

Subject Property

MD SOLAR 1, LLC - SHUGART VALLEY PL
 DOCKET 1390
 LOCATION MAP
 CHARLES COUNTY, MD

Approved

DATE
 JAN 2018

CHARLES COUNTY GOVERNMENT
 Department of Planning and
 Growth Management
 200 Baltimore St
 La Plata, MD 20646
 (301) 426-6527



SCALE
 DRAWN BY:
 CHECKED BY:



10,000 Feet

5,000

2,500

0

Information contained on this document is for informational purposes only and is not meant to be used for engineering purposes.



C-2

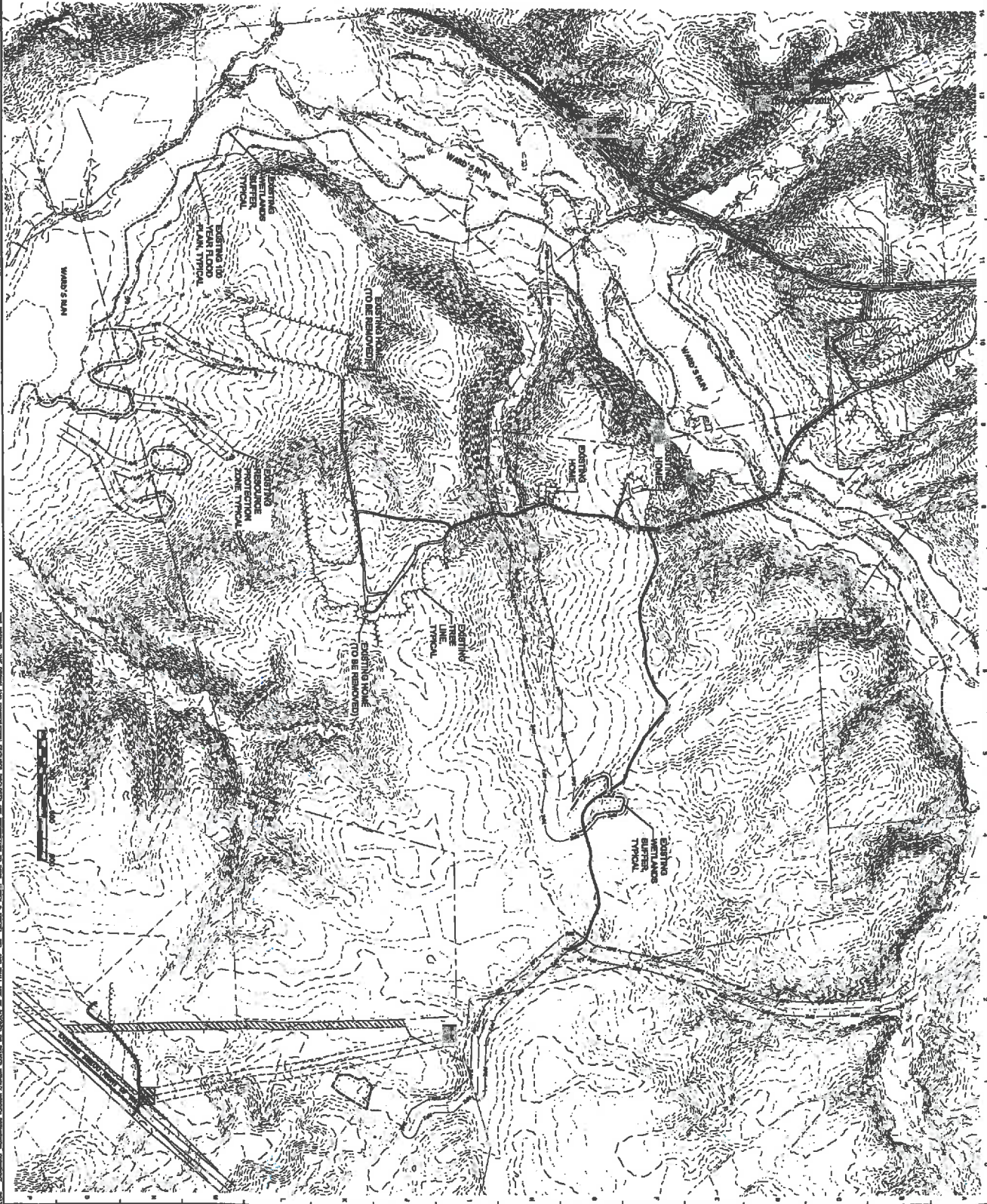
DATE	2/20/2020
BY	DAVIS, BOWEN & FRIEDEL, INC.
CHECKED	DAVIS, BOWEN & FRIEDEL, INC.
PROJECT	SHUGART VALLEY PLACE
SCALE	AS SHOWN

SHUGART VALLEY PLACE - MD1 SOLAR FARM
 2nd Election District, Charles County, Maryland

DAVIS, BOWEN & FRIEDEL, INC.
 ARCHITECTS ENGINEERS SURVEYORS

EXISTING SITE PLAN





C-2
 DATE: 12/23/2017
 TIME: 10:08 AM
 USER: AEF
 PLOTTER: PLOT01
 PLOT: C-2.dwg

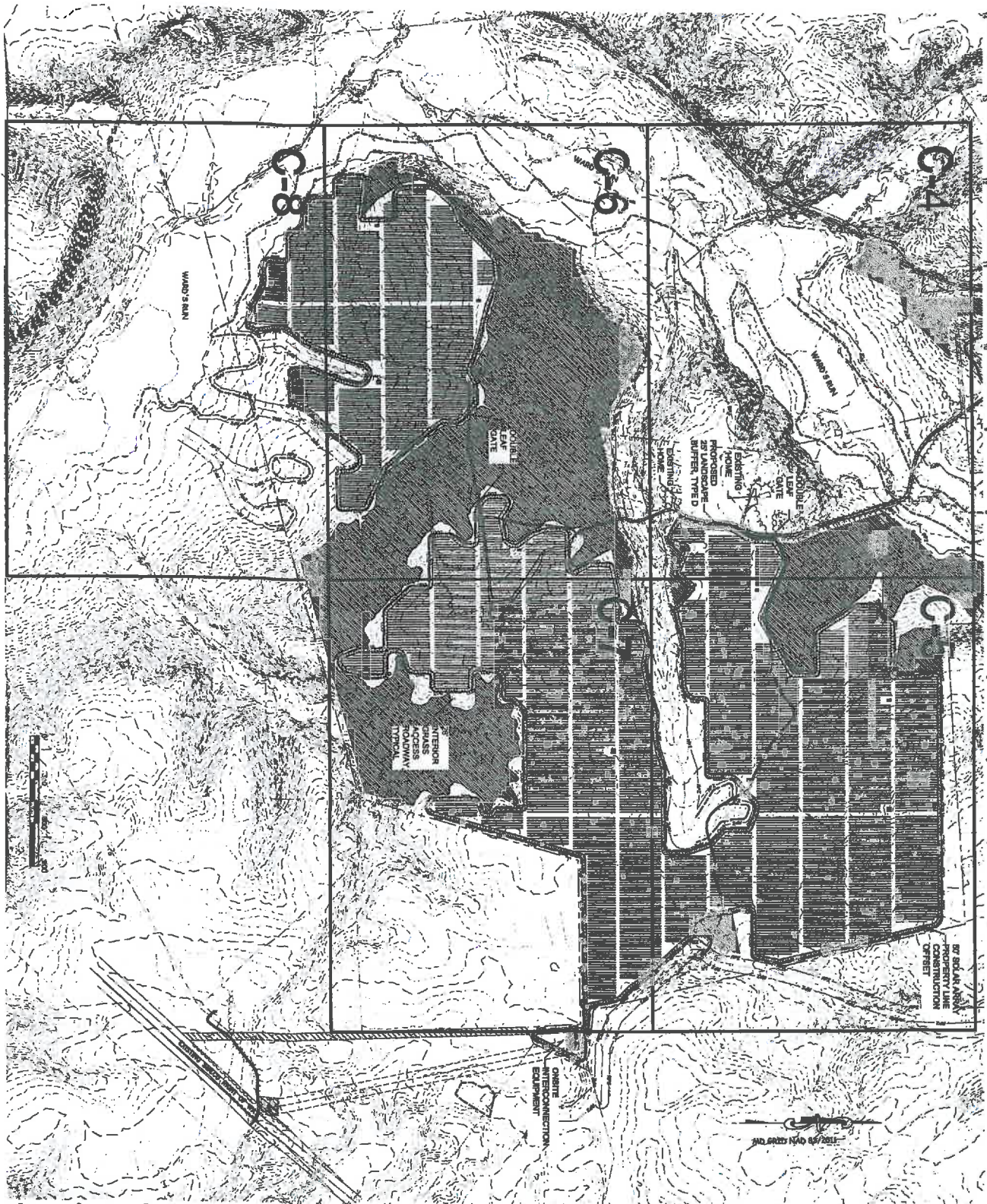
SHUGART VALLEY PLACE - MD1 SOLAR FARM
 2nd Election District, Charles County, Maryland

The Map 01, Grid 15, Parcel 20

DAVIS BOWEN & FRIEDEL, INC.
 ARCHITECTS ENGINEERS SURVEYORS
 1000 EAST PINE STREET, SUITE 200
 ANNAPOLIS, MD 21403-4450
 410.291.3333
 WWW.DBFRIEDEL.COM



THE STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 No. 10304
 EXPIRES 12/31/2020



C-3

DATE: 07/20/2011
 TIME: 10:58:11 AM
 PROJECT: MD1
 DRAWING: 20000001
 DRAWN: [Name]

SHUGART VALLEY PLACE - MD1 SOLAR FARM

2nd Election District, Charles County, Maryland

DATE: 07/20/2011
 TIME: 10:58:11 AM
 PROJECT: MD1
 DRAWING: 20000001
 DRAWN: [Name]

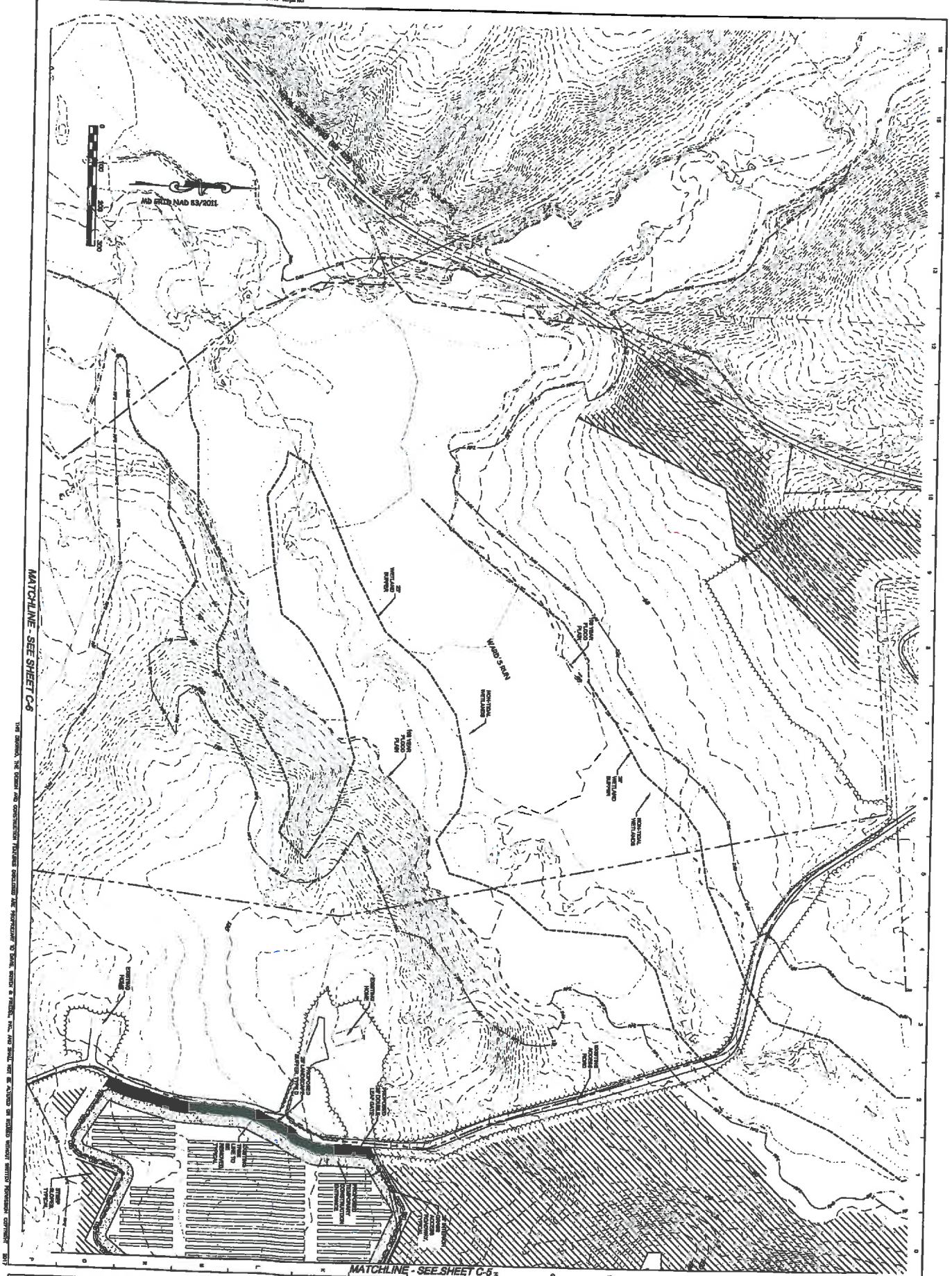
DAVIS, BOWEN & FRIEDEL, INC.

ARCHITECTS ENGINEERS SURVEYORS

1000 W. MARKET STREET, SUITE 200
 ANNAPOLIS, MD 21403
 TEL: 410-291-1000
 FAX: 410-291-1001
 WWW.DBFINC.COM



KEY MAP



MATCHLINE - SEE SHEET C-6

MATCHLINE - SEE SHEET C-6

C4	DATE: 10/19/11
	BY: [Signature]
	CHECKED: [Signature]
	SCALE: AS SHOWN
	PROJECT: SHUGART VALLEY PLACE - MD1 SOLAR FARM

SHUGART VALLEY PLACE - MD1 SOLAR FARM
 2nd Election District, Charles County, Maryland

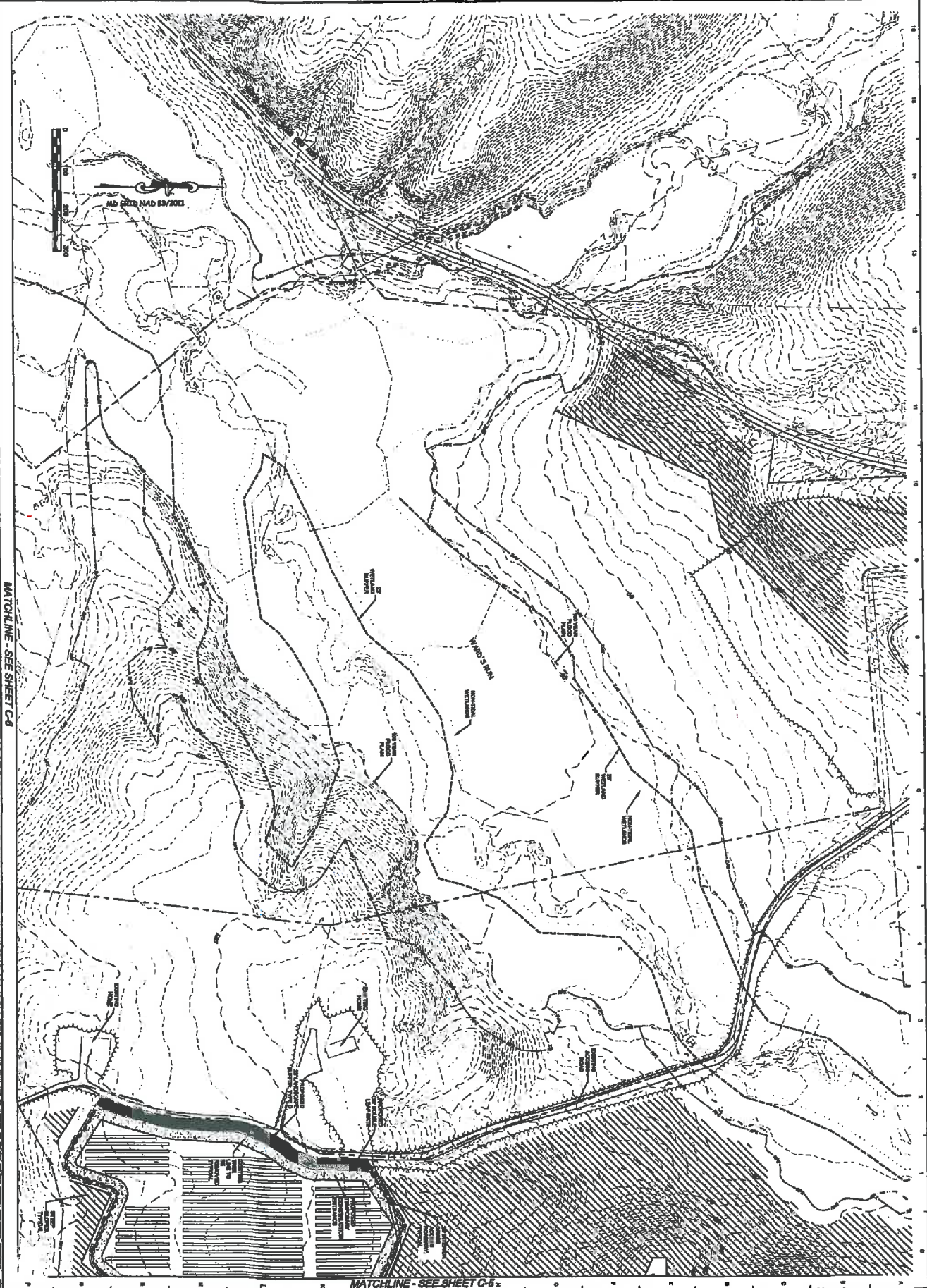
Title Map 41, Grid 11, Parcel 24



DAVIS, BOWEN & FRIEDEL, INC.
 ARCHITECTS ENGINEERS SURVEYORS



PROPOSED SITE PLAN



Sheet	C-4
Date	SEPTEMBER 2017
Scale	1"=400'
Project	S.A.L.
Client	20170001
Author	
Checker	
Reviewer	
Approved	

SHUGART VALLEY PLACE - MD1 SOLAR FARM
 2nd Election District, Charles County, Maryland

DAVIS, BOWEN & FRIEDEL, INC. ARCHITECTS ENGINEERS SURVEYORS
 10000 WOODBURN ROAD, SUITE 100, CHARLES COUNTY, MD 20746
 TEL: 410-326-1000 FAX: 410-326-1001
 WWW.DBFRIEDEL.COM

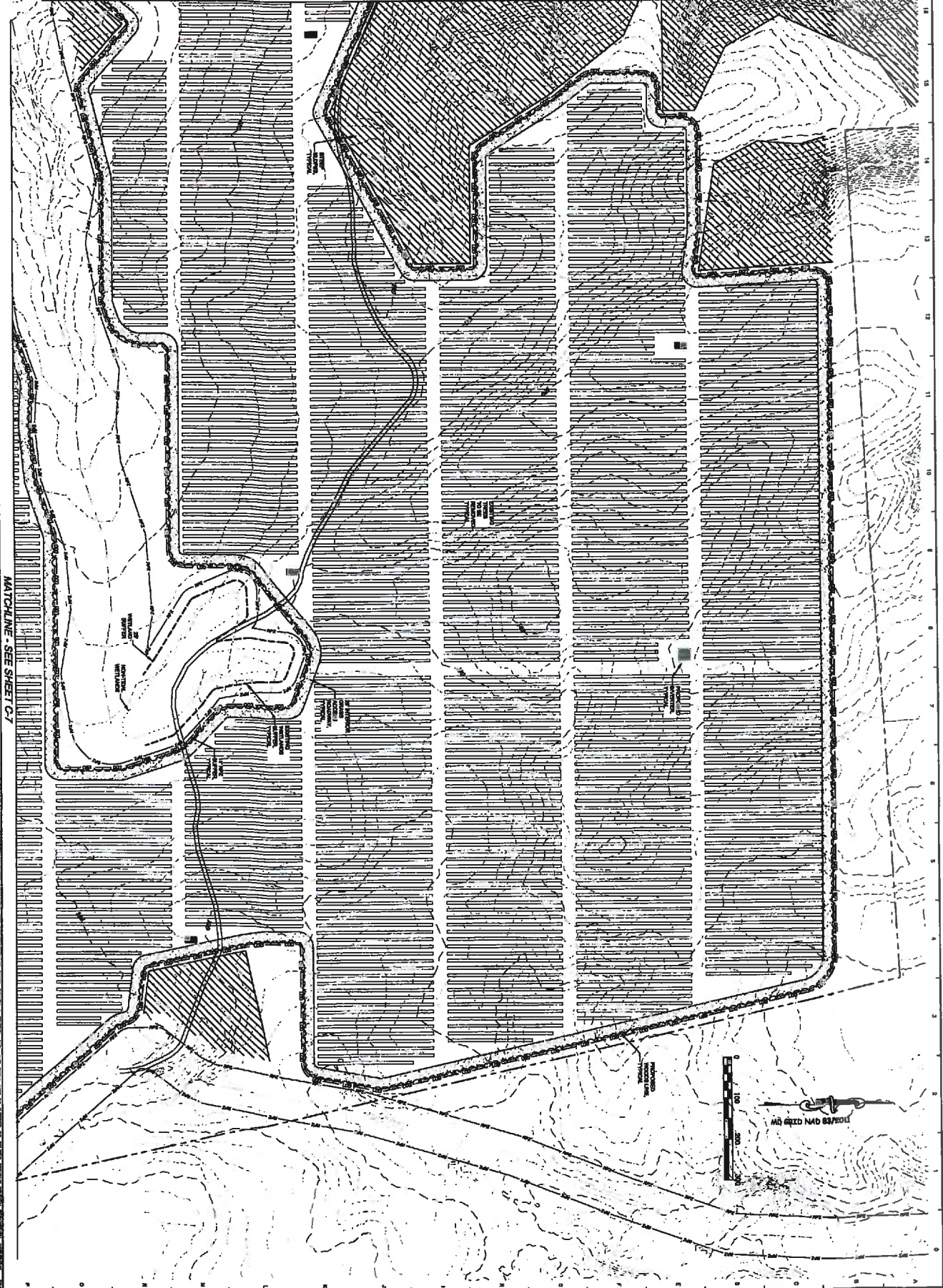
PROPOSED SITE PLAN



THIS DRAWING, THE DESIGN AND CONSTRUCTION THEREOF, INCLUDING ANY PROVISIONS TO SUCH DESIGN & CONSTRUCTION, AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF THE ENGINEER.

MATCHLINE - SEE SHEET C-4

MATCHLINE - SEE SHEET C-7



DATE	08/27/2014
TIME	1:40:07
USER	MD1
PLT	MD1
PRN	MD1
PLT	MD1
PRN	MD1

C-5

SHUGART VALLEY PLACE - MD1 SOLAR FARM

2nd Election District, Charles County, Maryland

Tax Map 41, Grid 11, Parcel 24



DAVIS, BOWEN & FRIEDEL, INC.

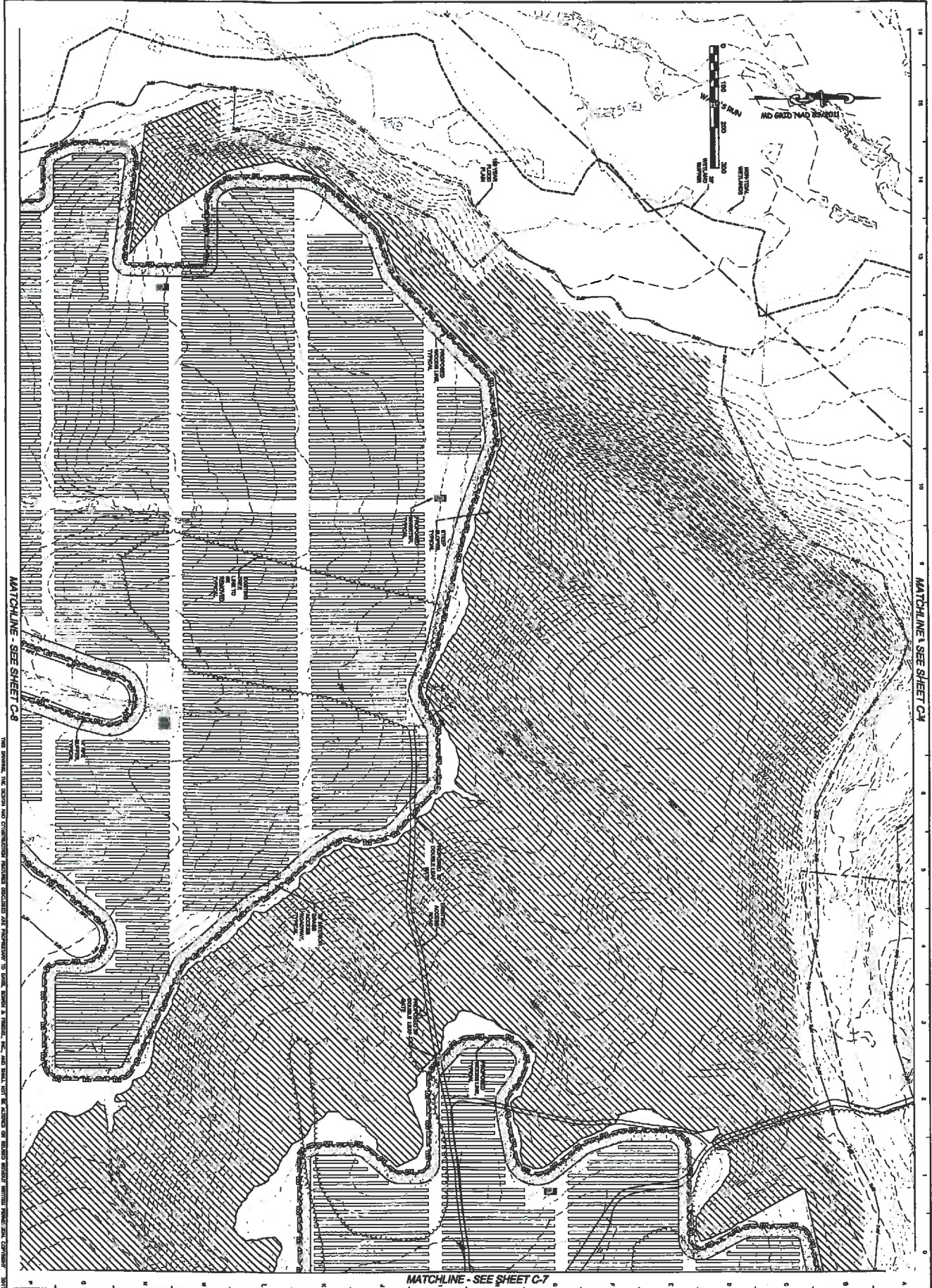
ARCHITECTS ENGINEERS SURVEYORS

1000 W. MARKET STREET, SUITE 200
FREDERICK, MARYLAND 21734
PHONE: 301-746-1000 FAX: 301-746-1001

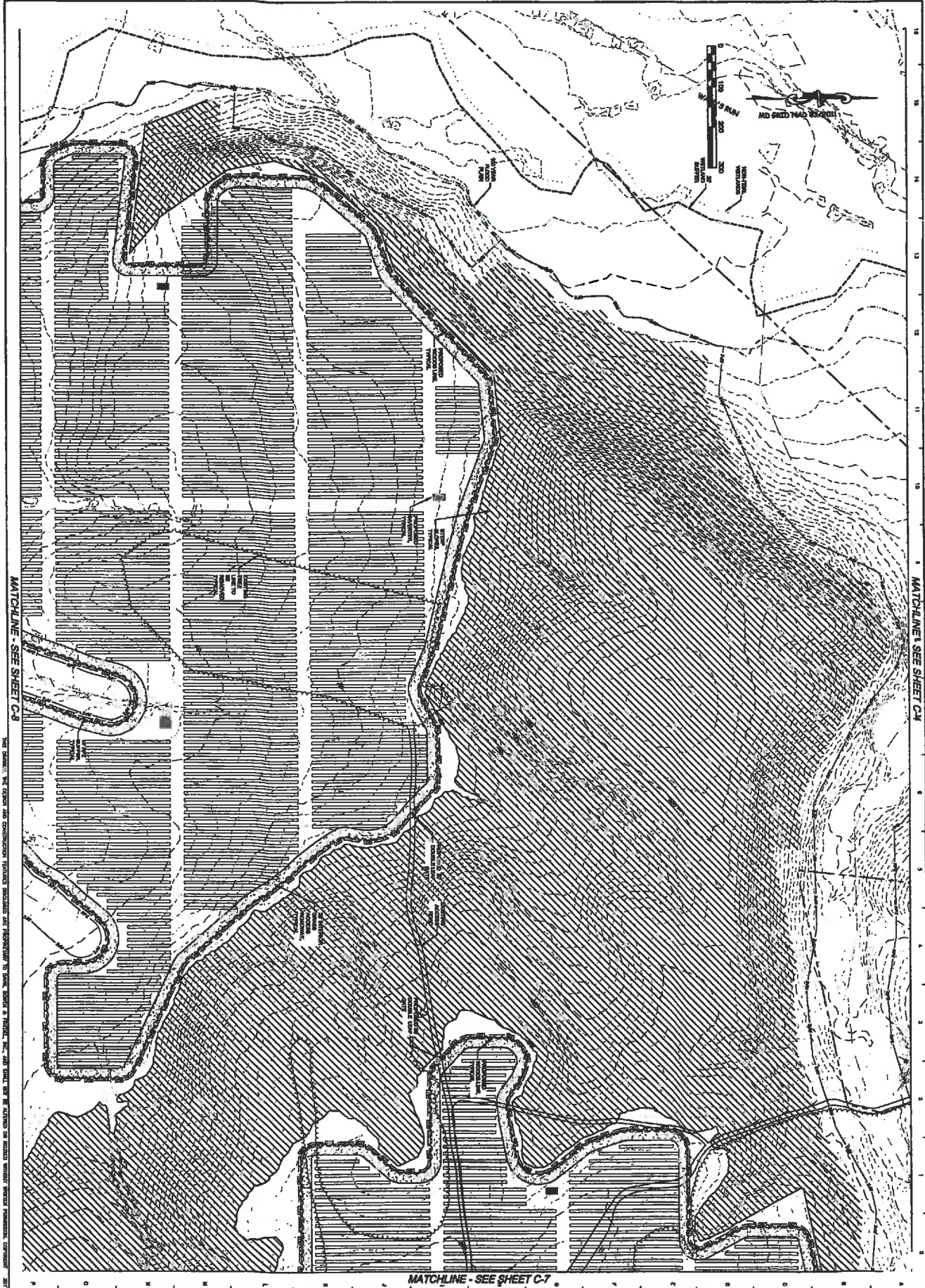
NO. 1	1/8" = 1'-0"
NO. 2	1/4" = 1'-0"
NO. 3	1/2" = 1'-0"
NO. 4	3/4" = 1'-0"
NO. 5	1" = 1'-0"
NO. 6	1 1/4" = 1'-0"
NO. 7	1 1/2" = 1'-0"
NO. 8	1 3/4" = 1'-0"
NO. 9	2" = 1'-0"
NO. 10	2 1/4" = 1'-0"
NO. 11	2 1/2" = 1'-0"
NO. 12	2 3/4" = 1'-0"
NO. 13	3" = 1'-0"
NO. 14	3 1/4" = 1'-0"
NO. 15	3 1/2" = 1'-0"
NO. 16	3 3/4" = 1'-0"
NO. 17	4" = 1'-0"
NO. 18	4 1/4" = 1'-0"
NO. 19	4 1/2" = 1'-0"
NO. 20	4 3/4" = 1'-0"
NO. 21	5" = 1'-0"
NO. 22	5 1/4" = 1'-0"
NO. 23	5 1/2" = 1'-0"
NO. 24	5 3/4" = 1'-0"
NO. 25	6" = 1'-0"
NO. 26	6 1/4" = 1'-0"
NO. 27	6 1/2" = 1'-0"
NO. 28	6 3/4" = 1'-0"
NO. 29	7" = 1'-0"
NO. 30	7 1/4" = 1'-0"
NO. 31	7 1/2" = 1'-0"
NO. 32	7 3/4" = 1'-0"
NO. 33	8" = 1'-0"
NO. 34	8 1/4" = 1'-0"
NO. 35	8 1/2" = 1'-0"
NO. 36	8 3/4" = 1'-0"
NO. 37	9" = 1'-0"
NO. 38	9 1/4" = 1'-0"
NO. 39	9 1/2" = 1'-0"
NO. 40	9 3/4" = 1'-0"
NO. 41	10" = 1'-0"
NO. 42	10 1/4" = 1'-0"
NO. 43	10 1/2" = 1'-0"
NO. 44	10 3/4" = 1'-0"
NO. 45	11" = 1'-0"
NO. 46	11 1/4" = 1'-0"
NO. 47	11 1/2" = 1'-0"
NO. 48	11 3/4" = 1'-0"
NO. 49	12" = 1'-0"
NO. 50	12 1/4" = 1'-0"
NO. 51	12 1/2" = 1'-0"
NO. 52	12 3/4" = 1'-0"
NO. 53	13" = 1'-0"
NO. 54	13 1/4" = 1'-0"
NO. 55	13 1/2" = 1'-0"
NO. 56	13 3/4" = 1'-0"
NO. 57	14" = 1'-0"
NO. 58	14 1/4" = 1'-0"
NO. 59	14 1/2" = 1'-0"
NO. 60	14 3/4" = 1'-0"
NO. 61	15" = 1'-0"
NO. 62	15 1/4" = 1'-0"
NO. 63	15 1/2" = 1'-0"
NO. 64	15 3/4" = 1'-0"
NO. 65	16" = 1'-0"
NO. 66	16 1/4" = 1'-0"
NO. 67	16 1/2" = 1'-0"
NO. 68	16 3/4" = 1'-0"
NO. 69	17" = 1'-0"
NO. 70	17 1/4" = 1'-0"
NO. 71	17 1/2" = 1'-0"
NO. 72	17 3/4" = 1'-0"
NO. 73	18" = 1'-0"
NO. 74	18 1/4" = 1'-0"
NO. 75	18 1/2" = 1'-0"
NO. 76	18 3/4" = 1'-0"
NO. 77	19" = 1'-0"
NO. 78	19 1/4" = 1'-0"
NO. 79	19 1/2" = 1'-0"
NO. 80	19 3/4" = 1'-0"
NO. 81	20" = 1'-0"
NO. 82	20 1/4" = 1'-0"
NO. 83	20 1/2" = 1'-0"
NO. 84	20 3/4" = 1'-0"
NO. 85	21" = 1'-0"
NO. 86	21 1/4" = 1'-0"
NO. 87	21 1/2" = 1'-0"
NO. 88	21 3/4" = 1'-0"
NO. 89	22" = 1'-0"
NO. 90	22 1/4" = 1'-0"
NO. 91	22 1/2" = 1'-0"
NO. 92	22 3/4" = 1'-0"
NO. 93	23" = 1'-0"
NO. 94	23 1/4" = 1'-0"
NO. 95	23 1/2" = 1'-0"
NO. 96	23 3/4" = 1'-0"
NO. 97	24" = 1'-0"
NO. 98	24 1/4" = 1'-0"
NO. 99	24 1/2" = 1'-0"
NO. 100	24 3/4" = 1'-0"



PROPOSED SITE PLAN



C-6	<p>SHUGART VALLEY PLACE - MD1 SOLAR FARM</p> <p>2nd Election District, Charles County, Maryland</p>	<p>DAVIS, BOWEN & FRIEDEL, INC.</p> <p>ARCHITECTS ENGINEERS SURVEYORS</p> <p>1400 W. WASHINGTON STREET SUITE 200 COLLEGE PARK, MD 20740 TEL: 410-326-7000 FAX: 410-326-7001 WWW.DBFRIEDEL.COM</p>	
<p>PROPOSED SITE PLAN</p>			



C-6	<p>SHUGART VALLEY PLACE - MD1 SOLAR FARM</p> <p>2nd Election District, Charles County, Maryland</p>	<p>DAVIS, BOWEN & FRIEDEL, INC.</p> <p>ARCHITECTS ENGINEERS SURVEYORS</p>	<p>PROPOSED SITE PLAN</p>
------------	------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------	----------------------------------

MATCHLINE - SEE SHEET C-8

MATCHLINE - SEE SHEET C-5

MATCHLINE - THIS SHEET

MATCHLINE - THIS SHEET



MD GRID NAD 83/2011

THIS DRAWING, THE DESIGN, AND THE INFORMATION CONTAINED HEREIN ARE THE PROPERTY OF DAVIS, BOWEN & FRIEDEL, INC. AND SHALL NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DAVIS, BOWEN & FRIEDEL, INC.

C-7	DATE	12/15/10
	BY	TRW
	CHECKED	TRW
	PROJECT	2/09/091

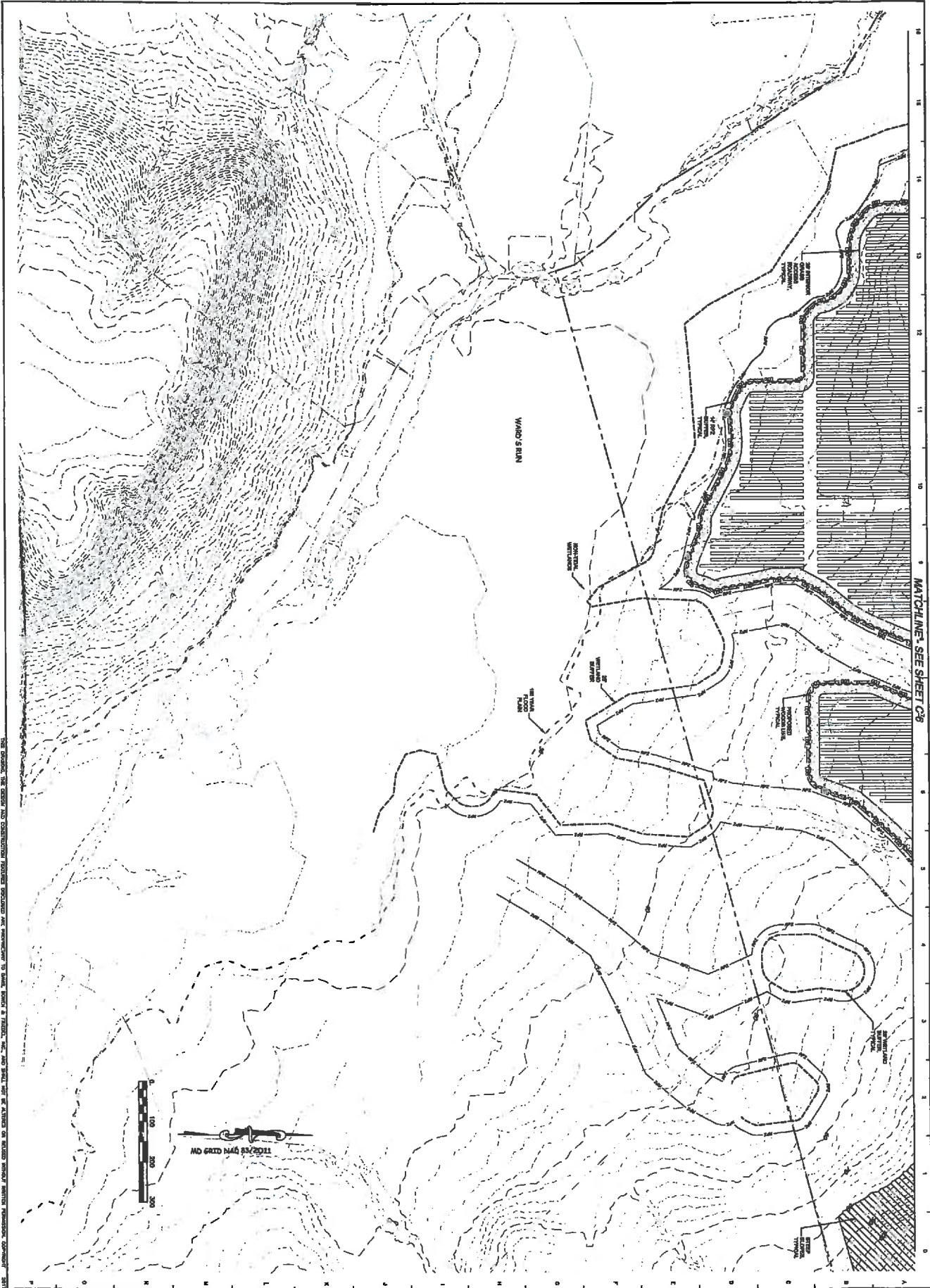
SHUGART VALLEY PLACE - MD1 SOLAR FARM
 2nd Election District, Charles County, Maryland

Tax Map 41, Grid 11, Parcel 24

DAVIS, BOWEN & FRIEDEL, INC.
 ARCHITECTS ENGINEERS SURVEYORS
 1000 W. MARKET STREET, SUITE 200
 WASHINGTON, DC 20005
 TEL: 202.462.1000 FAX: 202.462.1001
 WWW.DBFRIEDEL.COM



PROPOSED SITE PLAN



C-8

DATE: 08/22/2017
 TIME: 11:40 AM
 PROJECT: SHUGART VALLEY PLACE
 DRAWN BY: [Name]
 CHECKED BY: [Name]

SHUGART VALLEY PLACE - MD1 SOLAR FARM
 2nd Election District, Charles County, Maryland

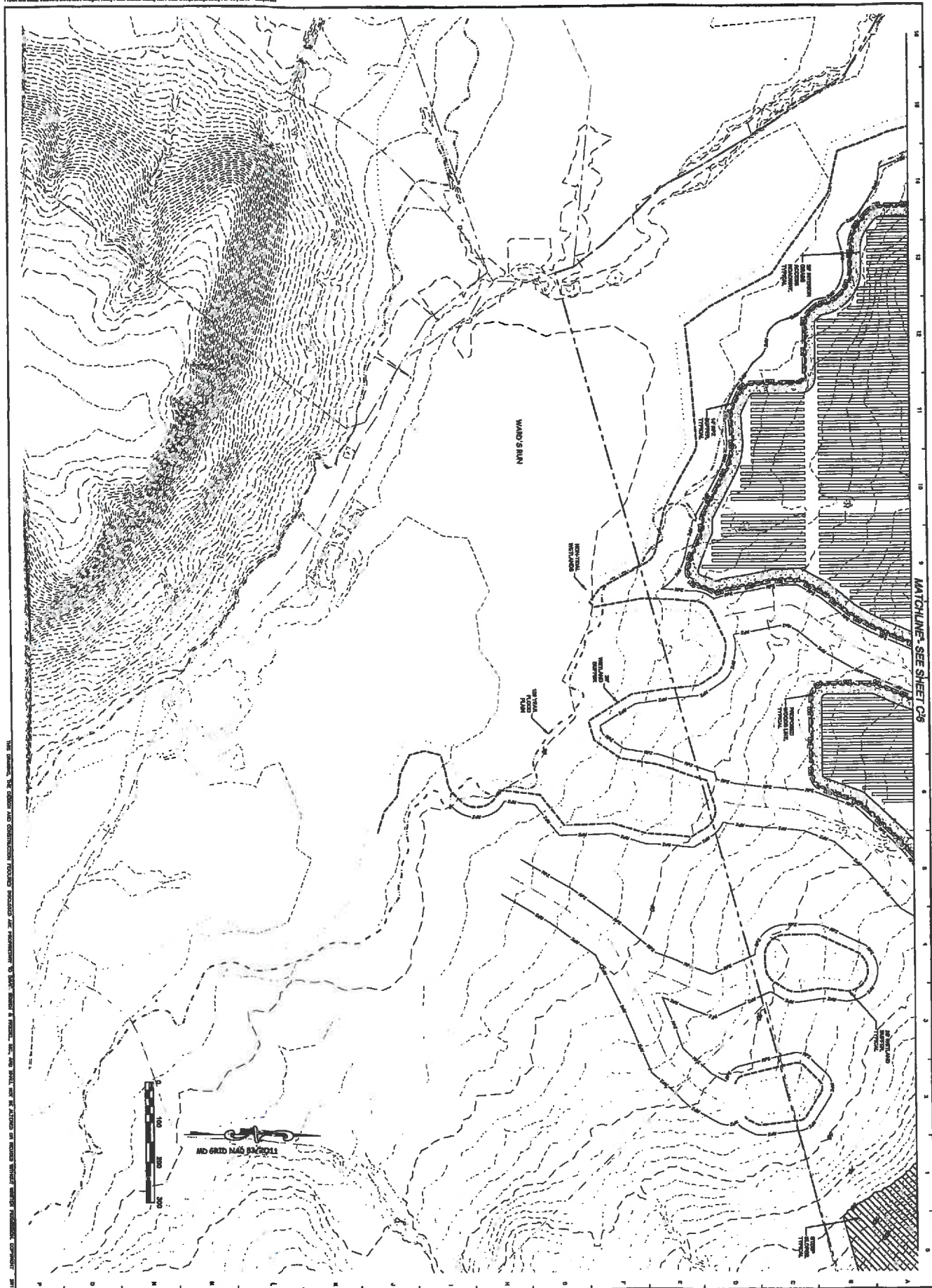
PROPOSED SITE PLAN

DATE: 08/22/2017
 TIME: 11:40 AM
 PROJECT: SHUGART VALLEY PLACE
 DRAWN BY: [Name]
 CHECKED BY: [Name]

DAVIS, BOWEN & FRIEDEL, INC.
 ARCHITECTS ENGINEERS SURVEYORS

1000 W. MARKET STREET, SUITE 200
 CHARLES COUNTY, MARYLAND 20755
 TEL: 410-326-1100
 FAX: 410-326-1101
 WWW.DBFRIEDEL.COM





MATCHLINE - SEE SHEET C-9

THE INFORMATION CONTAINED ON THIS MAP IS THE PROPERTY OF DAVIS, BOWEN & FRIEDEL, INC. AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN PERMISSION OF DAVIS, BOWEN & FRIEDEL, INC.

C-8	DATE: SEPTEMBER 2017
	SCALE: 1" = 100'
	PROJECT: MD1 SOLAR FARM
	PREPARED BY: DAVIS, BOWEN & FRIEDEL, INC.

SHUGART VALLEY PLACE - MD1 SOLAR FARM
 2nd Election District, Charles County, Maryland

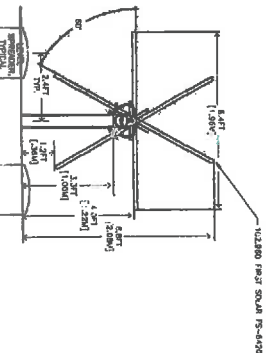
DAVIS, BOWEN & FRIEDEL, INC.
 ARCHITECTS ENGINEERS SURVEYORS

PROPOSED SITE PLAN



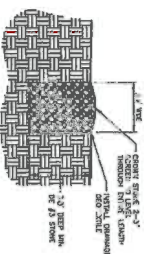
Top Map 41, Grid 11, Parcel 24

11
10
9
8
7
6
5
4
3
2
1
0



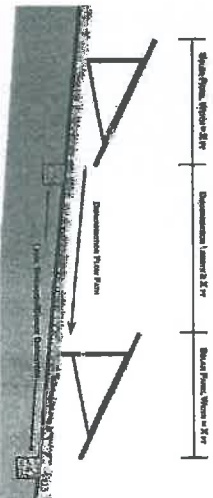
TYPICAL SINGLE AXIS TRACKING SOLAR PANEL DETAIL
NOT TO SCALE

NOTES:
1. WIND REGION - 120 MPH, EXPOSURE CATEGORY 'B'
2. WIND SPEED - 37.5 PSF
3. GROUND SNOW LOAD - 0 PSF

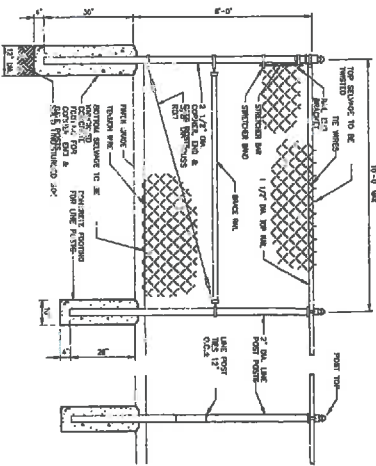


LEVEL SPREADER DETAIL
NOT TO SCALE

NOTES:
1. WIND REGION - 120 MPH, EXPOSURE CATEGORY 'B', WIND SPEED - 37.5 PSF
2. GROUND SNOW LOAD - 0 PSF

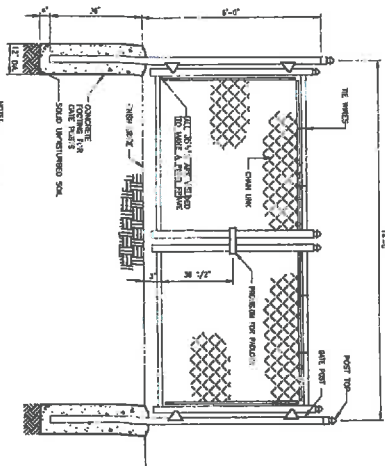


TYPICAL LEVEL SPREADER LAYOUT
NOT TO SCALE



CHAIN LINK FENCE
NOT TO SCALE

NOTES:
1. WIND REGION - 120 MPH, EXPOSURE CATEGORY 'B'
2. WIND SPEED - 37.5 PSF
3. GROUND SNOW LOAD - 0 PSF



DOUBLE LEAF GATE
NOT TO SCALE

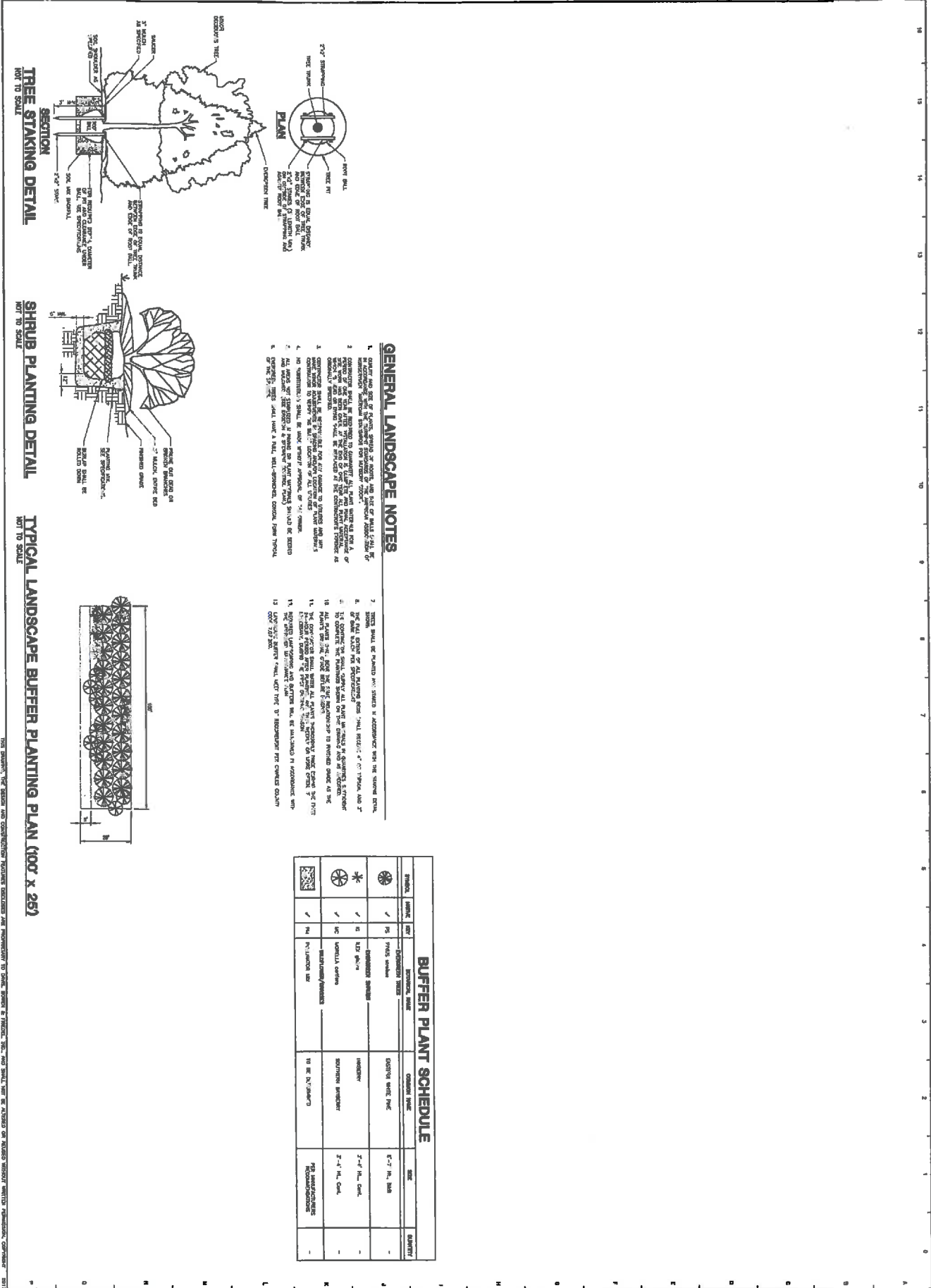
NOTES:
1. WIND REGION - 120 MPH, EXPOSURE CATEGORY 'B'
2. WIND SPEED - 37.5 PSF
3. GROUND SNOW LOAD - 0 PSF

DAVIS BOWEN & FRIEDEL, INC.	ARCHITECTS	ENGINEERS	SURVEYORS	LANDSCAPE ARCHITECTS
	PLANNING	CONSTRUCTION	INTERIOR DESIGN	ENVIRONMENTAL

SITE DETAILS

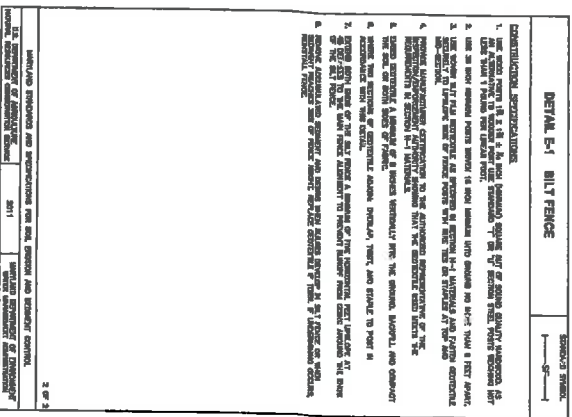
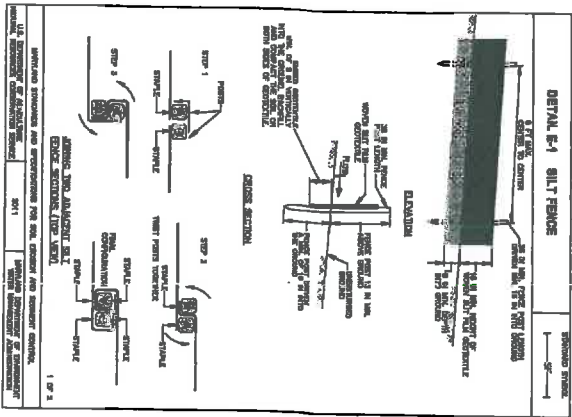
SHUGART VALLEY PLACE - MD1 SOLAR FARM
2nd Election District, Charles County, Maryland

C-9	DATE: 12/11/2017
PROJECT: 2000001	DRAWN BY: JCB
TITLE: SITE DETAILS	CHECKED BY: JCB
DATE: 12/11/2017	SCALE: AS SHOWN
PROJECT: 2000001	DATE: 12/11/2017



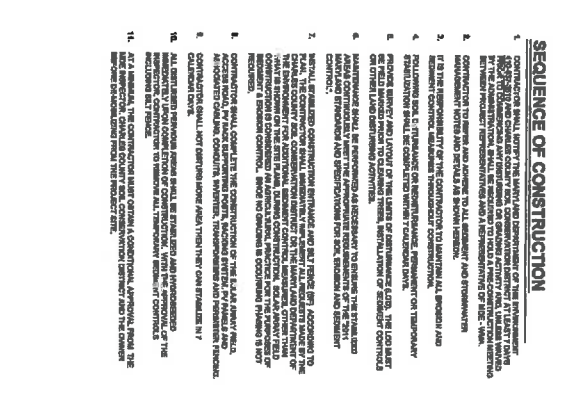
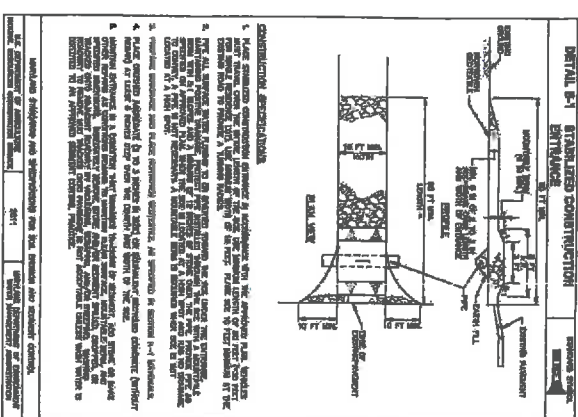
BUFFER PLANT SCHEDULE

SYMBOL	LANDSCAPE ITEM	PLANTING RATE	PLANTING DATE	PLANTING METHOD	PLANTING DATE	SIZE	PLANTING DATE
☉	SHRUB	10	10/15/13	10/15/13	10/15/13	2'-4" H. CAL.	10/15/13
☉	TREE	10	10/15/13	10/15/13	10/15/13	2'-4" H. CAL.	10/15/13
☉	TREE	10	10/15/13	10/15/13	10/15/13	2'-4" H. CAL.	10/15/13
☉	TREE	10	10/15/13	10/15/13	10/15/13	2'-4" H. CAL.	10/15/13



SITE DATA

GRAND SITE	675.0 ACRES
CONCRETE PERIMETER	2.14 ACRES
LOT TOTAL AREA WITH POOLS	22.73 ACRES
POOLS AND ACCESSORIES	22.73 ACRES
PERMITTED POOLS ONLY	4.88 ACRES
LANDSCAPE SERVICE AREA	6.88 ACRES



SEQUENCE OF CONSTRUCTION

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
2. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
3. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
4. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
5. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
6. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
7. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
8. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
9. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
10. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
11. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.

OPERATION & MAINTENANCE FOR OPEN AREAS

1. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
2. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
3. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
4. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
5. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
6. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
7. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
8. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
9. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
10. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.
11. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.

STANDARD STABILIZATION NOTE

1. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.

SEDIMENT & EROSION CONTROL

1. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.

GENERAL NOTES

1. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.

REVIEWED FOR THE CHARLES COUNTY CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

1. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.

GENERAL PERMIT FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY

1. THE CONTRACTOR SHALL MAINTAIN THE OPEN AREAS IN ACCORDANCE WITH THE SPECIFICATIONS AND STANDARD DRAWINGS FOR THE INSTALLATION OF THE CONCRETE CURB AND STORMWATER STRUCTURE.

SEED MIXES shall be an Approved Equal to one of the mixes provided below:

Seed Mix 1	10% Grass Seed	10% Clover	10% Alfalfa
Seed Mix 2	10% Grass Seed	10% Clover	10% Alfalfa
Seed Mix 3	10% Grass Seed	10% Clover	10% Alfalfa

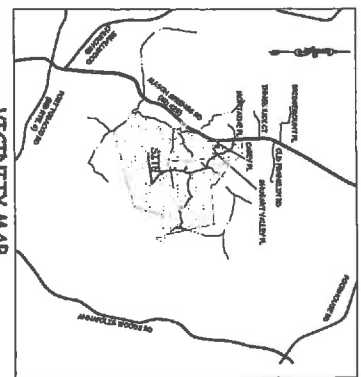
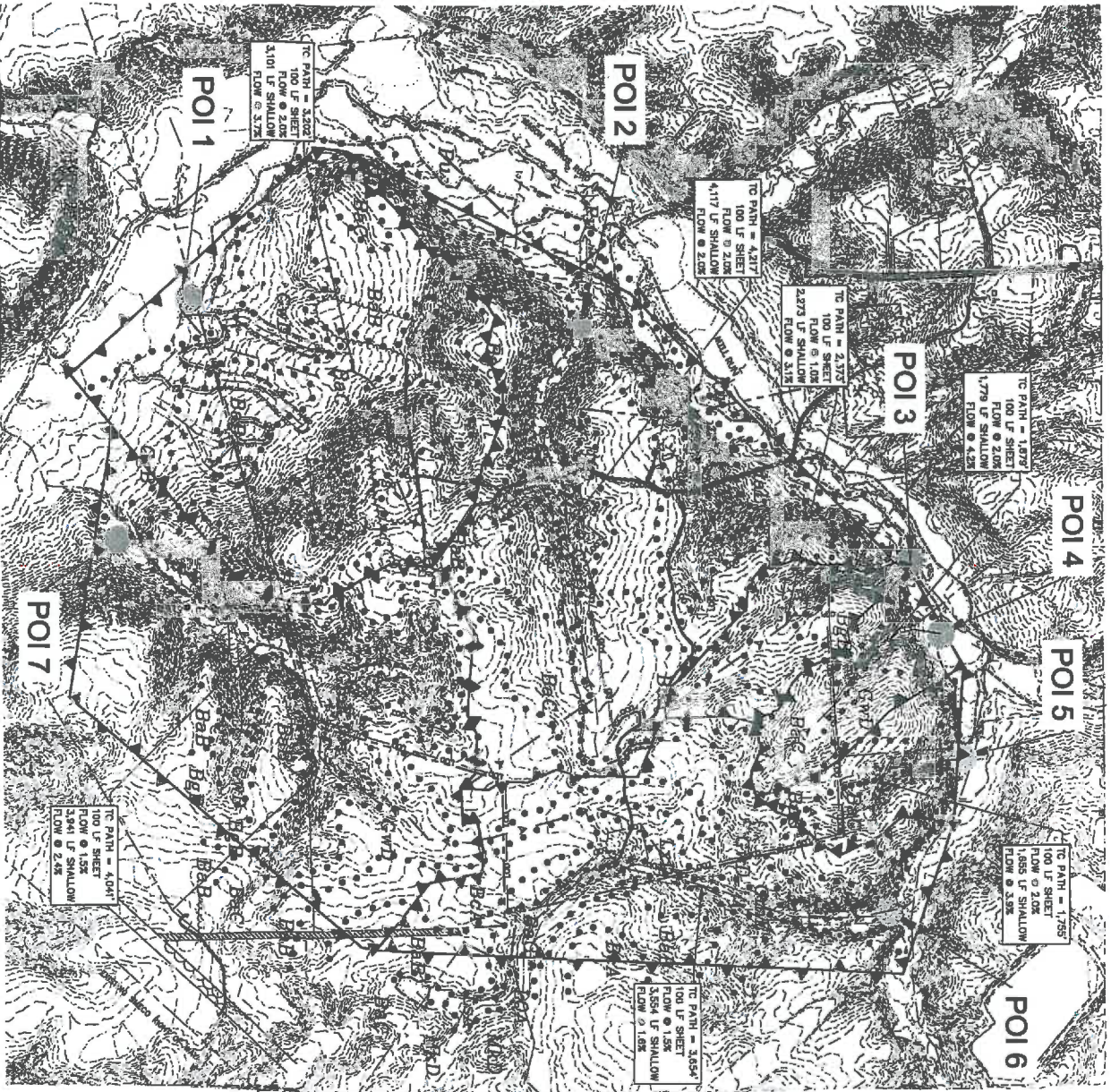
SHUGART VALLEY PLACE - MD1 SOLAR FARM
2nd Election District, Charles County, Maryland

DATE	BY	REVISION
10/15/2017	J. SHERMAN	ISSUED FOR PERMIT
10/15/2017	J. SHERMAN	ISSUED FOR PERMIT
10/15/2017	J. SHERMAN	ISSUED FOR PERMIT
10/15/2017	J. SHERMAN	ISSUED FOR PERMIT

C11

DAVIS, BOWEN & FRIEDEL, INC.
1000 W. MARKET STREET, SUITE 200, CHARLES COUNTY, MD 20814
(410) 326-1234
www.davisbowl.com

SEDIMENT/EROSION CONTROL NOTES & DETAILS



- LEGEND**
- PROPERTY LINE
 - LIMIT OF NATIONAL WETLANDS (PER DEPARTMENT OF NATURAL RESOURCES)
 - 70' NATIONAL WETLAND BUFFER
 - REGULATED PROTECTION ZONE (RPZ) (CHARLES COUNTY)
 - EXCLUDED ZONATION
 - AREAS OF STEEP SLOPES
 - EXISTING WOODS LINE
 - EXISTING OPENPAV
 - BY OTHER AGENCIES
 - ROAD RIGHTS OF WAY (R.O.W.) AND OTHER RIGHTS OF WAY (A.V.A.R.)
 - LIMIT OF DISTURBANCE WELLS TRENCH



THIS DRAWING, THE DESIGN AND CONSTRUCTION FEATURES SPECIFIED ARE FOR INFORMATION ONLY. NO WARRANTY IS MADE AS TO THE ACCURACY OF THE INFORMATION PROVIDED HEREON. CONSULT THE DESIGNER FOR MORE INFORMATION.

SWM-1

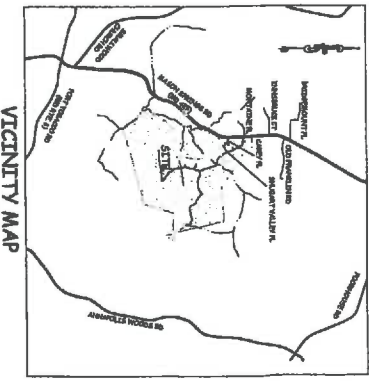
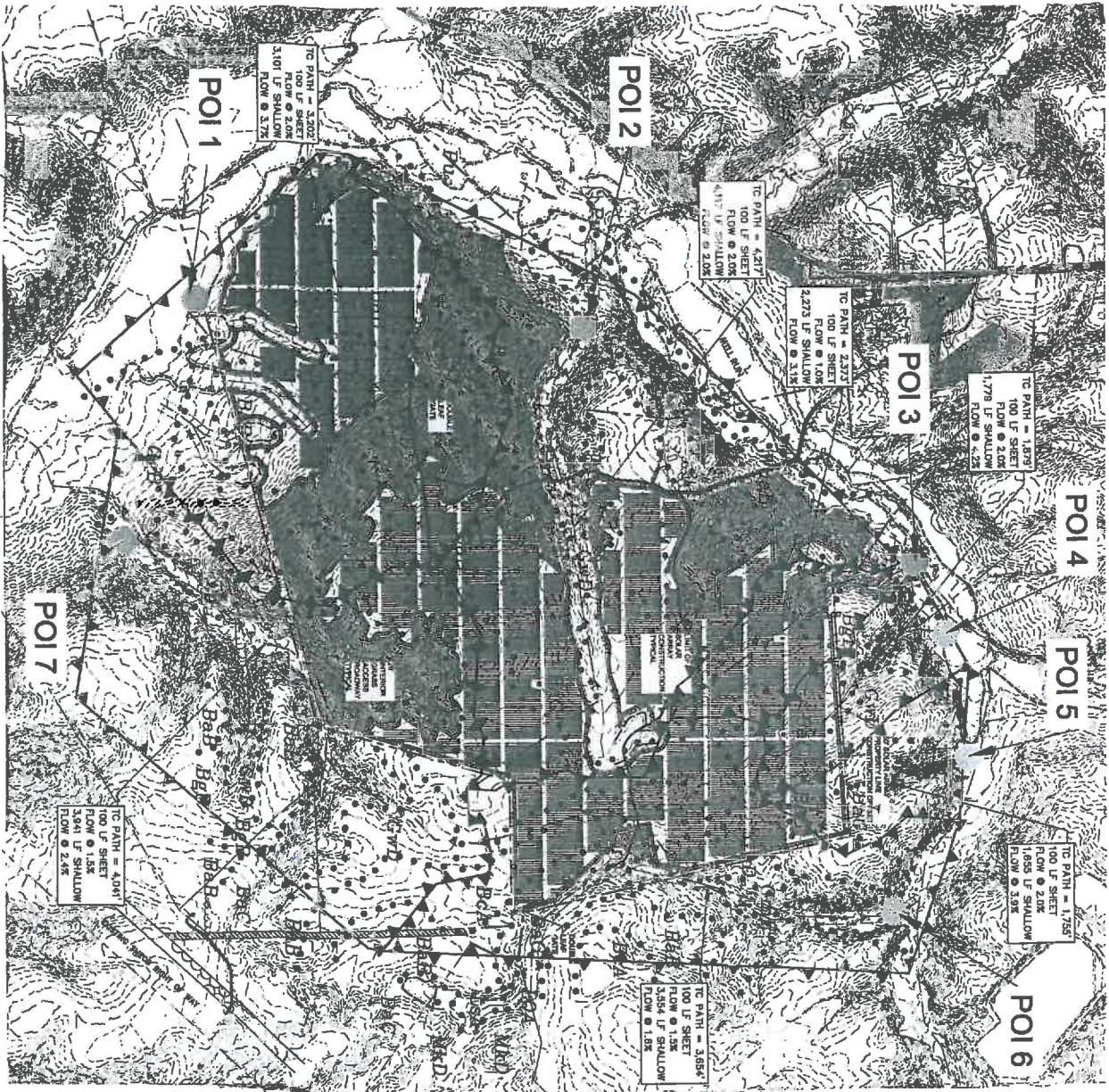
DATE: DECEMBER 2011
 DRAWN BY: JWB
 CHECKED BY: JWB
 PROJECT: SWM-1

SHUGART VALLEY PLACE - MD1 SOLAR FARM
 Charles County, Maryland

DAVIS, BOWEN & FRIEDEL, INC.
 ARCHITECTS ENGINEERS SURVEYORS

1100 EAST LANTANA AVENUE
 SUITE 200
 WEST PALM BEACH, FL 33411
 TEL: 561-833-8888
 FAX: 561-833-8889
 WWW.DBFRIEDEL.COM

PRE-DEVELOPMENT



- LEGEND**
- POSITIVE LINE
 - LIMIT OF NEAR-TIDAL WETLANDS (PER ENVIRONMENTAL PROTECTION AGENCY)
 - 50' MARSHAL WETLAND BUFFER (CHARLES COUNTY)
 - EXISTING CONTIGUA AREAS OF STEEP SLOPES
 - EXISTING WOODS LINE
 - EXISTING STREAM
 - 50' CRITICAL AREAS
 - FEEL UPHILL SLOPES TO 10% SLOPE PER FEMA HAZARD MITIGATION DIVISION
 - PROPOSED GRAVEL ACCESS ROAD
 - PROPOSED FENCE
 - LIMIT OF DISTURBANCE W/OUT FENCE



SWM-2

DATE: 05/09/2016
 DRAWN BY: CWT
 CHECKED BY: JSM
 PROJECT: SWM-2

SHUGART VALLEY PLACE - MD1 SOLAR FARM
 Charles County, Maryland

Task: POST-DEVELOPMENT
 Tax Map 41, Grid 11, Parcel 24

DAVIS, BOWEN & FRIEDEL, INC.
 ARCHITECTS ENGINEERS SURVEYORS

140325



GORDON • FEINBLATT_{LLC}
ATTORNEYS AT LAW

TODD R. CHASON
410.576.4169
FAX 410.576.4032
tchason@gfrlaw.com

233 EAST REDWOOD STREET
BALTIMORE, MARYLAND 21202-3332
410.576.4000
www.gfrlaw.com

September 22, 2017

VIA HAND DELIVERY

David J. Collins, Executive Secretary
Maryland Public Service Commission
William Donald Schaefer Tower
6 Saint Paul Street, 16th Floor
Baltimore, Maryland 21202

Re: IN THE MATTER OF THE APPLICATION OF MD
SOLAR 1, LLC FOR A CERTIFICATE OF PUBLIC
CONVENIENCE AND NECESSITY TO CONSTRUCT A
32.5 MW SOLAR PHOTOVOLTAIC GENERATING
FACILITY IN CHARLES COUNTY, MARYLAND

Dear Mr. Collins:

Please find enclosed for filing the Application of MD Solar 1, LLC for a Certificate of Public Convenience and Necessity authorizing the construction of the Shugart Valley Place Solar Project in Charles County, Maryland (the "Application"). Included for filing is an original and 17 copies of the Application, as well as an electronic copy of the Application on CD-ROM. The Application consists of a CPCN Application petition, an Environmental Review Document, and associated figures and appendices. Also included is a check in the amount of \$10,000 payable to the Maryland Public Service Commission as payment for the required filing fee.

Please do not hesitate to contact me if you have any questions.

Very truly yours,



Todd R. Chason

TRC:cct
Enclosures

GORDON•FEINBLATT_{LLC}

ATTORNEYS AT LAW

CERTIFICATE OF SERVICE

On September 22, 2017 copies of the foregoing Application for Certificate of Public Convenience and Necessity were sent to the below-listed agencies in accordance with COMAR 20.79.02.02:

4 copies to:	Ben Grumbles, Secretary Maryland Department of the Environment 1800 Washington Blvd., 7th Floor Baltimore, MD 21230	1 copy to:	Paula M. Carmody, Esquire Office of People's Counsel William Donald Schaefer Tower 6 St. Paul Street, Suite 2102 Baltimore, MD 21202-6806
1 copy to:	Wendi W. Peters, Secretary Maryland Department of Planning 301 W. Preston Street, Suite 1101 Baltimore, MD 21201-2305	1 copy to:	Ryan Zinke, Secretary U.S. Department of the Interior 1849 C Street NW Mail Stop 7229 Washington, DC 20240
6 copies to:	Mark J. Belton, Secretary Maryland Department of Natural Resources Tawes State Office Building, C4 580 Taylor Avenue Annapolis, MD 21401	1 copy to:	Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426
1 copy to:	Mike Gill, Secretary Maryland Department of Commerce 401 E. Pratt Street Baltimore, MD 21202	1 copy to:	Michael P. Huerta, Administrator Orville Wright Bldg. (FOB10A) Federal Aviation Administration National Headquarters 800 Independence Avenue, SW Washington, DC 20591
1 copy to:	Peter K. Rahn, Secretary Maryland Department of Transportation 7201 Corporate Center Drive P.O. Box 548 Hanover, MD 21076	1 copy to:	Greg Sheehan, Acting Director U.S. Fish & Wildlife Service Main Interior 1849 C Street NW, Room 3358 Washington, DC 20240-0001
1 copy to:	Paul J. Wiedefeld, Executive Director Maryland Aviation Administration P.O. Box 8766 Third Floor, Terminal Building BWI Airport, MD 21240-8766	1 copy to:	Austin J. Slater, President and CEO SMECO 15.35 Burn Stone Road P.O. Box 1937 Hughesville, MD 20637-1937
1 copy to:	Gregory C. Johnson, Administrator State Highway Administration Maryland Department of Transportation 707 North Calvert Street, Room C-400 Baltimore, MD 21202	1 copy to:	Charles County Department of Planning and Growth Management 200 Baltimore Street La Plata, MD 20646
1 copy to:	Mary Beth Tung, Director Maryland Energy Administration 1800 Washington Blvd., Suite 755 Baltimore, MD 21230	1 copy to:	Charles County Board of County Commissioners P.O. Box 2150 La Plata, MD 20646


Chastity E. C. Threadcraft

**BEFORE THE PUBLIC SERVICE
COMMISSION OF MARYLAND**

IN THE MATTER OF THE APPLICATION OF *
MD SOLAR 1, LLC FOR A CERTIFICATE OF *
PUBLIC CONVENIENCE AND NECESSITY *
TO CONSTRUCT A 32.5 MW SOLAR * Case No.
PHOTOVOLTAIC GENERATING FACILITY IN *
CHARLES COUNTY, MARYLAND

* * * * *

**APPLICATION OF MD SOLAR 1, LLC FOR A
CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY
AND REQUEST FOR WAIVER OF TWO-YEAR NOTICE PROVISION**

MD Solar 1, LLC (“Applicant”), by its undersigned counsel, hereby submits this Application to the Public Service Commission (“Commission”) for a Certificate of Public Convenience and Necessity (“CPCN”) to construct a nominal 32.5 megawatt (“MW”) alternating current (“AC”) generating capacity solar photovoltaic facility (“PV”) and associated interconnection facilities in Charles County, Maryland (“Shugart Valley Place Solar Project” or “Project”) pursuant to Md. Public Utilities Article (“PUA”) § 7-207.

The Application is comprised of this petition together with the attached Environmental Review Document (“ERD”) and associated figures and appendices. Section I of this petition provides an overview of the Project; Section II justifies the Commission’s approval of the application; Section III provides the information required by PUA § 7-207; and Section IV requests waiver of the two-year notice provision.

I. PROJECT INTRODUCTION

The Shugart Valley Place Solar Project will be a 32.5 MW AC solar PV project involving (1) solar PV facilities on two hundred forty-nine (249) acres located on Tax Map 41, Parcel 24 in Charles County, Maryland (the “Property”) and (2) associated interconnection facilities. The

Project will involve a capital investment of approximately \$31 to \$34 million. It will create approximately 60-80 temporary design, management, and construction jobs working remotely or on the site at the height of construction. The construction schedule is estimated to be 5-7 months, with scheduled completion prior to December 2018. Because of the nature of solar installations, environmental and land use impacts from the Project will be minimal and the long-term benefits significant.

Maryland has established one of the most aggressive renewable portfolio standard goals in the country, aiming for 25% of its power to be renewable by 2020, including 2.5% from solar sources. In order to meet these goals, Maryland needs not only small, residential rooftop installations but large utility-scale facilities like the Shugart Valley Place Solar Project.

In summary, there are compelling economic, environmental and legal reasons for the State and the Commission to expeditiously approve this CPCN application, with no countervailing harm. Accordingly, we ask the Commission to expeditiously approve the Project.

II. CPCN STANDARD

When the Commission considers whether to grant a CPCN, it must take into account “the effect of the generating station ... on:

- (i) the stability and reliability of the electric system;
- (ii) economics;
- (iii) esthetics;
- (iv) historic sites;
- (v) aviation safety as determined by the Maryland Aviation Administration and the administrator of the Federal Aviation Administration;
- (vi) when applicable, air and water pollution; and
- (vii) the availability of means for the required timely disposal of wastes produced by any generating station.”

PUA § 7-207(e)(2). Additionally, starting on October 1, 2017, the Commission must also consider “for a generating station:

- (i) the consistency of the application with the comprehensive plan and zoning of each county or municipal corporation where any portion of the generating station is proposed to be located; and
- (ii) the efforts to resolve any issues presented by a county or municipal corporation where any portion of the generating station is proposed to be located.”

PUA § 7-207(e)(3). The attached Environmental Review Document (“ERD”) provides significant detail as to all applicable factors, but in summary each such factor weighs heavily in favor of granting the Applicant’s requested CPCN.

The Project will be consistent with Charles County’s zoning requirements and its most recent Comprehensive Plan. The Property is zoned “Agricultural Conservation (AC),” where the Project is permitted by Special Exception. *See* ERD at § 4.E. In 2016, Charles County updated its Comprehensive Plan to include a new Chapter 6, entitled “Energy Conservation.” Goal 6.6 creates the objective to “[g]row a green economy with an increased number of jobs in the clean energy and energy efficiency sector.” Converting part of this site to a green energy project will implement Goal 6.6 of Charles County’s 2016 Comprehensive Plan, creating clean energy jobs and increasing revenue for businesses in Charles County. *See* ERD at § 1. The Applicant will apply for a Special Exception from Charles County, which will ensure the Project is consistent with local zoning requirements and allow the Applicant to address any issues raised by Charles County. *See* ERD at § 1.

The esthetic impact to the Property and surrounding area will be minimal. The Property is currently forested and will retain a natural forest buffer on all sides in order to completely shield the Project from public view. The Project has coordinated with the Maryland Historical Trust (“MHT”) to address any impacts to the historic built environment and/or archeological resources as determined appropriate by MHT. MHT determined that there were no issues of concern within the Project’s area and that further surveys are not necessary. *See* ERD at § 6.A.2.b-c.

With respect to the stability and reliability of the electric distribution system, the Applicant initiated a process to interconnect with the SMECO electric distribution grid serving Maryland by filing an Interconnection Request with PJM. *See* ERD at § 5.G-H. The Project will interconnect to the SMECO distribution grid serving Maryland via an overhead line tap at a new 69 kV switching station to be built adjacent to the Grayton-Ripley 69 kV circuit, which is in close proximity to the Project. *Id.*

Pursuant to Federal Energy Regulatory Commission (“FERC”) rules, PJM and SMECO undertake a multi-year, three-part interconnection study process to determine any upgrades that may be necessary to allow a proposed generator to interconnect without causing negative impacts to the stability or reliability of the electric power system. The Applicant has received a Feasibility Study from PJM, and will receive a complete System Impact Study and Facilities Study from PJM prior to construction. As a result of the studies, it is expected that the Project will not negatively impact the system’s stability or reliability. The installation of protective breaker equipment will allow remote operators to control circuit breakers, if necessary, as a safety measure. *Id.* PJM’s FERC-jurisdictional interconnection review process and operational safety measures will ensure the Project will not have a negative impact on the stability or reliability of SMECO’s system.

Due to the nature of solar power, the Project will have no impact on aviation. Unlike traditional fossil generation, there is no stack that may pose a hazard to air aviation. There is no air or water pollution (there are no emissions or discharges) associated with the Project. There is also no wastewater or cooling water for which disposal is required. Waste associated with decommissioning of the Project will be handled appropriately pursuant to a Decommissioning

Plan the Applicant will provide to the Commission and Power Plant Research Program. *See* ERD at § 6.E.

Finally, the Project will include significant economic benefits to the State by making more solar power and solar renewable energy credits available and by creating approximately 60-80 temporary design, management, and construction jobs. *See* ERD at § 2.

III. CPCN APPLICATION FILING REQUIREMENTS (COMAR 20.79.01.04)

- A. The applicant is MD Solar 1, LLC.
- B. The applicant's address is: 800 Brickell Avenue, Suite 110, Miami, FL 33131.
- C. The following persons are authorized to receive notices and communications with respect to this Application:

Mr. Jean David
MD Solar 1, LLC
800 Brickell Avenue, Suite 1100
Miami, FL 33131
(786) 310-8365
jean.david@origisenergy.com

Todd R. Chason
David W. Beugelmans
Chastity E. Threadcraft
Gordon Feinblatt LLC
233 East Redwood Street
Baltimore, MD 21202
(410) 576-4104
dbeugelmans@gflaw.com
cthreadcraft@gflaw.com

- D. Copies of this application are being made available for public inspection and copying at:

Charles County Department of Planning and Growth Management
200 Baltimore Street
La Plata, MD 20646

- E. A list of each local, state, and federal government agency having authority to approve or disapprove the construction or operation of the Project is set forth in Table 1 in the ERD.

F. The Project will interconnect to the electric distribution grid serving Maryland via an overhead line tap at a new 69 kV switching station to be built adjacent to the Grayton-Ripley 69 kV circuit, which is in close proximity to the Project. *See* ERD at § 5.G-H.

G. A general description of the generating station under COMAR 20.79.03.01 is provided in Section 5 of the ERD.

H. Implementation schedule: Construction is estimated to take 5-7 months, with scheduled completion prior to December 2018.

I. The Applicant has provided the environmental information for the generating station in Section 6 of the ERD.

IV. REQUEST FOR WAIVER AND EXPEDITED REVIEW

Although PUA § 7-208 requires the filing of CPCN applications at least two years prior to the commencement of construction for projects that involve the construction of an associated transmission facility of 69kv or more, the Commission has authority to waive that notice requirement upon a showing of good cause. PUA § 7-208(c). *See also* COMAR 20.79.01.07 (granting the Commission authority to “waive or modify any provision of this subtitle”). The Commission routinely grants such requests. *See, e.g.*, Case No. 9370, Order No. 87012 (May 8, 2015) (granting OneEnergy Dorchester LLC’s request for waiver); Case No. 9375, Order No. 87061 (June 15, 2015) (granting OneEnergy Wye Mills Solar, LLC’s request for waiver); Case No. 9314, Order No. 85683 (May 31, 2013) (indicating grant of Church Hill Solar Farm, LLC’s request for waiver); Case No. 9272, Order No. 84059 (May 26, 2011) (granting Maryland Solar LLC’s request for a waiver).

Imposing a two-year notice requirement may make sense for certain generating facilities, but not for the type of project proposed here where impacts will not extend beyond the borders of

the site. There are no emissions that will impact adjacent properties and the installation of solar PV panels will not materially impact property values for nearby residents. Requiring a two-year delay of the Project to satisfy this requirement would simply delay Maryland receiving the benefits offered by the Project without corresponding benefit. Accordingly, the Applicant submits that good cause exists to support the waiver of the two-year notice requirement.

V. CONCLUSION

The Applicant respectfully requests that the Commission (1) expeditiously approve this Application for a Certificate of Public Convenience and Necessity for the construction of the Shugart Valley Place Solar Project and (2) waive the two-year notice requirement of PUA § 7-208.

Respectfully submitted,




Todd R. Chason
David W. Beugelmans
Chastity E. Threadcraft
Gordon Feinblatt LLC
233 East Redwood Street
Baltimore, Maryland 21202
(410) 576-4104
Counsel for MD Solar 1, LLC

VERIFICATION

Before me, the subscriber, a Notary Public, in and for Miami-Dade, Florida
this day personally appeared Samir Verstyn and made oath and due form of law that he/she is the
Secretary at MD Solar 1, LLC and the matters and facts set forth in the foregoing Application for
a Certificate of Public Convenience and Necessity for the Shugart Solar Project are true and
correct to the best of his/her information, knowledge and belief.

WITNESS my hand and Notarial Seal this 20th day of September, 2017.



Samir Verstyn
Secretary
MD Solar 1, LLC

Alejandra Rodriguez Cadena
Notary Public Name (Print)



Alejandra Rodriguez Cadena
Commission # GG108916
Expires: May 29, 2021
Bonded thru Aaron Notary

My Commission Expires: _____



**Charles County Board of Appeals
Meeting of May 8, 2018**

**Department of Planning and
Growth Management
Staff Report**

Project Name: MD Solar 1, LLC – 4850 Shugart Valley Place, La Plata, MD 20646

BOA Docket #1390

Type of Project: Special Exception – Use #7.07.200 – Solar Energy Systems,
Large

Prepared by: Kirby R. Blass, Planner III, Planning Division

For questions, contact the Planning Division at 301-645-0540

TABLE OF CONTENTS

<u>ITEM</u>	<u>PAGE NUMBER</u>
I. APPLICANT & PROJECT INFORMATION:	2-3
II. ENVIRONMENTAL CHARACTERISTICS, HISTORICAL, AND ARCHAEOLOGICAL INFORMATION	3-4
III. SPECIAL EXCEPTION REQUIREMENT	4-4
IV. PROJECT CONSISTENCY, IMPACTS, AND FINDINGS	5-24
V. RECOMMENDATIONS AND PROPOSED CONDITIONS OF APPROVAL	24-26
VI. APPENDICES	26-27

I. Applicant & Project Information:

- A. Project Name:** MD Solar 1, LLC – 4850 Shugart Valley Road, La Plata, MD 20646
- Owners:** James B. Busler, et al., 4750 Robin Road, La Plata, MD 20646
Steve Scott, Trustee – 204 Washington Avenue, Suite 200, La Plata, MD 20646
- Applicant:** MD Solar 1, LLC, a Delaware limited liability company (Contract Purchaser).
- Consultant:** H&B Solutions, LLC, 37534 Oliver Drive, Shelbyville, Delaware 19975
- Representation:** Law Offices of Sue A. Greer, P.C. (Sue A. Greer, Esq.) – P.O. Box 1616, 200 Howard Street, Suite 101, La Plata, MD 20646

B. Project Number: Docket #1390

C. Subject Property: The property, 4850 Shugart Valley Place, La Plata, Maryland 20646, is identified as Parcel 24, within Grid 11 on Tax Map 41. Parcel account number 09-02005263. The subject parcel is accessed off of the eastern side of Mason Springs Road (MD Route 425). Parcel 24 is situated south of the Tenth District Volunteer Fire Department, which is located at the intersection and MD Route 425 and Bicknell/Poorhouse roads, and north of the Ironsides Volunteer Rescue Squad, which is located at the intersection of MD Route 425 and Port Tobacco Road. The subject property as well as all other properties surrounding it along MD Route 425 are similarly zoned Agricultural Conservation (AC) and possess similar agricultural, forested, and rural residential characteristics and land uses. The subject property contains an existing house and barn. Reference Appendices 24. Previous disturbances to the subject property include farming and timbering. A location map, zoning map, aerial map, and adjacent property map of the subject property are included in the report appendices.

D. Land Use & Zoning Category: The proposed use is a solar energy system, large, use #7.07.200. The entirety of the approximately 537-acre parcel is located within the Agricultural Conservation (AC) zone.

E. General Description of the Request: The Applicant, MD Solar 1, LLC, a Delaware limited liability company, is requesting special exception approval use approval from the Charles County Board of Appeals for a Solar Energy Systems, Large, as defined under Article XIII, Section §297-212 in the Charles County Zoning Ordinance. The special exception use application was filed with Charles County on October 27, 2017. The Applicant, MD Solar 1, LLC, has additionally filed a Certificate of Public Convenience and Necessity (CPCN) with the Maryland Public Service Commission (PSC). The CPCN application was filed with the Maryland PSC on September 22, 2017. CPCN licensing of the MD Solar 1, LLC application is currently under review and pending approval of the Public Utility Law Judge.

The Applicant, MD Solar 1, LLC proposes a 32.5-megawatt (MW) ground-mounted system on land zoned Agricultural Conservation (AC), which is accessed off of Mason Springs Road (MD Route 425). The project would deliver all of its output to the Pennsylvania-New Jersey-

Maryland (PJM) Interconnection, LLC, wholesale electricity market via the Southern Maryland Electric Cooperative (SMECO) distribution system ("Shugart Valley Place Solar Project"). The project will consist of approximately 100,000 to 104,000 First Solar FS-6420A thin film modules (solar panels) mounted on single-axis racking systems (east to west) which are to approximately seven feet (7') from grade when orientated at maximum tilt. The solar panels proposed are designed to absorb the sun's rays for energy generation and are constructed of dark materials and covered with an anti-reflective coating. There will be approximately fourteen (14) separate inverter pads, each with one (1) inverter per pad. Each inverter pad will make up 1/14 of the array alternating current (AC) capacity, or approximately 2.5 MW, to convert the direct current (DC) energy to alternating current (AC) energy. The solar panel arrays will be enclosed and protected using a six foot (6") high chain link fence (no barbed wire is proposed) with an access gate on the proposed access drive. The Applicant is maximizing the use of existing trees as a natural buffer and proposing a landscape buffer planting plan to satisfy the Charles County Zoning Ordinance.

The development of the property will involve cutting and clearing of existing tree cover on the parcel, as well as grading and stabilization of the project site, in order to facilitate establishment of the use as proposed. The portion of the property to be used for the solar project is gently rolling with grades from zero percent (0%) to fifteen percent (15%). Some grades in excess of fifteen percent (15%) will be used only to the extent needed to meet PJM capacity requirements. Cutting and clearing will be needed and the remainder of the wooded area will be placed into a Forest Conservation Easement (FCE) in order to meet Forest Conservation (FC) mitigation requirements.

- F. Neighborhood and Surrounding Uses:** For the purposes of this special exception use application, the neighborhood surrounding the subject property is identified as "each property owner that is within a two-hundred-foot radius of the property line" who are required to be mailed a notice of the scheduled Board of Appeals hearing via certified mail, in accordance with Chapter §297-411. B. of the Charles County Zoning Ordinance. Reference Appendices 4., which contains the Adjacent Property Map w/ Property Owner and Resident Agent List.

The subject property as well as all other properties surrounding it along MD Route 425 are similarly zoned Agricultural Conservation (AC) and possess similar agricultural, forested, and rural residential characteristics and land uses.

II. Environmental Characteristics, Historical, and Archaeological Information

A. Environmental Information, Resources, Watershed:

1. **Watershed:** This project is located within the Nanjemoy Creek watershed.

2. **Forest Conservation:** This project is subject to compliance with the requirements of the Charles County Forest Conservation Ordinance. This may be demonstrated by either submitting a Forest Stand Delineation (FSD) and Forest Conservation Plan (FCP) for approval by the Planning Division prior to approval of a Site Development Plan (SDP), Final Plat, Development Services (DS) permit or Building Permit; or, by qualifying for an exemption under Section §298-4, Forest Conservation Ordinance. There were 49 specimen trees identified on-site during the Special Exception review. An administrative

variance to the Forest Conservation Ordinance is required for any specimen trees proposed for removal, per Section §298-24, Forest Conservation Ordinance.

3. Habitat Protection Plan: A review letter from the Department of Natural Resources, Wildlife and Heritage Services dated July 5, 2017 was received during this Special Exception review. Per the letter, it was determined that there are no records of State or Federal listed plant or animal species within the project area; therefore no Habitat Protection measures have been required.

4. Resource Protection Zone (RPZ): Several streams and non-tidal wetlands exist on the subject property. The applicant has provided a preliminary delineation of the RPZ on the Special Exception Site Plan as required by Article XI, Resource Protection Zone (RPZ) (Overlay Zone), of the Charles Zoning Ordinance. Planning staff is in the process of confirming the delineation of RPZ with the applicant prior to approval of a Site Development Plan (SDP), Final Plat, Development Services (DS) permit, or Building Permit.

B. Historical & Archaeological Information: A Cultural Resources review of the Shugart Valley Place property was performed by Community Planning and the County's Archaeologist. The County's Archaeologist, Esther Read, conducted a preliminary assessment of the property and recommends that a Phase I archeological investigation be required. The preliminary assessment of the property was routed to the Applicant for their consideration on December 21, 2017. (Appendices 22). A copy of this preliminary assessment is attached for the Board members reference. While the Phase I archaeological investigation will not be required until the future Site Development Plan (SDP) stage, it is advised that the Applicant coordinate with Community Planning staff as early in the process as possible to address the concerns. Archaeological study may also be required for the associated offsite reforestation properties. Additionally, prior to demolition of the existing barn and house on the property, Community Planning may require further documentation of the structures at the future SDP stage.

III. Special Exception Requirement

The subject property, an approximately 537-acre parcel, is zoned Agricultural Conservation (AC). According to the Zoning Ordinance, a Special Exception is required for solar energy systems, large, in the AC zone (see Figure IV-1, Table of Permissible Uses, Use #7.07.200).

In order to comply with the Zoning Ordinance, the proposed solar energy systems, large, use must meet all of the requirements found in:

- Article XIII §297-212 Use #7.07.200 – Solar energy systems, large; and
- Article XXV §297-415 Special Exceptions.

The proposed solar energy systems, large, use must also be found to be consistent with the 2016 Adopted Charles County Comprehensive Plan.

If the Board of Appeals grants the Special Exception, the Applicant would be permitted to pursue development of the 537-acre parcel for the purposes of establishing a solar energy systems, large, use, on the subject property.

IV. Project Consistency, Impacts, and Findings

Article XIII Section §297-212, Use #7.07.200 of the Charles County Zoning Ordinance:

The request for approval of a Special Exception (Docket #1390) was evaluated based upon the standards set forth in Article XIII Section §297-212, Use #7.07.200 of the Charles County Zoning Ordinance. Ordinance language is provided below in bold text, followed by information provided by the applicant and staff's analysis of whether the Zoning Ordinance requirement has been met.

7.07.200 Solar energy system, large. Large solar energy systems are permitted as a special exception in all zones, provided that the following requirements are met:

A. Energy. The electricity generated by the large solar energy system shall be sold for-profit to a wholesale electricity market through a regional transmission organization and an interconnection with the local utility power grid and/or for direct distribution to a number of properties and consumers.

Per the Applicant: The Shugart Valley Solar Project will generate 32.5 MW and connect to SMECO's distribution system via a new 69 kV switching station to be built adjacent to the Grayton-Ripley 69 kV circuit. The Project will deliver all of its output to the PJM wholesale electricity market via SMECO, a regional transmission organization, for direct distribution to a number of properties and consumers. *See ERD §2.* The PJM System is the largest centrally dispatched control area in North America consisting of all or part of the States of Maryland, Pennsylvania, New Jersey, Delaware, District of Columbia, Illinois, Indiana, Kentucky, Michigan, North Carolina, Tennessee, Virginia, and West Virginia.

Staff Finding: Per the applicant's submittal materials and provided responses, it is staff's position that this use approval criterion will be satisfied. The Pennsylvania-New Jersey-Maryland (PJM) Interconnection, LLC, is a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in all or parts of the States referenced above by the Applicant. It is understood that the Shugart Valley Solar Project, has entered into a Power Purchase Agreement ("PPA") with Georgetown University in Washington D.C., as the power purchaser, which has the potential to provide almost 50% of the energy load demands for campus operations. As part of the use application, the applicant has supplied a September 22, 2017 dated Environmental Review Document (ERD) for the project site. (Reference Appendices 9). Page 8 of 34, within ERD §2, states: "The Applicant proposes to develop and construct the Project as part of a PPA with a private client."

B. The construction of the large solar energy system shall be in accordance with an approved building permit application. If the large solar energy system is to be interconnected to the local utility power grid, a copy of the conditional approval from the local utility must be provided prior to or at the time of application for the required building permit.

Per the Applicant: The Project will be required to obtain Site Plan approval from Charles County's Department of Planning & Growth Management. A Grading Permit,

Electrical Permit and Building Permit will be required and applied for at site plan approval. See ERD §4.E.1 & E.2.

The term “conditional approval” is a requirement generally applicable to small, rooftop solar facilities but is less specific when referring to utility scale solar facilities, which undergo a much more rigorous review process. Like the receipt of “conditional approval” for a rooftop system, the utility-scale process is designed to protect the utility system and public safety. Pursuant to the interconnection process applicable to utility-scale solar facilities, PJM (the regional grid operator) and SMECO (the transmission owner) undertake a multi-year, three-part study to determine any upgrades to the grid that may be necessary in order to allow the interconnection to safely occur.

The first part of the PJM review process, the Feasibility Study, is a shorter review meant to identify any major reliability issues that would limit the ability of the project to connect to the grid before PJM undertakes more detailed review. PJM and SMECO have completed this review and did not identify any issues.

The second part of the PJM review process, the System Impact Study, identifies any adverse reliability impacts that could occur if the proposed system were to interconnect without system upgrades. This determines the basis for the equipment necessary to connect to the grid in a protected and safe manner and also determine if any further network upgrades are needed. This process is expected to be completed for the Project by the end of February 2018. In some ways the System Impact Study is best equated with “conditional approval.”

The third part of the PJM review process, the Facilities Study, finalizes the specific equipment and identifies the cost necessary for the interconnection agreement (“ISA”). The terms of the ISA incorporate the results and determines the schedule for installation of the upgrades identified in the Facilities Study, and is the last step in the process that signifies SMECO and PJM have approved the interconnection.

The Project is expected to provide the executed ISA to the County prior to or at time of application for all required building permits.

Under certain circumstances, and if feasible and acceptable to all parties, a request to split the Project building permit from the interconnection building permit may achieve an import and beneficial early start for the Project itself. In this contingency, a submission of the System Impact Study or Facilities Study would be provided with the application to demonstrate adequate progress on final interconnection.

Staff Finding: Per the applicant’s submittal materials and provided response, it is staff’s position that this use approval criterion will be satisfied. It is understood that a multi-step review process is required between all parties – the interconnection customer, PJM, and SMECO, involving the interconnection of the large solar energy system to the local utility power grid. For the purposes of satisfying the “conditional approval” associated with this use approval criteria, the applicant will be required to submit the executed interconnection agreement (“ISA”) between the interconnection customer - MD Solar 1, LLC, PJM and SMECO prior to or at time of application for the required

building permit(s). Approval of the building permit(s) cannot occur until such time that the ISA is executed and provided to the County.

C. Setbacks. Ground-mounted large solar energy systems shall be set back a minimum of 50 feet from any property line.

Per the Applicant: The proposed array layout will maintain a fifty-foot (50') setback from the property line. See ERD §5.A.

Staff Finding: Per the applicant's submittal materials and provided responses, it is staff's position that this use approval criterion will be satisfied. No ground-mounted solar arrays are proposed or will be permitted to be installed less than 50' feet from any property line. Within the ERD §5.A., on page 14 of 34, the applicant states: "In accordance with 297-212, 7.02.200 of the Charles County Code, the proposed solar array layout will maintain a fifty-foot (50') setback from the property line. (See Figure 5)." Delineation and maintenance of this 50' foot setback requirement will be confirmed at time of future site development plan (SDP) application and verified throughout the development review and permit inspection processes.

D. Ground-mounted large solar energy systems:

(1) The total height of the solar energy system, including any mounts, shall not exceed 25 feet above the ground when orientated at maximum tilt.

(2) Shall be mounted onto a pole, rack or suitable foundation, in accordance with manufacturer specifications, in order to ensure the safe operation and stability of the system. The mounting structure (fixed or tracking capable) shall be comprised of materials approved by the manufacturer, which are able to fully support the system components and withstand adverse weather conditions.

(3) Multiple mounting structures shall be spaced apart at the distance recommended by the manufacturer to ensure safety and maximum efficiency.

Per the Applicant: The Project will consist of approximately 100,000-104,000 First Solar FS-6420 A thin film modules (solar panels) as shown in the Solar Array Layout. The array will be installed using pile-driven post-supported racking system utilizing galvanized steel posts with galvanized steel or aluminum structure for mounting the panels. A typical Solar Panel Racking Detail depicts the array with portrait racking with one row of modules positioned vertically on each rack. The space between rows will be approximately eighteen feet (18'). The solar arrays will continuously rotate from east to west around a horizontal axis, orientated N-S, to orient the panels at an optimal angle to the incoming solar insolation during the day. The minimum leading-edge height (bottom edge of the modules) will be approximately one foot (1') from grade, and the maximum top edge height of the modules will be approximately seven feet (7') from grade. This will occur on a daily basis as the single-axis tracking system rotates through its cycles. The total height of the solar energy system, including any mounts, shall not exceed twenty-five (25') feet above the ground when orientated at maximum tilt. Additionally, all electrical wiring used in the system components will be trenched except where wiring is brought together for interconnection to the system components and/or the power grid.

The solar arrays will be designed to withstand snow load of twenty-five (25) pounds per square foot (psf) and wind of one-hundred fifteen (115) miles per hour (mph) (per the International Building Code "IBC" 2015 for Charles County).

Depending on final racking vendor selection and design, the number of racks could vary. Subject to final design, the typical three (3) string rows will consist of twelve (12) pile driven posts each serving as the foundation. Each post will be driven to an estimated depth of five feet (5') to seven feet (7') below grade.

There will be approximately fourteen (14) separate inverter pads, each with one (1) inverter per pad. Each inverter pad will make up 1/14 of the array AC capacity, or approximately 2.5 MW, to convert the direct current (DC) energy to AC energy. Each power station will have a transformer to step up the AC voltage from 600V to 34.5 kV for connection to the site substation, which will then, via GSU, increase the power to 69 KV for the tie line to the SMECO transmission line.

See ERD §5.B. and associated figures.

Staff Finding: Per the applicant's submittal materials and provided response, it is staff's position that use approval criterion D. (1), (2), and (3) will be satisfied. The proposed total height, at maximum tilt, of the solar energy system arrays are approximately seven feet (7') from grade, well below the maximum height allowance of twenty-five feet (25'). Reference the Typical Single-Axis Tracking Solar Panel Detail on Sheet C-9 of the submitted Conceptual Site Plan. To ensure the safe operation and stability of the ground-mounted solar energy system, the solar panel arrays will be mounted to pile-driven post-supported racking systems, which utilize galvanized steel posts with galvanized steel or aluminum structures for the mounting of the panels. Each post will be driven to a depth of between five feet (5') and seven feet (7'). The solar array mounting structures, each with single-axis tracking capability, shall be comprised of materials approved by the manufacturer, which are able to fully support the system components and withstand adverse weather conditions, specifically snow loads up to twenty-five (25) pounds per square foot (psf) and wind gusts up to one-hundred fifteen (115) miles per hour (mph) (per the International Building Code "IBC" 2015 for Charles County). These specifications will be verified by the building code compliance reviewer prior to any future building permit approvals for the individual mounting structures. Future review of the site development plan (SDP) application as well as future building permit applications for the mounting structures will include confirmation of the aforementioned spacing distance between these mounting structures of eighteen feet (18'), to ensure safety and maximum efficiency. This spacing prevents the panels from shading one another and these 18' areas are to remain as grass covered on a natural grade. Additionally, the applicant has proposed the implementation strategy for the inclusion of pollinator habitat throughout the project site. The envisioned pollinator habitat will seek to promote a healthy ecosystem for honey bees and other pollinators. The applicant will work closely with the Power Plant Research Program (PPRP) Work Group on this endeavor, as specified in the ERD §5.B.5. on page 20 of 34.

(4) Shall be fully screened from adjoining properties and adjacent roads by a buffer yard D. Location of this buffer yard must take shading into account so it does not affect the system's efficiency. Appropriate fencing shall be provided for safety.

Per the Applicant: A buffer/landscape plan, which is compliant with Bufferyard D as set forth in the Charles County Code, will be provided as appropriate and depicted on the site plan to be submitted to the Department of Planning & Growth Management for review and approval. This plan will also be submitted to the Charles County Soil Conservation District Office for review and approval. The panel arrays will be enclosed and protected using a six foot (6') high chain link fence (no barbed wire is proposed) with an access gate on the proposed access drive. The perimeter fence will be located thirty-five (35') from the drip line of the wooded areas on the perimeter of the Project which are not to be cut. *See ERD §5.A. & 5.B.4.*

The Applicant is maximizing the use of existing trees as a natural buffer and proposing a landscape buffer planting plan that satisfies the Charles County Zoning Ordinance. A revised landscape buffer planting plan will be submitted during the Site Plan Process, which specifically identifies quantities, plant species, and denotes canopy, understory, shrub, and evergreen conifers.

Staff Finding: Per the applicant's submittal materials and provided responses, it is staff's position that this use approval criterion will be satisfied. The Bufferyard D required to fully screen adjoining and adjacent roads is illustrated in Chapter §297-385 of the Charles County Zoning Ordinance in 15', 20', 25', 30' and 40' depths per 100' of width segments. Each has a specific canopy, understory, shrub, and evergreen conifer plan unit multiplier per each 100' segment, which will be critical for compliance verification of this condition at time of site development plan (SDP) and final inspection. At this time, it is understood that the Applicant has not fully determined whether supplemental plantings are needed based upon the amount of retention of existing vegetation proposed for the bufferyard areas. At time of future SDP application, the required landscaping plan shall depict this level of detail accordingly for review and approval.

(5) Any glare generated by the system must be mitigated or directed away from an adjoining property or adjacent road when it creates a nuisance or safety hazard.

Per the Applicant: A glare analysis was performed as part of the ERD. Per the ERD, "Solar Photovoltaic (PV) panels, such as those proposed for this Project, are designed to absorb the sun's rays, rather than reflect it, in order to convert the solar energy into electricity. The PV technology differs from concentrated solar technology, which uses mirrors to concentrate the sun's rays, common in desert settings. Solar PV panels are becoming the most common solar technology, are constructed of dark materials, and are covered with an anti-reflective coating. As a result, glare is not an issue." *See ERD §5.E.5.* Further, the landscape buffer and the natural forested areas that surround the Property will likely absorb any residual glare that could potentially impact neighboring properties. *See ERD at Id.*

Staff Finding: Per the applicant's submittal materials and provided response, it is staff's position that this use approval criterion will be satisfied and that the proposed system will not generate any glare which creates a nuisance or safety hazard. The proposed Solar Photovoltaic (PV) panels will be buffered and fenced internally within the property boundaries and are specifically constructed of dark materials, with an anti-reflective

coating. They are engineered to absorb, not reflect, the sun's rays, in order to generate the desired electricity yields.

Although this use approval criterion specifically relates to glare impacts on adjoining property or adjacent roads, the applicant also performed glare impact analysis on nearby airfields. The result of the analysis yielded a result of no glare being predicted; however, documentation has not yet been received confirming both Maryland Aviation Administration (MAA) and Federal Aviation Administration (FAA) glare clearances for the Shugart Valley Solar Project, specifically related to a finding of no impact to flight patterns. To address any concern related to the panels creating a nuisance or safety hazard to aircraft, staff is recommending that a condition be applied which requires this documentation to be submitted as part of the Site Development Plan (SDP) application.

(6) It shall be demonstrated that the large solar energy system shall not unreasonably interfere with the view of, or from, sites of significant public interest, such as a public park, a state-designated scenic road, or historic resources.

Per the Applicant: Per the Maryland Historical Trust ("MHT") the Shugart Valley Solar Project is not located in an area of interest. *See ERD §6.A.2.c.* Nor is the Property within the view of or adjacent to any public park or state designated scenic road. Further, the Project will contain a 50' setback and bufferyard D screening it from adjacent roads. *See ERD §5.B.4.*

Staff Finding: The project is not located on a scenic and/or historic road or scenic byway, and the proposed solar arrays will not be visible from Mason Springs Road. Therefore, staff finds that the project will not unreasonably interfere with the view of, or from, a site of significant public interest such as a park, state-designated scenic road, or historical resources.

(7) Any electrical wiring used in the system shall be underground (trenched) except where wiring is brought together for inter-connection to system components and/or the local utility power grid.

Per the Applicant: See Response to Section D.(1)(2) & (3) above. All electrical wiring used in the system will be trenched except where wiring is brought together for interconnection to the system components and/or the power grid.

Staff Finding: Per the applicant's submittal materials and provided response, it is staff's position that this use approval criterion will be satisfied. All electrical wiring proposed in the system will be required to be trenched except where wiring is brought together for interconnection to the system components and/or the power grid. All electrical wiring used in the solar energy system will be required to be in compliance with all applicable electrical codes and apply for all applicable electrical permits.

(8) No ground-mounted large solar energy systems shall be affixed to a block wall or fence.

Per the Applicant: There is no proposal or plan to mount any system to a block wall or fence.

Staff Finding: Per the applicant's submittal materials and provided response, it is staff's position that this use approval criterion will be satisfied. No system components will be permitted to be mounted to a block wall or fence on the property.

E. Roof-mounted large solar energy systems.

(1) Roof-mounted large solar energy systems shall include integrated solar shingles, tiles, or panels as the surface layer of the roof structure, with no additional apparent change in relief or projection (the preferred installation), or separate flush or frame-mounted solar panels attached to the roof surface.

(2) Separate flush or frame-mounted large solar energy systems installed on the roof of a building or structure shall not:

(a) Project vertically above the peak of the sloped roof to which it is attached; or

(b) Project vertically more than eight feet above a flat roof installation.

(3) The combined height of a roof-mounted system and the principal structure to which it is attached may not exceed the maximum height for the relative zone in which it is located, as described in Article VI.

(4) It shall be demonstrated that the placement of the system shall not adversely affect safe access to the roof, pathways to specific areas of the roof, and safe egress from the roof.

(5) Any glare generated by the system must be mitigated or directed away from an adjoining property or adjacent road, when it creates a nuisance or safety hazard.

Per the Applicant: Not applicable.

Staff Finding: The special exception application submitted for use approval consideration is for a large ground-mounted solar energy system, therefore; use criteria E. (1) through (5), listed above, specifically pertaining to large roof-mounted solar energy systems are not applicable to the subject special exception request for 4850 Shugart Valley Place.

F. Appearance.

(1) Appearance, color, and finish. The large solar energy system shall remain painted or finished in the color or finish which was originally applied by the manufacturer.

Per the Applicant: MD Solar 1, LLC, the Applicant, understands that in accordance with Article XIII, §297-212, Use 7.07.200 of the Charles County Code the above referenced project, if approved, must (where applicable) comply with the following requirement.

Staff Finding: Per the applicant's response, it is staff's position that this use approval criterion will be satisfied. The applicant is not proposing to alter or modify the color or finish originally applied by the manufacturer of the solar energy system.

(2) All signs, other than the manufacturer's or installer's identification, appropriate warning signs, or owner identification, on a large solar energy system shall be prohibited. Not more than two manufacturer labels bonded to or painted upon the solar energy system shall be permitted.

Per the Applicant: MD Solar 1, LLC, the Applicant, understands that in accordance with Article XIII, §297-212, Use 7.07.200 of the Charles County Code the above referenced project, if approved, must (where applicable) comply with the following requirement.

Staff Finding: Per the applicant's response, it is staff's position that this use approval criterion will be satisfied. The applicant is not proposing any additional signage to be applied on the solar energy system other than those permitted by this code.

G. Code compliance. A large solar energy system shall comply with all applicable Construction and Electrical Codes.

Per the Applicant: MD Solar 1, LLC, the Applicant, understands that in accordance with Article XIII, §297-212, Use 7.07.200 of the Charles County Code the above referenced project, if approved, must (where applicable) comply with the following requirement.

Staff Finding: Per the applicant's response, it is staff's position that this use approval criterion will be satisfied. All required permitting and code compliance review will be performed prior to approval and operation of the system. As specified in the ERD §4.E.2., page 12 of 34, the applicant states the following: "A Grading Permit, Electrical Permit, and Building Permit will be applied for after site plan approval. The construction documents will provide the detailed engineering and specifications required to implement the approved site plan leasing to necessary Grading, Electrical, and Building Permits as required by Charles County."

H. Utility notification and inter-connection. Large solar energy systems that connect to the electric utility power grid shall comply with all utility notification requirements. A copy of the signed certificate of completion from the electric utility will be required prior to issuance of the use and occupancy permit for the system.

Per the Applicant: MD Solar 1, LLC, the Applicant, understands that in accordance with Article XIII, §297-212, Use 7.07.200 of the Charles County Code the above referenced project, if approved, must (where applicable) comply with the following requirement.

Staff Finding: Per the applicant's submittal materials and provided response, it is staff's position that this use approval criterion will be satisfied. As previously discussed in the staff findings supplied for Use 7.07.200 criteria B., it is understood that a multi-step review process is required between all parties – the interconnection customer, PJM, and

SMECO, involving the interconnection of the large solar energy system to the local utility power grid. For the purposes of satisfying the "conditional approval" associated with this use approval criteria, the applicant will be required to submit a copy of the signed certificate of grid interconnection completion, or its equivalent received from the electric utility, to Charles County, prior to issuance of the use and occupancy permit for the system.

I. When batteries are included as part of the large solar energy system, they must be placed in a secure container or enclosure, per manufacturer specifications, and meet the requirements of the Maryland Building and Electrical Codes when in use. When batteries are no longer in use or functional, they shall be disposed of or recycled in accordance with the laws and regulations of Charles County and other applicable laws and regulations. Battery systems shall be appropriately screened from view. Specialty-built buildings for battery storage are permitted for large projects.

Per the Applicant: MD Solar 1, LLC, the Applicant, understands that in accordance with Article XIII, §297-212, Use 7.07.200 of the Charles County Code the above referenced project, if approved, must (where applicable) comply with the following requirement.

Staff Finding: Per the applicant's response, it is staff's position that this use approval criterion will be satisfied. The applicant has acknowledged their responsibility to comply with the applicable requirements for batteries and meet the requirements of the Maryland Building and Electrical Codes when in use. As specified in the ERD §4.E.2., page 12 of 34, the applicant states the following: "A Grading Permit, Electrical Permit, and Building Permit will be applied for after site plan approval. The construction documents will provide the detailed engineering and specifications required to implement the approved site plan leasing to necessary Grading, Electrical, and Building Permits as required by Charles County."

J. All obsolete or unused systems shall be removed within 12 months of cessation of operations without cost to the County. Reusable components are to be recycled whenever possible.

Per the Applicant: MD Solar 1, LLC, the Applicant, understands that in accordance with Article XIII, §297-212, Use 7.07.200 of the Charles County Code the above referenced project, if approved, must (where applicable) comply with the following requirement.

Staff Finding: Per the applicant's response, it is staff's position that this use approval criterion will be satisfied. The applicant has acknowledged their responsibility to comply with the requirement to remove all obsolete or unused systems within 12 months of cessation of operations without cost to Charles County. Likewise, if any reusable components associated with the obsolete or unused systems are removed, they will be recycled whenever possible.

K. Violations. Subsequent to the effective date of this Subsection, it is unlawful for any person to construct, install, or operate a large solar energy system that is not in compliance

with this chapter or with any condition contained in a building permit issued pursuant to this chapter.

Per the Applicant: MD Solar 1, LLC, the Applicant, understands that in accordance with Article XIII, §297-212, Use 7.07.200 of the Charles County Code the above referenced project, if approved, must (where applicable) comply with the following requirement.

Staff Finding: Per the applicant's submittal materials and provided response, it is staff's position that this use approval criterion will be satisfied. The Applicant has thus far demonstrated their commitment to pursue all necessary local (special exception) and state (CPCN licensing) approvals associated with the proposed use, including compliance with this chapter or with any condition(s) contained in subsequent building permit(s) issued pursuant to this chapter.

L. Each application shall comply with the requirements of Natural Resources Article § 8-1808.1, COMAR Title 27, and the Charles County Critical Area Program. A growth allocation may be required for projects located within the Resource Conservation Zone.

Per the Applicant: MD Solar 1, LLC, the Applicant, understands that in accordance with Article XIII, §297-212, Use 7.07.200 of the Charles County Code the above referenced project, if approved, must (where applicable) comply with the following requirement.

Staff Finding: The Shugart Valley Solar Project is not located within the Chesapeake Bay Critical Area and therefore it is not subject to compliance with the requirements of Natural Resources Article §8-1801., COMAR Title 27, and the Charles County Critical Area Program. Likewise, growth allocations are not required for this project, as it is not located within a Resource Conservation Zone.

Article XXV Section 297-415. H. of the Charles County Zoning Ordinance:

The request for Special Exception (Docket #1390) was additionally evaluated based upon the standards set forth in Article XXV Section §297-415.H of the Charles County Zoning Ordinance, which states, The Board of Appeals shall grant a special exception when, from a preponderance of the evidence of record, the proposed use:

(1) Will not be detrimental to or endanger the public health, safety and general welfare.

Per the Applicant: The use of property as a Large Solar Energy System will not be detrimental to or endanger the public health, safety, and general welfare. As set forth in the CPCN application, "Maryland has established one of the most aggressive renewable portfolio standard goals in the country aiming for 25% of its power to be renewable by 2020, including 2.5% from solar sources." See also ERD §2. By connecting with the electrical distribution system serving Maryland, the Shugart Valley Solar Project will contribute towards compliance with the Renewable Portfolio Standard and will further the County's objective of "growing a green economy" as set forth in Chapter 6 of the 2016 Comprehensive Plan. The Project will result in substantial economic benefits to the County to include capital investment of approximately \$31 to \$34 million and the generation of 60-80 design,

management and construction jobs. See ERD §2. Additionally, the Project will be required to comply with all existing zoning, subdivision and development regulations. See also response to Required Finding 5 set forth below.

Staff Finding: Per the applicant's submittal materials and provided responses, it is staff's position that the proposed use of the property as a Large Solar Energy System will not be detrimental to or endanger the public health, safety and general welfare. The subject property is located in a rural area and is bounded by properties that are a combination of agriculture, forest, and rural residential uses. The facility will be buffered and fenced for aesthetics and safety purposes, and the applicant's application proffers that the use, once operational, will produce no identifiable detrimental impacts related to objectionable traffic, noise, type of physical activity, fumes, odors, dust, or glare.

All required permitting and code compliance review will be performed prior to approval and operation of the system. Staff has recommended numerous conditions related to future demonstration that no such detrimental impacts or endangerment to the public health, safety, and general welfare will occur during the construction or operational phases of the proposed use. These conditions coupled with the requirement for the use to meet all applicable federal, state, and local regulatory requirements, including the pending Certificate of Public Convenience and Necessity (CPCN) licensing application with the Maryland Public Service Commission (PSC), will ensure the use will not be detrimental or endanger the public health, safety and general welfare.

(2) Is a permissible special exception in the zone.

Per the Applicant: The Shugart Valley Property is zoned Agricultural Conservation, AC. Use 7.07.200, "Solar Energy Systems, Large" is permitted by Special Exception in all zones, to include the AC Zone.

Staff Finding: The Shugart Valley Property, more specifically the parcel identified as parcel 24 on Tax Map 41, is in its entirety zoned Agricultural Conservation, AC, and as such permits Use #7.07.200, "Solar Energy Systems, Large" via special exception use approval from the Charles County Board of Appeals.

(3) Will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or the general neighborhood.

Per the Applicant: The Shugart Valley Property is located in a rural area and is bounded by properties that are a combination of agriculture, forest and rural residential uses. The Project should have little to no impact upon the neighboring farms or residences. The proposed array will maintain a fifty-foot (50') setback from the property line and appropriate buffering, landscaping, fencing will be located within the setback. See ERD §5.A. The closest residential dwelling is approximately one quarter (1/4) mile away from the closest inverter pad. As more specifically set forth below in response to Required Finding 5, impacts to traffic, noise, air quality or glare are minimal to none.

Staff Finding: Per the applicant's submittal materials and provided response, it is staff's position that the proposed use of the property as a Large Solar Energy System will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding

properties or the general neighborhood. The subject property is located in a rural area and is bounded by properties that are a combination of agriculture, forest, and rural residential uses. The facility will be buffered and fenced for aesthetics and safety purposes, and the applicant's application proffers that the use, once operational, will not be detrimental to the use, peaceful enjoyment, economic value or development of surrounding properties or the general neighborhood.

All required permitting and code compliance review will be performed prior to approval and operation of the system. Staff has recommended numerous conditions related to future demonstration that no such detrimental impacts to the use, peaceful enjoyment, or economic value of surrounding properties will occur during the construction or operational phases of the proposed use. These conditions, coupled with the requirement for the use to meet all applicable federal, state, and local regulatory requirements, including the pending Certificate of Public Convenience and Necessity (CPCN) licensing application with the Maryland Public Service Commission (PSC), will ensure that the use will not be detrimental.

For the purposes of this special exception use application, the neighborhood surrounding the subject property is identified as "each property owner that is within a two-hundred-foot radius of the property line" who are required to be mailed a notice of the scheduled Board of Appeals hearing via certified mail, in accordance with Chapter §297-411. B. of the Charles County Zoning Ordinance. Reference Appendices 4. Which contains the Adjacent Property Map w/ Property Owner and Resident Agent List.

(4) Complies with the standards and requirements set forth in Article XIII.

Per the Applicant: As delineated below, the Shugart Valley Solar Project meets all of the requirements set forth in §297-212, Use 7.07.200.

Staff Finding: Per the applicant's submittal materials and provided responses, it is staff's position that the proposed Use 7.07.200 complies with the standards and requirements set forth in Article XIII.

(5) Will cause no objectionable impact from traffic, noise, type of physical activity, fumes, odors, dust or glare.

Per the Applicant: As part of the CPCN Application, a comprehensive analysis and review of the impacts of the Project were conducted. Impacts were studied both during the construction period and during the operational period. That analysis and results are contained within the ERD.

Access to the Project will be via Mason Springs Road / Maryland Route 425, which is designed as a minor collector. Traffic will be most impacted during the construction period, which is estimated to last for a period of five to six months. During the construction period, material and equipment will be delivered via tractor-trailers, concrete trucks and dump trucks. Daily construction traffic will include dump trucks, cars, pickup trucks, and other personnel vehicles. See ERD §5.B.6. The majority of traffic will be generated during the first thirty to ninety days, which is when supplies and materials deliveries will occur. Similar projects have anticipated the following number and types of deliveries and construction traffic:

Major System Component Deliveries Totals for the Project

Racking Trucks (42' Tractor Trailer) = 103
Combiner Box Trucks (42' Tractor Trailer) = 2
Misc. Material Trucks (42' Tractor Trailer) = 20
Module Trucks (42' Tractor Trailer) = 129
Inverter Trucks (42' Tractor Trailer) = 11
MV Switchgear Trucks (42' Tractor Trailer) = 1
Concrete Trucks = 300

Daily Construction Personnel Traffic

Foreman & Staff Vehicles (Pickup Truck) = 10/day
Site Construction Staff (Cars, SUV, Pickup Truck) = 50/day (Applicant encourages and assumes employees will carpool and commute together.)

In order to ensure minimal impact during the delivery and construction phase, the Applicant proposes to establish the following plan:

- All truck deliveries will have a duration of two (2) hours on site, and be staggered so that no more than two (2) trucks are on site at any given time.
- Deliveries will commence at 0900 hours and stop at 1400 hours to mitigate disruptions to the existing commuter traffic.
- Racking trucks, combiner box and miscellaneous material trucks will arrive on site in the first 30-60 days.
- Module trucks will begin arriving in around the 90 day mark and deliveries will continue for approximately 60 days. Four (4) module trucks will arrive every day for approximately five (5) weeks.
- Inverter trucks will arrive approximately two (2) weeks after the module trucks begin deliveries. Two (2) inverter trucks will arrive every day.
- The MV switchgear delivery will arrive sometime approximately four (4) weeks after the inverter trucks.
- Daily construction traffic will be kept to a minimum with entrance to the site Monday-Friday, starting at 0630 hours and departure no later than 1700 hours.

The peak construction crew of fifty (50) vehicles per day will be in the 60-120 (day) time frame. Months before peak construction as well as after peak construction are expected to be manned with less than half of the peak estimated construction staff. There will be no oversize or overweight vehicles necessary for material delivery to this project.

During the operational period there will be minimal traffic impact. Traffic would be limited to maintenance crews for mowing, panel washing and vegetation maintenance. This is often times conducted with one (1) or two (2) pick-up trucks. This traffic would be primarily limited to the summer months. Quarterly to yearly maintenance of the solar array components will be necessary, along with site visits for operational issues that may arise during normal

operation. This activity would be conducted with approximately two (2) pick-up trucks per occurrence. *See ERD at Id.*

Similar to traffic, the noise levels will be most impacted during the construction period. During the construction period, all noise will be maintained below the average ninety decibel (90dB) at the property lines. During operation period there will be little to no impact from noise. The Project has no moving parts and the only noise generated from the electrical equipment at the facility will be from the transformers and inverters at each pad. The closest residential dwelling is approximately one quarter (1/4) mile away from the closest inverter pad and the dB levels at this location will be well below the sixty-five/fifty-five (65/55) dB levels identified above. *See ERD §5.B.2.*

As a solar generation facility, the Project will emit no pollutants. Air quality impacts during construction will be minimal. During construction, the primary air-quality issue will be dust from non-point sources such as earthwork and construction traffic on unpaved roads. This type of dust is described as fugitive dust. Fugitive dust is expected to be less than a normal construction project since this Project will not require excessive-earthwork activities. Other potential sources of pollutants during construction are mobile internal combustion engines from earthwork equipment and an increase in vehicle traffic by workers. Emissions from these sources should have little impact. *See ERD §6.B.1.a.* As previously stated, the Project will generate no air pollution emissions during operations. *See ERD §6.B.1.b.*

As previously set forth, a glare analysis was conducted as part of the ERD. The results of the glare analysis indicate there would be no impact to flight patterns and little to no impact to neighboring properties. *See ERD §5.E.5.*

Staff Finding: Findings have been categorized as follows:

1. Will cause no objectionable impact from traffic. The proposal of a solar farm is found not to cause an objectionable impact from traffic. Page 7 of the Special Exception Justification states, "During the operational period, traffic will be limited to maintenance crews for mowing, panel washing, and vegetation maintenance. This is often times conducted with one (1) or two (2) pick-up trucks."
2. Will cause no objectionable impact from noise. As discussed in the Environmental Review Document (ERD) §5.B.2., the applicant has provided findings related to Noise and Vibration --

Impacts During Construction (ERD §5.B.2.a.) and
Impacts During Operation (ERD §5.B.2.b.).

Construction:

Within the Justification Report (Appendices 7.), the applicant specifies that "Similar to traffic, the noise levels will be most impacted during the construction period. During the construction period, all noise will be maintained below the average ninety decibel (90dB) at the property lines." 90 dBA is the maximum allowable level of construction period noise at receiving land uses, in accordance with Chapter 260-3. C. of the Charles County Noise Control Ordinance. Per the dBA sound levels and distances to property lines

proffered by the Applicant, the maximum allowable noise levels, during the construction period will not be exceeded.

The applicant proposes to have internal chipping areas dedicated to chipping operations. These locations will be designated on the site plans at the most central locations and just off the structural artery road that will run from the Project entrance to the rear of the Limit of Construction (LOC). Although the specific equipment cannot be known at this time, the industry practice/equipment and standard falls typically within a noise range of 100 dBA to 120 dBA at the source. In addition, to minimize potential noise impacts during evening and weekends, the applicant will only allow chipping operations to occur between 7:00 and 4:00 Monday through Friday, and 9:00 to 3:00 on Sundays. The applicant intends for noise levels to meet or be below the daytime standard of 60 dBA at the property line. In order to accomplish this, the applicant has agreed to limit the permissible locations of chipping operations to centrally located areas within the parcel that are a sufficient distance to meet or be below the 60 dBA standard. Noise reduction occurs at 6 dBA for every one hundred feet (100') of added distance.

For example: Typical 100 dBA equipment would be placed approximately 700 feet from the property line to account for noise dissipation through distance.

Typical 120 dBA equipment would be placed approximately 1,000 feet from the property line to account for noise dissipation through distance.

As a means of minimizing any potential noise impacts during the construction period, staff has proposed a recommended condition of approval associated with compliance to the established Noise Control requirements of Chapter 260. This condition incorporates the proffered hours for the chipping operations to occur on the property during the construction period.

Operation:

Additionally, within the Justification Report (Appendices 7.) the Applicant states, "During the operation period there will be little to no impact from noise. The Project has no moving parts and the only noise generated from the electrical equipment at the facility will be from the transformers and inverters at each pad. The closest residential dwelling is approximately one quarter (1/4) mile away from the closest inverter pad." ERD §5.B.2.b, states: "As utility scale solar generating power facilities become more common, more studies have been done demonstrating the low impact of noise during operation. Typical transformers used for a solar facility have a 50 dBA rating at one-hundred (100') feet. The Project anticipates a low-level noise interior to the perimeter fence. Noise reduction occurs at 6 dBA for every one hundred feet (100') of added distance."

The applicant has additionally provided the following compliance findings: "The Applicant confirms that noise from operational equipment and construction equipment will comply with the County Code related to noise, measured at the property line. Regarding the "OnSite Interconnection Equipment," the Applicant will own the adjoining "Smithpointe" parcel in this area, making it part of the project. The Project Site Plan will demonstrate this compliance in further detail. Regarding the noise produced at the source of the inverter, which is typically 65 dBA, the location of each inverter in the

interior of the parcel allows for noise to attenuate sufficiently to meet the County Code at the property line. The closest inverter to the property line is approximately four-hundred feet (400'). The project substation will also be located a sufficient distance from the nearest property line in compliance with County Code. With a sound dissipation rate of 6 dBA per one hundred feet (100'), even the equipment closest to the property line will pose no impact/noise level that exceeds the County Noise Control Ordinance (Chapter 260). In addition to the rate of dissipation per one hundred feet (100') substation and inverter equipment is stored in a housing (creating shielding and noise attenuation) which further filters/suppresses the noise."

In accordance with Chapter 260-B. of the Charles County Noise Ordinance, the maximum allowable noise levels, measured at the property line of the receiving land, is not to exceed the following during the operation period: 60 dBA, daytime (between 7:00 a.m. and 10:00 p.m., local time) and 50 dBA, nighttime (between 10:00 p.m. and 7:00 a.m., local time). Per the dBA sound levels and distances to property lines proffered by the Applicant, the maximum allowable noise levels, during the operation period will not be exceeded.

Per the applicant's submittal materials and provided responses, it is staff's position that impacts, if any, related to noise will only temporarily occur during the five to six month construction period of the system's installation. Once installation is complete and the system is in its operation period, it is staff's position that no objectionable impacts from noise will occur.

3. Will cause no objectionable impact from type of physical activity. The types of physical activity on the property will involve the major system component deliveries for the project, along with daily personnel traffic, both to occur during the five to six month construction period, as outlined in the applicant's findings. Additional types of physical activity will involve the proposed clearing, chipping, and grading of the acreage areas subject to the proposed use and the post driving equipment associated with the installation of the rows of solar array support structures. Once construction is complete, and the system is operational, the types of physical activities on the property will consist of only occasional maintenance crew visits.

Per the applicant's submittal materials and provides responses related to the types of physical activity proposed on the property, it is staff's position that impacts, if any, related to the type of physical activity will only temporarily occur during the five to six month construction stage of the system's installation. Once construction is complete and the system is operational, it is staff's position that no objectionable impacts from the type of physical activity will occur. During operational period, activities will be limited to occasional maintenance crew visits.

4. Will cause no objectionable impact from fumes. As discussed in the ERD §6.B.1.a, the applicant states the project will emit no pollutants and provides findings related to Air Quality During Construction (§ERD 6.B.1.a.) and Air Quality During Operation (§ERD 6.B.1.b.).

Air Quality During Construction (§ERD 6.B.1.a.) stipulates that "the primary air-quality issue during construction will be dust from non-point sources such as earthwork and

construction traffic on unpaved roads. This type of dust is described as fugitive dust. Fugitive dust is expected to be less than a normal construction project since this Project will not require excessive earthwork activities. Other potential sources of pollutants during construction are mobile internal combustion engines from earthwork equipment and an increase in vehicle traffic by workers. Emissions from these sources should have little impact."

Air Quality During Operation (ERD 6.B.1.b.) stipulates that "the Project, like all solar generation facilities, will generate no air pollution emissions during its operation."

Per the applicant's submittal materials and provided responses related to air quality both during construction and during operation, it is staff's position that impacts, if any, related to fumes will only temporarily occur during the five to six month construction stage of the system's installation. Once construction is complete and the system is operational, it is staff's position that no objectional impacts from fumes will occur. During the operational period, traffic will be limited to occasional maintenance crew visits.

5. Will cause no objectionable impact from dust. As discussed in the ERD §6.B.1.a, the applicant states the project will emit no pollutants and provides findings related to Air Quality During Construction (§ERD 6.B.1.a.) and Air Quality During Operation (§ERD 6.B.1.b.).

Air Quality During Construction (§ERD 6.B.1.a.) stipulates that "the primary air-quality issue during construction will be dust from non-point sources such as earthwork and construction traffic on unpaved roads. This type of dust is described as fugitive dust. Fugitive dust is expected to be less than a normal construction project since this Project will not require excessive earthwork activities. Other potential sources of pollutants during construction are mobile internal combustion engines from earthwork equipment and an increase in vehicle traffic by workers. Emissions from these sources should have little impact."

Air Quality During Operation (ERD 6.B.1.b.) stipulates that "the Project, like all solar generation facilities, will generate no air pollution emissions during its operation."

Per the applicant's submittal materials and provided responses related to air quality both during construction and during operation, it is staff's position that impacts if any related to dust will occur during the five to six month construction stage of the system's installation. Once construction is complete and the system is operational, it is staff's position that no objectional impacts from dust will occur. During the operational period, traffic will be limited to occasional maintenance crew visits.

6. Will cause no objectionable impact from glare. As previously discussed within Use 7.07.200 criteria D. (5), a glare analysis was performed by the applicant as part of the ERD. The proposed Solar Photovoltaic (PV) panels will be buffered and fenced internally within the property boundaries and are specifically constructed of dark materials, with an anti-reflective coating. They are engineered to absorb, not reflect, the sun's rays, in order to generate the desired electricity yields. Therefore, it is staff's position that the proposal of a solar farm will not cause an objectionable impact from glare; however, staff recommends a condition associated with use approval, specifically related to

confirmation of no glare impacts to flight patterns of aircraft to ensure full compliance with this required finding.

- (6) Will provide adequate utilities, water, sewer or septic system, access roads, storm drainage and/or other necessary public facilities and improvements. If a use requires an adequate public facilities review by the Planning Commission, such review shall be made a condition of the granting of the special exception by the Board.

Per the Applicant: As a solar generation facility, the Shugart Valley Place Solar project will require no water, sewer or septic systems. The Project will be required to comply with all State and local stormwater management rules and regulations. Any improvements to the site entrance off of the access road will be constructed with pervious materials.

Staff Finding: Findings have been categorized as follows:

1. Will provide adequate utilities. The proposed use will be required to provide adequate utilities in the form of proposed interconnection facilities. Per page 4 of the Application of MD Solar 1, LLC for a Certificate of Public Convenience and Necessity, dated September 22, 2017, "With respect to the stability and reliability of the electric distribution system, the Applicant initiated a process to interconnect with the SMECO electric distribution grid serving Maryland by filing an Interconnection Request with PJM. See ERD at §5.G-H. The Project will interconnect to the SMECO distribution grid serving Maryland via an overhead line tap at a new 69 kV switching station to be built adjacent to the Grayton-Ripley 69 kV circuit, which is close to the Project. *Id.* Pursuant to Federal Energy Regulatory Commission ("FERC") rules, PJM and SMECO undertake a multi-year, three-part interconnection study process to determine any upgrades that may be necessary to allow a proposed generator to interconnect without causing negative impacts to the stability or reliability of the electric power system. The Applicant has received a Feasibility Study from PJM, and will receive a complete System Impact Study and Facilities Study from PJM prior to construction. As a result of the studies, it is expected that the Project will not negatively impact the system's stability or reliability. The installation of protective breaker equipment will allow remote operators to control circuit breakers, if necessary, as a safety measure. *Id.* PJM's FERC-jurisdictional interconnection review process and operational safety measures will ensure the Project will not have a negative impact on the stability or reliability of SMECO's system." As stated in ERD §2, page 8 of 34, "This interconnection will require several upgrades to the SMECO system as identified in Appendix 1." Appendix 1 is the PJM Generation Interconnection Feasibility Study submitted as part of the special exception application, included for the Board of Appeal's consideration.
2. Will provide adequate water, sewer, or septic system. The proposed solar project requires no water, sewer, or septic system; therefore, these criteria are not applicable to the requested special exception use. There will be no operations and/or maintenance facilities as part of this Project and no full-time personnel located on the premises once operational. Within the ERD, specifically §5.B., page 15 of 34, it is clarified however that there is a limited need for water on-site. The only water use associated with the operation of this solar generation facility will be semi-annual cleansing of the panels, which may take place one (1) or two (2) times a year. Typically, this cleansing utilizes

only water sprayed from tanker trucks at relatively high speeds to remove dirt and dust from the panels.

3. Will provide access roads. Shugart Valley Place is accessed off MD Route 425 (Mason Springs Road), which is designated as a Minor Collector. The County defers to Maryland State Highway Administration (MD-SHA) to determine if improvements are necessary, since they own / maintain MD Route 425.

4. Will provide storm drainage and/or other necessary public facilities and improvements. The proposed use will be required to adhere to the established requirements of the Charles County 3-step stormwater management permitting process. Any and all stormwater management related requirements will be addressed in their entirety by the applicant. Currently, the applicant has submitted a conceptual stormwater management plan for the Shugart Valley project site – VCS #18-0003, which is currently under review with the Division of Codes, Permits & Inspection Services (CPIS).

5. Adequate public facilities review applicability. When the subject property applies for a Site Development Plan (SDP), an adequate public facilities (APF) review per Zoning Ordinance Section 257 will be made. The APF review includes the filing of a Preliminary Adequate Public Facilities (PAPF) Application. A subsequent traffic study is not projected at this time, based upon the description of low traffic generation from the site.

(7) Will provide adequate ingress and egress and be so designed as to minimize traffic congestion in the public streets.

Per the Applicant: Access to the site for ingress and egress to the site will be provided via Shugart Valley Place. Any improvements to Shugart Valley Place will be constructed with pervious materials.

Staff Finding: Adequate ingress and egress appears to be provided through Shugart Valley Place. This access point will be subject to a required State Highway Administration (SHA) entrance permit including any entrance improvements required by SHA. At this time the estimated low traffic generated from this site should not congest traffic on Mason Springs Road (MD Route 425) or Shugart Valley Place.

(8) Is in accordance with the objectives of the Charles County Comprehensive Plan.

Per the Applicant: As previously stated, Maryland has “established one of the most aggressive renewable portfolio standard goals in the country aiming for 25% of its power to be renewable by 2020, including 2.5% from solar sources.” By connecting with the electric distribution system serving Maryland, the Project will contribute towards compliance with the Renewable Portfolio Standard. Consistent with Maryland’s Goal and demonstrating leadership in this area, the recently adopted 2016 Charles County Comprehensive Plan incorporates a new Chapter 6, entitled “Energy Conservation.” As part of its updated Comprehensive Plan, the County adopted Goal and Objective 6.6, to “Grow a green economy with an increased number of jobs in the clean energy and energy efficient sector.” Converting part of this site to a green energy project will implement Goal 6.6. of the Charles County’s Comprehensive Plan by allowing for the creation of construction jobs, increased revenue for

local businesses in the County, in addition to the increased tax revenue associated with the commercial use of the property.

Staff Finding: Consistency with Comprehensive has been determined as follows:

- Community Planning staff has reviewed the subject application for consistency with the objectives of the 2016 Charles County Comprehensive Plan as required under § 297-415(H)(8) of the County Zoning Ordinance. The subject Special Exception use is located partially within an area designated as Rural Conservation District, and partially within an area designated as Watershed Conservation District, in the 2016 Comprehensive Plan.
 - Based on our area of expertise, staff finds that the proposed Special Exception use is in accordance with the objectives of the 2016 Charles County Comprehensive Plan, if the operation complies with the Zoning Ordinance and any conditions imposed by the Board of Appeals, and if required final site plan approvals and permits are obtained by the Applicant.
 - The proposal generally supports the goals and objectives for renewable energy in the 2016 Comprehensive Plan (Chapter 6).
- (9) Conforms to the applicable regulations of the zone in which it is located and to the special requirements established for the specific use.

Per the Applicant: Please see responses above.

Staff Finding: Per the applicant's submittal materials and provided responses, it is staff's position that the proposed special exception use conforms to the applicable regulations of the zone in which it is located, Agricultural Conservation (AC), and to the special requirements established for the specific use -- #7.07.200. Conformity and adherence to the applicable regulations and requirements for this use will, in part, be ensured via the proposed conditions of approval recommended below.

V. Recommendations and Proposed Conditions of Approval

A special exception use is considered compatible with uses permitted by-right within the zoning district, as long as specific criteria are met. Unless unique adverse impacts are identified, the special exception may be approved. The appropriate standard for determining whether the use would create adverse impacts upon surrounding properties is to show that the proposed use at the particular location proposed, would have impacts above and beyond those inherently associated with the special exception use, regardless of its location within the zone. Staff has reviewed the application for a Special Exception for a solar energy systems, large (Use #7.07.200) for the MD Solar 1, LLC – 4850 Shugart Valley Place property and believes the applicant has met its burden of proof and finds that the application is consistent with the Comprehensive Plan and complies with the Zoning Ordinance; therefore, staff recommends approval of Docket #1390 with the following conditions:

1. The Certificate of Public Convenience and Necessity (CPCN) license from the Maryland Public Service Commission (PSC) – Public Utility Law Judge – shall be obtained and a copy of the signed licensing document is to be provided to Charles County prior to approval / issuance of the required Site Development Plan (SDP) application.

2. This project is subject to compliance with the requirements of the Charles County Forest Conservation Ordinance. This may be demonstrated by either submitting a Forest Stand Delineation (FSD) and Forest Conservation Plan (FCP) for approval by the Planning Division prior to approval of a Site Development Plan, Final Development Services Permit or Building Permit; or, by qualifying for an exemption under Section §298-4, Forest Conservation Ordinance. There were 49 specimen trees identified on-site during the Special Exception review. An administrative variance to the Forest Conservation Ordinance is required for any specimen tree proposed for removal, per Section §298-24, Forest Conservation Ordinance.
3. The Applicant shall submit the executed interconnection agreement ("ISA") between the interconnection customer – MD Solar 1, LLC, PJM and SMECO prior to or at time of application for the required building permit(s). Approval of the building permit(s) shall not occur until such time that the ISA is executed and provided to the County.
4. The Applicant shall submit a copy of the signed certificate of grid interconnection completion, or its equivalent received from the electric utility, to Charles County, prior to issuance of the use and occupancy permit for the system.
5. When the Applicant applies for a Site Development Plan (SDP), an adequate public facilities (APF) review, per Zoning Ordinance Section §257 shall be conducted. The APF review includes the filing of a Preliminary Adequate Public Facilities (PAPF) Application.
6. The Applicant shall adhere to the established requirements of the Charles County 3-step stormwater management permitting process, with the Division of Codes, Permits, and Inspection Services (CPIS).
7. The Applicant shall provide a notation on Sheets C-2 and C-7 of the Site Development Plan (SDP) application which is to reference the inclusion of clearing, etc. associated with the connection to the existing SMECO ROW.
8. At time of Site Development Plan (SDP) application, the Applicant shall provide a demonstration of the pollinator habitat implementation strategy, envisioned to promote a healthy ecosystem for honey bees and other pollinators at the project site.
9. The Applicant shall submit a Phase I Archeological Investigation at the Site Development Plan (SDP) application stage. Additional documentation pertaining to the demolition of the existing home and barn on the property may be required at that time.
10. The Applicant shall demonstrate compliance with the established bufferyard regulations, at the Site Development Plan (SDP) application stage, in accordance with Article XXIII of the Charles County Zoning Ordinance. At this time, it is understood that the Applicant has not fully determined whether supplemental plantings are needed based upon the amount of retention of existing vegetation proposed for the bufferyard areas. At time of future SDP application, the required landscaping plan shall depict this level of detail accordingly for review and approval.
11. As part of the Site Development Plan (SDP) application, the Applicant shall provide documentation confirming both Maryland Aviation Administration (MAA) and Federal

Aviation Administration (FAA) glare clearances for the Shugart Valley Place Solar Project, specifically related to a finding of no impact to flight patterns.

12. During both the construction and operation periods, the Applicant shall adhere to the established Noise Control regulations as specified in Chapter 260 of the Charles County Code. During the construction period, the Applicant shall limit the permissible locations of chipping operations, to centrally located areas with the parcel, as to not exceed the 60 dBA daytime standard at the property line. To minimize any potential noise impacts during evenings and weekends, the Applicant shall only allow chipping operations to occur between 7:00 a.m. and 4:00 p.m. Monday through Friday, and 9:00 a.m. to 3:00 p.m. on Saturdays. This construction note specification shall be added to both the Site Development Plan (SDP) application and Development Services (DS) permit plan sets.
13. The Applicant shall obtain and maintain Sediment and Erosion Control Permit(s) from the Charles County Soil Conservation District prior to the commencement of work or construction. Future sediment and erosion control plans required for this project shall meet all applicable requirements of the Charles County Soil Conservation District and the Maryland Department of the Environment.
14. The operation of this Special Exception is contingent upon compliance with all applicable County, State, and Federal regulations, including, but not limited to, the following local regulations: Charles County Zoning Regulations, Grading and Sediment Control Ordinance, Road Ordinance, Stormwater Management Ordinance, Forest Conservation Ordinance, and Floodplain Ordinance.
15. The Board of Appeals for Charles County, Maryland, after proper notice and hearing, may suspend and/or revoke this Special Exception, provided findings by the Board of Appeals that any of the above-stated conditions have not been subject to full compliance by the Applicant, its agents, assignees, or successors in interest.

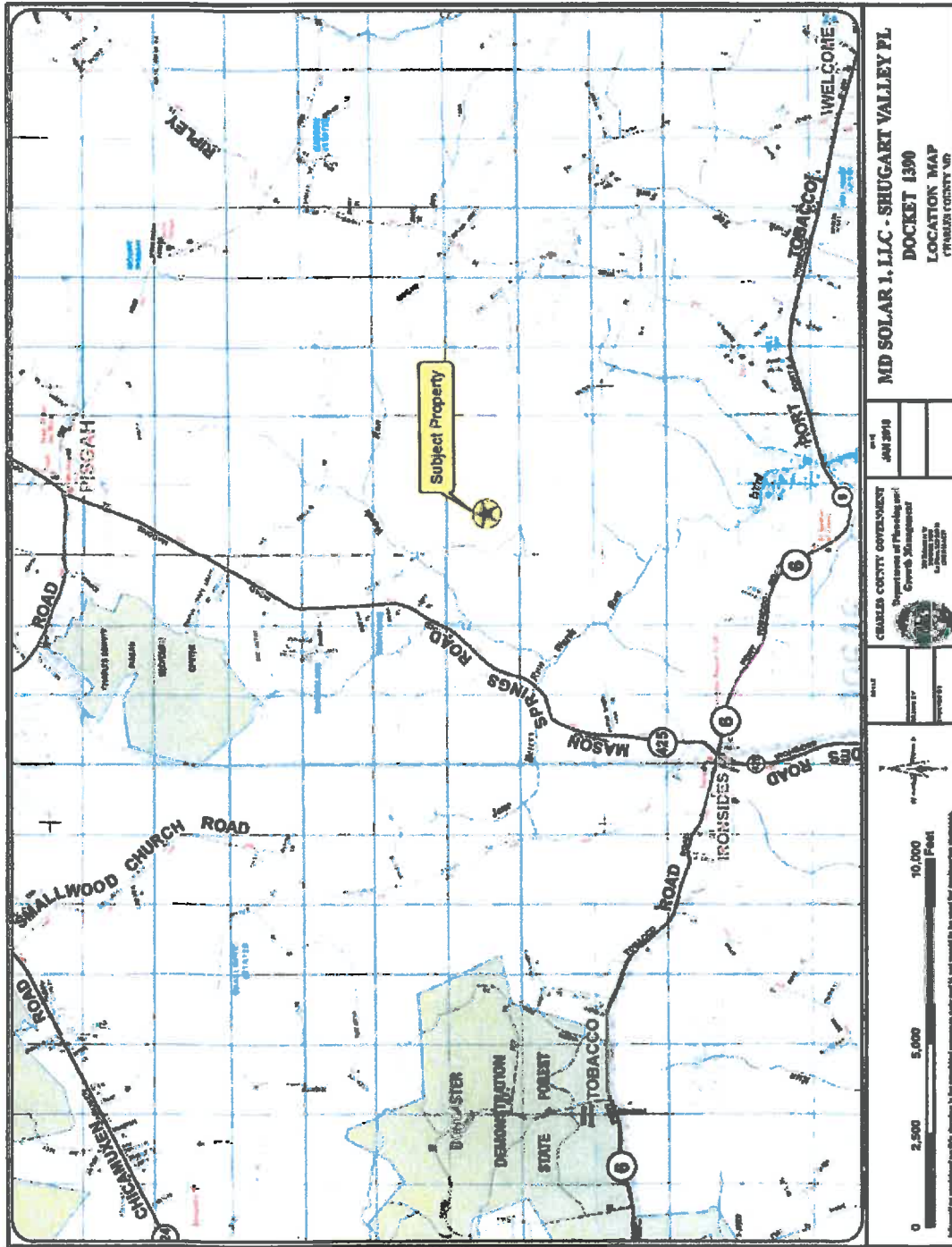
VI. Appendices

The following documents for the project have been provided to the Board of Appeals, and/or uploaded to Board Docs:

1. Docket 1390 Location Map
2. Docket 1390 Zoning Map
3. Docket 1390 Aerial Map
4. Docket 1390 Adjacent Property Map w/ Property Owner and Resident Agent List
5. Staff Report w/ Findings & Proposed Conditions
6. Special Exception Application – Use 7.07.200, Solar Energy Systems, Large
7. Justification Report – October 26, 2017
8. Application for Certificate of Public Convenience and Necessity – September 22, 2017
9. Environmental Review Document (ERD) – Project No. 16009.00 – September 22, 2017
10. Conceptual Site Plan – 02-2018 Resubmission
11. Appendix 1 – PJM Generation Interconnection Feasibility Study
12. Appendix 2 – ECS Forest Stand Delineation
13. Appendix 3 – ECS Forest Conservation Plan
14. Appendix 4 – NRCS Soils Report

15. **Appendix 5 – FEMA Flood Insurance Rate Map**
16. **Appendix 6 – Critical Area Commission Map**
17. **Appendix 7 – ECS Wetlands Report**
18. **Appendix 8 – MDE Wetlands Avoidance Confirmation Memo**
19. **Appendix 9 – Glare Analysis Reports**
20. **Appendix 10 – ECS Preliminary Geotechnical Assessment Report**
21. **Appendix 11 – DNR Wildlife and Heritage Response Letter**
22. **Appendix 12 – Maryland Historical Trust Response**
23. **Cultural Resources Assessment (Archaeological Assessment) – December 15, 2017**
24. **Existing Barn and House Photographs**
25. **Supplemental Justification Report – April 10, 2018**

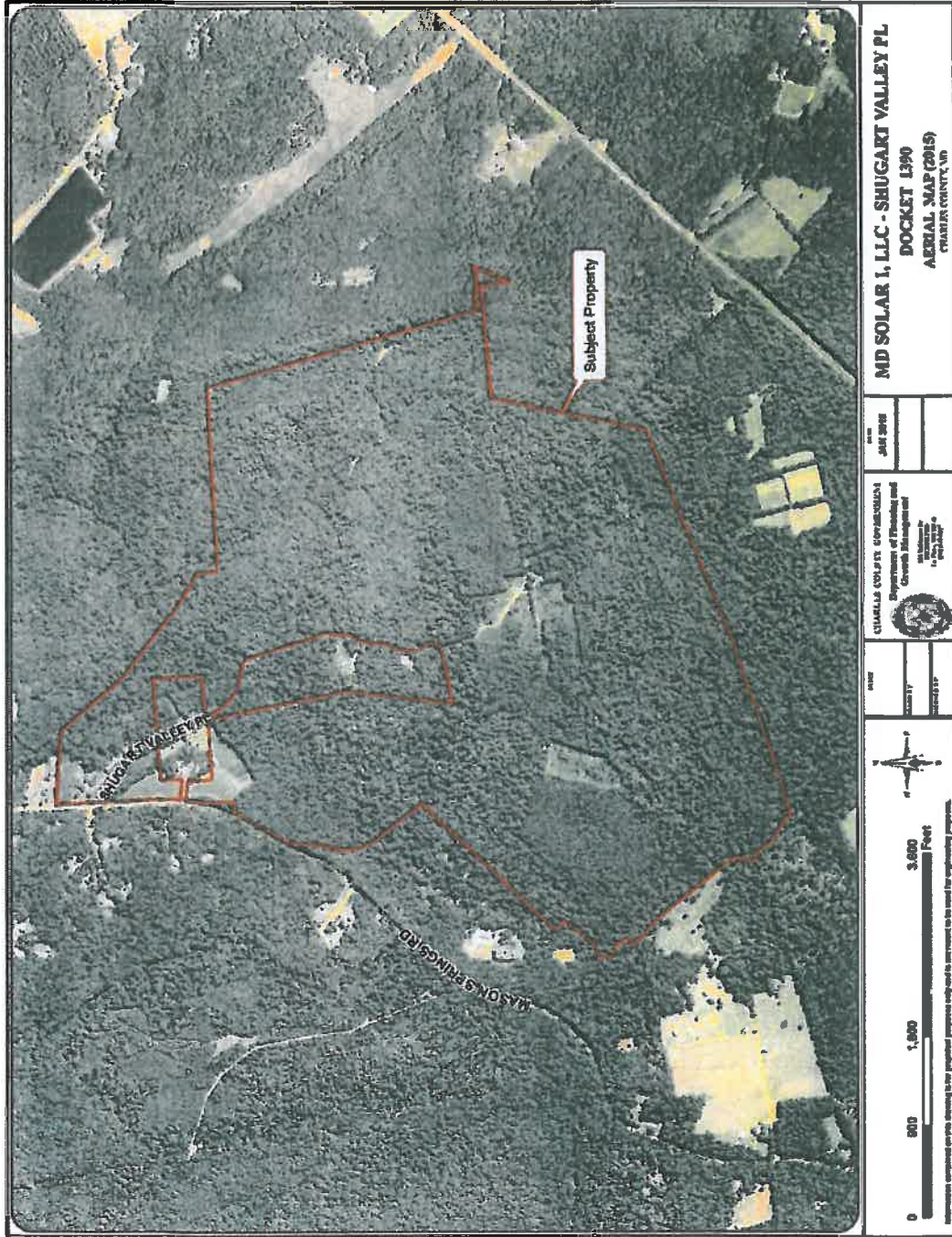
1. Docket 1390 Location Map



<p>CHESAPEAKE COUNTY GOVERNMENT Department of Planning and Growth Management Planning and Growth Management 10000 WELLS ROAD CHESAPEAKE, VA 23041</p>		<p>DATE JAN 2018</p>
<p>SCALE 0 2,500 5,000 10,000 Feet</p>		<p>PROJECT NO. 1390</p>
<p>PROJECT NAME MD SOLAR 1, LLC - SHUGART VALLEY PL</p>		<p>DOCKET NO. 1390</p>
<p>PROJECT LOCATION CHESAPEAKE COUNTY, VA</p>		<p>LOCATION MAP CHESAPEAKE COUNTY, VA</p>

Information contained on this drawing is for general purposes only and is not intended to be used for engineering purposes.

3. Docket 1390 Aerial Map

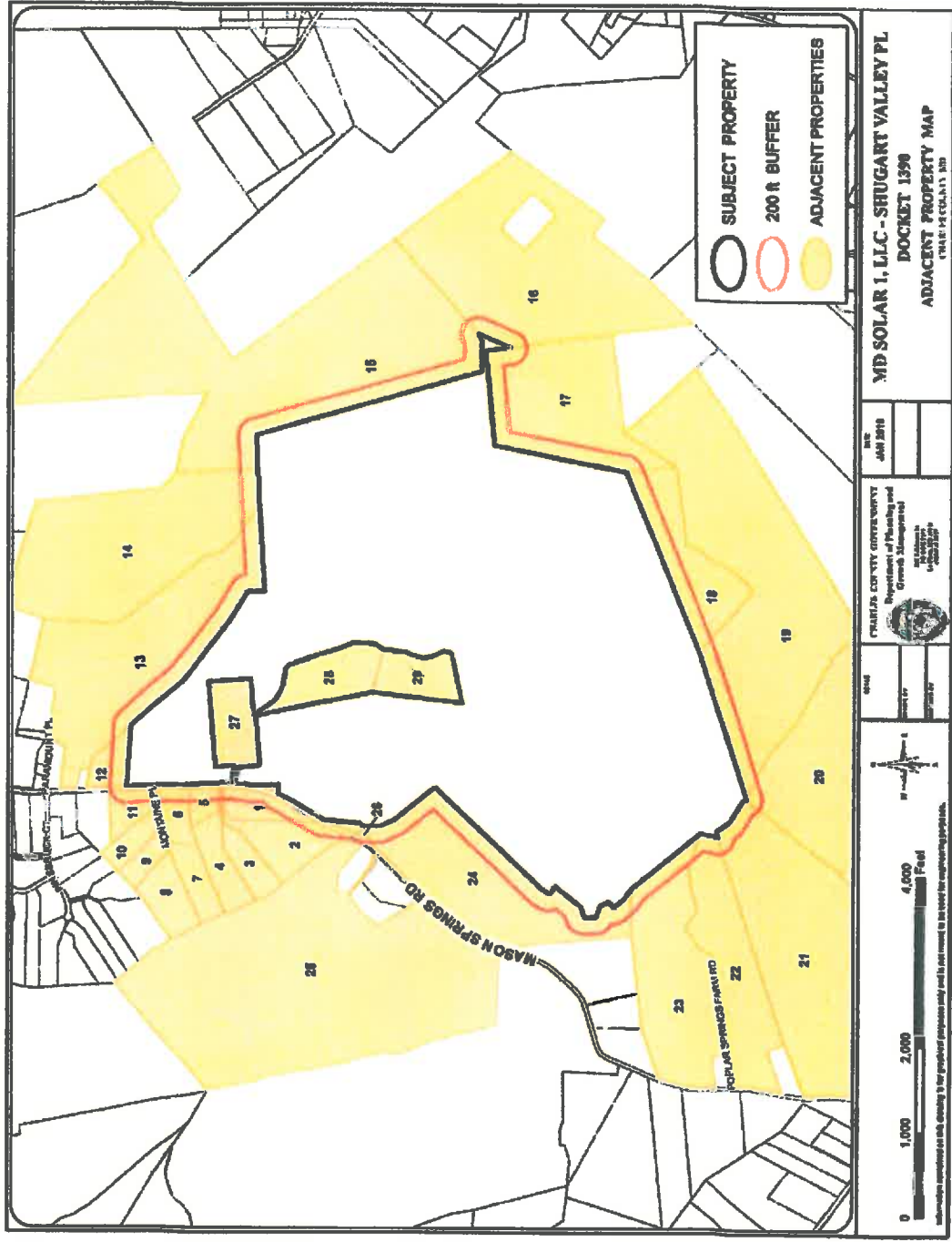


Special Exception #1390

30

May 8, 2018

1. Docket 1390 Adjacent Property Map



May 8, 2018

Special Exception #1390