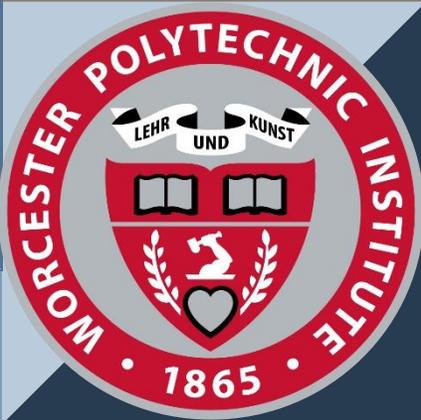


# NANTUCKET'S PATH TO SOLSMART STATUS

Daniel Brower, Brendan Fainer, Grace Phillips,  
Alana Reid

Sponsor: Lauren Sinatra, Nantucket Energy Office



**SOLSMART IS A NATIONAL PROGRAM THAT RECOGNIZES PLACES THAT HAVE DEMONSTRATED SOLAR LEADERSHIP.**



**NATIONALLY DISTINGUISHED. LOCALLY POWERED.**

NATIONALLY DISTINGUISHED. LOCALLY POWERED.

**BRONZE**



**SILVER**



**GOLD**



**PLATINUM**



# HOW TO ACHIEVE A SOLSMART DESIGNATION

## 1. SOLAR STATEMENT



## 2. ZONING REVIEW

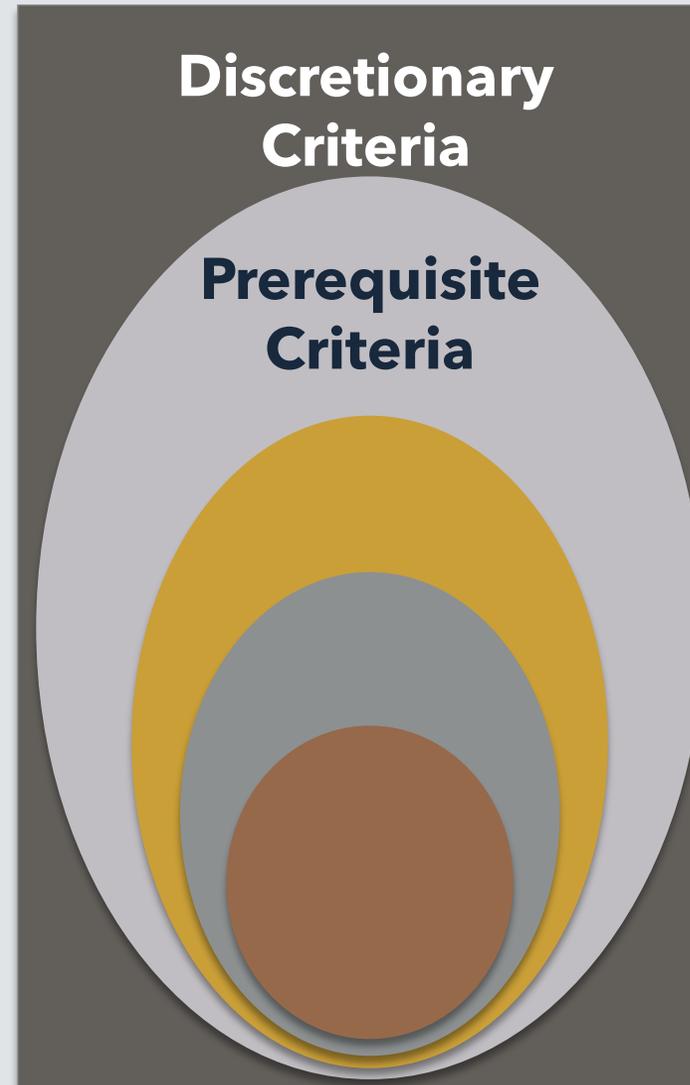


# All Criteria

→ Award 0, 5, 10, or 20 points

## Key:

- **Discretionary criteria**  
(all non-prerequisite criteria)
- **Platinum prerequisites**
- **Gold prerequisites**
- **Silver prerequisites**
- **Bronze prerequisites**



**BRONZE**

3 prerequisites  
+  
60 points

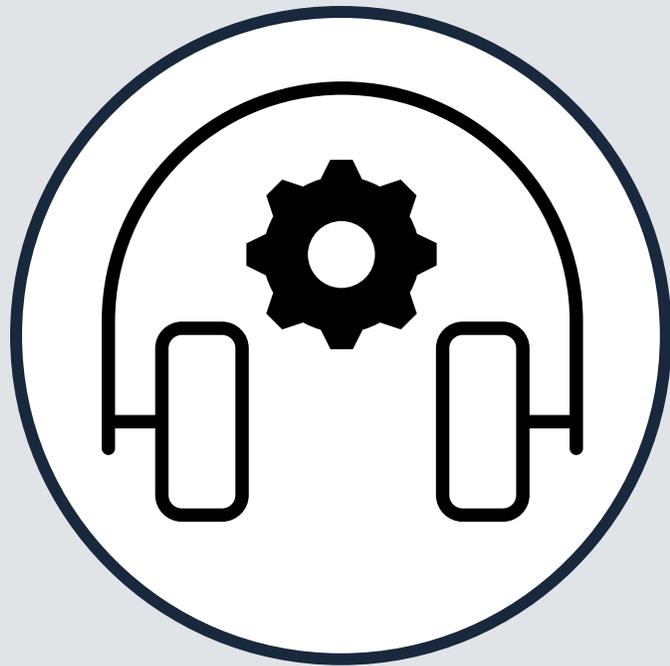
**SILVER**

Bronze status  
+  
4 prerequisites  
+  
100 points

Prerequisite criteria + sufficient points = SolSmart designation

# HOW TO ACHIEVE A SOLSMART DESIGNATION

## 3. TECHNICAL ASSISTANCE



## 4. DESIGNATION



# NANTUCKET IS A SOLAR LEADER

## Image Credits:

Surfside: <https://nantucket-ma.gov/DocumentCenter/View/45545/Town-Powers-Up-First-Municipal-Solar-Project-at-the-Surfside-Wastewater-Treatment-Plant-Press-Release-PDF>; solar map: <https://web.archive.org/web/20231208144413/https://www.nantucket-ma.gov/1156/Solar-Map-Resources>; Additional images provided by the Town of Nantucket Energy Office

# OBJECTIVES



**Determine  
Silver  
Requirements**



**Develop and  
Execute Plan**



**Identify  
Potential  
Improvements**



**Update and  
Enhance Web  
Resources**



**Recommend  
Path to Gold  
Status**



# RESULTS

# SOLSMART POINTS AS OF 12/12

<i>Status</i>	<i>Total Points</i>
<i>Attempting</i>	<b>50</b>
<i>Complete</i>	<b>165</b>
<i>Total</i>	<b>215</b>

- **215 of the 100 points required for SolSmart Silver status**
- **Silver prerequisites**
  - **Solar Landing Page**

# SOLAR LANDING PAGE



**UPDATED FAQs**



**PERMITTING  
CHECKLIST**



**BAR GRAPHS**



**UPDATED SOLAR  
MAP**

# UPDATED FAQs



MORE QUESTIONS



UPDATED ANSWERS

# PERMITTING CHECKLIST

- **Permitting Checklist**

shows:

- **Required Permits**

- **Permit Fees**

- **And more!**



Nantucket Energy Office | 2 Fairgrounds Rd | [Energy Office | Nantucket, MA - Official Website](#)

## Solar Photovoltaic (PV) System Permitting Checklist

The pre-submittal checklist below contains the minimum information and project plan details required to be submitted to The Town of Nantucket when applying for a permit to install a solar photovoltaic (PV) system. The intent of using the checklist is to provide transparent and well-defined information to minimize the number of required revisions, improve permit application quality, and accelerate the application and review process.

Both residential and commercial solar PV installations follow the same process on Nantucket.

The following local design guidelines should be used when planning a solar PV installation:

- [Building With Nantucket in Mind](#)
- [Nantucket Historic District Commission \(HDC\) Solar Guidelines](#)
- [Nantucket Fire Department Solar PV Plan Review Checklist](#)

A permit must be obtained prior to the start of any work. Complete the following permit application forms and submit any additional required documents. Permit application forms can be picked up from 2 Fairgrounds Rd (open from 7:30 AM to 4:30 PM on weekdays).

### Required Permits:

- HDC Certificate of Appropriateness (COA) [[Link to watermarked application](#)]
- Electrical Permit [[Link to watermarked application](#)]
- Building Permit<sup>1</sup> [[Link to watermarked application](#)]
- Environmental (Only for ground-mount systems)
  - MESA Review<sup>2</sup>
  - Conservation Commission<sup>3</sup>

### Additional Required Documents:

- HDC COA submission:
  - All applicable items listed on the required documents [Checklist](#)
  - [10 Day Waiver](#) for HDC hearing
- Electrical Permit:
  - Fee - check (made out to the Town of Nantucket)/cash
  - Schematic and specifications of solar PV system

<sup>1</sup> Ground mounted arrays are required to receive a Health Department review of the Building Permit

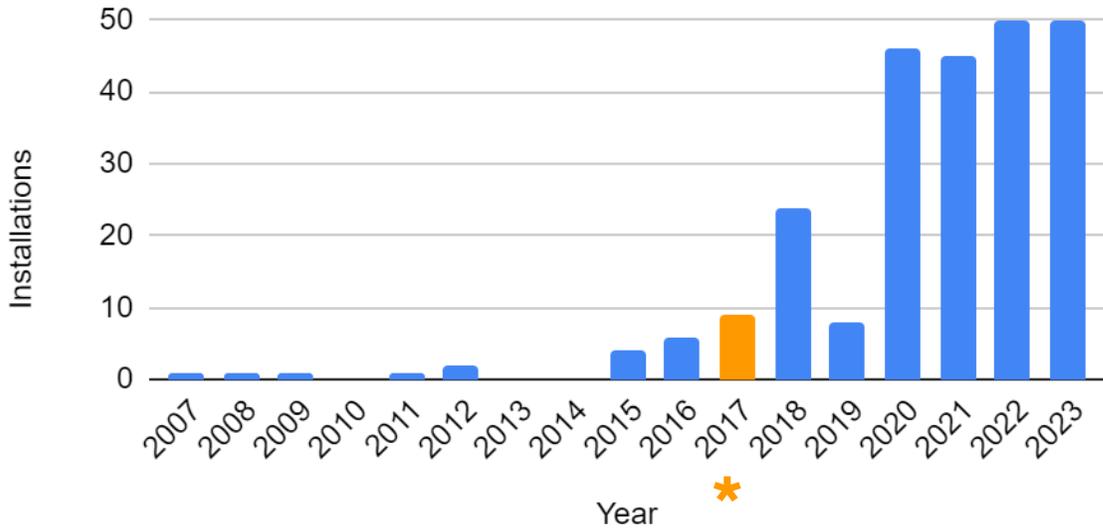
<sup>2</sup> Required for ground array systems installed on land that is designated as having state listed species habitat.

<sup>3</sup> Required for ground array system installed on designated wetlands and within the 100' Buffer Zone

# RESIDENTIAL SOLAR INSTALLATIONS

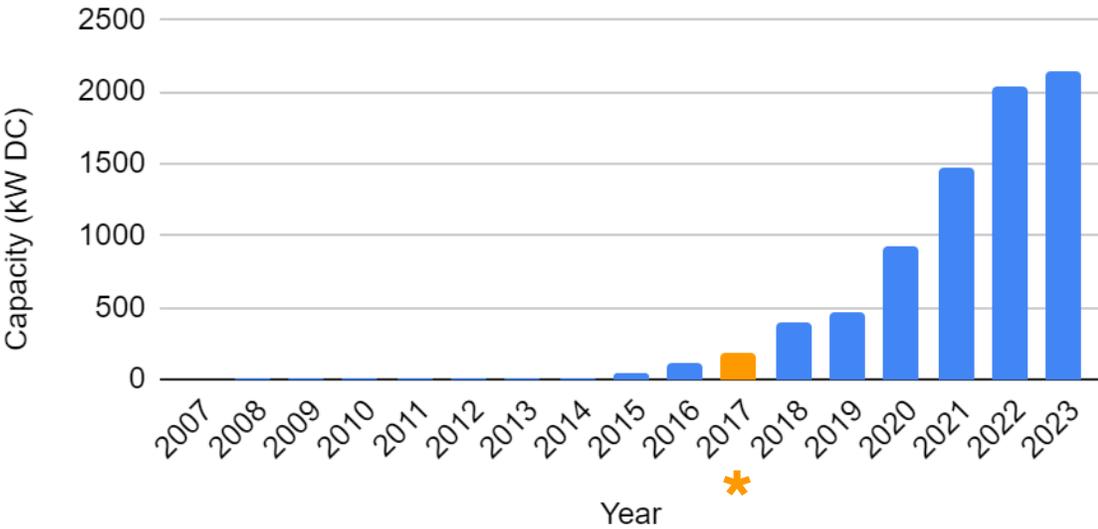
## RESIDENTIAL INSTALLATIONS

Nantucket Residential Solar Installations By Year



## CUMULATIVE INCREASE IN RESIDENTIAL KILOWATT CAPACITY

Cumulative Increased Residential Solar Capacity Since 2006



**\* The Local Solar Rebate Began in 2017**

# SOLAR MAP

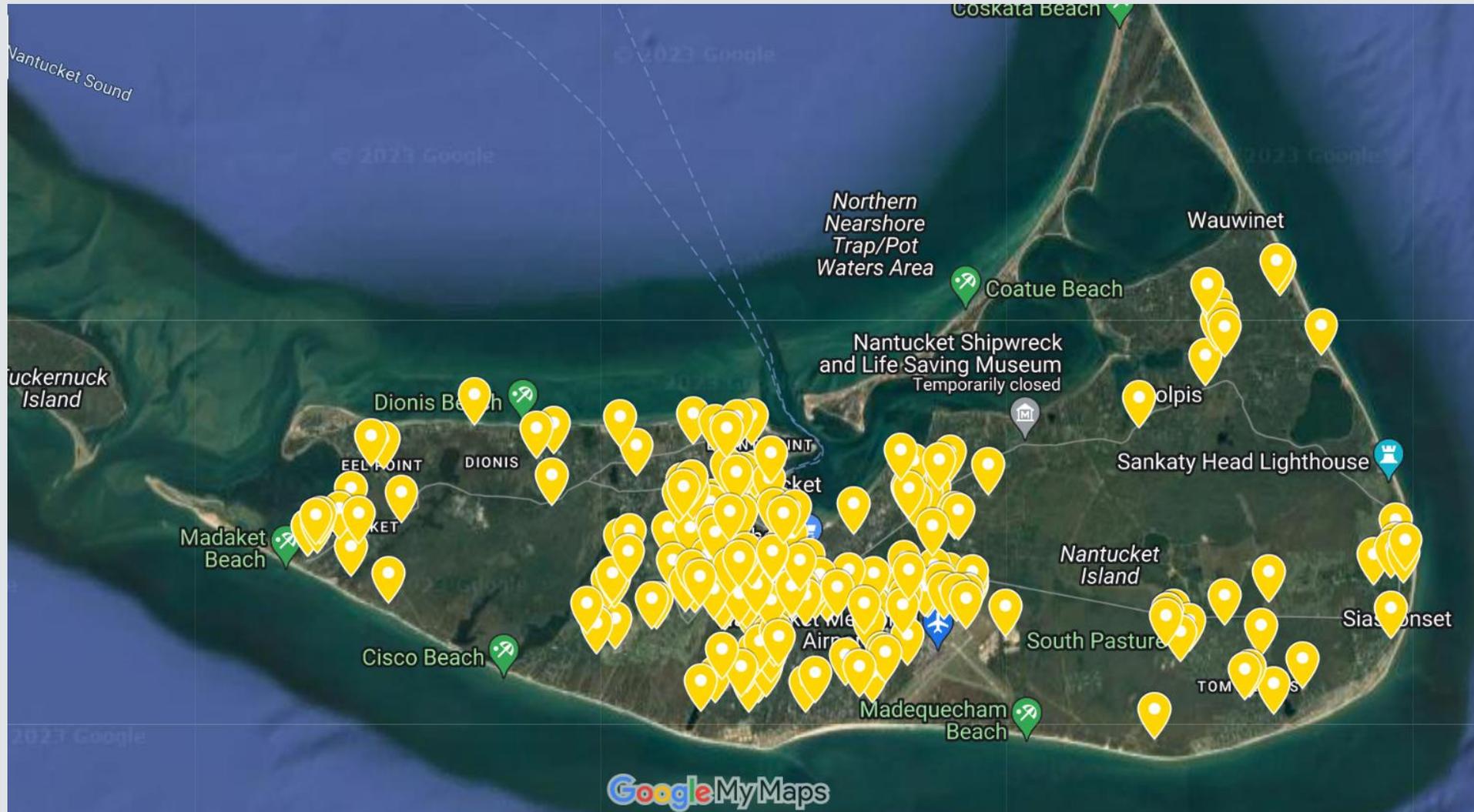
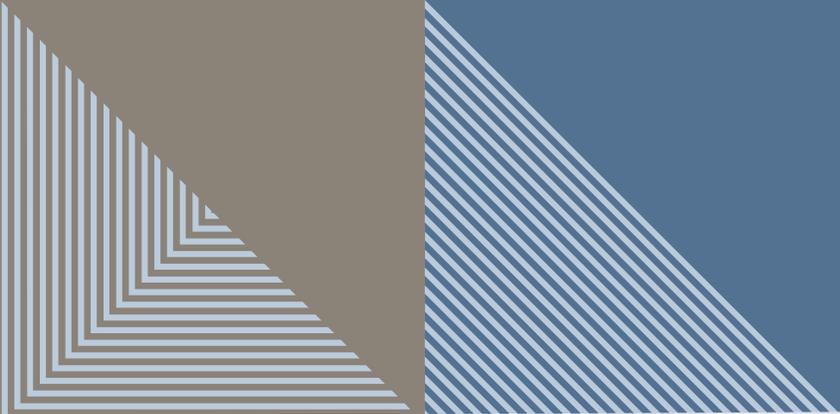
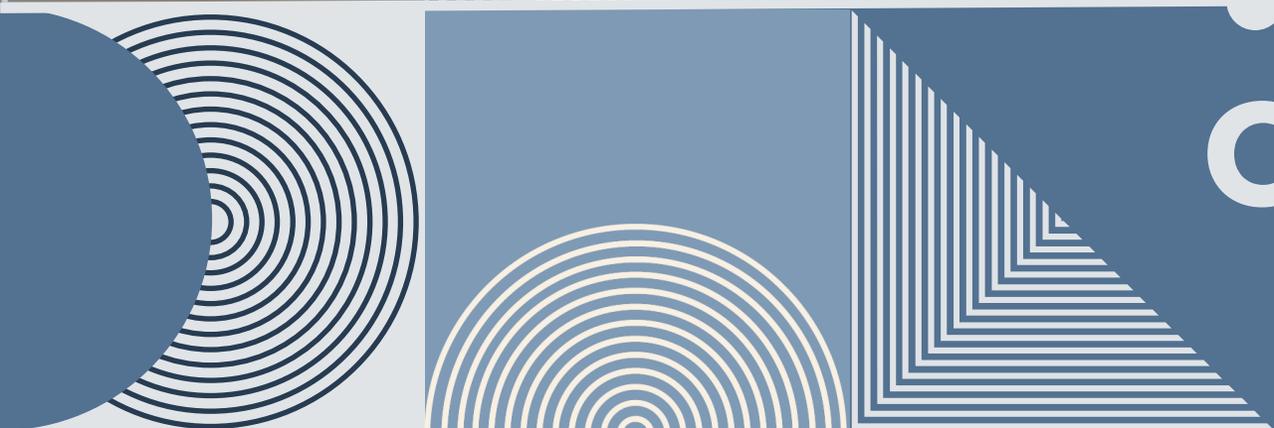


Image from updated  
Google My Map:  
<https://www.google.com/maps/d/viewer?mid=1OPC0CkD1Mr7IVLUhXSsCZF-nEzyBw&ll=41.301546720132116%2C-70.09520194520087&z=12>



# RECOMMENDATIONS & CONCLUSION



# ACHIEVE SILVER STATUS

- **Most of the work is complete**
- **Nantucket has earned 165 of the 100 required points for Silver status**
- **Prerequisites:**
  - Staff Training**
  - Zoning Determination letter**
  - Solar Landing Page**

**SILVER**



**January 2024**

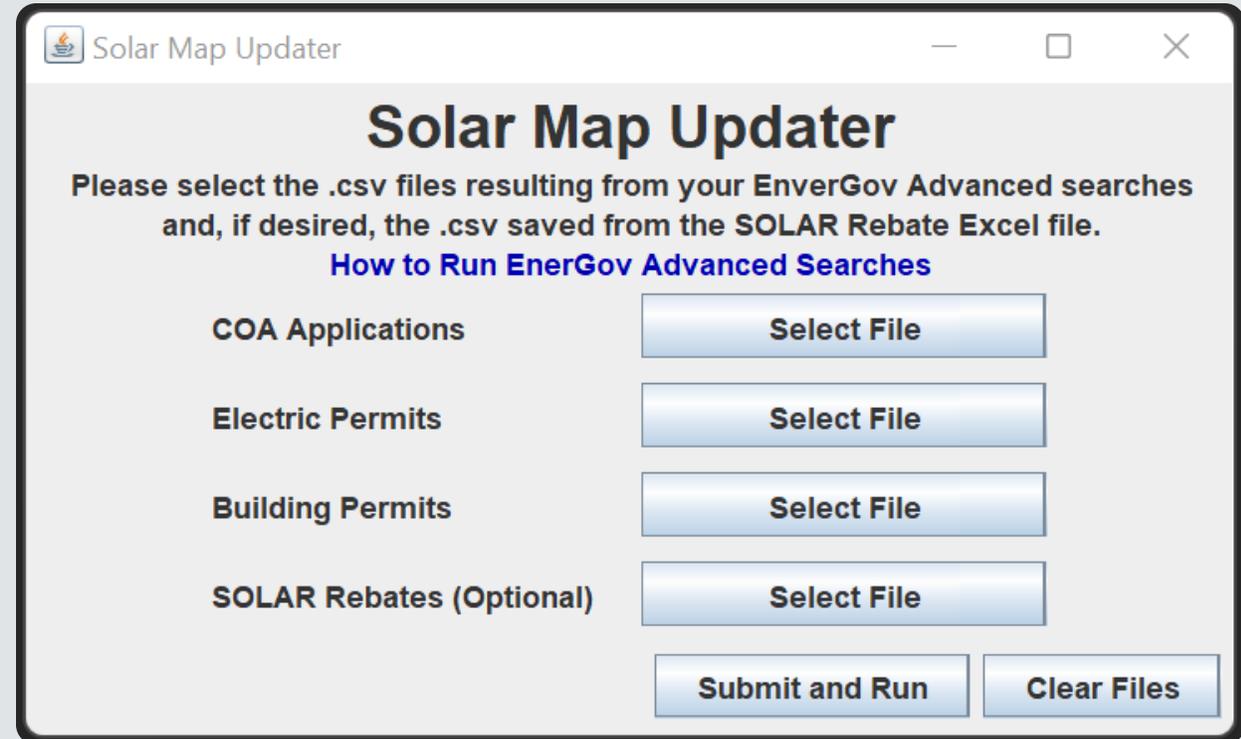
# COMPLETE GOLD PREREQUISITES

- **With completion of Silver,**
  - **215/200 Gold point requirement**
- **Gold prerequisites:**
  - **Codify solar by right use**
  - **Zoning Barrier Removal**
  - **3-day Permit turnaround time**



# MAINTAIN SOLAR LANDING PAGE

- **Quarterly update the Solar Map**
- **Creating instructions for sponsor**
- **Update other resources:**
  - **Permitting Checklist**
  - **FAQs**



The screenshot shows a web browser window titled "Solar Map Updater". The page content includes a title "Solar Map Updater", a paragraph of instructions: "Please select the .csv files resulting from your EnverGov Advanced searches and, if desired, the .csv saved from the SOLAR Rebate Excel file.", a blue link "How to Run EnverGov Advanced Searches", and four rows of file selection buttons. The rows are: "COA Applications" with a "Select File" button, "Electric Permits" with a "Select File" button, "Building Permits" with a "Select File" button, and "SOLAR Rebates (Optional)" with a "Select File" button. At the bottom right, there are two buttons: "Submit and Run" and "Clear Files".

Solar Map Updater

## Solar Map Updater

Please select the .csv files resulting from your EnverGov Advanced searches and, if desired, the .csv saved from the SOLAR Rebate Excel file.

[How to Run EnverGov Advanced Searches](#)

COA Applications	Select File
Electric Permits	Select File
Building Permits	Select File
SOLAR Rebates (Optional)	Select File

Submit and Run Clear Files

# AMENDMENTS TO PERMITTING PROCESS

- **Digitize the permitting process**
- **Develop "solar-only" permits:**
  - **The Historic District Commission's Certificate of Appropriateness**
  - **Building**

CERTIFICATE NO:

NOTE: It is strongly recommended  
Please see

This is a contractual agreement and must comply with the  
Resolves of Mass., 1970, for proposed work.

The certificate is valid for three years from the date of issuance. No structure may differ from the approved application. Violation may impede issuance of Certificate of Occupancy.

PROPERTY

TAX MAP N<sup>o</sup>: 99999999

Street & Number of Proposed Work: 2 Whale Rd

Owner of record: Moby Dick

Mailing Address: 2 Whale Rd, Nantucket

Contact Phone #: 555-5555

AGENT INFORMATION

Name:

Mailing Address:

Contact Phone #:

DESCRIPTION OF WORK TO BE PERFORMED

See reverse for required documentation

Roofing material:  Asphalt:  3-Tab  
 Wood (Type)

I hereby authorize the agent named above to bring the application into compliance with the HDC guidelines. I hereby agree that any revisions to this application will initiate a new sixty-day review period.  
Date October 18, 1851

CERTIFICATE NO:

Application to the HISTORIC DISTRICT COMMISSION, Nantucket, Massachusetts, for a

DATE ISSUED:

CERTIFICATE OF APPROPRIATENESS  
for structural work.

All blanks must be filled in using BLUE OR BLACK INK (no pencil) or marked N/A.  
NOTE: It is strongly recommended that the applicant be familiar with the HDC guidelines, *Building with Nantucket in Mind*, prior to submittal of application. Please see other side for submittal requirements. Incomplete applications will not be reviewed by the HDC.

This is a contractual agreement and must be filled out in ink. An application is hereby made for issuance of a Certificate of Appropriateness under Chapter 395 of the Acts and Resolves of Mass., 1970, for proposed work as described herein and on plans, drawings, and photographs accompanying this application and made a part hereof by reference. The certificate is valid for three years from date of issuance. No structure may differ from the approved application. Violation may impede issuance of Certificate of Occupancy.

PROPERTY DESCRIPTION

TAX MAP N<sup>o</sup>: 99999999 PARCEL N<sup>o</sup>: 9999 9999

Street & Number of Proposed Work: 2 Whale Rd

Owner of record: Moby Dick

Mailing Address: 2 Whale Rd, Nantucket MA, 02554

Contact Phone #: 555-5555 E-mail: Imawhale@whales.org

AGENT INFORMATION (if applicable)

Name:

Mailing Address:

Contact Phone #: E-mail:

FOR OFFICE USE ONLY

Date application received: Fee Paid: \$

Must be acted on by:

Extended to:

Approved: Disapproved:

Chairman:

Member:

Member:

Member:

Member:

Notes - Comments - Restrictions - Conditions

DESCRIPTION OF WORK TO BE PERFORMED

See reverse for required documentation.

- New Dwelling  Addition  Garage  Driveway/Apron  Commercial  Historical Renovation  Deck/Patio  Steps  Shed
  - Color Change  Fence  Gate  Hardscaping  Move Building  Demolition  Revisions to previous Cert. No.
  - Pool (Zoning District)  Roof  Other: **Install 10 all-black solar PV modules to rooftop of primary dwelling.**
- Size of Structure or Addition: Length: 3' Width: 4' Sq. Footage 1st floor: Decks/Patio: Size: 1st floor 2nd floor  
Sq. footage 2nd floor: Size: 1st floor 2nd floor  
Sq. footage 3rd floor:

Difference between existing grade and proposed finish grade: North South East West

Height of ridge above final finish grade: North South East West

Additional Remarks

REVISIONS:

1. East Elevation
2. South Elevation
3. West Elevation
4. North Elevation

Original Date: Original Builder: Is there an HDC survey form for this building attached?  Yes  N/A \*Cloud on drawings and submit photographs of existing elevations.

DETAIL OF WORK TO BE PERFORMED

Foundation: Height Exposed  Block  Block Parged  Brick (type)  Poured Concrete  Piers

Masonry Chimney:  Block Parged  Brick (type)  Other

Roof Pitch: Main Mass /12 Secondary Mass /12 Dormer /12 Other

Roofing material:  Asphalt:  3-Tab  Architectural  
 Wood (Type: Red Cedar, White Cedar, Shakes, etc.)

Fence: Height: Type: Length:

Roofing material:  Asphalt:  3-Tab  Architectural  
 Wood (Type: Red Cedar, White Cedar, Shakes, etc.)

Location Location

Leaders (material and size):

Sidewall:  White cedar shingles  Clapboard (exposure: inches) Front Side

Other

Trim: A. Wood  Pine  Redwood  Cedar  Other

B. Treatment  Paint  Natural to weather  Other

C. Dimensions: Fascia Rake Soffit (Overhang) Corner boards Frieze

Window Casing Door Frame Columns/Posts: Round Square

Windows:  Double Hung  Casement  All Wood  Other

True Divided Lights (muntins), single pane  SDL's (Simulated Divided Lights) Manufacturer

Doors\* (type and material):  TDL  SDL Front Rear Side

Garage Door(s): Type Material

Hardscape materials: Driveways Walkways Walls

\* Note: Complete door and window schedules are required.

COLORS

Sidewall Clapboard (if applicable) Roof

Trim Sash Doors

Deck Foundation Fence Shutters

\* Attach manufacturer's color samples if color is not from HDC approval list.

I hereby authorize the agent named above to act on my behalf to make changes in the specifications or the plans contained in this application in order to bring the application into compliance with the HDC guidelines. I hereby agree to abide by and comply with the terms and conditions of this application. I hereby agree that the submission of any revisions to this application will initiate a new sixty-day review period.

Date October 18, 1851

Signature of owner of record Moby Dick

Signed under penalties of perjury

ISSUED:

nd, prior to submittal of application.  
by the HDC.

ness under Chapter 395 of the Acts and  
on and made a part hereof by reference.

SE ONLY

Fee Paid: \$

Disapproved:

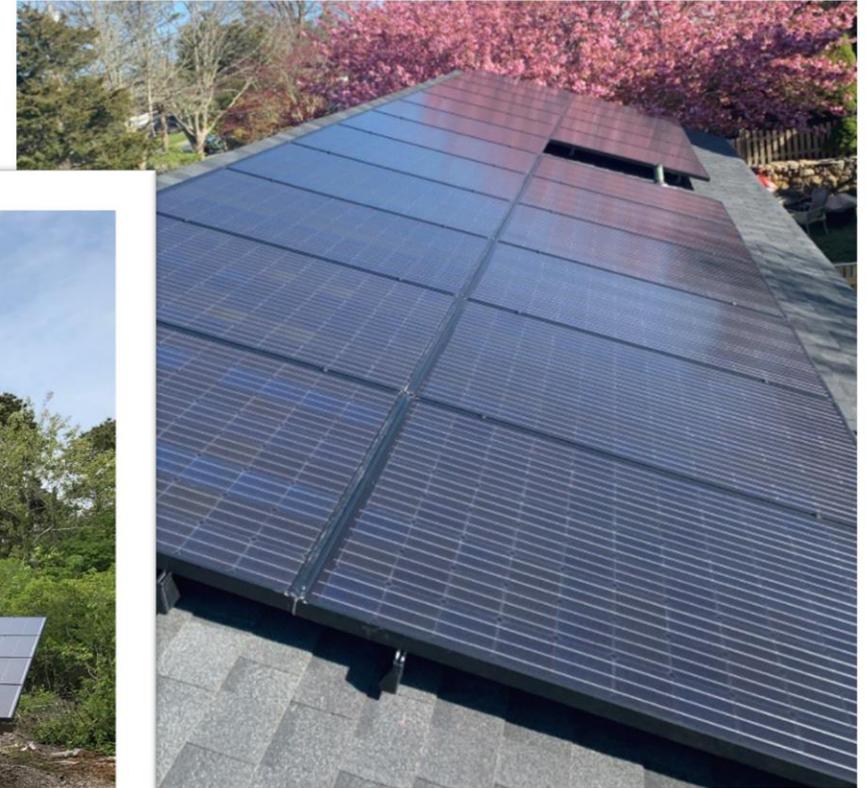
ns

icture or Addition: Length: 3'  
Width: 4'

pplication in order to bring the applica-  
1. I hereby agree that the submission of

Signed under penalties of perjury

# NANTUCKET IS A SOLAR LEADER



Images provided by the  
Nantucket Energy Office

# ACKNOWLEDGEMENTS

- ★ Project Advisors, Dr. Fred Looft & Dr. Susan Jarvis
- ★ Sponsor, Lauren Sinatra
- ★ Town of Nantucket Staff
- ★ Local solar installers
- ★ SolSmart community interviewees
- ★ Nantucket Yacht Club
- ★ Young's Bicycle Shop



• **THANK YOU!  
QUESTIONS?**