
**Town of South Windsor Planning and Zoning Commission
Site Plan Modification Permit Narrative**

Greenskies Clean Energy, LLC

S Windsor PD Carport

***151 Sand Hill Road
South Windsor, Connecticut***

Prepared for: **Greenskies Clean Energy, LLC**
127 Washington Avenue
West Building, Garden Level
North Haven, CT 06473

Prepared by: **All-Points Technology Corp., P.C.**
567 Vauxhall Street Extension – Suite 311
Waterford, Connecticut 06385

November 2021

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Permit Application Narrative

This document is submitted in accordance with the Town of South Windsor Zoning Regulations, completed by the Town of South Windsor Planning and Zoning Commission ("PZC") effective as of August 2, 2020.

Introduction

Greenskies Clean Energy, LLC ("Greenskies", "GCE", or the "Applicant") proposes construction of a carport solar photovoltaic facility ("Carport" or "Facility") behind the existing South Windsor Police Department building located at 151 Sand Hill Road, South Windsor, Connecticut (the "Subject Property" or "Site"). The Subject Property is a ± 5.32 -acre parcel owned by the Town of South Windsor. The proposed Carport includes the installation of two (2) ground mount solar carport arrays, consisting of 494 solar modules, that would generate ± 201 kW DC (± 150 kW AC) of renewable clean power. The Facility would be installed within the existing parking lot behind the existing building.

The following sections of this narrative describe the Site and proposed work. Per Zoning Regulations 7.20.2 and correspondence with Jeffery Doolittle, it is anticipated that the Carport would be considered a small solar energy system with direct consumption on the Subject Property and would need a Site Plan Modification permit that would be able to be handled administratively by the Town staff, which an approval would then be reported to the PZC during the next meeting by the Town planner. As such, the Site Plan Modification application is completed and attached as Appendix A.

Location Description

The Subject Property is located at 151 Sand Hill Road, South Windsor, Connecticut. The ± 5.32 -acre parcel, designated with a map block lot number of 76-8 by the Town of South Windsor Assessor's Office, is zoned in the Rural Residential ("RR") district. The RR district has the following

District	Min Lot Area (SF)	Min. Lot Frontage (FT)	Min. Lot Depth (FT)	Min. Yards front/side/rear (FT)	Max. Height of Buildings (STORY/FT)	Max. Lot Coverage (%)
RR	40,000	175	200	50/20/50	2.5/30	15

Access to the proposed Facility would be from the existing paved driveway off of Sand Hill Road to the building and parking lot.

Two (2) wetlands were identified on the Subject Property in proximity to the proposed Facility. One (1) wetland system is located along the western property boundary ("Wetland 1") and is a floodplain wetland associated with Plum Gully Brook. The other wetland system ("Wetland

2") is identified as an existing stormwater management basin located just south of the rear parking lot. Due to the location of the existing parking lot and spaces, the proposed Facility and improvements are designed minimize the impacts to the existing wetlands and associated 80-foot upland review area. However, the Facility will encroach into the 80-foot buffer associated with the existing stormwater management basin, Wetland 2. As such, an application for a Minimal Impact Inland Wetlands, Watercourses and Conservation Application has been submitted to the Inland Wetlands Agency/Conservation Commission ("IWA") for review.

Proposed Work Description

The Facility includes the installation of two (2) ground mount photovoltaic ("PV") solar carport arrays that would generate ± 201 kW DC (± 150 kW AC) of renewable clean power. See Attachment B, Site Plans by All-Points Technology Corporation, P.C. The proposed racking for the solar carport as well as the specifications for the associated equipment, including transformers, inverters, and modules, will be finalized prior to construction. It is anticipated that the carport will have a maximum height of approximately 23 feet.

The ± 201 kW DC (± 150 kW AC) PV System will be interconnected to the existing Police Department building with new equipment to be located to the southeast corner of the building. The entire installation will meet the 2017 NEC requirements.

The Facility will be constructed over the parking area located immediately south of the existing building. No clearing of surrounding trees is anticipated. The foundations of the northern carport will be located within existing pavement. The foundations of the southern carport will be located in the lawn area just south of the paved parking area. Any areas of soil disturbance will be seeded with the Ernst Solar Farm Seed mix or approved equivalent.

The proposed solar panels will be installed on a ground mounted racking system. Little to no grading will be required for development of the Facility. An electrical trench will be required to connect the Facility to the interconnection point located in the building. Since the Facility will be installed over existing pavement and grassed lawn area, the post-development runoff condition of the Facility is expected to match that of the pre-existing conditions. As a result, the stormwater analysis anticipates that no stormwater management best management practice is required for the Project. See Stormwater Memorandum, Attachment C.

While little to no grading is proposed and thus, little to no erosion and sediment would be generated with the construction of the Facility, an erosion and sedimentation control plan will nonetheless be implemented to prevent the potential release of sediments during construction activities. The plan will incorporate Best Management Practices ("BMPs") specified by the CT DEEP¹ and the U.S. Environmental Protection Agency² and comply with the requirements of the NPDES General Permit for Storm Water Discharges for Construction

¹ CT DEEP, 2002. *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*.

² United States Environmental Protection Agency, 1992. *Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices*.

Activities. The program areas of exposed soil will be kept to a minimum and a permanent vegetative cover or other forms of stabilization will be established as soon as practicable. Erosion and sedimentation controls will be maintained until areas of exposed soil are permanently stabilized. Additional details of the proposed Project are depicted on Project Site Plans, see Appendix B.

Work proposed includes the following:

- ▶ Installation of erosion control barriers;
- ▶ Installation of ground foundation, pole mounted solar panels and racking system;
- ▶ Excavation of underground utility installation; and
- ▶ Establishment of permanent vegetation with seeding and mulching of all disturbed areas.

GCE is the owner and will be and operator of the Facility. GCE will prepare an Operations & Maintenance plan which will include the monitoring and maintenance of all GCE facilities 24/7. GCE will coordinate with the Town Fire Department prior to the Facility being operational to ensure that the Department has the information required in case of an emergency.

Summary

The Applicant is proposing to construct a carport solar facility consisting of two (2) ground mount solar photovoltaic arrays providing a total of ± 201 kW DC (± 150 kW AC) behind the existing Police Department building located at 151 Sand Hill Road, South Windsor, Connecticut. The proposed design, construction, operation and maintenance plans are consistent with local, state and federal requirements. The Applicant respectfully requests that the Site Plan Modification Application be handled administratively through Town Staff.

Attachment A

Site Plan Modification Application Form Dated 11/10/21

**TOWN OF SOUTH WINDSOR
PLANNING & ZONING COMMISSION
APPLICATION FORM**

Application Number: _____

Official Receipt Date: _____

VPC Application #: _____

APPLICANT: Greenskies Clean Energy, LLC; Attn: Siva Thashnath

PROJECT NAME: S Windsor PD Carport

COMPLETE LOCATION OF PROPERTY: 151 Sand Hill Rd, South Windsor, CT 06074

OWNER OF RECORD ON LAND RECORDS: Town of South Windsor; Attn: Clay Major, Dir. of Facilities-Public Bld. Div.

OWNER ADDRESS: 1530 Sullivan Avenue, South Windsor, CT 06074

GIS PIN # _____ ZONE RR (Assessor's Map #76, Parcel #8)

NAME, ADDRESS, TELEPHONE & EMAIL ADDRESS OF PERSON TO WHOM INQUIRIES SHOULD BE DIRECTED:

Name: Jin Tao, Address: 567 Vauxhall Street Extension - Suite 311, Waterford, CT 06385, Telephone: 860-581-4863

Email: jtao@allpointstech.com

Estimated presentation time: 15 min.

THIS APPLICATION IS FOR: (Check all that apply):

- ☐ Zone Change to _____ (Public Hearing and Certificate of Mailing Required)
- ☐ Open Space Subdivision/Resubdivision (Public Hearing and Certificate of Mailing Required)
- ☐ Subdivision ☐ Minor ☐ Major
- ☐ Resubdivision (Public Hearing Required) ☐ Minor ☐ Major
- ☐ Conditional Subdivision
- ☐ Special Exception to Table _____ (Public Hearing and Certificate of Mailing Required)
- ☒ Site Plan of Development ☐ New ☒ Modification Building(s) Sq Ft _____
- ☐ General Plan of Development
- ☐ Earth Filling (Sec. 7.6) and/or Earth Removal (Sec. 7.16) (Public Hearing and Certificate of Mailing Required)
- ☐ Regulation Amendment ☐ Zoning ☐ Subdivision - Attach proposed amendment (Public Hearing Required)
- ☐ Temporary and Conditional Permit (Public Hearing Required) for _____
- ☐ Temporary and Conditional Permit Renewal for _____
- ☐ Detached In Law Apartment or ☐ Accessory Apartment (Public Hearing and Certificate of Mailing Required)
- ☐ Major Home Occupation (Certificate of Mailing Required) for _____
- ☐ Other (explain in detail) _____

PLEASE NOTE: An Application Pending Sign is required to be posted on the property for all applications ten (10) days prior to being heard by the Commission.

Signature of Applicant

Siva Thashnath

Print Name of Applicant

Signature of Property Owner

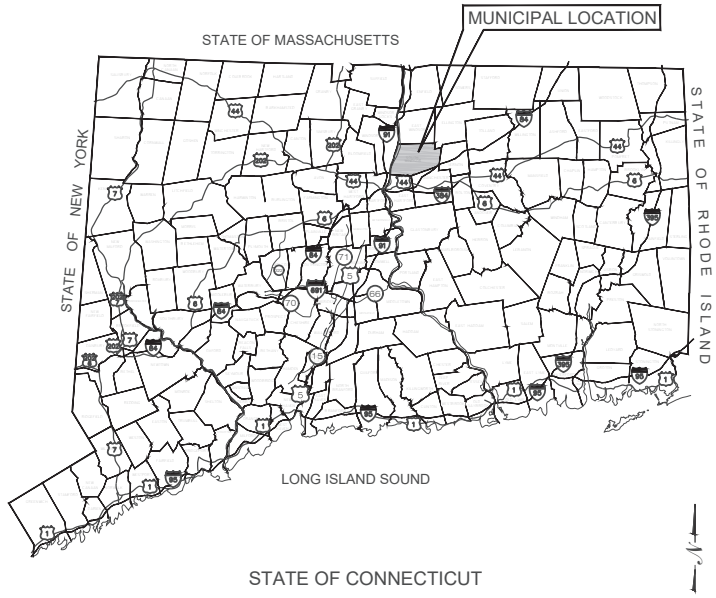
Michael Maniscalco

Print Name of Property Owner

Revised 2/26/2021

Attachment B

**S Windsor PD Carport Permit Plans
by All-Points Technology Corporation, dated
11/05/21**



GREENSKIES CLEAN ENERGY, LLC

"S WINDSOR PD CARPORT"

151 SAND HILL RD
SOUTH WINDSOR, CT 06074

LIST OF DRAWINGS

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1 OF 1 EXISTING CONDITIONS PLAN PROVIDED BY MARTIN SURVEYING ASSOCAITES, LLC.

GN-1 GENERAL NOTES

OP-1 OVERALL LOCUS MAP

EC-1 SEDIMENTATION & EROSION CONTROL NOTES & DETAILS

EC-2 SEDIMENTATION & EROSION CONTROL PLAN

SP-1 SITE & GRADING & UTILITY PLAN

DN-1 SITE DETAILS

SITE INFORMATION

SITE NAME: "S WINDSOR PD CARPORT"

LOCATION: 151 SAND HILL RD
SOUTH WINDSOR, CT 06074

SITE TYPE/DESCRIPTION: ADD (2) CARPORT ROOF MOUNTED SOLAR
PANEL ARRAYS W/ ASSOCIATED EQUIPMENT.

PROPERTY OWNER: TOWN OF SOUTH WINDSOR
1530 SULLIVAN AVENUE
SOUTH WINDSOR, CT 06074

APPLICANT: GREENSKIES CLEAN ENERGY, LLC
127 WASHINGTON AVENUE
WEST BUILDING, GARDEN LEVEL
NORTH HAVEN, CT 06473

ENGINEER CONTACT: KEVIN A. MCCAFFERY, P.E.
(860) 663-1697 x228

LATITUDE: 41°50'08.98" N
LONGITUDE: 72°33'08.16" W

MBLU: 76-8
ZONE: RR

TOTAL SITE ACREAGE: 5.32± AC.
TOTAL DISTURBED AREA: 0.15± AC.

USGS TOPOGRAPHIC MAP



SCALE : 1" = 2000'± SOURCE: NRCS HARTFORD CT DIGITAL RASTER GRAPHIC COUNTY MOSAIC, 2001



127 WASHINGTON AVENUE
WEST BUILDING, GARDEN LEVEL
NORTH HAVEN, CT 06473



567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

PERMIT SET

NO	DATE	REVISION
0	11/05/21	FOR REVIEW: KAM
1		
2		
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
COMP: ALL-POINTS TECHNOLOGY
CORPORATION, P.C.
ADD: 567 VAUXHALL STREET
EXTENSION - SUITE 311
WATERFORD, CT 06385

OWNER: TOWN OF SOUTH WINDSOR

ADDRESS: 1530 SULLIVAN AVENUE
SOUTH WINDSOR, CT 06074

S WINDSOR PD CARPORT

SITE 151 SAND HILL RD
ADDRESS: SOUTH WINDSOR, CT 06074

APT FILING NUMBER: CT599280

	DRAWN BY: JT
DATE: 11/05/21	CHECKED BY: KAM

SHEET TITLE:

TITLE SHEET & INDEX

SHEET NUMBER:

T-1



GENERAL NOTES

- ALL CONSTRUCTION SHALL COMPLY WITH PROJECT DEVELOPER STANDARDS, TOWN OF SOUTH WINDSOR STANDARDS, CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARDS AND SPECIFICATIONS IN THE ABOVE REFERENCED INCREASING HIERARCHY. IF SPECIFICATIONS ARE IN CONFLICT, THE MORE STRINGENT SPECIFICATION SHALL APPLY.
- IF NO PROJECT CONSTRUCTION SPECIFICATION PACKAGE IS PROVIDED BY THE PROJECT DEVELOPER OR THEIR REPRESENTATIVE, THE CONTRACTOR SHALL COMPLY WITH THE MANUFACTURER, TOWN OF SOUTH WINDSOR, OR CONNECTICUT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, AND BE IN ACCORDANCE WITH ALL APPLICABLE OSHA, FEDERAL, STATE AND LOCAL REGULATIONS.
- THE PROJECT DEVELOPER IS RESPONSIBLE FOR OBTAINING ALL NECESSARY ZONING AND STORMWATER PERMITS REQUIRED BY GOVERNMENT AGENCIES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN ALL TOWN OF SOUTH WINDSOR CONSTRUCTION PERMITS. THE CONTRACTOR SHALL POST ALL BONDS, PAY ALL FEES, PROVIDE PROOF OF INSURANCE AND PROVIDE TRAFFIC CONTROL NECESSARY FOR THIS WORK.
- REFER TO PLANS, DETAILS AND REPORTS PREPARED BY ALL-POINTS TECHNOLOGY CORPORATION FOR ADDITIONAL INFORMATION. THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS IN THE FIELD AND CONTACT THE PROJECT DEVELOPER IF THERE ARE ANY QUESTIONS OR CONFLICTS REGARDING THE CONSTRUCTION DOCUMENTS AND/OR FIELD CONDITIONS SO THAT APPROPRIATE REVISIONS CAN BE MADE PRIOR TO BIDDING/CONSTRUCTION. ANY CONFLICT BETWEEN THE DRAWINGS AND SPECIFICATIONS SHALL BE CONFIRMED WITH THE PROJECT DEVELOPERS CONSTRUCTION MANAGER PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF ALL PRODUCTS, MATERIALS PER PLANS, AND SPECIFICATIONS TO THE PROJECT DEVELOPER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION OR DELIVERY TO THE SITE. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
- SHOULD ANY UNKNOWN OR INCORRECTLY LOCATED EXISTING PIPING OR OTHER UTILITY BE UNCOVERED DURING EXCAVATION, CONSULT THE PROJECT DEVELOPER IMMEDIATELY FOR DIRECTIONS BEFORE PROCEEDING FURTHER WITH WORK IN THIS AREA.
- DO NOT INTERRUPT EXISTING UTILITIES SERVICING FACILITIES OCCUPIED AND USED BY THE PROJECT DEVELOPER OR OTHERS DURING OCCUPIED HOURS, EXCEPT WHEN SUCH INTERRUPTIONS HAVE BEEN AUTHORIZED IN WRITING BY THE PROJECT DEVELOPER AND THE LOCAL MUNICIPALITY. INTERRUPTIONS SHALL ONLY OCCUR AFTER ACCEPTABLE TEMPORARY SERVICE HAS BEEN PROVIDED.
- THE CONTRACT LIMIT IS THE PROPERTY LINE UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE CONTRACT DRAWINGS.
- THE CONTRACTOR SHALL ABIDE BY ALL OSHA, FEDERAL, STATE AND LOCAL REGULATIONS WHEN OPERATING CRANES, BOOMS, HOISTS, ETC. IN CLOSE PROXIMITY TO OVERHEAD ELECTRIC LINES. IF CONTRACTOR MUST OPERATE EQUIPMENT CLOSE TO ELECTRIC LINES, CONTACT POWER COMPANY TO MAKE ARRANGEMENTS FOR PROPER SAFEGUARDS. ANY UTILITY COMPANY FEES SHALL BE PAID FOR BY THE CONTRACTOR.
- THE CONTRACTOR SHALL COMPLY WITH OSHA CFR 29 PART 1926 FOR EXCAVATION TRENCHING AND TRENCH PROTECTION REQUIREMENTS.
- THE ENGINEER IS NOT RESPONSIBLE FOR SITE SAFETY MEASURES TO BE EMPLOYED DURING CONSTRUCTION. THE ENGINEER HAS NO CONTRACTUAL DUTY TO CONTROL THE SAFEST METHODS OR MEANS OF THE WORK, JOB SITE RESPONSIBILITIES, SUPERVISION OF PERSONNEL OR TO SUPERVISE SAFETY AND DO NOT VOLUNTARILY ASSUME ANY SUCH DUTY OR RESPONSIBILITY.
- THE CONTRACTOR SHALL RESTORE ANY DRAINAGE STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, LANDSCAPED AREAS OR SIGNAGE DISTURBED DURING CONSTRUCTION TO THEIR ORIGINAL CONDITION OR BETTER, AS APPROVED BY THE PROJECT DEVELOPER OR TOWN OF SOUTH WINDSOR.
- THE CONTRACTOR SHALL PROVIDE AS-BUILT RECORDS OF ALL CONSTRUCTION (INCLUDING UNDERGROUND UTILITIES) TO THE PROJECT DEVELOPER AT THE END OF CONSTRUCTION.
- ALTERNATIVE METHODS AND PRODUCTS, OTHER THAN THOSE SPECIFIED, MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCY PRIOR TO INSTALLATION DURING THE BIDDING/CONSTRUCTION PROCESS.
- INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE SYSTEMS HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE SYSTEMS ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE AND THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE SYSTEMS INCLUDING SERVICES. PRIOR TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" 72 HOURS BEFORE COMMENCEMENT OF WORK AT "811" AND VERIFY ALL UTILITY AND STORM DRAINAGE SYSTEM LOCATIONS.
- NO CONSTRUCTION OR DEMOLITION SHALL BEGIN UNTIL APPROVAL OF THE FINAL PLANS AND PERMITS ARE GRANTED BY ALL GOVERNING AND REGULATORY AGENCIES.

SITE PLAN NOTES

- THE SURVEY WAS PROVIDED BY MARTIN SURVEYING ASSOCIATES, LLC. DATED NOVEMBER 4, 2021.
- THERE ARE BORDERING VEGETATED WETLANDS (BVW/S) LOCATED ON THE SITE AS INDICATED ON THE PLANS. BVW BOUNDARIES WERE FLAGGED AND LOCATED BY ALL-POINTS TECHNOLOGY CORP., P.C., IN SEPTEMBER 2021.
- THERE WILL BE MINIMAL GRADING ON SITE IN THE AREAS OF THE MINOR CLEARING, TO ENSURE THAT PROPER DRAINAGE IS MAINTAINED.
- THE CONTRACTOR SHALL FOLLOW THE RECOMMENDED SEQUENCE OF CONSTRUCTION NOTES PROVIDED ON THE EROSION CONTROL PLAN OR SUBMIT AN ALTERNATE PLAN FOR APPROVAL BY THE ENGINEER AND/OR PERMITTING AGENCIES PRIOR TO THE START CONSTRUCTION. ALLOW A MINIMUM OF 14 WORKING DAYS FOR REVIEW.
- PROPER CONSTRUCTION PROCEDURES SHALL BE FOLLOWED ON ALL IMPROVEMENTS WITHIN THIS PARCEL SO AS TO PREVENT THE SILTING OF ANY WATERCOURSE OR BVWS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. IN ADDITION, THE CONTRACTOR SHALL ADHERE TO THE "EROSION CONTROL PLAN" CONTAINED HEREIN. THE CONTRACTOR SHALL BE RESPONSIBLE TO POST ALL BONDS AS REQUIRED BY GOVERNMENT AGENCIES WHICH WOULD GUARANTEE THE PROPER IMPLEMENTATION OF THE PLAN.
- ALL SITE WORK, MATERIALS OF CONSTRUCTION, AND CONSTRUCTION METHODS FOR EARTHWORK AND STORM DRAINAGE WORK, SHALL CONFORM TO THE SPECIFICATIONS AND DETAILS AND APPLICABLE SECTIONS OF THE PROJECT SPECIFICATIONS MANUAL. OTHERWISE THIS WORK SHALL CONFORM TO THE STATE OF CONNECTICUT DEPARTMENT OF TRANSPORTATION AND PROJECT GEOTECHNICAL REPORT IF THERE IS NO PROJECT SPECIFICATIONS MANUAL. ALL FILL MATERIAL UNDER STRUCTURES AND PAVED AREAS SHALL BE PER THE ABOVE STATED APPLICABLE SPECIFICATIONS, AND/OR PROJECT GEOTECHNICAL REPORT, AND SHALL BE PLACED IN ACCORDANCE WITH THE APPLICABLE SPECIFICATIONS UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL ENGINEER. MATERIAL SHALL BE COMPACTED IN 8" LIFTS TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 AT 95% PERCENT OF OPTIMUM MOISTURE CONTENT.
- ALL DISTURBANCE INCURRED TO PUBLIC, MUNICIPAL, COUNTY, STATE PROPERTY DUE TO CONSTRUCTION SHALL BE RESTORED TO ITS PREVIOUS CONDITION OR BETTER, TO THE SATISFACTION OF THE TOWN OF SOUTH WINDSOR AND STATE OF CONNECTICUT.
- IF IMPACTED OR CONTAMINATED SOIL IS ENCOUNTERED BY THE CONTRACTOR, THE CONTRACTOR SHALL SUSPEND EXCAVATION WORK OF IMPACTED SOIL AND NOTIFY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPERS ENVIRONMENTAL CONSULTANT PRIOR TO PROCEEDING WITH FURTHER WORK IN THE IMPACTED SOIL LOCATION UNTIL FURTHER INSTRUCTED BY THE PROJECT DEVELOPER AND/OR PROJECT DEVELOPERS ENVIRONMENTAL CONSULTANT.

UTILITY NOTES

- CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE TOWN OF SOUTH WINDSOR TO SECURE CONSTRUCTION PERMITS AND FOR PAYMENT OF FEES FOR STREET CUTS AND CONNECTIONS TO EXISTING UTILITIES.
- REFER TO DRAWINGS BY PROJECT DEVELOPER FOR THE ONSITE ELECTRICAL DRAWINGS AND INTERCONNECTION TO EXISTING ELECTRICAL GRID. SITE CONTRACTOR SHALL SUPPLY AND INSTALL PIPE ADAPTERS AS NECESSARY AT BUILDING CONNECTION POINT OR AT EXISTING UTILITY OR PIPE CONNECTION POINT. THESE DETAILS ARE NOT INCLUDED IN THESE PLANS.
- UTILITY LOCATIONS AND PENETRATIONS ARE SHOWN FOR THE CONTRACTORS INFORMATION AND SHALL BE VERIFIED WITH THE ELECTRICAL ENGINEER AND THE PROJECT DEVELOPERS CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL VISIT THE SITE AND VERIFY THE ELEVATION AND LOCATION OF ALL UTILITIES BY VARIOUS MEANS PRIOR TO BEGINNING ANY EXCAVATION. TEST PITS SHALL BE DUG AT ALL LOCATIONS WHERE PROP. SANITARY SEWERS AND WHERE PROP. STORM PIPING WILL CROSS EXISTING UTILITIES, AND THE HORIZONTAL AND VERTICAL LOCATIONS OF THE UTILITIES SHALL BE DETERMINED. THE CONTRACTOR SHALL CONTACT THE PROJECT DEVELOPER IN THE EVENT OF ANY DISCOVERED OR UNFORESEEN CONFLICTS BETWEEN EXISTING AND PROPOSED SANITARY SEWERS, STORM PIPING AND UTILITIES SO THAT AN APPROPRIATE MODIFICATION MAY BE MADE.
- UTILITY CONNECTION DESIGN AS REFLECTED ON THE PLAN MAY CHANGE SUBJECT TO UTILITY PROVIDER AND GOVERNING AUTHORITY STAFF REVIEW.
- THE CONTRACTOR SHALL ENSURE THAT ALL UTILITY PROVIDERS AND GOVERNING AUTHORITY STANDARDS FOR MATERIALS AND CONSTRUCTION METHODS ARE MET. THE CONTRACTOR SHALL PERFORM PROPER COORDINATION WITH THE RESPECTIVE UTILITY PROVIDER.
- THE CONTRACTOR SHALL ARRANGE FOR AND COORDINATE WITH THE RESPECTIVE UTILITY PROVIDERS FOR SERVICE INSTALLATIONS AND CONNECTIONS. THE CONTRACTOR SHALL COORDINATE WORK TO BE PERFORMED BY THE VARIOUS UTILITY PROVIDERS AND SHALL PAY ALL FEES FOR CONNECTIONS, DISCONNECTIONS, RELOCATIONS, INSPECTIONS, AND DEMOLITION UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATIONS MANUAL AND/OR GENERAL CONDITIONS OF THE CONTRACT.
- ALL EXISTING PAVEMENT WHERE UTILITY PIPING IS TO BE INSTALLED SHALL BE SAW CUT. AFTER UTILITY INSTALLATION IS COMPLETED, THE CONTRACTOR SHALL INSTALL TEMPORARY AND/OR PERMANENT PAVEMENT REPAIR AS DETAILED ON THE DRAWINGS OR AS REQUIRED BY THE TOWN OF SOUTH WINDSOR.
- ALL PIPES SHALL BE LAID ON STRAIGHT ALIGNMENTS AND EVEN GRADES USING A PIPE LASER OR OTHER ACCURATE METHOD.
- RELOCATION OF UTILITY PROVIDER FACILITIES, SUCH AS POLES, SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY PROVIDER.
- THE CONTRACTOR SHALL COMPACT PIPE BACKFILL IN 8" LIFTS ACCORDING TO THE PIPE BEDDING DETAILS. TRENCH BOTTOM SHALL BE STABLE IN HIGH GROUNDWATER AREAS. A PIPE FOUNDATION SHALL BE USED PER THE TRENCH DETAILS AND IN AREAS OF ROCK EXCAVATION.
- CONTRACTOR TO PROVIDE STEEL SLEEVES AND ANNULAR SPACE SAND FILL FOR UTILITY PIPE AND CONDUIT CONNECTIONS UNDER FOOTINGS.
- ALL UTILITY CONSTRUCTION IS SUBJECT TO INSPECTION FOR APPROVAL PRIOR TO BACKFILLING, IN ACCORDANCE WITH THE APPROPRIATE UTILITY PROVIDER REQUIREMENTS.
- A ONE-FOOT MINIMUM VERTICAL CLEARANCE BETWEEN WATER, GAS, ELECTRICAL, AND TELEPHONE LINES AND STORM PIPING SHALL BE PROVIDED. A SIX-INCH MINIMUM CLEARANCE SHALL BE MAINTAINED BETWEEN STORM PIPING AND SANITARY SEWER. A 6-INCH TO 18-INCH VERTICAL CLEARANCE BETWEEN SANITARY SEWER PIPING AND STORM PIPING SHALL REQUIRE CONCRETE ENCASEMENT OF THE SANITARY PIPING.
- THE CONTRACTOR SHALL RESTORE ANY UTILITY STRUCTURE, PIPE, CONDUIT, PAVEMENT, CURBING, SIDEWALKS, DRAINAGE STRUCTURE, SWALE OR LANDSCAPED AREAS DISTURBED DURING CONSTRUCTION, TO THEIR ORIGINAL CONDITION OR BETTER TO THE SATISFACTION OF THE PROJECT DEVELOPER AND TOWN OF SOUTH WINDSOR.
- INFORMATION ON EXISTING UTILITIES AND STORM DRAINAGE HAS BEEN COMPILED FROM AVAILABLE INFORMATION INCLUDING UTILITY PROVIDER AND MUNICIPAL RECORD MAPS AND/OR FIELD SURVEY, AND IS NOT GUARANTEED CORRECT OR COMPLETE. UTILITIES AND STORM DRAINAGE ARE SHOWN TO ALERT THE CONTRACTOR TO THEIR PRESENCE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR DETERMINING ACTUAL LOCATIONS AND ELEVATIONS OF ALL UTILITIES AND STORM DRAINAGE INCLUDING SERVICES. CONTACT "CALL BEFORE YOU DIG" AT 811 72 HOURS PRIOR TO CONSTRUCTION AND VERIFY ALL UNDERGROUND AND OVERHEAD UTILITY AND STORM DRAINAGE LOCATIONS. THE CONTRACTOR SHALL EMPLOY THE USE OF A UTILITY LOCATING COMPANY TO PROVIDE SUBSURFACE UTILITY ENGINEERING CONSISTING OF DESIGNATING UTILITIES AND STORM PIPING ON PRIVATE PROPERTY WITHIN THE CONTRACT LIMIT AND CONSISTING OF DESIGNATING AND LOCATING WHERE PROP. UTILITIES AND STORM PIPING CROSS EXISTING UTILITIES AND STORM PIPING WITHIN THE CONTRACT LIMITS.
- THE CONTRACTOR SHALL ARRANGE AND COORDINATE WITH UTILITY PROVIDERS FOR WORK TO BE PERFORMED BY UTILITY PROVIDERS. THE CONTRACTOR SHALL PAY ALL UTILITY FEES UNLESS OTHERWISE STATED IN THE PROJECT SPECIFICATION MANUAL AND GENERAL CONDITIONS, AND REPAIR PAVEMENTS AS NECESSARY.
- ELECTRIC DRAWINGS AND REQUIREMENTS ARE NOT INCLUDED AS PART OF THIS DRAWING SET AND SHOULD BE OBTAINED FROM THE PROJECT DEVELOPER.
- ALTERNATIVE METHODS AND PRODUCTS OTHER THAN THOSE SPECIFIED MAY BE USED IF REVIEWED AND APPROVED BY THE PROJECT DEVELOPER, ENGINEER, AND APPROPRIATE REGULATORY AGENCIES PRIOR TO INSTALLATION.
- THE CONTRACTOR SHALL MAINTAIN ALL FLOWS AND UTILITY CONNECTIONS TO EXISTING BUILDINGS WITHOUT INTERRUPTION UNLESS/UNTIL AUTHORIZED TO DISCONNECT BY THE PROJECT DEVELOPER, TOWN OF SOUTH WINDSOR, UTILITY PROVIDERS AND GOVERNING AUTHORITIES.

GENERAL LEGEND

	EXISTING	PROPOSED
PROPERTY LINE		
BUILDING SETBACK		
SOLAR SETBACK		
EASEMENT		
TREE LINE		
WETLAND		
WETLAND BUFFER		
VERNAL POOL		
VERNAL POOL BUFFER		
WATERCOURSE		
WATERCOURSE BUFFER		
MAJOR CONTOUR		
MINOR CONTOUR		
UNDERGROUND ELECTRIC		
OVERHEAD ELECTRIC		
GAS LINE		
WATER LINE		
BASIN		
SWALE		
FENCE		
LIMIT OF DISTURBANCE		
LIMIT OF CLEARING AND GRUBBING		
FILTER SOCK		
SILT FENCE		
BAFFLE		



127 WASHINGTON AVENUE
WEST BUILDING, GARDEN LEVEL
NORTH HAVEN, CT 06473



567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

PERMIT SET		
NO	DATE	REVISION
0	11/05/21	FOR REVIEW: KAM
1		
2		
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET
EXTENSION - SUITE 311
WATERFORD, CT 06385

OWNER: TOWN OF SOUTH WINDSOR

ADDRESS: 1530 SULLIVAN AVENUE
SOUTH WINDSOR, CT 06074

S WINDSOR PD CARPORT

SITE 151 SAND HILL RD
ADDRESS: SOUTH WINDSOR, CT 06074

APT FILING NUMBER: CT599280

	DRAWN BY: JT
DATE: 11/05/21	CHECKED BY: KAM

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

GN-1





Greenskies

a Clean Focus company

127 WASHINGTON AVENUE
WEST BUILDING, GARDEN LEVEL
NORTH HAVEN, CT 06473

ALL-POINTS

TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860) 663-1697
WWW.ALLPOINTSTECH.COM FAX: (860) 663-0935

PERMIT SET		
NO	DATE	REVISION
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DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET
EXTENSION - SUITE 311
WATERFORD, CT 06385

OWNER: TOWN OF SOUTH WINDSOR

ADDRESS: 1530 SULLIVAN AVENUE
SOUTH WINDSOR, CT 06074

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OVERALL LOCUS MAP

SHEET NUMBER:

OP-1

STATE OF CONNECTICUT

25871

PROFESSIONAL ENGINEER

EROSION CONTROL NOTES

EROSION AND SEDIMENT CONTROL PLAN NOTES

- THE CONTRACTOR SHALL CONSTRUCT ALL SEDIMENT AND EROSION CONTROLS IN ACCORDANCE WITH THE 2002 CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, AND AS DIRECTED BY THE TOWN OF SOUTH WINDSOR, 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. 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, SITE ENGINEER, 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 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.
- THE CONTRACTOR SHALL KEEP A SUPPLY OF EROSION CONTROL MATERIAL (SILT FENCE, COMPOST FILTER SOCK, EROSION CONTROL BLANKET, ETC.) ON-SITE FOR PERIODIC MAINTENANCE AND EMERGENCY REPAIRS.
- ALL FILL MATERIAL PLACED ADJACENT TO ANY WETLAND AREA SHALL BE GOOD QUALITY, WITH LESS 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.
- 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.
- CONSTRUCTION ENTRANCES (ANTI-TRACKING PADS) SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR CONSTRUCTION ACTIVITY AND SHALL BE MAINTAINED THROUGHOUT THE DURATION OF ALL CONSTRUCTION IF REQUIRED. THE LOCATION OF THE TRACKING PADS MAY CHANGE AS VARIOUS PHASES OF CONSTRUCTION ARE COMPLETED. CONTRACTOR SHALL ENSURE THAT ALL VEHICLES EXITING THE SITE ARE PASSING OVER THE ANTI-TRACKING PADS PRIOR TO EXITING.
- 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.
- 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.
- DIRECT ALL 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.
- THE CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AND SHALL NOT ALLOW THE 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.
- MINIMIZE LAND DISTURBANCES. SEED AND MULCH DISTURBED AREAS WITH TEMPORARY MIX AS SOON AS 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.
- 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 CHLORIDE MAY ALSO BE APPLIED TO ACCESS ROADS. DUMP TRUCK LOADS EXITING THE SITE SHALL BE COVERED.
- 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.
- 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.
- THE SITE WAS DESIGNED TO COMPLY WITH FEDERAL, STATE, AND, IF APPLICABLE, LOCAL STANDARDS, PLUS CURRENT ACCEPTED PRACTICES FOR THE INDUSTRY. ADDITIONAL CONTROLS AND ACTIVITIES MAY BE DEEMED NECESSARY BY THE SWPCP MONITOR DURING CONSTRUCTION AS A RESULT OF UNFORESEEN CONDITIONS AND/OR MEANS AND METHODS. SUCH ITEMS MAY INCLUDE, BUT ARE NOT LIMITED TO: ADDITIONAL FOREBAYS, BASINS, OR UPSTREAM STRUCTURAL CONTROLS, THE USE OF FLOODCULDS OF FLOOD LOGS TO DECREASE SEDIMENT, DISCHARGE MANAGEMENT SUCH AS ADDITIONAL ARMORING AND FILTERING MEASURES (I.E. STRAW BALES, WATTLES, ETC.), AND HYDROSEEDING WITH RAPIDLY GERMINATING SEED.
- SEEDING MIXTURES SHALL BE ERNST SOLAR FARM SEED MIX ERNMX-186 (SEE SITE DETAILS SHEET DN-1), OR APPROVED EQUAL BY OWNER.

SEDIMENT & EROSION CONTROL NARRATIVE

- THE PROJECT INVOLVES THE CONSTRUCTION OF A SOLAR CARPORT FACILITY WITH ASSOCIATED EQUIPMENT ON APPROXIMATELY 0.15± ACRES OF AN EXISTING PARKING LOT.

THE PROPOSED PROJECT INVOLVES THE FOLLOWING CONSTRUCTION:

- A. CONSTRUCTION OF 494 GROUND MOUNTED SOLAR PANELS IN TWO SEPARATE CARPORT STRUCTURES AND ASSOCIATED EQUIPMENT.
B. THE STABILIZATION OF DISTURBED AREAS TO MEET EXISTING CONDITIONS.
- FOR THIS PROJECT, THERE ARE APPROXIMATELY 0.15± ACRE OF THE SITE BEING DISTURBED WITH NEGLIGIBLE INCREASE IN THE IMPERVIOUS AREA OF THE SITE, AS ALL ACCESS THROUGH THE SITE IS VIA EXISTING PAVEMENT. IMPERVIOUS AREAS ARE LIMITED TO THE CONCRETE PADS FOR ELECTRICAL EQUIPMENT.
- THE PROJECT SITE, AS MAPPED IN THE SOIL SURVEY OF STATE OF CONNECTICUT (NRCS, VERSION 20, JUN 9, 2020), CONTAINS TYPE 704B AND 232B (HYDROLOGIC SOIL GROUP B) AND TYPE 702A (HYDROLOGIC SOIL GROUP C). A GEOTECHNICAL ENGINEERING REPORT HAS BEEN COMPLETED BY DOWN TO EARTH CONSULTING, LLC DATED SEPTEMBER 2021.

- IT IS ANTICIPATED THAT CONSTRUCTION WILL BE COMPLETED IN APPROXIMATELY 3-4 MONTHS.

- REFER TO THE CONSTRUCTION SEQUENCING AND EROSION AND SEDIMENTATION NOTES FOR INFORMATION REGARDING SEQUENCING OF MAJOR OPERATIONS IN THE ON-SITE CONSTRUCTION PHASES.

- STORMWATER MANAGEMENT DESIGN CRITERIA UTILIZES THE APPLICABLE SECTIONS OF THE 2004 CONNECTICUT STORMWATER QUALITY MANUAL AND THE TOWN OF SOUTH WINDSOR STANDARDS. TO THE EXTENT POSSIBLE AND PRACTICABLE FOR THIS PROJECT ON THIS SITE, EROSION AND SEDIMENTATION MEASURES ARE BASED UPON ENGINEERING PRACTICE, JUDGEMENT AND THE APPLICABLE SECTIONS OF THE CONNECTICUT EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS, LATEST EDITION.

- DETAILS FOR THE TYPICAL STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION MEASURES ARE SHOWN ON THE PLAN SHEETS OR PROVIDED AS SEPARATE SUPPORT DOCUMENTATION FOR REVIEW IN THIS PLAN.

- CONSERVATION PRACTICES TO BE USED DURING CONSTRUCTION:
A. STAGED CONSTRUCTION;
B. MINIMIZE THE DISTURBED AREAS TO THE EXTENT PRACTICABLE DURING CONSTRUCTION;
C. STABILIZE DISTURBED AREAS WITH TEMPORARY OR PERMANENT MEASURES AS SOON AS POSSIBLE, BUT NO LATER THAN 7-DAYS FOLLOWING DISTURBANCE;
D. MINIMIZE IMPERVIOUS AREAS;
E. UTILIZE APPROPRIATE CONSTRUCTION EROSION AND SEDIMENTATION MEASURES.

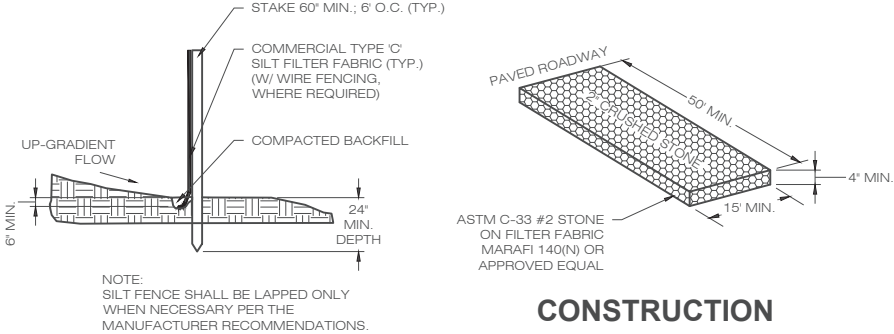
- THE FOLLOWING SEPARATE DOCUMENTS ARE TO BE CONSIDERED A PART OF THE EROSION AND SEDIMENTATION PLAN:
A. STORMWATER MANAGEMENT MEMO DATED NOVEMBER 2021.

SUGGESTED CONSTRUCTION SEQUENCE

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.

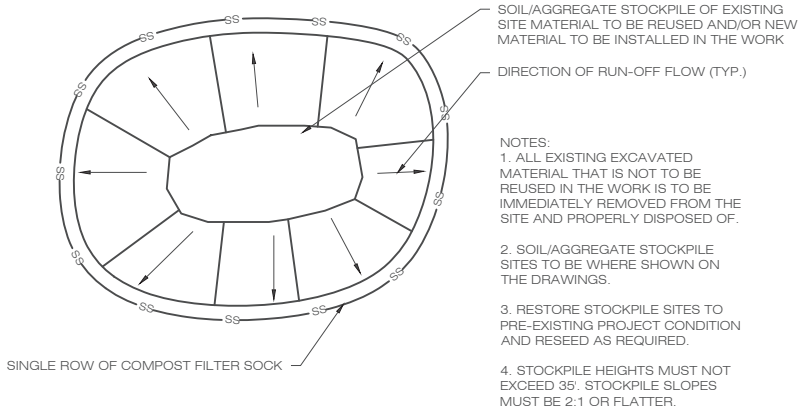
- THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING. PHYSICALLY FLAG THE LIMITS OF DISTURBANCE IN THE FIELD AS NECESSARY TO FACILITATE THE PRE-CONSTRUCTION MEETING.
- CONDUCT A PRE-CONSTRUCTION MEETING TO DISCUSS THE PROPOSED WORK AND EROSION AND SEDIMENTATION CONTROL MEASURES. THE MEETING SHOULD BE ATTENDED BY THE OWNER, THE OWNERS 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 CLEARING AND GRUBBING TO INSTALL THE REQUIRED CONSTRUCTION ENTRANCES.
- CLEAR ONLY AS NEEDED TO INSTALL THE PERIMETER EROSION AND SEDIMENTATION CONTROL MEASURES AND, IF APPLICABLE, TREE PROTECTION. ALL WETLAND AREAS SHALL BE PROTECTED BEFORE MAJOR CONSTRUCTION BEGINS.
- INSTALL PERIMETER EROSION CONTROL.
- TEMPORARILY SEED DISTURBED AREAS NOT UNDER CONSTRUCTION FOR THIRTY (30) DAYS OR MORE.
- INSTALL REMAINING ELECTRICAL CONDUIT.
- INSTALL RACKING POSTS FOR GROUND MOUNTED SOLAR PANELS.
- INSTALL GROUND MOUNTED SOLAR PANELS AND COMPLETE ELECTRICAL INSTALLATION.
- AFTER SUBSTANTIAL COMPLETION OF THE INSTALLATION OF THE SOLAR PANELS, COMPLETE REMAINING SITE WORK, INCLUDING ANY REQUIRED LANDSCAPE SCREENING, AND STABILIZE ALL DISTURBED AREAS.
- FINE GRADE, RAKE, SEED AND MULCH ALL REMAINING DISTURBED AREAS.
- AFTER THE SITE IS STABILIZED AND WITH THE APPROVAL OF THE PERMITTEE AND TOWN OF SOUTH WINDSOR AGENT, REMOVE PERIMETER EROSION AND SEDIMENTATION CONTROLS.

CONSTRUCTION OPERATION AND MAINTENANCE PLAN - BY CONTRACTOR		
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.
COMPOST 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.

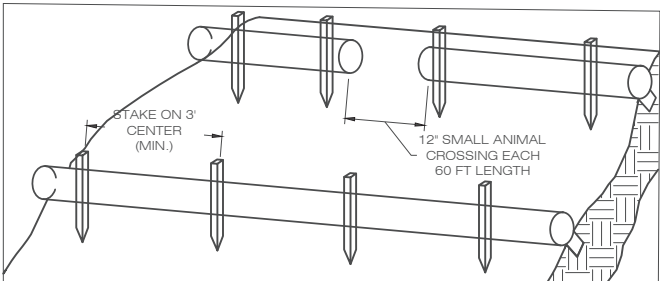


1 SILT FENCE DETAIL
SCALE : N.T.S.

2 CONSTRUCTION ENTRANCE DETAIL
SCALE : N.T.S.



3 MATERIALS STOCKPILE DETAIL
SCALE : N.T.S.



- BEGIN AT THE LOCATION WHERE THE SOCK IS TO BE INSTALLED BY EXCAVATING A 2-3' (5-7.5 CM) DEEP X 9' (22.9 CM) WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP SLOPE FROM THE ANCHOR TRENCH.
- PLACE THE SOCK IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE SOCK ON THE UPHILL SIDE. SOCKS SHALL BE INSTALLED IN 60 FT CONTINUOUS LENGTHS WITH ADJACENT SOCKS TIGHTLY ABUT. EVERY 60 FT THE SOCK ROW SHALL BE SPACED 12 INCHES CLEAR, END TO END, FOR AMPHIBIAN AND REPTILE TRAVEL. THE OPEN SPACES SHALL BE STAGGERED MID LENGTH OF THE NEXT DOWN GRADIENT SOCK.
- SECURE THE SOCK WITH 18-24" (45.7-61 CM) STAKES EVERY 3-4' (0.9 -1.2 M) AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE SOCK LEAVING AT LEAST 2-3' (5-7.5 CM) OF STAKE EXTENDING ABOVE THE SOCK. STAKES SHOULD BE DRIVEN PERPENDICULAR TO THE SLOPE FACE.

COMPOST FILTER SOCK SEDIMENTATION CONTROL BARRIER

4
SCALE : N.T.S.



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COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
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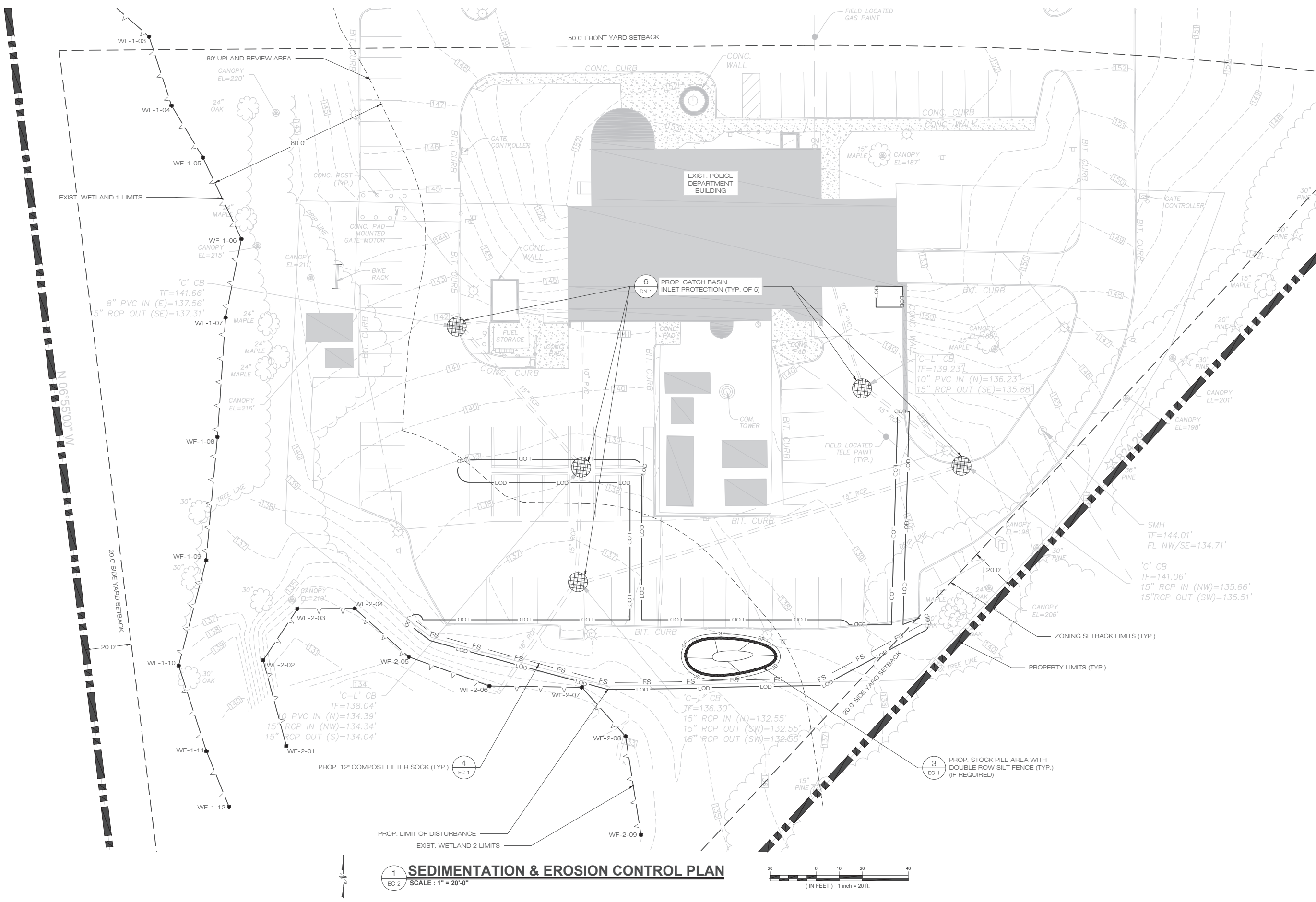
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SEDIMENTATION & EROSION CONTROL NOTES

SHEET NUMBER:

EC-1





Greenskies

a Clean Focus company

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SHEET TITLE:

SEDIMENTATION & EROSION CONTROL PLAN

SHEET NUMBER:

EC-2

STATE OF CONNECTICUT
JULIAN J. MCCAFFERY
25871
PROFESSIONAL ENGINEER

1
EC-2

SEDIMENTATION & EROSION CONTROL PLAN
SCALE : 1" = 20'-0"

PERMIT SET

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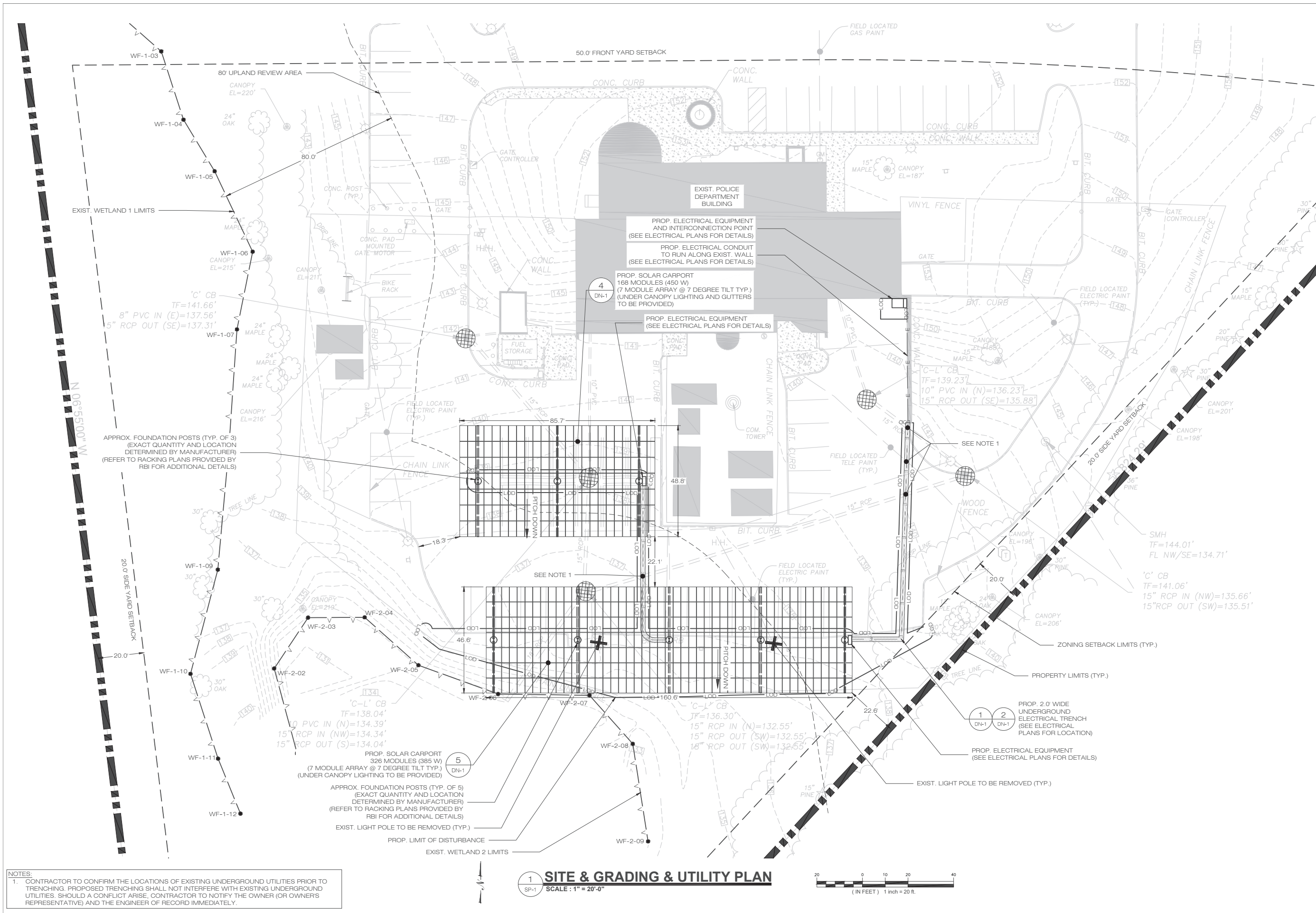
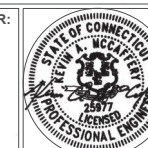
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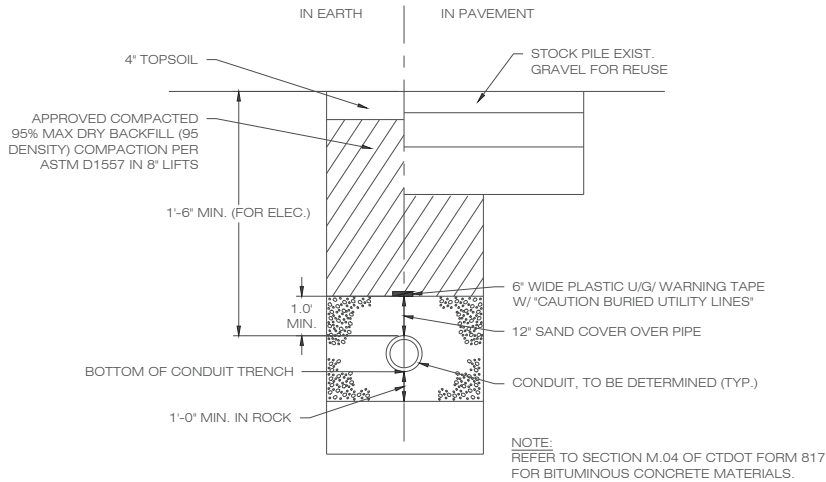
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SHEET TITLE:
SITE & GRADING
& UTILITY PLAN

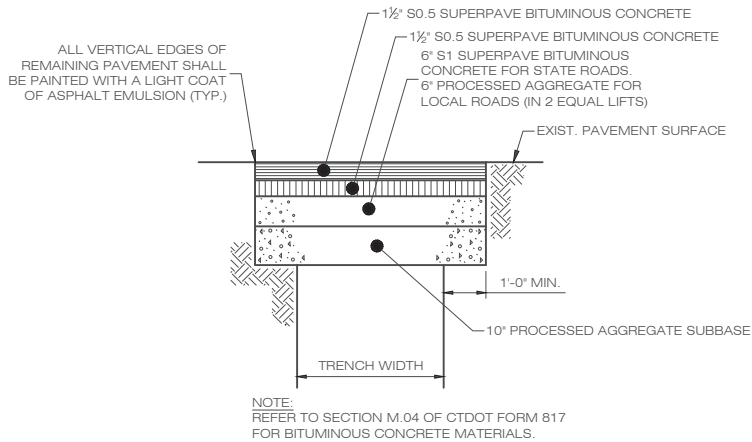
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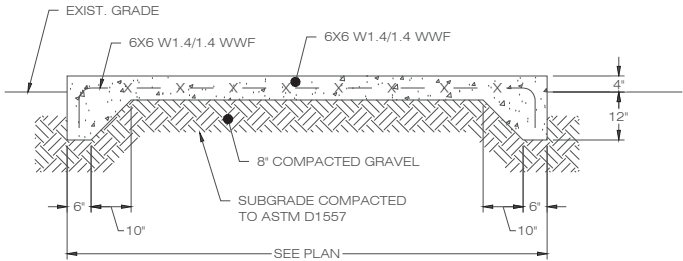
NOTES:
1. CONTRACTOR TO CONFIRM THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES PRIOR TO TRENCHING. PROPOSED TRENCHING SHALL NOT INTERFERE WITH EXISTING UNDERGROUND UTILITIES. SHOULD A CONFLICT ARISE, CONTRACTOR TO NOTIFY THE OWNER (OR OWNER'S REPRESENTATIVE) AND THE ENGINEER OF RECORD IMMEDIATELY.



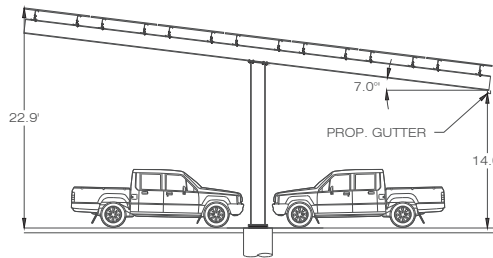
1 **ELECTRICAL TRENCH DETAIL**
DN-1 SCALE : N.T.S.



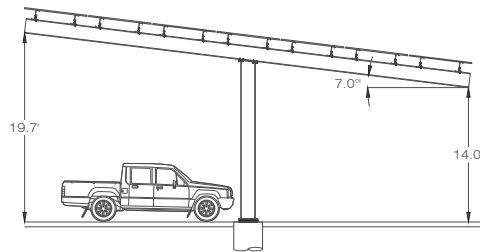
2 **PAVEMENT REPAIR OVER TRENCH**
DN-1 SCALE : N.T.S.



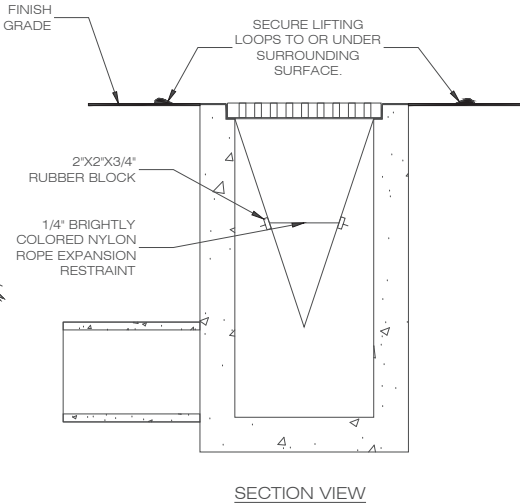
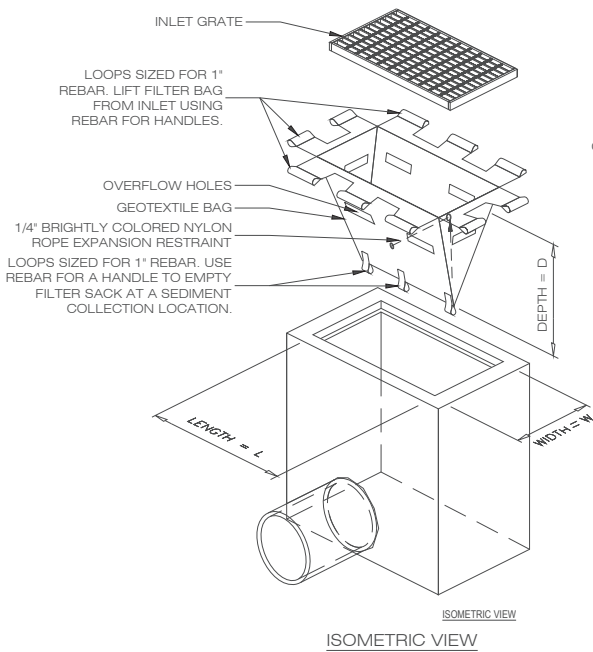
3 **CONCRETE EQUIPMENT PAD**
DN-1 SCALE : N.T.S.



4 **7 MODULE ARRAY (450 W)**
DN-1 SCALE : 1" = 10'-0"



5 **7 MODULE ARRAY (385 W)**
DN-1 SCALE : 1" = 10'-0"



6 **INLET PROTECTION**
DN-1 SCALE : N.T.S.

LOW TO MODERATE FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	300 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4633	120 LBS
MULLEN BURST	ASTM D-3786	800 PSI
TRAPEZOID TEAR	ASTM D-4533	120 LBS
UV RESISTANCE	ASTM D-4355	80 %
APPARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
FLOW RATE	ASTM D-4491	40 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	0.55 SEC -1
MODERATE TO HIGH FLOW GEOTEXTILE FABRIC SPECIFICATION TABLE		
PROPERTIES	TEST METHOD	UNITS
GRAB TENSILE STRENGTH	ASTM D-4632	265 LBS
GRAB TENSILE ELONGATION	ASTM D-4632	20 %
PUNCTURE	ASTM D-4833	135 LBS
MULLEN BURST	ASTM D-3786	420 PSI
TRAPEZOID TEAR	ASTM D-4533	45 LBS
UV RESISTANCE	ASTM D-4355	90 %
APPARENT OPENING SIZE	ASTM D-4751	20 US SIEVE
FLOW RATE	ASTM D-4491	200 GAL/MIN/SQ FT
PERMITTIVITY	ASTM D-4491	1.5 SEC -1

- NOTE:
1. REMOVE TRAPPED SEDIMENT WHEN BRIGHTLY COLORED EXPANSION RESTRAINT CAN NO LONGER BE SEEN.
 2. GEOTEXTILE SHALL BE A WOVEN POLYPROPYLENE FABRIC THAT MEETS OR EXCEEDS REQUIREMENTS IN THE SPECIFICATIONS TABLE.
 3. PLACE AN OIL ABSORBENT PAD OR PILLOW OVER INLET GRATE WHEN OIL SPILLS ARE A CONCERN.
 4. INSPECT PER REGULATORY REQUIREMENTS.
 5. THE WIDTH, "W", OF THE FILTER SACK SHALL MATCH THE INSIDE WIDTH OF THE GRATED INLET BOX.
 6. THE DEPTH, "D", OF THE FILTER SACK SHALL BE BETWEEN 18 INCHES AND 36 INCHES.
 7. THE LENGTH, "L", OF THE FILTER SACK SHALL MATCH THE INSIDE LENGTH OF THE GRATED INLET BOX.
 8. DO NOT USE IN PAVED AREAS WHERE PONDING MAY CAUSE TRAFFIC HAZARDS.

Greenskies
a Clean Focus company

127 WASHINGTON AVENUE
WEST BUILDING, GARDEN LEVEL
NORTH HAVEN, CT 06473

ALL-POINTS
TECHNOLOGY CORPORATION

567 VAUXHALL STREET EXTENSION - SUITE 311
WATERFORD, CT 06385 PHONE: (860)-663-1697
WWW.ALLPOINTSTECH.COM FAX: (860)-663-0935

PERMIT SET		
NO	DATE	REVISION
0	11/05/21	FOR REVIEW: KAM
1		
2		
3		
4		
5		
6		

DESIGN PROFESSIONAL OF RECORD

PROF: KEVIN A. MCCAFFERY, P.E.
COMP: ALL-POINTS TECHNOLOGY CORPORATION, P.C.
ADD: 567 VAUXHALL STREET
EXTENSION - SUITE 311
WATERFORD, CT 06385

OWNER: TOWN OF SOUTH WINDSOR

ADDRESS: 1530 SULLIVAN AVENUE
SOUTH WINDSOR, CT 06074

S WINDSOR PD CARPORT

SITE 151 SAND HILL RD
ADDRESS: SOUTH WINDSOR, CT 06074

APT FILING NUMBER: CT599280

DATE: 11/05/21 DRAWN BY: JT
CHECKED BY: KAM

SHEET TITLE:

SITE DETAILS

SHEET NUMBER:

DN-1

STATE OF CONNECTICUT
2587
PROFESSIONAL ENGINEER

Attachment C

**Stormwater Memorandum
by All-Points Technology Corporation, dated
11/10/21**



November 10, 2021

Siva Thashnath
Greenskies Clean Energy, LLC
127 Washington Avenue
West Building, Garden Level
North Haven, CT 06473

RE: S Windsor PD Carport
151 Sand Hill Road
South Windsor, Connecticut

Dear Mr. Thashnath,

We have prepared this letter report related to stormwater drainage associated with the proposed S Windsor PD Carport project (the “Project”). The Project is proposed behind the existing manufacturing building, located at 151 Sand Hill Road in South Windsor, Connecticut (the “Site”).

Introduction

The Site is a ± 5.32 -acre property developed as the South Windsor Police Department facility. The Project includes the installation of a ground-mounted solar carport array system, to be installed south of the building within the existing parking area. The ground-mounted system will consist of 494 solar panels to be installed on two (2) separate carports within the existing paved parking area. The power generated from this site will serve the existing Police Department facility.

Site Conditions and Stormwater Patterns

The two (2) proposed carport arrays and appurtenances is anticipated to cover ± 0.27 acre, associated with the proposed modules, foundations, trenching, erosion controls, and equipment. Little to no grading is proposed for the Project. No tree clearing or grubbing is anticipated. The overall anticipated limits of disturbance and temporary disturbance for the project, associated with the needed foundations and utility trenching, is ± 0.15 acre.

The existing Project area drains mainly from the north to the south. There is one (1) existing stormwater management basin located within the property, immediately south of the existing parking area. A series of catch basins are located throughout the parking area to capture and direct runoff to the stormwater management basin. The existing drainage patterns will be maintained throughout the site after construction.

The proposed ground-mounted solar carport arrays will be constructed on a post mounted racking system, with foundations to be located within the existing pavement of the parking area and in the field area immediately south of the parking area. Any areas of disturbance will be restored to meet

existing conditions, or seeded with the Ernst Solar Farm Seed Mix or an approved equal by the Property Owner.

Conclusion

With little to no impacts to the existing ground conditions for the proposed project, the post-construction stormwater runoff is anticipated to be equal to that of the pre-construction stormwater runoff. The existing Site drainage patterns will be maintained after construction and will function in the same manner as it does in its current condition. Therefore, no stormwater analysis or management was deemed to be required for the Project.

Should you have any questions, please contact me.

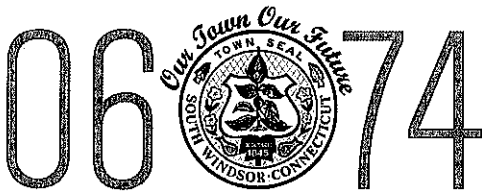
Very truly yours,
All-Points Technology Corporation, P.C.

A handwritten signature in black ink, reading "Kevin A. McCaffery". The signature is fluid and cursive, with the first name "Kevin" and last name "McCaffery" clearly legible.

Kevin A. McCaffery, PE
Senior Civil Engineer

Attachment D

**Town Authorization Letter,
dated 11/10/21**



November 12, 2021

Greenskies Clean Energy, LLC
127 Washington Avenue
West Building, Garden Level
North Haven, CT 06473
Attn: Siva Thashnath

Re: Proposed GCE S Windsor PD Carport Facility
151 Sand Hill Road
South Windsor, CT 06074

Dear Mr. Thashnath,

On behalf of the Town of South Windsor, as owner of the property located at 151 Sand Hill Road, South Windsor, Connecticut, I hereby authorize Greenskies Clean Energy, LLC ("GCE") to apply to the South Windsor Planning and Zoning Commission/Director of Planning for construction of solar carports in the existing rear parking area.

Sincerely,



Michael Maniscalco, MPA,
Town Manager