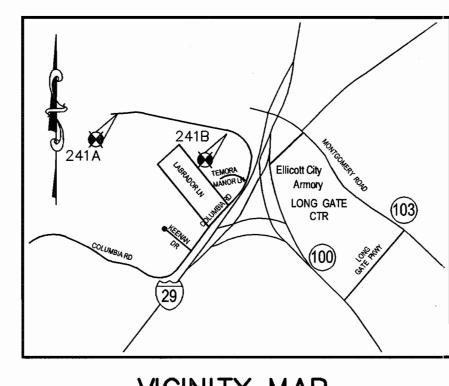
SITE DEVELOPMENT PLAN 1. THE SUBJECT PROPERTY IS ZONED R-20 PER THE FEBRUARY 02, 2006 COMPREHENSIVE ZONING PLAN. 2. IN ACCORDANCE WITH SECTION 128 OF HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THEN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR FOREST CREEK 3. IN ACCORDANCE WITH SECTION 128 OF HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR

Before You Dig "MISS UTILITY" Service Protection Center CALL TOLL FREE 1-800-257-7777



VICINITY MAP

LEGEND

8" WATER

---- EXISTING CONTOUR PROPOSED SPOT ELEVATION

EXISTING STREET LIGHT

EXISTING SANITARY SEWER EXISTING WATER MAIN

EXISTING STORM DRAIN

EXISTING FIRE HYDRANT

EXISTING STORM SEWER MANHOLE

LOD - LIMIT OF DISTURBANCE

SF - SILT FENCE SSF - SUPER SILT FENCE

EXISTING TREE LINE

EXISTING TREE, GREEN MOUNTAIN SUGAR MAPLE

EXISTING TREE, RED SUNSET, RED MAPLE

EXISTING TREE, WHITE PINE

STABILIZED CONSTRUCTION ENTRANCE

, بہ بہ بہ بہ بہ بہ بہ

EXISTING SEWER & UTILITY EASEMENT

PRIVATE DRAINAGE & UTILITY EASEMENT PRIVATE STORMWATER MANAGEMENT & UTILITY EASEMENT

PUBLIC SEWER & UTILITY EASEMENT FOREST CONSERVATION EASEMENT

(RETENTION) FOREST CONSERVATION EASEMENT (REFORESTATION)

B/BS = BASEMENT SLABC = MIN. CELLAR ELEVATION CD = CONC. DRIVECW = CONC. WALK LP = LAMP POSTFF = FIRST FLOORTF = TOP OF FOOTING FOY = FOYER ELEV.

REVISIONS

I.G. = INGROUND

W/O = WALKOUTFL = FLOW LINETC = TOP OF CURBNR = NOT RADIALBRL = BUILDING RESTRICTION LINE PUE = PUBLIC UTILITY EASEMENT = GARAGE DOOR

AC = AIR CONDITIONER

ext= extension

OH = OVERHANG MR = MORNING ROOMSR = SUN ROOMLR = LAUNDRY ROOM#R = # RISERS FROM BOTTOM OF STOOP TO FINISHED GRADE AT WALK

A. PRESENT ZONING: R-20 B. TOTAL PROJECT AREA = 7.28+/- ACRES C. AREA OF PLAN SUBMISSION = 4.31+/- ACRES D. LIMIT OF DISTURBANCE = 3.5+/-ACRESE. PROPOSED USES FOR SITE AND STRUCTURES = RESIDENTIAL, SINGLE FAMILY UNITS F. TOTAL NUMBER OF UNITS PROPOSED ON SUBMISSION = 13 G. NUMBER OF PARKING SPACES REQUIRED BY HOWARD COUNTY ZONING REGULATIONS = 2

SITE DATA

H. NUMBER OF PARKING SPACES PROVIDED ON SITE = 2 IN GARAGE I. OPEN SPACE PROVIDED = 2.29 ACRES, 31.5% OF GROSS AREA AS DEDICATED PER APPROVED PLAN F-05-42. J. RECREATIONAL OPEN SPACE PROVIDED = .18 ACRES, 2.5% OF GROSS AREA AS DEDICATED PER APPROVED PLAN

K. DPZ FILE REFERENCE NO.'S: ROAD CONSTRUCTION F-05-42 PUBLIC WATER & SEWER CONTRACT NO. 24-4250-D

February 6, 2006

Licenses & Permits 3430 Court House Drive Ellicott City, MD 21043

Re: Forest Creek Sediment Controls

Dear Sir or Madam:

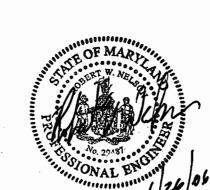
I Robert L. Dorsey, Jr. of Forest Hills LLC hereby give permission to Patriot Homes to use our sediment controls (pand, etc) to build homes in the Forest Creek subdivision. We will not be removing these controls until all construction has been completed.

Sheet Index	
Sheet Title	Sheet No.
Cover Sheet	1~
Site Development Plan	2
Site Development Details	3
Erosion and Sediment Control Plan	4
Erosion and Sediment Control Details	5

	ADDRESS CHART
LOT/PARCEL#	STREET ADDRESS
1	9006 Labrador Lane
2	9010 Labrador Lane
3	9014 Labrador Lane
4	9018 Labrador Lane
5	9022 Labrador Lane
6	9026 Labrador Lane
7	9005 Labrador Lane
8	9009 Labrador Lane
9	9013 Labrador Lane
10	9017 Labrador Lane
11	9021 Labrador Lane
12	9025 Labrador Lane
13	9029 Labrador Lane

		PERMI	T INFORMAT	ION CHART		
Subdivision Name	•		Section Area		Lot/Parce	el No.
FOREST CREEK			N/A 301		A STATE OF THE CONTRACT OF THE	
Plat # or L/F	Grid #	Zoning	Tax Map No.	Elect Distr		Census Tract Book
17991-93		R-20	24	2nd ELEC	. DIST.	602-306
Water Code	•	•	Sewer Code	•		•
Approved a consistency of a provider in the Approximation of the Approxi	F08	The state of the s		575	1600	agente a fig. 1966 compagnet a sy alliformatic, y symmetric from 1971 and pages

		:	The Group, Inc. ENGINEERS • ARCHITECTS • PLANNERS 7164 Columbia Gateway Drive, Suite 205 Columbia, Maryland 21046 Phone (410) 312-0966, Fax. (410) 312-0897	777111111111111111111111111111111111111
DESCRIPTION	BY	DATE	Phone (410) 312-0966, Fax. (410) 312-0897	



OWNER/DEVELOPER: FOREST HILLS, LLC 10717-B BIRMINGHAM WAY WOODSTOCK, MARYLAND 21163 (410) 465 - 5739 BUILDER:

10717-B (9rd Floor) Birmingham Way Woodstock, MD 91163

(410) 465-7200 FAX (410) 465-0488

PATRIOT HOMES
WINCOPIN CIRCLE, SUITE 300 COLUMBIA, MARYLAND 21044 (410) 423 - 0417

SCALE:	GRAPHIC SCALE 1"=30"	
1	0' 0' 30'	
DRAWN BY:	DW .	
CHECKED BY:	PJS	
DATE:	06/26/06	
JOB NO.	M3773.00	
SHEET NO.	1 OF 5	

COVER SHEET FOREST CREEK LOTS 1-13 & OPEN SPACE LOTS 14 -17 PLANS PREPARED FOR: **Patriot Homes**

TAX MAP 24 BLOCK 23 PARCEL 301 ZONE: R-20 2nd ELECTION DISTRICT

> Howard County Maryland SDP - 06 - 104

DEPARTMENT OF PLANNING AND ZONING 1/15/06

reviewded for howard SCD and meets technical requirements.

GENERAL NOTES

REAR YARD SETBACK (APPLIES FOR RESIDENTIAL SDP'S).

REAR YARD SETBACK (APPLIES FOR RESIDENTIAL SDP'S).

OVER DRIVEWAY SURFACE;

EXCAVATION WORK:

MISS UTILITY

STA. No. 241B

C&P TELEPHONE COMPANY

BALTIMORE GAS & ELECTRIC

AT&T CABLE LOCATION DIVISION

STATE HIGHWAY ADMINISTRATION

CONSTRUCTION INSPECTION DIVISION

HOWARD COUNTY BUREAU OF UTILITIES

HOWARD COUNTY DEPT. OF PUBLIC WORKS/

12. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.

DOCUMENTS AND STANDARD CONSTRUCTION PRACTICES.

MILDENBERG, BOENDER & ASSOCIATES, INC.

MILDENBERG, BOENDER & ASSOCIATES, INC.

WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE);

MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.

REGULATIONS AND SUBJECT TO THE 10/18/93 ZONING REGULATIONS.

COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

F-05-42, PREPARED BY MILDENBERG, BOENDER & ASSOCIATES, INC.

E 1,360,260.255

E 1,362,302.965

SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING SUCH WORK.

N 578,753.503

HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 241A & 241B.

(410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.

EXTERIOR STAIRWAYS NOT MORE THEN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY

4. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED

TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:

SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.);

STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING);

THE 65 dBA NOISE EXPOSURE. THE 65 dBA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT

ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

6A. A NOISE BARRIER IS BEING CONSTRUCTED ON COLUMBIA ROAD BY STATE HIGHWAY ADMINISTRATION UNDER

8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD

9. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS DIVISION AT

10. EXISTING GROUND CONDITIONS BASED ON GRADING PLAN SHT. 5 OF 13 OF THE ROAD CONSTRUCTION PLAN

11. PER THE SUBDIVISION PLAT COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY

ELEV. 391.237

13. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES ON SITE PRIOR TO COMMENCING CONSTRUCTION.

PROCEDURES. UTILIZED BY THE CONTRACTOR, NOR FOR THE SAFETY OF PUBLIC OR CONTRACTOR'S EMPLOYEES, OR

15. FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THIS PROJECT

CONSERVATION HAVE BEEN MET BY THE SUBDIVISION AND ROAD CONSTRUCTION PLANS, F-05-042, PREPARED BY

14. THE RBA GROUP SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION, MEANS, METHODS, TECHNIQUES, OR

FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT

16. THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST

17. THE LANDSCAPE REQUIREMENTS PER SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE

MANUAL HAVE BEEN MET BY THE SUBDIVISION AND ROAD CONSTRUCTION PLANS F-05-42 PREPARED BY

18. WATER AND SEWER WITH HOUSE CONNECTIONS HAVE BEEN PROVIDED BY CONTRACT NO. 24-4250-D, PLANS

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY

1-800-257-7777 (410) 725-9976

(410) 313-4900 (410) 393-3533

(410) 658-0123

(410) 531-5533

(410) 313-1880

GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS;

SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR

WITHIN THE LIMITS OF WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100

DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH

6. THE 65 dBA NOISE CONTOUR LINE DRAWN ON THIS DEVELOPMENT PLAN IS ADVISORY AS REQUIRED BY THE HOWARD

DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY

COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992, AND CANNOT BE CONSIDERED TO EXACTLY LOCATE

CONTRACT NUMBER HO662B51. THIS WILL FULFILL THE NOISE MIGTATION REQUIREMENTS FOR THE SITE PER F-05-42. 7. THIS SUBDIVISION WAS GRANDFATHERED TO THE SECOND AMENDMENT OF THE FORTH EDITION OF THE SUBDIVISION

5. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS

PREPARED BY MILDENBERG, BOENDER AND ASSOCIATES, INC. THE SUBDIVISION AND ROAD CONSTRUCTION PLANS F-05-42.

19. "C" ELEVATION SHOWN ON EACH LOT IS THE MINIMUM CELLAR ELEVATION... 20. STORMWATER MANAGEMENT HAS BEEN PROVIDED BY A SANDFILTER AND EXTENDED DETENTION POND AS PART OF

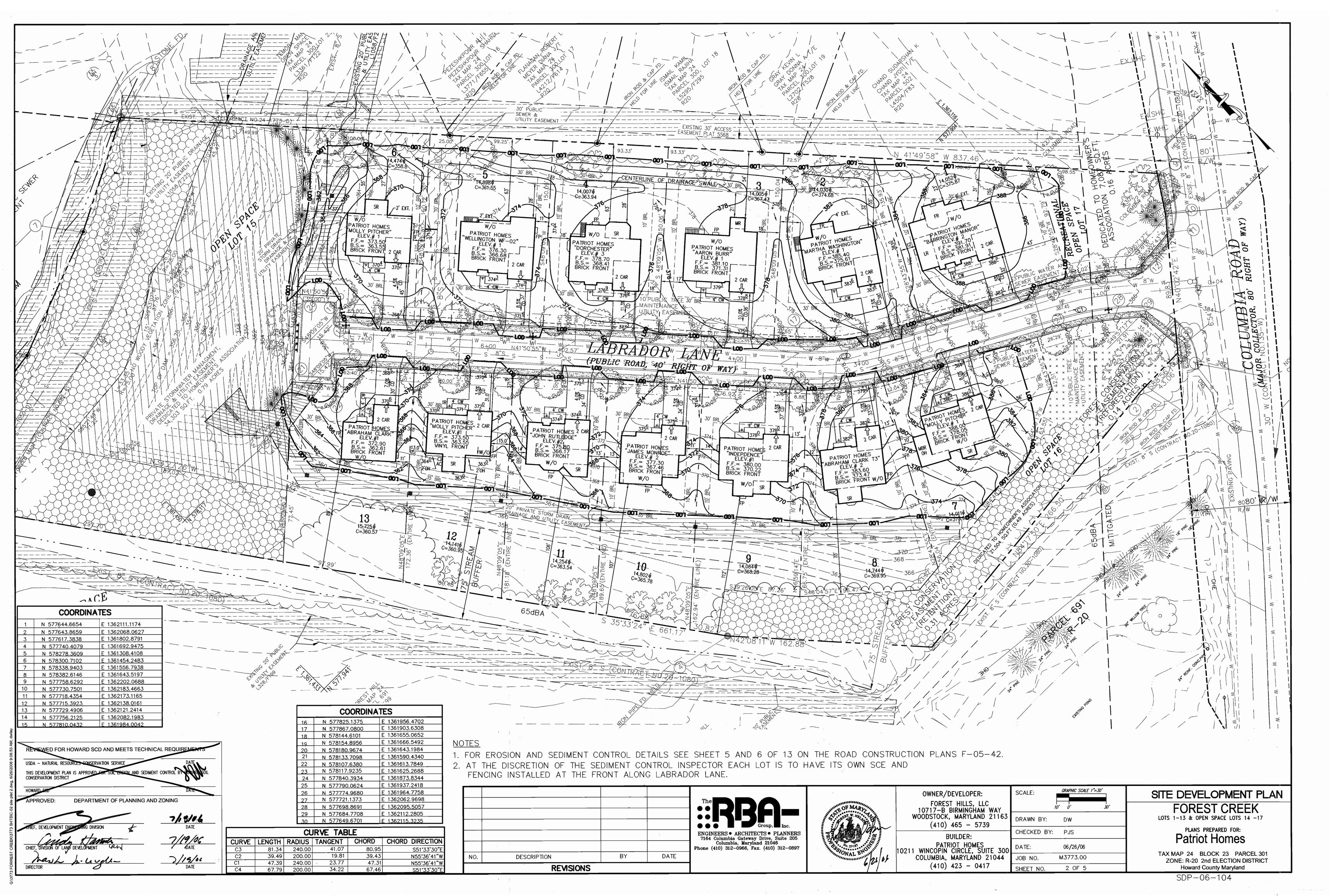
21. EROSION AND SEDIMENT CONTROL WILL BE PROVIDED BY FOREST HILL LLC, UNDER THE ROAD CONSTRUCTION PLANS, F-05-42. THE SEDIMENT BASIN WILL NOT BE CONVERTED UNTIL ALL LOTS HAVE BEEN DEVELOPED ACCORDING TO THIS SITE PLAN. AN AGREEMENT LETTER HAS BEEN PROVIDED BY FOREST HILL LLC TO PATRIOT

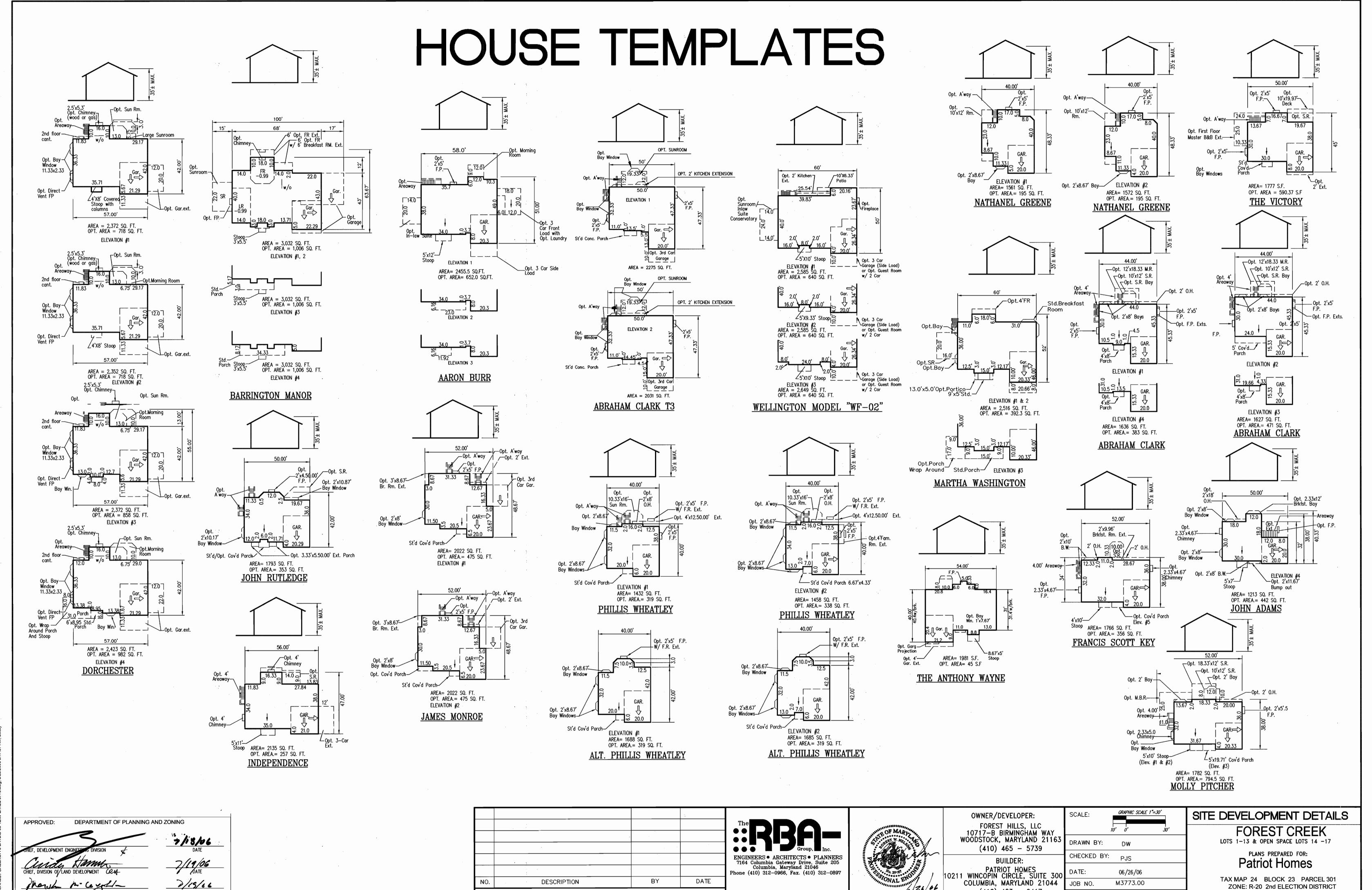
22. FOR EROSION AND SEDIMENT CONTROL DETAILS SEE SHEET 5 AND 6 OF 13 ON THE ROAD CONSTRUCTION PLANS

23. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND REPAIR OF ALL EROSION AND SEDIMENT CONTROL STRUCTURES DURING LOT CONSTRUCTION NOTED ON THESE PLANS.

24. FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL

25. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER; S EXPENSE.





REVISIONS

(410) 423 - 0417

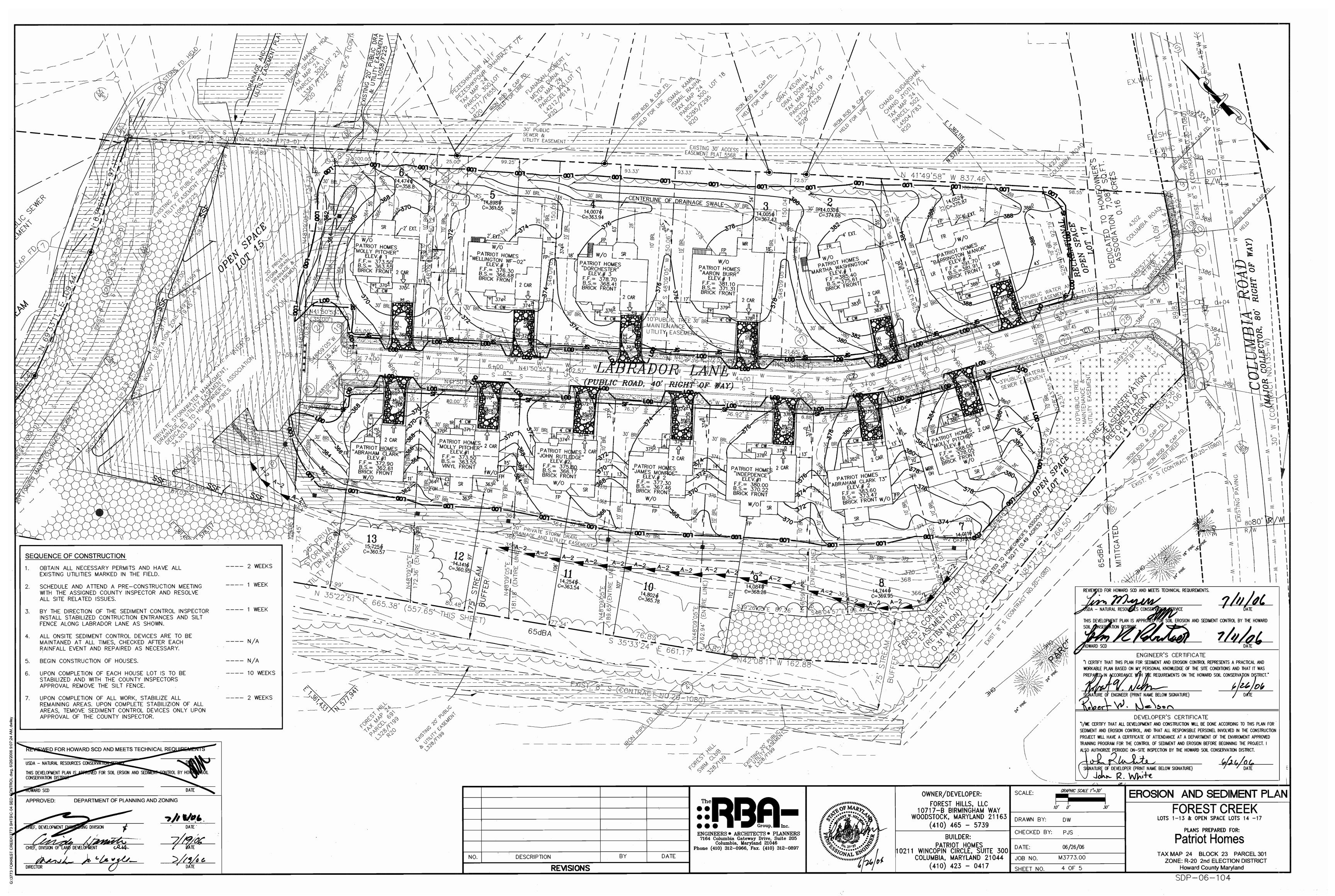
3 OF 5

SHEET NO.

Howard County Maryland

SDP-06-104

C 19773 FORBEST OBEEK13773 SHTSIC-03-TEMBI ATES 3773 duin 6/26/2006 R-17-57 A



PERMANENT OR TEMPORARY VEGETATION SHALL BE ESTABLISHED WITHIN SEVEN (7) DAYS ON THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, SEDIMENT CONTROL BASINS, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND WITHIN 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. MULCHING MAY ONLY BE USED ON DISTURBED AREAS AS TEMPORARY COVER WHERE VEGETATION IS NOT FEASIBLE OR WHERE SEEDING CANNOT BE COMPLETED BECAUSE OF WEATHER.

II. SEEDED PREPARATION AND SEEDING APPLICATION

LOOSEN THE TOP LAYER OF THE SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT SUCH AS DISC HARROWS, CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. INCORPORATE THE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF THE SOIL BY DISCING OR BY OTHER SUITABLE MEANS. ROUGH AREAS SHOULD NOT BE ROLLED OR DRAGGED SMOOTH, BUT LEFT IN A ROUGHENED CONDITION. STEEP SLOPES GREATER THAN 3:1 SHOULD BE TRACKED BY A DOZER, LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. THE TOP 1 TO 3 INCHES OF SOIL SHOULD BE LOOSE AND FRIABLE. PERMANENT COVER MAY REQUIRE AN APPLICATION OF TOPSOIL. IF SO, IT MUST MEET THE REQUIREMENTS SET FORTH IN SECTION 21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL FROM THE 1994 STANDARDS AND SPECIFICATIONS.

III. SOIL AMENDMENTS

SOIL TESTS SHALL BE MADE ON SITES OVER FIVE ACRES TO DETERMINE THE EXACT REQUIREMENTS FOR BOTH LIME AND FERTILIZER. FOR SITES UNDER 5 ACRES, IN LIEU OF A SOIL TEST, APPLY THE FOLLOWING:

FERTILIZER NITROGEN 2 LBS/1000 SQ. FT. (90 LBS/AC)

P205 4 LBS/1000 SQ. FT. (175 LBS/AC) K20 4 LBS/1000 SQ. FT. (175 LBS/AC)

FOR LOW MAINTENANCE AREAS APPLY 150 LBS/AC

UREAFORM FERTILIZER (38-0-0) AT 3.5 LBS/1000 SQ. FT. IN ADDITION TO THE ABOVE FERTILIZER AT THE TIME OF

GROUND LIMESTONE 2 TONS/AC

IV. SEDIMENT CONTROL PRACTICE SEEDING

SELECT A SEEDING MIXTURE FROM TABLE 25 OR 26 IN SECTION G OF THE 1994 STANDARDS AND SPECIFICATIONS. DOCUMENT SEEDING ON THE EROSION AND SEDIMENT CONTROL PLAN USING APPROPRIATE CHART BELOW. NOTE: IF SEDIMENT CONTROL PRACTICES ARE IN FOR LONGER THAN 12 MONTHS, PERMANENT SEEDING IS REQUIRED.

V. TEMPORARY/PERMANENT SEEDING MIXTURES AND RATES SELECT A SEEDING MIXTURE FROM APPROPRIATE TABLE 25 OR 26 IN SECTION G OF THE 1994 STANDARDS AND SPECIFICATIONS. DOCUMENT SEEDING ON THE EROSION AND SEDIMENT CONTROL PLAN USING APPROPRIATE CHART BELOW.

TEMPORARY SEEDING SUMMARY

Seed Mixtu	ure (Hardiness m Table 26	Zone 6B)		Fertilizer Rate	Lime Rate	
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	(10–10–10)	Lime Rate	
Barley Rye plus Fox Tail Millet	150	2/1-11/15	1"			
Rye	140	2/1-4/30 8/13-11/30	1"-2"	600 lb/ac (15 lb/1000 sf)	2 tons/ac (100 lb/1000 sf)	
Millet	50	5/1-8/14	1/4"-1/2"			

Seed Mixture (Hardiness Zone 6B) Fertilizer R From Table 26 S/AC (10							Lime Rate
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P 205	K 20	Lime Nate
Tall Fescue C. Blue Grass K. Blue Grass	150	3/1-5/15 (6b) 8/15-10/15 (7a) 8/15-11/15	1/4"-1/2"	(2 lb/ 1000 sf)	(4 lb/ 1000 sf)	(4 lb/ 1000 sf)	2 tons/ac (100 lb/
Tall Fescue Per. Rye Grass K. Blue Grass	123 15 10	3/1-5/15 (6b) 8/15-10/15 (7a) 8/15-11/15	1/4"-1/2"				1000 sf)
Tall Fescue W. Love Grass S. Lespedeza	110 8 80	3/1-5/15 (6b) 8/15-10/15 (7a) 8/15-11/15	1/4"-1/2"				

6/26/06

REVIEWDED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENT	S.
USDA - NATURAL RESOURCES CONSERVATION SERVICE	7/11/06
USPA — NATURAL RESOURCES CONSERVATION SERVICE	DATE
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SE	DIVENT CONTROL BY THE HOWARD
	DIMENT CONTROL BY THE HOWARD
SOIL CONSERVATION DISTRICT.	
	- 1)
John K Hobertook	7/11/06
HOMARD SCD	DATE
ENGINEER'S CERTIFICATE	
"I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL	
WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SIT	E CONDITIONS AND THAT IT WAS
PREPARED IN ACCORDANCE WITH THE REQUIREMENTS ON THE HOW	ARD SOIL CONSERVATION DISTRICT."
They have in no one high the new ments on the now	THE COLL CONCENTRATION DIGITALON

DEVELOPER'S CERTIFICATE

NATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE)

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONEL 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.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) John R. White

DEPARTMENT OF PLANNING AND ZONING

VI. TURFGRASS ESTABLISHMENT

THIS INCLUDES LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. AREAS TO RECEIVE SEED SHALL BE TILLED BY DISCING OR BY OTHER APPROVED METHODS TO A DEPTH OF 3 TO 5 INCHES, LEVELED AND RAKED TO PREPARE A PROPER SEEDBED. STONES AND DEBRIS OVER 1 ½ INCHES IN DIAMETER SHALL BE REMOVED. THE RESULTING SEEDBED SHALL BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY. USE CERTIFIED MATERIAL AND CHOOSE A TURFGRASS MIXTURE FROM PAGE G-20 OF THE 1994 STANDARDS AND SPECIFICATIONS OR SELECT FROM THE LIST IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MIMEO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND".

ALL SEEDINGS REQUIRE MULCHING. ALSO MULCH DURING NON-SEEDING DATES UNTIL SEEDING CAN BE DONE.

MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS/ACRE OR 90 LBS/1000 SQ. FT. (2 BALES). IF A MULCH ANCHORING TOOL IS USED, APPLY 2.5 TONS/ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOOL, WOOD CELLULOSE FIBER OR LIQUID MULCH BINDERS.

APPLY WOOD CELLULOSE FIBER AT A DRY WEIGHT OF 1,500 LBS/ACRE. IF MIXED WITH WATER, USE 50 LBS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

LIQUID BINDER SHOULD BE APPLIED HEAVIER AT THE EDGE, WHERE WIND CATCHES MULCH IN VALLEYS, AND ON CREST OF BANKS. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION. APPLY RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR AND MULCH. STAPLE LIGHTWEIGHT, PLASTIC NETTING OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD IS TO BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR USING STAGGERED JOINTS WITH ALL ENDS TIGHTLY ABUTTED AND NOT OVER LAPPING. SOD SHALL BE ROLLED AND THOROUGHLY WATERED AFTER INSTALLATION. DAILY WATERING TO MAINTAIN 4 INCH DEPTH OF MOISTURE FOR THE FIRST WEEK IS REQUIRED IN THE ABSENCE OF RAINFALL. SOD IS NOT TO BE APPLIED ON FROZEN GROUND.

- A. IRRIGATE-APPLY MINIMUM 1" OF WATER EVERY 3 TO 4 DAYS ON SOIL TEXTURE, WHEN SOIL MOISTURE BECOMES DEFICIENT TO PREVENT LOSS OF STAND OF PROTECTIVE VEGETATION.
- B. REPAIRS-IF STAND PROVIDES BETWEEN 40% AND 94% GROUND COVERAGE, OVERSEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED, IF STAND PROVIDES LESS THAN 40% COVERAGE, REESTABLISH STAND FOLLOWING ORIGINAL RATES AND PROCEDURES.

20.0 STANDARDS AND SPECIFICATIONS FOR LAND GRADING

RESHAPING OF THE EXISTING LAND SURFACE IN ACCORDANCE WITH A PLAN AS DETERMINED BY ENGINEERING SURVEY AND LAYOUT.

THE PURPOSE OF A LAND GRADING SPECIFICATION IS TO PROVIDE FOR EROSION CONTROL AND VEGETATIVE ESTABLISHMENT ON THOSE AREA WHERE THE EXISTING LAND SURFACE IS TO BE RESHAPED BY GRADING ACCORDING TO PLAN.

DESIGN CRITERIA

THE GRADING PLAN SHOULD BE BASED UPON THE INCORPORATION OF BUILDING DESIGNS AND STREET LAYOUTS THAT FIT AND UTILIZE EXISTING TOPOGRAPHY AND DESIRABLE NATURAL SURROUNDINGS TO AVOID EXTREME GRADE MODIFICATIONS. INFORMATION SUBMITTED MUST PROVIDE SUFFICIENT TOPOGRAPHIC SURVEYS AND SOIL INVESTIGATIONS TO DETERMINE LIMITATIONS THAT MUST BE IMPOSED ON THE GRADING OPERATION RELATED TO SLOPE STABILITY, EFFECT ON ADJACENT PROPERTIES AND DRAINAGE PATTERNS, MEASURES FOR DRAINAGE AND WATER REMOVAL AND VEGETATIVE TREATMENT, ETC. MANY COUNTIES HAVE REGULATIONS AND DESIGN PROCEDURES ALREADY ESTABLISHED FOR LAND GRADING AND CUT AND FILL SLOPES. WHERE THESE REQUIREMENTS EXIST, THEY SHALL BE FOLLOWED. THE PLAN MUST SHOW EXISTING AND PROPOSED CONTOURS OF THE AREA(S) TO BE GRADED. THE PLAN SHALL ALSO INCLUDE PRACTICES FOR EROSION CONTROL, SLOPE STABILIZATION, SAFE DISPOSAL OR RUNOFF WATER AND DRAINAGE, SUCH AS WATERWAYS, LINED DITCHES, REVERSE SLOPE BENCHES (INCLUDE GRADE AND CROSS SECTION), GRADE STABILIZATION STRUCTURES, RETAINING WALLS, AND SURFACE AND SUBSURFACE DRAINS. THE PLAN SHALL ALSO INCLUDE PHASING OF THESE PRACTICES. THE FOLLOWING SHALL BE INCORPORATED INTO THE PLAN:

1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE RUNOFF TO STORM DRAINS, PROTECTED OUTLETS OR TO STABLE WATER COURSES TO INSURE THAT SURFACE RUNOFF WILL NOT DAMAGE SLOPES OR OTHER GRADED AREAS.

2. CUT AND FILL SLOPES THAT ARE TO BE STABILIZED WITH GRASSES SHALL NOT BE STEEPER THAN 2:1. (WHERE THE SLOPE IS TO BE MOWED THE SLOPE SHOULD BE NO STEEPER THAN 3:1, 4:1 IS PREFERRED BECAUSE OF SAFETY FACTORS RELATED TO MOWING STEEP SLOPES). SLOPES EXCEEDING 2:1 SHALL REQUIRE SPECIAL DESIGN AND STABILIZATION CONSIDERATIONS THAT SHALL BE ADEQUATELY SHOWN ON THE

3. REVERSE BENCHES SHALL BE PROVIDED WHENEVER THE VERTICAL INTERVAL (HEIGHT) OF ANY 2:1 SLOPE EXCEEDS 20 FEET; FOR 3:1 SLOPE IT SHALL BE INCREASED TO 30 FEET AND FOR 4:1 TO 40 FEET. BENCHES SHALL BE LOCATED TO DIVIDE THE SLOPE FACE A EQUALLY AS POSSIBLE AND SHALL CONVEY THE WATER TO A STABLE OUTLET. SOILS, SEEPS, ROCK OUTCROPS, ETC., SHALL ALSO BE TAKEN INTO CONSIDERATION WHEN DESIGNING BENCHES. A. BENCHES SHALL BE A MINIMUM OF SIX-FEET WIDE TO PROVIDE FOR EASE OF MAINTENANCE. B. BENCHES SHALL BE DESIGNED WITH A REVERSE SLOPE OF 6:1 OR FLATTER TO THE TOE OF THE UPPER SLOPE AND WITH A MINIMUM OF ONE FOOT IN DEPTH. BENCH GRADIENT TO THE OUTLET SHALL BE BETWEEN 2 PERCENT AND 3 PERCENT, UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS. C. THE FLOW LENGTH WITHIN A BENCH SHALL NOT EXCEED 800' UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS. FOR FLOW CHANNEL STABILIZATION SEE TEMPORARY SWALE.

4. SURFACE WATER SHALL BE DIVERTED FROM THE FACE OF ALL CUT AND/OR FILL SLOPES BY THE USE OF EARTH DIKES, DITCHES AND SWALES OR CONVEYED DOWN SLOPE BY THE USE OF A DESIGNED STRUCTURE, EXCEPT WHERE: A. THE FACE OF THE SLOPE IS OR SHALL BE STABILIZED AND THE FACE OF ALL GRADED SLOPES SHALL BE PROTECTED FROM SURFACE RUNOFF UNTIL THEY ARE STABILIZED. B. THE FACE OF THE SLOPE SHALL NOT BE SUBJECT TO ANY CONCENTRATED FLOWS OF SURFACE WATER SUCH AS FROM NATURAL DRAINAGEWAYS, GRADED SWALES, DOWNSPOUTS, ETC. C. THE FACE OF THE SLOPE WILL BE PROTECTED BY SPECIAL EROSION CONTROL MATERIALS, TO INCLUDE, BUT NOT LIMITED TO: APPROVED VEGETATIVE STABILIZATION PRACTICES (SEE SECTION G), RIP-RAP OR OTHER APPROVED STABILIZATION METHODS.

5. CUT SLOPES OCCURRING IN RIPABLE ROCK SHALL BE SERRATED A SHOWN ON THE FOLLOWING DIAGRAM. THESES SERRATIONS SHALL BE MADE WITH CONVENTIONAL EQUIPMENT AS THE EXCAVATION IS MADE. EACH STEP OR SERRATION SHALL BE CONSTRUCTED ON THE CONTOUR AND WILL HAVE STEPS CUT AT NOMINAL TWO-FOOT INTERVALS WITH NOMINAL THREE-FOOT HORIZONTAL SHELVES. THESE STEPS WILL VARY DEPENDING ON THE SLOPE RATIO OR THE CUT SLOPE. THE NOMINAL SLOPE LINE IS 1:1. THESE STEPS WILL WEATHER AND ACT TO HOLD MOISTURE, LIME, FERTILIZER AND SEED THUS PRODUCING A MUCH QUICKER AND LONGER LIVED VEGETATIVE COVER AND BETTER SLOPE STABILIZATION. OVERLAND FLOW SHALL BE DIVERTED FROM THE TOP OF ALL SERRATED CUT SLOPES AND CARRIED TO SUITABLE OUTLET.

6. SUBSURFACE DRAINAGE SHALL BE PROVIDED WHERE NECESSARY TO INTERCEPT SEEPAGE THAT WOULD OTHERWISE ADVERSELY AFFECT SLOPE STABILITY OR CREATE EXCESSIVELY WET SITE CONDITIONS.

7. SLOPES SHALL NOT BE CREATED SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTIES WITHOUT ADEQUATELY PROTECTING SUCH PROPERTIES AGAINST SEDIMENTATION, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGES.

8. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIAL. IT SHOULD BE FREE OF STONES OVER TWO (2) INCHES IN DIAMETER WHERE COMPACTED BY HAND OR MECHANICAL TAMPERS OR OVER EIGHT (8) INCHES IN DIAMETER WHERE COMPACTED BY ROLLERS OR OTHER EQUIPMENT. FROZEN MATERIAL SHALL NOT BE PLACED IN THE FILL NOR SHALL THE FILL MATERIAL BE PLACED ON A FROZEN FOUNDATION.

9. STOCKPILES, BORROW AREAS AND SPOIL SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATIONS. 20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION ALL DISTURBED AREAS SHALL BE STABILIZED STRUCTURALLY OR VEGETATIVELY IN COMPLIANCE WITH.

24.0 MATERIALS SPECIFICATIONS

CLASS	APPARENT OPENING SIZE MM. MAX.	GRAB TENSILE STRENGTH LB. MIN.	BURST STRENGTH PSI MIN.
Α	0.30	250	500
В	0.60	200	320
С	0.30	200	320
D	0.60	90	145
E	0.30	90	145
F(SILT FENCE)	0.40-0.80*	90	190

* US STD SIEVE CW-022

GABIONS (§905.01.04).

DESCRIPTION

REVISIONS

THE PROPERTIES SHALL BE DETERMINED IN ACCORDANCE WITH THE FOLLOWING

APPARENT OPENING SIZE MSMT 323

GRAB TENSILE STRENGTH ASTM D 1682: 4X8" SPECIMEN, 1X2" CLAMPS, 12"/MM. STRAIN RATE IN BOTH PRINCIPAL DIRECTIONS OF GEOTEXTILE FABRIC.

BURST STRENGTH ASTM D 3786

THE FABRIC SHALL BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS, AND WILL BE ROT AND MILDEW RESISTANT, IT SHALL BE MANUFACTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS, AND COMPOSED OF A MINIMUM OF 85% BY WEIGHT OF POLYOLEPHINS, POLYESTERS. OR POLYAMIDES. THE GEOTEXTILE FABRIC SHALL RESIST DETERIORATION FROM ULTRAVIOLET EXPOSURE.

IN ADDITION, CLASSES A THROUGH E SHALL HAVE A 0.01 CM./SEC. MINIMUM PERMEABILITY WHEN TESTED IN ACCORDANCE WITH MSMT 507, AND AN APPARENT MINIMUM ELONGATION OF 20 PERCENT (20%) WHEN TESTED IN ACCORDANCE WITH THE GRAB TENSILE STRENGTH REQUIREMENTS LISTED ABOVE.

CLASS F GEOTEXTILE FABRICS FOR SILT FENCE SHALL HAVE A 50 LB./IN. MINIMUM TENSILE STRENGTH AND A 20 LB./IN. MINIMUM TENSILE MODULES WHEN TESTED IN ACCORDANCE WITH MSMT 509. THE MATERIAL SHALL ALSO HAVE A 0.3 GAL./FT.2/MIN. FLOW RATE AND SEVENTY-FIVE PERCENT (75%) MINIMUM FILTERING EFFICIENCY WHEN TESTED IN ACCORDANCE WITH MSMT 322.

GEOTEXTILE FABRICS USED IN THE CONSTRUCTION OF SILT FENCE SHALL RESIST DETERIORATION FROM ULTRAVIOLET EXPOSURE. THE FABRIC SHALL CONTAIN SUFFICIENT AMOUNTS OF ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 12 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120 DEGREES F

SIZE RAN	D ₅₀	D ₁₀₀	AASHTO	WEIGHT	
NUMBER 57*	3/8"-1 1/2"	1/2"	1 1/2"	M-34	N/A
NUMBER 1	2"-3"	2 1/2"	3"	M-34	N/A
RIP-RAP**	4"-7"	5 1/2"	7"	N/A	N/A
CLASS I	N/A/	9.5"	15"	N/A	150 lb MA
CLASS II	N/A	16"	24"	N/A	700 lb MA
CLASS III	N/A	23"	34"	N/A	200lb MAX

BY

*THIS CLASSIFICATION IS TO BE USED ON THE INSIDE FACE OF STONE OUTLETS AND ** THIS CLASSIFICATION IS TO BE USED WHEN EVER SMALL RIP-RAP IS REQUIRED. THE STATE HIGHWAY ADMINISTRATION DESIGNATION FOR THIS STONE IS STONE FOR

STONE FOR GABION BASKETS

BASKET THIC	KNESS	SIZE OF INDIVIDUAL STONES		
INCHES MM		INCHES	ММ	
6	150	3–5	75–125	
9	225	4–7	100-175	
12	. 300	4-7	100-175	
18	460	4–7	100–175	
36	910	4–12	100-300	
	9 12 18	6 150 9 225 12 300 18 460	INCHES MM INCHES 6 150 3-5 9 225 4-7 12 300 4-7 18 460 4-7	

NOTE: RECYCLED CONCRETE EQUIVALENT MAY BE SUBSTITUTED FOR ALL STONE CLASSIFICATIONS. RECYCLED CONCRETE EQUIVALENT SHALL BE CONCRETE BROKEN INTO THE SIZES MEETING THE APPROPRIATE CLASSIFICATION, SHALL CONTAIN NO STEEL REINFORCEMENT, AND SHALL HAVE A DENSITY OF 150 POUNDS PER CUBIC

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES. I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:

- A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.
- C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH. D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS. I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

- I. TOPSOIL SHALL BE A LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.
- II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

I. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:

- A. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATE A PH OF LESS THAN 6.0, SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
- B. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT. C. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED. D. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
- NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY, MAY BE USED IN LIEU OF NATURAL TOPSOIL.
- II. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

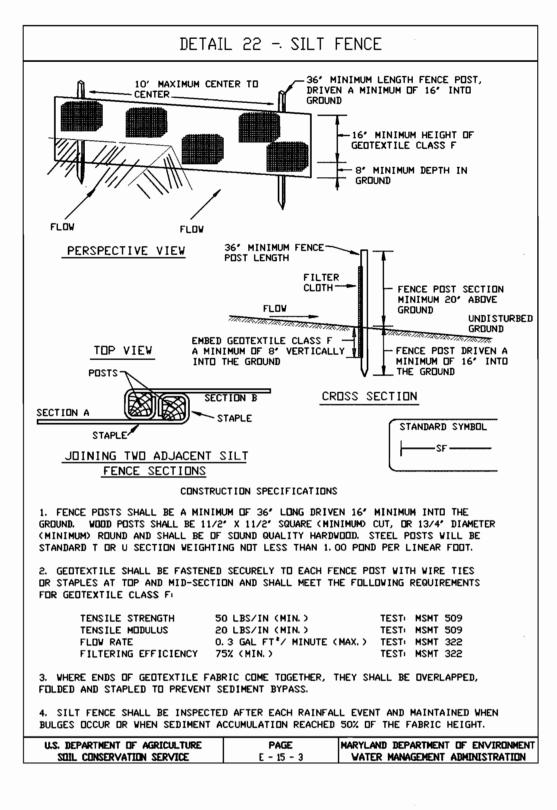
V. TOPSOIL APPLICATION.

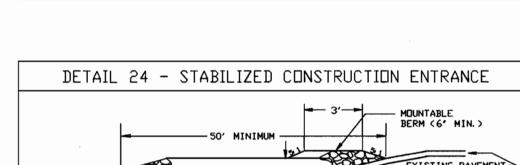
- I. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS. II. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4" - 8" HIGHER IN ELEVATION.
- III. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- IV. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

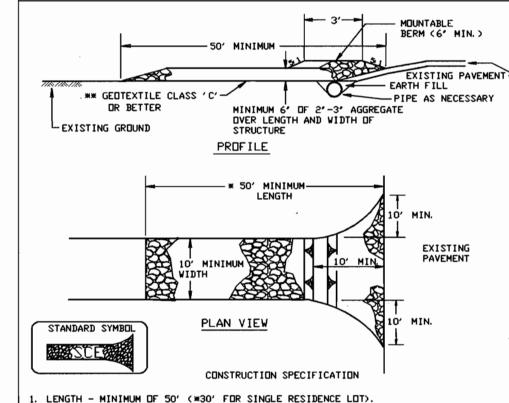
VI. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER. COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:

- I. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
- A. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER
- B. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS. THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE. C. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
- II. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB.#1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.







2. WIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING

GEDTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. **THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEDTEXTILE

4. STONE - 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

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 BERM 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 RUNDFF 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. PAGE MARYLAND DEPARTMENT OF ENVIRONMENT F - 17 - 3 VATER MANAGEMENT ADMINISTRATION U.S. DEPARTMENT OF AGRICULTURE SUIL CONSERVATION SERVICE

ENGINEERS • ARCHITECTS • PLANNERS

7164 Columbia Gateway Drive, Suite 205 Columbia, Maryland 21046

Phone (410) 312-0966, Fax. (410) 312-0897

DATE

OWNER/DEVELOPER: FOREST HILLS, LLC 10717-B BIRMINGHAM WAY WOODSTOCK, MARYLAND 21163 (410) 465 - 5739BUILDER: PATRIOT HOMES WINCOPIN CIRCLE, SUITE 300 COLUMBIA, MARYLAND 21044 (410) 423 - 0417

GRAPHIC SCALE 1"=30" SCALE: DRAWN BY: DWCHECKED BY: PJS 06/26/06 M3773.00 JOB NO. 5 OF 5 SHFFT NO

SEDIMENT CONTROL DETAILS FOREST CREEK LOTS 1-13 & OPEN SPACE LOTS 14 -17

PLANS PREPARED FOR:

Patriot Homes TAX MAP 24 BLOCK 23 PARCEL 301 ZONE: R-20 2nd ELECTION DISTRICT **Howard County Maryland**

SDP-06-104

APPROVED:

PERMANENT AND TEMPORARY SEEDING, SODDING AND MULCHING

PERMANENT OR TEMPORARY VEGETATION SHALL BE ESTABLISHED WITHIN SEVEN (7) DAYS ON THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, SEDIMENT CONTROL BASINS, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND WITHIN 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. MULCHING MAY ONLY BE USED ON DISTURBED AREAS AS TEMPORARY COVER WHERE VEGETATION IS NOT FEASIBLE OR WHERE SEEDING CANNOT BE COMPLETED BECAUSE OF WEATHER.

II. <u>SEEDED PREPARATION AND SEEDING APPLICATION</u>

LOOSEN THE TOP LAYER OF THE SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT SUCH AS DISC HARROWS, CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. INCORPORATE THE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF THE SOIL BY DISCING OR BY OTHER SUITABLE MEANS. ROUGH AREAS SHOULD NOT BE ROLLED OR DRAGGED SMOOTH, BUT LEFT IN A ROUGHENED CONDITION. STEEP SLOPES GREATER THAN 3:1 SHOULD BE TRACKED BY A DOZER, LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. THE TOP 1 TO 3 INCHES OF SOIL SHOULD BE LOOSE AND FRIABLE. PERMANENT COVER MAY REQUIRE AN APPLICATION OF TOPSOIL. IF SO, IT MUST MEET THE REQUIREMENTS SET FORTH IN SECTION 21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL FROM THE 1994 STANDARDS AND SPECIFICATIONS.

III. SOIL AMENDMENTS

SOIL TESTS SHALL BE MADE ON SITES OVER FIVE ACRES TO DETERMINE THE EXACT REQUIREMENTS FOR BOTH LIME AND FERTILIZER. FOR SITES UNDER 5 ACRES, IN LIEU OF A SOIL TEST, APPLY THE FOLLOWING:

FERTILIZER NITROGEN 2 LBS/1000 SQ. FT. (90 LBS/AC)

P205 4 LBS/1000 SQ. FT. (175 LBS/AC) K20 4 LBS/1000 SQ. FT. (175 LBS/AC)

FOR LOW MAINTENANCE AREAS APPLY 150 LBS/AC

UREAFORM FERTILIZER (38-0-0) AT 3.5 LBS/1000 SQ. FT. IN ADDITION TO THE ABOVE FERTILIZER AT THE TIME OF

GROUND LIMESTONE 2 TONS/AC

IV. SEDIMENT CONTROL PRACTICE SEEDING

SELECT A SEEDING MIXTURE FROM TABLE 25 OR 26 IN SECTION G OF THE 1994 STANDARDS AND SPECIFICATIONS. DOCUMENT SEEDING ON THE EROSION AND SEDIMENT CONTROL PLAN USING APPROPRIATE CHART BELOW. NOTE: IF SEDIMENT CONTROL PRACTICES ARE IN FOR LONGER THAN 12 MONTHS, PERMANENT SEEDING IS REQUIRED.

V. TEMPORARY/PERMANENT SEEDING MIXTURES AND RATES

SELECT A SEEDING MIXTURE FROM APPROPRIATE TABLE 25 OR 26 IN SECTION G OF THE 1994 STANDARDS AND SPECIFICATIONS. DOCUMENT SEEDING ON THE EROSION AND SEDIMENT CONTROL PLAN USING APPROPRIATE CHART BELOW.

TEMPORARY SEEDING SUMMARY

Seed Mixtu Froi	ure (Hardiness m Table 26	Zone 6B)		Fertilizer Rate	Lime Rate	
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	(10–10–10)		
Barley Rye plus Fox Tail Millet	150	2/1-11/15	1*			
Rye	140	2/1-4/30 8/13-11/30	1"-2"	600 lb/ac (15 lb/1000 sf)	2 tons/ac (100 lb/1000 sf)	
Millet	50	5/1-8/14	1/4"-1/2"			

S	Seed Mixture (Hardiness Zone 6B) Fertilizer Rate 900 S/AC (10-20-20)					900 Ib 0-20)	Lime Rate	
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P 205	K 20	Lime Nate	
Tall Fescue C. Blue Grass K. Blue Grass	150	3/1-5/15 (6b) .8/15-10/15 (7a) 8/15-11/15	1/4"-1/2"	(2 lb/ 1000 sf)	(4 lb/ 1000 sf)	(4. lb/ 1000 sf)	2 tons/ac (100 lb/	
Tall Fescue Per. Rye Grass K. Blue Grass	123 15 10	3/1-5/15 (6b) 8/15-10/15 (7a) 8/15-11/15	1/4"1/2"				1000 sf)	
Tall Fescue W. Love Grass S. Lespedeza	110 8 80	3/1-5/15 (6b) 8/15-10/15 (7a) 8/15-11/15	1/4"-1/2"					

REVIEWDED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS. - NATURAL RESOURCES CONSERVATION SERVICE THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD

ENGINEER'S CERTIFICATE "I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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 ON THE HOWARD SOIL CONSERVATION DISTRICT."

Mahre of Engineer (Print name below signature) ldport W. Nelson

DEVELOPER'S CERTIFICATE "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONEL 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.

SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) John R. White

626/06

DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING 115/06 VI. TURFGRASS ESTABLISHMENT

THIS INCLUDES LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. AREAS TO RECEIVE SEED SHALL BE TILLED BY DISCING OR BY OTHER APPROVED METHODS TO A DEPTH OF 3 TO 5 INCHES, LEVELED AND RAKED TO PREPARE A PROPER SEEDBED. STONES AND DEBRIS OVER 1 1/2 INCHES IN DIAMETER SHALL BE REMOVED. THE RESULTING SEEDBED SHALL BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY. USE CERTIFIED MATERIAL AND CHOOSE A TURFGRASS MIXTURE FROM PAGE G-20 OF THE 1994 STANDARDS AND SPECIFICATIONS OR SELECT FROM THE LIST IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MIMEO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND".

ALL SEEDINGS REQUIRE MULCHING. ALSO MULCH DURING NON-SEEDING DATES UNTIL SEEDING CAN BE DONE.

MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS/ACRE OR 90 LBS/1000 SQ. FT. (2 BALES). IF A MULCH ANCHORING TOOL IS USED, APPLY 2.5 TONS/ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOOL, WOOD CELLULOSE FIBER OR LIQUID MULCH BINDERS.

APPLY WOOD CELLULOSE FIBER AT A DRY WEIGHT OF 1,500 LBS/ACRE. IF MIXED WITH WATER, USE 50 LBS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

LIQUID BINDER SHOULD BE APPLIED HEAVIER AT THE EDGE, WHERE WIND CATCHES MULCH IN VALLEYS, AND ON CREST OF BANKS. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION. APPLY RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR AND MULCH. STAPLE LIGHTWEIGHT, PLASTIC NETTING OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD IS TO BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR USING STAGGERED JOINTS WITH ALL ENDS TIGHTLY ABUTTED AND NOT OVER LAPPING. SOD SHALL BE ROLLED AND THOROUGHLY WATERED AFTER INSTALLATION. DAILY WATERING TO MAINTAIN 4 INCH DEPTH OF MOISTURE FOR THE FIRST WEEK IS REQUIRED IN THE ABSENCE OF RAINFALL SOD IS NOT TO BE APPLIED ON FROZEN GROUND.

IX. MAINTENANCE

- A. IRRIGATE-APPLY MINIMUM 1" OF WATER EVERY 3 TO 4 DAYS ON SOIL TEXTURE, WHEN SOIL MOISTURE BECOMES DEFICIENT TO PREVENT LOSS OF STAND OF PROTECTIVE VEGETATION.
- B. REPAIRS-IF STAND PROVIDES BETWEEN 40% AND 94% GROUND COVERAGE, OVERSEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND PROVIDES LESS THAN 40% COVERAGE, REESTABLISH STAND FOLLOWING ORIGINAL RATES AND PROCEDURES.

20.0 STANDARDS AND SPECIFICATIONS FOR LAND GRADING

RESHAPING OF THE EXISTING LAND SURFACE IN ACCORDANCE WITH A PLAN AS DETERMINED BY ENGINEERING SURVEY AND LAYOUT.

THE PURPOSE OF A LAND GRADING SPECIFICATION IS TO PROVIDE FOR EROSION CONTROL AND VEGETATIVE ESTABLISHMENT ON THOSE AREA WHERE THE EXISTING LAND SURFACE IS TO BE RESHAPED BY GRADING ACCORDING TO PLAN.

DESIGN CRITERIA

THE GRADING PLAN SHOULD BE BASED UPON THE INCORPORATION OF BUILDING DESIGNS AND STREET LAYOUTS THAT FIT AND UTILIZE EXISTING TOPOGRAPHY AND DESIRABLE NATURAL SURROUNDINGS TO AVOID EXTREME GRADE MODIFICATIONS. INFORMATION SUBMITTED MUST PROVIDE SUFFICIENT TOPOGRAPHIC SURVEYS AND SOIL INVESTIGATIONS TO DETERMINE LIMITATIONS THAT MUST BE IMPOSED ON THE GRADING OPERATION RELATED TO SLOPE STABILITY, EFFECT ON ADJACENT PROPERTIES AND DRAINAGE PATTERNS. MEASURES FOR DRAINAGE AND WATER REMOVAL AND VEGETATIVE TREATMENT, ETC. MANY COUNTIES HAVE REGULATIONS AND DESIGN PROCEDURES ALREADY ESTABLISHED FOR LAND GRADING AND CUT AND FILL SLOPES. WHERE THESE REQUIREMENTS EXIST. THEY SHALL BE FOLLOWED. THE PLAN MUST SHOW EXISTING AND PROPOSED CONTOURS OF THE AREA(S) TO BE GRADED. THE PLAN SHALL ALSO INCLUDE PRACTICES FOR EROSION CONTROL, SLOPE STABILIZATION, SAFE DISPOSAL OR RUNOFF WATER AND DRAINAGE, SUCH AS WATERWAYS, LINED DITCHES, REVERSE SLOPE BENCHES (INCLUDE GRADE AND CROSS SECTION), GRADE STABILIZATION STRUCTURES, RETAINING WALLS, AND SURFACE AND SUBSURFACE DRAINS. THE PLAN SHALL ALSO INCLUDE PHASING OF THESE PRACTICES. THE FOLLOWING SHALL BE INCORPORATED INTO THE PLAN:

1. PROVISIONS SHALL BE MADE TO SAFELY CONDUCT SURFACE RUNOFF TO STORM DRAINS, PROTECTED OUTLETS OR TO STABLE WATER COURSES TO INSURE THAT SURFACE RUNOFF WILL NOT DAMAGE SLOPES OR OTHER GRADED AREAS.

2. CUT AND FILL SLOPES THAT ARE TO BE STABILIZED WITH GRASSES SHALL NOT BE STEEPER THAN 2:1. (WHERE THE SLOPE IS TO BE MOWED THE SLOPE SHOULD BE NO STEEPER THAN 3:1, 4:1 IS PREFERRED BECAUSE OF SAFETY FACTORS RELATED TO MOWING STEEP SLOPES). SLOPES EXCEEDING 2:1 SHALL REQUIRE SPECIAL DESIGN AND STABILIZATION CONSIDERATIONS THAT SHALL BE ADEQUATELY SHOWN ON THE

3. REVERSE BENCHES SHALL BE PROVIDED WHENEVER THE VERTICAL INTERVAL (HEIGHT) OF ANY 2:1 SLOPE EXCEEDS 20 FEET; FOR 3:1 SLOPE IT SHALL BE INCREASED TO 30 FEET AND FOR 4:1 TO 40 FEET. BENCHES SHALL BE LOCATED TO DIVIDE THE SLOPE FACE A EQUALLY AS POSSIBLE AND SHALL CONVEY THE WATER TO A STABLE OUTLET. SOILS, SEEPS, ROCK OUTCROPS, ETC., SHALL ALSO BE TAKEN INTO CONSIDERATION WHEN DESIGNING BENCHES. A. BENCHES SHALL BE A MINIMUM OF SIX-FEET WIDE TO PROVIDE FOR EASE OF MAINTENANCE. B. BENCHES SHALL BE DESIGNED WITH A REVERSE SLOPE OF 6:1 OR FLATTER TO THE TOE OF THE UPPER SLOPE AND WITH A MINIMUM OF ONE FOOT IN DEPTH. BENCH GRADIENT TO THE OUTLET SHALL BE BETWEEN 2 PERCENT AND 3 PERCENT, UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS. C. THE FLOW LENGTH WITHIN A BENCH SHALL NOT EXCEED 800' UNLESS ACCOMPANIED BY APPROPRIATE DESIGN AND COMPUTATIONS. FOR FLOW CHANNEL STABILIZATION SEE TEMPORARY SWALE.

4. SURFACE WATER SHALL BE DIVERTED FROM THE FACE OF ALL CUT AND/OR FILL SLOPES BY THE USE OF EARTH DIKES, DITCHES AND SWALES OR CONVEYED DOWN SLOPE BY THE USE OF A DESIGNED STRUCTURE, EXCEPT WHERE: A. THE FACE OF THE SLOPE IS OR SHALL BE STABILIZED AND THE FACE OF ALL GRADED SLOPES SHALL BE PROTECTED FROM SURFACE RUNOFF UNTIL THEY ARE STABILIZED. B. THE FACE OF THE SLOPE SHALL NOT BE SUBJECT TO ANY CONCENTRATED FLOWS OF SURFACE WATER SUCH AS FROM NATURAL DRAINAGEWAYS, GRADED SWALES, DOWNSPOUTS, ETC. C. THE FACE OF THE SLOPE WILL BE PROTECTED BY SPECIAL EROSION CONTROL MATERIALS, TO INCLUDE, BUT NOT LIMITED TO: APPROVED VEGETATIVE STABILIZATION PRACTICES (SEE SECTION G), RIP-RAP OR OTHER APPROVED STABILIZATION METHODS.

5. CUT SLOPES OCCURRING IN RIPABLE ROCK SHALL BE SERRATED A SHOWN ON THE FOLLOWING DIAGRAM. THESES SERRATIONS SHALL BE MADE WITH CONVENTIONAL EQUIPMENT AS THE EXCAVATION IS MADE. EACH STEP OR SERRATION SHALL BE CONSTRUCTED ON THE CONTOUR AND WILL HAVE STEPS CUT AT NOMINAL TWO-FOOT INTERVALS WITH NOMINAL THREE-FOOT HORIZONTAL SHELVES. THESE STEPS WILL VARY DEPENDING ON THE SLOPE RATIO OR THE CUT SLOPE. THE NOMINAL SLOPE LINE IS 1:1. THESE STEPS WILL WEATHER AND ACT TO HOLD MOISTURE, LIME, FERTILIZER AND SEED THUS PRODUCING A MUCH QUICKER AND LONGER LIVED VEGETATIVE COVER AND BETTER SLOPE STABILIZATION. OVERLAND FLOW SHALL BE DIVERTED FROM THE TOP OF ALL SERRATED CUT SLOPES AND CARRIED TO SUITABLE OUTLET.

6. SUBSURFACE DRAINAGE SHALL BE PROVIDED WHERE NECESSARY TO INTERCEPT SEEPAGE THAT WOULD OTHERWISE ADVERSELY AFFECT SLOPE STABILITY OR CREATE EXCESSIVELY WET SITE CONDITIONS.

7. SLOPES SHALL NOT BE CREATED SO CLOSE TO PROPERTY LINES AS TO ENDANGER ADJOINING PROPERTIES WITHOUT ADEQUATELY PROTECTING SUCH PROPERTIES AGAINST SEDIMENTATION, EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED DAMAGES.

8. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIAL. IT SHOULD BE FREE OF STONES OVER TWO (2) INCHES IN DIAMETER WHERE COMPACTED BY HAND OR MECHANICAL TAMPERS OR OVER EIGHT (8) INCHES IN DIAMETER WHERE COMPACTED BY ROLLERS OR OTHER EQUIPMENT. FROZEN MATERIAL SHALL NOT BE PLACED IN THE FILL NOR SHALL THE FILL MATERIAL BE PLACED ON A FROZEN FOUNDATION.

9. STOCKPILES, BORROW AREAS AND SPOIL SHALL BE SHOWN ON THE PLANS AND SHALL BE SUBJECT TO THE PROVISIONS OF THIS STANDARD AND SPECIFICATIONS. 20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION ALL DISTURBED AREAS SHALL BE STABILIZED STRUCTURALLY OR VEGETATIVELY IN COMPLIANCE WITH.

24.0 MATERIALS SPECIFICATIONS

CLASS	APPARENT OPENING SIZE MM. MAX.	GRAB TENSILE STRENGTH LB. MIN.	BURST STRENGTH PSI MIN.
A	0.30	250	500
В	0.60	200	320
С	0.30	200	320
D	0.60	90	145
E	0.30	90	145
F(SILT FENCE)	0.40-0.80*	90	190

* US STD SIEVE CW-022

THE PROPERTIES SHALL BE DETERMINED IN ACCORDANCE WITH THE FOLLOWING

APPARENT OPENING SIZE MSMT 323

GRAB TENSILE STRENGTH ASTM D 1682: 4X8" SPECIMEN, 1X2" CLAMPS, 12"/MM. STRAIN RATE IN BOTH PRINCIPAL DIRECTIONS OF GEOTEXTILE FABRIC.

BURST STRENGTH ASTM D 3786

THE FABRIC SHALL BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS, AND WILL BE ROT AND MILDEW RESISTANT, IT SHALL BE MANUFACTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS. AND COMPOSED OF A MINIMUM OF 85% BY WEIGHT OF POLYOLEPHINS POLYESTERS. OR POLYAMIDES. THE GEOTEXTILE FABRIC SHALL RESIST DETERIORATION FROM ULTRAVIOLET EXPOSURE.

IN ADDITION, CLASSES A THROUGH E SHALL HAVE A 0.01 CM./SEC. MINIMUM PERMEABILITY WHEN TESTED IN ACCORDANCE WITH MSMT 507, AND AN APPARENT MINIMUM ELONGATION OF 20 PERCENT (20%) WHEN TESTED IN ACCORDANCE WITH THE GRAB TENSILE STRENGTH REQUIREMENTS LISTED ABOVE.

CLASS F GEOTEXTILE FABRICS FOR SILT FENCE SHALL HAVE A 50 LB./IN. MINIMUM TENSILE STRENGTH AND A 20 LB./IN. MINIMUM TENSILE MODULES WHEN TESTED IN ACCORDANCE WITH MSMT 509. THE MATERIAL SHALL ALSO HAVE A 0.3 GAL./FT.2/MIN. FLOW RATE AND SEVENTY-FIVE PERCENT (75%) MINIMUM FILTERING EFFICIENCY WHEN TESTED IN ACCORDANCE WITH MSMT 322.

GEOTEXTILE FABRICS USED IN THE CONSTRUCTION OF SILT FENCE SHALL RESIST DETERIORATION FROM ULTRAVIOLET EXPOSURE. THE FABRIC SHALL CONTAIN SUFFICIENT AMOUNTS OF ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 12 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120 DEGREES F

SIZE RAN	IGE	D ₅₀	D ₁₀₀	AASHTO	·WEIGHT
NUMBER 57*	3/8"-1 1/2"	1/2"	1 1/2"	M-34	N/A
NUMBER 1	2"-3"	2 1/2"	3 "	M-34	N/A
RIP-RAP**	4"-7"	5 1/2"	7"	N/A	N/A
CLASS I	N/A/	9.5"	15"	N/A	150 lb MAX
CLASS II	N/A	16"	24"	N/A	700 Ib MAX
CLASS III	N/A	23"	34"	N/A	200lb MAX

*THIS CLASSIFICATION IS TO BE USED ON THE INSIDE FACE OF STONE OUTLETS AND ** THIS CLASSIFICATION IS TO BE USED WHEN EVER SMALL RIP—RAP IS REQUIRED. THE STATE HIGHWAY ADMINISTRATION DESIGNATION FOR THIS STONE IS STONE FOR GABIONS (§905.01.04).

STONE FOR GABION BASKETS

BASKET THIC	KNESS	SIZE OF INDIVIDUAL STONES		
INCHES	. MM	INCHES	MM	
6	150	3–5	75–125	
9	225	4–7	100-175	
12	300	4–7	100-175	
18	460	4–7	100175	
36	910	4–12	100-300	

NOTE: RECYCLED CONCRETE EQUIVALENT MAY BE SUBSTITUTED FOR ALL STONE CLASSIFICATIONS. RECYCLED CONCRETE EQUIVALENT SHALL BE CONCRETE BROKEN INTO THE SIZES MEETING THE APPROPRIATE CLASSIFICATION, SHALL CONTAIN NO STEEL REINFORCEMENT, AND SHALL HAVE A DENSITY OF 150 POUNDS PER CUBIC

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW PH, MATERIALS TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES. I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:

- A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH. B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR
- FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREAS HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS. I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS THE STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN THE REPRESENTATIVE SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS - SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

- 1. TOPSOIL SHALL BE A LOAM, SANDY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.
- II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

III. FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES:

I. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION SECTION I - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

IV. FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES:

I. ON SOIL MEETING TOPSOIL SPECIFICATIONS, OBTAIN TEST RESULTS DICTATING FERTILIZER AND LIME AMENDMENTS REQUIRED TO BRING THE SOIL INTO COMPLIANCE WITH THE FOLLOWING:

- A. PH FOR TOPSOIL SHALL BE BETWEEN 6.0 AND 7.5. IF THE TESTED SOIL DEMONSTRATE A PH OF LESS THAN
- 6.0. SUFFICIENT LIME SHALL BE PRESCRIBED TO RAISE THE PH TO 6.5 OR HIGHER.
- B. ORGANIC CONTENT OF TOPSOIL SHALL BE NOT LESS THAN 1.5 PERCENT BY WEIGHT C. TOPSOIL HAVING SOLUBLE SALT CONTENT GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
- D. NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.

NOTE: TOPSOIL SUBSTITUTES OR AMENDMENTS, AS RECOMMENDED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. MAY BE USED IN LIEU OF NATURAL TOPSOIL.

II. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION -SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS.

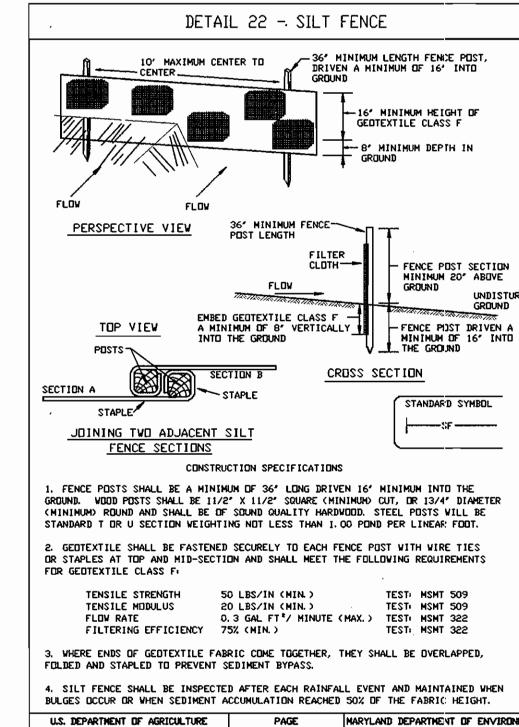
V. TOPSOIL APPLICATION.

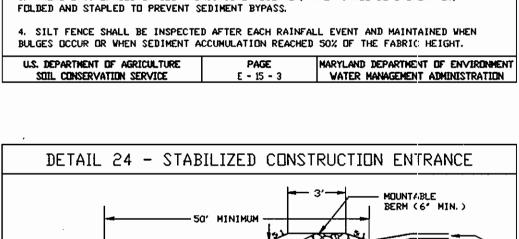
- I. WHEN TOPSOIUNG, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS. II. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4'' - 8'' HIGHER IN ELEVATION.
- III. TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED IN A 4" 8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- IV. TOPSOIL SHALL NOT BE PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

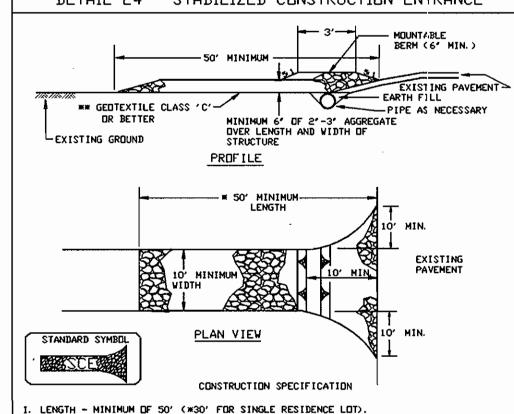
VI. ALTERNATIVE FOR PERMANENT SEEDING - INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:

- I. COMPOSTED SLUDGE MATERIAL FOR USE AS A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRES SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
- A. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM. A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.
- B. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS, AND 0.2 PERCENT POTASSIUM AND HAVE A PH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE. C. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SQUARE FEET.
- II. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPUED AT THE RATE OF 4 LB/1,000 SQUARE FEET, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA, PUB.#1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES. REVISED 1973.







. LENGTH - MINIMUM OF 50' (*30' FOR SINGLE RESIDENCE LOT) 2. VIDTH - 10' MINIMUM, SHOULD BE FLARED AT THE EXISTING ROAD TO PROVIDE A TURNING

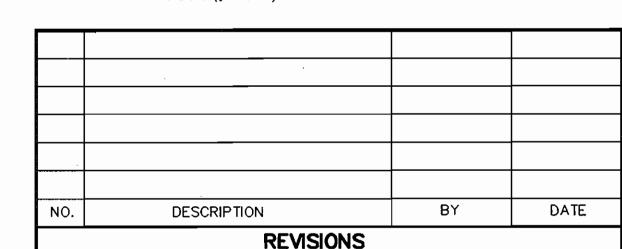
. GEDTEXTILE FABRIC (FILTER CLOTH) SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO PLACING STONE. ■*THE PLAN APPROVAL AUTHORITY MAY NOT REQUIRE SINGLE FAMILY RESIDENCES TO USE GEOTEXTILE.

4. STONE - 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

5. SURFACE WATER - ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED THROUGH THE ENTRANCE, MAINTAINING POSITIVE IRAINAGE. 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 HA 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 PBINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE. VEHICLES LEAVING THE SITE MUST TRAVEL DVER THE ENTIRE LENGTH OF THE STABILIZED CONSTRUCTION ENTRANCE.

U.S. DEPARTMENT OF AGRICULTURE



ENGINEERS • ARCHITECTS • PLANNERS 7164 Columbia Gateway Drive, Suite 205 Columbia, Maryland 21046 hone (410) 312-0966, Fax. (410) 312-0897



OWNER/DEVELOPER: FOREST HILLS, LLC 10717-B BIRMINGHAM WAY WOODSTOCK, MARYLAND 21163 (410) 465 - 5739BUILDER:

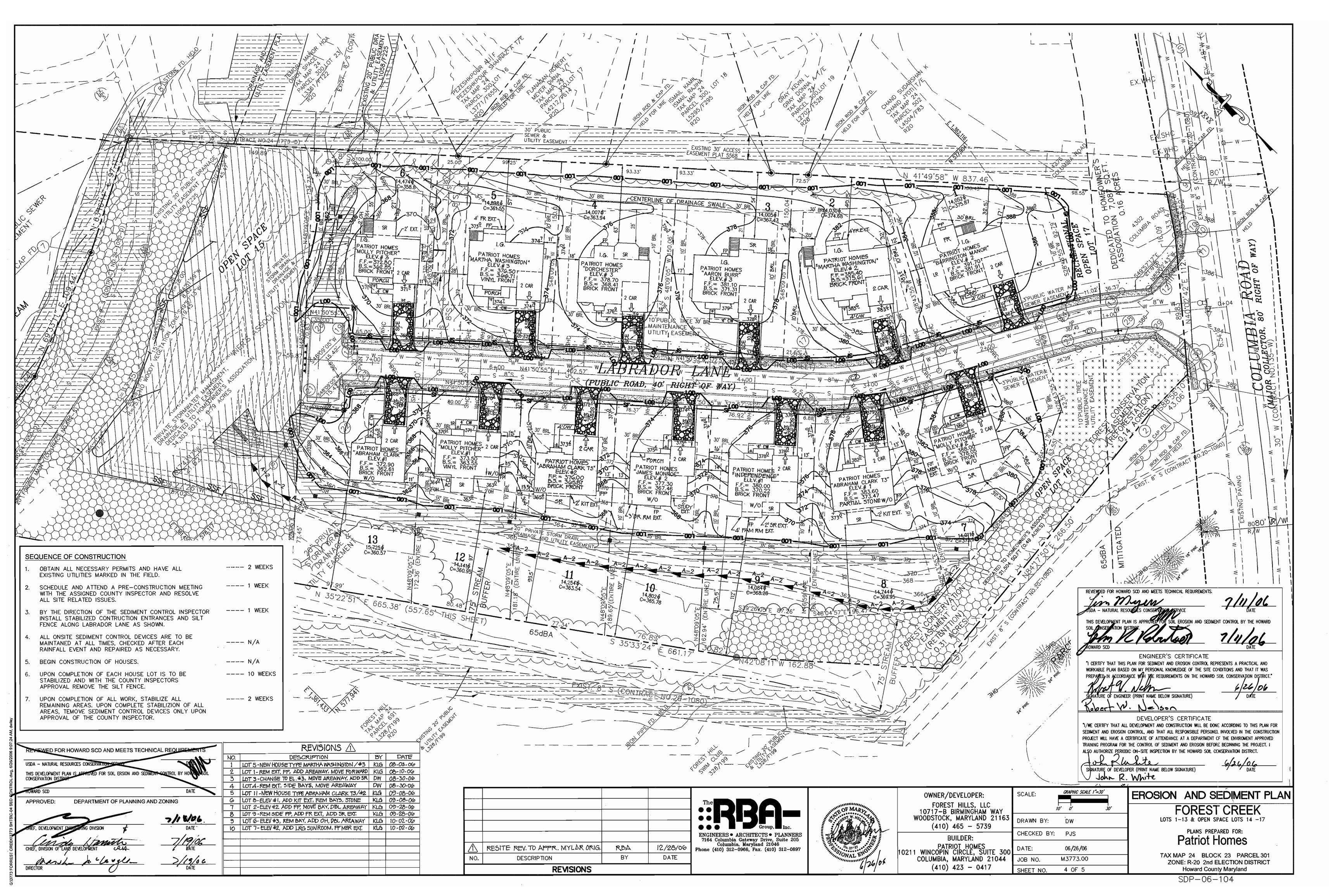
PATRIOT HOMES 10211 WINCOPIN CIRCLE, SUITE 300 COLUMBIA, MARYLAND 21044 (410) 423 - 0417

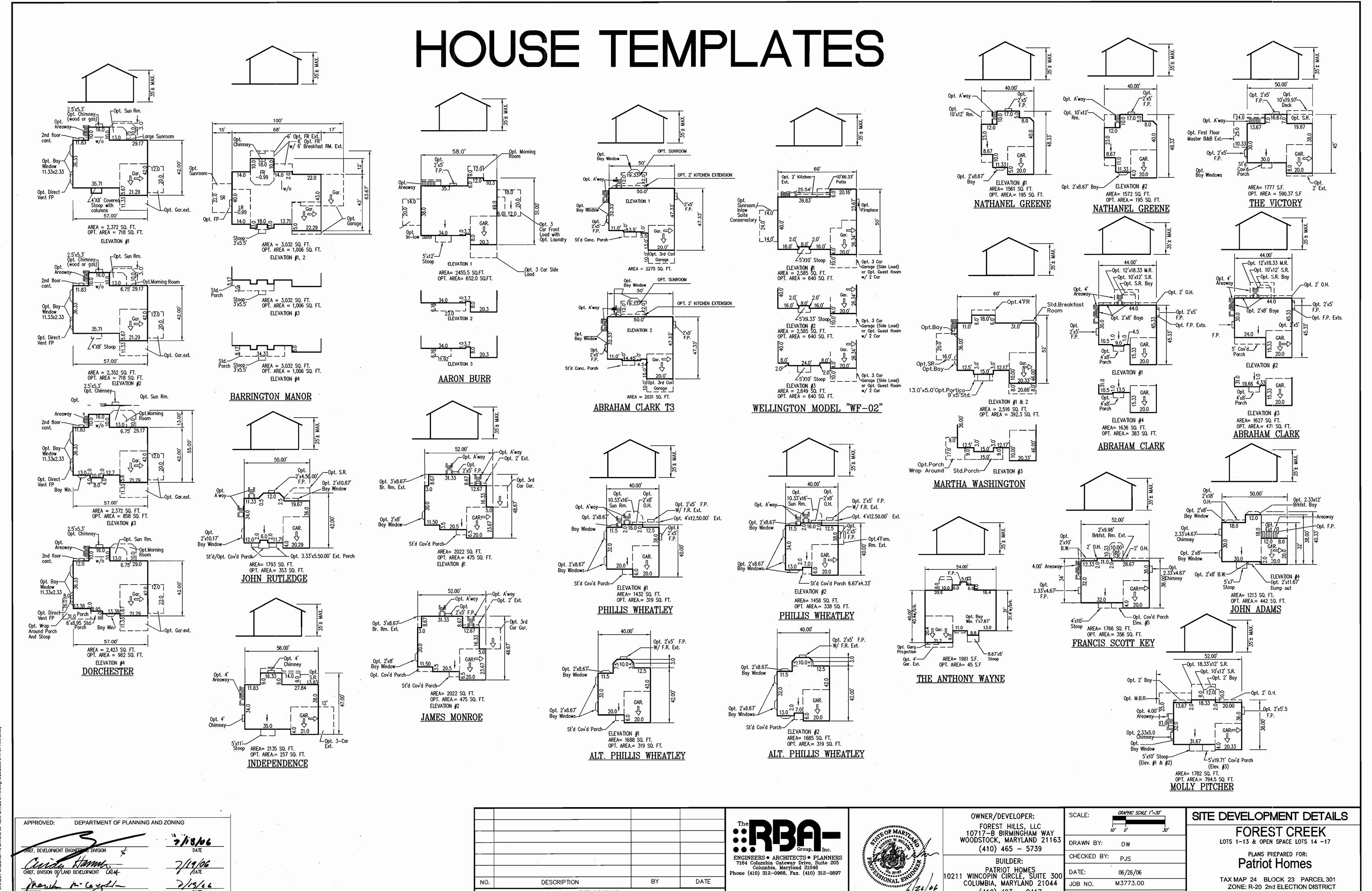
GRAPHIC SCALE 1"=30" SCALE: DRAWN BY: DW CHECKED BY: PJS 06/26/06 M3773.00 JOB NO. 5 OF 5

SEDIMENT CONTROL DETAILS FOREST CREEK LOTS 1-13 & OPEN SPACE LOTS 14 -17 PLANS PREPARED FOR: Patriot Homes TAX MAP 24 BLOCK 23 PARCEL 301

PAGE MARYLAND DEPARTMENT OF ENVIRONMENT F - 17 - 3 WATER MANAGEMENT ADMINISTRATION

ZONE: R-20 2nd ELECTION DISTRICT **Howard County Maryland** SDP-06-104





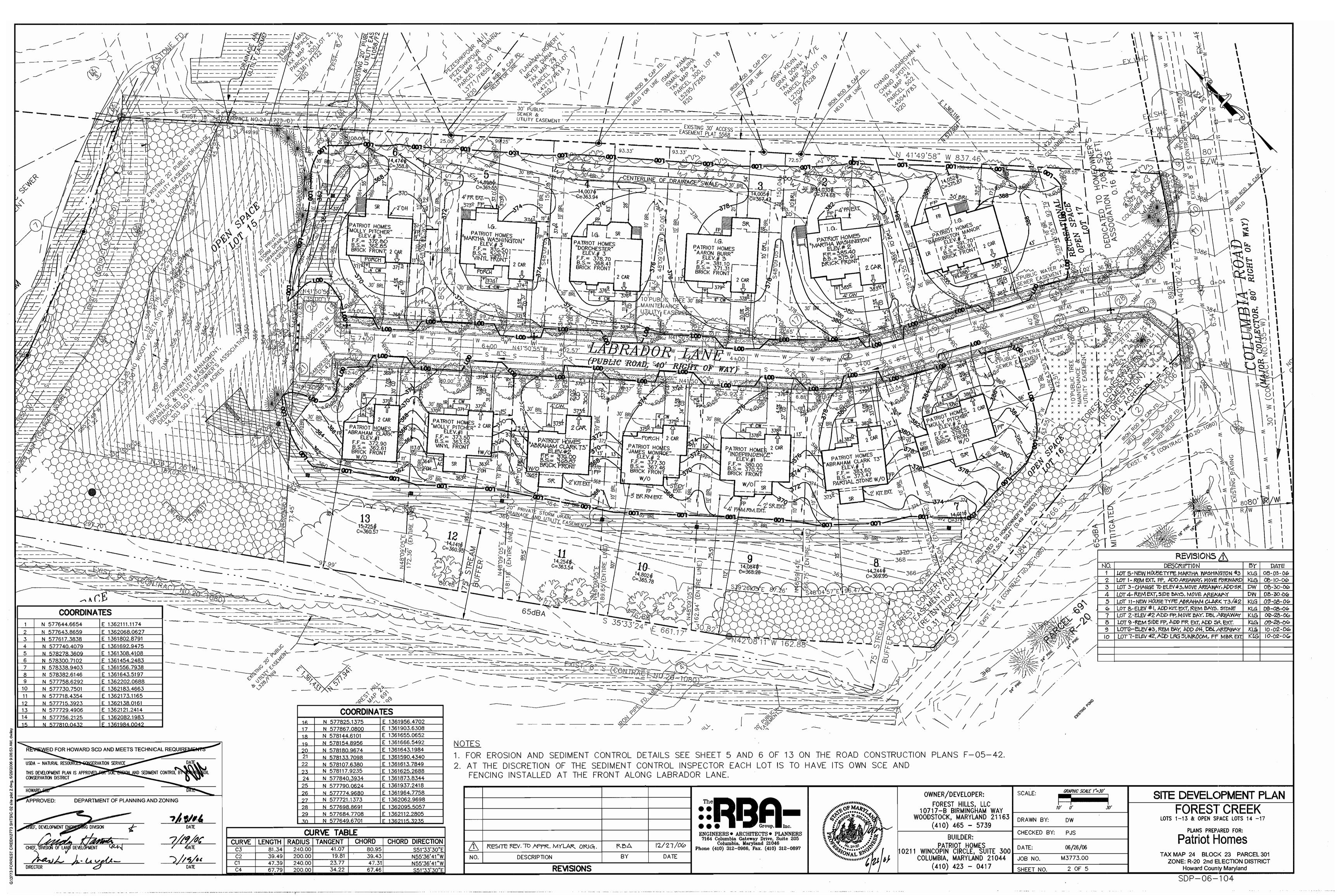
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GAATTA EORREST CREEKIATTA SHTSIC. 03. TEMPI ATES 3773 dwn 6/26/2006 8-17-57 AM Awilaw

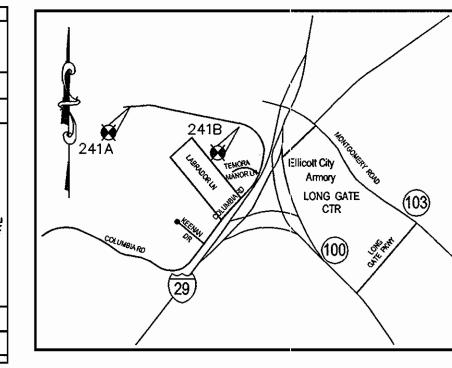


SITE DEVELOPMENT PLAN 1. THE SUBJECT PROPERTY IS ZONED R-20 PER THE FEBRUARY 02, 2006 COMPREHENSIVE ZONING PLAN. 2. IN ACCORDANCE WITH SECTION 128 OF HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THEN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR FOREST CREEK

Before You Dig "MISS UTILITY" Service Protection Center CALL TOLL FREE 1-800-257-7777

E. PROPOSED USES FOR SITE AND STRUCTURES = RESIDENTIAL, SINGLE FAMILY UNITS

G. NUMBER OF PARKING SPACES REQUIRED BY HOWARD COUNTY ZONING REGULATIONS = 2

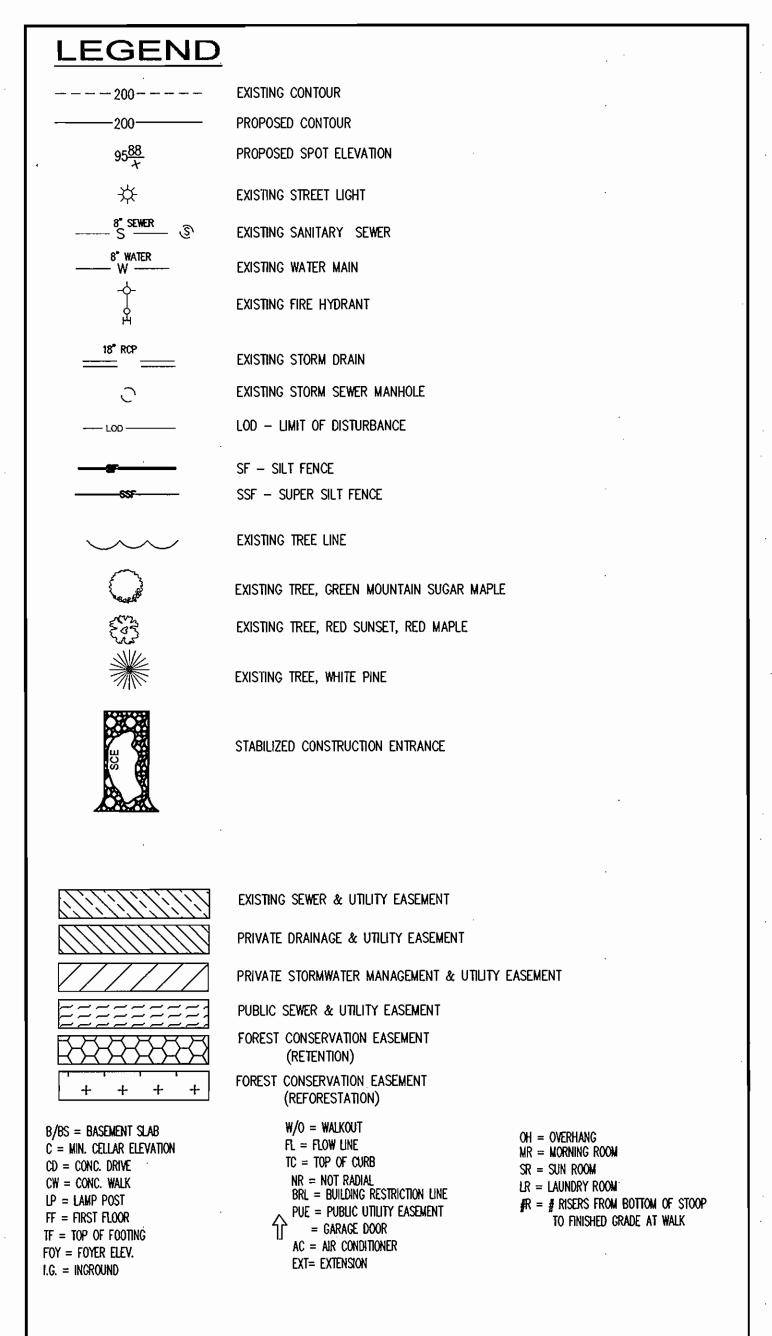


VICINITY MAP

1. OPEN SPACE PROVIDED = 2.29 ACRES, 31.5% OF GROSS AREA AS DEDICATED PER APPROVED PLAN F-05-42.

J. RECREATIONAL OPEN SPACE PROVIDED = .18 ACRES, 2.5% OF GROSS AREA AS DEDICATED PER APPROVED PLAN

PUBLIC WATER & SEWER CONTRACT NO. 24-4250-D



February 6, 2006 Licenses & Permits 3430 Court House Drive Ellicott City, MD 21043 Re: Forest Creek Sediment Controls Dear Sir or Madam: I Robert L. Dorsey, Jr. of Forest Hills LLC hereby give permission to Patriot Homes to use our sediment controls (pond, etc) to build homes in the Forest Creek subdivision. We will not be removing these controls until all construction has been completed.

A. PRESENT ZONING: R-20

B. TOTAL PROJECT AREA = 7.28+/- ACRES

D. LIMIT OF DISTURBANCE = 3.5+/-ACRES

C. AREA OF PLAN SUBMISSION = 4.31+/- ACRES

F. TOTAL NUMBER OF UNITS PROPOSED ON SUBMISSION = 13

K. DPZ FILE REFERENCE NO.'S: ROAD CONSTRUCTION F-05-42

H. NUMBER OF PARKING SPACES PROVIDED ON SITE = 2 IN GARAGE

Sheet Index			
Sheet Title	Sheet No.		
Cover Sheet	1-		
Site Development Plan	2		
Site Development Details	3		
Erosion and Sediment Control Plan	4		
Erosion and Sediment Control Details	5		

ADDRESS CHART LOT/PARCEL# STREET ADDRESS 9006 Labrador Lane 9010 Labrador Lane 9014 Labrador Lane 9018 Labrador Lane 9022 Labrador Lane 9026 Labrador Lane 9005 Labrador Lane 9009 Labrador Lane 9013 Labrador Lane 9017 Labrador Lane 9021 Labrador Lane 9025 Labrador Lane 9029 Labrador Lane

PERMIT INFORMATION CHART							
Subdivision Name			Section Area		Lot/Parcel No.		
FOREST CREEK			And the state of the same of t	N/A	301		
Plat # or L/F	Grid #	Zoning	Tax Map No.	Elect Distr		Census Tract Book	
17991-93		R-20	24	2nd ELEC	. DIST.	602-306	
Water Code		•	Sewer Code		<u> </u>		
F08			5751600				

BY DESCRIPTION DATE **REVISIONS**

ENGINEERS • ARCHITECTS • PLANNERS 7164 Columbia Gateway Drive, Suite 205 Columbia, Maryland 21046 Phone (410) 312-0966, Fax. (410) 312-0897



OWNER/DEVELOPER: FOREST HILLS, LLC 10717-B BIRMINGHAM WAY WOODSTOCK, MARYLAND 21163 (410) 465 - 5739

BUILDER: PATRIOT HOMES WINCOPIN CIRCLE. SUITE 300 COLUMBIA, MARYLAND 21044

GRAPHIC SCALE 1"=30" SCALE: DRAWN BY: DW CHECKED BY: PJS 06/26/06 M3773.00 JOB NO.

COVER SHEET FOREST CREEK LOTS 1-13 & OPEN SPACE LOTS 14 -17

PLANS PREPARED FOR: **Patriot Homes**

ZONE: R-20 2nd ELECTION DISTRICT **Howard County Maryland**

TAX MAP 24 BLOCK 23 PARCEL 301

REVIEWDED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS. DEPARTMENT OF PLANNING AND ZONING 1/15/06

REAR YARD SETBACK (APPLIES FOR RESIDENTIAL SDP'S).

REAR YARD SETBACK (APPLIES FOR RESIDENTIAL SDP'S).

OVER DRIVEWAY SURFACE:

EXCAVATION WORK:

MISS UTILITY

STA. No. 241B

C&P TELEPHONE COMPANY

AT&T CABLE LOCATION DIVISION

STATE HIGHWAY ADMINISTRATION

CONSTRUCTION INSPECTION DIVISION

BALTIMORE GAS & ELECTRIC

HOWARD COUNTY BUREAU OF UTILITIES

HOWARD COUNTY DEPT. OF PUBLIC WORKS/

12. PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT.

DOCUMENTS AND STANDARD CONSTRUCTION PRACTICES.

PREPARED BY MILDENBERG, BOENDER AND ASSOCIATES, INC.

THE SUBDIVISION AND ROAD CONSTRUCTION PLANS F-05-42.

STRUCTURES DURING LOT CONSTRUCTION NOTED ON THESE PLANS.

MILDENBERG, BOENDER & ASSOCIATES, INC.

MILDENBERG, BOENDER & ASSOCIATES, INC.

WIDTH - 12' (14' SERVING MORE THAN ONE RESIDENCE);

MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.

REGULATIONS AND SUBJECT TO THE 10/18/93 ZONING REGULATIONS.

COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.

F-05-42, PREPARED BY MILDENBERG, BOENDER & ASSOCIATES, INC.

HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 241A & 241B.

E 1,360,260.255

N 578,753.503

E 1,362,302.965

SHALL NOT RELIEVE THE CONTRACTOR FROM PERFORMING SUCH WORK.

19. "C" ELEVATION SHOWN ON EACH LOT IS THE MINIMUM CELLAR ELEVATION.

(410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.

3. IN ACCORDANCE WITH SECTION 128 OF HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR

EXTERIOR STAIRWAYS NOT MORE THEN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY

4. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED

TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:

SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.);

STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING)

THE 65 dBA NOISE EXPOSURE. THE 65 dBA NOISE LINE WAS ESTABLISHED BY HOWARD COUNTY TO ALERT

ACCEPTED NOISE LEVELS ESTABLISHED BY THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT.

6A. A NOISE BARRIER IS BEING CONSTRUCTED ON COLUMBIA ROAD BY STATE HIGHWAY ADMINISTRATION UNDER

8. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD

9. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/CONSTRUCTION INSPECTIONS DIVISION AT

10. EXISTING GROUND CONDITIONS BASED ON GRADING PLAN SHT. 5 OF 13 OF THE ROAD CONSTRUCTION PLAN

11. PER THE SUBDIVISION PLAT COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY

ELEV. 391.237

13. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES ON SITE PRIOR TO COMMENCING CONSTRUCTION.

15. FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THIS PROJECT

CONSERVATION HAVE BEEN MET BY THE SUBDIVISION AND ROAD CONSTRUCTION PLANS, F-05-042, PREPARED BY

16. THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST

17. THE LANDSCAPE REQUIREMENTS PER SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE

MANUAL HAVE BEEN MET BY THE SUBDIVISION AND ROAD CONSTRUCTION PLANS F-05-42 PREPARED BY

18. WATER AND SEWER WITH HOUSE CONNECTIONS HAVE BEEN PROVIDED BY CONTRACT NO. 24-4250-D, PLANS

21. EROSION AND SEDIMENT CONTROL WILL BE PROVIDED BY FOREST HILL LLC, UNDER THE ROAD CONSTRUCTION

23. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND REPAIR OF ALL EROSION AND SEDIMENT CONTROL

25. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER; S EXPENSE.

PLANS, F-05-42. THE SEDIMENT BASIN WILL NOT BE CONVERTED UNTIL ALL LOTS HAVE BEEN DEVELOPED

20. STORMWATER MANAGEMENT HAS BEEN PROVIDED BY A SANDFILTER AND EXTENDED DETENTION POND AS PART OF

ACCORDING TO THIS SITE PLAN. AN AGREEMENT LETTER HAS BEEN PROVIDED BY FOREST HILL LLC TO PATRIOT

22. FOR EROSION AND SEDIMENT CONTROL DETAILS SEE SHEET 5 AND 6 OF 13 ON THE ROAD CONSTRUCTION PLANS

24. FOR DRIVEWAY ENTRANCE DETAILS REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL

PROCEDURES, UTILIZED BY THE CONTRACTOR, NOR FOR THE SAFETY OF PUBLIC OR CONTRACTOR'S EMPLOYEES, OR

14. THE RBA GROUP SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION, MEANS, METHODS, TECHNIQUES, OR

FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT

THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS PRIOR TO ANY

1-800-257-7777

(410) 725-9976

(410) 313-4900

(410) 393-3533

(410) 658-0123

(410) 531-5533

(410) 313-1880

GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 45' TURNING RADIUS;

SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR

WITHIN THE LIMITS OF WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100

DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH

6. THE 65 dBA NOISE CONTOUR LINE DRAWN ON THIS DEVELOPMENT PLAN IS ADVISORY AS REQUIRED BY THE HOWARD

DEVELOPERS, BUILDERS AND FUTURE RESIDENTS THAT AREAS BEYOND THIS THRESHOLD MAY EXCEED GENERALLY

COUNTY DESIGN MANUAL, CHAPTER 5, REVISED FEBRUARY, 1992, AND CANNOT BE CONSIDERED TO EXACTLY LOCATE

CONTRACT NUMBER HO662B51. THIS WILL FULFILL THE NOISE MIGTATION REQUIREMENTS FOR THE SITE PER F-05-42. 7. THIS SUBDIVISION WAS GRANDFATHERED TO THE SECOND AMENDMENT OF THE FORTH EDITION OF THE SUBDIVISION

5. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS

(410) 423 - 0417

10717-B (2rd Floor) Birmingham Way Woodstock, MD 21163

(410) 465-7200 FAX (410) 465-04B8

1 OF 5 SHEET NO.

SDP-06-104

