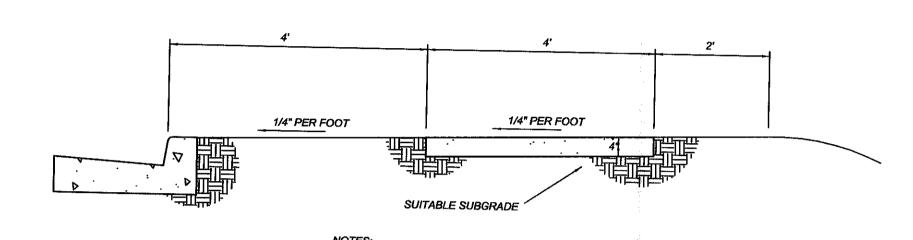
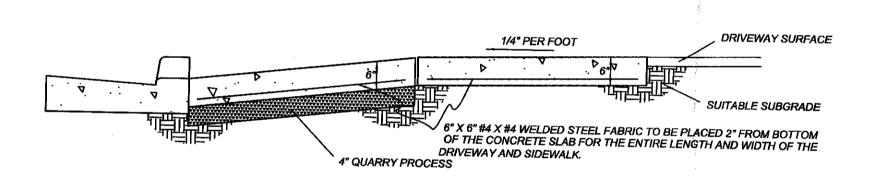


INTEGRAL CONCRETE CURB AND GUTTER NOT TO SCALE

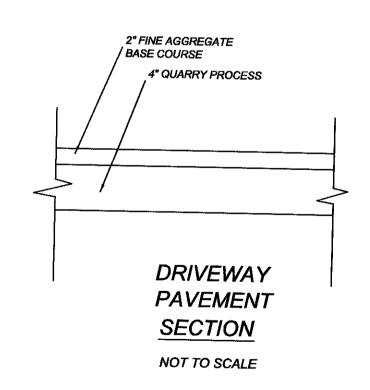


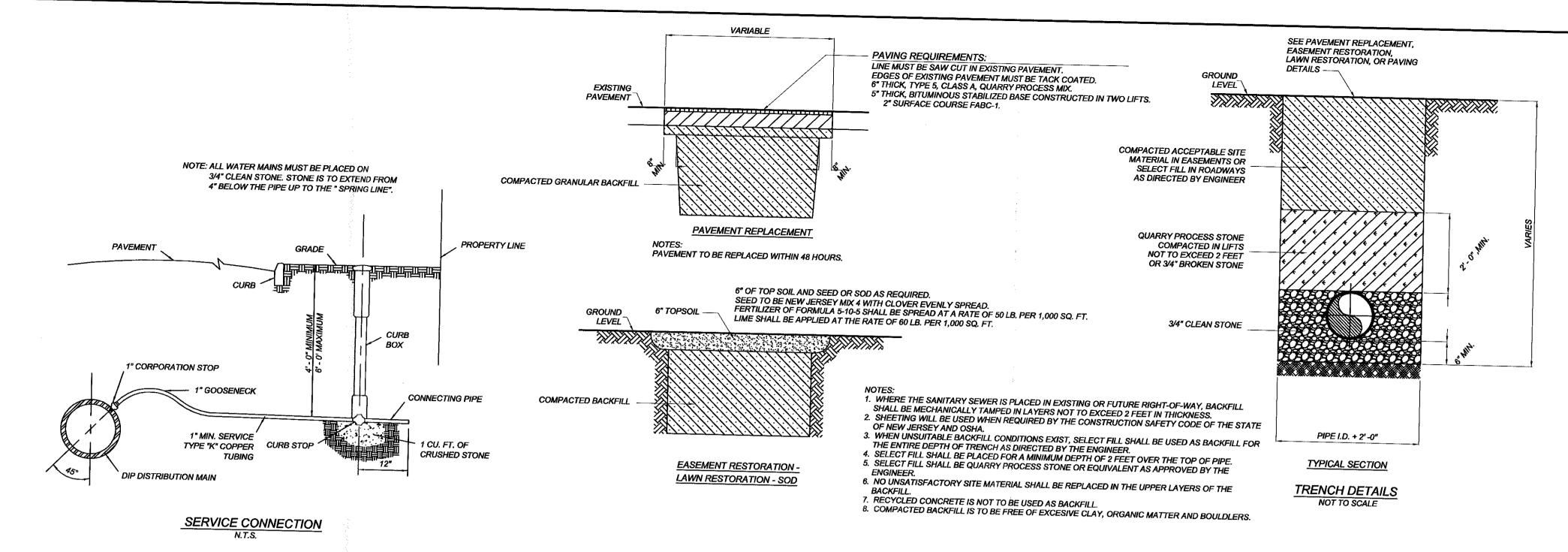
A. ALL CONCRETE SHALL BE 4,500 PSI AIR ENTRAINED. B. EXPANSION JOINTS SHALL BE AT 1' INTERVALS OR LESS. C. SIDEWALKS SHALL BE SCORED AT 4' INTERVALS.

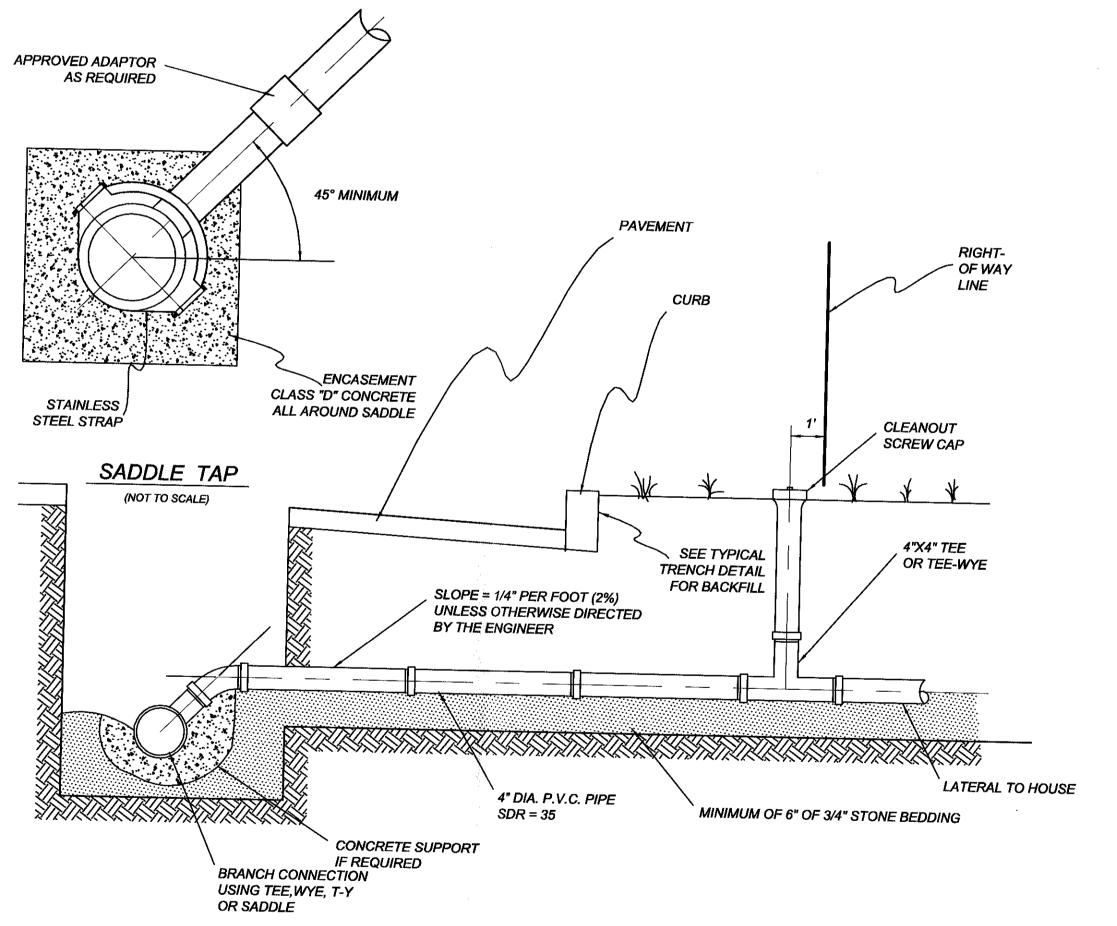
CONCRETE SIDEWALK SECTION NOT TO SCALE



CONCRETE DRIVEWAY CROSSING NOT TO SCALE







(NOT TO SCALE)

TYPICAL HOUSE CONNECTION

LOT 13.01, BLOCK 111 IN THE CITY OF PLAINFIELD UNION COUNTY, NEW JERSEY

DETAILS

4'-0"

4'-0"

----- SLOPE = 1/4" PER FOOT

A. CONCRETE TO BE 2,500 P.S.I. AIR ENTRAINED.
B. EXPANSION JOINTS SHALL BE AT 12" INTERVALS OR LESS.
C. SIDEWALK SHALL BE SCORED AT 4' INTERVALS.

○ 6"X6" #4X#4 WELDED STEEL FABRIC TO BE PLACED 2" FROM BOTTOMOF THE CONCRETE SLAB FOR THE ENTIRE LENGTH AND WIDTH OF THE SIDEWALK

CONCRETE SIDE WALK

N.T.S.

TITUS SURVEYING & ENGINEERING, P.C. 618 SOMERSET STREET

NORTH PLAINFIELD, NEW JERSEY 07060 FAX: (908) 756-9055 JOB NO. BOOK PAGE DR. BY CHECKED SHEET

PHONE: (908) 756-9047 NOVEMBER 27, 2019 3-1566-18 334 | 18 2 OF 4

RICHARD G. TITUS N.J. PROFESSIONAL LAND SURVEYOR LIC. NO. GS33181

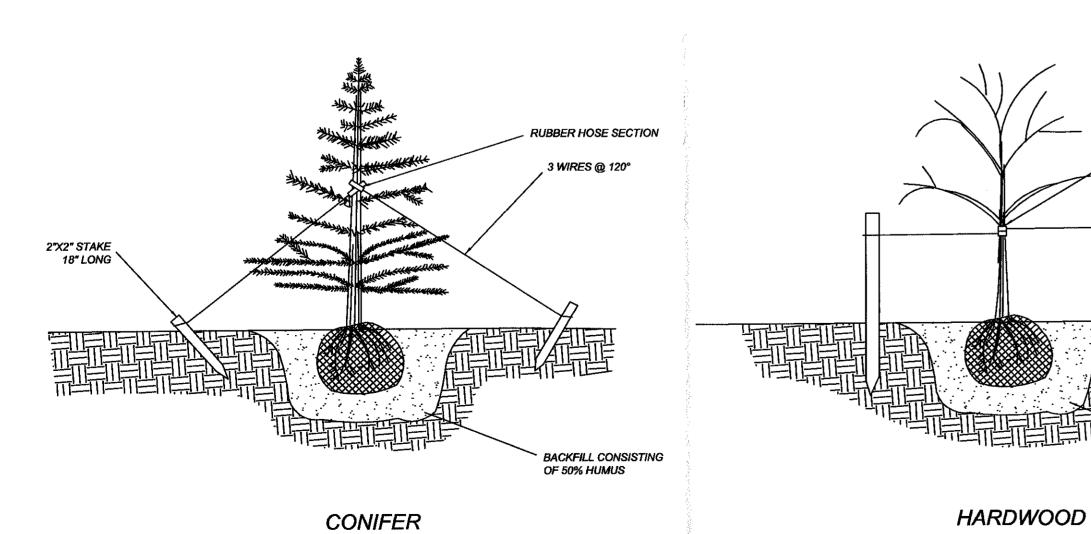
W. Seland Titro W. LELAND TITUS N.J. PROFESSIONAL

ENGINEER LIC. NO. GE31635



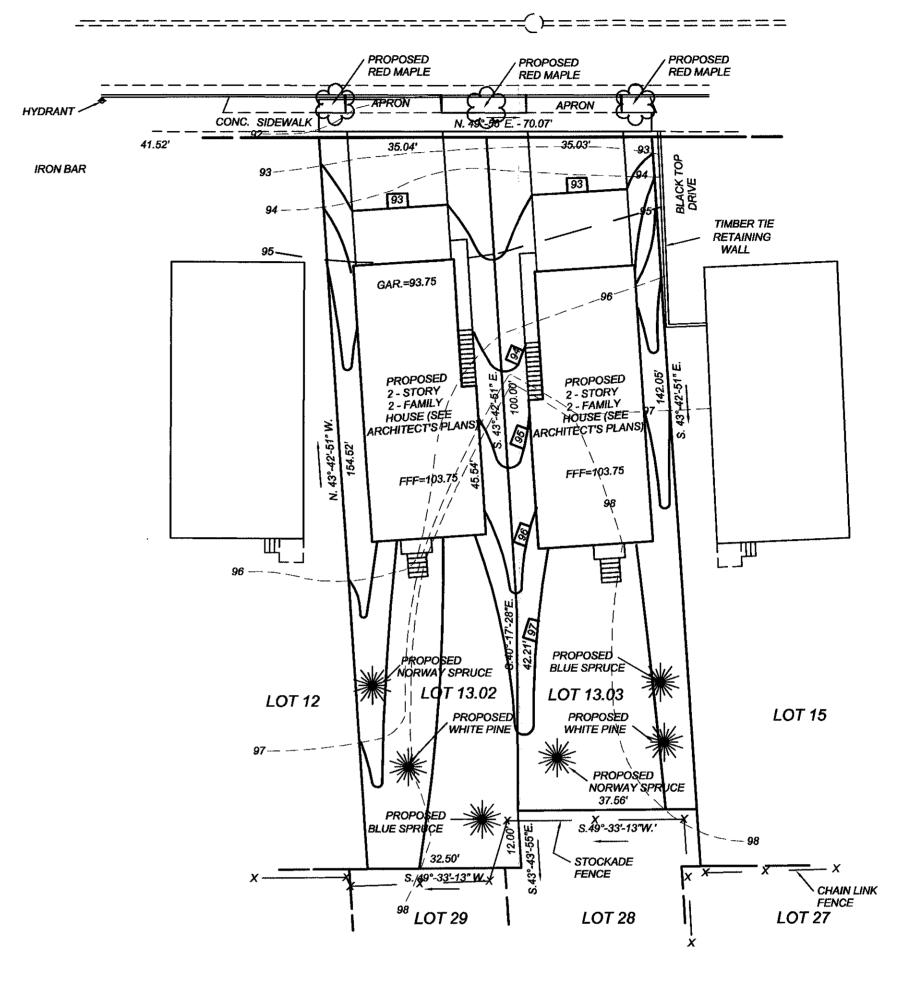
COMMON NAME	SCIENTIFIC NAME	QUANTITY	SIZE
RED MAPLE	Acer rubra	3	1½ INCH DIA.
NORWAY SPRUCE	Picea abies	6	6 FEET HIGH
WHITE PINES	Pinus strobus	6	6 FEET HIGH
	Picia pugens	6	6 FEET HIGH

DACKFILL CONSISTING OF 50% HUMUS



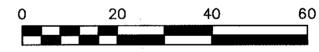
TREE PLANTING DETAILS NOT TO SCALE





LANDSCAPING PLAN

SCALE: 1 INCH = 20 FEET



LOT 13.01, BLOCK 111 IN THE CITY OF PLAINFIELD UNION COUNTY, NEW JERSEY

RICHARD G. TITUS N.J. PROFESSIONAL LAND SURVEYOR LIC NO. GS33181

W. Sland Titre

TITUS SURVEYING & ENGINEERING, P.C. 618 SOMERSET STREET

NORTH PLAINFIELD, NEW JERSEY 07060 8) 756-9047 FAX: (908) 756-9055 PHONE: (908) 756-9047

W. LELAND TITUS N.J. PROFESSIONAL ENGINEER JOB NO. BOOK PAGE DR. BY CHECKED SHEET LIC NO. GE31635

REVISED JANUARY 21, 2021

NOVEMBER 27, 2019 3-1566-18 344 REVISED OCTOBER 15, 2020

Agronomic Recommendations

1) Disturb as little area as possible when excavation foundations and storing topsoil.

2) Place topsoil and excavation material from foundations on downhill side of lot, whenever possible to trap runoff from scalped areas.

3) Seed, fertilized, and lime all disturbed areas immediately after finished grading is completes. Lime and fertilizer recommendations are as follows or according to results of soil tests:

a. Lime to be applied at the rate of 4,000 lbs. per acre (ground limestone)

b. Fertilizer to be at the rate of 500 lbs. of 10-10-10- per acre.

c. For critical areas such as road cuts and fills on slopes of 3:1 or greater, ground limestone should be increased to 4.000lbs, per acres and fertilizer to 1.000lbs, per acre.

(s) Mulching is required on all seeding. Materials shall be unrotted small grain straw, hay free of seeds, or salt hav to be applied at the rate of 70 to 90 lbs. per 1,000 square feet. Mulching shall be spread uniformly so that approximately 75% to 95% of the soil surface will be covered. Mulch to be anchored using synthetic or organic binders such as Curasol, DCA-70, Petro-set or Terra-tack at rates recommended by the manufacturer.

5) Seeding rates and mixtures recommended:

a. Temporary seeding

Lime: 2 tons per acre of ground area. Fertilizer: 500 Pounds per acre 10-20-10

seed: Mar. 1 to May 15 and Aug. 15 to Oct. 1 - 40lbs. of perennial rye grass per acre.

b. Permanent seeding (for critical areas, such as road or driveway cuts and fills on slopes of 3:1

or steeper)

Lime: 3 tons per acre of ground area. Fertilizer: 500 pounds per acre 10-20-10

Seed Mar. 1 to May 15 and Aug. 15 to Sept. 10 - 45lbs. of Kentucky 31

Fescue and 10 lbs. of crownvetch per acre. This is a general recommendation; other seedings can be used.

c. Permanent Seeding (road Right-of-Way and Movable areas, not lawn areas)

Lime: 3 tons per acre of ground area.

Fertilizer: 500 Pounds per acre 10-20-10

Seed: 80 lbs. of Kentucky 31 Fescue and 2 to 5 lbs. of annual rye grass per acre. Other seedings are acceptable provided they are adaptable to the area and are perennial. Date and rate of application according to standards for soil erosion and sediment control in New Jersey

d. Permanent Seeding (lawn areas)

Lime: 3 tons per acre of ground area.

Fertilizer: 500 pounds per acre 10-20-10 incorporated 4 inches into the soil. Seed: dates Mar. 1 to May 15 and Aug. 15 to Oct. 1 - 60 lbs. of Kentucky bluegrass, 60 lbs. of a red fescue, and 40 lbs. of a perennial rye grass per acre.

Shade areas: Increase red fescue 20 lbs. and decrease Kentucky bluegrass 20 lbs. Other mixtures acceptable provoded they meet "Standards for Approved Lawn Seed Mixtures" N.J. Agricultural Experimental Station and Cooperative Extension Service

e. Permanent stabilization by sodding

Lime: 3 tons per acres of ground area. Fertilizer: 500 pounds per acre 10-20-10

Sod: Use good quality of N.J. certified sod of Kentucky bluegrass and Red Fescue.

f. General seeding (critical areas, waterways, etc.)

125 lbs. per acre of athletic field mixture or equivalent containing approximately:

54% Kentucky 31 fescue, 17% Kentucky Bluegrass,

20% Creeping Red Fescue, 5% Red top, and 3% Inert

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.

2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN THIRTY (30) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF TWO (2) TONS PER ACRE. ACCORDING TO STATE STANDARDS.

3. PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN (10) DAYS AFTER FINAL GRADING.

4. ALL WORK TO BE DONE IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY. 5. A SUBBASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUBBASE

6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (i.e. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE, ACCORDING TO STATE STANDARDS.

7. ANY STEEP SLOPES RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY, AS THE INSTALLATION CONTINUES (i.e. SLOPES GREATER THAN 3:1).

8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A STONE PAD OF 1 1/2" TO 2" STONE, AT ALL CONSTRUCTION DRIVEWAYS, IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.

9. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A pH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE COVERED WITH A MINIMUM OF TWELVE (12) INCHES OF SOIL HAVING A DH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION. AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF TWENTY FOUR (24) INCHES OF SOIL HAVING A pH OF 5 OR MORE.

10. WRITTEN NOTIFICATION IS REQUIRED TO THE SOMERSET- UNION SOIL CONSERVATION DISTRICT SEVENTY-TWO HOURS IN ADVANCE OF ANY LAND DISTURBING ACTIVITY.

11. AT THE TIME THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED. ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER. SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT IT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NONVEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO

12. IN THAT N.J.S.A. 4:24-39 et.Seq. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR EROSION CONTROL HAVE BEEN COMPILED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR SITE PLAN AND ALL WORK AROUND INDIVIDUAL LOT IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.

13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL

14. ANY CHANGE TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RECERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.

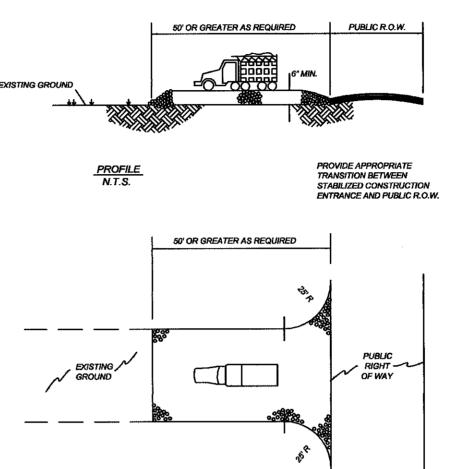
15. UNFILTERED DEWATERING IS NOT PERMITTED. TAKE ALL NECESSARY PRECAUTIONS DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH

16. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET. TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED IN ACCORDANCE WITH STATE STANDARDS FOR EROSION CONTROL.

17. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHTS-OF-WAY WILL BE REMOVED INNEDIATELY. 18.THE PROPERTY OWNER SHELL BE RESPONCIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR

BELOW STORMWATEROUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT. 19. STOCKPILE AND STAGING LOCATIONS DETERMINED IN THE FIELD, SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. THE DISTRICT RESERVES THE RIGHT TO DETERMINE WHEN CERTIFICATION OF A NEW AND SEPARATE SOIL

EROSION AND SEDIMENT PLAN WILL BE REQUIRED FOR THESE ACTIVITIES. 20. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #2.



STABILIZED CONSTRUCTION ENTRANCE

Soil De-compaction and Testing Requirements

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

2. Areas of the site which are subject to compaction testing and/or mitigation are graphically denoted on the certified soil erosion control plan.

3. Compaction testing locations are denoted on the plan. A copy of the plan or portion of the plan shall be used to mark locations of tests, and attached to the compaction remediation form, available from the local soil conservation district. This form must be filled out and submitted prior to receiving a certificate of compliance from the district.

4. In the event that testing indicates compaction in excess of the maximum thresholds indicated for the simplified testing methods (see details below), the contractor/owner shall have the option to perform either (1) compaction mitigation over the entire mitigation area denoted on the plan (excluding exempt areas), or (2) perform additional, more detailed testing to establish the limits of excessive compaction whereupon only the excessively compacted areas would require compaction mitigation. Additional detailed testing shall be performed by a trained, licensed professional.

Compaction Testing Methods

A. Probing Wire Test (see detail)

B. Hand-held Penetrometer Test (see detail)

C. Tube Bulk Density Test (licensed professional engineer required D. Nuclear Density Test (licensed professional engineer required)

Note: Additional testing methods which conform to ASTM standards and specifications, and which produce a dry weight, soil bulk density measurement may be allowed subject to District approval.

Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage (6" minimum depth) or similar) is proposed as part of the sequence of construction.

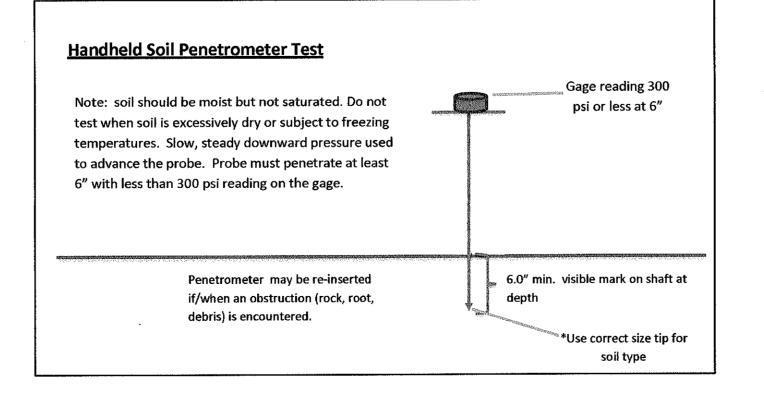
Procedures for Soil Compaction Mitigation

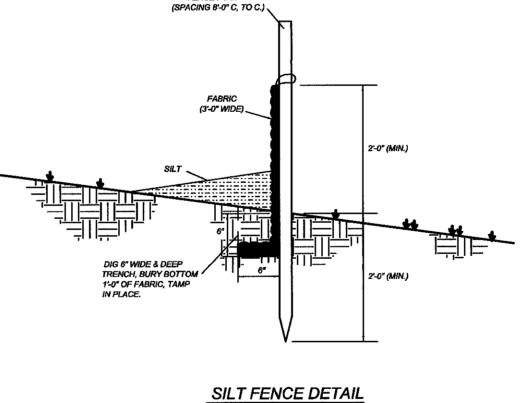
Procedures shall be used to mitigate excessive soil compaction prior to placement of topsoil and establishment of permanent vegetative cover.

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.

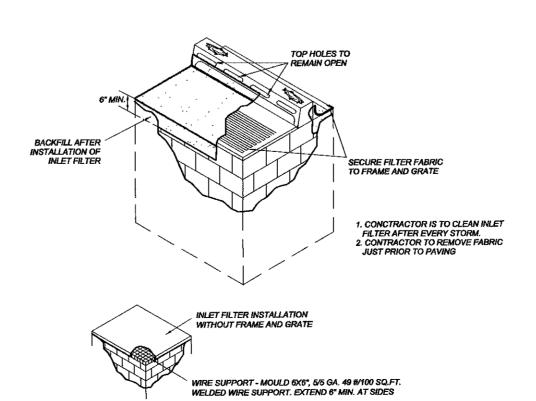
Simplified Testing Methods

Probing Wire Test- 15.5 ga steel wire (survey flag) Note: soil should be moist but not saturated. Do not test when soil is excessively dry or subject to freezing Hold Wire here: temperatures. Slow, steady downward pressure used to advance the wire. Wire must penetrate a minimum of 6" without deformation. 18-21" 6.0" min. visible mark on wire at Wire may be re-inserted if/when an obstruction (rock, root, debris) is encountered.



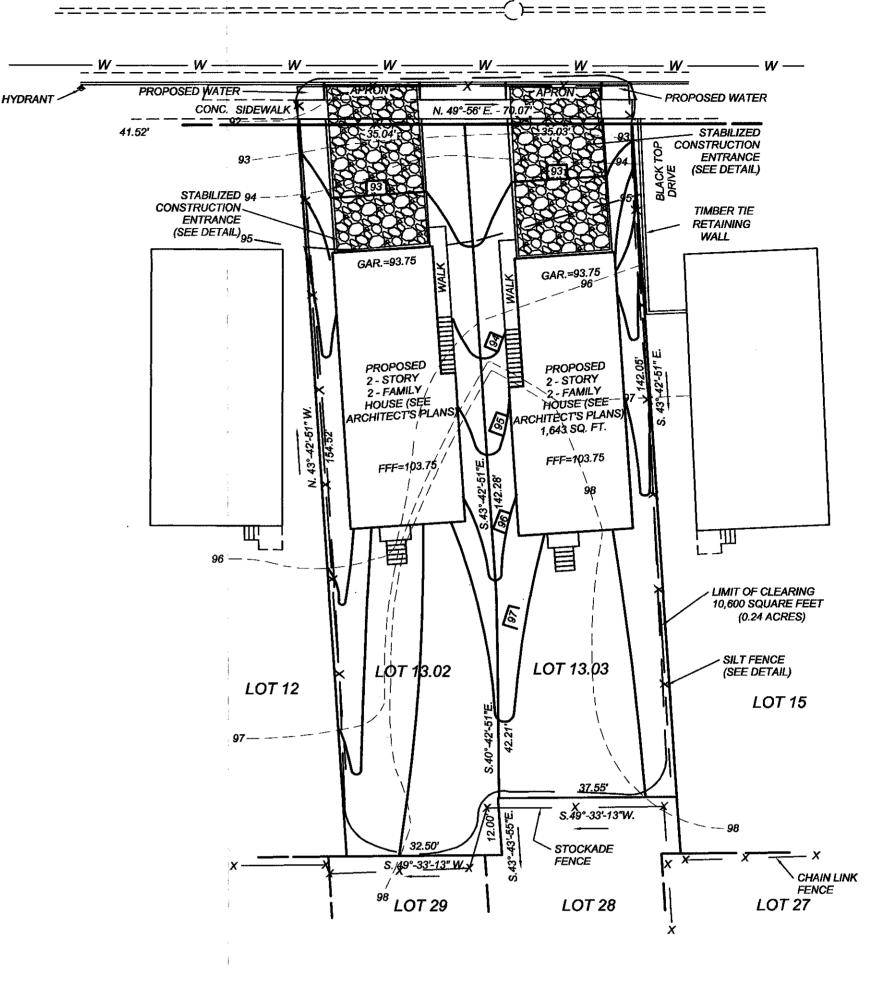


A sediment trap is excavated behind the curb at the inlet. The basin shall be at least 12 to 14 inches in depth, approximately 36 inches in width, and approximately 7 to 1: Storm water will reach the sediment trap via curb cuts adjacent to each side of the



INLET FILTER DETAIL

SECOND & STREET



EROSION CONTROL PLAN

SCALE: 1 INCH = 20 FEET

1) CONSTRUCT SILT FENCE AS SHOWN	2 DAYS
2) CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE	2 DAYS
3) REMOVE AND PROPERLY DISPOSE OF DIRT AND DEBRIS PILE	1 WEEK
4) ROUGH GRADE SITE AND REMOVE SURPLUS SOIL	
5) CONSTRUCT 2 FAMILY HOUSES	
6) SCARIFICATION /TILLAGE (6" MINIMUM DEPTH) ALL UNIMPROVED	
DISTURBED AREAS PRIOR TO PLACEMENT OF TOPSOIL AND	
ESTABLISHMENT OF PERMANENT VEGETATIVE COVER	2 DAYS
7) CLEANUP AND SEEDING WITH REMOVAL OF	
EROSION CONTROL DEVICES	2 DAYS

EROSION CONTROL PLAN

LOT 13.01, BLOCK 111 IN THE CITY OF PLAINFIELD

RICHARD G. TITUS N.J. PROFESSIONAL LAND SURVEYOR LIC NO. GS33181

TITUS SURVEYING & ENGINEERING, P.C. 618 SOMERSET STREET

UNION COUNTY, NEW JERSEY

NORTH PLAINFIELD. NEW JERSEY 07060 PHONE: (908) 756-9047

FAX: (908) 756-9055

W. Leland Titro W. LELAND TITUS N.J. PROFESSIONAL

JOB NO. BOOK PAGE DR. BY CHECKED SHEET NOVEMBER 27, 2019 13-1566-19 344 18 WLT RGT 4 OF 4

REVISED JANUARY 21, 2022

ENGINEER LIC NO. GE31635