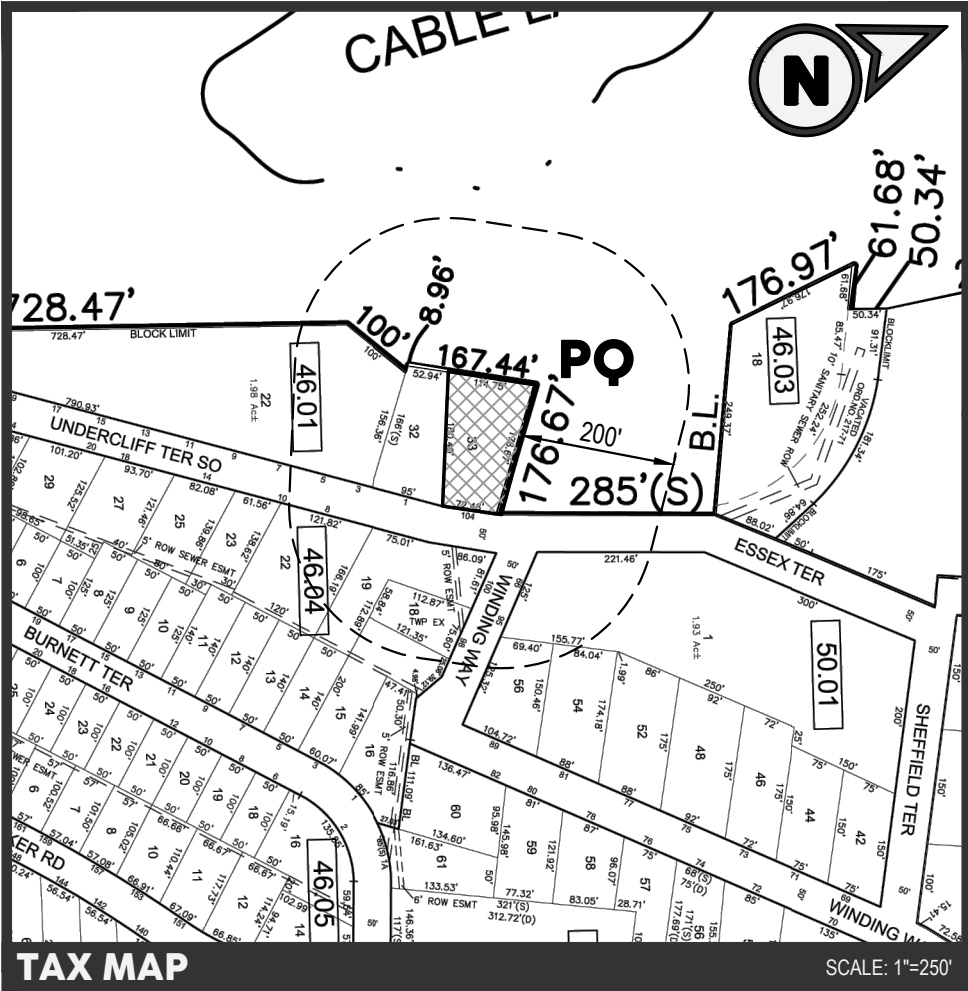


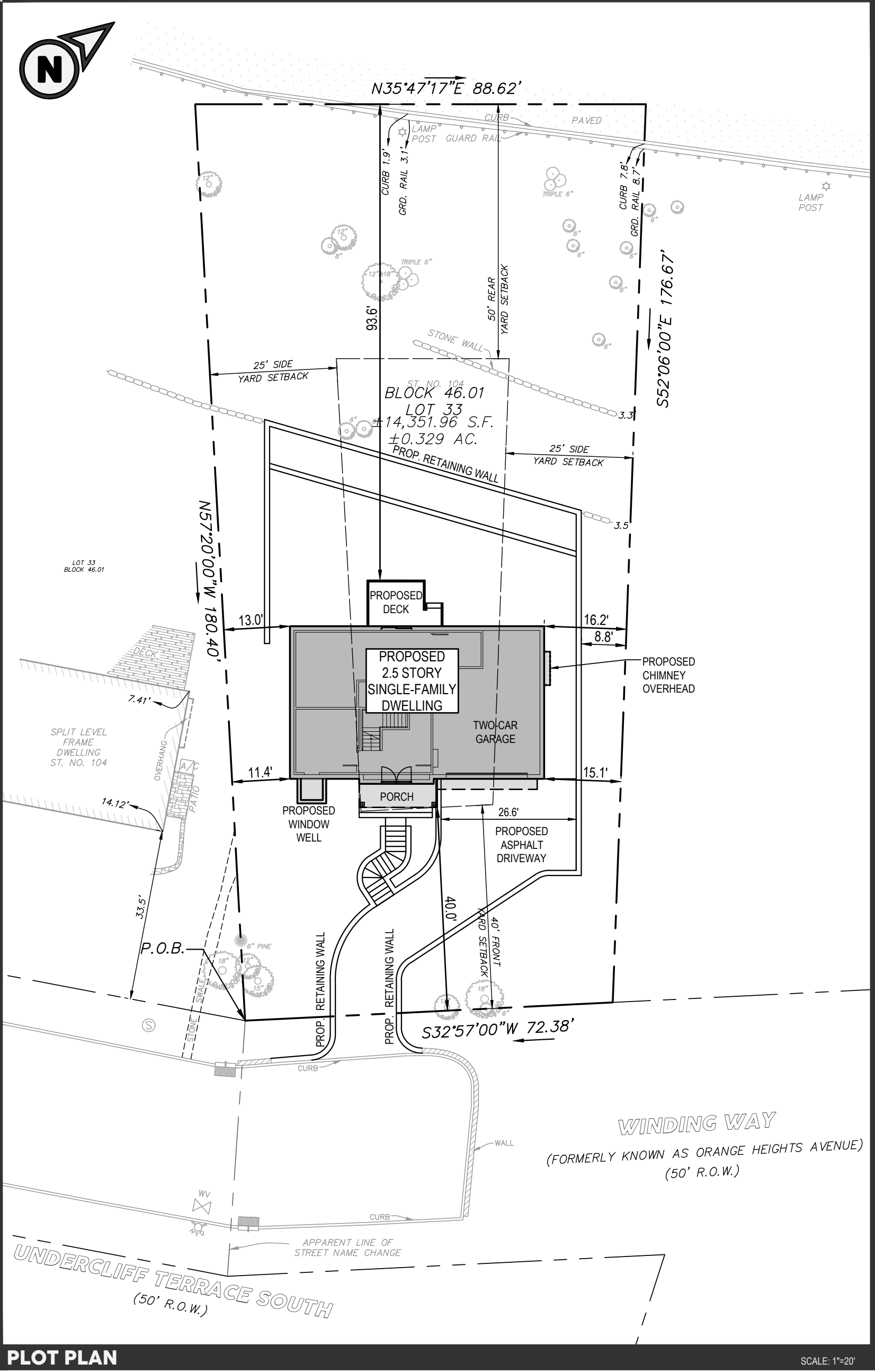
104 WINDING WAY - VARIANCE PLAN

PARDO DEVELOPMENT

BLOCK 46.01, LOT 33
WEST ORANGE
ESSEX COUNTY, NEW JERSEY



SOURCE: NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION, BGIS, NJ-GEOWEB



- ### GENERAL NOTES
- LOCATION: BLOCK 46.01, LOT 33
104 WINDING WAY
TOWNSHIP OF WEST ORANGE
ESSEX COUNTY, NEW JERSEY
TAX MAP SHEET # 4
 - OWNER/APPLICANT: PARDO DEVELOPMENT
104 WINDING WAY
WEST ORANGE, NJ 07052
 - LOT AREA: 14,351.96 S.F. (0.329 ACRES)
 - ZONE DISTRICT: R-1 (ONE-FAMILY DWELLINGS ON 80,000 S.F. LOTS)
 - EXISTING USE: VACANT
 - PROPOSED USE: SINGLE-FAMILY RESIDENTIAL
 - INFORMATION SHOWN TRANSFERRED FROM A SURVEY ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY TAX LOT 33 BLOCK 46.01 TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NEW JERSEY", DATED APRIL 09, 2020, PREPARED BY EKA ASSOCIATES, P.A. ENGINEERS-SURVEYORS-PLANNERS.
 - PROPOSED BUILDING INFORMATION, AS SHOWN, PER ARCHITECTURAL DRAWINGS ENTITLED, "NEW SINGLE FAMILY DWELLING FOR PARDO DEVELOPMENT BLOCK: 46.1, LOT: 33 104 WINDING WAY WEST ORANGE ESSEX COUNTY, NEW JERSEY 07052" DATED ISSUED FOR RECORD JULY 07, 2021, PREPARED BY DANTASCARRETE ARCHITECTURE.
 - THE PROPERTY APPEARS ON THE NATIONAL FLOOD INSURANCE PROGRAM - FIRM FLOOD INSURANCE RATE MAP, ESSEX COUNTY, NEW JERSEY, MAP NUMBER 34013C0094F, EFFECTIVE DATE JUNE 04, 2007. SUBJECT SITE IS LOCATED WITHIN ZONE X (AREA OF MINIMAL FLOOD HAZARD).
 - UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE. THEIR ACCURACY OR COMPLETENESS ARE NOT GUARANTEED BY THE ENGINEER. MARK OUTS FROM UTILITY COMPANIES AND FIELD CONFIRMATION BY CONTRACTOR MUST BE MADE PRIOR TO CONSTRUCTION SO THAT DISTURBANCE AND/OR DISRUPTION TO THESE UTILITIES MAY BE AVOIDED.
 - ELEVATIONS AS SHOWN ARE BASED ON ASSUMED DATUM PER SURVEY REFERENCED.
 - PUBLIC SEWER, WATER, GAS, ELECTRIC, CATV AND TELEPHONE SERVICES ARE PRESENTLY SERVING THE AREA AND WILL SERVE THE PROPOSED BUILDING.
 - ALL PROPOSED CONSTRUCTION TO BE IN CONFORMANCE WITH THE TOWNSHIP OF WEST ORANGE STANDARDS DETAILS.
 - THIS SITE PLAN MAKES NO CERTIFICATION OR REPRESENTATION AS TO THE LOCATION OF ANY UNDERGROUND ELECTRICAL, PHONE OR CABLE CONDUITS AND/ OR WIRES WHICH MAY BE PRESENT ON THE SITE.
 - PROPOSED GRADING TO BE DONE AS 3:1 MAXIMUM AND 2:0% MINIMUM WITHIN LAWN AREAS.
 - CONTRACTOR IS RESPONSIBLE FROM OBTAINING A ROAD OPENING PERMIT FROM THE TOWNSHIP OF WEST ORANGE PRIOR TO ANY WORK WITHIN THE TOWNSHIP'S RIGHT OF WAY.

ZONING TABULATION				
ZONING DISTRICT:	R-1 (ONE-FAMILY DWELLINGS ON 80,000 S.F. LOTS)			
	REQUIRED/ ALLOWED	EXISTING	PROPOSED	VARIANCE REQUESTED, PENC
MINIMUM LOT AREA	80,000 S.F.	2,491 S.F.*	2,491 S.F. (V)	VARIANCE REQUESTED, PENC
MINIMUM LOT AREA PER UNIT	80,000 S.F.	-	2,491 S.F. (V)	VARIANCE REQUESTED, PENC
MINIMUM LOT WIDTH	150 FT.	76.0 FT.*	76.0 FT. (V)	VARIANCE REQUESTED, PENC
MINIMUM FRONT YARD SETBACK	40 FT.	-	40.0 FT.	-
MINIMUM SIDE YARD SETBACK	25 FT.	-	11.4 FT. (V)	VARIANCE REQUESTED
MINIMUM SIDE YARD SETBACK COMBINED	50 FT.	-	26.5 FT. (V)	VARIANCE REQUESTED
MINIMUM REAR YARD SETBACK	50 FT.	-	93.60 FT.	-
MINIMUM FLOOR AREA	3,000 S.F.	-	2,689 S.F. (V)	VARIANCE REQUESTED
MAXIMUM BUILDING COVERAGE	20%	-	64.0% (V)	VARIANCE REQUESTED
MAXIMUM LOT COVERAGE	30%	-	111.6% (V)	VARIANCE REQUESTED
MAXIMUM BUILDING HEIGHT	35 FT.	-	31.33 FT.	-
MAXIMUM NUMBER OF STORIES	2.5	-	2.5	-

* PRE-EXISTING NONCONFORMITY (V) VARIANCE REQUESTED † BASED ON EFFECTIVE LOT AREA

BUILDING COVERAGE TABULATION			
EXISTING	PROPOSED		
NO STRUCTURES PRESENT	GROUND FL.	1,519 S.F.	
	PORCH	75 S.F.	
	TOTAL	1,594 S.F.	
	(1,594 S.F./2,491 S.F. = 0.640) 64.0%		

*CALCULATION IS BASED ON EFFECTIVE LOT AREA PER STEEP SLOPE ORDINANCE 25-28.8 SEE STEEP SLOPE DISTURBANCE PLAN FOR EFFECTIVE LOT AREA CALCULATIONS

FLOOR AREA TABULATION			
EXISTING	PROPOSED		
NO STRUCTURES PRESENT	DWELLING - 1ST FL.	1,429 S.F.	
	DWELLING - 2ND FL.	1,260 S.F.	
	TOTAL	2,689 S.F.	

LOT COVERAGE TABULATION			
EXISTING	PROPOSED		
NO STRUCTURES PRESENT	DWELLING	1,519 S.F.	
	PORCH, STEPS, DECK	296 S.F.	
	PAVEMENT	968 S.F.	
	TOTAL	2,783 S.F.	
	(2,783 S.F./2,491 S.F. = 1.116) 111.6%		

*CALCULATION IS BASED ON EFFECTIVE LOT AREA PER STEEP SLOPE ORDINANCE 25-28.8 SEE STEEP SLOPE DISTURBANCE PLAN FOR EFFECTIVE LOT AREA CALCULATIONS

BUILDING HEIGHT TABULATION			
EXISTING	PROPOSED		
NO STRUCTURES PRESENT	AVERAGE GRADE:		
	99.00' + 99.00' + 99.90' + 96.00' = 96.98		
	4		
	FIRST FLOOR FINISHED FLOOR ELEVATION = 101.00		
	HEIGHT FROM FINISHED FLOOR TO PEAK ROOF = 26.31'		
	BUILDING HEIGHT = (101.00 - 95.98) + 26.31' = 31.33'		

TOWNSHIP OF WEST ORANGE ZONING BOARD SIGNATURES	
BOARD CHAIRMAN	DATE
BOARD SECRETARY	DATE
MUNICIPAL ENGINEER	DATE



VARIANCES REQUESTED	
SECTION	DESCRIPTION
25. ATT.#3	A MINIMUM LOT AREA OF 80,000 S.F. IS REQUIRED; WHEREAS A LOT AREA OF 2,491 S.F. IS PROPOSED. THIS IS A PRE-EXISTING NONCONFORMING CONDITION.
25. ATT.#3	A MINIMUM LOT AREA PER UNIT OF 80,000 S.F. IS REQUIRED; WHEREAS A LOT AREA OF 2,491 S.F. IS PROPOSED. THIS IS A PRE-EXISTING NONCONFORMING CONDITION.
25. ATT.#3	A MINIMUM LOT WIDTH OF 100 FT. IS REQUIRED; WHEREAS A LOT WIDTH OF 76.0 FT. IS PROPOSED. THIS IS A PRE-EXISTING NONCONFORMING CONDITION.
25. ATT.#3	A MINIMUM SIDE YARD SETBACK OF 25 FEET IS REQUIRED; WHEREAS A SIDE YARD SETBACK OF 11.4 FT. IS PROPOSED.
25. ATT.#3	A MINIMUM COMBINED SIDE YARD SETBACK OF 50 FEET IS REQUIRED; WHEREAS A COMBINED SIDE YARD SETBACK OF 26.5 FT. IS PROPOSED.
25. ATT.#3	A MINIMUM FLOOR AREA OF 3,000 S.F. IS REQUIRED; WHEREAS 2,689 S.F. OF FLOOR AREA IS PROPOSED.
25. ATT.#3	A MAXIMUM BUILDING COVERAGE OF 20% IS REQUIRED; WHEREAS 64.0% OF BUILDING COVERAGE IS PROPOSED. BASED ON EFFECTIVE LOT AREA.
25. ATT.#3	A MAXIMUM LOT COVERAGE OF 30% IS REQUIRED; WHEREAS 111.6% OF LOT COVERAGE IS PROPOSED. BASED ON EFFECTIVE LOT AREA.
§25.8.4(b)	SOLID WALLS AND FENCES NOT HIGHER THAN SIX FEET ARE PERMITTED IN THE REAR YARD AND ON THE SIDE PROPERTY LINE UP TO THE REAR LINE OF THE APPLICANT'S HOUSE.

revisions

manTERRA
DESIGN LLC

104 WINDING WAY

BLOCK 46.01, LOT 33
104 WINDING WAY
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NJ
TAX MAP SHEET # 4

VARIANCE PLAN

GIOVANNI MANILIO, PE
NEW JERSEY PROFESSIONAL ENGINEER 47552

manTERRA
DESIGN LLC

drawn by jam date 08.28.2023
checked by jam scale 1"=20'
po box 275
somerville, nj 08876
908.800.5500
manterradesign.com
certificate of authorization: 24GA28327100

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1. UNDERGROUND UTILITIES SHOWN HEREON ARE APPROXIMATE; THEIR ACCURACY OR COMPLETENESS ARE NOT GUARANTEED BY THE ENGINEER. MARK OUTS FROM UTILITY COMPANIES AND FIELD CONFIRMATION BY CONTRACTOR MUST BE MADE PRIOR TO CONSTRUCTION SO THAT DISTURBANCE AND/OR DISRUPTION TO THESE UTILITIES MAY BE AVOIDED.
2. ELEVATIONS AS SHOWN ARE BASED ON ASSUMED DATUM PER SURVEY REFERENCED.
3. PUBLIC SEWER, WATER, GAS, ELECTRIC, CATV AND TELEPHONE SERVICES ARE PRESENTLY SERVING THE AREA AND WILL SERVE THE PROPOSED BUILDING.
4. ALL PROPOSED CONSTRUCTION TO BE IN CONFORMANCE WITH THE TOWNSHIP OF WEST ORANGE STANDARDS DETAILS.
5. THIS SITE PLAN MAKES NO CERTIFICATION OR REPRESENTATION AS TO THE LOCATION OF ANY UNDERGROUND ELECTRICAL, PHONE OR CABLE CONDUITS AND/OR WIRES WHICH MAY BE PRESENT ON THE SITE.
6. PROPOSED GRADING TO BE DONE AS 3:1 MAXIMUM AND 2:0% MINIMUM WITHIN LAWN AREAS.
7. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A ROAD OPENING PERMIT FROM THE TOWNSHIP OF WEST ORANGE PRIOR TO ANY WORK WITHIN THE TOWNSHIP'S RIGHT OF WAY. ADDITIONALLY OBTAIN A NJDOT ROAD OPENING PERMIT FOR ANY WORK PROPOSED IN THE NJDOT RIGHT OF WAY.

HATCH						
SLOPE RANGE	0% TO 10%	10% TO 14.9%	15% TO 19.9%	20% TO 24.9%	25% OR MORE	
AREA SHOWN	2,082 S.F. (0.05 AC.)	289 S.F. (0.01 AC.)	131 S.F. (0.00 AC.)	916 S.F. (0.02 AC.)	10,233 S.F. (0.23 AC.)	
PERMITTED DISTURBANCE	100%	60%	40%	20%	0%	
PORTION DISTURBANCE	32.2% (670 S.F.)	3.4% (10 S.F.)	0% (0 S.F.)	69.0% (633 S.F.)	50.4% (5,515 S.F.)	

STEEP SLOPE	AREA SHOWN	ADJUSTMENT FACTOR	EFFECTIVE LOT AREA
AREA 1: SLOPES 0-10%	2,082 S.F.	1.0	2,082 S.F.
AREA 1: SLOPES 10-14.99%	289 S.F.	0.6	173.4 S.F.
AREA 1: SLOPES 15-19.99%	131 S.F.	0.4	52.4 S.F.
AREA 1: SLOPES 20-24.99%	916 S.F.	0.2	183.2 S.F.
AREA 1: SLOPES 25% OR MORE	10,933 S.F.	0.0	0 S.F.
	TOTAL EFFECTIVE LOT AREA		2,491 S.F.

man | **TERRA**
DESIGN LLC

BLOCK 46.01, LOT 33
104 WINDING WAY
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NJ
TAX MAP SHEET # 4

GIOVANNI MANILIO, PE
NEW JERSEY PROFESSIONAL ENGINEER 47552

o box 275
omerville, nj 08876

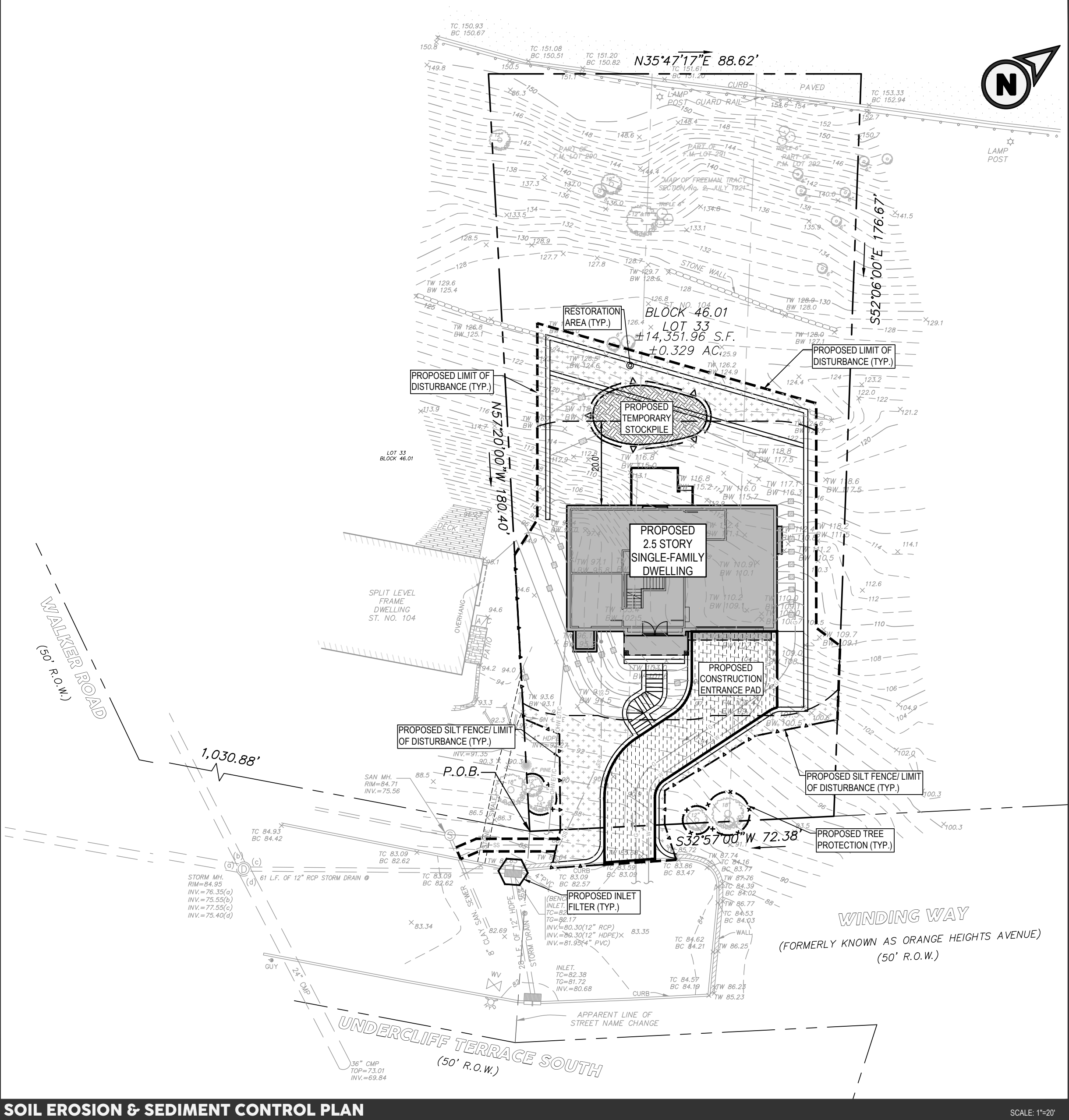
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nanterredesign.com

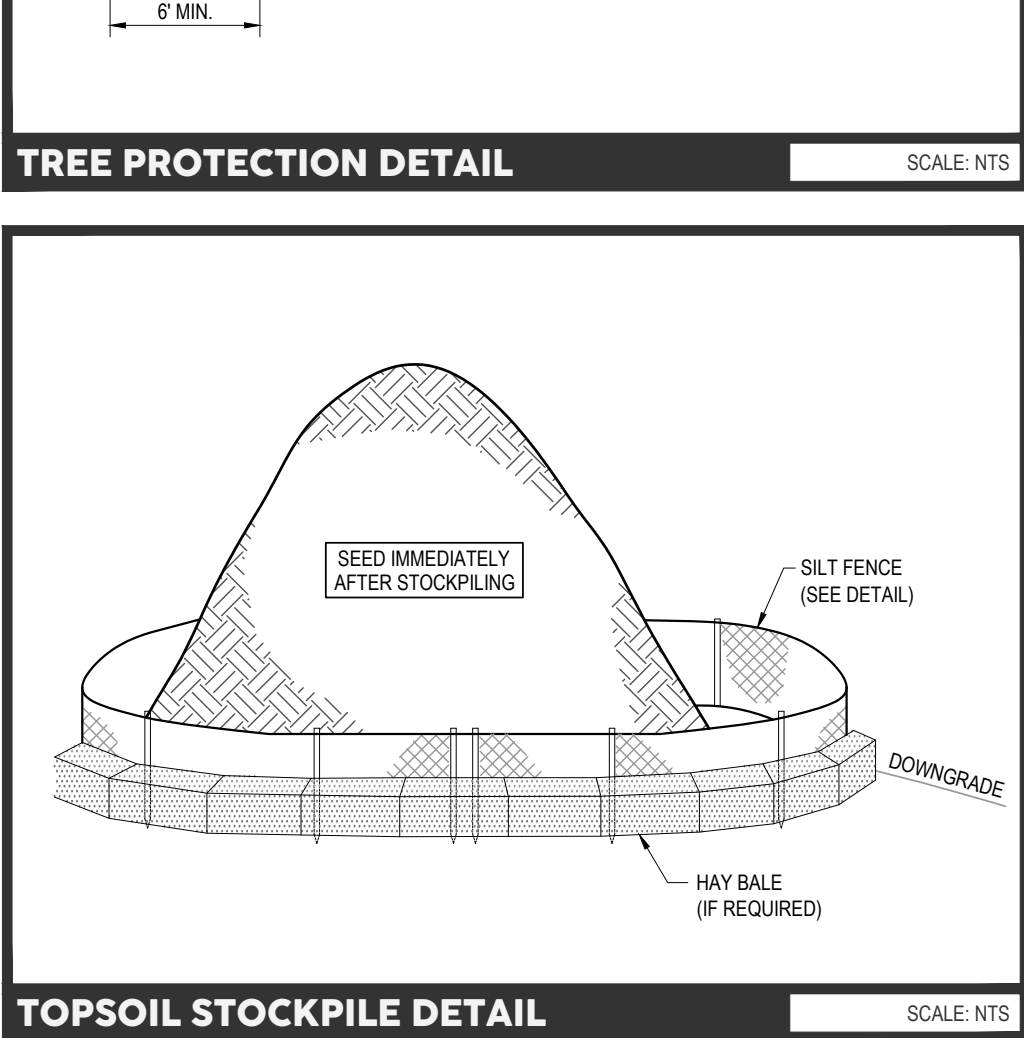
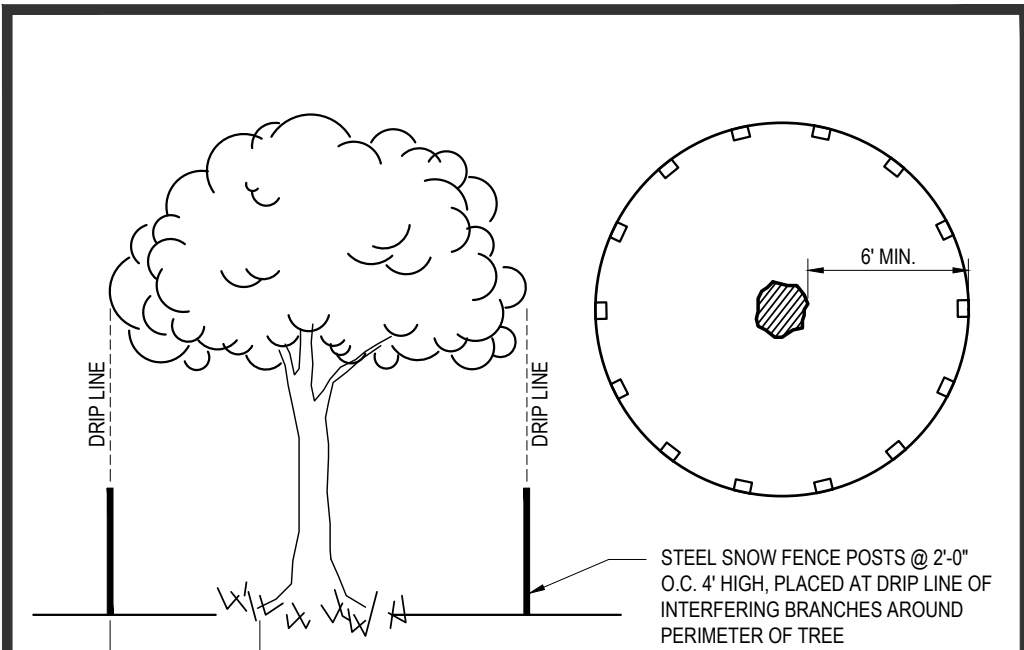
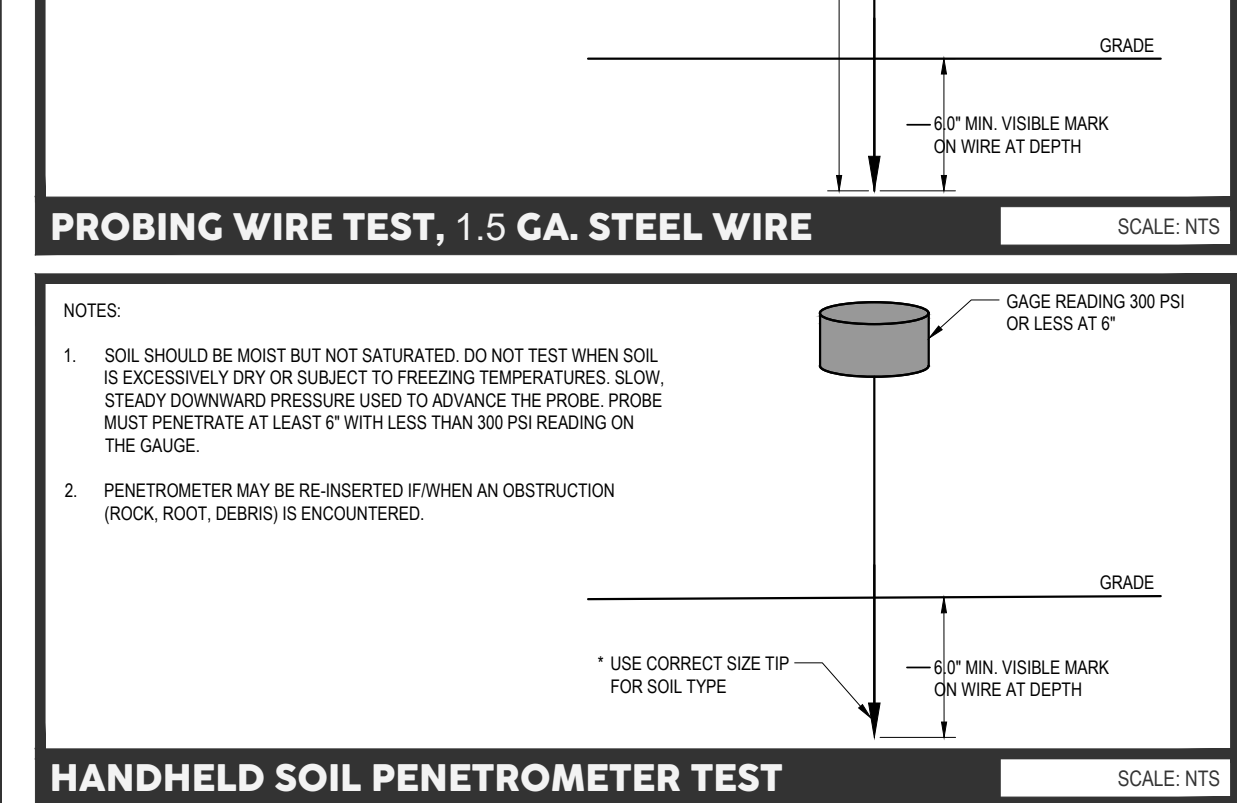
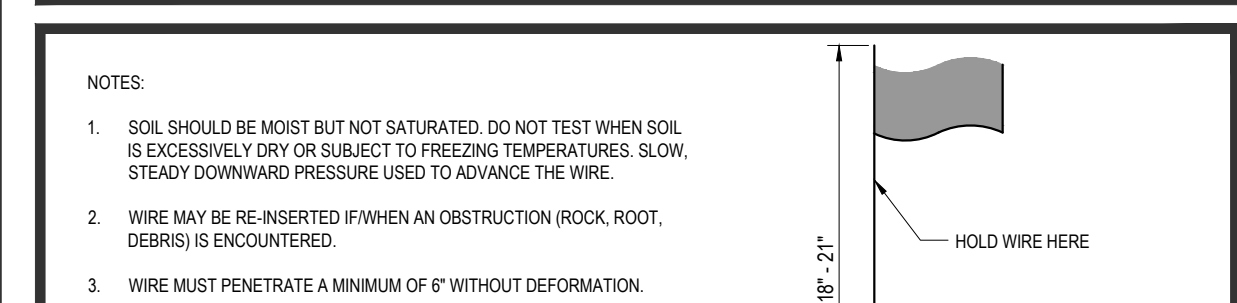
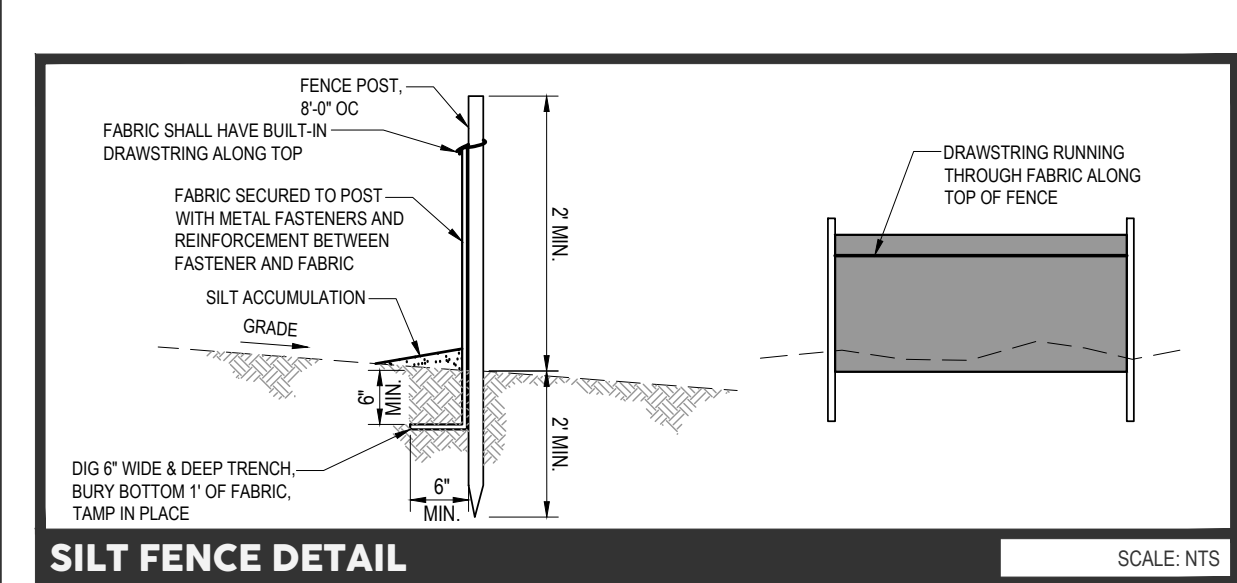
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SOIL EROSION & SEDIMENT CONTROL PLAN



SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN WILL BE CONSTRUCTED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL 7TH EDITION LAST REVISED JULY 2017. EFFECTIVE DECEMBER 2017. THESE MEASURES WILL BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
2. SOIL TO BE EXPOSED OR STOCKPILED FOR A PERIOD OF GREATER THAN 14 DAYS, AND NOT UNDER ACTIVE CONSTRUCTION MAY BE REQUIRED TO BE TEMPORARILY MULCHED, AND SEEDED OR OTHERWISE PROVIDED WITH VEGETATIVE COVER AS APPENDIX A3. THIS TEMPORARY COVER SHALL BE MAINTAINED UNTIL SUCH TIME WHEREBY PERMANENT RESTABILIZATION IS ESTABLISHED.
3. SEEDING DATES: THE FOLLOWING SEEDING DATES ARE RECOMMENDED TO BEST ESTABLISH PERMANENT VEGETATIVE COVER WITHIN MOST LOCATIONS IN THE HEPSCD: SPRING 3-15 AND FALL 8-15-10-1.
4. SEDIMENT FENCES AND TO BE PROPERLY TRENCHED AND MAINTAINED UNTIL PERMANENT VEGETATIVE COVER IS ESTABLISHED.
5. ALL STORM DRAINAGE INLETS SHALL BE PROTECTED BY ONE OF THE PRACTICES ACCEPTED IN THE STANDARDS, AND PROTECTION SHALL REMAIN UNTIL PERMANENT STABILIZATION HAS BEEN ESTABLISHED. STORM DRAINAGE OUTLET PUNTS SHALL BE PROTECTED AS REQUIRED BEFORE THEY BECOME FUNCTIONAL.
6. MULCH MATERIALS SHALL BE UNWETTED SMALL GRAIN STRAW APPLIED AT THE RATE OF 70 TO 90 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING THE DOWN. OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT.
7. ALL EROSION CONTROL DEVICES SHALL BE PERIODICALLY INSPECTED, MAINTAINED AND CORRECTED BY THE CONTRACTOR. ANY DAMAGE INCURRED BY EROSION SHALL BE REPAIRED IMMEDIATELY.
8. THE HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT WILL BE NOTIFIED IN WRITING AT LEAST 48 HOURS PRIOR TO ANY SOIL DISTURBING ACTIVITIES. FAX: (862) 333-4507 OR email: INFORMATION@HEPSCD.ORG.
9. THE APPLICANT MUST OBTAIN A DISTURBANCE REPORT OR COMPLIANCE REPORT TO APPLYING FOR THE CERTIFICATE OF OCCUPANCY OR TEMPORARY CERTIFICATE OF OCCUPANCY FROM THE RESPECTIVE MUNICIPALITY. NJ - 024 OR ANY OTHER CONTROLLING AGENCY. CONTACT THE DISTRICT AT 862-333-4507 TO REQUEST A FINAL INSPECTION, GIVING ADVANCED NOTICE UPON COMPLETION OF THE RESTABILIZATION MEASURES. A PERFORMANCE DEPOSIT MAY BE POSTED WITH THE DISTRICT WHEN WINTER WEATHER OR SNOW COVER PROHIBITS THE PROPER APPLICATION OF SEED, MULCH, FERTILIZER OR HYDROSEED.
10. PAVED ROADWAY MULCH MUST BE KEPT CLEAN AT ALL TIMES. DO NOT UTILIZE A FIRE OR GARDEN HOSE TO CLEAN ROADS UNLESS THE RUNOFF IS DIRECTED TO A PROPERLY DESIGNED AND FUNCTIONING SEDIMENT BASIN. WATER PUMPED OUT OF THE EXCAVATED AREAS CONTAINS SEDIMENT THAT MUST BE REMOVED PRIOR TO DISCHARGING TO RECEIVING BODIES OF WATER USING REMOVABLE PUMPING STATION, PUMP PITS, PORTABLE SEDIMENTATION TANKS AND/OR SILT CONTROL BAGS.
11. ALL SURFACES HAVING LAWN OR LANDSCAPING AS FINAL COVER ARE TO BE PROVIDED TOPSOIL PRIOR TO RE-SEEDING, SOODING OR PLANTING. A DEPTH OF 5 INCHES, FIRMED IN PLACE, IS REQUIRED, AS PER THE STANDARDS FOR TOPSOILING AND LAND GRADING. EFFECTIVE DECEMBER 2017.
12. ALL PLAN REVISIONS MUST BE SUBMITTED TO THE DISTRICT FOR PROPER REVIEW AND APPROVAL.
13. A CRUSHED STONE WHEEL CLEANING TRACKING PAD IS TO BE INSTALLED AT ALL SITE EXISTS USING 2 1/4\"/>

STANDARD FOR TEMPORARY VEGETATIVE COVER

- TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION
1. SITE PREPARATION:
 - A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARDS FOR LAND GRADING, PG. 19-1.
 - B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS. SEE STANDARDS 11 THROUGH 42.
 - C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 12\"/>
 2. SEEDING PREPARATION:
 - A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 50 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE. LIMING RATES SHALL BE ESTABLISHED VIA SOIL TESTING. MEASURES SHALL BE ESTABLISHED AND STANDARD FOR MEASURING THE ACIDITY AND SUPPLY OF CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES.
 - B. WORK LINE AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL, TO A DEPTH OF 4 INCHES WITH A DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
 - C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED IN ACCORDANCE WITH THE ABOVE.
 - D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS.
 3. SEEDING:
 - A. TEMPORARY SEEDING SHALL CONSIST OF SPRING OATS APPLIED AT A RATE OF 2.0 LBS. PER 1,000 SF OR PERENNIAL RYEGRASS APPLIED AT A RATE OF 1.0 LBS. PER 1,000 SF. TEMPORARY SEEDING TO BE MAINTAINED UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH PERMANENT SEEDING.
 - B. OPTIMAL DATE: 301 TO 430
 - C. ACCEPTABLE DATE: 501 TO 814
 - D. ACCEPTABLE DATE: 915 TO 1015
 4. MULCHING:
 - A. MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.
 - B. STRAW OR HAY UNWETTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, APPLIED AT THE RATE OF 1-1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRUMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION IS 3 TONS PER ACRE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MULCH. HAY MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED SEED.
 - C. APPLICATION: SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 80% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE TO 70 TO 90 POUNDS WITHIN EACH SECTION.
 - D. ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS:
 - A. PEGS AND TWINE: DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRSS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
 - B. MULCH NETTING: STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOVED.
 - C. CRUMPER (MULCH ANCHORING TOOL): A TRACTOR DRIVEN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
 - E. LIQUID MULCH-BINDERS: MAY BE USED TO ANCHOR HAY OR STRAW MULCH.
 - A. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
 - B. USE ONE OF THE FOLLOWING:
 - (1) ORGANIC AND VEGETABLE BASED BINDERS: NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOLOGIC EFFECT OR IMPIDE GROWTH OF TURFGRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE. SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
 - (2) SYNTHETIC BINDERS: HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION TO MULCH, DRYING AND CURING SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. IT SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.
 - C. NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.
 - F. WOOD-FIBER OR PAPER-FIBER MULCH: SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS. USED AT THE RATE OF 1,500 POUNDS PER ACRE OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
 - G. PELLETED MULCH: COMMINUTED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDBED AREA AND WATERED, FORM A MULCH MAT. PELLETED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60 TO 80 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS. SEEDBED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFYING AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROTECT SOIL COVERAGE.

SITE INFORMATION

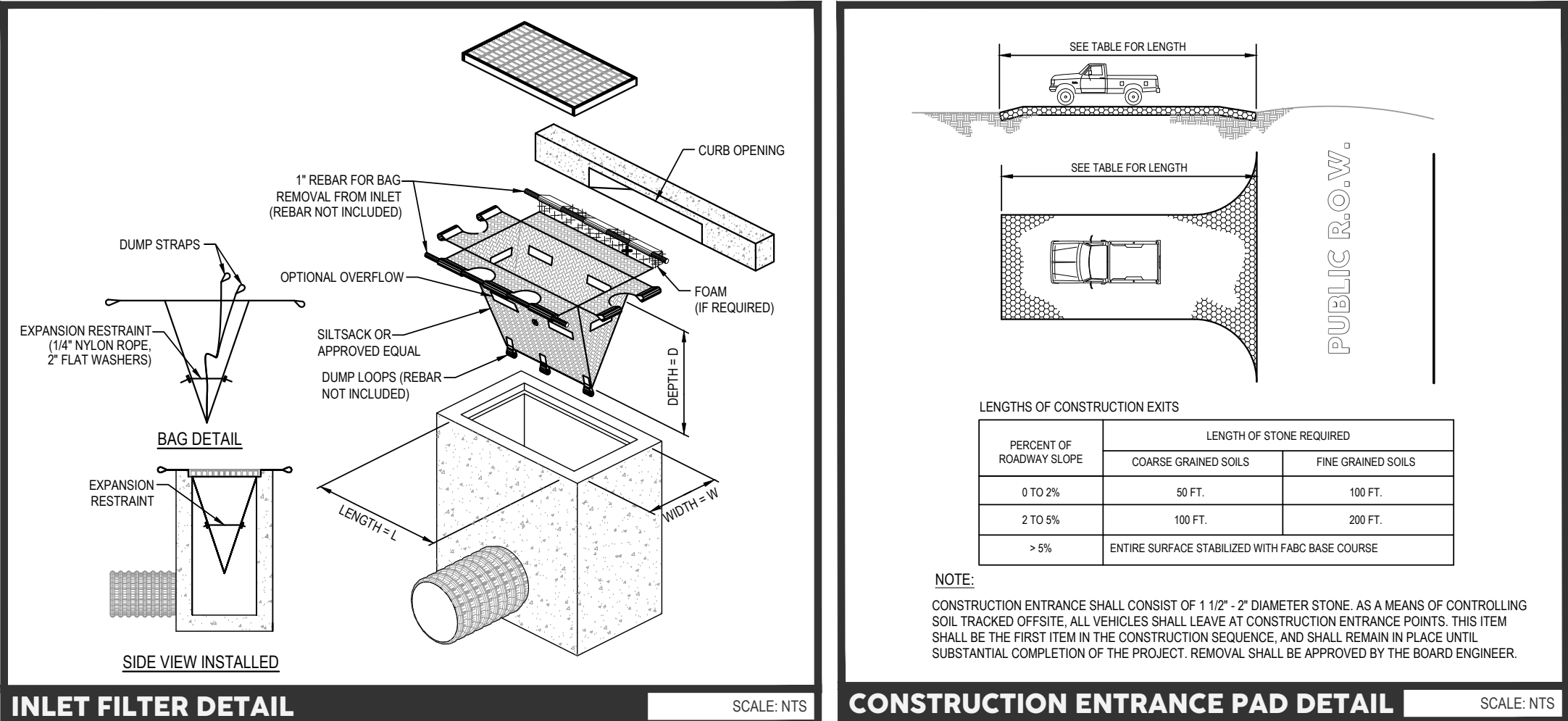
BLOCK 46.01, LOT 33
104 WINDING WAY
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NJ
LOT AREA = 14,351.96 S.F. (0.329 AC.)
DISTURBANCE = 7,138 S.F. (0.164 AC.)
RESTORATION = 1,045S.F. (0.024 AC.)

APPLICANT

PARDO DEVELOPMENT
104 WINDING WAY
WEST ORANGE, NJ 07052

HUDSON-ESSEX-PASSAIC SOIL CONSERVATION DISTRICT

80 ORCHARD STREET
BLOOMFIELD, NJ 07003
PHONE: 862-333-4505



SEQUENCE OF CONSTRUCTION:

NOTIFY THE SOIL CONSERVATION DISTRICT WITH WRITTEN NOTIFICATION 48 HOURS PRIOR TO ANY LAND DISTURBANCE.	2 DAYS
INSTALL SILT FENCE AS DEPICTED ON SOIL EROSION AND SEDIMENT CONTROL PLAN.	2 DAYS
INSTALL STONE CONSTRUCTION ENTRANCE PAD AS DEPICTED ON SOIL EROSION AND SEDIMENT CONTROL PLAN.	1 DAY
CLEAR SITE AND STRIP TOPSOIL AND STORE FOR FUTURE USE.	2 WEEKS
ROUGH GRADE AREAS FOR PROPOSED IMPROVEMENTS.	2 WEEKS
STABILIZE ALL CRITICAL AREAS SUBJECT TO EROSION.	ONGOING
CONSTRUCT BUILDINGS, SITE IMPROVEMENTS AND UTILITIES	10 MONTHS
FINE GRADE, PLACE TOPSOIL, INSTALL LANDSCAPING, SEED, AND MULCH IN ACCORDANCE WITH PERMANENT SEEDING AND MULCHING STANDARDS.	1 WEEK
AFTER LANDSCAPE STABILIZATION, REMOVE ALL SILT FENCING.	1 DAY
FINAL PAVE DRIVEWAY AREA.	2 DAYS
TOTAL DURATION	± 12 MONTHS

STANDARD FOR PERMANENT VEGETATIVE COVER

1. SITE PREPARATION:
 - A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.
 - B. IMMEDIATELY PRIOR TO SEEDING AND TOPSOIL APPLICATION, THE SUBSOIL SHALL BE EVALUATED FOR COMPACTION IN ACCORDANCE WITH THE STANDARD FOR LAND GRADING.
 - C. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS REQUIRED ON ALL SITES. TOPSOIL SHALL BE AMENDED WITH ORGANIC MATTER, AS NEEDED, IN ACCORDANCE WITH THE STANDARD FOR TOPSOILING.
 - D. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
 2. SEEDING PREPARATION:
 - A. UNIFORM APPLY GROUND LIMESTONE AND FERTILIZER TO TOPSOIL WHICH HAS BEEN SPREAD AND FIRMED, ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION OFFICES. SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS CO-OPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 50 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-10-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE AND INCORPORATED INTO THE SURFACE 4 INCHES. IF FERTILIZER IS NOT INCORPORATED, APPLY ONE-HALF THE RATE DESCRIBED ABOVE DURING SEEDING PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.
 - B. WORK LINE AND FERTILIZER INTO THE TOPSOIL AS NEARLY AS PRACTICAL, TO A DEPTH OF 4 INCHES WITH A DISC, SPRING-TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISKING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLE UNIFORM SEEDBED IS PREPARED.
 - C. HIGH ACID PRODUCING SOILS HAVING A PH OF 4 OR LESS OR CONTAINING HIGH SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDING PREPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS.
 3. SEEDING:
 - A. PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE OR APPROVED EQUIVALENT:

SITE CONTAINS SOL F&B FREEHOLD SANDY LOAM, 2 TO 5 PERCENT SLOPES AND CLASSIFIED AS "WELL DRAINER" PER NJ WEB SOIL SURVEY USDA

PLANTING MIXTURE TO BE USED: MIX-10 (RESIDENTIAL/COMMERCIAL USE)
TALL FESCUE (TURF TYPE) @ 25 LBS/AC.
PERENNIAL RYEGRASS @ 20 LBS/AC.
OR WHITE CLOVER @ 5 LBS/AC. (WHITE CLOVER CAN BE EXCLUDED ON LAWN SITES)

SITE IS LOCATED WITHIN USDA PLANT HARDINESS ZONE 6B. PLANTING DATES:
OPTIMAL DATE: 301 TO 430
ACCEPTABLE DATE: 501 TO 814
ACCEPTABLE DATE: 915 TO 1015 (*)

(*) SUMMER SEEDINGS SHOULD ONLY BE CONDUCTED WHEN THE SITE IS IRRIGATED. MIXES INCLUDING WHITE CLOVER REQUIRE THAT AT LEAST SIX WEEKS OF GROWING SEASON REMAIN AFTER SEEDING TO ENSURE ESTABLISHMENT BEFORE FROSTING CONDITIONS.
 - B. MULCHING IS REQUIRED ON ALL SEEDING. MULCH WILL PROTECT AGAINST EROSION BEFORE GRASS IS ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.
 - C. APPLICATION: SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 80% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE TO 70 TO 90 POUNDS WITHIN EACH SECTION.
 - D. ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STEEPNESS OF SLOPES, AND COSTS:
 - A. PEGS AND TWINE: DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRSS-CROSS AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
 - B. MULCH NETTING: STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOVED.
 - C. CRUMPER (MULCH ANCHORING TOOL): A TRACTOR DRIVEN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
 - E. LIQUID MULCH-BINDERS: MAY BE USED TO ANCHOR SALT HAY, HAY OR STRAW MULCH.
 - A. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS, AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE.
 - B. USE ONE OF THE FOLLOWING:
 - (1) ORGANIC AND VEGETABLE BASED BINDERS: NATURALLY OCCURRING, POWDER BASED, HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT RESULT IN A PHYTOLOGIC EFFECT OR IMPIDE GROWTH OF TURF GRASS. USE AT RATES AND WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURERS TO ANCHOR MULCH MATERIALS. MANY NEW PRODUCTS ARE AVAILABLE. SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE IN THIS STATE.
 - (2) SYNTHETIC BINDERS: HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED AND FOLLOWING APPLICATION OF MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OR DISPERSIBLE IN WATER. BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.
 - C. NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.
 - F. WOOD-FIBER OR PAPER-FIBER MULCH: SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS. USED AT THE RATE OF 1,500 POUNDS PER ACRE OR AS RECOMMENDED BY THE PRODUCT MANUFACTURER AND MAY BE APPLIED BY A HYDROSEEDER. MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
 - G. PELLETED MULCH: COMMINUTED AND EXTRUDED PAPER AND/OR WOOD FIBER PRODUCT, WHICH MAY CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS, AND COLORING AGENTS. THE DRY PELLETS, WHEN APPLIED TO A SEEDBED AREA AND WATERED, FORM A MULCH MAT. PELLETED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60 TO 80 LBS/1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO 0.4 INCHES OF WATER. THIS MATERIAL HAS BEEN FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR RENOVATION AREAS. SEEDBED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE STRAW MULCH AND TACKIFYING AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETED MULCH ON THE SEEDBED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROTECT SOIL COVERAGE.
5. IRRIGATION (WHERE FEASIBLE):
 - A. IF SOIL MOISTURE IS DEFICIENT SUPPLY NEW SEEDLING WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH APPLIED UP TO TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE MADE IN ANOMALY DRY HOT OR WEATHER OR ON DROUGHTY SITES.
 - B. TOPDRESSING: SINCE SOIL ORGANIC MATTER CONTENT AND SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED IN SECTION 2A-SEEDING PREPARATION IN THIS STANDARD, NO FOLLOW-UP OF TOPDRESSING IS MANDATORY. AN EXCEPTION MAY BE MADE WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FAILURE MAY DEVELOP. IN THAT INSTANCE, TOP DRESS WITH 10-10-10 OR EQUIVALENT AT 300 POUNDS PER ACRE OR DRY POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED.
7. ESTABLISHING PERMANENT VEGETATIVE STABILIZATION:
 - A. THE QUALITY OF PERMANENT VEGETATION RESTS WITH THE CONTRACTOR. THE TIMING OF SEEDING, PREPARING THE SEEDBED, APPLYING NUTRIENTS, MULCH AND OTHER MANAGEMENT ARE ESSENTIAL. THE SEED APPLICATION RATES IN TABLE 4S ARE THE MINIMUM REQUIRED FOR COMPLIANCE. A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN APPLICATION RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO REQUESTING A REPORT OF COMPLIANCE FROM THE DISTRICT. THESE RATES APPLY TO ALL METHODS OF SEEDING. ESTABLISHING PERMANENT VEGETATION MEANS THAT PERMANENT VEGETATIVE COVER OF THE SEEDING SPECIES) AND MOVED ONCE. NOTE THIS DESIGNATION OF MOVED ONCE DOES NOT GUARANTEE THE PERMANENCY OF THE TURF SHOULD OTHER MAINTENANCE FACTORS BE NEGLECTED OR OTHERWISE MISMANAGED.

SOIL DE-COMPACTION AND TESTING REQUIREMENTS

1. SURFACE SOILS PRIOR TO THE APPLICATION OF TOPSOIL, PERMANENT SEEDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENHANCE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
2. AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY DENOTED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
3. COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS, AND ATTACHED TO THE COMPACTION REMEDIATION FORM AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.
4. IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLDS INDICATED FOR THE SIMPLIFIED TESTING METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPT AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.
6. COMPACTION TESTING METHODS:
 - A. PROBING WIRE TEST (SEE DETAIL)
 - B. HAND-HELD PENETROMETER TEST (SEE DETAIL)
 - C. TURF BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
 - D. NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)

NOTE: ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.

SOIL COMPACTION TESTING IS NOT REQUIRED IF WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE @ 6" MINIMUM DEPTH) OR SIMILAR) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.
7. PROCEDURES FOR SOIL COMPACTION MITIGATION:
 - A. PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
 - B. RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE @ MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.), IN THE ALTERNATE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAY BE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL.

DUST CONTROL NOTES

- THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:
 - A. MULCHES: SEE STANDARD FOR STABILIZATION WITH MULCHES ONLY (PG. 5-1)
 - B. VEGETATIVE COVER: SEE STANDARD FOR TEMPORARY VEGETATIVE COVER (PG. 7-1), PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION (PG. 4-1), AND PERMANENT STABILIZATION WITH SOO (PG. 6-1)
 - C. SPRAY ON ADHESIVES: ON MINERAL SOILS (NOT EFFECTIVE ON MUCK) SOILS, KEEP TRAFFIC OFF THESE AREAS.
- TABLE 16-1: DUST CONTROL MATERIALS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM)-SPRAY ON USED			
POLYACRYLAMIDE (PAM)-DRY SPRAY			
ADICULATE SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

TLAGE - TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE.

CHISEL - TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRELS - SOLID BOARD FENCES, SNOW FENCES, BURIAL FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULATES OF FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS.

STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

revisions

104 WINDING WAY

BLOCK 46.01, LOT 33
104 WINDING WAY
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, NJ
TAX MAP SHEET # 4

SOIL EROSION AND SEDIMENT CONTROL PLAN

GIOVANNI MANILIO, PE
NEW JERSEY PROFESSIONAL ENGINEER #7552

manTERRA DESIGN LLC

drawn by jam date 08.28.2023

checked by jam scale 1"=20'

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certificate of authorization: 24GA28327100

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