

PLANT	LIST				
SYMBO	L QTY.	NAMES (BOTANICAL / SCIENTIFIC)	SIZE	ROOT	COMMENTS
SHADE	TREES				
A	14	Acer rubrum 'October Glory' / October Glory Red Maple	2 1/2-3" Cal.	B&B	
P	5	Platanus x acerifolia 'Bloodgood' / Bloodgood London Planetree	2 1/2-3" Cal.	B&B	
Q	9	Quercus phellos/ Willow Oak	2 1/2-3* Cql.	8&8	
E.VERG	REEN TREES				
PA	9	Picea abies/ Norway Spruce	8'-10' Ht.	B&B	
PŢ	8	Pinus thunbergiana/ Japanese Black Pine	8' -10' Ht.	848	
ORNAM	ENTAL TREES				
cc	7	Cercis canadensis/ Eastern Redbud	8' -10' Ht.	B&B	
ск	16	Cornus kousa/ Kousa Dogwood	8' -10' Ht.	B&B	
SHRUB	s				
AZ	55	Azalea 'Delaware Valley' / Delaware Valley White Azalea	15−18° Spr.	BAB	
ΕĀ	17	Euonymus alatus 'compactus'/ Compact Burning Bush	2-2 1/2' Spr.	B&B	
ND	66	Nandina domestica 'Fire Power'/ Fire Power Nandina	15-18° Spr.	B&B	
RP	8	Rhododendron P. J. M. 'Olga Metzitt'/ Olga Metzitt P. J. M. Rhododendron	18–24' Spr.	848	
TH	126	Taxus media 'Hicksii'/	2–2 1/2' Ht.	B&B	
ΥP	14	Viburnum plicatum var.tomentosum 'Mariesi Maries Doublefile Viburnum	i' / 2 1/2-3' Ht.	848	
GROUN	DCOVER				
LG	2, 130	Liriope spicata / Creeping Lily Turf	i qt.	Cont.	+/- 12° 0. C.

PERIMETER LANDSCAPE EDGE									
Category	Perimeter								
	Adj.	to R	oadwa 3	ys 4	5	6	Adj. to	Perim.	Prop
Landscape Type	E	E	В	c	В	E	_		
Linear Feet of Roadway Frontage/Perimeter	27'	136'	122'	215'	122'	214'	-		
Credit for Ex. Vegetation (Yes, No, Linear Feet) (describe below if needed)	NO	NO	NO.	NO	NO	NO	-		
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (describe below if needed)	NO	NO	NO	NO	NO	NO	t .		
Number of Plants Required Shade Trees Evergreen Trees Shrubs	1 0 7	3 0 9	2 3 0	5 11 0	2 3 0	5 0 54	0 0 0		
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2: 1 subst.) Shrubs (10: 1 subst.) (describe plant substitution credits below if needed)	A	ltern ltern	ative ative	Comp	lianc Iianc	eexce eexce	eds county eds county eds county eds county	req.— req.—	
Schedule 'A' Number of Shade Trees for Schedule 'A' Number of Evergreen Trees Schedule 'A' Number of Shrubs for bond Schedule 'A' Number of Street Trees for TOTAL Estimate for Bonding:	for bling:	ondin	g: 17 70	X	\$150	= \$5, = \$2, = \$2, = \$0	, 550 , 100		

PARKING LOT INTERNAL LANDSCAPING Number of Parking Spaces = 98 Spaces	
Number of Trees Required = 5 Trees @ 1 per 20 spaces	Number of Islands Regulred = 5
Number of Trees Provided Shade Trees Other Trees (2: 1 substitution) NOTE: Alternative Compliance per HRD's Standards Alternative Compliance exceeds County requirements	Number of Islands Provided = 5

LANDSCAPING NOTES

- 1. This plan has been prepared in accordance with Section 18. 124 of the Howard County Code and Chapter VI (Alternative Compliance) of the Howard County Landscape Manual
- 2. Contractor shall notify all utilities at least (5) five days before starting work. All General Notes, especially those regarding utilities, on Sheet 1 shall apply.
- 3. Field verify underground utility locations and existing conditions before starting planting work. Contact engineer / landscape architect if
- 4. Plant quantities shown on Plant List are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on the plan and those shown on the plant list, the quantities on the plan shall take precedence.
- 5. All plant material shall be full, heavy, well formed, and symmetrical, and conform to the A.A.N. Specifications, and be installed in accordance with project specifications.
- 6. No substitution shall be made without written consent of the owner or his representative.
- 7. All areas disturbed by construction activities but not otherwise planted, paved, or mulched shall be seeded or sadded in accordance with
- 8. The contractor shall notify the owner in writing if he/she encounters soil drainage conditions which may be detrimental to the growth of the
- 9. All exposed earth within limits of planting beds shall be mulched with shredded hardwood mulch per Planting Details.
- 10. "Schedule A Perimeter Landscape Edge: and "Schedule B Parking Lot Internal Landscaping" are provided for landscape surety calculation purposes only. Financial surety for the required landscaping shall be posted with the developers agreement in the amount of #11,550.
- 11. Tabulation for landscape shown: Required planting by HRD for 1.7485 acre of office at 28 trees / acre = 49 trees

Planting provided: Shade Trees (existing and proposed): 28 Ornamental Trees: 23 = 11.5 E.S.T. 1 Evergreen Trees (existing and proposed) 17 = 8.5 E.S.T. 1 1 E.S.T. - Equivalent Shade Trees The balance of the HRD required shade trees is provided by proposed shrubs and ground covers

APPROVED PLANNING BOARD of HOWARD COUNTY

DATE 9/23/99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING 18/99

PLANT MATERIALS AND PLANTING METHODS

A. Plant Materials

The landscape contractor shall furnish and install and/or dig, ball, burlap and transplant all of the plant materials called for on drawings and/or listed in the Plant Schedule.

1. Plant Names

Plant names used in the Plant Schedule shall conform with "Standardized Plant Names," latest edition.

2. Plant Standards

All plant material shall be equal to or better than the requirements of the "USA Standard for Nursery Stock" latest edition, as published by the American Association of Nurserymen (hereafter referred to as AAN Standards). All plants shall be typical of their species and variety, shall have a normal habit of growth and shall be first quality, sound, vigorous, well-branched and with healthy, well-furnished root systems. They shall be free of disease, insect pests and mechanical injuries.

All plants shall be nursery grown and shall have been grown under the same climate conditions as the location of this project for at least two years before planting. Neither heeled-in plants nor plants from cold storage will be accepted.

3. Plant Measurements

All plants shall conform to the measurements specified in the Plant Schedule as approved by

- a. Caliper measurements shall be taken six inches (6") above grade for trees under four-inch (4") caliper and twelve (12") above arade for trees four inches (4") in caliper
- b. Minimum branching height for all trees shall be six feet (6'). maximum eight feet (8°).
- c. Minimum size for planting shade trees shall be 3-3?" caliper, 14'-16' in height.
- d. Minimum size for planting minor or intermediate focus trees (pines. crabapples, etc.) shall be 3"-3?" caliper, 10'-12' in height.
- e. Minimum size for planting shrubs shall be 18" - 24" spread unless noted otherwise.
- f. Caliper, height, spread and size of ball shall be generally as follows:

CALIPER HEIGHT SPREAD SIZE OF BALL 3" - 3.5" 14'-16' 6'-8' 32" diameter 3. 5" - 4" 14' -16' 8' -10' 36" diameter

4" - 4.5" 16'-18' δ'-10' 40" diameter 4.5"-5" 16'-17' 10'-12' 44" diameter 5" - 5.5" 16'-20' 10'-12' 48" diameter 5.5"-6" 18'-20' 12'-14' 52" diameter

All plant material shall generally average the median for the size ranges indicated above as indicated in the "AAN Standards*.

4. Plant Identification

Legible labels shall be attached to all shade trees, minor trees, specimen shrubs and bundles or boxes of other plant material giving the botanical and common names, size and quantity of each. Each shipment of plants shall bear certificates of inspection as required by Federal, State and County authorities.

5. Plant Inspection

The ARC may, upon request by the builder or developer, at least ten (10) days prior to the installation of any proposed plant material, inspect all proposed plant material at the source of origin.

B. Planting Methods

All proposed plant materials that meet the specifications in Section A are to be planted in accordance with the following methods during the proper planting seasons as described in the following:

Planting Seasons

The planting of deciduous trees, shrubs and vines shall be from March 1st to June 15th and from September 15th to December 15th. Planting of deciduous material may be continued during the winter months providing there is no frost in the ground and frost-free topsoil planting mixtures are used.

The planting of evergreen material shall be from March 15th to June 15th and from August 15th to December 1st. No planting shall be done when ground is frozen or excessively moist. No frozen or wet topsoil shall be used at any time.

2. Digging

All plant material shall be dug, balled and burlapped (B+B) in accordance with the "AAN Standards"

3. Excavation of Plant Pits

The landscaping contractor shall excavate all plant pits, vine pits, hedge trenches and shrub beds in accordance with the following

- a. Locations of all proposed plant material shall be staked and approved in the field by the landscape architect before any of the proposed plant material is installed
- b. All pits shall be generally circular in outline, vertical sides; depth shall not be less than 6" deeper than the root ball, diameter shall not be less than two times the diameter of the root ball as set forth in the following schedule.

by the landscape contractor.

c. If areas are designated as shrub beds or hedge trenches, they shall be excavated to at least 18" depth minimum. Areas designated for ground covers and vines shall be excavated to at least 12" in depth minimum.

d. Diameter and depth of tree pits shall generally be as follows:

onder go	PIT				
PLANT SIZE	ROOT BALL	DIAMETER	DEPTH		
3" - 3.5"cal.	32"	64"	28"		
3.5" - 4" cal.	36"	72"	32"		
4" - 4.5"cal.	40"	80"	36"		
4.5"-5" cal.	44"	88*	40"		
5" - 5. 5"cal.	48"	98"	44"		
5.5"-6" cal.	52"	104"	48"		

A 20% compaction figure of the soil to be removed is assumed and will be allowed in calculation of extra tonsoil. The tabulated pit sizes are for purposes of uniform calculation and shall not override the specified depths below the bottoms of the root balls.

4. Staking, Guying and Wrapping

All plant material shall be staked or guyed, and wrapped in accordance with the following specifications:

- a. Stakes: Shall be sound wood 2" x 2" rough sawn oak or similar durable woods, or lengths, minimum 7'-0" for major trees and 5'-0" minimum for minor trees.
- b. Wire and Cable: Wire shall be #10 ga. galvanized or bethanized annealed steel wire. For trees over 3" caliper, provide 5/16" turn buckles, eve and eve with 4" takeup. For trees over 5° caliper, provide 3/16". 7 strand cable cadmium plated steel, with galvanized "eye" thimbles of wire and hose on trees up to 3" in caliper.
- Hose: Shall be new, 2 ply reinforced rubber hose, minimum 1/2" I.D. "Plastic Lock Ties" or "Paul's Trees Braces" may be used in place of wire and hose on trees up to 3"
- d. All trees under 3" in caliper are to be planted and staked in accordance with the attached "Typical Tree Staking Detail". All trees over 3" in caliper are to be planted and guyed in accordance with the attached "Typical Tree Guying Detail*

5. Plant Pruning, Edging and Mulching

- a. Each tree, shrub or vine shall be pruned in an appropriate manner to its particular requirements, in accordance with accepted standard practice. Broken or bruised branches shall be removed with clean cuts flush with the adjacent trunk or branches. All cuts over 1" in diameter shall be painted with an approved antiseptic tree wound
- b. All trenches and shrub beds shall be edged and cultivated to the lines shown on the drawing. The areas around isolated plants shall be edged and cultivated to the full diameter of the pit. Sod which has been removed and stacked shall be used to trim the edges of all excavated areas to the neat lines of the plant pit saucers, the edges of shrub areas, hedge trenches and vine
- After cultivation, all plant materials shall be mulched with a 2" layer of fine, shredded pine bark, peat moss, or another approved material over the entire area of the bed or saucer.

6. Plant Inspection and Acceptance

The ARC shall be responsible for inspecting all planting projects on a periodic basis to assure that all work is proceeding in accordance with the approved plans and specifications.

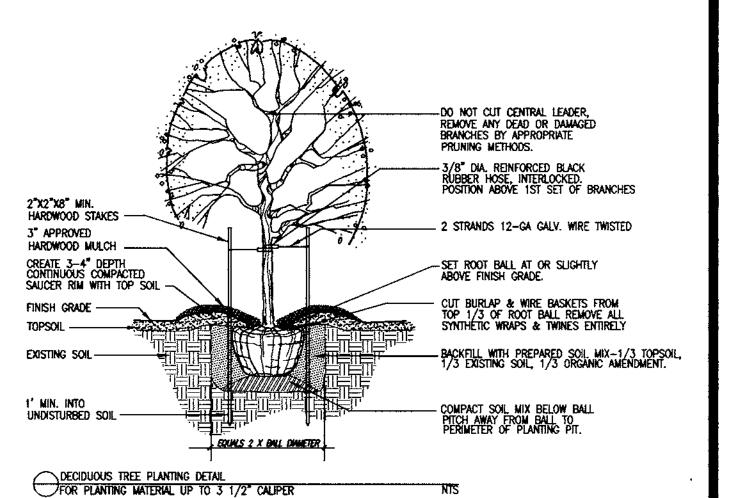
7. Plant Guarantee

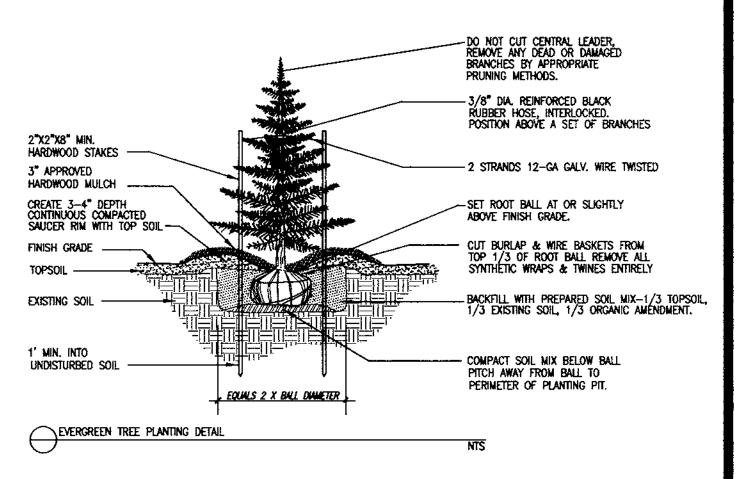
All plant material shall be guaranteed for the duration of one full growing season, after final inspection and acceptance of the work in the planting project. Plants shall be alive and in satisfactory growing condition at the end of the guarantee period

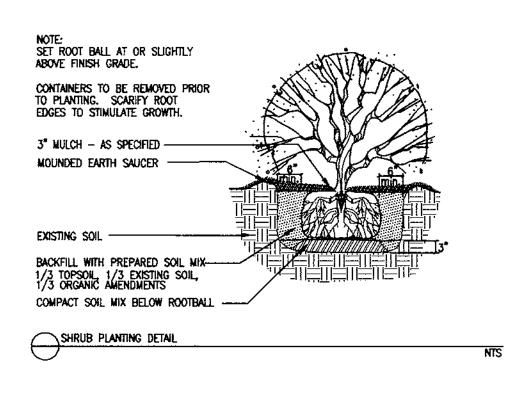
- a. For this purpose, the "growing season" shall be that period between the end of the "Spring" planting season, and the commencement of the "Fall" planting
- Guarantee for planting performed after the specified end of the "Spring" planting season, shall be extended through the end of the next following "Spring" planting season.

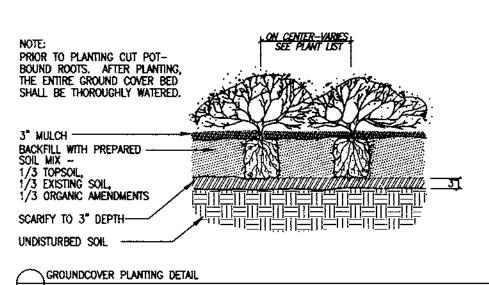
All sodding shall be in accordance to the "Landscape Specification" Guidelines for Baltimore-Washington metropolitan Areas" latest edition, approved by the Landscape Contractors Association of Metropolitan Washington and the American Society of Landscape

All sod shall be strongly rooted sod, not less than two years old and free of weeds and undesirable native grasses. Provide only sod capable of growth development when planted and in strips not more than 18" wide x 4" long. Provide sod composed principally of improved strain Kentucky bluegrass, such as, Columbia, Victa, or









LANDSCAPE NOTES & DETAILS SCALE ZONING G. L. W. FILE No. NOT TO SCALE VILLAGE OF RIVER HILL (PLOT AT 1"=1") PARCEL 'BB' DATE TAX MAP - GRID SHEET PLAT No. 13172 November 8 5 OF 6 HOWARD COUNTY, MARYLAND

GLW GUTSCHICK LITTLE & WEBER, P.A. CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS 3909 NATIONAL DRIVE - SUITE 250 - BURTONSVILLE OFFICE PARK BURTONSVILLE, MARYLAND 20866 TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

DES.KMK DRN. KMK CHK.

CHANGE GROUNDCOVER FROM IVY TO LIRIOPE PER OWNER REQUEST KMK REVISE PER 7/12/99 H. R. D. COMMENTS AND 7/14/99 HOWARD COUNTY LAND DEVELOPMENT COMMENTS KMK APP'R. REVISION BY

PREPARED FOR: TROUTMAN COMPANIES 9030 RED BRANCH ROAD SUITE 100 COLUMBIA, MD. 21045 PH: 410-730-7065

CLARKSVILLE ELECTION DISTRICT No. 5

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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. (410) 313-1855
- 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- 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 and 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, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL. Storm
- specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seedings and mulching (Sec. G). Temporary stabilization, with mulch alone, can only be done

5. All disturbed areas must be stabilized within the time period

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. Site Analysis: : 1.75 Total Area of Site : 1.75 Area Disturbed Area to be roofed or paved : 1.19 Acres Area to be vegetatively stabilized : 0.56 Acres 252 Cu. Yds. Cu. Yds. Total Fill 25-72 Off-site 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 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 is made.

11. Trenches for the construction of utilities is limited to 3 pipe lengths or that which shall be backfilled and stabilized within 1 working day, whichever is shorter.

PERMANENT SEEDING NOTES

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

Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless 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/1000 square feet) and 600 Ibs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 unreaform fertilizer (9 lbs/1000 sa ft).

2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq 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 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 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 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 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 sa ft) for anchorina.

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

TEMPORARY SEEDING NOTES

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

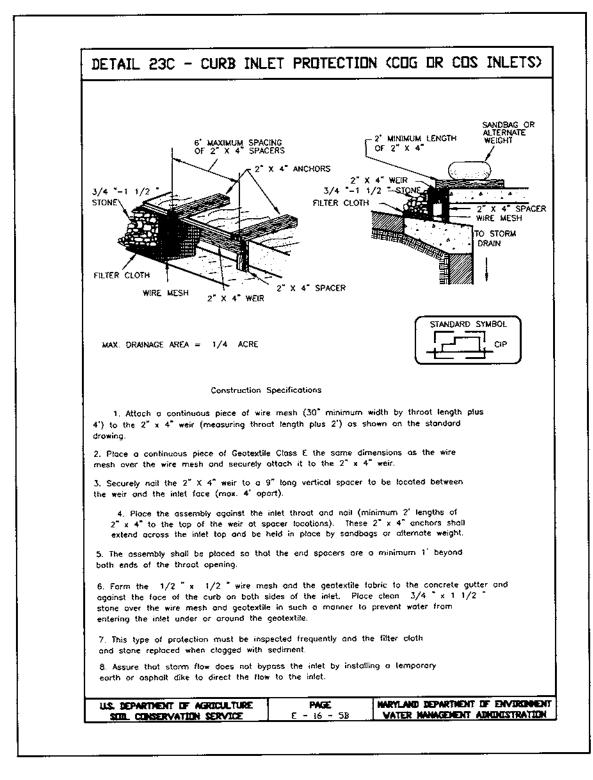
Seedbed Preparation: Loosen upper three inches of soil by raking, discing or other acceptable means before seeding (unless previously loosened).

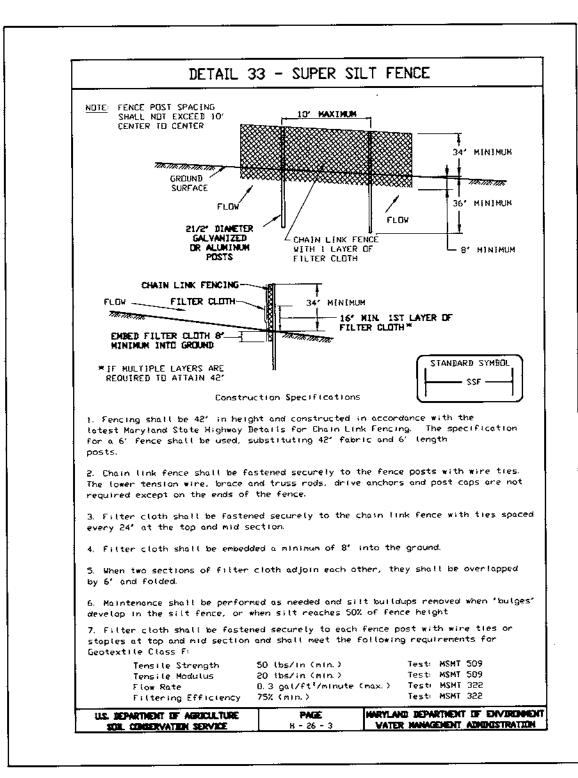
Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).

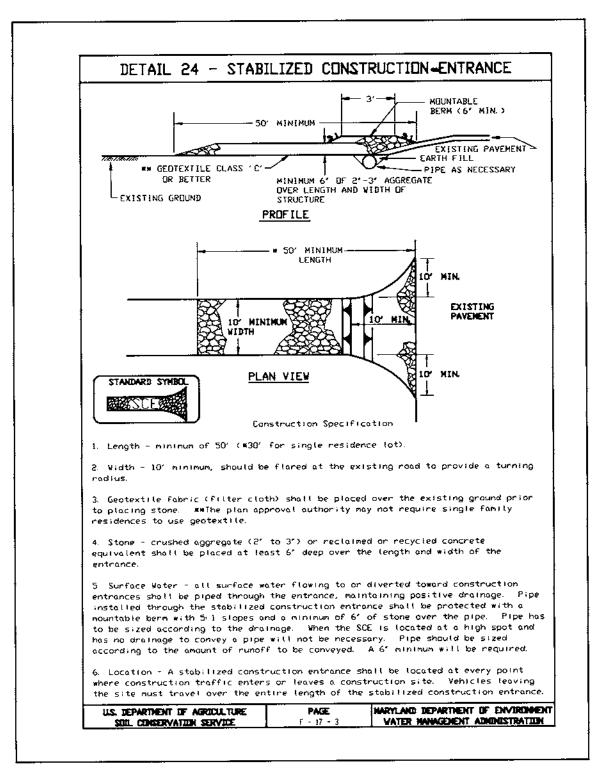
Seeding: For periods March 1 thru April 30 and from August 15 thru October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs./1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

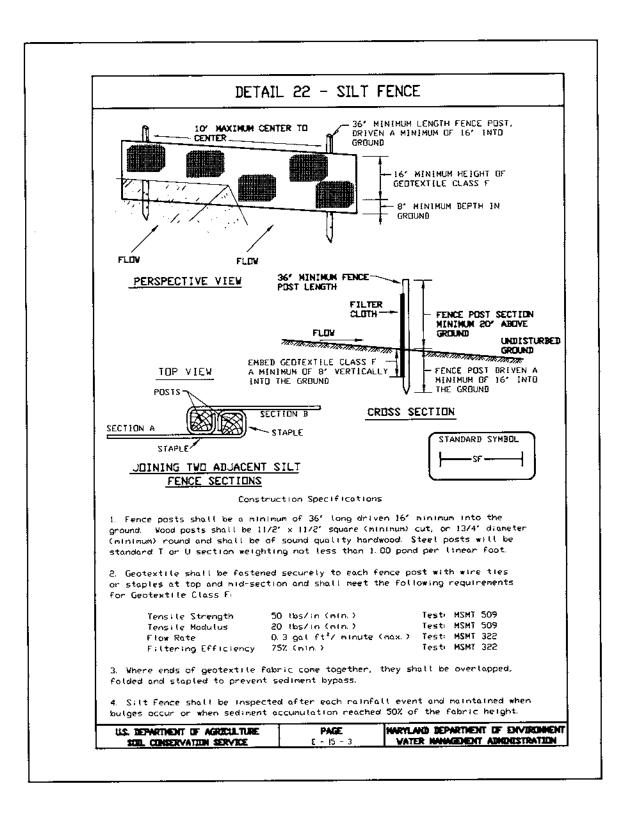
Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted, weed-free, small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or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

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

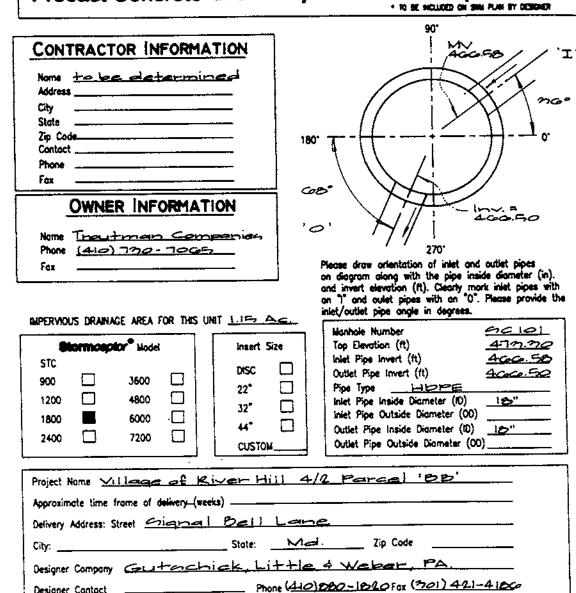












PLEASE FILL OUT COMPLETELY AND FAX TO: CSR Bydiro Condining ATTN: ED O'MALLEY FAX: (703)922-3659, PHONE: (703)971-1900 FOR TECHNICAL ASSISTANCE PLEASE CALL MIKE BARG, PHONE (703)971-1900

OPERATION AND MAINTENANCE SCHEDULE FOR STORMCEPTOR WATER QUALITY DEVICE

- The Stormceptor water quality structure shall be periodically inspected and cleaned to maintain operation and function. The owner shall inspect the Stormceptor unit yearly at a minimum utilizing the Stormceptor Inspection/Monitoring Form. Inspections shall be done by using a clear Plexiglass tube ("sludge judge") to extract a water column sample. When the sediment depths exceed the level specified in Table 6 of the Stormceptor Technical Manual, the unit must be cleaned.
- The Stormceptor water quality structure shall be checked and cleaned immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies.
- The maintenance of the Stormceptor unit shall be done using a vacuum truck which will remove the water, sediment, debris, floating hydrocarbons and other materials in the unit. Proper cleaning and disposal of the removed materials and liquid must be followed by the
- 4. The inlet and outlet pipes shall be checked for any obstructions at least once every six months. If obstructions are found, the owner shall have them removed. Structural parts of the Stormceptor unit shall be repaired as needed.
- The owner shall retain and make the Stormceptor Inspection/Monitoring Forms available to the Howard County officials upon their request.

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Maryland 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 HSCD."

Signature of Developer/Builder



"I 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.'

This Development Plan is approved for Soil Erosion and Sediment Control by the Howard Soil Conservation

CLARKSVILLE ELECTION DISTRICT No. 5

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements.

APPROVED PLANNING BOARD of HOWARD COUNTY

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GLW GUTSCHICK LITTLE & WEBER, P.A.

CIVIL ENGINEERS, LAND SURVEYORS, LAND PLANNERS, LANDSCAPE ARCHITECTS

BURTONSVILLE, MARYLAND 20866

TEL: 301-421-4024 BALT: 410-880-1820 DC/VA: 301-989-2524 FAX: 301-421-4186

3909 NATIONAL DRIVE - SUITE 250 - BURTONSWILLE OFFICE PARK

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

BY app'r.

PREPARED FOR: TROUTMAN COMPANIES 9030 RED BRANCH ROAD SUITE 100 COLUMBIA, MD. 21045 PH: 410-730-7065

VILLAGE OF RIVER HILL

SEDIMENT CONTROL NOTES & DETAILS

PARCEL "BB"

A RESUBDIVISION OF PARCEL 'H', VILLAGE OF RIVER HILL, SECTION 4 AREA 2

G. L. W. FILE No. ZONING SCALE AS SHOWN SHEET DATE TAX MAP - GRID November 8 HOWARD COUNTY, MARYLAND