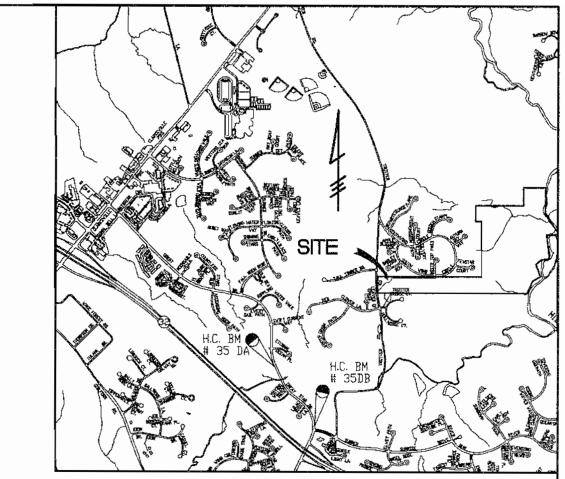
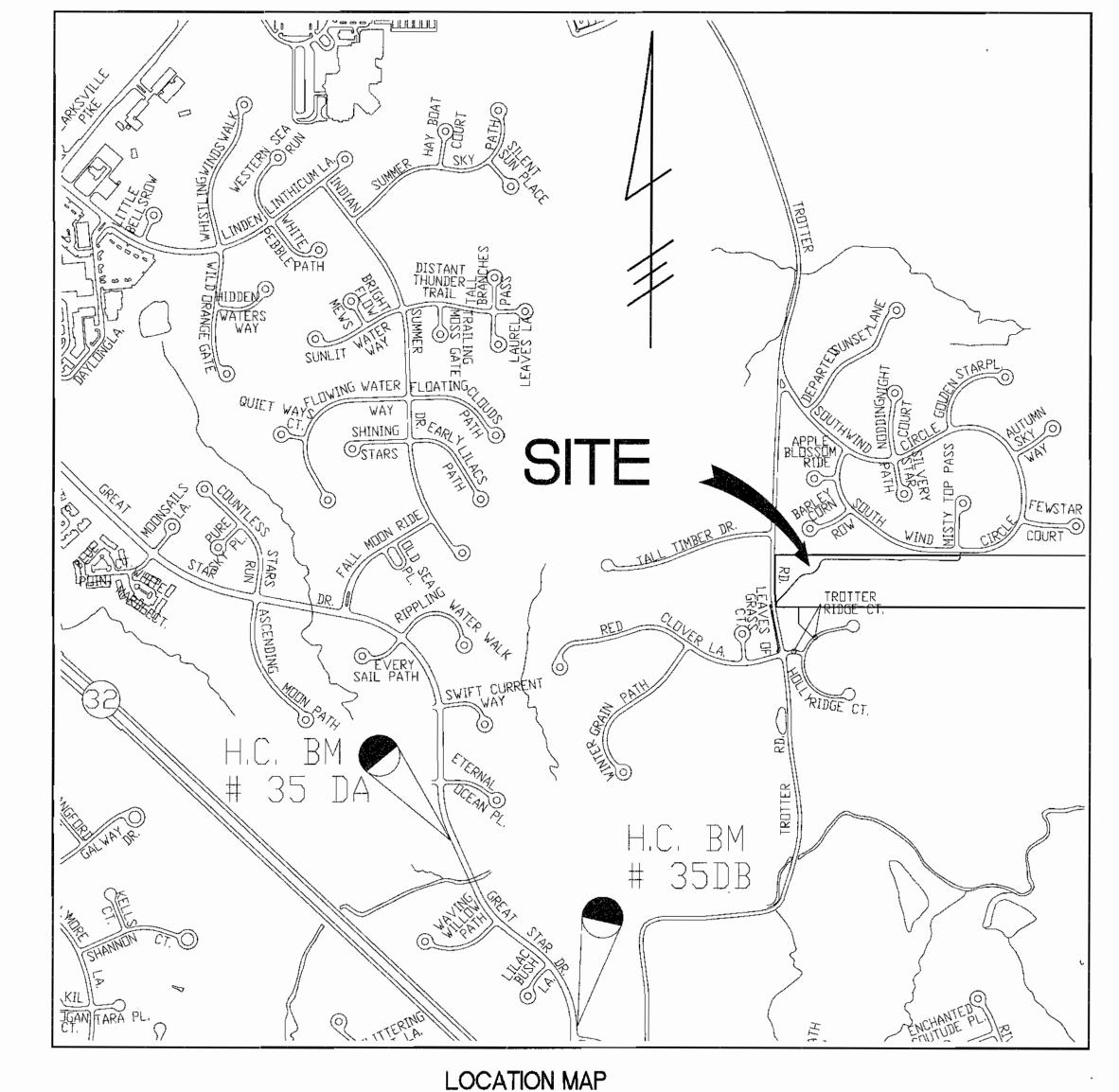
	SHEET INDEX
NO.	DESCRIPTION
1	COVER SHEET
2	PATHWAY PLAN I
3	SEDIMENT CONTROL NOTES AND DETAILS

# PHEASANT RIDGE I - PHEASANT RIDGE II PATHWAY CONNECTOR



# 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



SCALE: 1' = 600'

### 1. TOPOGRAPHY SHOWN ON THESE DRAWINGS ARE BASED ON: ROAD PLANS (F-91-91, F- 95-165) AND ON HOWARD COUNTY TOPOGRAPHY. THE INFORMATION SHOWN OR NOT SHOWN HEREON DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR PROPER COMPLETION OF GRADING.

2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY STANDARDS AND SPECIFICATIONS.

3. DEVIATIONS FROM THESE PLANS AND SPECIFICATIONS WITHOUT PRIOR WRITTEN CONSENT OF PHOENIX ENGINEERING MAY CAUSE THE WORK TO BE

4. THE LOCATION OF UTILITIES AND UTILITY EASEMENTS SHOWN ON THESE PLANS ARE FROM APPROVED SDP'S AND RECORDED PLATS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S ACTIONS SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.

5. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION AND MAINTAIN MINIMUM COVER IN ACCORDANCE

- MIN. COVER OVER SANITARY LINES: 2.5' ABOVE INVERT
- MIN. COVER OVER STORM DRAIN:
- MIN. COVER OVER GAS LINES: (AS PER BGE REQUIREMENTS) MIN. COVER OVER ELECTRIC LINES: (AS PER BGE REQUIREMENTS)
- 6. THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK, CONTRACTOR SHALL
- 7. FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- 8. ALL PROPOSED IMPROVEMENTS WILL BE MAINTAINED BY THE COLUMBIA ASSOCIATION.
- 9. A FEE SHALL BE PAID IN LIEU OF STORMWATER MANAGEMENT IN THE AMOUNT OF \$ 1,711.00 FOR THIS PROJECT, AS PER HOWARD COUNTY DEVELOPMENT ENGINEERING DIVISION LETTER DATED MARCH 1, 2001.
- 10. THE CONTRACTOR SHALL CONTACT THE BUREAU OF ENGINEERING, CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 48 HOURS IN ADVANCE OF
- PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL STAKE OUT ALL CONSTRUCTION AND VERIFY ALL OFFSETS, SETBACKS, EXISTING UTILITY LOCATIONS (HORIZONTAL AND VERTICAL) AND DIMENSIONS.
- 12. THE PAVEMENT DETAIL SHOWN ON THESE PLANS (3" BITUMINOUS SURFACE COURSE OVER 4" CRUSHED AGGREGATE BASE) IS NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING, THE FINAL PAVEMENT SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON IN-SITU TESTING OF THE FINISHED SUBGRADE. ANY PAVEMENT SECTION DETERMINED BY THE GEOTECHNICAL ENGINEER THAT IS LESS THAN THE HOWARD COUNTY MINIMUM STANDARD SHALL FIRST BE APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. THE TESTING AND GEOTECHNICAL ENGINEER SHALL BE PROVIDED BY THE OWNER.
- 13. ALL FILL SHALL BE ROLLED TO A MINIMUM DEGREE OF COMPACTION TO 95% MAXIMUM STANDARD PROCTOR DENSITY WITH A MOISTURE CONTENT BETWEEN O AND 3% OF OPTIMUM AS DETERMINED BY ASTM-D-698. FILL UNDER PAVED AREAS, SHALL BE COMPACTED TO 98% MAXIMUM STANDARD PROCTOR
- 14. ALL TREES 12" IN DIAMETER OR GREATER SHALL REMAIN PROTECTED AND UNDAMAGED AT ALL TIMES UNLESS OTHERWISE INDICATED. THE CONTRACTOR WILL ATTEMPT TO PROTECT ALL OTHER TREES THROUGH FIELD ADJUSTMENTS TO THE LAYOUT.
- 15. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, OR RIGHTS-OF-WAYS THAT MAY BE REQUIRED TO COMPLETE THE
- 16. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES AND SAFETY PRECAUTIONS AND PROGRAMS.
- 17. THE CONTRACTOR SHALL IMPLEMENT AND MAINTAIN SEDIMENT AND EROSION CONTROL MEASURES AND NOTIFY THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410) 313- 1855.

18. ADJUSTMENTS TO THE SEQUENCE OF CONSTRUCTION MUST BE APPROVED BY THE HOWARD COUNTY CONSTRUCTION AND INSPECTION DIVISION PRIOR TO

- 19. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE IN ACCORDANCE WITH HOWARD COUNTY SPECIFICATIONS AND STANDARDS.
- 20. ALL ROADS SHOWN ON THESE PLANS ARE PUBLIC ROADS.
- 21. THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS BECAUSE IT IS PLANNED UNIT DEVELOPMENT WHICH HAS PRELIMINARY DEVELOPMENT PLAN APPROVAL AND 50% OR MORE OF THE LAND WAS RECORDED AND SUBSTANTIALLY DEVELOPED BEFORE DECEMBER 31, 1992.
- 22. THERE ARE NO WETLANDS OR FLOODPLAIN ON THIS SITE.
- 23. NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT,
- 24. THE PROPOSED PATHWAYS WILL BE PRIVATELY OWNED AND MAINTAINED BY THE COLUMBIA ASSOCIATION.

25. PATHWAY PROJECTS IN THE VILLAGE OF RIVER HILL ARE: PHEASANT RIDGE ! -- SDP 92-121, PHEASANT RIDGE !! -- SDP 96-129, POINTERS RUN (PHASE !) SDP 95-11, POINTERS RUN (PHASE 2) SDP 96-05, POINTERS RUN (PHASE 3) SDP 98-14, PHEASANT RIDGE III (PHASE 1) SDP 00-14, PHEASANT RIDGE III (PHASE 2) SDP 01-21, AND PHEASANT RIDGE II PATHWAY CONNECTOR SDP 01-88.

26. Criteria & Mapper #DP Thase 201-A

# 0.42 AC. OR 18,295 S.F.

498.265 AC.

1.25 AC OR 54,450 S.F.

PEDESTRIAN PATHWAYS

APPROVED
PLANNING BOARD
of HOWARD COUNTY

SITE ANALYSIS

TOTAL AREA OF OPEN SPACE LOTS

LENGTH OF BOARDWALKS & BRIDGES:

TOTAL LIMIT OF DISTURBANCE:

TOTAL AREA OF THIS SUBMISSION

ZONING: NT-OS

PROPOSED USE:

LENGTH OF PATHWAYS:

PARKING REQUIRED: PARKING PROVIDED:

> OWNER/DEVELOPER THE COLUMBIA ASSOCIATION

PROVED: DEPARTMENT OF PLANNING AND ZONING

HEE DEVELOPMENT ENGINEERIN

ATTN: DENIS ELLIS

10221 WINCOPIN CIRCLE SUITE 100 COLUMBIA MARYLAND 21044-3410 (410) 381-0383

Revision Description

PREPARED BY: PHOENIX ENGINEERING, INC. CONSULTING ENGINEERS 813 MAIDEN CHOICE LANE, SUITE 300

(410) 247-8833 FAX 247-9397 COLUMBIA - VILLAGE OF RIVER HILL SECTION 1 AREA 3

BALTIMORE, MARYLAND 21228

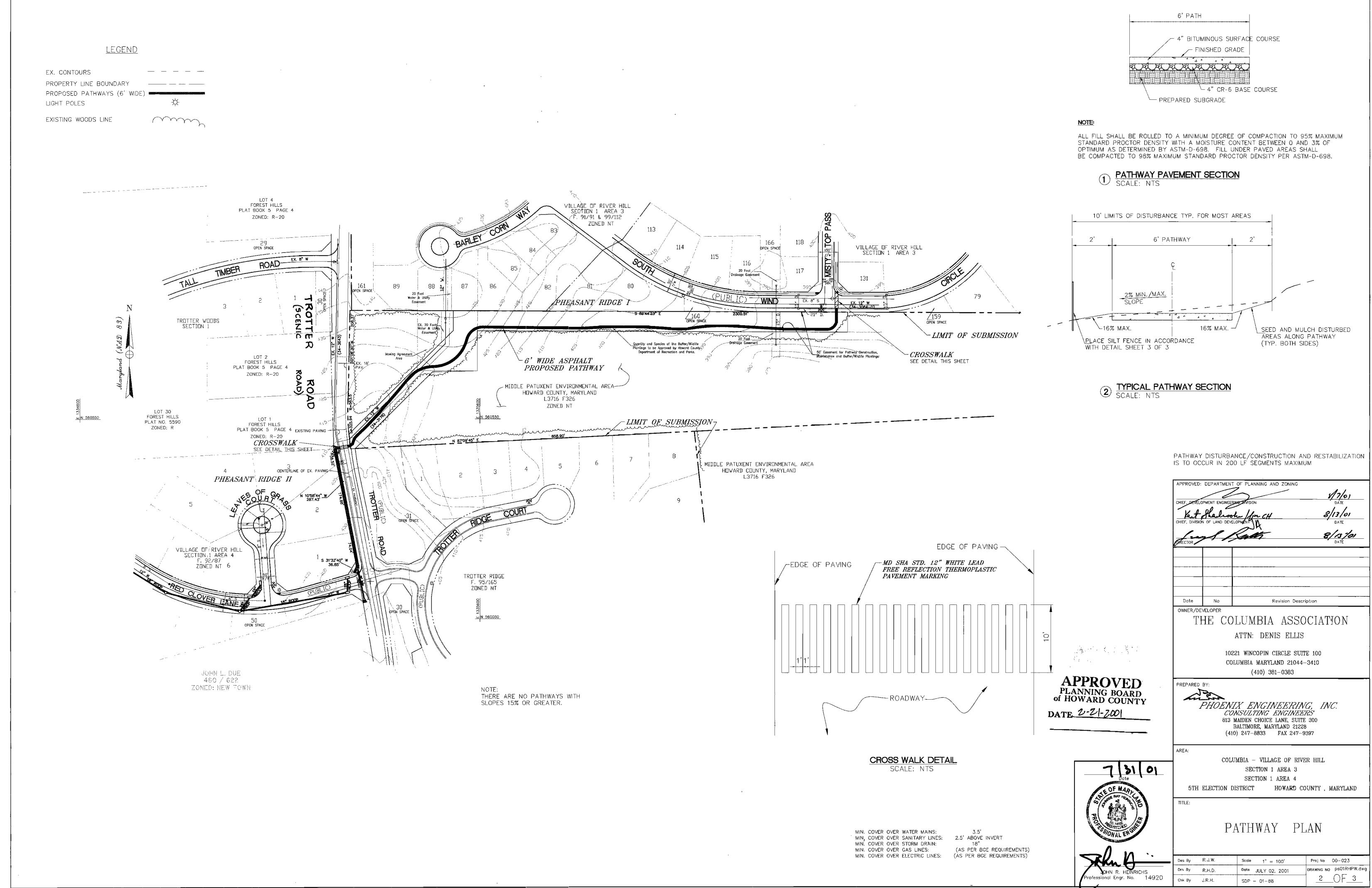
SECTION 1 AREA 4 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

COVER SHEET

Proj No 00-023 DRAWING NO tiO1PRPW.dwg Date JULY 02, 2001

BM #35DA ELEV. 351.590 ALUMINUM DISC ON CONCRETE MONUMENT SET FLUSH WITH GROUND 2.1' BEHIND FACE OF CURB ON WEST SIDE OF GREAT STAR DRIVE, 420'+/- SOUTH OF TIDES TERRACE AND 1.6' NORTH OF A STORM DRAIN INLET NORTHING 558918.643 EASTING 1333137.324

BM #35DB ELEV. 401.640 ALUMINUM DISC ON CONCRETE MONUMENT SET FLUSH WITH GROUND 7.3' BEHIND FACE OF CURB ON EAST SIDE OF GREAT STAR DRIVE, AND 46.9' NORTH OF LIGHT POLE AT INTERSECTION OF SUMMER SUNRISE DRIVE NORTHING 557696.168 EASTING 1333974.579



MIX	SEED MIX (USE CERTIFIED MATERIAL			USDA HARDI-		RECON	MENDE	D PLA	ANTING	DATES		102					
	IF AVAILABLE)	LBS/AC	LBS/1000 SQ FT.		NESS ZONES	3/1- 5/15	3/15- 6/1	5/16- 8/14	6/2+ 7/31	8/1- 10/1	8/15- 10/15		Ε				
1.	TALL FESCUE (75%)	150	3.4	MOIST TO DRY	5b		X			X			Α				
	CANADA BLUEGRASS (10%)		0-1	WIOICI TO DICT	6a		Х			Х							
	KENTUCKY BLUEGRASS (10%) REDTOP (5%)		Lave		Х					Х							
	(44)				7a	Х						Х					
				and the state of t	7ь	Х						Х					
2.	KENTUCKY BLUEGRASS (50%)	150	3.4	MOIST TO	5ь		Х			X			В				
	CREEPING RED FESCUE OR A			MODERATELY DRY TO DRY	6a		Х			Х		ļ					
	EDTOP (10%)		6b	Х					Х								
3.	TALL FESCUE (85%) PERENNIAL RYEGRASS (10%) KENTUCKY BLUEGRASS (5%)	TALL FESCUE (85%)	ALL FESCHE (85%)	TALL FESCUE (85%)	TALL FESCUE (85%)	125	2.9	MOIST TO	5b		Х			Х			С
J.		15	.34	DRY	6a		X			Х							
		125	.23		6b	Х					Х						
					7a	Х						Х					
					7b	Х						Х					
4.	RED FESCUE OR	60	.92	MOIST TO	5b		X			Х			D				
	CHEWINGS FESCUE (80%) PERENNIAL RYEGRASS (20%)	60	.92	DRY	6a		X			Х		1					
	PERENNIAL RIEGRASS (20%)	15	.34		6b	Х					X						
5.	TALL FESCUE (85%) OR	110	2.5	MOIST TO	5b		X			Х			Ε				
	PERENNIAL RYEGRASS (50%)	20	.46	DRY	6a		X			Х							
	PLUS CROWNVETCH OR FLATPEA	20 20	.46 .46		6b	X					Х						
		20	, +0		7a	Х						×					
				:	7b	X						X	1				
6.	WEEPING LOVEGRASS (17%)	4	.09	DRY TO VERY	6a	Х		×					F				
	SERECIA LESPEDEZA (83%)		DRY	7a	×		X					1					
	1				7b	X		X					1				

NOTES: A/ USED BY SHA ON SLOPED AREAS. ADD A LEGUME FOR SLOPES > THAN 3:1.

B/ USED IN MEDIAN AREAS BY SHA. SHADE TOLERANT. C/ POPULAR MIX - PRODUCES PERMANENT GROUND COVER QUICKLY. BLUEGRASS THICKENS STAND.

D/ BEST USE ON SHADY SLOPES, NOT ON POORLY DRAINED CLAYS.

E/ USE ON LOW MAINTENANCE, STEEP SLOPES. USE TALL FESCUE IN DRAUGHTY COND. CROWN VETCH BEST FOR 56, 6a, 6b. F/ SUITABLE FOR SEEDING IN MID - SUMMER.

Table 25 Permanent Seeding For Low Maintenance Areas (Cont'd)

MIX	SEED MIX (USE CERTIFIED MATERIAL	PLANT RATE	ING	SITE CONDITIONS	USDA HARDI—		RECON	MENDI	ED PLA	ANTING	DATES		10Z		
	IF AVAILABLE)	LBS/AC	LBS/1000 SQ FT.		NESS ZONES	3/1- 5/15	3/15- 6/1	5/16- 8/14	6/2- 7/31	8/1 10/1		8/15- 11/15	Ė		
7.	TALL FESCUE (83%)	110	2.5	DRY TO VERY	5b		Х		X	×			G		
, .	WEEPING LOVEGRASS (2%)	3	.07	DRY	6а		Х		Х	×					
	SERECIA LESPEDEZA (15%)	20	.46		6b	Х		X			X				
					7a	Х		X				Х			
					7b	Х		X		Ì		Х	1		
8.	REED CANARYGRASS (75%)	40	.92	WET TO	5b		Х			X			Н		
	REDTOP (6%) PLUS BIRDSFOOT TREEFOIL (19%)	3 10	.07	MODERATELY DRY	6a		Х			×			1		
	i i i i i i i i i i i i i i i i i i i	,0	10 .23		6Ь	X					Х				
	3				7a	×						Х	]		
					7ь	X						Х			
9.	TALL FESCUE (86%)	125	2.9	WET TO	5b		Х			Х			T		
	POA TRIVIALIS (7%)	10	.23	.23	.23	MODERATELY	6a		Х			X			1
	BIRDSFOOT TREEFOIL (7%)	10	.23	DRY	6b	Х					X		1		
10.	TALL FESCUE (80%)	120	3.4	WET TO DRY	5b		Х			X		-	J		
	HARD FESCUE (20%)	30	.69	-	6a		Х			X			1		
	1				Total Control of the	6b	X					X		1	
					7a	Х						Х	1		
					7b	X						×			
11.	HARD FESCUE (100%)	75	75 1.7	MOIST TO	5b		Х			×			к		
		, ,	'.,	DRY	6a		Х			X					
	4				6b	Х					X				
	:				7a	X						Х			

G/ WEEPING LOVEGRASS MAY BE SEEDED WITH TALL FESCUE IN MID-SUMMER. SERECIA LESPEDEZA IS BEST SUITED FOR ZONES 70 AND 7b. H/ USE ON POORLY DRAINED SOILS - DITCHES OR WATERWAYS. BIRDSFOOT TREEFOILIS BEST FOR ZONES 56, 6a, ABOVE 2000 FT. / USE IN AREAS OF MOIST SHADE. POA TRIVIALIS THRIVES IN WET SHADY AREAS. J/ TALL FESCUE MAY BE SEEDED ALONE. THE HARD FESCUE PROVIDES BETTER SHADE TOLERANCE AND PRODUCES A BETTER STAND. K/ LOW FERTILITY GRASS. REQUIRES INFREQUENT MOWING. GOOD COMPANION FOR WILDFLOWERS.

## Permanent Seeding Summary

	Seed Mixt	Fe	Lime Rate					
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P205	K20	Nate
	TALL FESCUE	126.32				,		
3.	PERENNIAL RYGRASS	14.81	3/1~5/15	1/4"	90 lb/ac (2.0 lb/ 1000 sf)	175 lb/ac (4.0 lb/	(4.0 lb/ (1000 sf)	2 tons/ac (100 lb/ 1000 sf)
	KENTUCKY BLUEGRASS	10.02			1000 81)	1000 31)	1000 31)	1000 31)

Section III: Permanent Seeding

Seeding grass an legumes to establish ground cover for a minimum period of one year on disturbed areas generally receiving low maintenance.

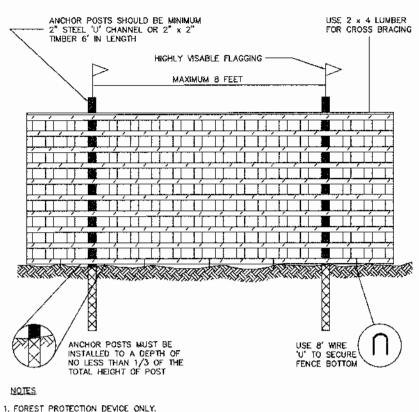
A. Seed Mixtures — Permanent Seeding

Select one or more of the species or mixtures listed in Table 25 for the appropriate Plant Hardiness Zone (from Figure 5) and enter them in the Permanent Seeding Summary below, along with application rates and seeding dates. Seeding depths can be estimated using Table 26. If this Summary is not put on the construction plans and completed, then Table 25 must be put on the plans. Additional planting specifications for exceptional sites such as shorelines, streambanks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-SCS Technical Field Office Guide, Section 342 - Critical Area Planting. For special lawn maintenance areas, see Sections IV Sod and V Turfgrass.

ii. For sites having disturbed area over 5 acres, the rates shown on this table shall be deleted and the rates recommended by the soil testing agency shall be written in.

iii. For areas receiving low maintenance, apply ureaform fertilizer (46-0-0) at 3 ½ lbs/1000 sq. ft. (150 lbs/ac), in addition to the above soil amendments shown in the table below, to be performed

G-20-9

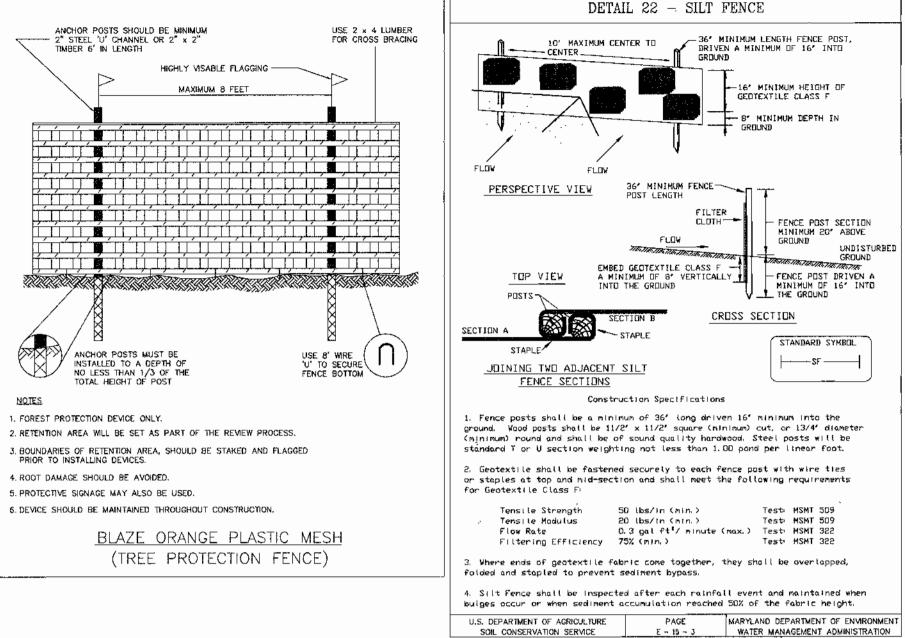


1. FOREST PROTECTION DEVICE ONLY. 2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.

4. ROOT DAMAGE SHOULD BE AVOIDED.

6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

BLAZE ORANGE PLASTIC MESH (TREE PROTECTION FENCE)



		Silt Fence Design Cr	Iteria
	Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
	Flatter than 50-1	untimited	unlimited
	50:1 to 10:1	125 feet	1,000 feet
	10:1 to 5:1	100 feet	750 feet
	5:1 to 3:1	60 feet	500 feet
	3:1 to 2:1	40 feet	250 feet
	2:1 and steeper	20 feet	125 feet
Note	system, soil Class A)		nd silt fence length will be e the only perimeter control
Note	system, soil Class A) unlimited. In these ar		

MARYLAND DEPARTMENT OF ENVIRONMENT

E - 15 - 3A WATER MANAGEMENT ADMINISTRATION Table 26 Temporary Seeding Rates, Depths, and Dates

SPECIES	MINIMUM SEEDI	MUM SEEDING RATES		PLANTING HARDINESS ZONES" AND SEEDING D							TES38	
3/ 20/23	MITAIN SEEDIN	DEPTH <sup>36</sup>	7a and 7b			6b			60	6a and 5b		
	PER ACRE	LBS/1000 SQ. FT.	INCHES			8/15- 11/30						
CHOOSE ONE: BARLEY OATS RYE 39	2.5 BU. (122 lbs) 3 BU. (96 lbs) 2.5 BU. (140 lbs)	2.21	1-2 1-2 1-2	X X X		BY 10/15 - X	× × ×		BY 10/15 - X	X X X	<del>-</del> - -	BY 10/1 - X
BARLEY OR RYE PLUS FOXTAIL MILLET*	150 lbs.	3.45	1	×	×	10/15 X	×	×	10/15 X	×	×	10/1 X
WEEPING LOVEGRASS <sup>4</sup>	4 lbs.	.09	1/4-1/2	_	X	_	_	Х		_	x	
ANNUAL RYEGRASS	50 lbs.	1.15	1/4-1/2	Х	_	11/1	X	_	11/1	X	****	8/15
MILLET*2	50 lbs.	1.15	1/2		Х	_	_	X	_	_	X	_

36. Applicable on slopes of 3:1 or flatter

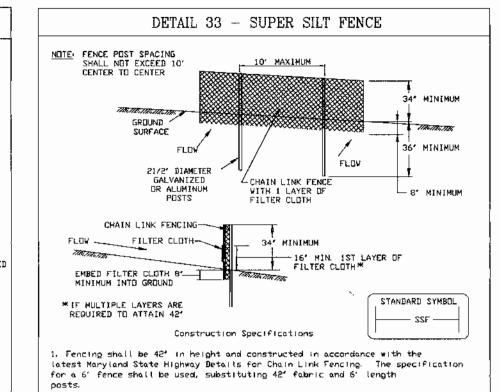
37. Refer to figure A — Adopted from USDA, ARS Miscellaneous Publication #1475, January 1990

38. Between fall and spring seeding dates, use mulch only if ground is frozen and reseed when thawed. 39. May be used as a nurse crop for late fall/early winter permanent seedings, add 56 lbs./ac to the permanent seeding mixture.

40. Maryland State Highway Administration Temporary Seed Mix. 41. May be used as a nurse crop for mid—summer permanent seedings. Add 2 lbs/ac to permanent seed mix. 42. May be used as a nurse crop for mid-summer permanent seedings. Add 10 lbs/ac to the permanent seed mix.

#### Table 24 Maintenance Fertilization for Permanent Seedings Use Soil Test Results or Rates Shown Below

Seeding Mixture	Туре	lb/ac	lb/1000 sf	Time	Mowing
Tall fescue makes up 70% or more of cover	10-10-10 or 30-10-10		11.5 9.2	Yearly as needed. Fall	Not closer than 3" if occasional mowing is desired
Crownvetch Sericea Lespedeza Birdsfoot Trefoil	0-20-0	400	9.2	Spring, the year following establishment and every 4—5 years thereafter	Do not mow crownvetch
Fairly uniform stand of tall fescue and sericea lespedeza, or birdsfoot trefoil	5-10-10	500	11.5	Fall, the year following establishment and every 4—5 years thereafter	Not required, no clos&f.5han 4" in the fall after seed has matured.
Weeping lovegrass & sericea lespedeza fairly uniform plant distribution.	5-10-10	500	11.5	Spring, the year following establishment and every 3—4 years thereafter.	Not required, no closer than 4" in the fall after seed has matured.
Red & chewings fescue, Kentucky bluegrass, hard fescue mixtures	20-10-10	250 100	5.8 2.3	September, 30 days later. December, May20, June 30, if needed.	Mow no closer than 2" for red fescue and K. bluegrass, 3" for fescue.



2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not

required except on the ends of the fence. 3. Filter cloth shall be fastened securely to the chain link fence with ties spaced

4. Filter cloth shall be embedded a minimum of 8° into the ground. 5. When two sections of filter cloth adjoin each other, they shall be overlapped

6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height 7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class Fi

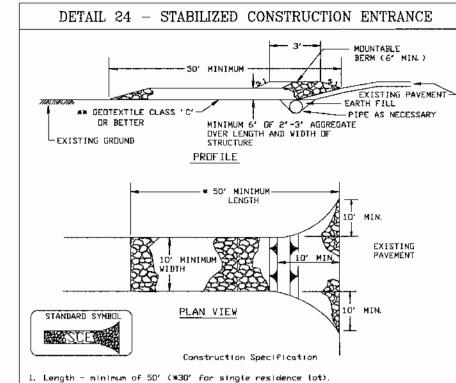
Tensile Strength Tensile Modulus 20 Ups/in (min.) Test: MSMT 509 0.3 gai/ft\*/minute (max.) Testi MSMT 322 Flow Rate Filtering Efficiency 75% (min.) Testi MSMT 322 U.S. DEPARTMENT OF AGRICULTURE MARYLAND DEPARTMENT OF ENVIRONMENT SOIL CONSERVATION SERVICE WATER MANAGEMENT ADMINISTRATION

SUPER SILT FENCE

#### Design Criteria Slope Length Silt Fence Length Slope Steepness (maximum) (maximum) 0 - 10% $0 - 10 \cdot 1$ Unlimited Unlimited 10 - 20% 20 - 33% 5:1 - 3:1 100 feet 1.000 feet 100 feet 311 - 211 50% + 2:1 + 50 feet 250 feet

U.S. DEPARTMENT OF AGRICULTURE

SOIL CONSERVATION SERVICE



2. Width - 10' minimum, should be flared at the existing road to provide a turning

to placing stone. \*\*The plan approval authority may not require single family

3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior

4. Stane - crushed aggregate (2' to 3') or reclaimed or recycled concrete equivalent shall be placed at least 6' deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable bern with 5:1 slopes and a minimum of 6' of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6' minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance F = 17 = 3 WATER MANAGEMENT ADMINISTRATION SOIL CONSERVATION SERVICE

#### SEDIMENT CONTROL NOTES

residences to use geotextile.

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, (410-313-2455)

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.

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, 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 1994 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 CERMINATION AND ESTAB-LISHMENT 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 INSPECTO

7) SITE ANALYSIS: TOTAL AREA OF SITE AREA DISTURBED AREA TO BE ROOFED OR PAVED 0.27 ACRES = 11550 SF AREA TO BE VEGETATIVELY STABILIZED 0.15 ACRES TOTAL CUT OFFSITE WASTE/BORROW AREA LOCATION TO BE DETERMINED

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

MARYLAND DEPARTMENT OF ENVIRONMEN

WATER MANAGEMENT ADMINISTRATION

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.

1) PREFERRED -- APPLY 2 TONS PER ACRE 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 DISC 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.)

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

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 KENTÚCKY 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  $^{2}$ 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 ÁCRE (8 GAL/1000 SQ FT) FOR ACHORING. MAINTENANCE -- INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND

### 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, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT 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 NOVEMBER 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.

FOR RATE AND METHODS NOT COVERED.

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 ANCHORING. REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL **APPROVED** 

1 31 01

JOHN R. HEINRICHS

ofessional Engr. No. 14920

DATE 2-21-2001

PLANNING BOARD of HOWARD COUNTY

Date

OWNER/DEVELOPER

10221 WINCOPIN CIRCLE SUITE 100 COLUMBIA MARYLAND 21044-3410 (410) 381-0383 PREPARED BY:

SEQUENCE OF CONSTRUCTION

Stake out pathway — 2 Days.

controls - 3-4 Days.

Obtain a grading permit and all other necessary permits — 1 Day.

Notify the Howard County Bureau of Licenses, Inspections and

Permits at least 48 hours before beginning any work.

5. Install silt fence, tree protection fence and other perimeter

. Obtain approval from inspector prior to proceeding — 1 Day. Begin clearing and grubbing for construction. Pathway

disturbance/construction and restabilization is to occur in

8. Grade pathway maintaining positive drainage at all times -1

9. Compact subgrade and install aggregate base for pathway — 1

11. Stabilize all disturbed areas with seed and mulch within 14 days

12. Upon stabilization of the site and approval of the Howard County

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS

"I/WE CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL

ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL

REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE

I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING

LOPMENT ENGINEERING BIVE

Kent Shertrook /4

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

7 2.01

Sediment Control Inspector, remove sediment and erosion

Install stabilized construction entrances — 1 Day.

200 LF seaments maximum - 2 weeks.

10. Install pathway pavement — 1 Week.

of disturbance. -1 Week

TECHNICAL REQUIREMENTS.

E ENGINEER:

CONSERVATION DISTRICT.

CONSERVATION DISTRICT.

DEVELOPER: DENIS ELLIS COLUMBIA ASSOCIATION

controls.

PHOENIX ENGINEERING, INC. CONSULTING ENGINEERS 813 MAIDEN CHOICE LANE, SUITE 300 BALTIMORE, MARYLAND 21228 (410) 247-8833 FAX 247-9397

THE COLUMBIA ASSOCIATION

ATTN: DENIS ELLIS

Revision Description

COLUMBIA - VILLAGE OF RIVER HILL SECTION 1 AREA 3

SECTION 1 AREA 4 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

es By R.J.W. Scale AS SHOWN Proj No 00-023 DRAWING NO De03prpw Ř.H.Ď. Date JULY 02, 2001 Chk By J.R.H.