

SEDIMENT CONTROL NOTES

- 1) 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 SPECIFICATIONS 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 structures, 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 perimeter in accordance with Vol. 1, Chaper 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 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
- 7) Sitè Analysis: Total Area of Site Area Disturbed
 - 4.0356 Acres 3.7 Acres Area to be roofed or paved 2.05
 - Area to be vegetatively stabilized 1.65 Acres 7400 Cu. yds 1400 Cu. yds Total Cut Total Fill TO BE TAKEN TO A SITE Offsire waste/borrow area location
- WITH AN APPROVED SEDIMENT CONTROL PLAN. 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 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 is made.

PERMANENT SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened. Soil Amendments: In lieu of soil test recommendations, use one of the following

- 1) Preferred Apply 2 tons per acres dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disk into upper three inches of soil. At 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 dolomitic limestone (92 lbs/1000 sq ft) and 1000 per acre 10-10-10 fertilizer (23 lbs/1000 sq. ft) before seeding. Harrow of disk into upper three inches of soil.

Seeding — For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs 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 page 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 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 1-1/2 to 2 tons per acre (70 to 90 1bs/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

Maintenance -- Inspect all seeded areas and make needed repairs, replacements and reseadings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative

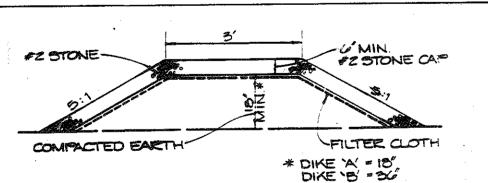
Seedbed preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendments: -- Apply 60 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

Seeding: - For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq 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 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for archaring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SECUMENT CONTROL for rate and methods not covered.



STONE MOUNTABLE BERM DETAIL NO SCALE

The owner shall provide a separate and independent sewer connection for each tenant or occupant of any building, shown on this site development plan who will discharge non-domestic waste to the public sewerage system if each separate and independent sewer connection shall include a standard manhole and other waste pretreatment devices as required and approved by Howard County. Waste lines on the interior of the building shall be designed, constructed or modified such that non-domestic waste will be discharged to the separate and independent sewer connection. No tenant or occupant of any building shown on this site development plan shall discharge regulated non-domestic waste to the public sewerage system prior to installation of the separate and independent sewer connection and related interior waste lines. The above statement shall apply to all initial and future occupants or tenants.

CROSS SECTION A-A OPTION: A one foot layer of 2" stone may be placed on the upstress side of the riprap in CONSTRUCTION SPECIFICATIONS FOR ST-V
Area under embankment shall be cleared, grubbed and stripped of any vegetation and root

STONE OUTLET SEDIMENT TRAP Y

- The fill material for the embandment shall be free of roots and other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The embandment shall be compacted by traversing with equipment while it is being constructed.
- 4. The stone used in the outlet shall be small riprap 4"-8" along with a 1' thickness of 2" aggregate placed on the up-grade side on the small :iprap on embedded filter cloth in the
- Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to it the design depth of the trap.
- 6. The structure shall be inspected after each rain and repairs made as meeded.
- 7. Construction operations shall be carried out in such a manner than erosion and water
- 8. The structure shall be removed and the area arabilised when the drainage area has been

Maximum Drainage Area: 5 Acres U.S. DEPARTMENT OF AGRICULTURE STONE OUTLE! SEPTEMENT TRAP SOIL COMSERVATION SERVICE COLLEGE PARK, MARYLAND ST-X

PERIMETER DIKE/SWALE

PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. ALL PERIMETER DIKE/SWALE SHALL HAVE UN'INTERRUPTED POSITIVE GRADE TO AN OUTLET.

2. DIVERTED RUNOFF FROM A DISTRUBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING

STABILIZATION OF THE AREA DISTURBED BY THE DIKE AND SMALE SHALL BE DONE IN ACCORDANCE WITH THE STANDARD AND SPECIFICATION FOR SEED AND STRAW MULCH, AND SHALL BE DONE WITHIN 10 DAYS.

6. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN

PERIMETER DIKE/SWALE

SEQUENCE OF OPERATIONS

2. NOTIFY THE HOWARD COUNTY DEPARTMENT OF PERMITS AND LICENSES 48 HOURS

INSTALL SEDIMENT TRAP #1 AND #2, PERIMETER DIKE / SWALE E TO F AND EARTH

DIKE C TO D, EARTH DIKE A TO B AND PERIMITER DIKE / SWALE G TO H AND I

WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR AND ROUGH GRADE

WATER QUALITY *INLET. INLET PROTECTION TO BE USED ON ALL INLETS. (10 DAYS)

WEATHER FORECAST INSTALL REMAINDER OF CURB AND GUTTER. STABILIZE AREAS

9. FINE GRADE THE SITE AND INSTALL CURB AND GUTTER WHERE POSSIBLE. (7 DAYS)

10. WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR AND DURING A DRY

13. WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE REMAINING

* SEE WATER QUALITY PLANS FOR INSTALLATION OF WATER QUALITY INLET I-1 (5 DAYS)

SEDIMENT CONTROL DEVICES (EARTH DIKE C TO D TO REMAIN AS PERMANENT

8. DURING A DRY FIVE DAY WEATHER FORECAST INSTALL ALL UTILITIES INCLUDING

6. CLEAR AND GRUB REMAINDER OF SITE TO BE DISTURBED. MAINTAIN POSITIVE

3 INSTALL STABILIZED CONSTRUCTION ENTRANCE. (1 DAY)

4. CLEAR AND GRUB FOR SEDIMENT CONTROL MEASURES. (2 DAYS)

DRAINAGE TO ALL SEDIMENT CONTROL MEASURES. (2 DAYS)

TO J, TEMPORARY SWALE AND ALL SILT FENCE (5 DAYS)

OUTSIDE OF PAVING OPERATION. (2 DAYS)

Existing Ground

Max. Drainage Area Limit: 2 Acres

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE

1. OBTAIN GRADING PERMIT.

BEFORE BEGINNING WORK.

11. INSTALL SUBBASE. (3 DAYS)

12. BEGIN PAVING OPERATION. (3 DAYS)

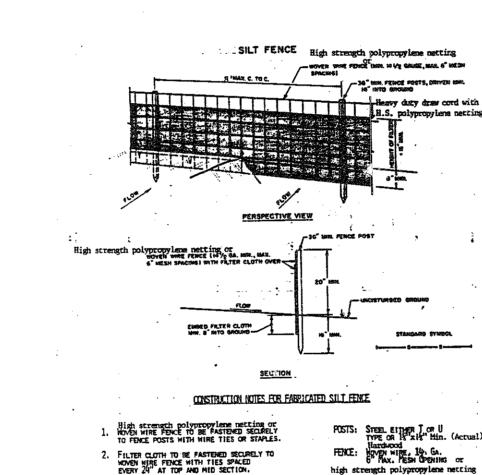
COLLEGE PARK, MARYLAND

PAVEMEN' PROFILE EXISTING PAVEMEN' PLAN VIEW CONSTRUCTION EPECIFICATIONS 1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent. 2. Length - As required, but not less than 50 ft. (except on a single residence lot where a 30 ft minimum length would apply). 3. Thickness - Not less than six (6) inches. 4. Width . Ten (10) ft. 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 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 usintained in a condition which will prevent tracking or flowing of sediment cato public rights-of-way. This way 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 8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-ofway. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE

3.0 G MIN. CAP of 24 STONE.

U. S. DEPARTMENT OF AGRICULTURE | STABILIZED CONSTRUCTION



PREFABRICATED UNIT: GEOFAB, Maintenance shall be perfored as meeded and material removed when "Bulges" develop in the silt fenc

U.S. DEPARTMENT OF ARRICULTURE

SILT FENCE

POSTS: STEEL EITHER I OR U FILTER CLOTH: FILTER X, MIRAFI ICUX, STABILINKA ILUCH OR APPROVED EGUAL

STANDARD DRAWING

_ Wire Nesh "2" x "2" MAX DPENING STANDARD SYMBOL--CURB INLET PROTECTION DETAIL STANDARD SYMBOL -STANDARD DRAWING INLET PROTECTION SOIL CONSERVATION SERVICE 1**P**D-1 STONE OUTLET STRUCTURE

SWALE INLET PROTECTION DETAIL

top of earth dike;

6" min.

STANDARD AND SPECIFICATIONS SUMP PIT

Definition

A temporary pit which is constructed to trap and filter water for pumping to a suitable discharge area.

Purpose

Conditions Where Practice Applies

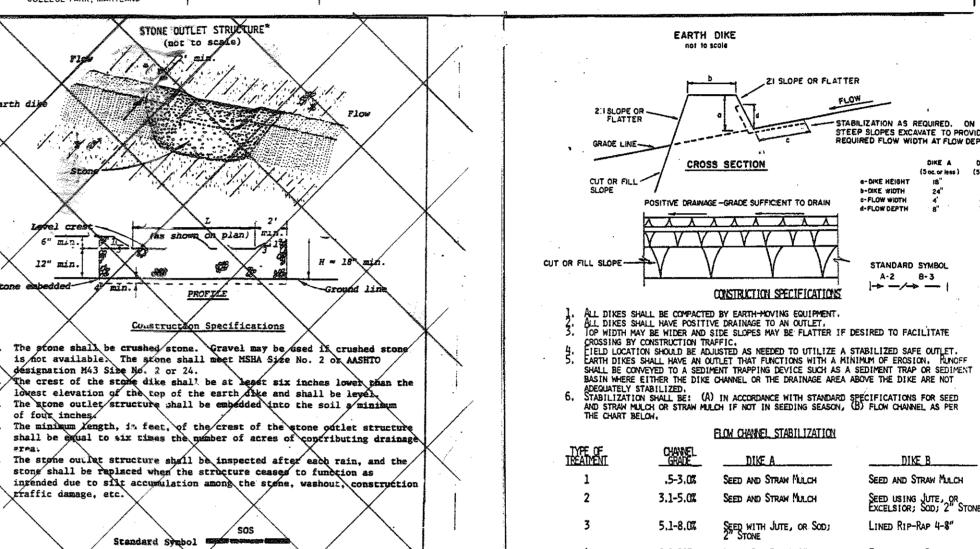
To remove excessive water from excavations.

Sump pits are constructed when water collects during the excavation phase of construction. This practice is particularly useful in urban areas during excavation for building foundations.

The number of sump pits and their locations shall be determined by the contractor. A design is not required but construction should conform to the general criteria outlined on Standard Drawing SP-1.

A perforated vertical standpipe is placed in the center of the pit to collect filtered water. Water is then pumped from the center of the pipe to a suitable discharge area.

Discharge of water pumped from the standpipe should be to a sediment trap, sediment basin or stabilized area. If water from the sump pit will be pumped directly to a storm drainage system, filter cloth (Mirafi 100 X, Poly Filter GB or a filter cloth with an equivalent sieve size between #40-80) should be wrapped around the standpipe to ensure clean water discharge. It is recommended that 1/4-1/2 inch hardware cloth be wrapped around and secured to the standpipe prior to attaching the filter cloth. This will increase the rate of water seepage into the standpipe.



SEED USING JUTE, OR EXCELSION; SOD; 2" STONE 8.1-207 LINED RIP-RAP 4-8" ENGINEERING DESIGN 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 THICKNESS AND PRESSED INTO THE SOIL.

C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.

PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT

S. DEPARTMENT OF AGRICULTURE EARTH DIKE SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND

These plans for S.W.M. construction, soil erosion and sediment control

REVISIONS

A C.E. 8-14-06 REVISE BELLATLANTIC TO VERIZON WIRELESS

Reviewed for the Howard Conservation District and meets technical

APPROVED: Howard County Department of Planning and Zoning

CHIEF DIVISION OF LAND DEVELOPMENT

AND RESEARCH APPROVED: For public water, sewer, storm drain system, and public roads. Howard County Department of Public Works

/17/95

PARCEL NUMBER STREET ADDRESS PARCEL A-I 9000 JUNCTION DRIVE

SUBDIVISION NAME JUNCTION INDUSTRIAL PARK BLOCK # ZONE TAX/ZONE MAP ELECT. DIST.

6069.0**2** 20 C04 WATER CODE: 4020000 SEWER COPE: SEDIMENT & EROSION CONTROL DETAILS THE JUNCTION INDUSTRIAL

PARCEL A-1 VERIZON WIRELESS

O.P. & Z. FILE NO. F-84-204; F-85-178 SKETCH NO. S-75-01 SCALE : 1" = 30" SEPTEMBER 30,1994

PRELIMINARY NO.P-84-10

GEORGE WILLIAM STEPHENS, JR. AND ASSOCIATES. INC

CIVIL ENGINEERS & LAND SURVEYORS

658 KENILWORTH DRIVE, SUITE 100 TOWSON, MARYLAND 21204 (410) 825-8120

DEVELOPER CERTIFICATION:

GRADING. STABILIZE WITH PERMANENT SEEDING) (4 DAYS)

I/We certify that all development and construction will be done according to this plan and that any responsible personnel involved in the construction project willhave 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.

STANDARD SYMBO

Standaré Drawkig

PDS-1

Robert McAvry je Real Estate Manager

9000 JUNCTION DRIVE ANNAPOLIS JUNCTION, MD. 20701 TEL. 301 512 - 2000

OWNER/DEVELOPER

ENGINEER CERTIFICATION:

OF AGRICULTURE

TEMPORARY SWALE

0.5% OR STEEPER, DEPENDENT ON YOPOGRAPHY

2:1 OR FLATTER

PLAN VIEW

1. ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.

2. Diverted runoff from a disturbed area shall be conveyed to a sediment trapping

Diverted runoff from an undisturbed area shall outlet directly into an undis-turbed stabilized area at non-erosive velocity.

ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.

5. THE SWALE SHALL BE EXCAVATED OF SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS

ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL
NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.

FLOW CHANNEL STABILIZATION

A (5 AC OR LESS)

SEED AND STRAW MULCH

SEED AND STRAW MULCH

SEED WITH JUTE OR

LINED 4-8" RIP-RAP

TEMPORARY SWALE

9. PERÍODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT,

OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.

6. FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.

8. STABILIZATION SHALL BE AS PER THE CHART BELOW:

GRADE

0.5-3.0%

3.1-5.02

5.1-8.0%

8.1-20%

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE COLLEGE PARK, MARYLAND

CONSTRUCTION SPECIFICATIONS

SOIL CONSERVATION SERVICE

College Park, Md.

OUTLET AS REQUIRED SEE ITEM 8 BELOW

certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

B (5 AC - 10 AC)

SEED AND STRAW MULCH

LINED RIP-RAP 4-8" RECYCLED CONCRETE EQUIVALENT

SEED USING JUTE OR EXCELSIOR

ENGINEERED DESIGN

Date 1/9/95

HOWARD COUNTY, MARYLAND ELECTION DISTRICT #6

SDP-95-31

SHEET 6 OF 7

1/20/95

1/20/95

PARCEL #

PARCEL A-1

CENSUS TRACT

