



WSP
100 Apollo Drive, Suite 302
Chelmsford, MA 01824
United States
T +1 978-692-9090
wsp.com

2025-09-19
Reference: US-EI-3652230438

Town of Worthington, Massachusetts
Planning Board
PO Box 247
Worthington, MA 01098

Application for Special Permit

On behalf of BWC Wades Stream, LLC, (Applicant/BlueWave), WSP USA Inc. is pleased to submit this Special Permit Application to the Worthington Town Planning Board for a proposed Large-Scale Ground Mounted Solar Photovoltaic Installation (LSGMSPI) (the Project). The completed Special Permit Application form is included as Attachment A, and all information requirements are provided in this letter and its attachments. Please find the certified abutter's list included with the Special Permit Application form in Attachment A. The petition filing fee will accompany this application from the Applicant under separate cover.

The Project is located at 190 Ridge Road, Worthington, Massachusetts in Hampshire County (the Site). Plans showing the existing and proposed Site conditions are included as Attachment B. The full legal description of the premises is included as Attachment C. The most recent deed for the property was filed on December 30, 2004, and can be found in the Hampshire County Registry of Deeds, book 8119 page 223. The assessor's map showing the Site lot number can be found in Attachment D.

The Project includes the installation of approximately 7,462 ground-mounted PV modules and will generate approximately 3.95-megawatts (MW) direct current (DC) and 2.00 MW alternating current (AC). The Project is considered a Large-Scale Ground Mounted Solar Photovoltaic Installation (LSGMSPI) per the Town of Worthington Protective Zoning By-laws (the By-laws). The Project has been designed to comply with all applicable local zoning and environmental regulations.

The proposed use may fall under a commercial or industrial classification due to the system's size and commercial power generation. Additionally, a portion of the northwest corner of the Site lies within the Town's designated Aquifer Protection Area. Per the By-laws, commercial and industrial development in this area requires a Special Permit. Considering these factors, the Applicant is submitting this request for a Special Permit to ensure the Project complies with the By-laws. Relevant requirements for development within the Aquifer Protection Area, as detailed in the By-laws section 9.2.7, are addressed in the Stormwater Report submitted with the Site Plan Review application.

This Special Permit Application is being submitted concurrently with the Site Plan Review (SPR) Application. Please refer to the SPR Application for detailed information regarding site layout, equipment specifications, environmental considerations, stormwater design, and applicant and property owner contact information. The materials submitted as part of that application are intended to serve both review processes.



Yours sincerely,

WSP USA Inc.

A handwritten signature in black ink, appearing to read 'Olivia Crosby'.

Olivia Crosby, PE
Lead Consultant, Civil Engineer

CC: BWC Wades Stream, LLC

Town of Worthington Zoning Board of Appeals

Attachments: A – Special Permit Application Form & Abutter's List

B – Issued for Permitting Plan Set

C – Legal Description of Premises

D – Assessor's Map

wsp





Attachment A - Special Permit Application Form & Abutters List



TOWN OF WORTHINGTON

P.O. Box 247 • Worthington, MA 01098 • 413 238-5577 • FAX 413 238-5579

Petitions To The Zoning Board of Appeals For Variances, Special Permits and Appeals

Petitions to the Board shall be on this accompanying form and additional pages attached for other information required.

This petition requires:

1. The name and address of the petitioning party.
2. The name of the owner and addresses of the owner of the property which is the subject matter of the petition [if not the same as the petitioning party].
3. A list of the names and addresses of all the owners of property within a distance of three hundred (300) feet of any boundary of the premises affected as they appear on the most recent tax list.
4. A sketch or plan of the affected premises showing the location, dimensions, and area of the lot, all existing and proposed structures/ additions, and distance from the boundary lines of all structures/ additions erected and to be erected on the lot. The Board of Appeals may require a copy of that portion of the building plans that show the height and other dimensions of any proposed structures/ additions, as well as any exterior lighting, grade alterations, drainage, parking areas, landscaping, or other improvements/ alterations that may affect abutting properties. The Board may further require a full or partial survey plan of the property when, in its opinion, boundary lines and/ or setbacks cannot be reliably determined by a sketch.
5. The application shall also be accompanied by a legal description of said premises (taken from the deed or mortgage).
6. Registry of deeds recording information for most recent deed to the premises – book, page, and date of recording.
7. A copy of that portion of the current assessors map showing the property and that of all abutters required to receive notice (see item 3, above).
8. Each petition shall be accompanied by a filing fee of 50 dollars.

This petition must be filled out in ink or typewritten, filed with the Town Clerk (original and four copies), and accompanied by the plans and documents referred to above.

TOWN OF WORTHINGTON, MASSACHUSETTS

BOARD OF APPEALS

PETITION TO BOARD OF APPEALS

Petitioner(s) BWC Wades Stream, LLC Address 190 Ridge Road, Worthington
Massachusetts

The petitioner is the (owner, lessee, tenant) in possession, has a written contract to purchase or lease the premises affected by this petition. (Cross out inapplicable words, not applicable to petitions for review). If petitioner is not owner please list owner and address.

Petition is hereby made for a { Permit under the provisions
~~Variation from the requirements of~~
~~Review of a decision of the Building Inspector under~~

Section 9.2.6 paragraph A.1 of Worthington By-Laws.

The Premises affected are situated on the North South East West X side of
Ridge Rd Street, 0 feet distant from the corner of Buffington Hill Rd Street
and are known as No 190 Ridge Rd Street.

DESCRIPTION OF PROPOSED/ EXISTING BUILDING

1. Size of building Not applicable. front Not applicable. feet deep.

Height Not applicable. stories: NA feet

2. Occupancy or use: (of each floor) Not applicable.

4. Date of erection (only if already existing) Not applicable.

5. Has there been a previous petition concerning the affected premises? To the applicant's knowledge, no prior ZBA petitions have been filed for this property.

6. Description of proposed work and/or use:

The Project includes the installation of approximately 7,462 ground-mounted PV modules and will generate approximately 3.95-
megawatts (MW) direct current (DC) and 2.00 MW alternating current (AC). The Project is considered a Large-Scale Ground
Mounted Solar Photovoltaic Installation (LSGMSPI) per the Town of Worthington Protective Zoning By-laws (the By-laws).

The system includes solar panels, inverters, racking, battery storage, interconnection infrastructure, fencing, and other site im-
provements. Further technical and design details, including site plans, equipment specifications and stormwater design are pro-
vided in the Site Plan Review application submitted concurrently with this Special Permit application.

7. The reasons upon which I base my petition are as follows:

The scale and nature of this project may place it within the commercial or industrial use category
under the zoning by-laws. Given this classification and the Project's partial location within the
Town's designated Wellhead Protection Area, the Applicant is seeking Special Permit approval
to ensure compliance with all applicable zoning requirements and environmental protections.

09/22/25

Date

Aslan Simin

Signature of owner or agent


Compiled BW Ridge Rd Special Permit Application 2025.09.19

Final Audit Report

2025-09-22

Created:	2025-09-22
By:	Brie Fortmuller (brie.fortmuller@bluewavesolar.com)
Status:	Signed
Transaction ID:	CBJCHBCAABAAxIOb3t25jJFf-Ie6UAJUudQgl_BPJw7a

"Compiled BW Ridge Rd Special Permit Application 2025.09.19" History

-  Document created by Brie Fortmuller (brie.fortmuller@bluewavesolar.com)
2025-09-22 - 3:20:13 PM GMT
-  Document emailed to Aaron Simms (asimms@bluewavesolar.com) for signature
2025-09-22 - 3:20:47 PM GMT
-  Email viewed by Aaron Simms (asimms@bluewavesolar.com)
2025-09-22 - 3:25:19 PM GMT
-  Document e-signed by Aaron Simms (asimms@bluewavesolar.com)
Signature Date: 2025-09-22 - 3:25:59 PM GMT - Time Source: server
-  Agreement completed.
2025-09-22 - 3:25:59 PM GMT



TOWN OF WORTHINGTON

P.O. Box 135 • Worthington, MA 01098 • (413) 238-5577x104 • FAX (413) 238-5579

assessors@worthington-ma.us

BOARD OF ASSESSORS

300 feet ABUTTERS' LIST Report

Subject Property: 190 Ridge Road – 407 0 28

[also own 407 0 27.1]

**Sena, Timothy J
Rude-Sena, Catherine
PO Box 132
Worthington, MA 01098**

Abutters:	Record Owners	Mailing Address
407 0 134.1	Worthington Golf Links, LLC [also own 407 0 26]	PO Box 207 Worthington, MA 01098
407 0 146	Lagoy, Matthew J & Ann M [also own 407 0 29]	140 Buffington Hill Road Worthington, MA 01098
407 0 147	Marich, Michael J & Kiersten C	99 Green Hill Road Washington, CT 06793
407 0 26.2	95 Dalton Avenue Nominee Trust Jeffrey Lynch, Trustee	PO Box 1787 Pittsfield, MA 01202
407 0 27	Commonwealth of MA Division of Fisheries & Wildlife	251 Causeway Street Ste 400 Boston, MA 02114-2152
407 0 32	Norman & Cynthia Tebo Living Trust Norman W. Tebo, Trustee	PO Box 118 Worthington, MA 01098
407 0 33	Sena, Paul A. & Judith A [also own Lots 35 & 39]	PO Box 272 Worthington, MA 01098
407 0 34	Muller, Karin I	141 Buffington Hill Road Worthington, MA 01098

September 17, 2025

Prepared by: *Jean Boudreau*
Jean Boudreau, Assessor

Attached please find copy of Assessors Map.

Attachment B – Issued for Permitting Plan Set

PROPRIETARY INFORMATION: THIS DRAWING IS THE PROPERTY OF WSP USA INC. AND IS NOT TO BE LOANED OR REPRODUCED IN ANY WAY WITHOUT THE PERMISSION OF WSP USA INC.

BWC WADES STREAM, LLC

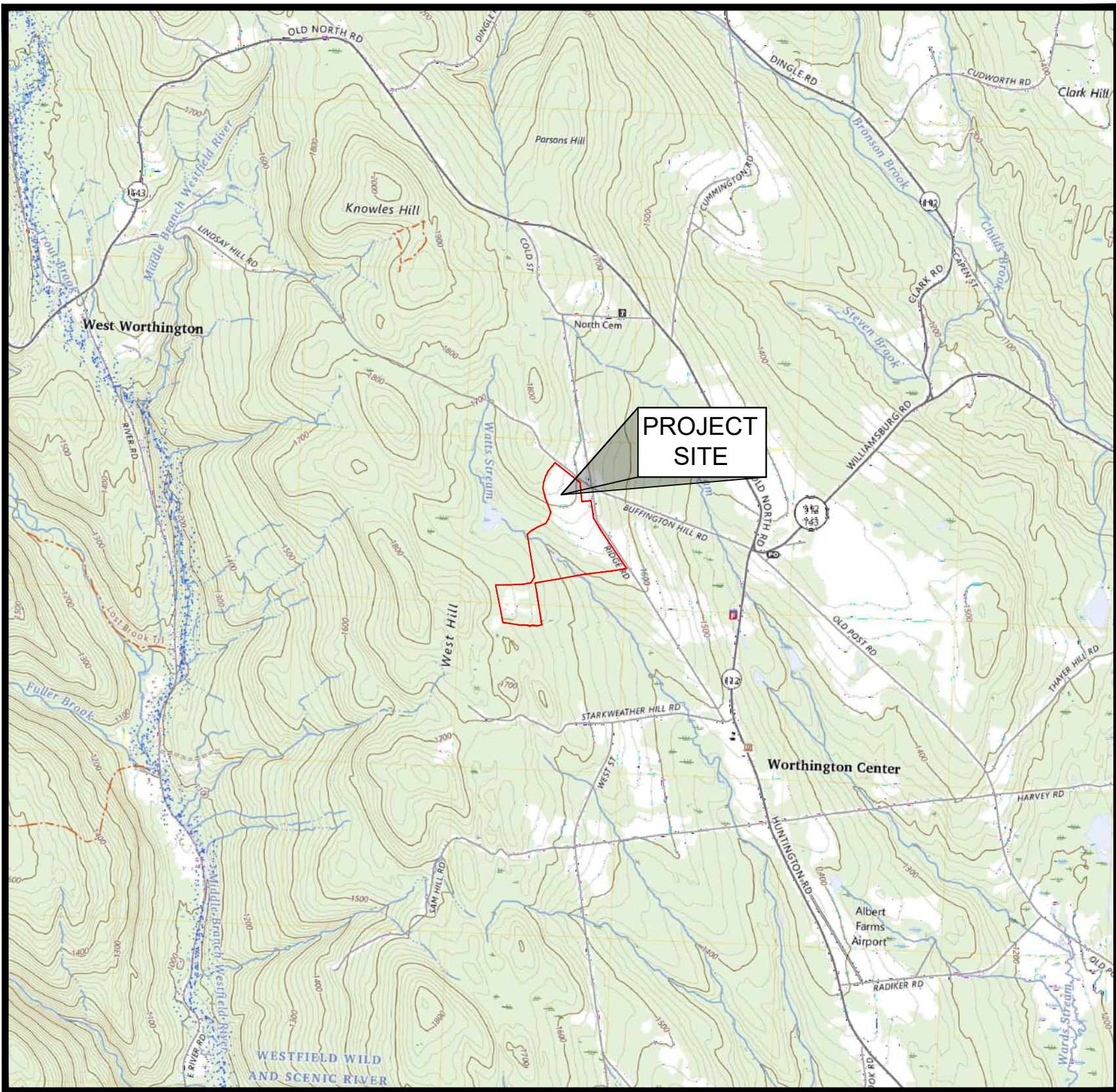
2.0 MW AC GROUND-MOUNT SOLAR PV DEVELOPMENT

190 RIDGE ROAD

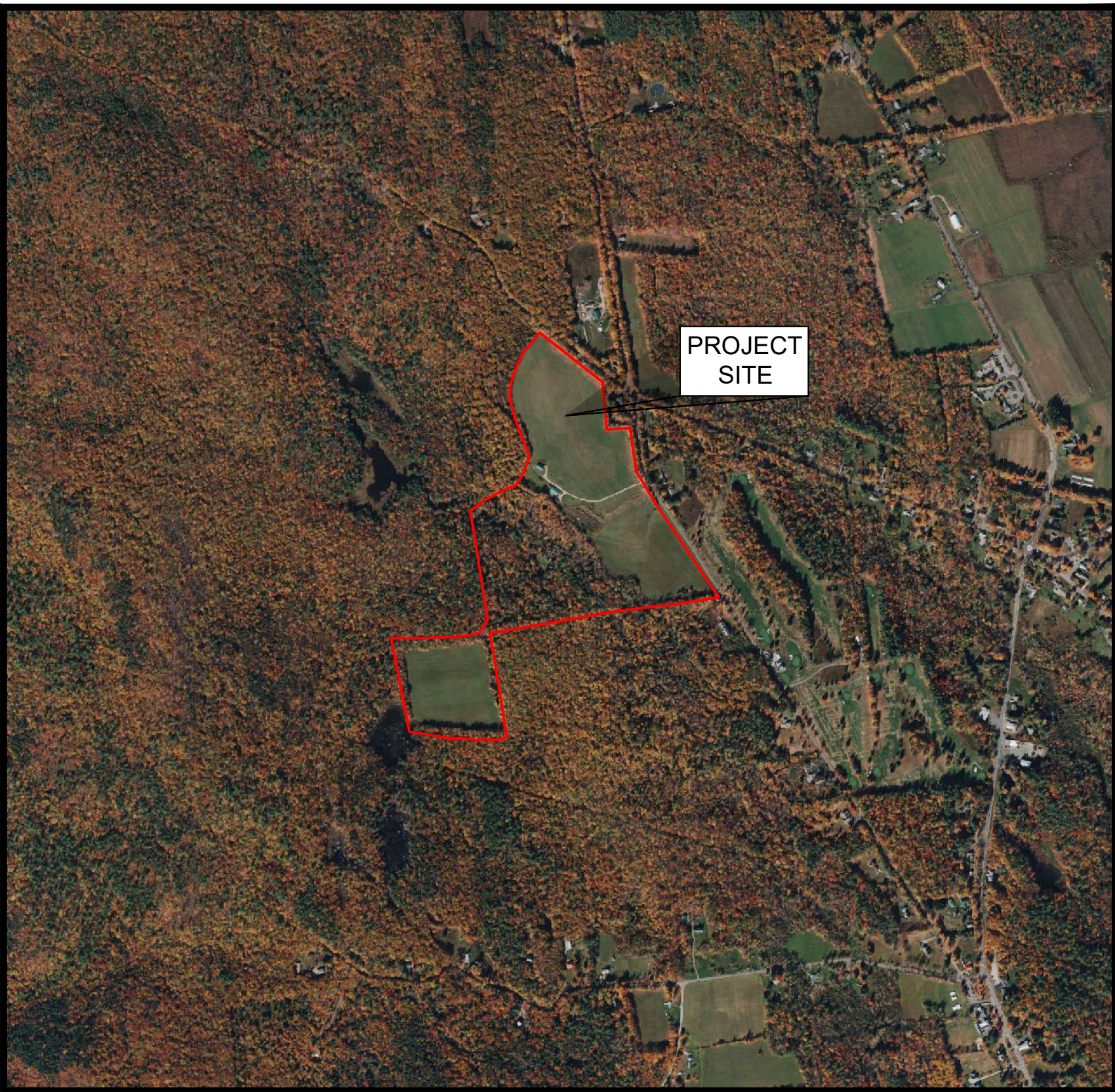
WORTHINGTON, MA 01098

SEPTEMBER 23, 2025

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION



LOCUS MAP
1"=2500'



AERIAL IMAGE
1"=1000'

DRAWING INDEX

SHEET NUMBER	DRAWING TITLE	DRAWING NUMBER
	COVER SHEET	
1	CONSTRUCTION, EROSION AND SEDIMENTATION CONTROL NOTES	G-001
2	EXISTING CONDITIONS	V-101
3	PROPOSED CONDITIONS	C-101
4	GRADING/EARTHWORK PLAN	C-102
5	ACCESS ROAD TOPOGRAPHIC PROFILE ANALYSIS	C-104
6	SHADOW ANALYSIS OF PROPOSED CONDITIONS	C-105
7	DETAILS (SHEET 1 OF 2)	C-501
8	DETAILS (SHEET 2 OF 2)	C-502

PROPERTY OWNER
TIMOTHY J. SENA &
CATHERINE RUDE-SENA
PO BOX 132
WORTHINGTON, MA 01098

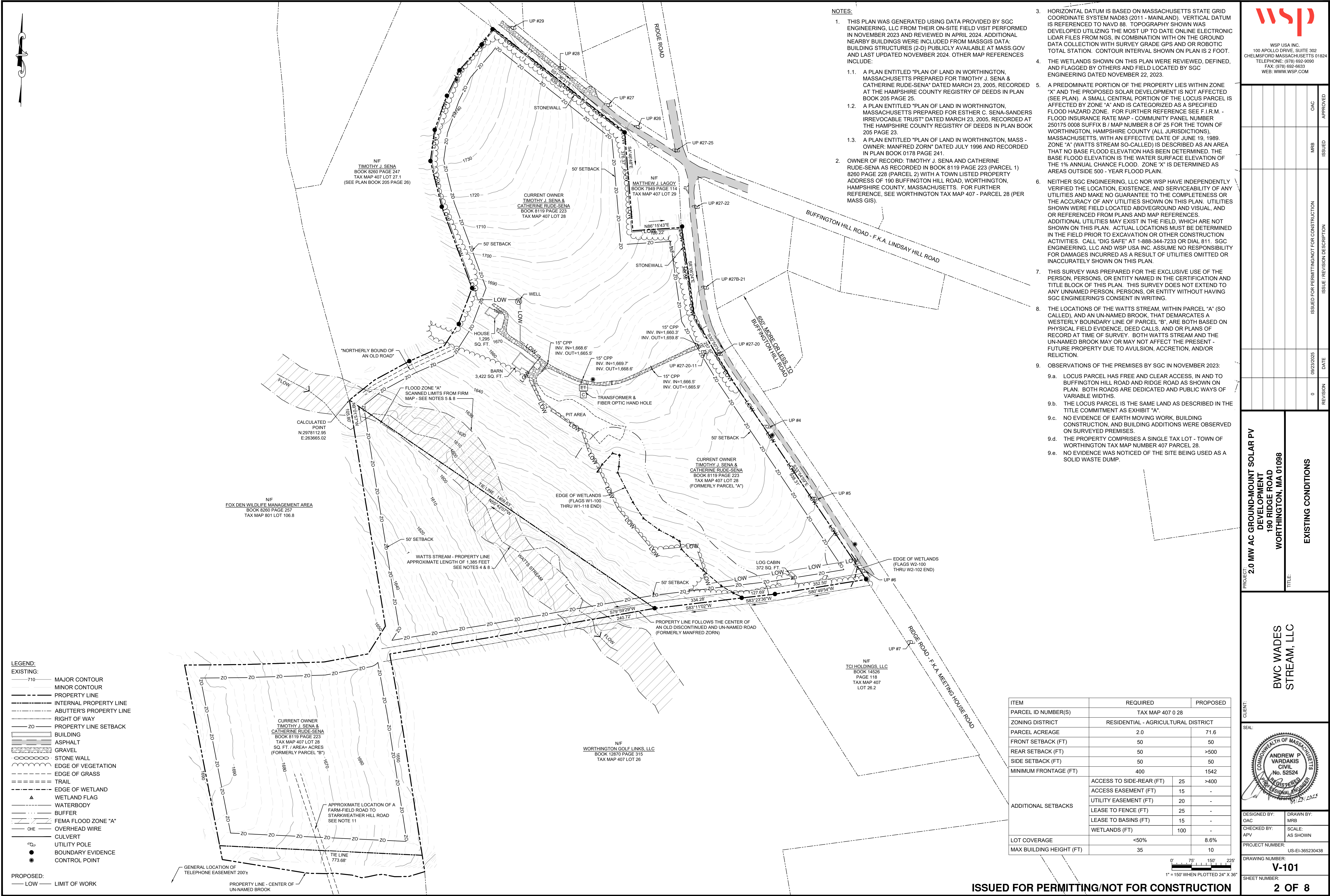
PREPARED BY

WSP USA INC.
100 APOLLO DRIVE SUITE 302
CHELMSFORD, MASSACHUSETTS 01824
T +1 978-692-9090
OLIVIA.CROSBY@WSP.COM

DEVELOPED BY
BWC WADES STREAM, LLC

116 HUNTINGTON AVE
BOSTON, MA 02116
T +1 617-209-3122
ASSETMGMT@BLUEWAVE.ENERGY

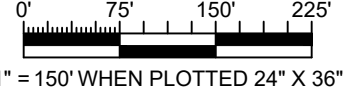
SITE PLAN REVIEW BY
TOWN OF WORTHINGTON
PLANNING BOARD
PO BOX 247, 160 HUNTINGTON ROAD
WORTHINGTON, MA 01098
T +1 413-238-5577
PLANNING@WORTHINGTONMA.US



- LEGEND:**
- EXISTING:**
- 710 MAJOR CONTOUR
 - MINOR CONTOUR
 - PROPERTY LINE
 - INTERNAL PROPERTY LINE
 - ABUTTER'S PROPERTY LINE
 - RIGHT OF WAY
 - PROPERTY LINE SETBACK
 - BUILDING
 - ASPHALT
 - GRAVEL
 - STONE WALL
 - EDGE OF VEGETATION
 - EDGE OF GRASS
 - TRAIL
 - EDGE OF WETLAND
 - WETLAND FLAG
 - WATERBODY
 - BUFFER
 - FEMA FLOOD ZONE "A"
 - OVERHEAD WIRE
 - CULVERT
 - UTILITY POLE
 - BOUNDARY EVIDENCE
 - CONTROL POINT
- PROPOSED:**
- LOW LIMIT OF WORK

- NOTES:**
- THIS PLAN WAS GENERATED USING DATA PROVIDED BY SGC ENGINEERING, LLC FROM THEIR ON-SITE FIELD VISIT PERFORMED IN NOVEMBER 2023 AND REVIEWED IN APRIL 2024. ADDITIONAL NEARBY BUILDINGS WERE INCLUDED FROM MASSGIS DATA: BUILDING STRUCTURES (2-D) PUBLICLY AVAILABLE AT MASS.GOV AND LAST UPDATED NOVEMBER 2024. OTHER MAP REFERENCES INCLUDE:
 - A PLAN ENTITLED "PLAN OF LAND IN WORTHINGTON, MASSACHUSETTS PREPARED FOR TIMOTHY J. SENA & CATHERINE RUDE-SENA" DATED MARCH 23, 2005, RECORDED AT THE HAMPSHIRE COUNTY REGISTRY OF DEEDS IN PLAN BOOK 205 PAGE 25.
 - A PLAN ENTITLED "PLAN OF LAND IN WORTHINGTON, MASSACHUSETTS PREPARED FOR ESTHER C. SENA-SANDERS IRREVOCABLE TRUST" DATED MARCH 23, 2005, RECORDED AT THE HAMPSHIRE COUNTY REGISTRY OF DEEDS IN PLAN BOOK 205 PAGE 23.
 - A PLAN ENTITLED "PLAN OF LAND IN WORTHINGTON, MASS - OWNER: MANFRED ZORN" DATED JULY 1996 AND RECORDED IN PLAN BOOK 0178 PAGE 241.
 - OWNER OF RECORD: TIMOTHY J. SENA AND CATHERINE RUDE-SENA AS RECORDED IN BOOK 8119 PAGE 223 (PARCEL 1) 8260 PAGE 228 (PARCEL 2) WITH A TOWN LISTED PROPERTY ADDRESS OF 190 BUFFINGTON HILL ROAD, WORTHINGTON, HAMPSHIRE COUNTY, MASSACHUSETTS. FOR FURTHER REFERENCE, SEE WORTHINGTON TAX MAP 407 - PARCEL 28 (PER MASS GIS).
 - HORIZONTAL DATUM IS BASED ON MASSACHUSETTS STATE GRID COORDINATE SYSTEM NAD83 (2011 - MAINLAND). VERTICAL DATUM IS REFERENCED TO NAVD 88. TOPOGRAPHY SHOWN WAS DEVELOPED UTILIZING THE MOST UP TO DATE ONLINE ELECTRONIC LIDAR FILES FROM NGS, IN COMBINATION WITH ON THE GROUND DATA COLLECTION WITH SURVEY GRADE GPS AND OR ROBOTIC TOTAL STATION. CONTOUR INTERVAL SHOWN ON PLAN IS 2 FOOT.
 - THE WETLANDS SHOWN ON THIS PLAN WERE REVIEWED, DEFINED, AND FLAGGED BY OTHERS AND FIELD LOCATED BY SGC ENGINEERING DATED NOVEMBER 22, 2023.
 - A PREDOMINATE PORTION OF THE PROPERTY LIES WITHIN ZONE "X" AND THE PROPOSED SOLAR DEVELOPMENT IS NOT AFFECTED (SEE PLAN). A SMALL CENTRAL PORTION OF THE LOCUS PARCEL IS AFFECTED BY ZONE "A" AND IS CATEGORIZED AS A SPECIFIED FLOOD HAZARD ZONE. FOR FURTHER REFERENCE SEE F.I.R.M. - FLOOD INSURANCE RATE MAP - COMMUNITY PANEL NUMBER 250175 0008 SUFFIX B / MAP NUMBER 6 OF 25 FOR THE TOWN OF WORTHINGTON, HAMPSHIRE COUNTY (ALL JURISDICTIONS). MASSACHUSETTS, WITH AN EFFECTIVE DATE OF JUNE 19, 1989, ZONE "A" (WATTS STREAM SO-CALLED) IS DESCRIBED AS AN AREA THAT NO BASE FLOOD ELEVATION HAS BEEN DETERMINED. THE BASE FLOOD ELEVATION IS THE WATER SURFACE ELEVATION OF THE 1% ANNUAL CHANCE FLOOD. ZONE "X" IS DETERMINED AS AREAS OUTSIDE 500 - YEAR FLOOD PLAIN.
 - NEITHER SGC ENGINEERING, LLC NOR WSP HAVE INDEPENDENTLY VERIFIED THE LOCATION, EXISTENCE, AND SERVICEABILITY OF ANY UTILITIES AND MAKE NO GUARANTEE TO THE COMPLETENESS OR THE ACCURACY OF ANY UTILITIES SHOWN ON THIS PLAN. UTILITIES SHOWN WERE FIELD LOCATED ABOVEGROUND AND VISUAL, AND OR REFERENCED FROM PLANS AND MAP REFERENCES. ADDITIONAL UTILITIES MAY EXIST IN THE FIELD, WHICH ARE NOT SHOWN ON THIS PLAN. ACTUAL LOCATIONS MUST BE DETERMINED IN THE FIELD PRIOR TO EXCAVATION OR OTHER CONSTRUCTION ACTIVITIES. CALL "DIG SAFE" AT 1-888-344-7233 OR DIAL 811. SGC ENGINEERING, LLC AND WSP USA INC. ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN ON THIS PLAN.
 - THIS SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF THE PERSON, PERSONS, OR ENTITY NAMED IN THE CERTIFICATION AND TITLE BLOCK OF THIS PLAN. THIS SURVEY DOES NOT EXTEND TO ANY UNNAMED PERSON, PERSONS, OR ENTITY WITHOUT HAVING SGC ENGINEERING'S CONSENT IN WRITING.
 - THE LOCATIONS OF THE WATTS STREAM, WITHIN PARCEL "A" (SO CALLED), AND AN UN-NAMED BROOK, THAT DEMARCATES A WESTERLY BOUNDARY LINE OF PARCEL "B", ARE BOTH BASED ON PHYSICAL FIELD EVIDENCE, DEED CALLS, AND OR PLANS OF RECORD AT TIME OF SURVEY. BOTH WATTS STREAM AND THE UN-NAMED BROOK MAY OR MAY NOT AFFECT THE PRESENT - FUTURE PROPERTY DUE TO AVULSION, ACCRETION, AND/OR RELICTION.
 - OBSERVATIONS OF THE PREMISES BY SGC IN NOVEMBER 2023:
 - LOCUS PARCEL HAS FREE AND CLEAR ACCESS, IN AND TO BUFFINGTON HILL ROAD AND RIDGE ROAD AS SHOWN ON PLAN. BOTH ROADS ARE DEDICATED AND PUBLIC WAYS OF VARIABLE WIDTHS.
 - THE LOCUS PARCEL IS THE SAME LAND AS DESCRIBED IN THE TITLE COMMITMENT AS EXHIBIT "A".
 - NO EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION, AND BUILDING ADDITIONS WERE OBSERVED ON SURVEYED PREMISES.
 - THE PROPERTY COMPRISES A SINGLE TAX LOT - TOWN OF WORTHINGTON TAX MAP NUMBER 407 PARCEL 28.
 - NO EVIDENCE WAS NOTICED OF THE SITE BEING USED AS A SOLID WASTE DUMP.

ITEM	REQUIRED	PROPOSED
PARCEL ID NUMBER(S)	TAX MAP 407 0 28	
ZONING DISTRICT	RESIDENTIAL - AGRICULTURAL DISTRICT	
PARCEL ACREAGE	2.0	71.6
FRONT SETBACK (FT)	50	50
REAR SETBACK (FT)	50	>500
SIDE SETBACK (FT)	50	50
MINIMUM FRONTAGE (FT)	400	1542
ADDITIONAL SETBACKS	ACCESS TO SIDE-REAR (FT)	25 >400
	ACCESS EASEMENT (FT)	15 -
	UTILITY EASEMENT (FT)	20 -
	LEASE TO FENCE (FT)	25 -
	LEASE TO BASINS (FT)	15 -
WETLANDS (FT)		100 -
LOT COVERAGE	<50%	8.6%
MAX BUILDING HEIGHT (FT)	35	10



ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

WSP USA INC.
100 APOLLO DRIVE, SUITE 302
CHELMSFORD MASSACHUSETTS 01824
TELEPHONE: (978) 692-9090
FAX: (978) 692-6633
WEB: WWW.WSP.COM

ISSUE / REVISION DESCRIPTION	DATE	REVISION
ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION	09/23/2025	0

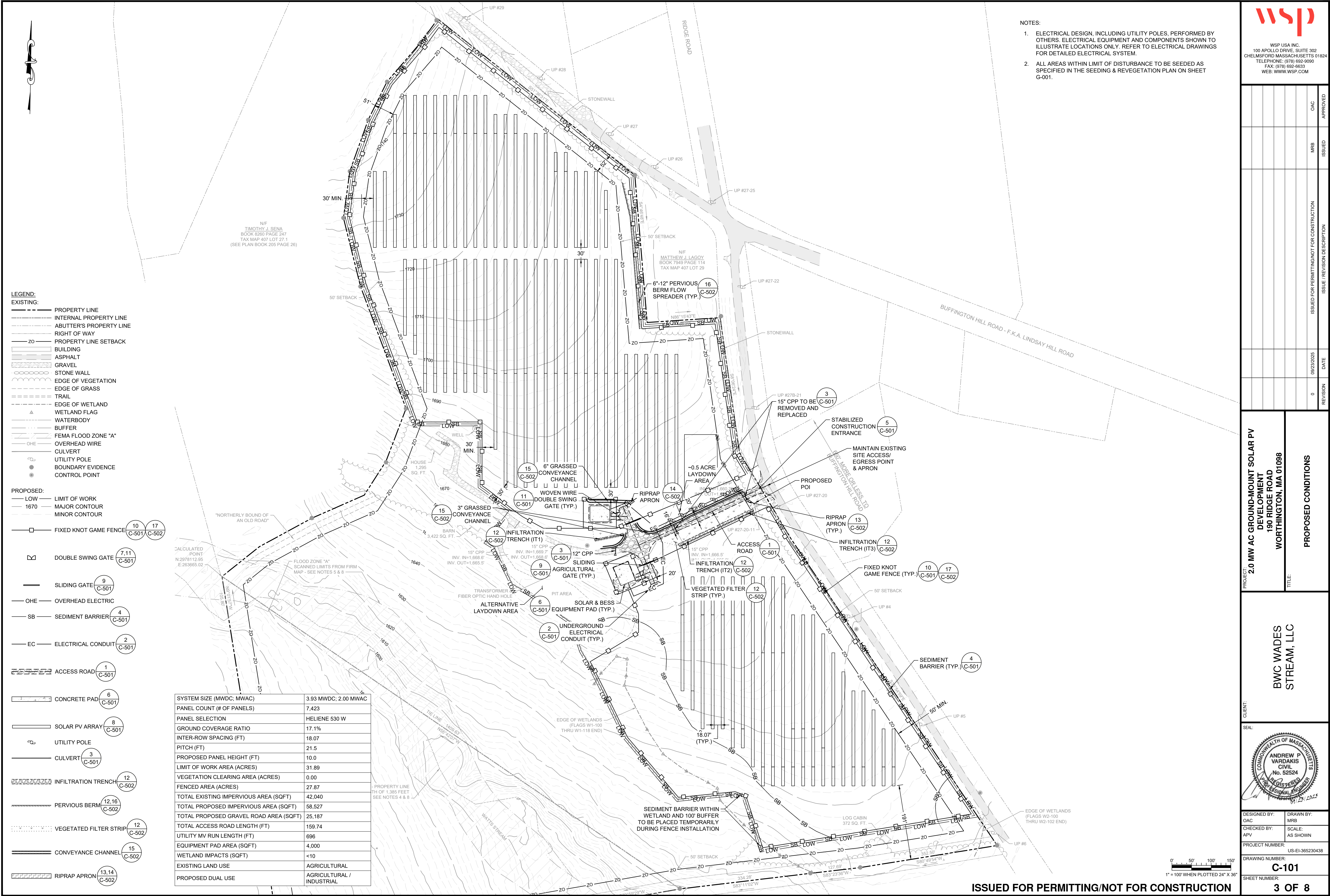
PROJECT: 2.0 MW AC GROUND-MOUNT SOLAR PV DEVELOPMENT
190 RIDGE ROAD
WORTHINGTON, MA 01098

CLIENT: BWC WADES STREAM, LLC

EXISTING CONDITIONS

DESIGNED BY: OAC
CHECKED BY: APV
PROJECT NUMBER: US-EI-365230438
DRAWING NUMBER: V-101
SHEET NUMBER: 2 OF 8

DRAWN BY: MRB
SCALE: AS SHOWN



1. ELECTRICAL DESIGN, INCLUDING UTILITY POLES, PERFORMED BY OTHERS. ELECTRICAL EQUIPMENT AND COMPONENTS SHOWN TO ILLUSTRATE LOCATIONS ONLY. REFER TO ELECTRICAL DRAWINGS FOR DETAILED ELECTRICAL SYSTEM.
2. ALL AREAS WITHIN LIMIT OF DISTURBANCE TO BE SEEDDED AS SPECIFIED IN THE SEEDING & REVEGETATION PLAN ON SHEET G-001.

[illegible]

AC GROUND-MOUNT SOLAR PV
DEVELOPMENT
190 RIDGE ROAD
WORTHINGTON, MA 01098

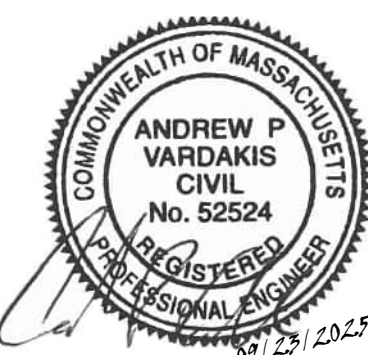
PROPOSED CONDITIONS

PROJEC

BWC WADES
STREAM, LLC

IENT:

SEA



DESIGNED BY:
OAC

CHECKED BY:
APV

PROJECT NUMBER: US-EI-3652304

DRAWING NUMBER:

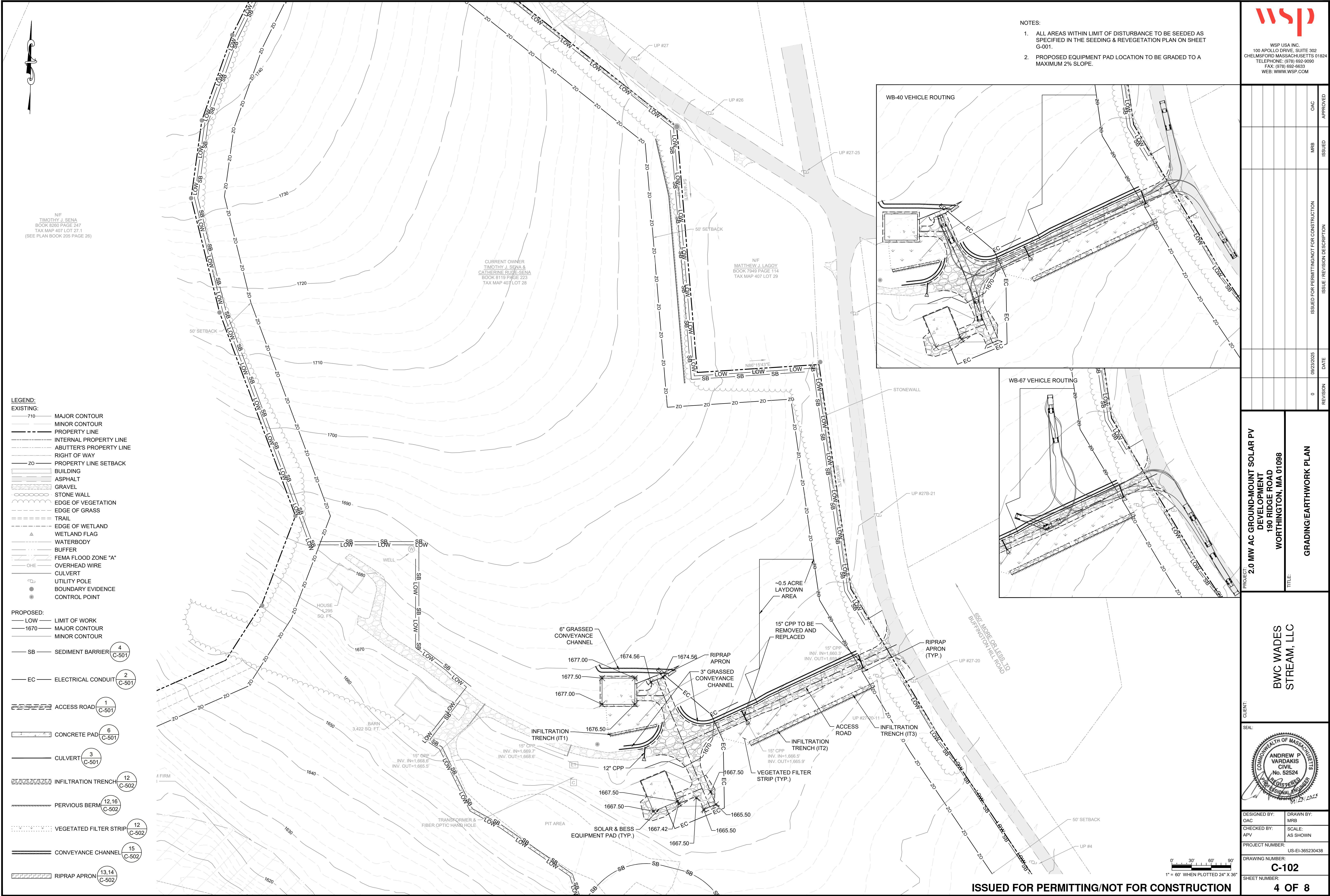
C-101

SHEET NUMBER:

3 OF 8

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN WSP USA INC. AND ITS CLIENT: (I) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL, AND MAY NOT BE COPIED OR DISCLOSED; AND (II) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.



1. ALL AREAS WITHIN LIMIT OF DISTURBANCE TO BE SEEDDED AS SPECIFIED IN THE SEEDING & REVEGETATION PLAN ON SHEET G-001.
2. PROPOSED EQUIPMENT PAD LOCATION TO BE GRADED TO A MAXIMUM 2% SLOPE.

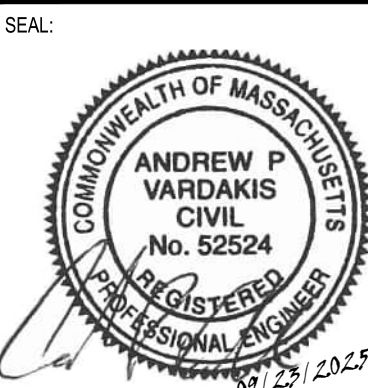
[illegible]

**W AC GROUND-MOUNT SOLAR PV
DEVELOPMENT
190 RIDGE ROAD
WORTHINGTON, MA 01098**

GRADING/EARTHWORK PLAN

PROJECT

BWC WADES
STREAM, LLC



DESIGNED BY
OAC

CHECKED BY:
APV

DRAWN BY
MRB

SCALE:
AS SHOWN

PROJECT NUMBER

DRAWING NUMBER

C-

4 OF 8

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN WSP USA INC. AND ITS CLIENT: (I) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (II) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.

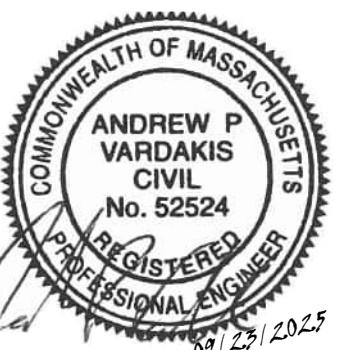
[illegible]

7 AC GROUND-MOUNT SOLAR PV
DEVELOPMENT
190 RIDGE ROAD
WORTHINGTON, MA 01098

ANALYSIS

DWC WADES
STREAM, LLC

10



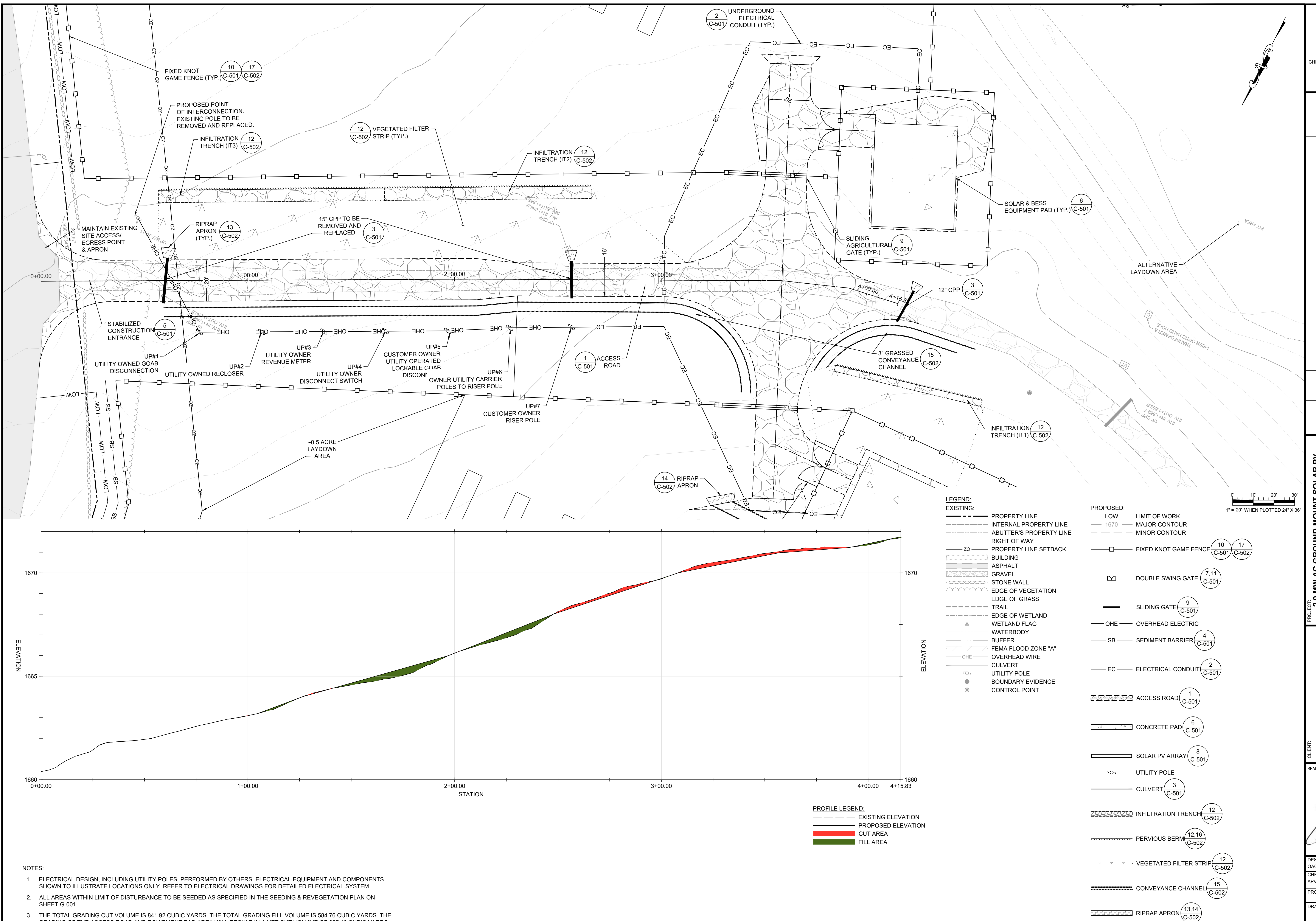
SIGNED BY: C	DRAWN BY: MRB
CHECKED BY: r	SCALE: AS SHOWN

PROJECT NUMBER: US-EI-365230438

DRAWING NUMBER:

C-103

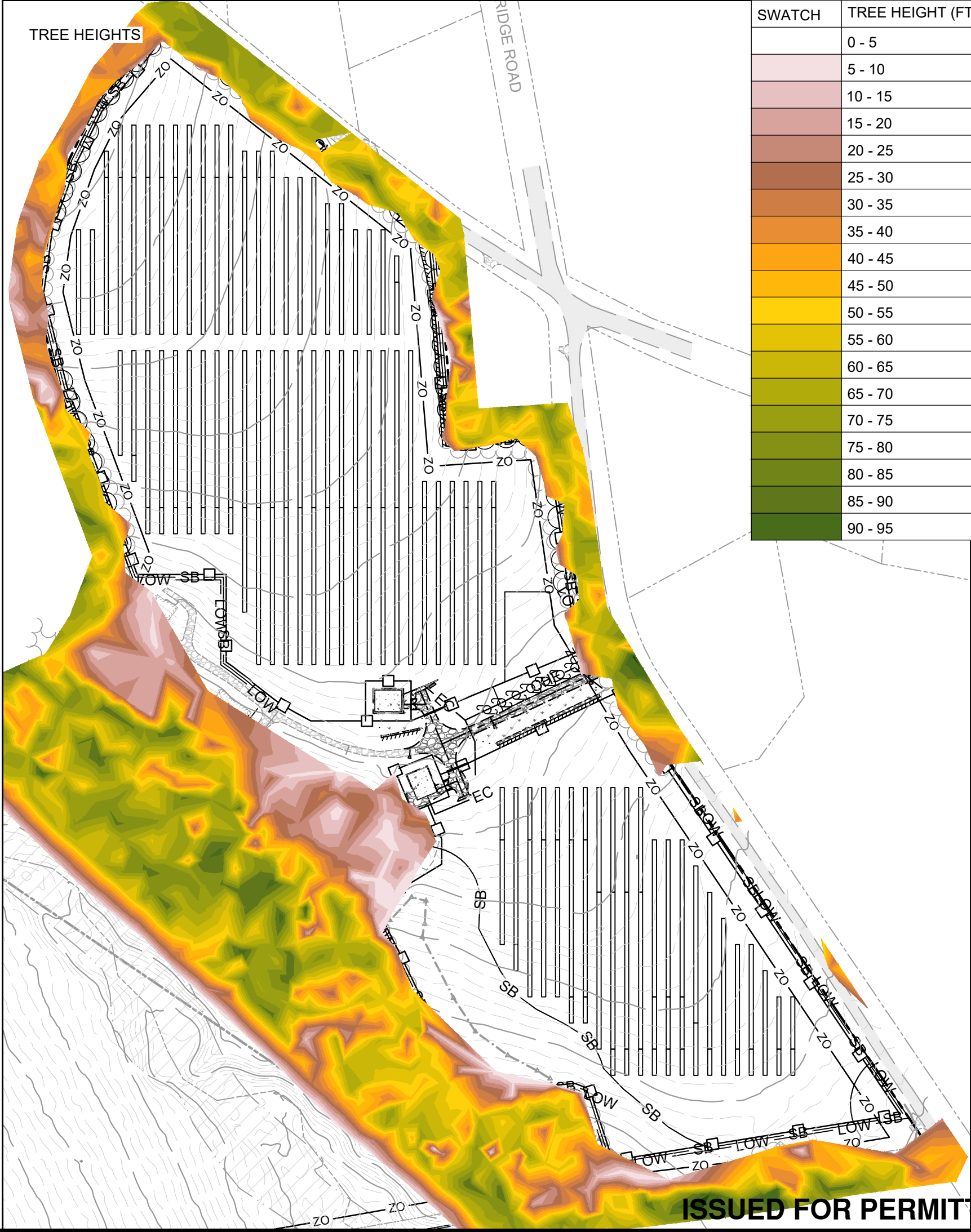
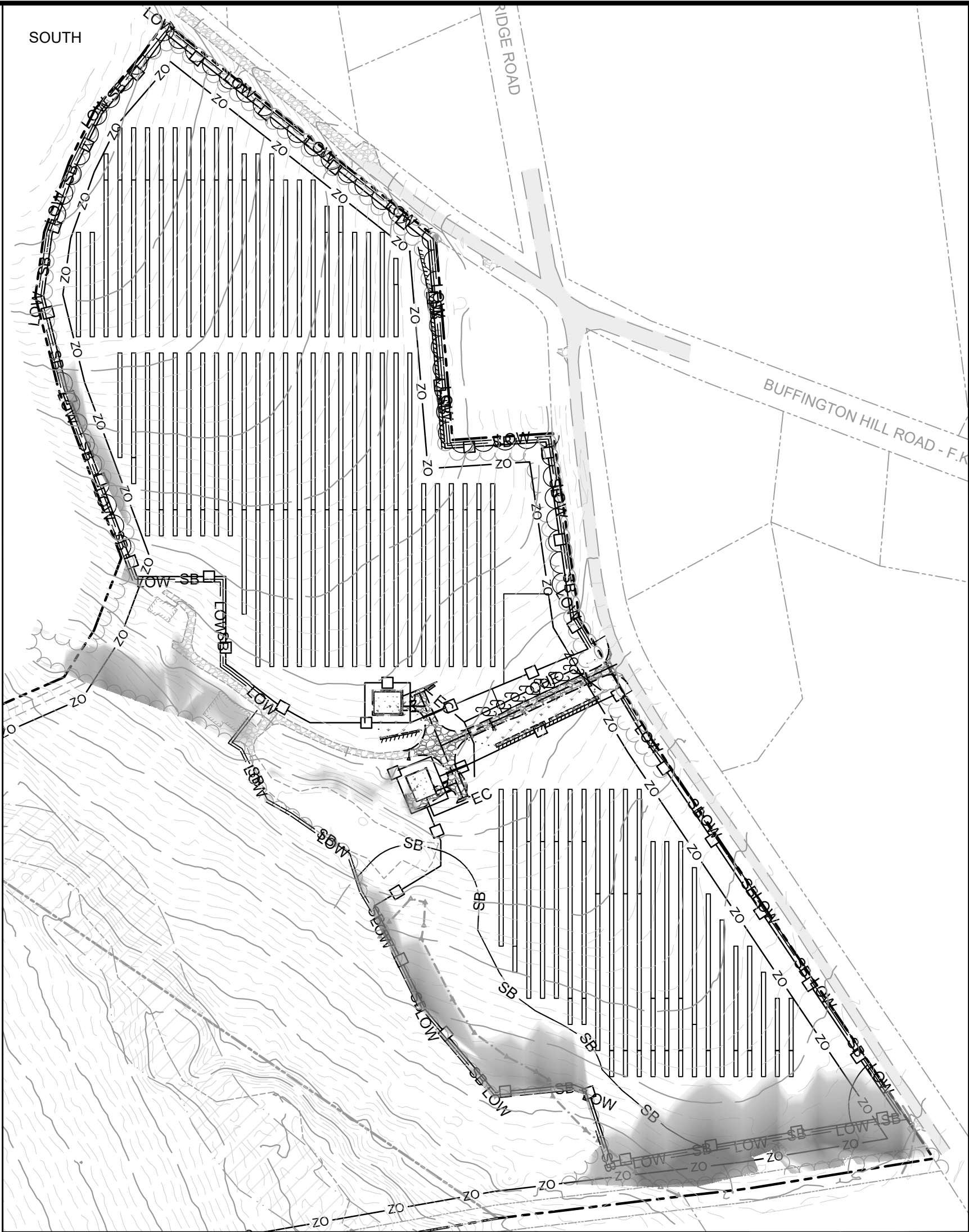
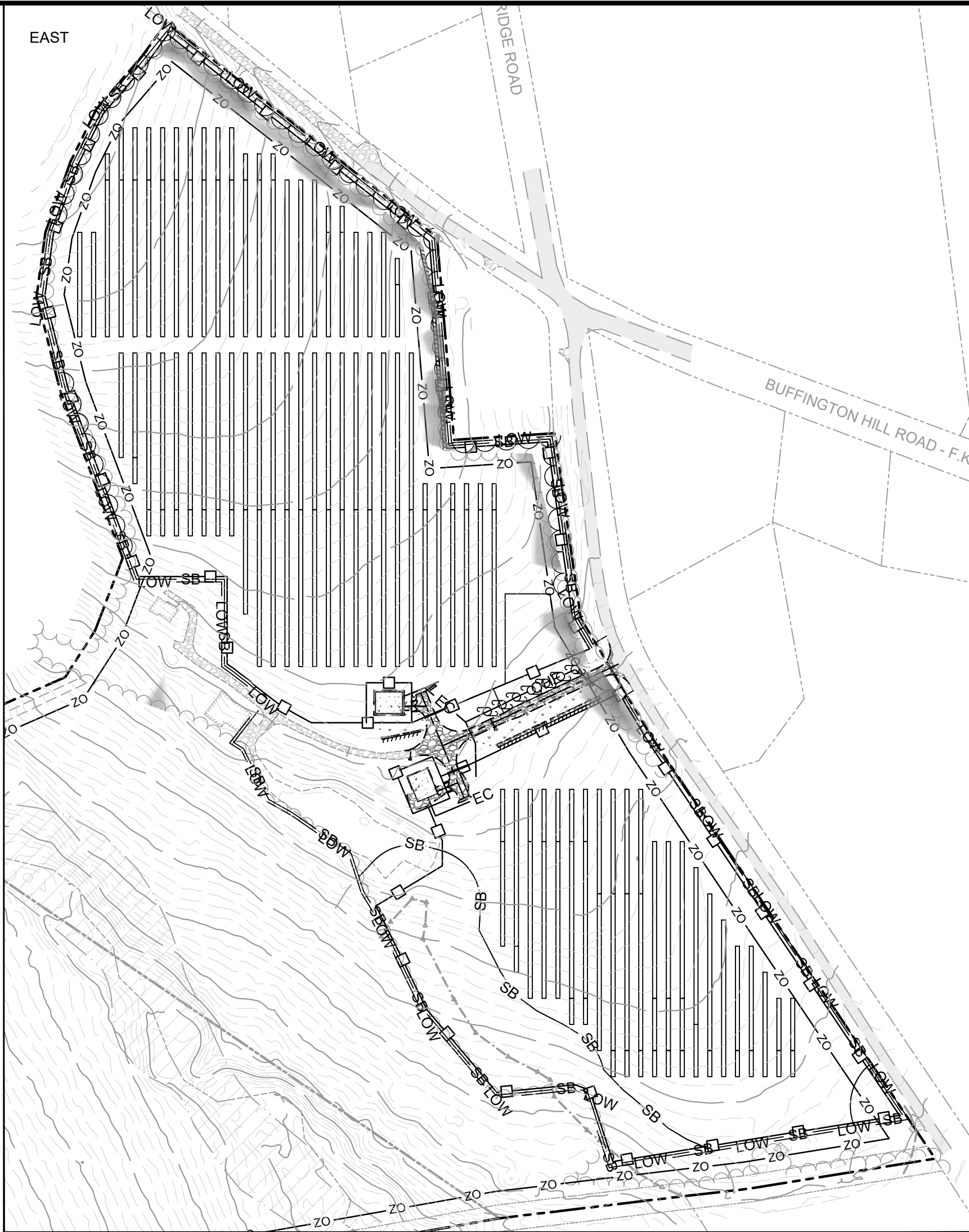
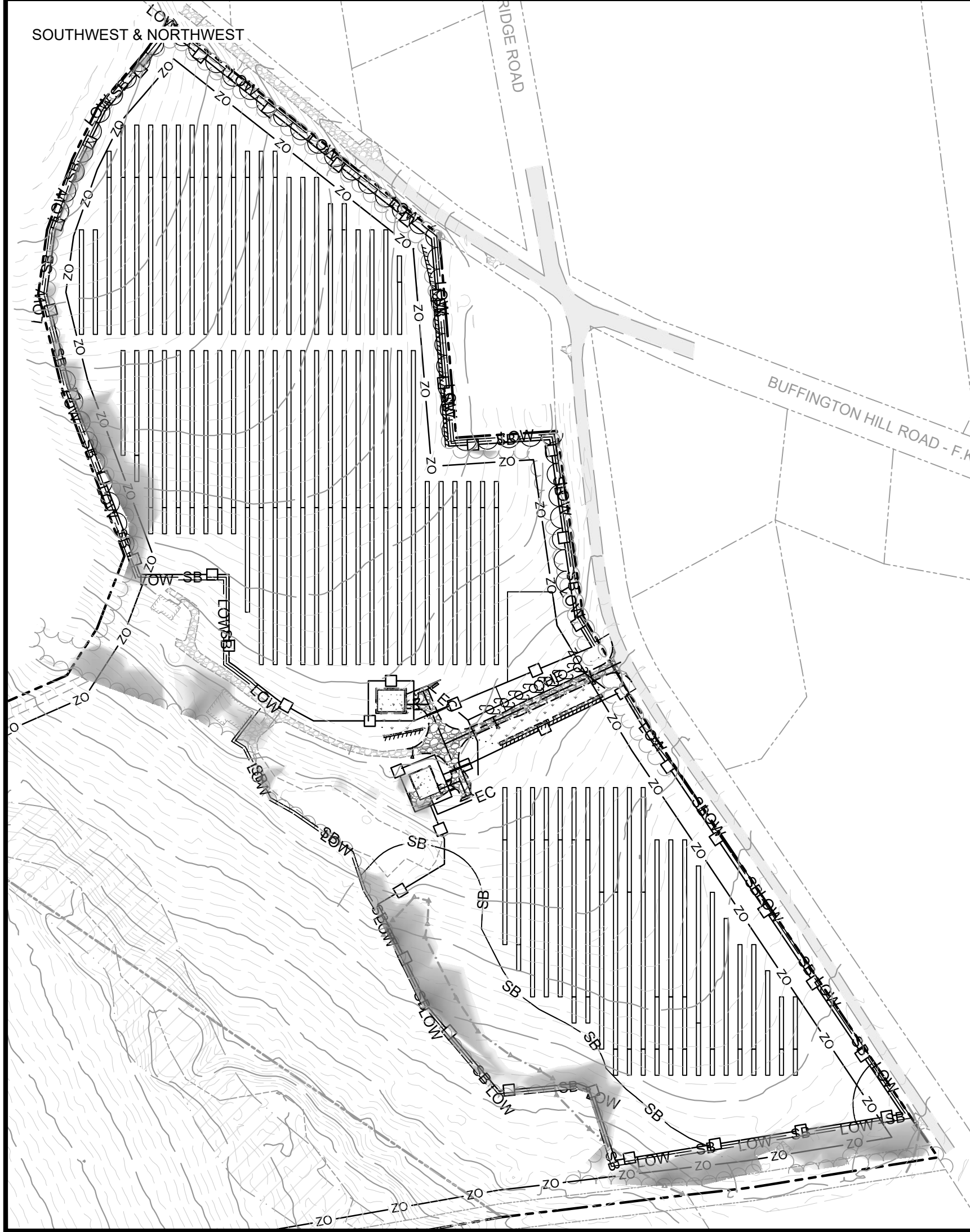
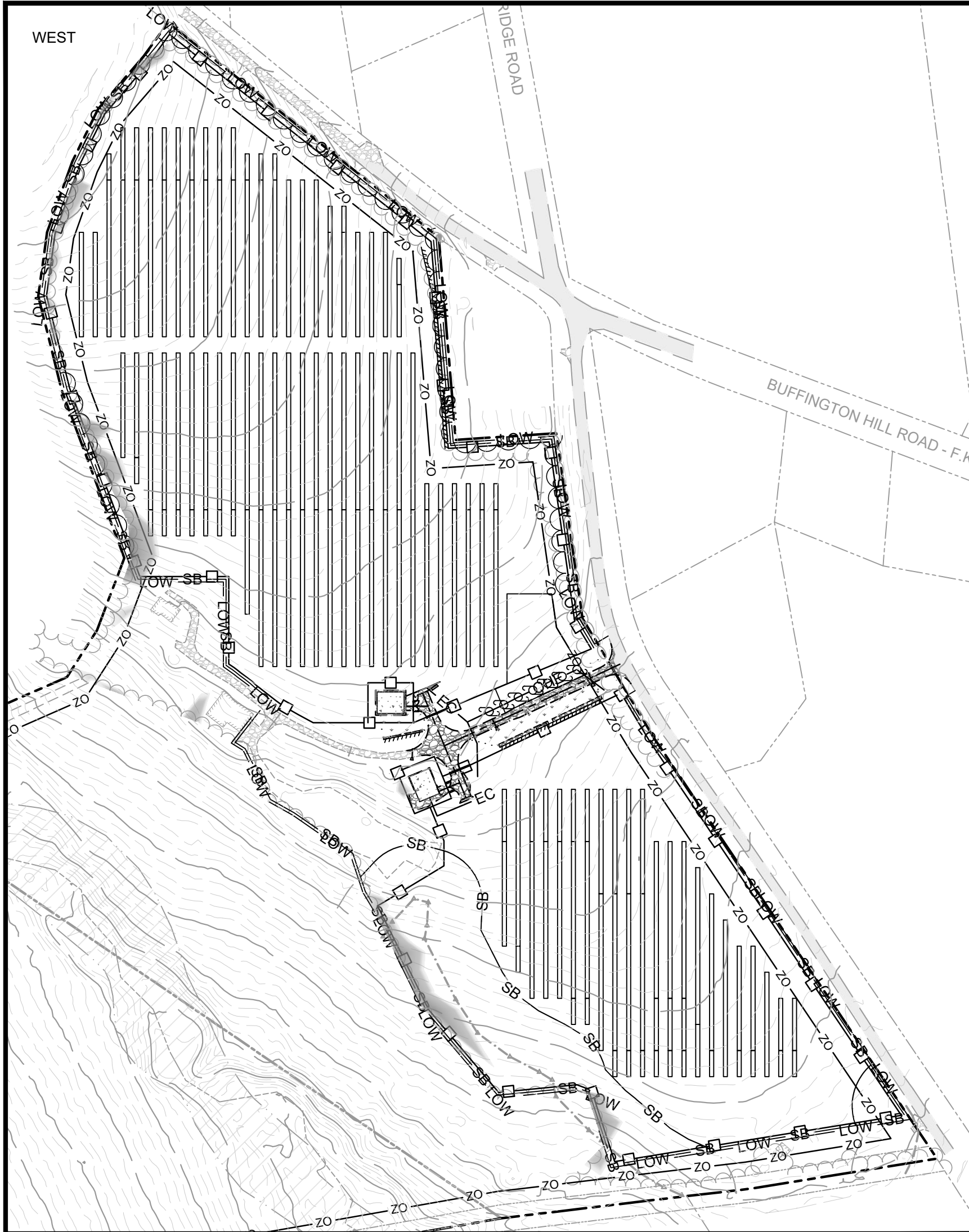
SHEET NUMBER: _____



ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

5 OF 8

UNLESS OTHERWISE AGREED IN A WRITTEN CONTRACT BETWEEN WSP USA INC. AND ITS CLIENT: (I) THIS DOCUMENT CONTAINS INFORMATION, DATA AND DESIGN THAT IS CONFIDENTIAL AND MAY NOT BE COPIED OR DISCLOSED; AND (II) THIS DOCUMENT MAY ONLY BE USED BY THE CLIENT IN THE CONTEXT AND FOR THE EXPRESS PURPOSE FOR WHICH IT HAS BEEN DELIVERED. ANY OTHER USE OR RELIANCE ON THIS DOCUMENT BY ANY THIRD PARTY IS AT THAT PARTY'S SOLE RISK AND RESPONSIBILITY.



NOTES:

- IDEAL SHADING SETBACKS:
- SOUTHERN TREES: 3X TREE HEIGHT
- EAST & WEST TREES: 2.5X TREE HEIGHT
- SOUTHWEST & SOUTHEAST TREES: 3X TREE HEIGHT
- NORTHWEST AND NORTHEAST TREES: 0.85X TREE HEIGHT

LEGEND:

EXISTING:

- PROPERTY LINE
- INTERNAL PROPERTY LINE
- ABUTTER'S PROPERTY LINE
- RIGHT OF WAY
- 20' PROPERTY LINE SETBACK
- BUILDING
- ASPHALT
- GRAVEL
- STONE WALL
- EDGE OF VEGETATION
- EDGE OF GRASS
- TRAIL
- EDGE OF WETLAND
- WETLAND FLAG
- WATERBODY
- BUFFER
- FEMA FLOOD ZONE "A"
- OVERHEAD WIRE
- CULVERT
- UTILITY POLE
- BOUNDARY EVIDENCE
- CONTROL POINT

PROPOSED:

- LOW LIMIT OF WORK
- 1670 MAJOR CONTOUR
- MINOR CONTOUR

FIXED KNOT GAME FENCE

DOUBLE SWING GATE

SLIDING GATE

OHE OVERHEAD ELECTRIC

SB SEDIMENT BARRIER

EC ELECTRICAL CONDUIT

ACCESS ROAD

CONCRETE PAD

SOLAR PV ARRAY

UTILITY POLE

CULVERT

INFILTRATION TRENCH

PERVIOUS BERM

VEGETATED FILTER STRIP

CONVEYANCE CHANNEL

RIPRAP APRON

SWATCH

TREE HEIGHT (FT)

0 - 5
5 - 10
10 - 15
15 - 20
20 - 25
25 - 30
30 - 35
35 - 40
40 - 45
45 - 50
50 - 55
55 - 60
60 - 65
65 - 70
70 - 75
75 - 80
80 - 85
85 - 90
90 - 95

DESIGNED BY: OAC

CHECKED BY: APV

PROJECT NUMBER: US-EI-365230438

DRAWING NUMBER: C-104

SHEET NUMBER: 6 OF 8

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION

WSP USA INC.

100 APOLLO DRIVE, SUITE 302

CHELMSFORD MASSACHUSETTS 01824

TELEPHONE: (978) 692-9090

FAX: (978) 692-6633

WEB: WWW.WSP.COM

PROJECT: 2.0 MW AC GROUND-MOUNT SOLAR PV DEVELOPMENT

190 RIDGE ROAD

WORTHINGTON, MA 01098

TITLE: SHADOW ANALYSIS OF PROPOSED CONDITIONS

CLIENT: BWC WADES STREAM, LLC

SEAL: ANDREW P. VARDAKIS, CIVIL ENGINEER, No. 52524, REGISTERED PROFESSIONAL ENGINEER, 09/23/2025

DESIGNED BY: OAC

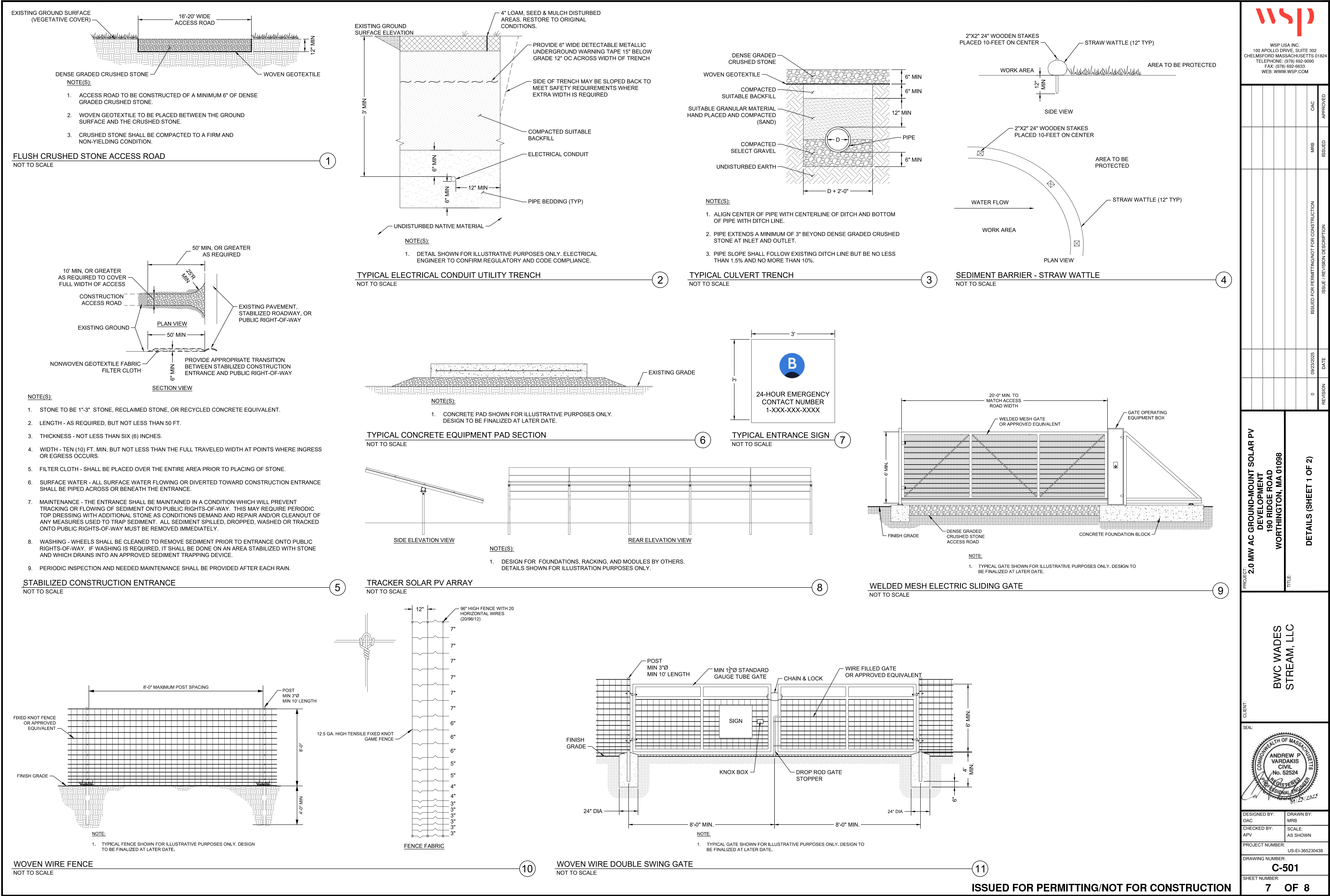
CHECKED BY: APV

PROJECT NUMBER: US-EI-365230438

DRAWING NUMBER: C-104

SHEET NUMBER: 6 OF 8

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION



WSP USA INC.
100 APOLLO DRIVE, SUITE 302
CHELMSFORD MASSACHUSETTS 01824
TELEPHONE: (978) 692-9090
FAX: (978) 692-6633
WEB: WWW.WSP.COM

ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION	
DATE	REVISION
09/23/2025	0

ISSUE / REVISION DESCRIPTION	MRB	OAC	APPROVED
ISSUED FOR PERMITTING/NOT FOR CONSTRUCTION			

PROJECT: 2.0 MW AC GROUND-MOUNT SOLAR PV DEVELOPMENT
190 RIDGE ROAD
WORTHINGTON, MA 01098

TITLE: DETAILS (SHEET 1 OF 2)

CLIENT: BWC WADES STREAM, LLC

ANDREW P. VARDAKIS
CIVIL
No. 52524
REGISTERED PROFESSIONAL ENGINEER
09/23/2025

DESIGNED BY: OAC	DRAWN BY: MRB
CHECKED BY: APV	SCALE: AS SHOWN
PROJECT NUMBER: US-EI-365230438	
DRAWING NUMBER: C-501	
SHEET NUMBER: 7 OF 8	

Attachment C – Legal Description of Premises

LOCUS PARCEL-(AS SURVEYED)
OFFICE FILE NUMBER: 24-0258
EFFECTIVE DATE: MARCH 14, 2024

A PORTION OF A CERTAIN PARCEL OF LAND WITH THE BUILDINGS THEREON LYING ON THE WESTERLY SIDELINE OF RIDGE ROAD, FORMERLY KNOWN AS MEETING HOUSE ROAD, SITUATED IN THE TOWN OF WORTHINGTON, HAMPSHIRE COUNTY, MASSACHUSETTS BOUNDED AND DESCRIBED AS FOLLOWS:

BEGINNING AT A POINT IN A STONE WALL ON THE WESTERLY SIDELINE OF RIDGE ROAD AT THE INTERSECTION OF SAID SIDELINE AND LANDS OF TIMOTHY J. SENA & CATHERINE RUDE-SENA, AS DESCRIBED IN BOOK 8119 LOT 223 AND LAND OF MATTHEW J. LAGOY, AS DESCRIBED IN BOOK 7949 PAGE 114, AND RUNNING:

THENCE, ALONG SAID SIDELINE OF RIDGE ROAD AND REMNANT STONE WALL, SOUTH 8°06'24" EAST, 346.06 FEET TO A POINT;

THENCE, SOUTH 30°50'34" EAST, ALONG SAID RIDGE ROAD AND REMNANT STONE WALL, 257.97 FEET TO A POINT;

THENCE, SOUTH 33°54'59" EAST, ALONG SAID RIDGE ROAD, 938.31 FEET TO AN IRON PIPE FOUND MARKING LANDS NOW OR FORMERLY TCI HOLDINGS LLC;

THENCE, SOUTH 80°49'54" WEST, ALONG LANDS OF TCI HOLDINGS LLC, 352.50 FEET TO AN IRON PIPE FOUND;

THENCE, SOUTH 83°23'36" WEST, ALONG LANDS OF TCI HOLDINGS LLC, 127.69 FEET TO AN IRON PIPE FOUND;

THENCE, SOUTH 83°11'02" WEST, ALONG LANDS OF WORTHINGTON GOLF LINKS LLC, 334.28 FEET TO AN IRON PIPE FOUND;

THENCE, SOUTH 79°59'29" WEST, ALONG LANDS OF WORTHINGTON GOLF LINKS LLC, ABOUT 241 FEET TO THE CENTERLINE OF THE WATTS BROOK, SO CALLED;

THENCE, FOLLOWING THE MEANDERING CENTERLINE OF SAID WATTS BROOK IN A NORTHERLY DIRECTION FOR A DISTANCE OF ABOUT 1,385 FEET TO LAND NOW OR FORMERLY FOX DEN WILDLIFE MANAGEMENT AREA AS DESCRIBED IN BOOK 8260 PAGE 257;

THENCE, NORTH 09°01'57" WEST, ALONG LAND OF SAID FOX DEN, ABOUT 105 FEET TO A POINT AND OTHER LANDS OF TIMOTHY J. SENA AS DESCRIBED IN BOOK 8260 PAGE 247 AND HAVING A "TIE DISTANCE" OF NORTH 55°42'07" WEST, 1409.63 FEET FROM THE LAST IRON PIPE FOUND LOCATED ON THE SOUTHERLY SIDELINE OF THIS PARCEL AND EASTERLY 247 FEET FROM THE WATTS BROOK;

THENCE ALONG OTHER LANDS OF SAID SENA, NORTH 51°24'03" EAST, 121.60 FEET TO A POINT;

THENCE, NORTH 61°29'07" EAST, 151.77 FEET TO A REBAR FOUND;

THENCE, NORTH 66°15'14" EAST, 145.71 FEET TO A POINT;

THENCE, NORTH 32°42'32" EAST, 102.91 FEET TO A REBAR FOUND;

THENCE, NORTH 20°46'45" EAST, 143.12 FEET TO A REBAR FOUND;

THENCE, NORTH 20°27'08" WEST, 331.28 FEET TO A REBAR FOUND;

THENCE, NORTH 13°58'42" WEST, 179.91 FEET TO A REBAR FOUND;

THENCE, NORTH 7°49'44" EAST, 119.69 FEET TO A REBAR FOUND;

THENCE, NORTH 19°35'39" EAST, 138.58 FEET TO A REBAR FOUND;

THENCE, NORTH 26°15'59" EAST, 108.29 FEET TO A REBAR FOUND;

THENCE, NORTH 40°42'06" EAST, 129.09 FEET TO A REBAR FOUND;

THENCE, NORTH 36°05'20" EAST, 76.64 FEET TO A REBAR FOUND MARKING THE SOUTHERLY SIDELINE OF BUFFINGTON HILL ROAD (FORMERLY LINDSAY HILL ROAD);

THENCE, SOUTH 51°36'31" EAST, ALONG BUFFINGTON HILL ROAD AND A STONE WALL, 639.34 FEET TO A REBAR FOUND MARKING LANDS NOW OR FORMERLY MATTHEW J. LAGOY;

THENCE, SOUTH 4°46'48" EAST, ALONG SAID LANDS OF LAGOY, 376.37 FEET TO A POINT;

THENCE, NORTH 86°15'43" EAST, ALONG SAID LANDS OF LAGOY, 186.22 FEET TO THE POINT OF BEGINNING.

CONTAINING 2,046,829 SQUARE FEET / 46.99 ACRES, MORE OR LESS.

BEARINGS ARE BASED ON MASS GRID COORDINATES - NAD 83 (2011 -

Attachment D – Assessor's Map

