) 473-8243 Franklin Office

55 West Central Street Franklin, MA 02038-2101 Phone (508) 528-3221 Fax (508) 528-7921

March 13, 2015

Town of Sutton Conservation Commission Sutton Town Hall 4 Uxbridge Road Sutton, MA 01590

Re:

Notice of Intent

Clean Energy Collective – Solar Installation 80 Worcester-Providence Turnpike (Route 146)

#### Dear Commission Members:

On behalf of the applicant, Clean Energy Collective, 146 West Boylston Drive, Worcester, MA 01606, we hereby submit the following response to the review comments within the 2/24/15 memo prepared by Brandon B. Faneuf, specifically the seven bulleted questions on pages 5 and 6 of the report and the three numbered recommendations at the conclusion of the report.

- Why is it absolutely necessary to clearcut into the A and B-Series BVW's AURA, to within 30' of the wetland boundaries?
  - 1. An Alternative Analysis prepared by Clean Energy Collective is enclosed herewith.
- Why can't the photovoltaic panels in the AURA of the B-Series BVW be placed further upslope and stay
  outside of the AURA entirely? For example, there is a gap between a short and long section that could
  potentially be used for panels and not grass.
  - 2. As the panels are considered structures, they must conform to the setbacks imposed under the Town's Zoning by law. Sheet 3 of the Site Plans shows the panel locations along with the required setbacks. The panels are located as far away from the wetlands as the setbacks allow.
- Why is it absolutely necessary to clearcut into the AURA of the IVW?
  - 3. An Alternative Analysis prepared by Clean Energy Collective is enclosed herewith.
- Can impacts to AURA be minimized by reconfiguring the solar arrays in a different manner to keep disturbance completely outside, or at least further away from Resource Areas?
  - 4. Impact to the "A" series AURA has been minimized by a reduction of the proposed cleared area by 4,320 square feet. An Alternative Analysis prepared by Clean Energy Collective is enclosed herewith.

- Can the riprap swale at the end of the vegetated swale, in the AURA of the B-Series BVW, be shortened so it remains completely outside of the AURA?
  - 5. The swale was designed to minimize erosion. The swale as designed ends at an area in which the stumps and existing low growing vegetation are to remain, this will provide a great deal of energy dissipation as well as filtering. If the swale ended further up the slope it would outfall onto freshly graded loam and would be a major cause of concern for erosion and siltation of the adjacent wetland.
- If the applicant cannot avoid impact in AURA, and the Commission agrees with the rationale, some form of mitigation must be proposed to offset permanent impact. A wildlife habitat analysis may be helpful in this regard.
  - 6. The site is largely wooded with second growth hardwood species which is a common cover type in the region. The majority of the AURA impacts are in this common cover type which lacks significant habitat features. The AURA associated with wetland "A" (south side of existing driveway) consists of a mature red oak/hardwood cover type which is arguably the most valuable AURA on the project site. Impacts to this AURA have been reduced significantly on the revised project plans. Mitigation for the remainder of the AURA impacts is provided in the vicinity of the existing, dilapidated house. The proposed mitigation includes extra (i.e., 2:1) wetland replication/restoration in a previously disturbed AURA area; removal of the dilapidated house and surrounding surface debris and planting of the 3,290 square foot, disturbed AURA area with native shrub and herbaceous species following clean-up. The revised mitigation site plan includes details for this additional mitigation planting.
- In order to quantify disturbance for mitigation and lead to a fruitful discussion, please provide a calculation of how many square feet of AURA are proposed, total, discounting temporary impact associated with the razing of the house and construction of the wetland replication area, and discounting disturbance within the existing driveway. Please break them down by resource area (A/B-Series BVW, IVW). Basically concerning AURA that is currently forested on the west sides of the A and B-Series BVW's, and the AURA of the IVW.
  - 7. Initial submittal

A-Series AURA disturbance – 10,878 sf B-Series AURA disturbance – 16,285 sf IVW-Series AURA disturbance – 29,106 sf

SEE SHEET 10 FOR CURRENT AREAS

Revised submittal

A-Series AURA disturbance – 6,558 sf B-Series AURA disturbance – 16,285 sf IVW-Series AURA disturbance – 29,106 sf

# Brandon B. Faneuf Recommendations

1. Answer bulleted questions above and provide an Alternatives Analysis under Section 7.9 of the Bylaw.

• Bulleted questions answered above, An Alternative Analysis prepared by Clean Energy Collective is enclosed herewith along with three plans depicting alternatives. "Alternative 1" being the initial submittal plan, "Alternative 2" shows a no-disturbance alternative and "Alternative 3" is the current revised submittal.

- 2. Move the replication area to the A-Series wetland side, or replace/repair the existing culvert under the driveway so that a hydraulic connection between the A and B-Series wetlands are re-established.
- Notation has been added to clean the existing pipe and extend it through the proposed wall.
  - 3. Perform an exercise showing a 2:1 grassed slope down the south side of the driveway instead of a retaining wall, and let me know how many additional sf of disturbance to BVW it would create. This may be better than a retaining wall that could limit small wildlife passage.
- Sketch has been prepared and reviewed.

Meeting discussion items - March 4, 2015.

- Retaining wall along driveway changed to boulder retaining wall as suggested.
- Notation added to culvert pipe "Clean existing pipe and extend through wall"
- Swale design proposed swale has a built up berm on the lower side, and check dams are half the height of the swale allowing for flow within the swale over the top of the check dams when necessary.
- A landscape maintenance plan has been added to the site plans. The use of stump grindings for erosion control, and soil testing for acidity is included on the plan.
- Solar panels have been reduced in the area of the "A" and "B" series wetlands so that no panels are within the buffer/AURA of these wetlands.
- The amount of clearing within the "A" series wetland AURA has been reduced by 4,320 square feet.
- Seed mix as proposed contains a tackifier.
- Erosion concern at the panel driplines In instances where the panels are laid out perpendicular to the slope the drip edges would concentrate the water along the natural flow path of the topography and tend to channelize and erode as it gathered volume downgradient, however the panel alignment proposed is at an angle to the slope so that the flow off of a single unit would have a different natural flow path than the adjacent units therefor minimizing the tendency of channelizing.

If you have any questions or comments, please call me at 508-234-6834.

Sincerely

Guerriere & Halnon, Inc.

Bruce Williams



March 13, 2015

Town of Sutton
Conservation Commission
Sutton Town Hall
4 Uxbridge Rd.
Sutton, MA 01590

RE:

Notice of Intent

Clean Energy Collective – Community Solar Project

80 Worcester Providence Turnpike

**Dear Commission Members:** 

The following is submitted to you in response to Mr. Brandon B. Faneuf's request that the applicant provide the Commission with an Alternative's Analysis in connection with the NOI filed by CEC for it's proposed community solar project at 80 Worcester Providence Turnpike.

Response to request for Alternative Analysis for proposed work in the AURA associated with A and B Series BVW's and the IVW.

The applicant's Alternative Analysis includes 2 new plans for consideration by the Conservation Commission:

Alternative Plan #2 – No Disturbance Plan
 This plan demonstrates the effects to the proposed community solar site plan if there is no disturbance of any kind to either the existing A and B Series BVW's, or their AURA's located on either side of the existing driveway, as well as the IVW, and it's AURA, located at the eastern edge of the property.

The results of a No Disturbance Plan will prevent the community solar project from being permitted and constructed for the following reasons:

• Because portions of the driveway are located in the resource area, the driveway cannot be widened without affecting the resource area. The Fire Department has determined the driveway must be widened to a minimum of 18' (the FD prefers a width of 24') for emergency vehicles to access the property. If the driveway is not widened to at least 18', the Planning Board will likely deny its approval of the project because it does not meet fire safety requirements of the Town.

146 West Boylston Drive, Worcester, MA 01606



- The stormwater management system for the site has been designed to control drainage from the site in accordance with local and state regulations. Portions of the drainage swale are located within a resource area along the easterly area of the site. The proposed swale was also designed to address current drainage issues at the site which are impacting abutters properties located on Rt. 146. The proposed stormwater management system will not meet local and state regulations if it located outside of the resource area. The Planning Board will likely deny its approval of the project because the applicant cannot meet stormwater requirements.
- Solar photovoltaic arrays require limited shading in order to effectively generate solar energy. Alternative Plan #1 demonstrates the effect of shading on the community solar project if tree clearing in the resource areas is not permitted. The results are an approximate reduction of 60% of the solar arrays, thereby making the project uneconomic and financially infeasible to construct. As part of its mitigation plan, the applicant has proposed a detailed wetlands mitigation plan, including wetland replication and AURA restoration, intended to improve the existing on-site resource areas. The proposed improvements to the wetlands will be completed by the applicant only if the project is approved by the Planning Board and Conservation Commission.

### 2. Alternative Plan #3 - Current Revised Plan

The Conservation Commission, and its consultant, has asked the applicant to consider making changes to the proposed community solar project in an effort to reduce impacts on the Series A and B BVW's as well as the IVW.

The Current Revised Plan includes the following revisions:

- Solar panels that were previously located in the resource areas, adjacent to the riprap swale, have been removed.
- 2. The riprap swale was not shortened within the B Series BVW
- The applicant has reduced its proposed tree clearing area in the Series A wetlands, located to the south of the driveway.
- 4. The applicant has included a berm along the eastern edge of the vegetated berm in order to improve the management of stormwater run-off.
- The applicant has revised its landscaping plan to include new vegetation that is more conducive to improving natural wildlife habitat at the property.
- The applicant has redesigned its proposed retaining wall, located at the southern edge of the
  driveway, to include stones and small boulders, in an effort to make it more conducive to
  small wildlife habitat environment.

146 West Boylston Drive, Worcester, MA 01606



7. Additional mitigation for AURA impacts have been provided in the form of native shrub and herbaceous planting and seeding within the AURA area to be restored.

Please note the riprap swale was not shortened due to erosion control concerns voiced by the Conservation Commission at the previous hearing.

Alternative Plan #2 demonstrates the applicant's good faith efforts to reduce project impacts to wetland resource areas while maintaining a community solar project that is economically feasible and will offer residents an opportunity to support clean energy in Sutton.

Sincerely

Éreg⊌ry B./Carey

**Enclosures** 

Cc: Brandon B. Faneuf Arthur Allen Normand Gamache Michael Whigham

# Conservation Sign in Sheet Date: 3-18-15

Name	Address & or Email	Agenda Address
Ker Kellens	14 HIGHAMIN VIEW 1/2, UR	Warrent Harry
L'ANCE ANDORSON	ONE Hair St WKinner/le	-
<i>h</i> 11		229
5		ONE RUShan to
Thomas I Wickstran	60 Churt & Whiteella	Lot 2 Mades Ref
Sharm " Tim Fisher	46 Haney St. Upton	42 Bonel Hollow Red.
ad Thismle	341 Main J. Douglas MA	Lot 1 Mynohyny All
Bonne Hele	3754/11 St WhitnSwille	Lot 2 Manchava Po
Ron + Usa Alarie	113 W. Millbury Rd Suffer	One Remshan Rd
Wormand Ganache	1029 PROVIDENCE RA	6,
GANES CAUSH	Close Eliensy Collective	Ko Parinence P