

SOIL EROSION AND SEDIMENT CONTROL

1. All soil erosion and sediment control practices will be installed in accordance with the NJ Jersey Standards for Soil Erosion and Sedimentation. Silt fences shall be installed in previously undisturbed areas that will be left exposed for more than thirty (30) days and not subject to construction traffic shall immediately receive a temporary seeding. If the season prohibits temporary seeding, the disturbed area will be mulched with soil, hay or equivalent and be enclosed in accordance with the NJ Standards (i.e. peg and immediately following initial disturbance or rough grading, all critical areas subject to erosion will receive a temporary seeding in combination with straw mulch or a suitable equivalent at a rate of 2 tons per acre, according to the NJ Standards.
2. Stabilization Specifications – Temporary Seeding and Mulching:
 - a. Stabilization Specifications – Temporary Seeding – fertilizer – 14 lbs/1,000 sq. ft. or equivalent
 - b. Seed – Annual Ryegrass 40 lbs/acre or other approved seeds; plant between March 1 and May 15 or between August 15 and October 1.
 - c. Mulch – soil hay or small grain straw at a rate of 70 to 90 lbs/1,000 sq ft to be applied according to the NJ Standards. Mulch shall be secured by approved methods to prevent wind erosion.
3. A sub-base course will be applied immediately following rough grading and installation of improvements in order to stabilize driveways. In areas where no utilities are present, sub-base will be installed within 15 days of preliminary grading.
4. The site shall be graded and maintained such that all stormwater run-off is prevented to soils erosion and sedimentation.
5. All sedimentation structures will be inspected and maintained on a regular basis. Maximum side slopes of all exposed surfaces shall not exceed 2:1 unless otherwise approved by the District.
6. Prior to commencement of construction in that area.
7. Paved roadways must be kept clean at all times.
8. All catch basins must be protected with a crushed stone or haybole filter (see detail).
9. Permanent vegetative to be seeded or sodded on all exposed areas within ten (10) days of final grading. Mulch to be used as necessary for protection until seeding is established.
10. Permanent Stabilization Specifications: Seeding
 - Perennial Ryegrass 1/2 lb/1,000 sq ft
 - Kentucky Bluegrass 1 lb/1,000 sq ft
 - Timothy 1/2 lb/1,000 sq ft
 - Spreading Fescue 1/2 lb/1,000 sq ft
 - Lime 90 lb/1,000 sq ft
 - Fertilizer 14 lb/1,000 sq ft
11. Permanent Stabilization Specifications: Mulching
 - Mulch materials to be selected and applied to be approximately 75% to 95% of soil surface will be covered.
 - a. Methods: Peg and twine; Mulch netting; Liquid mulch – binders.
 - b. All mulched areas to be sprinkled with water until wet at the beginning of each day to control dust.
 - c. Any soil having a pH of 4 or less or containing iron sulfides shall be covered with a minimum of 12" of soil having a pH of 5 or more prior to seedbed preparation.
12. At the time of site preparation for permanent vegetative stabilization, any soil not suitable to support adequate vegetative ground cover will be removed and replaced in suitable vegetative ground cover. If removal or treatment of the soil will not provide suitable conditions, non-vegetative means of permanent ground stabilization will have to be provided.
13. The Soil Conservation District may request additional measures to minimize on or off-site erosion. Erosion control measures and specifications shall be included in writing 72 hours prior to the commencement of any land disturbance.
14. Any changes 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 and State Soil Erosion and Sediment Control Standards
15. **SEQUENCE OF CONSTRUCTION**
 1. INSTALL ALL SOIL EROSION & SEDIMENT CONTROL MEASURES _____ 2 DAYS
 2. STRIP TOPSOIL AND STOCKPILE, INSTALL SILT FENCE ON LOW SIDE AND _____ 4 DAYS
 3. ROUGH GRADE ROAD _____ 10 DAYS
 4. INSTALL SANITARY SEWER SYSTEM _____ 14 DAYS
 5. INSTALL STORM WATER MANAGEMENT SYSTEM INCLUDING DETENTION BASIN _____ 14 DAYS
 6. INSTALL GRANITE BLOCK CURB _____ 4 DAYS
 7. INSTALL BASE COURSE OF PAVEMENT _____ 3 DAYS
 8. BEGIN BUILDING CONSTRUCTION _____ 1 YEAR
 9. FINE GRADE AND SEED SITE _____ 2 DAYS
 10. INSTALL FINAL COURSE OF PAVEMENT _____ 2 DAYS
 11. REMOVE ALL SOIL EROSION & SEDIMENT CONTROL MEASURES _____ 2 DAYS

DUST CONTROL

WHEN REQUIRED ONE OR MORE OF THE FOLLOWING METHODS SHALL BE USED FOR DUST CONTROL:

- MULCHES – SEE NOTES FOR TEMPORARY AND PERMANENT STABILIZATION
- VEGETATIVE COVER – SEE NOTES FOR TEMPORARY AND PERMANENT STABILIZATION
- SPRAY-ON ADHESIVES – ON MINERAL SOILS (NOT EFFECTIVE ON CLAY SOILS) KEEP TRAFFIC OFF THESE AREAS

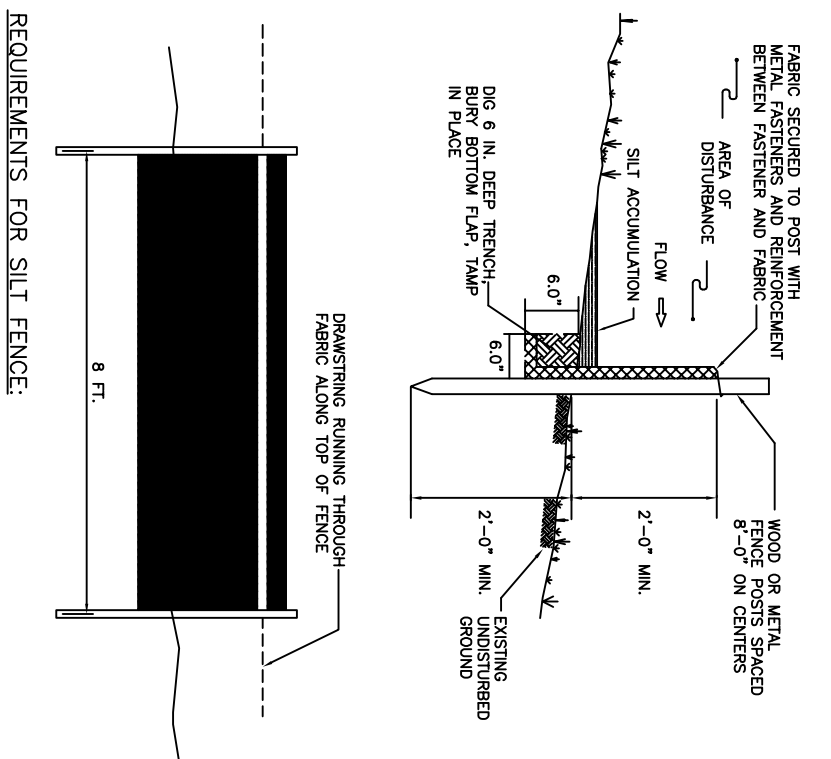
ADHESIVE	WATER DILUTION	TYPE OF NOZZLE	APPLY GA./ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYMERAMINE (PM) – SPRAY ON ASPHALT	NONE	NONE	NONE
POLYMERAMINE (PM) – PER SPRAY	NONE	COARSE SPRAY	1200
ADHESIVE FOR SEAM SAW STOCK	NONE	COARSE SPRAY	1200

PLUGS – TO ROUGHEN SURFACE AND BRING CLAYS TO THE SURFACE THIS IS A TEMPORARY MEASURE. PLUGS SHALL BE INSTALLED IN AREAS WHERE THE TOPSOIL IS NOT PLANNED TO BE PLACED ON UNPAVED SIDE OF SITE. GASETE-TYPE PLUGS SPACE ABOUT 12 INCHES ON CENTER. PLUGS SHALL BE INSTALLED IN AREAS WHERE THE TOPSOIL IS NOT PLANNED TO BE PLACED ON PAVED SIDE OF SITE. PLUGS SHALL BE INSTALLED IN AREAS WHERE THE TOPSOIL IS NOT PLANNED TO BE PLACED ON PAVED SIDE OF SITE. PLUGS SHALL BE INSTALLED IN AREAS WHERE THE TOPSOIL IS NOT PLANNED TO BE PLACED ON PAVED SIDE OF SITE.

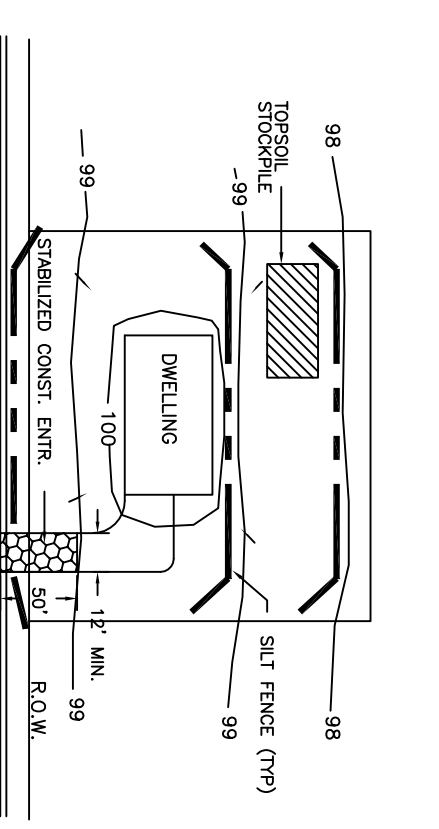
SPRINKLING – SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRENS – SOIL BARRIERS, STAY FENCES, BARRIER FENCES, SEAT WAIVES, BARS OF WIRE, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. CALCULUM OXIDE – SHALL BE IN THE FORM OF LOOSE, FINE GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP STRONG FRESH WATER FROM ACCUMULATING IN STREAMS OR ACCUMULATION AROUND PLANTS.

STONE – COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.



REQUIREMENTS FOR SILT FENCE: FENCE POSTS SHALL BE SPACED AT SET CENTER-TO-CENTER OR OTHER. THE SILT FENCE SHALL BE INSTALLED AND MAINTAINED AS SHOWN IN THE DETAILS AND SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. THE SILT FENCE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. THE SILT FENCE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. THE SILT FENCE SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

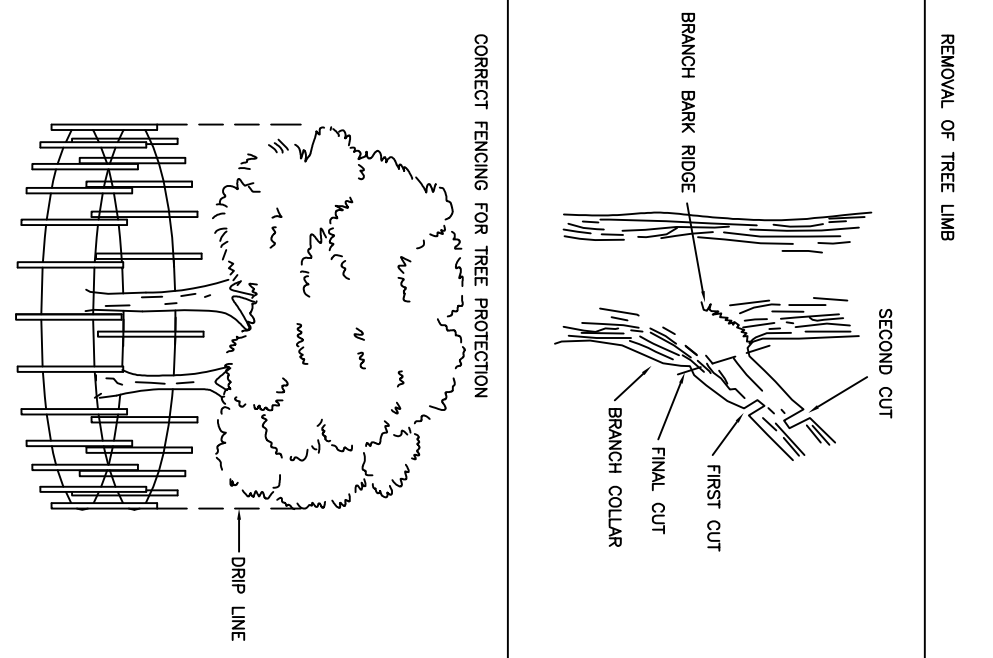


NOTES: STABILIZED CONSTRUCTION ENTRANCE SHALL BE PROVIDED IN ACCORDANCE WITH THE TYPICAL LOT UNDER CONSTRUCTION DETAIL EXCEPT FOR THE DIMENSIONS SHOWN ABOVE. THE STROPPED SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL STROPPED DETAIL.

1. ALL SILT FENCE SHALL BE PROVIDED IN ACCORDANCE WITH THE SILT FENCE AND ALL DISTURBED AREA REMAINING DISTURBED FOR MORE THAN 30 DAYS SHALL BE STABILIZED. (I.e. slopes greater 3:1)
2. ALL DISTURBED AREAS SHALL BE STABILIZED IN ACCORDANCE WITH THE 'MINIMUM STABILIZATION REQUIREMENTS' FOR PERMANENT STABILIZATION PRIOR TO RECEIVING A CERTIFICATE OF OCCUPANCY.

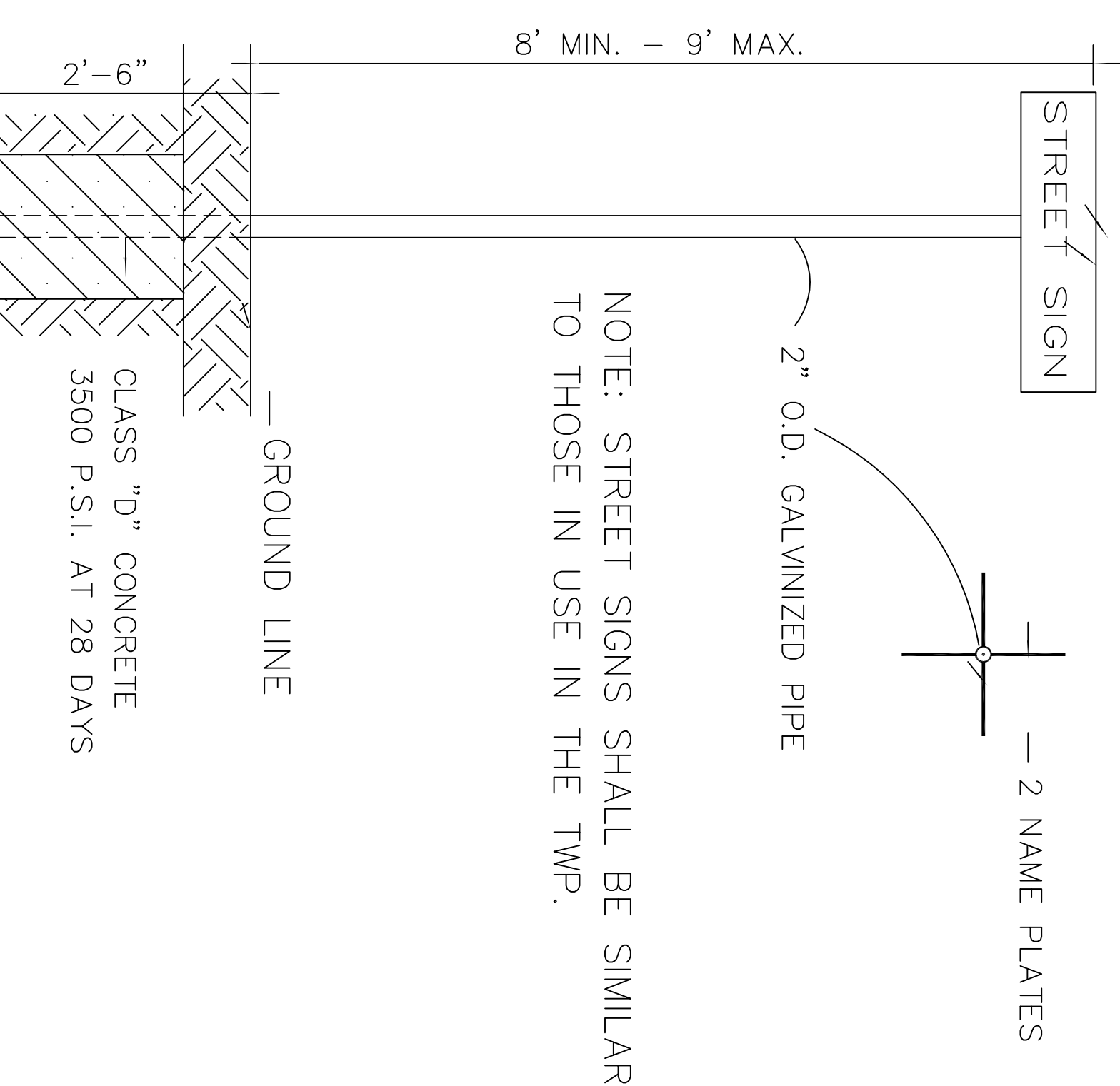
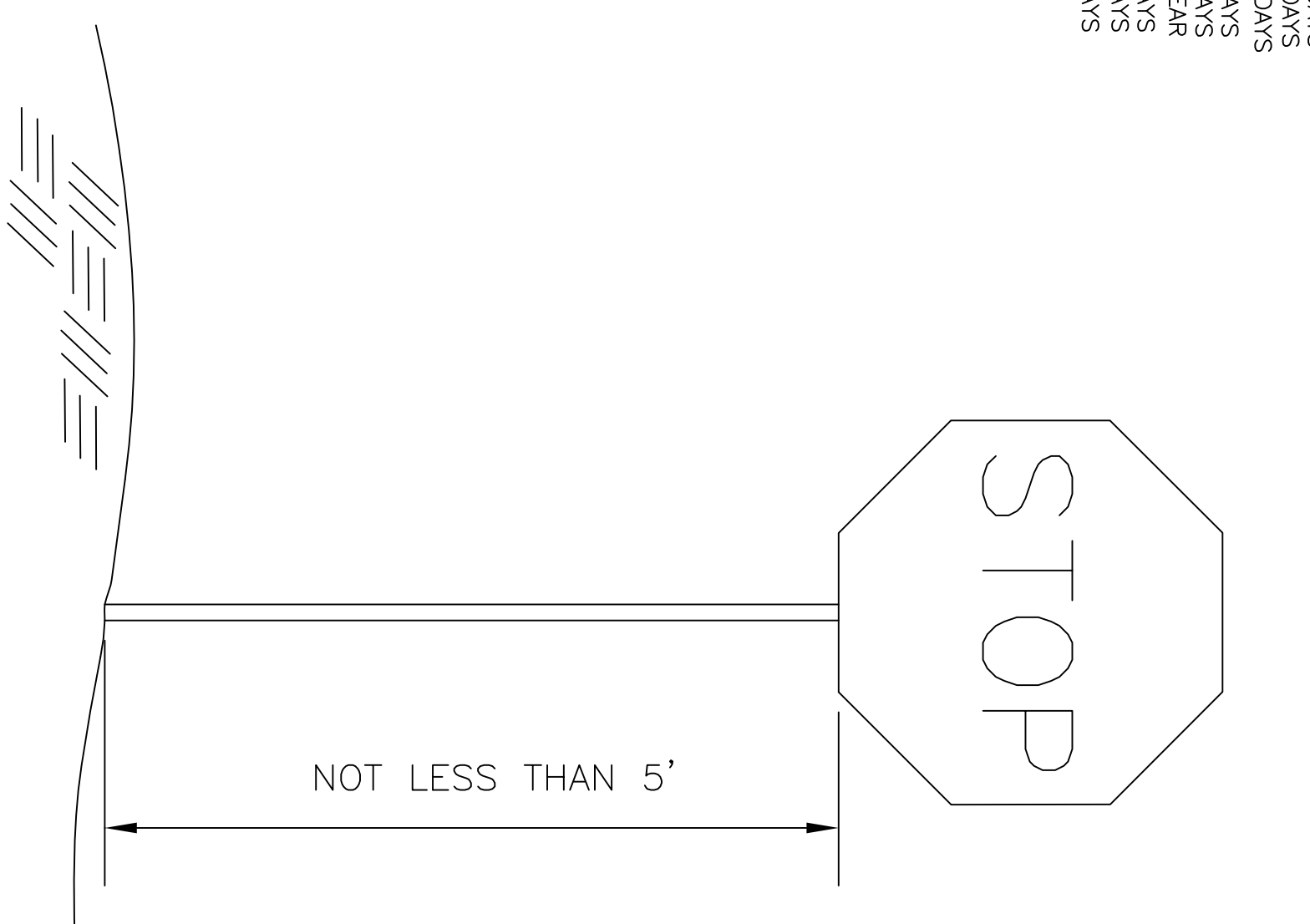
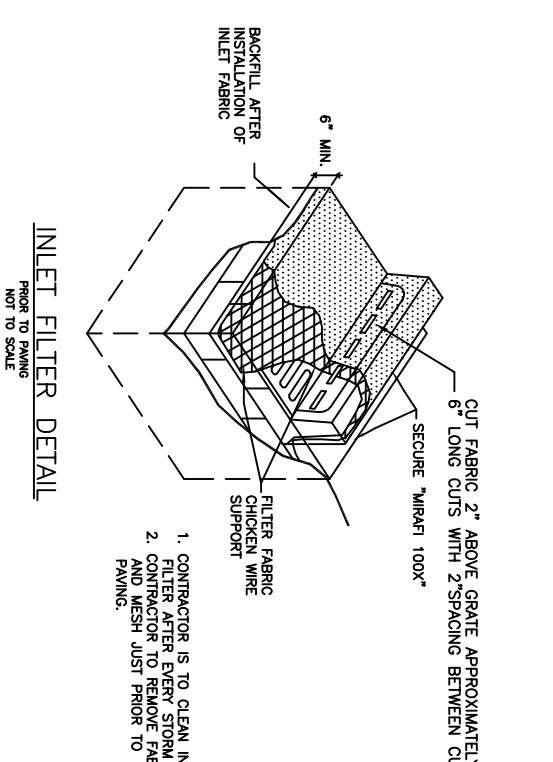
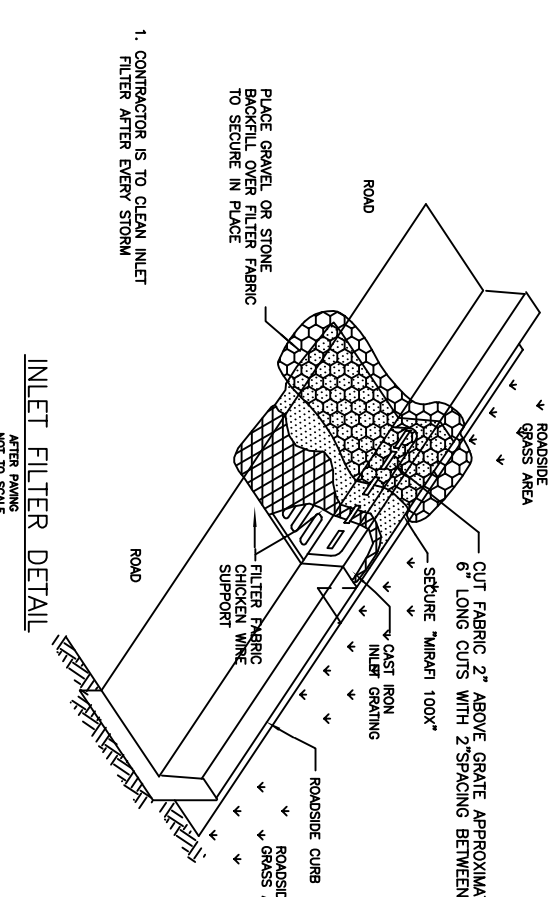
TYPICAL LOT UNDER CONSTRUCTION

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. INSTALL 24" MIN. DIAMETER GALVANIZED STEEL POSTS AT 20' MAX. SPACING AND SET FOOT INTO THE GROUND.
2. FASTER A GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (24" NOT MINIMUM OPENING) 42" HIGH WITH 12" MIN. DIAMETER GALVANIZED POSTS AT 20' MAX. SPACING.
3. FASTER WOVEN SILT FILL DETENTIBLE AS SHOWN IN SECTION H-1 MATERIALS SPECIFY TO THE SUPPLIER SIZE OF CHAIN LINK FENCE WITH THE SPACED EVERY 24" INCHES AT THE TOP AND END SECTION ENDS DETENTIBLE AND CHAIN LINK FENCE 24" MINIMUM OF 8 INCHES INTO THE GROUND.
4. FASTER WOVEN SILT FILL DETENTIBLE AS SHOWN IN SECTION H-1 MATERIALS SPECIFY TO THE SUPPLIER SIZE OF CHAIN LINK FENCE WITH THE SPACED EVERY 24" INCHES AT THE TOP AND END SECTION ENDS DETENTIBLE AND CHAIN LINK FENCE 24" MINIMUM OF 8 INCHES INTO THE GROUND.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 4:1 SLOPES TO THE MAIN FENCE ALIGNMENT TO PREVENT BLOWUP FROM GONCE AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROMOTE MUNICIPALITIES CERTIFICATION TO THE INSPECTOR/PROSPECT AUTHORITY SHOWING THAT THE SUPER SILT FENCE MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BUILT UP IN FENCE OR WHEN SEDIMENT CHAIN LINK FENCING AND DETENTIBLE.



NOTE: STREET SIGNS SHALL BE SIMILAR TO THOSE IN USE IN THE TWP.

CONSTRUCTION DETAILS

WILLIAM G. HOLLOWAY
 N.J. LIC. PROFESSIONAL ENGINEER #27473
 & LAND SURVEYOR #27473
 N.J. PROFESSIONAL PLANNER #2530

ADMAN T. MURPHY
 N.J. LIC. PROFESSIONAL SURVEYOR #21519
 N.J. PROFESSIONAL PLANNER #2531

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 N.J. LIC. PROFESSIONAL ENGINEER #27473
 & LAND SURVEYOR #27473
 N.J. PROFESSIONAL PLANNER #2530

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FILE LF14-026 SHEET 13 OF 13

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FINAL MAJOR SUBDIVISION PLAN
 WESTMINSTER PRESBYTERIAN CHURCH
 LOT 32 BLOCK 2006
 MOUNTAIN AVENUE &
 PLAINFIELD AVENUE
 TOWNSHIP OF
 BERKELEY HEIGHTS
 UNION COUNTY
 NEW JERSEY
 CONSTRUCTION DETAILS

DRAWN BY: SP
 CHECKED BY: WGH
 JOB NO.: 14-026
 BOOK:
 SCALE: N.T.S.
 DATE: APRIL 30, 2021
 REVISIONS:
 OCTOBER 20, 2021
 JANUARY 12, 2022

CE CERTIFICATE OF AUTHORIZATION
 No. 246427959700
 NOTES:
 SHEET 13 OF 13