# Late-Filed Exhibit 7

Revised Site Plan Sheet with proposed access slopes at 1.5 to 1 in the vicinity of the wetland crossing, and a calculation of the associated reduced wetland impact.

The slopes in the vicinity of the proposed wetland crossing have been modified from 3:1 to 2:1. This increase in slope along the embankment will reduce the proposed wetland disturbance from approximately 1,100 square-feet to 1,050 square-feet and reduce the length of the proposed culvert to 30-feet. The applicable revised design plans are included herein.



		1	
COMMON NAME	ROOT	SIZE	COMMENTS
MERICAN HOLLY	B&B	7-8' HT	FULL, EXTRA HEAVY
EASTERN RED-CEDAR	B&B	7-8' HT	FULL, EXTRA HEAVY
	COMMON NAME MERICAN HOLLY CASTERN RED-CEDAR	COMMON NAME ROOT MERICAN HOLLY B&B ASTERN RED-CEDAR B&B	COMMON NAME ROOT SIZE MERICAN HOLLY B&B 7-8' HT CASTERN RED-CEDAR B&B 7-8' HT

	TOTAL
SIZE DC	1.399 MW
SIZE AC	0.999 MW
INVERTER LOAD RATIO	1.40
MODULE TYPE	TRACKING TRINASOLAR TSM-540-DEG19C.20 (540W)
MODULE QUANTITY	2,590
INVERTER	SUNGROW SG125HV 125KW
INVERTER QUANTITY	8
UTILITY	EVERSOURCE



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# GENERAL NOTES

- 1. REFER TO THE EXISTING CONDITIONS MAP FOR THE ENTIRE PROPERTY BOUNDARY AND EXISTING CONDITIONS INFORMATION. THE PLAN HEREON DEPICTS A PORTION OF THE PROPERTY IN WHICH THE SITE WORK IS BEING PROPOSED.
- THIS DRAWING IS INTENDED TO DESCRIBE GRADING AND DRAINAGE ONLY. REFER TO SITE PLAN FOR GENERAL INFORMATION, AND DETAIL SHEETS FOR DETAILS.
   THE CONTRACTOR SHALL PRESERVE EXISTING VEGETATION WHERE POSSIBLE AND/OR AS
- NOTED ON DRAWINGS, REFER TO EROSION CONTROL PLAN FOR LIMIT OF DISTURBANCE AND EROSION CONTROL NOTES.
- TOPSOIL SHALL BE STRIPPED AND STOCKPILED ON SITE FOR USE IN FINAL LANDSCAPING.
  THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY CONSTRUCTION PERMITS REQUIRED BY GOVERNMENT AND LOCAL AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY CONSTRUCTION PERMITS FROM THE TOWN OF MANCHESTER REQUIRED TO PERFORM ALL WORK, INCLUDING FOR STREET CUTS AND CONNECTIONS TO EXISTING UTILITIES. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
- 6. ALL DISTURBANCE INCURRED TO TOWN OR STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE TOWN OF BETHANY AUTHORITY.
- 7. IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE OWNER AND/OR OWNER'S ENVIRONMENTAL CONSULTANT.
- ALL PIPE LENGTHS ARE HORIZONTAL DISTANCES AND ARE APPROXIMATE.
  ALL DISTURBED AREAS TO BE RESEEDED WITH ERNMX-147 WITHIN THE ARRAY AREA. ERNMX-610 WILL BE USED OUTSIDE FENCELINE AND IN NON-ARRAY AREAS.

PROPERTY LINE

# LEGEND



_	MAJOR CONTOURS
_	MINOR CONTOURS
	EXISTING MAJOR CONTOURS
	EXISTING MINOR CONTOURS
	PROPOSED SPOT ELEVATION
	EXISTING SPOT ELEVATION
	STORM DRAIN PIPE
	RIP RAP SPILLWAY
	OUTLET CONTROL STRUCTURE
	FLARED END SECTION

RIPRAP OUTLET PROTECTION

PERMANENT WETLAND DISTURBANCE AREA

2	05/06/24	CSC INTERROGATORIES
1	04/19/24	CSC INTERROGATORIES
Rev. #:	Date	Description
Graphic Scale	0	40 80
501 Main Stre 11 Vanderbilt	<b>JS</b> <b>JS</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b>	<b>OLLLI</b> <b>GINEERING</b> 468 T: (203) 880-5455 A 02062 T: (781) 352-8491 F: (203) 880-9695 F: (203) 880-9695
Drawn By:	AWC	SUMME OF CONNECTION
Checked By:	СЈВ	
Approved By:	: KMS	- 25759
Project #:	2310010	1 CENSE COM
Plan Date:	01/15/24	Kevin Solli, P.E.
Scale	1'' = 40'	CT 25759
Droject:		
Project:		
Project: PI	ROPO	SED SOLAR
Project: PI PHO	ROPO ГОVО	SED SOLAR LTAIC ARRAY
Project: PH PHO	ROPO ΓΟVΟ 250 CA	SED SOLAR LTAIC ARRAY rter street
Project: PHO PHO	ROPO ΓΟVΟ 250 CA ANCHEST	SED SOLAR LTAIC ARRAY rter street er, connecticut
Project: PHO PHO MA Sheet Title:	ROPO ΓΟVΟ 250 CA ANCHEST	SED SOLAR LTAIC ARRAY RTER STREET ER, CONNECTICUT
Project: PHO PHO MA Sheet Title: GRA	ROPO TOVO 250 CA ANCHEST DING 8	SED SOLAR LTAIC ARRAY RTER STREET ER, CONNECTICUT
Project: PHO PHO MA Sheet Title: GRA DRA	ROPO FOVO 250 CA ANCHEST DING & JNAGE	SED SOLAR DLTAIC ARRAY RTER STREET TER, CONNECTICUT Sheet #: 2,2,21



- PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, ENGINEER OF RECORD, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A 13. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE STORM WITH A RAINFALL AMOUNT OF 0.25 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS AS NECESSARY IN A TIMELY MANNER.
- 5. THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOSITE FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.
- 11. NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM PERMITTEE OR THE EROSION CONTROL BLANKETS. ALL SLOPES SHALL BE SEEDED AND BANKS WILL BE STABILIZED MUNICIPALITY. IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
- 18. SEEDING MIXTURES SHALL BE FUZZ & BUZZ MIX PREMIUM ERNMX-147, OR APPROVED EQUAL. NEW 12. DIRECT ANY DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE CONFORMING TO THE ENGLAND EROSION CONTROL/ RESTORATION MIX FOR STORMWATER BASINS & MOIST SITES, OR APPROVED GUIDELINES WITHIN THE APPROVED LIMIT OF DISTURBANCE IF REQUIRED. DISCHARGE TO STORM DRAINS EQUAL, SHALL BE UTILIZED ON THE BOTTOM OF THE BASIN & FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE PERMITTEE OR APPROVED EQUAL, ON THE SIDE SLOPES OF THE BASIN. SEE SHEET DN-2 FOR ALL SEED MIXTURES. MUNICIPALITY.
- ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON-SITE AT ALL TIMES AND SECURED APPROPRIATELY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT.

19. REFER TO SHEET 2.41 FOR SEDIMENT & EROSION CONTROL NARRATIVE & DETAILS.

E&S MEASURE      INSPECTION SCHEDULE      MAINTENANCE REQUIRED					
CONSTRUCTION ENTRANCE DAILY DAILY PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REP	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT.				
COMPOSITE FILTER SOCKWEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED.	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED.				
SILT FENCEWEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.				
TOPSOIL/BORROW STOCKPILES DAILY REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.				
TEMPORARY SOIL PROTECTION    WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"    REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.				
TEMPORARY SEDIMENT TRAP CALCULATIONS					
TRAP NUMBERDRAINAGE AREA (AC)REQ.REQ. WET VOLUMEBOTTOM BOTTOMWET ELEVATIONDRY ELEVATIONTOP 	TOTAL VOLUME )VIDED (C				
1      2.35      8,503      4,251      611.00      612.00      615.00      616.00      14,044      42,650	56,694				

# LEGEND XXXXXXXXXXXXXXXXXXXXXXX \_\_\_\_\_

PROPERTY LINE RIGHT-OF-WAY LINE ADJOINING LOT LINE SILT FENCE PROTECTION CURB REMOVAL FENCE / ROCK WALL REMOVAL TEMPORARY SEDIMENT TRAP / BASIN

STONE CHECK DAM

MATERIAL STOCKPILE AREA

CONSTRUCTION ENTRANCE

DIVERSION SWALE/BERM

EROSION CONTROL MATTING

PHASE 1 CLEARING AND GRUBBING

PHASE 1 CLEARING ONLY (STUMPS TO REMAIN)

# CONSTRUCTION SEQUENCE (PHASE I)

THE FOLLOWING SUGGESTED SEQUENCE OF CONSTRUCTION ACTIVITIES IS PROJECTED BASED UPON ENGINEERING JUDGEMENT AND BEST MANAGEMENT PRACTICES. THE CONTRACTOR MAY ELECT TO ALTER THE SEQUENCING TO BEST MEET THE CONSTRUCTION SCHEDULE. THE EXISTING SITE ACTIVITIES AND WEATHER CONDITIONS. SHOULD THE CONTRACTOR ALTER THE CONSTRUCTION SEQUENCE OR ANY EROSION AND SEDIMENTATION CONTROL MEASURES THEY SHALL MODIFY THE STORMWATER POLLUTION CONTROL PLAN ("SWPCP") AS REQUIRED BY THE GENERAL PERMIT. MAJOR CHANGES IN SEQUENCING AND/OR METHODS MAY REQUIRE REGULATORY APPROVAL PRIOR TO IMPLEMENTATION.

- THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING. PHYSICALLY FLAG THE LIMITS OF DISTURBANCE IN THE FIELD AS NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING.
- CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL MEASURES. THE MEETING SHOULD BE ATTENDED BY TH OWNER. THE OWNER'S REPRESENTATIVE(S), THE GENERAL CONTRACTOR, DESIGNATED SUB-CONTRACTORS AND THE PERSON, OR PERSONS, RESPONSIBLE FOR THE IMPLEMENTATION, OPERATION, MONITORING AND MAINTENANCE OF THE EROSION AND SEDIMENTATION MEASURES. THE CONSTRUCTION PROCEDURES FOR THE ENTIRE PROJECT SHALL BE REVIEWED AT THIS MEETING.
- NOTIFY CALL BEFORE YOU DIG AT 811, AS REQUIRED, PRIOR TO THE START OF CONSTRUCTION. REMOVE EXISTING IMPEDIMENTS AS NECESSARY AND PROVIDE MINIMAL DISTURBANCE TO INSTALL THE REQUIRED CONSTRUCTION ENTRANCE.
- INSTALL STREAM CROSSING & ACCESS DRIVE.
- INSTALL SILT FENCE / PERIMETER SEC MEASURES AS PROPOSED (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL SEC MEASURES). PREPARE TEMPORARY PARKING AND STORAGE AREAS. ESTABLISH MATERIAL STOCKPILE AREA
- AND INSTALL SEC BARRIER SURROUNDING PILE. COMPLETE PHASE I CLEARING & GRUBBING FOR INSTALLATION OF SEDIMENT TRAP AND GRASS LINED SWALES PER DESIGN PLANS. STABILIZE OPEN SOILS WITH SPECIFIED SEED MIXES.

ΟN	<b>OPERATION</b>	& MAINTENANCE PLAN

	05/06/24 CSC INTERROGATORIES		
2	05/06/24	CSC INTERROGATORIES	
1	04/19/24	CSC INTERROGATORIES	
Rev. #:	Date	Description	
Graphic Scale:			
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5			
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11 Vanderbilt A	, Monroe, CT 00408 .ve, Norwood, MA 0206	1: (203) 880-3455    F: (203) 880-9695      2    T: (781) 352-8491    F: (203) 880-9695	
Drawn By:	SFU	WINNING CONNE	
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Approved By:	KMS		
Project #:	23100101	25759 4 S	
Plan Date:	01/15/24	Manager Constant English	
Scale:	1" = 60'	Kevin Solli, P.E. CT 25759	
Project:		-	
PR	OPOSE	ED SOLAR	
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CONTR	OL PLAN	$  \Delta.JI$	
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- 2024 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE TOWN OF MANCHESTER PERMITTEE, AND/OR SWPCP MONITOR. ALL PERIMETER SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF CLEARING AND GRUBBING AND DEMOLITION OPERATIONS.
- THESE DRAWINGS ARE ONLY INTENDED TO DESCRIBE THE SEDIMENT AND EROSION CONTROL MEASURES FOR THIS SITE. SEE CONSTRUCTION SEQUENCE FOR ADDITIONAL INFORMATION. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THE EROSION & SEDIMENT CONTROL PLAN ARE SHOWN AS REQUIRED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL EROSION CONTROL MEASURES ARE CONFIGURED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION OF SOILS AND PREVENT THE TRANSPORT OF SEDIMENTS AND OTHER POLLUTANTS TO STORM DRAINAGE SYSTEMS AND/OR WATERCOURSES. ACTUAL SITE CONDITIONS OR SEASONAL AND CLIMATIC CONDITIONS MAY WARRANT ADDITIONAL CONTROLS OR CONFIGURATIONS, AS REQUIRED, AND AS DIRECTED BY THE PERMITTEE AND/OR SWPCP MONITOR. REFER TO SITE PLAN FOR GENERAL INFORMATION AND OTHER CONTRACT PLANS FOR APPROPRIATE INFORMATION.
- A BOND OR LETTER OF CREDIT MAY BE REQUIRED TO BE POSTED WITH THE GOVERNING AUTHORITY FOR THE EROSION CONTROL INSTALLATION AND MAINTENANCE.
- THE CONTRACTOR SHALL APPLY THE MINIMUM EROSION & SEDIMENT CONTROL MEASURES SHOWN ON THE PLAN IN CONJUNCTION WITH CONSTRUCTION SEQUENCING, SUCH THAT ALL ACTIVE WORK ZONES ARE PROTECTED. ADDITIONAL AND/OR ALTERNATIVE SEDIMENT AND EROSION CONTROL MEASURES MAY BE INSTALLED DURING THE CONSTRUCTION PERIOD IF FOUND NECESSARY BY THE CONTRACTOR, OWNER, ENGINEER OF RECORD, MUNICIPAL OFFICIALS, OR ANY GOVERNING AGENCY. THE CONTRACTOR SHALL CONTACT THE OWNER AND APPROPRIATE GOVERNING AGENCIES FOR APPROVAL IF ALTERNATIVE CONTROLS OTHER THAN THOSE SHOWN ON THE PLANS ARE PROPOSED BY THE CONTRACTOR.
- THE CONTRACTOR SHALL TAKE EXTREME CARE DURING CONSTRUCTION SO AS NOT TO DISTURB UNPROTECTED WETLAND AREAS OR INSTALLED SEDIMENTATION AND EROSION CONTROL MEASURES. THE CONTRACTOR SHALL INSPECT ALL SEDIMENT AND EROSION CONTROLS WEEKLY AND WITHIN 24 HOURS OF A 13. THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE STORM WITH A RAINFALL AMOUNT OF 0.25 INCHES OR GREATER TO VERIFY THAT THE CONTROLS ARE OPERATING PROPERLY AND MAKE REPAIRS AS NECESSARY IN A TIMELY MANNER.
- 5. THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOSITE FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.

THAN 5% FINES PASSING THROUGH A #200 SIEVE (BANK RUN), SHALL BE PLACED IN MAXIMUM ONE FOOT LIFTS, AND SHALL BE COMPACTED TO 95% MAX. DRY DENSITY MODIFIED PROCTOR OR AS SPECIFIED IN THE CONTRACT SPECIFICATIONS.

- 8. PROTECT EXISTING TREES THAT ARE TO BE SAVED BY FENCING, ORANGE SAFETY FENCE, CONSTRUCTION TAPE, OR EQUIVALENT FENCING/TAPE. ANY LIMB TRIMMING SHOULD BE DONE AFTER CONSULTATION WITH AN ARBORIST AND BEFORE CONSTRUCTION BEGINS IN THAT AREA. FENCING SHALL BE MAINTAINED AND REPAIRED DURING CONSTRUCTION.
- 9. CONSTRUCTION ENTRANCES (ANTI-TRACKING PADS) SIIALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SIIALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION IF REQUIRED. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF PASSING OVER THE ANTI-TRACKING PADS PRIOR TO EXITING.
- 10. ALL CONSTRUCTION SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE, WHICH SHALL BE MARKED WITH SILT FENCE, SAFETY FENCE, HAY BALES, RIBBONS, OR OTHER MEANS PRIOR TO CLEARING. CONSTRUCTION ACTIVITY SHALL REMAIN ON THE UPHILL SIDE OF THE SEDIMENT BARRIER UNLESS WORK IS SPECIFICALLY CALLED FOR ON THE DOWNHILL SIDE OF THE BARRIER.
- 11. NO CUT OR FILL SLOPES SHALL EXCEED 2:1 EXCEPT WHERE STABILIZED BY ROCK FACED EMBANKMENTS OR EROSION CONTROL BLANKETS. ALL SLOPES SHALL BE SEEDED AND BANKS WILL BE STABILIZED IMMEDIATELY UPON COMPLETION OF FINAL GRADING UNTIL TURF IS ESTABLISHED.
- 12. DIRECT ANY DEWATERING PUMP DISCHARGE TO A SEDIMENT CONTROL DEVICE CONFORMING TO THE GUIDELINES WITHIN THE APPROVED LIMIT OF DISTURBANCE IF REQUIRED. DISCHARGE TO STORM DRAINS OR SURFACE WATERS FROM SEDIMENT CONTROLS SHALL BE CLEAR AND APPROVED BY THE PERMITTEE OR MUNICIPALITY.
- ACCUMULATION OF RUBBISH OR CONSTRUCTION DEBRIS ON THE SITE. PROPER SANITARY DEVICES SHALL BE MAINTAINED ON-SITE AT ALL TIMES AND SECURED APPROPRIATELY. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID THE SPILLAGE OF FUEL OR OTHER POLLUTANTS ON THE CONSTRUCTION SITE AND SHALL ADHERE TO ALL APPLICABLE POLICIES AND REGULATIONS RELATED TO SPILL PREVENTION AND RESPONSE/CONTAINMENT.

PRACTICABLE (2 WEEK MAXIMUM UNSTABILIZED PERIOD) USING PERENNIAL RYEGRASS AT 40 LBS PER ACRE. MULCH ALL CUT AND FILL SLOPES AND SWALES WITH LOOSE HAY AT A RATE OF 2 TONS PER ACRE. IF NECESSARY, REPLACE LOOSE HAY ON SLOPES WITH EROSION CONTROL BLANKETS OR JUTE CLOTH. MODERATELY GRADED AREAS, ISLANDS, AND TEMPORARY CONSTRUCTION STAGING AREAS MAY BE HYDROSEEDED WITH TACKIFIER.

15. SWEEP AFFECTED PORTIONS OF OFF SITE ROADS ONE OR MORE TIMES A DAY (OR LESS FREQUENTLY IF TRACKING IS NOT A PROBLEM) DURING CONSTRUCTION. FOR DUST CONTROL, PERIODICALLY MOISTEN EXPOSED SOIL SURFACES WITH WATER ON UNPAVED TRAVELWAYS TO KEEP THE TRAVELWAYS DAMP. CALCIUM CIILORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SIIALL BE COVERED.

CONSTRUCTION ARE COMPLETED. CONTRACTOR SHALL ENSURE THAT ALL VEHICLES EXITING THE SITE ARE 16. VEGETATIVE ESTABLISHMENT SHALL OCCUR ON ALL DISTURBED SOIL, UNLESS THE AREA IS UNDER ACTIVE CONSTRUCTION, IT IS COVERED IN STONE OR SCHEDULED FOR PAVING WITHIN 30 DAYS. TEMPORARY SEEDING OR NON-LIVING SOIL PROTECTION OF ALL EXPOSED SOILS AND SLOPES SHALL BE INITIATED WITHIN THE FIRST 7 DAYS OF SUSPENDING WORK IN AREAS TO BE LEFT LONGER THAN 30 DAYS.

> 7. MAINTAIN ALL PERMANENT AND TEMPORARY SEDIMENT CONTROL DEVICES IN EFFECTIVE CONDITION THROUGHOUT THE CONSTRUCTION PERIOD. UPON COMPLETION OF WORK SWEEP CONCRETE PADS, CLEAN THE STORMWATER MANAGEMENT SYSTEMS AND REMOVE ALL TEMPORARY SEDIMENT CONTROLS ONCE THE SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN RECEIVED FROM PERMITTEE OR THE MUNICIPALITY.

18. SEEDING MIXTURES SHALL BE FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL. NEW ENGLAND EROSION CONTROL/ RESTORATION MIX FOR STORMWATER BASINS & MOIST SITES, OR APPROVED EQUAL, SHALL BE UTILIZED ON THE BOTTOM OF THE BASIN & FUZZ & BUZZ MIX - PREMIUM - ERNMX-147, OR APPROVED EQUAL, ON THE SIDE SLOPES OF THE BASIN. SEE SHEET DN-2 FOR ALL SEED MIXTURES.

19. REFER TO SHEET 2.41 FOR SEDIMENT & EROSION CONTROL NARRATIVE & DETAILS.

CONSTRUCTION OPERATION & MAINTENANCE PLAN				
E&S MEASURE	INSPECTION SCHEDULE	MAINTENANCE REQUIRED		
CONSTRUCTION ENTRANCE	DAILY	PLACE ADDITIONAL STONE, EXTEND THE LENGTH OR REMOVE AND REPLACE THE STONE. CLEAN PAVED SURFACES OF TRACKED SEDIMENT.		
COMPOSITE FILTER SOCK	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED.		
SILT FENCE	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR/REPLACE WHEN FAILURE OR DETERIORATION IS OBSERVED. REMOVE SILT WHEN IT REACHES 1/2 THE HEIGHT OF THE FENCE.		
TOPSOIL/BORROW STOCKPILES	DAILY	REPAIR/REPLACE SEDIMENT BARRIERS AS NECESSARY.		
TEMPORARY SOIL PROTECTION	WEEKLY & WITHIN 24 HOURS OF RAINFALL > 0.25"	REPAIR ERODED OR BARE AREAS IMMEDIATELY. RESEED AND MULCH.		



PROPERTY LINE **RIGHT-OF-WAY LINE** ADJOINING LOT LINE SILT FENCE PROTECTION CONSTRUCTION FENCE CURB REMOVAL FENCE / ROCK WALL REMOVAL TEMPORARY SEDIMENT TRAP / BASIN STONE CHECK DAM MATERIAL STOCKPILE AREA

CONSTRUCTION ENTRANCE

CONCRETE WASHPIT

DIVERSION SWALE/BERM

PHASE 2 CLEARING AND GRUBBING

# CONSTRUCTION SEQUENCE (PHASE II)

TEMPORARILY SEED. THROUGHOUT CONSTRUCTION, DENUDED AREAS THAT WILL BE INACTIVE FOR 14 DAYS OR MORE. 2. ONCE SEDIMENT TRAP AND GRASS LINED SWALES ARE STABILIZED, COMPLETE PHASE 2

- CLEARING AND GRUBBING. STABILIZE OPEN SOILS WITH SPECIFIED SEED MIXES.
- INSTALL RACKING POSTS FOR SOLAR PANELS. INSTALL SOLAR PANELS AND COMPLETE ELECTRIC INSTALLATION.
- COMPLETE REMAINING SITE WORK, INCLUDING CHAIN LINK FENCE, EQUIPMENTS PADS, AND
- ITERCONNECTION ROUTE. STABILIZE ALL DISTURBED AREAS THROUGHOUT CONSTRUCTION PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE
- PER APPENDIX I (I)(1)(C)(iii): FOR SLOPES GREATER THAN OR EOUAL TO 8%, EROSION CONTROL BLANKETS OR STUMP GRINDINGS OR EROSION CONTROL MIX MULCH OR HYDROSEED WITH TACKIFER SHALL BE APPLIED WITHIN 72 HOURS OF FINAL GRADING, OR WHEN A RAINFALL OF 0.5 INCHES OR GREATER IS PREDICTED WITHIN 24 HOURS OF FINAL GRADING, WHICHEVER TIM PERIOD IS LESS.
- 8. CONVERT SEDIMENT TRAP TO PERMANENT STORMWATER BASIN. REMOVE ALL SEDIMENT AND REPAIR ALL BASIN BANKS AS REQUIRED. INSTALL LOW FLOW ORIFICES IN OUTLET CONTROL STRUCTURE.
- 9. REPAIR AND STABILIZE GRASS LINED SWALES AS REQUIRED.
- 10. PREPARE SITE FOR FINAL GRADING. 11. FINE GRADE, RAKE, SEED, AND MULCH ALL REMAINING DISTURBED AREAS.
- 12. CONTRACTOR / CONSTRUCTION MANAGER TO COORDINATE WITH ENGINEER OF RECORD AND
- SOIL CONSERVATION DISTRICT AGENT TO OBTAIN STABILIZED SITE STATUS. 13. CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION REPORT IS SIGNED BY THE CONSTRUCTION MANAGER AND SUBMITTED.

)N	<b>OPER</b>	ATION	& MA	AINTEI	NANCE	PL	AN

2 05/06/24 CSC INTERROGATORIES	
1 04/19/24 CSC INTERROGATORIES	
Rev. #: Date Description	
Graphic Scale:	
	)
Solution      Solution	<b>G</b> 9695 9695
Drawn By: SFU	
Checked By: AWC	W.H.W.
Approved By: KMS	Poolin unit
Project #: 23100101	K.
Plan Date: 01/15/24	
Scale:      1" = 60'      Kevin Solli, P.E.        CT 25759	
Project:	
PROPOSED SOLAR	
PHOTOVOLTAIC ARRA	ΥY
<b>250 CARTER STREET</b>	
MANCHESTER, CONNECTICUT	
Sheet Title: Sheet #:	
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SOIL EROSION &	
SOIL EROSION & SEDIMENT 232	

- (1) POINT OF APPLICATION OF GRADE OR MATCH EXISTING GROUND
- (2) GRAVEL ACCESS DRIVE
- (3) NONWOVEN GEOTEXTILE (MIRAFI 140N OR EQUAL)
- (4) LIMIT OF EXCAVATION OR LIMIT OF COMPACTION
- (5) EROSION CONTROL BLANKET ON SLOPES 3:1 OR GREATER
- (6) 6" TOPSOIL AND SEED
- (7) VEGETATED CHANNEL
- 1. THE CONTRACTOR SHALL CONTACT CT CALL BEFORE YOU DIG (CBYD) A MINIMUM OF 72 HOURS PRIOR TO BEGINNING CONSTRUCTION.
- 2. TRANSITIONS BETWEEN TYPICAL ACCESS ROAD SECTIONS SHALL OCCUR OVER 50 FEET. (TYPICAL)









SCALE: NTS







SCALE: NTS

- 4" TOP COURSE - ROLLED BANK RUN GRAVEL CONFORMING TO CTDOT FORM 817 M.02.03 AND M.02.03 GRADATION "C" OR COMPACTED 1<sup>1</sup>/<sub>4</sub>" PROCESSED TRAPROCK MIX

6" BINDER COURSE - ROLLED BANK RUN GRAVEL CONFORMING TO CTDOT FORM 817 M.02.03 AND M.02.06 GRADATION "A"

- GEOTEXTILE FABRIC (MIRAFI 140N OR APPROVED EQUAL)



# **ENVIRONMENTAL NOTES - RESOURCE PROTECTION MEASURES**

# EASTERN BOX TURTLE PROTECTION PROGRAM

EASTERN BOX TURTLES ARE LISTED AS STATE "SPECIES OF SPECIAL CONCERN" BY THE CT DEEP. SPECIES CLASSIFIED AS "THREATENED" BY THE CT DEEP ARE NATIVE SPECIES THAT HAVE A NATURALLY RESTRICTED RANGE IN HABITAT IN THE STATE, ARE AT A LOW POPULATION LEVEL, ARE IN SUCH HIGH DEMAND BY HUMANS THAT ITS UNREGULATED TAKING WOULD BE DETRIMENTAL TO THE CONSERVATION OF ITS POPULATION, OR HAVE BEEN EXTIRPATED FROM THE STATE. EASTERN BOX TURTLES TYPICALLY INHABIT WELL-DRAINED FOREST BOTTOMLANDS AND OPEN DECIDUOUS FORESTS AND WILL UTILIZE A VARIETY OF OTHER EARLY SUCCESSIONAL HABITATS SUCH AS FIELD EDGES (AND OTHER EDGE HABITAT SUCH AS UTILITY CORRIDORS) AND THICKETS. THEY ALSO WILL UTILIZE WETLAND HABITATS SUCH AS MARSHES, BOGS, AND STREAMS AT VARIOUS TIMES DURING THEIR ACTIVE SEASON. EASTERN BOX TURTLES ARE ACTIVE BETWEEN APRIL 1 AND NOVEMBER 1; IN THE REMAINING MONTHS, THEY ARE DORMANT, IN A STATE OF BRUMATION A FEW INCHES UNDER THE GROUND SURFACE.

THE FOLLOWING IS A SUMMARY OF MEASURES REQUIRED BY THE CT DEEP AND TO BE USED BEFORE, DURING AND FOLLOWING CONSTRUCTION TO PROTECT EASTERN BOX TURTLES THAT MAY POTENTIALLY BE ENCOUNTERED AT THE SITE. ALL GROUND DISTURBANCE WORK ASSOCIATED WITH THE PROJECT MUST BE CONDUCTED BETWEEN APRIL 1 AND NOVEMBER 1, THE EASTERN BOX TURTLES' ACTIVE SEASON. IT IS RECOMMENDED MOWING NOT OCCUR DURING MAY 15 TO SEPTEMBER 15. IF MOWING IS TO OCCUR DURING THIS TIME FRAME, WHETHER PRE- OR POST-CONSTRUCTION, THE CT DEEP **RECOMMENDS THE FOLLOWING:** 

- PRE-CONSTRUCTION:
- IN PREPARING THE SITE FOR DEVELOPMENT, EXCLUSIONARY FENCING THAT IS AT LEAST 20 INCHES TALL AND THAT IS SECURED AND KEYED INTO THE GROUND, MUST BE INSTALLED AROUND THE PERIMETER OF THE WORK AREA TO PREVENT TURTLE ACCESS TO THE SITE. THE WORK AREA INCLUDES ALL AREAS USED FOR SITE ACCESS, EQUIPMENT PARKING, MATERIAL STAGING, MATERIAL STORAGE, AND CONSTRUCTION PURPOSES. THE ENTRANCE TO THE SITE ALSO MUST BE CORDONED OFF WITH AN EXCLUSIONARY METHOD WHEN THE SITE IS NOT IN USE. THIS CAN BE ACCOMPLISHED WITH A ROW OF HAY BALES THAT CAN BE MOVED WHEN ACCESS TO THE SITE IS NEEDED. • IF MOWING NEEDS TO OCCUR BEFORE EXCLUSIONARY FENCE INSTALLATION WITHIN THE ACTIVE TURTLE
- TIMEFRAME, THE MOWING STYLE, MOWING HEIGHT, MOWING DIRECTIONALITY, MOWING SPEED, AND THE LOCATION OF NON-MOWING AREAS SHOULD BE AS FOLLOWS: a. 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 ONE TO FIVE YEARS. IN AREAS WITH MORE
- WOODY VEGETATION, A LESS THAN ONE TO TWO-INCH DIAMETER BRONTOSAURUS-STYLE MOWER WILL HAVE THE LEAST IMPACT ON TURTLES. b. MOWING HEIGHT: THE RETENTION OF MOWING STUBBLE SEVEN TO TWELVE INCHES IN HEIGHT WILL REDUCE
- MORTALITY, REDUCE BLADE WEAR, AND WILL LEAVE IMPORTANT COVER FOR ANIMALS. c. MOWING DIRECTIONALITY: 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-FOOT STRIP AROUND THE PERIMETER OF THE FIELD AND MOW THIS AREA LAST. MOST TURTLES ARE FOUND WITHIN THESE AREAS, AND THIS PROVIDES TIME FOR THEM TO REACT TO THE MOWING ACTIVITY AND MOVE OUT OF THE AREA. IF THE FIELD IS NEAR A STREAM, START MOWING THE SIDE FURTHEST FROM THE STREAM AND WORK TOWARDS THE STREAM. IF THE FIELD IS BORDERED BY WOODLAND, START MOWING THE SIDE FURTHEST FROM WOODLAND AND WORK TOWARDS WOODLAND. IF THE FIELD IS BORDERED BY A ROAD, START MOWING NEXT TO THE ROAD AND WORK YOUR WAY ACROSS THE FIELD.
- d. MOWING SPEED: MOWING IN LOW GEAR OR AT SLOW SPEEDS WILL ALLOW TURTLES TO REACT AND MOVE OUT OF THE FIELD. e. NON-MOWING AREAS: LEAVE AN UNMOWED FIELD EDGE IN IIIGII TURTLE-USE AREAS UNTIL AFTER SEPTEMBER 15.
- ONCE EXCLUSIONARY FENCING HAS BEEN INSTALLED SURROUNDING THE WORK AREA, A QUALIFIED INDIVIDUAL MUST SURVEY THE AREA TO DETERMINE IF THERE ARE ANY TURTLES WITHIN THE WORK AREA. IF TURTLES ARE IDENTIFIED, THEY ARE TO BE CAREFULLY MOVED TO AN AREA OUTSIDE OF THE WORK AREA IN A SAFE MANNER THAT WILL NOT HARM THEM. IF LISTED SPECIES OF TURTLES ARE IDENTIFIED, THE QUALIFIED INDIVIDUAL WILL DOCUMENT AND REPORT THESE FINDINGS TO THE CT DEEP IN THE MANNER IDENTIFIED WITHIN THE NDDB DETERMINATION LETTER. ONLY WHEN THE QUALIFIED INDIVIDUAL DETERMINES THAT NO TURTLES ARE WITHIN THE WORK AREA AND THAT THE SITE IS SECURE FROM TURTLES RE-ENTERING CAN CONSTRUCTION BEGIN.
- PRIOR TO COMMENCING ACTIVITY, A MEETING IS TO BE HELD WITH ALL CONSTRUCTION PERSONNEL WORKING WITHIN THE EXCLUSION AREA BY THE QUALIFIED INDIVIDUAL TO APPRAISE THEM OF THE SPECIES DESCRIPTION AND THEIR DUTIES IN REGARD TO MAINTAINING THE SECURITY OF THE SITE. SHOULD CONSTRUCTION PERSONNEL ENCOUNTER A TURTLE, THE QUALIFIED INDIVIDUAL WILL INSTRUCT PERSONNEL DURING THIS MEETING ON HOW TO CAREFULLY REMOVE THE TURTLE FROM THE SITE, HOW TO DOCUMENT THEIR FINDINGS AND TO REPORT IT TO THE QUALIFIED INDIVIDUAL FOR REPORTING TO THE CT DEEP.
- MID-CONSTRUCTION: • PRIOR TO THE START OF WORK ACTIVITY EACH DAY, THE EXCLUSIONARY FENCING IS TO BE INSPECTED BY CONSTRUCTION PERSONNEL AND ALL GAPS OR OPENINGS AT THE GROUND LEVEL IDENTIFIED SHOULD BE FIXED OR REPAIRED IMMEDIATELY TO PREVENT TURTLES ACCESS TO THE SITE. IF A BREACH IS IDENTIFIED, WORK SHALL HALT UNTIL THE QUALIFIED INDIVIDUAL SURVEYS THE SITE AND DETERMINES NO TURTLES ARE WITHIN THE WORK AREA.
- ALL HEAVY MACHINERY (ACTIVE OR PARKED) MUST BE WITHIN THE LIMITS OF THE EXCLUSIONARY ZONE OR ON PAVED SURFACES. NO MACHINERY IS TO BE PARKED IN ANY TURTLE HABITAT (I.E., THE AREA OUTSIDE OF THE EXCLUSIONARY ZONE).
- AT THE END OF EACH WORK DAY, THE EXCLUSIONARY MEASURES AT THE ENTRANCE TO THE WORK SITE MUST BE REIMPLEMENTED TO PREVENT TURTLES FROM ACCESSING THE SITE. IF THIS IS NOT DONE, THE EXCLUSIONARY ZONE IS CONSIDERED VOID AND A QUALIFIED INDIVIDUAL MUST RE-SURVEY THE SITE AND CONCLUDE THAT NO TURTLES ARE PRESENT WITHIN THE WORK AREA BEFORE CONSTRUCTION ACTIVITY CAN BEGIN AGAIN. -CONSTRUCTION:
- AFTER COMPLETION OF THE PROJECT, EXCLUSIONARY FENCING SHALL BE REMOVED ONCE THE AREA IS STABILIZED TO ALLOW FOR REPTILE AND AMPHIBIAN PASSAGE TO RESUME. IF CORDONING OFF SEGMENTS OF THE WORKSITE TO BE COMPLETED IN SEPARATE PHASES, ONCE THESE AREAS ARE STABLE, ONLY THEN MAY EXCLUSIONARY FENCING BE REMOVED. ALL ACTIVE AREAS MUST REMAIN EXCLUSIONARY TO TURTLES.

IN ADDITION TO THESE MEASURES, THE CT DEEP RECOMMENDS THE FOLLOWING BE IMPLEMENTED INTO THE GENERAL SITE DESIGN FOR THE DEVELOPMENT TO INCREASE THE VALUE OF HABITAT FOR WILDLIFE AND STATE-LISTED SPECIES. • A SITE MANAGEMENT PLAN TO PROMOTE NATIVE VEGETATION GROWTH IN THE AREA UNDER THE SOLAR PANELS SHOULD BE CREATED.

• USE WILDLIFE-FRIENDLY FENCING TO ALLOW WILDLIFE MOVEMENT TO AND FROM THE DEVELOPMENT. • DEVELOP A MANAGEMENT PLAN FOR AREAS OF THE PROPERTY WHERE DEVELOPMENT IS NOT OCCURRING AND/OR FOR WHEN SOLAR PANELS ARE DECOMMISSIONED THAT WILL SUPPORT STATE-LISTED SPECIES.



VERTICAL SCALE : 1'' = 4'

CSC INTERROGATORIES 05/06/24 CSC INTERROGATORIES 04/19/24 Description Rev. #: Date Graphic Scale: 501 Main Street, Monroe, CT 06468 T: (203) 880-5455 F: (203) 880-9695 11 Vanderbilt Ave, Norwood, MA 02062 T: (781) 352-8491 F: (203) 880-9695 Drawn By: CJS Checked By: CJB Approved By: KMS Project #: 23100101 01/15/24 Plan Date: Kevin Solli, P.E. NTS CT 25759 cale: PROPOSED SOLAR PHOTOVOLTAIC ARRAY 250 CARTER STREET MANCHESTER, CONNECTICUT heet Title: Sheet #: ENVIRONMENTAL 3.03 NOTES & DETAILS