

STANDARD SYMBOL:

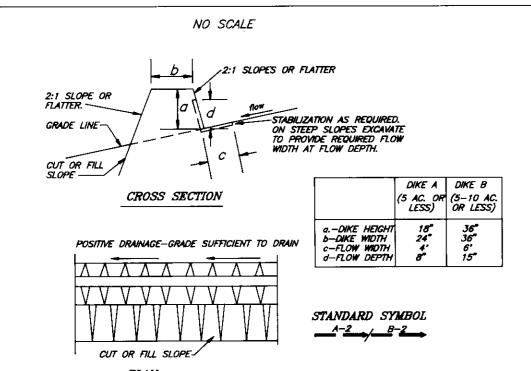
CONSTRUCTION SPECIFICATIONS

- STONE SIZE: USE 2" STONE, OR RECYCLED CONCRETE EQUIVALENT. LENGTH: AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.)
- THICKNESS: NOT LESS THAN SIX (6) INCHES. 4. WIDTH: TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.

 5. FILTER CLOTH: WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO
- PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A
- SINGLE FAMILY RESIDENCE.

 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 RIGHTS-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 " SIMIL BE DONE ON AN AREA SIABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. 9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAINFALL.

STABILIZED CONSTRUCTION ENTRANCE (SCE)



CONSTRUCTION SPECIFICATIONS

- adquately stabilized.

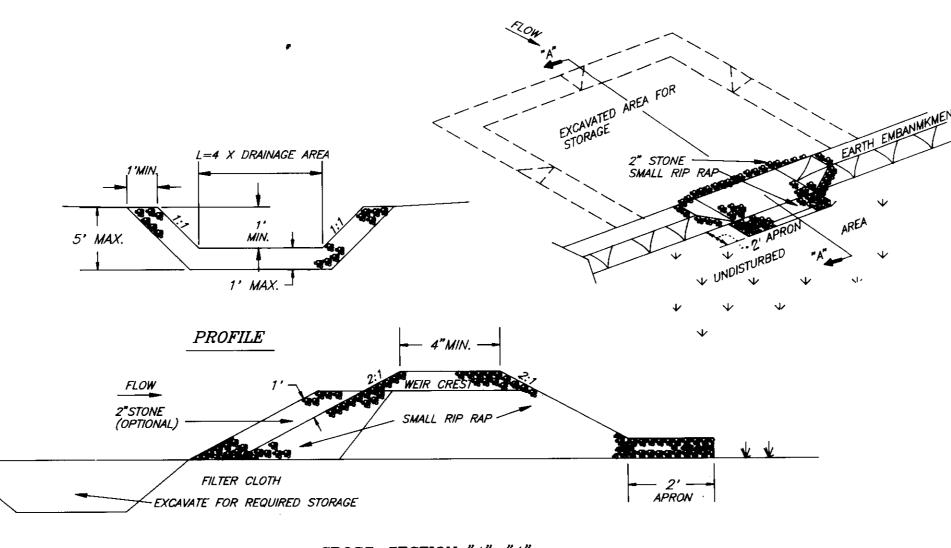
 Stabilization shall be: (A) In accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) Flow channel as per the chart below.

FLOW CHANNEL STABILIZATION

- A. Stone to be 2 inch stone, or recycled concrete equivalent, in a layer at least 3 inches in thickness and be pressed into the soil with construction equipment. B. Rip Rap to be 4-8 inches in a layer at least 8 inches thick and pressed into
- Approved equivalents can be substituted for any of the above materials. 7. Periodic inspection and required maintenance must be provided after each rain event.

EARTH DIKE (ED) NO SCALE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT from Brooklin 11-15-91 DATE APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING CHIEF, PIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE. STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF RUBLIC WORKS CHIEF BUREAU OF ENGINEERING



CROSS-SECTION "A"-"A"

OPTION: A one foot layer of 2" stone may be placed on the upstream side of the riprap in place of the embedded filter cloth. CONSTRUCTION SPECIFICATIONS FOR ST-V

- Area under embankment shall be cleared, grubbed and stripped of any vegetation an d root mat.
- The pool area shall be cleared. The fill material for the embankment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The
- embankement shall be compacted by traversing with equipment while it is being constructed. Al cut and fill slopes shell be 2:1 or flatter.
- The stone used in the outlet shall be riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small riprap or embedded filter cloth in the riprap.
- Sediment shall be removed and the trap restored to it's original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. The structure shall be inspected after each rain and repairs made as needed.
- Construction operations shall be carried out in such a manner that erosion and water pollution is minimized. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (ST-V)

NO SCALE

US Soil Conservation Service THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL Approved 10/30/91

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for sediment and erosion control and that all responsible personnel involved in the construction 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 on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed

8-14-91 D**ate**

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SFFORFO PREPARATION: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules: 1) Preferred- Apply 2 tons per acre dolomitic limestone (92 lbs/100 sgft.) and 600 lbs per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq.ft.)

2) Acceptable- Apply 2 tons per acre dolomatic limestone (92 lbs/1000 sg ft.) and 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sg ft.) before seeding. Harrow or disc into upper three inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre 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 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) 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 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft)

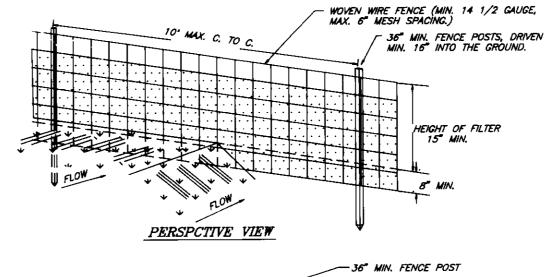
MAINTENANCE: Inspect all seeded areas and make needed repairs, repalcements and

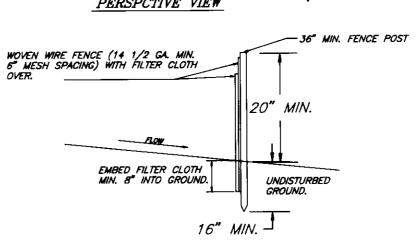
TEMPORARY SEEDING NOTES

SEEDBED PREPARARTION: 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 (14lbs/1000 sq ft). SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sg ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru 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 sq ft) 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 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.





STANDARD SYMBOL: — S — S — S —

SECTION

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES
- 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
- 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER— LAPPED BY SIX INCHES AND FOLDED.

 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

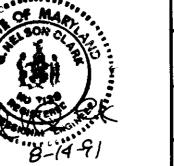
FENCE: WOVEN WIRE, 14 GA., 6" MAX. MESH OPENING.
FILTER CLOTH: FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUAL.
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE (S) NO SCALE

ENGINEER'S CERTIFICATE

I hereby certify that this plan for Sediment and Erosion Control represents a practical and workable plan based on my personal knowledge of the site condtions and that it was prepared in accordance with the requirements of the Howard Soil Conserva-

Signature

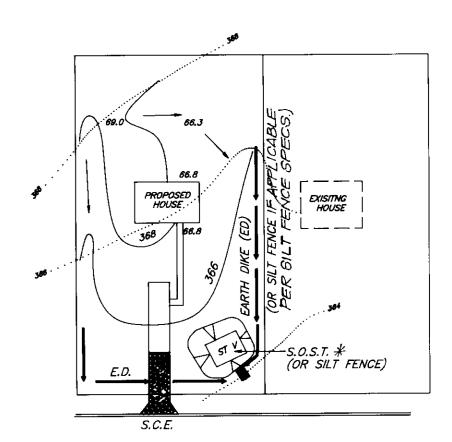


SEDIMENT AND EROSION CONTROL NOTES

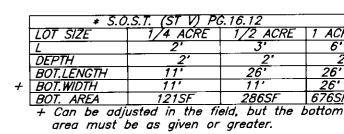
- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of
- any construction. (992-2437). 2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control stuctures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the
- project site. 4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol.1 Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm
- 5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec.51) sod (Sec.54), temporary seeding (Sec.50) and mulching (Sec.52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of
- 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.

7. SITE ANALYSIS: Total Area of Site: Area Disturbed: Area to be roofed or paved: Area to be vegetatively stabilized.; 3 Total Cut:

- Offsite 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. Additional sediment control must be provided, if deemed
- necessary by the Howard County DPW Sediment Control Inspector. 10. On all sites with disturbed areas in excess of 2 acres, approval 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
- 11. If houses are to be constructed on an "as sold" basis, at random, Single Family Sediment Control, as shown below
- shall be implemented. All pipes to be blocked at the end of each day (see detail
- this sheet). N/A 13. The total amount of silt fence= 735 LF
- * It is the responsibility of the contractor to identify the spoil/borrow site, notify and gain approval from HSCD of the site and its grading permit no. at the time of construction.



NOTE: Single lot detail cannot be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing an existing sediment trap.



SINGLE LOT SEDIMENT CONTROL PLAN

NO SCALE

CONSTRUCTION SEQUENCE:	NO.	OF DAYS
A. Obtain grading permit and install sediment and erosion contril device and stabilize. Block slots where shown in Plan.	25	7
B. Excavate for foundations, rough grade and temporarily stabilize.		30
C. Construct structures, sidewalks and driveways.		90
o. Final grade and stabilize in accordance with Stds. and Specs.		14
Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.		7

*Delay construction of houses on lot : 110 See single lot sediment control detail, this sheet.



DESIGNED SEDIMENT & EROSION CONTROL DETAILS KIWM LOTS 102 THRU 115, 117, 119 AND 120 DRAWN HUNT CLUB ESTATES

SECTION 5 AREA 2 IST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

AUG 1991

HECKED

KIWM

91-119 RYLAND GROUP FILE NO. 7130 Minstrel Way Suite 215 91-119 SiE Columbia, Maryland, 20

S.D.P. 92-28

AS SHOWN

DRAWING

3 OF 3

JOB NO.