

### PERMANENT SEEDING NOTES

Apply to graded or cleared area not subject to immediate further disturbance where a permanent long—lived vegetative cover is needed.

Seedbod Preparation: Loosen upper three inches of soil be raking, discing or other acceptable means before seeding. (If not previously loosened)

Soil Amendments: In lieu of soil test recommendations, use on the following

- 1) Preferred Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 600 lbs per acre 10—10—10 fertilizer (14 lbs/1000 sf) before seeding Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0+0 ureaform fertilizer (9 lbs/1000 sf).
- 2) Acceptable Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sf) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 through April 30 and August 1 through October 15, seed with 60 lbs per acre (1.4 lbs/1000 sf) of Kentucky 31 Tall Fescue. For the period May 1 through July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sf) of Weeping Lovegrass. During the period of October 16 through February 28, protect site by: Option 1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option 2) use sod. Option 3) seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

Mulching: Apply 1-1/12 to 2 tons per acre (70 to 90 lbs/1000 sf) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per core (8 gal/1000 sf) for anchoring.

Maintenance: inspect all seeded areas and make needed repairs, replacements and reseedings.

# STANDARD SYMPOL WOVEN WIRE FENCE (MIN. 14 1/2 GAUGE, MAX 6" MESH SPACING) PERSPECTIVE VIEW WOVEN MARE FENCE (MIN. 14 1/2 GAUGE, MAX 6" MESSI SPACING) WITH FILTER CLOTH OVER EMBED FILTER CLOTH SECTION CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. Woven wire fence to be fastened securely POST: Sizel either T or U type to fence posts with wire ties or stoples. or 2" hardwood 2. Filter cloth to be fastened securely to FENCE: Woven wire, 14 1/2 Ga. 6" woven wire fence with ties spaced every Max. mesh opening FILTER CLOTH: Filter X, Mirafi 24" at ton and mid section. 3. When two sections of filter cloth adjoin 100X. Stabilinka T140N each other they shall be overlapped by or approved equal six inches and folded. PREFABRICATED UNIT: Geofab. 4. Maintenance small be performed as needed Envirofence, or approved and material removed when "bulges" develop SILT FENCE DETAIL

AS-BUILT CERTIFICATION ! HEREBY CERTIFY THAT THE FACILITY SHOWN ON THIS PLAN WAS CONSTRUCTED AS SHOWN ON THE "AS-BUILT" PLANS AND MEETS THE APPROVED PLANS AND SPECIFICATIONS JOHN M. ELORRIAGA CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION BASED UPON ONSITE INSPECTIONS AND MATERIAL TESTS WHICH ARE CONDUCTED DURING CONSTRUCTION. THE ONSITE INSPECTIONS AND MATERIAL TESTS ARE THOSE INSPECTIONS AND TESTS DEEMED SUFFICIENT AND APPROPRIATE BY COMMONLY ACCEPTED ENGINEERING STANDARDS. CERTIFY DOES NOT MEAN OR IMPLY A GUARANTEE

BY THE ENGINEER NOR DOES AN ENGINEER'S CERTIFICATION RELIEVE ANY OTHER PARTY FROM MEETING REQUIREMENTS IMPOSED BY CONTRACT, EMPLOYMENT, OR OTHER MEANS, INCLUDING MEETING COMMONLY ACCEPTED INDUSTRY PRACTICES.

NOT TO SCALE

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING



#### TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short—term vegetative cover is needed

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding. (If not previously loosened)

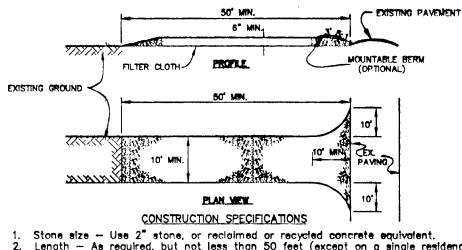
Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf).

Seeding: For periods March 1 through April 30 and from August 15 through November 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sf). For the period May 1 through August 14, seed with 3 lbs per acre of Weeping Lovegrass (0.07 lbs/1000 sf). For the period November 16 through February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

- Mulching: Apply 1—1/2 to 2 tons per acre (70 to 90 lbs/1000 st) of unfrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.

Refer to the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.

#### STANDARD SYMBOL



Length — As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum would apply). Thickness — Not less than six (6) inches Width — Ten (10) foot minimum, but not less than the full width at points where

- ingress or egress occurs.

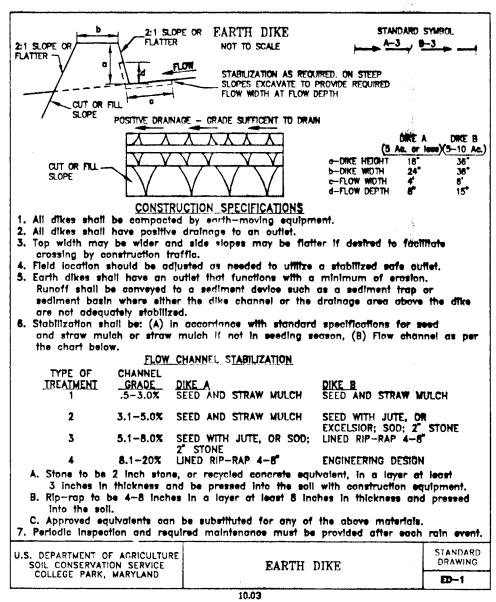
  Filter Cloth Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.

  6. Surface Water — All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted. 7. Maintenance - The entrance shall be maintained in a condition which will prevent
- tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights—of—way must be removed immediately. 8. Washing — Wheels shall be cleaned to remove sediment prior to entrance onto public rights—of—way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device

9. Periodic inspection and needed maintenance shall be provided after each rain.

## STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE



ENGINEER'S CERTIFICATE hereby certify that this plan for erosion and sediment control represents

11 m //JOHN M. ELORRIAGA

a practical and workable plan based on my personal knowledge of the site

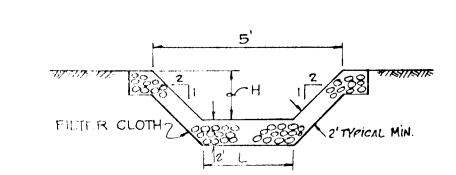
the Howard County Soil Conservation District.

conditions and that it was prepared in accordance with the requirements of

SPILLWAY SECTION AT WATER QUALITY INFILTRATION BASIN N.T.S.

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION

DISTRICT AND MEETS TECHNICAL REQUIREMENTS.



N.T.5.

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL

SEDIAINT CONTROL NOTES

7. Site Analysis:

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).

2. All vegetative and structural practices are to be installed accordingly to the provisions of this plan and are to be in conformance with the most current "Maryland Standards and Specifications for Soil Fresion and Sediment Control",

3. Following initial soil disturbances or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar drays for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 calendar days as to all other disturbed or graded areas

k. All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the "Howard County Design Manual, Storm Drainage"

5. All disturbed areas must be stabilized within the time period specified above in accordance with the "1991 Maryland Standards and Specifications for Soll Erosion and Sediment Control" for Permonent Seedings (Sec. 51), Sod (Sec. 54), Temporary Seeding (Sec. 50) and Mutching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.

6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.

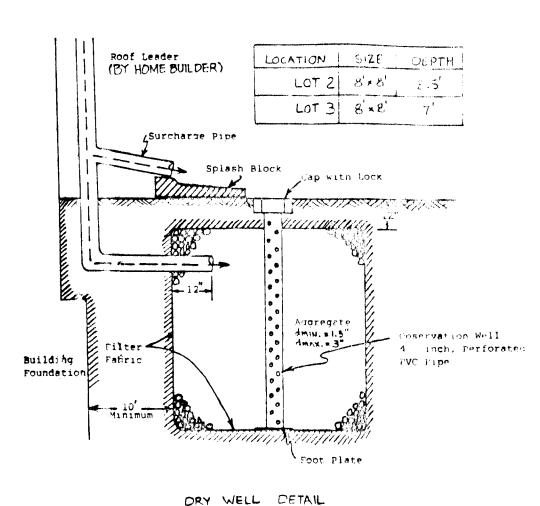
Total Area of Site: 4.47 dones 0.50 acres Area to be Disturbed: Area to be roofed or paved: 0.17 acres Area to be vegetatively stabilized: 0.33 acres Total Cut: 2700 cy. Total Fill: 2300 cy. Offsith Waste/Borrow Area Location: \*

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance. 9. Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.

10. On all sites with disturbed areas in excess of 2 acres, opprove of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is mode. 11. Trenches for the construction of utilities is limited to three pipe len the or that

which can be back filled and stabilized within one working day, which wer is shorter. 12. Quantities and estimates shown are for sediment control purposes only

Contractor shall prepare his/her own quantity estimates to his/her satisfaction \* It is the responsibility of the contractor to identify the specifiborrow site and notify and gain approval from the sediment annihol inspector. of the Site and it's grading permit number at the time of construction.



CEX.GRD (12/194) 'FREEBOARD -WSEL = 327.5 CREST EL = 327. -9" RIP-RAP PROTECTION d50 = 4" dMAX = 6"

Qio = 3.1 CF5 , C = 3.1, L = 3', H = 0.50' GABION DEWATERING FILTER DEVICE SECTION

PROP PAVEMENT

EX. GRD.

nept Name Lilions Property SV/M ocation Howard County, Marvland

rown, moist, med um dense

Brown, moist, medium dense,

micaceous silty 3and (SM)

micaneous sandy Silt (ML)

(GSDA: Loam)

Boring Terminated at 10.0

DRIVEN SPLIT SPOON UNLESS

A-CONTINUOUS FLIGHT AUGER

THERWISE NOTED

30-BOCK CORE

D-DISINTEGRATED

I-INTACT

AT COMPLETION Dry

327.8

(12/194)-

FILTER CLOTH-

RIP-RAP PROTECTION

ON FILTER CLOTH @

Hammer Wt.

BOTTOM OF FOREBAY

d50 = 4", dmax = 6", THK = 9"

HILLIS - CARNES

ENGINEERING ASSOCIATES, INC

RECORD OF SOIL EXPLORATION

Hote Diameter

8-7-6

RIP-RAP CHANNEL

FOREBAY

WATER QUALITY INFILTRATION BASIN WATER QUALITY INFILTRATION BASIN SCALE: I" = 10' HORZ SCALE: 1" = 20' HORZ. 1" = 2' VERT. 1" = 2' VERT. HILLIS - CARNES ENGINEERING ASSOCIATES, INC. ENGINEERING ASSOCIATES, NC PECOND OF SOIL EXPLORATION RECORD OF SOIL EXPLORATION Color Motisture Dentity Size Proportion DEPTHI SCALE CON BLOWS 6" NO. REC.

at 8.0' white drilling

\*caved at 8.5\*

"caved at 7.5"

324 322

15' × 20' RIP-RAP

d50=4"dmxx=6"

APRON

THK = 9"

Q = 8.1 CF5

V= 1.62 FP5

EX. GRD. (12/'94)

WATER QUALITY

7 STORAGE EL. = 327.0

Brown, maist, loose to medium

(USDA: Loamy Sand)

dense, micaceous sitty Sand (SM)

SECTION B-B

PROPOSED GRADE

DEPTH OF BASIN, RUQUIREMENTS

PER SPEC. 378 ARE NOT REQ'D.

Page 1 of 1

NOTES

at 8.0' while drilling

\*caved at 8.5\*

5-5-5

POND BOTTOM EL. = 326.0

NOTE : DUE TO THE SIZE AND

HSA-HOLLOW STEM AUGERS DRIVEN SPLIT SPOON UNLESS D-DISINTEGRATED AT COMPLETION 8.0\* D-DISTATED PATED DRIVEN SPLIT SPOON UNLESS AT COMPLETION 8.0 HBA-HOLLOW STEM AUGERS CFA-CONT FLIGHT AUGERS CFA-CONT. FLIGHT AUGERS THERWISE NOTED. I-INTACT CFA-CONT FLIGHT AUGERS DC-DRIVING CASING -PRESSED SHELBY TUBE DC-DRIVING CASING DC-DRIVING CASING MD-MUD DRILLING MO-MUD DRILLING A-CONTINUOUS FLIGHT AUGER RC-ROCK CORE RC-ROCK CORE TETANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 1404 HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS TANDARD PENETRATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140# HAMMER FALLING 30" COUNT MADE AT 6" INTERVALS TITANDARD PENETHATION TEST-DRIVING 2" OD SAMPLER 1" WITH 140F HAMMER FALLING 30": COUNT MADE AT 6" INTERVALS

SEQUENCE OF CONSTRUCTION OBTĀIN GRĀDING PERMIT. INSTALL STABILIZED CONSTRUCTION ENTRANCE, SILT FENCE

micaceous sifty Sand (SM)

(USDA: Loamy Sand)

- GABION DEWATERING DEVICE

ON FILTER CLOTH (L = 6')

(SEE SECTION ON THIS SHEET)

SPILLWAY

CREST

W.Q. STORAGE = 640 CF

POND DOT. EL. = 326.0

SECTION A-A

\*caved at 8.5"

WATER QUALITY

T STORAGE EL .= 327.0 |EL .= 327.0

(DAY 1-4) CONSTRUCT WATER QUALITY BASIN, RIP RAP APRON. CONSTRUCT FOREBAY AT THIS TIME. REMOVE EXISTING TEMPORARY TEE TURN-AROUND, EXISTING SHED EXISTING RIP RAP, AND GRADE ROAD TO THE SUBBASE. (DAY 9-15) CONSTRUCT WATER MAIN AND SANITARY SEWER ASE, CONNECTIONS. (16-20) CONSTRUCT MODIFIED COMBINATION CURBS AND GUTTER AND RIP RAP CHANNEL AT CURB OPENING. (DAY 21-25) CONSTRUCT PAVING. (DAY 26-30)

COMPLETE FINAL GRADING OF SITE AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES INSTALL STREET TREES (DAY 33) CONSTRUCT FOREBAY.

11. UPON APPROVAL OF HOWARD COUNTY SEDIMENT CONTROL INSPECTOR REMOVE ALL SEDIMENT CONTROL DEVICES, FINAL GRADE AND PERMANENTLY STABILIZE AS NEEDED

REVISION TSA GROUP, INC. planning • architecture • engineering 8480 Baltimore National Pike . Ellicott City, Maryland 21043 . (410) 485-8105

OWNER/DEVELOPER: PROJECT: TIPTON MANOR LOTS 1-4 LOCATION: SAMUEL LYONS TAX MAP 46-PARCEL 15 10688 SCAGGSVILLE ROAD 6th ELECTION DISTRICT LAUREL, MARYLAND 20707

CHK: CAM | SCALE:

HOWARD COUNTY, MARYLAND SEDIMENT CONTROL NOTES & DETAILS AND WATER QUALITY DETAILS MARCH, 1995 PROJECT NO. 0615

> AS SHOWN DRAWING 3 OF 3 F95.132