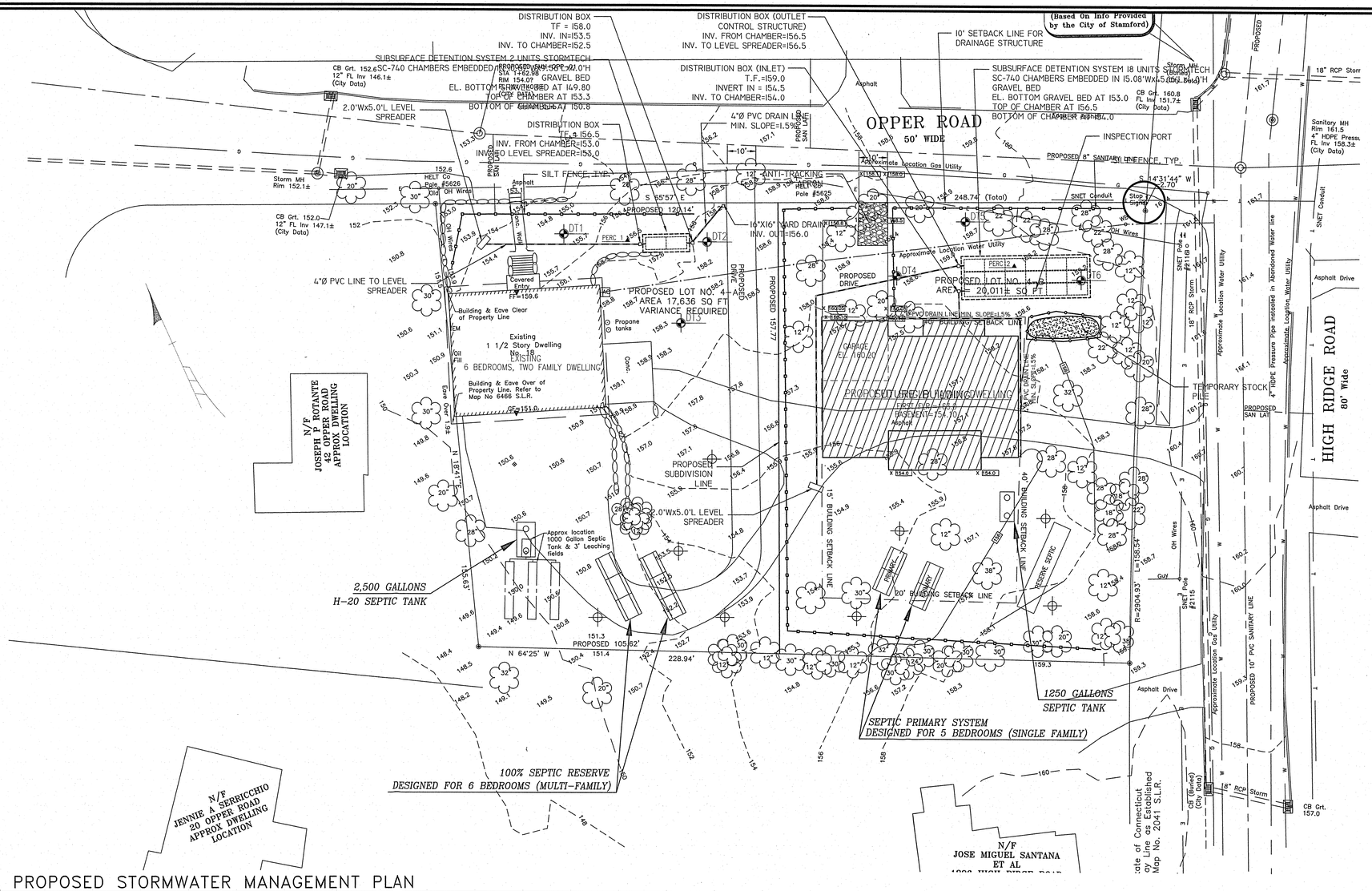
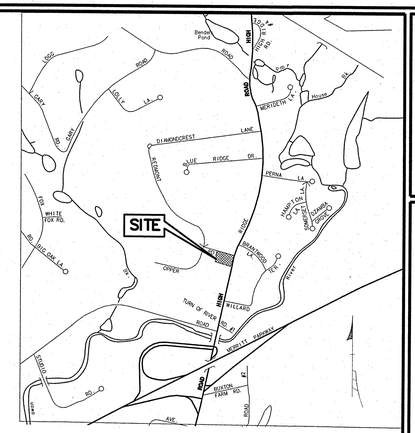


1 PROPOSED STORMWATER MANAGEMENT PLAN

SCALE: 1" = 20'



LOCATION MAP

SCALE: 1" = 1000'

GENERAL NOTES:

1. THIS PLAN IS FOR THE STORMWATER MANAGEMENT FOR THE PROPOSED LOT SUBDIVISION. THIS PLAN IS NOT TO BE USED AS A SITE OR CONSTRUCTION PLAN.
2. TOPOGRAPHIC INFORMATION AND EXISTING SEPTIC INFORMATION WERE OBTAINED FROM A SURVEY TITLED "PRELIMINARY SUBDIVISION PREPARED FOR DARIO & MARIA PALLADINO, 18 OPPER ROAD, STAMFORD, CONNECTICUT" DATED JANUARY 14, 2022 WITH LATEST REVISION DATE OF 3-17-22. PREPARED BY EDWARD J. FRATTAROLI, INC.
3. A-2 SURVEY INFORMATION WAS OBTAINED FROM A SURVEY TITLED "PRELIMINARY SUBDIVISION PREPARED FOR DARIO & MARIA PALLADINO, 18 OPPER ROAD, STAMFORD, CONNECTICUT" DATED JANUARY 14, 2022 WITH LATEST REVISION DATE OF 3-17-22. PREPARED BY EDWARD J. FRATTAROLI, INC.
4. PROPERTY DEPICTED HEREON IS LOCATED IN AN R-20 ZONE. LOT AREA EQUALS 0.864+/- ACRES PER THE STAMFORD TAX ASSESSOR'S OFFICE.
5. THE CONTRACTOR SHALL LOCATE AND VERIFY THE SIZE, LOCATION, DEPTH AND INVERTS OF ANY AND ALL EXISTING UTILITIES PRIOR TO COMMENCING OPERATIONS. THE CONTRACTOR SHALL ALSO BE REQUIRED TO CONTACT THE TOLL FREE "CALL-BEFORE-YOU-DIG" PHONE NUMBER AT 811.
7. ALL WORK PERFORMED BY THE OWNER/DEVELOPER MUST INCLUDE IMPLEMENTATION OF AN APPROVED SOIL EROSION AND SEDIMENTATION PLAN IN ACCORDANCE WITH PUBLIC ACT No. 83--388 (PASSED BY THE CONNECTICUT GENERAL ASSEMBLY). THE OWNER/DEVELOPER SHALL BE THOROUGHLY FAMILIAR WITH THE CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL PUBLISHED BY THE CONNECTICUT COUNCIL OF SOIL AND WATER CONSERVATION, JANUARY 1985.
8. PROPERTY IS SERVED BY CITY WATER.
9. THE PROPOSED DRIVEWAY WILL SERVE AS THE MACHINERY ACCESS ROUTE. SUGGESTED TEMPORARY CONSTRUCTION ACCESS ROUTE IS SHOWN HEREON.
10. THE PROPOSED DEVELOPMENT SHOWN HEREON WILL REQUIRE REVIEW AND APPROVAL BY THE STAMFORD BUILDING DEPARTMENT AND ENGINEERING BUREAU.
11. ACTUAL PLACEMENT OF PROPOSED SOIL EROSION CONTROL MEASURES TO BE DETERMINED IN THE FIELD IN CONSULTATION WITH THE STAMFORD E.P.B. STAFF PRIOR TO COMMENCEMENT OF CONSTRUCTION. SUGGESTED LOCATIONS ARE SHOWN HEREON.
12. RESTORE ALL DISTURBED AREAS WITH A MINIMUM OF FOUR INCHES (4") F TOPSOIL, SEED, AND HAY MULCH UPON COMPLETION OF CONSTRUCTION.

LEGEND AND COLOR CODE

- 160 —— EXISTING CONTOUR LINES
- TH 1 — DEEP TEST LOCATION IDENT LETTER OR No.
- PERC A — PERCOLATION TEST LOCATION IDENT. NUMBER OR LETTER
- PROPOSED RESERVE LEACHING UNIT
- PROPOSED SEPTIC TANK
- D.B. — PROPOSED DISTRIBUTION BOX

Standard City of Stamford Notes:

1. A Street Opening Permit is required for all work within the City of Stamford Right-of-Way.
2. All work within the City of Stamford Right-of-Way shall be constructed to City of Stamford requirements, the State of Connecticut Basic Building Code and the Connecticut Guidelines for Soil Erosion and Sedimentation Control.
3. The Engineering Bureau of the City of Stamford shall be notified three days prior to any commencement of construction or work within the City of Stamford Right-of-Way.
4. Trees within the City of Stamford Right-of-Way to be removed shall be posted in accordance with the Tree Ordinance.
5. Prior to any excavation the Contractor and/or Applicant/Owner, in accordance with Public Act 77-350, shall be required to contact "Call Before You Dig" at 1-800-922-4455 for mark out of underground utilities.
6. All retaining walls three (3) feet or higher measured from finished grade at the bottom of the wall to finished grade at the top of the wall and retaining walls supporting a surcharge or impounding Class I, II or IIA liquids are required to have a Building Permit. Retaining walls shall be designed and inspected during construction by a Professional Engineer licensed in the State of Connecticut. Prior to the issuance of a Certificate of Occupancy, retaining walls shall be certified by a Professional Engineer licensed in the State of Connecticut.
7. Certification will be required by a professional engineer licensed in the State of Connecticut that work has been completed in compliance with the approved drawings.
8. A Final Improvement Location Survey will be required by a professional land surveyor licensed in the State of Connecticut.
9. Connection to a city-owned storm sewer shall require the Waiver Covering Storm Sewer Connection to be filed with the City of Stamford Engineering Bureau.
10. Granite block or other decorative stone or brick, depressed curb, driveway apron and curbing within the City of Stamford Right-of-Way shall require the Waiver Covering Granite Block Depressed Curb and Driveway Aprons to be filed with the City of Stamford Engineering Bureau.
11. Sediment and erosion controls shall be maintained and repaired as necessary throughout construction until the site is stabilized.
12. To obtain a Certificate of Occupancy, submittal must include all items outlined in the Checklist for Certificate of Occupancy (Appendix D of the City of Stamford Drainage Manual).
13. Reference EPB Permit #, Zoning Permit #, Zoning Board of Appeals #, Subdivision #, if applicable.

STANDARD CONSTRUCTION NOTES:

1. A HIGHWAY PERMIT IS REQUIRED FOR ALL WORK WITHIN THE CITY OF STAMFORD -- RIGHT OF WAY.
2. ALL WORK WITHIN THE CITY OF STAMFORD RIGHT OF WAY SHALL BE CONSTRUCTED TO CITY OF STAMFORD STANDARDS.
3. CATCH BASINS FOR PRIVATE DRIVEWAYS SHALL HAVE A MINIMUM GRATE OF TWO FEET BY TWO FEET. IF THE DRIVEWAY IS CURBED THE CATCH BASIN SHALL HAVE A MINIMUM CURB INLET OF SIX INCHES. EACH DRIVEWAY CATCH BASIN SHALL ALSO HAVE A MINIMUM TWO-FOOT SUMP AND BELL TRAP.
4. ALL DRAINAGE CONNECTIONS TO THE CITY DRAINAGE SYSTEM SHALL BE GRAVITY LINES. IF A DISCHARGE FROM A SUMP PUMP IS CONNECTED TO THE CITY DRAINAGE SYSTEM IT MUST DISCHARGE TO A DRAINAGE STRUCTURE ON PRIVATE PROPERTY AND THEN BE CONNECTED TO THE CITY DRAINAGE SYSTEM. ALL SUMP PUMPS REQUIRE A BACKFLOW PREVENTER (CHECK VALVE) BETWEEN THE PUMP AND THE DRAINAGE STRUCTURE. A DRAIN CONNECTION PERMIT FROM THE HIGHWAY DIVISION IS REQUIRED FOR ALL CONNECTIONS TO THE TOWN DRAINAGE SYSTEM.
5. IN ROADWAY CUTS, SUBDRAINS SHALL BE REQUIRED IF SEEPAGE OCCURS DURING CONSTRUCTION OR WITHIN ONE YEAR AFTER ROAD CONSTRUCTION IS COMPLETED AND ACCEPTED, EVEN THOUGH PLANS MAY HAVE BEEN APPROVED WITHOUT SUBDRAINS AND/OR ROADWAY CONSTRUCTION HAS BEEN COMPLETED.
6. ALL RETAINING WALLS GREATER THAN THREE FEET ARE REQUIRED TO BE DESIGNED, AND INSPECTED DURING CONSTRUCTION BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF CONNECTICUT. A RETAINING WALL CERTIFICATION SIGN-OFF AND RETAINING WALL FIELD INSPECTION RECORD FROM SHALL BE SUBMITTED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
7. ALL DETENTION/RETENTION SYSTEMS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL SYSTEMS SHALL USE A MANIFOLD SYSTEM TO DISTRIBUTED RUNOFF EVENLY INTO EACH ROW OF INFILTRATORS. DETENTION SYSTEMS WILL HAVE A MANIFOLD SYSTEM THAT CREATES THE LONGEST TRAVEL TIME TO THE CONTROL STRUCTURE.

OPERATIONS AND MAINTENANCE PLAN

SCOPE:

THE PURPOSE OF THE OPERATIONS AND MAINTENANCE PLAN IS TO ENSURE THAT THE EXISTING AND PROPOSED STORMWATER COMPONENTS INSTALLED AT 12 WARD PLACE, TRUMBULL, CT ARE MAINTAINED IN OPERATIONAL CONDITION THROUGHOUT THE LIFE OF THE PROJECT. THE SERVICE PROCEDURES ASSOCIATED WITH THIS PLAN SHALL BE PERFORMED AS REQUIRED BY THE PARTIES LEGALLY RESPONSIBLE FOR THEIR MAINTENANCE.

FREQUENCY OF SERVICE:
AS FURTHER DEFINED IN THE FOLLOWING, ALL STORMWATER COMPONENTS SHOULD BE CHECKED ON A PERIODIC BASIS AND KEPT IN FULL WORKING ORDER. ULTIMATELY, THE REQUIRED FREQUENCY OF INSPECTION WILL DEPEND ON RUNOFF QUANTITIES, POLLUTANT LOADING, AND CLOGGING DUE TO DEBRIS. AT A MINIMUM IT IS RECOMMENDED THAT ALL STORMWATER COMPONENTS BE INSPECTED AND SERVICED TWICE A YEAR, ONCE BEFORE WINTER BEGINS AND ONCE DURING SPRING CLEANUP.

SERVICE PROCEDURE:

1. STORM DRAINAGE PIPING AND JUNCTION BOXES:
   a. ALL STORM DRAINAGE PIPING SHALL BE COMPLETELY FLUSHED OF DEBRIS AND ACCUMULATED SEDIMENT AT THE COMPLETION OF CONSTRUCTION.
   b. JUNCTION BOXES SHALL BE INSPECTED AND REPAIRED ON AN ANNUAL BASIS.
   c. UNLESS SYSTEM PERFORMANCE INDICATES DEGRADATION OF PIPING, COMPREHENSIVE VIDEO INSPECTION OF STORM DRAINAGE PIPING SHALL OCCUR ONCE EVERY TEN YEARS.
   d. ANY ADDITIONAL MAINTENANCE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS SHALL ALSO BE COMPLETED.
2. STORM CONTROL STRUCTURES
   a. ALL CONTROL STRUCTURES (ORIFICE, WEIR, ETC.) SHALL BE COMPLETELY CLEANED OF ACCUMULATED DEBRIS AND SEDIMENTS AT THE COMPLETION OF CONSTRUCTION. ANY REPAIRS SHALL BE PERFORMED.
   b. FOR THE FIRST YEAR, CONTROL STRUCTURES (ORIFICE, WEIR, ETC.) SHALL BE INSPECTED ON A QUARTERLY BASIS.
   c. ANY ACCUMULATED DEBRIS SHALL BE REMOVED AND ANY REPAIRS MADE TO THE CONTROL STRUCTURES (ORIFICE, WEIR, ETC.)
   d. FROM THE SECOND YEAR ONWARD, VISUAL INSPECTIONS SHALL OCCUR TWICE A YEAR, ONCE IN THE SPRING AND ONCE IN THE FALL, AFTER FALL CELANUP OF LEAVES HAS OCCURRED.
   e. ACCUMULATED DEBRIS SHALL BE REMOVED AND REPAIRS MADE AS REQUIRED.
   f. ANY ADDITIONAL MAINTENANCE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS SHALL BE COMPLETED.
3. LEVEL SPREADERS
   a. ALL OUTFALLS SHALL BE COMPLETELY CLEANED OF ACCUMULATED DEBRIS AND SEDIMENTS AT THE COMPLETION OF CONSTRUCTION. ANY REPAIRS TO LEVEL SPREADERS SHALL BE PERFORMED.
   b. FOR THE FIRST YEAR, LEVEL SPREADERS SHALL BE INSPECTED ON A QUARTERLY BASIS.
   c. ANY ACCUMULATED DEBRIS SHALL BE REMOVED AND ANY REPAIRS MADE TO THE LEVEL SPREADER AS REQUIRED.
   d. FROM THE SECOND YEAR ONWARD, VISUAL INSPECTIONS SHALL OCCUR TWICE A YEAR, ONEC IN THE SPRING AND ONCE IN THE FALL, AFTER FALL CLEANUP OF LEAVES HAS OCCURRED.
   e. ACCUMULATED DEBRIS SHALL BE REMOVED AND REPAIRS MADE AS REQUIRED.
   f. ANY EROSION SHALL BE PROMPTLY REPAIRED AND THE CAUSE OF EROSION SHALL BE IDENTIFIED AND CORRECTED.
   g. ANY ADDITIONAL MAINTENANCE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS SHALL ALSO BE COMPLETED.
4. INFILTRATION SYSTEM
   a. ALL INFILTRATIONS SHALL BE COMPLETELY CLEANED OF ACCUMULATED DEBRIS AND SEDIMENTS UPON THE COMPLETION OF CONSTRUCTION.
   b. FOR THE FIRST YEAR, THE INFILTRATORS SHALL BE INSPECTED ON A QUARTERLY BASIS.
   c. ANY ACCUMULATED DEBRIS WITHIN THE INFILTRATORS SHALL BE REMOVED AND ANY REPAIRS MADE TO THE UNITS AS REQUIRED.
   d. FROM THE SECOND YEAR ONWARD, VISUAL INSPECTION SHALL OCCUR TWICE A YEAR, ONCE IN THE SPRING AND ONCE IN THE FALL, AFTER FALL CELANUP OF LEAVES HAS OCCURRED.
   e. ACCUMULATED DEBRIS WITHIN THE UNITS SHALL BE REMOVED AND REPAIRS MADE AS REQUIRED.
   f. ANY ADDITIONAL MAINTENANCE REQUIRED PER THE MANUFACTURER'S SPECIFICATIONS SHALL ALSO BE COMPLETED
5. ROOF GUTTERS
   a. REMOVE ACCUMULATED DEBRIS AND INSPECT FOR DAMAGE. ANY DAMAGE SHOULD BE REPAIRED AS REQUIRED.

DEEP TEST RESULTS:

NOTE: DEEP TESTS WERE CONDUCTED BY JOELVITO N. VILLALUZ, PE, LEED AP ON MAY 4, 2022

DT 1
0 - 4" TOP SOIL
4 - 60" ORANGE BROWN SANDY SILTY LOAM
60 - 73" ORANGE BROWN SANDY SILTY LOAM WITH ROCKS

NO MOTTLING
NO WATER
NO LEDGE
ROOTS TO 64"

DT 2
0 - 4" TOPSOIL
4 - 14" ORANGE BROWN SANDY SILTY LOAM
14 - 64" ORANGE BROWN SILTY SANDY LOAM WITH ROCKS

NO MOTTLING
NO WATER TABLE
NO LEDGE
ROOTS TO 58"

DT 3
0 - 6" TOPSOIL
6 - 22" ORANGE BROWN SANDY SILTY LOAM
22 - 72" LIGHT ORANGE BROWN SILTY SAND WITH ROCKS

NO MOTTLING
NO WATER TABLE
NO LEDGE
ROOTS TO 36"

DT 4
0 - 6" TOPSOIL
6 - 16" ORANGE BROWN SANDY SILTY LOAM
16 - 72" ORANGE BROWN SANDY SILTY LOAM WITH ROCKS

NO MOTTLING
NO WATER TABLE
NO LEDGE
ROOTS 38"

DT 5
0 - 5" TOPSOIL
5 - 16" ORANGE BROWN SANDY SILTY LOAM
16 - 60" ORANGE BROWN SILTY LOAM WITH ROCKS

NO MOTTLING
NO WATER TABLE
NO LEDGE
ROOTS 36"

DT 6
0 - 5" TOPSOIL
5 - 30" ORANGE BROWN SANDY SILTY LOAM
30 - 63" ORANGE BROWN SILTY SAND WITH ROCKS

NO MOTTLING
NO WATER TABLE
NO LEDGE
ROOTS 46"

PERCOLATION TESTS:

NOTE: TESTS CONDUCTED ON MAY 7, 2022
ALL PERC TESTS WERE PRESOAKED.

PERC TEST 1

TIME	READING	FALL
9:30AM	2-1/4"	
10:00AM	4-3/8"	2-1/8"
10:15AM	5-1/4"	1-7/8"
10:30AM	6-1/8"	1-7/8"
10:35AM	9-1/4"	1-5/8"
10:40AM	11-1/8"	1-3/8"
10:50AM	12-1/2"	1-3/8"

7.27 MIN/INCH

PERC TEST 2

TIME	READING	FALL
9:30AM	2-1/2"	"
10:00AM	4-1/2"	2"
10:15AM	6-1/4"	1-3/4"
10:25AM	8"	1-3/4"
10:35AM	9-3/8"	1-1/8"
10:45AM	11-1/8"	1-1/2"
10:55AM	12-5/8"	1-1/2"

8.6 MIN/INCH

CIVIL ENGINEER:

JOELVITO N. VILLALUZ, P.E. LEED AP
CT PE LIC. NO. 23386
1 GILBERT STREET
SHELTON, CONNECTICUT 06484
TELEFAX: 203.922.8240

STATE OF CONNECTICUT — JOELVITO N. VILLALUZ — REGISTERED PROFESSIONAL ENGINEER — PE.0023386

SCALE : 1" = 20'

PENDING MUNICIPAL APPROVAL

DRAWING REVISIONS

NO.	DESCRIPTION	DATE

MAP NO. 68
BLOCK 377
LOT 4
AREA = 0.864± Acres
ZONING: R-20

PROPOSED SITE PLAN
FOR TWO-LOT
SUBDIVISION AT
18 OPPER ROAD (LOT 4),
STAMFORD, CT 06903

FOR
DARIO AND MARIA PALLADINO
18 OPPER ROAD
STAMFORD, CT 06903

SITE PLAN AND NOTES

#033-22

SEPTEMBER 3, 2022

C100

A. PURPOSE-EROSION CONTROL

ALL CONSTRUCTION ACTIVITIES INVOLVING THE REMOVAL OR DISTURBANCE OF SOILS ARE TO BE PROVIDED WITH APPROPRIATE PROTECTIVE MEASURES TO MINIMIZE EROSION AND CONTAIN SEDIMENT DISPOSITION WITHIN THE AREA UNDER DEVELOPMENT. THE MINIMUM STANDARD FOR INDIVIDUAL MEASURES SHALL BE THOSE OUTLINED IN THE "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" 2002 EDITION AS AMENDED TO DATE. THOSE METHODS DEEMED MOST EFFECTIVE FOR THIS PROJECT ARE DESCRIBED HEREIN.

B. CONTINGENCY PLAN

AS A PRECAUTIONARY MEASURE THE CONTRACTOR SHALL AT ALL TIMES KEEP AT LEAST TWO ONE HUNDRED FOOT ROLLS OF SEDIMENTATION FENCE & 20 HAYBALES STOCKPILED ON SITE WHICH SHALL BE AVAILABLE FOR UNFORESEEN EROSION OR SEDIMENT PROBLEMS SHOULD ANY ARISE. THE CONTRACTOR SHALL IMMEDIATELY INSTALL THE SEDIMENT FENCE DOWN SLOPE SO AS TO CONTAIN ANY SEDIMENT. THE CONTRACTOR SHALL THEN PROMPTLY CONTACT THE DESIGN ENGINEER TO DETERMINE IF FURTHER CORRECTIVE ACTION IS REQUIRED. THE DESIGN ENGINEER, AFTER CONSULTATION WITH THE ZONING/WETLANDS ENFORCEMENT OFFICER SHALL THEN INSTRUCT THE CONTRACTOR AS TO WHAT ADDITIONAL MEASURES ARE DEEMED NECESSARY.

C. GENERAL GUIDELINES-EROSION CONTROL

1. OTHER THAN CONSTRUCTION SPECIFICALLY SHOWN ON THESE APPROVED PLANS, NO ACTIVITIES SHALL BE CONDUCTED WITHIN DESIGNATED WETLAND AREAS, WATERCOURSES, FLOOD PLAINS OR WITHIN CHANNEL ENCROACHMENT LINES WITHOUT THE PRIOR APPROVAL OF THE PLANNING AND ZONING COMMISSION AND INLAND WETLANDS COMMISSION.
2. WHEREVER FEASIBLE, NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED.
3. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME DURING CONSTRUCTION.
4. PRIOR TO THE START OF CONSTRUCTION, TEMPORARY BALED HAY EROSION CHECKS, SEDIMENTATION FENCES AND OTHER APPROVED SEDIMENT CONTROL MEASURES SHALL BE IN PLACE WHERE SHOWN ON THESE PLANS AND AT OTHER LOCATIONS WHERE DEEMED NECESSARY.
5. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE PERIOD OF EXPOSURE SHALL BE KEPT TO A MINIMUM, INSTALLING PERMANENT AND FINAL VEGETAT-ION, STRUCTURES, ETC. AT THE EARLIEST POSSIBLE OPPORTUNITY.
6. CONSTRUCTION EQUIPMENT SHALL NOT UNNECESSARILY CROSS LIVE STREAMS EXCEPT BY MEANS OF BRIDGES, CULVERTS OR OTHER APPROVED MEANS.
7. ALL TEMPORARY EROSION AND SEDIMENT CONTROLS SHALL REMAIN IN PLACE AND BE MAINTAINED REGULARLY IN PROPER FUNCTIONING CONDITION, UNTIL ALL AREAS EXPOSED DURING SITE CONSTRUCTION HAVE BEEN SUITABLY STABILIZED WITH PAVEMENT, PERMANENT STRUCTURES AND/OR FINAL VEGETATIVE COVER.
8. CUT AND FILL SLOPES SHALL NOT BE STEEPER THAN 2:1 UNLESS STABILIZED BY A GEOTEXTILE MAT.
9. ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATER FROM DAMAGING THE CUT FACE OF EXCAVATIONS OR THE SLOPING SURFACES OF FILLS.
10. FILL SHALL BE PLACED AND COMPACTED SO AS TO MINIMIZE SLIDING OR EROSION OF THE SOIL.

D. SEDIMENT BARRIERS

1. PURPOSE

TO INTERCEPT AND RETAIN SMALL AMOUNTS OF SEDIMENT FROM DISTURBED OR UNPROTECTED AREAS OF LIMITED EXTENT.

2. MATERIALS AND INSTALLATION

SEDIMENT BARRIERS MAY CONSIST OF FILTER FENCE OR STRAW OR HAY BALES, STONE BERMS, OR OTHER FILTER MATERIALS. PLANNED LIFESPAN OF SEDIMENT BARRIERS VARIES. STRAW OR HAY BALES SHOULD ONLY BE USED AS A TEMPORARY BARRIER FOR NO LONGER THAN 60 DAYS. SYNTHETIC FILTER FENCES CAN BE USED FOR 60 DAYS OR LONGER DEPENDING ON ULTRAVIOLET STABILITY AND MANUFACTURER'S RECOMMENDATIONS. STONE BARRIERS CAN BE USED FOR LONGER PERIODS OF TIME.

A. STRAW/HAY BALES

1. SHEET FLOW APPLICATIONS

a. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

b. ALL BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED. BALES SHALL BE INSTALLED SO THAT BINDINGS ARE ORIENTED AROUND THE SIDES RATHER THAN ALONG THE TOPS AND BOTTOMS OF THE BALES TO PREVENT DETERIORATION OF THE BINDINGS.

c. THE BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED AND CHINKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AGAINST THE BARRIER. BACKFILL SOIL SHALL CONFORM TO THE GROUND LEVEL ON THE DOWNHILL SIDE AND SHALL BE BUILT UP TO 4 INCHES AGAINST THE UPHILL SIDE OF THE BARRIER. BALES SHOULD BE PLACED 10 FEET AWAY FROM TOE OF SLOPE OR AS SHOWN ON THE PLANS.

d. EACH BALE SHALL BE SECURELY ANCHORED BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER. STAKES OR REBARS SHALL BE DRIVEN DEEP ENOUGH INTO THE GROUND TO SECURELY ANCHOR THE BALES.

e. THE GAPS BETWEEN BALES SHALL BE CHINKED (FILLED BY WEDGING) WITH STRAW TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES. (LOOSE STRAW SCATTERED OVER THE AREA IMMEDIATELY UPHILL FROM A STRAW BALE BARRIER TENDS TO INCREASE BARRIER EFFICIENCY.) IN SLOPING AREAS WHERE SURFACE FLOW FOLLOWS THE BALE LINE, PERPENDICULAR BALE CHECKS SHALL BE INSTALLED AT APPROPRIATE INTERVALS (100 FEET MAXIMUM).

f. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

g. BALE BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS, BUT NOT BEFORE THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

2. CHANNEL FLOW APPLICATIONS

a. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE, ORIENTED PERPENDICULAR TO THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

b. THE REMAINING STEPS FOR INSTALLING A BALE BARRIER FOR SHEET FLOW APPLICATIONS APPLY HERE, WITH THE FOLLOWING ADDITION.

c. THE BARRIER SHALL BE EXTENDED TO SUCH A LENGTH THAT THE BOTTOMS OF THE END BALES ARE HIGHER IN ELEVATION THAN THE TOP OF THE LOWEST MIDDLE BALE TO ASSURE THAT SEDIMENT LADEN RUNOFF WILL FLOW EITHER THROUGH OR OVER THE BARRIER BUT NOT AROUND IT.

3. MAINTENANCE

a. INSPECTION SHALL BE MADE AFTER EACH STORM EVENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.

b. CLEAN OUT OF ACCUMULATED SEDIMENT BEHIND THE BALES IS NECESSARY IF 1/2 OF THE ORIGINAL HEIGHT OF THE BALES BECOMES FILLED IN WITH SEDIMENT.

B. FILTER FENCES

1. MATERIALS

a. SYNTHETIC FIBER FILTER FABRIC

SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER, OR POLYETHYLENE FILAMENTS AND SHALL BE CERTIFIED BY MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:

PHYSICAL PROPERTY	REQUIREMENTS
FILTERING EFFICIENCY	75% (MIN.)
TENSILE STRENGTH AT 20% (MAX.) ELONGATION	EXTRA STRENGTH- 50 LBS./LIN. IN. (MIN.) STANDARD STRENGTH- 30 LBS./LIN. IN. (MIN.)
FLOW RATE	0.3 GAL./SQ. FT./MIN. (MIN.)

b. NATURAL FIBER FILTER FABRIC

BURLAP SHALL BE 10 OUNCE PER SQUARE YARD FABRIC. POSTS FOR FILTER FENCES SHALL BE EITHER 2X3 OR 2X4 INCH STUDS OR 0.5 POUNDS (MINIMUM) PER LINEAR FOOT STEEL WITH A MINIMUM LENGTH OF 5 FEET. STEEL POSTS SHALL HAVE PROJECTIONS FOR FASTENING WIRE TO THEM. STAKES FOR FILTER FENCE SHALL BE 1"X2" WOOD OR EQUIVALENT METAL WITH MINIMUM LENGTH OF 3 FEET.

WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 42 INCHES IN HEIGHT, A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 INCHES.

SOME SILT FENCES DO NOT REQUIRE A WIRE BACKING. CONSULT MANUFACTURER'S INSTRUCTIONS FOR PROPER INSTALLATION REQUIREMENTS.

2. INSTALLATION REQUIREMENTS

THIS SEDIMENT BARRIER UTILIZES BURLAP OR STANDARD STRENGTH OR EXTRA STRENGTH SYNTHETIC FILTER FABRICS. IT IS DESIGNED FOR SITUATIONS IN WHICH ONLY SHEET OR OVERLAND FLOWS IS EXPECTED. IN SPECIAL CASES BURLAP MAY BE USED IN DRAINWAYS.

a. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES (HIGHER BARRIERS MAY IMPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE). THE FILTER FENCE SHALL BE PLACED 10 FEET AWAY FROM THE TOE OF THE SLOPE, OR AS SHOWN ON THE PLANS.

b. WHEN JOINTS ARE NECESSARY, FILTER CLOTH SHALL BE SPLICED TOGETHER ONLY AT A SUPPORT POST, WITH A MINIMUM 6 INCH OVERLAP, AND SECURELY SEALED. SEE MANUFACTURER'S RECOMMENDATIONS.

c. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 12 INCHES). WHEN EXTRA STRENGTH FABRIC IS USED WITHOUT THE WIRE SUPPORT FENCE, POST SPACING SHALL BE AS MANUFACTURER RECOMMENDS.

d. A TRENCH SHALL BE EXCAVATED APPROXIMATELY 6 INCHES WIDE AND 6 INCHES DEEP ALONG THE LINE OF POSTS AND UPSLOPE FROM THE BARRIER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS

e. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST 1 INCH LONG, TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 2 INCHES BELOW THE ORIGINAL GROUND SURFACE.

f. THE STANDARD STRENGTH FILTER FABRIC SHALL BE STAPLED, WIRED OR TIED TO THE WIRE FENCE, AND 8 INCHES OF FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL NOT EXTEND MORE THAN 36 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

g. WHEN EXTRA STRENGTH FILTER FABRIC OR BURLAP AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE ELIMINATED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED, WIRED, OR TIED DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEM NO. f APPLYING.

h. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.

i. FILTER BARRIERS SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPSLOPE AREA HAS BEEN PERMANENTLY STABILIZED.

3. MAINTENANCE

a. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.

b. SHOULD THE FABRIC DECOMPOSE OR BECOME DEFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.

c. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

d. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

E. LAND GRADING

1. PURPOSE

TO RESTORE AREA UPON COMPLETION OF PIPE INSTALLATION.

2. INSTALLATION REQUIREMENTS

A. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH APPROVED SEDIMENT CONTROL PLAN UNTIL THEY ARE PERMANENTLY STABILIZED.

B. ALL SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED SEDIMENT CONTROL PLAN.

C. TOPSOIL REQUIRED FOR THE ESTABLISHMENT OF VEGETATION SHALL BE STOCKPILED IN AN AMOUNT NECESSARY TO COMPLETE FINISHED GRADING OF ALL EXPOSED AREAS.

D. AREAS TO BE FILLED SHALL BE CLEANED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS, OR OTHER OBJECTIONABLE MATERIAL.

E. AREAS ARE TO BE TOPSOILED IN ACCORDANCE WITH TOPSOILING REQUIREMENTS.

F. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS.

G. ALL FILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED EIGHT INCHES IN THICKNESS.

H. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.

I. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS.

J. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.

K. WHERE SEEPS OR SPRINGS ARE ENCOUNTERED DURING CONSTRUCTION SUBSURFACE DRAINAGE SHALL BE PROVIDED.

L. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

3. MAINTENANCE

ALL STRUCTURAL, NONSTRUCTURAL AND VEGETATIVE SEDIMENT AND EROSION CONTROL PRACTICES IMPLEMENTED DURING LAND GRADING OPERATIONS SHALL BE MAINTAINED ACCORDING TO REQUIREMENTS OUTLINED ON THIS PLAN.

F. TOPSOILING

1. PURPOSE

TO PROVIDE A SUITABLE GROWTH MEDIUM FOR FINAL SITE STABILIZATION WITH VEGETATION.

2. INSTALLATION REQUIREMENTS

A. SITE INVESTIGATIONS SHALL BE MADE TO DETERMINE IF THERE IS SUFFICIENT TOPSOIL OF GOOD QUALITY TO USE FOR SITE RESTORATION. HIGH QUALITY TOPSOIL SHALL BE FRIABLE AND LOAMY (LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, CLAY LOAM). OTHER SOIL TYPES WITH HIGH ORGANIC CONTENT MAY BE FOUND SUITABLE AFTER TESTING. IT SHALL BE FREE OF DEBRIS, TRASH, STUMPS, ROCKS, ROOTS, AND NOXIOUS WEEDS. IT SHALL GIVE EVIDENCE OF BEING ABLE TO SUPPORT HEALTHY VEGETATION. IT SHALL CONTAIN NO SUBSTANCE THAT IS POTENTIALLY TOXIC TO PLANT GROWTH. ALL TOPSOIL SHALL BE TESTED BY A RECOGNIZED LABORATORY TO DETERMINE THE PROPER APPLICATION RATES FOR LIME AND FERTILIZER.

B. STRIPPING

STRIPPING SHALL BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA. A 4 TO 6 INCH STRIPPING DEPTH IS COMMON, BUT DEPTH MAY VARY DEPENDING ON THE PARTICULAR SOIL. ALL PERIMETER DIKES, BASINS, AND ANY OTHER SEDIMENT CONTROLS SHALL BE IN PLACE PRIOR TO STRIPPING.

C. STOCKPILING

TOPSOIL SHALL BE STOCKPILED IN SUCH A MANNER THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE SHALL RESULT

D. SIDE SLOPES

SIDE SLOPES OF THE STOCKPILE SHALL NOT EXCEED 2 TO 1 (2 HORIZONTALLY TO 1 VERTICALLY).

E. SEDIMENT BARRIER

A SEDIMENT BARRIER SHALL SURROUND ALL TOPSOIL STOCKPILES.

F. TEMPORARY SEEDING

TEMPORARY SEEDING OF STOCKPILES SHALL BE COMPLETED WITHIN 15 DAYS OF THE FORMATION OF THE STOCKPILE, IN ACCORDANCE WITH THE TEMPORARY VEGETATIVE COVER REQUIREMENTS.

G. SITE PREPARATION

BEFORE TOPSOILING, ESTABLISH NEEDED EROSION AND SEDIMENT CONTROL MEASURES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, WATERWAYS, SEDIMENT BASINS, ETC. THESE MEASURES MUST BE MAINTAINED DURING TOPSOILING.

H. GRADING

PREVIOUSLY ESTABLISHED GRADES ON THE AREAS TO BE TOPSOILED SHALL BE MAINTAINED ACCORDING TO THE APPROVED PLANS.

I. LIMING

WHERE THE pH OF THE SUBSOIL IS 6.0 OR LESS, GROUND AGRICULTURAL LIMESTONE SHALL BE SPREAD IN ACCORDANCE WITH THE SOIL TEST OR THE VEGETATIVE ESTABLISHMENT PRACTICE BEING USED.

J. BONDING

AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE, AND IMMEDIATELY PRIOR TO SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOOSENED BY DISCING OR SCARIFYING TO A DEPTH OF AT LEAST 2 INCHES TO ENSURE BONDING OF THE TOPSOIL AND SUBSOIL.

K. APPLYING TOPSOIL

TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING OR PROPOSED SODDING OR SEEDING. THE TOPSOIL SHALL BE UNIFORMLY DISTURBED TO A MINIMUM COMPACTED DEPTH OF 4 INCHES, ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. IT IS NECESSARY TO COMPACT THE SOIL ENOUGH TO ENSURE GOOD CONTACT WITH THE UNDERLYING SOIL AND TO OBTAIN A UNIFORM FIRM SEEDBED FOR THE ESTABLISHMENT OF A HIGH QUALITY TURF. HOWEVER, UNDUE COMPACTION IS TO BE AVOIDED AS IT INCREASES RUNOFF VELOCITY AND VOLUME, AND PREVENTS SEED GERMINATION.

G. TEMPORARY MULCHING

1. PURPOSE

TO PREVENT EROSION BY PROTECTING THE EXPOSED SOIL SURFACE AND TO AID IN THE GROWTH OF VEGETATION BY CONSERVING AVAILABLE MOISTURE, CONTROLLING WEEDS, AND PROVIDING PROTECTION AGAINST EXTREME HEAT AND COLD.

2. INSTALLATION REQUIREMENTS

A. ORGANIC MULCHES

ORGANIC MULCHES MAY BE USED IN ANY AREA WHERE MULCH IS REQUIRED, SUBJECT TO THE RESTRICTIONS NOTED IN THE TABLE BELOW.

ORGANIC MULCH MATERIALS AND APPLICATION RATES

MULCHES	RATES PER ACRE / PER 1000FT²	NOTES
MULCHES OR HAY	1 1/2- 2 TONS / 70-90 LBS	FREE FROM WEEDS AND COARSE HAY MATTER. MUST BE ANCHORED. SPREAD WITH MULCH BLOWER OR BY HAND.
WOOD FIBER	1000- 2000 LBS./ 25-50 LBS.	FIBERS 4mm OR LONGER. DO NOT USE ALONE IN WINTER OR DURING HOT, DRY WEATHER. APPLY AS SLURRY.
CORN STALKS	4-6 TONS / 185-275 LBS.	CUT OR SHREDDED IN 4-6 INCH LENGTHS. AIR DRIED. DO NOT USE IN FINE TURF AREAS. APPLY WITH MULCH BLOWER OR BY HAND.
WOOD CHIPS	4-6 TONS / 185-275 LBS.	FREE OR COARSE MATTER. AIR DRIED. TREAT WITH 12 LBS. NITROGEN PER TON. DO NOT USE IN FINE TURF AREAS. APPLY WITH MULCH BLOWER, CHIP HANDLER, OR BY HAND.
BARK CHIPS SHREDDED BARK	50-70 CU. YDS./ 1-2 CU. YDS.	FREE OR COARSE MATTER. AIR DRIED. DO NOT USE IN FINE TURF AREAS. APPLY WITH MULCH BLOWER, CHIP HANDLER, OR BY HAND.

B. MATERIALS

SELECT MULCH MATERIAL BASED ON SITE CONDITIONS, AVAILABILITY OF MATERIALS, AND LABOR AND EQUIPMENT. OTHER MATERIALS MAY BE USED ONLY WITH THE PERMISSION OF THE APPROVING AUTHORITY.

C. PRIOR TO MULCHING

COMPLETE THE REQUIRED GRADING AND INSTALL NEEDED SEDIMENT CONTROL MEASURES.

D. APPLICATION

MULCH MATERIALS SHALL BE SPREAD UNIFORMLY, BY HAND OR MACHINE. WHEN SPREADING STRAW OR HAY MULCH BY HAND, DIVIDE THE AREA TO BE MULCHED INTO APPROXIMATELY 1,000 SQUARE FOOT SECTIONS AND PLACE 70-90 POUNDS (1-1/2 TO 2 BALES) OF STRAW OR HAY IN EACH SECTION TO ENSURE UNIFORM DISTRIBUTION.

3. MAINTENANCE

ALL MULCHES MUST BE INSPECTED PERIODICALLY, IN PARTICULAR AFTER RAINSTORMS, TO CHECK FOR EROSION. WHERE EROSION IS OBSERVED, ADDITIONAL MULCH SHOULD BE APPLIED. NETS SHOULD BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, REINSTALL NET AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE. INSPECTIONS SHOULD TAKE PLACE UNTIL GRASSES ARE FIRMLY ESTABLISHED. GRASSES SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED WHICH IS MATURE ENOUGH TO CONTROL SOIL EROSION AND TO SURVIVE SEVERE WEATHER CONDITIONS. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE; REPAIR AS NEEDED.

H. PERMANENT VEGETATIVE COVER

1. PURPOSE

TO PERMANENTLY STABILIZE THE SOIL, TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF AND TO ENHANCE THE ENVIRONMENT.

2. INSTALLATION REQUIREMENTS

A. SITE PREPARATION

GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE. ALL GRADING SHOULD BE DONE IN ACCORDANCE WITH THE PLANS.

B. SEEDED PREPARATION

1. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF CONNECTICUT SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 300 POUNDS PER ACRE OR 7.5 POUNDS PER 1,000 SQUARE FEET USING 10-10-10 OR EQUIVALENT. IN ADDITION, 300 POUNDS OF 38-0-0 FERTILIZER PER ACRE OR EQUIVALENT OF SLOW RELEASE NITROGEN MAY BE USED FOR TOPDRESSING. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AS FOLLOWS.

SOIL TEXTURE	TONS/AC.	LBS./1000 SQ. FT.
CLAY, CLAY LOAM AND HIGH ORGANIC SOIL	4	180
SANDY LOAM, LOAM, SILT LOAM	3	135
LOAMY SAND, SAND	2	90

REFER TO COUNTY SOIL SURVEY REPORT FOR SOIL TEXTURES AT THE SITES.

2. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED. ALL BUT CLAYEY, SILTY SOILS, OR COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.

3. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.

4. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

C. SEEDING DATES

SPRING SEEDINGS USUALLY GIVE THE BEST RESULTS. SPRING SEEDINGS OF ALL SEED MIXES WITH LEGUMES IS RECOMMENDED, HOWEVER LATE SUMMER SEEDINGS PRIOR TO SEPTEMBER 1 CAN BE MADE. WHEN CROWN VETCH IS SEEDED IN LATE SUMMER AT LEAST 35 PERCENT OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). THE RECOMMENDED SEEDING DATES ARE:

APRIL 1 THROUGH JUNE 1
AUGUST 15 THROUGH SEPTEMBER 1

WITH THE EXCEPTION OF CROWN VETCH, THE FINAL SEEDING DATE MAY BE EXTENDED 15 DAYS.

D. SEEDING

1. THE SEED MIXTURE SHALL BE AS INDICATED IN THE SPECIFICATIONS.
2. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDINGS WHICH ARE MULCHED MAY BE LEFT ON SOIL SURFACE.
3. WHEREVER FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.
4. FROST CRACK SEEDING CAN BE USED. FROST CRACK SEEDING MUST BE DONE IN LATE WINTER OR EARLY SPRING. SUITABLE WEATHER CONDITIONS ARE FREEZING NIGHTS AND THAWING DAYS WITH LITTLE OR NO SNOW COVER. SEEDING RATES MUST BE INCREASED 10 PERCENT WHEN USING THIS METHOD.
5. HYDRAULIC APPLICATION (HYDROSEEDING), IS A SUITABLE METHOD FOR USE IN CRITICAL AREAS. WHEN HYDROSEEDING, A SEEDBED IS PREPARED IN THE CONVENTIONAL WAY OR BY HAND RAKING TO LOOSEN AND SMOOTH THE SOIL AND TO REMOVE SURFACE STONES LARGER THAN SIX INCHES IN DIAMETER. SLOPES MUST BE NO STEEPER THAN 2 TO 1 (2 FEET HORIZONTALLY TO 1 FOOT VERTICALLY). LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. THE USE OF THE FIBER MULCH ON CRITICAL AREAS IS NOT RECOMMENDED (UNLESS IT IS USED TO HOLD STRAW OR HAY). FIBER MULCH DOES NOT PROVIDE ADEQUATE SEEDBED PROTECTION. BETTER PROTECTION IS GAINED BY USING STRAW MULCH AND HOLDING IT WITH ADHESIVE MATERIALS OR 500 POUNDS PER ACRE OF WOOD FIBER MULCH. SEEDING RATES MUST BE INCREASED 10 PERCENT WHEN HYDROSEEDING.
6. APPLY MULCH ACCORDING TO TEMPORARY MULCHING MEASURES.
7. IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES, USE THE TEMPORARY MULCHING MEASURES TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

I. TEMPORARY VEGETATIVE COVER

1. PURPOSE

TO TEMPORARILY STABILIZE THE SOIL AND REDUCE DAMAGE FROM WIND AND/OR WATER EROSION.

2. INSTALLATION REQUIREMENTS

A. SITE PREPARATION

(1) SITE PREPARATION SHOULD BE CONDUCTED IN ACCORDANCE WITH THE MEASURE FOR LAND GRADING.

B. SEEDBED PREPARATION

(1) APPLY LIMESTONE AND FERTILIZER IN ACCORDANCE WITH PROCEDURES OUTLINED IN TOPSOILING SECTION.

C. SEEDING

(1) SELECT SEED FROM SPECIFICATIONS.
(2) WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER LIME AND SEED.
(3) APPLY SEED/MULCH UNIFORMLY AS INDICATED IN PERMANENT VEGETATIVE COVER SECTION.
(4) SEEDING MAY BE DONE FROM MAR.1 - OCT.15. IRRIGATE AS REQUIRED DURING DRY PERIODS.

J. DUST CONTROL

1. PURPOSE

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, AND REDUCE THE PRESENCE OF DUST WHICH MAY CAUSE OFF SITE DAMAGE, BE A HEALTH HAZARD TO HUMANS, WILDLIFE AND PLANTLIFE, OR A TRAFFIC SAFETY HAZARD.

2. INSTALLATION REQUIREMENTS

A. WATER

THE EXPOSED SOIL SURFACE SHOULD BE MOISTENED PERIODICALLY WITH ADEQUATE WATER TO CONTROL DUST.

B. STONE

COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL. IN AREAS ADJACENT TO WATERWAYS, USE CHEMICALLY STABLE AGGREGATE.

3. MAINTENANCE

WHEN TEMPORARY DUST CONTROL MEASURES ARE USED, REPETITIVE TREATMENT SHALL BE APPLIED AS NEEDED TO ACCOMPLISH CONTROL.

K. INSPECTION

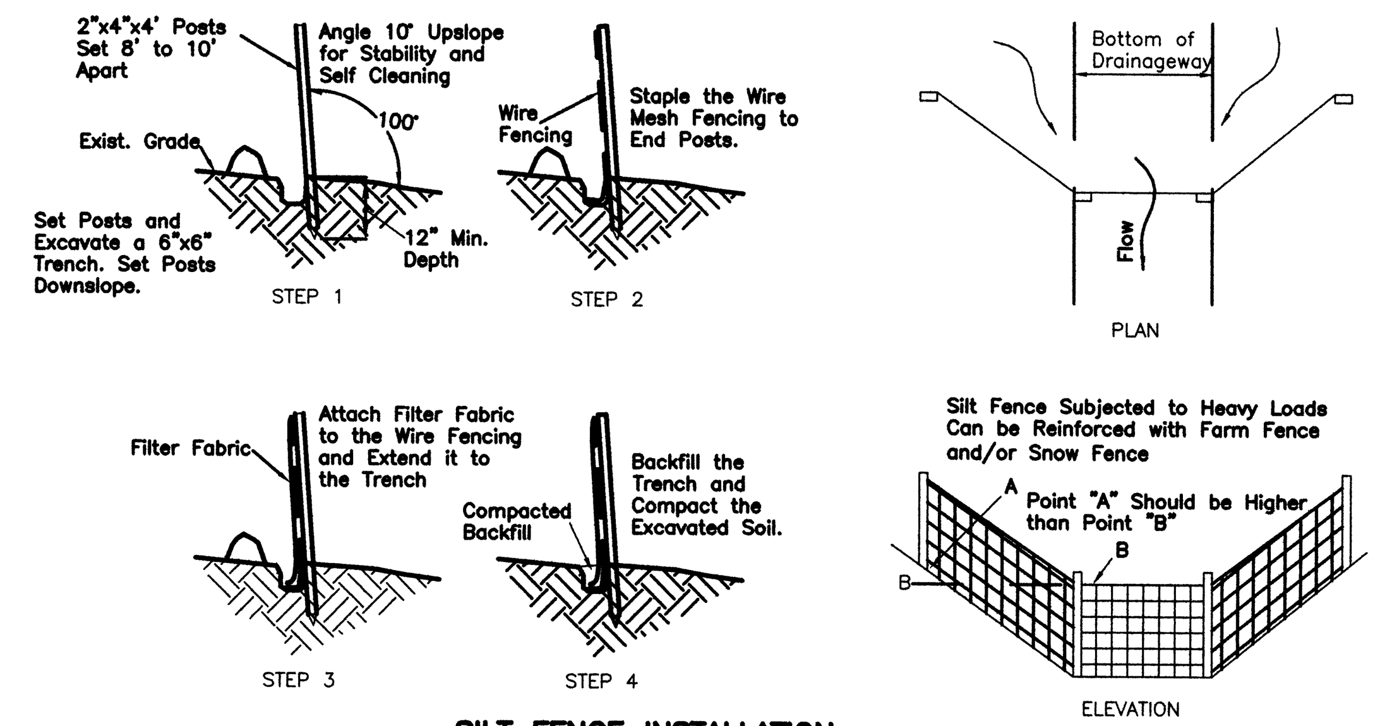
THE TOWN WILL MAINTAIN A FULL TIME INSPECTION SCHEDULE DURING CONSTRUCTION ACTIVITIES.

THE ENGINEER SHALL INSPECT AND ENFORCE ALONG WITH THE TOWN.

L. PERSON RESPONSIBLE FOR S.E.S.C. MAINTAINANCE/IMPLEMENTATION

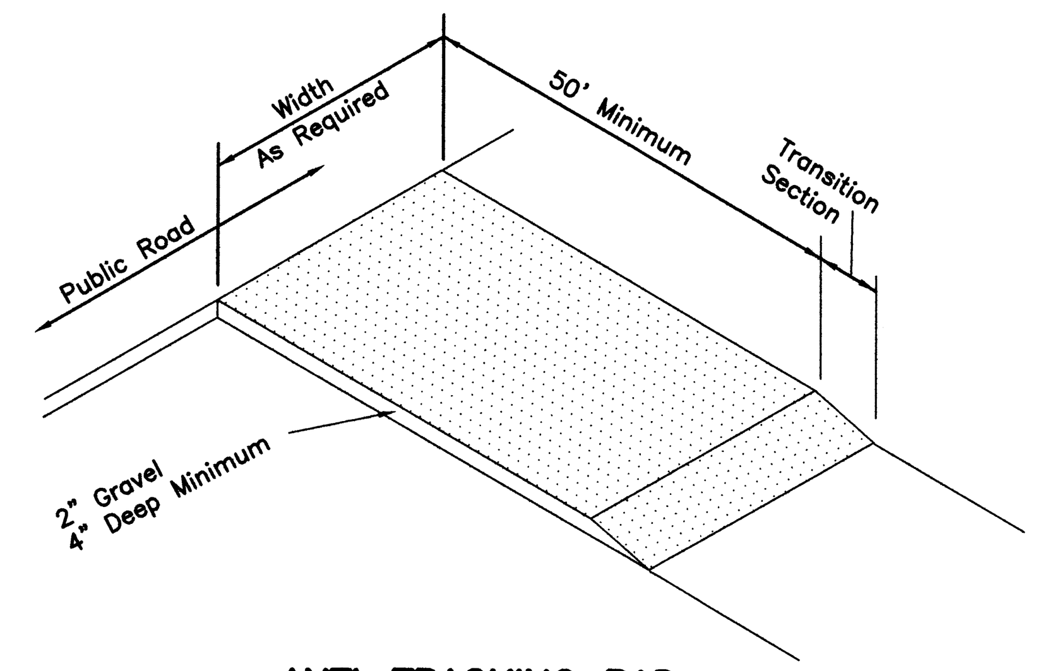
PERSON RESPONSIBLE IN THE IMPLEMENTATION AND MAINTENANCE OF THE SOIL EROSION AND SEDIMENTATION CONTROL SHALL BE;

MR. MICHAEL BECKER
THE BECKER COMPANIES LLC
KINGS HIGHWAY
FAIRFIELD, CT 06824
(203)292-0020 - OFFICE
(203)257-2368 - CELL

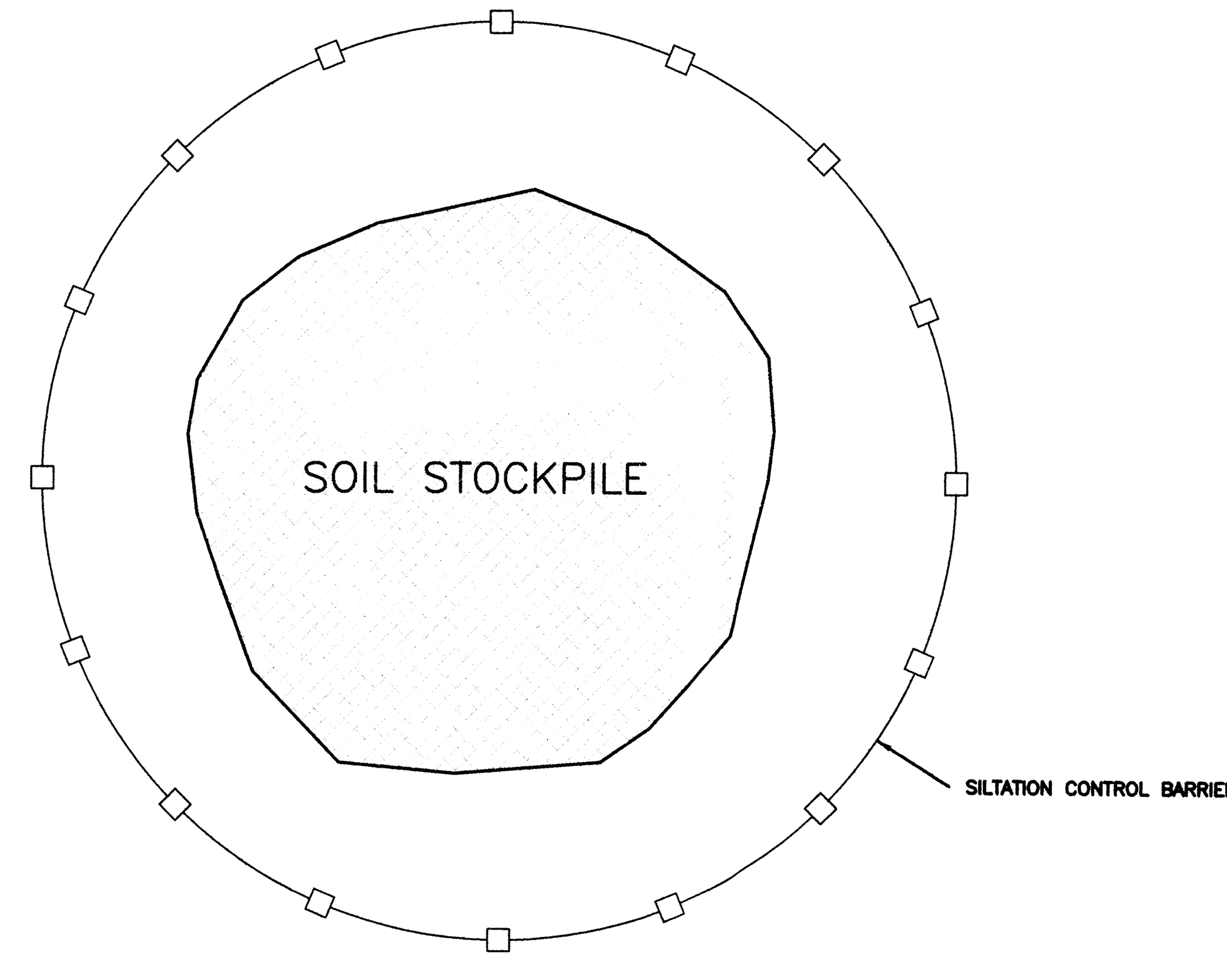


SILT FENCE INSTALLATION

EARTH - SEDIMENTATION BARRIER DETAIL
N.T.S.



ANTI-TRACKING PAD
N.T.S.

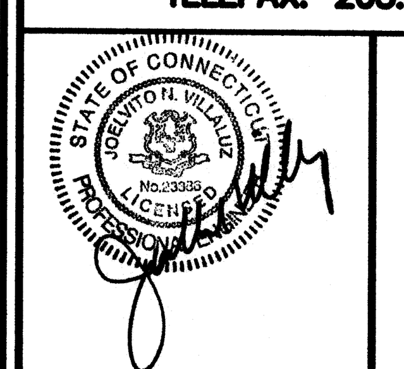


NOTE:
IF STOCKPILE IS TO EXIST FOR MORE THAN 15 DAYS, SURFACES SHALL BE SEEDED WITH GRASS MIXTURE FOR STABILIZATION.

STOCKPILE SILTATION CONTROL
N.T.S.

CIVIL ENGINEER:

JOELVITO N. VILLALUZ, P.E. LEED AP
CT PE LIC. NO. 23386
1 GILBERT STREET
SHELTON, CONNECTICUT 06484
TELEFAX: 203.922.8240



SCALE : 1" = 30'

PENDING MUNICIPAL APPROVAL

DRAWING REVISIONS

NO.	DESCRIPTION	DATE

PROPOSED SITE PLAN FOR TWO-LOT SUBDIVISION AT 18 OPPER ROAD (LOT 4), STAMFORD, CT 06903

FOR
DARIO AND MARIA PALLADINO
18 OPPER ROAD
STAMFORD, CT 06903

SOIL EROSION & SEDIMENTATION CONTROL NOTES & DETAILS

SEPTEMBER 3, 2022

C101

SC-740 STORMTECH CHAMBER SPECIFICATIONS

1. CHAMBERS SHALL BE STORMTECH SC-740.
2. CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
3. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
4. CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
5. THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
6. CHAMBERS SHALL BE DESIGNED, TESTED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (<1 MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
7. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%. THE ASC IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
8. ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
   - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
   - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
   - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
9. CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

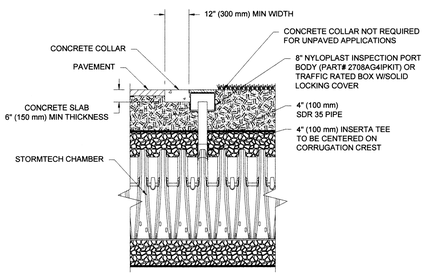
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45° (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION CREST.

2 TYP. INSPECTION PORT DETAIL
SCALE: N.T.S.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-740 SYSTEM

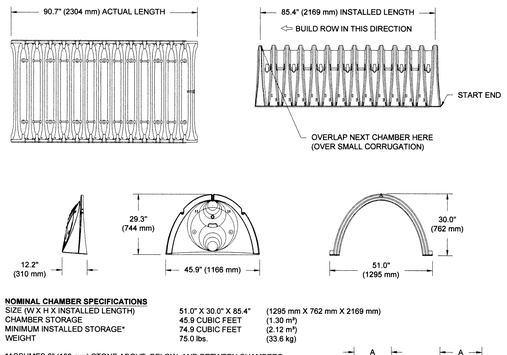
1. STORMTECH SC-740 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
2. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
   - STONESHOOTER LOCATED OFF THE CHAMBER BED.
   - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
   - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOE OR EXCAVATOR.
4. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.
5. JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
6. MAINTAIN MINIMUM - 6" (150 mm) SPACING BETWEEN THE CHAMBER ROWS.
7. EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE 3/4-2" (20-50 mm).
8. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
9. ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

1. STORMTECH SC-740 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
2. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-740 CHAMBERS IS LIMITED:
   - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
   - NO RUBBER TIRED LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE".
   - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH SC-310/SC-740/DC-780 CONSTRUCTION GUIDE"
3. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

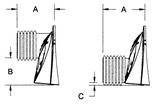
CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 30.0" X 85.4"	(1295 mm X 762 mm X 2169 mm)
CHAMBER STORAGE	45.9 CUBIC FEET	(1.30 m³)
MINIMUM INSTALLED STORAGE*	74.9 CUBIC FEET	(2.12 m³)
WEIGHT	75.0 lbs.	(33.6 kg)

*ASSUMES 6" (152 mm) STONE ABOVE, BELOW, AND BETWEEN CHAMBERS



PRE-FAB STUB AT BOTTOM OF END CAP WITH FLAMP END WITH "BR"
PRE-FAB STUBS AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "B"
PRE-FAB STUBS AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "T"
PRE-CORED END CAPS END WITH "PC"

PART #	STUB	A	B	C
SC740EPE06T / SC740EPE06TPC	6" (150 mm)	10.9" (277 mm)	18.5" (470 mm)	---
SC740EPE06B / SC740EPE06BPC			---	0.5" (13 mm)
SC740EPE08T /SC740EPE08TPC	8" (200 mm)	12.2" (310 mm)	16.5" (419 mm)	---
SC740EPE08B / SC740EPE08BPC			---	0.6" (15 mm)
SC740EPE10T / SC740EPE10TPC	10" (250 mm)	13.4" (340 mm)	14.5" (368 mm)	---
SC740EPE10B / SC740EPE10BPC			---	0.7" (18 mm)
SC740EPE12T / SC740EPE12TPC	12" (300 mm)	14.7" (373 mm)	12.5" (318 mm)	---
SC740EPE12B / SC740EPE12BPC			---	1.2" (30 mm)
SC740EPE15T / SC740EPE15TPC	15" (375 mm)	18.4" (467 mm)	9.0" (229 mm)	---
SC740EPE15B / SC740EPE15BPC			---	1.3" (33 mm)
SC740EPE18T / SC740EPE18TPC	18" (450 mm)	19.7" (500 mm)	5.0" (127 mm)	---
SC740EPE18B / SC740EPE18BPC			---	1.6" (41 mm)
SC740EPE24B*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)
SC740EPE24BR*	24" (600 mm)	18.5" (470 mm)	---	0.1" (3 mm)

ALL STUBS, EXCEPT FOR THE SC740EPE24B/SC740EPE24BR ARE PLACED AT BOTTOM OF END CAP SUCH THAT THE OUTSIDE DIAMETER OF THE STUB IS FLUSH WITH THE BOTTOM OF THE END CAP. FOR ADDITIONAL INFORMATION CONTACT STORMTECH AT 1-888-892-2694.

* FOR THE SC740EPE24B/SC740EPE24BR THE 24" (600 mm) STUB LIES BELOW THE BOTTOM OF THE END CAP APPROXIMATELY 1.75" (44 mm). BACKFILL MATERIAL SHOULD BE REMOVED FROM BELOW THE N-12 STUB SO THAT THE FITTING SITS LEVEL.

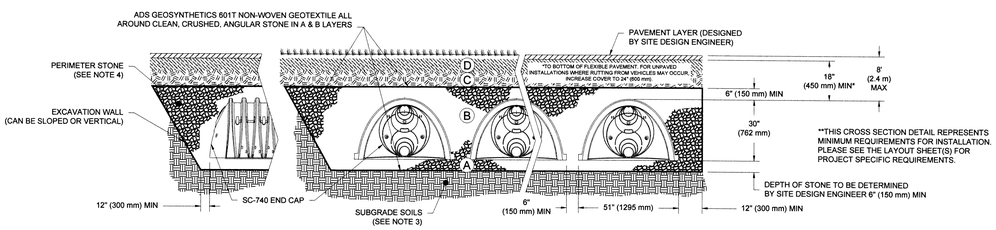
NOTE: ALL DIMENSIONS ARE NOMINAL

3 STORMTECH SC-740 SPECIFICATIONS
SCALE: N.T.S.

ACCEPTABLE FILL MATERIALS: STORMTECH SC-740 CHAMBER SYSTEMS

	MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	**FINAL FILL:** FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	**INITIAL FILL:** FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 18" (450 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER.	AASHTO M145[1] A-1, A-2-4, A-3 OR AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED AGGREGATE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	**EMBEDMENT STONE:** FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	**FOUNDATION STONE:** FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	CLEAN, CRUSHED, ANGULAR STONE	AASHTO M43[4] 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE[2,3]

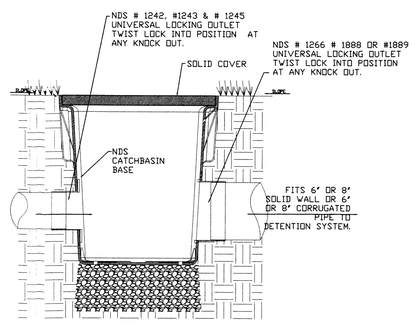
PLEASE NOTE:
1. THE LISTED AASHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR. FOR EXAMPLE, A SPECIFICATION FOR **#4** STONE WOULD STATE: "CLEAN, CRUSHED, ANGULAR NO. 4 (AASHTO M43) STONE".
2. STORMTECH COMPACTION REQUIREMENTS ARE MET FOR 'A' LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LIFTS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTOR.
3. WHERE INFILTRATION SURFACES MAY BE COMPROMISED BY COMPACTION, FOR STANDARD DESIGN LOAD CONDITIONS, A FLAT SURFACE MAY BE ACHIEVED BY RAKING OR DRAGGING WITHOUT COMPACTION EQUIPMENT. FOR SPECIAL LOAD DESIGNS, CONTACT STORMTECH FOR COMPACTION REQUIREMENTS.
4. ONCE LAYER 'C' IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER 'D' UP TO THE FINISHED GRADE. MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER 'C' OR 'D' AT THE SITE DESIGN ENGINEER'S DISCRETION.



NOTES:

1. CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
2. SC-740 CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
3. THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
4. PERIMETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION WALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
5. REQUIREMENTS FOR HANDLING AND INSTALLATION:
   - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
   - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
   - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, a) THE ARCH STIFFNESS CONSTANT AS DEFINED IN SECTION 6.2.8 OF ASTM F2418 SHALL BE GREATER THAN OR EQUAL TO 550 LBS/FT/%, AND b) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.

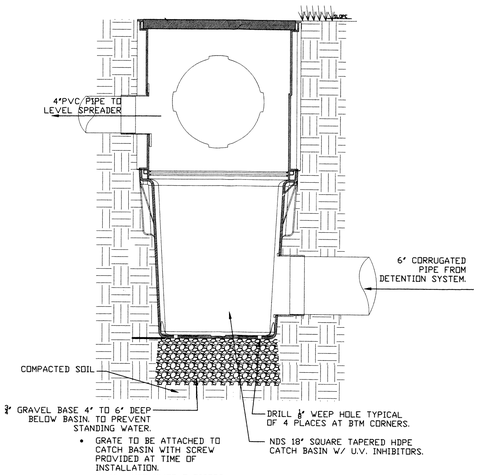
1 STORMTECH SC-740 CROSS SECTION DETAIL
SCALE: N.T.S.



NOTE:
- NDS ADAPTERS THAT FIT THIS BASIN ARE AS FOLLOWS. # 1242, # 1243, # 1245 # 1266 # 1888 & #1889 USE # 1206 IF PLUGGING AN OUTLET. INCLUDES (2) # 1890 REDUCER RINGS USED WITH SMALLER CONNECTIONS.

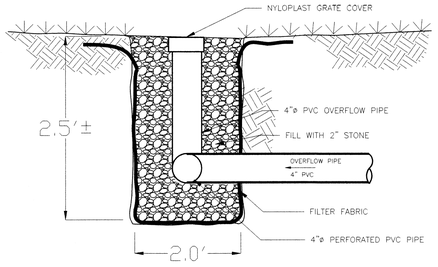
NDS 18" sq. CATCH BASIN PLUMBING CONNECTIONS.

4 TYP. INLET DISTRIBUTION BOX
SCALE: N.T.S.



- GRATE TO BE ATTACHED TO CATCH BASIN WITH SCREW PROVIDED AT TIME OF INSTALLATION.
- DO NOT USE OVER 5 RISERS WITH CATCH BASIN.

5 TYP. DISTRIBUTION BOX (OUTLET CONTROL)
SCALE: N.T.S.



6 TYP. LEVEL SPREADER DETAIL
SCALE: N.T.S.

CIVIL ENGINEER:

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CT PE LIC. NO. 23386
1 GILBERT STREET
SHELTON, CONNECTICUT 06484
TELEFAX: 203.922.8240

STATE OF CONNECTICUT — JOELVITO N. VILLALUZ — No.23386 — LICENSED PROFESSIONAL ENGINEER

SCALE : AS SHOWN

PENDING MUNICIPAL APPROVAL

DRAWING REVISIONS

NO.	DESCRIPTION	DATE

PROPOSED SITE PLAN FOR TWO-LOT SUBDIVISION AT 18 OPPER ROAD (LOT 4), STAMFORD, CT 06903

FOR DARIO AND MARIA PALLADINO 18 OPPER ROAD STAMFORD, CT 06903

DETAILS

SEPTEMBER 3, 2022

C102