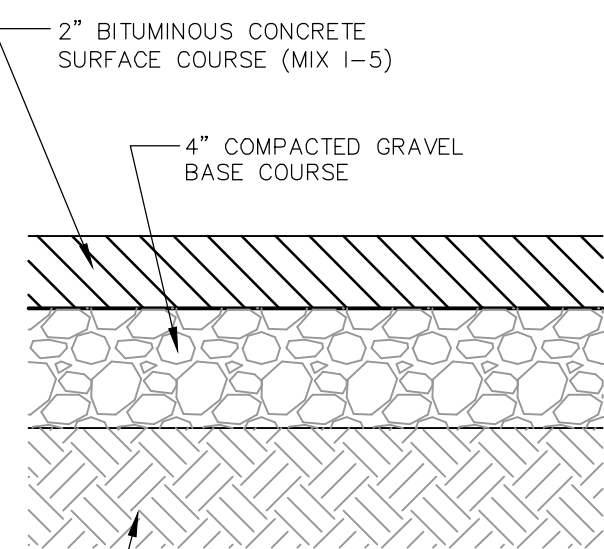


BLOCK 2401
LOT 27
DB 20782/1875

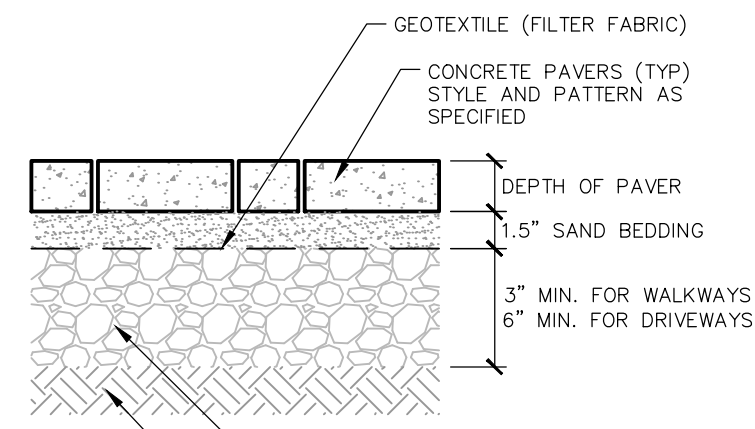
BLOCK 2401
LOT 29
DB 24163/337

BLOCK 2301
LOT 3.01
DB 3814/146

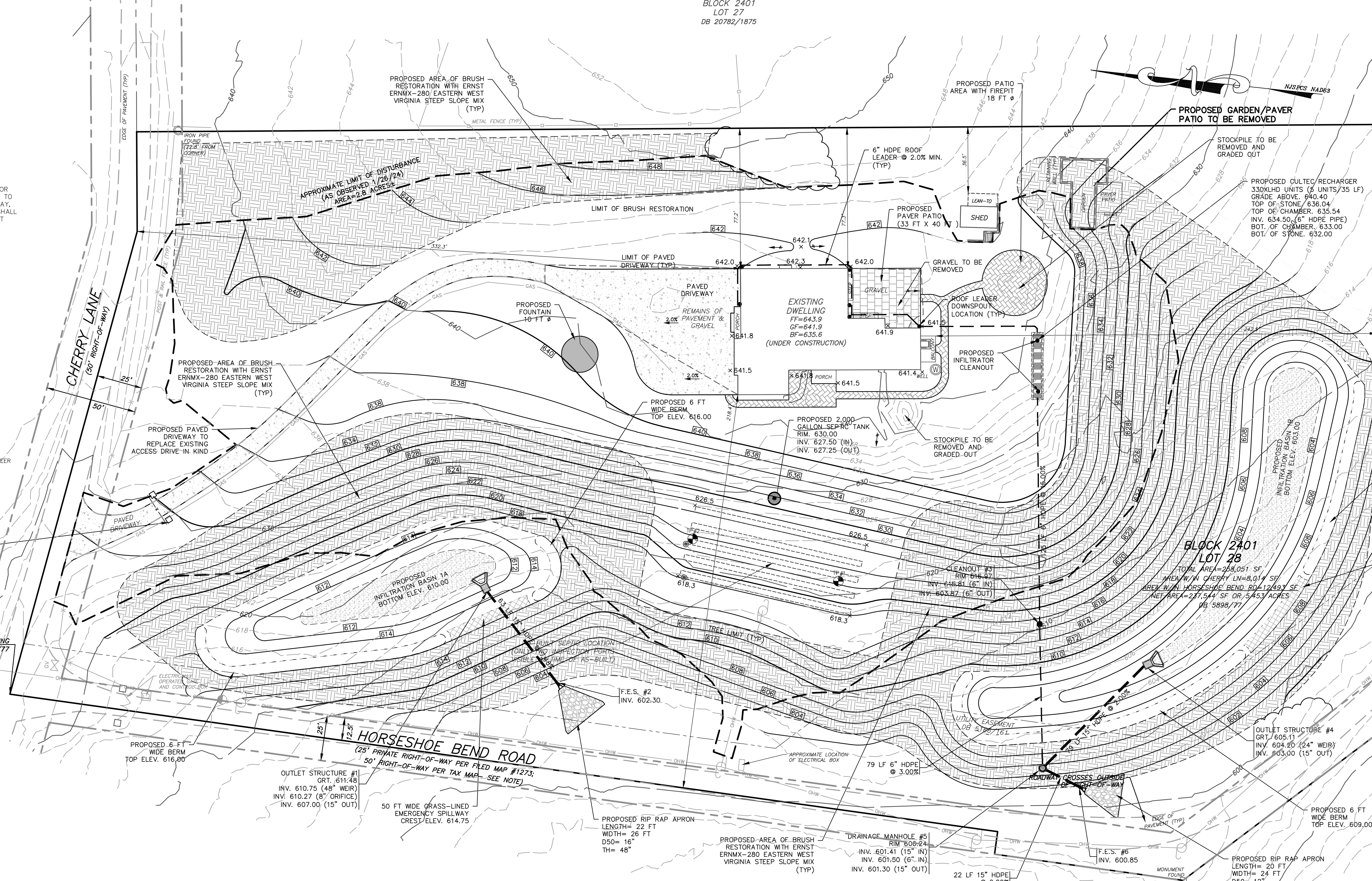
BLOCK 2301
LOT 3.02
DB 24524/1729



DRIVEWAY PAVEMENT SECTION
N.T.S.

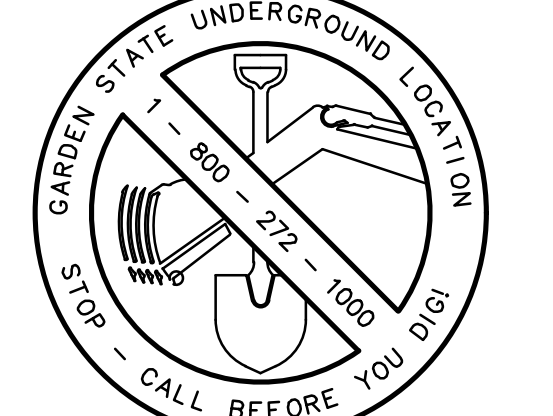


BRICK PAVER DETAIL
NOT TO SCALE

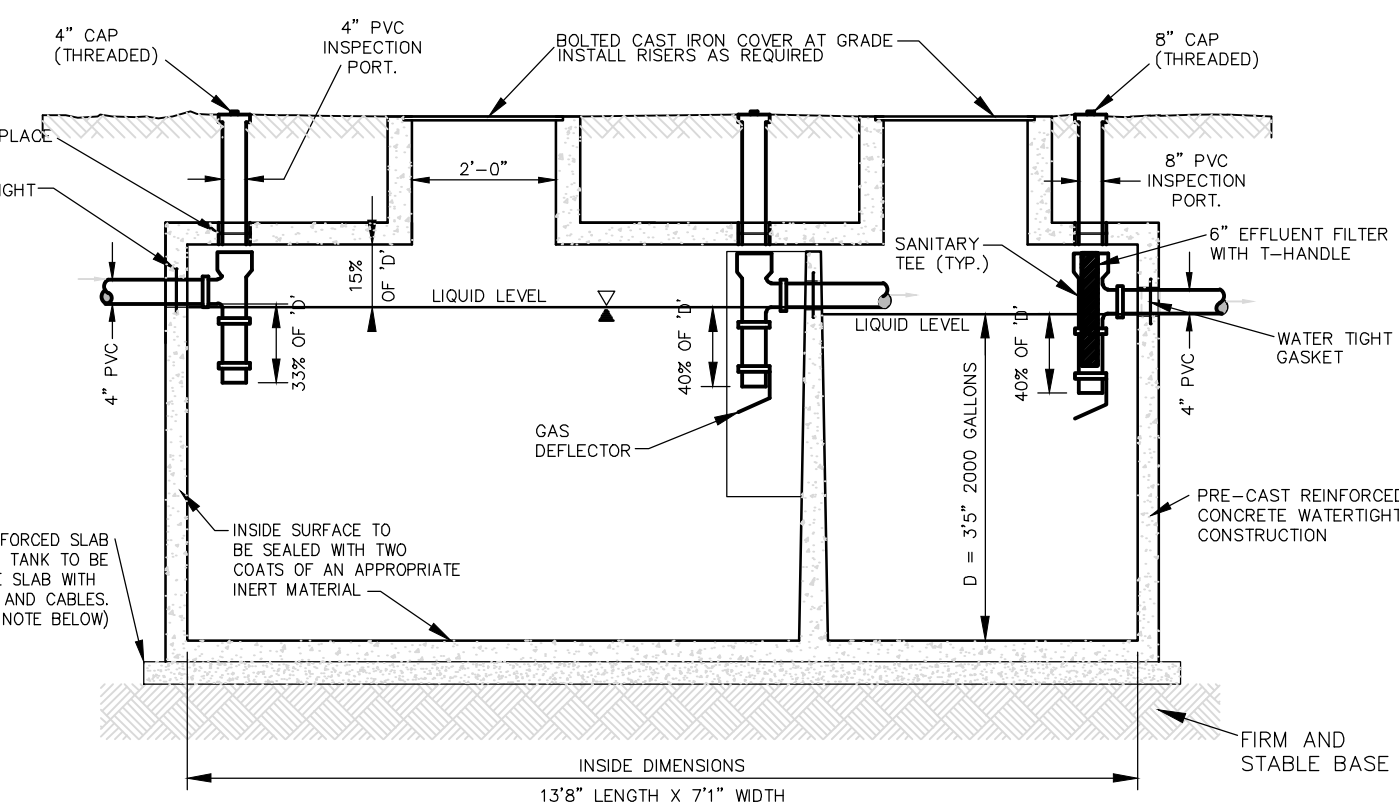


NOTE: UNLESS OTHERWISE DENOTED, ALL DISTURBED AREAS TO BE REVEGETATED AS OPEN SPACE/LAWN AREA

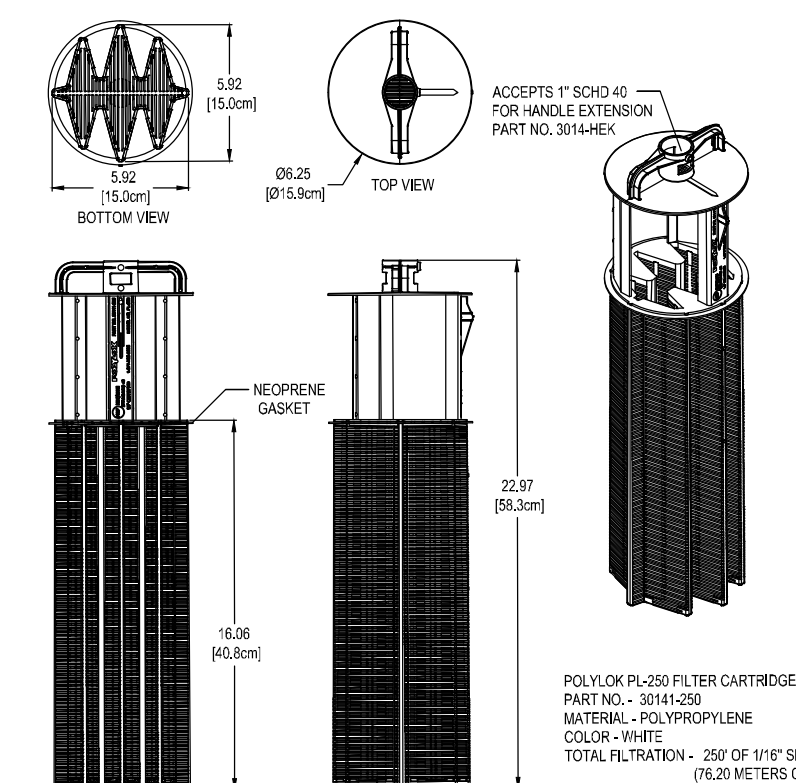
PROTECT YOURSELF
A PHONE CALL
CAN BE YOUR INSURANCE POLICY



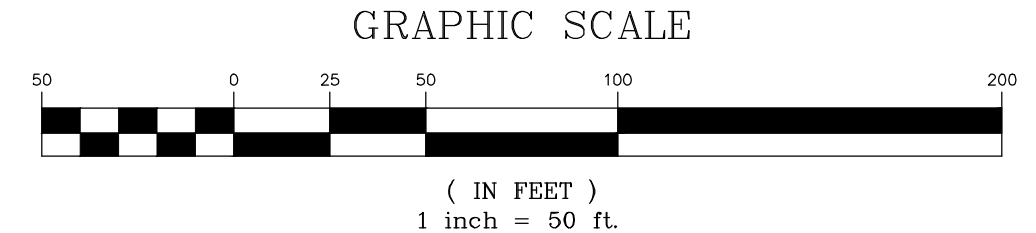
WHAT YOU DON'T KNOW CAN HURT YOU.
THE STATE OF NEW JERSEY REQUIRES NOTIFICATION OF EXCAVATORS, DESIGNERS, OR ANY PERSON PREPARING TO DISTURB THE EARTH'S SURFACE ANYWHERE IN THE STATE.



CONCRETE SEPTIC TANK DETAIL
2000 GALLON - 2 COMPARTMENT
NOT TO SCALE



6" POLYLOK EFFLUENT FILTER
NOT TO SCALE



DATE	REVISION
03/25/24	PER REVISED GRADING AND STEEP SLOPES APPLICATION
02/15/24	PER LAND USE BOARD APPLICATION SUBMISSION

DYKSTRA WALKER DESIGN GROUP
PROFESSIONAL ENGINEERS, PLANNERS & SURVEYORS
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PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE03788100

SITE LAYOUT, GRADING, & UTILITY PLAN
LOT GRADING & DEVELOPMENT PLAN
YEMAN RESIDENCE
BLOCK 2401, LOT 28
#465 CHERRY LANE
BOROUGH OF MENDHAM
MORRIS COUNTY NEW JERSEY

SCALE: 1" = 30'
JOB NO.: 22208
DRAWN BY: KLA
CHECKED BY: TFG
DATE: 02/07/2024
SHEET NO. 3 OF 10

J. dykstra PROJ:22-22208 VAR:Variance PLAN:VARIANCE PLAN 22208.dwg 03/25/24 12:10:08PM kieren Layout:LAYO

BLOCK 2101
LOT 1.06

BLOCK 2101
LOT 1.08

BLOCK 2101
LOT 1.07

BLOCK 2101
LOT 1

BLOCK 2401
LOT 27
DB 20782/1875

**LIMIT OF DISTURBANCE
AREA OF DISTURBANCE=
237,708 SF OR 5.457 ACRES**

PROPOSED GARDEN/PAVER
PATIO TO BE REMOVED

**TOPSOIL
STACKPILE
(TYP)**

BLOCK 2401
LOT 29
DB 24163/337

NOTE: UNLESS OTHERWISE
DENOTED, ALL DISTURBED
AREAS TO BE
REVEGETATED AS OPEN
SPACE/LAWN AREA

PROPOSED 6-FT
WIDE BERM
TOP ELEV. 609.00

50 FT WIDE GRASS-LINED
EMERGENCY SPILLWAY
CREST ELEV. 607.50

**BLOCK 2401
LOT 28**
TOTAL AREA = 268,051 SF
AREA IN CHERRY LN = 8,014 SF
AREA IN HORSESHOE BEND RD = 17,487 SF
NET AREA = 242,544 SF OR 5.453 ACRES
DB 5898/777

**TEMPORARY INLTER FILTER
PROTECTION DEVICE (TYP)**

PROPOSED 6 FT
WIDE BERM
TOP ELEV. 609.00

BLOCK 2301
LOT 4.03
DB 23459/347

BLOCK 2301
LOT 3.02
DB 24524/1729

BLOCK 2301
LOT 3.01
DB 3814/146

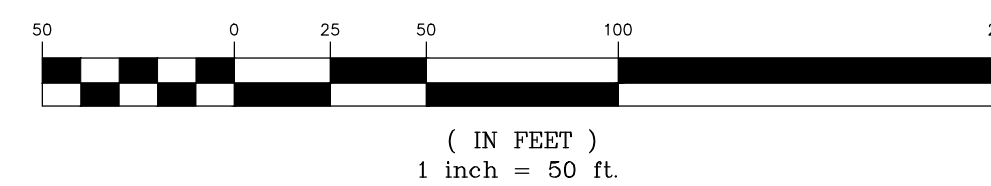
**EXISTING DRIVEWAY TO BE UTILIZED
AS A TEMPORARY STABILIZED
CONSTRUCTION ENTRANCE**

PROPOSED RIP RAP APRON
50 FT WIDE GRASS-
EMERGENCY SPILLWAY
CREST ELEV. 614.00
LENGTH= 22 LF
WIDTH= 26 FT
D50= 16"
TH= 48"

**TEMPORARY SEDIMENT
FILTER FENCE (TYP)**

PROPOSED RIP RAP APRON
LENGTH= 20 LF
WIDTH= 24 FT
D50= 12"
TH= 36"

GRAPHIC SCALE



**DYKSTRA WALKER
DESIGN DW GROUP PA**
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WWW.DYKSTRAWALKER.COM

THOMAS F. GRAHAM, P.E.
PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE03788100

SOIL EROSION & SEDIMENT CONTROL PLAN

LOT GRADING & DEVELOPMENT PLAN

YEMAN RESIDENCE

BLOCK 2401, LOT 28

#465 CHERRY LANE

BOROUGH OF MENDHAM

MORRIS COUNTY NEW JERSEY

DW

SCALE: 1" = 30'

JOB NO.: 22208

DRAWN BY: KLA

CHECKED BY: TFG

DATE: 02/07/2024

SHEET NO. 4 OF 10

BLOCK 2101
LOT 1.06

BLOCK 2101
LOT 1.08

BLOCK 2101
LOT 1.07

BLOCK 2101
LOT 1

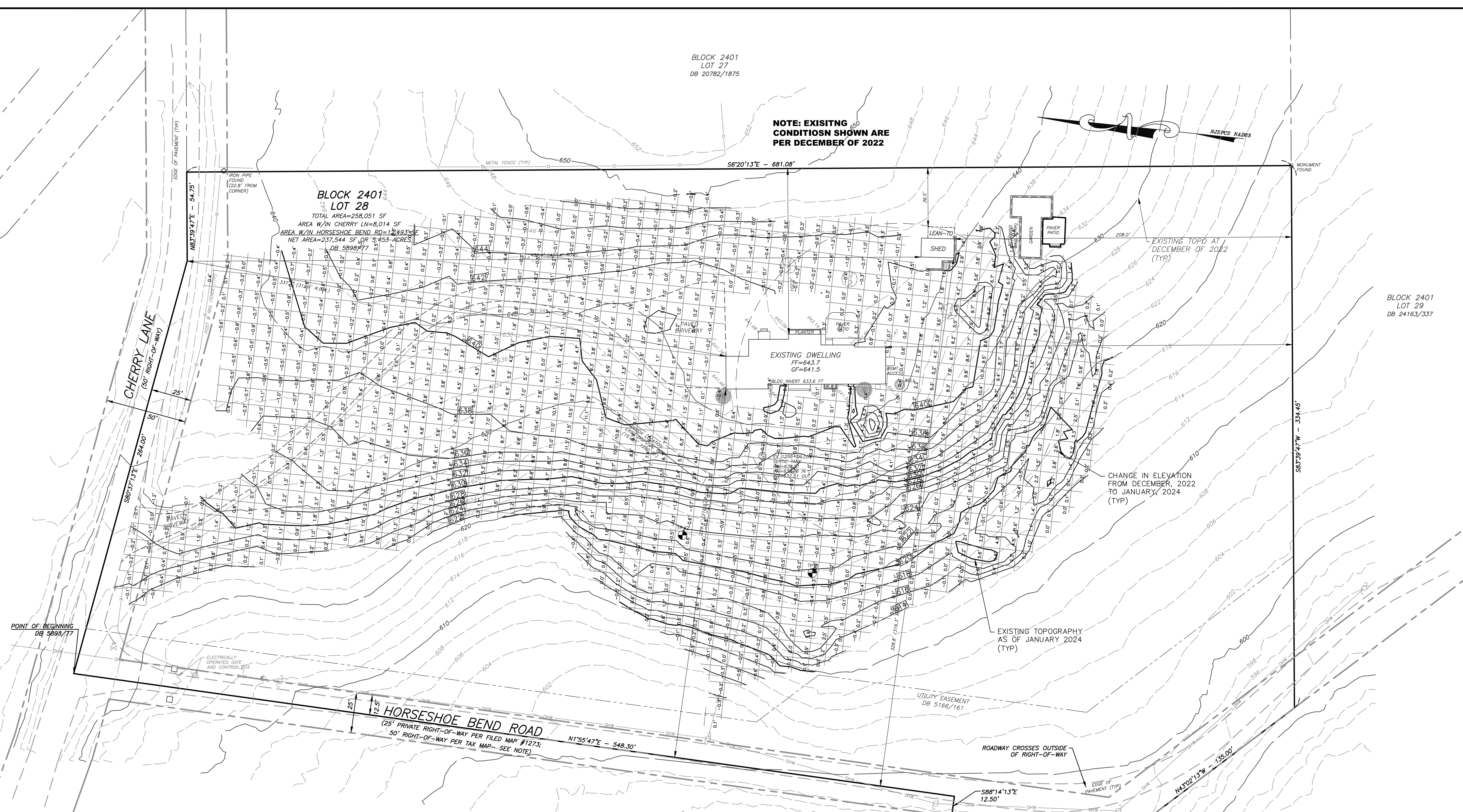
BLOCK 2401
LOT 27
DB 20782/1875

NOTE: EXISTING
CONDITIONS SHOWN ARE
PER DECEMBER OF 2022

BLOCK 2401
LOT 29
DB 24163/337

BLOCK 2301
LOT 4.03
DB 23459/347

BLOCK 2301
LOT 3.02
DB 24524/1729



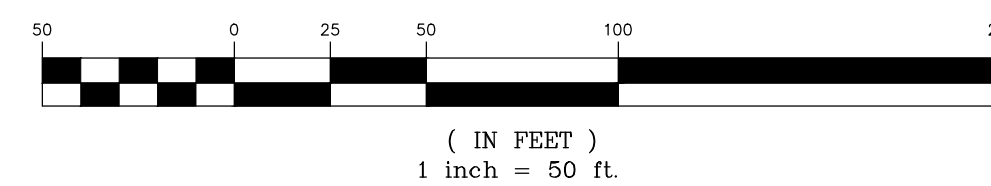
EARTHWORK QUANTITY CALCULATIONS

+ FILL (FROM EXISTING GRADE TO FINISHED GRADE):	7,760 CY ±
- CUT (FROM FINISHED GRADE TO EXISTING GRADE INCLUDING SLAB EXCAVATION):	740 CY ±
- CUT (BUILDING FOUNDATION)	440 CY ±
- CUT (DISPOSAL FIELD)	430 CY ±
TOTAL FILL (IMPORTED) AS OF JANUARY OF 2024:	6,150 CY ±

NOTE: EARTHWORK VOLUMES ARE APPROXIMATE. ACTUAL QUANTITIES WILL VARY DUE TO ACCURACY OF TOPOGRAPHY AND DUE TO STRIPPING LOSS AND EXPANSION AND/OR CONTRACTION OF MATERIAL DURING REMOVAL AND PROCESSING ACTIVITIES.

BLOCK 2301
LOT 3.01
DB 3814/146

GRAPHIC SCALE



03/25/24	PER REVISED GRADING AND STEEP SLOPES APPLICATION
02/15/24	PER LAND USE BOARD APPLICATION SUBMISSION
DATE	REVISION

DYKSTRA WALKER DESIGN GROUP
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 WWW.DYKSTRAWALKER.COM

THOMAS F. GRAHAM, P.E.
 PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE03788100

AS-BUILT EARTHWORK ANALYSIS
 LOT GRADING & DEVELOPMENT PLAN
VEMAN RESIDENCE
 BLOCK 2401, LOT 28
 #465 CHERRY LANE
 BOROUGH OF MENDHAM
 MORRIS COUNTY NEW JERSEY

DW
SCALE: 1" = 30'
JOB NO.: 22208
DRAWN BY: KLA
CHECKED BY: TFG
DATE: 02/07/2024
SHEET NO. 7 OF 10

BLOCK 2401
LOT 27
DB 20782/1875

NOTE: EXISTING
CONDITIONS SHOWN ARE
PER JANUARY OF 2024

PROPOSED GARDEN/PAVER
PATIO TO BE REMOVED

N.T.S.P.C.S. NAD83

BLOCK 2101
LOT 1.06

BLOCK 2101
LOT 1.08

BLOCK 2101
LOT 1.07

BLOCK 2101
LOT 1

BLOCK 2401
LOT 29
DB 24163/337

NOTE: UNLESS OTHERWISE
DENOTED, ALL DISTURBED
AREAS TO BE
REVEGETATED AS OPEN
SPACE/LAWN AREA

PROPOSED DECORATIVE
PILLARS AND
ENTRANCE GATE

POINT OF BEGINNING
DB 5898/77

HORSESHOE BEND ROAD
(25' PRIVATE RIGHT-OF-WAY PER FILED MAP #1273;
50' RIGHT-OF-WAY PER TAX MAP - SEE NOTE)

BLOCK 2401
LOT 28

CHANGE IN ELEVATION
FROM JANUARY 2024
TO PROPOSED
TOPOGRAPHY
(TYP.)

EARTHWORK QUANTITY CALCULATIONS

+ FILL (FROM EXISTING GRADE TO FINISHED GRADE):	12,690 CY ±
- CUT (FROM FINISHED GRADE TO EXISTING GRADE INCLUDING SLAB EXCAVATION):	6,820 CY ±
- CUT (BASIN SAND)	100 CY ±
- CUT (INFILTRATOR UNITS)	25 CY ±
- CUT (UTILITY TRENCHES)	50 CY ±
TOTAL FILL (IMPORTED) PROPOSED SINCE OF JANUARY OF 2024:	5,695 CY ±

NOTE: EARTHWORK VOLUMES ARE APPROXIMATE. ACTUAL QUANTITIES WILL VARY DUE TO ACCURACY OF TOPOGRAPHY AND DUE TO STRIPPING LOSS AND EXPANSION AND/OR CONTRACTION OF MATERIAL DURING REMOVAL AND PROCESSING ACTIVITIES.

NET EARTHWORK ANALYSIS

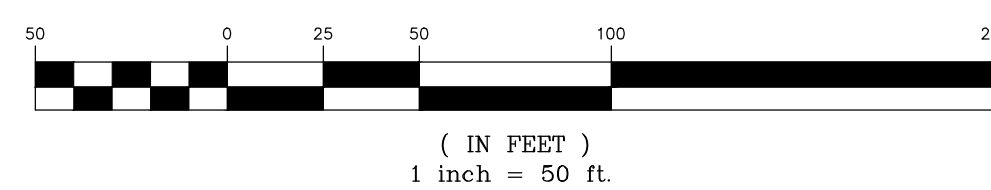
TOTAL EXISTING IMPORT: 6,150 CY ±
PROPOSED ADDITIONAL IMPORT: 5,695 CY ±
NET SOIL MOVEMENT: 6,150 CY ± + 5,695 CY ± = 11,845 CY ± (IMPORTED)

BLOCK 2301
LOT 3.01
DB 3814/146

BLOCK 2301
LOT 4.03
DB 23459/347

BLOCK 2301
LOT 3.02
DB 24524/1729

GRAPHIC SCALE



03/25/24	PER REVISED GRADING AND STEEP SLOPES APPLICATION
02/15/24	PER LAND USE BOARD APPLICATION SUBMISSION
DATE	REVISION

DYKSTRA WALKER
DESIGN DW GROUP
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WWW.DYKSTRAWALKER.COM

THOMAS F. GRAHAM, P.E.
PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE03788100

PROPOSED EARTHWORK ANALYSIS
LOT GRADING & DEVELOPMENT PLAN
YEMAN RESIDENCE
BLOCK 2401, LOT 28
#465 CHERRY LANE
BOROUGH OF MENDHAM
MORRIS COUNTY NEW JERSEY

SCALE: 1" = 30'
JOB NO.: 22208
DRAWN BY: KLA
CHECKED BY: TFG
DATE: 02/07/2024
SHEET NO. 8 OF 10

MORRIS COUNTY SOIL CONSERVATION DISTRICT
SOIL EROSION AND SEDIMENT CONTROL NOTES:

- ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, AND WILL BE IN PLACE PRIOR TO ANY MAJOR SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- ANY DISTURBED AREA 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 AREAS WILL BE MULCHED WITH STRAW OR HAY AND TACKED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS. SEE NOTE 21 BELOW.
- PERMANENT VEGETATION IS TO BE ESTABLISHED ON EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH IS TO BE USED FOR PROTECTION UNTIL VEGETATION IS ESTABLISHED. SEE NOTE 22 BELOW.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS (STEEP SLOPES, SANDY SOILS, WET CONDITIONS) SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN ACCORDANCE WITH NOTE 21 BELOW.
- TEMPORARY DIVERSION BERMS ARE TO BE INSTALLED ON ALL CLEARED ROADWAYS AND EASEMENT AREAS. SEE THE DIVERSION DETAIL.
- PERMANENT SEEDING AND STABILIZATION TO BE IN ACCORDANCE WITH THE "STANDARDS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION COVER" SPECIFIED RATES AND LOCATIONS SHALL BE ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN.
- THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SO THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
- ALL SEDIMENTATION STRUCTURES (SILT FENCE, INLET FILTERS, AND SEDIMENT BASINS) WILL BE INSPECTED AND MAINTAINED DAILY.
- STOCKPILES SHALL NOT BE LOCATED WITHIN 50' OF A FLOODPLAIN, SLOPE, DRAINAGE FACILITY, OR ROADWAY. ALL STOCKPILE BASES SHALL HAVE A SILT FENCE PROPERLY ENTRENCHED AT THE TOE OF SLOPE.
- A STABILIZED CONSTRUCTION ACCESS WILL BE INSTALLED, WHENEVER AN EARTHEN ROAD INTERSECTS WITH A PAVED ROAD. SEE THE STABILIZED CONSTRUCTION ACCESS DETAIL AND CHART FOR DIMENSIONS.
- ALL NEW ROADWAYS WILL BE TREATED WITH SUITABLE SUBBASE UPON ESTABLISHMENT OF FINAL GRADE ELEVATIONS.
- PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
- BEFORE DISCHARGE POINTS BECOME OPERATIONAL, ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED AS REQUIRED.
- ALL DEWATERING OPERATIONS MUST BE DISCHARGED DIRECTLY INTO A SEDIMENT FILTER AREA. THE FILTER SHOULD BE COMPOSED OF A FABRIC OR APPROVED MATERIAL. SEE THE DEWATERING DETAIL.
- ALL SEDIMENT BASINS WILL BE CLEANED WHEN THE CAPACITY HAS BEEN REDUCED BY 50%. A CLEAN OUT ELEVATION WILL BE IDENTIFIED ON THE PLAN AND A MARKER INSTALLED ON THE SITE.
- DURING AND AFTER CONSTRUCTION, THE APPLICANT WILL BE RESPONSIBLE FOR THE MAINTENANCE AND UPKEEP OF THE DRAINAGE STRUCTURES, VEGETATIVE COVER, AND ANY OTHER MEASURES DEEMED APPROPRIATE BY THE DISTRICT. SAID RESPONSIBILITY WILL END WHEN COMPLETED WORK IS APPROVED BY THE MORRIS COUNTY SOIL CONSERVATION DISTRICT.
- ALL TREES OUTSIDE THE DISTURBANCE LIMIT INDICATED ON THE SUBJECT PLAN OR THOSE TREES WITHIN THE DISTURBANCE AREA WHICH ARE DESIGNATED TO REMAIN AFTER CONSTRUCTION ARE TO BE PROTECTED WITH TREE PROTECTION DEVICES. SEE THE TREE PROTECTION DETAIL.
- THE MORRIS COUNTY SOIL CONSERVATION DISTRICT MAY REQUEST ADDITIONAL MEASURES TO MINIMIZE ON-SITE OR OFF-SITE EROSION PROBLEMS DURING CONSTRUCTION.
- THE MORRIS COUNTY SOIL CONSERVATION DISTRICT MUST BE NOTIFIED, IN WRITING, AT LEAST 72 HOURS PRIOR TO ANY LAND DISTURBANCE, AND A PRE-CONSTRUCTION MEETING HELD.
- CONTRACTOR TO SET UP A MEETING WITH THE INSPECTOR FOR PERIODIC INSPECTIONS OF THE TEMPORARY SEDIMENT BASIN PRIOR TO AND DURING ITS CONSTRUCTION.

21. TOPSOIL STOCKPILE PROTECTION

- APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT.
- APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
- APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1000 SQ. FT. AND ANNUAL RYEGRASS AT 1 LB. PER 1000 SQ. FT.
- MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
- APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
- PROPERLY ENTRENCH A SILT FENCE AT THE BOTTOM OF THE STOCKPILE.

22. TEMPORARY STABILIZATION SPECIFICATIONS

- APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT.
- APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
- APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1000 SQ. FT. AND ANNUAL RYEGRASS AT 1 LB. PER 1000 SQ. FT.
- MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
- APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.

23. PERMANENT STABILIZATION SPECIFICATIONS

- APPLY TOPSOIL TO A DEPTH OF 5 INCHES (UNSETTLED).
- APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT. AND WORK FOUR INCHES INTO SOIL.
- APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
- APPLY HARD FESCUE SEED AT 2.7 LBS. PER 1000 SQ. FT. AND CREEPING RED FESCUE SEED AT 0.7 LBS PER 1000 SQ. FT. AND PERENNIAL RYEGRASS SEED AT 0.25 LBS PER 1000 SQ. FT.
- MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
- APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.

***NOTE: 72 HOURS PRIOR TO ANY SOIL DISTURBANCE, NOTICE IN WRITING, SHALL BE GIVEN TO THE MORRIS COUNTY SOIL CONSERVATION DISTRICT AND A PRE-CONSTRUCTION MEETING HELD.**

SEQUENCE OF CONSTRUCTION

- INSTALL EROSION CONTROL MEASURES INCLUDING SILT FENCE, ETC AS NOTED ON PLAN. DURATION = 1 DAY.
- CLEAR AND GRUB PROPERTY. DURATION = 5 DAYS.
- STRIP AND STOCKPILE TOPSOIL, INSTALL SILT FENCE AROUND STOCKPILES, PERFORM TEMPORARY STABILIZATION OF STOCKPILES. DURATION = 3 DAYS.
- CONSTRUCT SITE IMPROVEMENTS. DURATION = 260 DAYS.
- INSTALL PERMANENT STABILIZATION. DURATION = 5 DAYS.
- REMOVE TEMPORARY SOIL EROSION MEASURES AFTER PERMANENT STABILIZATION IS ESTABLISHED AND APPROVED BY SOIL CONSERVATION DISTRICT. DURATION = 2 DAYS.

TOTAL DURATION = 276 DAYS.

STANDARD FOR DUST CONTROL

DEFINITION

THE CONTROL OF DUST ON CONSTRUCTION SITES AND ROADS.

PURPOSE

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCED ON-SITE AND OFF-SITE DAMAGE AND HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.

CONDITION WHERE PRACTICE APPLIES

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. CONSULT WITH LOCAL MUNICIPAL ORDINANCES ON ANY RESTRICTIONS.

WATER QUALITY ENHANCEMENT

SEDIMENTS DEPOSITED AS "DUST" ARE OFTEN FINE, COLLOIDAL MATERIAL WHICH IS EXTREMELY DIFFICULT TO REMOVE FROM WATER ONCE IT BECOMES SUSPENDED. USE OF THIS STANDARD WILL HELP TO CONTROL THE GENERATION OF DUST FROM CONSTRUCTION SITES AND SUBSEQUENT BLOWING AND DEPOSITION INTO LOCAL SURFACE WATER RESOURCES.

PLANNING CRITERIA

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

MULCHES - SEE STANDARD OF STABILIZATION WITH MULCHES ONLY, PG. 5-1

VEGETATIVE COVER - SEE STANDARD FOR TEMPORARY VEGETATIVE COVER, PG. 7-1.

PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION PG. 4-1, AND PERMANENT STABILIZATION WITH SOD, PG. 6-1.

SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

TABLE 16-1: DUST CONTROL MATERIALS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE (PAM) - SPRAY ON	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD, P. 26-1.		
POLYACRYLAMIDE (PAM) - DRY SPREAD			
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1,200

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 FLOWING ON WINDWARD SIDE 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 WATES, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

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

STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

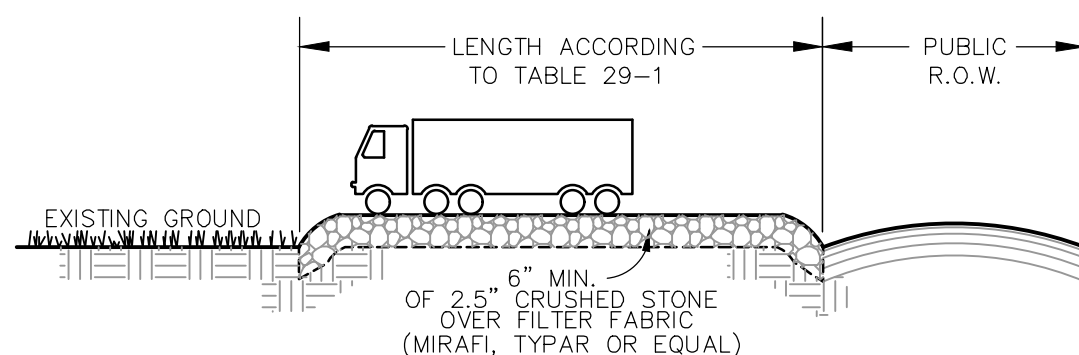
SOILS TABLE

SOIL SYMBOL	SOIL SERIES	HYDROLOGIC SOIL GROUP
GkaaC	GLADSTONE GRAVELLY LOAM, 8 TO 15 PERCENT SLOPES	B
Gkaod	GLADSTONE GRAVELLY LOAM, 15 TO 25 PERCENT SLOPES	B

PER USDA WEB SOIL SURVEY

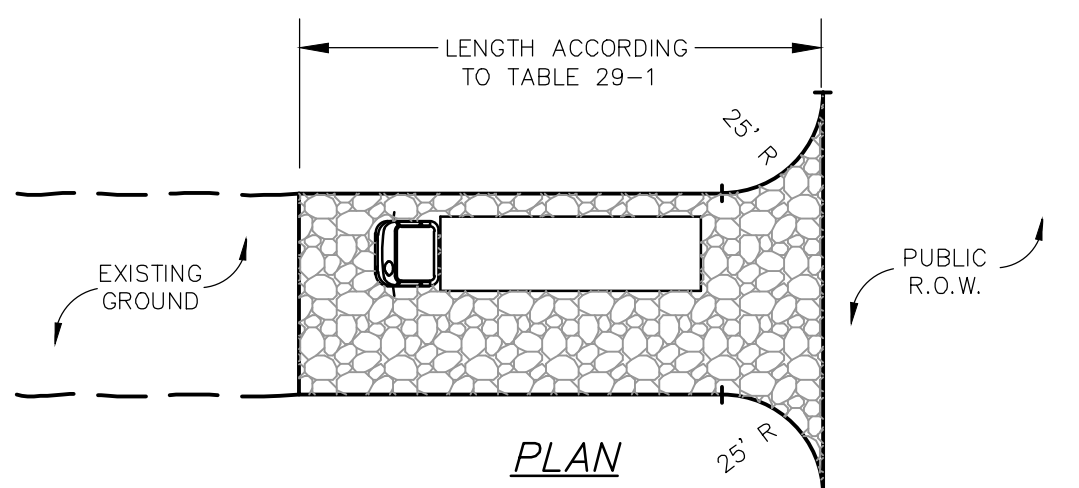
TABLE 29-1

PERCENTAGE SLOPE OF ROADWAY	LENGTH REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0-2%	50 FT	100 FT
2-5%	100 FT	200 FT
> 5%	ENTIRE SURFACE STABILIZED WITH F.A.B.C. AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING BODY.	

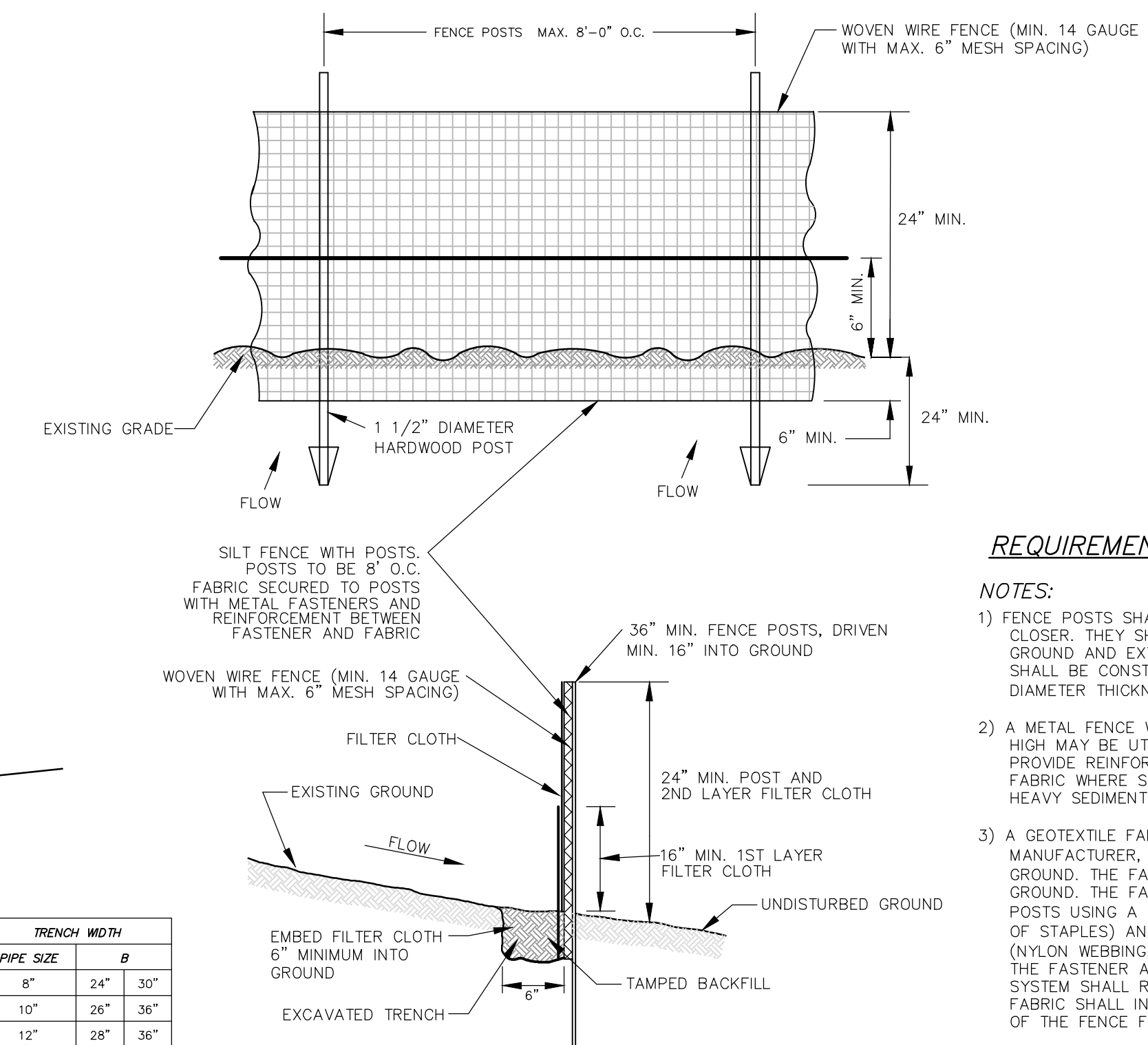


NOTE: PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE

SECTION



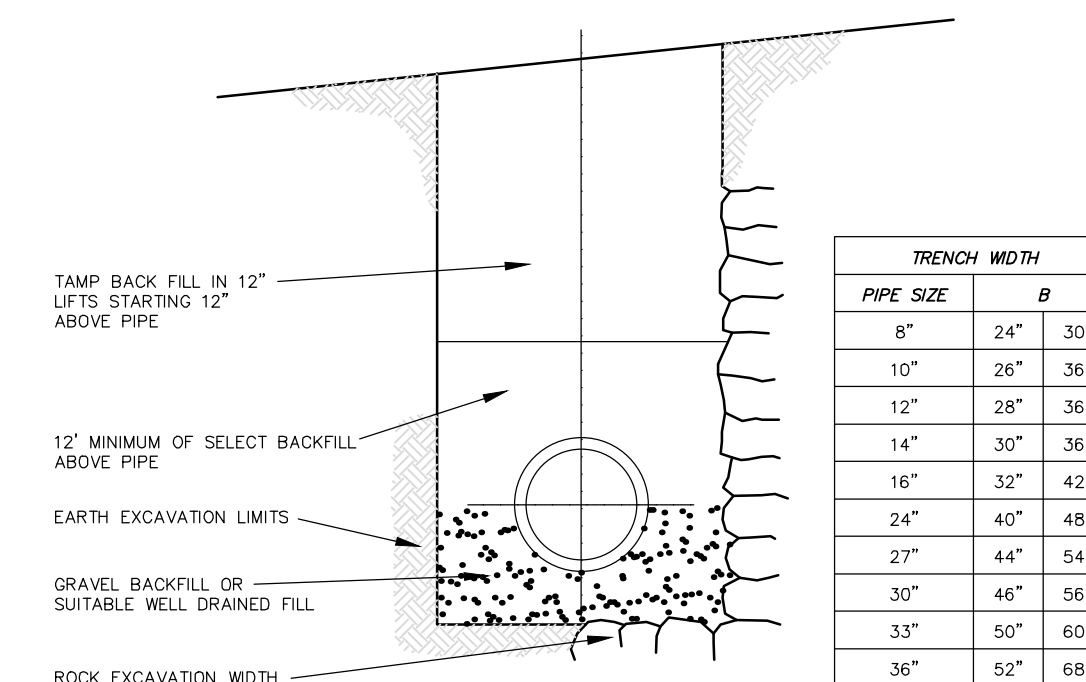
STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE



REQUIREMENTS FOR SILT FENCE

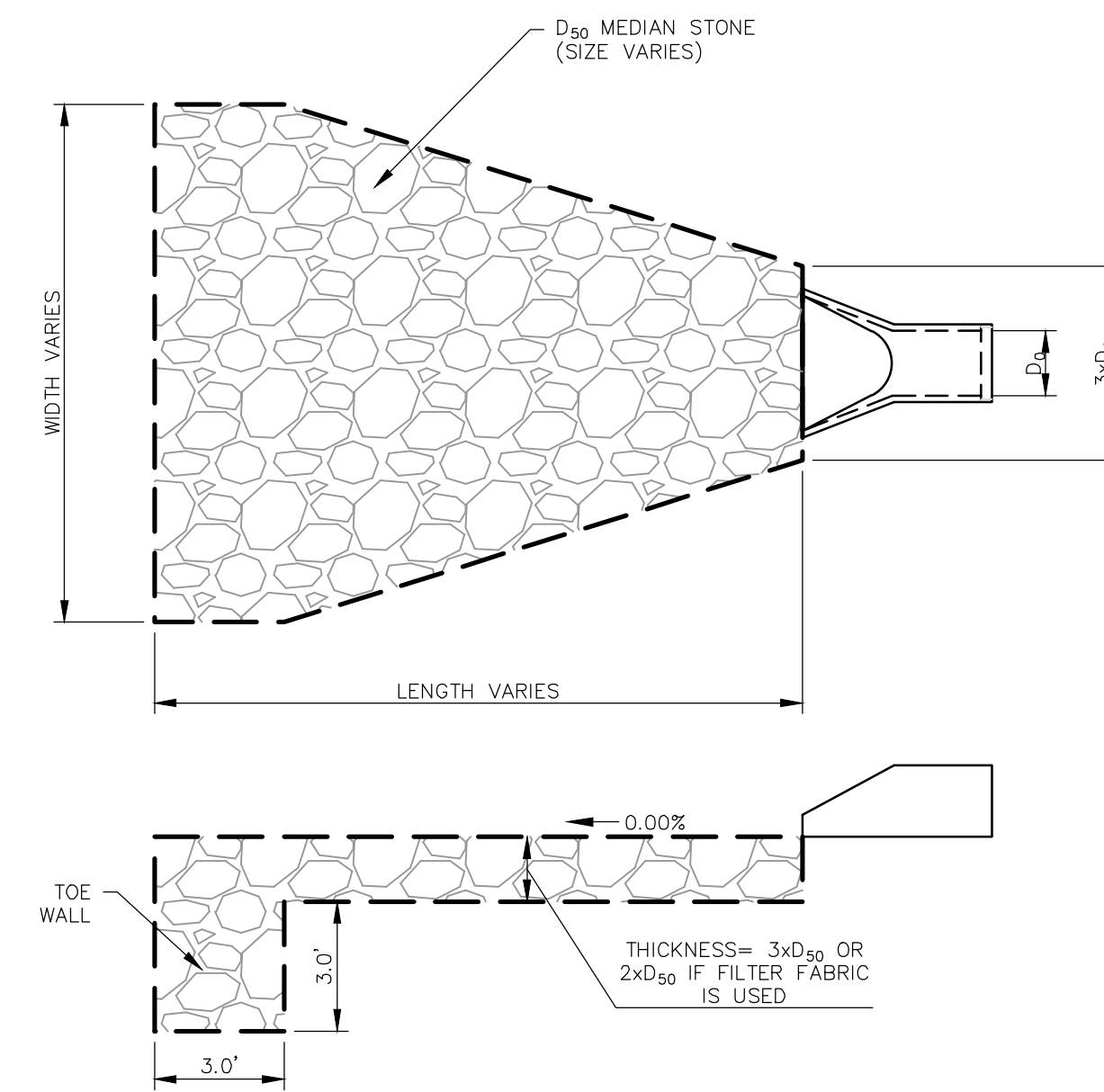
NOTES:

- FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER OR CLOSER. THEY SHALL EXTEND AT LEAST 2 FEET INTO THE GROUND AND EXTEND AT LEAST 2 FEET ABOVE GROUND. POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER THICKNESS OF 1 1/2".
- A METAL FENCE WITH 6" OR SMALLER OPENINGS AND AT LEAST 2" HIGH MAY BE UTILIZED, FASTENED TO THE FENCE POSTS, TO PROVIDE REINFORCEMENT AND SUPPORT TO THE GEOTEXTILE FABRIC WHERE SPACE FOR OTHER PRACTICES IS LIMITED AND HEAVY SEDIMENT LOADING IS EXPECTED.
- A GEOTEXTILE FABRIC, RECOMMENDED FOR SUCH USE BY THE MANUFACTURER, SHALL BE BURIED AT LEAST 6" DEEP IN THE GROUND. THE FABRIC SHALL EXTEND AT LEAST 2' ABOVE THE GROUND. THE FABRIC MUST BE SECURELY FASTENED TO THE POSTS USING A SYSTEM CONSISTING OF METAL FASTENERS (NAILS OF STAPLES) 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.

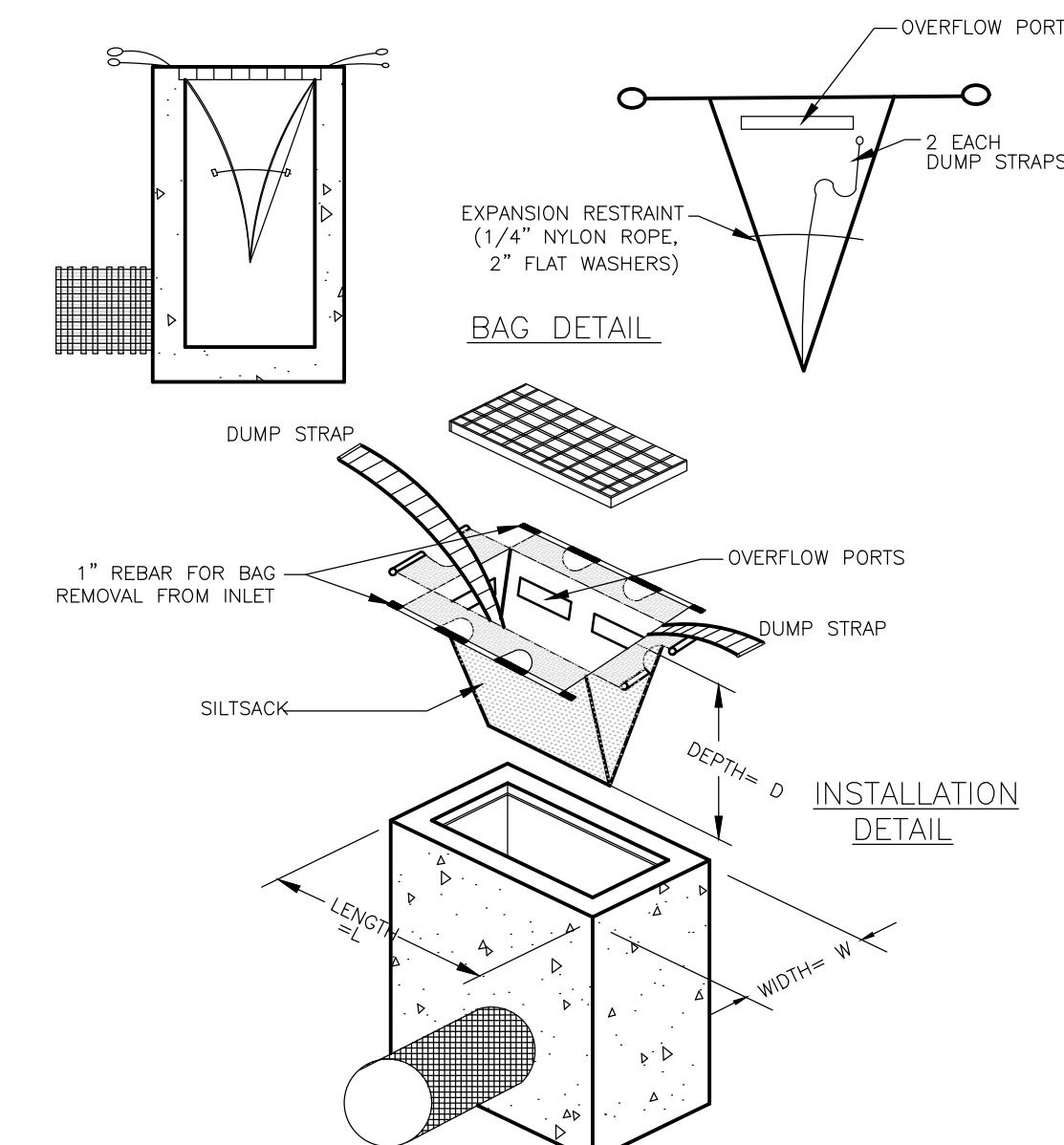


TRENCH DETAIL-STORM SEWER
N.T.S.

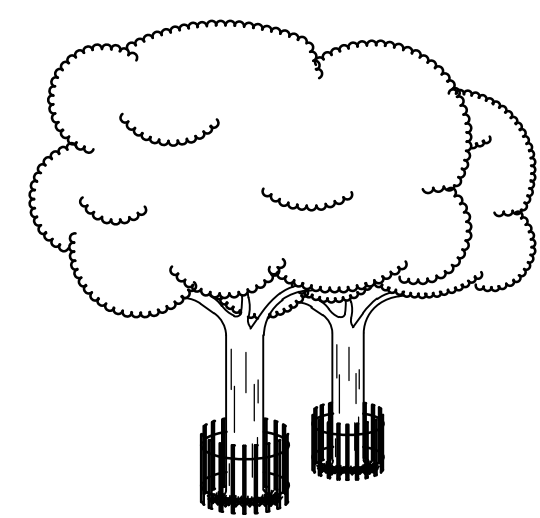
(ALL TRENCH EXCAVATION SHALL MEET OSHA TRENCHING REQUIREMENTS)



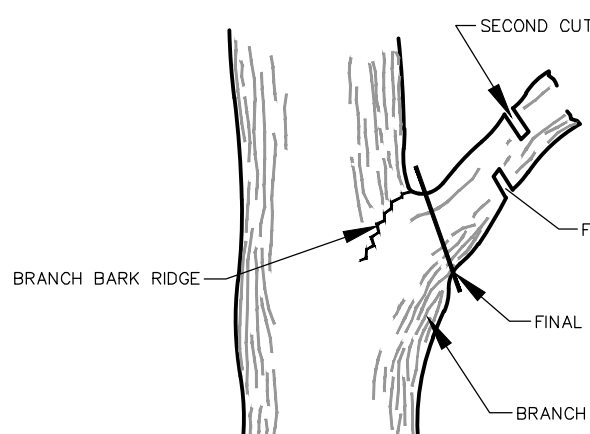
RIP-RAP APRON
NOT TO SCALE



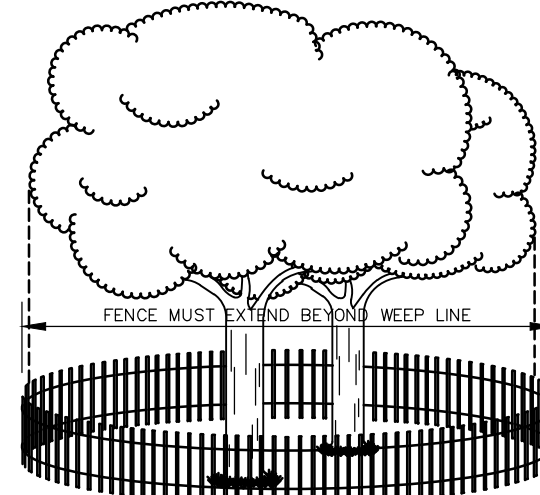
DETAIL OF TEMPORARY STORM SEWER INLET PROTECTION
NOT TO SCALE



INCORRECT FENCING



TREE LIMB REMOVAL



CORRECT FENCING

TREE PROTECTION
NOT TO SCALE

DYKSTRA WALKER DESIGN GROUP, P.A.
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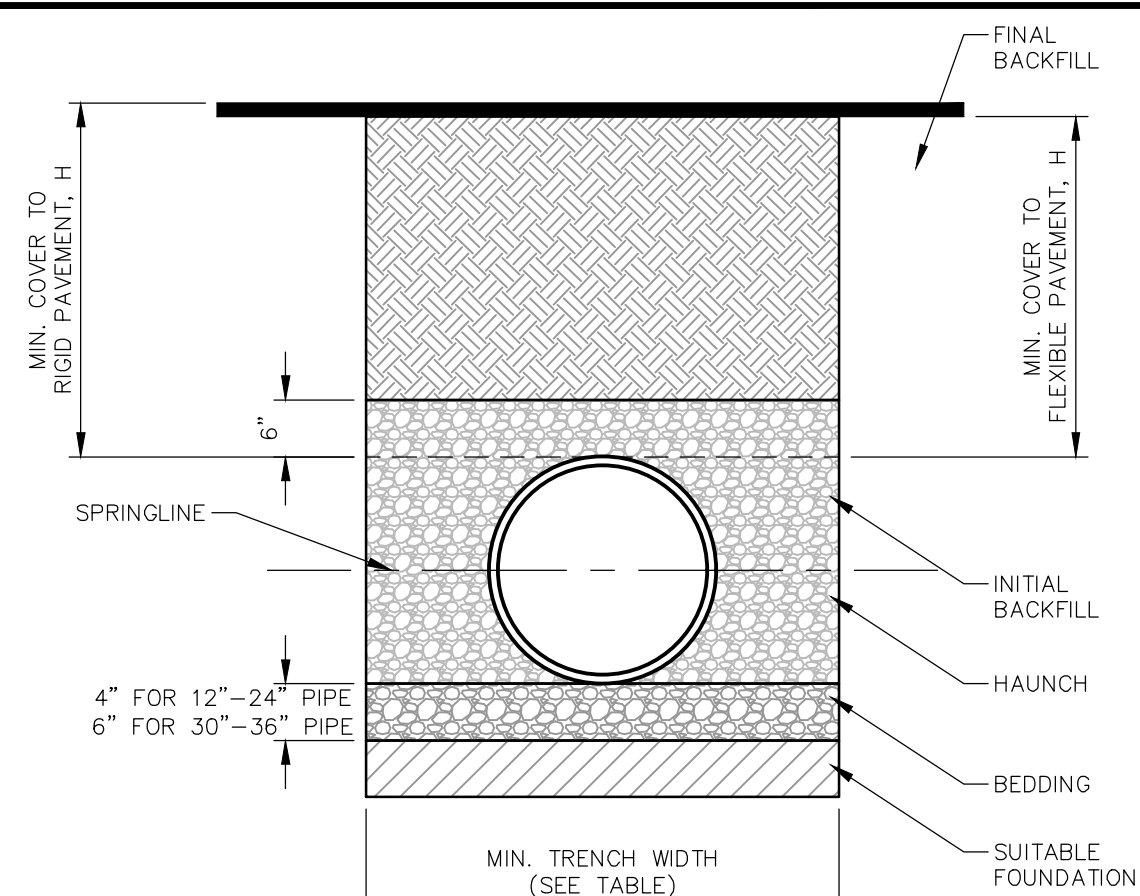
THOMAS F. GRAHAM, P.E.
 PROFESSIONAL ENGINEER, N.J. LIC. NO. 24GE03788100

CONSTRUCTION NOTES & DETAILS

LOT GRADING & DEVELOPMENT PLAN
VEMAN RESIDENCE
 BLOCK 2401, LOT 28
 #465 CHERRY LANE
 BOROUGH OF MENDHAM
 MORRIS COUNTY NEW JERSEY

DW

SCALE: AS NOTED
 JOB NO.: 22208
 DRAWN BY: KLA
 CHECKED BY: TFG
 DATE: 02/07/2024
 SHEET NO. 9 OF 10



RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	26"
10"	28"
12"	30"
15"	34"
18"	39"
24"	48"
30"	56"
36"	64"
42"	72"
48"	80"
54"	88"
60"	96"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	H-25 SURFACE LIVE LOAD CONDITION	HEAVY CONSTRUCTION (75T AXLE LOAD)*
12"-48"	12"	48"
54"-60"	24"	60"

*VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

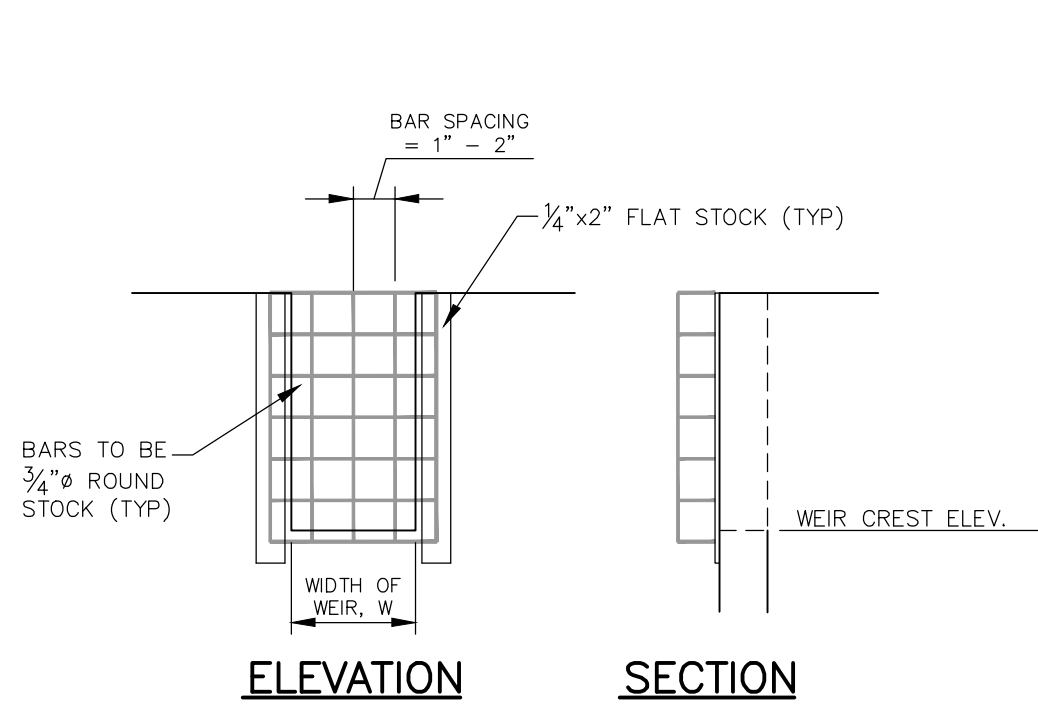
MINIMUM RECOMMENDED COVER BASED ON RAILWAY LOADING CONDITIONS

PIPE DIAM.	COOPER E-80**
12"-48"	36"
54"-60"	48"

**COVER IS MEASURED FROM TOP OF PIPE TO BOTTOM OF RAILWAY TIE
***E-80 COVER REQUIREMENTS, ARE ONLY APPLICABLE TO ASTM F 2306 PIPE.

HDPE PIPE BEDDING DETAIL
NOT TO SCALE

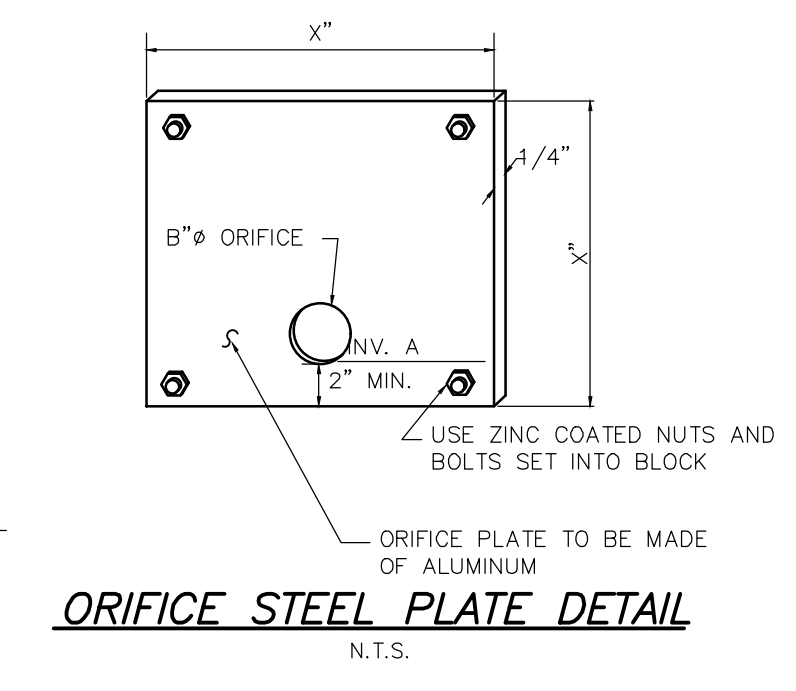
- NOTES:**
- ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
 - MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
 - FOUNDATION:** WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER, AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
 - BEDDING:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" FOR 4"-24"; 6" FOR 30"-60".
 - INITIAL BACKFILL:** SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
 - MINIMUM COVER:** MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION, FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF PAVEMENT OR TO TOP OF RIGID PAVEMENT.
 - ALL TRENCH EXCAVATION SHALL MEET OSHA TRENCHING REQUIREMENTS



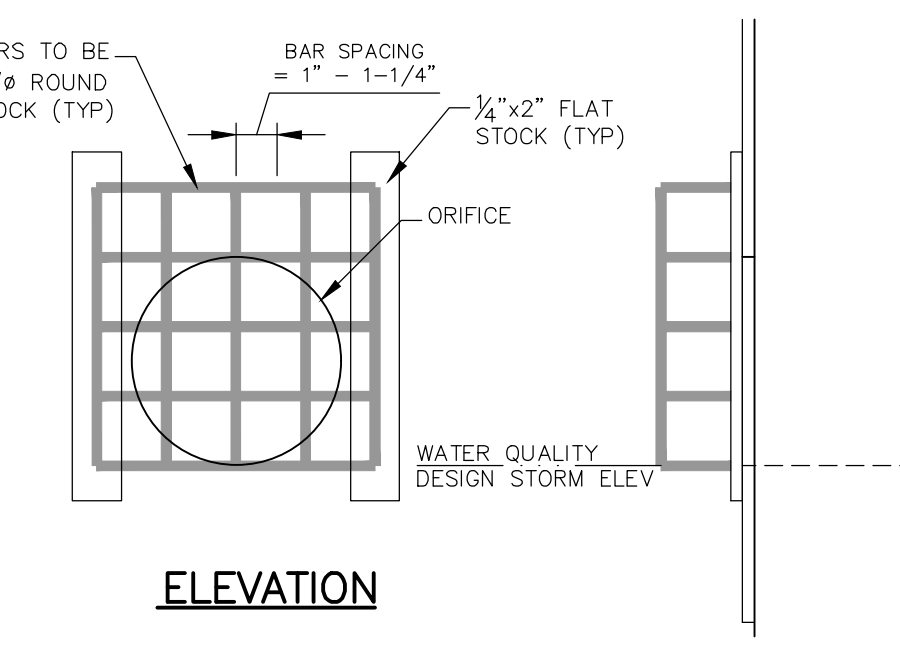
TRASH RACK AT WEIR
N.T.S.

TRASH RACK NOTES:

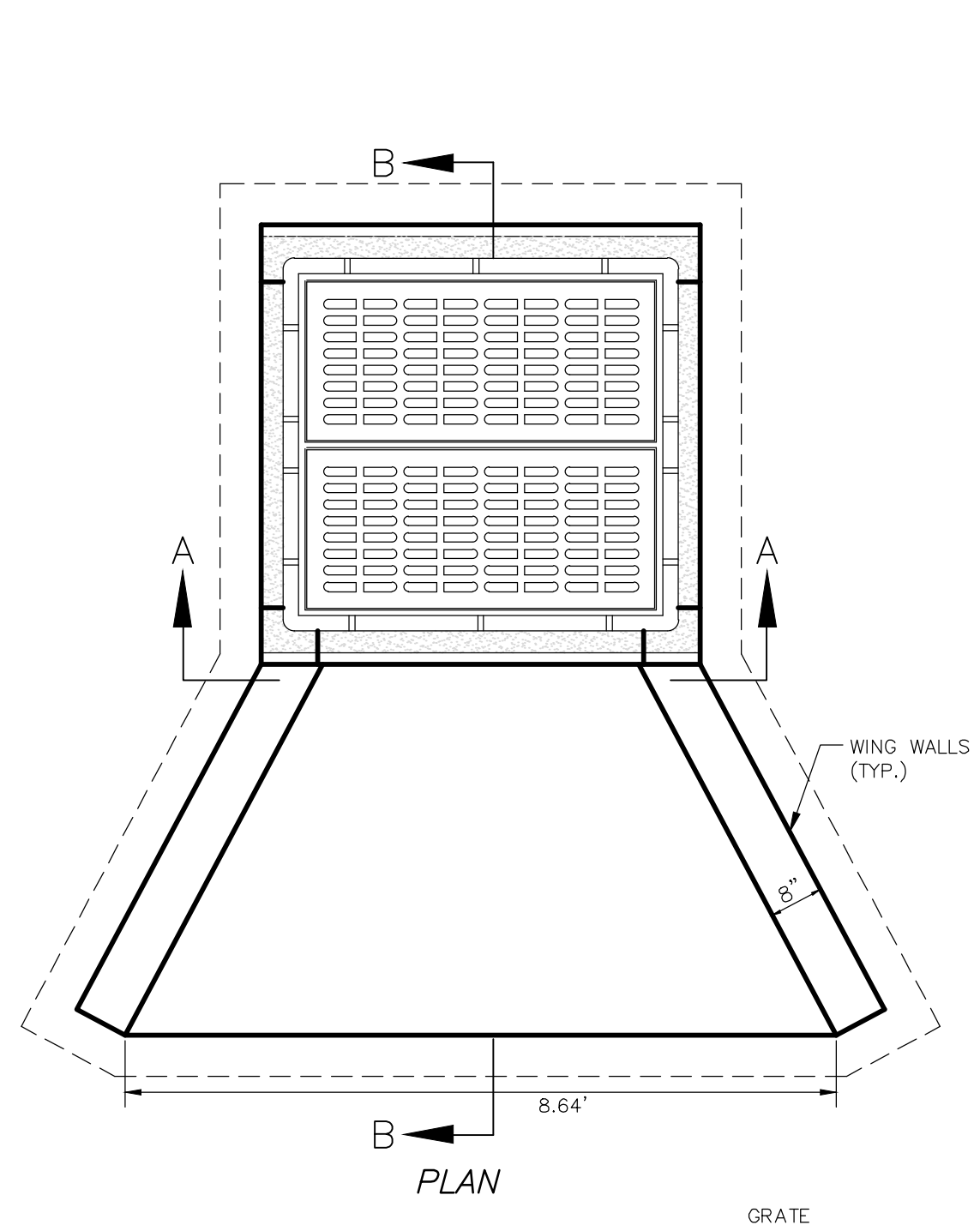
- TRASH RACKS SHALL BE INSTALLED AT ALL INTAKE LOCATIONS OF THE OUTLET STRUCTURE (WEIR, ORIFICE, ETC.).
- PARALLEL BARS ABOVE THE WATER QUALITY DESIGN ELEVATION SHALL BE NO GREATER THAN 1/2 THE WIDTH OF THE WEIR, AND 1/2 THE DIAMETER OF THE ORIFICE. IN NO CASE SHALL THE SPACING BE LESS THAN 1" OR GREATER THAN 6".
- PARALLEL BARS BELOW THE WATER QUALITY DESIGN ELEVATION SHALL BE 1" OH-CENTER.
- TRASH RACK SHALL BE CONSTRUCTED OF RIGID, CORROSION-RESISTANT MATERIAL.
- TRASH RACK SHALL BE ABLE TO WITHSTAND A PERPENDICULAR LIVE LOAD OF 300 LBS/sq. SHOP DRAWINGS SHALL BE PROVIDED TO DESIGN ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.



ORIFICE STEEL PLATE DETAIL
N.T.S.



TRASH RACK AT ORIFICE
N.T.S.

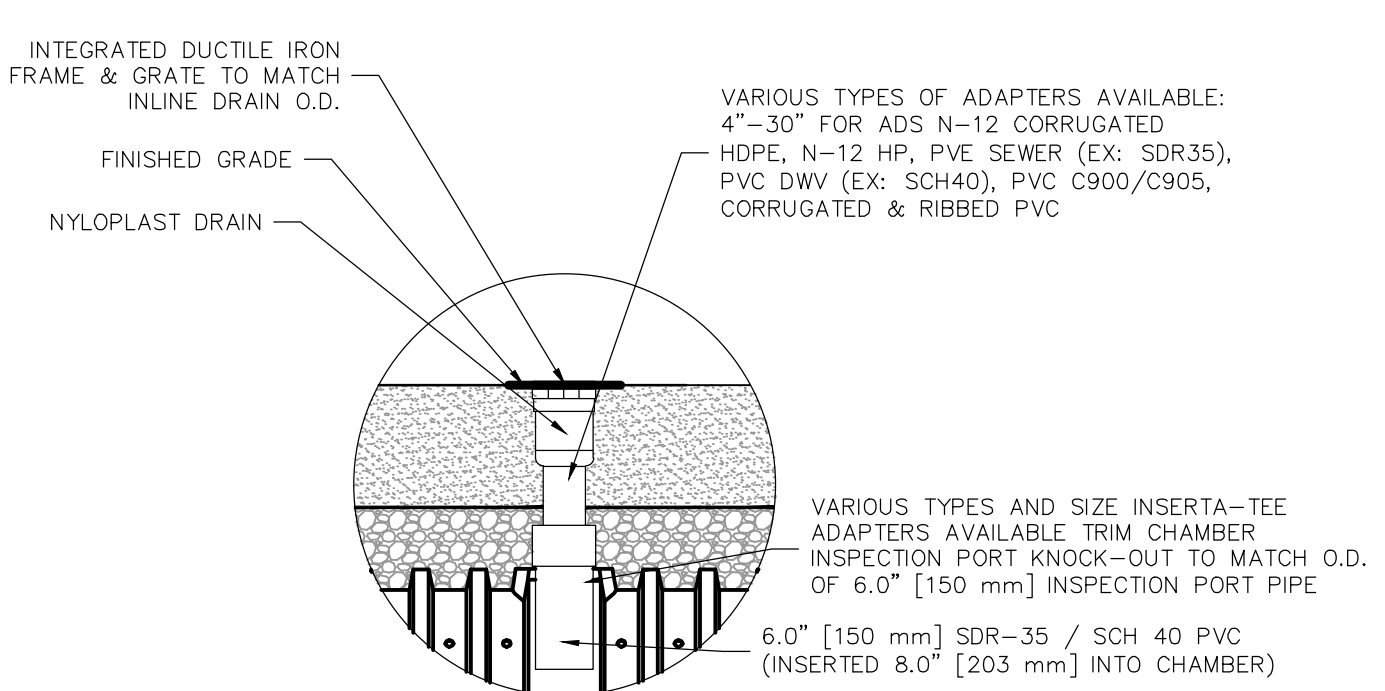


OUTLET STRUCTURE

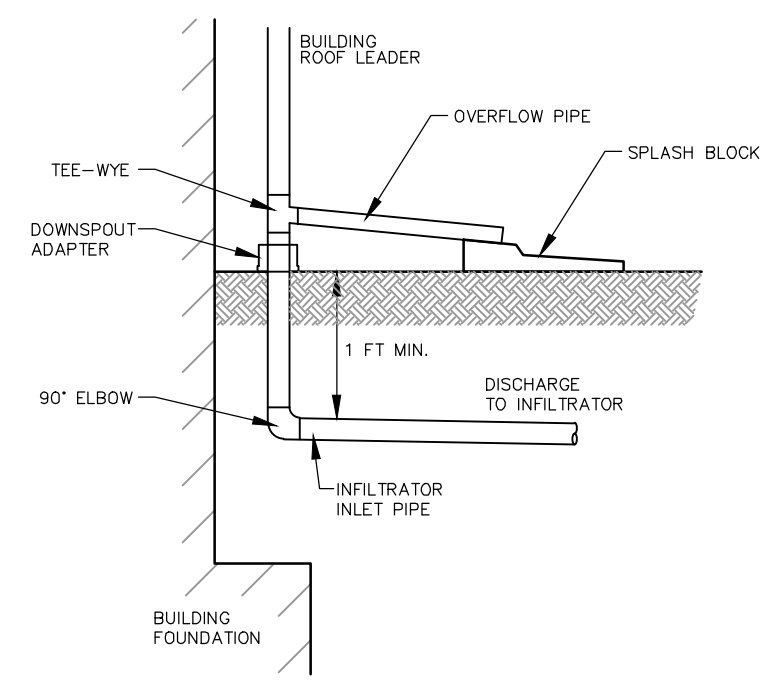
	1	4
GRATE ELEVATION "A"	611.48	605.11
WEIR WIDTH "B"	48"	24"
CREST ELEVATION "C"	610.75	604.20
DIAMETER "D"	8"	N/A
INVERT "E"	610.27	N/A
DIAMETER "F"	15"	N/A
WQ STORM ELEV "G"	601.27	603.10
BASEIN BOTTOM "H"	610.00	603.00
DIAMETER "J"	15"	15"
INVERT "K"	607.00	603.00
ORIFICE PLATE DIMENSION "X"	24"	N/A

OUTLET STRUCTURE NOTES:

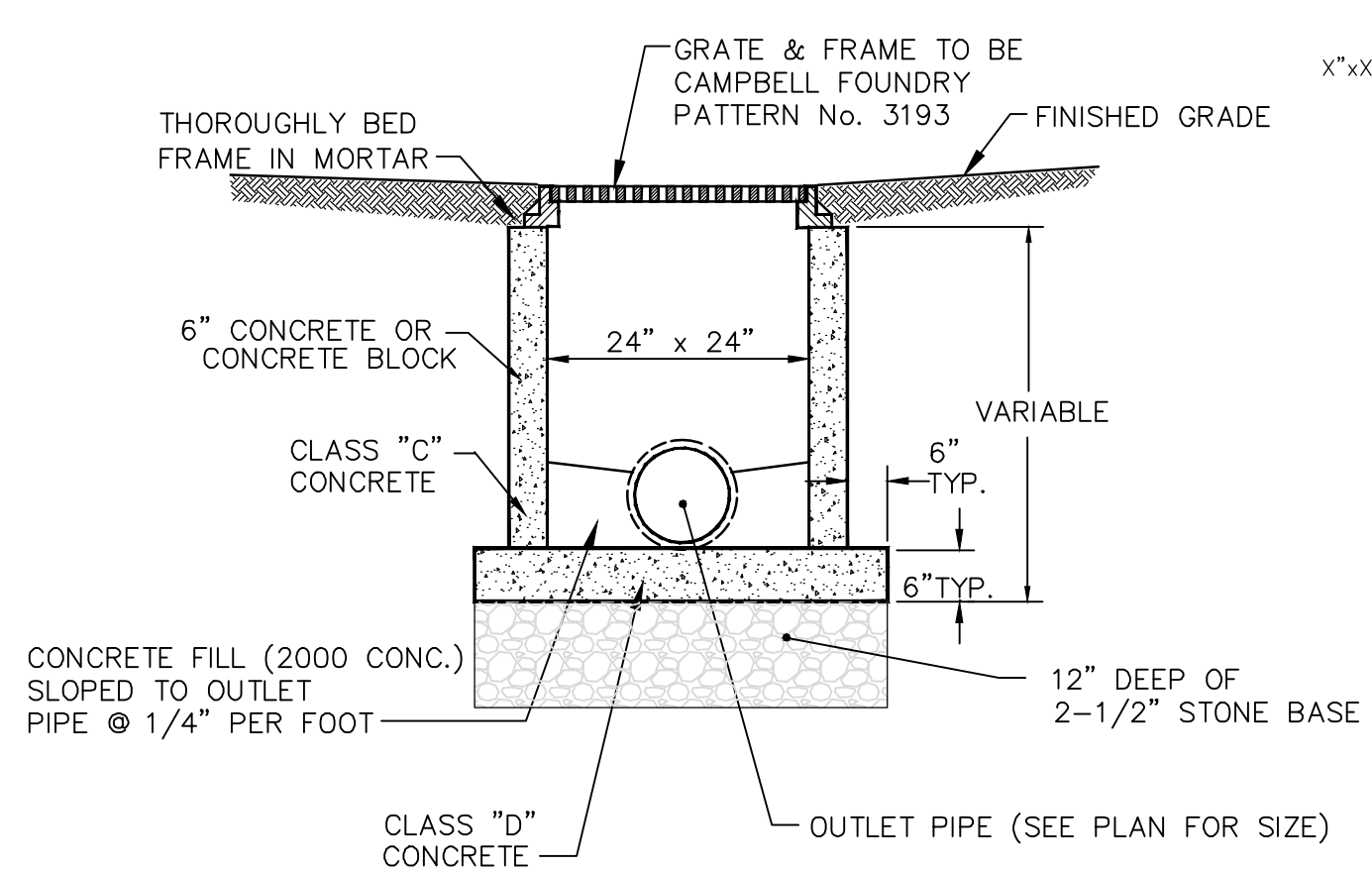
- FOOTING TO BE NJDOT CLASS "B" CONCRETE.
- INVERT TO BE NJDOT CLASS "B" CONCRETE.
- IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED BOTH INSIDE AND OUTSIDE WITH 1/2" THICK CEMENT PLASTER.
- FRAME AND GRATE TO BE NO. 3425 AS MANUFACTURED BY CAMPBELL FOUNDRY CO. OR APPROVED EQUAL.
- PROVIDE ALUMINUM LADDER RUNGS @ 12" CENTER TO CENTER.
- WHEN ADDITIONAL DEPTH IS SCHEDULED WALLS BELOW THE DEPTH OF 8'-0" MEASURED FROM THE INLET GUTTER TO THE INVERT, SHALL BE 12" THICK. THE FOUNDATION DIMENSIONS SHALL BE INCREASED TO 12" WIDTH AND TO 12" IN DEPTH.



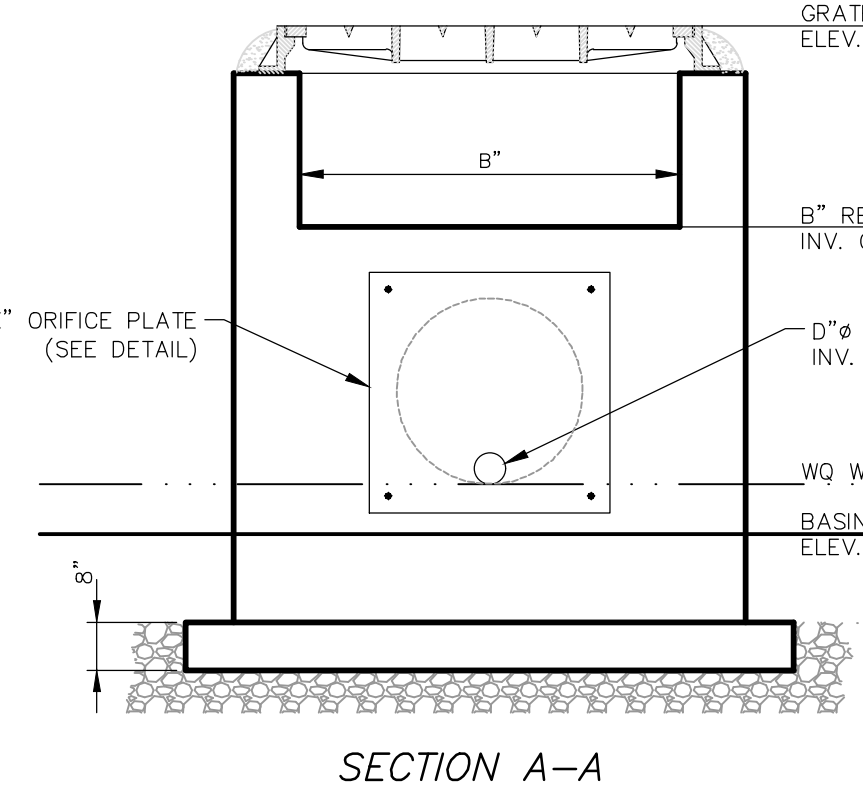
INLINE DRAIN SYSTEM



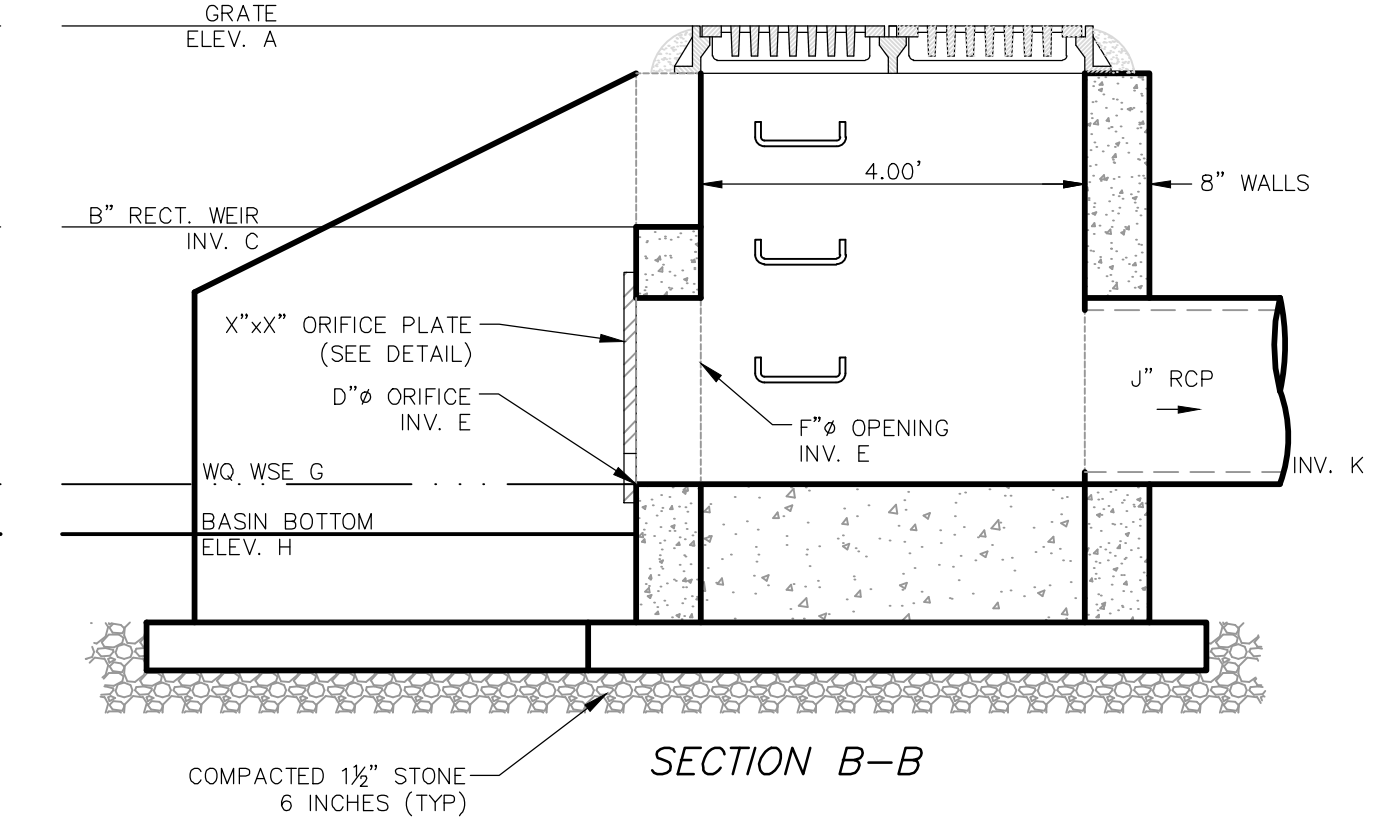
INFILTRATOR OVERFLOW DETAIL
NOT TO SCALE



LAWN INLET
NOT TO SCALE



SECTION A-A



SECTION B-B

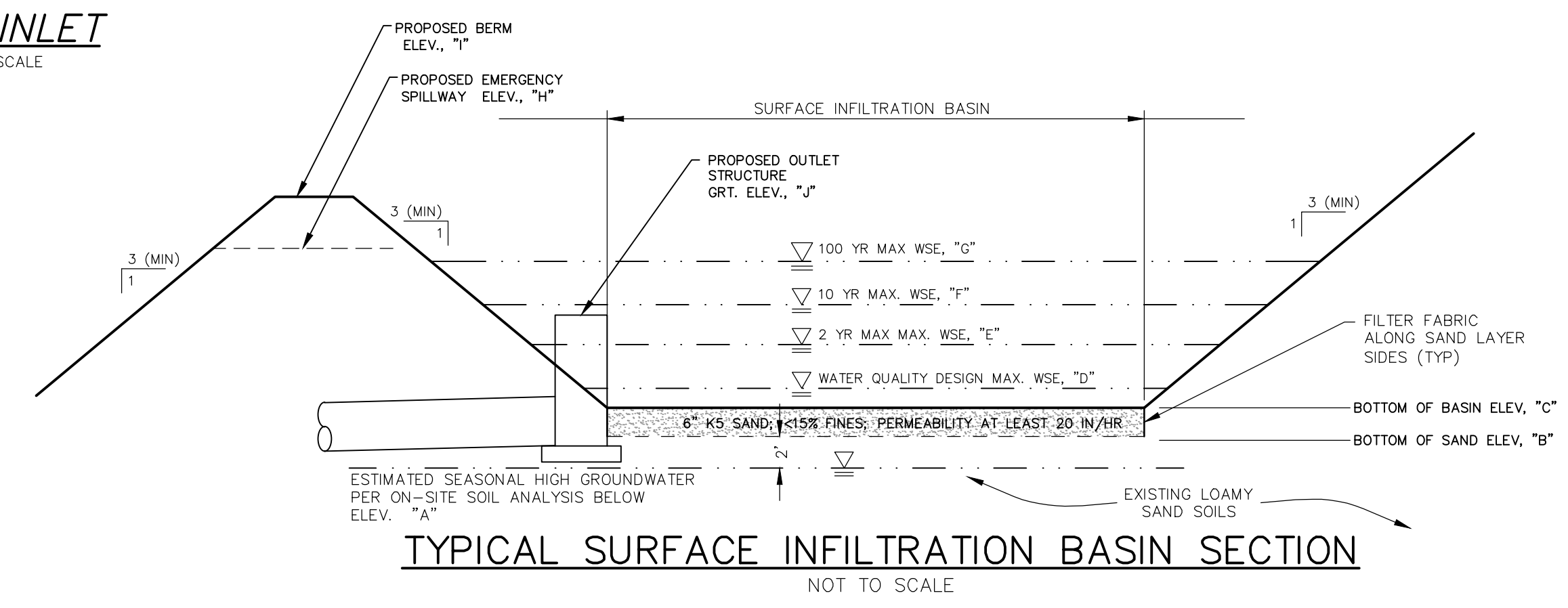
OUTLET STRUCTURE FOR SURFACE BASIN
NOT TO SCALE

INFILTRATION BASIN CONSTRUCTION NOTES:

- DURING CLEARING AND GRADING OF THE SITE, MEASURES MUST BE TAKEN TO ELIMINATE SOIL COMPACTION AT THE LOCATION OF THE PROPOSED INFILTRATION BASIN.
- THE LOCATION OF THE PROPOSED INFILTRATION BASIN MUST BE CORRODED OFF DURING CONSTRUCTION TO PREVENT COMPACTION OF THE SUBSOIL BY CONSTRUCTION EQUIPMENT OR STOCKPILES.
- THE USE OF THE LOCATION PROPOSED FOR AN INFILTRATION BASIN TO PROVIDE SEDIMENT CONTROL DURING CONSTRUCTION IS DISCOURAGED; HOWEVER, WHEN UNAVOIDABLE, EXCAVATION FOR THE SEDIMENT CONTROL BASIN MUST BE AT LEAST TWO (2) FEET ABOVE THE FINAL DESIGN ELEVATION OF THE BASIN BOTTOM.
- EXCAVATION AND CONSTRUCTION OF AN INFILTRATION BASIN MUST BE PERFORMED USING EQUIPMENT PLACED OUTSIDE THE LIMITS OF THE BASIN.
- THE EXCAVATION TO THE FINAL DESIGN ELEVATION OF THE INFILTRATION BASIN BOTTOM MAY ONLY OCCUR AFTER ALL CONSTRUCTION WITHIN ITS DRAINAGE AREA IS COMPLETED AND THE DRAINAGE AREA IS STABILIZED. IF CONSTRUCTION OF THE INFILTRATION BASIN CANNOT BE DELAYED, BERMS MUST BE PLACED AROUND THE PERIMETER OF THE BASIN DURING ALL PHASES OF CONSTRUCTION TO DIVERT ALL FLOWS AWAY FROM THE BASIN. THE BERMS MAY NOT BE REMOVED UNTIL ALL CONSTRUCTION WITHIN THE DRAINAGE AREA IS COMPLETED AND THE AREA IS STABILIZED.
- THE CONTRIBUTING DRAINAGE AREA MUST BE COMPLETELY STABILIZED PRIOR TO INFILTRATION BASIN USE.
- POST-CONSTRUCTION TESTING MUST BE PERFORMED ON THE AS-BUILT INFILTRATION BASIN IN ACCORDANCE WITH THE "CONSTRUCTION AND POST-CONSTRUCTION OVERSIGHT AND SOIL PERMEABILITY" SECTION IN APPENDIX E OF THE NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICES MANUAL. WHERE AS-BUILT TESTING SHOWS A LONGER DRAIN TIME THAN DESIGNED, CORRECTIVE ACTION MUST BE TAKEN. THE DRAIN TIME IS DEFINED AS THE TIME IT TAKES TO FULLY INFILTRATE THE MAXIMUM DESIGN STORM RUNOFF VOLUME THROUGH THE MOST HYDRAULICALLY RESTRICTIVE LAYER.

SURFACE INFILTRATION BASIN

	1A	1B
ESTIMATED GROUNDWATER ELEV. "A"	607.50	600.50
BOTTOM OF SAND ELEV. "B"	609.50	602.50
BOTTOM OF BASIN ELEV. "C"	610.00	603.00
WATER QUALITY STORM ELEV. "D"	610.27	603.10
2 YR MAX WSE ELEV "E" (FUTURE)	610.72	604.15
10 YR MAX WSE ELEV "F" (FUTURE)	611.03	604.35
100 YR MAX WSE ELEV "G" (FUTURE)	611.45	605.11
EMERGENCY SPILLWAY ELEV "H"	614.75	607.50
EMERGENCY SPILLWAY CREST WIDTH	50 FT	50 FT
BERM ELEV "I"	616.00	609.00
GRATE ELEV "J"	611.45	605.11

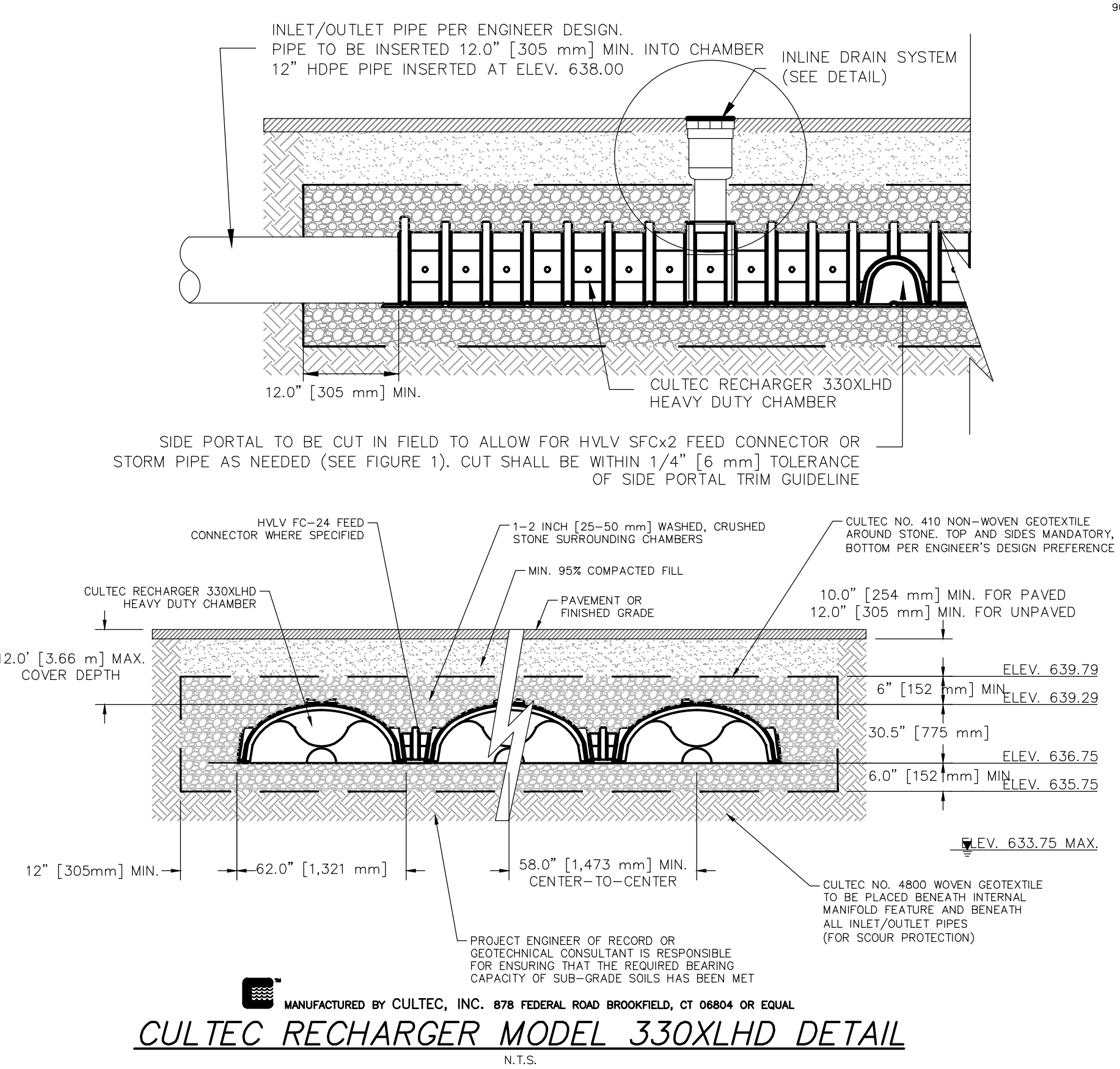


TYPICAL SURFACE INFILTRATION BASIN SECTION
NOT TO SCALE

*ESTIMATED SEASONAL HIGH WATER TABLE DEPTHS WERE BASED ON DIRECT OBSERVATION OF SEEPAGE/GROUNDWATER WHERE OBSERVED OR ESTIMATED IN THE FIELD BY DESIGN ENGINEER TAKING INTO CONSIDERATION SOIL CONDITIONS, TOPOGRAPHY, ROOT DEPTH, ETC.

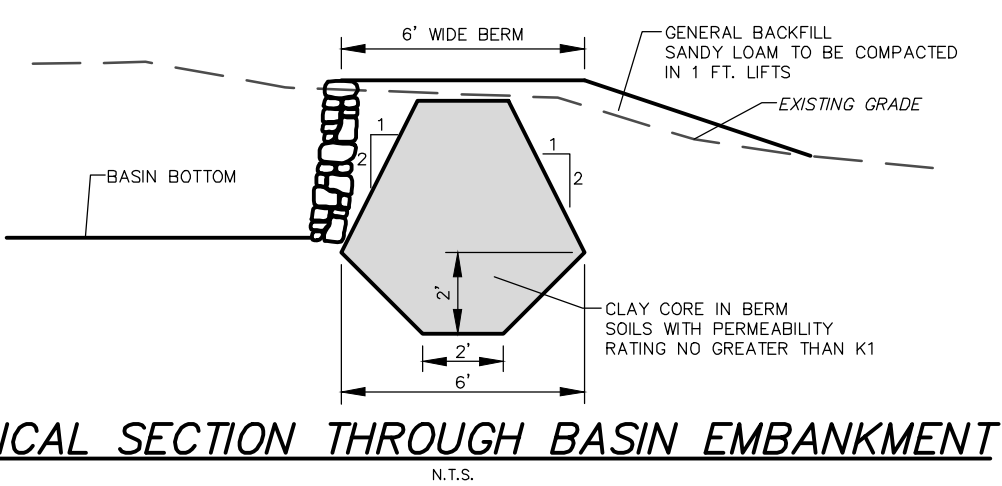
ADDITIONAL TESTING IN ACCORDANCE WITH THE NEW JERSEY STORMWATER BEST MANAGEMENT PRACTICES MANUAL, APPENDIX E, IS REQUIRED AT THE TIME OF CONSTRUCTION TO ENSURE ADEQUATE SOIL PERMEABILITY AND DEPTH TO GROUNDWATER. CONTRACTOR SHALL COORDINATE BASIN CONSTRUCTION WITH THE DESIGN ENGINEER FOR FURTHER SOIL TESTING.

NOTE: BASIN BOTTOM SAND LAYER MUST MEET ALL THE SPECIFICATIONS FOR CLEAN, MEDIUM-AGGREGATE CONCRETE SAND IN ACCORDANCE WITH AASHTO M-6 OR ASTM C-33, AS CERTIFIED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY.



CULTEC RECHARGER MODEL 330XLHD DETAIL
N.T.S.

SPLASH BLOCK
NOT TO SCALE



TYPICAL SECTION THROUGH BASIN EMBANKMENT
N.T.S.

DATE	REVISION
03/25/24	PER REVISED GRADING AND STEEP SLOPES APPLICATION
02/15/24	PER LAND USE BOARD APPLICATION SUBMISSION

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CONSTRUCTION NOTES & DETAILS

LOT GRADING & DEVELOPMENT PLAN
YEMAN RESIDENCE
BLOCK 2401, LOT 28
#465 CHERRY LANE
BOROUGH OF MENDHAM
MORRIS COUNTY NEW JERSEY

SCALE: AS NOTED
JOB NO.: 22208
DRAWN BY: KLA
CHECKED BY: TFG
DATE: 02/07/2024
SHEET NO. 10 OF 10

J. Dykstra, PROJ. 22-22208 (Ving) VARIANCE PLAN, VARIANCE PLAN 22208.dwg, 03/25/24, 12:10:43PM, kieren, Layout DETAILS (2)