The petitioner is submitting for a partial Development and Management (D&M) Plan for the site, to begin sitework in preparation of construction of the electrical facility. The final electrical layout and interconnection of the facilities is still under design and review with the interconnecting utility. The responses below outline the Petitioner's Development and Management Plan.

1. The Petitioner shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-60 through 16-50j-62 of the Regulations of Connecticut State Agencies. The D&M Plan shall be provided to the service list and submitted to and approved by the Council prior to the commencement of facility construction and shall include:

    a. A final site plan including, but not limited to, final facility layout, access roads, electrical interconnection including riser pole locations, fence design, equipment pads, and stormwater management control structures;
    Attached as ***Exhibit A - Benz Civil Site Documents REV #9 - 6-24-21*** are the final site plan and civil construction documents. A revision to the plans has been made for this phase of construction to forgo demolition of the residence on site and utilize the existing driveway. Minor modifications have been made to the plans to support these changes and the SWPCP has been amended to include these revisions.

    The Petitioner is continuing to work with United Illuminating (UI) to finalize the project interconnection. The Petitioner will work with UI to reduce overhead visual impacts of the project along Benz Street as mentioned in the CSC decision hearing for the project. The final interconnection design is ultimately controlled by the utility, and the Petitioner will press the Council's concerns during the final design process.

    b. Details of construction phasing that includes, at a minimum, one growing season upon completion of the stormwater basins, swales, perimeter erosion and sedimentation controls, and solar field grading, prior to the commencement of solar array construction. One growing season is defined as April 1 through June 15 or August 15 through October 15;
    It is intended to begin site preparation on or before 8/2/21 pending the CSC approval of the site preparation portion of the D&M plan. After site clearing, perimeter erosion controls and grading will occur with the intent to get vegetation established in those areas on or around August 15th, to allow for a growing season through October 15th. The site will be inspected at that time to determine if groundcover establishment is sufficient to begin solar facility construction on October 17th, 2021. Physical construction of the facility would not commence until the Council has approved the construction portion of the D & M plan.

    c. Submit a box turtle protection program;
    Attached as ***Exhibit B – Box turtle protection plan***

    d. Submit a copy of the DEEP Stormwater Permit;
    Attached as ***Exhibit C – DEEP Stormwater Permit Authorization***

    e. Submit the final structural design for the racking system, stamped by a Professional Engineer duly licensed in the State of Connecticut prior to commencement of construction;

The petitioner is yet to finalize the racking and electrical design for the project. Once the site is cleared/graded, the Petitioner will perform on site testing to determine racking and foundation design. The Petitioner will submit final racking and electrical design documents prior to the construction of the solar facility for approval of a final Development and Management Plan.

f. Final plans for hosting sheep grazing at the site, if applicable, including, but not limited to, provisions for emergency evacuation;
The Petitioner will submit a sheep grazing plan for approval prior to grazing the site. The grazing plan will accompany the submission for the final Development and Management Plan.

g. Installation of a black vinyl-coated solar field perimeter fence along Benz Street with a six inch gap at the bottom for wildlife movement if WS opts not to host sheep grazing at the site under (f);
The Petitioner will install a black vinyl coated perimeter fence along Benz Street with the civil phase of construction. The Petitioner intends to graze the site once the electrical facility is operational. The black vinyl coated fence will be installed without a 6" gap to ensure a secure facility.

h. Construction hours shall occur Monday through Saturday with any Sunday work to be requested, as necessary;
Due to the nature of completing the site preparation in a timely fashion to attain site stabilization as quickly as possible, the Petitioner is requesting to be able to perform Sunday work throughout the site preparation process.

i. Submit an updated DEEP NDDB determination letter prior to commencement of construction;
Attached as ***Exhibit D – DEEP Updated NDDB determination Letter***.

j. Consult with the DEEP Dam Safety Division regarding permitting requirements, if any, for the proposed stormwater basins prior to site construction;
The Petitioner has contacted DEEP Dam Safety, they are currently reviewing the project, it is not anticipated that any additional permitting requirements will be necessary at this time. Prior to construction, the Petitioner will provide the CSC with official correspondence.

k. Solar module specifications that indicate the selected solar module will not contain PFAS and will not be characterized as hazardous waste through applicable TCLP testing at the time of this decision; and
The Petitioner has tentatively selected a Trina 475W module for the project. ***Exhibit E – Trina Module Cut Sheet***

l. Identification of the location for the on-site disposal of excess cut material from site grading activities. If a rock processor is to be used on-site, submit details regarding the location of the processor and associated erosion/sedimentation controls and sediment traps, and details of water use to control dust emissions.
A crushing area has been identified on the grading and erosion control plan in Exhibit A. This includes an area large enough for crushing stockpiles to and to work around them, for loading and handling material once complete. There are any additional erosion control measures required for the crushing operation. The crushing equipment will

require water hookup of a ¾" hose connection from the residence and watering systems are built into the crusher for dust control. All crushing operations will follow the requirements of the approved SWPCP.

Additional Items:
The Petitioner has updated the language associated with the originally submitted decommissioning memo ***Exhibit F – Benz Solar Decommissioning Memo***.

EXHIBIT A

BENZ STREET SOLAR
CONNECTICUT SITING COUNCIL DOCUMENTS

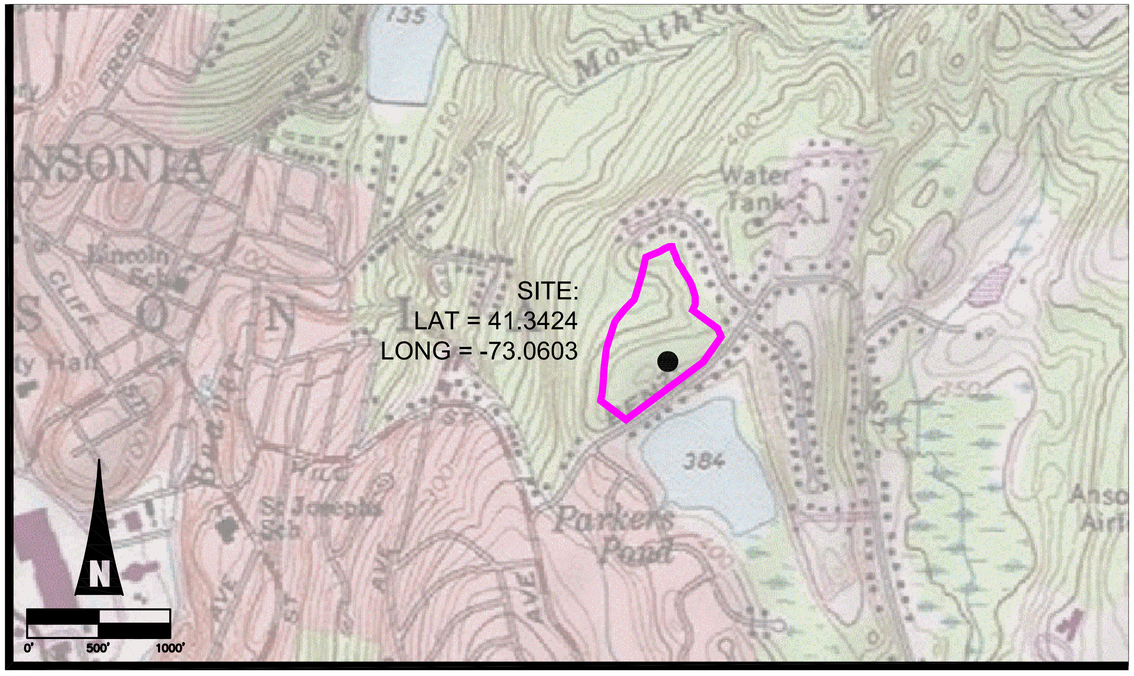
FOR

Site/Electrical Layout, Grading/Drainage/Erosion Control/Landscaping

IN

ANSONIA, CONNECTICUT

LOCATION MAP



SHEET INDEX

●	9	6/24/2021	1	COVER SHEET
●	-	2/04/2019	2	ALTA SURVEY (BY GODFREY HOFFMAN HODGE, LLC)
●	9	6/24/2021	3	SITE PLAN
●	9	6/24/2021	4	GRADING AND EROSION CONTROL PLAN
●	9	6/24/2021	5	SITE GRADING PLAN: BASIN #1
●	9	6/24/2021	6	SITE GRADING PLAN: BASIN #2
●	9	6/24/2021	7	LANDSCAPE PLAN
●	9	6/24/2021	8	KEY OBSERVATION POINTS
●	9	6/24/2021	9	PROJECT CROSS SECTION
●	9	6/24/2021	10	CIVIL NOTES
●	9	6/24/2021	11	CIVIL DETAILS

DRAWING INDEX LEGEND

FILLED CIRCLE INDICATES DRAWING INCLUDED WITHIN THIS ISSUE
MOST RECENT REVISION NUMBER
MOST RECENT ISSUE OR REVISION DATE

○	-	X/XX/202X	X	SHEET TITLE

CONTACT INFO:

RECORD LANDOWNER:
PLH, LLC
77 WATER STREET
8TH FLOOR
NEW YORK, NY 10005

OWNER/DEVELOPER:
ECOS ENERGY
222 SOUTH 9TH STREET
SUITE 1600
MINNEAPOLIS, MN 55402

CIVIL ENGINEER:
CLA ENGINEERS, INC.
317 MAIN STREET
NORWICH, CT 06360
TEL: 860-886-1966

SURVEYOR & WETLANDS DELINEATION:
GODFREY HOFFMAN HODGE, LLC
26 BROADWAY
NORTH HAVEN, CT 06085
TEL: 203-239-4217

No.	Date	Revision
9	6/24/2021	MISC. UPDATES AND REVISIONS
8	5/24/2021	MISC. UPDATES AND REVISIONS
7	4/16/2021	MISC. UPDATES AND REVISIONS
6	3/22/2021	MISC. UPDATES AND REVISIONS
5	9/17/20	MISC. UPDATES AND REVISIONS PER CSC
4	7/24/20	MISC. UPDATES AND REVISIONS
3	5/22/20	2 MW CSC SUBMISSION
2	4/1/20	REVISED HYDROLOGY
1	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING
317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

KYLE L. RAUBERT — No. 24228 — LICENSED PROFESSIONAL ENGINEER — STATE OF CONNECTICUT

31 BENZ STREET
ANSONIA, CT 06401

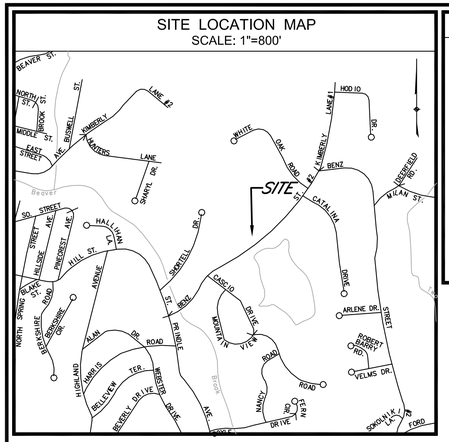
BENZ STREET SOLAR

COVER SHEET

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 1

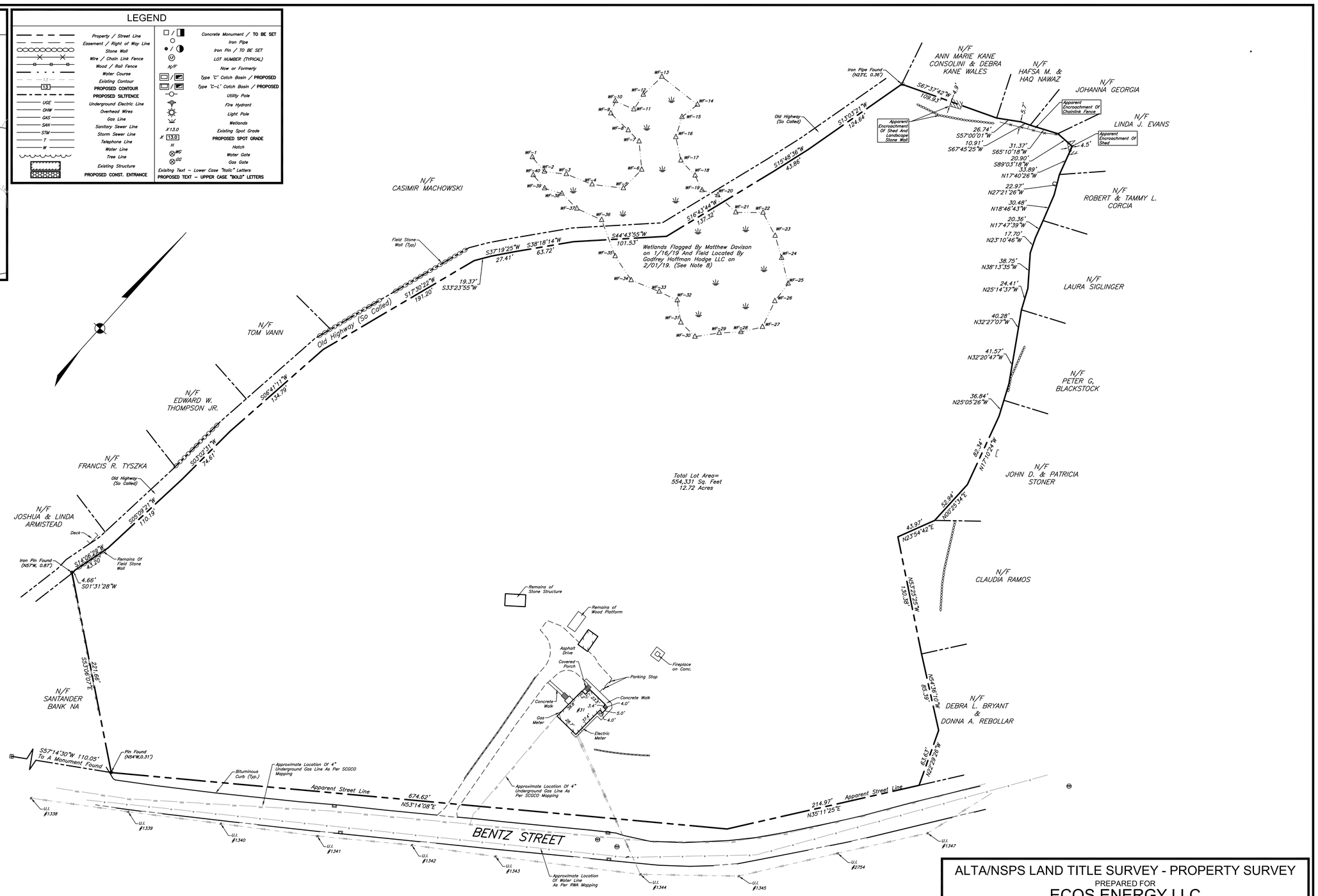
M:\6000\6400\6430 Benz Street Solar\Drawings\+Current\01 COVER SHEET-BENZ.dwg

SITE LOCATION MAP
SCALE: 1"=800'



LEGEND

Property / Street Line	Concrete Monument / TO BE SET
Easement / Right of Way Line	Iron Pipe
Stone Wall	Iron Pin / TO BE SET
Wire / Chain Link Fence	LOT NUMBER (TYPICAL)
Wood / Rail Fence	N/F Now or Formerly
Water Course	Type "C" Catch Basin / PROPOSED
Existing Contour	Type "D-L" Catch Basin / PROPOSED
PROPOSED CONTOUR	Utility Pole
PROPOSED SILTFENCE	Fire Hydrant
UGE Underground Electric Line	Light Pole
OHW Overhead Wires	Wetlands
GAS Gas Line	Existing Spot Grade
SAN Sanitary Sewer Line	PROPOSED SPOT GRADE
STM Storm Sewer Line	Hatch
T Telephone Line	Water Gate
W Water Line	Gas Gate
Tree Line	Existing Text – Lower Case "Italic" Letters
Existing Structure	PROPOSED TEXT – UPPER CASE "BOLD" LETTERS
PROPOSED CONST. ENTRANCE	



NOTES:

1. THIS MAP AND SURVEY HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300B-1 THRU 20-300B-20, THE MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT EFFECTIVE JUNE 21, 1996, AMENDED OCTOBER 26, 2018.
A) THE HORIZONTAL ACCURACY CONFORMS TO CLASS "A-2".
B) THE BOUNDARY DETERMINATION CATEGORY IS A "FIRST SURVEY".
C) THE TYPE OF SURVEY IS A "PROPERTY SURVEY".

2. ALL MONUMENTATION FOUND OR SET IS DEPICTED ON THIS MAP.

3. THE NORTH ARROW, BEARINGS, AND COORDINATES ARE BASED UPON THE CONNECTICUT STATE PLANE COORDINATE SYSTEM, NAD 83 UTILIZING THE STATE OF CONNECTICUT ACORN GPS NETWORK.

4. REFERENCE MAP(S):
A. MAP OF TWO LOTS PROPERTY OF JOSEPH DAVIDSON BENZ ST ANSONIA, CONN.
BY, DANIEL B. GUION
DATED, MAY. 16, 1985
B. ANTHONY & ELAINE DEFAZIO LOT 12 ANSONIA, CONN.
BY, JOSEPH WYSOWSKI
DATED, AUGUST 14, 1969
C. MAP SHOWING HOUSE LOCATION ON LOT #14 WHITE OAK RIDGE ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, OCTOBER 2, 1962
D. MAP SHOWING HOUSE LOCATION ON LOT #2 WHITE OAK RIDGE ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, SEPTEMBER 6, 1961
E. MAP SHOWING HOUSE LOCATION ON LOT #6 WHITE OAK RIDGE ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, OCTOBER 25, 1961
F. WHITE OAK RIDGE DEVELOPMENT BY FOREST HEIGHTS INC. ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, MAY 1961, REVISED TO JUNE 9, 1961
G. MAP OF BUILDING LOTS OWNED BY ANDREW WEISZ, THOMAS WEISZ, & JOSEPH DIGIORGI SECTION 1 ANSONIA, CONN.
BY, CLARKE AND PEARSON
DATED, AUGUST 19, 1959
H. MOUNTAIN VIEW ESTATES SECTION 1 ANSONIA – CONN.
BY, FREDERICK HAHN
DATED, FEBRUARY 10, 1959
I. MOUNTAIN VIEW ESTATES SECTION 3 ANSONIA – CONN.
BY, FREDERICK HAHN
DATED, MARCH 5, 1959
J. LOT #1 MOUNTAIN VIEW ESTATES ANSONIA CONN
BY, FREDERICK HAHN
DATED, FEBRUARY 10, 1959
K. LOT #2 MOUNTAIN VIEW ESTATES ANSONIA – CONN.
BY, FREDERICK HAHN
DATED, DECEMBER 26, 1958
L. LOT #3 MOUNTAIN VIEW ESTATES ANSONIA – CONN.
BY, FREDERICK HAHN
DATED, DECEMBER 26, 1958
M. LOT #4 MOUNTAIN VIEW ESTATES ANSONIA CONN
BY, FREDERICK HAHN
DATED, FEBRUARY 10, 1959
N. LOT #5 MOUNTAIN VIEW ESTATES ANSONIA CONN
BY, FREDERICK HAHN
DATED, FEBRUARY 10, 1959

5. PROPERTY IS SUBJECT TO AND TOGETHER WITH THE FOLLOWING:
A. SUBJECT TO AN AGREEMENT IN FAVOR OF THE CITY OF ANSONIA AS PER VOLUME 121 PAGE 208 OF THE ANSONIA LAND RECORDS.
B. RIGHTS, RESTRICTIONS, ENCUMBRANCES, COVENANTS, EASEMENTS, ETC. AS PER THE RECORD MAY APPEAR.

6. THE SUBJECT PROPERTY IS DESIGNATED AS MAP 87, BLOCK 00, LOT 01 ON THE ANSONIA ASSESSOR'S RECORDS.

7. PROPERTY IS LOCATED IN FLOOD ZONE(S): "X" (AREAS DETERMINED TO BE OUTSIDE THE 500 YEAR FLOOD PLAIN) AS DEPICTED ON F.I.R.M. COMMUNITY NO. 090090C0408J DATED MAY 16, 2017 AND 090090C0406H DATED DECEMBER 17, 2010.

8. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON MAY HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES; FROM PAROLE TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE. THE LOCATIONS OF WHICH ARE UNKNOWN TO GODFREY–HOFFMAN HODGE, LLC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION. CALL BEFORE YOU DIG 1-800-922-4455.

TO CONNECTICUT ATTORNEYS TITLE INSURANCE COMPANY,
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 6, 7(A), 8, 9, 10 , 11, 12, 13, 14, 16, 17, 18, 19 AND 20 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON FEBRUARY 1, 2019.

TO THE BEST OF MY KNOWLEDGE AND BELIEF THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

ADAM HOFFMAN, L.S. #15168

NOT VALID WITHOUT LIVE SIGNATURE AND SEAL.

STATE OF CONNECTICUT ADAM HOFFMAN No.15168 LICENSED LAND SURVEYOR

ALL WORK, LABOR, AND MATERIALS TO BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES AND LAWS WHICH SHALL TAKE PRECEDENCE OVER THESE DRAWINGS IN THE EVENT OF ERRORS AND/OR OMISSIONS HEREIN.

THE WORD "CERTIFY" OR "DECLARE" IS UNDERSTOOD TO BE AN EXPRESSION OF PROFESSIONAL OPINION BY THE LAND SURVEYOR AND/OR ENGINEER, WHICH IS BASED ON THEIR BEST KNOWLEDGE, INFORMATION AND BELIEF. AS SUCH IT CONSTITUTES NEITHER A GUARANTEE OR WARRANTY.

THE INFORMATION CONTAINED HEREIN IS THE PROPRIETARY AND CONFIDENTIAL PROPERTY OF GODFREY–HOFFMAN HODGE, LLC. REPRODUCTIONS, PUBLICATION, DISTRIBUTION, OR DUPLICATION IN WHOLE OR IN PART REQUIRES THE WRITTEN PERMISSION OF GODFREY–HOFFMAN HODGE, LLC. THIS DOCUMENT AND COPIES THEREOF ARE VALID ONLY IF THEY BEAR THE LIVE SIGNATURE AND LIVE SEAL OF THE DESIGNATED LICENSED PROFESSIONAL.

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NO.	DATE	DESCRIPTION

REVISIONS

ALTA/NSPS LAND TITLE SURVEY - PROPERTY SURVEY

PREPARED FOR

ECOS ENERGY LLC

31 BENZ STREET
ANSONIA, CONNECTICUT

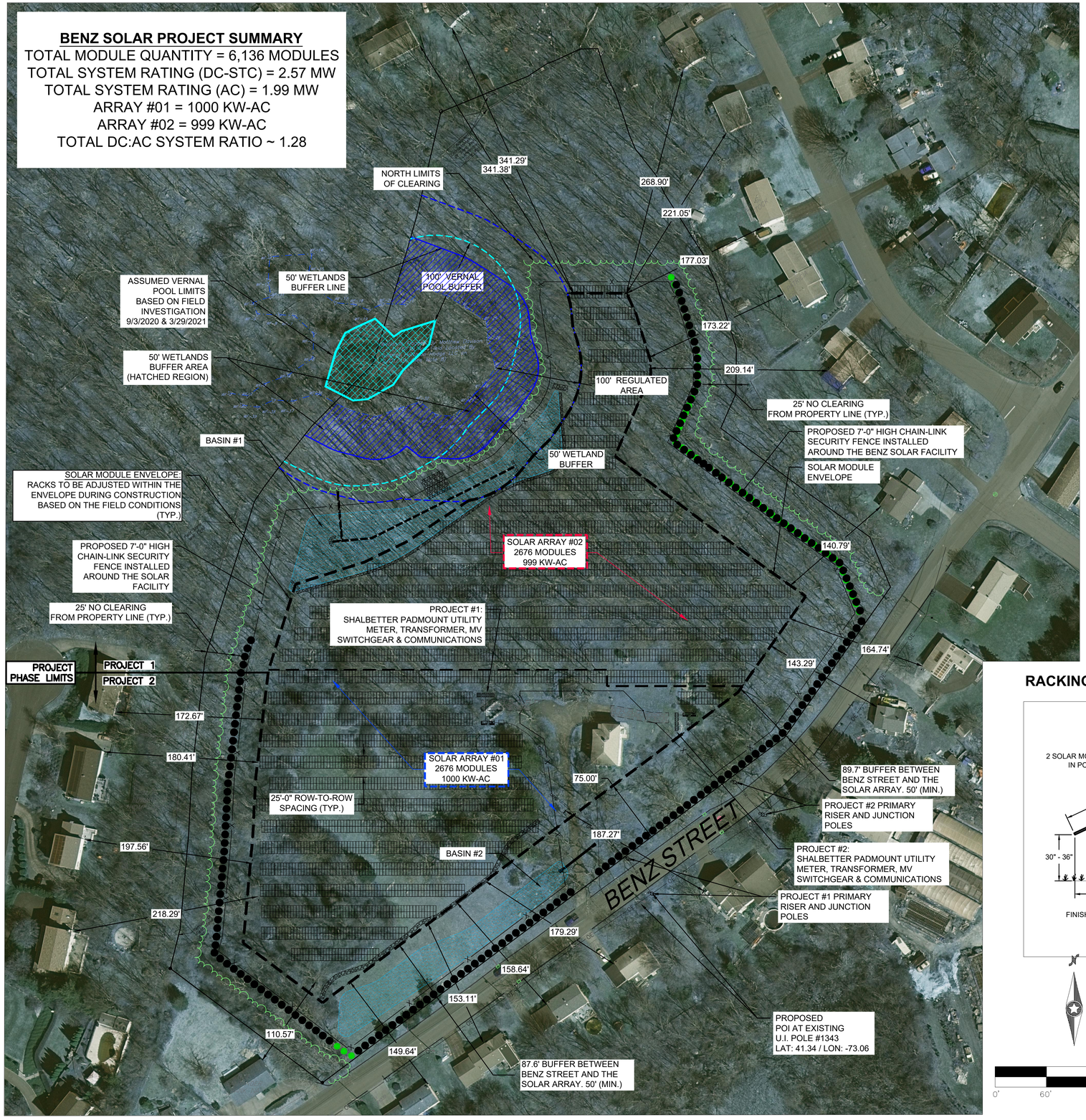
0 25 50 75 100 125

GODFREY HOFFMAN HODGE, LLC
PROFESSIONAL LAND SURVEYORS & CIVIL ENGINEERS
26 BROADWAY NORTH HAVEN, CT 06473; TEL: 203.239.4217 - WWW.GODFREYHOFFMAN.COM
1783 FARMINGTON AVENUE, UNIONVILLE, CT 06085; TEL: 860.673.0444 - WWW.HODGELLC.COM

DRAWN BY:	KMA
CHECKED BY:	CSW
DATE:	02-04-2019
SCALE:	1"=50'
PROJECT:	19-006
DRAWING:	1 of 1

BENZ SOLAR PROJECT SUMMARY

TOTAL MODULE QUANTITY = 6,136 MODULES
TOTAL SYSTEM RATING (DC-STC) = 2.57 MW
TOTAL SYSTEM RATING (AC) = 1.99 MW
ARRAY #01 = 1000 KW-AC
ARRAY #02 = 999 KW-AC
TOTAL DC:AC SYSTEM RATIO ~ 1.28



LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED PROJECT FENCE
- PROPOSED GRAVEL ACCESS ROAD
- UMV — PROPOSED AC DISTRIBUTION
- OE — PROPOSED OVERHEAD ELECTRIC
- ARBORVITAE SCREENING TREES
- BASIN OUTLET
- 50' WETLAND BUFFER AREA
- WETLAND DELINEATION LINE
- 24 x 2 SOLAR MODULE BOCK
- 18 x 2 SOLAR MODULE BOCK
- 6 x 2 & 12 x 2 SOLAR MODULE BOCK

PROJECT INFORMATION:

EXISTING ZONING : R
PROPOSED USE : SPECIAL COMMERCIAL

SPECIFIC SITE NOTES:
1. NO LIGHTING PROPOSED WITH THE PROJECT
2. NO AUDIBLE NOISE GREATER THAN THE SITES EXISTING AMBIENT NOISE LEVEL SHALL BE DETECTABLE AT OR BEYOND THE PROPERTY LINE OF THE PROJECT
3. EMERGENCY VEHICULAR & SITE ACCESS TO BE PROVIDED TO ALL LOCAL RESPONDERS (POLICE, FIRE, ETC...)

PROJECT AREAS & IMPACTS:

TOTAL SITE AREA = 12.72 ACRES

TOTAL SITE CLEARING = ±9.0 ACRES

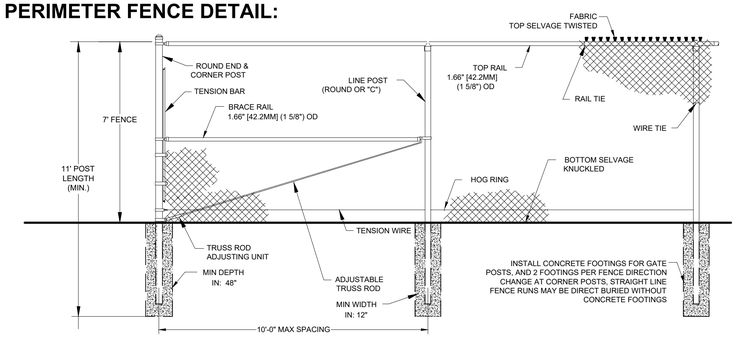
TOTAL ARRAY FOOTPRINT (FENCE LIMITS) = 8.38 ACRES

TOTAL PROPOSED IMPERVIOUS:
GRAVEL ACCESS ROAD, STRUCTURAL POSTS & EQUIPMENT PADS = 0.12 ACRES
SOLAR MODULES EFFECTIVE IMPERVIOUS = 0.65 ACRES

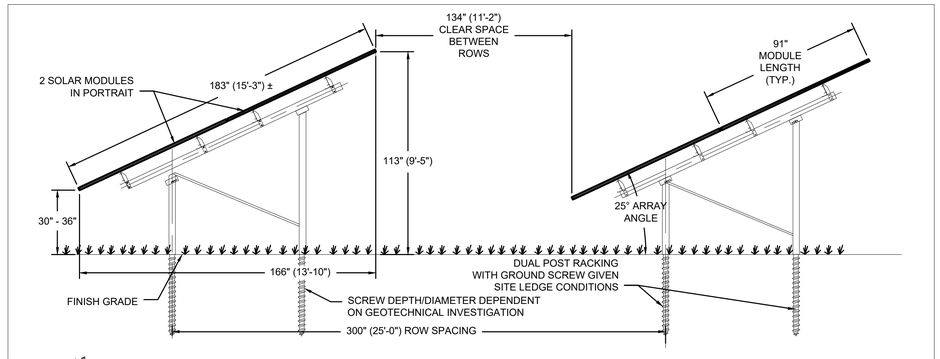
EASTERN BOX TURTLE PROTECTION

EASTERN BOX TURTLES MAY BE PRESENT IN THE PROJECT AREA. ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE AWARE OF THE EASTERN BOX TURTLE PROTECTION PLAN AND ADHERE TO THE REQUIREMENTS OUTLINED IN THE PLAN.

PERIMETER FENCE DETAIL:



RACKING PROFILE DETAIL:



N

0' 60' 120' 180'

No.	Date	Revision
9	6/04/2021	MISC. UPDATES AND REVISIONS
8	5/24/2021	MISC. UPDATES AND REVISIONS
7	4/16/2021	MISC. UPDATES AND REVISIONS
6	3/23/2021	MISC. UPDATES AND REVISIONS
5	9/17/20	MISC. UPDATES AND REVISIONS PER CSC
4	7/24/20	MISC. UPDATES AND REVISIONS
3	5/22/20	2 MW CSC SUBMISSION
2	4/1/20	REVISED HYDROLOGY
1	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
CIVIL • STRUCTURAL • SURVEYING
317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

STATE OF CONNECTICUT — ERIC M. BRESSER — No. 24220 — PROFESSIONAL ENGINEER

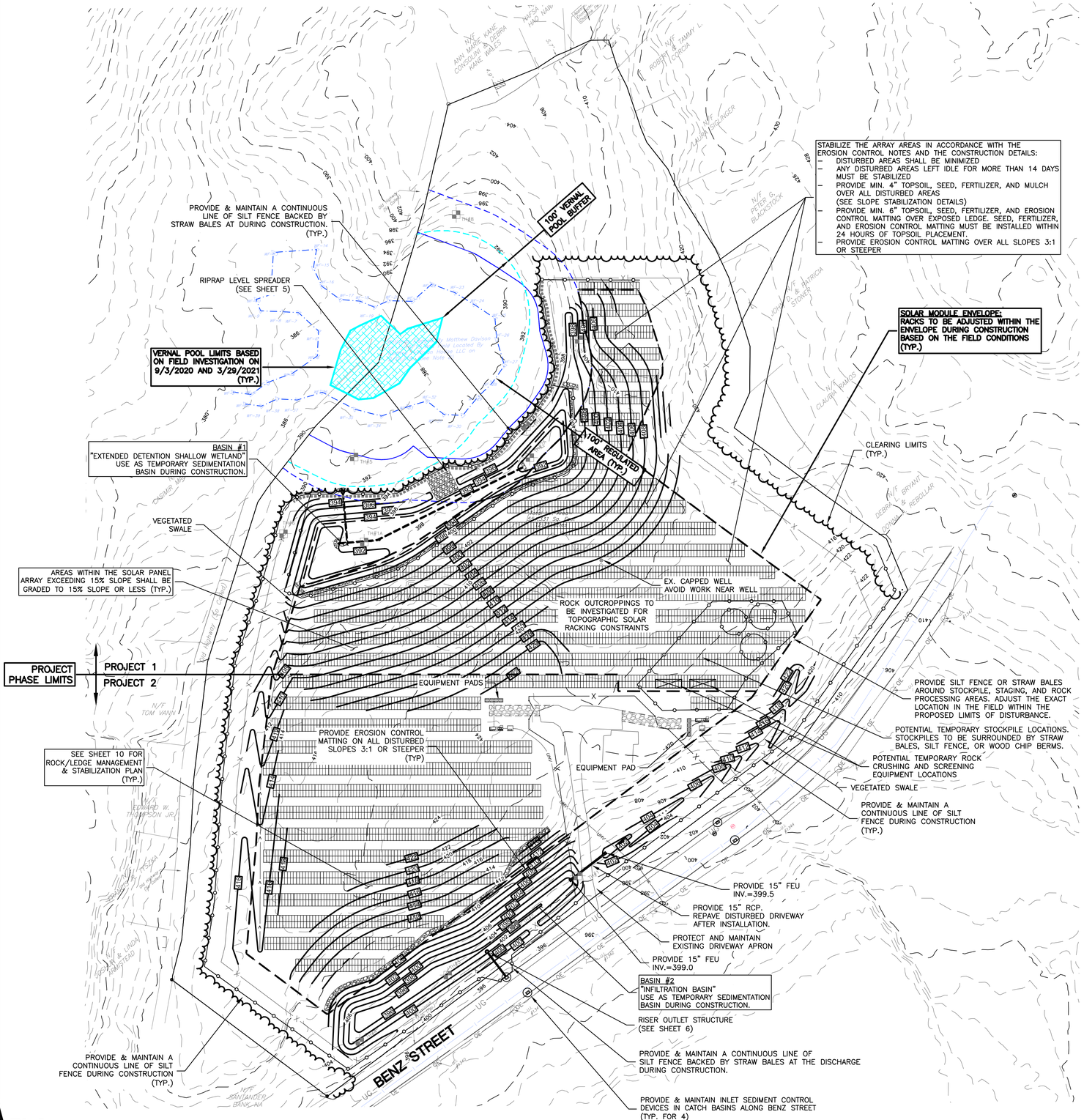
31 BENZ STREET
ANSONIA, CT 06401

BENZ STREET SOLAR

SITE PLAN

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 3

M:\6000\6400\6430 Benz Street Solar\Drawings\+Current\03 SITE PLAN-BENZ.dwg



LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED UNDERGROUND MV CABLE
- PROPOSED OVERHEAD ELECTRIC
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- 100' WETLAND REGULATED AREA LIMIT
- 50' WETLAND BUFFER
- WETLAND DELINEATION LINE & AREA
- RIP-RAP BASIN OUTLET

TEST HOLE DATA:

TH–1
TD=72"
No bedrock
No water
No mottles

0–9" Topsoil, Brown fine sandy loam with boulders
9–52" Yellow brown fine sandy loam with boulders
52–72" Gray loamy sand with boulders

TH–2
TD=72"
No bedrock
No water
No mottles

0–10" Topsoil, Brown fine sandy loam with boulders
10–3" Yellow brown fine sandy loam with boulders
38–72" Gray loamy sand with boulders, dense at 65 inches

TH–3
TD=84"
No bedrock
No water
No mottles

0–12" Topsoil, Brown fine sandy loam with boulders
12–28" Yellow brown fine sandy loam with boulders
28–84" Gray loamy sand with boulders, dense at 63"

TH–4
TD=74"
No bedrock
No water
No mottles

0–10" Topsoil, Brown fine sandy loam
10–40" Yellow brown fine sandy loam
40–74" Gray loamy sand with angular boulders and stones and mica

TH–5
TD=76"
No bedrock
Wet at 44"
Mottles 24"

0–8" Topsoil, Dark Brown fine sandy loam
8–24" Red brown fine sandy loam
24–76" Red brown sandy loam with gray brown mottles

TH–6
TD=70"
No bedrock
Wet at 50"
Mottles 30"

0–7" Topsoil, Dark Brown fine sandy loam
7–32" Red brown fine sandy loam with gray brown mottles
32–70" Gray loamy sand with boulders

TH–7
TD=70"
No bedrock
Wet at 36"
Mottles 32"

0–16" Topsoil, Dark Brown fine sandy loam
16–32" Red brown fine sandy loam with gray brown mottles
32–70" Red brown fine sandy loam with boulders and gray brown mottles

TH–8 (done with shovel and auger)
TD=37"
No bedrock
No water
Mottles 34"

0–8" Topsoil, Dark Brown fine sandy loam
8–34" Red brown fine sandy loam
37+" Red brown loamy sand with boulders and gray brown mottles

Additional Test pits performed on April 30, 2021
R.Russo CLA Engineers, R. Galton ECOS,
Douglas Construction excavator

TP–1A
TD=98"
No water
Mottles 46"
No bedrock

0–10" Topsoil, dark brown sandy loam
10–28" subsoil strong brown fine sandy loam
28–46" subsoil brown fine sandy loam
46–98" gray brown fine sandy loam with stones DENSE
Samples at 46–98"

TP–2A
TD=118"
Seeping 54"
Mottles 54"
No bedrock

0–14" Topsoil, dark brown sandy loam
14–43" subsoil yellow brown fine sandy loam
43–54" subsoil brown fine sandy loam
54–118" gray brown fine sandy loam with stones and cobbles DENSE

TP–3A
TD=32"
Water 28"
Mottles 28"
Bedrock 32"

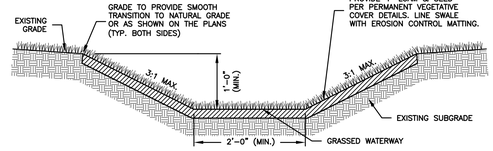
0–9" Topsoil, dark brown sandy loam
9–32" subsoil yellow brown fine sandy loam with boulders
Note: Surface ledge 15 feet to the east.

CONSTRUCTION NOTES:

1. THE CONTRACTOR SHALL PERFORM ALL TREE REMOVAL ACTIVITIES ON SITE TO ALLOW FOR SEDIMENT TRAP INSTALLATION. NO GRUBBING IS TO OCCUR DURING TREE REMOVAL, PRIOR TO SEDIMENT TRAP INSTALLATION.
2. ALL SEDIMENT TRAP'S IDENTIFIED ON THE PLAN SHALL BE STAKED BY A REGISTERED SURVEYOR AND INSTALLED PER PLANS PRIOR TO ANY CONSTRUCTION ACTIVITY.
3. AS-BUILT DRAWINGS SHALL BE MAINTAINED BY THE CONTRACTOR THROUGHOUT THE CONSTRUCTION OF THE PROJECT.
4. EASTERN BOX TURTLES MAY BE PRESENT IN THE PROJECT AREA. ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE AWARE OF THE EASTERN BOX TURTLE PROTECTION PLAN AND ADHERE TO THE REQUIREMENTS OUTLINED IN THE PLAN.

EROSION CONTROL NOTES:

1. DEVELOPER/CONTRACTOR TO OBTAIN A DEEP GENERAL STORMWATER PERMIT PRIOR TO BEGINNING CONSTRUCTION.
2. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BEFORE ANY SOIL DISTURBANCE.
3. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE STABILIZED.
4. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES.
5. WETLAND AREAS AND SURFACE AREAS SHALL BE PROTECTED FROM SEDIMENT. OFF-SITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED THROUGH THE PROJECT AREA WITHOUT CAUSING EROSION. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
6. ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. STABILIZATION MEASURES SUCH AS HYDRO-SEEDING OR APPLICATION OF HAY/MULCH OR SOIL NETTING SHALL BE APPLIED PRIOR TO REMOVAL OF TEMPORARY EROSION MEASURES AND INSPECTED WEEKLY UNTIL STABILIZATION IS COMPLETE. TEMPORARY EROSION CONTROL MEASURES MAY BE REMOVED ONCE STABILIZATION OF ALL SITE SOILS HAS BEEN ACHIEVED AND WRITTEN AUTHORIZATION TO DO SO HAS BEEN PROVIDED BY THE STORM-WATER AUTHORITY. TRAPPED SEDIMENT SHALL BE REMOVED IMMEDIATELY WITH TEMPORARY EROSION CONTROL METHODS AND LAWFULLY DISPOSED OF OFF-SITE. OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN THIRTY DAYS.



VEGETATED SWALE DETAIL
NOT TO SCALE

No.	Date	Revision
9	6/24/2021	MISC. UPDATES AND REVISIONS
8	5/24/2021	MISC. UPDATES AND REVISIONS
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3	5/22/20	2 MR CSC SUBMISSION
2	4/1/20	REVISED HYDROLOGY
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31 BENZ STREET
ANSONIA, CT 06401

BENZ STREET SOLAR

GRADING AND EROSION CONTROL PLAN

Project No.	CLA-6430
Proj. Engineer	E.M.B.
Date:	2/11/2020
Sheet No.	4

CLA

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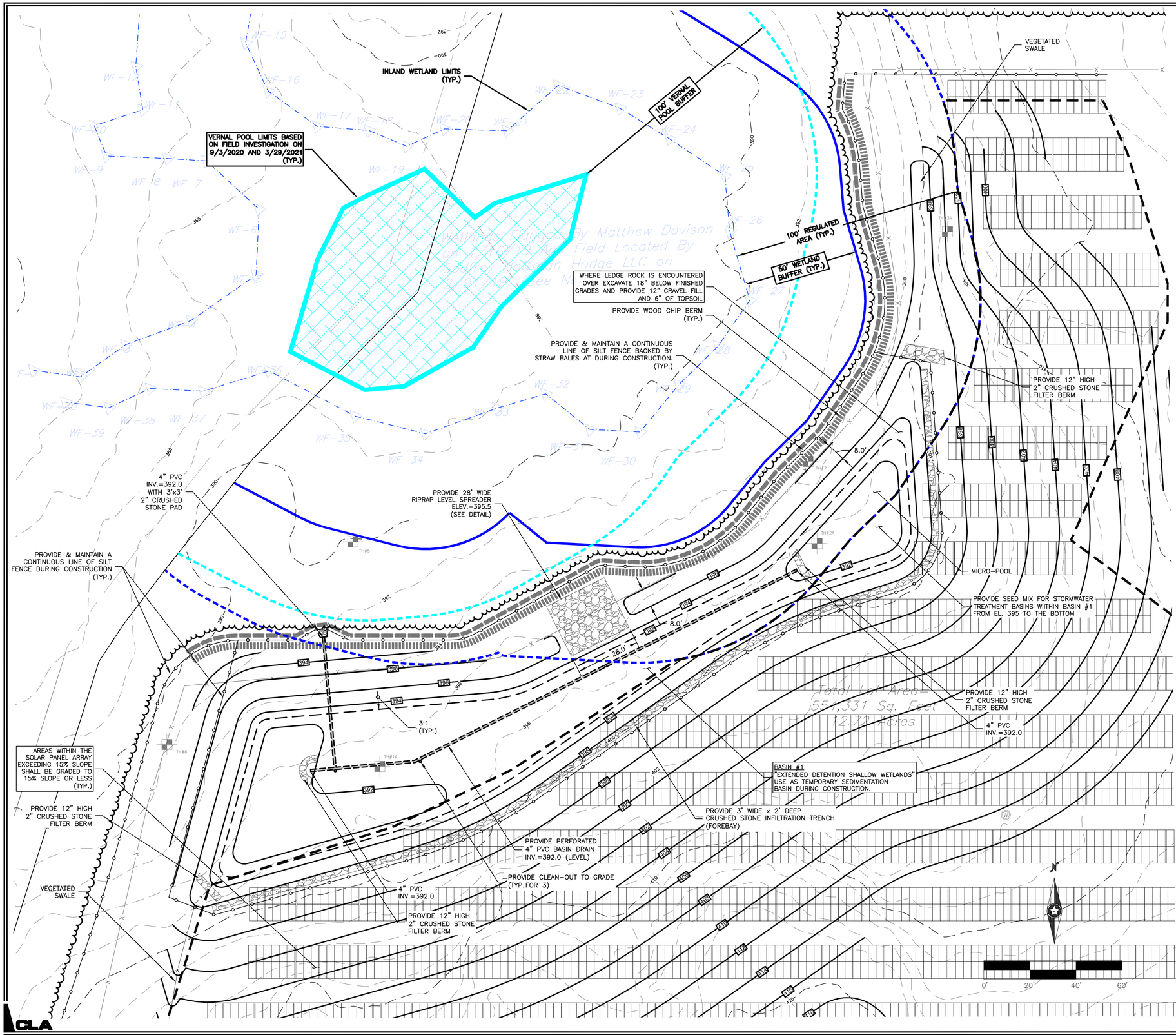


LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED UNDERGROUND MV CABLE
- PROPOSED OVERHEAD ELECTRIC
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- 100' WETLAND REGULATED AREA LIMIT
- 50' WETLAND BUFFER
- WETLAND DELINEATION LINE & AREA
- RIP-RAP BASIN OUTLET

SEED MIX FOR STORMWATER TREATMENT BASIN

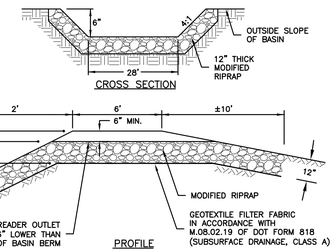
SEE SHEET 7 – LANDSCAPE PLAN FOR SEED MIX SPECIFICATIONS

PERVIOUS TOPSOIL MIX FOR STORMWATER TREATMENT BASINS

THE FOLLOWING PERVIOUS TOPSOIL MIX SHALL BE USED IN THE STORMWATER TREATMENT BASINS. THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE M.13.01.1 OF DOT FORM 817 WITH THE FOLLOWING GRADATION:

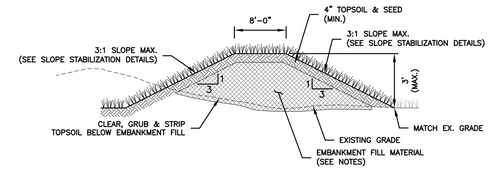
SIEVE	% PASSING
#10	100%
#40	60–80%
#80	5%
#200	0%

DO NOT COMPACT MATERIAL DURING INSTALLATION



STORMWATER TREATMENT BASIN #1 OUTLET DETAIL

NOT TO SCALE



NOTES:

1. EMBANKMENT FILL MATERIAL SHALL CONSIST OF THE FOLLOWING
   - A. CLEAN MINERAL SOIL, FREE OF ROOTS, WOODY VEGETATION, STUMPS, SOD, OVERSIZED STONES, ROCKS, OR OTHER ORGANIC UNSUITABLE MATERIAL.
   - B. SHALL BE A NON-FREE DRAINING GLACIAL TILL
   - C. MATERIAL SHALL CONTAIN AT LEAST 15% PASSING THE #200 SIEVE AND NOT MORE THAN 50% PASSING THE #200 SIEVE.
   - D. NO STONES LARGER THAN 6" SHALL BE ALLOWED WITHIN THE EMBANKMENT.
   - E. NO STONES LARGER THAN 3" SHALL BE ALLOWED WITHIN 2 FEET OF STRUCTURES.
2. EMBANKMENT FILL SHALL BE PLACED IN MAXIMUM 9" LIFTS. THE EXISTING GRADE AND THE SURFACE OF EACH LIFT SHALL BE SCARIFIED PRIOR TO THE PLACEMENT OF THE NEXT LIFT.
3. EMBANKMENT FILL SHALL BE COMPACTED TO 90%-95% STANDARD PROCTOR COMPACTION

STORMWATER TREATMENT BASIN EMBANKMENT FILL SECTION DETAIL

NOT TO SCALE

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1	2/11/20	CSC SUBMISSION

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31 BENZ STREET
ANSONIA, CT 06401

BENZ STREET SOLAR

GRADING PLAN : BASIN #1

Project No.	CLA-6430
Proj. Engineer	E.M.B.
Date:	2/11/2020
Sheet No.	5

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VEGETATED SWALE (SEE SHEET 4)

PROVIDE 5' WIDE x 2' DEEP CRUSHED STONE INFILTRATION TRENCH (FOREBAY)

EXISTING DRIVEWAY TO REMAIN

PROVIDE 15" RCP. REPAVE DISTURBED DRIVEWAY AFTER INSTALLATION.

VEGETATED SWALE (SEE SHEET 4)

PROVIDE 15" FEU INV.=399.0

PROVIDE 15" FEU INV.=399.5

AREAS WITHIN THE SOLAR PANEL ARRAY EXCEEDING 15% SLOPE SHALL BE GRADED TO 15% SLOPE OR LESS (TYP.)

WHERE LEDGE ROCK IS ENCOUNTERED OVER EXCAVATE 18" BELOW FINISHED GRADES AND PROVIDE 12" GRAVEL FILL AND 6" OF TOPSOIL

SEE STORMWATER TREATMENT BASIN #2 – SECTION A-A

3:1 (TYP.)

PROVIDE 4' DIA. CONCRETE RISER OUTLET STRUCTURE T/RISER=399.0 WEIR EL.=398.5 INV.OUT=395.5 (12" PVC)

BENZ STREET

BASIN #2
PERMANENT WATER QUALITY BASIN. USE AS TEMPORARY SEDIMENTATION TRAP DURING CONSTRUCTION.

PROVIDE 12" PVC

PROVIDE 10' WIDE GRASS LINED EMERGENCY OVERFLOW LEVEL SPREADER ELEV.=399.5

PROVIDE & MAINTAIN A CONTINUOUS LINE OF SILT FENCE BACKED BY STRAW BALES AT THE EMERGENCY OVERFLOW DURING CONSTRUCTION.

PROVIDE & MAINTAIN INLET SEDIMENT CONTROL DEVICES IN CATCH BASINS ALONG BENZ STREET (TYP. FOR 4)

CONNECT TO EXISTING CATCH BASIN. PROVIDE BRICK AND MORTAR PARGING FOR WATER TIGHT CONNECTION. INV.=392.0

PROVIDE & MAINTAIN A CONTINUOUS LINE OF SILT FENCE DURING CONSTRUCTION (TYP.)

75.0'

Bituminous Curb (Typ.)

U.I. #1343

U.I. #1342

U.I. #1341

U.I. #1340

0' 20' 40' 60'

LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED UNDERGROUND MV CABLE
- PROPOSED OVERHEAD ELECTRIC
- EXISTING CONTOUR
- PROPOSED CONTOUR
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- 100' WETLAND REGULATED AREA LIMIT
- 50' WETLAND BUFFER
- WETLAND DELINEATION LINE & AREA
- RIP-RAP BASIN OUTLET

SEED MIX FOR STORMWATER TREATMENT BASIN

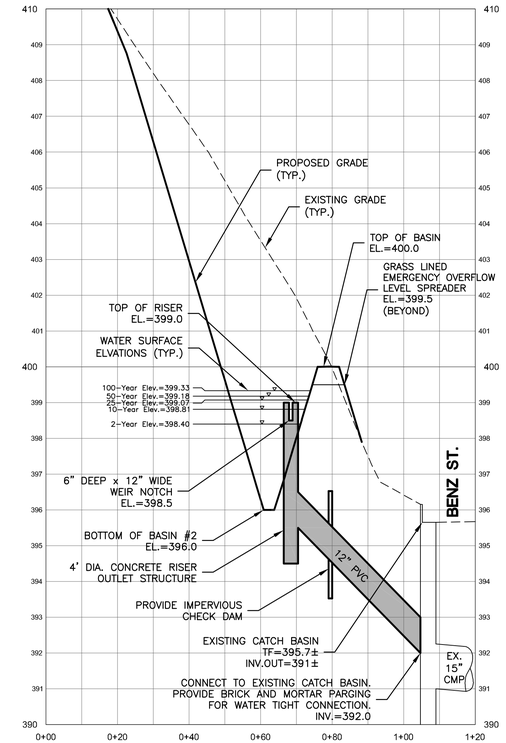
SEE SHEET 7 – LANDSCAPE PLAN FOR SEED MIX SPECIFICATIONS

PERVIOUS TOPSOIL MIX FOR STORMWATER TREATMENT BASINS

THE FOLLOWING PERVIOUS TOPSOIL MIX SHALL BE USED IN THE STORMWATER TREATMENT BASINS. THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE M.13.01.1 OF DOT FORM 817 WITH THE FOLLOWING GRADATION:

SIEVE	% PASSING
#10	100%
#40	60–80%
#80	5%
#200	0%

DO NOT COMPACT MATERIAL DURING INSTALLATION



STORMWATER TREATMENT BASIN #2 - SECTION A-A

SCALE: HORIZ: 1"=20'
VERT: 1"=2'

No.	Date	Revision
9	6/24/2021	MISC. UPDATES AND REVISIONS
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31 BENZ STREET
ANSONIA, CT 06401

BENZ STREET SOLAR

GRADING PLAN : BASIN #2

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 6

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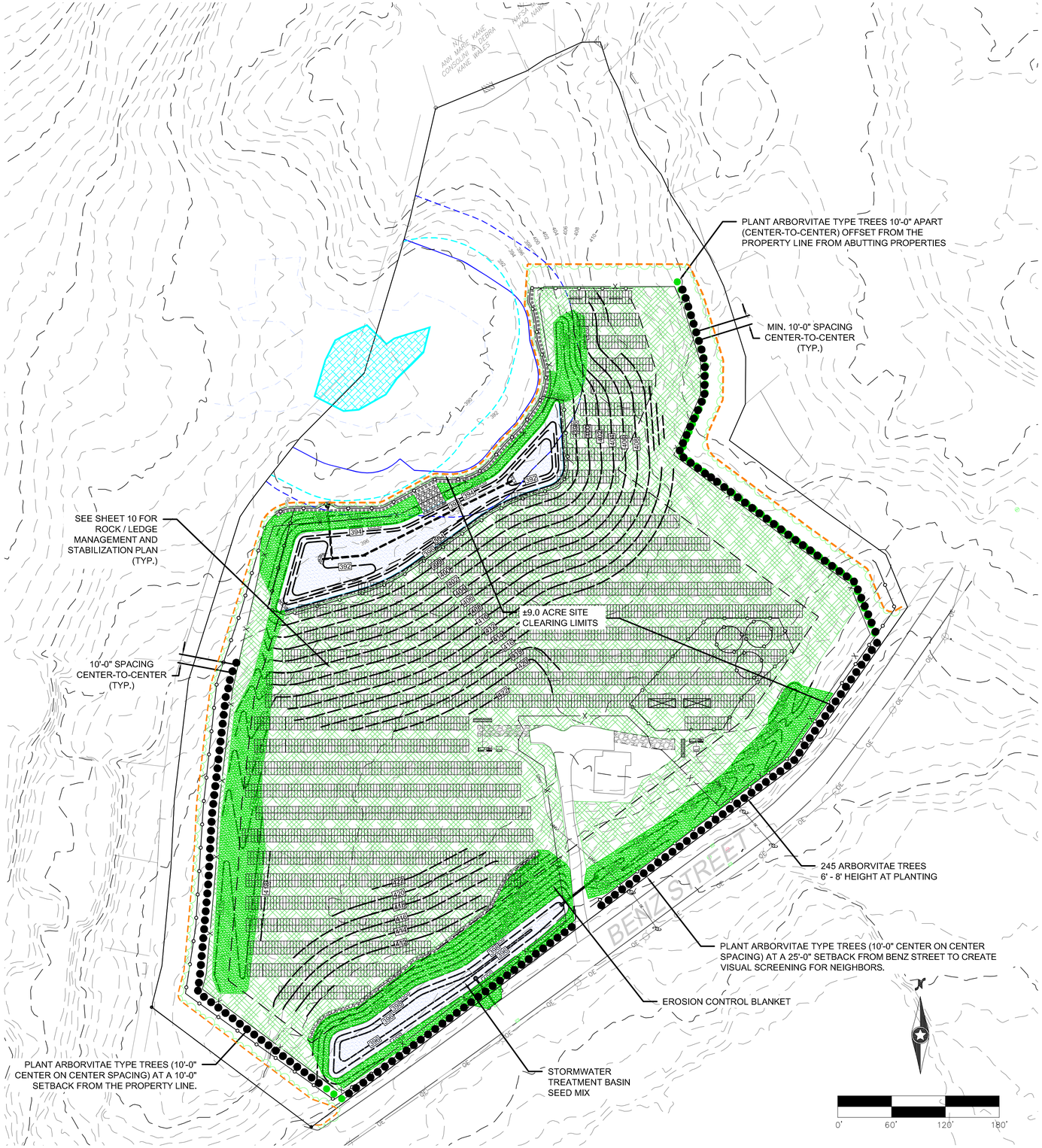


LEGEND:

- EXISTING PROPERTY LINE
- PROPOSED FENCE
- PROPOSED GRAVEL ACCESS ROAD
- PROPOSED UNDERGROUND MV CABLE
- PROPOSED OVERHEAD ELECTRIC
- EXISTING CONTOUR
- PROPOSED CONTOUR
- PROPOSED CLEARING LIMITS
- 26 x 2 SOLAR MODULE BOCK
- 13 x 2 SOLAR MODULE BOCK
- 100' WETLAND REGULATED AREA LIMIT
- WETLAND DELINEATION LINE & AREA
- RIP-RAP BASIN OUTLET

SEED LEGEND:

- STORMWATER BASIN SEED MIX (AREA = 0.45 AC)
- EROSION CONTROL BLANKET WITH SEED (AREA = 1.65 AC)
- SOLAR ARRAY SEEDING / HAY MULCH EROSION CONTROL (AREA = 7.9 AC)

SEED MIX FOR STORMWATER TREATMENT BASINS:

THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX FOR DETENTION BASINS AND MOIST SITES CONTAINS A SELECTION OF NATIVE GRASSES AND WILDFLOWERS DESIGNED TO COLONIZE RECENTLY DISTURBED SITES WHERE QUICK GROWTH OF VEGETATION IS DESIRED TO STABILIZE THE SOIL SURFACE. IT IS AN EXCELLENT SEED MIX FOR ECOLOGICALLY APPROPRIATE RESTORATIONS ON MOIST SITES THAT REQUIRE QUICK STABILIZATION AS WELL AS LONG-TERM ESTABLISHMENT OF NATIVE VEGETATION. THIS MIX IS PARTICULARLY APPROPRIATE FOR DETENTION BASIS THAT DO NOT NORMALLY HOLD STANDING WATER. SOME PLANTS IN THIS MIX CAN TOLERATE INFREQUENT INUNDATION, BUT NOT CONSTANT FLOODING.

SEEDING: THE MIX MAY BE APPLIED BY HYDROSEEDING, BY MECHANICAL SPREADER, BY HYDRO-SEEDING OR ON SMALL SITES IT CAN BE SPREAD BY HAND. WHEN APPLYING ON BARE SOIL, RAKE THE SOIL TO CREATE GROOVES, APPLY SEED, THEN LIGHTLY RAKE OVER. IN NEW ENGLAND, THE BEST RESULTS ARE OBTAINED WITH A SPRING OR EARLY FALL SEEDING. SUMMER AND LATE FALL SEEDING WILL BENEFIT WITH A LIGHT MULCHING OF WEED-FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRE A SLIGHT INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS THE SOILS ARE PARTICULARLY INFERTILE.

APPLICATION RATE: 35 LBS/ACRE (1250 SQ. FT./LB.)

SPECIES *: SWITCHGRASS (PANICUM VIRGATUM), VIRGINIA WILD RYE (ELYMUS VIRGINICUS), CREEPING RED FESCUE (FESTUCA RUBRA), FOX SEDGE (CAREX VULPINOIDEA), CREEPING BENTGRASS (AGROSTIS STOLONIFERA), SOFT RUSH (JUNCUS EFFUSUS), NEW ENGLAND ASTER (ASTER NOVAE-ANGLIAE), GRASS-LEAVED GOLDENROD (EUTHAMIA GRAMINIFOLIA), GREEN BULRUSH (SCIRPUS ATROVIRENS), BONESET (EUPATORIUM PERFOLIATUM), BLUE VERVAIN (VERBENA HASTATA) UPLAND BENTGRASS (AGROSTIS PERENNANS), BIG BLUESTEM, NIAGRA (ANDROPOGON GERARDII), SENSITIVE FERN (ONOCLEA SENSIBILIS), LITTLE BLUESTEM (SCHIZACHYRIUM SCOPARIUM), WOOLGRASS (SCIRPUS CYPERINUS).

SEEDING NOTES:

1. THE CONTRACTOR SHALL SEED ALL DISTURBED AREAS ASSOCIATED WITH TREE AND ROCK REMOVAL AND SITE CLEARING. CONTRACTOR SHALL A INSTALL A 50% / 50% CLOVER / FESCUE MIX OR ENGINEER APPROVED ALTERNATE SEED MIXTURE.
2. ALL SEDIMENT TRAP SIDE SLOPES ARE 3:1 AND SHALL BE SEEDED AND BLANKETED

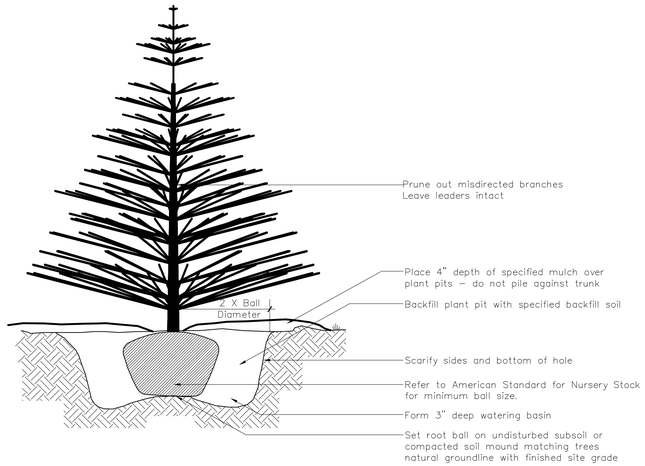
PERVIOUS TOPSOIL MIX FOR STORMWATER TREATMENT BASINS:

THE FOLLOWING PERVIOUS TOPSOIL MIX SHALL BE USED IN THE STORMWATER TREATMENT BASINS. THE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE M.13.01.1 OF DOT FORM 817 WITH THE FOLLOWING GRADATION:

SIEVE	% PASSING
#10	100%
#40	60-80%
#80	5%
#200	0%

DO NOT COMPACT MATERIAL DURING INSTALLATION

ARBORVITAE TREE DETAIL:



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31 BENZ STREET
ANSONIA, CT 06401

BENZ STREET SOLAR

LANDSCAPE PLAN

Project No.	CLA-6430
Proj. Engineer	E.M.B.
Date:	2/11/2020
Sheet No.	7

M:\6000\6400\6430 Benz Street Solar\Drawings\+Current\07 LANDSCAPE PLAN-BENZ.dwg

KOP 4 - MIDDLE OF SITE LOOKING EAST

KOP 5 - EASTERN MIDDLE OF SITE LOOKING SOUTH

KOP 6 - SOUTH WEST OF SITE LOOKING EAST

KOP 3 - NORTHERN SITE, LOOKING SOUTH-EAST

KOP 2 - BENZ STREET LOOKING NORTH

KOP 1 - SOUTH OF BENZ STREET LOOKING NORTH-WEST

No.	Date	Revision
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31 BENZ STREET
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BENZ STREET SOLAR

KEY OBSERVATION POINTS

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 8

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EXHIBIT A: PROJECT CROSS SECTION (NORTHERN SITE VIEW)

(SCALE: 1" = 80')

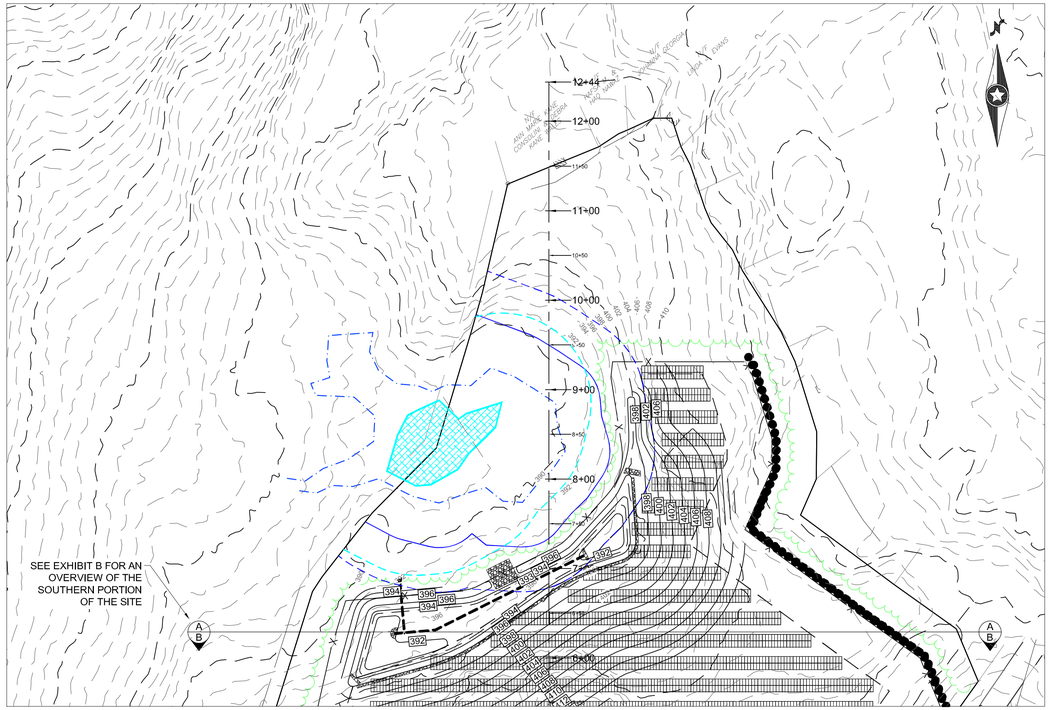
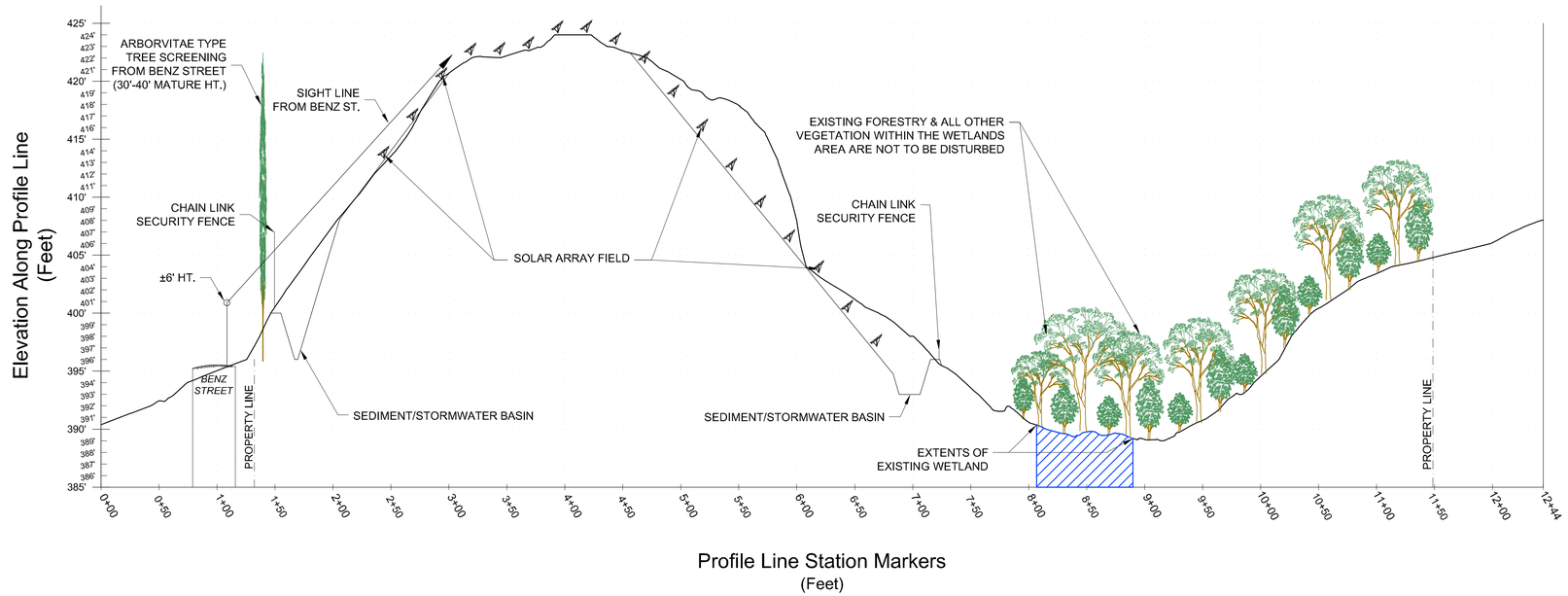


EXHIBIT B: PROJECT CROSS SECTION (SOUTHERN SITE VIEW)

(SCALE: 1" = 80')

PROJECT PROFILE:



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BENZ STREET SOLAR

PROJECT CROSS SECTION

Project No.	CLA-6430
Proj. Engineer	E.M.B.
Date:	2/11/2020
Sheet No.	9

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ROAD DESIGN PARAMETERS

1. ROAD MAINTENANCE CAN BE EXPECTED OVER THE LIFE OF THE PERMANENT FACILITY.

SPECIAL PROVISIONS FOR GRADING AND EROSION CONTROL

THE CONTRACTOR SHALL PROVIDE EROSION CONTROL MEASURES AS PLANNED AND SPECIFIED FOLLOWING BEST MANAGEMENT PRACTICES AS OUTLINED BY THE STATE OF CONNECTICUT AND BEING IN CONFORMANCE WITH THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) GENERAL STORMWATER PERMIT. SEE THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) FOR EROSION CONTROL AND RESTORATION SPECIFICATIONS. UNLESS OTHERWISE NOTED OR MODIFIED HEREIN, ALL SECTIONS OF THE GENERAL CONDITIONS SHALL APPLY.

EXECUTION

1. CLEARING AND GRUBBING
   A. THE CONTRACTOR SHALL BE REQUIRED TO REMOVE ALL TREES, STUMPS, BRUSH, AND DEBRIS WITHIN THE GRADING LIMITS SHOWN ON THE PLANS. THE CONTRACTOR IS TO REMOVE ONLY THOSE TREES WHICH ARE DESIGNATED BY THE OWNER'S REPRESENTATIVE FOR REMOVAL, AND SHALL EXERCISE EXTREME CARE AROUND EXISTING TREES TO BE SAVED.
2. TOPSOIL STRIPPING
   A. TOPSOIL SHALL BE STRIPPED FROM ALL ROADWAY AREAS THROUGH THE ROOT ZONE. TOPSOIL SHALL NOT BE STRIPPED OUTSIDE OF THE DESIGNATED DISTURBANCE AREAS.
   B. ANY TOPSOIL, THAT HAS BEEN STRIPPED, SHALL BE RE-SPREAD OR STOCKPILED WITHIN GRADING AREAS AND/OR USED AS FILL OUTSIDE OF THE DISTURBANCE AREAS, AS DIRECTED BY THE ENGINEER.
3. EMBANKMENT CONSTRUCTION.
   A. EMBANKMENT CONSTRUCTION SHALL CONSIST OF THE PLACING OF SUITABLE FILL MATERIAL, AFTER TOPSOIL STRIPPING, ABOVE THE EXISTING GRADE. GENERALLY, EMBANKMENTS SHALL HAVE COMPACTED SUPPORT SLOPES OF TWO AND A HALF FEET HORIZONTAL TO ONE FOOT VERTICAL. THE MATERIAL FOR EMBANKMENT CONSTRUCTION SHALL BE OBTAINED FROM THE ACCESS ROAD EXCAVATION (SEE GEOTECHNICAL REPORT FOR RESTRICTIONS), OR ANY SUITABLE, APPROVED SOIL OBTAINED OFFSITE BY CONTRACTOR, AS DIRECTED OR APPROVED BY THE ENGINEER. THIS MATERIAL SHALL BE PLACED IN LIFTS NOT TO EXCEED 9".
   B. SIDE SLOPES GREATER THAN 2.5:1 WILL NOT BE PERMITTED, UNLESS OTHERWISE NOTED ON THE PLAN.

TESTING REQUIREMENTS:

1. TESTING SHALL BE PERFORMED BY A DESIGNATED INDEPENDENT TESTING AGENCY.
2. SUBMIT TESTING AND INSPECTION RECORDS SPECIFIED TO THE CIVIL ENGINEER OF RECORD FOR REVIEW.
   A. THE ENGINEER WILL REVIEW THE TESTING AND INSPECTION RECORDS TO CHECK CONFORMANCE WITH THE DRAWINGS AND SPECIFICATIONS. THE ENGINEER'S REVIEW DOES NOT RELIEVE THE CONSTRUCTION CONTRACTOR FROM THE RESPONSIBILITY FOR CORRECTING DEFECTIVE WORK.
3. PROOF ROLLING:
   A. PROOF-ROLLING SHALL BE PERFORMED IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER OR QUALIFIED GEOTECHNICAL REPRESENTATIVE USING A FULLY LOADED TANDEM AXLE DUMP TRUCK WITH A MINIMUM GROSS WEIGHT OF 25 TONS OR A FULLY LOADED WATER TRUCK WITH AN EQUIVALENT AXLE LOADING. PROOF-ROLLING ACCEPTANCE STANDARDS INCLUDE NO RUTTING GREATER THAN 1.5 INCHES, AND NO "PUMPING" OF THE SOIL BEHIND THE LOADED TRUCK.
4. SIEVE ANALYSIS:
   A. SIEVE ANALYSIS SHALL BE CONDUCTED IN ACCORDANCE WITH AASHTO T27
5. PROCTOR:
   A. PROCTORS SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D-1557
6. ATTERBERG LIMITS:
   A. ATTERBERG LIMITS SHALL BE DETERMINED IN ACCORDANCE WITH AASHTO T89 AND T90
7. MOISTURE DENSITY (NUCLEAR DENSITY):
   A. MOISTURE DENSITY TESTING SHALL BE DONE IN ACCORDANCE WITH AASHTO T310

SUBGRADE COMPACTION, TEST ROLLING AND AGGREGATE BASE COMPACTION:

1. FILL MATERIAL:
   A. SOILS USED AS FILL MATERIAL SHALL BE TESTED FOR GRAIN SIZE ANALYSIS, MOISTURE CONTENT, ATTERBERG LIMITS ON FINES CONTENT, AND PROCTOR TESTS (MODIFIED DRY MAXIMUM DENSITY).
      a. FOR PLACED & COMPACTED FILLS, PROVIDE ONE COMPACTION TEST PER LIFT FOR EVERY 1000 FT OF ROAD LENGTH. INCLUDE THE LOCATION, DRY DENSITY, MOISTURE CONTENT, AND COMPACTION PERCENT BASED ON MODIFIED PROCTOR MAXIMUM DRY DENSITY.
   B. IN ROADWAY CUT AREAS, OR WHERE EMBANKMENT CONSTRUCTION REQUIRES LESS THAN 12 INCHES OF FILL PLACEMENT, COMPACT TO A MINIMUM OF 95 PERCENT OF THE MATERIAL'S MODIFIED PROCTOR MAXIMUM DRY DENSITY.
2. COMPACTED SUBGRADE:
   A. THE ENTIRE SUBGRADE SHALL BE PROOF-ROLLED PRIOR TO THE PLACEMENT OF THE AGGREGATE BASE TO IDENTIFY AREAS OF UNSTABLE SUBGRADE.
   B. IF PROOF ROLLING DETERMINES THAT THE SUBGRADE STABILIZATION CANNOT BE ACHIEVED, THE FOLLOWING ALTERNATIVES WILL BE IMPLEMENTED:
      a. REMOVE UNSUITABLE MATERIAL AND REPLACE WITH SUITABLE EMBANKMENT.
      b. SCARIFY, DRY, AND RECOMPACT SUBGRADE AND PERFORM ADDITIONAL PROOF ROLL.
      c. INCREASE ROAD BASE THICKNESS.
   C. PROVIDE 1 MOISTURE DENSITY COMPACTION TESTS FOR EVERY 1000 L.F. OF ROAD LENGTH. COMPACTED SUBGRADE MUST BE COMPACTED TO A MINIMUM OF 95% MODIFIED PROCTOR MAXIMUM DRY DENSITY AT ±3% OF OPTIMUM MOISTURE CONTENT FOR GRANULAR SOILS AND AT -1 TO +3% OF OPTIMUM MOISTURE CONTENT FOR COHESIVE SOILS.
3. AGGREGATE BASE:
   A. AGGREGATE BASE SHALL BE PROOF-ROLLED OVER THE ENTIRE LENGTH. PROVIDE 1 SIEVE ANALYSIS PER 2500 CY OF ROAD BASE PLACED.
      a. IF PROOF ROLLING DETERMINES THAT THE ROAD IS UNSTABLE, ADDITIONAL AGGREGATE SHALL BE ADDED UNTIL THE UNSTABLE SECTION IS ABLE TO PASS A PROOF ROLL.

TABLE 1: TESTING SCHEDULE SUMMARY

LOCATION	TEST	FREQUENCY
STRUCTURAL FILL	GRAIN SIZE ANALYSIS, MOISTURE CONTENT, ATTERBERG LIMITS ON FINES CONTENT, AND PROCTOR	1 PER MAJOR SOIL TYPE
	MOISTURE DENSITY	1 PER 2,000 CY OR MIN. 1 PER LIFT
COMPACTED SUBGRADE	PROOF-ROLL	ENTIRE LENGTH
	MOISTURE DENSITY TEST (NUCLEAR DENSITY)	1 PER 1,000 FT OR MIN. 5 FOR THE SITE
AGGREGATE BASE	PROOF-ROLL	ENTIRE LENGTH
	SIEVE ANALYSIS	1 PER 2,500 CY

GENERAL NOTES:

1. THE PLANIMETRIC FEATURES, GROUND SURFACE CONTOURS ON A LIDAR SURFACE PROVIDED NOAA.
2. NO GRADING OR SOIL DISTURBANCE IS PERMITTED OUTSIDE OF THE GRADING LIMITS IDENTIFIED ON THE PLANS.
3. GRADE ALL PROPOSED ROADS TO THE SLOPES PROPOSED ON THE PLANS.
4. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING DRAINAGE THROUGHOUT THE CONSTRUCTION OF THIS PROJECT. CONSTRUCTION ACTIVITIES SHALL NOT BLOCK THE NATURAL OR MANMADE CREEKS OR DRAINAGE SWALES CAUSING RAINWATER TO POND. ADDITIONAL CULVERTS IN EXCESS OF THOSE ON THE PLANS MAY BE REQUIRED AS APPROVED BY THE ENGINEER.
5. THE CONTRACTOR SHALL NOTIFY DIGSAFE AT LEAST 48 HOURS BEFORE EXCAVATION ACTIVITIES COMMENCE.
6. WETLAND INFORMATION SHOWN ON THE PLAN WAS PROVIDED BY GODFREY, HOFFMAN, AND LODGE, LLC AND FLAGGED BY MATHEW DAVISON. THE GENERAL CONTRACTOR SHALL VERIFY THAT ALL WETLAND PERMITS HAVE BEEN SUBMITTED AND APPROVED PRIOR TO CONSTRUCTION COMMENCING.
7. ELECTRICAL COLLECTION SYSTEM SHOWN ON THE PLAN SHALL BE CONSIDERED PRELIMINARY. CONTRACTOR SHALL REFER TO FINAL ELECTRICAL DESIGN PLANS FOR ACTUAL DESIGN LOCATIONS.

STORMWATER POLLUTION PREVENTION PLAN (SWPCP):

1. REFER TO THE SWPPP BOOKLET FOR SEDIMENT AND EROSION CONTROL PROCEDURES, LOCATIONS OF BMPs, DETAILS, AND INSPECTION INFORMATION.
2. ALL AREAS DISTURBED DURING CONSTRUCTION ACTIVITIES AND NOT COVERED BY ROAD SURFACING MATERIALS, SHALL BE SEEDED IN ACCORDANCE WITH THE SWPPP PLAN.
3. TEMPORARY EROSION CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE TEMPORARY EROSION CONTROL PLAN SHALL BE IN ACCORDANCE WITH STATE OF CONNETICUT, THE EPA, AND THE SWPCP ON FILE.

SLOPE STABILIZATION:

ALL AREAS DESIGNATED ON THE PLAN FOR SLOPE STABILIZATION SHALL BE GRADED AND COMPACTED, SMOOTH AND CLEAN TO THE FINISH CONTOURS SHOWN ON THE PLAN, WITH A MINIMUM OF 4 INCHES OF TOPSOIL PLACED ON THE AREA. STABILIZATION SHALL BE ACHIEVED IN ONE OF TWO MANNERS:

EITHER: 1) HAND-PLACED RIPRAP
OR:
2) SEED WITH EROSION CONTROL AND REVEGITATION MAT (ECRM)

1. PLACEMENT OF RIP-RAP

RIPRAP HAND PLACED. HAND-PLACED RIPRAP SHALL CONSIST OF ROUGH UNHEWN QUARRY STONES, APPROXIMATELY RECTANGULAR, PLACED DIRECTLY ON THE SPECIFIED SLOPES OR SURFACES. IT SHALL BE SO LAID THAT THE WEIGHT OF THE LARGE STONES IS CARRIED BY THE SOIL RATHER THAN BY ADJACENT STONES. STONES SHALL WEIGH BETWEEN 50 AND 150 LB. EACH AND AT LEAST 60 % OF THEM SHALL WEIGH MORE THAN 100 LB. EACH WHEN USED ON EMBANKMENT CONSTRUCTION. RIP RAP FOR BMPS SHALL BE 6"-8" DIA. PREPARATION FOR HAND-PLACED RIP RAP. BEFORE ANY RIP RAP IS PLACED, THE SURFACE TO BE COVERED SHALL BE FULLY COMPACTED AND GRADED TO THE REQUIRED SLOPE. PLACE MIRAFITM8 OR APPROVED EQUAL GEOTEXTILE ON SLOPE. RIP RAP ON SLOPES SHALL COMMENCE COMMENCE IN A TRENCH BELOW THE TOW OF THE SLOPE AND SHALL PROGRESS UPWARD, EACH STONE BEING LAID BY HAND PERPENDICULAR TO THE SLOPE WITH THE LONG DIMENSION VERTICAL, FIRMLY BEDDED AGAINST THE SLOPE AND AGAINST THE ADJOINING STONE, WITH ENDS IN CONTACT, AND WITH WELL-BROKEN JOINTS. SIMILAR METHODS SHALL BE USED WHEN LAYING RIPRAP ON STREAM BEDS, IN DITCHES, AND ON LEVEL SURFACES.

THE FINISHED SURFACE OF THE RIPRAP SHALL PRESENT AN EVEN, TIGHT SURFACE, NOT LESS THAN 12 INCHES THICK, MEASURED PERPENDICULAR TO THE SLOPE.

THE STONES WEIGHING MORE THAN 100 LB. SHALL BE WELL DISPERSED THROUGHOUT THE AREA WITH THE 50-100 LB. STONES LAID BETWEEN THEM IN SUCH A MANNER THAT ALL STONES WILL BE IN CLOSE CONTACT. THE REMAINING VOIDS SHALL BE FILLED WITH SPALLS OF SUITABLE SIZE AND WELL TAMPED TO PRODUCE A FIRM AND COMPACT REVETMENT.

2. STABILIZATION WITH EROSION CONTROL AND REVEGITATION MAT (ECRM)
1) AREA MUST BE GRADED SMOOTH AND CLEAN TO FINISH GRADES, AND COMPACTED.

2) SEED AND MULCH AREA. USE SEED MIX APPROVED BY THE ENGINEER.

3) INSTALL ECRM PER MANUFACTURER'S INSTRUCTIONS, HOWEVER THESE MUST INCLUDE THE FOLLOWING MINIMUM REQUIREMENTS:

A) GRADE GROUND TO FINISH CONTOURS. REMOVE ALL ROCKS, DIRT CLODS, STUMPS, ROOTS, TRASH, AND OTHER OBSTRUCTIONS LYING IN DIRECT CONTACT WITH THE SOIL SURFACE.

B) DIG MAT ANCHOR TRENCHES (MINIMUM 12"DEEP, 6" WIDE) AT TERMINAL ENDS AND PERIMETER SIDES WHERE MAT IS TO BE INSTALLED.

C) INSTALL MAT BY ROLLING UPHILL PARALLEL TO WATER FLOW, STARTING AT TRENCH. OVERLAP ROLLS BY MINIMUM OF 3". FASTEN TO GROUND WITH 18" PINS AND 1 1/2" WASHERS, OR EQUIVALENT. PIN MAT AT ENDS, AND EVERY 3' TO 5' ALONG OVERLAPS. DO NO STRETCH MAT. SPLICING ROLLS SHOULD BE DONE IN A CHECK SLOT. BACKFILL TO COVER ENDS AND FASTENERS, ROLLING MAT ACROSS BACKFILL AND PIN AGAIN.

FOR MAT USE MIRAFI MIRAMAT TM8 OR EQUIVALENT.

INVASIVE SPECIES:

1. ALL EQUIPMENT SHALL BE INSPECTED UPON ARRIVAL. EQUIPMENT ARRIVING WITH OBSERVABLE SOIL OR PLANT FRAGMENTS WILL BE REMOVED AND CLEANED.
2. STRAW BALES ARE NOT BE USED ON SITE; ONLY WEED-FREE STRAW BALES ARE APPROVED.
3. OFF-SITE TOPSOIL MUST BE FREE OF INVASIVE SPECIES. THE ENGINEER SHALL BE NOTIFIED OF THE TOPSOIL SOURCE 6 WEEKS BEFORE DELIVERY.

SEDIMENTATION AND EROSION CONTROL PLAN

CONTACT:
STEVE BROYER
ECOS ENERGY
222 SOUTH 9TH STREET
SUITE 1600
MINNEAPOLIS MN 55402

THE PURPOSE OF THIS PROJECT IS TO INSTALL APPROXIMATELY 6136 SOLAR MODULES AND ASSCOCIATED ELECTICAL EQUIPMENT FOR POWER GENERATION.

THE TOTAL AREA OF THE PROJECT SITE IS APPROXIMATELY 12.7 ACRES AND THE TOTAL AREA OF THE SITE THAT IS EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES IS 10.7 ACRES.

THE EROSION & SEDIMENTATION CONTROL PLAN AND DETAILS HAVE BEEN DEVELOPED AS A STRATEGY TO CONTROL SOIL EROSION AND SEDIMENTATION DURING AND AFTER CONSTRUCTION. THIS PLAN IS BASED ON THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEEP.

IN THE AREAS OF SOLAR PANEL INSTALLATION, THERE ARE SEVERAL ACTIVITIES (SITE GRADING, FOOTING INSTALLATION, PANEL INSTALLATION, AND ELECTRICAL TRENCH WORK) THAT WILL DISTURB SOIL. SOIL MUST BE PROMPTLY STABILIZED AFTER EACH ACTIVITY.

THIS PROJECT WILL NOT BE PHASED. THE DEVELOPMENT WILL FOLLOW THE CONSTRUCTION SEQUENCE PROVIDED ON THIS PLAN.

THE PROPOSED LOCATIONS OF SILTATION AND EROSION CONTROL MEASURES ARE SHOWN ON THE PLANS. THE CONTRACTOR SHALL PROVIDE SILT FENCE, HAY BALES, EROSION MAT, STONE CHECK DAMS, A CONSTRUCTION ENTRANCE, AND/OR OTHER EROSION CONTROL MEASURES AS NEEDED OR DIRECTED BY THE ENGINEER OR TOWN STAFF TO ADEQUATELY PREVENT SEDIMENT TRANSPORT.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO SITE DISTURBANCE.

THE CONTRACTOR SHALL INSPECT, REPAIR AND/OR REPLACE EROSION CONTROL MEASURES EVERY 7 DAYS AND IMMEDIATELY FOLLOWING ANY SIGNIFICANT RAINFALL OR SNOW MELT. SEDIMENT DEPOSITS MUST BE REMOVED BEFORE DEPOSITS REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER. SEDIMENT CONTROL DEVICES SHALL REMAIN IN PLACE AND BE MAINTAINED BY THE CONTRACTOR UNTIL AREAS UPSLOPE ARE PERMANENTLY STABILIZED.

STAKED HAY BALE SILT BARRIERS OR SILT FENCE SHALL BE INSTALLED AROUND ANY TEMPORARYSTOCKPILE AREAS. TEMPORARY VEGETATIVE COVER MAY BE REQUIRED (SEE NOTE).

CONTINUOUS DUST CONTROL USING WATER OR APPROVED EQUAL SHALL BE PROVIDED FOR ALL EARTH STOCKPILES, EARTH PILED ALONG EXCAVATIONS, SURFACES OF BACKFILLED TRENCHES AND GRAVELED ROADWAY SURFACES. THE USE OF CALCIUM CHLORIDE FOR DUST CONTROL SHALL NOT BE ALLOWED.

IF DEWATERING IS NECESSARY DURING ANY TIME OF CONSTRUCTION A CLEAR WATER DISCHARGE SHALL BE PROVIDED AS SHOWN IN THE HAY-BALE BARRIER DEWATERING DETAIL OR ALTERNATE METHOD PROPOSED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

ALL DISTURBED AREAS SHALL BE RESTORED PER THE SLOPE STABILIZATION AND PERMANENT VEGETATION DETAILS. ALL DISTURBED AREAS THAT ARE SLOPED LESS THAN THREE HORIZONTAL TO ONE VERTICAL (3:1) SLOPE SHALL BE LOAMED, SEEDED, FERTILIZED AND MULCHED PER THE PERMANENT VEGETATIVE COVER SPECIFICATIONS. EROSION CONTROL MATTING SHALL BE PROVIDED ON ALL DISTURBED AREAS THAT ARE SLOPED MORE THAN THREE HORIZONTAL TO ONE VERTICAL (3:1).

IF FINAL SEEDING OF DISTURBED AREAS IS NOT TO BE COMPLETED BEFORE OCTOBER 15, THE CONTRACTOR SHALL PROVIDE TEMPORARY MULCHING (DORMANT SEEDING MAY BE ATTEMPTED AS WELL) TO PROTECT THE SITE AND DELAY PERMANENT SEEDING.

WHEN FEASIBLE, TEMPORARY SEEDING OF DISTURBED AREAS THAT HAVE NOT BEEN FINISHED GRADED SHALL BE COMPLETED PRIOR TO OCTOBER 15.

ON EACH FRIDAY AND ALSO ON THE DAY BEFORE ANY RAIN FORECAST OF 0.5 INCHES OR MORE, THE CONTRACTOR SHALL HAY MULCH ALL EXPOSED SOIL.

ANY EROSION WHICH OCCURS WITHIN THE DISTURBED AREAS SHALL BE IMMEDIATELY REPAIRED AND STABILIZED. DURING THE CONSTRUCTION PHASE, INTERCEPTED SEDIMENT SHALL BE RETURNED TO THE SITE. POST SEEDING, INTERCEPTED SEDIMENT, IF ANY, SHALL BE DISPOSED OF IN A MANNER APPROVED BY THE TOWN AND ENGINEER.

EROSION AND SEDIMENTATION CONTROL MEASURES SHALL REMAIN IN PLACE UNTIL VEGETATION IS RE-ESTABLISHED OR SLOPES ARE STABILIZED AND REMOVAL IS APPROVED BY THE ENGINEER.

UNFORESEEN PROBLEMS WHICH ARE ENCOUNTERED IN THE FIELD SHALL BE SOLVED ACCORDING TO THE "2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN COOPERATION WITH THE CONNECTICUT DEEP.

THE CONTRACTOR SHALL PROVIDE THE NAME AND EMERGENCY CONTACT INFORMATION FOR THE PROJECT PERSONNEL RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROLS PRIOR TO THE START OF CONSTRUCTION.

THE OWNER WILL EMPLOY A CERTIFIED SOIL SCIENTIST TO PERFORM WEEKLY EROSION & SEDIMENTATION CONTROL INSPECTION.
A. ROUTINE REPAIRS OR MODIFICATIONS SHALL BE COMPLETED BY THE CONTRACTOR WITHIN 48 HOURS AFTER DIRECTION BY THE INSPECTOR.
B. EMERGENCY REPAIRS SHALL BE COMPLETED IMMEDIATELY UPON DIRECTION BY THE INSPECTOR.

THE WETLANDS ENFORCEMENT OFFICER SHALL BE NOTIFIED AT LEAST 2 BUSINESS DAYS PRIOR TO CONSTRUCTION TO INSPECT EROSION CONTROLS.

STATE AND FEDERAL PERMITS REQUIRED: THIS PROJECT REQUIRES A PERMIT FROM THE STATE OF CONNECTICUT SITING COUNCIL.

THE FOLLOWING DOCUMENTS ARE CONSIDERED TO BE PART OF THIS EROSION AND SEDIMENTATION CONTROL PLAN: THE COMPLETE SITE PLANS, THE DRAINAGE NARRATIVE PREPARED BY CLA ENGINEERS, AND THE CTDEEP 2002 MANUAL.

CONSTRUCTION SEQUENCE

1. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITY AT THE SITE, APPLICANT BENZ SOLAR LLC SHALL
   a. PROVIDE DEEP WITH A SIGNED LETTER FROM THE CITY OF ANSONIA AUTHORIZING THE CONNECTION OF BASIN NUMBER 2 (STORMWATER TREATMENT BASIN #2 OUTLET RISER DETAIL, PAGE 11 OF 11 OF THE CONSTRUCTION DOCUMENTS) WITH THE CITY OF ANSONIA'S STORMWATER SYSTEM
   b. CONTRACT WITH THE APPROPRIATE CONSERVATION DISTRICT TO PROVIDE INSPECTION SERVICES AT THE SITE PURSUANT TO APPENDIX F OF THE GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTEWATERS FROM CONSTRUCTION ACTIVITIES
   c. CONTACT CALL BEFORE YOU DIG (811 OR 1-800-922- 4455) TO MARK UTILITIES.
2. NOTIFY THE TOWN OF ANSONIA ZONING AND INLAND WETLANDS AGENTS OF START OF CONSTRUCTION A MINIMUM OF 48 HOURS IN ADVANCE.
3. HAVE CT LICENSED LAND SURVEYOR STAKE OUT THE CLEARING LIMITS AND PERIMETER EROSION CONTROL.
4. CUT TREES BUT DO NOT GRUB.
5. INSTALL CONSTRUCTION ENTRANCE.
6. INSTALL PERIMETER EROSION AND SEDIMENTATION CONTROLS (HAY BALES AND WOODCHIP MULCH) AND HAVE INSPECTED BY SITE INSPECTOR PRIOR TO GRUBBING OR GRADING ACTIVITIES.
7. EXCAVATE AND STABILIZE BASIN #1, IF DEWATERING IS NECESSARY FOR EXCAVATION PLEASE COORDINATE DEWATERING PLAN WITH QUALIFIED ENVIRONMENTAL PROFESSIONAL. INSTALL BASIN DRAIN OUTLET PIPING AND CAP PIPE IN THE BOTTOM OF THE BASIN. PROVIDE A STAKE MARKING THE CAP LOCATION. DO NOT INSTALL PERFORATED BASIN DRAIN AND CRUSHED STONE. BASIN #1 SHALL BE USED AS A TEMPORARY SEDIMENTATION BASIN DURING CONSTRUCTION. UPON COMPLETION OF THE BASIN #1 GRADING THE CONTRACTOR SHALL HAVE THE STABILIZED BASIN INSPECTED BY SITE INSPECTOR.
8. GRUB WATERSHED 1 SITE AREA AND PERFORM SITE GRADING AND STABILIZATION WITHIN WATERSHED 1 WORK AREA AS IDENTIFIED ON THE PLANS.
9. GRADE AND STABILIZE WESTERN SWALE TO BASIN #1.
10. PRIOR TO THE CONSTRUCTION TRANSITION TO WATERSHED #2, THE CONTRACTOR SHALL HAVE THE WATERSHED #1 GRADING AND STABILIZATION REVIEWED BY THE SITE INSPECTOR TO ENSURE APPROPRIATE STABILIZATION.
11. EXCAVATE AND STABILIZE BASIN #2, IF DEWATERING IS NECESSARY FOR EXCAVATION PLEASE COORDINATE DEWATERING PLAN WITH QUALIFIED ENVIRONMENTAL PROFESSIONAL. BASIN #2 SHALL BE USED AS A TEMPORARY SEDIMENTATION BASIN DURING CONSTRUCTION. UPON COMPLETION OF THE BASIN #2 GRADING THE CONTRACTOR SHALL HAVE THE STABILIZED BASIN INSPECTED BY SITE INSPECTOR.
12. GRADE AND STABILIZE EASTERN SWALE TO BASIN #2 AND INSTALL DRIVEWAY CULVERT.
13. GRUB WATERSHED 2 SITE AREA AND PERFORM ADDITIONAL SITE GRADING WITHIN WATERSHED 2 WORK AREA AS IDENTIFIED ON THE PLANS.
14. INSTALL ACCESS DRIVEWAY.
15. INSTALL PERIMETER CHAIN LINK FENCE AROUND ENTIRE SITE.
16. INSTALL THE BASIN DRAIN PERFORATED PIPE AND CRUSHED STONE WITHIN BASIN #1.
17. AFTER THE INITIAL GRADING WORK IS COMPLETE THE BASINS, SWALES, AND ALL DISTURBED AREAS SHALL BE LEFT FOR A MINIMUM OF ONE GROWING SEASON (APRIL 1ST THROUGH JUNE 15TH OR AUGUST 15TH THROUGH OCTOBER 15TH). THE SITE SHALL BE LEFT UNDISTURBED TO ALLOW NEW VEGETATION TO ESTABLISH. ROUTINE INSPECTIONS SHALL BE PERFORMED AND ANY ERODED AREAS OR BARE AREAS RESTORED. ANY WORK ASSOCIATED WITH THE INSTALLATION / RACKING OF THE SOLAR ARRAY WILL NOT COMMENCE UNTIL THE PERIMETER CONTROLS, INCLUDING, BUT NOT LIMITED TO, ALL SWALES AND BASINS, HAVE BEEN VEGETATIVELY STABILIZED.
18. INSTALL SOLAR RACKING FOUNDATIONS, AND RACKING, AND SOLAR MODULES. HYDROSEED OR SEED AND MULCH ANY EXPOSED SOIL AT THE END OF EACH WEEK AND BEFORE EVERY RAINFALL PREDICTED FOR 0.5 INCHES OR MORE.
19. TRENCH FOR AND INSTALL ELECTRIC LINES AND AT THE END OF EACH WEEK HYDROSEED OR MULCH AND SEED ANY EXPOSED SOIL AT THE END OF EACH WEEK AND BEFORE EVERY RAINFALL PREDICTED FOR 0.5 INCHES OR MORE.
20. INSTALL REMAINING ELECTRIC INFRASTRUCTURE AND AT THE END OF EACH WEEK HYDROSEED OR MULCH AND SEED ANY EXPOSED SOIL AT THE END OF EACH WEEK AND BEFORE EVERY RAINFALL PREDICTED FOR 0.5 INCHES OR MORE.
21. OVERSEED DISTURBED SOILS WHEN ALL SOLAR PANEL INSTALLATION AND ELECTRICAL TRENCHING IS COMPLETE.
22. CLEAN SEDIMENTS BASINS AND GRADE AND RE-SEED FOR USE AS STORMWATER BASINS WHEN SITE INSPECTOR DEEMS SOILS ARE STABILIZED.
23. INSTALL PERIMETER SCREENING PLANTINGS

ROCK / LEDGE MANAGEMENT & STABILIZATION PLAN

WITHIN STORMWATER BASINS

1. BOULDERS AND LOOSE ROCK, IF ENCOUNTERED, WITHIN THE STORMWATER BASINS SHALL BE REMOVED FROM THE BASIN LIMITS BY EXCAVATOR OR MECHANICAL MEANS ONLY. ANY VOIDS LEFT BY THE BOULDERS OR LOOSE ROCK SHALL BE BACKFILLED WITH GRAVEL FILL. PROVIDE TOPSOIL AND SEED MIX AS SPECIFIED ON THE PROJECT PLANS.
2. LEDGE, IF ENCOUNTERED, SHALL BE REMOVED BY MECHANICAL MEANS ONLY, BLASTING SHALL NOT BE PERMITTED AT THE SITE. LEDGE SHALL BE REMOVED TO A MINIMUM OF 18" BELOW FINISHED GRADE ELEVATION. 12" OF GRAVEL FILL AND 6" OF TOPSOIL SHALL BE INSTALLED OVER LEDGE. PROVIDE SEED MIX AS SPECIFIED ON THE PROJECT PLANS.

ROCK THROUGHOUT THE SITE

1. LEDGE, BOULDERS, OR LOOSE ROCK WHEN ENCOUNTERED THROUGHOUT THE REMAINING PORTIONS OF THE SITE SHALL BE REMOVED AS NEEDED TO PERFORM THE WORK. REMOVAL SHALL BE BY EXCAVATOR, OR BY MECHANICAL MEANS ONLY. BLASTING SHALL NOT BE PERMITTED AT THE SITE.
2. WHEN BOULDERS OR LOOSE ROCK IS EXCAVATED AS PART OF THE WORK, ANY VOIDS LEFT BEHIND SHALL BE BACKFILLED WITH GRAVEL FILL.
3. WHEN LEDGE IS ENCOUNTERED AT THE GROUND SURFACE WITHIN THE WORK AREA A MINIMUM OF 6" OF TOPSOIL, SEED, FERTILIZER, AND EROSION CONTROL MATTING SHALL BE INSTALLED OVER THE LEDGE AS CALLED FOR ON THE PROJECT PLANS. SEED, FERTILIZER, AND EROSION CONTROL MATTING MUST BE INSTALLED WITHIN 24 HOURS OF TOPSOIL PLACEMENT.
4. EXCAVATED ROCK MAY BE TEMPORARILY STORED ON SITE AND THE CONTRACTOR SHALL MANAGE THE MATERIAL IN EITHER OF THE FOLLOWING MANNERS, AT THEIR DISCRETION:
   A. ROCK MAY BE REMOVED FROM THE SITE VIA TRUCKS AND/OR TRAILERS AND LEGALLY DISPOSED OF OR PROCESSED OFFSITE.
   B. ROCK MAY BE CRUSHED ONSITE, PROCESSED, AND USED AS TRENCH BACKFILL OR AS GENERAL FILL ONSITE. PORTABLE CRUSHING EQUIPMENT, PROCESSING EQUIPMENT, AND STOCKPILES SHALL BE SURROUNDED BY SILT FENCE OR STRAW BALE BARRIERS.
   C. BOULDERS MAY BE PLACED AROUND THE SITE PERIMETER TO BE USED AS SCREENING FEATURES. LOCATIONS SHALL BE COORDINATED WITH THE SITE OWNER.
5. PROCESSED ROCK PLACED ON THE SITE AS GENERAL FILL SHALL MAINTAIN THE STORMWATER DRAINAGE PATTERNS AS SHOWN ON THE PROJECT PLANS.

No.	Date	Revision
9	8/24/2021	MISC. UPDATES AND REVISIONS
8	5/24/2021	MISC. UPDATES AND REVISIONS
7	4/16/2021	MISC. UPDATES AND REVISIONS
6	3/22/2021	MISC. UPDATES AND REVISIONS
5	9/17/20	MISC. UPDATES AND REVISIONS PER CSC
4	7/24/20	MISC. UPDATES AND REVISIONS
3	5/22/20	2 MW CSC SUBMISSION
2	4/1/20	REVISED HYDROLOGY
1	2/11/20	CSC SUBMISSION

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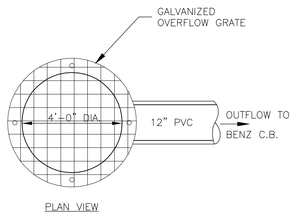
BENZ STREET SOLAR

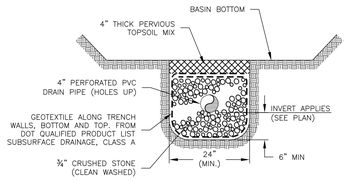
CIVIL NOTES

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 10

M:\6000\6400\6430 Benz Street Solar\Drawings\+Current\10 DETAILS & NOTES-BENZ.dwg

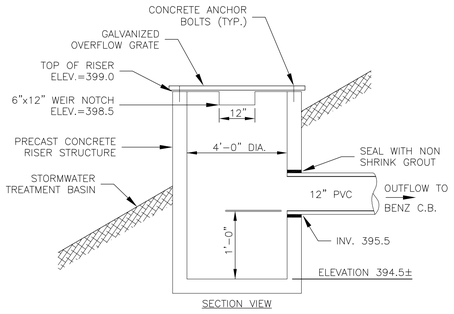


PLAN VIEW



BASIN DRAIN DETAIL

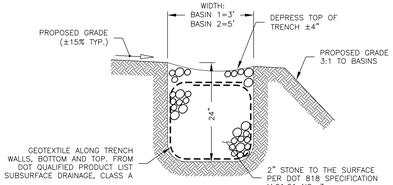
NOT TO SCALE



SECTION VIEW

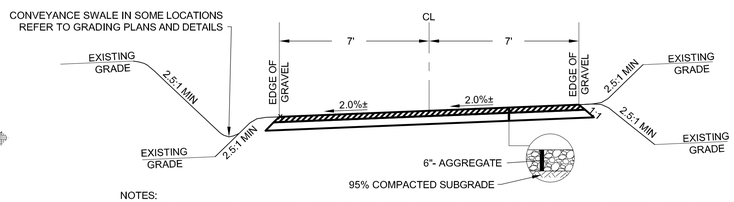
STORMWATER TREATMENT BASIN #2 OUTLET RISER STRUCTURE DETAIL

NOT TO SCALE



STONE INFILTRATION TRENCH DETAIL

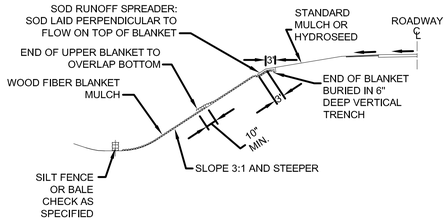
NOT TO SCALE



NOTES:
1. CONTRACTOR TO SUBCUT ROADWAY TO EXISTING GRADE ELEVATION TO MAINTAIN EXISTING SITE DRAINAGE PATTERNS WHEREVER POSSIBLE.
2. IN FILL LOCATIONS CONTRACTOR TO GRADE TOE OF SLOPE TO EXISTING GRADE, AND MAINTAIN NATURAL DRAINAGE PATTERNS.
3. IN CUT LOCATIONS CONTRACTOR TO CREATE SWALE ON DOWNSTREAM SIDE, REFER TO GRADING PLANS FOR DETAILS.
4. CONTRACTOR TO COMPACT AGGREGATE TO 95% MAXIMUM DRY DENSITY.
5. REFER TO GEOTECHNICAL RECOMMENDATIONS FOR ADDITIONAL ROADWAY SECTION DESIGN INFORMATION.

ACCESS ROAD DETAIL

NOT TO SCALE



EROSION CONTROL BLANKET INSTALLATION ON AN INSLOPE
(WHEN REQUIRED)

CATEGORY	SLOPE	VELOCITY
1	FLAT	-
2	3:1	< 5.0 fps
3	3:1	< 6.5 fps
4	2:1	< 7.0 fps

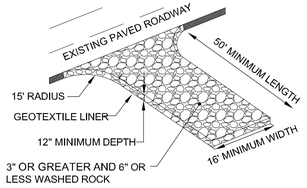
CATEGORY	ACCEPTABLE TYPES
1	STRAW RD 1S, WOOD FIBER RD 1S
2	STRAW 1S, WOOD FIBER 1S
3	STRAW 2S, WOOD FIBER 2S
4	STRAW/COCONUT 2S, WOOD FIBER HV 2S

THE LETTERING DESIGNATION SHALL BE DEFINED AS FOLLOWS:

1S - NETTING ON ONE SIDE
RD - RAPIDLY DEGRADABLE
2S - NETTING ON TWO SIDES
HV - HIGH VELOCITY

EROSION CONTROL BLANKET

NOT TO SCALE

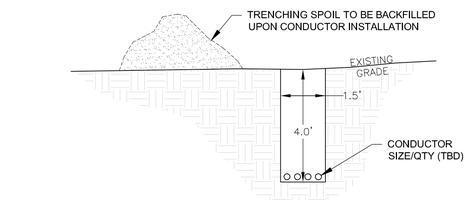


NOTE:

ROCK CONSTRUCTION ENTRANCE SHOULD BE A MINIMUM THICKNESS OF 1.0' AND CONTAIN MAXIMUM SIDE SLOPES OF 4:1. ROCK ENTRANCE SHOULD BE INSPECTED AND MAINTAINED REGULARLY. ROCK ENTRANCE LENGTH MAY NEED TO BE EXTENDED IN CLAY SOILS.

ROCK CONSTRUCTION ENTRANCE

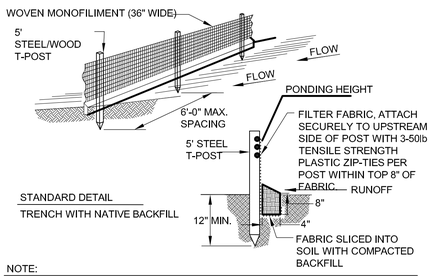
NOT TO SCALE



NOTES:
1. CONDUCTOR CLEARANCES DEPENDENT ON GEOTECHNICAL PARAMETERS AND ELECTRICAL DESIGN
2. CONDUCTOR SIZING AND QUANTITIES PER TRENCH DEPENDENT ON FINAL ELECTRICAL DESIGN TRENCH DIMENSIONS FOR EARTHWORK QUANTITIES ARE CONSERVATIVE.

TRENCHING DETAIL

NOT TO SCALE



STANDARD DETAIL

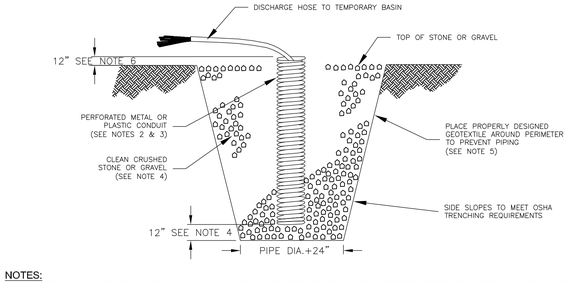
TRENCH WITH NATIVE BACKFILL

NOTE:

1. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN ACCUMULATED TO 1/3 THE HEIGHT OF THE FABRIC OR MORE.
2. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
3. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
4. ALL ENDS OF THE SILT FENCE SHALL BE WRAPPED UPSLOPE SO THE ELEVATION OF THE BOTTOM OF FABRIC IS HIGHER THAN "PONDING HEIGHT".

SILT FENCE

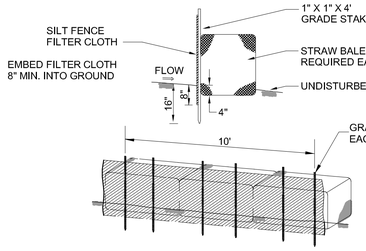
NOT TO SCALE



NOTES:
1. OVERALL SUMP PIT DIMENSIONS SHALL BE COMPATIBLE WITH ANTICIPATED SEEPAGE RATES AND PUMP SIZE TO BE USED.
2. THE STANDPIPE DIAMETER AND NUMBER OF PERFORATIONS SHALL BE COMPATIBLE THE PUMP SIZE BEING USED.
3. PERFORATIONS IN THE STANDPIPE SHALL BE EITHER CIRCULAR OR SLOTS. PERFORATION SIZE SHALL NOT EXCEED ½" DIAMETER.
4. CRUSHED STONE OR GRAVEL SHALL BE NO SMALLER THAN CT. DOT #67 SIZE NOR LARGER THAN CT. DOT #3 SIZE. CRUSHED STONE SHALL EXTEND A MINIMUM OF 12" BELOW THE BOTTOM OF THE STANDPIPE.
5. IF EXCESSIVE MOVEMENT OF FINE SOIL PARTICLES FROM THE SURROUNDING EXISTING SOILS IS ANTICIPATED, A PROPERLY DESIGNED GEOTEXTILE SHALL BE PLACED BETWEEN THE EXISTING SOILS AND THE CRUSHED STONE OR GRAVEL BACKFILL.
6. THE STANDPIPE SHALL EXTEND A MINIMUM OF 12" ABOVE THE SURROUNDING GROUND.

TYPICAL PUMP PIT DEWATERING DETAIL

NOT TO SCALE

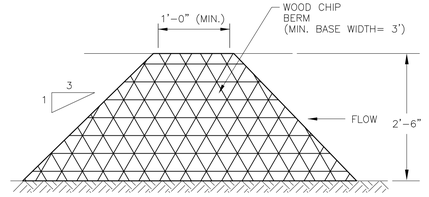


STRAW-BALE / SILT FENCE EROSION PROTECTION

NOT TO SCALE

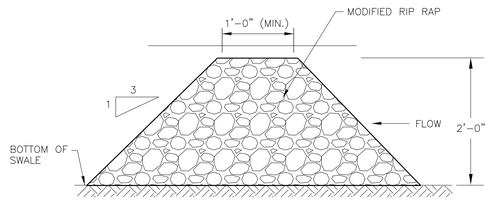
CONSTRUCTION NOTES:

1. SILT FENCE FILTER CLOTH TO BE SECURELY FASTENED TO GRADE STAKE WITH STAPLES, 6" ON CENTER.
2. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN ONE ANOTHER THEY SHALL OVERLAP BY 6" AND BE FOLDED.
3. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.



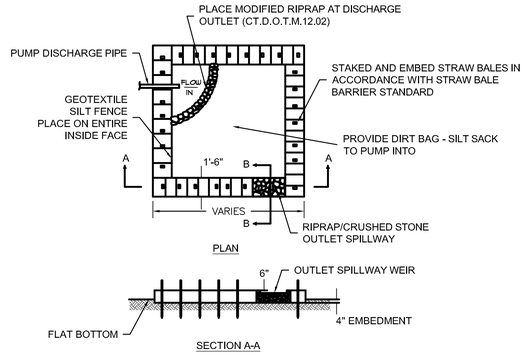
WOOD CHIP BERM

NOT TO SCALE

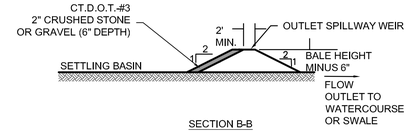


RIP-RAP CHECK DAM

NOT TO SCALE



NOTE: DIMENSIONS VARY ACCORDING TO PUMPING RATES. MINIMUM REQUIRED STORAGE IS CALCULATED FROM CREST OF SPILLWAY WEIR.



SECTION B-B

DEWATERING SETTLING BASIN DETAIL

NOT TO SCALE

DEWATERING PLAN

IF DEWATERING IS NECESSARY DURING CONSTRUCTION A CLEAR WATER DISCHARGE SHALL BE PROVIDED AS FOLLOWS:

A. THE PUMP INLET WILL BE WRAPPED IN FILTER FABRIC AND PLACED IN CRUSHED STONE WITHIN THE TRENCH.

B. THE PUMP OUTLET WILL DISCHARGE TO THE DEWATERING ENCLOSURE PER THE DETAIL FOR DEWATERING SETTLING BASIN TO BE LOCATED OUTSIDE OF THE 100' UPLAND REVIEW ZONE.

C. THE DISCHARGE FROM THE DEWATERING ENCLOSURE WILL BE MONITORED AND ADDITIONAL MEASURES EMPLOYED IF NECESSARY.

No.	Date	Revision
9	6/24/2021	MISC. UPDATES AND REVISIONS
8	5/24/2021	MISC. UPDATES AND REVISIONS
7	4/16/2021	MISC. UPDATES AND REVISIONS
6	3/25/2021	MISC. UPDATES AND REVISIONS
5	9/17/20	MISC. UPDATES AND REVISIONS PER CSC
4	7/24/20	MISC. UPDATES AND REVISIONS
3	5/22/20	S_MW CSC SUBMISSION
2	4/1/20	REVISED HYDROLOGY
1	2/11/20	CSC SUBMISSION

CLA Engineers, Inc.
CIVIL · STRUCTURAL · SURVEYING
317 Main Street Norwich, Connecticut
(860) 886-1966 Fax (860) 886-9165

STATE OF CONNECTICUT
KYLE M. RATHBUN
No. 24326
REGISTERED
PROFESSIONAL ENGINEER

31 BENZ STREET
ANSONIA, CT 06401

BENZ STREET SOLAR

CIVIL DETAILS

Project No. CLA-6430
Proj. Engineer E.M.B.
Date: 2/11/2020
Sheet No. 11

M:\6000\6400\6430 Benz Street Solar\Drawings\+Current\10 DETAILS & NOTES-BENZ.dwg

Exhibit B

Benz Solar Site
Eastern Box Turtle (*Terrapene carolina carolina)*
Protection Plan

The Benz solar site in Ansonia CT (41°20'35.1"N 73°03'39.4"W) was documented to have at least one Eastern Box Turtle in 2020 by CLA Engineers. The Eastern Box Turtle is a State Special Concern species afforded protection under the Connecticut Endangered Species Act. It is also listed as a Greatest Conservation Need species in Connecticut's Comprehensive Wildlife Conservation Strategy (CT DEP 2005).

CLA has designed best management practices to be carried out before and during construction to satisfy requirements from the Connecticut Department of Energy & Environmental Protection ("CTDEEP") Wildlife Division and the CT Siting Council. These practices follow protocols developed from previous rare species consultations and state-approved protection plans. The practices and protocols presented here are focused on preventing incidental mortality to Eastern Box Turtle specifically and will also assist in avoiding impacts to other on-site herpetofauna.

CLA Engineers will serve as the Environmental Monitor for this project to ensure that Eastern Box Turtle protection measures are implemented properly. The Contractor shall contact Robert Russo at least 5 business days prior to the pre-construction meeting. Mr. Russo can be reached by phone at (860) 227-4895 or via email at brusso@claengineers.com. The recommended Eastern Box Turtle protection program consists of the following components:

1. Isolation of the project perimeter shall occur prior to clearing activities.
2. Targeted searches of the project area prior to construction: between April 1st and May 31st.
3. Periodic inspection and maintenance of isolation structures: throughout construction period.
4. Education of all contractors and sub-contractors prior to initiation of work on the site.
5. Documentation and reporting: submitted to CSC and NDDB by December 31, 2021 and 2022.

1. Isolation Barrier (Erosion and Sedimentation Controls)

a. Plastic netting used in a variety of erosion control products (i.e., erosion control blankets, fiber rolls [wattles], reinforced silt fence) has been found to entangle wildlife, including reptiles, amphibians, birds and small mammals. These products or reinforced silt fence should not be used on the project. Temporary erosion control products, either erosion control blankets, fiber rolls composed of processed fibers mechanically bound together to form a continuous matrix (netless) and/or netting composed of planar woven natural biodegradable fiber should be used to avoid/minimize wildlife entanglement.
b. Installation of erosion and sedimentation controls (i.e., silt fencing), required for erosion control compliance and creation of a barrier to migrating/dispersing herpetofauna, should be installed by the Contractor prior to clearing activities or any earthwork.
c. The barrier fencing should be installed with minimal ground disturbance and tree clearing, preferably using a single small backhoe or trenching equipment.

d. The fencing will consist of non-reinforced conventional erosion control woven fabric, installed approximately six inches below surface grade and staked at seven to ten-foot intervals using four-foot oak stakes or approved equivalent. The Contractor is responsible for daily inspections of the fencing for tears or breeches in the fabric and accumulation levels of sediment, particularly following storm events of 0.25 inch or greater. CLA will provide periodic inspections of the fencing throughout the duration of construction activities, generally on a biweekly frequency or more frequently if site conditions warrant.
e. The Environmental Monitor will inspect the work zone following erosion control barrier installation to ensure the barrier is satisfactorily installed.
f. All openings in the isolation barrier, used during the work day for accessibility, should be closed with hay bales at the completion of each day.
g. The extent of the barrier fencing will be as shown on the site plans. The Contractor should have available additional barrier fencing should field conditions warrant extending the fencing as directed by CLA. No equipment, vehicles or construction materials shall be stored outside of the isolation barrier fencing.
h. All silt fencing shall be removed within 30 days of completion of work and permanent stabilization of site soils.

2. Targeted Searches–Pre-Construction

a. Upon completion of the barrier fence installation, the project limits will be searched for Eastern Box Turtle. The purpose of this work is to locate and remove all box turtles from within the construction zone <u>prior to clearing activities and throughout the duration of facility construction.</u>
b. All turtles observed will be removed from the project area to the identified Relocation Zone that is located in the 100 foot vernal pool envelope.
c. The time of day, frequency and intensity of the pre-construction searches should be determined by the Environmental Monitor based on weather conditions and success of relocation progression. It is anticipated that searches will be conducted once per week at a minimum, with more intensive and frequent searches conducted during periods of high activity which would increase the likelihood of captures.
d. The Relocation Zone consists of an area of mixed hardwood forest within 100 feet of the vernal pool. This is the area where the turtle was previously observed.

3. Contractor Education

a. Prior to the start of construction, the Contractor shall attend an educational session at the pre-construction meeting with CLA. This orientation and educational session will consist of an introductory meeting with CLA providing photos of herpetofauna that may be encountered during construction activities, including eastern box turtles, emphasizing the non-aggressive nature of these species, the absence of need to destroy wildlife that might be encountered and the need to follow the prescribed protection measures.
b. The Contractor will be provided with cell phone and email contacts for CLA to immediately report encounters with any turtles or other herpetofauna. Educational poster materials will be provided by CLA and displayed on the job site to maintain worker awareness as the project progresses.

4. Turtle Protective Measures–During Construction

a. Prior to the start of construction each day, the Contractor shall search the entire work area for turtles. The Environmental Monitor will also conduct periodic inspections of the work area depending upon weather conditions, observed turtle activity, or other factors.
b. If a turtle is found, it shall be immediately moved by carefully grasped in both hands, one on each side of the shell, between the turtle's forelimbs and the hind limbs, and placed just outside of the isolation barrier closest to where it was encountered. The Environmental Monitor should be notified of any observed Eastern Box Turtle.
c. Special care shall be taken by the Contractor during early morning and evening hours and on overcast rainy days so that possible basking or foraging turtles are not harmed by construction activities.

5. Reporting

a. Following completion of the construction project, CLA will provide a summary report to the Connecticut Siting Council and CTDEEP documenting the monitoring and maintenance of the barrier fence and erosion control measures.
b. Any observations of Eastern Box Turtle or other state listed species will be reported to CTDEEP by CLA with photo-documentation (if possible) and with specific information on the location and disposition of the animal.

Exhibit C

Connecticut Department of
ENERGY &
ENVIRONMENTAL
PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

Bureau of Materials Management and Compliance Assurance

Notice of Permit Authorization

June, 16 2021

Steven Broyer
JEFFERSON SOLAR LLC
222 S 9th St
Minneapolis, MN 55402-3382

Subject: General Permit Registration for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities
Application NO.: 202080118

Steven Broyer:

The Department of Energy and Environmental Protection, Water Permitting and Enforcement Division of the Bureau of Materials Management and Compliance Assurance, has completed the review of the Benz Street Solar (located at 31 Benz St, Ansonia) registration for the **General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities, effective 10/1/13 (general permit)** . The project is compliant with the requirements of the general permit and the discharge(s) associated with this project is (are) authorized to commence as of the date of this letter. Permit No. GSN003655 has been assigned to authorize the stormwater discharge(s) from this project.

Questions can be emailed to deep.stormwater@ct.gov.

Exhibit D

Connecticut Department of ENERGY & ENVIRONMENTAL PROTECTION

79 Elm Street • Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer

May 17, 2021

Blake Nicholson
Windam Solar LLC
222 S 9th St, Suite 1600
Minneapolis, MN 55402
blake.nicholson@ecosrenewable.com

NDDB DETERMINATION NUMBER: 202105024

Project: Benz Solar - Solar Energy Facility -31 Benz St., Ansonia, CT

Expiration: May 17, 2023

I have reviewed Natural Diversity Data Base (NDDB) maps and files regarding this project. According to our records, there are State-listed species (RCSA Sec. 26-306) documented nearby the proposed project area.

- **Eastern box turtle (*Terrapene carolina carolina*)- State Special Concern**

In Connecticut, these turtles are found in well-drained forest bottomlands and a matrix of open deciduous forests, early successional habitat, fields, gravel pits, and or powerlines. Turtles are dormant between November 1 and April 1 and hibernate in only a few inches from the surface in forested habitat.

The greatest threat to this species is habitat loss, fragmentation, and degradation due to development. This species is very sensitive to adult mortality because of late maturity (10 years old) and long life span (50-100years). Vehicular traffic, heavy equipment used for farming, and ATV use in natural areas are implicated specifically in adult mortality through collisions. Illegal collection by the pet trade and unknowing public for home pets exacerbates mortality rates and removes important individuals from the population. Predation rates are also unnaturally high because of increased predator populations (e.g. skunks, foxes, raccoons, and crows) that surround developed areas.

Construction protection measures:
Land disturbance activities that will crush active turtles or unearth/or crush hibernating turtles or nests need to consider local habitat features and apply fencing and/or time of year restrictions as appropriate. We recommend you consult with a herpetologist familiar with preferred habitats to assist you with proper techniques to ensure the best protection strategies are employed for your site.

If land disturbance will occur in open fields, early successional habitat, sandy open patches nearby wetland features, and sandy roads and roadsides or other potential nesting areas designated by a qualified herpetologist you will need to take precautions to prevent female turtles from entering work area and setting up nests. This fencing would need to be in place before May 15.

If land disturbance will occur in forested habitat you will need to take precautions to avoid crushing hibernating adults.

- Restrict your land disturbance activities in forested habitat to the turtle active season (conduct land disturbance activities between April 1- November 1).

When working in the upland between April 1- November 1:

- Exclusionary practices will be required to prevent any turtle access into construction areas. These measures will need to be installed at the limits of disturbance as shown on the plans.
- Exclusionary fencing be at least 20 inches tall and must be secured to and remain in contact with the ground and be regularly maintained (at least bi-weekly and after major weather events) to secure any gaps or openings at ground level that may let animal pass through.
- Prior to construction, all turtles occurring within fencing work area will be relocated to suitable habitat outside disturbance area. This should be performed by a qualified professional familiar with habitat requirements and behavior of the species.
- The Contractor must search the work area each morning prior to any work being done.
- All construction personnel working within the turtle habitat must be apprised of the species description and the possible presence of a listed species.
- Any turtles encountered within the immediate work area shall be carefully moved to an adjacent area outside of the excluded area and fencing should be inspected to identify and remove access point. These animals are protected by law and no turtles should be relocated from the site.
- In areas where silt fence is used for exclusion, it shall be removed as soon as the area is stable to allow for reptile and amphibian passage to resume.
- No heavy machinery or vehicles may be parked in any turtle habitat.
- Special precautions must be taken to avoid degradation of wetland habitats including any wet meadows and seasonal vernal pools.

Site Management protection measures:

Mowing is major source of human induced adult turtle mortality.

- Avoid mowing or vehicular traffic during peak use by this species (May 15-Sept 15)

Use these additional techniques to minimize impact, especially if you need to mow during peak use times:

- Mowing style: Avoid flail mower heads with guide bars that ride along the ground. Sickle bar mowers will have the least impact if mowing every 1-5 years. In areas with more woody vegetation >1-2" diameter Brontosaurus-style mower will likely have the least impact on turtles.
- Mowing height: If mowing during active season, retention of mowing stubble to 7-12 inches will reduce mortality, reduce blade wear, and will leave important cover for animals.
- Directionality - If mowing during the active season is necessary, start mowing from the center of the field and use a back-and-forth approach, or large circular pattern, to avoid concentrating fleeing animals where they may be killed or stranded. In addition, leave an unmowed 30 ft strip around the perimeter of the field and mow this area last. Most turtles are found in these areas and this provides time for them to react to the mowing activity and move out of the area.
    - If field is near stream: start mowing the side furthest from stream and work towards stream.
    - If field is bordered by woodland: start mowing side furthest from woodland and work towards woodland.
    - If field is bordered by road, start mowing next to the road and work your way across field.
- Mower Speed – Mowing in low gear or at slow speeds will allow turtles to react and move out of the field.
- Unmowed Edge - Leaving an unmowed field edge in high turtle use areas until after September 15th.

Site Design Recommendations:
If planned properly, you can increase the value of the habitat for wildlife and state listed species with your development.

- **Create a site management plan to promote native vegetation growth in the area under the solar panels.** Restoring native vegetation will attract pollinators and avoid the need for constant mowing. Reduced need for mowing will reduce the risk for turtles.
- Provide habitat for wildlife and allow for connectivity for wildlife movement. Use wildlife-friendly fencing to allow movement through the solar development.

This is determination is valid for two years.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Bureau of Natural Resources and cooperating units of DEEP, independent conservation groups, and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the NDDB should not be substituted for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated in the NDDB as it becomes available.

Please contact me if you have any questions (shannon.kearney@ct.gov). Thank you for consulting with the Natural Diversity Data Base and continuing to work with us to protect State-listed species.

Sincerely,

/s/ Shannon B. Kearney
Wildlife Biologist

Mono Multi Solutions

Preliminary

Exhibit E

THE DUOMAX twin

BIFACIAL DUAL GLASS 252 LAYOUT MODULE

PRODUCTS	POWER RANGE
TSM-DEG15VC.20(II)	475-490W

252 LAYOUT
MONOCRYSTALLINE MODULE

475-490W
POWER OUTPUT RANGE

20.8%
MAXIMUM EFFICIENCY

0~+5W
POSITIVE POWER TOLERANCE

Founded in 1997, Trina Solar is the world's leading total solution provider for solar energy. With local presence around the globe, Trina Solar is able to provide exceptional service to each customer in each market and deliver our innovative, reliable products with the backing of Trina as a strong, bankable brand. Trina Solar now distributes its PV products to over 100 countries all over the world. We are committed to building strategic, mutually beneficial collaborations with installers, developers, distributors and other partners in driving smart energy together.

Comprehensive Products and System Certificates

IEC61215/IEC61730/IEC61701/IEC62716/UL61730
ISO 9001: Quality Management System
ISO 14001: Environmental Management System
ISO14064: Greenhouse Gases Emissions Verification
ISO45001: Occupation Health and Safety Management System

High power

- Up to 490W front power and 20.8% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings

High reliability

- Ensured PID resistance through cell process and module material control
- Resistant to salt, acid and ammonia
- Proven to be reliable in high temperature and humidity areas
- Certificated to fire class A
- Minimizes micro-crack and snail trails
- Mechanical performance: Up to 5400 Pa positive load and 2400 Pa negative load

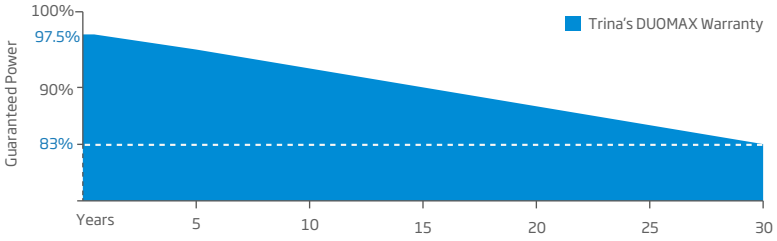
High energy generation

- Up to 25% additional power gain from back side depending on the albedo ;
- Excellent IAM and low light performance validated by 3rd party with cell process and module material optimization
- Better anti-shading performance and lower operating temperature

Easy to install

- Frame design makes module compatible with all racking and installation methods
- Easy to handle and install as normal framed module during transportation

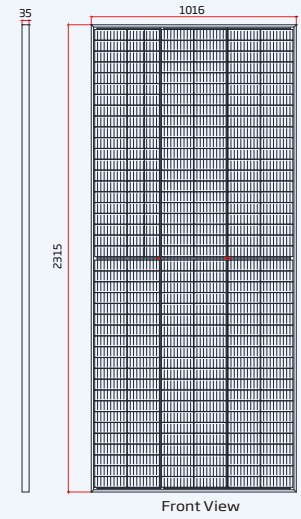
Trina Solar's DUOMAX Performance Warranty



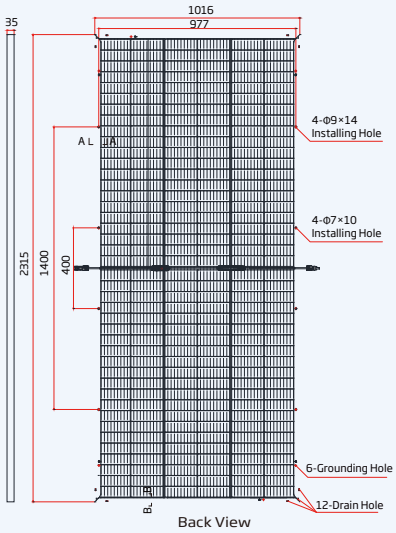
From the 2nd year to the 30th year, the average annual power decline will be no more than 0.5%.

Trinasolar

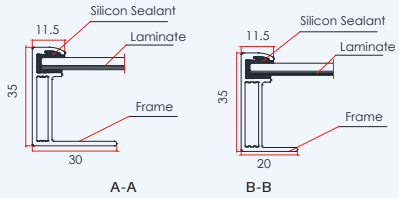
DIMENSIONS OF PV MODULE(mm)



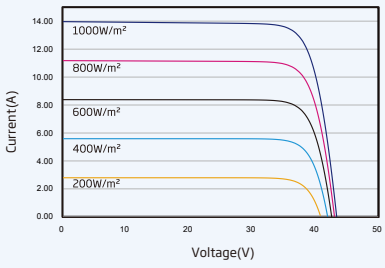
Front View



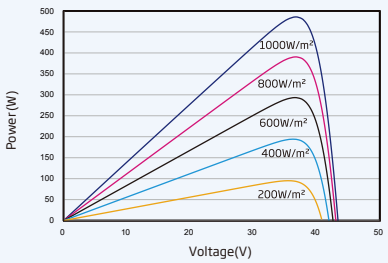
Back View



I-V CURVES OF PV MODULE(485 W)



P-V CURVES OF PV MODULE(485W)



ELECTRICAL DATA (STC)

Peak Power Watts-P_{MAX} (Wp)*	475	480	485	490
Power Tolerance-P_{MAX} (W)	0 ~ +5			
Maximum Power Voltage-V_{MPP} (V)	36.0	36.1	36.2	36.3
Maximum Power Current-I_{MPP} (A)	13.19	13.29	13.39	13.49
Open Circuit Voltage-V_{OC} (V)	43.2	43.3	43.4	43.5
Short Circuit Current-I_{SC} (A)	13.80	13.92	13.97	14.07
Module Efficiency η_m (%)	20.2	20.4	20.6	20.8

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
*Measuring tolerance: ±3%.

Electrical characteristics with different rear side power gain (reference to 485 Wp front)

Maximum Power-P_{MAX} (Wp)	509	558	582	606
Maximum Power Voltage-V_{MPP} (V)	36.2	36.2	36.2	36.2
Maximum Power Current-I_{MPP} (A)	14.06	15.40	16.07	16.74
Open Circuit Voltage-V_{OC} (V)	43.5	43.6	43.7	43.8
Short Circuit Current-I_{SC} (A)	14.67	16.07	16.76	17.46
Pmax gain	5%	15%	20%	25%

Power Bifaciality:70±5%.

ELECTRICAL DATA (NMOT)

Maximum Power-P_{MAX} (Wp)	363	367	371	375
Maximum Power Voltage-V_{MPP} (V)	34.3	34.4	34.8	34.8
Maximum Power Current-I_{MPP} (A)	10.59	10.68	10.67	10.76
Open Circuit Voltage-V_{OC} (V)	41.1	41.2	41.2	41.3
Short Circuit Current-I_{SC} (A)	11.10	11.20	11.24	11.32

NMOT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Orientation	252 cells (12 × 21)
Module Dimensions	2315 × 1016 × 35 mm (91.14× 40× 1.38 inches)
Weight	30.5 kg (67.2 lb)
Front Glass	2.0 mm (0.08 inches), High Transmission, AR Coated Heat Strengthened Glass
Encapsulant material	POE/EVA
Back Glass	2.0 mm (0.08 inches), Heat Strengthened Glass (White Grid Glass)
Frame	35mm(1.38 inches) Anodized Aluminium Alloy
J-Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0mm² (0.006 inches²), Portrait: 600mm/P 600mm(23.62/23.62inches) Landscape: 2200 mm /P 2200 mm (86.61/86.61 inches)
Connector	MC4 EVO2 / TS4*

*Please refer to regional datasheet for specified connector.

TEMPERATURE RATINGS

NMOT(Nominal Moudule Operating Temperature)	41°C (±3°C)
Temperature Coefficient of P_{MAX}	- 0.35%/°C
Temperature Coefficient of V_{OC}	- 0.25%/°C
Temperature Coefficient of I_{SC}	0.04%/°C

MAXIMUM RATINGS

Operational Temperature	-40~+85°C
Maximum SystemVoltage	1500V DC (IEC)
	1500V DC (UL)
Max Series Fuse Rating	25A

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

WARRANTY

12 year Product Workmanship Warranty

30 year Power Warranty

(Please refer to product warranty for details)

PACKAGING CONFIGURATION

Modules per box: 31 pieces

Modules per 40' container: 620 pieces

CAUTION: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.
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Exhibit F

Benz Solar Project - Decommissioning Memo

This memo describes a Decommissioning Plan that establishes the approach to conduct decommissioning activities for the permanent closure of the Facilities at the end of the Facilities' useful life or the permanent cessation of the Facilities' operation, whichever comes first. The Plan describes the approach for removal and/or abandonment of facilities and equipment associated with the Facilities and describes anticipated land-restoration activities.

DECOMMISSIONING ACTIVITIES:

Decommissioning will involve removal and disposal or recycling of all above-surface Project components. All recyclable materials will be transported to the appropriate nearby recycling facilities. Any non-recyclable materials will be properly disposed of at a nearby landfill. 95% or greater of the Facilities' components will be recyclable.

Decommissioning Preparation:

The first step in the decommissioning process will be to assess existing site conditions and prepare the site for demolition. Site decommissioning and equipment removal can take up to six months to complete for a project of this size. Therefore, access roads, fencing, and electrical power will temporarily remain in place for use by the decommissioning and site restoration workers until no longer needed. Demolition debris will be placed in temporary on-site storage areas pending final transportation and disposal/recycling according to the procedures listed below.

PV Equipment Removal and Recycling:

During decommissioning, all the Facilities components will be either removed from the site and recycled or abandoned in place 12 inches below grade (for underground conduit). Equipment removal will include all pad-mounted cabinets, above ground and in conduit wiring, solar modules, solar module racking, transformers, switchgear, inverters, and panel boards. Major equipment such as transformers will be recycled or rebuilt for future uses.

Steel beams that supported the module racking and inverters/panelboards will be mechanically pulled out of the ground; any resulting holes will be backfilled with on-site soil to match existing site soil conditions. The concrete transformer and interconnection equipment pads will be broken up and removed from the site.

Demolition debris and removed equipment may be cut or dismantled into pieces that can easily be transported from the site. The majority of steel and aluminum will be processed for transportation and delivered to an off-site recycling center. The solar modules will be palletized and transported to the nearest recycling facility that will accept them. Minimal non-recyclable materials are anticipated; these will be properly disposed of at the nearest qualified disposal facility.

Internal Power Collection System:

The DC and AC power collection system will be dismantled and removed. All underground cables will be removed from conduit and recycled. Conduit associated with DC and AC power, may remain in place at a depth of 12 inches below ground surface. All conduit that is removed will be recycled.

Access Roads:

The onsite access driveway will remain in place to accomplish decommissioning at the end of the facility's life. At the time of decommissioning, if the landowner determines that this road will be beneficial for the future use of the site, the access road may remain in place after decommissioning. The future use of the site is currently undetermined, but it is assumed that the access to the site will remain unchanged for future development of the parcel.

Security Fence:

The chain link perimeter security fence will remain in place during decommissioning activities for site safety and security purposes. At the time of decommissioning, if the landowner determines that this fence will be beneficial for the future use of the site, the fence may remain after decommissioning. The future use of the site is currently undetermined. If the fencing is not used, it will be removed and transported to the nearest steel recycling facility. Holes left behind by the fence support posts will be backfilled with on site soil and will be seeded to match existing onsite groundcover.

Landscaping:

The double row of screening vegetation along certain areas of the northern and western perimeter of the Site will remain in place during decommissioning activities for site safety and security purposes. At the time of decommissioning, if the landowner determines that this landscaping will be beneficial for the future use of the site, the landscaping may remain after decommissioning. The future use of the site is undetermined at this time. If the landscaping is not used, it will be removed and transported to the nearest plant material disposal facility for composting or mulching. Shrubs, bushes, and trees would be stump cut to just below ground level.

13.8 kV Interconnection Line:

The interconnection cabling that runs East from the project and across Benz Street to connect the Facilities to the UI distribution circuit will remain in place during decommissioning activities to provide electric service onsite during decommissioning. At the time of decommissioning, if the landowner determines that this electric service line will be beneficial for the future use of the site, the line may remain after decommissioning. If the line is not used, it will be removed per UI guidelines and transported offsite to the nearest recycling facility.

SITE RECLAMATION:

After the Facilities are completely decommissioned, and all equipment has been removed from the Site, additional activities will be performed to ensure appropriate surface drainage patterns and establishment of groundcover of disturbed areas.

Restoration Process:

Site Restoration activities associated with decommissioning are anticipated to be very minimal. Ponds and swales will remain in place as constructed for the solar facility. The grading and sitework preformed for the solar facility will have created a rolling terrain suitable for a variety of future development options for the site.

Reclamation will restore vegetative cover disturbed by the removal of equipment. The process will involve the replacement of topsoil and vegetation, as well as modification of site topography where necessary to maintain appropriate site drainage.

If any soils are determined to be compacted at levels that would affect successful revegetation, decompaction will occur. The method of decompaction will depend on how compacted the soil has become over the life of the Project.

Monitoring Activities:

The Site will be monitored after Site Reclamation activities are complete to confirm that any earthwork and revegetation was performed correctly and last permanently. The Site will be periodically inspected (at least twice annually) to ensure appropriate stabilization and groundcover is established during the reclamation process. Any deficiencies will be immediately corrected. This monitoring will continue for a period of five years, or until the Site is redeveloped for a future use, whichever comes first.