# SITE USE PERMIT SE SOUTH HILL ROAD, CHERRY CREEK, NY 14723 13.50 MWAC RATED WIND + ENERGY STORAGE ELECTRIC SY

## **GENERAL NOTES**

- 1. AS CONTAINED HEREIN, "CONTRACTOR" IS ASSUMED TO BE THE EPC PROVIDER HIRED BY THE SYSTEM/PROJECT OWNER.
- 2. WHEN THERE IS A CONFLICT BETWEEN THESE GENERAL NOTES AND THE DRAWINGS, THE DRAWINGS SHALL GOVERN.
- 3. ALL WORK SHALL CONFORM TO THE MINIMUM STANDARDS OF THE FOLLOWING: LOCAL BUILDING CODE, LOCAL ELECTRICAL CODE, ANY OTHER REGULATING AGENCIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK AND THOSE CODES AND STANDARDS LISTED IN THESE DRAWINGS.
- 4. THESE DRAWINGS SHALL NOT BE USED FOR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DEVELOPING A CONSTRUCTION LEVEL DESIGN AND ASSOCIATED DRAWINGS AND DETAILS.
- 5. COORDINATE THESE DRAWINGS WITH SPECIFICATIONS AND MANUFACTURER INSTALLATION AND OPERATION MANUALS.
- 6. UNLESS OTHERWISE NOTED, THE DESIGN REPRESENTED ON THESE PLANS IS BASED ON THE INFORMATION AND CRITERIA LISTED IN THE "BASIS OF DESIGN" SECTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY SUCH INFORMATION IN PREPARATION OF THE CONSTRUCTION DESIGN.
- 7. THE EXISTING CONDITIONS REPRESENTED ON THESE PLANS ARE BASED ON PUBLICLY AVAILABLE INFORMATION AND THE SITE DISCOVERY SUMMARIZED IN THESE DRAWINGS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ACCURACY OF SUCH INFORMATION AND SUPPLEMENT WITH ANY ADDITIONAL REQUIRED INFORMATION.
- 8. UNLESS INDICATED AS EXISTING (E), ALL PROPOSED MATERIALS AND EQUIPMENT SHALL BE CONSIDERED TO BE NEW.
- 9. ALL EQUIPMENT AND COMPONENTS SHALL BE MOUNTED IN COMPLIANCE WITH THE MANUFACTURER'S REQUIREMENTS, CONSTRUCTION DETAILS, AND/OR PRUDENT INDUSTRY STANDARDS.

## PROJECT SCOPE

EXISTING ELECTRICAL SYSTEM UPON COMPLETION.

WHILE THE BATTERIES ARE DISCHARGING.

## SYSTEM DESCRIPTION

SYSTEM SIZE	13.5 MWAC	TURBINE MODEL	VESTAS V150				
NUMBER OF TURBINES	3	ROTOR DIAMETER (FT)	493				
HUB HEIGHT (FT)	394	TIP HEIGHT (FT)	650				
ENERGY STORAGE SYSTEM DESCRIPTION							
SYSTEM POWER CAPACITY		4500 X 3 KWAC (13500 KWAC TOTAL)					
SYSTEM ENERGY CAPACITY		4 HOURS AT RATED POWER CAPACITY					
POWER CONVERSION SYSTEM / INVERTER		SMA SC-3450-UP-US					
TOTAL SYSTEM DESCRIPTION							
TOTAL WIND+STORAGE POWER CAPACITY		4500 X 3 KWAC (13500 KWAC TOTAL)					
MAXIMUM EXPORT TO U	JTILITY	13500 KWAC					

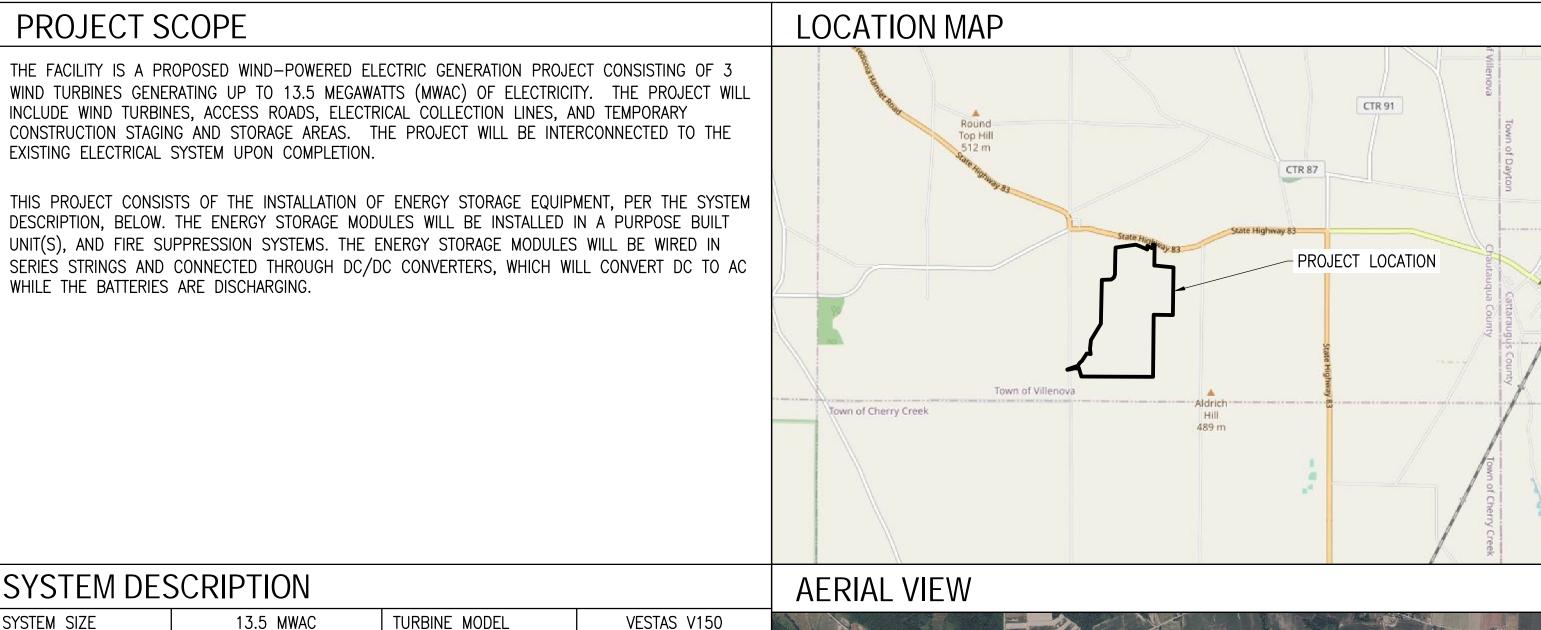
WIND + GRID

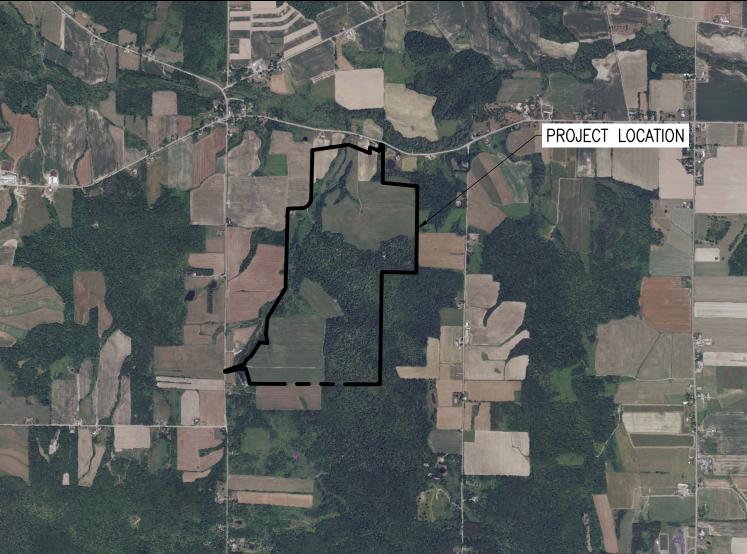
STORAGE CHARGING MODE

PROJECT DIRECTORY

APPLICABLE CODES AND STANDARDS

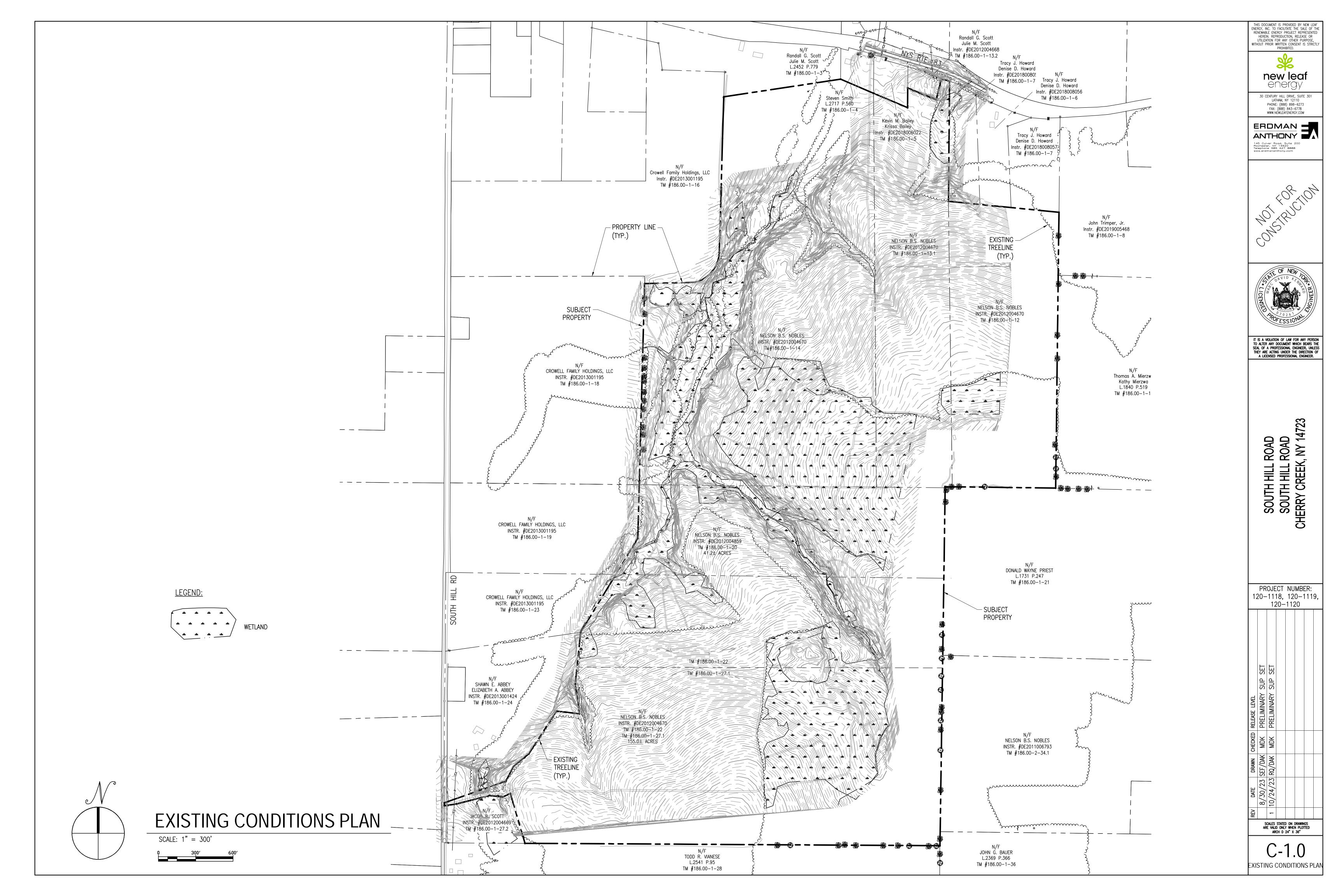
2017 NATIONAL ELECTRICAL CODE 2020 BUILDING CODE OF NEW YORK STATE UL-1741 - INVERTERS UL-1642 - STANDARD FOR LITHIUM BATTERIES UL-1973 - STANDARD FOR BATTERIES FOR USE IN LIGHT ELECTRIC RAIL (LER) APPLICATIONS AND STATIONARY APPLICATION UL-9540 - STANDARD FOR ENERGY STORAGE SYSTEM AND EQUIPMENT	SYSTEM / PROJECT OWNER         VILLENOVA WIND 3, LLC         VILLENOVA WIND 4, LLC         VILLENOVA WIND 5, LLC         800-818-5249         55 TECHNOLOGY DR, SUITE 102         LOWELL, MA 01851         LAND OWNER / HOST         NELSON B.S. NOBLES         (716) 490-4707         7690 ROUTE 83, SOUTH DAYTON NY 14138         AUTHORITY HAVING JURISDICTION         TOWN OF VILLENOVA         1094 BUTCHER ROAD         VILLENOVA, NY 14138         UTILITY         NYSEG	CIVIL ENGINEER FIRM: ERDMAN ANTHONY CONTACT: MARC KENWARD PHONE: (585) 427–8888 DESIGN ENGINEER FIRM: NEW LEAF ENERGY, INC. CONTACT: RYAN QUINN PHONE: (949) 668–1140	(E)EXISTINGAHJAUTHORITY HAVING JURISDICTIONALALUMINUMAPPROXAPPROXIMATEARYARRAYBLDGBUILDINGNLENEW LEAF ENERGYCLCENTERLINEDASDATA ACQUISITION SYSTEMDIADIAMETERDODITTOEWEAST-WESTFBOFURNISHED BY OTHERSFFFORWARD FACINGGALVGALVANIZEDHDGHOT DIP GALVANIZEDHVACHEATING VENTILATION AND AIR CONDITIONINGIDINSIDE DIAMETERMFRMANUFACTURERMODSOLAR MODULE	NS NTS OAE OC OD OFCI PV PVC SCH SS STC TBD TP TYP UON VIF WP	NORTH-SOUTH NOT TO SCALE OR APPROVED EQUAL ON CENTER OUTSIDE DIAMETER OWNER FURNISHED CONTRACTOR INSTALLED PHOTOVOLTAIC POLY VINYL CHLORIDE SCHEDULE STAINLESS STEEL SOLAR SUPPORT STRUCTURE STANDARD TEST CONDITIONS TO BE DETERMINED TAMPER PROOF TYPICAL UNLESS OTHERWISE NOTED VERIFY IN FIELD WEATHER PROOF
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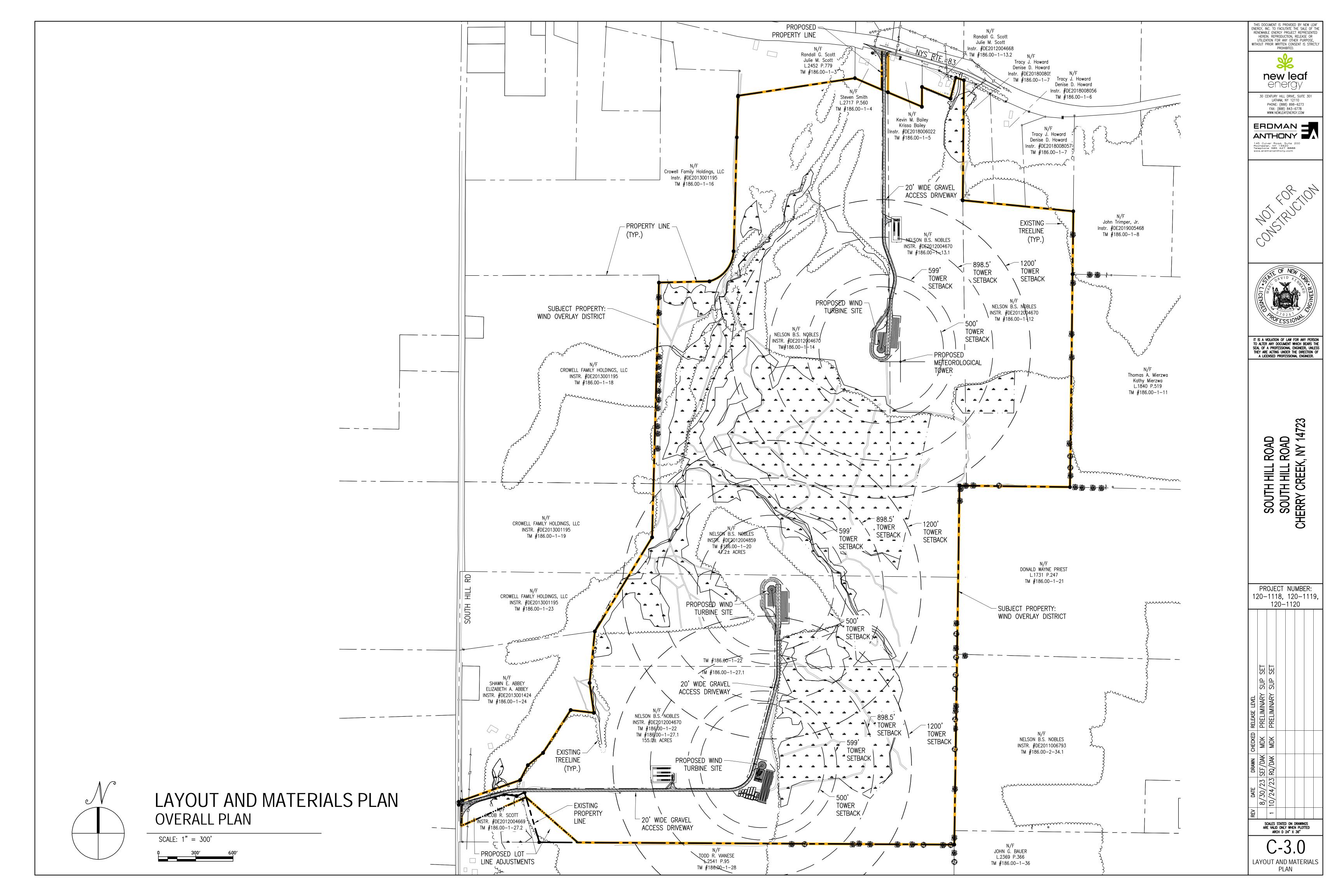


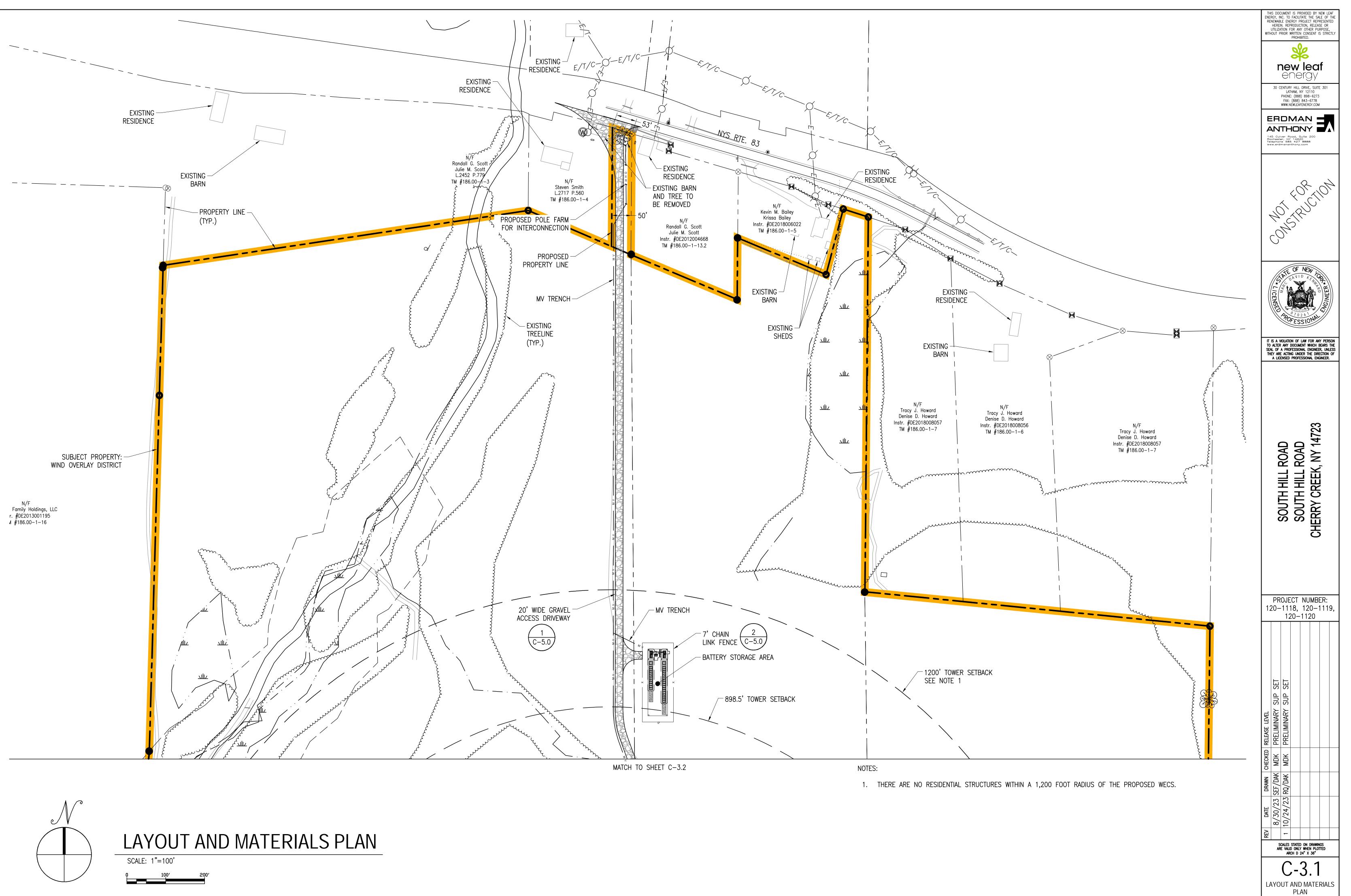


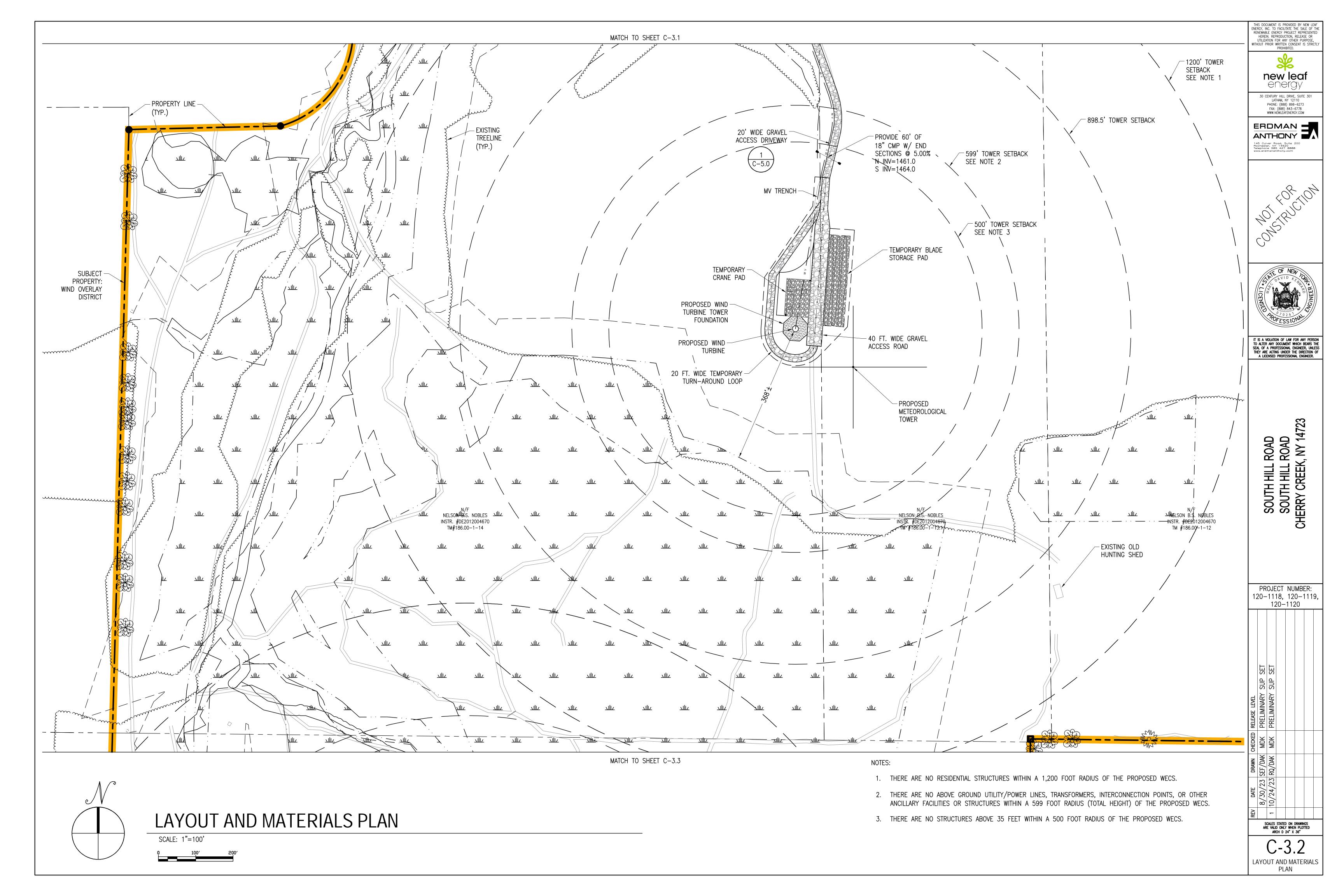
## GENERAL ABBREVIATIONS

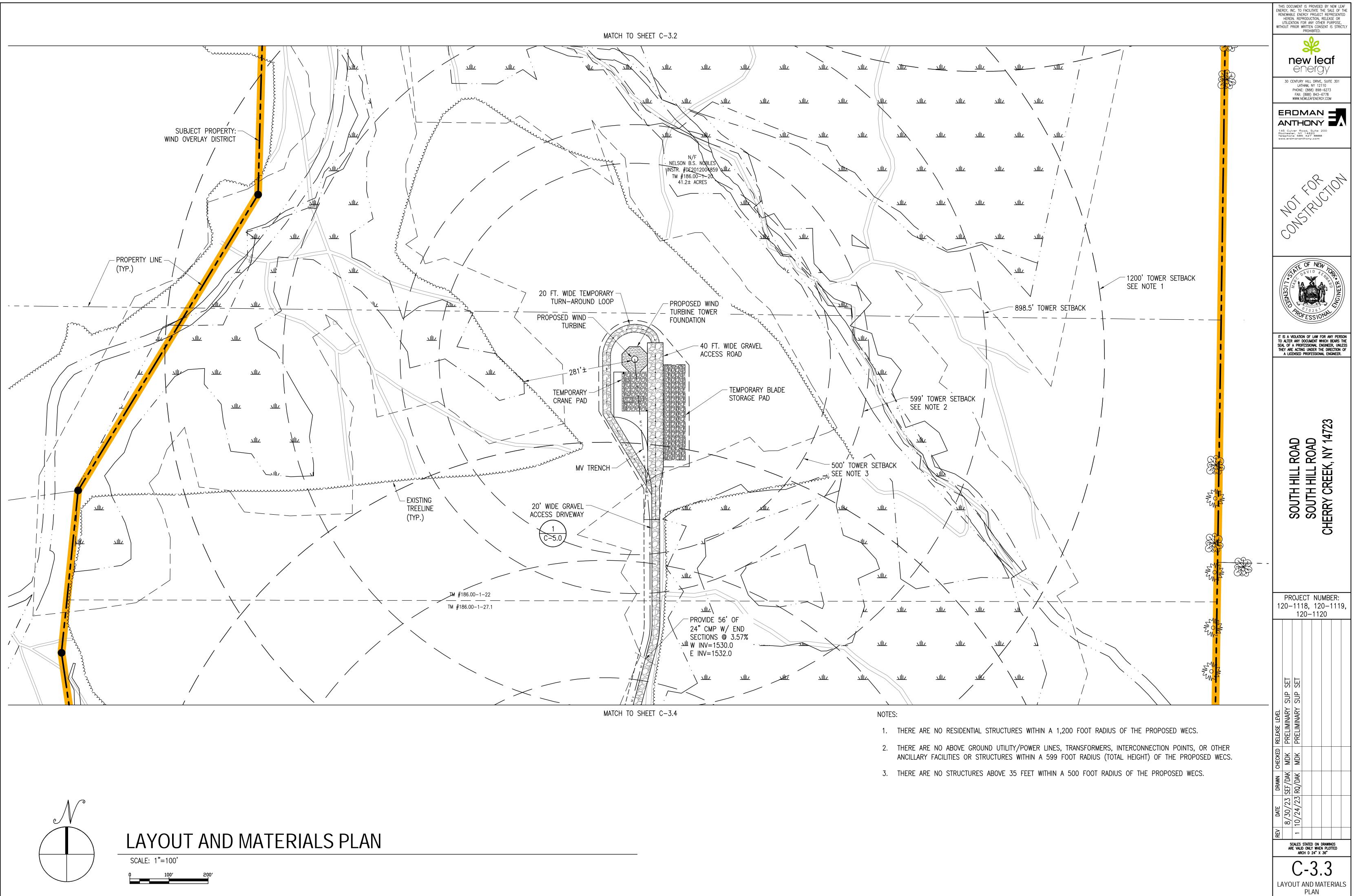
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DRAWING LIST SHEET NUMBER T-1 CIVIL	SHEET TITLE TITLE PAGE	HOT FOR TION NOT FRUCTION COMPTRUCTION
$ \begin{array}{c} CIVIL \\ \hline C-1.0 \\ \hline C-3.0 \\ \hline C-3.1 \\ \hline C-3.2 \\ \hline C-3.2 \\ \hline C-3.3 \\ \hline C-3.4 \\ \hline C-3.5 \\ \hline C-3.6 \\ \hline C-4.0 \\ \hline \end{array} $	EXISTING CONDITIONS PLANLAYOUT AND MATERIALS PLANDRIVEWAY PROFILES	CENSED A DE CONTRACTOR AND A DE CONTRACTOR A D
$ \begin{array}{c} C-3.6\\ \hline C-4.0\\ \hline C-4.1\\ \hline C-4.2\\ \hline C-4.3\\ \hline C-4.4\\ \hline C-5.0\\ \hline C-5.1\\ \hline C-5.2\\ \end{array} $	DRIVEWAY PROFILES GRADING AND EROSION CONTROL PLAN GRADING AND EROSION CONTROL PLAN GRADING AND EROSION CONTROL PLAN GRADING AND EROSION CONTROL PLAN CIVIL DETAILS CIVIL DETAILS CIVIL DETAILS	T IS A VOLATION OF LAW FOR ANY PERSON TO ALTER ANY DOCUMENT WHICH BEARS THE SEAL OF A PROFESSIONAL ENGINEER, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. CHERKY, NY 14723 CHERKY, NY 14723 CHERKY, NY 14723
		PROJECT NUMBER: 120–1118, 120–1119, 120–1120
		REV       DATE       DRAWN       CHECKED       RELEASE       LEVEL         1       10/24/23       SEF/DAK       MDK       PRELIMINARY       SUP       SET         1       10/24/23       RQ/DAK       MDK       PRELIMINARY       SUP       SET         1       10/24/23       RQ/DAK       MDK       PRELIMINARY       SUP       SET         1       10/24/23       RQ/DAK       MDK       PRELIMINARY       SUP       SET
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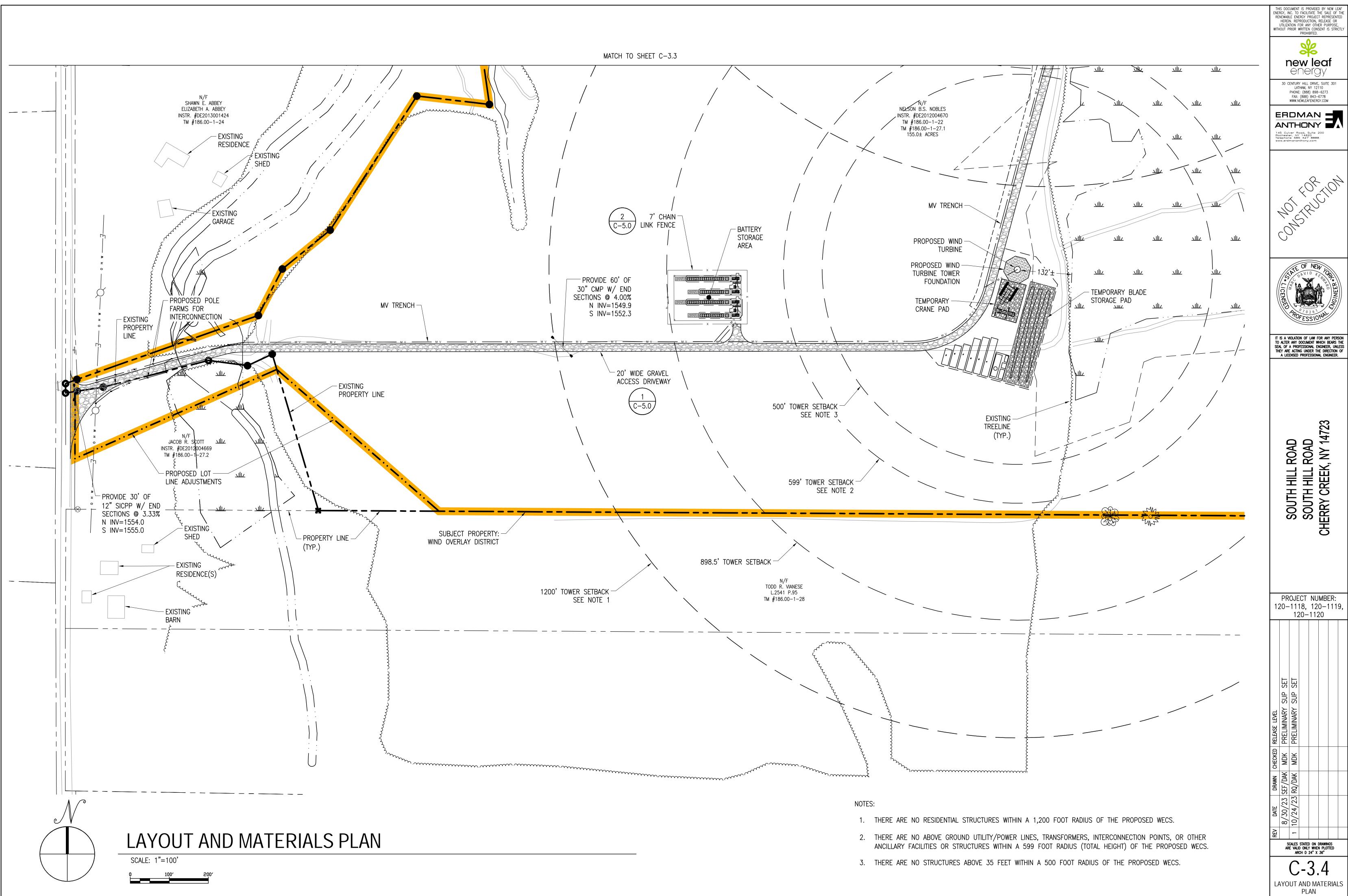


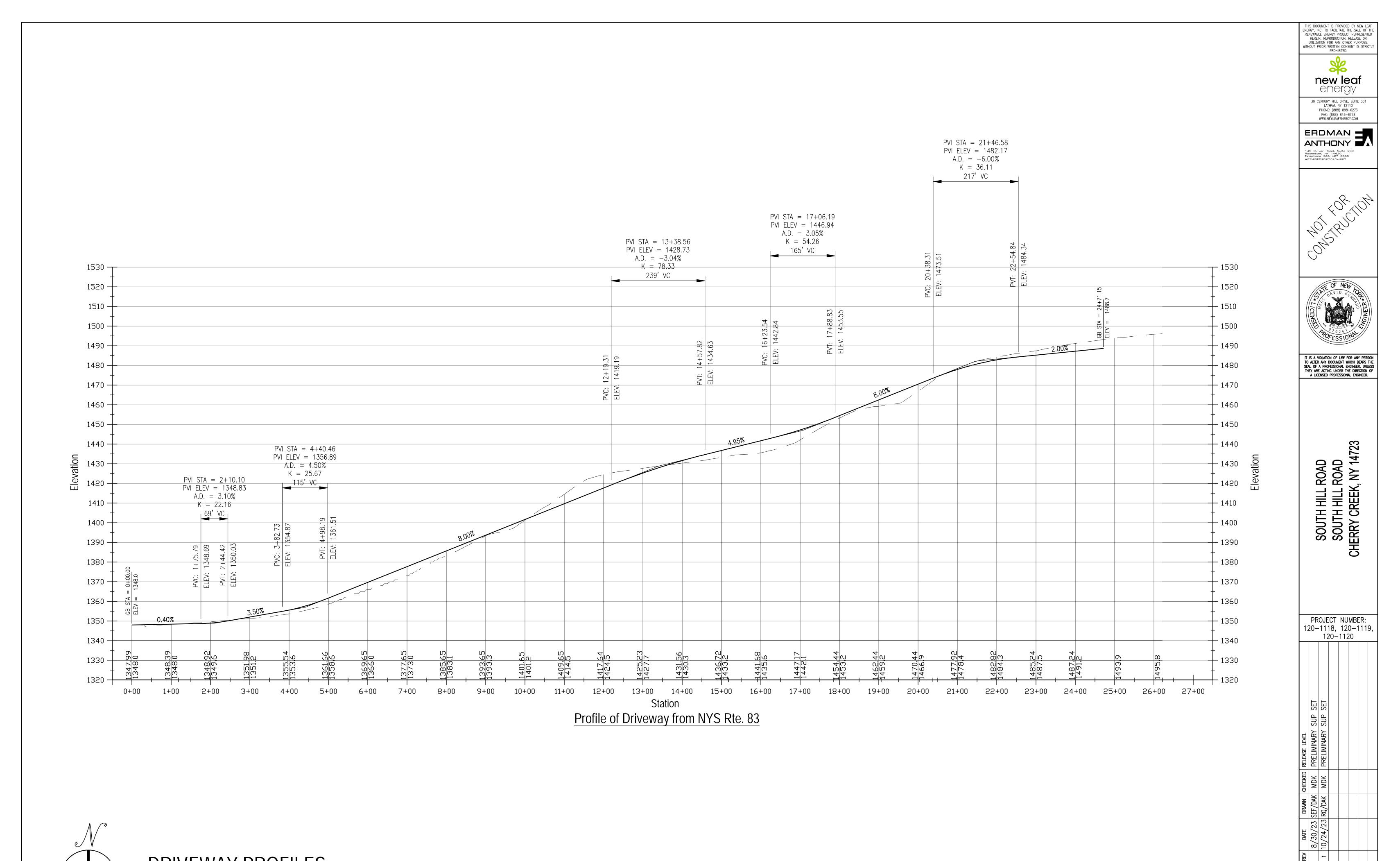








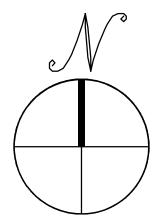




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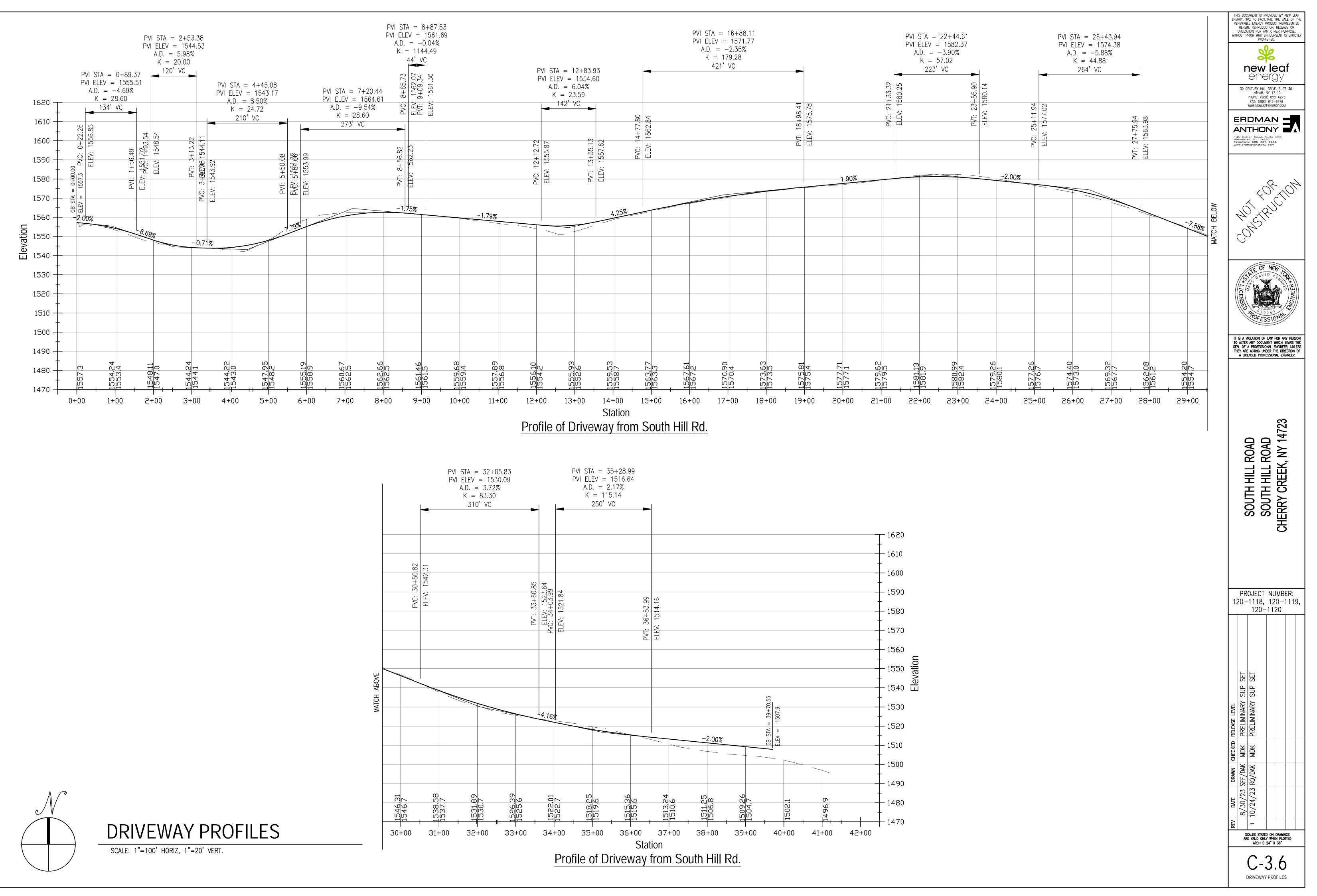
C-3.5

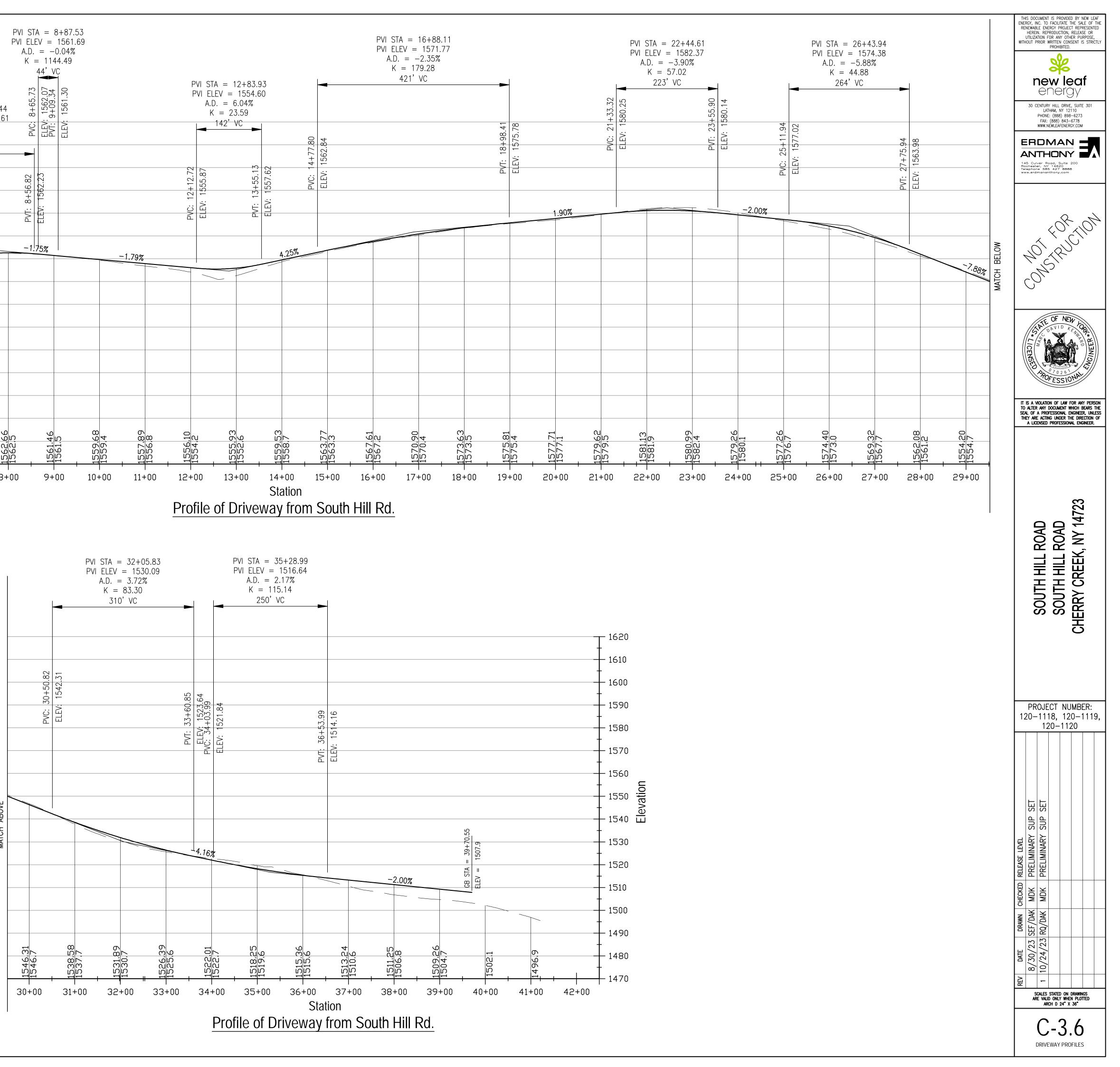
DRIVEWAY PROFILES

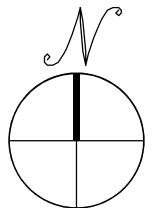


DRIVEWAY PROFILES

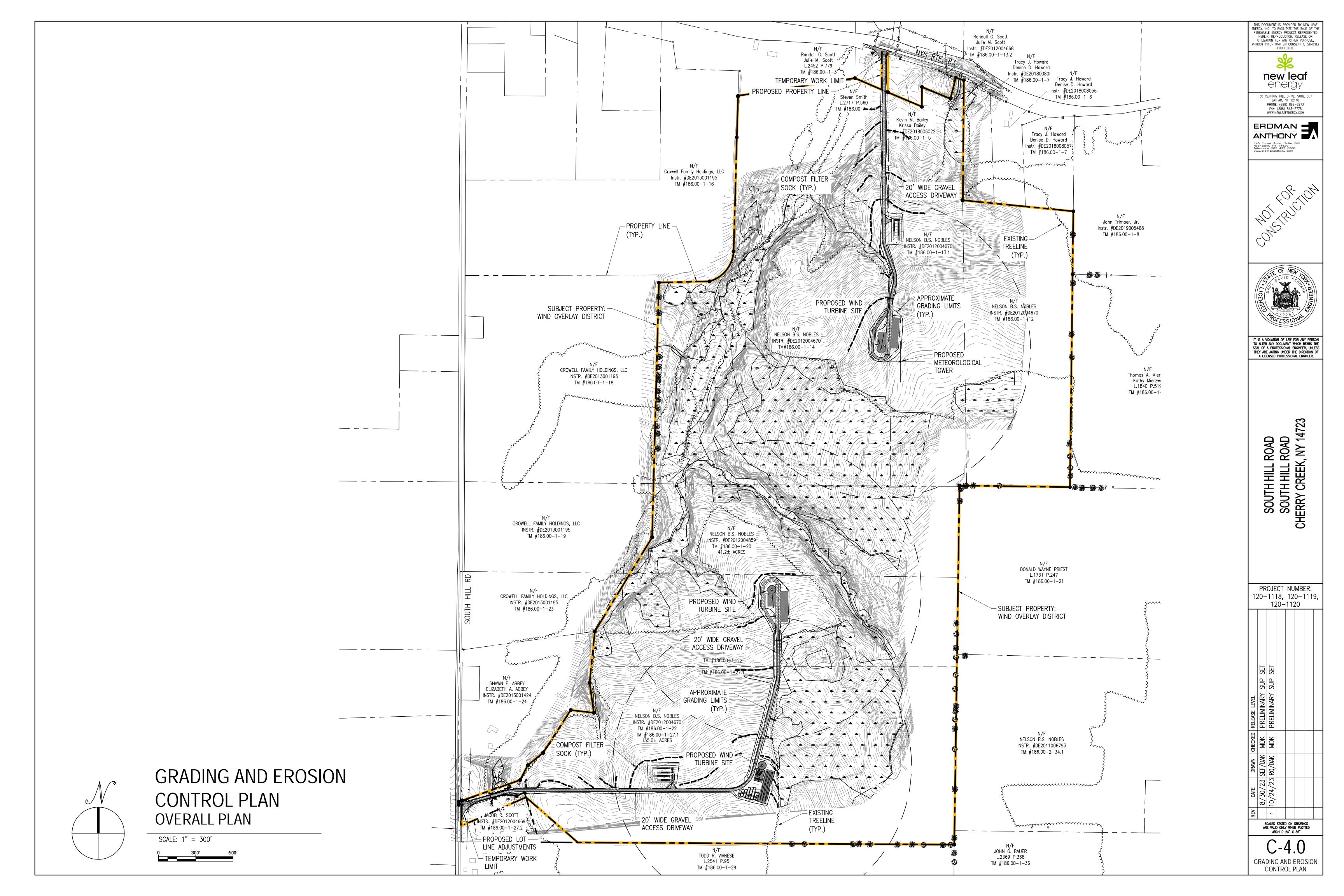
SCALE: 1"=100' HORIZ, 1"=20' VERT.







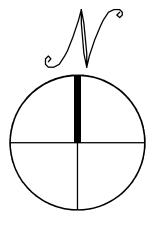




### EROSION AND SEDIMENT CONTROL NOTES:

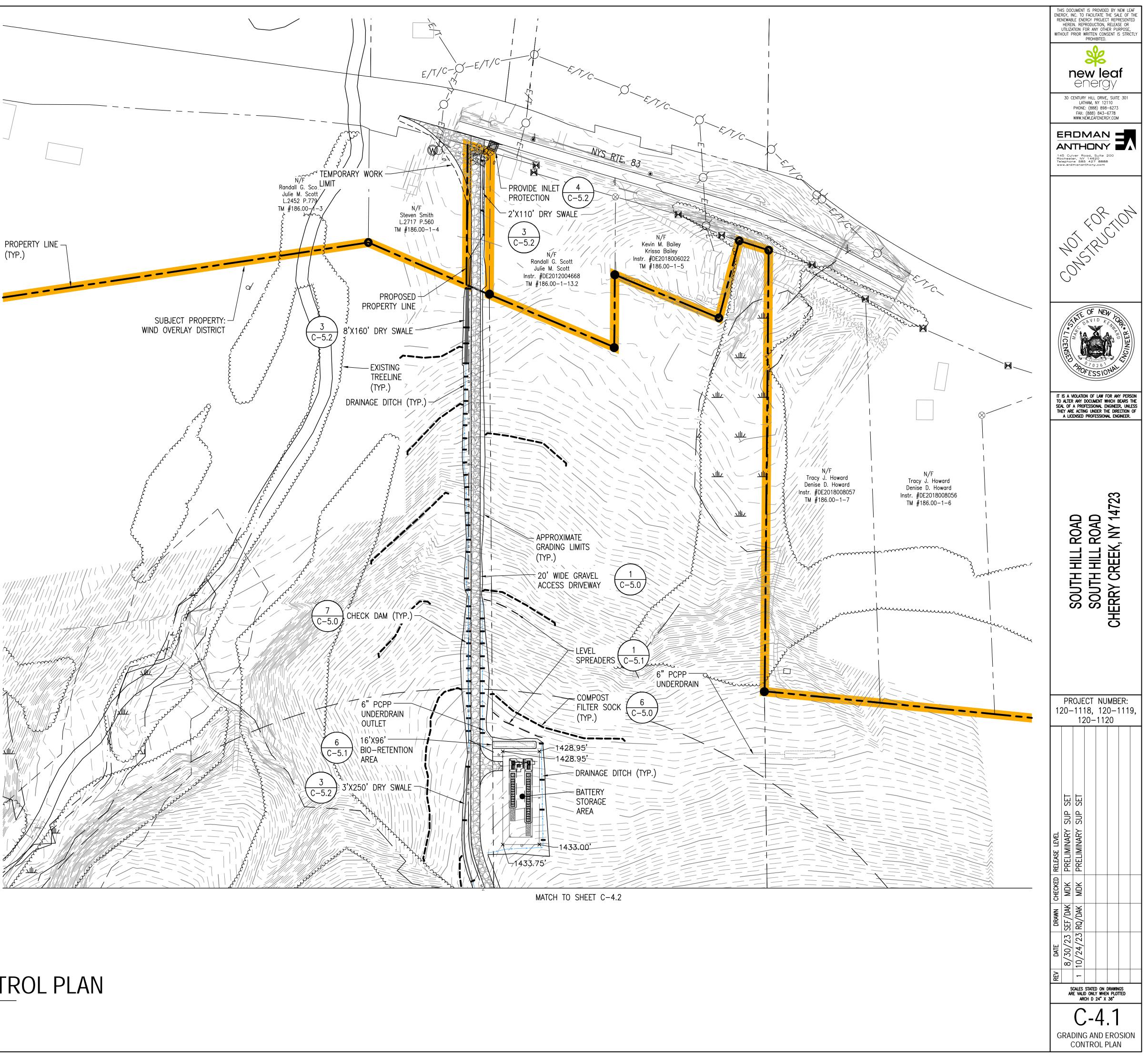
- 1. A SPDES PERMIT SHALL BE IN PLACE PRIOR TO COMMENCING ANY EARTH DISTURBANCE. THE SPDES PERMIT # IS (TBD), AND WAS ISSUED ON (DD/MM/20YY)
- 2. EROSION CONTROLS SHALL BE PROVIDED IN ACCORDANCE WITH THE SEQUENCE OF STAGED CONSTRUCTION PROVIDED IN THE SWPPP. A COPY OF THE APPROVED SWPPP SHALL BE MAINTAINED ON THE SITE.
- 3. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY SITE EXCAVATION OR DISTURBANCE AND SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME
- 4. SEDIMENT BARRIERS SHALL BE INSPECTED AND APPROVED BY THE CEOR BEFORE CONSTRUCTION CAN START.
- 5. STRAW AND MULCH SHALL BE MOWINGS OF ACCEPTABLE HERBACEOUS GROWTH, FREE OF NOXIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY WHEN INSTALLED.
- 6. IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES MUST BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN FOURTEEN (14) DAYS FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED.
- 7. SEDIMENT BARRIERS SHALL BE CONSTRUCTED AROUND ALL SOIL STOCKPILE AREAS.
- 8. CLEAN OUT PROJECT DRAINAGE FEATURES AND STRUCTURES (I.E. CULVERTS, BASINS, SWALES, ETC.) AFTER COMPLETION OF CONSTRUCTION AND AS REQUESTED BY THE CEOR.
- 9. SEDIMENT COLLECTED DURING CONSTRUCTION BY THE VARIOUS EROSION CONTROL SYSTEMS SHALL BE DISPOSED OF ON THE SITE ON A REGULAR BASIS. SEDIMENT SHALL BE REMOVED FROM EROSION CONTROL SYSTEMS WHEN THE HEIGHT OF THE SEDIMENT EXCEEDS ONE-HALF OF THE HEIGHT OF THE SEDIMENT CONTROL MEASURE OR IN ACCORDANCE WITH SYSTEMS STANDARD SPECIFICATION.
- 10. THE "TRAINED CONTRACTOR" IS RESPONSIBLE FOR DAILY INSPECTIONS, MAINTENANCE, AND DIRECTING REPAIR ACTIVITIES.
- 11. DAMAGED OR DETERIORATED ITEMS WILL BE REPAIRED IMMEDIATELY AFTER IDENTIFICATION OR AS DIRECTED BY THE CONTRACTOR/CEOR.
- 12. PIPE OUTLETS (IF ANY) SHALL BE STABILIZED WITH STONE. REFER TO DETAILS.
- 13. TEMPORARY SEEDING (perennial RYE gRASS) SHALL BE AT A RATE OF 45 LBS PER ACRE. DISTURBED AREAS OUTSIDE AND DOWN SLOPE FROM THE CONSTRUCTION LIMITS SHALL BE SIMILARLY SEEDED.
- 14. WATER PUMPED OR OTHERWISE DISCHARGED FROM THE SITE DURING CONSTRUCTION DEWATERING SHALL BE FILTERED. A DEWATERING PLAN SHALL BE SUBMITTED FOR APPROVAL BY THE CONTRACTOR TO THE CEOR AND ADDED TO THE SWPPP.
- 15. WHEN TEMPORARY DRAINAGE IS ESTABLISHED, EROSION/SEDIMENTATION CONTROL MEASURES MAY BE REQUIRED BY THE CEOR AND WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- 16. A STABILIZED CONSTRUCTION EXIT SHALL BE PROVIDED. A VEHICLE WASH DOWN FACILITIES SHALL BE PROVIDED IF THE STABILIZED CONSTRUCTION ENTRANCE IS INEFFECTIVE IN PREVENTING SOIL FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SOIL REACHING A PUBLIC OR PRIVATE ROADWAY SHALL BE REMOVED IMMEDIATELY.
- 17. NECESSARY MEASURES SHALL BE TAKEN TO CONTAIN ANY FUEL OR POLLUTION RUNOFF. NO RE-FUELING SHALL OCCUR WITHIN 100 FEET OF ANY WETLAND RESOURCE AREA AND 200 FEET FROM RIVERFRONT LEAKING EQUIPMENT OR SUPPLIES SHALL BE IMMEDIATELY REPAIRED OR REMOVED FROM THE SITE.
- 18. THE COST OF REPAIRING EROSION CONTROL MEASURES OR REMOVING SEDIMENT FROM EROSION CONTROL SYSTEMS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE APPLICABLE EROSION CONTROL ITEM.
- 19. EROSION CONTROL MEASURES SHALL BE KEPT OPERATIONAL AND MAINTAINED CONTINUOUSLY THROUGHOUT THE PERIOD OF LAND DISTURBANCE UNTIL PERMANENT SEDIMENT AND EROSION CONTROL MEASURES ARE OPERATIONAL.
- 20. CONTRACTOR SHALL SPRAY WATER FROM A WATER TRUCK ON DRY AND WINDY DAYS TO PREVENT DUST FROM FORMING. OTHER ALLOWED FORMS OF DUST CONTROL INCLUDE: CALCIUM CHLORIDE.
- 21. FINAL STABILIZATION MEANS THAT ALL SOIL DISTURBANCE ACTIVITIES HAVE CEASED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF EIGHTY (80) PERCENT OVER THE ENTIRE PERVIOUS SURFACE HAS BEEN ESTABLISHED; OR OTHER EQUIVALENT STABILIZATION MEASURES, SUCH AS PERMANENT LANDSCAPE MULCHES, ROCK RIP-RAP OR WASHED/CRUSHED STONE HAVE BEEN APPLIED ON ALL DISTURBED AREAS THAT ARE NOT COVERED BY PERMANENT STRUCTURES, CONCRETE OR PAVEMENT.
- 22. AFTER ALL DISTURBED AREAS HAVE REACHED FINAL STABILIZATION, THE CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROL MEASURES AT THE DIRECTION OF THE CEOR.
- 23. AFTER THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES, THE CONTRACTOR SHALL HAND RAKE AND SEED THE AREA OF THE TEMPORARY EROSION CONTROL MEASURE.
- 24. EROSION CONTROL MEASURES AS SHOWN ON THESE DRAWINGS ARE INTENDED TO CONVEY MINIMUM REQUIREMENTS. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL MEASURES AS NECESSARY TO PREVENT SOIL EROSION AND TO ACCOMPLISH THE PROJECT'S STORMWATER POLLUTION PREVENTION PLAN (SWPPP) **OBJECTIVES.**
- 25. ACCESS ROADS/AISLES TO BE USED FOR DELIVERY & DISTRIBUTION OF MATERIALS THROUGH THE SITE. CONTRACTOR SHALL NOT PLACE ACCESS AISLES THROUGH WETLAND AREAS. ACCESS AISLES AND TEMPORARY STAGING, STORAGE & PARKING AREAS ARE TO BE DE-COMPACTED AND RESTORED PER SWPPP.
- 26. ALL EXCESS TOPSOIL IS TO REMAIN ON-SITE, STOCKPILED AND PERMANENTLY STABILIZED WITH SEEDING.

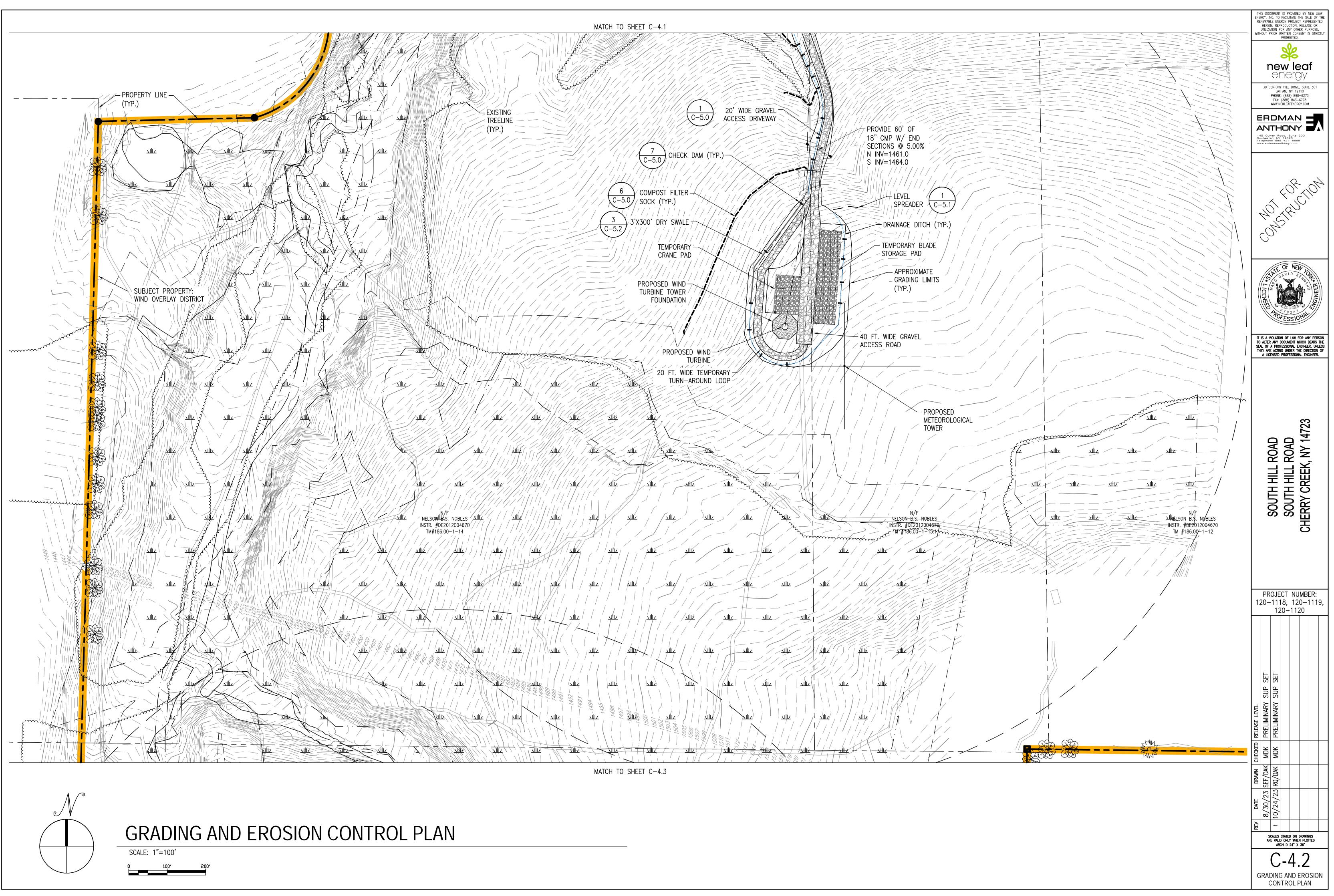
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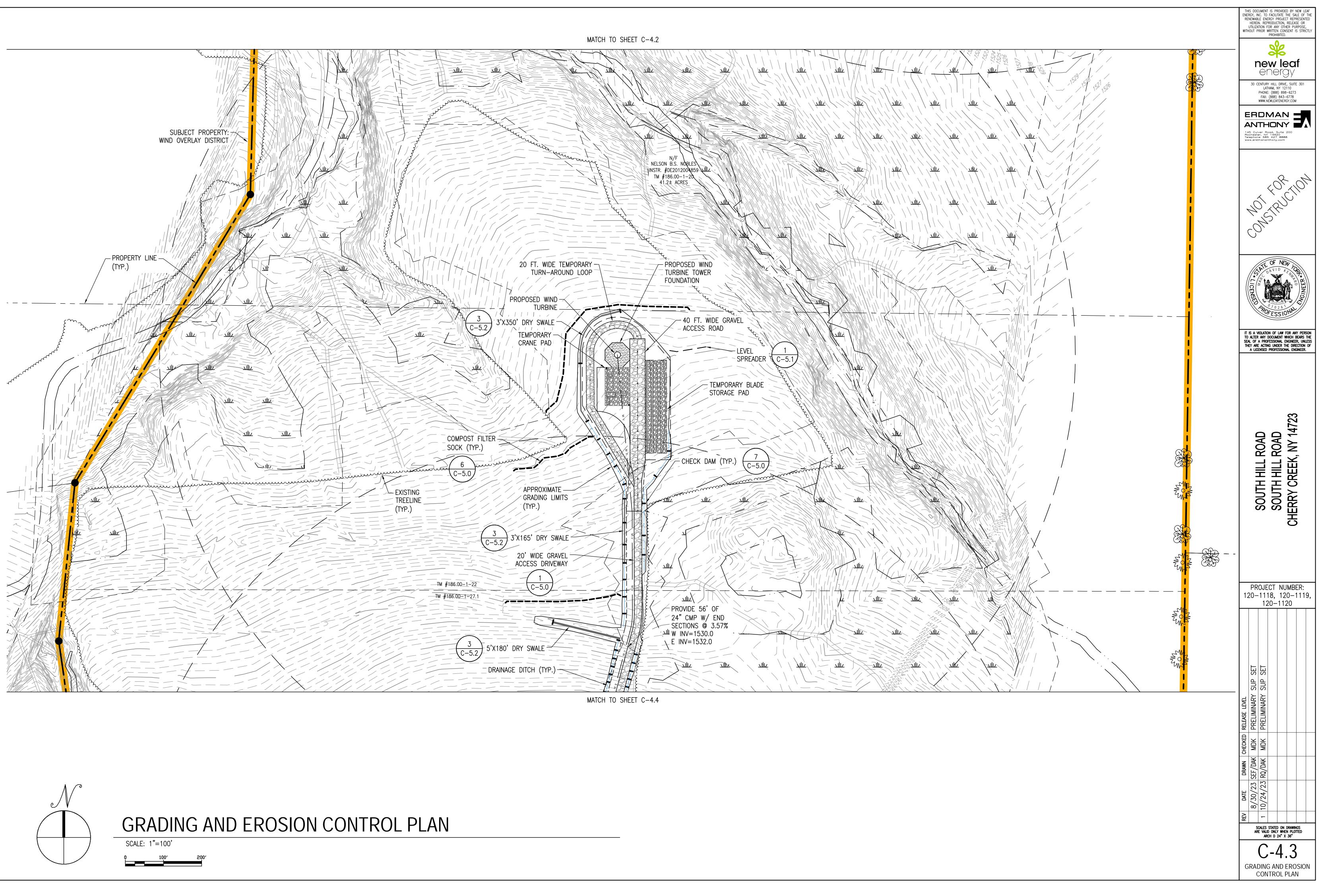


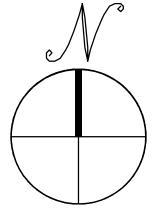
# GRADING AND EROSION CONTROL PLAN

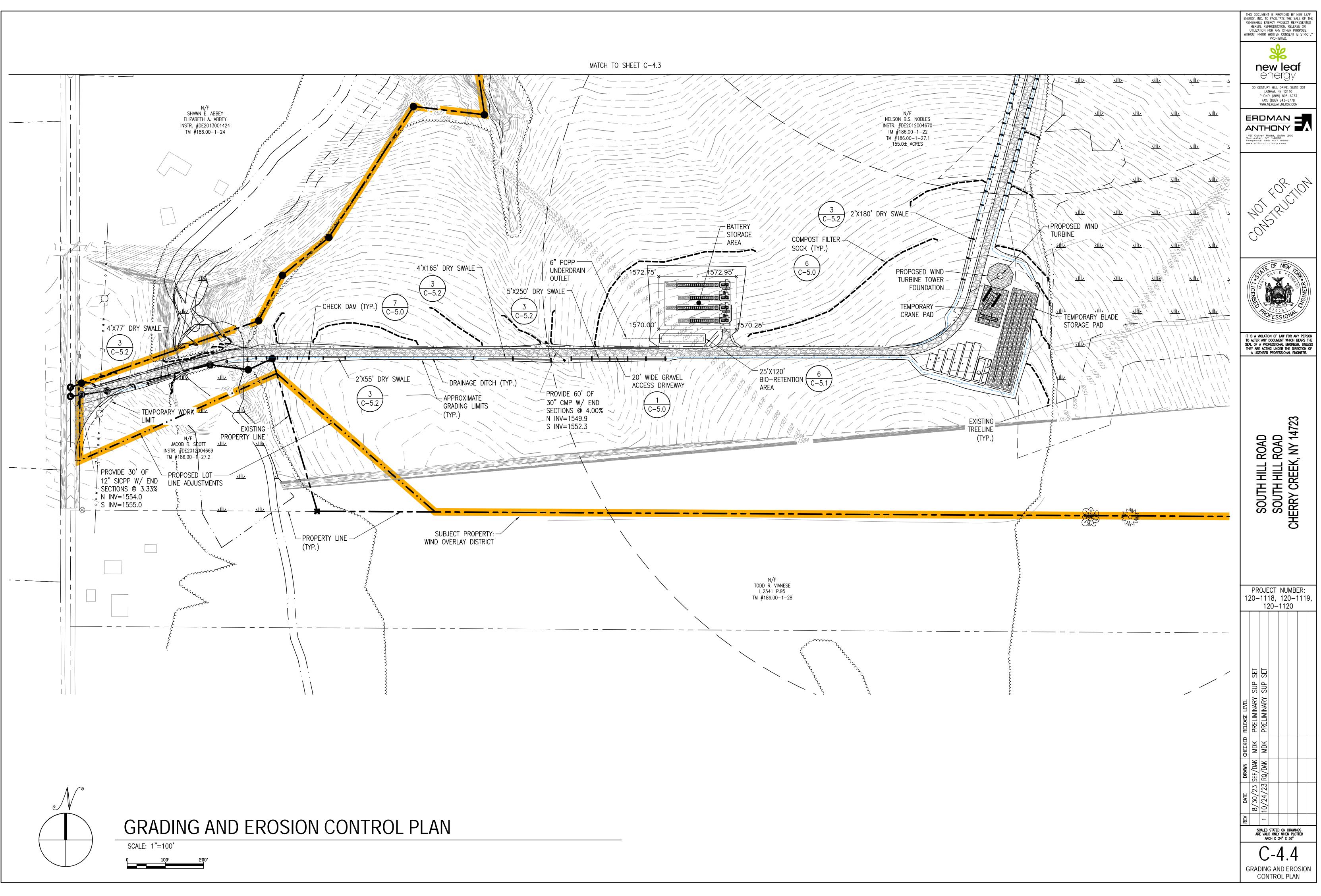
PROPERTY LINE -(TYP.)

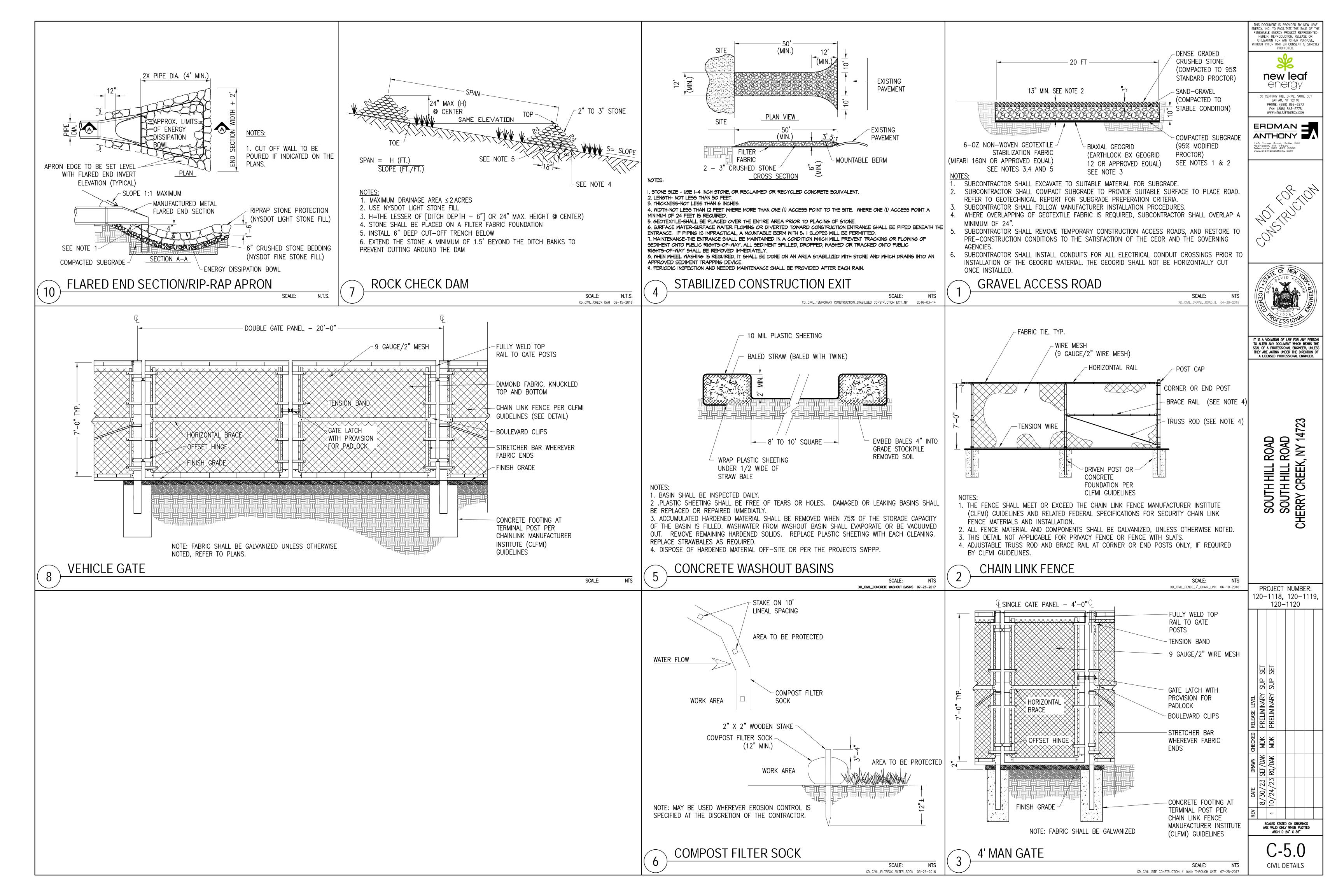


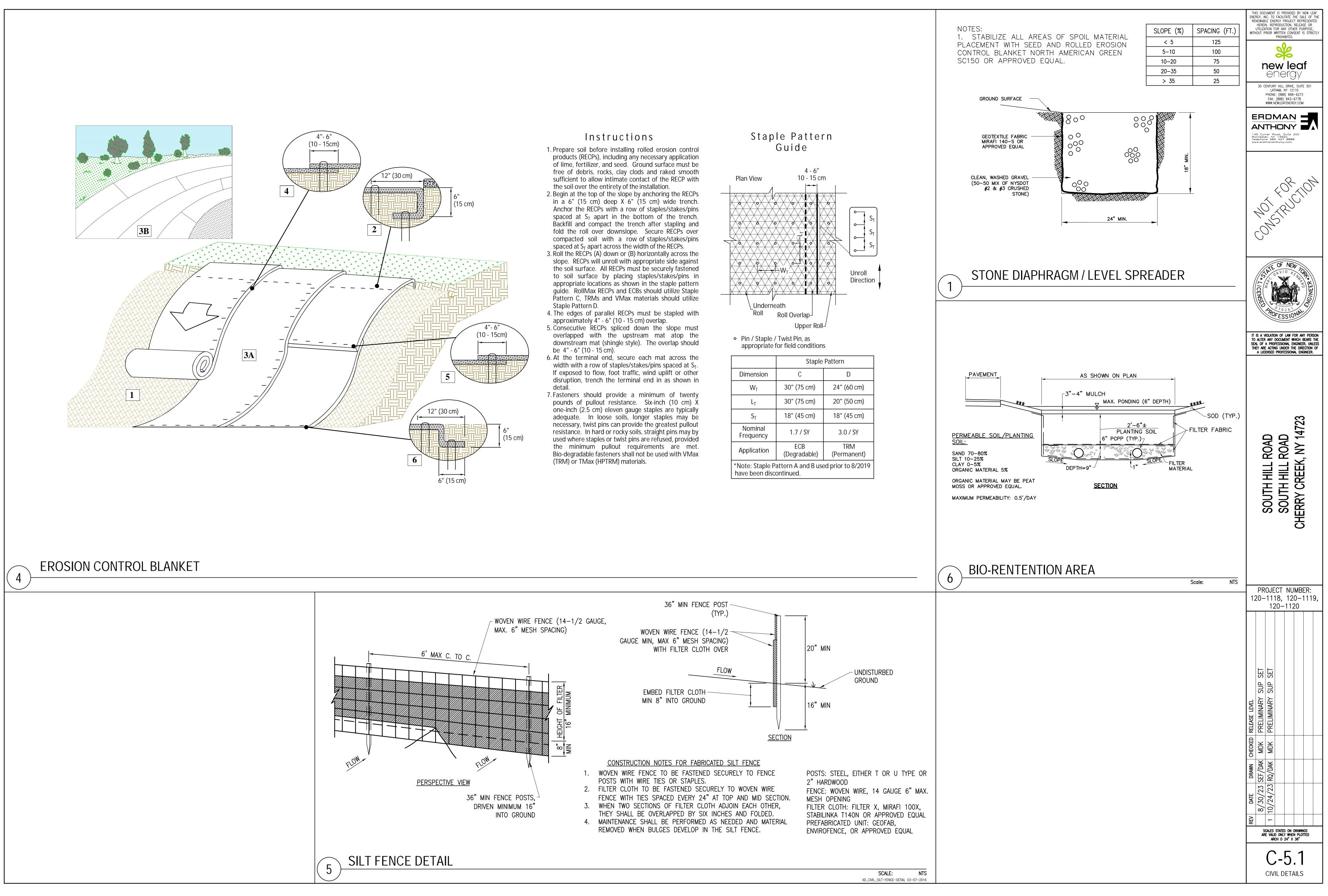


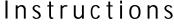


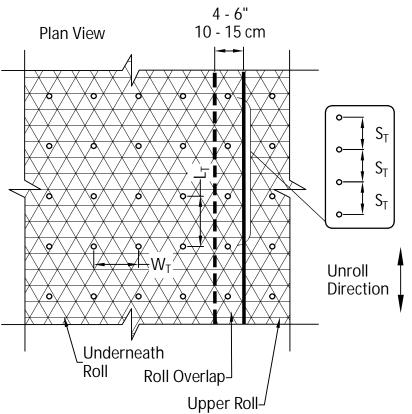




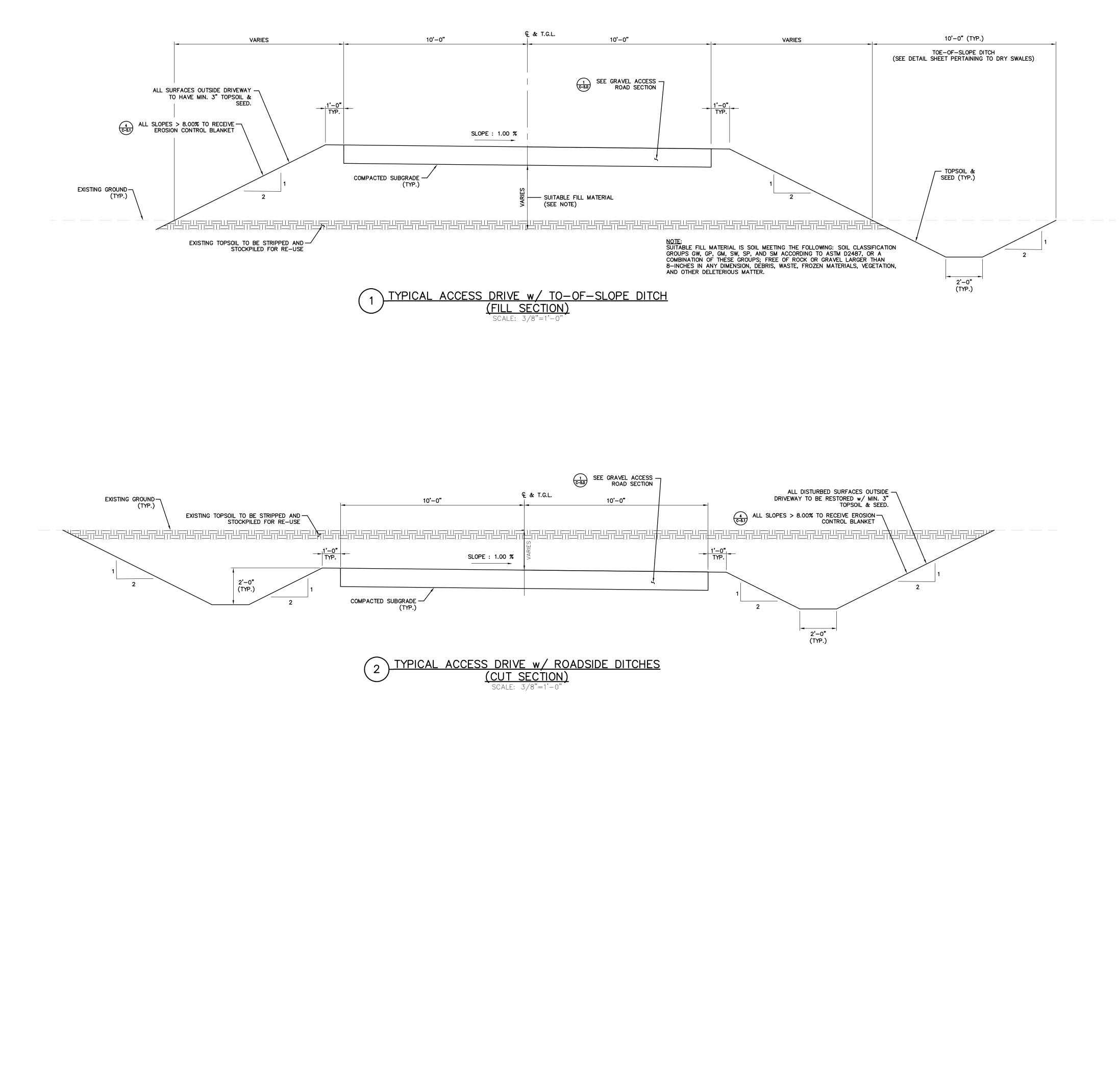


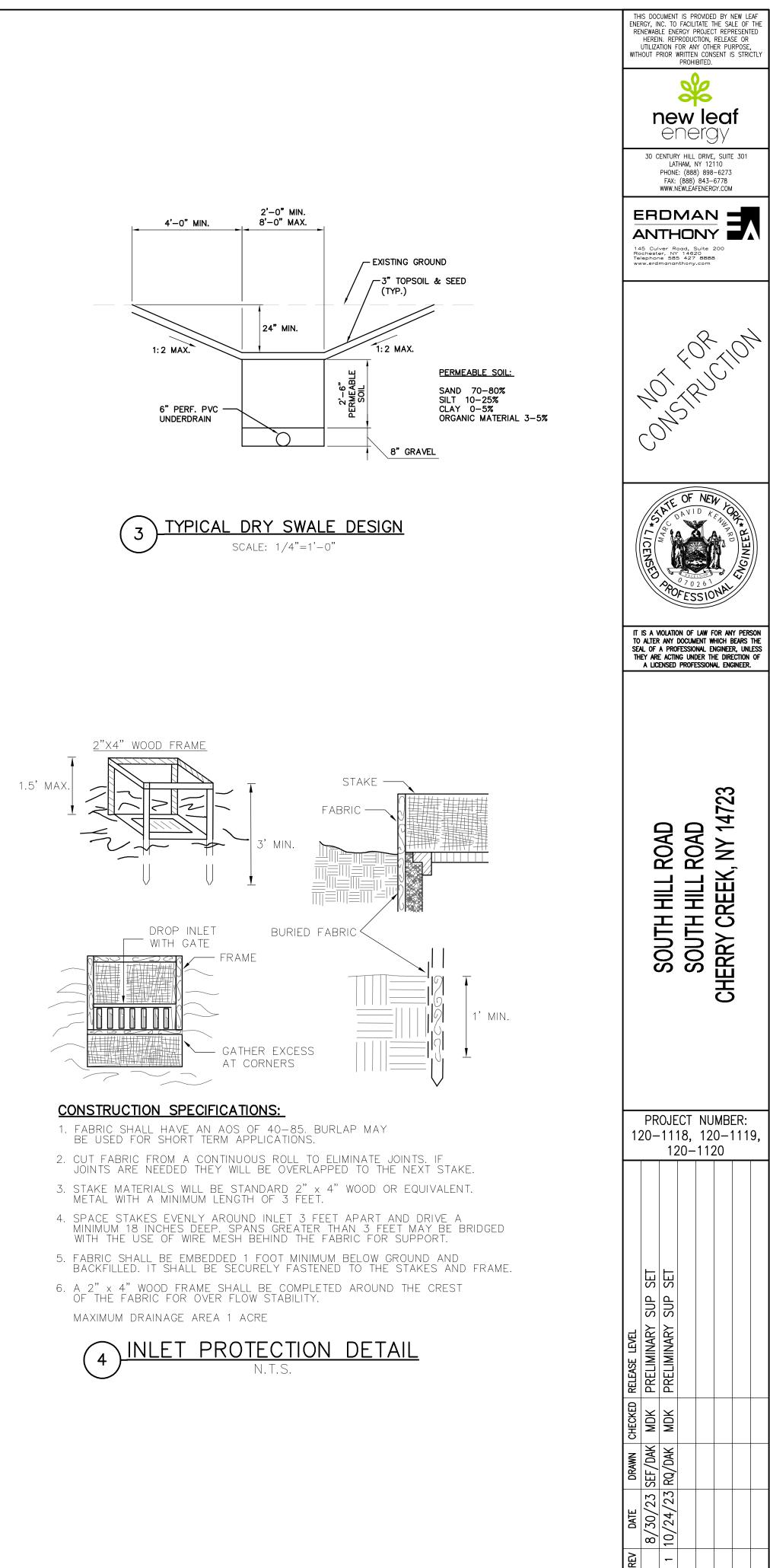






	Staple Pattern		
Dimension	С	D	
W <sub>T</sub>	30" (75 cm)	24" (60 cm)	
LT	30" (75 cm)	20" (50 cm)	
S <sub>T</sub>	18" (45 cm)	18" (45 cm)	
Nominal Frequency	1.7 / SY	3.0 / SY	
Application	ECB (Degradable)	TRM (Permanent)	





SCALES STATED ON DRAWINGS ARE VALID ONLY WHEN PLOTTED ARCH D 24" X 36" C-5.2 CIVIL DETAILS