

A large, stylized sunburst graphic in shades of yellow and orange, with several white stars scattered across it. The sunburst is partially obscured by a diagonal orange band.

**NOVEMBER 10, 2014  
SPECIAL TOWN MEETING**

PRESENTATION ON  
SOLAR ARTICLES 9 & 10

BRYAN DUMONT, CHAIR ENERGY COMMITTEE  
REBECCA A. BOUCHER, MAA, PRINCIPAL ASSESSOR

## **SOLAR TAX AGREEMENTS**

- A. Why do a tax agreement?**
- B. How are our Towns interests protected?**
- C. Is the tax agreement a “deal” or tax break?**
- D. How solar tax agreements work**

# WHY DO A TAX AGREEMENT?

Municipal land is ordinarily tax exempt per MGL C

However, MGL c. 59 § 2B, states municipal owned real estate shall be valued, classified, assessed, and taxed annually to the lessee if used in connection with a business conducted for profit or leased or occupied for other than public purposes

Solar energy generation facilities are in the business of producing, manufacturing, and generating electricity for retail sale to the public and are therefore classified as a non-exempt property use.

MGL c. 59 §38H (b) allows electric generation companies to negotiate an agreement for payment in lieu of tax. This avoids costly litigation over valuations and provide tax stability for both the project owner and the municipality. Generally power plants are a very large taxpayer in the small communities they are situated in so changes in their value affect the distribution of the tax over the remaining tax base.

## **HOW ARE OUR TOWNS INTERESTS PROTECTED?**

**Inability to place tax lien on personal property or on town owned land**

**Tax Agreement creates a contractual obligation and includes language to incorporate provisions of MGL Chapters 59 & 60 relating to assessment, taxation, and collection laws**

**Agreement includes language to prevent sale to tax exempt entity**

# **IS THE AGREEMENT A “DEAL” OR TAX BREAK?**

**Tax agreements per MGL c. 59 §38H (b) shall be the result of good faith negotiations and shall be the equivalent of their property tax obligation based on full and fair cash valuation.**

**Tax agreement amounts are included in the tax base of purposes of determining the levy limit and levy ceiling and the MRF in classification of property**

**Tax Agreements and valuation methodology reviewed by MA Department of Revenue**

# HOW SOLAR TAX AGREEMENTS WORK

The solar equipment and infrastructure has value as personal property similar to other utility companies

Leased land has value as real estate

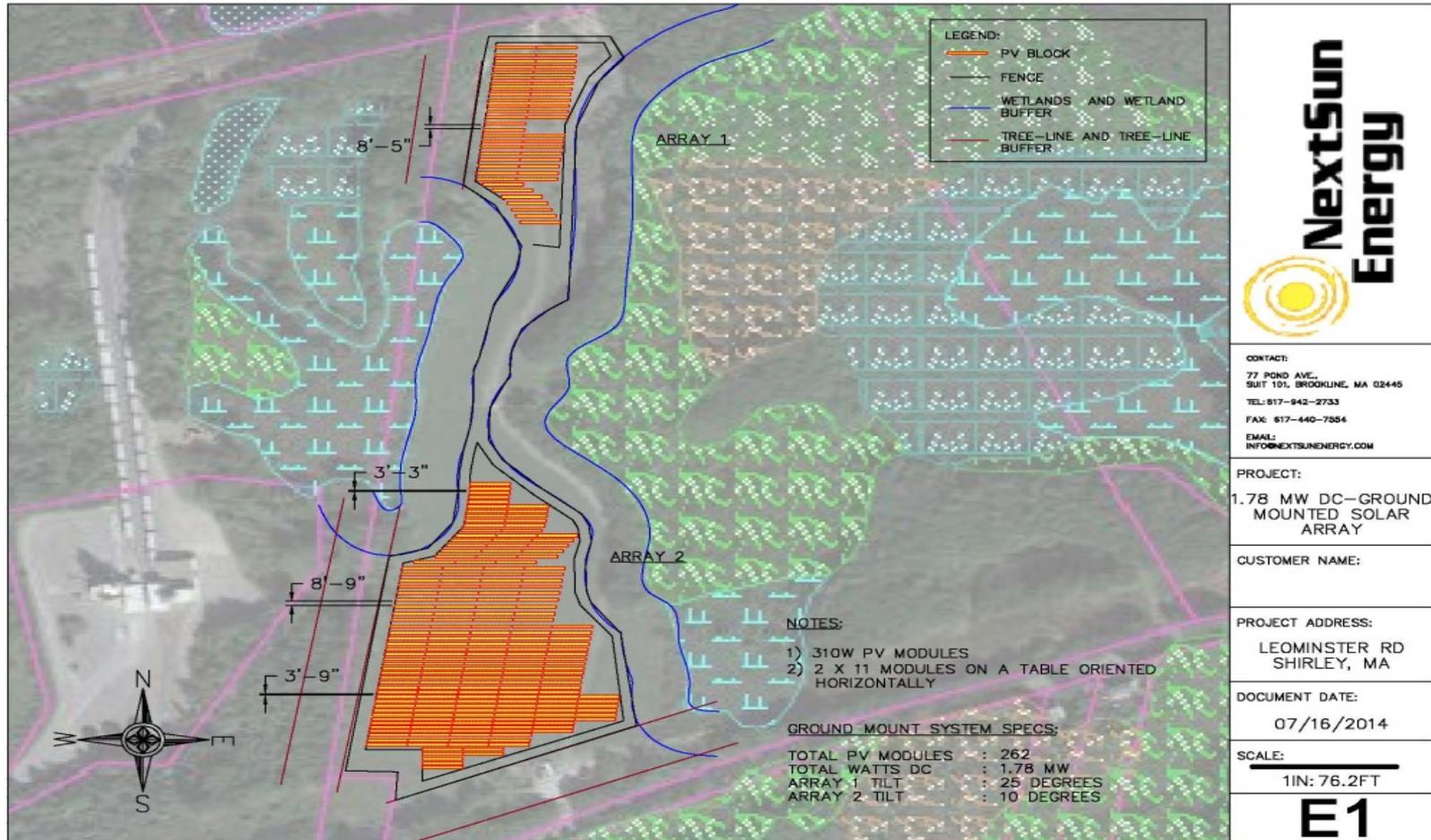
Agreement sets a fixed valuation schedule based on 2 approaches to value

- Cost: Applies a depreciation schedule to the original cost of assets (plus land value)
- Income Capitalization Approach: considers value of Cash Flows resulting from Income on sale of energy & SREC's less Expenses to operate the solar facility (plus land value)

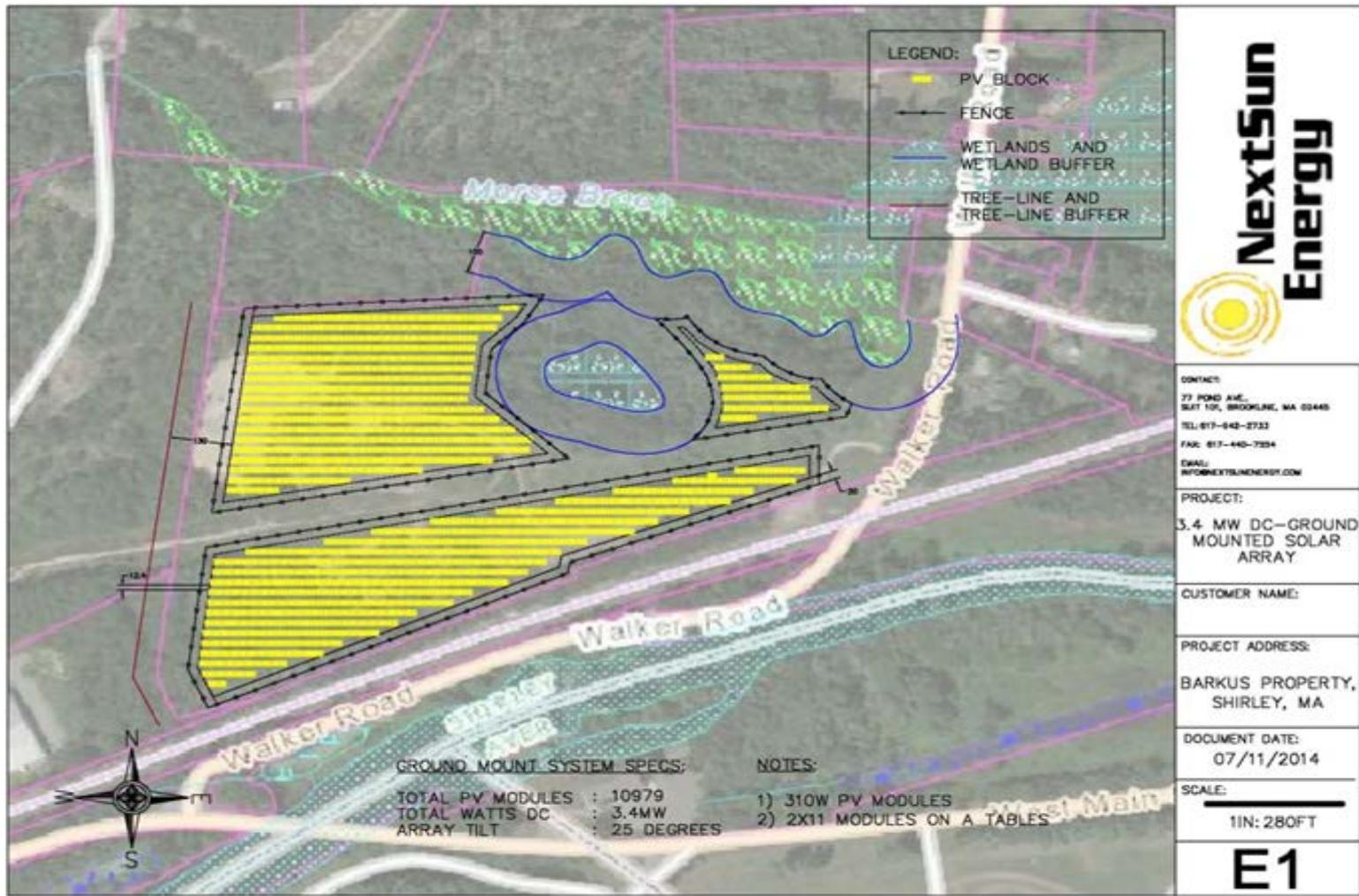
Each year the towns tax rate will be applied to the fixed valuation schedule to generate quarterly property tax bills.

Solar development will expand our Industrial and Personal Property tax bases and will be considered New Growth creating additional tax levy capacity in our levy limit calculation.

**TOWN OF SHIRLEY LAND  
 LOCATED ON LEOMINSTER RD  
 PARCEL ID 10 A 2 AKA TOWN LANDFILL  
 1.5 MG AC**



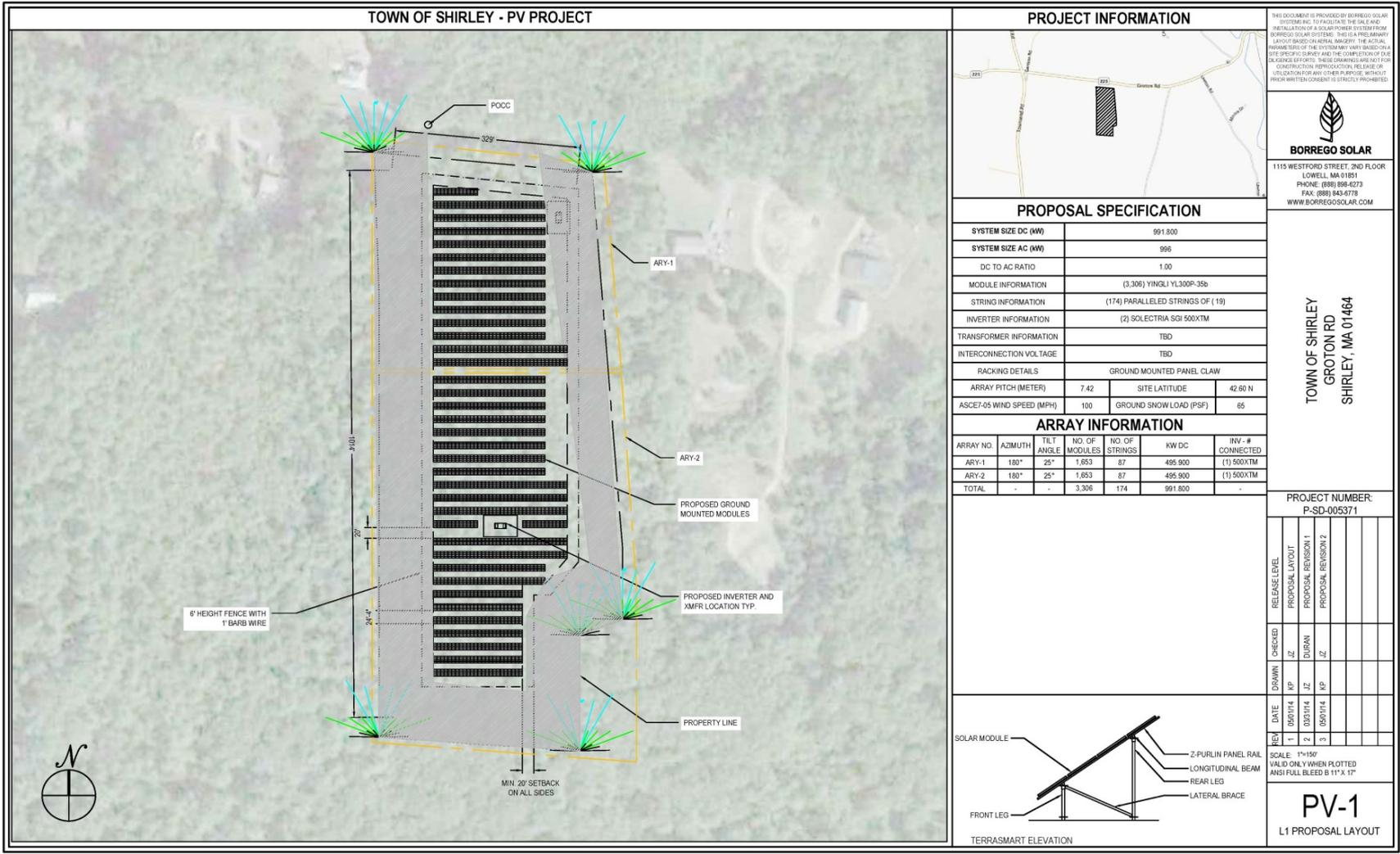
**TOWN OF SHIRLEY LAND  
 LOCATED ON WALKER RD  
 PARCEL ID 28 A 2.12 AKA BARTKUS PROPERTY  
 3 MG AC**



**SHIRLEY WATER DISTRICT LAND  
LOCATED OFF WALKER & PATTERSON ROADS  
PARCEL ID 42 A 1  
3 MG AC**



# TOWN OF SHIRLEY LAND LOCATED ON GROTON ROAD PARCEL ID 97 B 14 & 97 B 15 1 MG AC



TOWN OF SHIRLEY - PV PROJECT

### PROJECT INFORMATION



THIS DOCUMENT IS PROVIDED BY BORREGO SOLAR SYSTEMS INC. TO FACILITATE THE DESIGN AND INSTALLATION OF A SOLAR POWER SYSTEM FROM BORREGO SOLAR SYSTEMS. THIS IS A PRELIMINARY LAYOUT DRAWING - IN FINAL DESIGN, THE ACTUAL NUMBER OF PANELS AND THE EXACT ARRAY LAYOUT WILL BE SPECIFIC TO THE SITE AND THE COMPLETION OF THE DESIGN EFFORTS. THESE DRAWINGS ARE NOT FOR CONSTRUCTION, REPRODUCTION, RELEASE, OR REUSE FOR ANY OTHER PURPOSE, WITHOUT WRITTEN CONSENT. CONSENT IS STRICTLY PROHIBITED.

**BORREGO SOLAR**  
1115 WESTFORD STREET, 2ND FLOOR  
LOWELL, MA 01851  
PHONE: (888) 898-4273  
FAX: (888) 843-4778  
WWW.BORREGOSOLAR.COM

### PROPOSAL SPECIFICATION

SYSTEM SIZE DC (kW)	991.800		
SYSTEM SIZE AC (kW)	996		
DC TO AC RATIO	1.00		
MODULE INFORMATION	(3,306) YINGLI YL300P-35b		
STRING INFORMATION	(174) PARALLELED STRINGS OF (19)		
INVERTER INFORMATION	(2) SOLECTRIA SGI 500XTM		
TRANSFORMER INFORMATION	TBD		
INTERCONNECTION VOLTAGE	TBD		
RACKING DETAILS	GROUND MOUNTED PANEL CLAW		
ARRAY PITCH (METER)	7.42	SITE LATITUDE	42.60 N
ASCE7-05 WIND SPEED (MPH)	100	GROUND SNOW LOAD (PSF)	65

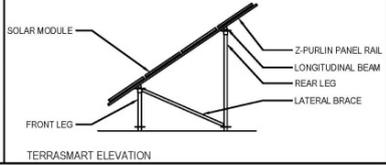
### ARRAY INFORMATION

ARRAY NO.	AZIMUTH	TILT ANGLE	NO. OF MODULES	NO. OF STRINGS	KW DC	NO. OF CONNECTED
ARY-1	182°	25°	1,653	87	495,900	(1) 500XTM
ARY-2	182°	25°	1,653	87	495,900	(1) 500XTM
TOTAL	-	-	3,306	174	991,800	-

TOWN OF SHIRLEY  
GROTON RD  
SHIRLEY, MA 01464

PROJECT NUMBER:  
P-SD-005371

REV	DATE	BY	CHECKED	RELEASE LEVEL
1	08/01/14	KP	JZ	PROPOSAL LAYOUT
2	03/01/14	JZ	DURAN	PROPOSAL REVISION 1
3	08/01/14	KP	JZ	PROPOSAL REVISION 2



SCALE: 1"=150'  
VALID ONLY WHEN PLOTTED  
ANSI FULL BLEED 8 1/2" X 11"

**PV-1**  
L1 PROPOSAL LAYOUT