501-503 STATION AVENUE

BLOCK 25, LOTS 16 & 17.01 HADDON HEIGHTS BOROUGH, CAMDEN COUNTY, NEW JERSEY

PROPERTY OWNERS WITHIN 200 FEET OF SUBJECT PROPERTY

TO BE FURNISHED UPON RECEIP

PUBLIC UTILITIES

1250 HADDONFIELD-BERLIN ROAD CHERRY HILL, NJ 08003

NEW JERSEY AMERICAN WATER CO. 800 GROVE STREET HADDON HEIGHTS, NJ 08028

MERCHANTVILLE-PENNSAUKEN WATER COMMISSION 20 WEST MAPLE AVENUE MERCHANTVILLE, NJ 08109

CAMDEN COUNTY MUNICIPAL UTILITIES PO BOX 1432

REAL ESTATE DEPARTMENT 650 PARK AVENUE EAST ORNAGE, NJ 07017

TRANSCONTINENTAL GAS PIPE LINE 3200 SOUTH WOOD AVENUE LINDEN, NJ 07036

COLONIAL PIPELINE CO. PO BOX 727 WOODBURY, NJ 08096

STANDARD SPECIFICATIONS:

THE LATEST NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION WITH ALL AMENDMENTS AND SUPPLEMENTS SHALL GOVERN ALL OF THE WORK PERFORMED UNDER THIS CONTRACT EXCEPT AS SUPPLEMENTED HEREIN.

UNDERGROUND UTILITY LOCATION:

LOCATIONS OF UTILITIES SHOWN ON THIS PLAN ARE NOT NECESSARILY COMPLETE. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES OPERATING WITHIN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION, SIZE, TYPE AND ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO COMMENCEMENT ANY SITE DISTURBANCE ACTIVITIES, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. LOCATION OF UTILITIES SHALL INCLUDE CONTACT BY THE CONTRACTOR WITH THE APPLICABLE UNDERGROUND UTILITY LOCATION SERVICE, AS REQUIRED. BY LAW, LOCATION OF UTILITIES SHALL INCLUDE CONTACT WITH THE NJ ONE-CALL SYSTEM (800-272-1000), AT LEAST 3 DAYS PRIOR TO COMMENCING WORK.

TRASH REMOVAL:

ALL TRASH WILL BE MAINTAINED INTERNALLY IN AND THE OWNER WILL CONTRACT FOR TRASH PICKUP. THERE WILL BE NO TRASH CANS STORED OUTSIDE THE BUILDING.

SITE SAFETY:

THE OWNER, OR HIS REPRESENTATIVE, IS TO DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR CONSTRUCTION SITE SAFETY DURING THE COURSE OF IMPROVEMENTS PURSUANT TO N.J.A.C. 5:23-2.21 (e) OF THE N.J. UNIFORM CONSTRUCTION CODE AND CFR 1926.32 (f) (OSHA COMPETENT PERSON).

OTHER REQUIRED APPROVALS:

NJDOT - HIGHWAY ACCESS PERMIT:

CAMDEN COUNTY PLANNING BOARD: PENDING CAMDEN COUNTY SOIL CONSERVATION DISTRICT: PENDING

REQUIRED NUMBER OF OFF STREET PARKING SPACES

OFF-STREET PARKING

PROVIDED: 6 SPACES

1 ADA PARKING STALL (VAN-ACCESSIBLE)

ARKING SPACES i. 1- OR 2- ii. 1 ADA PAR	RKING FOR RESIDENTIAL USES MUST BE PROVIDE WITHIN 500 FEET OF THE PROPERTY BOUNDARY BEDROOM UNITS: 1 PARKING SPACE PER UNIT. KING SPACE REQUIRED ON SITE TO SERVE COMMOFF—STREET PARKING: 13 SPACES	OF THE RESIDENTIAL BUILDING. REQUIRED: 12 SPACES	
QUIRED	PROPOSED - ON SITE	PROPOSED - OFF SITE	CONFORMS
SPACES	5 STANDARD PARKING STALLS	7 SPACES (1)	Y

(1) APPLICANT TO PROVIDE THE BOROUGH WITH A COPY OF THE AGREEMENT FOR USE OF OFF STREET PARKING SPACES.

GENERAL NOTES:

- 1. THE PROPERTIES THAT ARE THE SUBJECT OF THIS REDEVELOPMENT PLAN ARE KNOWN AS LOTS 16 AND 17:01 IN BLOCK 25. THE COMBINED LOT AREAS CONTAIN 8481.84 SQ. FT., OR 0.195 ACRES, AND ARE LOCATED IN THE CB - CENTRAL BUSINESS DISTRICT ACCORDING TO THE OFFICIAL ZONING MAP OF THE BOROUGH OF HADDON HEIGHTS IN CAMDEN COUNTY, NEW JERSEY,
- 2. OWNER/APPLICANT: BROKEN GROUND PROPERTIES LLC 5 CIRCLE LANE
- CHERRY HILL, NJ 08003 3. THE PURPOSE OF THIS PLAN IS TO DEPICT A PROPOSED MIXED USE DEVELOPMENT A. GROUND FLOOR SPACE WITH FRONTAGE ALONG STATION AVENUE AND WHITE HORSE PIKE, WITH PERMITTED USES CONSISTENT WITH THE HADDON HEIGHTS
- BOROUGH REDEVELOPMENT PLAN THAT WAS ADOPTED BY BOROUGH COUNCIL BY ORDINANCE NO. 2023;1537 ON NOVEMBER 8, 2023. B. SECOND AND THIRD STORY RESIDENTIAL UNITS COMPRISING (6) 1-BEDROOM DWELLING UNITS AND (2) 2-BEDROOM DWELLING UNITS.
- 4. INFORMATION TO PREPARE THESE PLANS OBTAINED FROM THE FOLLOWING SOURCES: A. PLAN ENTITLED "BOUNDARY AND TOPOGRAPHIC SURVEY" - BLOCK 25, LOTS 7, 16, 17.01" SHEET 1 OF 1, PREPARED BY STANTEC CONSULTING SERVICES INC.,
- DATED 05.01.2023 AND SIGNED ON 05.16.2023. B. SURVEY UPDATE PER STANTEC FIELD VISIT PERFORMED ON 12:28:2023. BOROUGH OF HADDON HEIGHTS TAX MAP, PLATE 3.
- EXISTING USES: A. 501 STATION AVENUE: 3 STORY MIXED USE BUILDING AND BOROUGH WELCOME B. 503 STATION AVENUE: 1 STORY BUILDING WITH 2 COMMERCIAL UNITS.
- 6. EXISTING PUBLIC SANITARY SEWER AND DOMESTIC WATER UTILITIES SERVICE THE SITE.

ZONING DATA 501-503 STATION AVE, BLOCK 25, LOTS 16 & 17.01 BOROUGH OF HADDON HEIGHTS, CAMDEN COUNTY, NJ

LOT 6 | LOT 5 | LOT 4 | LOT 3 | LOT 2 | LOT 1

STATION AVENUE

(COUNTY ROUTE NO. 656)

R-1 ZONE

CB ZONE

R-3 ZONE

Standard	Requirement for current Zoning District (CB Zone)	Requirement for lots a minimum of 8,000 sf	Proposed for this Application	BUILDING INFORMATIO	N
Minimum lot size	2,500 square feet	8,000 square feet	8736.9 square feet	TOTAL BUILDING AREAS	
Minimum lot width	25 feet	80 feet	87.5 feet	FIRST FLOOR	3
Minimum street frontage	N/A	80 feet each street	87.5 feet to Station Ave. 100 feet to White Horse Pike	SECOND FLOOR	6
Minimum lot depth	100 feet	100 feet	100 feet	THIRD FLOOR	6
Minimum front yard building	10 feet	0 feet to Station Ave	O feet to Station Ave	BUILDING TOTAL	11
setback from property line		5 feet to White Horse Pike within	5 feet to White Horse Pike		
		100 feet of Station Ave	444	GENERAL	
		20 feet to White Horse Pike	4	BUILDING HEIGHT (T.O. ROOF)	3
		beyond 100 feet from Station Ave	-t-re-ttttttttttttt-	LOT AREA	8
Maximum front yard building	N/A	10 feet to Station Ave	0 feet to Station Ave	BUILDING COVERAGE	6
setback from property line		25 feet to White Horse Pike	5 feet to White Horse Pike	SITE GREEN AREA + GREEN ROOF	4
Minimum front yard setback	N/A	12 feet Station Ave	12.5 feet to Station Ave	SITE GREEN AREA + GREEN ROOF	=
distance from building to curb		19 feet to White Horse Pike within 100 feet of Station Avenue 34 feet to White Horse Pike beyond 100 feet from Station Avenue	119.2 feet to White Horse Pike	DRA	\VI
Minimum side yard setback for principal building	0 feet	O feet on Station Ave O feet one side/15 feet aggregate on White Horse Pike	0 feet on Station Ave 0 feet one side/19 feet aggregate on White Horse Pike	SHEET TITLE GENERAL INFORMATION PLAN SITE DEMOLITION PLAN	
Minimum rear yard setback for principal building	20 feet	15 feet	20 feet	SITE PLAN	
Minimum distance between buildings	N/A	0 feet side to side 25 feet side to rear	0 feet side to side 70 feet side to rear	grading plan Utility plan	
Minimum parking setback	N/A	2 feet from side and rear yard Surface parking is not permitted in front of buildings.	2 feet from side and 3 feet from rear yard. No surface parking proposed in front of buildings	SOIL EROSION & SEDIMENT CONTRO SOIL EROSION & SEDIMENT CONTRO	L N
Minimum driveway setback from property line	N/A	2 feet from side and rear yard	2 feet from side and 3 feet from rear yard	SOIL EROSION & SEDIMENT CONTRO ACCESS PERMIT SITE PLAN	M. U
Maximum impervious cover	80%	including green roof	94.4% ground level with totaL 66.7% including green roof	DETAIL SHEET 2	
Maximum building height	3 stories or 36 feet	3 stories or 36 feet with allowance for an additional 42" for parapets	36 feet to Roof Deck; 45 ft. incl. Pilot House	DETAIL SHEET 3	
		46 feet for pilot house (with an additional 5' allowance for the elevator hoistway to address		LANDSCAPE & SITE LIGHTING PLAN- LANDSCAPE DETAILS	

intrapment requirements)

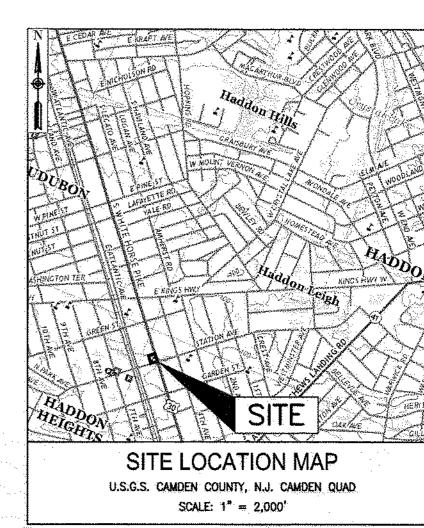
THIRD FLOOR	6,480 GSF	
BUILDING TOTAL	16,854 GSF	-
GENERAL		
BUILDING HEIGHT (T.O. ROOF)	35'-0"	
LOTAREA	8,766 GSF	
BUILDING COVERAGE	6,612 SF (75%)	
SITE GREEN AREA + GREEN ROOF	478 SF+2344 SF =2822 SF (33%)	P. T.
DRA	WING INDEX	
SHEET TITLE	and the state of t	NO. Si
GENERAL INFORMATION PLAN	G	-001

3,894 GSF

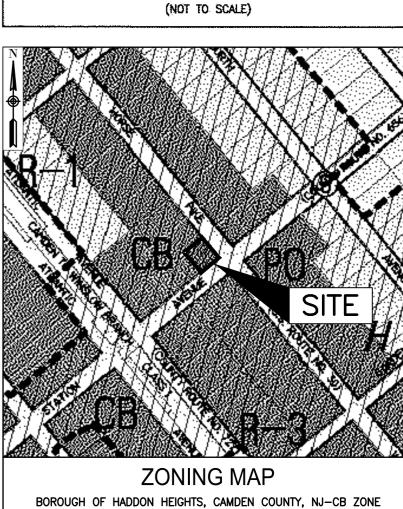
6,480 GSF

ZONING DISTRICT-BOUNDARY LINE

DRAWING INC	DEX	
SHEET TITLE	NO.	SHEET
GENERAL INFORMATION PLAN	G-001	1
SITE DEMOLITION PLAN	C-101.1	2
SITE PLAN	C-102	3
GRADING PLAN	C-103	4
UTILITY PLAN	C-104	5
SOIL EROSION & SEDIMENT CONTROL PLAN	C-105	6
SOIL EROSION & SEDIMENT CONTROL NOTES	C-105.1	7
SOIL EROSION & SEDIMENT CONTROL DETAILS	C-105.2	8
ACCESS PERMIT SITE PLAN	C-102.1	9
DETAIL SHEET	C-501	10
DETAIL SHEET 2	C-502	11
DETAIL SHEET 3	C-503	12
LANDSCAPE & SITE LIGHTING PLAN	L-101	13
LANDSCAPE DETAILS	L-501	14







(NOT TO SCALE)

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CHAIRMAN:	DATE:
SECRETARY:	DATE:
ENGINEER:	DATE:
BOROUGH CLERK:	DATE:
BOROUGH ENGINEER:	DATE:

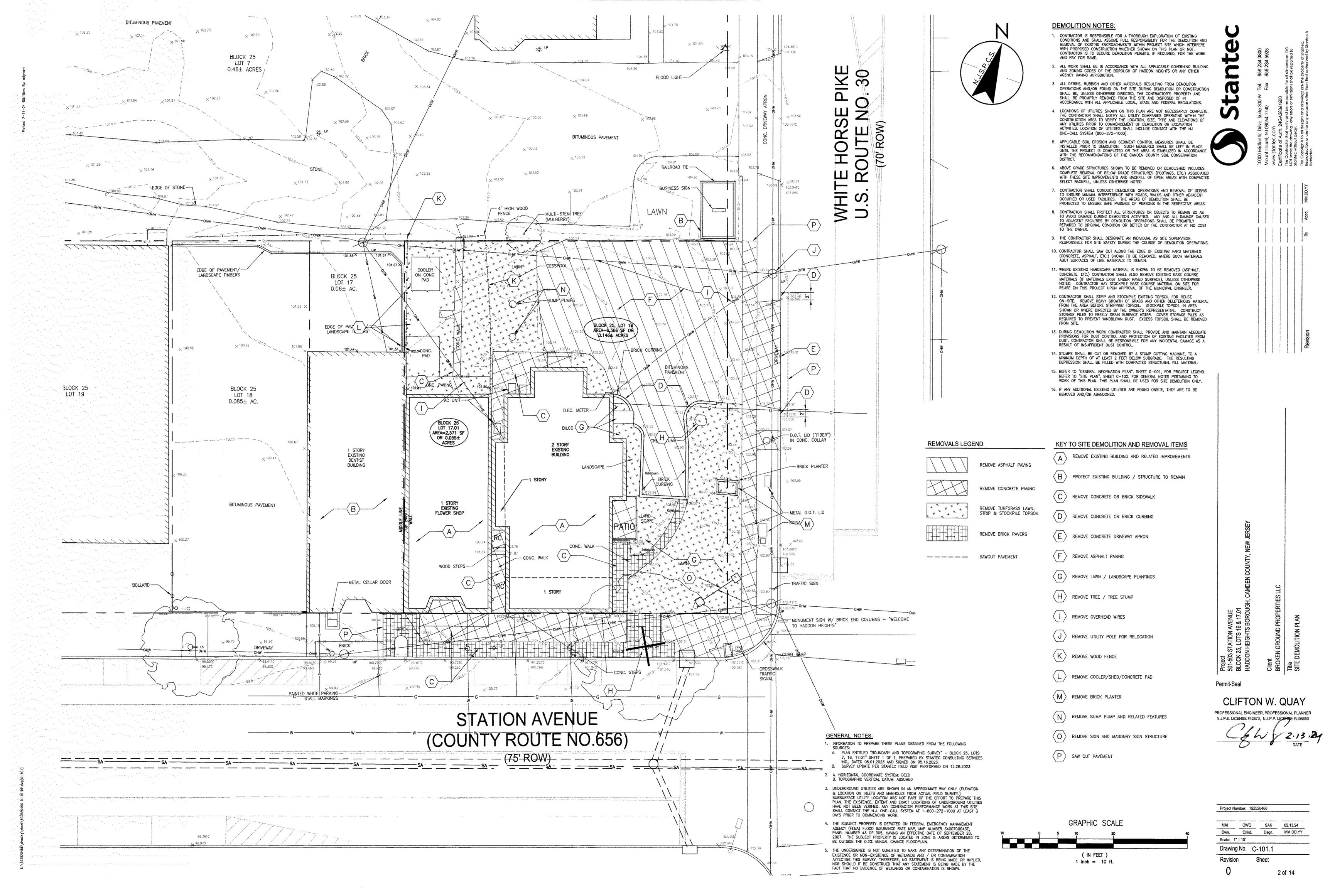
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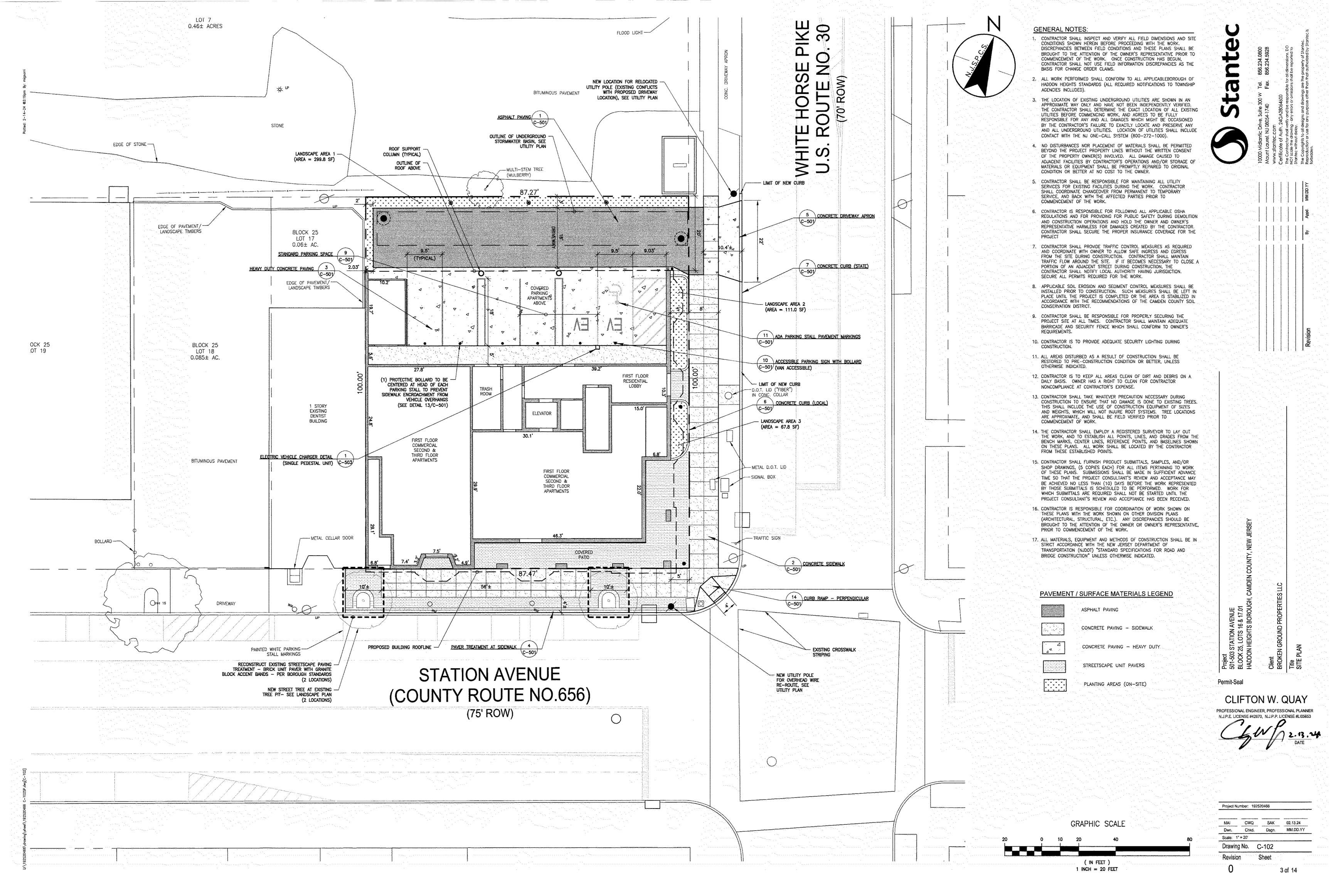
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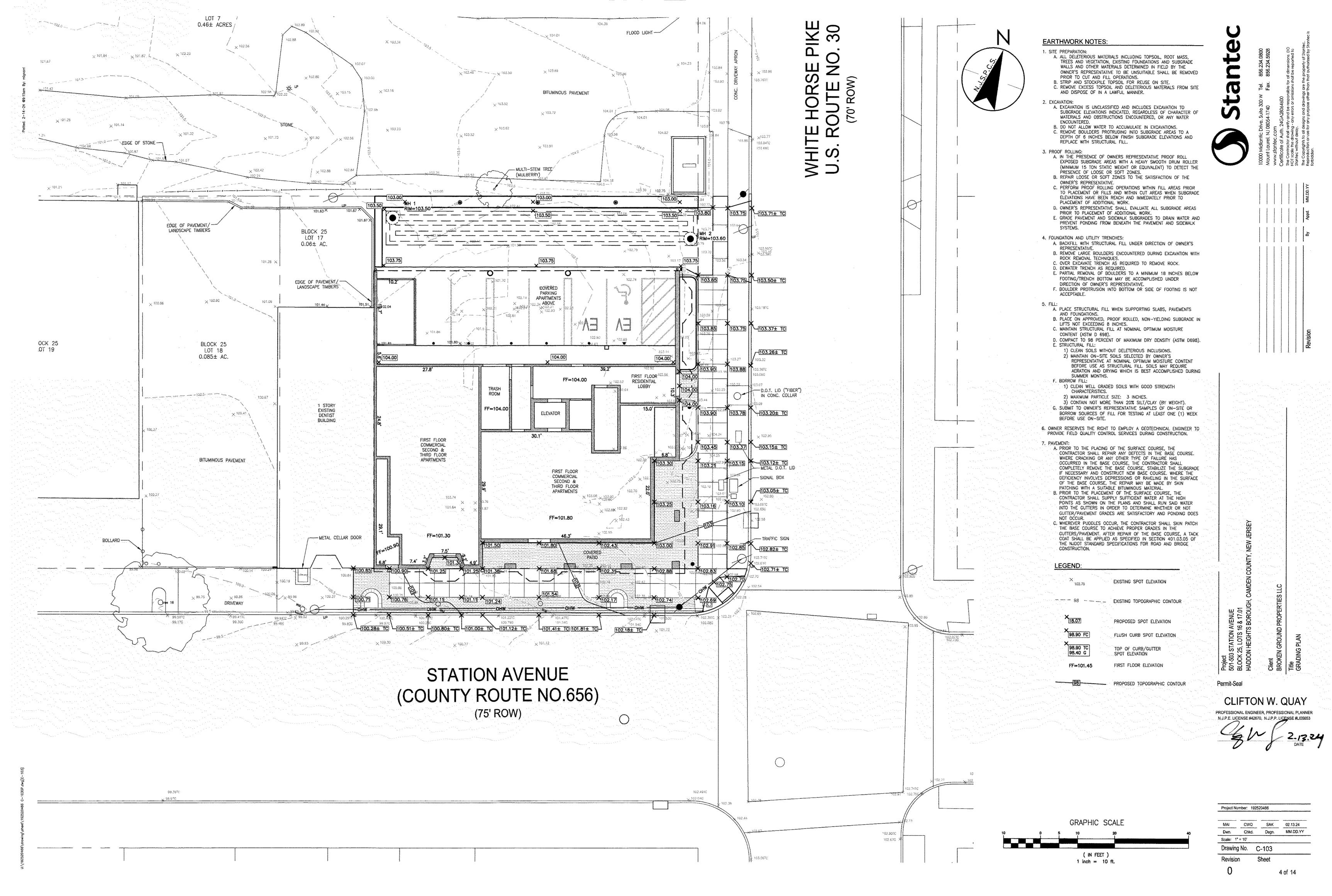
Permit-Seal

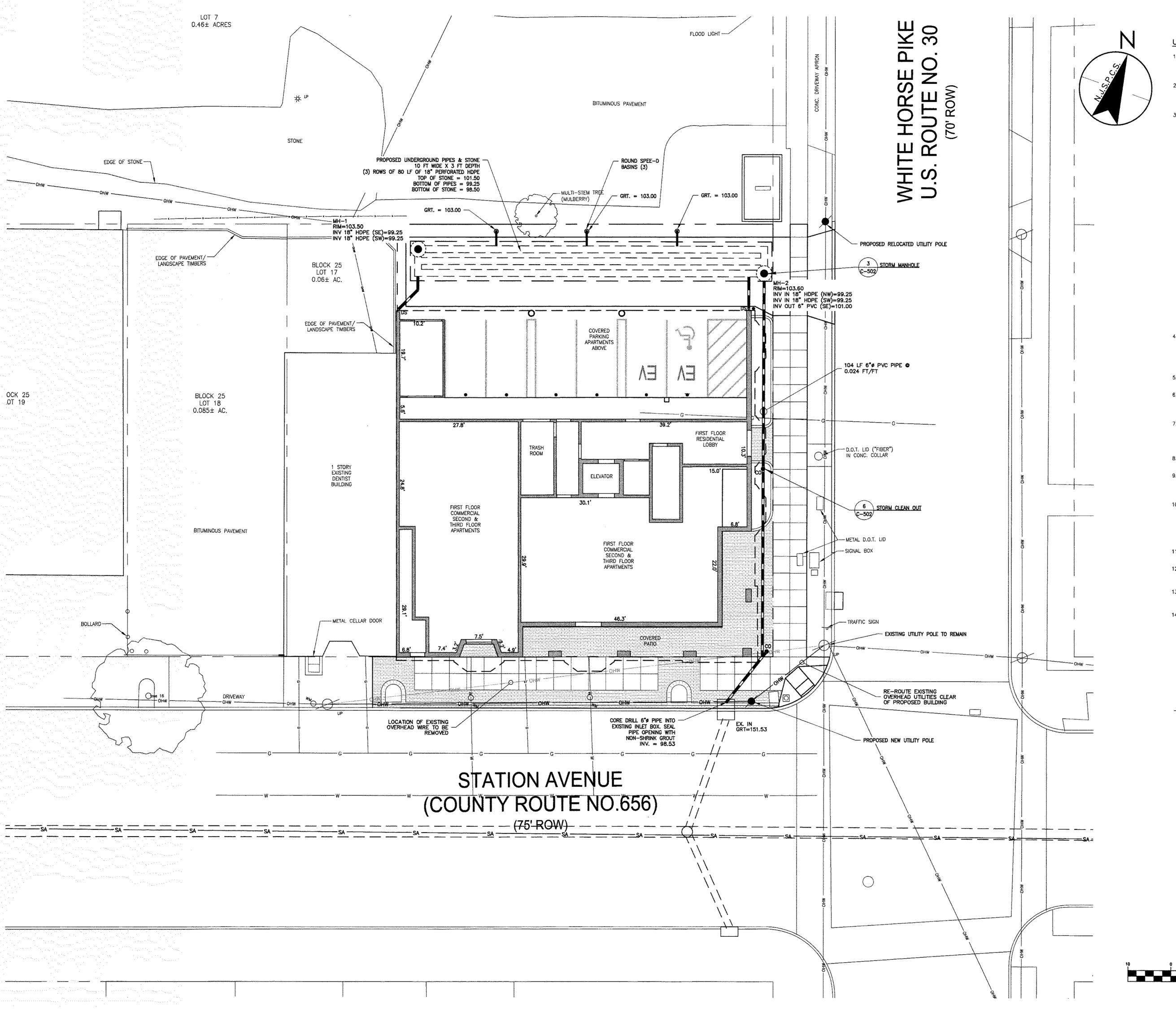
CLIFTON W. QUAY PROFESSIONAL ENGINEER, PROFESSIONAL PLANNER N.J.P.E. LICENSE #42670, N.J.P.P. LICENSE #LI05653

Project Number: 192520466 MAI CWQ SAK 02.13.24 Dwn. Chkd. Dsgn. MM.DD.YY Sheet 1 of 14









UTILITY NOTES:

1. ALL UTILITY CONTRACTORS SHALL PROCURE ALL REQUIRED PERMITS, LICENSES AND INSPECTIONS, PAY ALL CHARGES AND GIVE ALL NECESSARY NOTICES AS REQUIRED BY THE AUTHORITY HAVING

2. ALL METHODS AND MATERIALS OF CONSTRUCTION SHALL CONFORM, WHERE APPLICABLE, TO THE RULES AND REGULATIONS OF THE GOVERNING AUTHORITY HAVING JURISDICTION AND/OR THE LOCAL LITELITY COMPANY.

3. PIPE MATERIAL:

A. REINFORCED CONCRETE PIPE (RCP): ASTM C 76, CLASS III, WITH WALL TYPE A, B, OR C; MESH REINFORCEMENT; INSIDE NOMINAL DIAMETER AS INDICATED WITH BELL AND SPIGOT END.

1) REINFORCED CONCRETE: ASTM C 443.

2) PIPE JOINT: SDR 35 PER ASTM D-3034 WITH BELL AND GASKET JOINTS.

B. POLYVINYL CHLORIDE (PVC) PIPE: ASTM D 3034, RATED SDR 35, UNLESS OTHERWISE REQUIRED BY LOCAL UTILITY HAVING JURISDICTION.

1) CONTINUOUSLY MARK PIPE WITH MANUFACTURER'S NAME, PIPE SIZE, CELL CLASSIFICATION, SDR RATING, AND ASTM D 3034 CLASSIFICATION.

2) PIPE JOINT: ASTM D 3034, TABLE 2; WITH INTEGRALLY MOLDED BELL ENDS AND FACTORY SUPPLIED ELASTOMERIC GASKETS AND LUBRICANT.

C. POLYVINYL CHLORIDE (PVC) PIPE: ASTM D 1784, RATED SCHEDULE 40, UNLESS OTHERWISE REQUIRED BY LOCAL UTILITY HAVING JURISDICTION.

1) CONTINUOUSLY MARK PIPE WITH MANUFACTURER'S NAME, PIPE SIZE, CELL CLASSIFICATION, SCHEDULE 40 RATING, AND ASTM D 1784 CLASSIFICATION.

2) PIPE JOINT: ASTM D 3212; WITH INTEGRALLY MOLDED BELL ENDS AND FACTORY SUPPLIED ELASTOMERIC GASKETS AND LUBRICANT.

D. CORRUGATED POLYETHYLENE (HDPE) PIPE: AASHTO DESIGNATION #M252, TYPE S; SMOOTH INTERIOR.

1) FITTINGS: ASTM D 3034, RATED SDR 35; WITH THERMO—MOLDED PVC.

2) GASKETS: ASTM F 477; WITH THERMO—MOLDED PVC FITTINGS AND CPP PIPE JOINT ASSEMBLY.

4. MATERIALS FOR POTABLE WATER SERVICE AND ALL METHODS OF CONSTRUCTION SHALL CONFORM TO LOCAL WATER AND SEWER DEPARTMENT RULES AND REGULATIONS. CONTRACTOR SHALL PROVIDE ALL NECESSARY MATERIALS, LABOR AND TESTING FOR AND SERVICE CONNECTIONS AND COORDINATE SERVICE INITIATION REQUIREMENTS WITH THE TOWNSHIP.

PROVIDE MINIMUM COVER OF 42" FROM FINISH GRADE FOR POTABLE WATER SERVICE.

6. CONTRACTOR SHALL COORDINATE INSTALLATION OF GAS SERVICE WITH PSE&G AND PROVIDE ALL NECESSARY MATERIALS AND LABOR NOT PROVIDED BY PSE&G FOR COMPLETION OF MAIN AND SERVICE. SIZE OF SERVICE SHALL BE VERIFIED WITH PSE&G.

7. CONTRACTOR SHALL COORDINATE INSTALLATION OF ELECTRIC SERVICE WITH PSE&G AND PROVIDE ALL NECESSARY MATERIALS AND LABOR NOT PROVIDED BY PSE&G FOR COMPLETION OF SERVICE. SERVICE REQUIREMENTS SHALL BE VERIFIED WITH PSE&G. CONNECTION LOCATION TO BE DETERMINED BY PSE&G.

 REFER TO PLAN C-102 FOR GENERAL NOTES PERTAINING TO WORK OF THIS PLAN.

9. GENERAL CONTRACTOR SHALL EMPLOY AN INDEPENDENT SOILS INSPECTOR FOR 100% CONTINUOUS INSPECTION OF THE BEDDING AND BACKFILL OPERATION. COMPACTION TESTS SHALL BE TAKEN AT THE BOTTOM OF TRENCH AND AT EACH LIFT OF BACKFILL.

10. GENERAL CONTRACTOR SHALL EMPLOY A LICENSED SURVEYOR TO RECORD AS—BUILT TOP OF PIPE ELEVATIONS TAKEN WHEN BEDDING OPERATION IS 75% COMPLETE. THESE ELEVATIONS SHALL BE TAKEN AT POINTS OF CONNECTION, CHANGES IN DIRECTION AND AT MINIMUM 20' INTERVALS ALONG THE LENGTH OF THE PIPE. THESE ELEVATIONS SHALL BE RECORDED AS AS—BUILT DIMENSIONS ON A SITE PLAN FOR REVIEW BY THE PROJECT CIVIL ENGINEER.

 ALL SANITARY LINES ARE TO BE FLUSHED PRIOR TO CONTRACTOR TURNOVER OF THE FACILITY.

12. CONTRACTOR TO VERIFY WITH UTILITY COMPANY FOR PROPER LOCATION OF TELECOMMUNICATION DROP, CONDUIT SHALL RUN FROM DROP TO IT ROOM.

13. CONTRACTOR TO COORDINATE WITH VERIZON FOR PROPOSED TELEPHONE SERVICE. SERVICE SHALL BE RUN IN UNDERGROUND

14. CONTRACTOR TO COORDINATE WITH DATA SERVICE PROVIDERS FOR CONNECTION. ALL SERVICE TO BE RUN UNDERGROUND,

LEGEND:

CO

CLEANOUT

UNDERGROUND STORM PIPE

UNDERGROUND PERFORATED STORM PIPE

OHW

OVERHEAD UTILITIES

DOWNSPOUT (ROOF COLLECTOR)

ROUND BASIN DRAIN W/ ATRIUM GRATE

STORM MANHOLE

STORM CLEANOUT

Permit-Seal

CLIFTON W

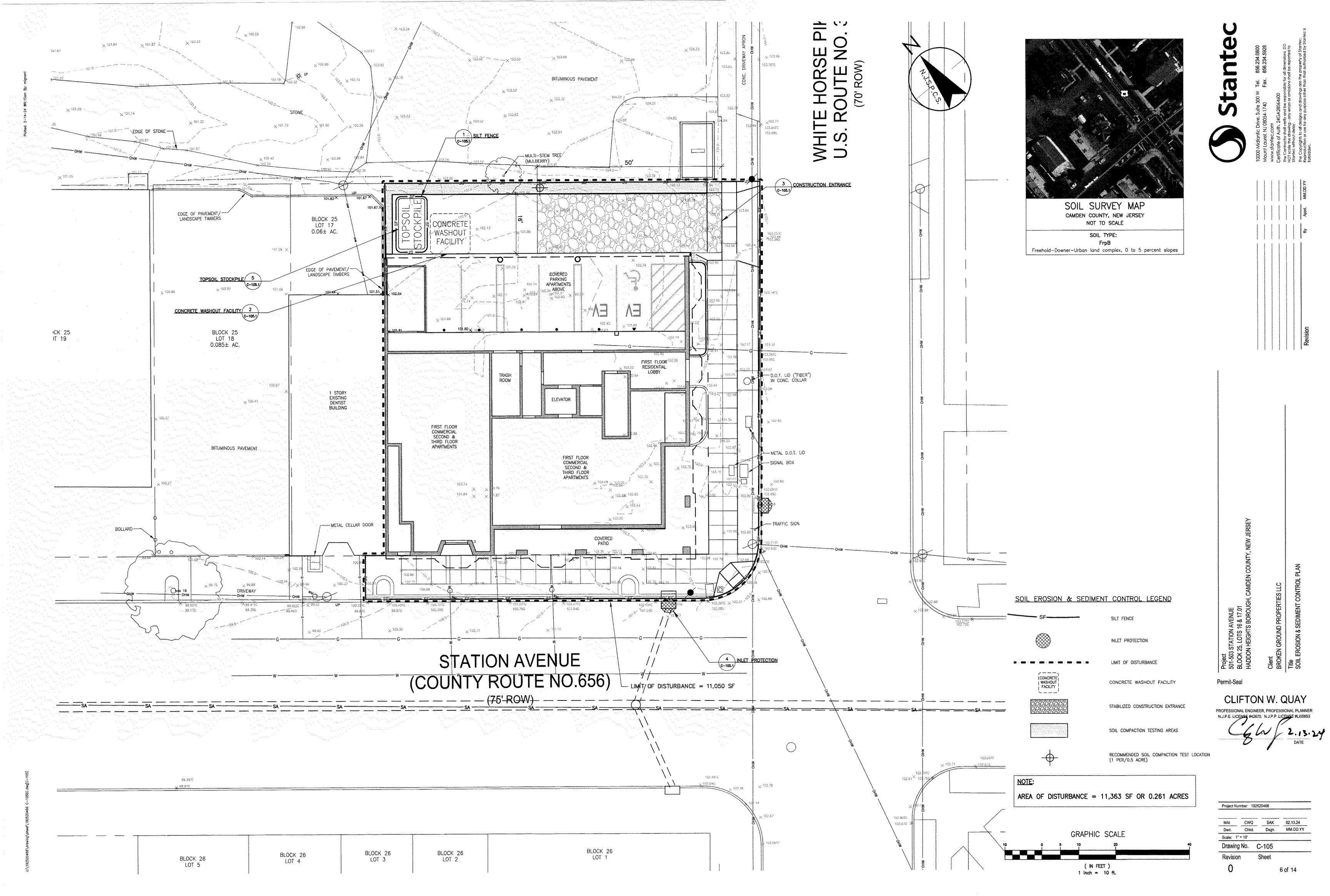
CLIFTON W. QUAY
PROFESSIONAL ENGINEER, PROFESSIONAL PLANNEI
N.J.P.E, LICENSE #L105653

GRAPHIC SCALE

O 5 10 20 40

(IN FEET)
1 inch = 10 ft.

Project N	ımber: 192	2520466	
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OF SEDIMENT FROM THE CONSTRUCTION SITE.

COMPLETED AND/OR THE AREA IS STABILIZED. 4. THE CONTRACTOR SHALL PERFORM ALL WORK, FURNISH ALL MATERIALS AND INSTALL ALL MEASURES REQUIRED TO REASONABLY CONTROL SOIL EROSION RESULTING FROM CONSTRUCTION OPERATIONS AND PREVENT EXCESSIVE FLOW

5. ANY DISTURBED AREA THAT IS TO BE LEFT EXPOSED FOR MORE THAN THIRTY (30) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE NEW JERSEY STANDARDS AND THEIR RATES SHOULD BE INCLUDED IN THE NARRATIVE, IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID

6. IT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION AND RATES OF APPLICATION AT THE REQUEST OF THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT.

7. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH AT A RATE OF 2 TONS PER ACRE, ACCORDING TO THE NEW JERSEY STANDARDS IMMEDIATELY FOLLOWING

8. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.

9. ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY

10. A CRUSHED STONE, TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. THE STABILIZED PAD WILL BE INSTALLED ACCORDING TO THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS

11. ALL DRIVEWAYS MUST BE STABILIZED WITH 2 1/2" CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT

12. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.

13. ALL CATCH BASIN INLETS WILL BE PROTECTED ACCORDING TO THE CERTIFIED PLAN.

14. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME

15. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA. THE SEDIMENT FILTER SHOULD BE COMPOSED OF A SUITABLE SEDIMENT FILTER FABRIC. (SEE DETAIL) THE BASIN MUST BE DEWATERED TO NORMAL POOL WITHIN 10 DAYS OF THE DESIGN STORM. 16. NJSA 4:24-39, ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE ALL PROVISIONS OF

THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR THE PROJECT MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE AS A PREREQUISITE TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.

17. MULCHING IS REQUIRED ON ALL SEEDED AREAS TO INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED TO PROMOTE EARLIER VEGETATION COVER.

18. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE

19. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION

20. THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY LAND

21. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY SUBSEQUENT OWNERS.

22, IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING OF TOPSOIL, THE STOCKPILE MUST BE STABILIZED ACCORDING TO THE STANDARD FOR TEMPORARY VEGETATIVE COVER. STABILIZE TOPSOIL PILE WITH STRAW MULCH FOR PROTECTION IF THE SEASON DOES NOT PERMIT THE APPLICATION AND ESTABLISHMENT OF TEMPORARY SEEDING. ALL SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY AND THE BASE MUST BE PROTECTED WITH A SEDIMENT BARRIER.

23. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT. THE REVISED PLAN MUST BE IN ACCORDANCE WITH THE CURRENT NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL

24. METHODS FOR THE MANAGEMENT OF HIGH ACID PRODUCING SOILS SHALL BE IN ACCORDANCE WITH THE STANDARDS, HIGH ACID PRODUCING SOILS ARE THOSE FOUND TO CONTAIN IRON SULFIDES OR HAVE A pH OF 4 OR LESS.

25, TEMPORARY AND PERMANENT SEEDING MEASURES MUST BE APPLIED ACCORDING TO THE NEW JERSEY STANDARDS, AND MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).

26, MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.

27. DUST IS TO BE CONTROLLED BY AN APPROVED METHOD ACCORDING TO THE NEW JERSEY STANDARDS AND MAY INCLUDE WATERING WITH A SOLUTION OF CALCIUM CHLORIDE AND WATER.

28. ADJOINING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE. 29. USE STAGED CONSTRUCTION METHODS TO MINIMIZE EXPOSED SURFACES, WHERE APPLICABLE.

30. ALL VEGETATIVE MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH AMERICAN STANDARDS FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF THE NURSERYMEN AND IN ACCORDANCE WITH THE NEW JERSEY STANDARDS.

31. NATURAL VEGETATION AND SPECIES SHALL BE RETAINED WHERE SPECIFIED ON THE LANDSCAPE PLAN.

32. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.

STANDARDS FOR LAND GRADING

DEFINITION: RESHAPING THE GROUND SURFACE BY GRADING TO PLANED GRADES WHICH ARE DETERMINED BY TOPOGRAPHIC SURVEY AND LAYOUT.

1. THE CUT FACE OF EARTH EXCAVATIONS AND FILLS SHALL BE NO STEEPER THAN THE SAFE ANGLE OF REPOSE FOR THE MATERIALS ENCOUNTERED AND FLAT ENOUGH FOR PROPER MAINTENANCE.

2. THE PERMANENTLY EXPOSED FACES OF EARTH CUTS AND FILLS SHALL BE VEGETATED OR OTHERWISE PROTECTED

3. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE WATER TO STORM DRAINS OR SUITABLE WATER COURSES. AND TO PREVENT SURFACE RUNOFF FROM DAMAGING CUT FACES AND FILL SLOPES.

4. SUBSURFACE DRAINAGE IS TO BE PROVIDED IN AREAS HAVING A HIGH WATER TABLE, TO INTERCEPT SEEPAGE THAT. WOULD ADVERSELY AFFECT SLOPE STABILITY, BUILDING FOUNDATIONS OR CREATE UNDESIRABLE WETNESS.

5. ADJOINING PROPERTY SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS

6. FILL SHALL NOT BE PLACED ADJACENT TO THE BANK OF A STREAM OR CHANNEL, UNLESS PROVISIONS ARE MADE TO PROTECT THE HYDRAULIC, BIOLOGICAL, AESTHETIC AND OTHER ENVIRONMENTAL FUNCTIONS OF THE STREAM.

A. TIMBER, LOGS, BRUSH, RUBBISH, ROCKS, STUMPS AND VEGETATIVE MATTER WHICH WILL INTERFERE WITH THE GRADING OPERATION OR AFFECT THE PLANNED STABILITY OR FILL AREAS SHALL BE REMOVED AND DISPOSED OF ACCORDING TO THE PLAN.

B. TOPSOIL IS TO BE STRIPPED AND STOCKPILED IN AMOUNTS NECESSARY TO COMPLETE FINISH GRADING OF ALL EXPOSED AREAS REQUIRING TOPSOIL C. FILL MATERIAL IS TO BE FREE OF BRUSH, RUBBISH, TIMBER, LOGS, VEGETATIVE MATTER AND STUMPS IN

AMOUNTS THAT WILL BE DETRIMENTAL TO CONSTRUCTING STABLE FILLS. D. ALL FILLS SHALL BE COMPACTED SUFFICIENTLY FOR THEIR INTENDED PURPOSE AND AS REQUIRED TO REDUCE

ALL DISTURBED AREAS SHALL BE LEFT WITH A NEAT AND FINISHED APPEARANCE AND SHALL BE PROTECTED

F. TREES TO BE RETAINED SHALL BE PROTECTED IF NECESSARY IN ACCORDANCE WITH THE STANDARD FOR TREE PROTECTION DURING CONSTRUCTION. G. SOIL COMPACTION RESULTING FROM LAND GRADING ACTIVITIES CAN IMPACT THE INFILTRATION RATE OF THE SOIL. RESTORATION OF COMPACTED SOILS THROUGH DEEP TILLAGE (6" TO 12") AND THE

ADDITION OF ORGANIC MATTER MAY BE REQUIRED IN PLANNED PERVIOUS AREAS TO ENHANCE THE INFILTRATION RATE OF THE DISTURBED SOIL. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.)

DUST CONTROL NOTES

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES NOTES. VEGETATIVE COVER-SEE STANDARD FOR TEMPORARY VEGETATIVE COVER NOTES, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION NOTES AND PERMANENT STABILIZATION WITH SOD NOTES.

3. SPRAY-ON ADHESIVES-ONMINERAL SOILS (NOT EFFECTIVE ONMUCK SOILS). KEEP TRAFFIC OFF THESE AREAS. TABLE 16-1 DUST CONTROL MATERIALS

MATERIAL.	WATER DILLUTION	TYPE OF NOZZLE	APPLY GALLON/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 POLYACRYLAMIDE (PAM) - DRY SPREAD	USED AS AN ADDIT	TO MANUFACTURER'S INSTI TIVE TO SEDIMENT BASINS ENDED COLLOIDS, SEE SEDI	TO FLOCCULATE AND
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

4. TILLAGE -- 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

BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. 7. CALCIUM CHLORIDE SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FFFD 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 OR ACCUMULATION AROUND PLANTS. 8. STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL

STANDARD FOR STABILIZATION WITH MULCH

STABILIZING EXPOSED SOILS WITH NON-VEGETATIVE MATERIALS EXPOSED FOR PERIODS LONGER THAN 14 DAYS

METHODS AND MATERIALS

SITE PREPARATION

1.1. 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. 2. PROTECTIVE MATERIALS

2.1. UNROTTED SMALL-GRAIN STRAW, AT 2.0 TO 2.5 TONS PER ACRE, IS SPREAD UNIFORMLY AT 90 TO 115 POUNDS PER 1,000 SQUARE FEET AND ANCHORED WITH A MULCH ANCHORING TOOL, LIQUID MULCH BINDERS, OR NETTING TIE DOWN, OTHER SUITABLE MATERIALS MAY BE USED IF APPROVED BY THE SOIL CONSERVATION DISTRICT. THE APPROVED RATES ABOVE HAVE BEEN MET WHEN THE MULCH COVERS THE GROUND COMPLETELY UPON VISUAL INSPECTION, I.E. THE SOIL CANNOT BE SEEN BELOW THE MULCH.

2.2. SYNTHETIC OR ORGANIC SOIL STABILIZERS MAY BE USED UNDER SUITABLE CONDITIONS AND IN QUANTITIES AS RECOMMENDED BY THE MANUFACTURER.

2.3. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE (OR ACCORDING TO THE MANUFACTURER'S REQUIREMENTS) MAY BE APPLIED BY A HYDROSEEDER.

2.4. MULCH NETTING, SUCH AS PAPER JUTE, EXCELSIOR, COTTON, OR PLASTIC, MAY BE USED.

2.5. WOODCHIPS APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 2 INCHES MAY BE USED. WOODCHIPS WILL NOT BE USED ON AREAS WHERE FLOWING WATER COULD WASH THEM INTO

2.6. GRAVEL, CRUSHED STONE, OR SLAG AT THE RATE OF 9 CUBIC YARDS PER 1,000 SQ. FT. APPLIED UNIFORMLY TO A MINIMUM DEPTH OF 3 INCHES MAY BE USED. SIZE 2 OR 3 (ASTM

3. MULCH ANCHORING - SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT OF HAY OR STRAW MULCH AT THE RATE OF 70 TO 90 LBS PER 1000 SF TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA AND STEEPNESS OF SLOPES,

3.1. PEG AND TWINE - DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 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 CRISS-CROSS AND A SQUARE PATTERN, SECURE TWINE AROUND EACH PEG WITH TWO OR

3.2. MULCH NETTINGS - STAPLE PAPER, COTTON, OR PLASTIC NETTINGS OVER MULCH, USE DEGRADABLE NETTING IN AREAS TO BE MOWED. NETTING IS USUALLY AVAILABLE IN ROLLS 4 FEET WIDE AND UP TO 300 FEET LONG.

3.3. CRIMPER MULCH ANCHORING COULTER TOOL - A TRACTOR-DRAWN IMPLEMENT ESPECIALLY DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE. THIS PRACTICE AFFORDS MAXIMUM EROSION CONTROL, BUT ITS USE IS LIMITED TO THOSE SLOPES UPON WHICH THE TRACTOR CAN OPERATE SAFELY. SOIL PENETRATION SHOULD BE ABOUT 3 TO 4 INCHES. ON SLOPING LAND, THE OPERATION SHOULD BE ON THE CONTOUR.

TOP SOILING SCHEDULE

MATERIAL
1. TOPSOIL SHOULD BE FRIABLE, LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES, AND CONTAIN NO TOXIC SUBSTANCE OR ADVERSE CHEMICAL OR PHYSICAL CONDITION THAT MAY BE HARMFUL TO PLANT GROWTH. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER. MORE THAN 0.5 MILLIMHOS MAY DESICATE SEEDLINGS AN ADVERSELY IMPACT GROWTH). TOPSOIL HAULED IN FROM OFFSITE SHOULD HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.

1.2. TOPSOIL SUBSTITUTE IS A SOIL MATERIAL WHICH MAY HAVE BEEN AMENDED WITH SAND, SILT, CLAY, ORGANIC MATTER, FERTILIZER OR LIME AND HAS THE APPEARANCE OF TOPSOIL TOPSOIL SUBSTITUTES MAY BE UTILIZED ON SITES WITH INSUFFICIENT TOPSOIL FOR ESTABLISHING PERMANENT VEGETATION. ALL TOPSOIL SUBSTITUTE MATERIALS SHALL MEET THE REQUIREMENTS OF TOPSOIL NOTED ABOVE. SOIL TESTS SHALL BE PERFORMED TO DETERMINE THE COMPONENTS OF SAND, SILT, CLAY, ORGANIC MATTER, SOLUBLE SALTS AND pH LEVEL.

STRIPPING AND STOCKPILING
2.1. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING. STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.

WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL PH TO APPROXIMATELY 6.5.

A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL. STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.

2.6. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH STANDARDS PREVIOUSLY DESCRIBED HEREIN; SEE STANDARDS FOR PERMANENT OR TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, WEEDS SHOULD NOT BE ALLOWED TO GROW ON STOCKPILES.

SITE PREPARATION - GRADE AT THE ONSET OF THE OPTIMAL SEEDING PERIOD SO AS TO MINIMIZE THE DURATION AND AREA OF EXPOSURE OF DISTURBED SOIL TO EROSION. IMMEDIATELY PROCEED TO ESTABLISH VEGETATIVE COVER IN ACCORDANCE WITH THE SPECIFIED SEED MIXTURE. TIME IS OF THE ESSENCE

GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. SEE THE STANDARD AS GUIDANCE FOR IDEAL CONDITIONS, SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT.

LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL TO A PH OF APPROXIMATELY 6.5 AND NCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES. PRIOR TO TOPSOILING, THE SUBSOIL SHALL BE IN COMPLIANCE WITH THE STANDARD FOR LAND

PLACE IS REQUIRED, ALTERNATIVE DEPTHS MAY BE CONSIDERED WHERE SPECIAL REGULATORY

AND/OR INDUSTRY DESIGN STANDARDS ARE APPROPRIATE SUCH AS ON GOLF COURSES, SPORTS

EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION 3.5. STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS.

APPLYING TOPSOIL TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE: I.E., LESS THAN FIELD CAPACITY. 4.2. A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5.0 INCHES, MINIMUM OF 4 INCHES, FIRMED IN

FIFLDS. LANDFILL CAPPING. ETC., SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFID SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A PH OF 5.0 OR MORE, N ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOIL. PURSUANT TO THE REQUIREMENTS IN SECTION 7 OF THE STANDARD FOR PERMANENT VEGETATIVE STABILIZATION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT PERMANENT VEGETATIVE COVER BECOMES ESTABLISHED ON AT LEAST 80% OF THE SOILS TO BE STABILIZED WITH VEGETATION. FAILURE TO ACHIEVE THE MINIMUM COVERAGE MAY REQUIRE ADDITIONAL WORK TO BE PERFORMED BY THE CONTRACTOR TO INCLUDE SOME OR ALL OF THE FOLLOWING: SUPPLEMENTAL SEEDING. RE-APPLICATION OF LIME AND FERTILIZERS, AND/OR THE ADDITION OF ORGANIC MATTER (LE COMPOST) AS A TOP DRESSING, SUCH ADDITIONAL MEASURES SHALL BE BASED ON SOIL TESTS SUCH AS THOSE OFFERED BY RUTGERS COOPERATIVE EXTENSION SERVICE OR OTHER APPROVED

LABORATORY FACILITIES QUALIFIED TO TEST SOIL SAMPLES FOR AGRONOMIC PROPERTIES.

A PREVENTIVE MAINTENANCE PROGRAM ANTICIPATES REQUIREMENTS AND ACCOMPLISHES WORK WHEN IT CAN BE

DONE WITH LEAST EFFORT AND EXPENSE TO INSURE ADEQUATE VEGETATIVE COVER. MAINTENANCE SHOULD OCCUR ON A REGULAR BASIS, CONSISTENT WITH FAVORABLE PLANT GROWTH, SOIL, AND CLIMATIC CONDITIONS. THIS INVOLVES REGULAR SEASONAL WORK FOR MOWING, FERTILIZING, LIMING, WATERING, PRUNING, FIRE CONTROL, WEED AND PEST CONTROL, RESEEDING, AND TIMELY REPAIRS.

THE DEGREE OF PREVENTIVE MAINTENANCE NEEDED DEPENDS UPON THE TYPE OF VEGETATION AND ITS

1. MOWING IS A RECURRING PRACTICE AND ITS INTENSITY DEPENDS UPON THE FUNCTION OF THE GROUND COVER. ON HIGH TO MODERATE (A TO B) MAINTENANCE AREAS, SUCH AS LAWNS, CERTAIN RECREATION FIELDS, AND PICNIC AREAS, MOWING WILL BE FREQUENT (2 TO 7 DAY INTERVALS) AND TYPICALLY AT A HEIGHT OF 2.5 TO 3 INCHES. RETURN CLIPPINGS FROM MOWING (MULCHING MOWER) TO THE TURE TO REDUCE THE AMOUNT OF FERTILIZER NEEDED TO MAINTAIN THE TURF BY AS MUCH AS 50%, SOME TURF MIXTURES CAN BE MANAGED AS NATURALIZED STANDS REQUIRING ONLY ONE (COOL SEASON MIXTURES) OR TWO (WARM SEASON MIXTURES) MOWINGS PER YEAR. MOWING OF NATURALIZED AREAS IS TYPICALL DONE AT HEIGHTS NO LESS THAN 4 INCHES AND SHOULD NOT BE DONE BETWEEN APRIL 1ST HI.53848X, AND JULY 15TH H1.53846X,TO AVOID DISTURBING GROUND NESTING BIRDS. THE LARGE AMOUNT OF CLIPPING DEBRIS GENERATED BY MOWING NATURALIZED AREAS WILL NEED TO BE REMOVED AND/OR DISPERSED SO THE VEGETATION IS NOT SMOTHERED. BURNING OF NATURALIZED AREAS IS ANOTHER PROCEDURE USED TO MANAGE NATURALIZED TURFS, LOW MAINTENANCE (D) AREAS MAY BE LEFT UNMOWED TO PERMIT NATURAL SUCCESSION. SEE PG. 4-13 FOOTNOTE #4, MAINTENANCE LEVELS A, B, C AND D IN THE STANDARD FOR PERMANENT VEGETATIVE COVER, TABLE 4-3.

. 2. INCORPORATION OF ORGANIC MATTER (FOR EXAMPLE, MATURE COMPOST) INTO THE SOIL WILL

SUBSTANTIALLY REDUCE THE NEED FOR FERTILIZER AND IRRIGATION INPUTS. 3. FERTILIZER AND LIME SHOULD BE APPLIED AS NEEDED TO MAINTAIN A DENSE STAND OF DESIRABLE SPECIES. FREQUENTLY MOWED AREAS AND THOSE ON SANDY SOILS WILL REQUIRE MORE FREQUENT

FERTILIZATION BUT AT LOWER NUTRIENT RATES PER APPLICATION. 4. LIME REQUIREMENT SHOULD BE DETERMINED BY SOIL TESTING EVERY 2 OR 3 YEARS. FERTILIZATION MAY INCREASE THE NEED FOR LIMING. CONTACT THE LOCAL COUNTY EXTENSION OFFICE FOR DETAILS ON SOIL TESTING AND FERTILIZATION AND PEST CONTROL RECOMMENDATIONS ONLINE AT HTTP://NJAES.RUTGERS.EDU/COUNTY/.

5. FERTILIZATION AND ADDITIONS OF OTHER SOIL AMENDMENTS ARE NOT RECOMMENDED FOR MANAGING NATIVE VEGETATION SUCH AS IN THE PINELANDS NATIONAL RESERVE. SEE THE STANDARD FOR PERMANENT VEGETATIVE STABILIZATION FOR SPECIFIC REQUIREMENTS IN THE PNR.

6. WEED INVASION MAY RESULT FROM ABUSIVE MOWING AND FROM INADEQUATE FERTILIZING AND LIMING. MANY NEWLY ESTABLISHED GRASSES WILL NOT SURVIVE IF MOWED AT HEIGHTS BELOW 2.5 INCHES AND AT INTERVALS GREATER THAN 7 DAYS, BRUSH INVASION IS A COMMON CONSEQUENCE OF LACK OF MOWING. THE AMOUNT OF WEEDS OR BRUSH THAT CAN BE TOLERATED IN ANY VEGETATED AREA DEPENDS UPON THE INTENDED USE OF THE LAND, DRAINAGE WAYS ARE SUBJECT TO RAPID INFESTATION BY WEED AND WOODY PLANTS. THESE SHOULD BE CONTROLLED, SINCE THEY OFTEN REDUCE DRAINAGE WAY EFFICIENCY. CONTROL OF WEEDS OR BRUSH IS ACCOMPLISHED BY USING HERBICIDES OR

7. FIRE HAZARD IS GREATER WHERE DRY VEGETATION HAS ACCUMULATED. THE TALLER THE VEGETATION, THE GREATER THE HAZARD.

8. PRUNE TREES AND SHRUBS TO REMOVE DEAD OR DAMAGED BRANCHES. REMOVE UNDESIRABLE OR INVASIVE PLANTS TO MAINTAIN INTEGRITY OF THE LANDSCAPE AND ENHANCE QUALITY OF PERMANENT VEGETATIVE COVER.

PERMANENT VEGETATIVE COVER

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

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.

A. UNIFORMLY 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 SOIL SAMPLE MAILERS ARE

AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (HTTP://NJAES.RUTGERS.EDU/COUNTY/). FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 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 SEEDBED PREPARATION AND REPEAT ANOTHER ONE-HALF RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING.

B. WORK LIME 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 SOIL, SOILS HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE BEFORE INITIATING SEEDBED REPARATION. SEE STANDARD FOR MANAGEMENT OF HIGH ACID-PRODUCING SOILS FOR SPECIFIC REQUIREMENTS

A. SELECT A MIXTURE FROM TABLE 4-3 OR USE A MIXTURE RECOMMENDED BY RUTGERS COOPERATIVE EXTENSION OR NATURAL RESOURCES CONSERVATION SERVICE WHICH IS APPROVED BY THE SOIL CONSERVATION DISTRICT. SEED GERMINATION SHALL HAVE BEEN TESTED WITHIN 12 MONTHS OF THE PLANTING DATE. NO SEED SHALL BE ACCEPTED WITH A GERMINATION TEST

1. SEEDING RATES SPECIFIED ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO 50% REDUCTION IN RATES MAY BE USED WHEN PERMANENT VEGETATION IS ESTABLISHED PRIOR TO A REPORT OF COMPLIANCE INSPECTION. THESE RATES APPLY TO ALL METHODS OF SEEDING, ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVERAGE WITH THE SPECIFIED SEED

2. WARM-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT HIGH TEMPERATURES, GENERALLY 85'F AND ABOVE. SEE TABLE 4-3 MIXTURES 1 TO 7. PLANTING RATES FOR WARM-SEASON GRASSES SHALL BE THE AMOUNT OF PURE LIVE SEED (PLS) AS DETERMINED BY GERMINATION TESTING RESULTS.

MANY GRASSES BECOME ACTIVE AT 65° F. SEE TABLE 4-3, MIXTURE 8-20, ADJUSTMENT OF PLANTING RATES TO COMPENSATE FOR THE AMOUNT OF PLS IS NOT REQUIRED FOR COOL SEASON GRASSES. B. CONVENTIONAL SEEDING IS PERFORMED BY APPLYING SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDINGS, SEED SHALL BE

3. COOL-SEASON MIXTURES ARE GRASSES AND LEGUMES WHICH MAXIMIZE GROWTH AT TEMPERATURES BELOW 85' F.

INCORPORATED INTO THE SOIL WITHIN 24 HOURS OF SEEDBED PREPARATION TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING, DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE-TEXTURED SOIL C. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD. WHEN PERFORMED ON THE CONTOUR,

D. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK, OR TRAILER-MOUNTED TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND SPRAYING THE MIX ONTO THE PREPARED SEEDBED, MULCH SHALL NOT BE INCLUDED IN THE TANK WITH SEED, SHORT-FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE SECTION 4-MULCHING BELOW). HYDROSEEDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL. WHEN POOR SEED TO SOIL CONTACT OCCURS, THERE IS A REDUCED SEED GERMINATION AND GROWTH E. SEED MIXTURE BASED ON #15 IN TABLE 4-3:

HARD FESCUE CHEWINGS FESCUE

PERENNIAL RYEGRASS.

1 LBS. PER 1000 S.F. STRONG CREEPING RED FESCUE 1 LBS. PER 1000 S.F. 0.25 LBS. PER 1000 S.F TOTAL = 5.25 LBS. PER 1000 S.F.

3 LBS. PER 1000 S.F.

RECOMMENDED OPTIMAL PLANTING DATES: 8/15 to 10/30.

SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON SITE WILL BE MAXIMIZED.

RECOMMENDED ACCEPTABLE PLANTING DATES: 2/1 to 4/30 OR 5/1 TO 8/14. 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 FREEZING CONDITIONS.

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 SHALLBE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, TO BE 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 CRIMPER 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.

APPLICATION - SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT AT LEAST 85% OF THE SOIL SURFACE IS COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION, 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.

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 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 CRISS-CROSS AND A SQUARE PATTERN, SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

2. MULCH NETTINGS - STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE A

DEGRADABLE NETTING IN AREAS TO BE MOWED. 3. CRIMPER (MULCH ANCHORING COULTER TOOL) - A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW. ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS RAVERSABLE 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. 4. 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 phytotoxic effect OR IMPEDE GROWTH OF TURF GRASS. 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.

AND, FOLLOWING APPLICATION OF MULCH, DRYING AND CURING, SHALL NO LONGER BE SOLUBLE OF DISPERSIBLE IN WATER, BINDER SHALL BE APPLIED AT RATES RECOMMENDED BY THE MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

2. SYNTHETIC BINDERS - HIGH POLYMER SYNTHETIC EMULSION, MISCIBLE WITH WATER WHEN DILUTED

NOTE: ALL NAMES GIVEN ABOVE ARE REGISTERED TRADE NAMES, THIS DOES NOT CONSTITUTE A

RECOMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS. B. 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.

C. PELLETIZED MULCH - COMPRESSED 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 SEEDED AREA AND WATERED, FORM A MULCH MAT. PELLETIZED MULCH SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, MULCH MAY BE APPLIED BY HAND OR MECHANICAL SPREADER AT THE RATE OF 60-75 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, SEEDED AREAS WHERE WEEDSEED FREE MULCH IS DESIRED, OR ON SITES WHERE STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE. APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE SOIL COVERAGE.

IF SOIL MOISTURE IS DEFICIENT SUPPLY NEW SEEDING 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 ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.

f. TOPORESSING SINCE SOIL ORGANIC MATTER CONTENT AND SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED IN SECTION 2A - SEEDBED 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, TOPDRESS WITH 10-10-10 OR EQUIVALENT AT 300 POUNDS PER ACRE OR 7 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

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 ABOVE ARE REQUIRED WHEN A REPORT OF COMPLIANCE IS REQUESTED PRIOR TO ACTUAL ESTABLISHMENT OF PERMANENT VEGETATION. UP TO SOX REDUCTION IN APPLICATION RATES MAY BE LISED WHEN PERMANENT VECETATION IS ESTABLISHED PRIOR TO REDUCTION A REPORT OF COMPLIANCE FROM THE DISTRICT, THESE RATES APPLY TO ALL METHODS OF SEEDING, ESTABLISHING PERMANENT VEGETATION MEANS 80% VEGETATIVE COVER (OF THE SEEDED SPECIES) AND MOWED ONCE. NOTE THIS DESIGNATION OF MOWED ONCE DOES NOT GUARANTEE THE PERMANENCY OF THE TURF SHOULD OTHER MAINTENANCE FACTORS BE NEGLECTED OR OTHERWISE MISMANAGED,

TEMPORARY VEGETATIVE COVER

ACCORDANCE WITH STANDARDS FOR LAND GRADING.

UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.).

RETILLED IN ACCORDANCE WITH THE ABOVE.

A. SELECT SEED FROM RECOMMENDATIONS IN TABLE 7-2.

ACID PRODUCING SOILS.

SEED SELECTIONS

COOL SEASON GRASSES

SPRING OATS

WINTER BARLEY

4. ANNUAL RYEGRASS

5. WINTER CEREAL RYE

WARM SEASON GRASSES

SITE WILL BE MAXIMIZED

AREA, STEEPNESS OF SLOPES, AND COSTS.

ADHESIVE AGENT IS REQUIRED.

b. USE ONE OF THE FOLLOWING:

IN THIS STATE

A DEGRADABLE NETTING IN AREAS TO BE MOWED.

7. MILLET (GERMAN OR HUNGARIAN) 30

PEARL MILLET

PERENNIAL RYEGRASS

STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.

SOIL COMPACTION. THIS PRACTICE IS PERMISSIBLE ONLY WHERE THERE IS NO DANGER TO UNDERGROUND

A. APPLY GROUND LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED

BY RUTGERS CO-OPERATIVE EXTENSION, SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS

OR 11 POUNDS PER 1,000 SQUARE FEET OF 10-20-10 OR EQUIVALENT WITH 50% WATER INSOLUBLE

STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY

CALCIUM AND MAGNESIUM TO GRASSES AND LEGUMES. LIMING RATE SHOULD BE ESTABLISHED VIA SOIL

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

C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE

D. SOILS HIGH IN SULFIDES OR HAVING A PH OF 4 OR LESS REFER TO STANDARD FOR MANAGEMENT OF HIGH

TEMPORARY VEGETATIVE STABILIZATION GRASSES, SEEDING RATES, DATES AND DEPTH

SQ. FT.

1.0

2.0

2.2

1.0

2.8

0.5

0.7

1. SEEDING RATE FOR WARM SEASON GRASS, SELECTIONS 6 - 7 SHALL BE ADJUSTED TO REFLECT THE

2. MAY BE PLANTED THROUGHOUT SUMMER IF SOIL MOISTURE IS ADEQUATE OR SEEDED AREA CAN BE

SEEDINGS, SEED SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING

TANK, WITH AN AGITATION SYSTEM AND HYDRAULIC PUMP FOR MIXING SEED, WATER AND FERTILIZER AND

SPRAYING THE MIX ONTO THE PREPARED SEEDBED. MULCH SHALL NOT BE INCLUDED IN THE TANK WITH

FERTILIZER ARE APPLIED TO THE SURFACE AND NOT INCORPORATED INTO THE SOIL POOR SEED TO SOIL

CONTACT OCCURS REDUCING SEED GERMINATION AND GROWTH, HYDROSEEDING MAY BE USED FOR AREAS

CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDLING EMERGENCE. THIS IS THE PREFERRED METHOD.

WHEN PERFORMED ON THE CONTOUR, SHEET EROSION WILL BE MINIMIZED AND WATER CONSERVATION ON

TOO STEEP FOR CONVENTIONAL EQUIPMENT TO TRAVERSE OR TOO OBSTRUCTED WITH ROCKS, STUMPS,

C. AFTER SEEDING, FIRMING THE SOIL WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL

MULCHING IS REQUIRED ON ALL SEEDING, MULCH WILL INSURE AGAINST EROSION BEFORE CRASS IS

ESTABLISHED AND WILL PROMOTE FASTER AND EARLIER ESTABLISHMENT. THE EXISTENCE OF VEGETATION

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

SUFFICIENT TO CONTROL SOIL EROSION SHALL BE DEEMED COMPLIANCE WITH THIS MULCHING REQUIREMENT.

A. STRAW OR HAY. UNNROTTED 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 CRIMPER

MULCH IS NOT RECOMMENDED FOR ESTABLISHING FINE TURF OR LAWNS DUE TO THE PRESENCE OF WEED

APPLICATION, SPREAD MULCH UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 95% OF

INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH

ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR

1. PEG AND TWINE. DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL

3. CRIMPER (MULCH ANCHORING TOOL), A TRACTOR-DRAWN IMPLEMENT SOMEWHAT LIKE A DISC

WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE

SURFACE EVERY 4 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 CRIS-CROSS

AND A SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.

2. MULCH NETTINGS. STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTINGS TO THE SOIL SURFACE. USE

HARROW. ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3

G. APPLICATIONS SHOULD BE HEAVIER AT EDGES WHERE WIND MAY CATCH THE MULCH, IN VALLEYS,

(1) ORGANIC AND VEGETABLE BASED BINDERS - NATURALLY OCCURRING, POWDER BASED,

MULCH UNDER SATISFACTORY CURING CONDITIONS WILL FORM MEMBRANED NETWORKS OF

HYDROPHILIC MATERIALS WHEN MIXED WITH WATER FORMULATES A GEL AND WHEN APPLIED TO

INSOLUBLE POLYMERS. THE VEGETABLE GEL SHALL BE PHYSIOLOGICALLY HARMLESS AND NOT

WEATHER CONDITIONS AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH MATERIALS.

(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

NOTE: ALL NAMES GIVE ABOVE ARE REGISTERED TRADE NAMES. THIS DOES NOT CONSTITUTE A

COMMENDATION OF THESE PRODUCTS TO THE EXCLUSION OF OTHER PRODUCTS.

PER ACRE (OR AS RECOMMENDED BY THE PROJECT MANUFACTURER) AND MAY BE APPLIED BY A

C. PELLETIZED MULCH, COMPRESSED AND EXTRUDED PAPER AND/OR WOOD FIRER PRODUCT, WHICH MAY

CONTAIN CO-POLYMERS, TACKIFIERS, FERTILIZERS AND COLORING AGENTS. THE DRY PELLETS, WHEN

ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, MULCH MAY BE APPLIED BY HAND OR

CONTAINING NO GROWTH OR GERMINATION INHIBITING MATERIALS, USED AT THE RATE OF 1,500 PONDS

HYDROSEEDER. THIS MULCH SHALL NOT BE MIXED IN THE TANK WITH SEED, USE IS LIMITED TO FLATTER

APPLIED TO A SEEDED AREA AND WATERED, FORMA MULCH MAT. PELLETIZED MULCH SHALL BE APPLIES IN

MECHANICAL SPREADER AT THE RATE OF 60-75 LBS./1,000 SQUARE FEET AND ACTIVATED WITH 0.2 TO

0.4 INCHES OF WATER. THIS MATERIAL HAS BEE FOUND TO BE BENEFICIAL FOR USE ON SMALL LAWN OR

RENOVATION AREAS, SEEDED AREAS WHERE WEED-SEED FREE MULCH IS DESIRED OR ON SITES WHERE

APPLYING THE FULL 0.2 TO 0.4 INCHES OF WATER AFTER SPREADING PELLETIZED MULCH ON THE SEED

BED IS EXTREMELY IMPORTANT FOR SUFFICIENT ACTIVATION AND EXPANSION OF THE MULCH TO PROVIDE

B. WOOD-FIBER OR PAPER-FIBER MULCH, SHALL BE MADE FROM WOOD, PLANT FIBERS OR PAPER

MANY NEW PRODUCTS ARE AVAILABLE, SOME OF WHICH MAY NEED FURTHER EVALUATION FOR USE

RESULT IN A PHYTOTOXIC EFFECT OR IMPEDE GROWTH OF TURFGRASS, USE AT RATES AND

AND AT CRESTS OF BANKS. THE REMAINDER OF THE AREA SHOULD BE UNIFORM IN APPEARANCE,

TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS

FECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THI

CONTOUR OF SLOPES, STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR

4. LIQUID MULCH-BINDERS. - MAY BE USED TO ANCHOR HAY OR STRAW MULCH.

MANUFACTURER AND REMAIN TACKY UNTIL GERMINATION OF GRASS.

SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

STRAW MULCH AND TACKIFIER AGENT ARE NOT PRACTICAL OR DESIRABLE.

THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA

SEED. SHORT FIBERED MULCH MAY BE APPLIED WITH A HYDROSEEDER FOLLOWING SEEDING. (ALSO SEE

SECTION IV MULCHING) HYDROSEFDING IS NOT A PREFERRED SEEDING METHOD BECAUSE SEED AND

AMOUNT OF PURE LINE SEED (PLS) AS DETERMINED BY A GERMINATION TEST RESULT. NO

A. CONVENTIONAL SEEDING. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP

SEEDER, DRILL OR CULTIPACKER SEEDER. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED

OR DRAGGING, DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.

B. HYDROSEEDING IS A BROADCAST SEEDING METHOD USUALLY INVOLVING A TRUCK OR TRAILER MOUNTED

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ADJUSTMENT IS REQUIRED FOR COOL SEASON GRASSES.

3. PLANT HARDINESS ZONE (SEE FIGURE 7-1, PG. 7-4.)

OPTIMUM SEEDING DATE²

BASED ON PLANT HARDINESS ZONE

8/15-10/15

8/15-10/15

8/15-10/15

8/1-12/15

5/1-9/1

5/1-9/1

OPTIMUM

DEPTH

(INCHES)

0.5

1.0

1.0

1.0

1.0

SEEDING RATE

(POUNDS)

PER ACRE | PER 1000

NITROGEN UNLESS A SOIL TEST INDICATES OTHERWISE, CALCIUM CARBONATE IS THE EQUIVALENT AND

COOPERATIVE EXTENSION OFFICES. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE

SITE PREPARATION

SEEDBED PREPARATION

 METHODS AND MATERIALS 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

A. HIGH QUALITY CULTIVATED SOD IS PREFERRED OVER NATIVE OR PASTURE SOD. B. SOD SHOULD BE FREE OF BROADLEAF WEEDS AND UNDESIRABLE COARSE AND FINE WEED GRASSES. C. SOD SHOULD BE OF UNIFORM THICKNESS, TYPICALLY 5/8 INCH, PLUS OR MINUS 1/4 INCH, AT TIME

B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION OF CUTTING (EXCLUDES TOP GROWTH.). C. IMMEDIATELY PRIOR TO SEEDING, THE SURFACE SHOULD BE SCARIFIED 6" TO 12" WHERE THERE HAS BEEN

INSTALLED WITHIN A PERIOD OF 24 HOURS OR LESS DURING SUMMER MONTHS.

D. SOD SHOULD BE VIGOROUS AND DENSE AND BE ABLE TO RETAIN ITS OWN SHAPE AND WEIGHT WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP FROM THE UPPER 10 PERCENT OF THE STRIP. BROKEN PADS AND ROLLS OR TORN AND UNEVEN ENDS WILL NOT BE ACCEPTABLE.

E. FOR DROUGHTY SITES, A SOD OF TURF-TYPE TALL FESCUE OR TURF-TYPE TALL FESCUE MIXED WITH KENTUCKY BLUEGRASS IS PREFERRED OVER A 100% KENTUCKY BLUEGRASS SOD. ALTHOUGH NOT WIDELY AVAILABLE, A SOD OF FINE FESCUE IS ALSO ACCEPTABLE FOR DROUGHTY SITES. F. ONLY MOIST, FRESH, UNHEATED SOD SHOULD BE USED. SOD SHOULD BE HARVESTED, DELIVERED, AND

PERMANENT STABILIZATION WITH SOD

A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR LIMING. FERTILIZING, INCORPORATION OF ORGANIC MATTER, AND OTHER SOIL PREPARATION PROCEDURES. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH STANDARD FOR LAND GRADING.

B. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING THE SOIL B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, STRUCTURE. A UNIFORM APPLICATION TO A DEPTH OF 6 INCHES (UNSETTLED) IS REQUIRED ON ALL

C. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS

A. UNIFORMLY APPLY GROUND LIMESTONE, AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS SUCH AS OFFERED BY RUTGERS CO-OPERATIVE EXTENSION. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL RUTGERS COOPERATIVE EXTENSION OFFICES (<u>HTTP://NJAES.RUTGERS.EDU/COUNTY/</u>).
FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET USING 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 1/2 THE RATE DESCRIBED ABOVE DURING SEEDBED PREPARATION AND REPEAT ANOTHER ½ RATE APPLICATION OF THE SAME FERTILIZER WITHIN 3 TO 5 WEEKS AFTER SEEDING. CALCIUM CARBONATE IS THE EQUIVALENT AND STANDARD FOR MEASURING THE ABILITY OF LIMING MATERIALS TO NEUTRALIZE SOIL ACIDITY AND SUPPLY CALCIUM AND MAGNESIUM TO GRASSES AND

LIMING RATES SHOULD BE ESTABLISHED VIA SOIL TESTING.

B. WORK LIME, AND FERTILIZER INTO THE TOPSOIL 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 REASONABLY UNIFORM, FINE SEEDBED IS PREPARED.

C. REMOVE FROM THE SURFACE ALL OBJECTS THAT WOULD PREVENT GOOD SOD TO TOPSOIL CONTACT AND REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL

D. INSPECT SITE JUST BEFORE SODDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED IN ACCORDANCE WITH THE ABOVE.

A. SOD STRIPS SHOULD BE LAID ON THE CONTOUR, NEVER UP AND DOWN THE SLOPE, STARTING AT THE BOTTOM OF THE SLOPE AND WORKING UP. ON STEEP SLOPES, THE USE OF LADDERS WILL FACILITATE THE WORK AND PREVENT DAMAGE TO THE SOD. DURING PERIODS OF HIGH TEMPERATURE, LIGHTLY

IRRIGATE THE SOIL IMMEDIATELY PRIOR TO LAYING THE SOD.

B. PLACE SOD STRIPS WITH SNUG, EVEN JOINTS (SEAMS) THAT ARE STAGGERED. OPEN SPACES INVITE

C. LIGHTLY ROLL OR TAMP SOD IMMEDIATELY FOLLOWING PLACEMENT TO INSURE SOLID CONTACT OF ROOT MAT AND SOIL SURFACE, DO NOT OVERLAP SOD, ALL JOINTS SHOULD BE BUITED TIGHTLY TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS AND INVASION OF WEEDS.

.D. ON SLOPES GREATER THAN 3 TO 1, SECURE SOD TO SURFACE SOIL WITH WOOD PEGS, WIRE STAPLES

BIODEGRADABLE PLASTIC SPIKES, OR SPLIT SHINGLES (8 TO 10 INCHES LONG BY 3/4 INCH WIDE).

E. SURFACE WATER CANNOT ALWAYS BE DIVERTED FROM FLOWING OVER THE FACE OF THE SLOPE, BUT A CAPPING STRIP OF HEAVY JUTE OR PLASTIC NETTING, PROPERLY SECURED, ALONG THE CROWN OF THE SLOPE AND EDGES WILL PROVIDE EXTRA PROTECTION AGAINST LIFTING AND UNDERCUTTING OF SOD. THE SAME TECHNIQUE CAN BE USED TO ANCHOR SOD IN WATER-CARRYING CHANNELS AND OTHER CRITICAL

F. IMMEDIATELY FOLLOWING INSTALLATION, SOD SHOULD BE WATERED UNTIL WATER PENETRATES THE SOIL LAYER BENEATH SOD TO A DEPTH OF 1 INCH. MAINTAIN OPTIMUM WATER FOR AT LEAST TWO WEEKS.

AREAS. WIRE STAPLES MUST BE USED TO ANCHOR NETTING IN CHANNEL WORK.

SINCE SOIL ORGANIC MATTER AND SLOW RELEASE NITROGEN FERTILIZER (WATER INSOLUBLE) ARE PRESCRIBED IN SECTIONS 1 AND 2IN THIS STANDARD, A FOLLOW-UP TOPDRESSING IS NOT MANDATORY, EXCEPT WHERE GROSS NITROGEN DEFICIENCY EXISTS IN THE SOIL TO THE EXTENT THAT TURF FAILURE MAY DEVELOP, TOPDRESSING SHALL THEN BE APPLIED, TOPDRESS WITH 10-0-10 OR EQUIVALENT AT 400 POUNDS PER. ACRE OR 7 POUNDS PER 1,000 SQUARE FEET EVERY 3 TO 5 WEEKS UNTIL THE GROSS NITROGEN DEFICIENCY IN THE TURF IS AMELIORATED

STABILIZED CONSTRUCTION ENTRANCE NOTES

1. A STABILIZED PAD OF CRUSHED STONE (ASTM C-33, SIZE NO. 2 OR 3) SHALL BE LOCATED AT POINTS WHERE TRAFFIC WILL BE ENTERING OR LEAVING THE CONSTRUCTION SITE. USE CLEAN CRUSHED ANGULAR STONE. CRUSHED CONCRETE OF SIMILAR SIZE MAY BE SUBSTITUTED BUT WILL REQUIRE MORE FREQUENT UPGRADING AND MAINTENANCE.

2, STONE THICKNESS SHALL NOT BE LESS THAN 6". WIDTH SHALL NOT BE LESS THAN THE FULL

WIDTH OF THE INGRESS OR EGRESS, LENGTH SHALL BE 50 FEET MINIMUM WHERE THE SOILS

ARE COURSE GRAINED (SANDS OR GRAVELS) OR 100 FEET MINIMUM WHERE SOILS ARE FINE

GRAINED (CLAYS OR SILTS), EXCEPT WHERE THE TRAVELED LENGTH IS LESS THAN 50 OR 100 FEET RESPECTIVELY. THESE LENGTHS MAY BE INCREASED WHERE FIELD CONDITIONS DICTATE. STORMWATER FROM UP-SLOPE AREAS SHALL BE DIVERTED AWAY FROM THE STABILIZED PAD. 3, THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT SEDIMENT FLOW

BE INSTALLED BEFORE INSTALLING THE STABILIZED CONSTRUCTION ENTRANCE.

ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY. 4. AT POORLY DRAINED LOCATIONS, SUBSURFACE DRAINAGE GRAVEL FILTER OR GEOTEXTILE SHALL

ANTICIPATED SEQUENCE OF CONSTRUCTION:

BE AVAILABLE AT THE SITE AT ALL TIMES.

INSTALL STABILIZED CONSTRUCTION ENTRANCE.

1. CONTACT THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT AT 856-767-6299 A MINIMUM OF 72 HOURS PRIOR TO ANY SOIL DISTURBANCE TO ARRANGE A PRECONSTRUCTION MEETING. THE ORIGINAL CAMDEN COUNTY SOIL CONSERVATION DISTRICT CERTIFICATION AND PLANS MUST

INSTALL SILT FENCE AND INLET PROTECTION. MAINTAIN THROUGHOUT CONSTRUCTION. 4. CLEAR AND GRUB SITE. REMOVE EXISTING HARDSCAPE, AND BUILDINGS AS NECESSARY TO

15. REMOVE EXISTING HARDSCAPE, PAVEMENT AND CURBING AS SHOWN ON SHEET C-101.

7. PLACE ALL UNDERGROUND UTILITIES AS BUILDING CONSTRUCTION CONTINUES, 8. CONSTRUCT CURBING.

10. CONSTRUCT SIDEWALKS AND RAMPS.

9. FINE GRADE SITE AND PLACE STABILIZED BASE COURSE,

6. ROUGH GRADE BUILDING FOUNDATION AND PARKING AREAS.

11. REDISTRIBUTE TOPSOIL AND SEED PER SEEDING SPECIFICATIONS. 12. PLACE PARKING AREA PAVING AND FINAL POROUS PAVEMENT.

13. PLACE LANDSCAPING AND MULCH.

14. REMOVE EROSION CONTROL DEVICES UPON STABILIZATION.

15. CONTACT THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT FOR FINAL INSPECTION.

CLIFTON W. QUAY PROFESSIONAL ENGINEER, PROFESSIONAL PLANNER N.J.P.E. LICENSE #42670, N.J.P.P. LICENSE #LI05653

CWQ SAK 02.13.24 MAI Dwn. Chkd. Dsgn. MM.DD.YY Scale: AS NOTED Drawing No. C-105.1

Project Number: 192520466

Sheet

Revision

- 1. PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
- 2. RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAYBE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL

SOIL COMPACTION MITIGATION NOTES

- 1. PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
- 2. RESTORATION OF COMPACTED SOILS SHALL BE THROUGH DEEP SCARIFICATION/TILLAGE (6" MINIMUM DEPTH) WHERE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEMS, ETC.). IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAY BE SUBSTITUTED SUBJECT TO DISTRICT APPROVAL,
- 3. SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (SCARIFICATION/TILLAGE 6" MINIMUM DEPTH) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION. COMPACTION TESTING METHODS
- PROBING WIRE TEST (SEE DETAIL 6/C-105.1)
- B. HAND-HELD PENETROMETER TEST (SEE DETAIL 6/C-105.1)
- TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED) 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
- 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

SOIL COMPACTION TESTING REQUIREMENTS

- 1. SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE 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 SOILEROSION CONTROL PLAN. SEE EXAMPLE SITE PLAN AT: HTTP://WWW.NJ.GOV/AGRICULTURE/DIVISIONS/ANR/NRC/NJEROSION.HTML
- 3, COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARKLOCATIONS OF TESTS, AND ATTACHED TO THE SOIL COMPACTION MITIGATION VERIFICATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT OR HTTP://WWW.NJ.GOV/AGRICULTURE/DIVISIONS/ANR/NRC/NJEROSION.HTML. 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 TESTINGMETHODS (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.

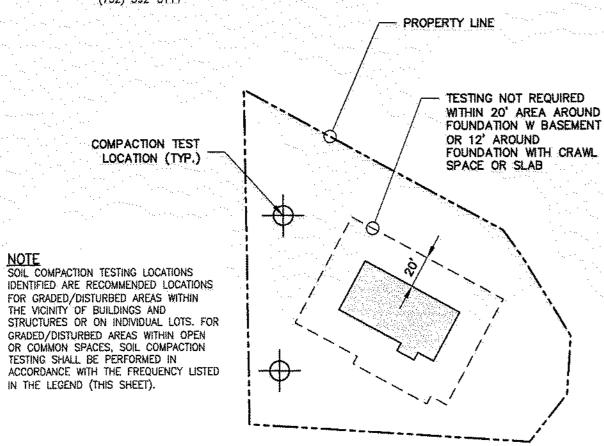
TOP SOILING NOTES

- 1. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE.
- 2. A UNIFORM APPLICATION TO AN AVERAGE DEPTH OF 5" (MINIMUM 4") FIRMED IN PLACE IS REQUIRED.
- 3. PURSUANT TO THE REQUIREMENTS IN SECTION 7 OF THE STANDARD FOR PERMANENT VEGETATIVE STABILIZATION, THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT PERMANENT VEGETATIVE COVER BECOMES ESTABLISHED ON AT LEAST 80% OF THE SOILS TO BE STABILIZED WITH VEGETATION. FAILURE TO ACHIEVE THE MINIMUM COVERAGE MAY REQUIRE ADDITIONAL WORK TO BE PERFORMED.

ADDITIONAL NOTES FOR PROJECTS WITH BASINS

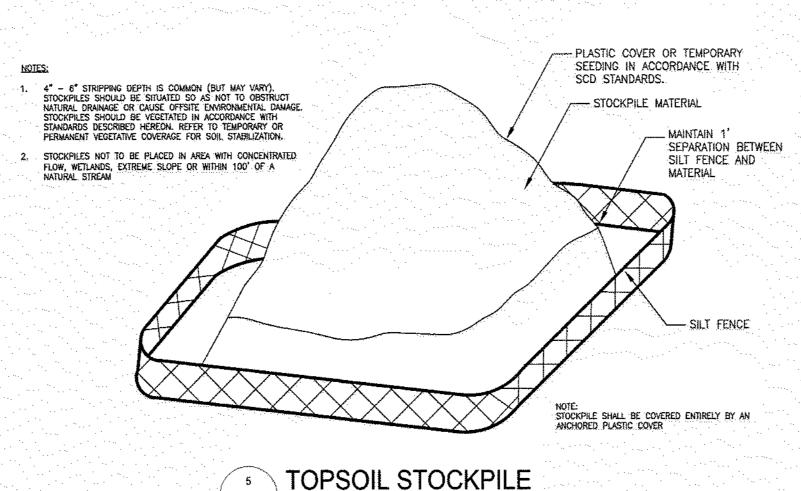
- BASIN MUST BE PROPERLY CONSTRUCTED AND PERMANENTLY STABILIZED, AND CONDUIT OUTLET PROTECTION INSTALLED, PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
- 2. THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL HAVE SPECIFIC REQUIREMENTS FOR TOPSOILING, THE INSTALLATION OF SOD, TEMPORARY AND/OR PERMANENT VEGETATIVE COVER AND LAND GRADING. THE TEXT FOUND ON PAGES 4-1(SEC. 1B), 6-2 (SEC. 2D), 7-1 (SEC. 1C) 8-2 (SEC. 3D) AND 19-4 (SECOND TO LAST SECTION) SERVE TO HELP MINIMIZE SOIL COMPACTION AND REDUCE MAINTENANCE
- 3. ENTITY RESPONSIBLE FOR OVERALL MAINTENANCE OF THE STORMWATER MANAGEMENT MEASURE DURING AND AFTER CONSTRUCTION ON THE PLAN:

EVERGREEN ENERGY SOLUTIONS 1465 LANES MILL ROAD LAKEWOOD, NJ 08701 (732) 592-5111



TYPICAL SOIL COMPACTION TESTING LOCATIONS

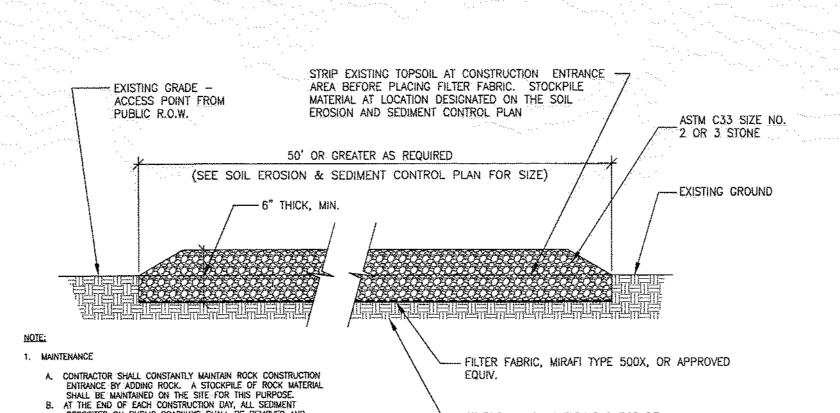




C-105.2 /

DEPOSITED ON PUBLIC ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE BY THE CONTRACTOR

NOT TO SCALE



- STABLE & NON-YIELDING SUBGRADE

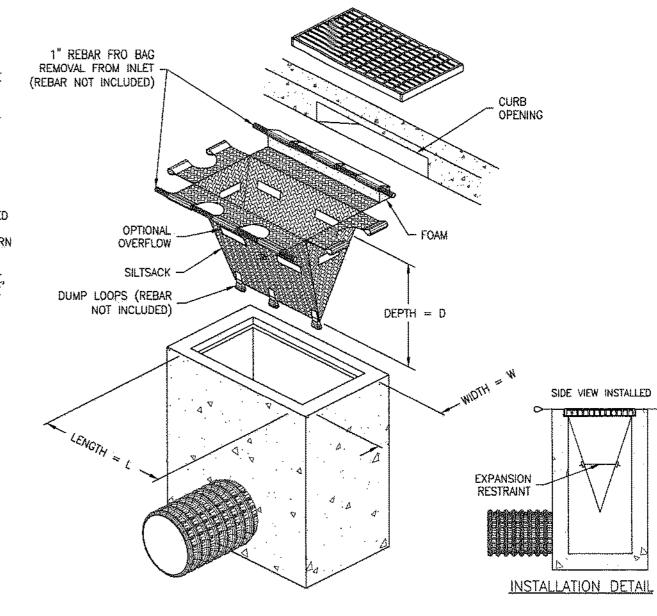
STABILIZED CONSTRUCTION ENTRANCE C-105.2 / NOT TO SCALE

- 1. TO INSTALL SILTSACK IN THE CATCH BASIN, REMOVE THE GRATE AND PLACE THE SACK IN THE OPENING, HOLD OUT APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME, THIS IS THE AREA OF THE LIFTING STRAPS, REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
- 2. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, SILTSACK IS FULL AND SHOULD BE EMPTIED.
- 3, TO REMOVE SILTSACK, TAKE TWO PIECES OF 1" DIAMETER REBAR AND PLACE THROUGH THE LIFTING LOOPS ON EACH SIDE OF THE SACK TO FACILITATE THE LIFTING OF SILTSACK.
- 4. TO EMPTY SILTSACK, PLACE IT WHERE THE CONTENTS WILL BE COLLECTED, PLACE THE REBAR THROUGH THE LIFT STRAPS (CONNECTED TO THE BOTTOM OF THE SACK) AND LIFT. THIS WILL TURN SILTSACK INSIDE OUT AND EMPTY THE CONTENTS, CLEAN OUT AND RINSE, RETURN SILTSACK TO ITS ORIGINAL SHAPE AND PLACE BACK IN THE BASIN.
- 5. SILTSACK IS REUSABLE. ONCE THE CONSTRUCTION CYCLE IS COMPLETE, REMOVE SILTSACK FROM THE BASIN AND CLEAN. SILTSACK SHOULD BE STORED OUT OF THE SUNLIGHT UNTIL NEEDED ON ANOTHER PROJECT,
- 6. SILTSACK SEDIMENT CONTROL DEVICE IS MANUFACTURED BY ACF ENVIRONMENTAL, RICHMOND, VA (800) 448-3636.

REGULAR FLOW SILTSACK

(FOR AREAS OF LOW TO MODERATE PRECIPITATION AND RUN-OFF)

ROPERTIES	TEST METHOD	UNITS
RAB TENSILE STRENGTH	ASTM D-4632	300 LBS
RAB TENSILE ELONGATION	ASTM D-4832	20 %
JNCTURE	ASTM D-4833	120 LBS
JLLEN BURST	ASTM D-3786	800 PSI
PAPEZOID TEAR	ASTM D-4533	120 LBS
/ RESISTANCE	ASTM D-4355	80 %
PARENT OPENING SIZE	ASTM D-4751	40 US SIEVE
OW RATE	ASTM D-4491	40 GAL/MIN/SQ F
RMITTIVITY	ASTM D-4491	



INLET PROTECTION C-105.2 / NOT TO SCALE

TEMPORARY CONCRETE WASHOUT FACILITY NOTES:

1. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE LOCATED A MINIMUM OF 15M (50 FT) FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES. EACH FACILITY SHALL BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS AREAS TO PREVENT DISTURBANCE OR TRACKING.

2. A SIGN SHALL BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO JUIL FOR THE PROPER FACILITIES. TO UTILIZE THE PROPER FACILITIES. I. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND

3. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE CONSTRUCTED AND MAINTAINED IN SUFFICIENT QUANTITY AND SIZE TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS. THE LENGTH AND WIDTH OF THE FACILITY MAY BE INCREASED AS NEEDED.

4. TEMPORARY WASHOUT FACILITIES SHALL HAVE A TEMPORARY PIT OR BERMED AREAS OF SUFFICIENT VOLUME TO COMPLETELY CONTAIN ALL LIQUID AND WASTE CONCRETE MATERIALS GENERATED DURING WASHOUT PROCEDURES.

5. PERFORM WASHOUT OF CONCRETE MIXER TRUCKS IN DESIGNATED AREAS ONLY.

6. WASH CONCRETE ONLY FROM MIXER TRUCK CHUTES INTO APPROVED CONCRETE WASHOUT FACILITY. WASHOUT MAY BE COLLECTED IN AN IMPERMEABLE BAG FOR DISPOSAL.

7. PUMP EXCESS CONCRETE IN CONCRETE PUMP BIN BACK INTO CONCRETE MIXER TRUCK.

8. CONCRETE WASHOUT FROM CONCRETE PUMPER BINS CAN BE WASHED INTO CONCRETE PUMPER TRUCKS AND DISCHARGED INTO DESIGNATED WASHOUT AREA OR PROPERLY DISPOSED OFFSITE.

9. ONCE CONCRETE WASTES ARE WASHED INTO THE DESIGNATED AREA AND ALLOWED TO HARDEN, THE CONCRETE SHALL BE BROKEN UP, REMOVED AND DISPOSED OF PROPERLY.

REMOVAL OF TEMPORARY CONCRETE WASHOUT FACILITY NOTES:

1. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHALL BE REMOVED AND DISPOSED OF PROPERLY, DISPOSAL OF SLURRIES OR LIQUID WASTE SHALL BE DISPOSED OF OFFSITE EITHER TO A PERMITTED TREATMENT FACILITY OR BACK TO THE MIX PLANT. 2. THE CONTRACTOR'S WATER POLLUTION CONTROL MANAGER (WPCM) SHALL MONITOR ON SITE CONCRETE WASTE STORAGE AND DISPOSAL PROCEDURES AT LEAST WEEKLY OR AS DIRECTED BY THE RE.

3. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE MAINTAINED TO PROVIDE ADEQUATE HOLDING CAPACITY WITH A MINIMUM FREEBOARD OF 100 MM (4 INCHES) FOR ABOVE GRADE FACILITIES AND 300 MM (12 INCHES) FOR BELOW GRADE FACILITIES. MAINTAINING TEMPORARY CONCRETE WASHOUT FACILITIES. SHALL INCLUDE REMOVING AND

disposing of hardened concrete and liquid waste and returning the facilities to a functional CONDITION.

EXISTING FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USED ONCE 5. TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE INSPECTED WEEKLY FOR DAMAGE (I.E. TEARS IN THE PVC LINER, MISSING SAND BAGS, ETC.). DAMAGED FACILITIES SHALL BE REPAIRED.

STATEWIDE STORM PERMITTING PROGRAM NOTES: CONCRETE TRUCK WASHOUT AREAS WILL BE MAINTAINED ON A CONTINUAL BASIS AND AS NEEDED.
 THE STORMWATER POLLUTION PREVENTION PLAN AND THE SPILL RESPONSE PLAN SHALL BE AVAILABLE ON SITE FOR REVIEW BY THE SCD INSPECTOR AND/OR THE NJDEP INSPECTOR. 3. THE SCD INSPECTOR OR NUDEP INSPECTOR MAY REQUIRE ADDITIONAL MEASURES FOR STORMWATER POLLUTION PREVENTION TO BE INSTALLED. 4. INSPECTIONS OF ALL STORMWATER POLLUTION PREVENTION PLAN MEASURES WILL BE CONDUCTED AND DOCUMENTED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.

5. WASTE COLLECTION CONTAINERS WILL NOT BE PERMITTED TO OVERFLOW.
6. ANY SPILLS OF HAZARDOUS OR SANITARY WASTES WILL BE CLEANED UP IMMEDIATELY, AND IN ACCORDANCE WITH THE SPILL RESPONSE PLAN. SPILL KITS MUST BE AVAILABLE ONSITE OR ADJACENT TO THE SITE. 7. ANY HAZARDOUS SUBSTANCE RELEASES IN EXCESS OF REPORTABLE QUANTITIES (RQ) ESTABLISHED UNDER 40 C.F.R. 110, 117 AND 302 THAT OCCUR WITHIN A 24 HOUR PERIOD MUST BE REPORTED TO THE NATIONAL RESPONSE

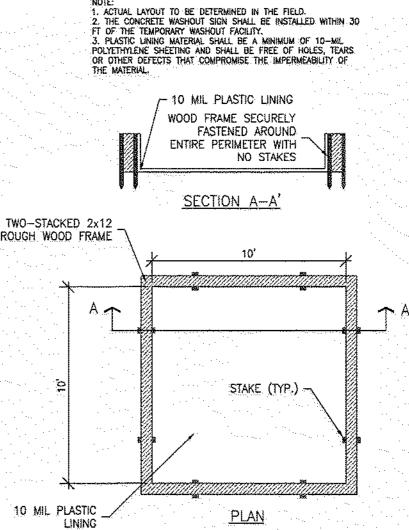
110, 117 AND 302 THAT OCCUR WITHIN A 24 HOUR PERIOD MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER (800-424-8802).

8. NO VEHICLE MAINTENANCE SHALL BE PERFORMED ON SITE.

9. ANY CHEMICALS TO BE STORED ON SITE DURING CONSTRUCTION SHALL BE STORED AS TO ENSURE NO. CONTAMINATION FROM THE CHEMICALS WILL OCCUR.

10. CONTRACTOR IS REQUIRED TO DEVELOPE AN ITEMIZED SPILL RESPONSE PLAN IN CONFORMANCE WITH APPLICABLE DEP REQUIREMENTS. SPILL RESPONSE PLAN SHALL BE AVAILABLE ON SITE.

11. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING WEEKLY SITE INSPECTIONS AND AFTER A RAIN EVENT PER THE NEW JERSEY STORM WATER POLLUTION PREVENTION PLAN (SPPP) INSPECTION AND MONITORING PROGRAM, THE INSPECTION AND AFTER A RAIN EVENT PER THE INSPECTION AND APPLICABLE OF THE OPERATOR OF THE PROPERTY OF THE OPERATOR OF THE OPERATOR OF THE PROPERTY OF THE OPERATOR OF THE O INSPECTIONS WILL INSURE ONGOING BEST MANAGEMENT PRACTICE (BMP) PERFORMANCE DURING THE CONSTRUCTION PROJECT. BMPs SHALL BE EVALUATED FOR PROPER INSTALLATION AND FUNCTIONING AND WHETHER ADDITIONAL MEASURES ARE REQUIRED DURING CONSTRUCTION, WEEKLY INSPECTIONS ARE TO BE DOCUMENTED ON THE "SPPP CHECKLIST AND INSPECTION FORM." INSPECTION REPORTS SHALL BE KEPT ON SITE.



CONCRETE WASHOUT FACILITY C-105.2 NOT TO SCALE

FENCE POSTS SHALL BE SPACED B FEET
CENTER-TO-CENTER OR CLOSER, THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND. POST SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1 1

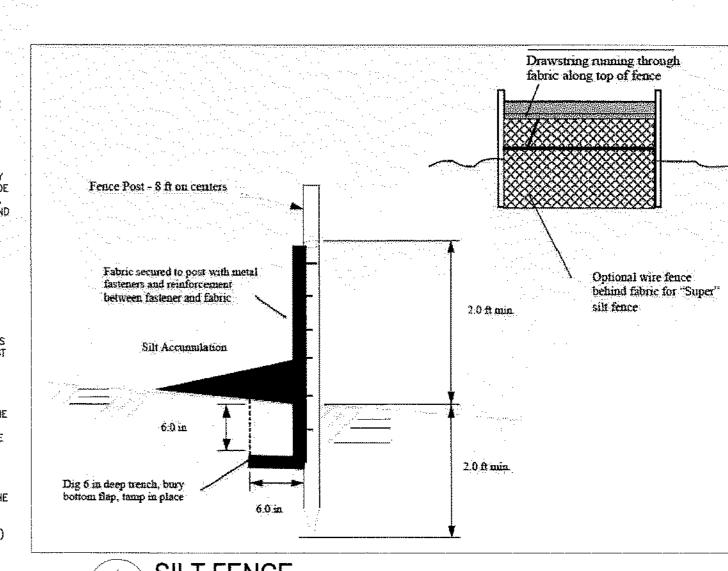
2. "SUPER" SILT FENCE -A METAL FENCE WITH 6 INCH OR SMALLER MESH OPENINGS AND AT LEAST 2 FEET HIGH MAY BE UTILIZED, FASTENED TO THE FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOLEXTILE FABRIC. POSTS MAY BE SPACED LESS THAN 8 FEET ON CENTER AND MAY BE CONSTRUCTED OF HEAVIER WOOD OR METAL AS NEEDED LO WITHSTAND HEAVIER SEDIMENT LOADING. THIS PRACTICE II APPROPRIATE WHERE SPACE FOR OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED. "SUPER" SILT FENCE IS NOT TO BE USED IN PLACE OF PROPERLY DESIGNED DIVERSIONS (PG, 15-1) WHICH MAY BE NEEDED TO CONTROL SURFACE RUNOFF RATES AND VELOCITIES,

3. A GEOTEXTILE FABRIC, RECOMMENDED.FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6 INCHES DEEP IN THE GROUND THE FABRIC SHALL EXTEND AT LEAST 2 FEET ABOVE THE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OR STAPLE) AND A HIGH STRENGTH REINFORCEMENT MATERIAL (NYLON WEBBING, GROMMETS. WASHERS ETC.) PLACED BETWEEN THE FASTENER AND THE GEOTEXTILE FABRIC. THE FASTENING SYSTEM SHALL RESIST TEARING AWAY FROM THE POST. THE FABRIC SHALL INCORPORATE A DRAWSTRING IN THE TOP PORTION OF THE FENCE FOR ADDED STRENGTH,

4. SEDIMENT SHALL BE REMOVED FROM THE UPSTREAM FACE OF THE BARRIER WHEN IT HAS REACHED A DEPTH OF 1/2 THE

DETERIORATION AND SEDIMENT REMOVAL.

5. REPAIR OR REPLACE BARRIER (FABRIC, POSTS, BALES ETC.) WHEN DAMAGED. 6. BARRIERS SHALL BE INSPECTED DAILY FOR SIGNS OF



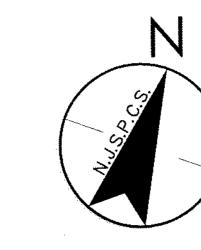
SILT FENCE C-105.2 NOT TO SCALE

Permit-Seal

CLIFTON W. QUAY PROFESSIONAL ENGINEER, PROFESSIONAL PLANNER N.J.P.E. LICENSE #42670, N.J.P.P. LICENSE #LI05653

Project Number: 192520466 CWQ \$AK 02.13.24 MAI Dwn. Chkd. Dsgn. Scale: AS NOTED Drawing No. C-105.2

MM.DD.YY Sheet Revision



SOLID WHITE LINE

WHITE HORSE PIKE

(a.k.a. US Route 30)

(ROW 66')

- PROPOSED RELOCATED DRIVEWAY

EXISTING WHITE HORSE PIKE DRIVEWAY TO REMAIN

--- DRIVEWAY

- EXISTING TRAFFIC SIGNAL

DRIVEWAY / DRIVEWAY

SOLID WHITE LINE

EXISTING TRAFFIC SIGNAL

SOLID WHITE LINE



Permit-Seal

CLIFTON W. QUAY

PROFESSIONAL ENGINEER, PROFESSIONAL PLANNER N.J.P.E. LICENSE #42670, N.J.P.P. LICENSE #LI05653

GRAPHIC SCALE (IN FEET) 1 inch = 50 ft.

Project Number: 192520466
 MAI
 CWQ
 SAK
 02.13.24

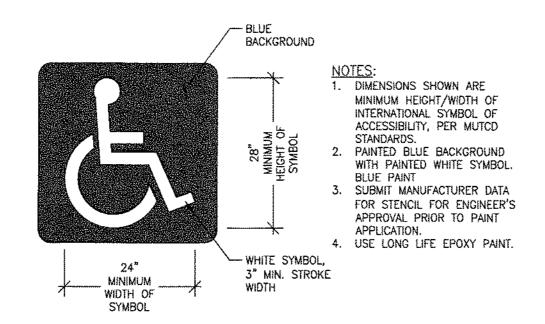
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 MM.DD.YY

 Scale:
 1" = 50'
 Drawing No. C-102.1 Revision 9 of 14

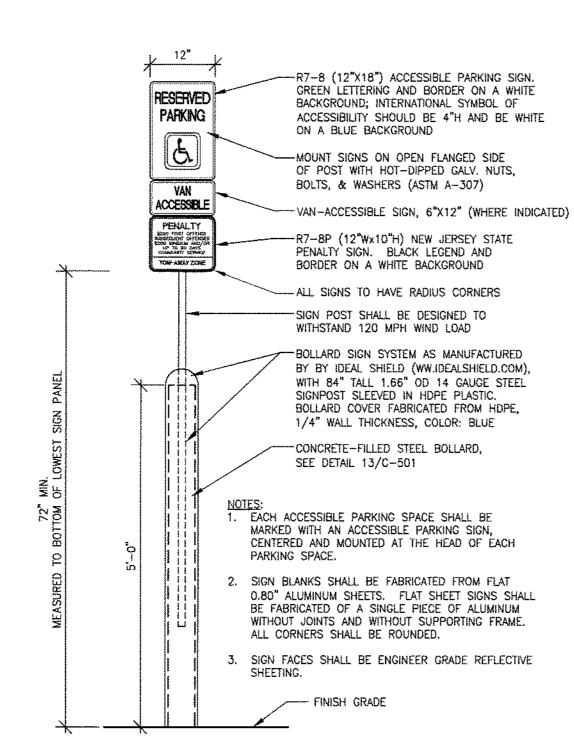
ADA PARKING STALL PAVEMENT MARKINGS C-501 NOT TO SCALE

VAN ACCESSIBLE

VAN ACCESSIBLE

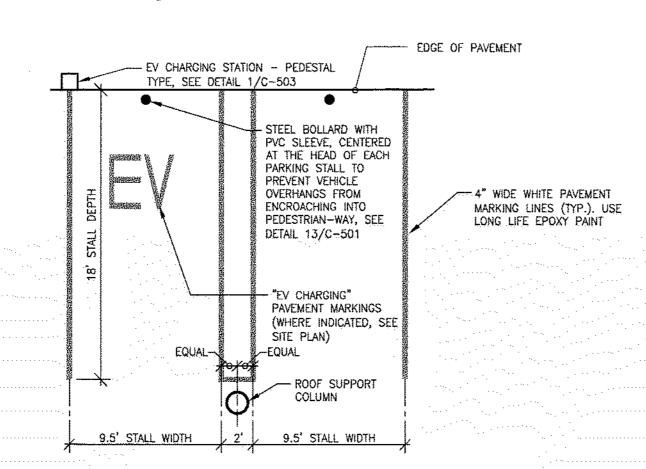


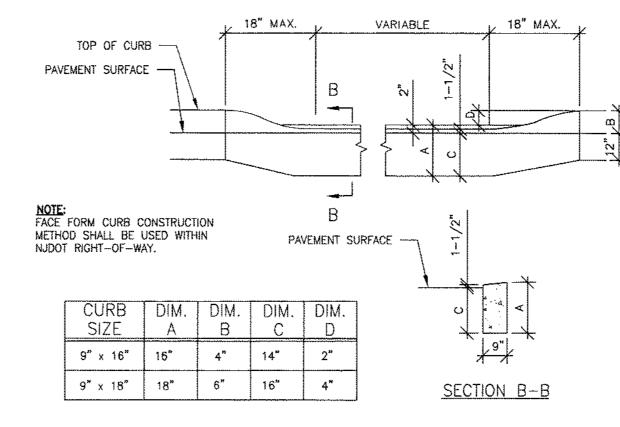
ADA PAVEMENT MARKING SYMBOL C-501 NOT TO SCALE



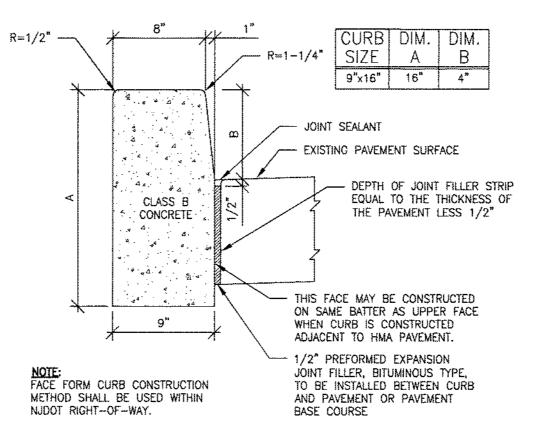
ADA PARKING SIGN W/ BOLLARD C-501

NOT TO SCALE

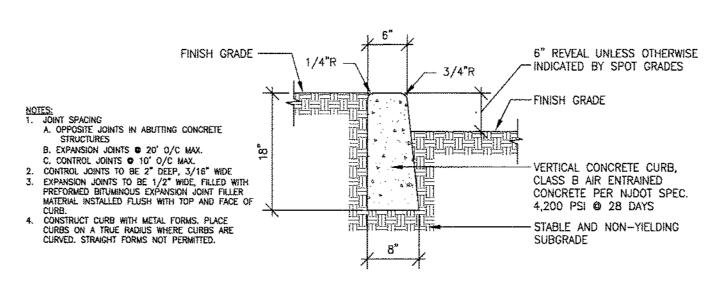




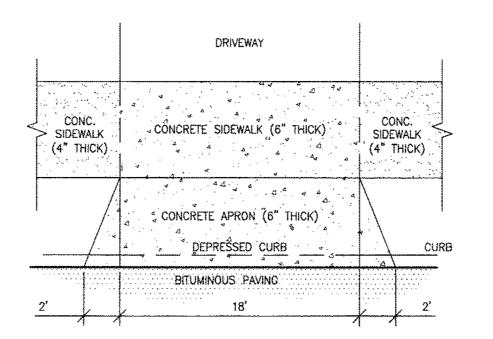
DEPRESSED CONCRETE CURB (STATE) NOT TO SCALE

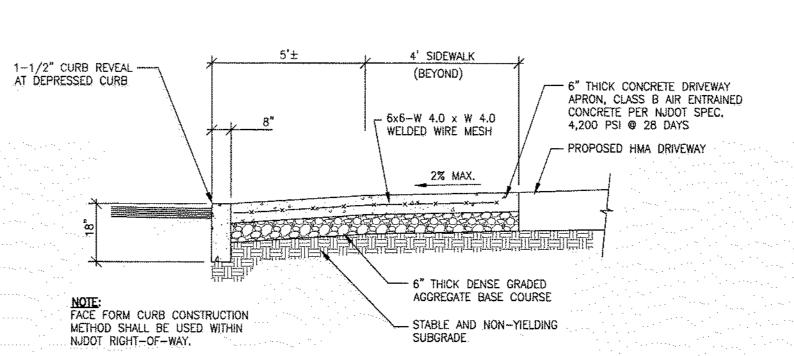


CONCRETE CURB (STATE) C-501 / NOT TO SCALE



CONCRETE CURB (LOCAL) C-501 NOT TO SCALE







(MATCH EXISTING)

RECLAIMED OR NEW CLAY BRICK -PAVERS AND GRANITE BLOCK PAVER

BANDING UNITS TO MATCH EXISTING

STATION AVENUE STREETSCAPE

DECORATIVE PAVING TREATMENT

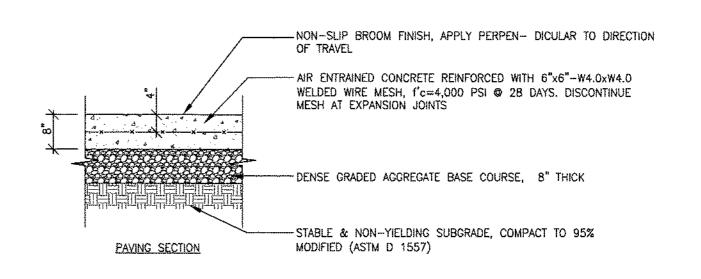
EXISTING COUNTY CURB -

1/2" R (TYP.)

C-501

CONTROL JOINT

NOT TO SCALE

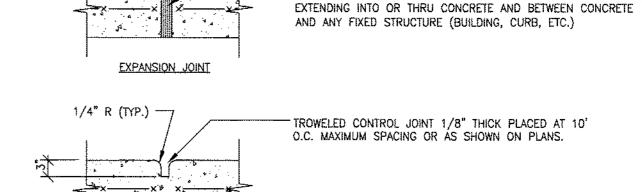


1/2" THICK PREMOLDED BITUMINOUS EXPANSION JOINT MATERIAL,

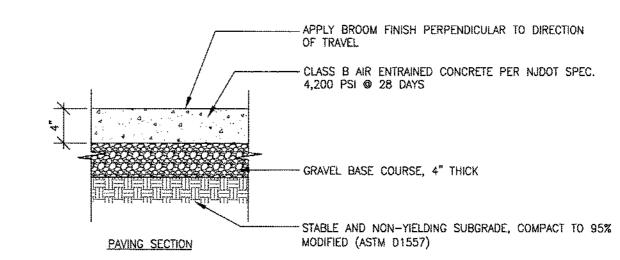
SURFACE AS SHOWN. PLACE AT 30' O.C. MAXIMUM SPACING OR

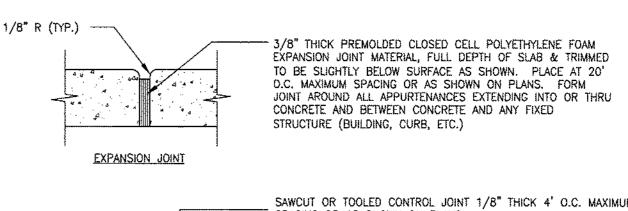
AS SHOWN ON PLANS. FORM JOINT AROUND ALL APPURTENANCES

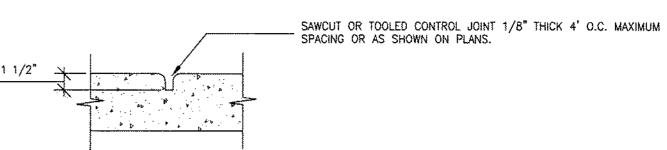
FULL DEPTH OF SLAB & TRIMMED TO BE SLIGHTLY BELOW





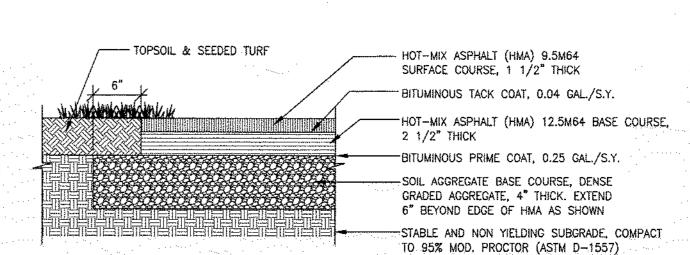






CONCRETE SIDEWALK C-501 NOT TO SCALE

CONTROL JOINT







- HAND TIGHT JOINTS, SAND SWEPT

- POLYMERIC SAND SETTING BED.

THICK. F'C=3000 PSI (MIN.) AT

- CONCRETE BASE COURSE, 3"

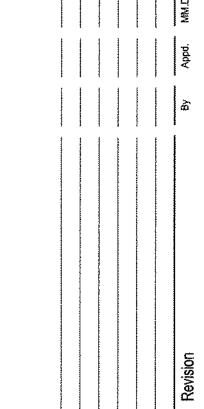
CONCRETE SIDEWALK, SEE

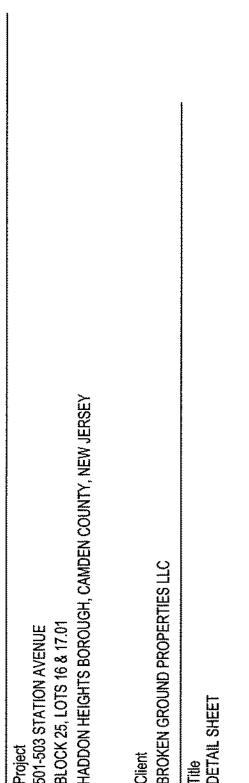
DETAIL 2/C-501

WITH POLYMERIC SAND

3/4" THICK

28 DAYS





Permit-Seal

CLIFTON W. QUAY PROFESSIONAL ENGINEER, PROFESSIONAL PLANNER N.J.P.E. LICENSE #42670, N.J.P.P. LICENSE #LI05653

Project N	umber: 1925	20466	
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Drawin	a No C	-501	

Sheet

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Revision

STEEL BOLLARD WITH PVC SLEEVE COVER NOT TO SCALE

36" MINIMUM TOP LANDING DISTANCE AT CURB

DIRECTIONS. COMPLY WITH GRADING PLAN

APPROACH SIDEWALK

SIDE FLARE

DETECTABLE WARNING SURFACE:

NEW CONCRETE.

TAPERED CURB (TYP.) -

RAMPS. LANDING SLOPES SHALL BE <2% IN ALL

APPROACH

SIDEWALK TRANSITION

- GUTTER LINE

- ADA-COMPLIANT DETECTABLE

2' BEHIND BACK OF CURB

FLUSH CURB (MAX. 2% CROSS SLOPE). SEE SITE PLAN FOR WIDTH

NOTES:

1. RAMP SURFACE TEXTURE SHALL BE COARSE BROOMING OR NON-SKID TYPE SURFACE.

2. SIDE FLARE SLOPES MEASURED ALONG CURB

LINE. 1:10 MAX. SLOPE.

1. CAST-IN-PLACE DETECTABLE WARNING SURFACE (DWS) TILES: ACCESSIBLE TRUNCATED-DOME DETECTABLE WARNING TILES WITH REPLACEABLE SURFACE CONFIGURED FOR SETTING FLUSH IN NEW CONCRETE WALKWAY SURFACES, WITH SLIP-

CURB RAMP - PERPENDICULAR

2. COLOR: RED, UNLESS OTHERWISE SPECIFIED BY LOCAL AUTHORITY WITH JURISDICTION.

A. ENGINEERED PLASTICS, INC. (grmor-tile.com)

NOT TO SCALE

1'-6" DIA.

ACCESS PRODUCTS, INC. (accesstile.com)

3. ACCEPTABLE PRODUCTS/MANUFACTURERS OF DWS PRODUCTS INCLUDE, BUT ARE NOT LIMITED TO:

RESISTANT SURFACE TREATMENT ON DOMES AND FIELD OF TILE. USE FOR ALL CURB RAMPS TO BE CONSTRUCTED IN

-HEAVY DUTY LDPE BOLLARD COVER - 6" ARCHITECTURAL

COLOR: 285 BLUE UNLESS OTHERWISE INDICATED

-6" O.D. NOMINAL DIAMETER, (6.625" O.D.) SCHEDULE 40 HOT-DIPPED GALVANIZED STEEL

PIPE. FILL STEEL PIPE WITH NON-SHRINK

GROUT OR QUICK SETTING ANCHORING CEMENT

-ISOLATION JOINT (EXPANSION JOINT) BETWEEN FOOTING AND SIDEWALK, WITH JOINT SEALANT

FINISH GRADE - CONCRETE PAVING

- CONCRETE FOOTING, 18 DIA. x 36" DEEP

FOR BOLLARDS WITH SIGNS, USE IDEAL SHIELD'S "BOLLARD

SIGN SYSTEM" OR APPROVED EQUIVALENT PRODUCT, INSTALL

PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.

- STABLE & NON-YIELDING SUBGRADE

AND BACKER ROD

-TROWEL FINISH TOP OF CONCRETE FOOTING TO SHED WATER AWAY FROM POST (1/8" PER FT. WASH)

DECORATIVE BOLLARD SLEEVE, 1/4" WALL THICKNESS, BY

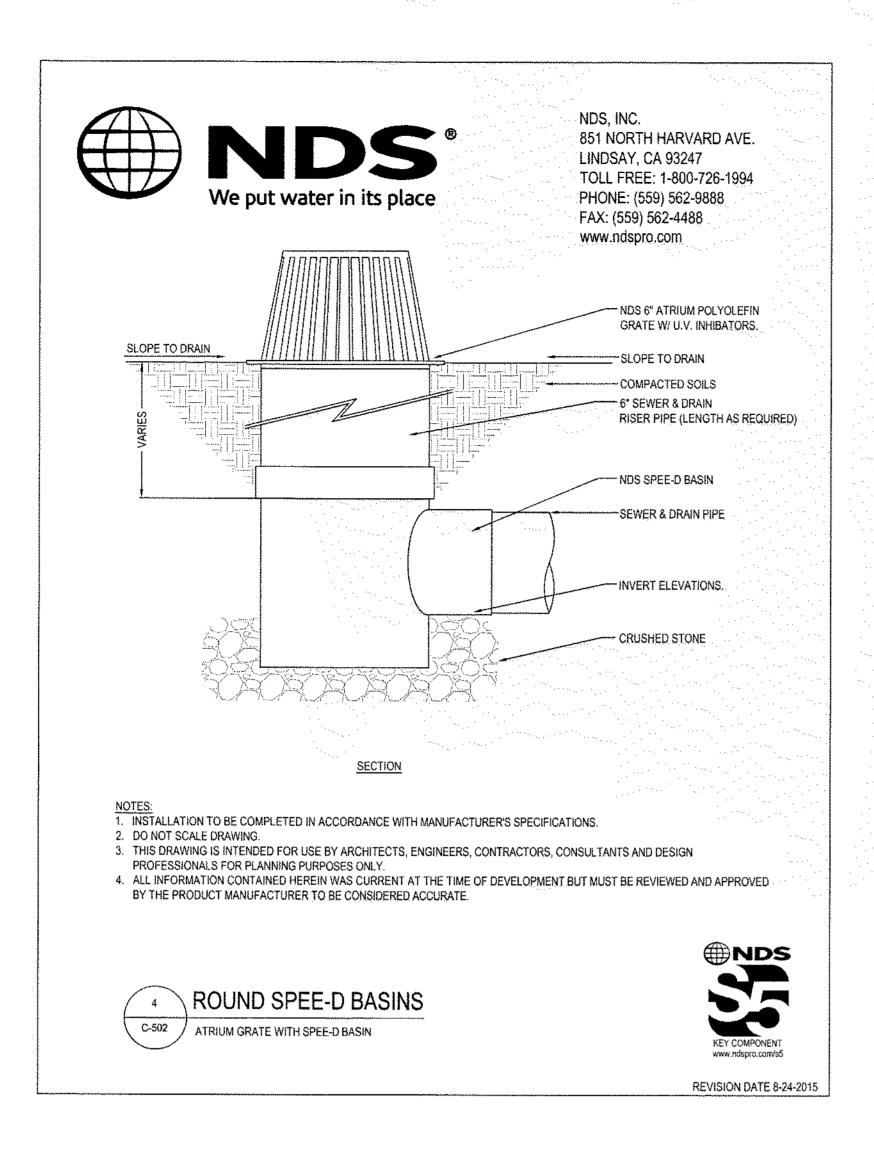
"IDEAL SHIELD", OR APPROVED EQUIVALENT PRODUCT. INSTALL PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS.

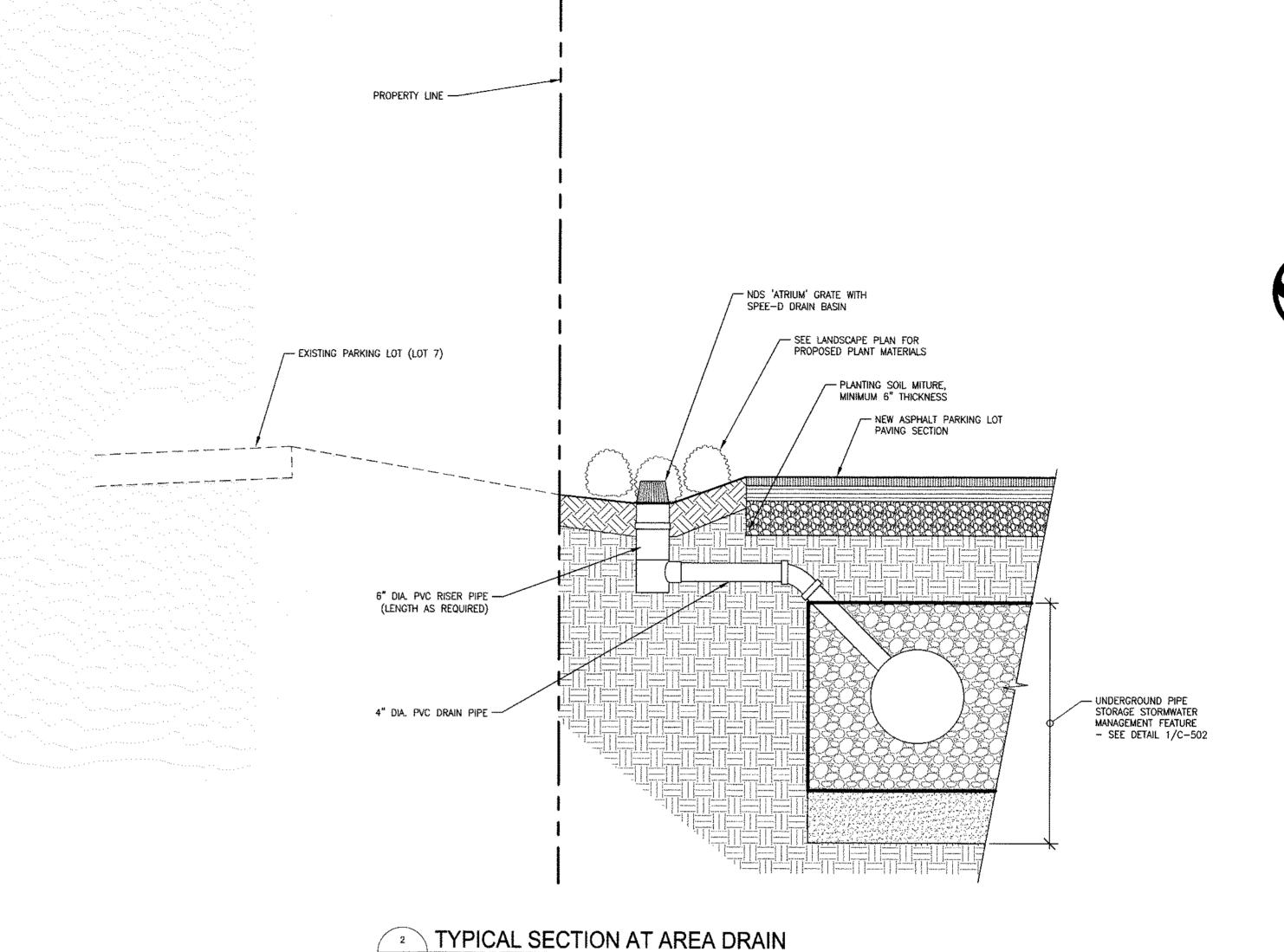
WARNING SURFACE, FULL WIDTH OF CURB RAMP AND EXTENDING

> STANDARD PARKING SPACE C-501 NOT TO SCALE

CONCRETE DRIVEWAY APRON

C-501 NOT TO SCALE

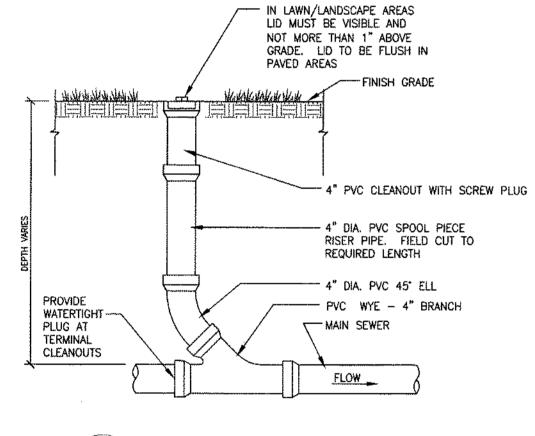




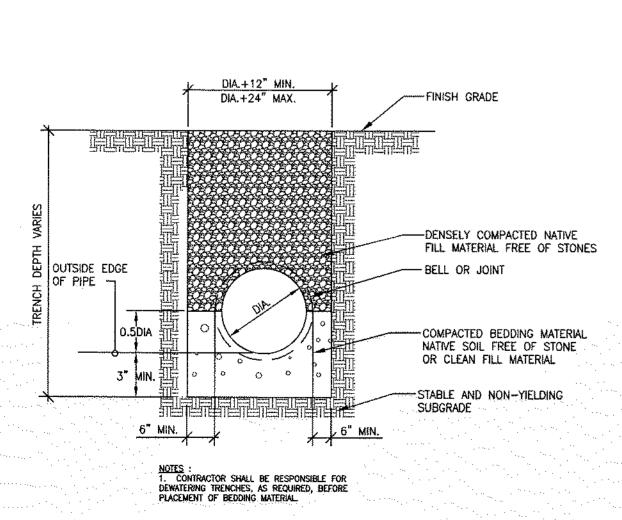
C-502 NOT TO SCALE

C-502

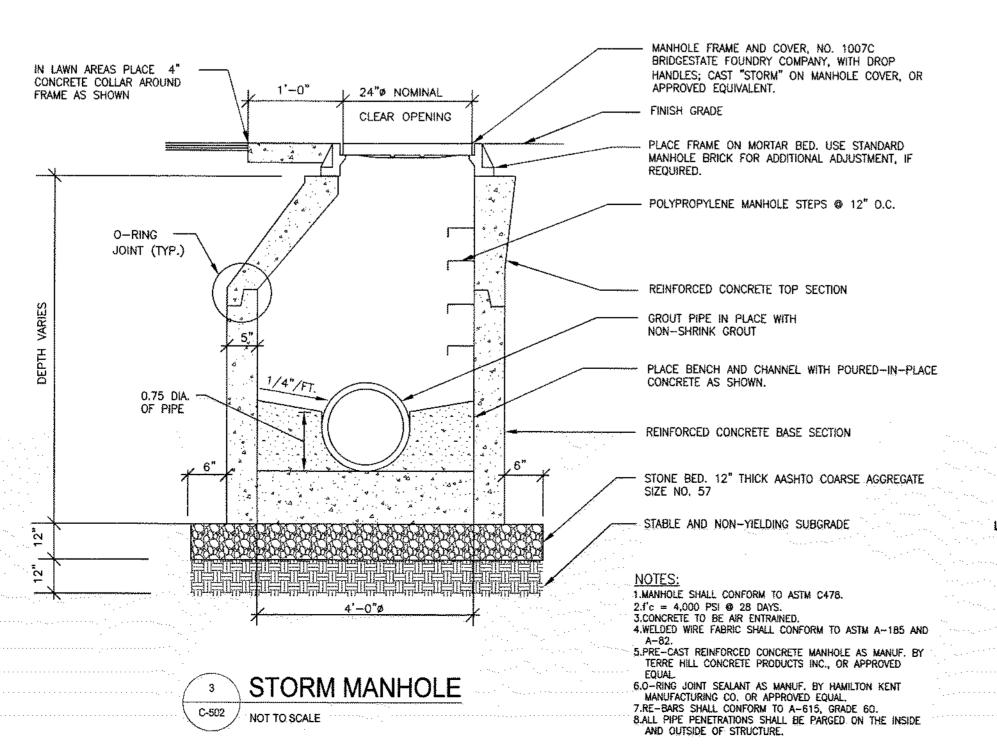
NOT TO SCALE

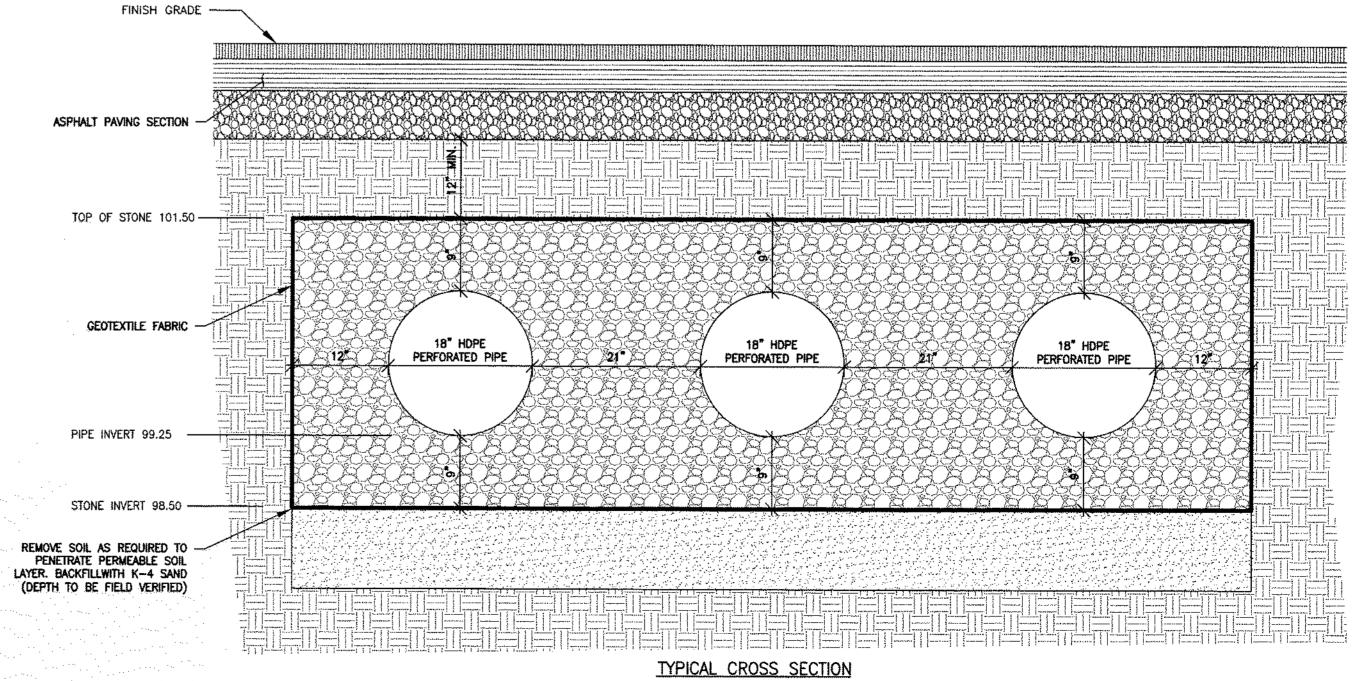


STORM CLEANOUT C-502 NOT TO SCALE



PIPE BEDDING/TRENCH C-502 NOT TO SCALE





UNDERGROUND PIPE STORAGE

Project Number: 192520466
 MAI
 CWQ
 SAK
 02.13.24

 Dwn.
 Chkd.
 Dsgn.
 MM.DD.YY
 Scale: AS NOTED Drawing No. C-502 Revision

CLIFTON W. QUAY

N.J.P.E. LICENSE #42670, N.J.P.P. LICENSE #L105653

Permit-Seal

6.000

1.063 CHARGER TOP 3.000 7.125 32.875 CHARGER FRONT

11,500 ----8.751 ----3x6x32 PEDESTAL 72.000 SIDE **-6.000-**32.875 16.120 0 0 0.375 11.500

8,000 ----

RETRACTOR

(SINGLE / DUAL)

3x6x32 PEDESTAL

FRONT/BACK

DUAL MOUNT BRACKET PowerCharge* | 500 Canal View Blvd, Suite 100 | Rochester, NY 14623 | 585•533•4085 | PowerChargeEV.com

0 0

4.504

PowerCharge | 500 Canal View Blvd, Suite 100 | Rochester, NY 14623 | 585•533•4085 | PowerChargeEV.com

Dual Retractor Pedestal

C-503

(Single configuration available)

LEVEL 2 CHARGING STATION

• Up to 10x faster than a standard 110v

up to 35 miles of driving range for

electric vehicle, and driving range

MOUNT CONFIGURATIONS

(5-Year Parts & Labor optional)

every hour of charge time

• 3-Year Parts Warranty

plug, the Level 2 Series safely delivers

 Adjustable output allows for the ideal power to match your supply panel,

CABLE RETRACTOR

off the ground

Optional cable retractor extends the

life of the cables by elevating them

Creates a safer environement by

SLIM & DURABLE DESIGN

 Outdoor rated with multiple mounting configurations

pedestal mounted

MULTIPLE MODELS

Open Access Control

• RFID Access Control

• Ethernet (40A Only)

When connected to a backend software pian.

it unlocks features such

payment, usage data reporting, driver _ notifications, remote diagnostics, and more

UL-Listed meets

Meets standards for

Americans with

Disabilities Act

safetycriteria for use in North America

as point of sale

Cellular

Networked

• Small footprint whether wall or

Non-networked common for residential and fleet use

Non-networked model with RFID-card access control

greatly reducing tripping hazards

ELECTRIC VEHICLE CHARGER DETAIL NOT TO SCALE

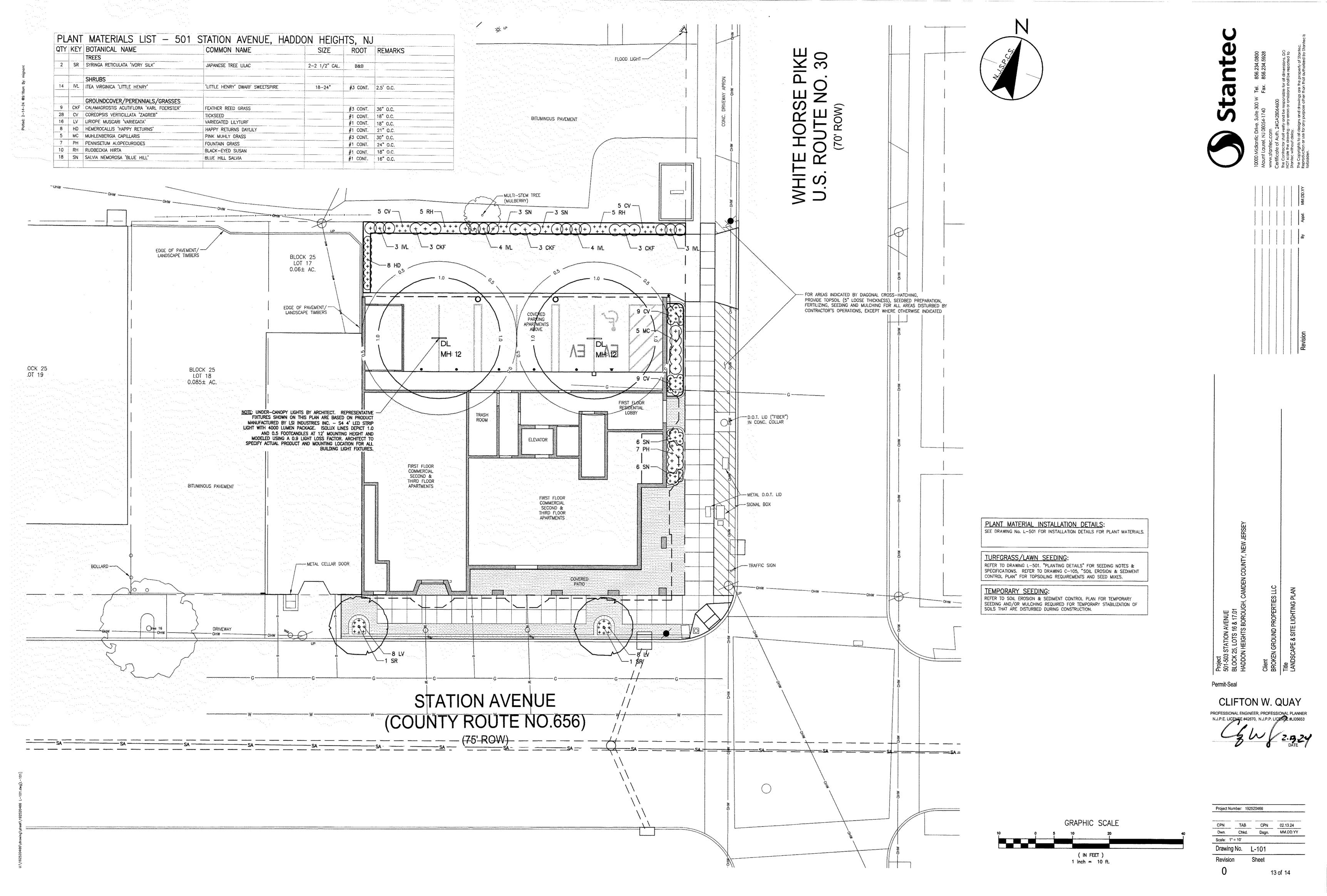
Project Number: 192520466 MAI CWQ SAK 02.13.24

Dwn. Chkd. Dsgn. MM.DD.YY Scale: AS NOTED Drawing No. C-503 Revision

CLIFTON W. QUAY

PROFESSIONAL ENGINEER, PROFESSIONAL PLANNER

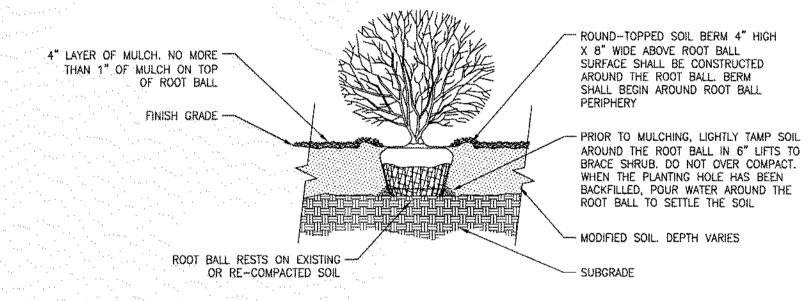
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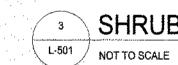


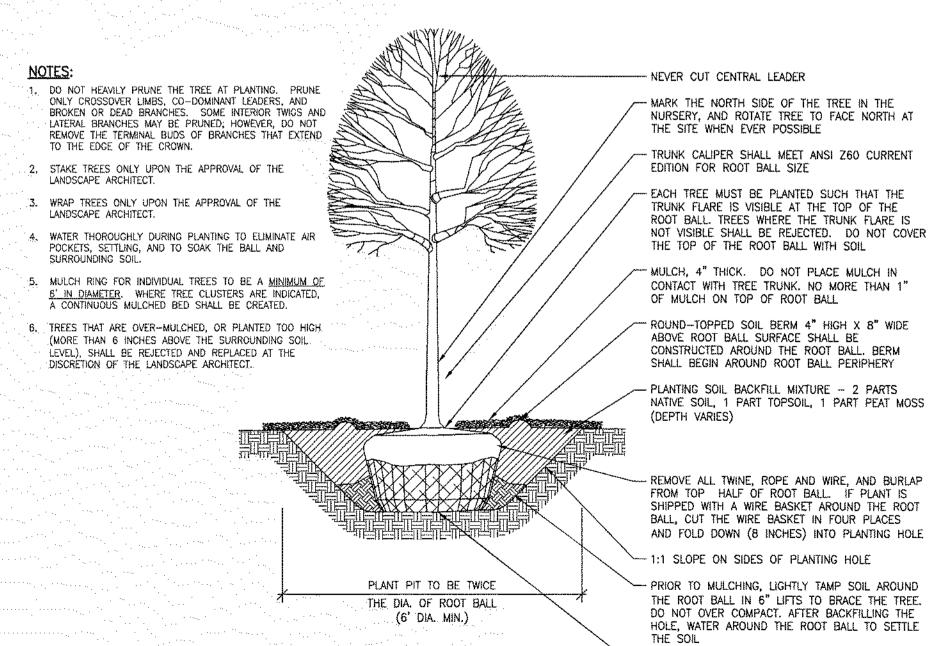
GROUND COVER / PERENNIAL NOT TO SCALE

NOT

- ROOT BALLS GREATER THAN 2' DIA. SHALL SIT ON A MOUND OF UNDISTURBED SOIL TO PREVENT SETTLEMENT.
- ROOT BALLS SMALLER THAN 2' DIA. SHALL SIT ON COMPACTED PLANTING SOIL.
- 3. TOP OF ROOT BALL SHALL BE 1" TO 2" ABOVE FINISH
- 4. PLANTING HOLE FOR ROOT BALL SIZES 2' DIA. AND LARGER SHALL BE 2' LARGER ON ALL SIDES THAN DIAMETER OF
- 5. PLANTING HOLE FOR ROOT BALL SIZES LESS THAN 2' DIA. SHALL BE TWICE THE DIAMETER OF THE ROOT BALL.







SEEDED LAWN — SEE SEEDING
NOTES & SPECIFICATIONS FOR
REQUIREMENTS

TOPSOIL — SEE SOIL EROSION
& SEDIMENT CONTROL PLAN
FOR REQUIREMENTS

PREPARED SUBGRADE

X SEEDED LAWN DETAIL

NOT TO SCALE

1 DECIDUOUS TREE

1 DECIDUOUS TREE

1 NOT TO SCALE

- PLACE ROOT BALL ON EXISTING OR

PLANTING NOTES AND SPECIFICATIONS

- 1. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS SHOWN, INCLUDING ALL LABOR, MATERIALS, EQUIPMENT, INCIDENTALS
- 2. ALL PLANTS SHALL BE NURSERY GROWN. PLANT QUALITY AND SIZE, ROOT SPREAD AND ROOT BALL OR CONTAINER SIZE SHALL BE IN ACCORDANCE WITH ANSI Z60.1, AMERICAN STANDARDS FOR NURSERY STOCK, LATEST EDITION. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH. THEY SHALL BE SOUND, HEALTHY, VIGOROUS, WELL—BRANCHED AND DENSELY FOLIATED WHEN IN LEAF. THEY SHALL BE FREE OF DISEASE AND INSECT PESTS, EGGS AND LARVAE. THEY SHALL HAVE HEALTHY AND WELL DEVELOPED ROOT SYSTEMS.
- 3. DECIDUOUS TREES SHALL BE SELECTED FOR STRAIGHT TRUNKS, SYMMETRICAL AND FULL HEADS WITH NO OPEN AREAS AND WITH ONE STRAIGHT LEADER. TREES WITH A CROTCH OR FORKED TRUNK SHALL BE REJECTED. CONIFEROUS EVERGREEN TREES SHALL BE FULLY BRANCHED FROM THE GROUND TO UPPERMOST WHORL WITH NO LARGE OPEN AREAS BETWEEN WHORLS. SHRUBS SHALL HAVE FULL, DENSE AND SYMMETRICAL HEADS AND SHALL BE FOLIATED TO THE GROUND. LEGGY OR ONE—SIDED PLANTS SHALL BE REJECTED. GROUND COVER PLANTS SHALL BE THRIFTY, WELL BALANCED PLANTS, WELL—ESTABLISHED IN CONTAINERS.
- 4. ALL PLANTS (B&B OR CONTAINER) SHALL BE PROPERLY IDENTIFIED BY WEATHERPROOF LABELS SECURELY ATTACHED THERETO BEFORE DELIVERY TO THE PROJECT SITE. LABELS SHALL IDENTIFY THE PLANTS BY NAME, SPECIES AND SIZE. LABELS SHALL NOT BE REMOVED UNTIL FINAL INSPECTION BY THE PROJECT CONSULTANT OR OWNER'S AGENT.
- 5. SUBSTITUTIONS: DUE TO POSSIBLE LIMITED PLANT AVAILABILITY, PLANT MATERIAL OF SIMILAR CHARACTER MAY BE SUBSTITUTED, UPON REQUEST BY THE CONTRACTOR, IF APPROVED BY THE OWNER.
- 6. BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH FIRM, NATURAL BALLS OF EARTH, OF DIAMETER AND DEPTH TO INCLUDE MOST OF THE FIBROUS ROOTS. ALL ROOT WRAPPING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED AT TIME
- 7. CONTAINER GROWN STOCK SHALL HAVE BEEN GROWN IN A CONTAINER LONG ENOUGH FOR THE ROOT SYSTEM TO HAVE DEVELOPED SUFFICIENTLY TO HOLD ITS SOIL TOGETHER FIRM AND WHOLE. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. AFTER REMOVAL FROM THE CONTAINER, THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO VERTICAL
- 8. ROOT BALLS OF ALL PLANTS SHALL BE ADEQUATELY PROTECTED AT ALL TIMES FROM SUN AND DRYING WINDS OR FROST. PLANTS WITH BROKEN ROOT BALLS OR EXCESSIVE DAMAGE TO THE CROWN SHALL BE REJECTED.
- INSOFAR AS IT IS PRACTICABLE, PLANT MATERIALS SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT THE STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A 3 DAY PERIOD AFTER DELIVERY.
- 10. PLANTING SOIL FOR BACKFILLING PLANTED AREAS SHALL CONSIST OF 2 PARTS BY VOLUME OF LOAMY TOPSOIL THOROUGHLY MIXED WITH ONE PART PEAT MOSS. NOTHING BUT SUITABLE TOPSOIL, FREE OF DRY SOD, STIFF CLAY, DEBRIS, OR OTHER UNSUITABLE MATERIALS, SHALL BE USED FOR PLANTING.
- 11. ALL PLANTING SHALL BE INSTALLED AT THE LOCATIONS INDICATED ON THE DRAWINGS. MINOR ADJUSTMENTS TO PLANTING LOCATIONS MAY BE NECESSARY DUE TO FIELD CONDITIONS AND FINAL GRADING. THE CONTRACTOR SHALL ENSURE THAT LANDSCAPE INSTALLATION DOES NOT INTERRUPT ESTABLISHED OR PROJECTED DRAINAGE PATTERNS. THE CONTRACTOR SHALL NOTIFY THE OWNER IF MAJOR ADJUSTMENTS ARE REQUIRED.
- 12. ALL PLANTS SHALL BE PLUMB AND STRAIGHT AND INSTALLED AT SUCH A LEVEL THAT, AFTER SETTLEMENT, THE INDICATED RELATIONSHIP BETWEEN THE CROWN OF THE ROOT BALL AND THE GROUND SURFACE WILL BE ESTABLISHED. (SEE PLANTING DETAILS). ALL PLANTS SHALL BE LOCATED IN THE CENTER OF OF THEIR RESPECTIVE PLANTING PITS.
- 13. TREES IN LEAF WHEN PLANTED SHALL BE TREATED WITH ANTI-DESICCANT SUCH AS "WILT-PROOF".
- 14. MULCH: IMMEDIATELY AFTER PLANTING OPERATIONS ARE COMPLETED ALL TREE AND SHRUB PLANTING PITS SHALL BE COVERED WITH A 3" (THREE INCH) LAYER OF DOUBLE SHREDDED HARDWOOD ROOT MULCH OR OTHER MATERIAL APPROVED BY THE OWNER. THE LIMIT OF THIS MULCH FOR DECIDUOUS TREES AND SINGLE EVERGREEN TREES SHALL BE THE AREA OF THE PIT, FOR SHRUB BEDS AND EVERGREEN TREE CLUSTERS. A CONTINUOUS MULCHED BED SHALL BE CREATED.
- 15. ALL PLANTING BEDS ADJACENT TO LAWN, SOD OR SEEDED AREAS SHALL BE SPADE EDGED.
- 16. ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT HERBICIDE PRIOR TO FINAL LANDSCAPE INSPECTION. GROUND COVER AREAS SHALL BE WEEDED PRIOR TO APPLICATION OF PRE-EMERGENT. APPLY PRE-EMERGENT AS PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 17. EACH TREE AND SHRUB SHALL BE PRUNED, AFTER INSTALLATION, IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS TO PRESERVE THE NATURAL CHARACTER OF THE PLANT. ALL DEAD WOOD OR SUCKERS AND ALL BROKEN OR BADLY BRUISED BRANCHES SHALL BE REMOVED. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS.
- 18. THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT AND THE OWNER'S AGENT IN WRITING OF ALL SOIL OR DRAINAGE CONDITIONS WHICH THE CONTRACTOR CONSIDERS DETRIMENTAL TO THE GROWTH OF PLANTS, IF SUCH CONDITIONS ARE ENCOUNTERED DURING PLANTING. STATE THE CONDITIONS AND SUBMIT A PROPOSAL FOR CORRECTING THE CONDITIONS, INCLUDING ANY CHANGE IN COST, FOR REVIEW AND ACCEPTANCE BY THE OWNER.
- 19. IN THE EVENT OF A DISCREPANCY BETWEEN QUANTITIES LISTED IN THE PLANT LIST AND THOSE QUANTITIES SHOWN ON THE PLANS, THOSE SHOWN ON THE PLANS SHALL GOVERN.
- 20. NEW PLANTING AREAS AND NEW TURF AREAS SHALL BE ADEQUATELY IRRIGATED OR WATERED BY THE CONTRACTOR AS REQUIRED TO ESTABLISH THE NEW PLANTS AND LAWN, UNTIL OWNER'S ACCEPTANCE.
- 21. ANY MATERIAL/WORK MAY BE REJECTED IF IT DOES NOT MEET THE REQUIREMENTS OF THE SPECIFICATIONS. ALL REJECTED MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
- 22. UPON COMPLETION OF ALL LANDSCAPING, A PROJECT MEETING FOR ACCEPTANCE OF THE WORK SHALL BE HELD. THE CONTRACTOR SHALL NOTIFY THE OWNER TO SCHEDULE THE INSPECTION AT LEAST SEVEN (7) DAYS PRIOR TO THE ANTICIPATED INSPECTION DATE.
- 23. CONTRACTOR SHALL MAINTAIN ALL PLANT MATERIAL UNTIL FINAL ACCEPTANCE BY OWNER. THE ONE-YEAR GUARANTEE PERIOD SHALL COMMENCE UPON FINAL ACCEPTANCE BY OWNER.
- 24. CUARANTEE: ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN A VIGOROUS GROWING CONDITION FOR A PERIOD OF NOT LESS THAN ONE FULL YEAR FROM THE DATE OF FINAL ACCEPTANCE BY OWNER. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MONITOR THE PROJECT DURING THE GUARANTEE PERIOD AND NOTIFY THE OWNER IF PROBLEMS DEVELOP WITH THE PLANT MATERIAL. ANY MATERIAL THAT IS 25% DEAD OR MORE SHALL BE CONSIDERED DEAD AND MUST BE REPLACED AT NO CHARGE. A TREE SHALL BE CONSIDERED DEAD WHEN THE MAIN LEADER HAS DIED BACK, OR THERE IS 25% OF THE CROWN DEAD. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. REPLACEMENT PLANTS SHALL BE GUARANTEED FOR A PERIOD OF 90 DAYS AFTER THEIR INSTALLATION.
- 25. REFER TO "SITE PLAN", SHEET C-102 FOR GENERAL NOTES PERTAINING TO WORK OF THIS PLAN. REFER TO SHEET C-101 FOR PROJECT LEGEND. THIS PLAN SHALL BE USED FOR LANDSCAPE PURPOSES ONLY. THE CONTRACTOR SHALL REVIEW RELATED ARCHITECTURAL/ENGINEERING PLANS TO BECOME THOROUGHLY FAMILIAR WITH GRADING AND UTILITIES.

SEEDING NOTES AND SPECIFICATIONS

- 1. GENERAL: PROVIDE TOPSOILING, SEEDBED PREPARATION, FERTILIZING, SEEDING AND MULCHING OF ALL NEWLY GRADED FINISHED EARTH SURFACES, UNLESS INDICATED OTHERWISE, AND AT ALL AREAS INSIDE OR OUTSIDE THE LIMITS OF CONSTRUCTION THAT ARE DISTURBED BY THE CONTRACTOR'S OPERATIONS. SOW SEED FROM APRIL 1 TO MAY 31 FOR SPRING PLANTING AND FROM AUGUST 16 TO OCTOBER 15 FOR FALL PLANTING. SEEDING PERIOD MAY BE EXTENDED OR REDUCED ACCORDING TO PREVAILING WEATHER CONDITIONS AT THE TIME, AS DIRECTED BY THE LANDSCAPE ARCHITECT.
- 2. TOPSOILING: COMPLY WITH SOIL EROSION & SEDIMENT CONTROL PLAN AND NOTES. ADDITIONAL REQUIREMENTS FOR LAWN AREAS:

 A. FINISHED SURFACE OF THE TOPSOIL SHALL CONFORM TO THE FINISHED GRADE AND SHALL BE FREE FROM DEPRESSIONS,
- A. FINISHED SURFACE OF THE TOPSOIL SHALL CONFORM TO THE FINISHED GRADE AND SHALL BE FREE FROM DEPRESSIONS, HOLLOWS, OR OTHER IRREGULARITIES.
- B. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE RUBBLE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.
- 3. SEEDBED PREPARATION: COMPLY WITH SOIL EROSION & SEDIMENT CONTROL PLAN AND NOTES.
- 4. SEED MIXTURES: COMPLY WITH SOIL EROSION & SEDIMENT CONTROL PLAN AND NOTES.
- SEED APPLICATION: COMPLY WITH SOIL EROSION & SEDIMENT CONTROL PLAN AND NOTES.
 A. SOW SEED WITHIN 24 HOURS OF SEEDBED PREPARATION.

COMPLETED AND VEGETATION IS ESTABLISHED.

12. ACCEPTANCE OF SATISFACTORY LAWNS:

- B. SEED SHALL NOT BE APPLIED BY HYDROSEEDING UNLESS APPROVED BY THE LANDSCAPE ARCHITECT.
- 6. MULCH ALL SEEDED LAWN AREAS AFTER SEED APPLICATION. COMPLY WITH SOIL EROSION & SEDIMENT CONTROL PLAN AND NOTES.
- 7. STEEP SLOPES (3:1 OR GREATER): INSTALL SLOPE STABILIZATION FABRIC IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS, AFTER SEEDING APPLICATION.
- A. UNLESS OTHERWISE DIRECTED, WATER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SOURCE OF WATER SHALL BE OF SUITABLE QUALITY FOR IRRIGATION, CONTAINING NO ELEMENTS TOXIC TO PLANT LIFE.
- B. START WATERING AREAS SEEDED AS REQUIRED BY TEMPERATURE AND WIND CONDITIONS. APPLY WATER AT A RATE SUFFICIENT TO INSURE THOROUGH WETTING OF SOIL TO A DEPTH OF 2 INCHES WITHOUT RUN OFF.
- C. DURING THE GERMINATION PROCESS, SEED IS TO BE KEPT ACTIVELY GROWING AND NOT ALLOWED TO DRY OUT.

 D. IRRIGATE TO ACHIEVE MINIMUM OF 1" OF WATER PER WEEK FOR A MINIMUM OF 4 WEEKS OR UNTIL GERMINATION IS
- 9. SOD, IF AND WHERE INDICATED ON THE DRAWINGS, SHALL BE SAME AS GENERAL LAWN SEED MIX AND SHALL BE INSTALLED IN ACCORDANCE WITH AMERICAN ASSOCIATION OF SOD PRODUCERS' STANDARDS. SPECIFY "CERTIFIED SOD" OR HIGH QUALITY CULTIVATED SOD. IT IS TO BE FREE OF WEEDS AND UNDESIRABLE GRASSES AND ALSO BE OF UNIFORM THICKNESS. ALSO TO HAVE GOOD ROOT MAT WITHOUT BROKEN PADS OR TORN UNEVEN ENDS.
- 10. MAINTENANCE DURING ESTABLISHMENT PERIOD: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL AREAS DURING THE PERIOD WHEN GRASS IS BECOMING ESTABLISHED AND UNTIL ALL WORK UNDER THIS CONTRACT IS COMPLETE AND ACCEPTED. MAINTAIN AND ESTABLISH TURF BY WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING, REPLANTING, AND PERFORMING OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE TURF. ROLL, REGRADE, AND REPLANT BARE OR ERODED AREAS AND REMULCH TO PRODUCE A UNIFORMLY SMOOTH TURF. PROVIDE MATERIALS AND INSTALLATION THE SAME AS THOSE USED IN THE ORIGINAL
- A. FILL IN AS NECESSARY SOIL SUBSIDENCE THAT MAY OCCUR BECAUSE OF SETTLING OR OTHER PROCESSES. REPLACE MATERIALS AND TURF DAMAGED OR LOST IN AREAS OF SUBSIDENCE.
- B. IN AREAS WHERE MULCH HAS BEEN DISTURBED BY WIND OR MAINTENANCE OPERATIONS, ADD NEW MULCH AND ANCHOR AS
- C. IF ANY PORTION OF THE SURFACE BECOMES GULLIED OR OTHERWISE DAMAGED FOLLOWING SEEDING, THE EFFECTED CONDITIONS AND GRADE OF THE SOIL PRIOR TO SEEDING SHALL BE RESERVED AS SPECIFIED HEREIN.
- CONDITIONS AND GRADE OF THE SOIL PRIOR TO SEEDING SHALL BE RESEEDED AS SPECIFIED HEREIN.

 11. SEE SOIL EROSION & SEDIMENT CONTROL PLAN FOR TEMPORARY SEEDING AND STABILIZATION MEASURES FOR SOILS DISTURBED DURING CONSTRUCTION.
- A. SATISFACTORY SEEDED LAWN: AT END OF MAINTENANCE PERIOD, A HEALTHY, UNIFORM, CLOSE STAND OF GRASS HAS BEEN ESTABLISHED, FREE OF WEEDS AND SURFACE IRREGULARITIES, WITH COVERAGE EXCEEDING 90 PERCENT OVER ANY 10 SQ. FT. AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES.
- AND BARE SPOTS NOT EXCEEDING 5 BY 5 INCHES.

 B. SATISFACTORY SODDED LAWN: AT END OF MAINTENANCE PERIOD, A HEALTHY, WELL-ROOTED, EVEN-COLORED, VIABLE LAWN HAS BEEN ESTABLISHED, FREE OF WEEDS, OPEN JOINTS, BARE AREAS, AND SURFACE IRREGULARITIES.
- C. REESTABLISH LAWNS THAT DO NOT COMPLY WITH REQUIREMENTS AND CONTINUE MAINTENANCE UNTIL LAWNS ARE SATISFACTORY.
 13. GUARANTEE: ALL LAWN WORK INCLUDING THE REPAIR OF WASHOUTS, GULLIES, ETC., SHALL BE GUARANTEED FOR ONE CALENDAR YEAR FROM THE DATE OF FINAL ACCEPTANCE BY THE OWNER.

Stante

| 10000 Midlantic Drive, Suite. | Mount Laurel, NJ 08054-1746 | www.stantec.com | Certificate of Auth, 24GA2806 | The Contractor shall verify and be NOI scale the drawing- any error stantec without delay.

Revision By

ITS BOROUGH, CAMDEN COUNTY, NEW ND PROPERTIES LLC

ent ROKEN GROUND PROPE

Permit-Seal

CLIFTON W. QUAY
PROFESSIONAL ENGINEER, PROFESSIONAL PLANNER
N.J.P.E. LICENSE #42670, N.J.P.P. LICENSE #LI05663

Project Number: 192520466

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MAI CWQ SAK 02.13.24

Dwn. Chkd. Dsgn. MM.DD.YY

Scale: AS NOTED

Drawing No. L-501

Revision Sheet