Attachment K – Wetland Delineation



May 21, 2021

PRELIMINARY JURISDICTIONAL DETERMINATION

Northern Virginia Regulatory Section NAO-2021-00432 (Lower Rappahannock Watershed)

Mr. David Savage – Waller Solar I, LLC C/o Ben Sagara – Timmons Group 1001 Boulders Parkway, Suite 300 Richmond, VA 23225

Dear Mr. Savage:

This letter is in regard to your request for a preliminary jurisdictional determination of the aquatic resources (e.g., wetlands, streams, and ponds) on an approximately 2,799.7-acre site located on property known as "Waller Solar" in Lancaster County, Virginia (Coordinates: 37.803519, -76.506772).

The maps entitled, "Waller Solar, Figure 4: Wetlands and Waters Delineation Map, sheets 1 through 20" by Timmons Group revised on April 22, 2021 and received by the U.S. Army Corps of Engineers (Corps) on April 26, 2021 (copy on file) provides the locations of the aquatic resources on the property referenced above. This letter is not confirming the Cowardin classifications of these aquatic resources.

These aquatic resources exhibit wetland criteria as defined in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region. This site also contains aquatic resources with an ordinary high-water mark.

Please be aware that you may be required to obtain a Corps permit for any discharge of dredged and/or fill material, either temporary or permanent, into a water of the U.S. In addition, you may be required to obtain a Corps permit for certain activities occurring within, under, or over a navigable water of the U.S. subject to the Section 10 of the Rivers and Harbors Act. Furthermore, you may be required to obtain state and local authorizations, including a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ), a permit from the Virginia Marine Resources Commission (VMRC), and/or a permit from your local wetlands board. This preliminary jurisdictional determination and associated aquatic resource delineation map may be submitted with a permit application.

This delineation and preliminary jurisdictional determination may not be valid for the Wetland Conservation Provisions of the Food Security Act of 1985, as amended. Therefore, if you or your tenant are US Department of Agriculture (USDA) program participants, or anticipate participation in USDA programs, you should discuss the applicability of a certified wetland determination with the local USDA service center, prior to starting work.

This is a preliminary jurisdictional determination and is not a legally binding determination regarding whether Corps jurisdiction applies to the aquatic resources in question. To determine Corps' jurisdiction, you may request and obtain an approved jurisdictional determination.

This delineation of aquatic resources can be relied upon for no more than five years from the date of this letter. New information may warrant revision. Enclosed is a copy of the "Preliminary Jurisdictional Determination Form." Please review the document, sign, and return one copy to the Corps, either by email (Nancy.D.Hankins@usace.army.mil) or by standard mail to:

Attn: Nancy P. Davis US Army Corps of Engineers - Norfolk District CENAO-WR-R 803 Front Street Norfolk, VA 23510-1011

If you have any questions, please contact me either by telephone at (757) 201-7044 or by email at <u>Nancy.D.Hankins@usace.army.mil</u>.

Sincerely,

Nancy P. Davis Digitally signed by Nancy P. Davis Date: 2021.05.21 14:36:10-04'00'

Nancy P. Davis Environmental Scientist Norfolk District Regulatory Branch

Enclosures:

cc: Brian Barnes - Lancaster County Jean Bradford – Department of Environmental Quality

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applic	Date: 5/21/2021				
Attach	Attached is:				
	INITIAL PROFFERED PERMIT (Standard Per	mit or Letter of permission)	А		
	PROFFERED PERMIT (Standard Permit or Letter of permission)				
	PERMIT DENIAL	С			
	APPROVED JURISDICTIONAL DETERMINA	D			
Х	X PRELIMINARY JURISDICTIONAL DETERMINATION				
SECTION I - The following identifies your rights and options regarding an administrative appeal of the above					
decisio	decision Additional information may be found at				

http://www.usace.army.mil/Missions/CivilWorks/RegulatoryProgramandPermits/appeals.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- OBJECT: If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- ACCEPT: If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- APPEAL: If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REOUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT
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REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal	If you only have questions regarding the appeal process you may
process you may contact:	also contact:
Nancy P. Davis	Ms. Naomi J. Handell
Regulatory Environmental Scientist	Regulatory Program Manager (CENAD-PD-OR)
U.S. Army Corps of Engineers – Fort Norfolk	U.S. Army Corps of Engineers Fort Hamilton Military Community
803 Front Street, Norfolk, VA 23510	301 General Lee Avenue Brooklyn, New York 11252-6700
Telephone: (757)201-7044	Telephone number: (917) 789-4841
Telephone. (757)201 7044	Naomi.J.Handell@usace.army.mil
RIGHT OF ENTRY: Your signature below grants the right of entr consultants, to conduct investigations of the project site during the	y to Corps of Engineers personnel, and any government course of the appeal process. You will be provided a 15 day

nonce of any site investigation, and will have the opportunity to participate in an site investigations.			
	Date:	Telephone number:	
Signature of appellant or agent.			



May 21, 2021

Supplemental Pre-application Information

Project Number: NAO-2021-00432 Applicant: David Savage (Waller Solar I, LLC) Project Location: Approximately 2,799.7-acre site located on property known as "Waller Solar" in Lancaster County, Virginia (Coordinates: 37.803519, -76.506772).

- 1. A search of the Virginia Department of Historic Resources data conducted via VCRIS and/or CorpsMap revealed the following:
 - □ No known historic properties are located on the subject property.
 - ☑ The following known architectural resources are located on the subject property:

#	DHR ID	Property Names	Address	Historic Name	NR Eligibility
1	051-0048	Levelfields (Historic), The Inn at Levelfields (Current)	State Route 3	No Data	DHR Staff: Eligible
2	051-0081	Lancaster Court House Historic District (Current)	Va Rte. 3 At Lancaster	Lancaster Court House Historic District	NRHP Listing, VLR Listing
3	051-0060	Windsor Farm (Historic/Current)	Route 3	No Data	DHR Staff: Eligible
4	051-0041	Downing House, Judge Samuel (Historic), Edgely (Historic), Edgley and Cemetery (Historic), McKenna House, Susan and Dickson (Historic)	Route 201	No Data	DHR Staff: Eligible
5	051-0081-0013	Chilton House, 8300 Mary Ball Road (Historic/Location)	8300 Mary Ball Road - Alt Route 3	Lancaster Court House Historic District	No Data
6	051-0168	Liberty Square House and Cemetery (Historic)	Beane's Rd 3/4M. East Rt.201	No Data	No Data
7	051-5041	Saratoga (Current)	11545 Mary Ball Road - Alt Route 3	No Data	DHR Staff: Eligible
8	051-5208	House, Courthouse Road (Function/Location)	Courthouse Road	No Data	No Data
9	051-5196	House, 9773 Mary Ball Hwy (Rt 3) (Function/Location), Joe Beane House (Current)	9773 Mary Ball Highway - Alt Route 3	No Data	No Data
10	051-5193	House, Mary Ball Hwy (Rt 3) (Function/Location)	Mary Ball Highway - Alt Route 3	No Data	No Data

11	051-0027	White Marsh Church and Cemetery (Historic/Current), White Marsh United Methodist Church and Cemetery (Historic/Current)	1040 Mary Ball Road, 1040 Mary Ball Washington Highway, Route 3	No Data	DHR Staff: Eligible
12	051-0059	Lebanon Baptist Church and Cemetery (Historic)	Intersection Of Routes 617 And 600	No Data	No Data
13	051-5197	Fairlawn (Historic), House, 9864 Mary Ball Hwy (Rt 3) (Function/Location)	9864 Mary Ball Highway - Alt Route 3	No Data	No Data
14	051-5195	House, Mary Ball Highway (Function/Location)	Mary Ball Highway	No Data	No Data
15	051-5207	House, 10486 Courthouse Road (Function/Location)	10486 Courthouse Road	No Data	No Data
16	051-5199	House, 10279 Mary Ball Hwy (Rt 3) (Function/Location), Norris House (Historic/Current)	10279 Mary Ball Highway - Alt Route 3	No Data	No Data
17	051-5200	House, Mary Ball Hwy (Rt 3) (Function/Location), Lankford-Jett House (Historic/Current)	Mary Ball Highway - Alt Route 3	No Data	No Data
18	051-5049	House, Regina Road (Historic), Wicomico Hunt Club (Current)	Regina Road, Route 604	No Data	No Data
19	051-5194	Bungalow, Mary Ball Hwy (Rt 3) (Function/Location)	Mary Ball Highway - Alt Route 3	No Data	No Data
20	051-0235	Edgely Cemetery (Historic)	Route 201	No Data	No Data
21	051-0051	Melrose (Historic)	854 Pinckardsville Road	No Data	DHR Staff: Eligible
22	051-5021	Commercial Building, 27 Alfonso Road (Function/Location)	27 Alfonso Road, 27 Route 617	No Data	No Data
23	051-5198	House, Mary Ball Highway (Function/Location)	Mary Ball Highway - Alt Route 3	No Data	No Data
24	051-0013	Lancaster County Courthouse (Historic/Current)	Va Rte. 3 Near Junction With Rte. 600	Lancaster Court House Historic District	No Data
25	051-0063	Job Carter's Ordinary (Historic), Lancaster Tavern (Historic)	8373 Mary Ball Highway - Alt Route 3	Lancaster Court House Historic District	No Data

26	051-5189	Gaskins House (Current), House, Mary Ball Hwy (Rt 3) (Function/Location)	Mary Ball Highway - Alt Route 3	No Data	No Data
27	051-5187	Courthouse Apartments (Current), House, Mary Ball Hwy (Rt 3) (Function/Location)	Mary Ball Highway - Alt Route 3	No Data	No Data
28	051-5052	House, 9225 Mary Ball Road (Function/Location)	9225 Mary Ball Road, 9225 Route 3	No Data	No Data
29	051-5067	House, Field Trail Road (Function/Location)	Field Trail Road, Route 602	No Data	No Data
30	051-5051	House, Mary Ball Road (Function/Location)	Mary Ball Road, Route 3	No Data	DHR Staff: Not Eligible
31	051-5022	House, Alfonso Road (Function/Location)	Alfonso Road, Route 617	No Data	No Data
32	051-5191	House, 8964 Mary Ball Highway (Function/Location), O'Daire House (Current)	8964 Mary Ball Highway - Alt Route 3	No Data	No Data
33	051-5188	House, 8871 Mary Ball Hwy (Rt 3) (Function/Location), Oliver House (Historic/Current)	8871 Mary Ball Highway - Alt Route 3	No Data	No Data
34	051-5192	Cape Cod House (Descriptive)	9134 Mary Ball Highway	No Data	No Data
35	051-0032	Trinity Episcopal Church (Historic)	Mary Ball Road, Route 3	Lancaster Court House Historic District	DHR Board Det. Not Eligible
36	051-5190	Ernestine Jett House (Current), House, 8950 Mary Ball Highway (Function/Location)	8950 Mary Ball Highway - Alt Route 3	No Data	No Data
37	051-0070	Christian Science Services (Current), Woman's Club of Lancaster County (Historic/Current)	Mary Ball Place	Lancaster Court House Historic District	No Data
38	051-0061	Cornwell House (Historic), Lancaster House (Historic/Current), Mary Ball Washington Museum (Current)	8346 Mary Ball Road - Alt Route 3	Lancaster Court House Historic District	No Data
39	051-0233	U.S. Post Office and Store, Regina (Historic)	20 Regina Road	No Data	No Data
40	051-0081-0014	House, VA Route 3 (Function/Location)	Va Rte. 3	Lancaster Court House Historic District	No Data
41	051-0012	Lancaster County Jail (Historic), Mary Ball Washington Museum and Library (Current)	8346 Mary Ball Road, Courthouse Green, Route 3	Lancaster Court House Historic District	No Data

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42	051-0081-0011	House, 8394 VA Route 3 (Function/Location)	8394 Va Rte. 3	Lancaster Court House Historic District	No Data
43	051-0081-0022	House, 8471 VA Route 3 (Function/Location)	8471 Va Rte. 3	Lancaster Court House Historic District	No Data
44	051-0081-0009	Courthouse Office Building (Current), Giese Store and Residence (Historic)	8343 Va Rte. 3	Lancaster Court House Historic District	No Data
45	051-0081-0015	House, VA Route 3 (Function/Location)	Va Rte. 3	Lancaster Court House Historic District	No Data
46	051-0052	Kamps and Carters Mill (Historic), Lancaster Roller Mill (Historic)	Route 790 (Kamps Mill Road)	No Data	DHR Staff: Eligible
47	051-0081-0012	House, 8424 VA Route 3 (Function/Location)	8424 Va Rte. 3	Lancaster Court House Historic District	No Data
48	051-0081-0021	House, 8433 VA Route 3 (Function/Location)	8433 Va Rte. 3	Lancaster Court House Historic District	No Data
49	051-0081-0017	House, 8389 VA Route 3 (Function/Location)	8389 Va Rte. 3	Lancaster Court House Historic District	No Data
50	051-0081-0019	House, VA Route 3 (Historic)	Va Rte. 3	Lancaster Court House Historic District	No Data
51	051-0081-0020	House, 8425 VA Route 3 (Function/Location)	8425 Va Rte. 3	Lancaster Court House Historic District	No Data
52	051-0005	Lancaster County Clerk's Office (Historic), Old Clerk's Office (Historic)	Route 3	Lancaster Court House Historic District	No Data
53	051-0081-0016	Mary Ball Washington Museum and Library Annex Building (Current)	Va Rte. 3	Lancaster Court House Historic District	No Data
54	051-0081-0008	Law Offices (Historic), Old Post Office (Historic), Steuart- Blakemore Genealogy Library Building (Current)	Va Rte.3	Lancaster Court House Historic District	No Data
55	051-0081-0018	House, VA Route 3 (Function/Location)	Va Rte. 3	Lancaster Court House Historic District	No Data
56	051-0077	Dunaway Place (Historic)	No Data	No Data	No Data
57	051-5047	House, Route 605 (Function/Location)	Route 605	No Data	No Data
58	051-0082	Shackleford House Site (Historic)	Nw Side Of Route 3 At Brook Vale	No Data	No Data
59	051-0167	Eubank House (Historic), Hopedale (Alleged), Hopevale (Alleged)	Beane's Rd. (Rt.615), East Of Rt. 201	No Data	No Data
60	051-0132	Whip Poor Will Hunt Club (Current)	Beanes Road, Route 615	No Data	No Data
61	051-0092	House, Route 617 (Function/Location)	Route 617	No Data	No Data

62	051-0234	Lively Hunt Club (Historic)	10800 Courthouse Road, 10800 Route 600	No Data	No Data
63	051-0055	Plain View Site (Historic)	No Data	No Data	No Data
64	051-5018	House, 10656 Mary Ball Road (Function/Location)	10656 Mary Ball Road, 10656 Route 3	No Data	No Data
65	051-0054	Oliver House (Historic)	Mary Ball Washington Highway (Route 3)	No Data	No Data
66	051-5023	House, Lara Road (Function/Location)	Lara Road, Route 600	No Data	No Data
67	051-5050	House, Mary Ball Road (Function/Location)	Mary Ball Road, Route 3	No Data	DHR Staff: Not Eligible
68	051-5033	House, 1525 Alfonso Road (Function/Location)	1525 Alfonso Road, 1525 Route 617	No Data	No Data
69	051-5068	School, Field Trail Road (Function/Location)	Field Trail Road, Route 602	No Data	No Data
70	051-0133	Hurst House (Historic)	Route 615	No Data	No Data
71	051-5020	House, White Chapel Road (Function/Location)	Route 201, White Chapel Road	No Data	No Data
72	051-5019	Wake Forest (Historic)	Route 201	No Data	No Data
73	051-5048	House, Route 605 (Function/Location)	Route 605	No Data	No Data
74	051-5046	House, Route 3 (Function/Location)	Route 3	No Data	No Data
75	051-0062	Confederate Soldiers Monument (Historic), Lancaster County Confederate Monument (Historic)	Va Rte. 3	Lancaster Court House Historic District	No Data

#	DHR ID	Site Name	Site Category	Time Period	Restricted
1	44LA0179	Saratoga	Domestic	Antebellum Period (1830 - 1860), Civil War (1861 - 1865), Reconstruction and Growth (1866 - 1916), World War I to World War II (1917 - 1945)	No Data
2	44LA0041	No Data	Domestic	19th Century: 1st half (1800 - 1849)	Restricted: No release
3	44LA0138	No Data	DSS Legacy	19th Century (1800 - 1899), 20th Century (1900 - 1999)	Restricted: No release
4	44LA0176	No Data	DSS Legacy	18th Century: 4th quarter (1775 - 1799), 19th Century (1800 - 1899), 20th Century: 1st quarter (1900 - 1924)	Restricted: No release
5	44LA0113	No Data	Funerary, Religion	No Data	Restricted: No release
6	44LA0067	No Data	Domestic, Funerary	18th Century (1700 - 1799)	Restricted: No release
7	44LA0170	No Data	Domestic	18th Century: 4th quarter (1775 - 1799), 19th Century (1800 - 1899), 20th Century (1900 - 1999)	Restricted: No release
8	44LA0171	No Data	Domestic	18th Century: 4th quarter (1775 - 1799)	Restricted: No release

☑ The following known archaeological resources are located on the subject property:

- □ The following known architectural and archaeological resources are located in the vicinity of the subject property:
- American Battlefield Protection Program (ABPP) consultation may be required.
- \boxtimes Tribal consultation may be required.
- □ Section 408 coordination may be required.

NOTE:

The information above is for planning purposes only. In most cases, the property has not been surveyed for historic resources. Undiscovered historic resources may be located on the subject property or adjacent properties and this supplemental information is not intended to satisfy the Corps' requirements under Section 106 of the National Historic Preservation Act (NHPA).

²⁾ Prospective permittees should be aware that Section 110k of the NHPA (16 U.S.C. 470h-2(k)) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of Section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant.

- 2. A search of U.S. Fish and Wildlife Service's IPaC system revealed the following:
 - □ No known populations of federally listed species are located on the subject property.
 - The following federally listed species may be present on the subject property: Northern Long-eared Bat *Myotis septentrionalis* Small Whorled Pogonia *Isotria medeoloides*

Please note this information is being provided to you based on the preliminary data you submitted to the Corps relative to project boundaries and project plans. Consequently, these findings and recommendations are subject to change if the project scope changes or new information becomes available and the accuracy of the data.



1001 Boulders Parkway Suite 300 Richmond, VA 23225 P 804.200.6500 F 804.560.1016 www.timmons.com

February 12, 2021

Nancy Hankins U.S. Army Corps of Engineers - Norfolk District Northern Section 803 Front Street Norfolk, Virginia 23510

> Re: Jurisdictional Waters of the U.S. Delineation Package Waller Solar (Approx. 2,764.3 acres) Lancaster County, VA

Dear Mrs. Hankins,

Please find the enclosed Jurisdictional Waters of the U.S. Delineation Package for the Waller Solar site. On behalf of Waller Solar I, LLC, Timmons Group is submitting this package to you in order to obtain a preliminary jurisdictional determination confirmation of the delineation performed at the Waller Solar site.

Please review this enclosure and contact Ben Sagara at (804) 200-6567 or <u>ben.sagara@timmons.com</u> so that we may schedule a site visit to review the delineation and confirm the jurisdictional boundary.

Sincerely, Timmons Group

Alanna Burket Environmental Technician

Ben Sagara Environmental Scientist

Enclosure

CC Richard Thomas, Timmons Group

PREPARED FOR: WALLER SOLAR I, LLC 1105 NAVASOTA STREET AUSTIN, TX 78702

WALLER SOLAR JURISDICTIONAL WATERS OF THE U.S. DELINEATION PACKAGE

FEBRUARY 2021



PREPARED BY: TIMMONS GROUP YOUR VISION ACHIEVED THROUGH OURS. 1001 BOULDERS PARKWAY, SUITE 300 RICHMOND, VIRGINIA 23225 PHONE: 804.200.6500 FAX: 804.560.1648 WWW.TIMMONS.COM TIMMONS GROUP PROJECT NO. 38786.008

EXECUTIVE SUMMARY

On behalf of Waller Solar I, LLC, Timmons Group environmental scientists Ben Sagara, Dan Cox, Melissa Davis, Sarah Heath, Ben Crumrine, Morgan Gilbert, Alanna Burket, Greg Kouri, Lindsey Hall, and Kate Hefner conducted a field delineation between February and December, 2020 to identify jurisdictional wetlands and other waters of the U.S. within the project study limits of the Waller Solar site (Site).

The Site encompasses approximately 2,764.3 acres and is located in the north eastern portion of Lancaster County, Virginia (see <u>Figure 1: Vicinity Map</u>). Waller Solar is located within the Coastal Plain Physiographic Providence, within the Lower Rappahannock watershed (HUC 02080104) (see <u>Figure 2: Hydrologic Unit Code Map</u>). The majority of the Site consists of silvicultural and agricultural lands and is bound by forest and agricultural fields (see <u>Figure 3: Environmental Inventory Map</u>).

The Site was delineated based upon the methodology outlined in the 1987 U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual, the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0), and subsequently issued USACE regulatory guidance regarding the identification of jurisdictional stream channels through the recognition of field indicators of an ordinary high water mark within drainage features. Using these methodologies, delineation mapping was produced and is included along with the attached Site description and discussion for your review. During our delineation, approximately 251.45 acres of palustrine forested (PFO) wetlands, 1.84 acres of palustrine scrub-shrub (PSS) wetlands, 6.38 acres of palustrine emergent (PEM) wetlands, and 0.08 acres of palustrine open water (POW) were identified onsite. In addition, 74,373 linear feet of perennial stream (R3), 31,946 linear feet of intermittent stream (R4), and 484 linear feet of ephemeral stream (R6) were identified onsite.

JURISDICTIONAL WATERS OF THE U.S. DELINEATION PACKAGE WALLER SOLAR

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MAPS

Figure 1	Vicinity Map
Figure 2	Hydrologic Unit Code Map
Figure 3	Environmental Inventory Map
Figure 4	Wetlands and Waters of the U.S. Delineation Map

APPENDICES

Appendix A	Field Data Sheets
Appendix B	USACE JD Request Form

1.0 PROJECT INFORMATION SHEET

<u>General</u>

Client Name: State: County:	Waller Solar Virginia Lancaster
Latitude: Longitude:	37.803519° -76.506772°
Subject Property Size:	+/- 2,764.3 acres
HUC Code:	02080104 (Lower Rappahannock Watershed)
Waterbodies (TNW):	Lancaster Creek, Callahan Swamp, McMahon Swamp, Bellwood Swamp, Balls Branch
Corresponding Information	
USGS Quad:	Lancaster and Lively, 2016
USDA Soils Map:	http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm Lancaster, VA
Owner/Applicant	
Name:	Waller Solar I, LLC
Address:	1105 Navasota Street Austin, TX 78702
Contact:	David Savage
<u>Consultant</u>	
Name:	Timmons Group
Address:	1001 Boulders Parkway, Suite 300 Richmond, VA 23225
Telephone:	(804) 200-6500
Contacts:	Ben Sagara: (804) 200-6567; <u>ben.sagara@timmons.com</u>

2.0 INTRODUCTION

On behalf of Waller Solar I, LLC, Timmons Group environmental scientists Ben Sagara, Dan Cox, Melissa Davis, Sarah Heath, Ben Crumrine, Morgan Gilbert, Alanna Burket, Greg Kouri, Lindsey Hall, and Kate Hefner conducted a field delineation between February and December, 2020 to identify jurisdictional wetlands and other waters of the U.S. within the project study limits of the Waller Solar site (Site).

3.0 SITE INFORMATION

3.1 Site Location

Waller Solar is located in the north eastern portion of Lancaster County, Virginia, adjacent to Route 3 (see <u>Figure 1: Vicinity Map</u>). The Site can be accessed from several unnamed two-track roads off of Alfonso Road, Lara Road, Courthouse Road, Mary Ball Road, Field Trial Road, Miskimon road, and Giese road. The Site housed within the Coastal Plain Physiographic Province, within the Lower Rappahannock watershed (HUC 02080104) (see <u>Figure 2: Hydrologic Unit Code Map</u>).

3.2 Site Description

Waller Solar encompasses approximately 2,764.3 acres and consists primarily of silvicultural and agricultural lands. Many sections of the Site have been clear-cut within the last five years. The Site is bound by forest and agricultural fields on all sides. Several parcels are housed within the Site, creating three larger tracts of land connected by proposed easements (see Figure 3: Environmental Inventory Map).

4.0 METHODS OF DELINEATION

4.1 Preliminary Offsite Investigation/Data Review

A review of publicly available resources was performed prior to the on-site field investigation in order to determine the extent of onsite jurisdictional areas located within the project limits. These mapping resources generally include but are not limited to the United States Geological Survey (USGS) topographic maps, USGS National Hydrography Dataset (NHD), the U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) soils database, and the U.S. Fish & Wildlife Service National Wetlands Inventory (NWI) database.

4.2 Field Investigation

The Site was delineated based upon the methodology outlined in the 1987 U.S. Army Corps of Engineers Wetland Delineation Manual, the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region (Version 2.0), and subsequently issued USACE regulatory guidance regarding the identification of jurisdictional stream channels through the recognition of field indicators of an ordinary high water mark within drainage features. The wetland boundary was flagged with consecutively numbered pink and black ribbon at approximately 50 ft intervals. Field data stations were established in representative upland areas and within close proximity to the flagged wetland boundary in order to document upland and wetland conditions existing along the jurisdictional boundary. Field data stations were labeled and marked with blue flagging in the field. Features identified in the field were located using sub-meter Bluetooth GPS technology. Photographs were taken of the field data stations to depict existing site conditions along the delineation boundary. Field data sheets are included in <u>Appendix A</u>. Site photographs collected during the field delineation are available upon request.

5.0 DELINEATION FINDINGS

5.1 Preliminary Offsite Investigation/Data Review Findings

The USGS map depicts Lancaster Creek running along the northern border of the northwestern parcel. McMahon Swamp begins in the northern section of the eastern parcel, crosses the parcel, and flows south along the parcel's western border until it flows offsite at the southern boundary. Callahan Swamp is an offsite tributary that converges with McMahon Swamp along the western boundary of the eastern parcel. The headwaters of Bellwood Swamp begin within the southwestern parcel and flows south. Tributaries of Ball's Branch cross the western easement. USGS mapping shows the Site has topographic highs at 100 feet above mean sea level across the broad coastal ridgetops and topographic lows at approximately 10 feet above mean sea level within onsite swamps (see Figure 1: Vicinity Map).

The NRCS soils map shows that the majority of the Site is dominated by eleven soil series: Beltsville very fine sandy loam, Bibb and Levy soils, Caroline very fine sandy loam, Kempsville fine sandy loam, Mattapex silt loam, mixed alluvial land, Rumford loamy sand, Sassafras fine sandy loam, sloping sandy land, steep sandy land, and Woodstown fine sandy loam. Of these, only two, Bibb and Levy and mixed alluvial land, are classified as hydric in Lancaster County. They are both described by NRCS as being frequently flooded and poorly drained. These soil series occur within the swamp systems located across the Site. NWI mapping depict freshwater ponds, some freshwater emergent wetlands, and freshwater forested/shrub wetlands associated with the onsite swamp systems (see Figure 3: Environmental Inventory Map).

5.2 Onsite Determination/Finding

5.2.1 Jurisdictional Area Summary

The onsite delineation verified the presence of wetlands and hydric soils depicted on the NWI and Soil Survey mapping and determined the wetland systems to be more extensive than mapped. A summary of the jurisdictional areas identified onsite is provided below in <u>Table 1</u>: <u>Jurisdictional Areas Summary</u>. The location and size of jurisdictional areas delineated onsite are shown on <u>Figure 4</u>: Wetlands and Waters of the U.S. Delineation Map.

Table 1: Jurisdictional Area Summary

Area Description	Area Size (acres)	PFO (acres)	PSS (acres)	PEM (acres)	POW (acres)	R3 Streams (If)	R4 Streams (If)	R6 Streams (If)
Waller Solar	2,764.3	254.45	1.84	6.38	0.08	74,373	31,946	484
 Notes: 1) PFO = palustrine forested wetlands, PSS = palustrine scrub-shrub wetlands, PEM = palustrine emergent wetlands, POW = palustrine open water, R3 = upper perennial streams, R4 = intermittent streams, R6 = ephemeral streams, and If = linear feet. 2) Jurisdictional area acreages are preliminary based on field delineation and have not been confirmed or surveyed. 								

5.2.1.1 Jurisdictional Area Vegetation

A wide spectrum vegetative community within onsite wetlands was observed throughout the Site. The following description primarily refers to areas along the jurisdictional boundary where field data stations were established. The tree stratum is generally dominated by river birch (*Betula nigra*), loblolly pine (*Pinus taeda*), red maple (*Acer rubrum*), and sweetgum (*Liquidambar styraciflua*). The sapling stratum, where present, is dominated by ironwood (*Carpinus caroliniana*), American holly (*Ilex opaca*), sweetgum, and red maple. The shrub stratum, where present, is dominated by American holly, ironwood, and loblolly pine. The herb stratum is generally dominated by netted chain fern (*Woodwardia areolata*), sedges (*Carex spp.*), and (*Juncus effusus*). The vine stratum, where present, is dominated by greenbrier, grape vine (*Vitis rotundifolia*), and Japanese honeysuckle (*Lonicera japonica*).

5.2.1.2 Jurisdictional Area Hydrology

Primary hydrology indicators observed in the jurisdictional areas included Surface Water (A1), High Water Table (A2), Saturation (A3), Drift Deposits (B3), Iron Deposits (B5), Water-Stained Leaves (B9), Oxidized Rhizospheres on Living Roots (C3), and Thin Muck Surface (C7). Secondary hydrology indicators observed in the jurisdictional areas included Drainage Patterns (B10), Crayfish Burrows (C8), Geomorphic Position (D2), and FAC-Neutral Test (D5).

5.2.1.3 Jurisdictional Area Soils

Many of the soils within the wetland areas onsite exhibit low chroma matrix colors and redoximorphic concentrations that are characteristic of reducing anaerobic conditions associated with the formation of hydric soils, or were heavy in organics and contain thick, low value and low chroma matrix colors. Wetland soils are generally black (10YR 2/1) or very dark brown (10YR 2/2) to very pale brown (10YR 7/2). Redox concentrations greater than 5% were often observed between 0 and 24 inches below the soil surface and were typically pale brown (2.5Y 7/3), olive yellow (2.5Y 6/6), or reddish yellow (7.5YR 6/8) to pinkish grey (7.5YR 6/2). Gleyed soils were also present in some areas, typically greenish grey (5G 5/1) or very dark grayish olive (5GY 3/2) to light olive green (10GY 5/4).

Jurisdictional area soils met one, or a combination of, the Organic Bodies (A6), 5 cm Mucky Mineral (A7), Depleted Below Dark Surface (A11), Thick Dark Surface (A12), Sandy Redox (S5), Stripped Matrix (S6), Dark Surface (S7), Loamy Gleyed Matrix (F2), Depleted Matrix (F3), Depleted Dark Surface (F6), or Umbric Surface (F13) hydric soil indicators. Soil textures included many types of sand, loam, and clay soils, as well as mucky mineral. Field Data Sheets are included in <u>Appendix A</u> and provide additional detail regarding the representative soils within wetlands.

5.3.1 Upland Area Summary

During the field, approximately 2,504.56 acres of non-jurisdictional area was identified onsite. The majority of the upland areas located within the subject property are characterized by planted pine or mixed pine-hardwoods, recently clear-cut lands, and agricultural lands (see Figure 3: Environmental Inventory Map). Upland soils were typically contained black (10YR 2/1) to yellowish brown (10YR 5/4) A horizon underlain by very pale brown (10YR 7/3) to olive yellow (2.5Y 6/6) B horizon. Soil textures included many types of sandy and loamy soils. The mapped soils present within the Site are depicted on Figure 3: Environmental Inventory Map. Primary indicators of wetland hydrology observed within the upland areas include Saturation (A3), likely due to recent precipitation events. Secondary wetland hydrology indicators observed included Drainage Patterns (B10), Geomorphic Position (D2), and FAC-Neutral Test (D5). The location and size of upland areas delineated onsite are shown on Figure 4: Wetlands and Waters of the U.S. Delineation Map.

6.0 REFERENCES

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MAPS

Path: Y:\804\38786-Open Road\38786.008-Waller_Solar\GIS\38786.008-JD-VIC.mxd





	Lower Rappahannock Soils	T 6B 5B 22 15E 16D 16D 19A 19B 5B
Mapunit Symbol	Mapunit Name	
13 14B	Rappahannock muck	
15E	Rumford soils, 15 to 50 percent slopes	
16D	Rumford and Tetotum soils, 6 to 15 percent slopes	
17A 17E	Rumford soils, 15 to 50 percent slopes	
18B	State fine sandy loam, 2 to 6 percent slopes	SaC2
18D	Rumford and Tetotum soils, 6 to 15 percent slopes	
19A	Suffolk sandy loam, 2 to 6 percent slopes	SaB SaC2 SfB
2	Bibb and Levy soils	SfB
20A 20B	Tetotum fine sandy loam, 0 to 2 percent slopes	
21B	Suffolk sandy loam, 2 to 6 percent slopes	KeA SSD Sace
1 <u>3</u> 3B	Bohicket silty clay loam	Sac2 Sac2 Ste
4B	Dogue fine sandy loam, 2 to 6 percent slopes	D STB SSD SSD
5B	Emporia loam, 2 to 6 percent slopes	KeA
6B 7	Kempsville sandy loam, 2 to 6 percent slopes	
BeA	Beltsville very fine sandy loam, nearly level	
BeB2	Beltsville very fine sandy loam, gently sloping Beltsville very fine sandy loam, gently sloping, eroded	
BeB2	Bertie silt loam	SED SED SED SED REE BEE2
Bt	Bladen silt loam	
CaC3 CaD3	Caroline clay loam, sloping, severely eroded Caroline clay loam, strongly sloping, severely eroded	
CfB2	Caroline very fine sandy loam, gently sloping, eroded	
CfC2	Caroline very fine sandy loam, sloping, eroded	SSD SSD SFB
CrD3	Craven clay loam, strongly sloping, severely eroded	SSD
CsA	Craven silt loam, nearly level	StE SfB
CsB2 CsC2	Craven silt loam, gently sloping, eroded Craven silt loam, sloping, eroded	Mx CfC2 SSD RUB
Dr	Dragston fine sandy loam	SSD
Ek Ea	Elkton silt loam	CfB2
KeA	Kempsville fine sandy loam, nearly level	Sac2 SsD SsD RcB
KeB	Kempsville fine sandy loam, gently sloping	D SSD Sac2 SfB CfB2
KeB2 KeC2	Kempsville fine sandy loam, gently sloping, eroded	STB SaB
KeC3	Kempsville fine sandy loam, sloping, severely eroded	SaB Sab
LaB	Lakeland loamy fine sand, gently sloping	SSD BEE2 SSD SSD
Le	Local alluvial land	Wo KeB BeB2 STB RtB
MaA	Matapeake silt loam, nearly level	STB STB KOB KOB
MaB MaB2	Matapeake silt loam, gently sloping Matapeake silt loam, gently sloping, eroded	SIB SIB
MaC2	Matapeake silt loam, sloping eroded	SfB SfB
MaD2	Matapeake silt loam, strongly sloping, eroded	SaC3
Mx	Mixed alluvial land	SSD SSD
Ot	Othello silt loam	RUD CONTRACTOR
RtB RuB	Rumford loamy sand, thick surface, gently sloping	Saca SfB
RuC2	Rumford loamy sand, sloping, eroded	SiB SiB SiB SiB
SaA SaB	Sassafras fine sandy loam, nearly level	SSD STR
Sab SaB2	Sassafras fine sandy loam, gently sloping, eroded	B SaC2 SaB2
SaC2	Sassafras fine sandy loam, sloping, eroded	SaB SaB SaB
SaC3 SaD2	Sassafras fine sandy loam, sloping, severely eroded Sassafras fine sandy loam, strongly sloping, eroded	Sac2 Br Sac2
SaD3	Sassafras fine sandy loam, strongly sloping, severely erod	
SfA SfB	Sassafras loamy fine sand, thick surface, nearly level	
SsD	Sloping sandy land	SaB2 Wo Notanti de la raciona de
StE	Steep sandy land	KeB SaA SaC3 KeB Lo
To	Tidal marsh, high	Sacz edg
W	Water	STA SAA SAA
Wo	Woodstown fine sandy loam	
Dr	Sans 10	Sab Sab Sac
	Sabs Sab SsD	SaB SaC2
Wo	Br SaB SaC2 KeB	SaB SaB SaB
Fa		
SIB Wo	KeB SSD K	
STR		
	MA MA REAL KOB SEB KOB2 St	SD SEB KEB2 SEB ME SSD ME CEX SEB
SfA Ss	D CALLER KAB COL KAB	
SfB SfB	NUMER IN PROPERTY RUB	Cadd KeA Real Saca
Ste To SfA		SSD SSD SSD Sale SSD Sale
	Mt Deb2/ SSL	
Legend		Sace Ste Sace
		MX W SaC2 SsD
F	Project Study Limits- 2.764.3 Acres	CaD3 SaB
*· ••••••••••••••••••••••••••••••••••••		CaC3 BeA KeB BeA
N	Vational Hydrography Dataset	B2 GfB2 GfC2 SaB SaB
		GEB CED3 CED3 SEB BEA KEA SEB
Hydric Soi		
F	Hydric	Ste Ste Caus CiB2 KeB Ste Ste
		SaB StE CaD3 SaC2
	Non Hydric	SSD SaB SaB SSD SaB
		VO R SEB SAA SAB SEB WO SED WO SAC
USA USUZ		

SaB SSD SsD SaB SaG2 KeB SaB KeB SsD SSD SaB SSD CfB2 SaB SSD SaB **SD**



