

City of Harrington
AGENDA
Board of Adjustment Public Hearing
December 22, 2014
6:30 p.m.

Call to Order

Roll Call

Variance Application for 101 Clukey Drive – AgroLab Inc.

An application by Paradise Energy Solutions on behalf of William Rohrer, AgroLab Inc. for a variance to permit accessory structures in the front of the main building. The property is 6.6 +/- acres located at 101 Cluckey Drive, Harrington, DE, identified as Kent County Tax Map 6-09-18.05-01-59.01 and is zoned M.

Adjourn

Posted 11/26/2014
Kelly Blanchies
Clerk of Council

Note: 29 Del.C. §10004(e)(2). Agenda items as listed may not be considered in sequence. This agenda is subject to change to include additional items including Executive Sessions or the deletion of items including Executive Sessions, which arise at the time of the meeting. If there are questions or special accommodations are needed, please contact Kelly Blanchies at City Hall, 398-4476 (at least 72-hours in advance of the meeting for special accommodations).

City of Harrington:

AgroLab Inc., in conjunction with Paradise Energy Solutions is seeking a variance from the following section of code that prohibits construction of an accessory structure in the front part of the property in relation to the street.

Chapter 440. ZONING

Article XIV. General Regulations

§ 440-68. Yard exception for private garage or accessory building.

*A private garage, or other accessory buildings, which is not an integral structural part of a main building, may be located in this required side and/or rear yard but not less than five feet from any property line, provided that it is situated not less than **10 feet farther back from the street line than the rearmost portion of the main building.** Nothing in this section shall be construed to prohibit the erection of a common or joint garage which is not an integral structural part of a main building on adjoining lots.*

The property located at 101 Clukey Drive was previously owned by Guardian Construction and served as the office, vehicle shop, vehicle staging, and construction material staging area. William Rohrer (W.R. Rohrer LLC) bought the property December 2013 and moved AgroLab Inc to the site March 2014. AgroLab Inc. is an agronomy lab analyzing soil, plant tissue, manure, feed, fertilizer and water. The property is 6.6 acres zoned manufacturing. The purpose of the solar array is to provide energy for on-site operations and protect the business against rising electric rates. A grant was approved by the USDA to assist in the installation.

The main building (4,000 sf) is in the center of the property and current codes require solar panel construction behind or to the side of the main building of the property. The implication of this code follows:

- The accessory structure solar panels would not have maximum sunlight exposure in the rear (north of the property).
- The accessory structure solar panels would obstruct the vacant shop near the rear of the property.
- Restricting any business activity (solar) in front (southwest) of the main building would devalue the 3 acres of property in front of the main building. A purchased value of approximately \$61K per acres represents a \$183k value of manufacturing/commercial property unsuitable for any business activity.

The proposed solar panels will not create any noise or have any moving parts. They will be installed with attention to aesthetics. It is a much better use of the property to keep manufacturing/commercial activity in the rear of the property and install the solar array on the southwest portion of the property. The proposed location would not interfere with current operation and potential future expansion. By its nature the solar array area will be kept free of debris and overgrown vegetation. The law's intent is to prohibit structures that would be an eyesore or tend to attract clutter. We appreciate your consideration in this matter.

Sincerely,
Andy Hostetler
Paradise Energy Solutions
436 Snow Hill Road, Salisbury, MD 21804
410-845-2829

William Rohrer
AgroLab Inc.
101 Clukey Drive, Harrington, DE 19952
302-535-6591

City of Harrington Review Application

BASE \$ _____
 ESCROW \$ _____
 ACCT # _____
 Planner fills in above

Request to Review	check one application	# of complete application	Notes:
Annexation Request		15	#1 Applications that are not completely filled out nor legible will be returned. #2 The # of complete application includes copies of the <i>application</i>, plans, prints as well as any supportive material/ correspondence/info
Category B Plan Review		5	
Conceptual Category A Plan Review		10	
Conceptual Subdivision Review		10	
Final Category A Plan Review		11	
Final Subdivision		10	
Conditional Use		15	
Preliminary Category A Plan Review		10	
Preliminary Subdivision		10	
Board of Adjustment (Exception/Variance)	X	15	
Board of Adjustment Appeals		15	
Utility Review		4	
Rezoning Request		15	

NOTE: ALL Harrington application fees are located in Chapter 180 of the Code.

Property Information	Please type or legibly print the information below
Kent County Tax Map/Parcel:	6-09-18005-01-5901-000
Project Location:	101 Clukey Drive, Harrington, DE 19952
Property Size/Dimension:	6.6 Acres
Project Title/Name:	AgroLab Solar Array
Current Zoning District:	Manufacturing
Proposed Zoning (if applicable):	
Current Property Use:	Agronomy Lab
Proposed Property Use:	
Designated Primary Contact Name:	Andy Hostetler

Engineer/Surveyor Information	Please type or legibly print the information below
Company Name:	Paradise Energy Solutions
Contact Person:	Andy Hostetler
Phone Number:	410-845-2829
Fax Number:	443-736-7120
Email address:	ahostetler@paradiseenergysolutions.com
Mailing Address:	436 Snow Hill Road
City, State, Zip Code	Salisbury, MD 21804


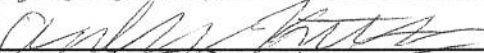
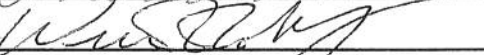
Current Property Owner Information	Please type or legibly print the information below
Current Owner Name:	William Rohrer
Contact Person:	William Rohrer
Phone Number:	302-535-6591
Email Address:	wrohrer@agrolab.us
Fax Number:	
Mailing Address:	101 Clukey Dr.
City, State, Zip Code	Harrington, DE 19952

BASE \$ _____
 ESCROW \$ _____
 ACCT # _____
 Planner fills in above

Developer Information	Please type or legibly print the information below
Company Name:	Paradise Energy Solutions
Contact Person:	Andy Hostetler
Phone Number:	410-845-2829
Fax Number:	443-736-7120
Email Address:	ahostetler@paradiseenergysolutions.com
Mailing Address:	436 Snow Hill Road
City, State, Zip Code	Salisbury, MD 21804

Please read the following and certify:

- 1- I understand that the designated primary contact on this project will receive all meeting information, correspondence and will be billed for the professional services rendered from the City Engineer, City Planner and/or the City Solicitor as required for my application.
- 2- I the undersigned, hereby certify that, I have supplied all the information listed on this form and that statements contained in any papers or plans submitted as part of this application are true and correct.
- 3- I also certify that this project was designed in accordance with the plan requirements, the Comprehensive Plan, Zoning Code, and Construction Design Standards for the City.
- 4- I further certify that I or an agent on my behalf will attend all public hearings/meetings necessary for this application, and that I will answer any questions to the best of my ability to respond to the present and future needs, the health, safety, morals, convenience, order, prosperity, and general welfare of the inhabitants of Harrington.
- 5- I understand that any incomplete applications will not move forward in the review process; however, I will be notified in writing after a thorough review has been completed by the City Staff and Consultants.
- 6- It is understood that the City of Harrington staff processes all applications in the order in which they were received. Each application will follow the process after eligibility and the appropriate reviews have been completed. The designated primary contact will receive written comments on every review.

Signature of Primary Contact	
Signature of Developer	
Signature of All Current Property Owners	
Signature of All Current Property Owners	
Submittal Date to the City	

CITY STAFF TO COMPLETE AREA BELOW	
Date Application was received:	
Application was received by:	
Application Fee Amount collected:	
Method of Payment:	
Ensure a copy of the receipt is attached to the original application.	

- REBAR & CAP SET
- CONCRETE MONUMENT FOUND
- UTILITY POLE/LIGHT POLE
- FIRE HYDRANT
- TELECOMMUNICATIONS RISER

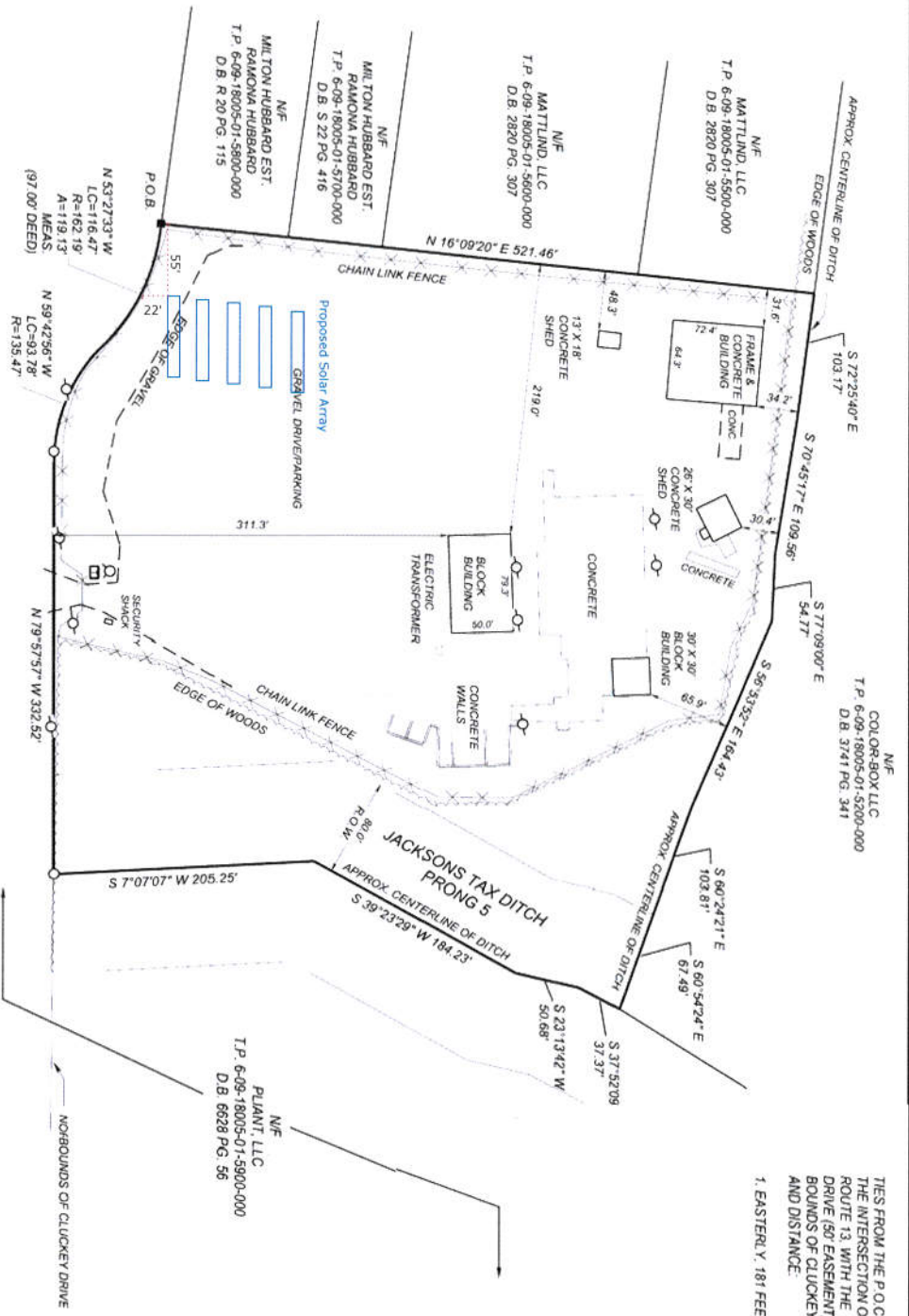
LEGEND

SURVEYOR'S CERTIFICATION
 I HEREBY CERTIFY THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF, THAT THE SURVEY SHOWN HEREON IS CORRECT. THAT IT IS A SURVEY OF ALL THE LANDS CONVEYED BY TERRE HILL SILCO COMPANY, INC. TO JOSEPH CUNANE AND MONA J. CUNANE BY DEED RECORDED JULY 19, 1995 AMONG THE LAND RECORDS OF KENT COUNTY, DELAWARE IN DEED BOOK 134 PAGE 261.

BOUNDARY SURVEY PLAN
 FOR
WILLIAM R. ROHRER JR.
W.R. ROHRER LLC
 CITY OF HARRINGTON
 MISPELLION HUNDRED
 KENT COUNTY, DELAWARE

DONALD G. GROWER, PLS., INC.
 PROFESSIONAL LAND SURVEYING SERVICES
 57C SAULSBURY ROAD, DOVER, DE 19904
 TEL. 302-526-2495 CEL. 302-632-1979
 EMAIL: dgrower@comcast.net
 Mailing Address: 533 Carol Street, Dover, DE 19904
 DATE: 12/09/2013 JOB NO.: 713-2013
 SCALE: 1"=100' DRAWN BY: DGG
 SHEET NO.: 1 OF 1 COPYRIGHT 2013 DONALD G. GROWER, PLS. NO. 0734

CLUCKEY DRIVE
 50' EASEMENT



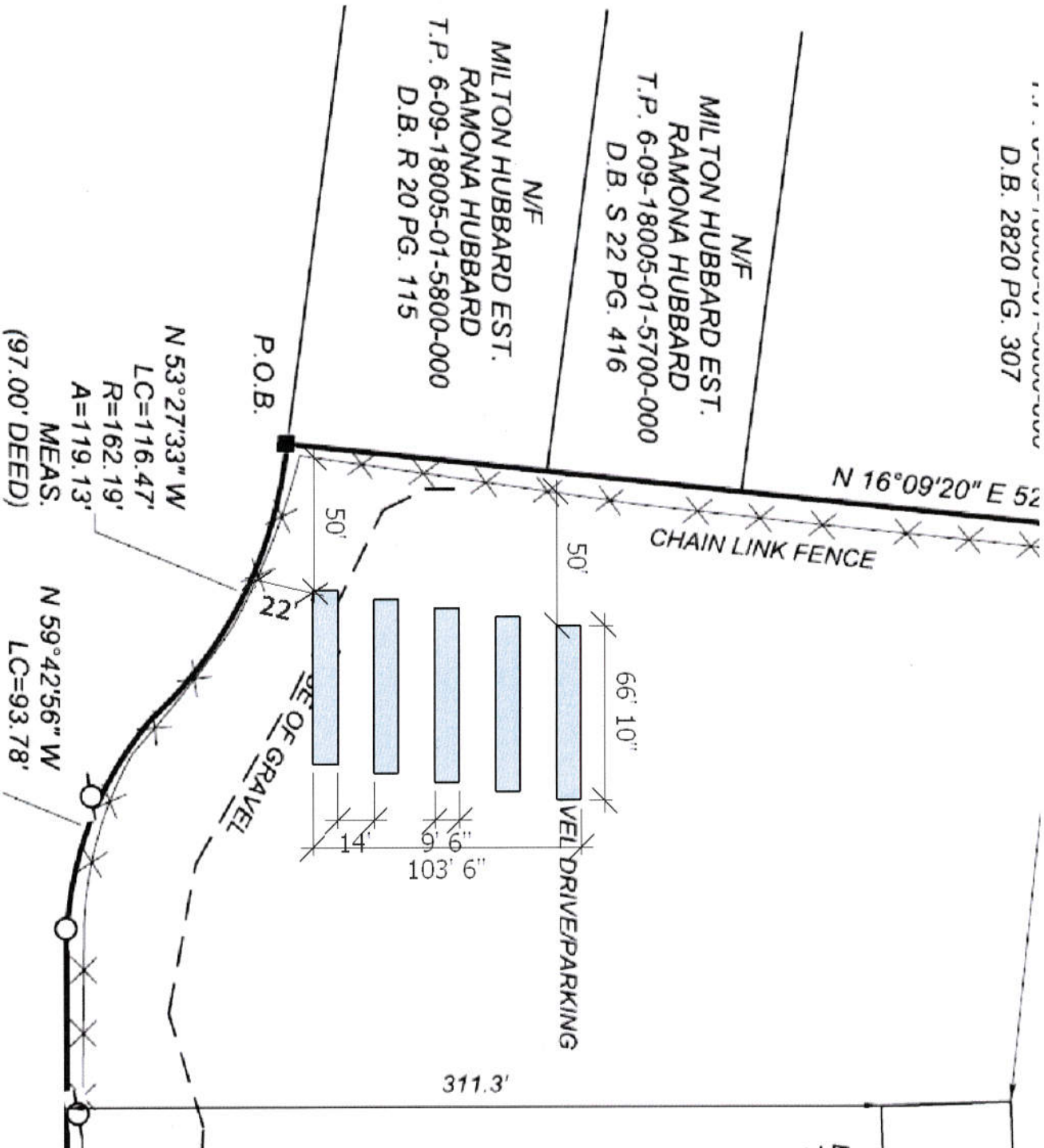
1. EASTERLY 181 FEET TO THE POINT OF BEGINNING
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SITE DATA
 TAX PARCEL: 6-09-18005-01-5901-000
 ADDRESS: 101 CLUCKEY DRIVE HARRINGTON, DE 19952
 AREA: 6.605 ACRES
 DEED REFERENCE: DEED BOOK 134 PAGE 261
 CURRENT OWNER: JOSEPH CUNANE MONA J. CUNANE
 SURVEY CLASS: THIS SURVEY MEETS OR EXCEEDS THE REQUIREMENTS FOR A SUBURBAN SURVEY.

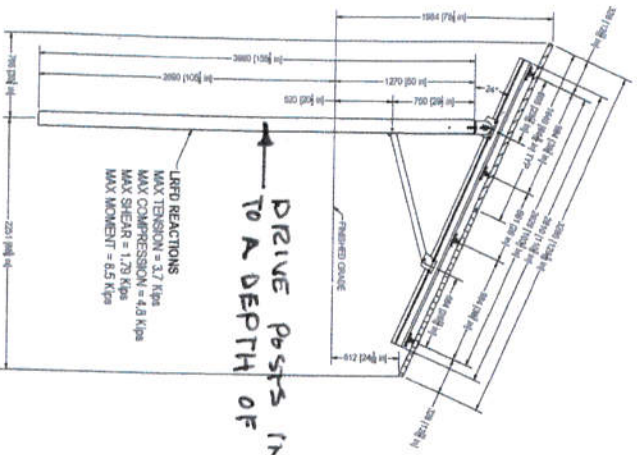
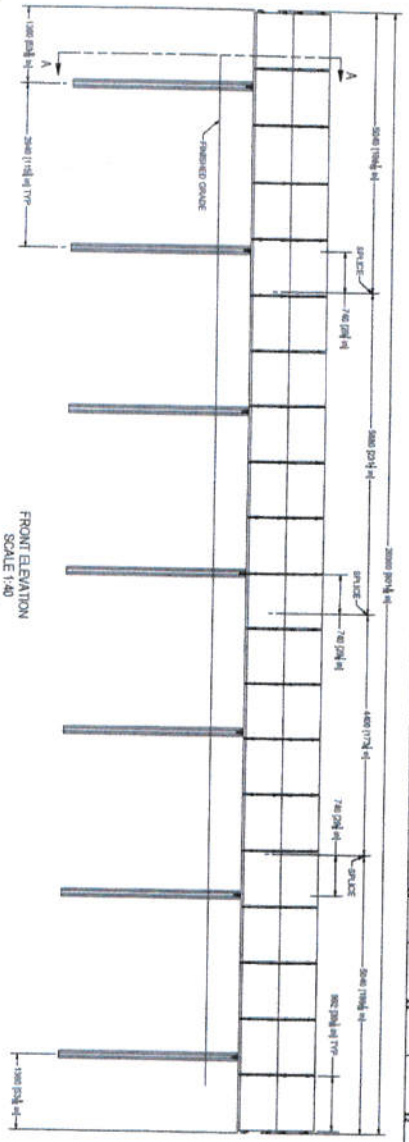
TITLE NOTE
 THIS MAP WAS PREPARED WITHOUT THE BENEFIT OF A TITLE REPORT, WHICH MAY SHOW ADDITIONAL CONVEYANCES, EASEMENTS, COVENANTS, RIGHTS-OF-WAYS OR MORE STRINGENT BUILDING RESTRICTION LINES THAN THOSE SHOWN HEREON. NO RECORDED RIGHTS-OF-WAYS OR EASEMENTS WERE PROVIDED BY OTHERS FOR THE PREPARATION OF THIS SURVEY.



AgroLab Solar Array Layout

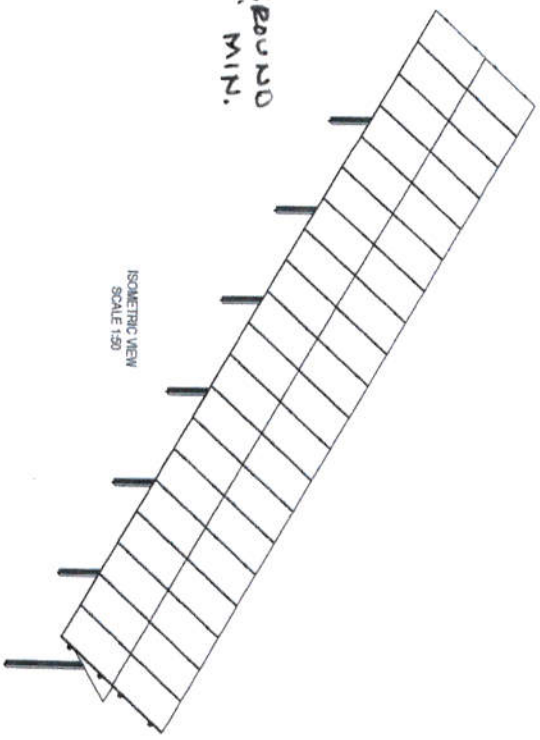


AH



DRIVE POSTS INTO GROUND
TO A DEPTH OF 6'-0" MIN.

LRFD REACTIONS
MAX TENSION = 3.7 Kips
MAX COMPRESSION = 4.8 Kips
MAX SHEAR = 1.79 Kips
MAX MOMENT = 8.5 Kips



NO.	REVISION	DATE	BY	CHKD.
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APPROVED

Client: Paradise Energy Solutions
875 Brackbill Road
Gap, PA 17327

Ground Mount FS 2V x 20 24"
Erector Rocking Structures
Dimensions and Specifications
DESIGNED BY SCHLETTER INC.
FIELDING AND COMMERCIAL

Project Site: Agriplot Inc
101 Cluckey Drive
Harrington, DE 19952

Drawing Number: V.01



DESIGN CRITERIA
2. ALL DIMENSIONS SHALL BE IN ACCORDANCE WITH LOCAL ORDINANCES.
LOADS
1. UNIFORM LOAD - 2.0 PSF
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AC-240P/156-60S
 AC-245P/156-60S
 AC-250P/156-60S
 AC-255P/156-60S

www.axitecsolar.com

AXITEC®
 high quality german solar company

AXIpower

60 cell/polycrystalline photovoltaic modules

High performance photovoltaic modules



German / U.S. engineered

The advantages:



12 years manufacturer's warranty



Guaranteed positive power tolerance from 0-5 Wp by individual measurement



Maximum 113 PSF snow load



100 % electroluminescence inspection



High stability due to AXITEC-Soft-Grip-Seam aluminium frame construction



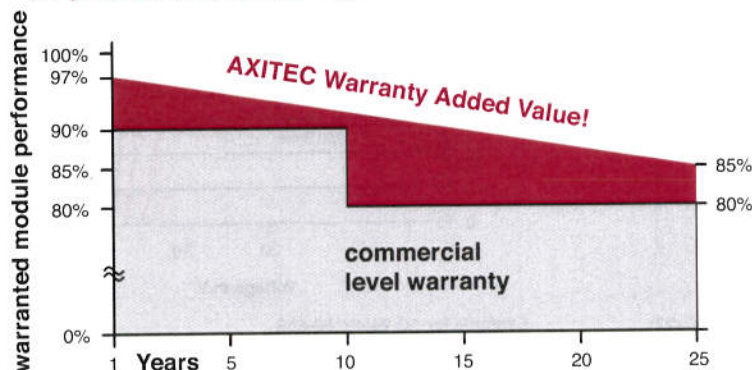
High quality junction box and connector systems



Fig. similar 60P156USA130425A

Exclusive linear AXITEC high performance guarantee!

- 15 years manufacturer's guarantee on 90 % of the nominal performance
- 25 years manufacturer's guarantee on 85 % of the nominal performance



CEC listed

SUNNY TRIPOWER

12000TL-US / 15000TL-US / 20000TL-US / 24000TL-US



RATED FOR
1000 V DC & 600 V DC
SYSTEMS



Design flexibility

- 1000 V DC or 600 V DC
- Two independent DC inputs
- 15° to 90° mounting angle range
- Detachable DC Connection Unit

System efficiency

- 98% CEC, 98.5% Peak
- 1000 V DC increases system efficiency
- OptiTrac advanced MPPT
- OptiTrac Global Peak MPPT

Enhanced safety

- Integrated DC AFCI
- Floating system with all-pole sensitive ground fault protection
- Reverse polarity indicator

Future-proof

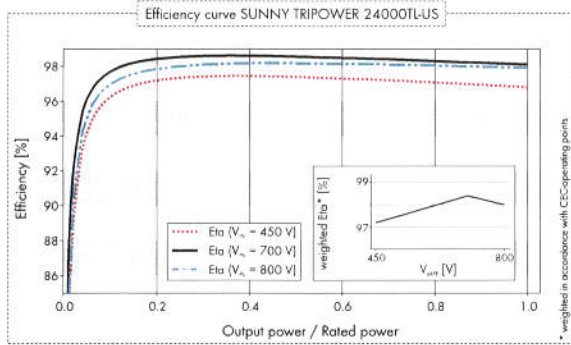
- Cluster Controller, WebConnect/Speedwire
- Bi-directional Ethernet communications
- Complete grid management feature set
- Ability to satisfy future utility requirements

SUNNY TRIPOWER

12000TL-US / 15000TL-US / 20000TL-US / 24000TL-US

The ultimate solution for decentralized PV plants

SMA's new Sunny Tripower TL-US is raising the level of performance for decentralized commercial PV plants. This three-phase transformerless inverter is UL listed for up to 1000 V DC maximum system voltage and has peak efficiency above 98 percent, while OptiTrac Global Peak minimizes the effects of shade for maximum energy production. The Sunny Tripower delivers a future-proof solution with full grid management, and communications and monitoring features. The Sunny Tripower is also equipped with all-pole ground fault protection and integrated AFCI for a safe, reliable solution. It offers unmatched flexibility with a wide input voltage range and two independent MPP trackers. Suitable for both 600 V DC and 1,000 V DC applications, the Sunny Tripower allows for flexible design and a lower levelized cost of energy.



Accessories



RS485 interface
DM-485CB-US-10



SMA Cluster Controller
CLCON-10

● Standard features ○ Optional features — Not available
Data at nominal conditions

Technical data

Input (DC)

Max. recommended PV power (@ module STC)
Max. DC power (@ $\cos \phi = 1$)
Max. DC voltage*
Rated MPPT voltage range
MPPT operating voltage range
Min. DC voltage / start voltage
Number of MPP tracker inputs
Max. input current / per MPP tracker input

Output (AC)

AC nominal power
Max. AC apparent power
Output phases / line connections
Nominal AC voltage
AC voltage range
Rated AC grid frequency
AC grid frequency / range
Max. output current
Power factor at rated power / adjustable displacement
Harmonics

Efficiency

Max. efficiency
CEC efficiency

Protection devices

DC reverse polarity protection
Ground fault monitoring / Grid monitoring
All-pole sensitive residual current monitoring unit
DC AFCI compliant to UL 1699B
AC short circuit protection
Protection class / overvoltage category

General data

Dimensions (W / H / D) in mm (in)
Packing dimensions (W / H / D) in mm (in)
Weight
Packing weight
Operating temperature range
Noise emission (typical)
Internal consumption at night
Topology
Cooling concept
Electronics protection rating

Features

Display / LED indicators (Status / Fault / Communication)
Interfaces: Speedwire / RS485
Mounting angle range
Warranty: 10 / 15 / 20 years
Certifications and approvals
NOTE: US inverters ship with gray lids
* Suitable for 600 V DC max. systems
Type designation

Sunny Tripower 12000TL-US	Sunny Tripower 15000TL-US	Sunny Tripower 20000TL-US	Sunny Tripower 24000TL-US
15000 W	18750 W	25000 W	30000 W
12250 W	15300 W	20400 W	24500 W
1000 V	1000 V	1000 V	1000 V
300 V...800 V	300 V...800 V	380 V...800 V	450 V...800 V
150 V...1000 V	150 V...1000 V	150 V...1000 V	150 V...1000 V
150 V / 188 V	150 V / 188 V	150 V / 188 V	150 V / 188 V
2	2	2	2
66 A / 33 A	66 A / 33 A	66 A / 33 A	66 A / 33 A
12000 W	15000 W	20000 W	24000 W
12000 VA	15000 VA	20000 VA	24000 VA
	3 / 3-N-PE 480 / 277 V WYE 244 V...305 V 60 Hz 50 Hz, 60 Hz / -6 Hz...+5 Hz		
14.4 A	18 A	24 A	29 A
	1 / 0.8 leading...0.8 lagging < 3 %		
98.2 %	98.2 %	98.5 %	98.5 %
97.5 %	97.5 %	97.5 %	98.0 %
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	665 / 690 / 265 (26.1 / 27.1 / 10.4) 780 / 790 / 380 (30.7 / 31.1 / 15.0) 55 kg (121 lbs) 61 kg (134.5 lbs) -25°C...+60°C 51 dB(A) 1 W Transformerless OptiCool NEMA 3R		
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STP 12000TL-US-10 STP 15000TL-US-10 STP 20000TL-US-10 STP 24000TL-US-10