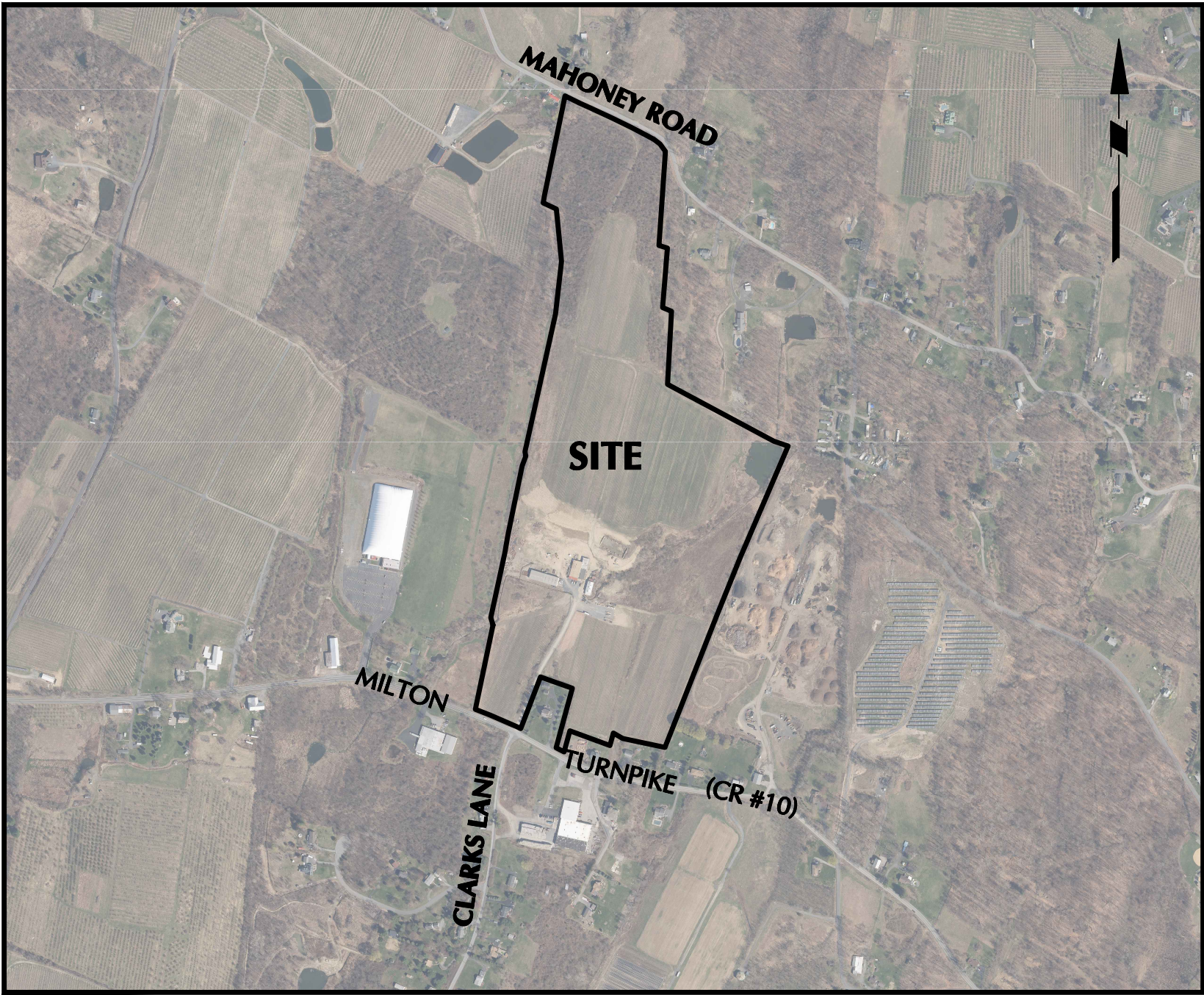


SITE PLAN REVIEW DOCUMENTS

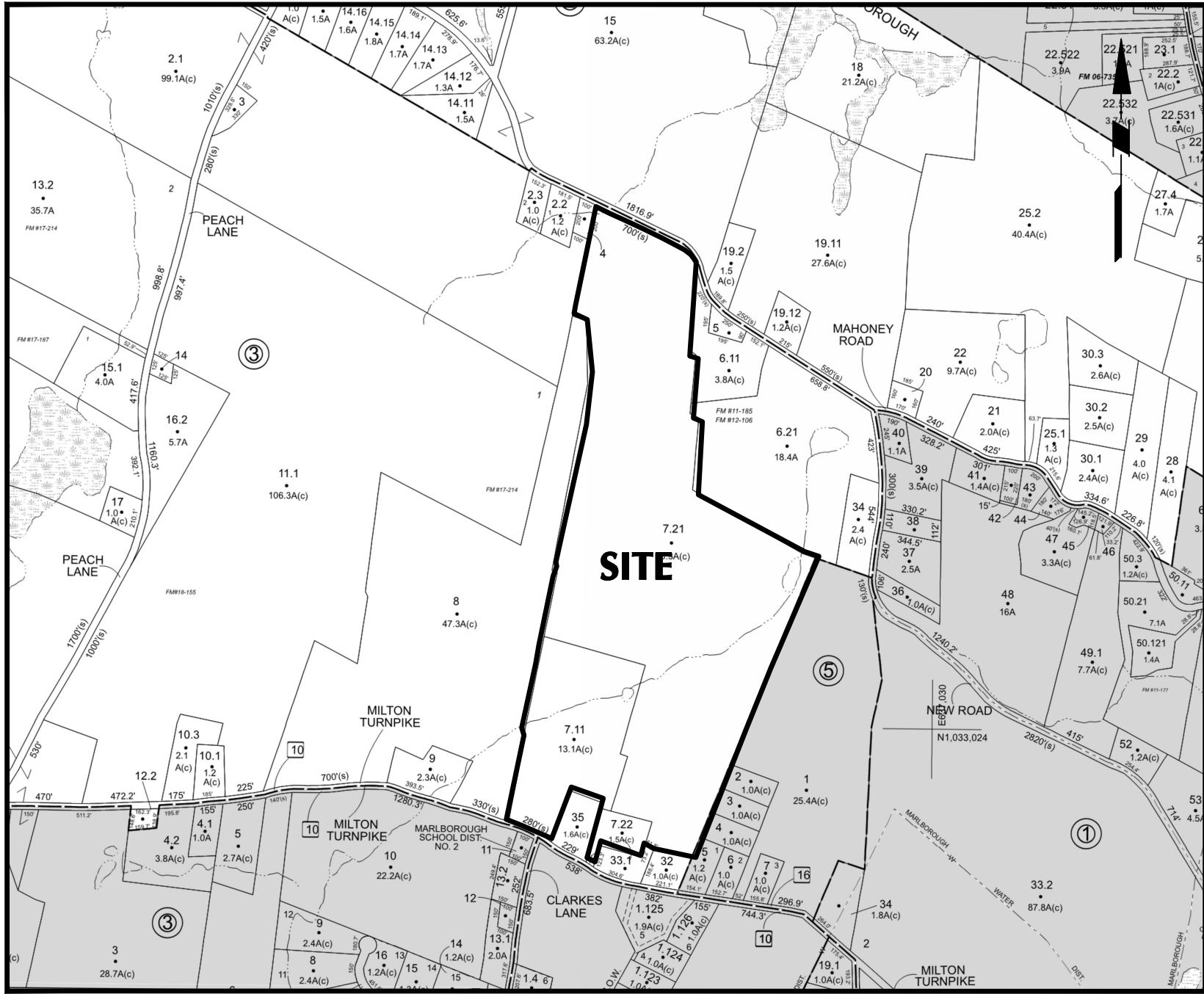
HIGHLAND 201 SOLAR, LLC

4.1 MWAC SOLAR FACILITY

TOWN OF MARLBOROUGH
ULSTER COUNTY, NEW YORK

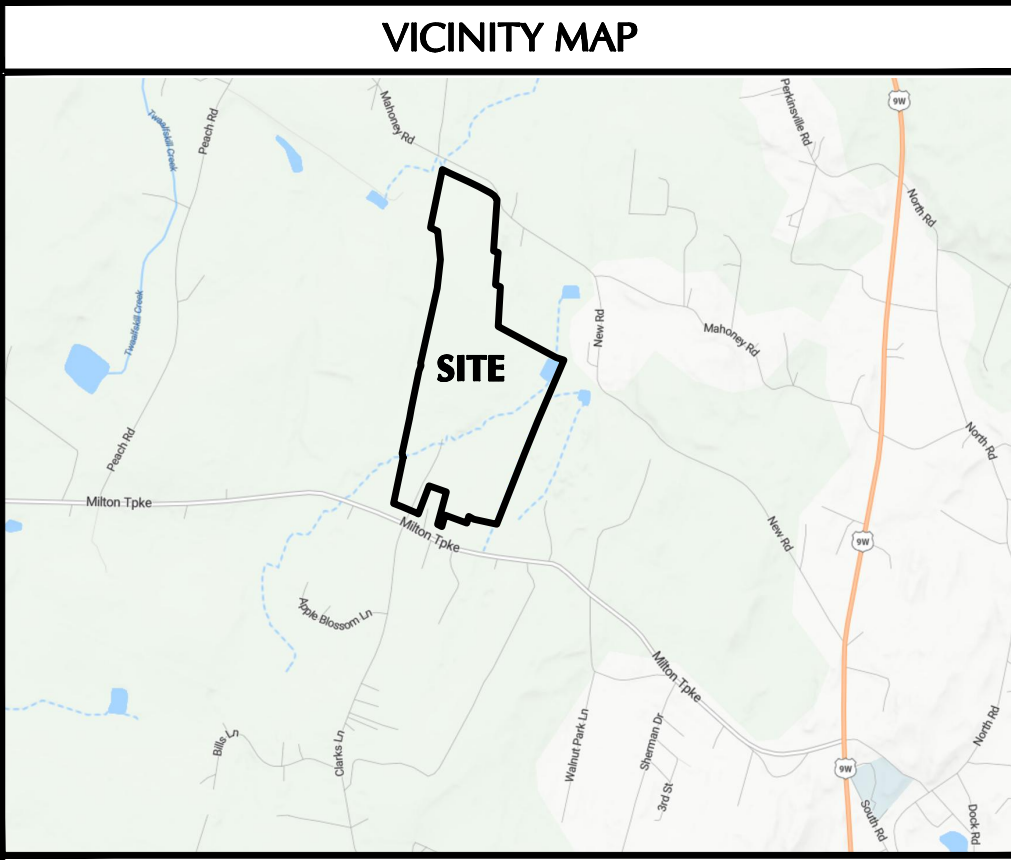


LOCATION MAP
1"=800'



TAX MAP
1"=800'

DRAWING LIST				
DRAWING NO.	SHEET NUMBER	DRAWING TITLE	ISSUE DATE	REVISION DATE
CS001	1 OF 17	COVER SHEET	8/30/2024	11/15/2024
CB101	2 OF 17	EXISTING CONDITIONS PLAN	8/30/2024	11/15/2024
CA101	3 OF 17	SLOPES ANALYSIS PLAN	8/30/2024	11/15/2024
CD101	4 OF 17	TREE REMOVAL & DEMOLITION PLAN	8/30/2024	11/15/2024
CS100	5 OF 17	OVERALL SITE PLAN	8/30/2024	11/15/2024
CS101	6 OF 17	SITE PLAN (1 OF 2)	8/30/2024	11/15/2024
CS102	7 OF 17	SITE PLAN (2 OF 2)	8/30/2024	11/15/2024
CG101	8 OF 17	GRADING & DRAINAGE PLAN (1 OF 2)	8/30/2024	11/15/2024
CG102	9 OF 17	GRADING & DRAINAGE PLAN (2 OF 2)	8/30/2024	11/15/2024
CG201	10 OF 17	ACCESS ROAD PROFILES	8/30/2024	11/15/2024
CE100	11 OF 17	PHASING PLAN	8/30/2024	11/15/2024
CE101	12 OF 17	EROSION & SEDIMENT CONTROL PLAN (1 OF 2)	8/30/2024	11/15/2024
CE102	13 OF 17	EROSION & SEDIMENT CONTROL PLAN (2 OF 2)	8/30/2024	11/15/2024
CS501	14 OF 17	DETAILS (1 OF 2)	8/30/2024	11/15/2024
CS502	15 OF 17	DETAILS (2 OF 2)	8/30/2024	11/15/2024
LP101	16 OF 17	PLANTING PLAN	8/30/2024	11/15/2024
LP501	17 OF 17	PLANTING NOTES & DETAILS	8/30/2024	11/15/2024



SITE DATA	
MUNICIPALITY	TOWN OF MARLBOROUGH
TAX PARCEL #:	95.4-3-7.210 & 95.4-3-7.110 & 95.4-3-7.22
PROPERTY ACREAGE	78.0 Acres
SITE ADDRESS	206 MILTON TURNPIKE, MILTON NY
PROPERTY OWNER	CARSON POWER, LLC
ZONING DISTRICT	RAG-1
PROPOSED USE:	LARGE SCALE SOLAR ENERGY SYSTEM
DISTURBED AREA:	28.3 Acres
IMPERVIOUS AREA:	1.52 Acres

APPLICANT	
HIGHLAND 201 SOLAR, LLC 110 WILLIAM STREET, 24TH FLOOR NEW YORK, NY 10038	
TELEPHONE: (703) 485-6666	
CONTACT: VARDAAN GURUNG	

CIVIL ENGINEER & LANDSCAPE ARCHITECT	
LANGAN ENGINEERING, ENVIRONMENTAL, SURVEYING, LANDSCAPE ARCHITECTURE, AND GEOLOGY D.P.C. 1 NORTH BROADWAY SUITE 910 WHITE PLAINS, NY 10601	
TEL: 914-323-7400	
CONTACT: CHRISTINA M. ZOLEZI, PE	

SURVEYOR	
LAWSON SURVEYING & MAPPING 2959 COUNTY ROUTE 8 ONEONTA, NY 13820	
TEL: 607-432-3300	
CONTACT: ROBERT J. LAWSON, L.S.	

ULSTER COUNTY STANDARD NOTE

NO SITE PREPARATION OR CONSTRUCTION, INCLUDING UTILITY CONNECTIONS, SHALL COMMENCE UNTIL A VALID HIGHWAY WORK PERMIT HAS BEEN SECURED FROM THE ULSTER COUNTY DEPARTMENT OF PUBLIC WORKS UNDER SECTION 136 OF THE HIGHWAY LAW.

TOWN OF MARLBOROUGH
OWNER CONCURRENCES

THE UNDERSIGNED OWNER(S) OF THE PROPERTY SHOWN HEREIN CERTIFY THAT THEY ARE FAMILIAR WITH THIS MAP AND ITS NOTES AND CONTENTS AS STATED HEREON INCLUDING ALL CONDITIONS OF APPROVAL.

OWNER _____

DATE _____

TOWN OF MARLBOROUGH
PLANNING BOARD APPROVAL



110 William Street
24th Floor
New York, NY 10038

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Project No. 190107801

HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
TOWN OF MARLBOROUGH
ULSTER COUNTY
NEW YORK

DESCRIPTION	INITIAL SUBMITTAL	PER TOWN COMMENTS & UCDPW SUBMITTAL			
CHECKED	CZ	CZ			
DRAWN	LC	LC			
DATE	08/30/2024	11/15/2024			
REV	0.	1.			
Drawing No.					
CS001					
COVER SHEET					
Sheet 1 of 17					

ADJOINING OWNERS

Moriarty Services, Inc. (reputed owner) L 5485 P 282 103.1-5-1	Moriarty Services, Inc. (reputed owner) L 5485 P 282 103.1-5-2	Moriarty Services, Inc. (reputed owner) L 5485 P 282 103.1-5-3	Moriarty Services, Inc. (reputed owner) L 5485 P 282 103.1-5-4
Gustavo L. Miranda & Elisa Lopez (reputed owner) L 5753 P 1 103.1-5-5	Theresa Corso & Robert Corso (reputed owner) L 1405 P 788 95.4-3-32	Timothy A. Marquis & Tara J. Marquis (reputed owner) L 1527 P 64 95.4-3-33.1	Theresa Ann Corso (reputed owner) L 3415 P 277 95.4-3-35
Hudson Valley Domicile, LLC (reputed owner) L 3016 P 219 95.4-3-8	Apple Exchange, Inc. (reputed owner) L 1240 P 599 95.4-3-2.1	Janet Wahl-Cordero (reputed owner) L 5566 P 54 95.4-3-4	James Mannese (reputed owner) L 4418 P 292 95.4-3-6.11
James J. Mannese & Bridget L. Mannese (reputed owner) L 5608 P 168 95.4-3-6.21			



LEGEND	
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EASEMENT LINE
	LIMIT OF DISTURBANCE
	EXISTING WETLAND
	EXISTING WETLAND STREAM
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING FLOOD PLAIN
	EXISTING UTILITY
	EXISTING TREELINE

GENERAL NOTES

1. SURVEY INFORMATION SHOWN IN THIS PLAN SET IS FROM A SURVEY ENTITLED "ORGANIC VALLEY, LLC" DATED APRIL 22, 2024 BY LAWSON SURVEYING & MAPPING.
2. HORIZONTAL DATUM IS NEW YORK STATE EAST ZONE (3101) NAD 83 GPS DERIVED.
3. VERTICAL DATUM IS NAVD 88 GPS DERIVED.
4. A WETLAND AND WATERBODY DELINEATION PERFORMED BY NORTH COUNTRY ECOLOGICAL SERVICES IN MAY 2024.

ULSTER COUNTY STANDARD NOTES

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Project

HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
TOWN OF MARLBOROUGH
ULSTER COUNTY
NEW YORK

Project No. 190107801

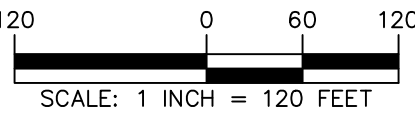
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PER TOWN COMMENTS & UCDPW SUBMITTAL	CZ	LC	11/15/2024	1.

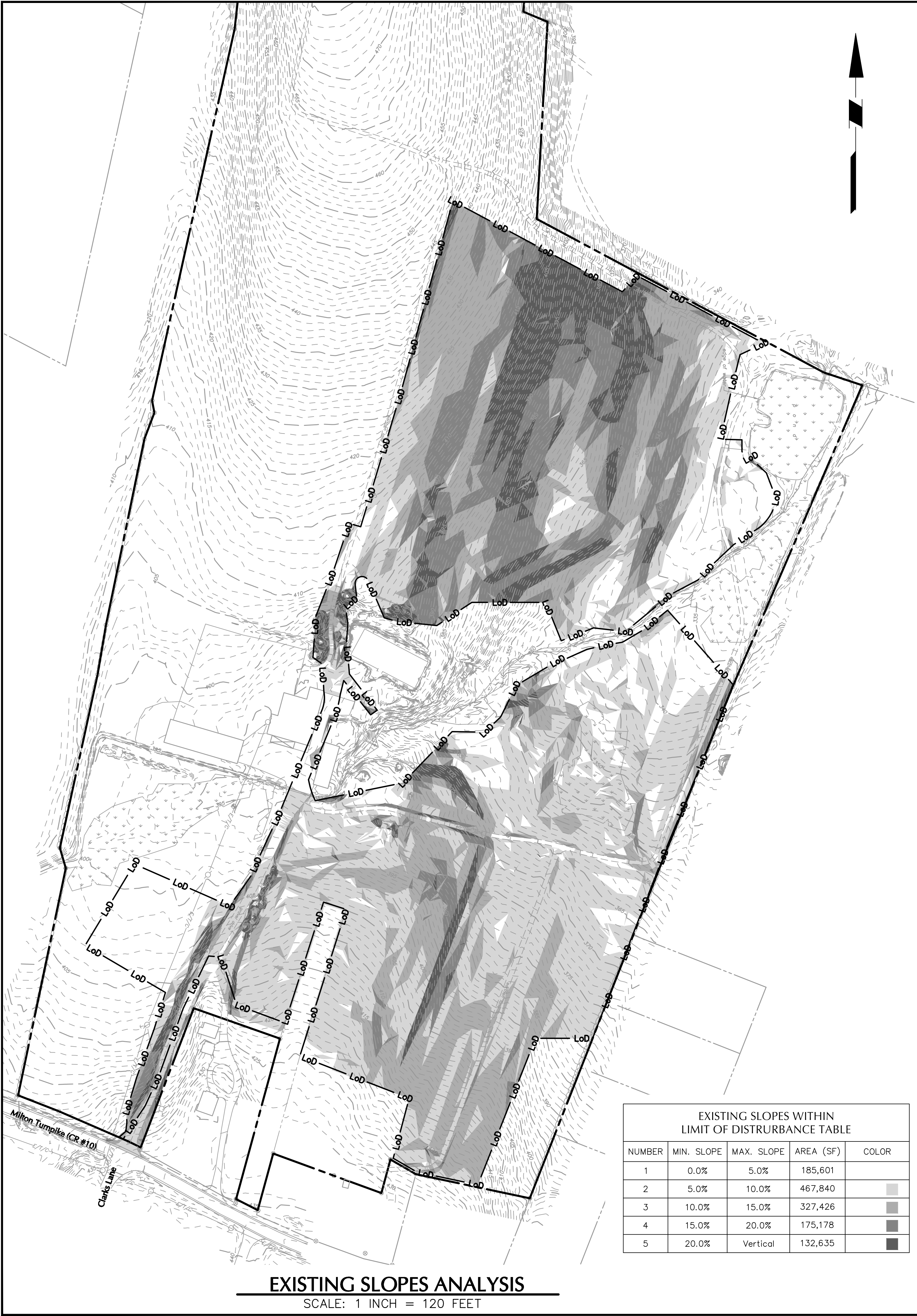
Drawing No.

CB101

EXISTING
CONDITIONS PLAN

Sheet 2 of 17





EXISTING SLOPES WITHIN LIMIT OF DISTURBANCE TABLE				
NUMBER	MIN. SLOPE	MAX. SLOPE	AREA (SF)	COLOR
1	0.0%	5.0%	185,601	
2	5.0%	10.0%	467,840	
3	10.0%	15.0%	327,426	
4	15.0%	20.0%	175,178	
5	20.0%	Vertical	132,635	

EXISTING SLOPES ANALYSIS

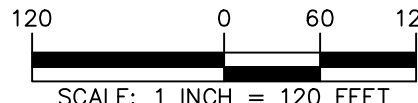
SCALE: 1 INCH = 120 FEET




PROPOSED SLOPES WITHIN LIMIT OF DISTURBANCE TABLE				
NUMBER	MIN. SLOPE	MAX. SLOPE	AREA (SF)	COLOR
1	0.0%	5.0%	174,900	
2	5.0%	10.0%	457,462	
3	10.0%	15.0%	333,523	
4	15.0%	20.0%	173,041	
5	20.0%	Vertical	149,755	

PROPOSED SLOPES ANALYSIS

SCALE: 1 INCH = 120 FEET






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Project No. 190107801

Project

HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
TOWN OF MARLBOROUGH
ULSTER COUNTY
NEW YORK

REV	DATE	DESCRIPTION
0	08/30/2024	INITIAL SUBMITTAL
1	11/15/2024	PER TOWN COMMENTS & UCDPW SUBMITTAL

Drawing No.

CA101

SLOPES ANALYSIS
PLAN

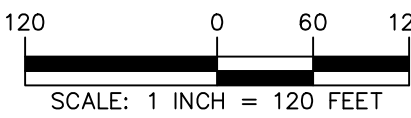
Sheet 3 of 17

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LEGEND	
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EASEMENT LINE
	LIMIT OF DISTURBANCE
	EXISTING WETLAND
	EXISTING WETLAND STREAM
	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING FLOOD PLAIN
	PROPOSED PAVEMENT, GRAVEL AND TRAIL REMOVAL
	SITE FEATURE TO BE REMOVED
	EXISTING UTILITY
	EXISTING TREELINE
	PROPOSED TREE CLEARING

TREE REMOVAL NOTES	
1.	ALL TREES TO BE REMOVED WITHIN LIMITS OF DISTURBANCE.
2.	TREE CLEARING ACTIVITIES SHALL BE RESTRICTED TO OCTOBER 1 TO MARCH 31.



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Project No. 190107801

Project

HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
TOWN OF MARLBOROUGH
ULSTER COUNTY
NEW YORK

REV	DATE	DRAWN	CHECKED	DESCRIPTION
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1.	11/15/2024	LC	CZ	PER TOWN COMMENTS & UCDPW SUBMITTAL

Drawing No.

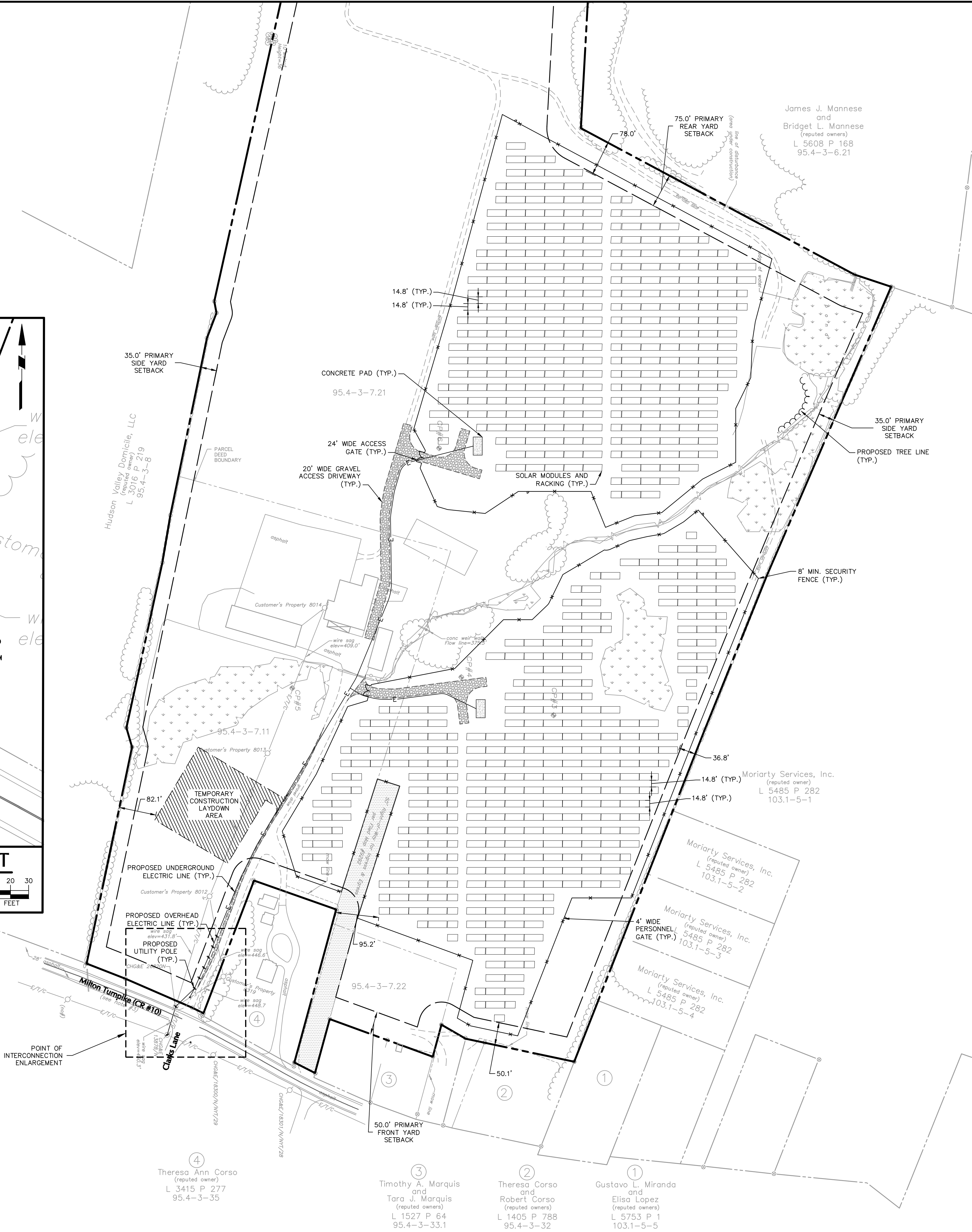
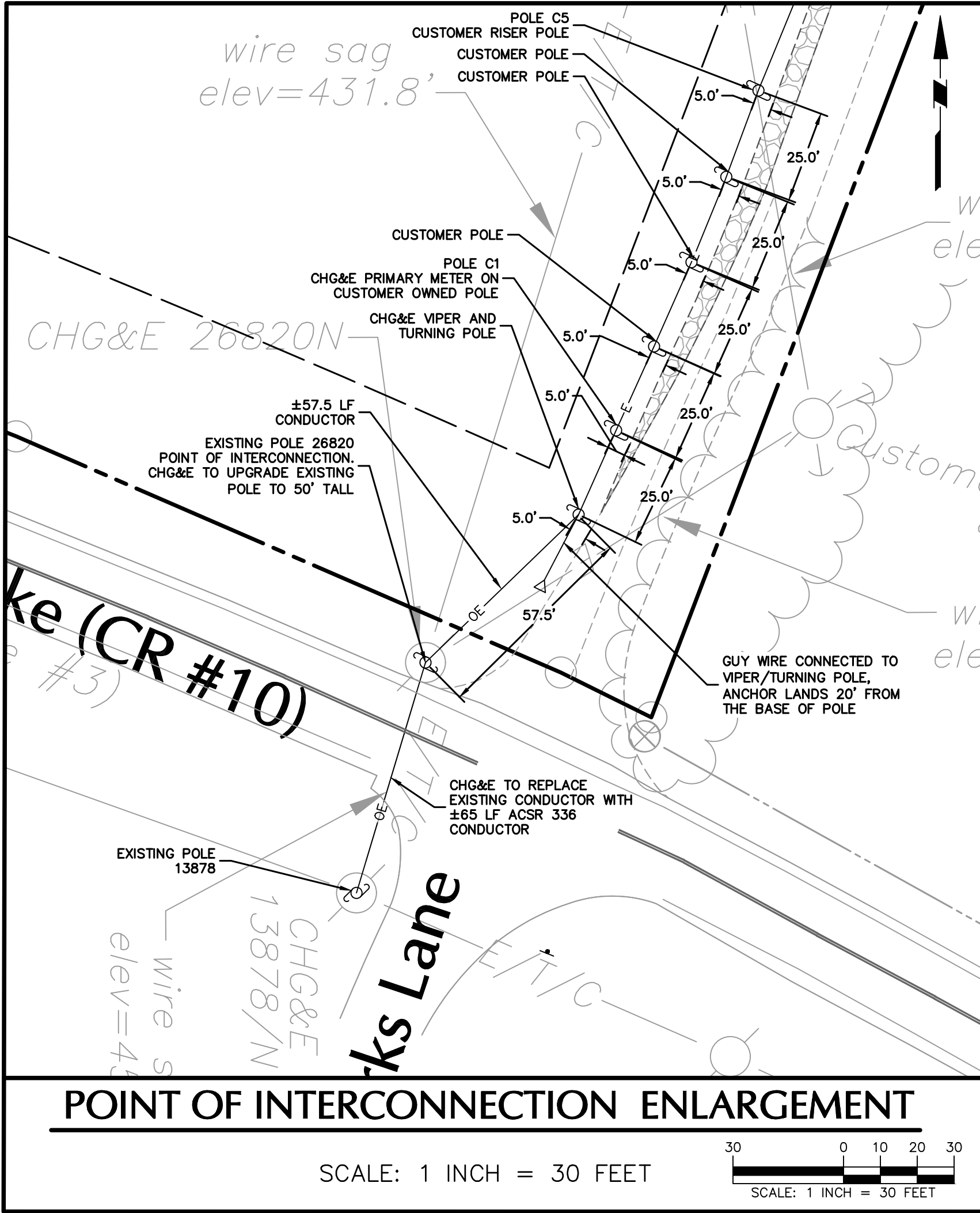
CD101

TREE REMOVAL & DEMOLITION PLAN

Sheet 4 of 17

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ZONING COMPLIANCE TABLE			
PROPERTY ADDRESS:	206 MILTON TURNPIKE		
TAX PARCEL:	95.4-3-7.110, 7.210 & 7.220		
ZONING DISTRICT:	RAG-1		
SITE USE:	LARGE SCALE SOLAR ENERGY SYSTEM		
ITEM	REQUIRED ⁽¹⁾	EXISTING	PROPOSED
MIN. LOT SIZE	1 ACRE	78.0 ACRES	78.0 ACRES
MIN. LOT WIDTH	150 FEET	1,148.7 FEET	1,148.7 FEET
MIN. LOT DEPTH	200 FEET	1,796.6 FEET	1,796.6 FEET
MIN. FRONT YARD SETBACK	50 FEET	803.4 FEET	50.1 FEET
MIN. SIDE YARD SETBACK			
ONE	35 FEET	170.2 FEET	36.8 FEET
BOTH	80 FEET	780.4 FEET	118.9 FEET
MIN. REAR YARD SETBACK	75 FEET	931.3 FEET	78.0 FEET
MAX. BUILDING COVERAGE	20%	0.9%	0.9%
MAX. AREA OF USE ⁽²⁾	20 ACRES	--	16.75 ACRES
MAX. LOT COVERAGE ⁽²⁾	30%	--	10.7%
MAX. HEIGHT ⁽²⁾	15 FEET	--	<15 FEET
NOTE:			
1. THE REQUIREMENTS SHOWN ARE PER TOWN OF MARLBOROUGH TOWN CODE SECTION 155 ZONING.			
2. THE REQUIREMENTS SHOWN ARE PER TOWN OF MARLBOROUGH TOWN CODE SECTION 155-32.2 SOLAR ENERGY, SECTION I.			



LEGEND	
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EASEMENT LINE
	SETBACK LINE
	EXISTING WETLAND
	EXISTING WETLAND STREAM
	PROPOSED FENCELINE
	PROPOSED PANELS
	PROPOSED GRAVEL ACCESS ROAD
	PROPOSED CONCRETE PAD
	PROPOSED LAYDOWN AREA
	PROPOSED OVERHEAD ELECTRIC LINE
	PROPOSED UNDERGROUND ELECTRIC LINE
	PROPOSED UTILITY POLE
	PROPOSED TREELINE

UTILITY NOTES

- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS IN A MANNER WHICH WILL NOT NEGATIVELY AFFECT ANY EXISTING USERS OF THESE UTILITIES.
- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITY (WATER, SEWER, GAS, ELECTRIC, TELEPHONE AND CABLE) LOCATIONS, INVERTS AND CONDITIONS PRIOR TO CONSTRUCTION. ANY CONDITIONS FOUND TO DIFFER FROM THOSE SHOWN ON THE DRAWINGS AND REQUIRING MODIFICATIONS TO THE SITE DESIGN SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE CONSTRUCTION. DIFFERING UTILITY CONDITIONS THAT ARE ENCOUNTERED BY THE CONTRACTOR, THAT REQUIRE MODIFICATION OF SITE DESIGN AND THAT ARE NOT BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CORRECT AT HIS SOLE COST.
- THE LOCATION OF EXISTING ELECTRIC LINES ARE APPROXIMATE. THE CONTRACTOR MUST CONSULT THE LOCAL UTILITY COMPANIES FOR ADDITIONAL INFORMATION. ALL PROPOSED ELECTRICAL WORK, TRANSFORMER PADS, AND ASSOCIATED APPURTENANCES SHALL BE IN CONFORMANCE WITH APPLICABLE LOCAL, COUNTY, STATE AND FEDERAL GUIDELINES AND REQUIREMENTS.
- MIN. DEPTH OF COVER OVER ELECTRIC SERVICES SHALL BE TWO (2) FT.
- PROVIDE A KNOX BOX AT EACH GATED ENTRANCE FOR FIRE DEPARTMENT USE.

GENERAL SITE NOTES

- THE CONTRACTOR SHALL FURNISH, INSTALL, TEST AND COMPLETE ALL WORK TO THE SATISFACTION OF THE ENGINEER AND OWNER IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION; AS SUCH, THESE PLANS DO NOT COMPLETELY REPRESENT, NOR ARE THEY INTENDED TO REPRESENT, ALL SPECIFIC INSTRUCTIONS REQUIRED FOR SITEWORK CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO CONSTRUCT ALL IMPROVEMENTS DEPICTED ON THESE PLANS IN ACCORDANCE WITH ALL APPLICABLE RULES, REGULATIONS AND LAWS IN EFFECT AT THE TIME OF CONSTRUCTION.
- THE CONTRACTOR SHALL ACCEPT THE SITE AS IS. THE CONTRACTOR SHALL ASSESS CONDITIONS, AND THE QUALITY AND QUANTITY OF WORK REQUIRED. THE OWNER AND ENGINEER MAKE NO GUARANTEE IN REGARD TO THE ACCURACY OF ANY INFORMATION THAT WAS OBTAINED DURING INVESTIGATIONS. THE CONTRACTOR SHALL MAKE A THOROUGH SITE INSPECTION PRIOR TO CONSTRUCTION TO CHECK EXISTING CONDITIONS; CORRELATE CONDITIONS WITH THE DRAWINGS; AND, RESOLVE ANY POSSIBLE CONSTRUCTION CONFLICTS WITH THE OWNER AND ENGINEER PRIOR TO COMMENCEMENT OF THE WORK. THE CONTRACTOR SHALL PERFORM ADDITIONAL TOPOGRAPHIC SURVEYS IF HE/SHE DEEMS NECESSARY, PROVIDED THEY ARE COORDINATED WITH THE OWNER. ANY CONDITIONS DETERMINED BY THE CONTRACTOR THAT DIFFER FROM THE INFORMATION SHOWN ON THE DRAWINGS THAT ARE NOT BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER PRIOR TO THE START OF WORK SHALL NOT BE CONSIDERED GROUNDS FOR ADDITIONAL PAYMENT OR CHANGES TO THE CONTRACT DURATION, OR ANY OTHER CLAIMS AGAINST THE OWNER OR OWNER'S ENGINEER.
- THE CONTRACTOR SHALL, WHEN HE/SHE DEEMS NECESSARY, PROVIDE A WRITTEN REQUEST FOR INFORMATION (RFI) TO THE OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER PRIOR TO THE CONSTRUCTION OF ANY SPECIFIC SITEWORK ITEM. THE (RFI) SHALL BE IN A FORM ACCEPTABLE TO OWNER AND/OR OWNER'S DESIGNATED REPRESENTATIVE, AND ENGINEER AND SHALL ALLOW FOR A MINIMUM OF THREE WORK DAYS FOR A WRITTEN REPLY. RFIS SHALL BE NUMBERED CONSECUTIVELY BY DATE SUBMITTED. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SITEWORK ITEMS CONSTRUCTED DIFFERENTLY THAN INTENDED OR AS DEPICTED ON THE PLANS.
- INFORMATION RELATED TO ELEVATIONS AND PROPOSED UTILITIES (SUCH AS ROADWAY GRADES, INVERT ELEVATIONS, RIM ELEVATIONS, GRATE ELEVATIONS, BUILDING FINISHED FLOOR ELEVATIONS, ETC.) MAY BE FOUND IN MORE THAN ONE LOCATION IN THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL SUFFICIENTLY REVIEW ALL PLANS, PROFILES AND ANY OTHER INFORMATION IN THE CONTRACT DOCUMENTS FOR CONSISTENCY PRIOR TO BID. ANY INCONSISTENCIES OR DISCREPANCIES THAT ARE FOUND BY THE CONTRACTOR OR HIS ASSIGNS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER IN WRITING, IN THE FORMAT OF AN RFI PRIOR TO BID.
- THERE ARE ADDITIONAL NOTES, SPECIFICATIONS AND REQUIREMENTS CONTAINED THROUGHOUT THE PLAN SET AS WELL AS REFERENCES TO SPECIFICATIONS FROM APPLICABLE GOVERNING AUTHORITIES AND INDUSTRY STANDARDS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN, REVIEW AND ADHERE TO ALL THESE DOCUMENTS.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT ALL CONSTRUCTION STAKEOUT FOR THIS PROJECT MUST BE COMPLETED FROM THE SITE SPECIFIC SURVEY CONTROL (HORIZONTAL AND VERTICAL) UPON WHICH THE DESIGN IS BASED. THE CONTRACTOR SHOULD NOT RELY ON OR RE-ESTABLISH SURVEY CONTROL BY GPS OR OTHER METHODS FOR USE IN CONSTRUCTION STAKEOUT OR ANY OTHER PURPOSE FOR THIS PROJECT. ANY DISCREPANCIES BETWEEN THE EXISTING HORIZONTAL OR VERTICAL DATA SHOWN ON THESE DRAWINGS AND THAT ENCOUNTERED IN THE FIELD MUST BE REPORTED TO THE DESIGN TEAM PRIOR TO CONSTRUCTION FOR RESOLUTION.
- SOLAR RACKING LAYOUT SHOWN IN THIS PLAN SET IS FROM A FILE RECEIVED FROM CARSON POWER TITLED "BASEPLAN" DATED JULY 29, 2024.

ULSTER COUNTY STANDARD NOTE

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Project No. 190107801

Project

HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
TOWN OF MARLBOROUGH
ULSTER COUNTY

DESCRIPTION	CHECKED	DRAWN	DATE	REV
INITIAL SUBMITTAL	CZ	LC	08/30/2024	0.
PER TOWN COMMENTS & UCDPW SUBMITTAL	CZ	LC	11/15/2024	1.

Drawing No.

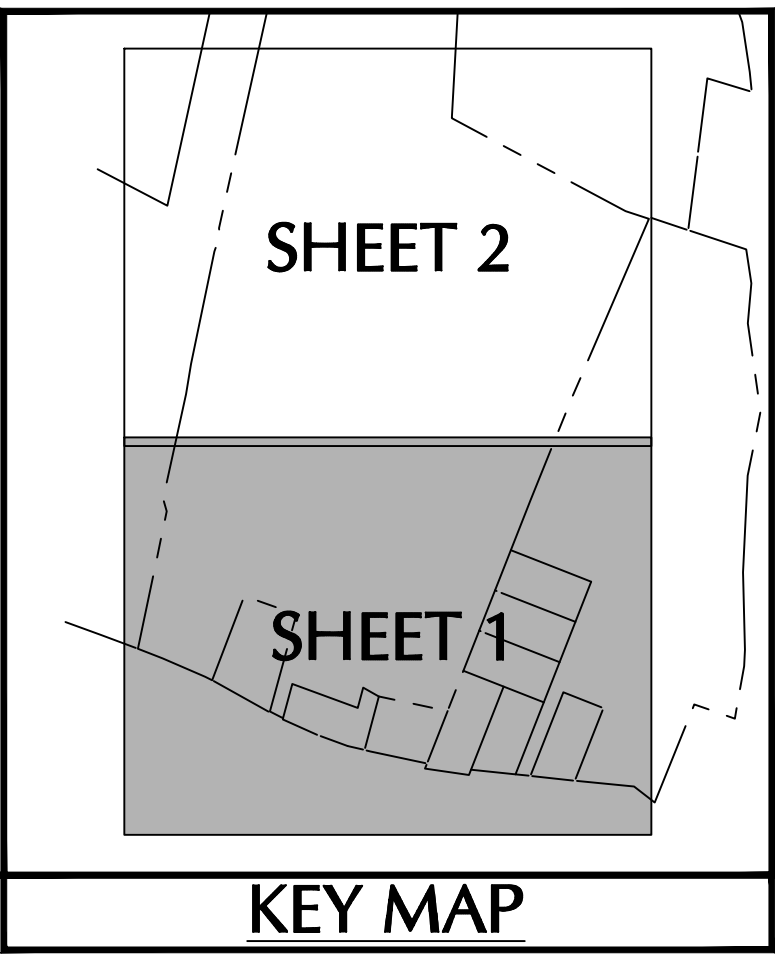
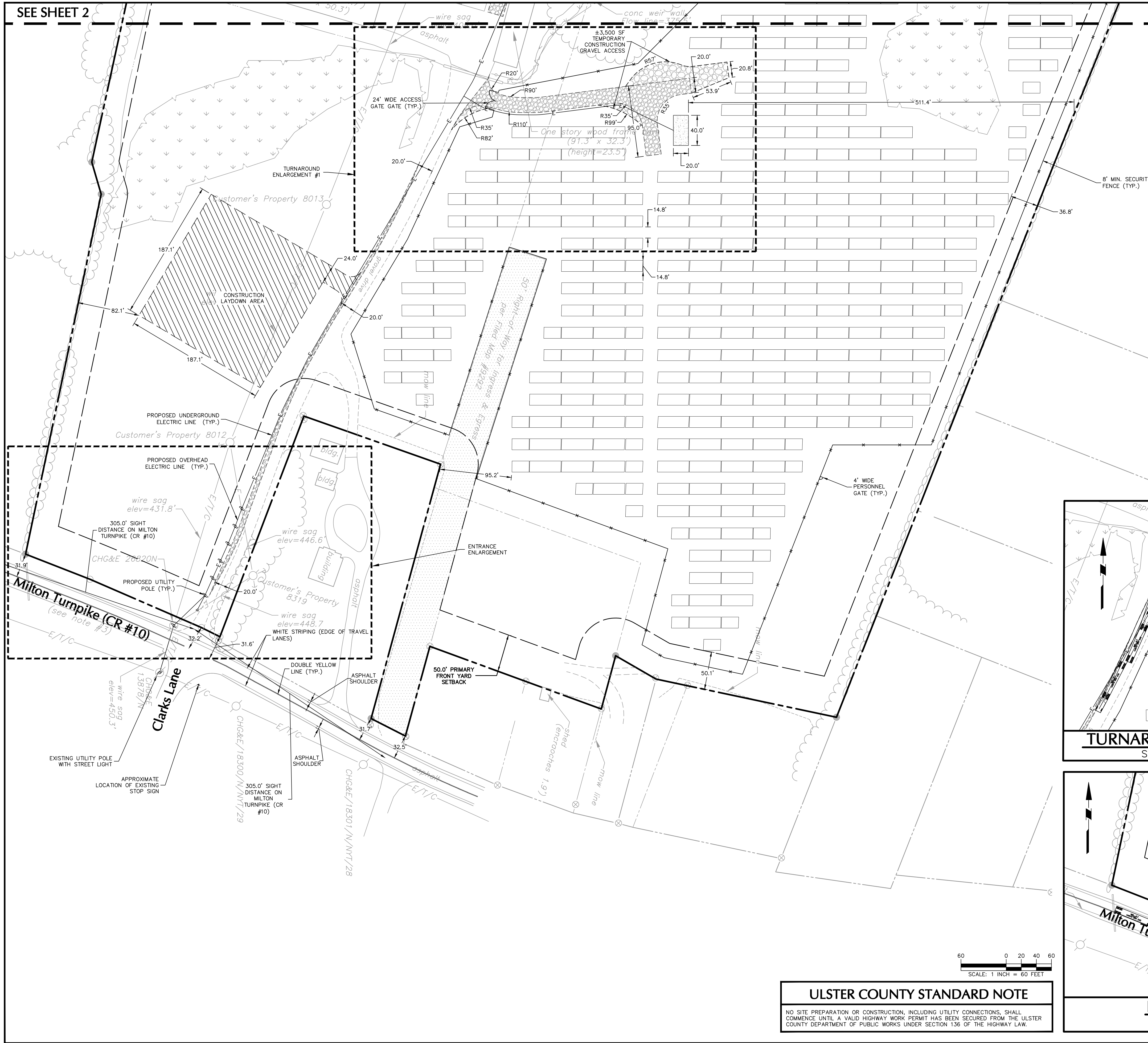
CS100

OVERALL SITE PLAN

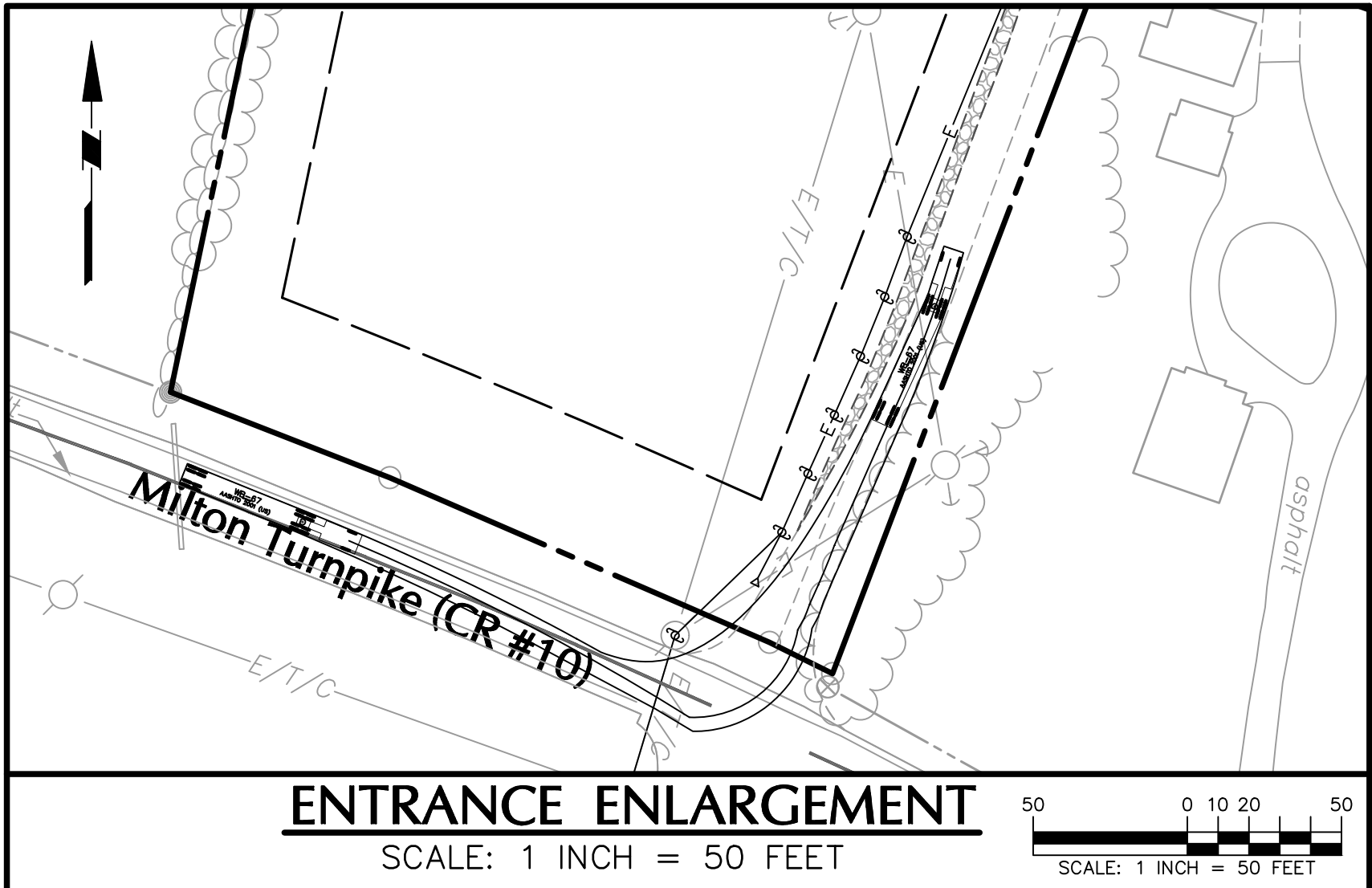
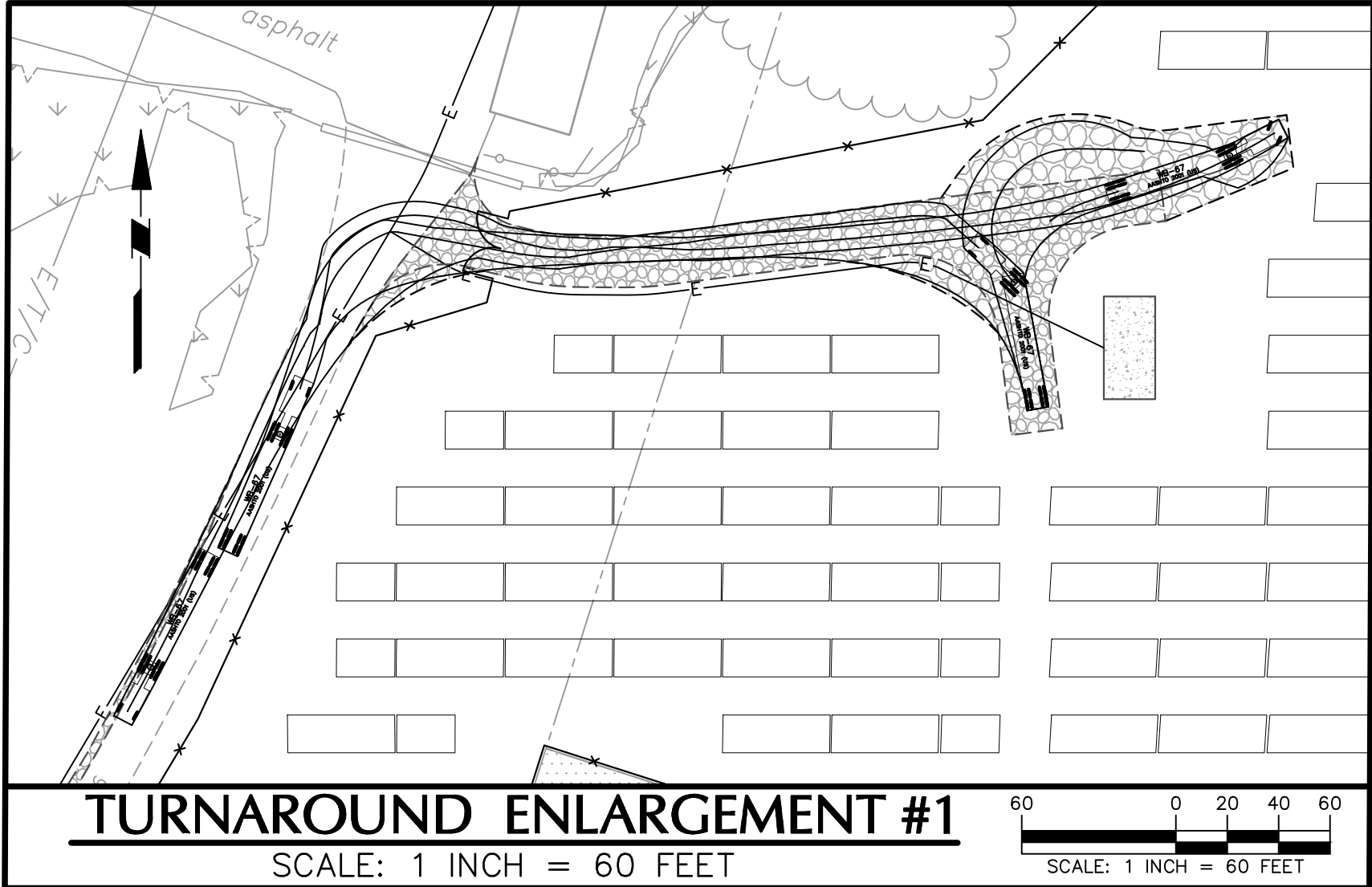
Sheet 5 of 17

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SEE SHEET 2



LEGEND	
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	EASEMENT LINE
	SETBACK LINE
	EXISTING WETLAND
	EXISTING WETLAND STREAM
	PROPOSED FENCELINE
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	PROPOSED GRAVEL ACCESS ROAD
	PROPOSED CONCRETE PAD
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	PROPOSED UNDERGROUND ELECTRIC LINE
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Michael J. Finn
Professional Engineer
No. 081475
State of New York

HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
TOWN OF MARLBOROUGH
ULSTER COUNTY
NEW YORK

Project No. 190107801

REV	DATE	DRAWN	CHECKED	DESCRIPTION
0.	08/30/2024	LC	CZ	INITIAL SUBMITTAL
1.	11/15/2024	LC	CZ	PER TOWN COMMENTS & UCDPW SUBMITTAL

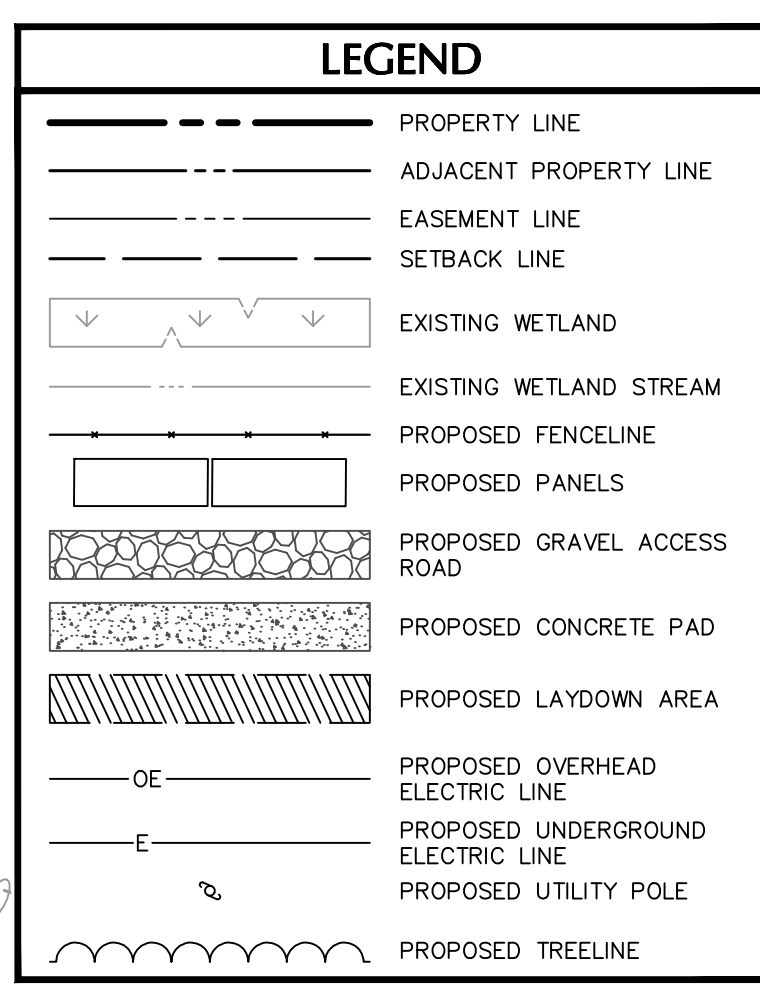
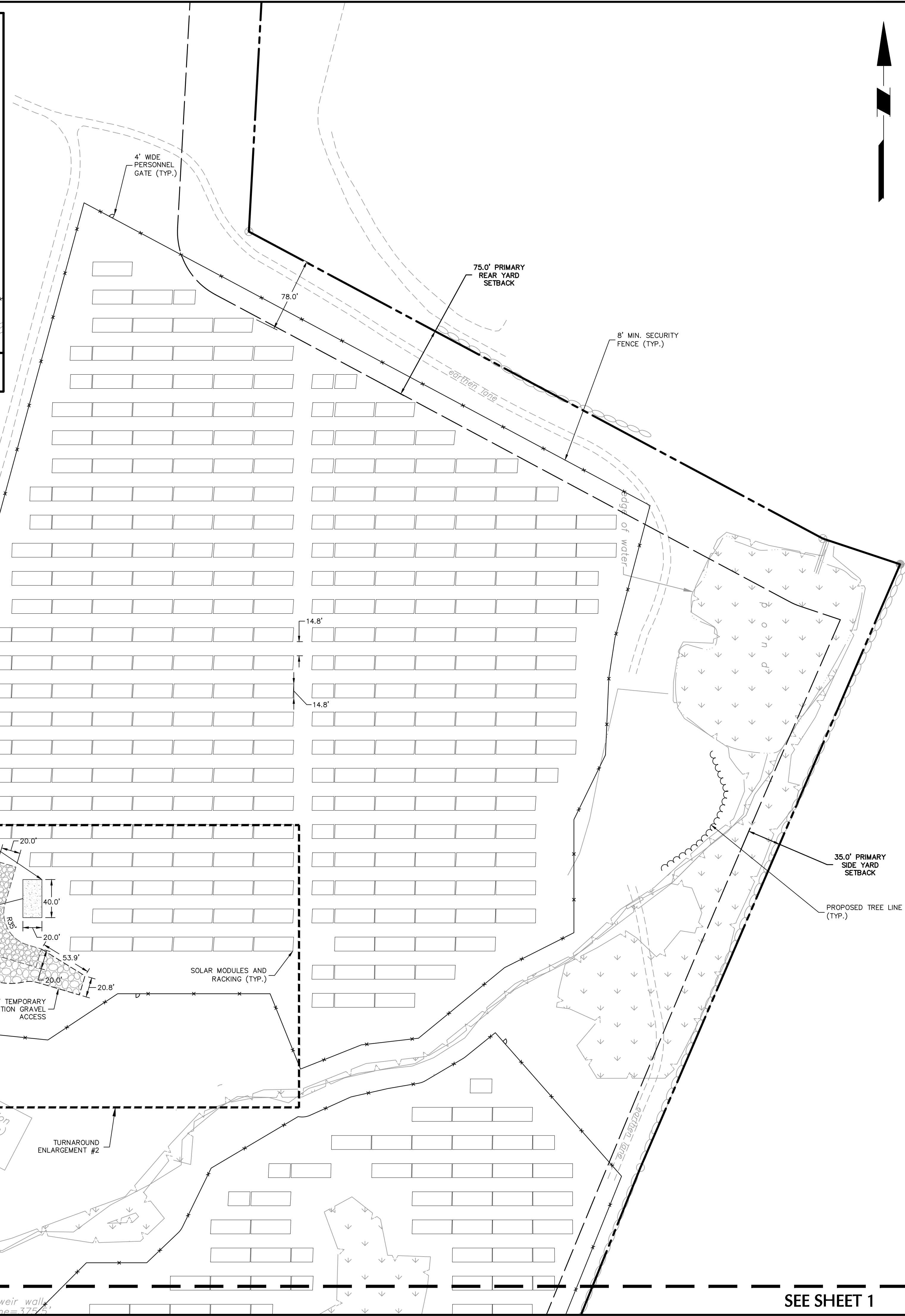
Drawing No.



CS101

SITE PLAN

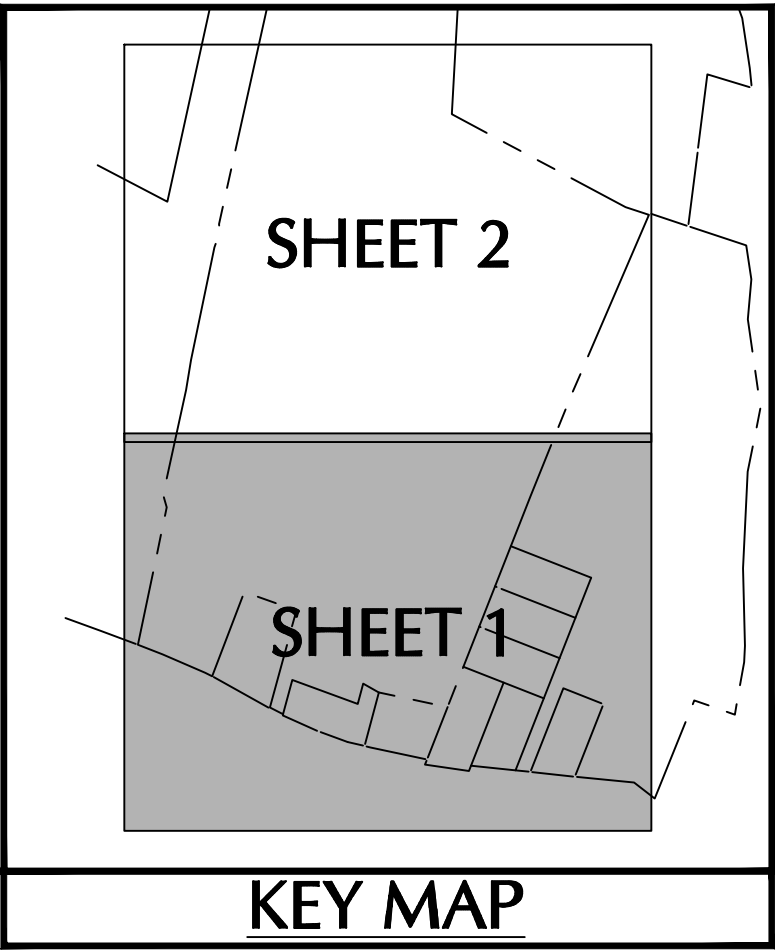
(1 OF 2)

Sheet 6 of 17



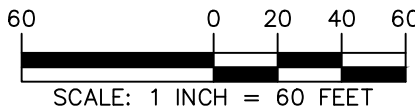
	<p>110 William Street 24th Floor New York, NY 10038</p> <p>LANGAN</p> <p>Langan Engineering, Environmental, Surveying, Landscape Architecture, and Geology, P.C.</p> <p>One North Broadway, Suite 910 White Plains, NY 10601</p> <p>T: 914.323.7400 F: 914.323.7401 www.langan.com</p>									
	<p>NOTES: 1. ALL MEASUREMENTS OF THE SITE SHOWN ON THIS PLAN ARE BASED ON THE DATA PROVIDED BY THE CLIENT. THE ENGINEER HAS CONDUCTED A VISUAL INSPECTION OF THE SITE AND HAS FOUND NO EVIDENCE OF ANY OTHER MEASUREMENTS. THE ENGINEER HAS CONDUCTED A VISUAL INSPECTION OF THE SITE AND HAS FOUND NO EVIDENCE OF ANY OTHER MEASUREMENTS.</p>									
										
	<p>HIGHLAND SOLAR</p> <p>SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220</p> <p>TOWN OF MARLBOROUGH</p> <p>LISTER COUNTY, NEW YORK</p>									
	<p>Project</p>									
<p>Drawing No.</p>										
<p>CS102</p> <p>SITE PLAN</p> <p>(2 OF 2)</p> <p>Sheet 7 of 17</p>										

SEE SHEET 2



LEGEND	
100	PROPOSED CONTOUR MAJOR
101	PROPOSED CONTOUR MINOR
---	PROPOSED GRAVEL DIAPHRAGM
---	PROPOSED DRAINAGE PIPE

APPROXIMATE EARTHWORK QUANTITIES	
FINISHED GRADE TO EXISTING GRADE:	
CUT:	2,990 CU. YD.
FILL:	7,140 CU. YD.
NET (FILL):	4,150 CU. YD.
EARTHWORK ADJUSTMENTS:	
GRAVEL DRIVEWAY:	1,140 CU. YD.
DRY SWALE:	220 CU. YD.
CONCRETE PADS:	35 CU. YD.
BIORETENTION BASINS:	35 CU. YD.
TOTAL ADJUSTMENT (CUT):	1,430 CU. YD.
TOTAL NET = 4,150 - 1,430 = 2,720 CU. YD. (FILL)	
NOTE: 1. EARTHWORK BASED UPON COMPARING THE FINISHED GRADE ELEVATION TO THE EXISTING GRADES. ANALYSIS DOES NOT ACCOUNT FOR ANY COMPACTION OR EXPANSION OF MATERIAL.	



ULSTER COUNTY STANDARD NOTE

NO SITE PREPARATION OR CONSTRUCTION, INCLUDING UTILITY CONNECTIONS, SHALL COMMENCE UNTIL A VALID HIGHWAY WORK PERMIT HAS BEEN SECURED FROM THE ULSTER COUNTY DEPARTMENT OF PUBLIC WORKS UNDER SECTION 136 OF THE HIGHWAY LAW.

110 William Street
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HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
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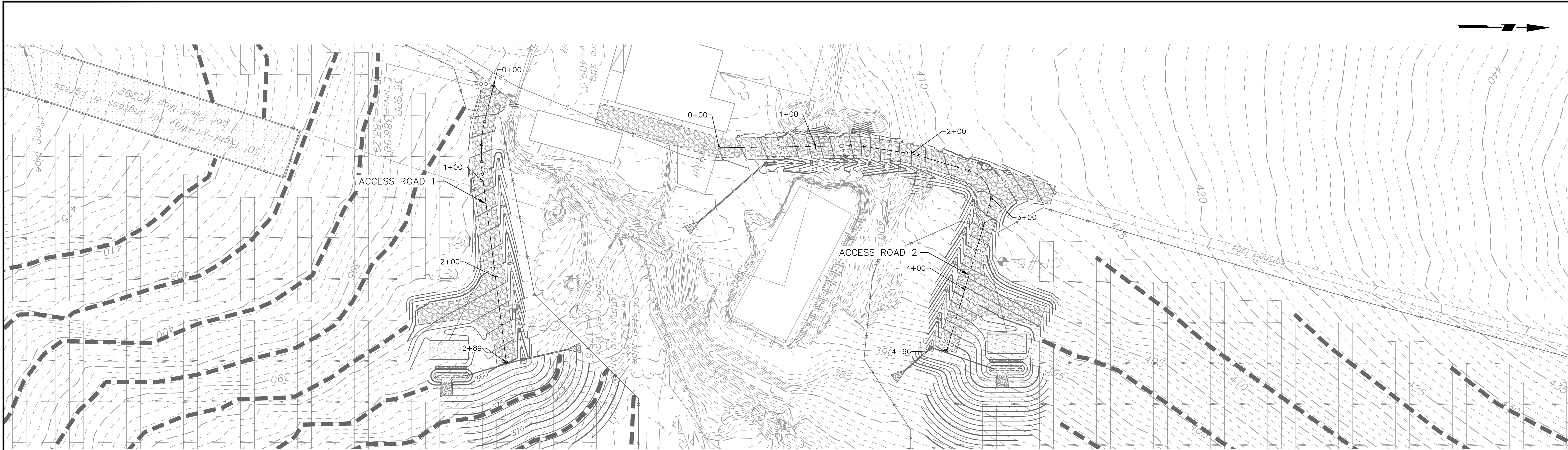
Project

DESCRIPTION	CHECKED	DRAWN	DATE	REV
INITIAL SUBMITTAL	CZ	LC	08/30/2024	0.
PER TOWN COMMENTS & UCDPW SUBMITTAL	CZ	LC	11/15/2024	1.

Drawing No.

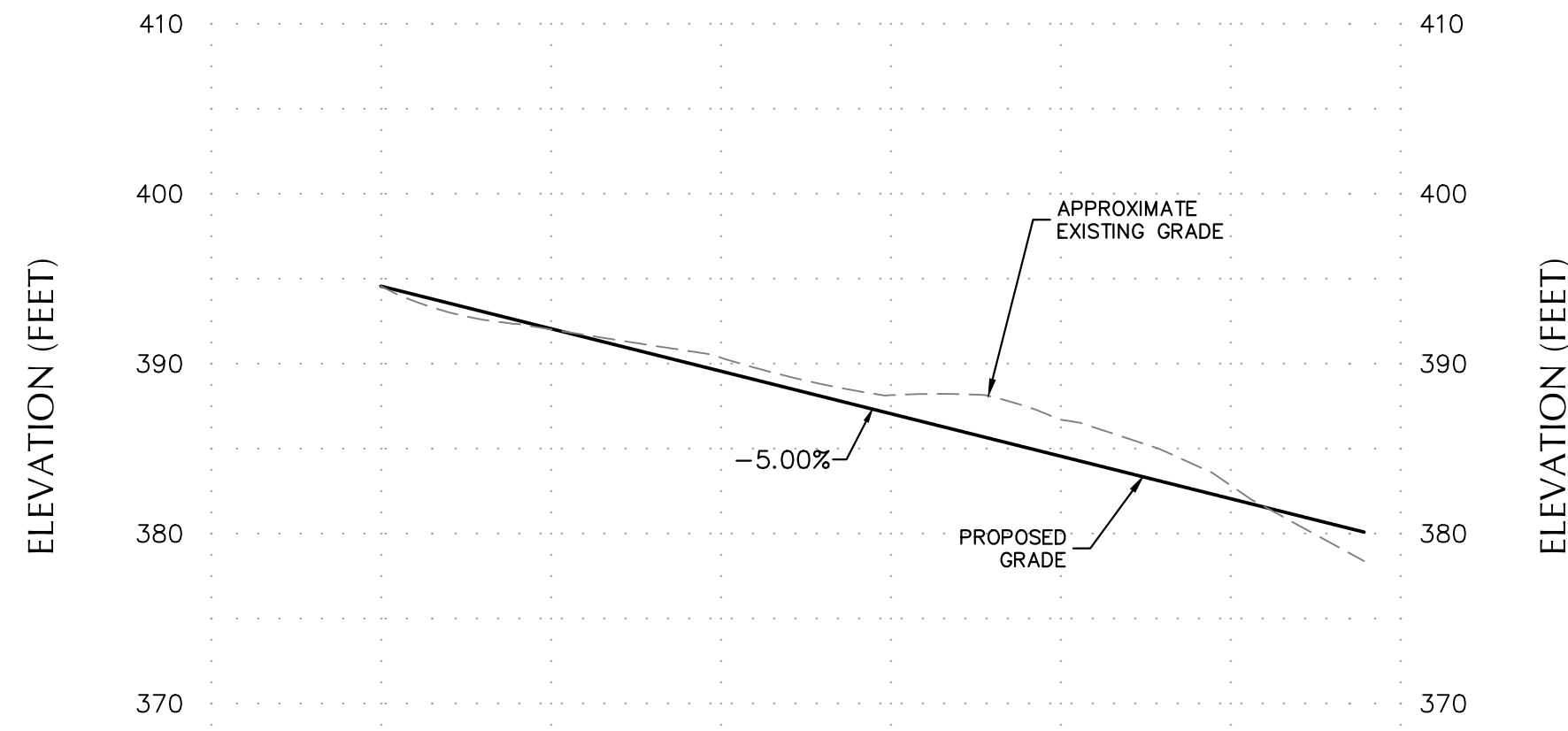
CG101
GRADING PLAN
(1 OF 2)
Sheet 8 of 17

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PROPOSED DRIVEWAY PLAN

SCALE: 1 INCH = 50 FEET

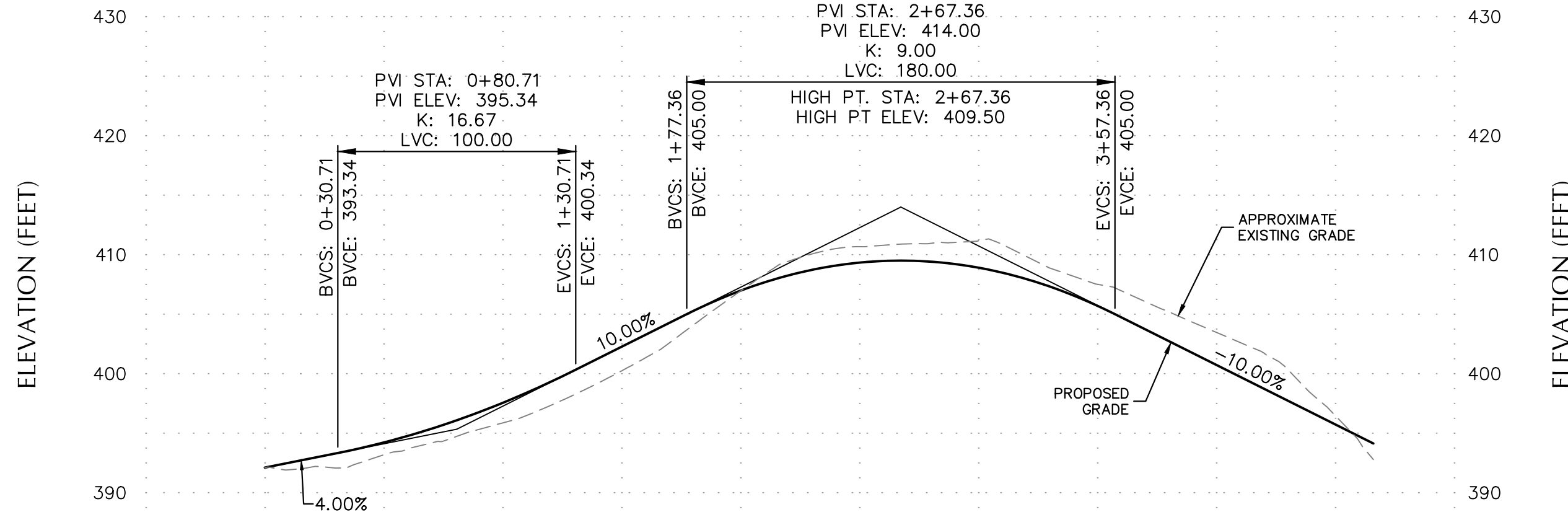


ACCESS ROAD 1 PROFILE

H: 1" = 50'

V: 1" = 10'

DISTANCE (FEET)	-50	0	100	200	300
EXISTING ELEV (FEET)	394.6	392.0	390.4	388.1	386.7
PROPOSED ELEV (FEET)	394.6	392.1	389.6	387.1	384.6

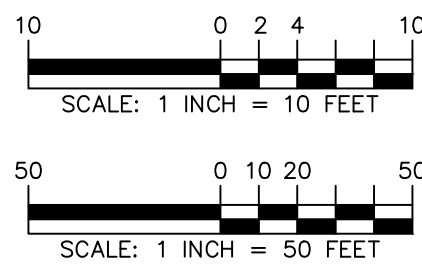



ACCESS ROAD 2 PROFILE

H: 1" = 50'

V: 1" = 10'

DISTANCE (FEET)	-50	0	100	200	300	400	500
EXISTING ELEV (FEET)	392.1	393.2	395.9	400.2	406.9	411.2	407.5
PROPOSED ELEV (FEET)	392.1	394.2	397.5	402.3	407.0	409.3	408.9






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Drawing No.

CG201

ACCESS ROAD PROFILES

Sheet 10 of 17

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POLLUTION PREVENTION NOTES

GOOD HOUSEKEEPING PRACTICES ARE DESIGNED TO MAINTAIN A CLEAN AND ORDERLY WORK ENVIRONMENT. GOOD HOUSEKEEPING MEASURES MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS BY THOSE PARTIES INVOLVED WITH THE DIRECT CARE AND DEVELOPMENT OF THE PROJECT. THE FOLLOWING MEASURES SHOULD BE IMPLEMENTED TO CONTROL THE POSSIBLE EXPOSURE OF HARMFUL SUBSTANCES AND MATERIALS TO STORMWATER RUNOFF:

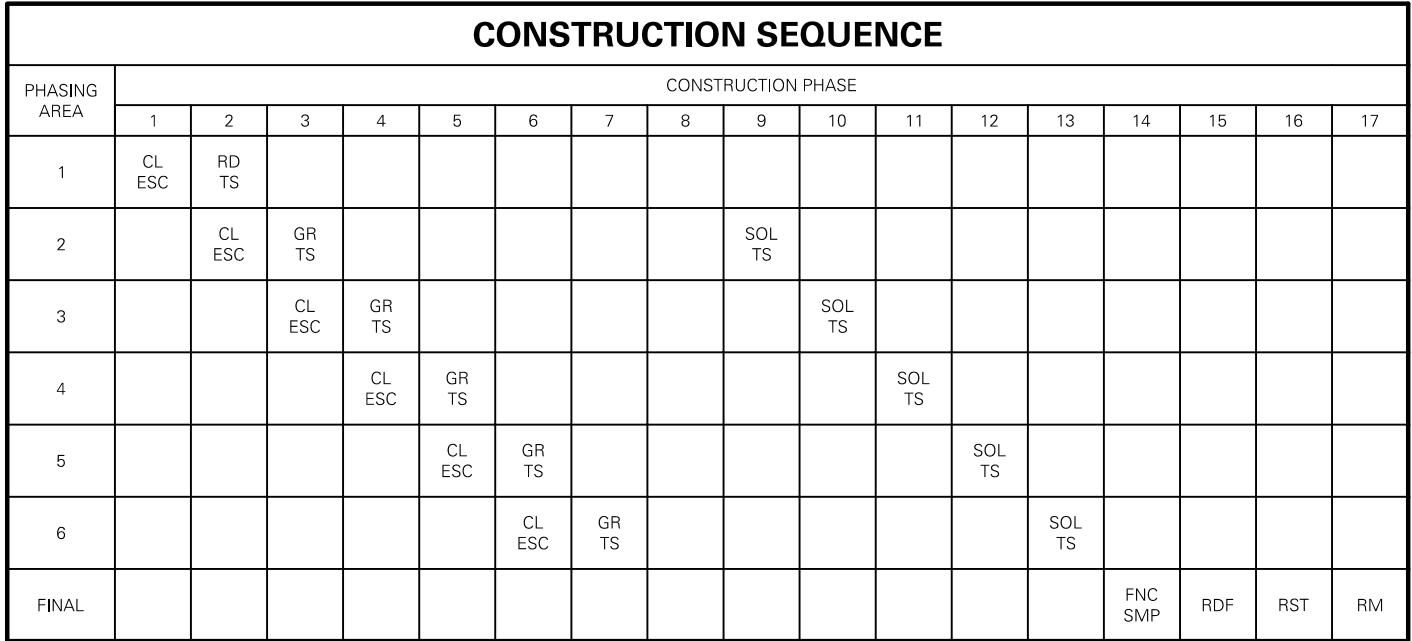
1. MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATION MUST BE STOCKPILED AWAY FROM STORM DRAINAGE, WATER BODIES AND/OR WATERCOURSE, AND SURROUNDED WITH ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES. SOIL STOCKPILE LOCATIONS MUST BE EXPOSED NO LONGER THAN 14 DAYS BEFORE SEEDS.
2. EQUIPMENT MAINTENANCE AREAS MUST BE PROTECTED FROM STORMWATER FLOWS AND MUST BE SUPPLIED WITH APPROPRIATE WASTE RECEPTACLES FOR SPENT CHEMICALS, SOLVENTS, OILS, GREASES, GASOLINE, AND ANY POLLUTANTS THAT MIGHT WASH-DOWN THE SURROUNDING HABITAT AND/OR WATER SUPPLY. EQUIPMENT WASH-DOWN ZONES MUST BE LOCATED WITHIN AREAS DRAINING TO SEDIMENT CONTROL DEVICES.
3. THE USE OF DETERGENTS FOR LARGE-SCALE (I.E., VEHICLES, BUILDINGS, PAVEMENT SURFACES, ETC.) WASHING IS PROHIBITED.
4. MATERIAL STORAGE LOCATIONS AND FACILITIES (I.E., COVERED STORAGE AREAS, STORAGE SHEEDS, ETC.) MUST BE LOCATED ON-SITE AND MUST BE STORED ACCORDING TO THE MANUFACTURER'S STANDARDS IN A DEDICATED STAGING AREA. CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER TOXIC MATERIAL MUST BE STORED IN WATERPROOF CONTAINERS. RUNOFF CONTAINING SUCH MATERIALS MUST BE COLLECTED AND REMOVED FROM THE SITE IMMEDIATELY AND DISPOSED AT AN APPROVED SOLID WASTE OR CHEMICAL DISPOSAL FACILITY.
5. HAZARDOUS SPILLS MUST BE IMMEDIATELY CONTAINED TO PREVENT SUCH POLLUTANTS FROM ENTERING THE SURROUNDING HABITAT AND/OR WATER SUPPLY. SPILL KITS MUST BE PROVIDED ON-SITE AND MUST BE DISPLAYED IN A PROMINENT LOCATION FOR EASE OF ACCESS AND USE. SPILLS GREATER THAN FIVE (5) GALLONS MUST BE REPORTED TO THE NYSDEC RESPONSE UNIT AT 1-800-457-7362. IN ADDITION, A RECORD OF THE SPILL AND/OR NOTIFICATIONS MUST BE DOCUMENTED AND ATTACHED TO THE SWPPP.
6. PORTABLE SANITARY WASTE FACILITIES MUST BE PROVIDED ON-SITE FOR WORKERS AND MUST BE PROPERLY MAINTAINED.
7. DUMPSTERS AND/OR DEBRIS CONTAINERS MUST BE LOCATED ON-SITE AND MUST BE OF ADEQUATE SIZE TO MANAGE RESPECTIVE MATERIALS. REGULAR COLLECTION AND DISPOSAL OF WASTES MUST OCCUR AS REQUIRED.
8. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 50 FEET FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS AREAS TO PREVENT DISTURBANCE. TEMPORARY CONCRETE WASHOUT SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONSTRUCTION EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER NEEDED, THE FACILITY SHOULD BE REMOVED AND THE CONCRETE SHOULD BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT THE TEMPORARY CONCRETE WASHOUT FACILITIES MUST BE REMOVED AND DISPOSED OF: HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITY MUST BE BACKFILLED AND/OR REPAIRED, SEEDED, AND MULCHED FOR FINAL STABILIZATION.
9. NON-STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION, WHICH DISCHARGES FROM THE SITE, MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE. IT CAN BE RETAINED IN THE PONDS UNTIL IT INFILTRATES AND EVAPORATES.

- 00 HOUSEKEEPING PRACTICES ARE DESIGNED TO MAINTAIN A CLEAN AND ORDERLY WORK ENVIRONMENT. GOOD HOUSEKEEPING MEASURES MUST BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS BY THOSE PERSONS INVOLVED WITH THE DIRECT CARE AND DEVELOPMENT OF THE SITE. THE FOLLOWING MEASURES SHOULD BE IMPLEMENTED TO CONTROL THE POSSIBLE EXPOSURE OF HARMFUL SUBSTANCES AND MATERIALS TO STORMWATER RUNOFF:
1. MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATION MUST BE STOCKPILED AWAY FROM STORM DRAINAGE, WATER BODIES AND/OR WATERCOURSES AND SURROUNDING BY THOSE PERSONS INVOLVED WITH SEDIMENT CONTROL MEASURES. STOCKPILE LOCATIONS MUST BE EXPOSED NO LONGER THAN 14 DAYS BEFORE SEEDING.
2. EQUIPMENT MAINTENANCE AREAS MUST BE PROTECTED FROM STORMWATER FLOWS AND MUST BE SUPPLIED WITH APPROPRIATE RECEPTACLES FOR SPENT CHEMICALS, SOLVENTS, OILS, GREASES, GASOLINE, AND ANY POLLUTANTS THAT MIGHT CONTAMINATE THE SURROUNDING HABITAT AND/OR WATER SUPPLY. EQUIPMENT WASH-DOWN ZONES MUST BE LOCATED WITHIN AREAS DRAINING TO SEDIMENT CONTROL DEVICES.
3. THE USE OF DETERGENTS FOR LARGE-SCALE (I.E., VEHICLES, BUILDINGS, PAVEMENT SURFACES, ETC.) WASHING IS PROHIBITED.
4. MATERIAL STORAGE LOCATIONS AND FACILITIES (I.E., COVERED STORAGE AREAS, STORAGE SHEDS, ETC.) MUST BE LOCATED ON-SITE AND MUST BE STORED ACCORDING TO THE MANUFACTURER'S STANDARDS IN A DEDICATED STAGING AREA. CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER TOXIC MATERIAL MUST BE STORED IN CONTAINERS OF CONTAINMENT. RUMBLE CONTAINERS OF SUCH MATERIALS MUST BE COLLECTED, REMOVED FROM THE SITE, TREATED AND DISPOSED AT AN APPROVED SOLID WASTE OR CHEMICAL DISPOSAL FACILITY.
5. HAZARDOUS SPILLS MUST BE IMMEDIATELY CONTAINED TO PREVENT SUCH SPILLS FROM ENTERING THE SURROUNDING HABITAT AND/OR WATER SUPPLY. SPILL KITS MUST BE PROVIDED ON-SITE AND MUST BE DISPLAYED IN A PROMINENT LOCATION FOR EASE OF ACCESS AND USE. SPILLS GREATER THAN FIVE (5) GALLONS MUST BE REPORTED TO THE NYSDRC RESPONSE UNIT AT 1-800-457-7362. IN ADDITION, A RECORD OF THE INCIDENT(S) AND/OR NOTIFICATIONS MUST BE DOCUMENTED AND ATTACHED TO THE SWPPP.
6. PORTABLE SANITARY WASTE FACILITIES MUST BE PROVIDED ON-SITE FOR WORKERS AND MUST BE PROPERLY MAINTAINED.
7. DUMPSTERS AND/OR DEBRIS CONTAINERS MUST BE LOCATED ON-SITE AND MUST BE OF ADEQUATE SIZE TO MANAGE RESPECTIVE MATERIALS. REGULAR COLLECTION AND DISPOSAL OF WASTES MUST OCCUR AS REQUIRED.
8. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED AT MINIMUM OF 50 FEET FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES. SUCH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS AREAS TO PREVENT DISTURBANCE OR TRACKING. A SIGN SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER NEEDED, THE WORKER SHALL BE RESPONSIBLE FOR THE REMOVAL, BEING REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT THE TEMPORARY CONCRETE WASHOUT FACILITIES MUST BE REMOVED AND DISPOSED OF. HOLES, DEPRESSIONS OR LOGS FROM THE FACILITY SHOULD BE REPAIRED. THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES MUST BE BACKFILLED AND/OR REPAIRED, SEED, AND MULCHED FOR FINAL STABILIZATION.
9. NON-STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION, WHICH DISCHARGES FROM THE SITE, MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY OR WELL FROM THE SITE, IT CAN BE RETAINED IN THE PONDS UNTIL IT INFILTRATES AND EVAPORATES.

EROSION & SEDIMENT CONTROL NOTES

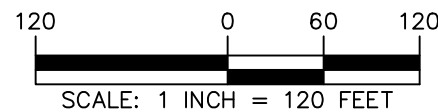
1. REFER TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) SPDES GENERAL PERMIT IN APPENDIX A OF THE STORMWATER POLLUTION PREVENTION PLAN FOR ADDITIONAL REQUIREMENTS.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" LATEST EDITION.
3. BEFORE BEGINNING CONSTRUCTION, THE OWNER MUST SET UP A PRE-CONSTRUCTION MEETING WITH THE QUALIFIED PROFESSIONAL, QUALIFIED INSPECTOR, CONTRACTORS, AND SUBCONTRACTORS TO DISCUSS THE RESPONSIBILITIES RELATED TO THE STORMWATER POLLUTION PREVENTION PLAN IMPLEMENTATION.
4. THE CONTRACTOR AND SUBCONTRACTOR MUST IDENTIFY THE TRAINED INDIVIDUAL THAT WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
5. BEFORE BEGINNING CONSTRUCTION, ALL EROSION AND SEDIMENT CONTROLS MUST BE INSTALLED IN ACCORDANCE WITH THE PLANS. SITE PREPARATION ACTIVITIES MUST BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISTURBANCE. EXISTING VEGETATION TO REMAIN MUST BE PROTECTED TO ENSURE OVER CLEARING DOES NOT OCCUR.
6. PERMANENT TRAFFIC CORRIDORS MUST BE ESTABLISHED AND "ROUTES OF CONVENIENCE" MUST BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES MUST BE INSTALLED AT THE LOCATIONS SHOWN ON THE PROJECT PLANS.
7. STOCKPILED TOPSOIL MUST BE ENCLOSED WITH SILT FENCE OR HAY BALES AND COVERED OR TEMPORARILY SEEDED. ALL GRASS SEED MUST CONTAIN AT LEAST 25% RAPID GERMINATING PERENNIAL RYE GRASS.
8. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION MUST BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
9. DUST MUST BE CONTROLLED BY SPRINKLING EXPOSED SOIL AREAS PERIODICALLY WITH WATER AS REQUIRED.
10. EROSION MATERIAL TEMPORARILY STOCKPILED ON SITE DURING CONSTRUCTION MUST BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND MUST BE PROPERLY PROTECTED BY A SILT FENCE BARRIER.
11. EARTHWORK ACTIVITIES MUST BE CONSISTENT WITH THE PHASING PLANS. THE EARTHWORK OPERATION AREAS MUST BE STABILIZED ON AN ONGOING BASIS WITH NO AREAS THAT ARE NOT CURRENTLY UNDER CONSTRUCTION LEFT WITHOUT AT LEAST TEMPORARY COVER FOR MORE THAN 14 DAYS.
12. EROSION AND SEDIMENT CONTROL INSPECTIONS:
 - A. THE TRAINED INDIVIDUAL MUST INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES ON A DAILY BASIS TO ENSURE PROPER PERFORMANCE. ANY SEDIMENT BUILT UP MUST BE CLEANED AND REMOVED. ALL DAMAGES TO EROSION AND SEDIMENT CONTROLS MUST BE REPAIRED AT THE END OF THE WORK DAY.
 - B. THE QUALIFIED INSPECTOR MUST CONDUCT SITE INSPECTIONS EVERY 7 DAYS. ANY DEFICIENCIES NOTED IN THE REPORTS MUST BE CORRECTED IMMEDIATELY BY THE CONTRACTOR.
 - C. IF SOIL DISTURBANCE ACTIVITIES ARE SUSPENDED FOR WINTER SHUTDOWN, TEMPORARY STABILIZATION MEASURES WILL BE APPLIED TO ALL DISTURBED AREAS. IF APPROVED BY THE NYSDEC OR M54 MUNICIPALITY, THE FREQUENCY OF INSPECTIONS BY THE QUALIFIED INSPECTOR MAY BE REDUCED TO ONE INSPECTION EVERY 30 DAYS.
 - D. IF AUTHORIZED BY THE NYSDEC OR M54 MUNICIPALITY TO DISTURB MORE THAN 5 ACRES AT ONE TIME, THE QUALIFIED INSPECTOR MUST CONDUCT AT LEAST 2 SITE INSPECTIONS, SEPARATED BY 2 DAYS, EVERY 7 DAYS UNTIL SUCH TIME THAT LESS THAN 5 ACRES OF SOIL REMAIN EXPOSED.
13. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE REMOVED WHEN ALL DISTURBED AREAS HAVE UNDERGONE FINAL STABILIZATION, WHEN UPGRADE SURFACES ARE PROPERLY STABILIZED AND ALL STORMWATER MANAGEMENT SYSTEMS ARE IN PLACE AND OPERATIONAL. ALL AREAS DISTURBED BY THE REMOVAL OF THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE FILLED IN, TOPSOILED, SEEDED, AND MULCHED. FINAL STABILIZATION IS ACHIEVED WHEN ALL SOIL DISTURBING ACTIVITIES ARE COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 80% IS ESTABLISHED, OR EQUIVALENT STABILIZATION MEASURES, SUCH AS PLACEMENT OF MULCH OR GEOTEXTILE, IS COMPLETED ON ALL AREAS NOT PAVED OR COVERED BY PERMANENT STRUCTURES.

1. REFER TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDOC) SPDES GENERAL PERMIT IN APPENDIX A OF THE STORMWATER POLLUTION PREVENTION PLAN FOR ADDITIONAL REQUIREMENTS.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH "NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL" LATEST EDITION.
3. BEFORE BEGINNING CONSTRUCTION, THE OWNER MUST SET UP A PRE-CONSTRUCTION MEETING WITH THE QUALIFIED PROFESSIONAL, QUALIFIED INSPECTOR, CONTRACTORS, AND SUBCONTRACTORS TO DISCUSS THE RESPONSIBILITIES RELATED TO THE STORMWATER POLLUTION PREVENTION PLAN IMPLEMENTATION.
4. THE CONTRACTOR AND SUBCONTRACTOR MUST IDENTIFY THE TRAINED INDIVIDUAL THAT WILL BE RESPONSIBLE FOR THE IMPLEMENTATION AND MAINTENANCE OF THE EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
5. BEFORE BEGINNING CONSTRUCTION, ALL EROSION AND SEDIMENT CONTROLS MUST BE INSTALLED IN ACCORDANCE WITH THE PLANS. SITE PREPARATION ACTIVITIES MUST BE PLANNED TO MINIMIZE THE SCOPE AND DURATION OF SOIL DISTURBANCE. EXISTING VEGETATION TO REMAIN MUST BE PROTECTED TO ENSURE OVER CLEARING DOES NOT OCCUR.
6. PERMANENT TRAFFIC CORRIDORS MUST BE AVOIDED. STABILIZED CONSTRUCTION ENTRANCES MUST BE INSTALLED AT THE LOCATIONS SHOWN ON THE PROJECT PLANS.
7. STOCKPILED TOPSOIL MUST BE ENCLOSED WITH SILT FENCE OR HAY BALES AND COVERED OR TEMPORARILY SEEDED. ALL GRASS SEED MUST CONTAIN AT LEAST 25% RAPID GERMINATING PERENNIAL RYE GRASS.
8. DAMAGE TO SURFACE WATERS RESULTING FROM EROSION AND SEDIMENTATION MUST BE MINIMIZED BY STABILIZING DISTURBED AREAS AND BY REMOVING SEDIMENT FROM CONSTRUCTION SITE DISCHARGES.
9. DUST MUST BE CONTROLLED BY SPRINKLING EXPOSED SOIL AREAS PERIODICALLY WITH WATER AS REQUIRED.
10. EROSION MATERIAL TEMPORARILY STOCKPILED ON SITE DURING CONSTRUCTION MUST BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE AND MUST BE PROPERLY PROTECTED BY A SILT FENCE BARRIER.
11. EARTHWORK ACTIVITIES MUST BE CONSISTENT WITH THE PHASING PLANS. THE EARTHWORK OPERATION AREAS MUST BE STABILIZED ON AN ONGOING BASIS WITH NO AREAS THAT ARE NOT CURRENTLY UNDER CONSTRUCTION LEFT WITHOUT AT LEAST TEMPORARY COVER FOR MORE THAN 14 DAYS.
12. EROSION AND SEDIMENT CONTROL INSPECTIONS:
 - A. THE TRAINED INDIVIDUAL MUST INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES ON A DAILY BASIS TO ENSURE PROPER PERFORMANCE. ANY SEDIMENT BUILD-UP MUST BE CLEARED AND REMOVED. ALL DAMAGES TO EROSION AND SEDIMENT CONTROLS MUST BE REPAIRED AT THE END OF THE WORK DAY.
 - B. THE QUALIFIED INSPECTOR MUST CONDUCT SITE INSPECTIONS EVERY 7 DAYS. ANY DEFICIENCIES NOTED IN THE REPORTS MUST BE CORRECTED IMMEDIATELY BY THE CONTRACTOR.
 - C. IF SOIL DISTURBANCE ACTIVITIES ARE SUSPENDED FOR WINTER SHUTDOWN, TEMPORARY STABILIZATION MEASURES WILL BE APPLIED TO ALL DISTURBED AREAS. IF APPROVED BY THE NYSDOC OR M54 MUNICIPALITY, THE FREQUENCY OF INSPECTIONS BY THE QUALIFIED INSPECTOR MAY BE REDUCED TO ONE INSPECTION EVERY 30 DAYS.
 - D. IF AUTHORIZED BY THE NYSDOC OR M54 MUNICIPALITY TO DISTURB MORE THAN 5 ACRES AT ONE TIME, THE QUALIFIED INSPECTOR MUST CONDUCT AT LEAST 2 SITE INSPECTIONS, ONE OF MULCH OR GEOTEXTILE, EVERY 7 DAYS UNTIL SUCH TIME THAT LESS THAN 5 ACRES OF SOIL REMAIN EXPOSED.
13. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE REMOVED WHEN ALL DISTURBED AREAS HAVE UNDERGONE FINAL STABILIZATION. WHEN UPGRADE SURFACES ARE PROPERLY STABILIZED AND ALL STORMWATER MANAGEMENT SYSTEMS ARE IN PLACE AND OPERATIONAL, ALL AREAS DISTURBED BY THE REMOVAL OF THE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES MUST BE FILLED IN, TOPSOILED, SEEDED, AND MULCHED. FINAL STABILIZATION IS ACHIEVED WHEN ALL SOIL DISTURBING ACTIVITIES ARE COMPLETED AND A UNIFORM PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 80% IS ESTABLISHED, OR EQUIVALENT STABILIZATION MEASURES, SUCH AS PLACEMENT OF MULCH OR GEOTEXTILE, IS COMPLETED ON ALL AREAS NOT PAVED OR COVERED BY PERMANENT STRUCTURES.



CONSTRUCTION SEQUENCE KEY	
CL	COMPLETE TREE REMOVAL AND STUMPING.
ESC	INSTALL EROSION AND SEDIMENT CONTROL PRACTICES.
FNC	INSTALL FENCE.
GR	SITE GRADING.
LD	REMOVE TEMPORARY LAYDOWN AREA. STABILIZE THE DISTURBED AREA.
RD	CONSTRUCT ACCESS ROAD, TEMPORARY LAYDOWN AREA, AND/OR INVERTER PADS.
RDF	COMPLETE SITE RESTORATION OVER PERMEABLE HAUL ROAD AND FINALIZE INSTALLATION.
RM	REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL PRACTICES. STABILIZE THE DISTURBED AREA.
RST	COMPLETE SITE RESTORATION. APPLY SEED AND MULCH.
SMP	INSTALL GRASS FILTER STRIP.
SOL	INSTALL SOLAR PANELS.
TS	APPLY TEMPORARY SEED AND MULCH.
NOTE - PHASE AND DESCRIPTIONS ARE INTENDED TO PROVIDE A GENERAL DESCRIPTION OF GROUND DISTURBING ACTIVITIES. GROUND DISTURBANCES SUCH AS TRENCHING FOR CONDUIT AND OTHER ELECTRICAL EQUIPMENT INSTALLATION NEEDS MAY ALSO BE OCCURRING DURING ANY GIVEN PHASE. THE OVERALL DISTURBANCE WILL BE MONITORED BY THE QUALIFIED INSPECTOR TO ENSURE THE SITE DISTURBANCE REMAINS UNDER FIVE ACRES AT ANY GIVEN TIME.	

NOTE - PHASE AND DESCRIPTIONS ARE INTENDED TO PROVIDE A GENERAL DESCRIPTION OF GROUND DISTURBING ACTIVITIES. GROUND DISTURBANCES SUCH AS TRENCHING FOR CONDUIT AND OTHER ELECTRICAL EQUIPMENT INSTALLATION NEEDS MAY ALSO BE OCCURRING DURING ANY GIVEN PHASE. THE OVERALL DISTURBANCE WILL BE MONITORED BY THE QUALIFIED INSPECTOR TO ENSURE THE SITE DISTURBANCE REMAINS UNDER FIVE ACRES AT ANY GIVEN TIME.



LEGEND	
———— LoD ————	LIMIT OF DISTURBANCE
=====	PHASE BOUNDARY
————100————	PROPOSED MAJOR CONTOUR
————101————	PROPOSED MINOR CONTOUR

———— LoD ————	LIMIT OF DISTURBANCE
————	PHASE BOUNDARY
———— 100 ————	PROPOSED MAJOR CONTOUR
———— 101 ————	PROPOSED MINOR CONTOUR



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PERSON, UNLESS HE IS ACTING UNDER THE DIRECTION OF A LICENSED



HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220

SECTION 35-4, BLOCK 5107, 7-210, & 7-220
TOWN OF MARLBOROUGH
ULSTER COUNTY
NEW YORK

Project No. 190107801 **LANGRAN**

Project

REV	DATE	DRAWN	CHECKED	DESCRIPTION
0.	08/30/2024	LC	CZ	INITIAL SUBMITTAL
1.	11/13/2024	LC	CZ	PER TOWN COMMENTS & UCDPH SUBMITTAL

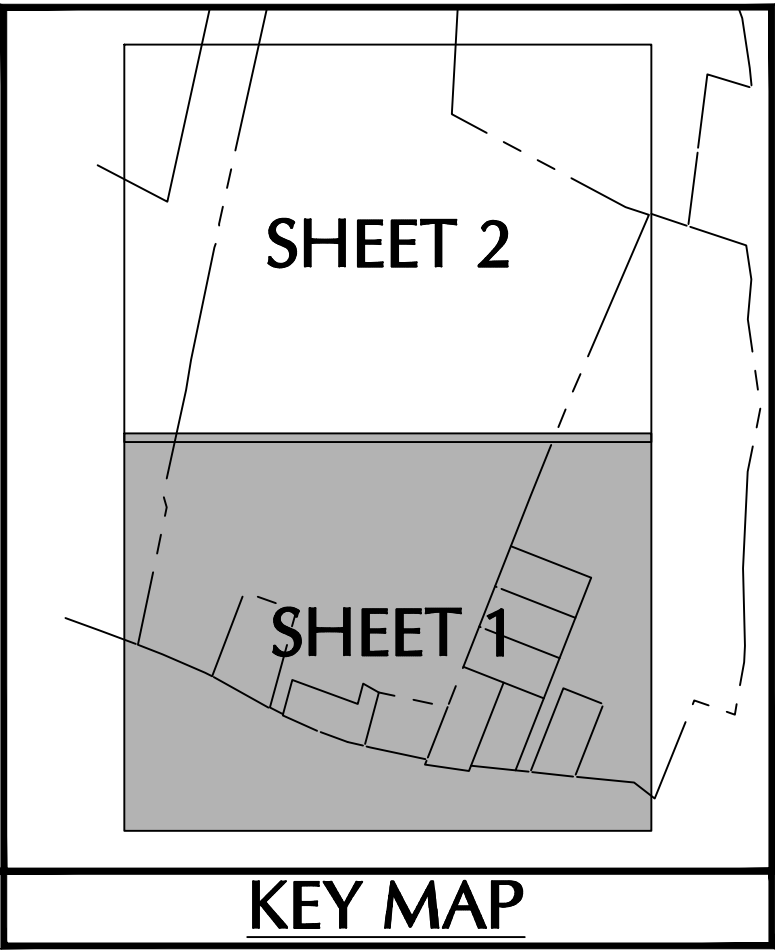
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CE100

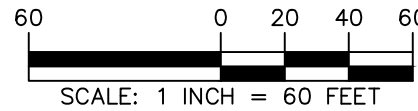
PHASING PLAN

Sheet 11 of 17

SEE SHEET 2




LEGEND	
LoD	LIMIT OF DISTURBANCE
— x — x — x —	SILT FENCE
— x — x — x — x —	DOUBLE ROW SILT FENCE
• • • • •	FILTER SOCKS
[Pattern]	STABILIZED CONSTRUCTION ENTRANCE
[Pattern]	TEMPORARY SOIL STOCKPILE
[Pattern]	CONCRETE WASHOUT AREA



ULSTER COUNTY STANDARD NOTE


NO SITE PREPARATION OR CONSTRUCTION, INCLUDING UTILITY CONNECTIONS, SHALL COMMENCE UNTIL A VALID HIGHWAY WORK PERMIT HAS BEEN SECURED FROM THE ULSTER COUNTY DEPARTMENT OF PUBLIC WORKS UNDER SECTION 136 OF THE HIGHWAY LAW.



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Project No. 190107801

Project

HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
TOWN OF MARLBOROUGH
ULSTER COUNTY
NEW YORK

REV	DATE	DRAWN	CHECKED	DESCRIPTION
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1.	11/15/2024	LC	CZ	PER TOWN COMMENTS & UCDPW SUBMITTAL

Drawing No.

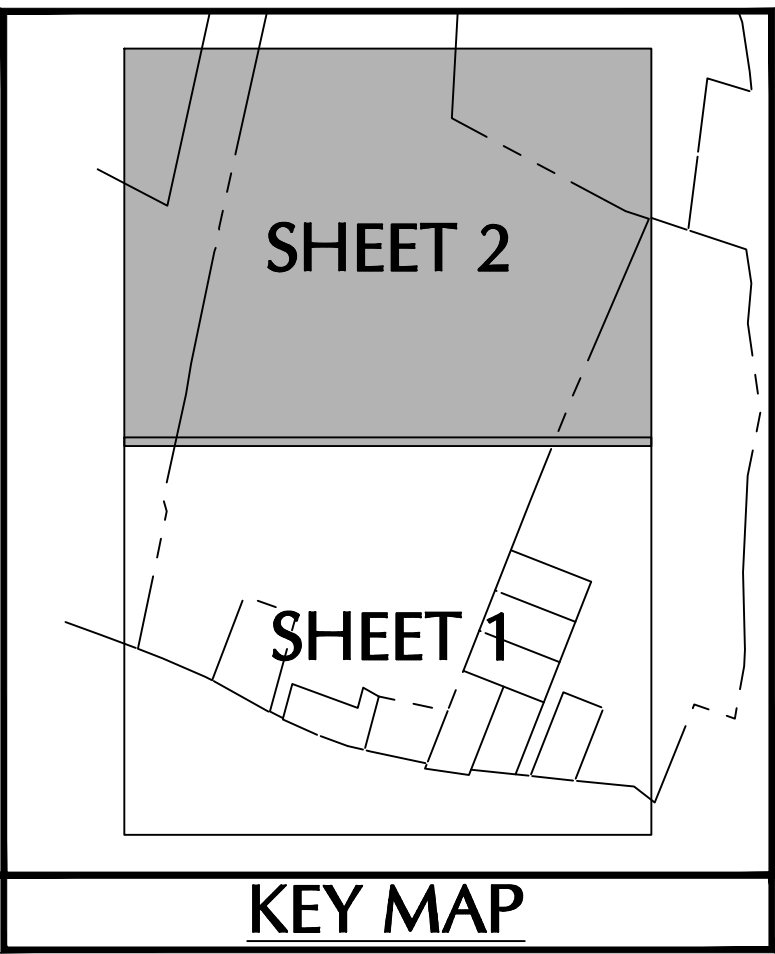
CE101

EROSION & SEDIMENT CONTROL

PLAN (1 OF 2)

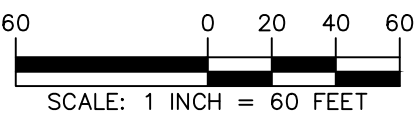
Sheet 12 of 17

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LEGEND	
— LoD —	LIMIT OF DISTURBANCE
— x — x — x —	SILT FENCE
— x — x — x — x — x —	DOUBLE ROW SILT FENCE
• • • • •	FILTER SOCKS
[Stippled Area]	STABILIZED CONSTRUCTION ENTRANCE
[Hatched Area]	TEMPORARY SOIL STOCKPILE
[Grid Pattern]	CONCRETE WASHOUT AREA

SEE SHEET 2





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Project No. 190107801

HIGHLAND SOLAR

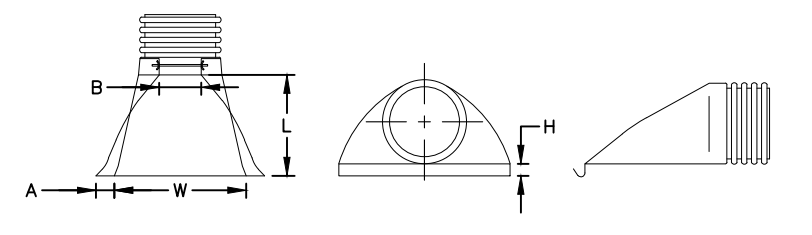
SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
TOWN OF MARLBOROUGH
ULSTER COUNTY
NEW YORK

REV	DATE	DRAWN	CHECKED	DESCRIPTION
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1.	11/15/2024	LC	CZ	PER TOWN COMMENTS & UCDPW SUBMITTAL

Drawing No.

CE102
EROSION & SEDIMENT CONTROL
PLAN (2 OF 2)
Sheet 13 of 17

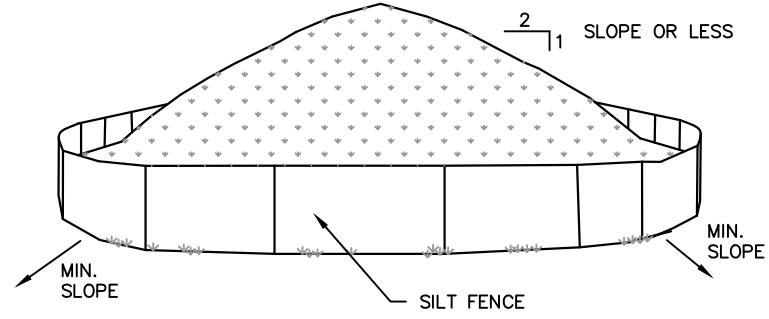
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DIA. (IN)	12	15	18	24	30	36
A (IN)	6.5	6.5	7.5	7.5	7.5	7.5
B (IN)	10.0	10.0	15.0	18.0	22.0	25.0
H (IN)	6.5	6.5	6.5	6.5	8.6	8.6
L (IN)	23.0	25.0	32.0	36.0	58.0	58.0
W (IN)	29.0	29.0	35.0	45.0	63.0	63.0

FLARED END SECTION - HDPE

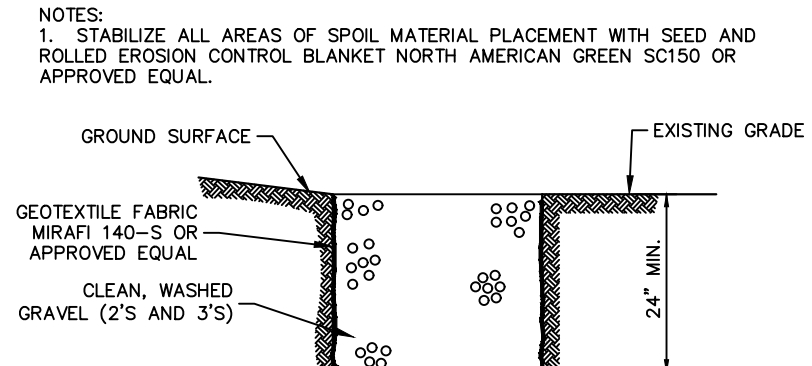
SCALE: NTS



- NOTES:
- AREA CHOSEN FOR STOCKPIILING OPERATIONS SHALL BE DRY AND STABLE.
 - MAXIMUM SLOPE OF STOCKPILE SHALL BE 1V:2H.
 - UPON COMPLETION OF SOIL STOCKPIILING, EACH PILE SHALL BE SURROUNDED WITH SILT FENCING, THEN STABILIZED WITH VEGETATION OR COVERED.
 - SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.
 - HAY BALES TO BE USED WHERE STOCKPILES ARE LOCATED ON PAVED AREAS.

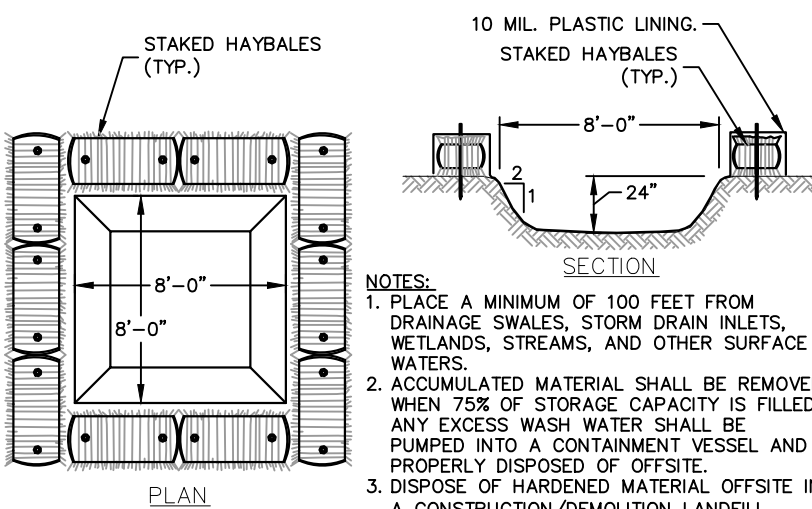
TEMPORARY STOCKPILE

SCALE: NTS



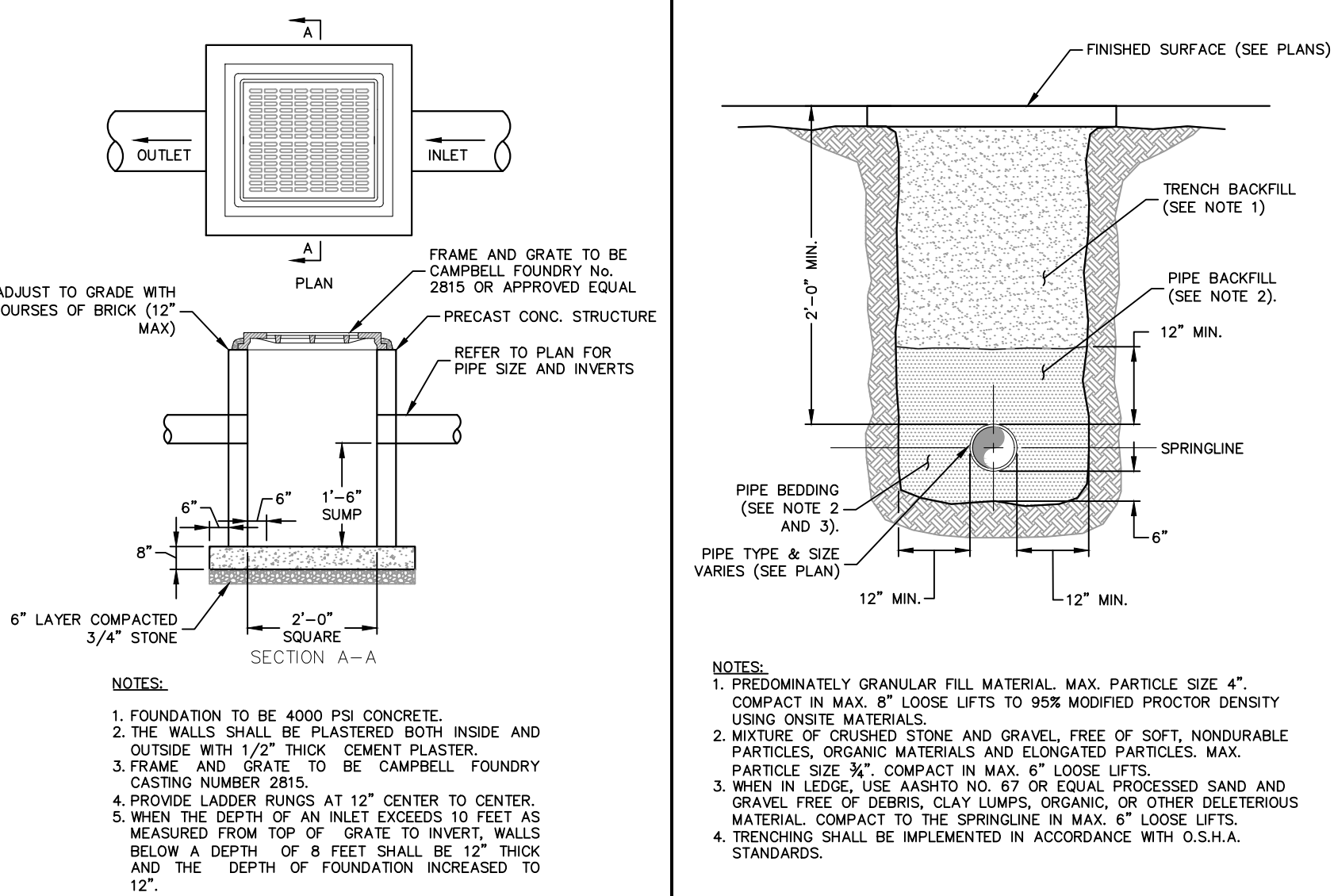
GRAVEL DIAPHRAGMS

SCALE: NTS



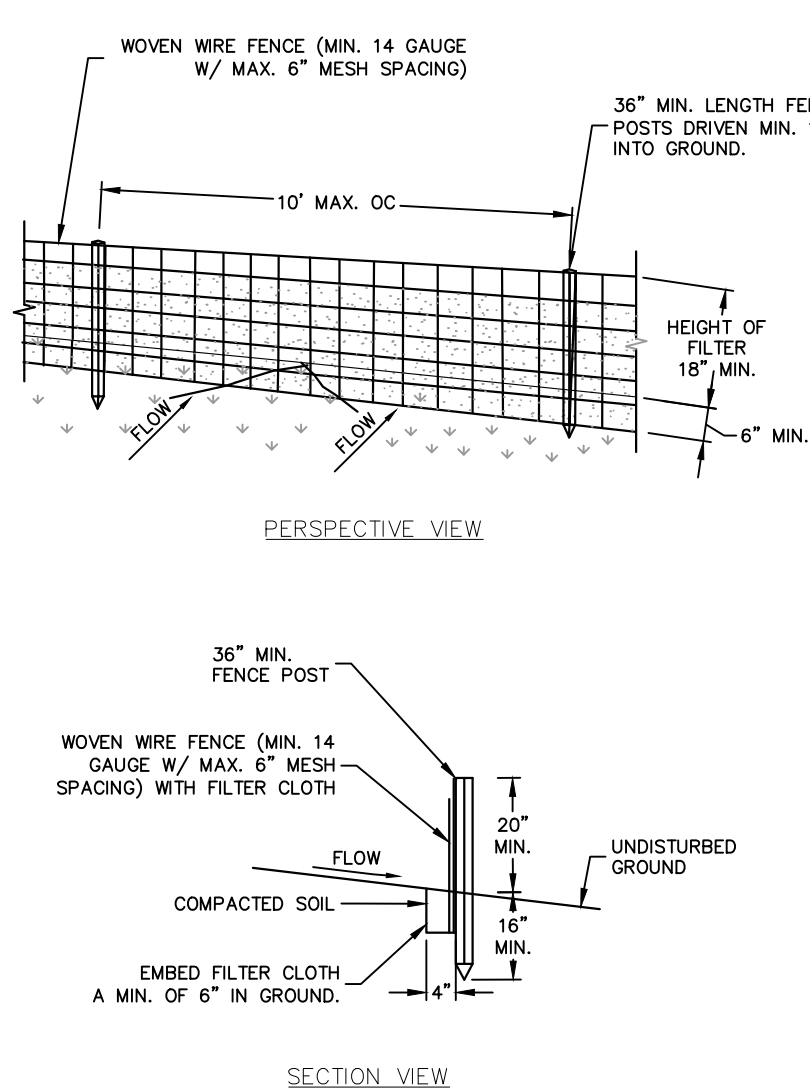
TEMPORARY CONCRETE WASH AREA

SCALE: NTS



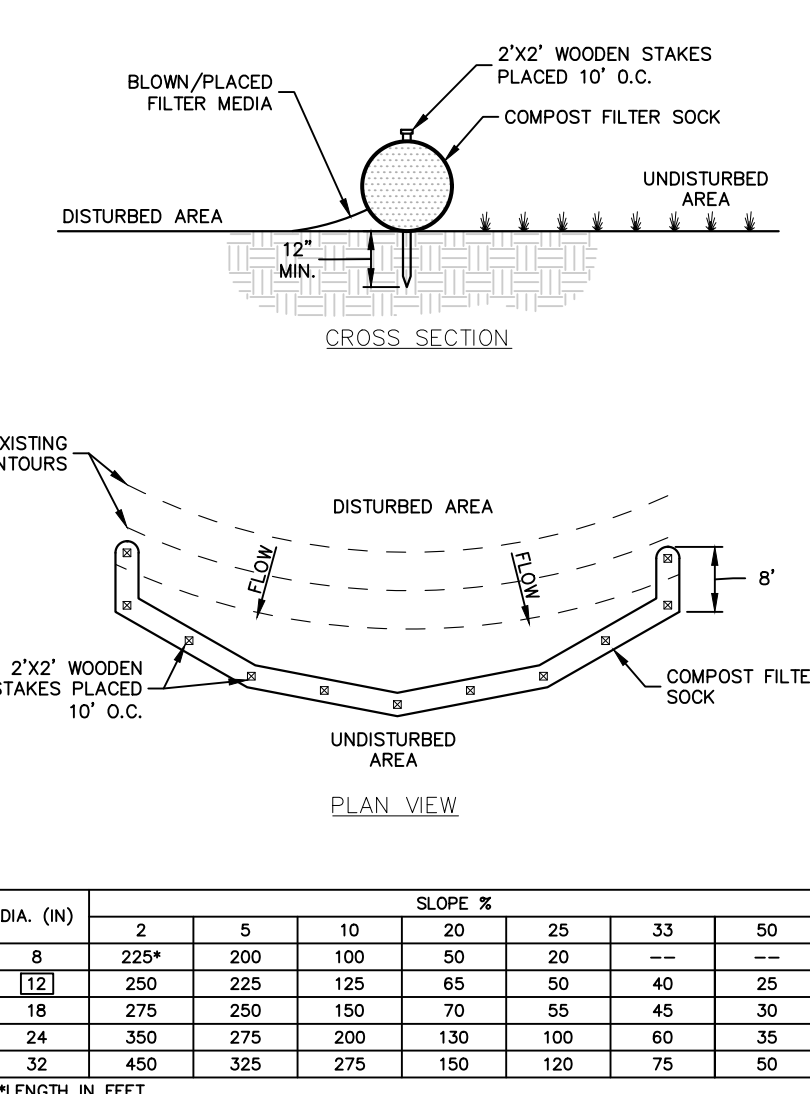
YARD DRAIN

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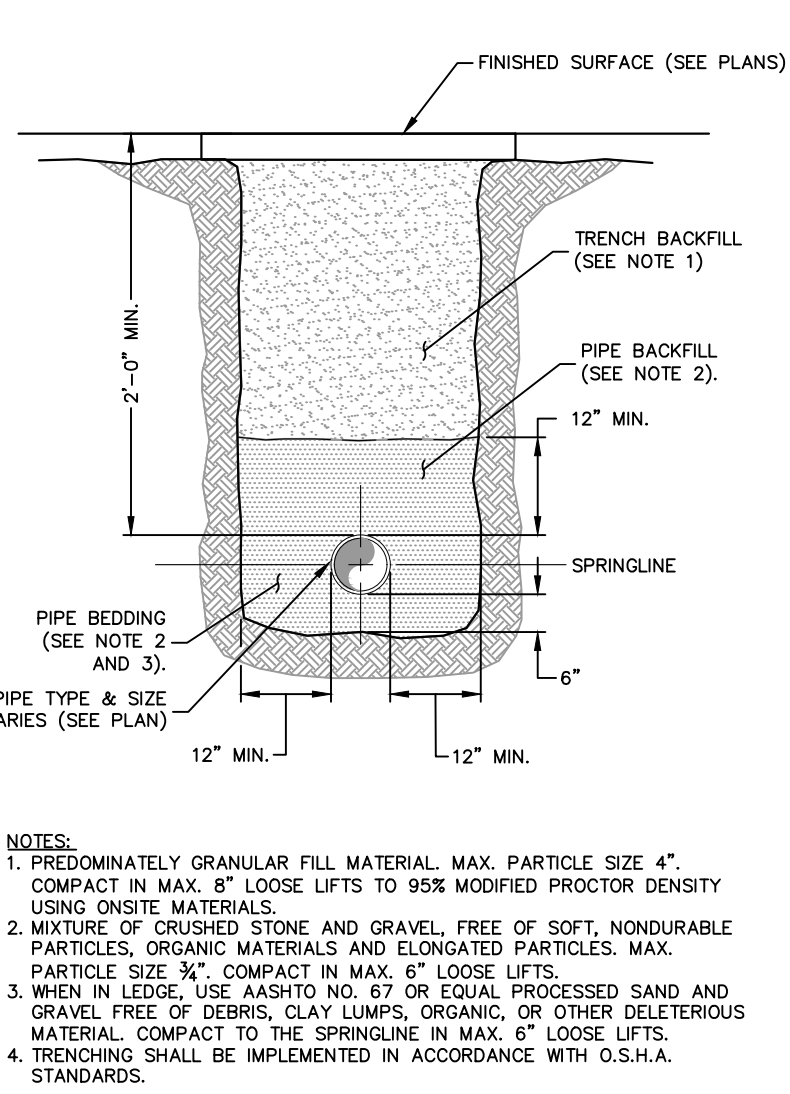
SILT FENCE

SCALE: NTS



FILTER SOCK

SCALE: NTS



DRAINAGE PIPE TRENCH

SCALE: NTS

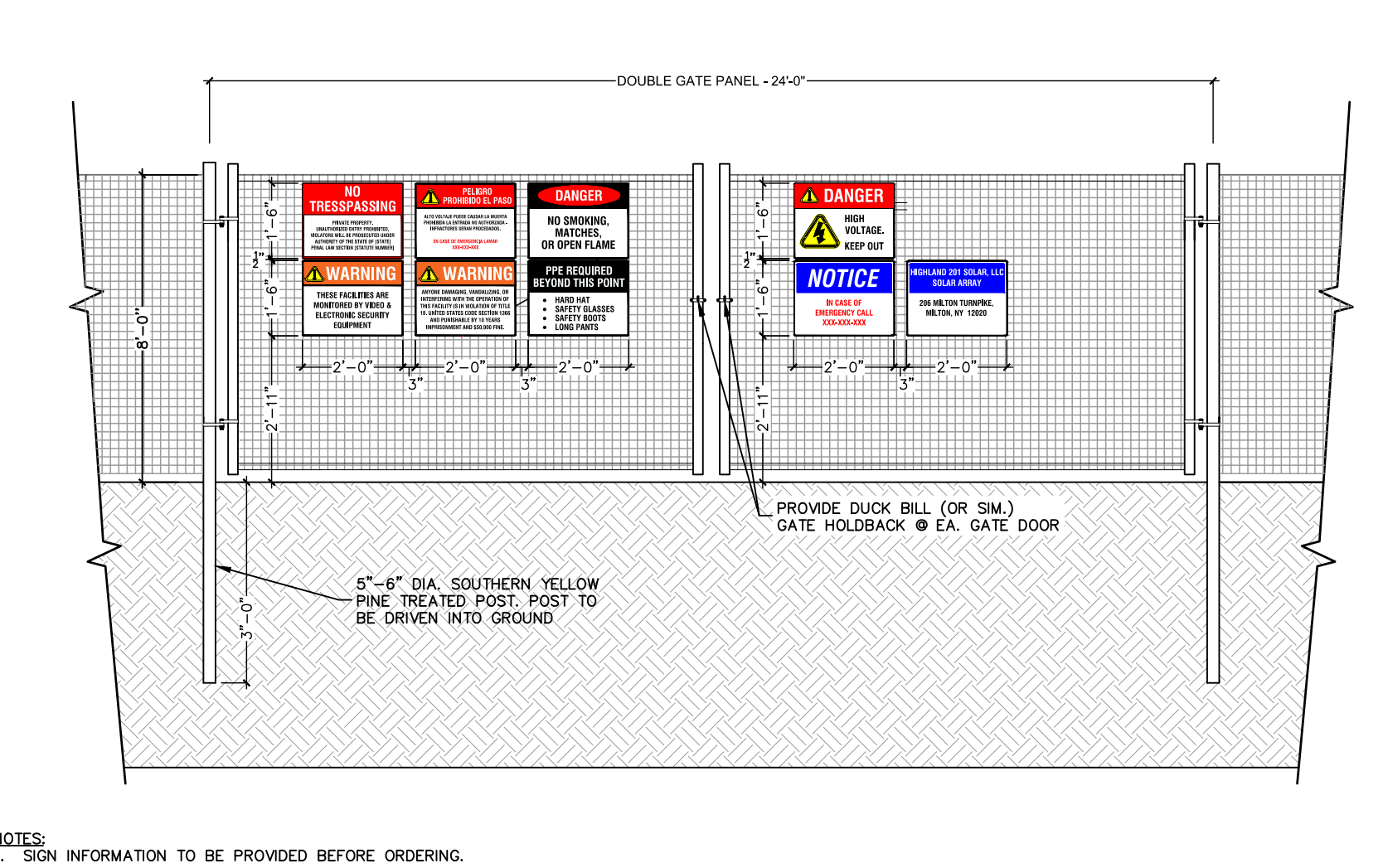
CONSTRUCTION SPECIFICATIONS

- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL, EITHER 1" OR 1 1/2" TYPE, OR HARDWOOD.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 14 GAUGE, 6" MAXIMUM MESH OPENING.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
- FILTER CLOTH SHALL BE EITHER FILTER K, MIRAFI 100K, STABURKA T140N, OR APPROVED EQUIVALENT.
- PRE-FABRICATED UNITS SHALL BE GEOTAP, ENVIRONMENT, OR APPROVED EQUIVALENT THAT MEETS THE MINIMUM REQUIREMENTS SHOWN.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

DETAIL NOTES

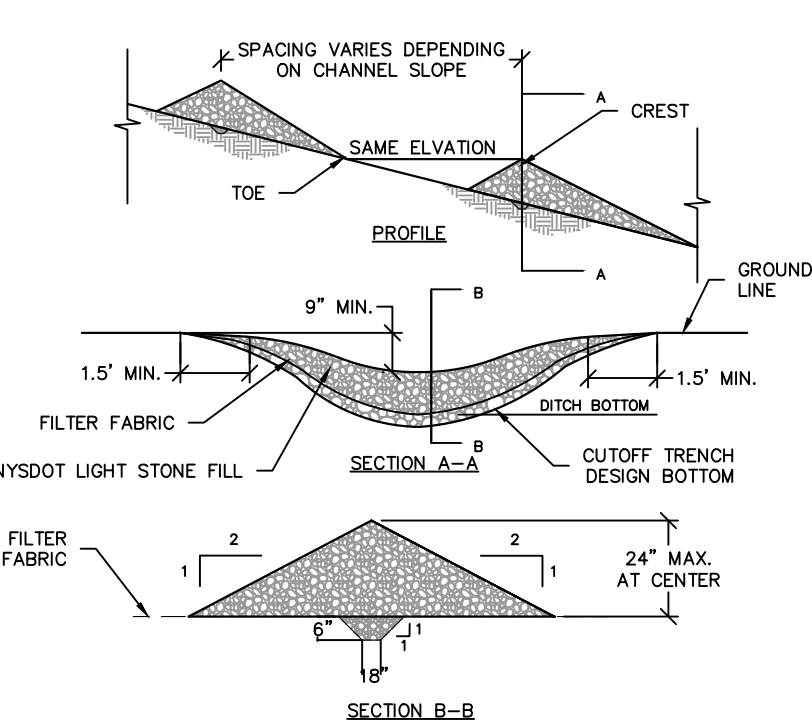
- INSTALLATION SHALL BE DONE IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL ("THE BLUE BOOK").
- ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE, BUT AT LEAST 10 FEET FROM THE TOE OF A SLOPE STEEPER THAN 3H:1V, TO ALLOW FOR MAINTENANCE AND ROLL DOWN. THE AREA BEYOND THE FENCE MUST BE UNDISTURBED OR STABILIZED.
- THE TYPE OF SILT FENCE SPECIFIED FOR EACH LOCATION ON THE PLAN SHALL NOT EXCEED THE MAXIMUM SLOPE LENGTH AND MAXIMUM FENCE LENGTH REQUIREMENTS SHOWN IN THE TABLE BELOW. IF A TYPE SILT FENCE IS NOT SPECIFIED ON THE PLANS, THE CRITERIA FOR STANDARD SILT FENCE CAN BE APPLIED.
- SILT FENCE SHALL BE REMOVED AS SOON AS THE DISTURBED AREA HAS ACHIEVED FINAL STABILIZATION.

SLOPE	STEEPNESS	SLOPE LENGTH/FENCE LENGTH (FT.)		
		STANDARD	REINFORCED	SUPER
<2%	<50:1	300/1500	N/A	N/A
2-10%	50:1 TO 10:1	125/1000	250/2000	300/2500
10-20%	10:1 TO 5:1	100/750	150/1000	200/1000
20-33%	5:1 TO 3:1	60/500	80/750	100/1000
33-50%	3:1 TO 2:1	40/250	70/350	100/500
>50%	>2:1	20/125	30/175	50/250



24' WIDE DOUBLE AGRICULTURAL/GAMING FENCE VEHICULAR GATE

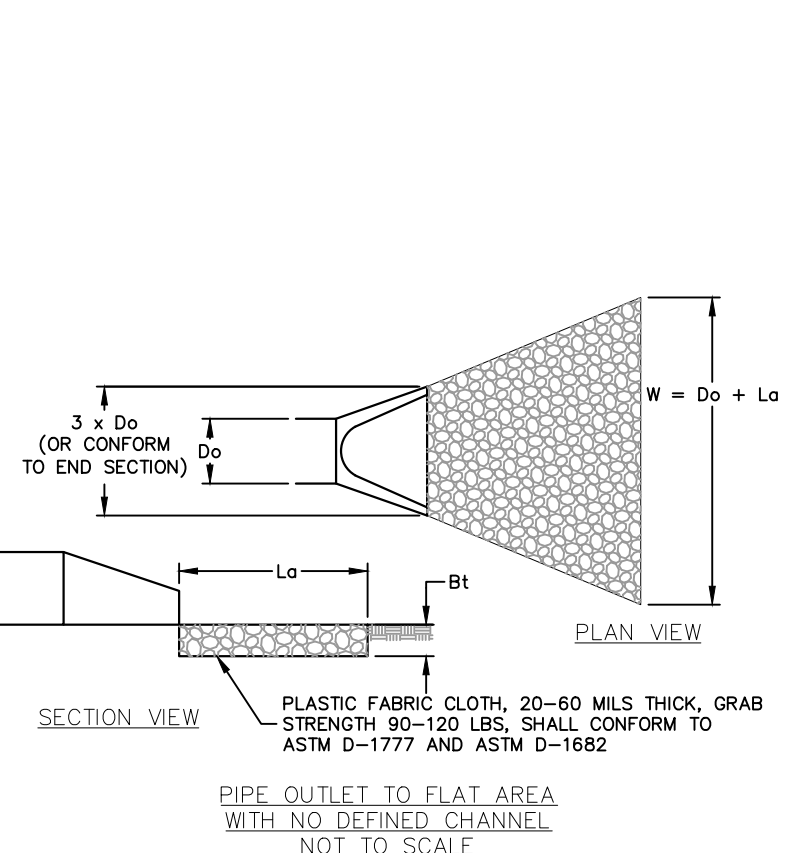
SCALE: NTS



- CONSTRUCTION SPECIFICATIONS:
- STONE SHALL BE 2 TO 9 INCHES IN SIZE (NYSDOT LIGHT STONE FILL MEETS THESE REQUIREMENTS). STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN ON THE PLAN.
 - SET SPACING OF CHECK DAMS AS INDICATED ON PLANS. THE TOE OF THE UPGRADENT CHECK DAM SHALL BE AT THE SAME ELEVATION AS THE CREST OF THE CHECK DAM IMMEDIATELY DOWNGRADENT.
 - EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
 - PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
 - ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAM ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

STONE CHECK DAM

SCALE: NTS



OUTLET	Q (CFS)	Do (IN)	Lo (FT)	W (FT)	d50 (IN)	Bt (IN)
FES-1	6.6	12	10	11	6	14
FES-3	13.6	12	16	17	9	20
FES-5	4.6	12	10	11	6	14
FES-7	9.7	12	12	13	6	14
FES-9	9.7	12	12	13	6	14

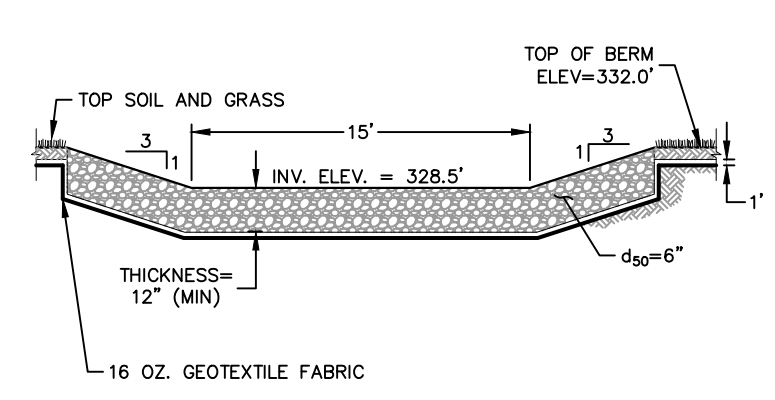
RIP RAP OUTLET PROTECTION

SCALE: NTS

- PRETREATMENT 2' WIDE X 3' DEEP, 2"-5" PEA GRAVEL, NO. 6 DIAPHRAGM LINE WITH FILTER FABRIC (MIRAFI 140N OR EQUAL) (SEE PLAN FOR LOCATIONS)
- REFER TO LANDSCAPE PLANS FOR ADDITIONAL PLANTING INFORMATION
- OUTLET CONTROL STRUCTURE (SET 12" ABOVE FILTER BED). REFER TO DETAIL AND PLANS FOR ADDITION INFORMATION
- CUT FILTER FABRIC 6" BELOW GRADE (TYP.)
- REFER TO LANDSCAPE PLANS FOR ADDITIONAL INFORMATION
- GEOTEXTILE FABRIC IN NON-HOTSPOT AREAS
- 30 MIL. PVC LINER IN HOTSPOTS
- DRAINAGE LAYER (WASHED, NO FINES) 1/2"-1" CRUSHED STONE
- PERFORATED UNDERDRAIN. REFER TO PLANS FOR SIZE AND INVERT ELEVATIONS
- 12" PONDING
- WATER QUALITY
- 2.5' PLANTING SOIL
- 3.33'
- 6" PERF. PIPE IN 10" GRAVEL DRAINAGE LAYER (NO. 57 STONE)
- OUTLET PIPE. REFER TO PLANS FOR ADDITIONAL INFORMATION
- SECTION VIEW - SLOPED MAIN COLLECTOR LATERAL
- SECTION VIEW - NON-SLOPED MAIN COLLECTOR LATERAL
- CONSTRUCTION INSTALLATION:
- STAKE THE LIMITS AND PROVIDE OFFSETS OF THE PROPOSED BIORETENTION AREA AND SET ACCESSIBLE REFERENCE ELEVATIONS, AS NEEDED.
 - INSTALL EROSION AND SEDIMENT CONTROL MEASURES CONSISTENT WITH OVERALL DEVELOPMENT EAS PLAN.
 - STABILIZE THE GRADING AROUND THE PROPOSED AREA AND DIVERT RUNOFF AWAY FROM THE PROPOSED EXCAVATIONS.
 - EXCAVATE THE BIORETENTION AREA TO THE PROPOSED LINES AND GRADES SHOWN ON THE SITE PLANS, AND SCARIFY THE EXISTING SOIL SURFACES, TAKING CARE NOT TO COMPACT THE IN-SITU SOILS.
 - INSTALL THE UNDERDRAIN SYSTEM AND OVERFLOW STRUCTURES. INSTALL THE FABRIC ON THE SIDEWALLS AND STAKE IN PLACE.
 - BACKFILL THE EXCAVATIONS WITH THE SOIL MIXTURE AS SHOWN ON THE PLANS AND SPECIFIED HEREIN.
 - FINISH GRADING THE SURFACE OF THE BIORETENTION AREA. LEAVE ROOM FOR 3-INCHES OF SHREDDED HARDWOOD MULCH.
 - PLANT VEGETATION WITHIN THE BIORETENTION AREA AS SPECIFIED IN THE PLANTING NOTES AND LANDSCAPE PLANS.
 - MULCH THE SURFACE WITH NOT MORE THAN 3-INCHES OF SINGLE PASS. REMOVE TEMPORARY SEDIMENT CONTROLS AND ANY ENTRANCE BLOCKS TO THE BIORETENTION AREA AFTER ACCEPTANCE BY THE DESIGN PROFESSIONAL AND THE LOCAL REGULATORY AUTHORITY.
 - BIORETENTION SOIL MEDIA SHALL BE IMPORTED AND NOT MIXED ON SITE. MATERIAL SHALL BE APPROVED BY THE ENGINEER.

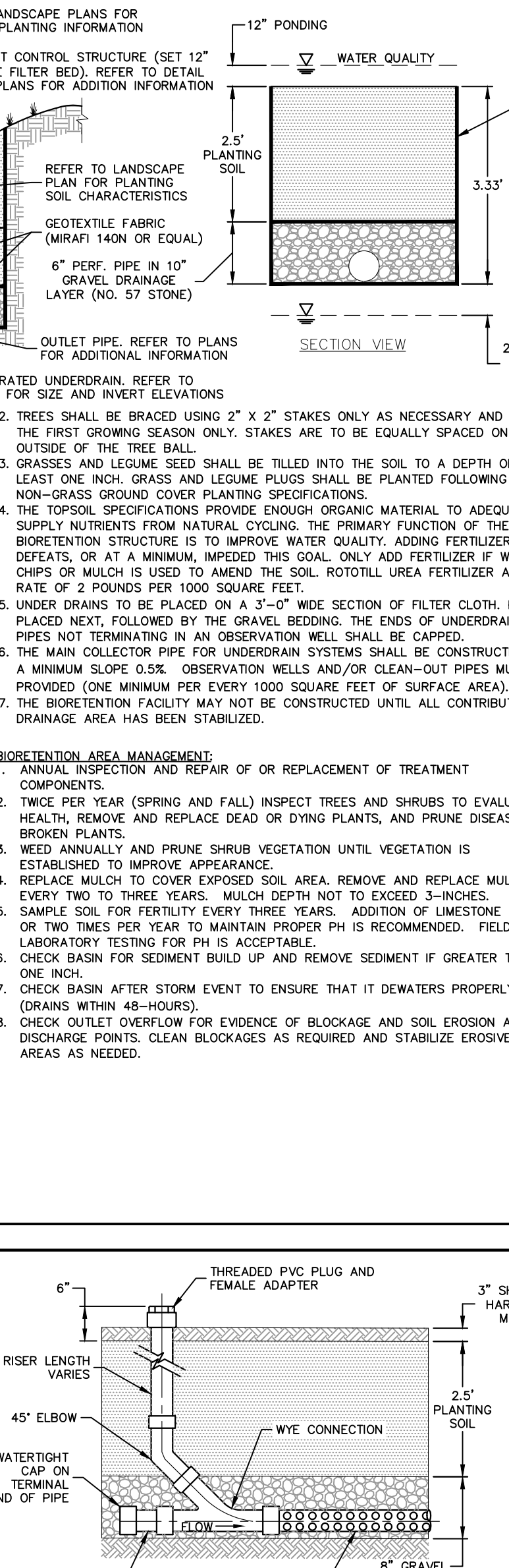
BIORETENTION WITH UNDERDRAIN

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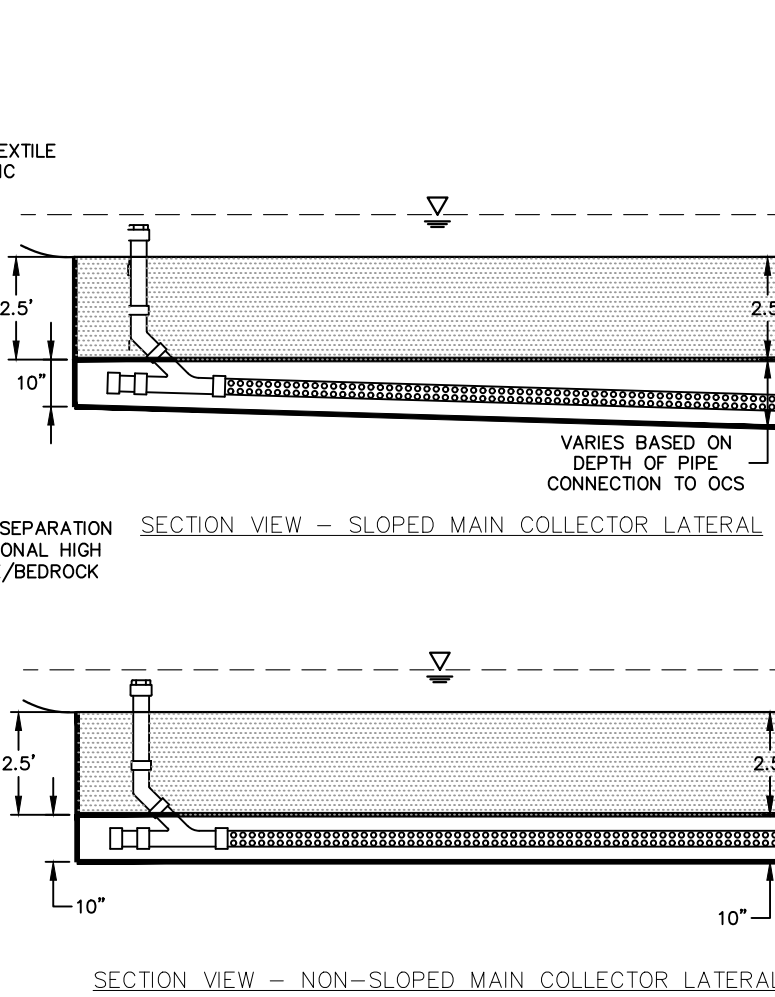
OVERFLOW WEIR

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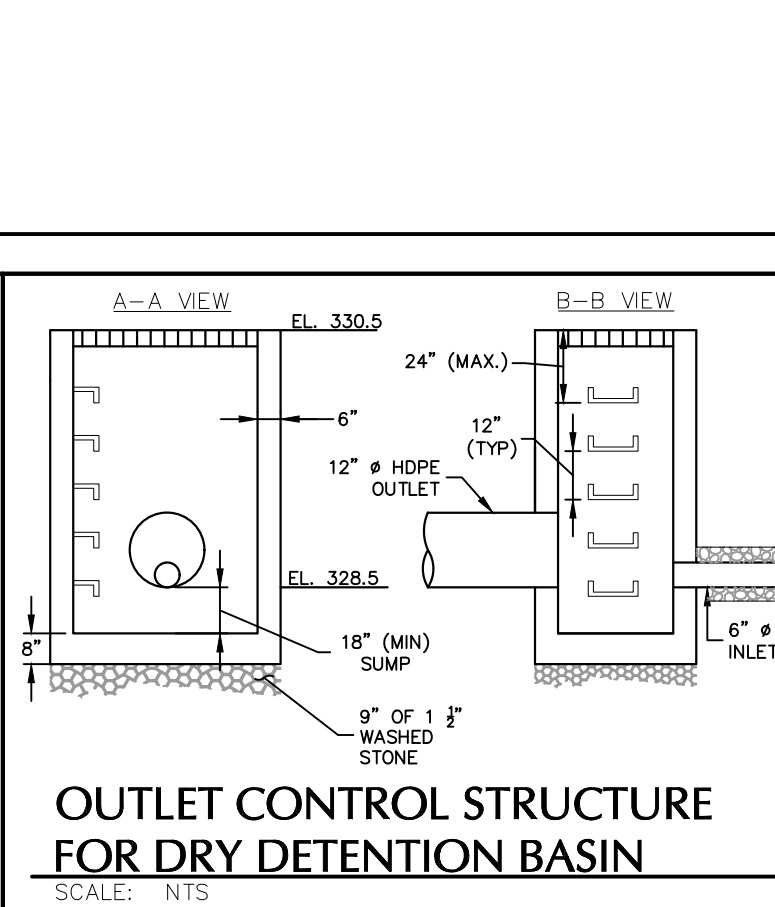


BIORETENTION CLEANOUT

SCALE: NTS



- CONSTRUCTION INSTALLATION:
- STAKE THE LIMITS AND PROVIDE OFFSETS OF THE PROPOSED BIORETENTION AREA AND SET ACCESSIBLE REFERENCE ELEVATIONS, AS NEEDED.
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OUTLET CONTROL STRUCTURE FOR DRY DETENTION BASIN

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Michael J. Finn
Professional Engineer
D81475

HIGHLAND SOLAR

SECTION 95.4, BLOCK 3, LOT 7.110, 7.210, & 7.220
TOWN OF MARLBOROUGH
ULSTER COUNTY

Project

DESCRIPTION
INITIAL SUBMITTAL
PER TOWN COMMENTS & UCDWP SUBMITTAL

CZ CZ

DATE
08/30/2024
11/15/2024

REV
0.
1.


Drawing No.

CS501

DETAILS (1 OF 2)

Sheet 14 of 17



	STATE OF NEW YORK DEPARTMENT OF TRANSPORTATION	
	U.S. CUSTOMARY STANDARD SHEET	
WORK ZONE TRAFFIC CONTROL LEGENDS AND NOTES		
APPROVED SEPTEMBER 18, 2008	ISSUED UNDER EB 08-036	
/S/ DAVID J. CLEMENTS, P.E. DIRECTOR, OFFICE OF TRAFFIC SAFETY AND MOBILITY		619-11

NO SITE PREPARATION OR CONSTRUCTION, INCLUDING UTILITY CONNECTIONS, SHALL COMMENCE UNTIL A VALID HIGHWAY WORK PERMIT HAS BEEN SECURED FROM THE COUNTY DEPARTMENT OF PUBLIC WORKS UNDER SECTION 136 OF THE HIGHWAY LA

1. NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES," 1942 EDITION, PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED.
2. ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A NATURAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST.
3. NO PLANT SHALL BE UNTO THE GROUND BEFORE GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
4. STANDARDS FOR TYPE, SPREAD, HEIGHT, ROOT BALL AND QUALITY OF NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH GUIDELINES AS SET FORTH IN THE "AMERICAN STANDARD FOR NURSERY STOCK," PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
5. NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BE THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANTS' ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES MAY BE SUBSTITUTED IF IT IS EQUIVOCALLY SHOWN TO BE SMALLER, GREATER, COOLER, AND HABIT; THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SERVICE LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES. NOTIFY THE PROJECT ENGINEER AND OWNER IMMEDIATELY OF ANY CONFLICTS WITH PROPOSED PLANTING LOCATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO SUCH UTILITIES.
7. THE CONTRACTOR SHALL MAKE NO BUREAU SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER, TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
8. LANDSCAPE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER. AFTER PLANTING WORK BEGINS, THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF INSTALLED MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INDICATED.
9. THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIAL AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS OF MANUFACTURING METHODS, SPECIFICATIONS, AND QUALITY. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO RETURN REJECTED PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, SPECIES, INJURIES, AND LAEFT DEFECTS, AND TO REJECT MATERIALS THAT DO NOT MEET THE SPECIFICATIONS. THE CONTRACTOR SHALL REMOVE REJECTED MATERIALS AND REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.
10. DELIVERY, STORAGE, AND HANDLING
 - A. PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS MUST BE PROTECTED FROM DEGRADATION DURING DELIVERY, AND WHILE STORED AT THE SITE.
 - B. TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WERE ORDERED. THE CONTRACTOR SHALL PROTECT THE TRUNKS OF TREES AND SHRUBS FROM DAMAGE BY CARS, TRUCKS, OR OTHER HARD-BODIED OR BIND-THE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NARROW LEAF SHEATHS. PROVIDE PROTECTIVE COVERING DURING TRANSPORT. DO NOT DROP BURLAP AND BURRLAPPED STOCK DURING DELIVERY OR HANDLING.
 - C. ALL PLANTS SHALL BE TOPPED AND BURRLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED. THE WIRE BASKET SHALL BE REMOVED FROM THE TREE OR SHRUB IMMEDIATELY UPON DELIVERY. THE CONTRACTOR SHALL REMOVE THE WIRE BASKET FROM THE TREE OR SHRUB IMMEDIATELY UPON DELIVERY. THE CONTRACTOR SHALL REMOVE THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
 - D. THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PERMITTED BY THE OWNER. PLANT MATERIAL FOUND TO BE UNSUITS DYING OR DEAD DURING THIS PERIOD, SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE, AND KEEP ROOTS MOIST BY COVERING WITH WETTED BURLAP.
11. LANDSCAPED AREAS TO BE CLEANED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS, ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
12. ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES.
13. NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF TWO YEARS FROM DATE OF DELIVERY TO THE OWNER. PLANT MATERIAL FOUND TO BE UNLIVELY DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
14. THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION.
15. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
16. THE BACKFILL MIXTURE AND SOIL MIXES TO BE INSTALLED PER THE SPECIFICATIONS.
17. AFTER PLANT IS PLACED IN TRIP PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
18. MULCH SHOULD NOT BE PILED UP ALONG THE TRUNK OF ANY PLANT MATERIAL. NO MULCH OR TOPSOIL SHOULD BE TOUCHING THE BASE OF THE PLANT MATERIAL.
19. IF FENCE INSTALLATION SHALL BE COMPLETED PRIOR TO COMMENCEMENT OF ANY LANDSCAPE PLANTING, LAWN AND GRASSES, OR IRRIGATION WORK.
20. FOR ANY DISCREPANCIES BETWEEN THE PLANT SCHEDULE AND PLANTING PLAN THE GRAPHIC QUANTITY SHOWN SHALL GOVERN.
21. PLANT MATERIALS SHALL NOT BE PLANTED UNTIL THE FINISHED GRADING HAS BEEN COMPLETED.
22. ALL PLANT INSTALLATIONS SHALL BE COMPLETED EITHER BETWEEN APRIL 1 - JUNE 15 OR SEPTEMBER 1 - OCTOBER 15, UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT. SEE LAWN SEEDING DATES IN SEEDING NOTES.

PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, STONES, TRASH AND STONES OVER 1/2" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO EXISTING PLANTS, AND GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS ODORS.

2. **PLANTING SOIL:**

REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOILS AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAR SURFACE SOIL OF ALL ROOTS, PLANTS, SOIL, AND GRAVEL OVER 1" IN DIAMETER AND DEBRIS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICATED IN THE SPECIFICATION.

SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.

CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER, MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS. SOIL OR MANUFACTURED MATERIALS SHALL BE STORED IN STOCKPILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH AN IMPERMEABLE TIME OF ACTUAL USE.

ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO THE STATE COOPERATIVE EXTENSION SERVICE, OR APPROVED AGENCY, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY THROUGHOUT THE PROJECT. FOR TESTING PURPOSES, TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER, THE CONTRACTOR, BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATE RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.

A. THE FOLLOWING TESTING SHOULD BE PERFORMED AND RESULTS GIVEN TO THE LANDSCAPE ARCHITECT FOR APPROVAL OF SOIL ANALYSIS:

- a. PARTICLE SIZE ANALYSIS – LOAMY SAND: 60%-75% SAND, 25%-40% SILT, AND 5%-15% CLAY
- b. FERTILITY ANALYSIS: pH (5.5 – 6.5), SOLUBLE SALTS (LESS THAN 2 MMHO/CM), NITRATE, PHOSPHATE, POTASSIUM, CALCIUM AND MAGNESIUM
- c. ORGANIC MATTER CONTENT: 2.5%-5% IN NATIVE SOILS; UP TO 10% IN AMENDED SOILS
- d. NUTRIENT SUBSTANCE ANALYSIS
- e. MATERIAL DRAINAGE RATE: 60% PASSING IN 2 MINUTES, 40% RETAINED

IF MORE THAN 1% OF MATERIAL SHALL BE RETAINED BY A #4 SIEVE

3. **SOIL AMENDMENT FOR PLANT MATERIAL:**

IF SOIL ORGANIC CONTENT IS INADEQUATE, SOIL SHALL BE AMENDED WITH COMPOST OR COMPOSTABLE, WEED FREE, ORGANIC MATERIAL. ORGANIC AMENDMENT SHALL BE WELL COMPOSTED, PH RANGE OF 6-8, MOISTURE CONTENT 75-85% BY WEIGHT, 100% PASSING THROUGH 1" SIEVE, SOLUBLE SALT CONTENT LESS THAN 0.5 M MHO/CM, MEETING ALL APPLICABLE ENVIRONMENTAL CRITERIA FOR CLEAN FILL.

- a. ORGANIC MATTER AS A SOIL AMENDMENT: LEAF MOLD WITH 60-90% ORGANIC CONTENT BY WEIGHT, SHREDED LEAF LITTER, COMPOSTED FOR A MINIMUM OF 1 YR. SHOULD BE FREE OF DEBRIS, STONES OVER 1/2", WOOD CHIPS
- b. SOIL IN BEDS AND PLANTING ISLANDS OTHER THAN BACKFILL MATERIAL AND TOPSOIL, SHOULD BE FRIABLE, WELL DRAINED, AND FREE OF DEBRIS, INCLUDING STONES AND TRASH.

4. **AMENDMENTS FOR BACK FILL IN TREE AND SHRUB PITS:**

- a. GROUND LIMESTONE (WITH A MIN. OF 88% OF CALCIUM AND MAGNESIUM CARBONATES) USED PENDING APPROVAL OF SOIL ANALYSIS
 - BRING PH LEVELS TO 5.5 MIN. TO 6.5 FOR NON-ERIGACIOUS PLANTS
 - BRING PH LEVELS TO 4.5 MIN. TO 5.5 FOR ERIGACIOUS PLANTS
- b. TERRA-SORB BY PLANT HEALTH CARE 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN PLANTER BACKFILL MIXTURE WITH TREES AND SHRUBS
- c. CHIPWOOD SAVOR BY PLANT HEALTH CARE 800-421-9051 (SEE MANUFACTURER RECOMMENDATIONS) USED IN BACKFILL MIXTURE WITH TREES.

WHEN PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTATIONS.

5. **INFILTRATION/ DETENTION BASIN SOIL MIX:**

INFILTRATION/ DETENTION SOIL MIX IS TO BE USED IN ALL DETENTION AND INFILTRATION BASINS.

a. TOPSOIL/HORTICULTURAL SOIL MIX: REFER TO SPECIFICATIONS LISTED IN SECTION ABOVE

1) **CHEMICAL ANALYSIS**

- a. pH – LOWER THAN 7.0
- b. TOXIC SUBSTANCE ANALYSIS

e. FINAL BIORETENTION MIX

2) **CHEMICAL ANALYSIS**

- a. pH – 5.5-6.5
- b. SOLUBLE SALTS: LESS THAN 2 MMHO/CM

3) **CONTRACTOR TO SUBMIT TOXIC SUBSTANCE ANALYSIS AND MATERIAL DRAINAGE RATE IN ADDITION TO INFORMATION LISTED ABOVE. DRAINAGE RATE OF MATERIAL TO BE 20 INCHES/HOUR(+/- 1 INCH/HOUR).**

SITE TO BE CLEARED WITHIN THE LIMITS OF DISTURBANCE. ALL EXISTING TREES, INCLUDING WOODY AND SHRUB VEGETATION, SHALL BE REMOVED. MEADOW SEED MIX 'A' (SPECIFIED BELOW) WILL BE USED TO STABILIZE THE DISTURBED AREA WITHIN THE LIMITS OF DISTURBANCE.

2. MEADOW MIX A
ERNST SEED MIX ERNMX-186 "ERNST SOLAR FARM SEED MIX"

45.40% FESTUCA RUBRA	GREeping RED FESCUE
15.00% FESTUCA LONGIFOLIA	HARD FESCUE, "SWORD II"
15.00% FESTUCA OVINA VAR. DURIUSCULA	HARD FESCUE, "JETT"
10.00% FESTUCA RUBRA SSP. COMMUTATA	CHEWINGS FESCUE
5.00% POA PRATENSIS	KENTUCKY BLUEGRASS, "MAVERICK"
5.00% POA PRATENSIS	KENTUCKY BLUEGRASS, "NAVY"
4.50% TRIFOLIUM REPENS	WHITE CLOVER, DUTCH

NOTES:

1. SEED AT A RATE OF 260 LBS./ACRE OF 100% PURE LIVE SEED.
2. FOR SPRING SEEDING, APPLY A NURSE CROP OF OATS AT A RATE OF 30 LBS./ACRE.
3. FOR FALL SEEDING, APPLY A NURSE CROP OF WINTER RYE AT A RATE OF 30 LBS./ACRE.

MEADOW MIX B
ERNST SEED MIX ERNMX-611 "NORTHEAST SOLAR POLLINATOR 'A' MIX"

35.00% BOUTELOUA CURTIPENDULA, BUTTE	BUTTE SIDEOTS GRAMA, BUTTE
35.00% SCHIZACHYRIUM SCOPARULUM	FORT INDIANTOWN GAP-PA ECOTYPE LITTLE BLUESTEM,
	FORT INDIANTOWN GAP-PA ECOTYPE
10.00% AGROSTIS PERENNANS	ALBANY PINE BUSH-NY ECOTYPE AUTUMN BENTGRASS,
	ALBANY PINE BUSH-NY ECOTYPE
	BUTTERFLY MILKWEED
	PARTRIDGE PEA, PA ECOTYPE
4.00% ASCLEPIAS TUBEROSA	LANCELEAF COREOPSIS
4.00% CHAMAECRISTA FASCICULATA	BLACKEYED SUSAN
4.00% COREOPSIS LANCEOLATA	NARROWLEAF MOUNTAINMINT
4.00% RUBRICKIA HIRTA	TALL WHITE BEARDTONGUE
0.80% PLYCHOTHEMUM TENNIFOLIUM	AROMATIC ASTER, PA ECOTYPE
0.70% ASTER OBLONGIFOLIUS, PA ECOTYPE	ZIGZAG ASTER, PA ECOTYPE
0.50% PRENANTHOIDES, PA ECOTYPE	NARROWLEAF BLUE EYED GRASS
0.50% SISYRINCHIUM ANGUSTIFOLIUM	GOLDEN ALEXANDERS
0.50% ZIZIA AUREA	GRAY GOLDENROD, PA ECOTYPE
0.10% SOLIDAGO NEMORALIS, PA ECOTYPE	

NOTES:

1. SEED AT A RATE OF 15 LBS./ACRE OF 100% PURE LIVE SEED.
2. FOR SPRING SEEDING, APPLY A NURSE CROP OF OATS AT A RATE OF 30 LBS./ACRE.
3. FOR FALL SEEDING, APPLY A NURSE CROP OF WINTER RYE AT A RATE OF 30 LBS./ACRE.

MEADOW SEED MIX C ERNST SEED MIX ERNMX-183 "NATIVE DETENTION AREA MIX"

32% PANICUM CLANDESTINUM, "TIOGA"	DEERTONGUE, "TIOGA"
20% CAREX VULPINODIA	FOX SEED
20% ELYMUS VIRGINICUS	VIRGINIA WILDRYE
20% PANICUM VIRGATUM, "SHAWNEE"	SWITCHGRASS, "SHAWNEE"
2% AGROSTIS PERENNANS, ALBANY PINE BUSH	AUTUMN BENTGRASS, ALBANY PINE BUSH
2% JUNCUS TENUIS	PATH RUSH
1% JUNCUS EFFUSUS	SOFT RUSH
1% PANICUM RIGIDULUM	REDTOP PANICGRASS

NOTES:

1. SEED AT A RATE OF 20 LBS./ACRE OF 100% PURE LIVE SEED.
2. FOR SPRING SEEDING, APPLY A NURSE CROP OF OATS AT A RATE OF 30 LBS./ACRE.
3. FOR FALL SEEDING, APPLY A NURSE CROP OF WINTER RYE AT A RATE OF 30 LBS./ACRE.

The diagram is a cross-section of a landscape restoration site. It shows several distinct layers and construction steps. At the top is a thin layer of vegetation. Below it is a layer of "6\" imported planting soil (or amended existing planting soil)" which is "ROTO-TILLED INTO SUBGRADE TO A DEPTH OF 12\". Below this is a layer of "PRIOR TO PLACEMENT OF 6\" DEPTH PLANTING SOIL LAYER, THE CONTRACTOR SHALL APPLY 3\" OF COMPOST AND ROTO-TILL INTO SUBGRADE TO A MIN. DEPTH OF 12\". Below that is a layer of "SUBGRADE WITHIN 2\"-6\" OF FINISH GRADE IN PLANTING AREAS SHALL CONSIST OF FREE DRAINING SANDY SOIL FILL". At the bottom is a layer of "EXISTING SOIL PREVIOUSLY STRIPPED FROM FORMER LANDSCAPE AREAS CAN BE USED FOR PLANTING SOIL UPON APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT. CONTRACTOR SHALL REFER TO PLANTING SOIL SPECIFICATIONS FOR REQUIRED SUBMITTALS". On the left side, there are three vertical dimension lines: "6\" MIN." for the top layer, "12\" MIN." for the compost layer, and "2\" MIN." for the subgrade layer.

6" MIN.

12" MIN.

2" MIN.

6" IMPORTED PLANTING SOIL (OR AMENDED EXISTING PLANTING SOIL) SHALL BE ROTO-TILLED INTO SUBGRADE TO A DEPTH OF 12".

PRIOR TO PLACEMENT OF 6" DEPTH PLANTING SOIL LAYER, THE CONTRACTOR SHALL APPLY 3" OF COMPOST AND ROTO-TILL INTO SUBGRADE TO A MIN. DEPTH OF 12".

SUBGRADE WITHIN 2"-6" OF FINISH GRADE IN PLANTING AREAS SHALL CONSIST OF FREE DRAINING SANDY SOIL FILL.

*EXISTING SOIL PREVIOUSLY STRIPPED FROM FORMER LANDSCAPE AREAS CAN BE USED FOR PLANTING SOIL UPON APPROVAL BY THE PROJECT LANDSCAPE ARCHITECT. CONTRACTOR SHALL REFER TO PLANTING SOIL SPECIFICATIONS FOR REQUIRED SUBMITTALS.

A cross-sectional diagram of a planting area. At the top is a layer of vegetation. Below it is a layer of soil, indicated by a vertical dimension line on the left labeled "12" MIN.". The soil layer is hatched with diagonal lines. Below the soil layer is a layer of subgrade, indicated by a vertical dimension line on the right labeled "SUBGRADE". The subgrade is hatched with a cross-hatch pattern. Arrows point from the text descriptions to the corresponding layers in the diagram.

EXISTING SOIL IN ALL PROPOSED PLANTING AREAS SHALL BE ROTO-TILLED TO A DEPTH OF 12" (EXCLUDING TREE PROTECTION AREAS) AND AMENDED IN ACCORDANCE WITH PLANTING SOIL SPECIFICATIONS. EXISTING SOIL WITHIN TREE PROTECTION AREAS SHALL BE LOOSEND AND AMENDED BY NON-MECHANICAL METHODS, PROTECTING ROOT MASS AGAINST DAMAGE.

SUBGRADE

NOTES:

1. CONTRACTOR IS RESPONSIBLE TO SEND SAMPLES OF EXISTING SOILS INTENDED FOR USE IN PLANTING AREAS (1 PER 500 CY) TO TESTING LABORATORY OR UNIVERSITY COOPERATIVE EXTENSION FOR TESTING. ALL TESTING COSTS ARE AT THE CONTRACTOR'S EXPENSE.
2. RECYCLED CRUSHED CONCRETE AND ASPHALT MILLINGS SHALL NOT BE PLACED WITHIN 2'-6" OF FINISH GRADE IN PROPOSED LANDSCAPE AREAS.
3. IMPORTED FILL SHALL CONTAIN NO CONTAMINATION IN EXCEEDENCE OF THE PROJECT STATE ENVIRONMENTAL REVIEW AGENCY STANDARDS AND MEET THE ENVIRONMENTAL REQUIREMENTS FOR THE PROJECT, IF APPLICABLE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF COMPLIANCE PRIOR TO DELIVERY OF ANY FILL TO THE SITE.
4. CONTRACTOR TO LIGHTLY COMPACT ALL PLACED PLANTING SOILS AND RAISE GRADES ACCORDINGLY TO ALLOW FOR FUTURE SETTLEMENT OF PLANTING SOILS (TYP.).
5. NO STONES, WOOD CHIPS, OR DEBRIS LARGER THAN 1/2" SHALL BE ACCEPTABLE WITHIN PLANTING AREAS.

Diagram illustrating the planting instructions for a tree in a container, showing the root ball, soil, mulch, and various layers.

- CENTRAL LEADER SHALL NOT BE CUT OR DAMAGED (TYP.)
- 3" MULCH LAYER. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK.
- SET TOP OF ROOTBALL FLUSH TO GRADE OR 1-2" HIGHER.
- IN SLOWLY DRAINING SOILS.
- 4" HIGH EARTH SAUCER
- BEYOND EDGE OF ROOT BALL.
- PLANTING SOIL AS SPECIFIED
- REMOVE ALL TWINE, ROPE, WIRE, AND BURLAP FROM TOP HALF OF ROOT BALL AND ALL NON-Biodegradable MATERIAL.
- IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, CUT THE WIRE BASKET IN FOUR PLACES AND FOLD DOWN IT INTO PLANTING HOLE.
- TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT.
- SET ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.
- 2.5 X BALL DIA. MIN.

MAINTENANCE OPERATIONS BEFORE APPROVAL:

- A. PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- B. CARE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING OR REPLACING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS AS ORIGINALLY INSTALLED, WATERING WHEN NEEDED OR DIRECTED, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
- C. CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS REQUIRED BEFORE FINAL ACCEPTANCE.

2. MAINTENANCE DURING CONSTRUCTION:

- A. MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RELOCATED TO PROPER GRADE AND POSITION; PLANTING SAUCERS RESTORED AND DEAD MATERIAL REMOVED. STAKES AND GUYS SHALL BE TIGHTENED AND REPAIRED. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.
- B. IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION, ACCEPTANCE SHALL NOT BE GRANTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED ACCEPTABLE BY THE LANDSCAPE ARCHITECT.
- C. ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED, THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS SHALL BE MADE IMMEDIATELY AFTER THE REPORT OF DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
- D. PLANTS SHALL BE GUARANTEED FOR A PERIOD OF TWO YEARS AFTER INSPECTION AND PROVISIONAL ACCEPTANCE.
- E. AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS SECTION TO BE REPLACED SHALL BE REPLACED BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON.

3. LAWN MAINTENANCE:

- A. BEGIN MAINTENANCE IMMEDIATELY AFTER EACH PORTION OF LAWN IS PLANTED AND CONTINUE FOR 8 WEEKS AFTER ALL LAWN PLANTING IS COMPLETED.
- B. WATER TO KEEP SURFACE SOIL MOIST; REPAIR WASHED OUT AREAS BY FILLING WITH TOPSOIL, LIMING, FERTILIZING AND RE-SEEDING. MOW TO 2 1/2 - 3 INCHES AFTER GRASS REACHES 3 1/2 INCHES IN HEIGHT, AND MOW FREQUENTLY ENOUGH TO KEEP GRASS FROM EXCEEDING 3 1/2 INCHES. WEED BY LOCAL SPOT APPLICATION ONLY AFTER GRASS IS WELL-ESTABLISHED.
- C. REMOVE WEEDS FROM THE LAWN AREAS, ONCE GRASS IS WELL ESTABLISHED, IF WEEDS ARE STILL PRESENT; REFER TO SUPPLIER RECOMMENDATIONS FOR PREFERRED TREATMENT METHOD.

[illegible]