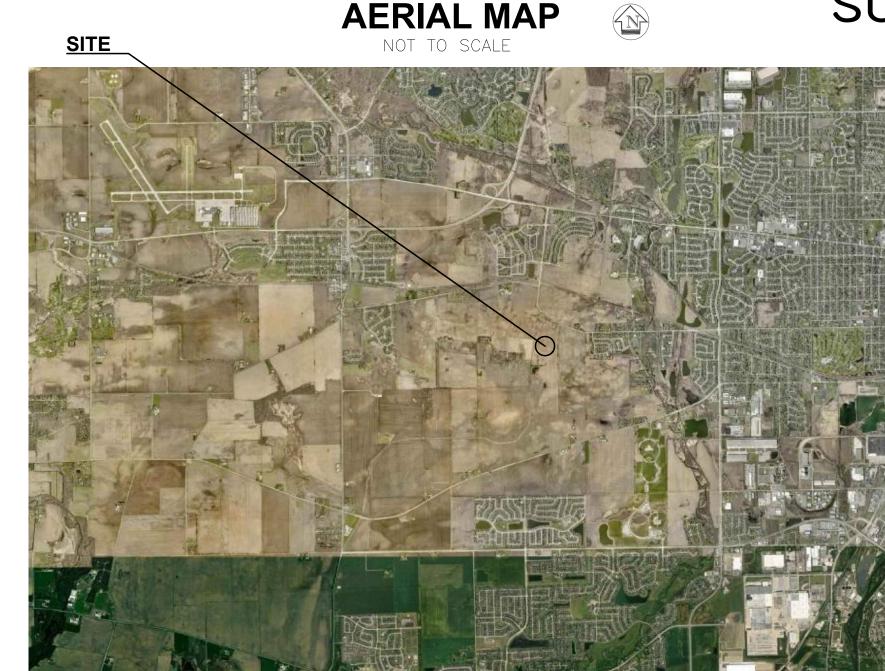
$S\frac{1}{2}SEC 23 & W\frac{1}{2}SEC 26$ **TOWNSHIP: 38N** RANGE: 7E SUGAR GROVE TOWNSHIP

# BLUESTEM SOLAR PRAIRIE STREET UNINCORPORATED KANE COUNTY SUGAR GROVE, IL, 60554

LOCATION MAP



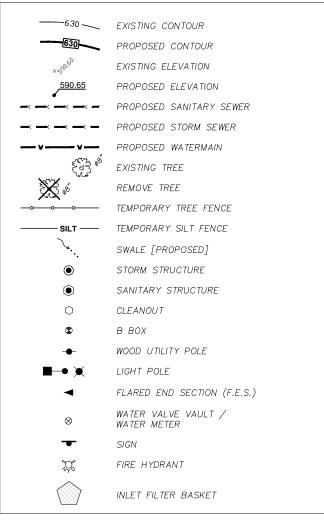
### **GENERAL NOTES:**

- 1. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING JULIE FOR UTILITY LOCATES A MINIMUM OF 48 HOURS IN ADVANCE OF BEGINNING EXCAVATION.
- 2. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON THE JOB SITE.
- 3. THE CONTRACTOR SHALL BE REQUIRED TO OBTAIN ALL NECESSARY PERMITS AS REQUIRED, PRIOR TO COMMENCING CONSTRUCTION.
- 4. THE ILLINOIS DEPARTMENT OF TRANSPORTATION " STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION, AND ALL ADDENDA THERETO, SHALL GOVERN THE EARTHWORK AND PAVING WORK UNDER THIS CONTRACT.
- 5. THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS," LATEST EDITION, SHALL GOVERN THE UNDERGROUND WORK UNDER THIS CONTRACT, EXCEPT AS MODIFIED BY THESE SPECIFICATIONS, OR WHERE IN CONFLICT WITH KANE COUNTY STANDARDS
- 6. ALL EROSION CONTROL WORK SHALL MEET THE REQUIREMENTS OF THE KANE COUNTY STORM WATER ORDINANCE.
- 7. ALL WORK SHALL BE CONDUCTED IN ACCORDANCE WITH OSHA REQUIREMENTS AND KANE COUNTY REGULATIONS AND STANDARDS, AND SHALL CONFIRM IN ALL RESPECTS TO ALL STATE AND FEDERAL LAWS AND REGULATIONS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR SAFETY ON JOB
- 8. THE CONTRACTORS SHALL NOTIFY ALL UTILITY COMPANIES FOR FILED LOCATIONS OF THEIR FACILITIES PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE MAINTENANCE AND PRESERVATION OF THESE FACILITIES. ANY UTILITY LOCATIONS SHOWN ON THE PLANS ARE BASED ON AVAILABLE RECORDS AND ARE FOR GENERAL DIRECTION ONLY.
- 9. CONSTRUCTION OPERATION SHALL BE CONDUCTED IN SUCH A WAY AS TO PREVENT TRACKING OF MUD OR SOIL, DEBRIS, ASPHALT AND CONCRETE ONTO PUBLIC THOROUGHFARES. AT THE END OF EACH DAY, THE CONTRACTOR SHALL REMOVE MATERIALS DEPOSITED ONTO PUBLIC STREETS AND ALLEYS.
- 10.PUBLIC STREETS AND ALLEYS SHALL BE RESTORED PROMPTLY MEETING KANE COUNTY DOT STANDARDS AND SPECIFICATIONS.
- 11. THE CONTRACTOR SHALL VERIFY THE EXACT ELEVATION AND LOCATION OF ALL EXISTING UTILITIES AND APPURTENANCES PRIOR TO CONSTRUCTION, TO AVOID INTERFERENCES.
- 12. APPROPRIATE PRECAUTIONS SHALL BE TAKEN TO AVOID DAMAGE TO AND TO PROTECT EXISTING UTILITIES AND APPURTENANCES IN THE VICINITY OF WORK.
- 13. ALL SOLAR PANEL LAYOUTS SHOULD BE DONE BY A REGISTERED LAND SURVEYOR AFTER CONFIRMING THE PROPERTY CORNERS IN THE FIELD. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER PRIOR TO INITIATING CONSTRUCTION.

### **SITE PLAN NOTES:**

- A. SITE LAYOUT HAS BEEN PREPARED BASED UPON OWNER DIRECTION CURRENT AT THE DATE OF THIS DRAWING. SUBSEQUENT OWNER DIRECTION CHANGES MAY EXIST, THEREFORE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION
- B. EXISTING SITE TOPOGRAPHY BY RIDGELINE CONSULTANTS. CONTRACTOR SHALL FIELD CHECK EXISTING ELEVATIONS AND CONDITIONS PRIOR TO CONSTRUCTION AND NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES PRIOR TO STARTING CONSTRUCTION.
- C. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, (UNLESS OTHERWISE NOTED ON PLANS) INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, TRAFFIC SIGNALS AND POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH GOVERNING AUTHORITIES REQUIREMENTS AND PROJECT SITEWORK SPECIFICATIONS AND SHALL BE APPROVED BY SUCH. ALL COST SHALL BE INCLUDED IN BASE BID.
- SITE BOUNDARY INFORMATION TAKEN FROM ALTA SURVEY PREPARED BY RIDGELINE CONSULTANTS.
- THE CONTRACTOR SHALL ADJUST RIM ELEVATIONS OF ALL EXISTING STRUCTURES TO PROPOSED GRADES AS INDICATED ON PLANS.
- F. NO SPECIAL CONDITIONS WERE PRESENT ON THIS SITE.

### DRAWINGS LEGEND



#### NOTES:

LOCATION OF UTILITIES SHOWN HEREON IS CERTIFIED AT SURFACE STRUCTURES ONLY. UNDERGROUND LINES AS SHOWN ARE ESTIMATED LOCATIONS BASED ON AVAILABLE VISIBLE EVIDENCE. ENGINEERING PLANS AND OUR BEST JUDGMENT. ACTUAL LOCATIONS OF UNDERGROUND UTILITIES IN THE VICINITY OF ANY PROPOSED CONSTRUCTION SHALL BE VERIFIED BY EXCAVATION.

THE BASIS OF BEARINGS IS THE ILLINOIS STATE PLANE COORDINATE SYSTEM.

A J.U.L.I.E. LOCATE FOR THE UNDERGROUND UTILITIES WAS NOT PROVIDED AT THE TIME OF THE SURVEY LACKING EXCAVATION, THE TYPE AND LOCATION OF SAID UTILITIES CANNOT BE ACCURATELY. COMPLETELY. AND

FOR BUILDING LINES, EASEMENTS AND OTHER RESTRICTIONS NOT SHOWN HEREON, REFER TO YOUR DEED, TITLE POLICY, ZONING ORDINANCE, ETC

> SITE BENCHMARK: UNKNOWN

> > EXP. 11-30-25

Note: The exact location of all utilities shall be verified by the contractor prior to construction activities. For utility locations J.U.L.I.E. 1 (800) 892-0123

PROJECT NARRATIVE

\_\_\_\_\_\_ CONSTRUCT COMMUNITY SOLAR FIELD.

TOTAL PROPERTY AREA = 138.95 ACRES

SPECIAL PROTECTION AREAS: THERE ARE WETLANDS LOCATED ONSITE. NO WETLANDS WILL BE DISTURBED.

THERE IS NO UPSTREAM TRIBUTARY AREA FOR THE SITE.

DETENTION/VOLUME CONTROL FACILITY: 4,770 SQ FT OF NET NEW IMPERVIOUS AREA. STORMWATER MANAGEMENT IS NOT REQUIRED BY KANE COUNTY STORMWATER ORDINANCE (UNDER 25,000 SQ FT OF NET NEW IMPERVIOUS UNDER 3 ACRES

HYDROLOGICALLY DISTURBED AREA) STORMWATER MITIGATION/BMP IS REQUIRED BY KANE COUNTY STORMWATER ORDINANCE

BIOSWALES LOCATED AT LOW POINTS TO STORE RUNOFF FROM HYDROLOGICALLY DISCONNECTED SURFACES OF

SOLAR PLANELS

NO NEW SANITARY SEWERS OR SERVICES PROPOSED

NO NEW WATER MAINS OR SERVICES PROPOSED

ANY DISTURBED DRAIN TILE TO BE REPAIRED/RELOCATED PER AIMA AGREEMENT

SOILS/INFILTRATION RATE: JNDERLYING SOILS ARE PRIMARILY SILT LOAM

HYDROLOGIC SOIL GROUP B OR C.

GROUNDWATER ELEVATION: SEASONAL HIGH GROUND WATER ELEVATION UNKNOWN

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF ILLINOIS.

SIGNATURE

MY LICENSE EXPIRES ON NOVEMBER 30, 2025

INDEX TO SHEETS NO. DESCRIPTION C - 0.0COVER SHEET C - 1.0EXISTING CONDITIONS, DEMOLITION, AND EROSION CONTROL PLAN C-2.0SITE PLAN PRELIMINARY GRADING AND DRAINAGE PLAN C-2.1PRELIMINARY STORMWATER MANAGEMENT PLAN C - 2.2C - 3.0SITE DETAILS

MUNICIPALITY APPROVAL STAMP

**CLEAN FIELD** 

CONTRACTOR

contact@inwavere.com

MAHWAH, NJ 07430



CIVIL ENGINEER

**ENGINEERS** 

Phone 207.829.5016 • Fax 207.829.5692 • sme-engineers.com

PROJECT NAME:

**BLUESTEM SOLAR** 

LOCATION:

41°45'08.6"N, 88°24'16.0"W AURORA, IL

**ISSUED FOR: DATE** SITE LAYOUT 08-27-2025 PROGRESS SET 09-11-2025 PROGRESS SET 09-17-2025

DATE: TITLE: COVER

SHEET

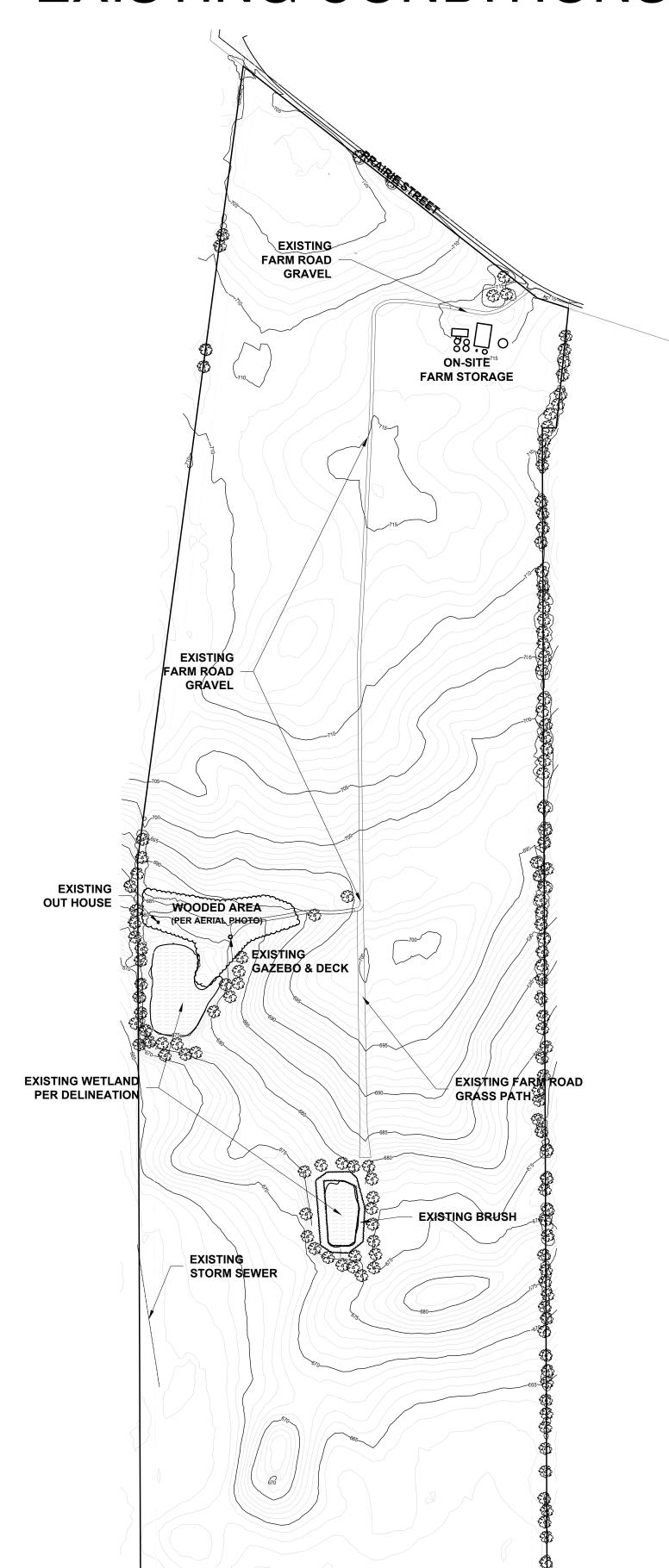
PROJECT #:

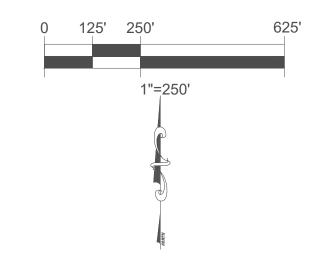
IW-101

SHEET

# EXISTING CONDITIONS

# DEMOLITION & EROSION CONTROL





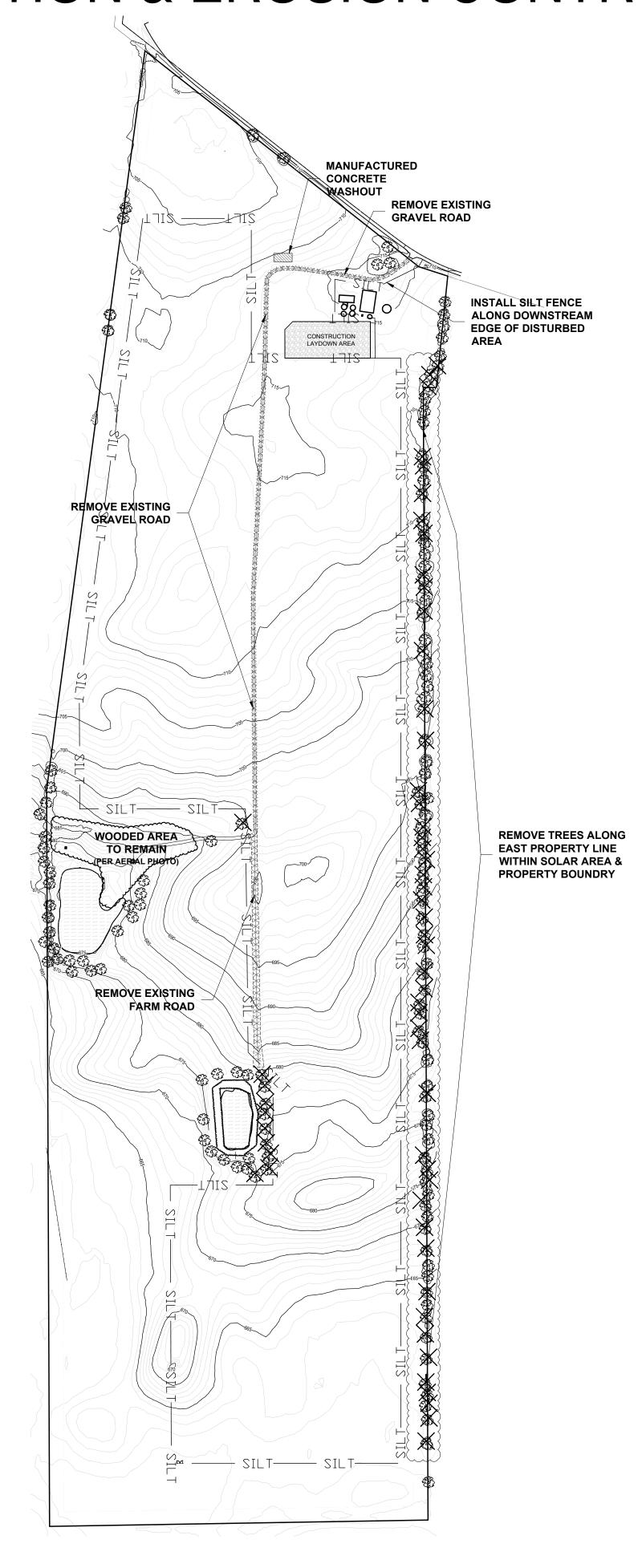
#### SOIL EROSION AND SEDIMENTATION CONTROL NOTES

- 1. INSTALL ROW SILT FENCE PRIOR TO ANY EARTH DISTURBING ACTIVITIES. 2. CONTRACTOR TO REMOVE ANY MUD TRACKED ONTO EXISTING PAVEMENT
- 3. A CONCRETE WASHOUT SHOULD BE PROVIDED ON-SITE. CONCRETE CANNOT BE WASHED OUT INTO THE PUBLIC RIGHT-OF-WAY OR STORM SEWER SYSTEM.

#### **DEMOLITION NOTES**

- 1. CONTRACTOR SHALL REMOVE THE EXISTING FARM ROAD AS SHOWN. 2. CONTRACTOR TO REMOVE TREES AS SHOWN. IF ANY OTHER TREES ARE TO BE REMOVED DUE TO CONFLICT WITH PROPOSED IMPROVEMENTS, CONTRACTOR MUST CONTACT BONO CONSULTING FOR APPROVAL.
- 3. ALL DEMOLITION DEBRIS SHALL BE PROPERLY DISPOSED OF.

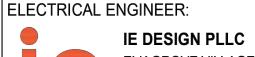
#### **EXISTING TREES PER AERIAL PHOTOS**





NAPERVILLE, IL 60565 contact@inwavere.com

CONTRACTOR:



ELK GROVE VILLAGE, IL 60007 contact@iedesignco.com

PROFESSIONAL DESIGN FIRM # 184.008367-0002 CIVIL ENGINEER

**ENGINEERS** 

4 Blanchard Road, PO Box 85A, Cumberland, Maine 04021

Phone 207.829.5016 • Fax 207.829.5692 • sme-engineers.com

PROJECT NAME:

**BLUESTEM SOLAR** 

LOCATION:

41°45'08.6"N, 88°24'16.0"W AURORA, IL

ISSUE #	<b>ISSUED FOR:</b>	DATE
1	SITE LAYOUT	08-27-2025
2	PROGRESS SET	09-11-2025
3	PROGRESS SET	09-17-2025
		-

EXISTING CONDITIONS, DEMOLITION, **EROSION CONTROL** 

PROJECT #:

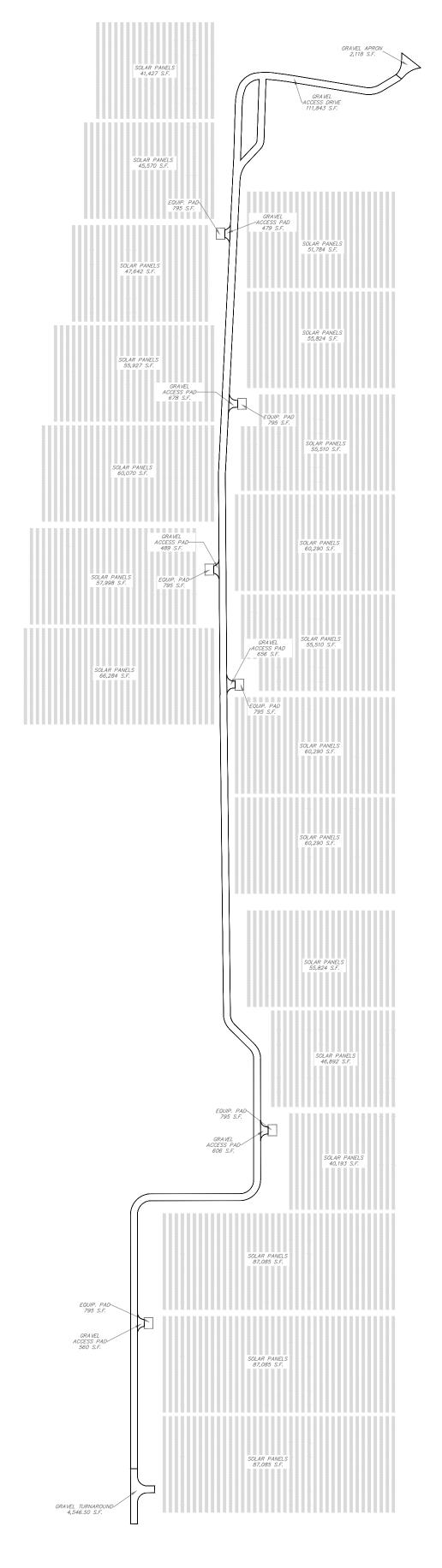
IW-101

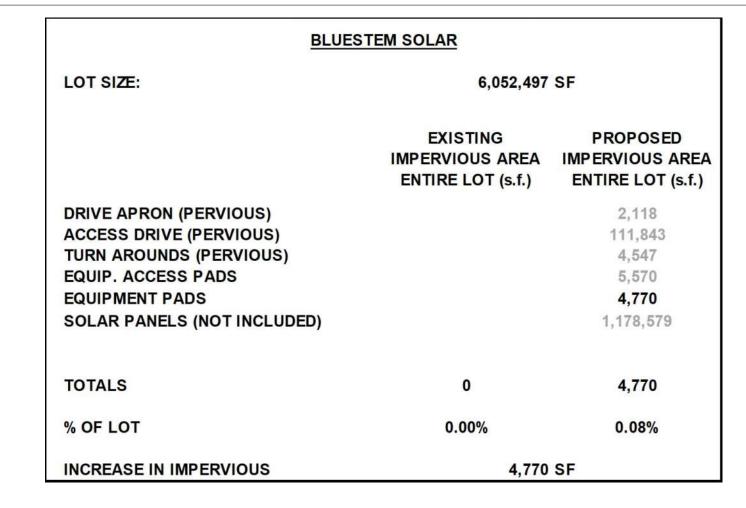


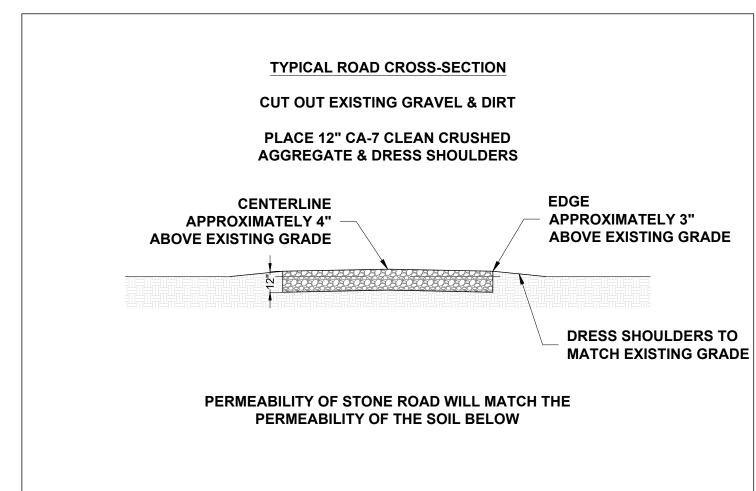
PERMANENT SEEDING TO BE PIZZO NATIVE PLANT NURSERY LOW PROFILE PRAIRIE MIX.

Temporary Seeding, Species, Rates, & Dates													
		Seeding Dates											
Species	lbs./Acre	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec
Oats	90												
Cereal Rye	90												
Winter Wheat	90												
Winter Mulch	25												

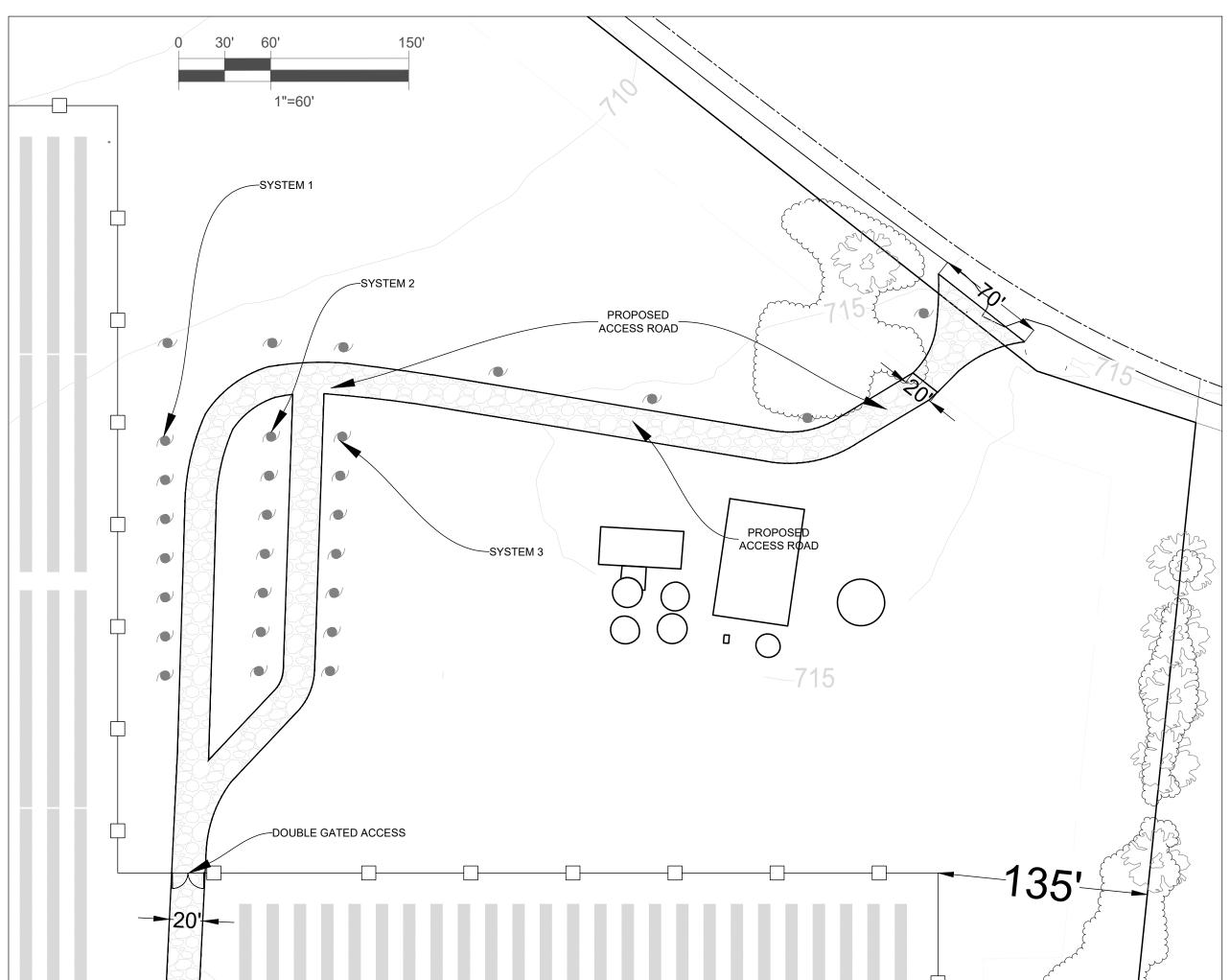
## PROPOSED IMPERVIOUS AREAS NTS

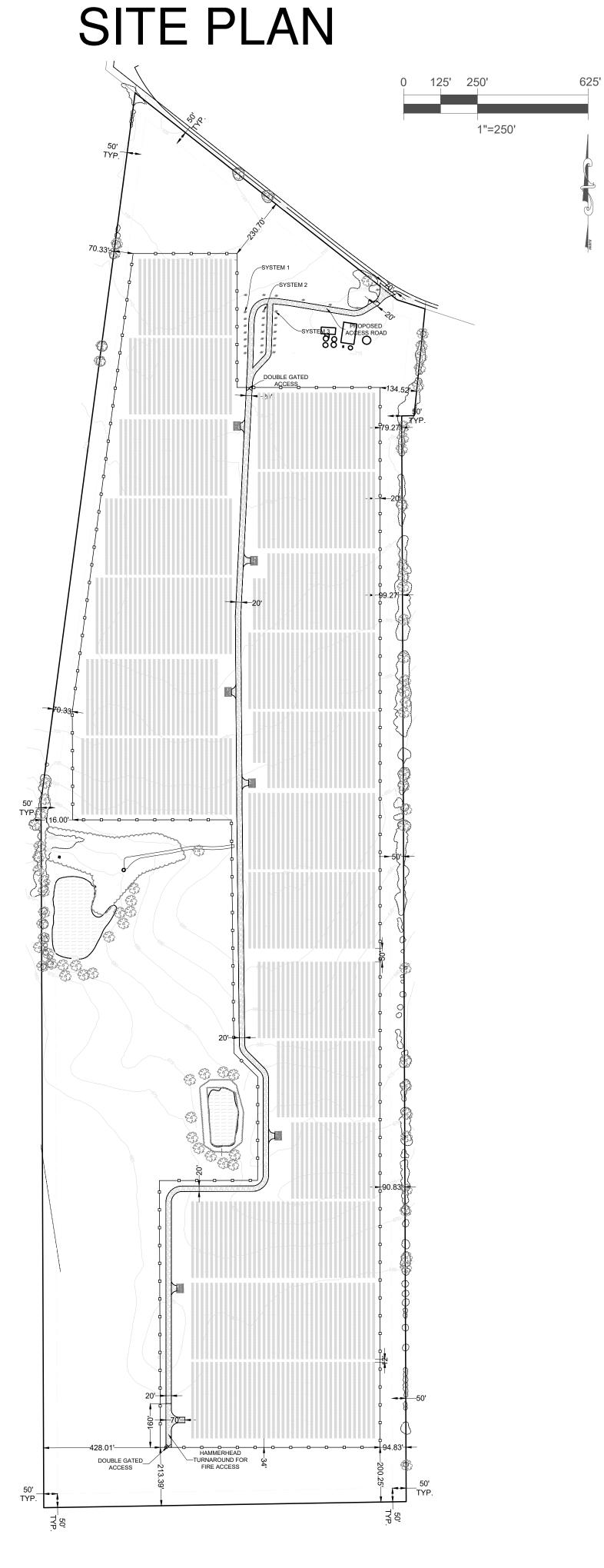






# SITE ACCESS





MUNICIPALITY APPROVAL STAMP

**CLEAN FIELD** 211 ISLAND RD, MAHWAH, NJ 07430

CONTRACTOR:

NAPERVILLE, IL 60565 contact@inwavere.com

ELECTRICAL ENGINEER:

**IE DESIGN PLLC** ELK GROVE VILLAGE, IL 60007 contact@iedesignco.com PROFESSIONAL DESIGN FIRM # 184.008367-0002

CIVIL ENGINEER

BONO CONSULTING 331-229-3512 rwalker@bonoconsulting.com

CIVIL ENGINEERS
A Sevee & Maher Engineers company

DESIGN FIRM NO. 184.008857-0002

4 Blanchard Road, PO Box 85A, Cumberland, Maine 04021

**ENGINEERS** 

Phone 207.829.5016 • Fax 207.829.5692 • sme-engineers.com

PROJECT NAME:

**BLUESTEM SOLAR** 

LOCATION:

41°45'08.6"N, 88°24'16.0"W AURORA, IL

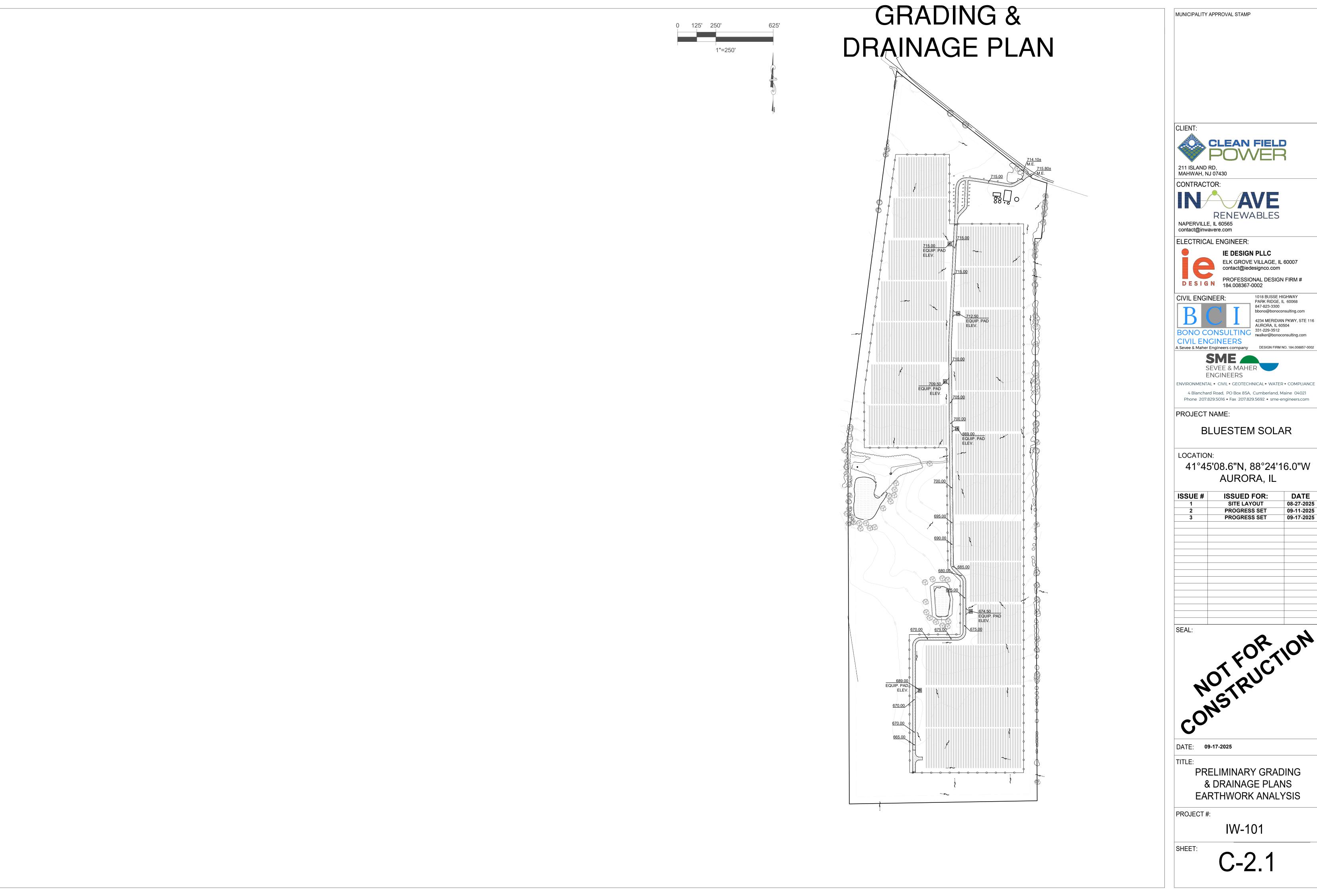
ISSUE #	<b>ISSUED FOR:</b>	DATE
1	SITE LAYOUT	08-27-202
2	PROGRESS SET	09-11-202
3	PROGRESS SET	09-17-202

SITE PLAN

PROJECT #:

IW-101

C-2.0







ELK GROVE VILLAGE, IL 60007 contact@iedesignco.com

4 Blanchard Road, PO Box 85A, Cumberland, Maine 04021 Phone 207.829.5016 • Fax 207.829.5692 • sme-engineers.com

41°45'08.6"N, 88°24'16.0"W AURORA, IL

	710110101, 12	
ISSUE #	ISSUED FOR:	DATE
1	SITE LAYOUT	08-27-2025
2	PROGRESS SET	09-11-2025
3	PROGRESS SET	09-17-2025

PRELIMINARY GRADING & DRAINAGE PLANS EARTHWORK ANALYSIS

Minnesota Disconnected Impervious Area Calculations for Solar Panels

Average Horizontal Length Beneath the Panel

Ahnway Series Bi-55-520 to Bi-55-550 Solar Panels

2272 mm 7.45 ft Length 1133 mm 3.72 ft Width 10.00 ft Spacing Max Angle 60 degrees 1.04719755 radians Min Angle 0 degrees 0 radians

Z = (cos(max angle) x length + cos(min angle) x length) / 2

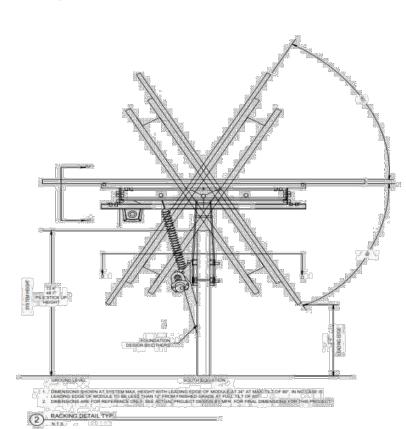
5.59 ft

Impervious Area of Solar Panel = Z x Width

20.78 sq ft

Pervious Area per Solar Panel = (Length + Spacing) x Width

Perv Area 64.88 sq ft



Minnesota Disconnected Impervious Area Calculations for Solar Panels Bluestem Road Solar Panels Water Quality Volume To Be Treated Per Panel 0.77 cuft from MN spreadsheet BMP Volume for Panels (MN method) 30,104 cuft

BMP Volume = 1" x Imp Area 398 cu ft Total BMP Volume Required 30,501 cuft 0.70 ac-ft

4770 sq ft

North BMP - Bioswale - excavate down ~ 702 elevation to hold water Drain by likely existing field tile Field tile to be confirmed with tile survey Captures ~ 15% site area

Stores ~ 15% volume required (0.1 ac-ft)

Impervious area (equipement pads)

NE BMP - Bioswale - Berm up ~ 711 elevation to hold water Drain by likely existing field tile Field tile to be confirmed with tile survey Captures ~ 5% site area Stores ~ 5% volume required (0.05 ac-ft)

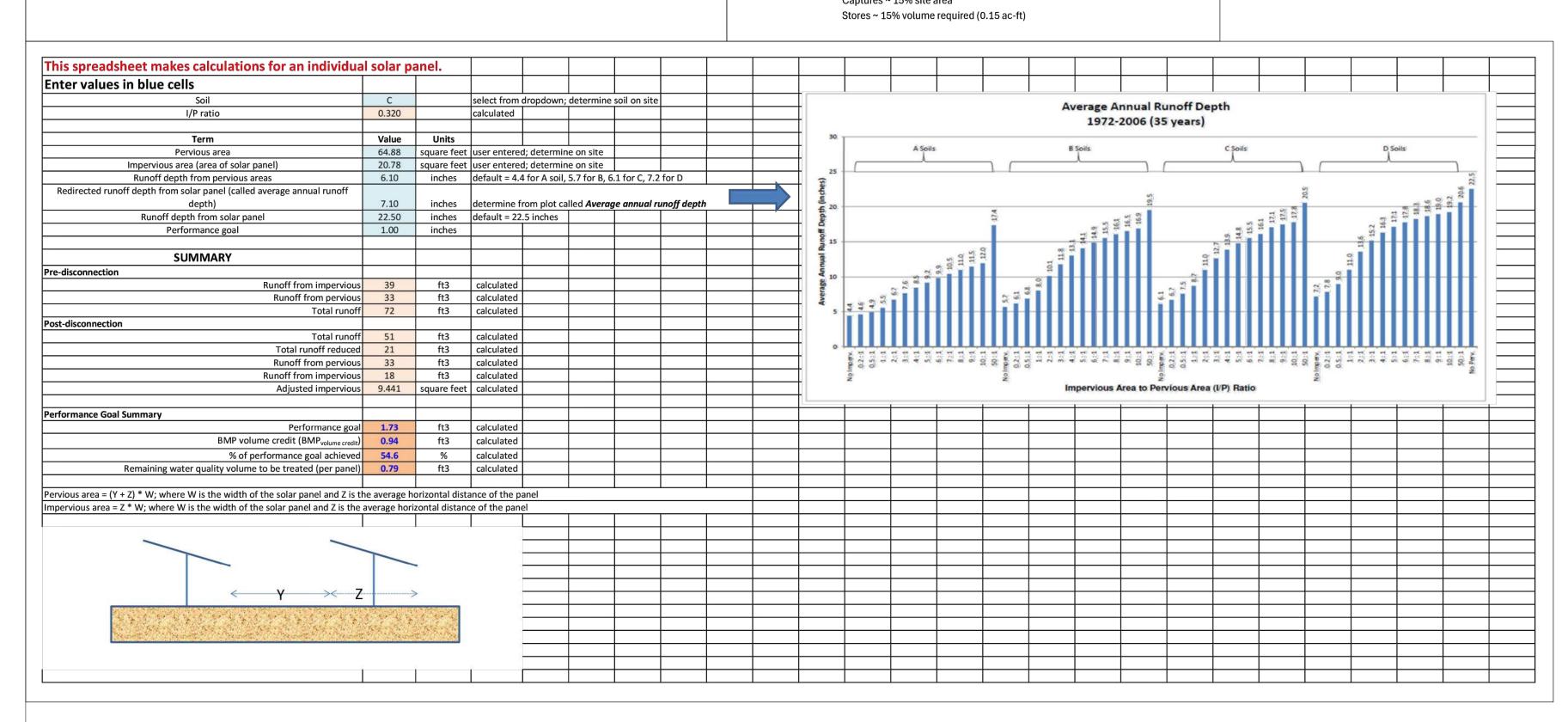
East BMP - Bioswale - berm up ~ 675 elevation to hold water Drain by likely existing field tile Field tile to be confirmed with tile survey Captures ~ 35% site area Stores ~ 35% volume required (0.25 ac-ft)

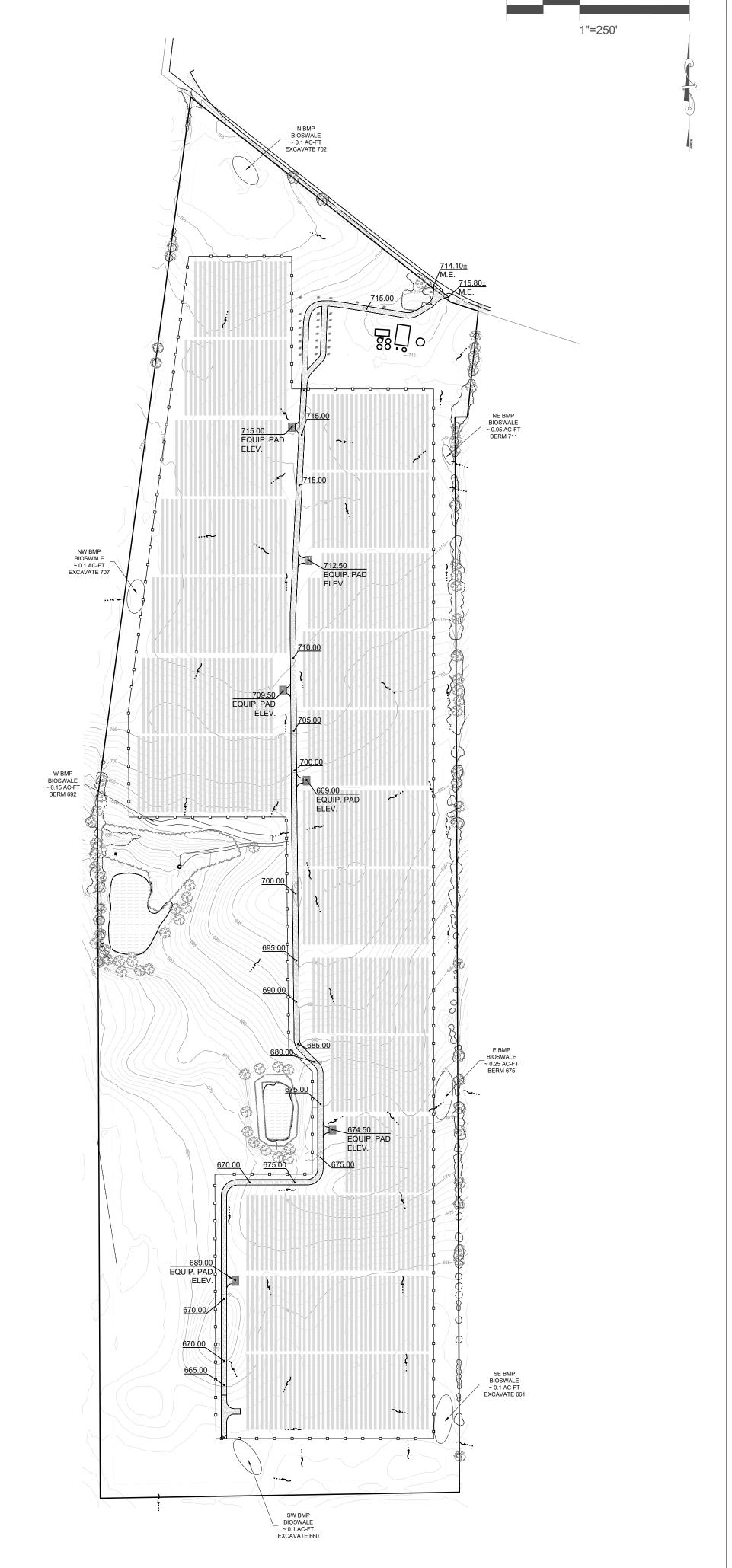
SE BMP - Bioswale - excavate down ~ 661 elevation to hold water Drain by likely field tile Field tile to be confirmed with tile survey Captures ~ 15% site area Stores ~ 15% volume required (0.1 ac-ft)

SW BMP - Bioswale - excavate down ~ 660 elevation to hold water Drain by likely field tile Field tile to be confirmed with tile survey Captures ~ 15% site area Stores ~ 15% volume required (0.1 ac-ft)

West BMP - Bioswale - berm up ~ 662 elevation to hold water Drain by likely field tile Field tile to be confirmed with tile survey Captures ~ 20% site area Stores ~ 20% volume required (0.15 ac-ft)

NW BMP - Bioswale - excavate down ~ 707 elevation to hold water Drain by likely field tile Field tile to be confirmed with tile survey Captures ~ 15% site area





MUNICIPALITY APPROVAL STAMP

625'

0 125' 250'

**CLEAN FIELD** 

CONTRACTOR:

MAHWAH, NJ 07430

DESIGN

NAPERVILLE, IL 60565

contact@inwavere.com

ELECTRICAL ENGINEER: **IE DESIGN PLLC** e

ELK GROVE VILLAGE, IL 60007 contact@iedesignco.com PROFESSIONAL DESIGN FIRM # 184.008367-0002

CIVIL ENGINEER PARK RIDGE, IL 60068 847-823-3300 bbono@bonoconsulting.com 4234 MERIDIAN PKWY, STE 116

BONO CONSULTING 331-229-3512 rwalker@bonoconsulting.com CIVIL ENGINEERS A Sevee & Maher Engineers company DESIGN FIRM NO. 184.008857-0002

SEVEE & MAHER **ENGINEERS** 

ENVIRONMENTAL • CIVIL • GEOTECHNICAL • WATER • COMPLIANCE 4 Blanchard Road, PO Box 85A, Cumberland, Maine 04021 Phone 207.829.5016 • Fax 207.829.5692 • sme-engineers.com

PROJECT NAME:

**BLUESTEM SOLAR** 

LOCATION:

41°45'08.6"N, 88°24'16.0"W AURORA, IL

**ISSUED FOR:** DATE ISSUE # SITE LAYOUT 08-27-2025 PROGRESS SET 09-11-2025 PROGRESS SET 09-17-2025

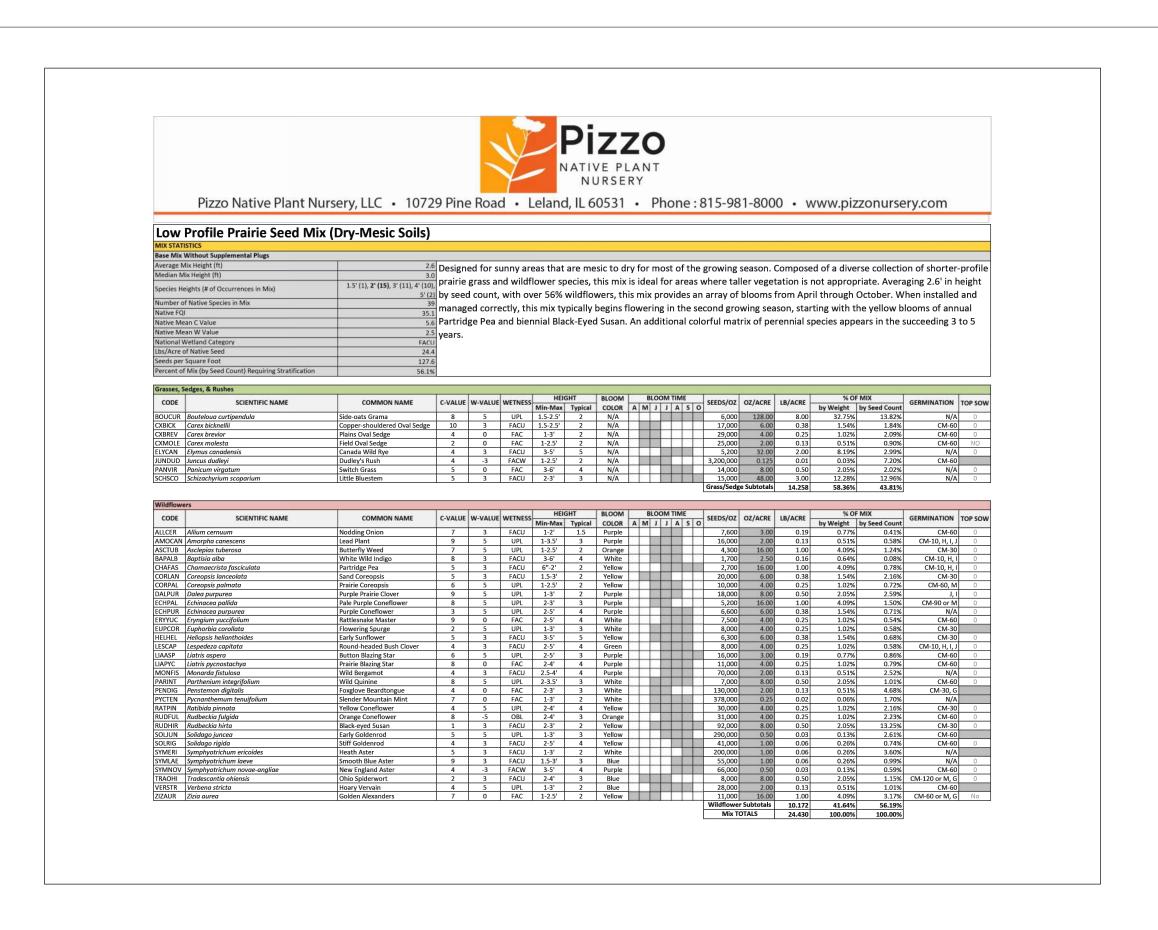
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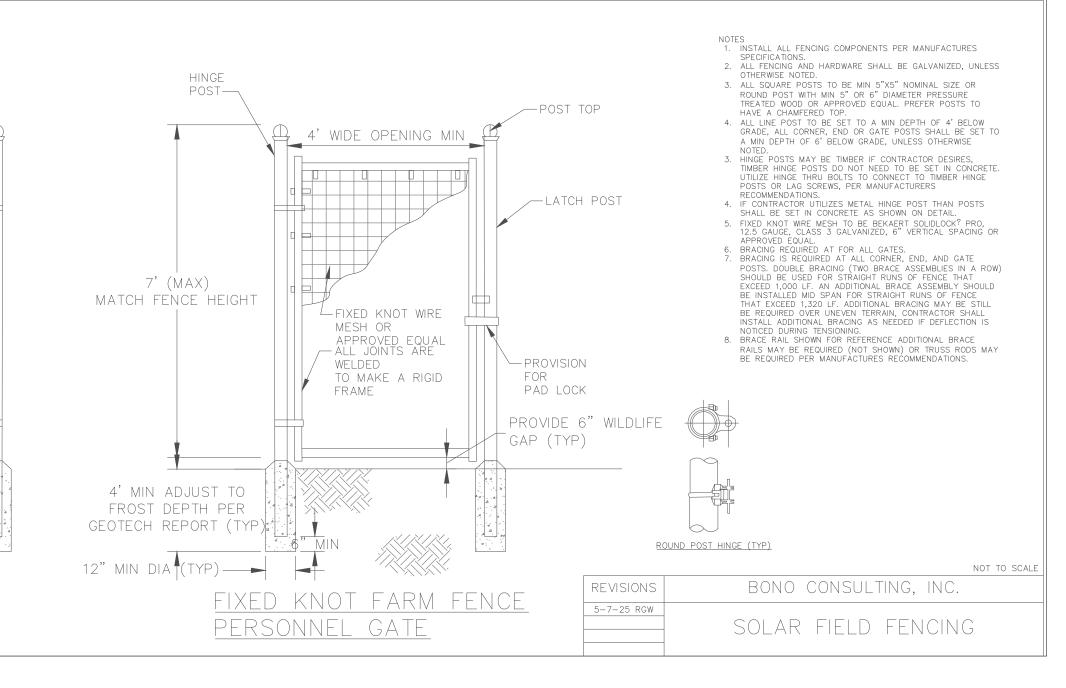
TITLE:

**PRELIMINARY** STORMWATER MANAGMENT PLAN

PROJECT #:

IW-101





**CLEAN FIELD** 211 ISLAND RD,

MUNICIPALITY APPROVAL STAMP

CONTRACTOR:

NAPERVILLE, IL 60565 contact@inwavere.com

MAHWAH, NJ 07430

ELECTRICAL ENGINEER:

**IE DESIGN PLLC** 8

ELK GROVE VILLAGE, IL 60007 contact@iedesignco.com PROFESSIONAL DESIGN FIRM # 184.008367-0002

CIVIL ENGINEER:

DESIGN

PARK RIDGE, IL 60068 847-823-3300 bbono@bonoconsulting.com 4234 MERIDIAN PKWY, STE 116 AURORA, IL 60504 BONO CONSULTING 331-229-3512 rwalker@bonoconsulting.com

CIVIL ENGINEERS A Sevee & Maher Engineers company DESIGN FIRM NO. 184.008857-0002

SEVEE & MAHER **ENGINEERS** 

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PROJECT NAME:

**BLUESTEM SOLAR** 

LOCATION:

41°45'08.6"N, 88°24'16.0"W AURORA, IL

ISSUE #	ISSUED FOR:	DAT
1	SITE LAYOUT	08-27-2
2	PROGRESS SET	09-11-2
3	PROGRESS SET	09-17-2

DATE: 09-17-2025

TITLE:

**DETAILS** 

PROJECT #:

IW-101

SHEET:

C-3.0

