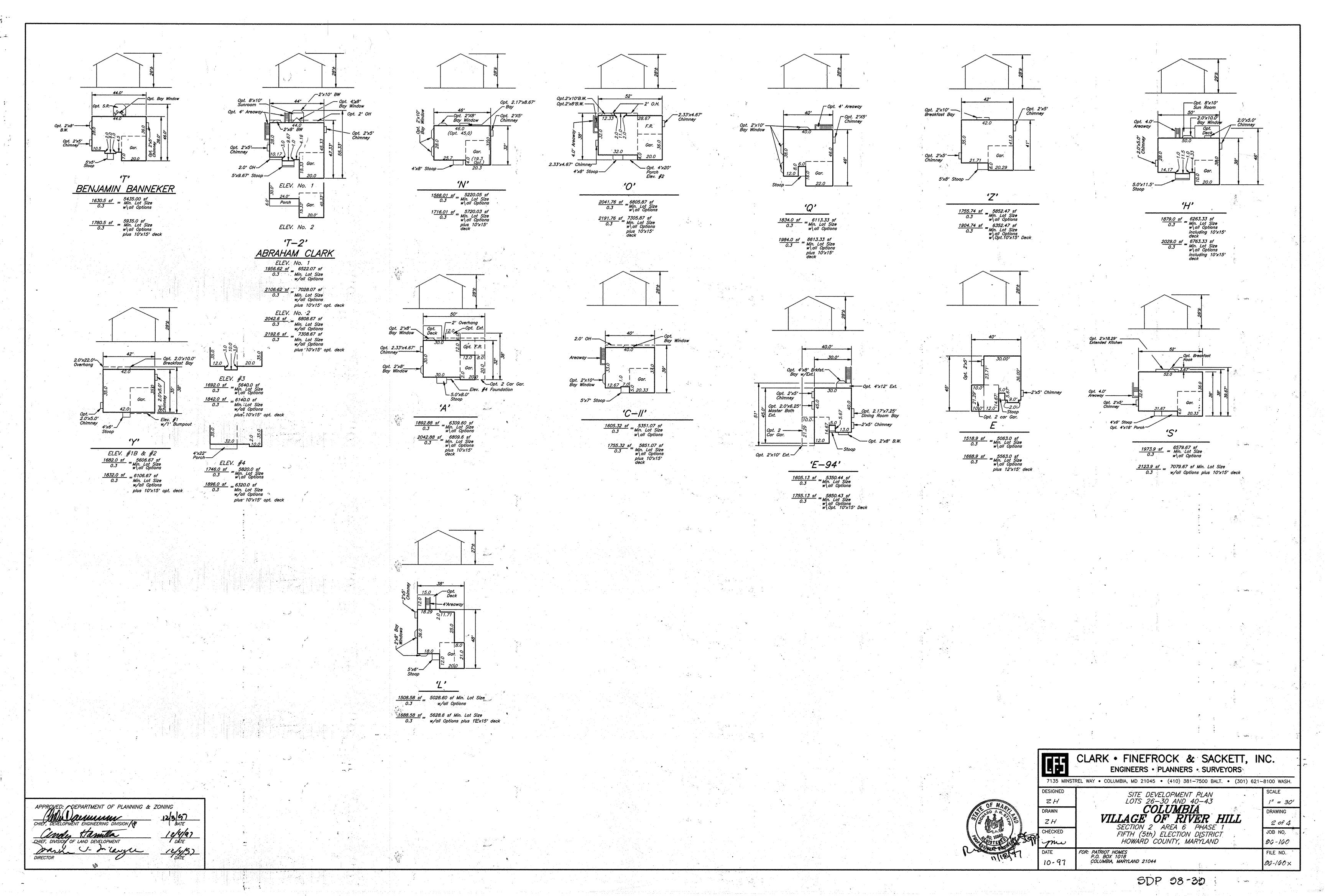


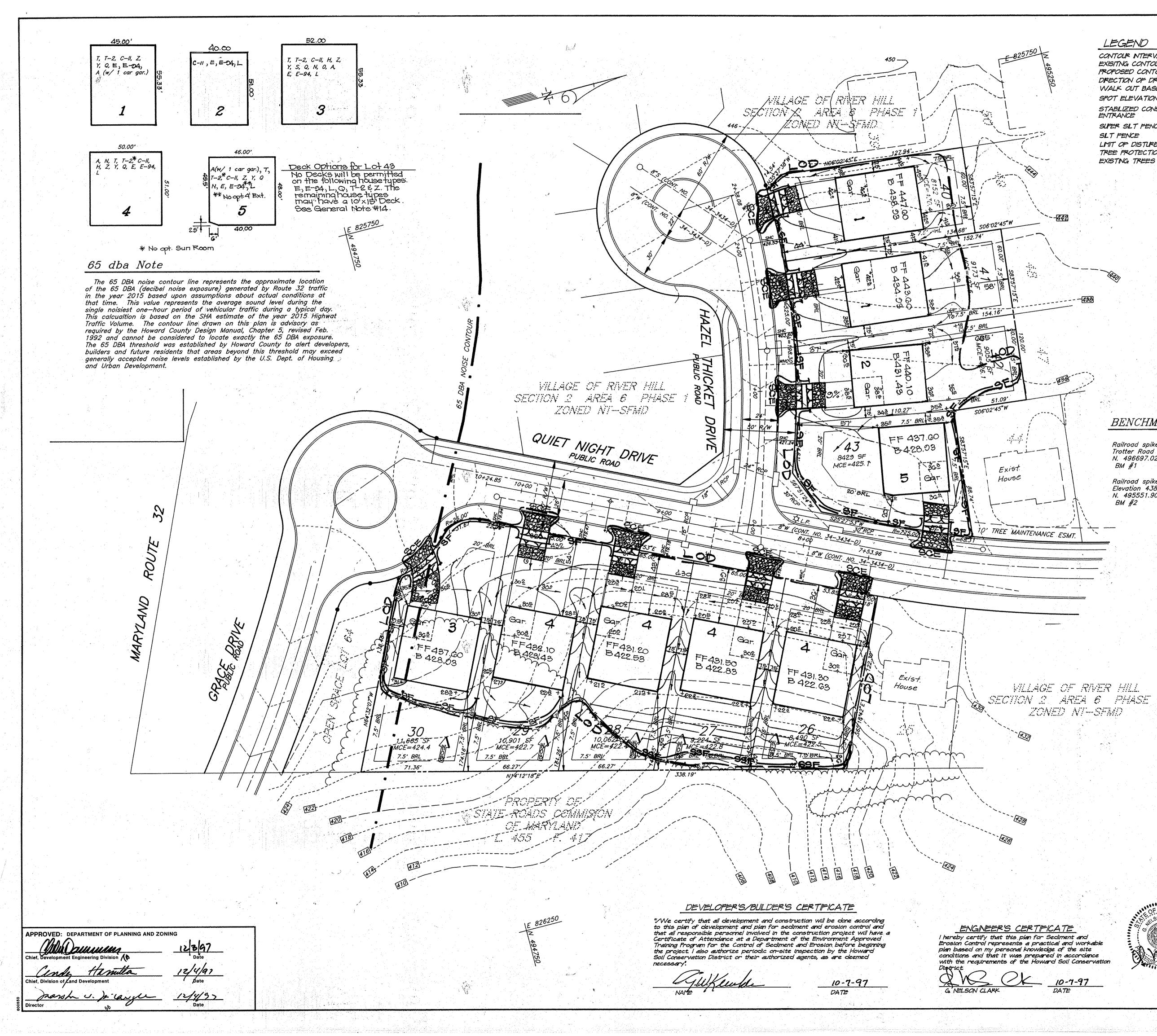
······	
LOT NUMBER STR	HART EET ADDRESS
	UIET NIGHT RIDE
28 G453 Q	UIET NIGHT RIDE
	UIET NIGHT RIDE
	AZEL THICKET DRIVE
42 G504 H	AZEL THICKET DRIVE
	UIET NIGHT RIDE
, <u>LEGEND</u>	#2437003 #2437003 ROAD ROAD
CONTOUR INTERVAL EXISTING CONTOUR	
PROPOSED CONTOUR DIRECTION OF DRAINAGE WALK-OUT BASEMENT	HALL SHOP HALL SHOP HO.CO.MON.
EXISTING SEWER MAIN	<u> * sewer</u>
EXISTING WATER MAIN EXISTING STORM DRAIN EXISTING TREES TO REMAIN	$\frac{15^{-} \text{ s.o.}}{5}$
•	
- ARD	GENERAL NOTES:
438	1. Subject property is zoned: NTSFMD per 10–18–93 Comprehensive Zoning Plan.
	2. The total area included in this submission is :1.959 Auree
	3. The total number of lots included in this submission is: 9
	4. Improvement to property : Single Family Detached
	 Department of Planning and Zoning reference file numbers F-96-98, S-91-03, P-95-17, W&S Cont # 34-3434-D Utilities shown as existing are taken from approved Water and
	Sewer plans Contract # 34–3434–D & approved Road Construction plans F–96–98. 7. Any damage to county owned rights–of–way shall be corrected
	at the developer's expense. 8. All roadways are public and existing.
DUNCTURADEC	9. The existing topography was taken from Road Construction plans F–96–98 prepared by Riemer, Muegge & Associates, Inc.
BENCHMARKS	in July, 1996.
Railroad spike in pole #525680 Trotter Road Elev. 393.27	10. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland
N. 496697.02 E. 822026.81 BM #1	Staté Plane Coordinate System – Howard County Monument No. 2337001 and 2437003.
Railroad spike in Poplar	11. The contractor shall notify the Department of Public Works/ Division of Construction Inspection at (410) 313–1880 at least twenty–four (24) hours prior to the start of work.
Elevation 438.92 N. 495551.90 E. 820727.80 BM #2	12. The contractor shall notify "Miss Utility" at 1–800–257–7777 at least 48 hours prior to any excavation work.
$\sum_{i=1}^{n} \frac{1}{2} \sum_{i=1}^{n} \frac{1}{2} \sum_{i$	13. For driveway entrance details, refer to Ho. Co. Design Manual Volume IV details. R-G.05
	14. In accordance with FDP Phase 209 Part IV bay windows or chimneys not more than 10 feet
	in width may project not more than 4 feet into any setbacks; porches and decks may project not more than 3 feet into
	the front or rear setbacks. 15. Stormwater Management is provided per: F—96—98
	16. All landscaping will be installed by the developer in conjuction with the construction plans for F-96-98,except as provided in note 21.
	17. SHC elevations are located at the property line. 18. Stormwater Management is provided by the MD. Rte 32
	stream crossings. Water Quality is provided by publicly owed Bioretention Areas.
SHEET INDEX	19. Maximum lot coverage permitted: 30% 20. No usable yard can encroach upon the G5 dBA
NO. DESCRIPTION 2 Site Development Plan	noise Contour line.
4 Sediment Erosion Control Plans	SPECIAL NOTES:
<i>₩₩₩₩₩</i>	This plan is for house siting and lot grading only. Improvements shown within the rights—of—way on this S.D.P. are not to be used
a <i>e frase i</i>	for construction. For construction, see approved Road Construction Plans F–96–98 and/or approved Water and Sewer Plans Contract
7	# 34-3434-D. 21 LANDSCAPE SURETY:
43	This plan has been prepared in accordance with provisions of Section 16-124 of the Ho. Co. Code and Landscape Manual. Financial Surety for the required 3 landscape trees in the
	Financial Surety for the required 3 landscape trees in the amount of \$300.00 is part of the builders drading permit application on Lot 43.
	OWNER / DEVELOPER
	THE HOWARD RESEARCH AND DEVELOPMENT CORP.
	10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044
	SUBDIMISION NAME COLUMBIA VILLAGE OF RIVER HILL 2/G/1 26-30 AND 40-43
	PLAT NO. BLOCK NO. ZONE TAX MAP NO. ELECTION DIST. CENSUS TRACT 12395 15/21 NT-SFMD 35 5TH 6055
	WATER CODE SEWER CODE
	CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS
	7135 MINSTREL WAY • COLUMBIA. MD. 21045 • (410) 381-7500 BALTO. • (301) 621-8100 - WASH
OF MAD	DESIGNED SITE DEVELOPMENT PLAN SCALE I"=30"



ENGINEERS • PLANNERS • SURVEYORS	.
7135 MINSTREL WAY • COLUMBIA. MD 21045 • (410) 381-7500 BALTO. • ((301) 621-8100 - WASH
SIGNED SITE DEVELOPMENT PLAN LOTS 26-30 AND 40-43	SCALE /"=30'
AWN 2H/H VILLAGE OF RIVER HILL	L DRAWING
SECTION 2 AREA 6 PHASE 1 FIFTH (5th) ELECTION DISTRICT HOWARD COUNTY, MARYLAND	JOB NO. 96-160
TE FOR: PATRIOT HOMES P.O. BOX 1018 COLUMBIA, MARYLAND 21044	FILE NO. <i>96-160-</i> X

SDP 98-39

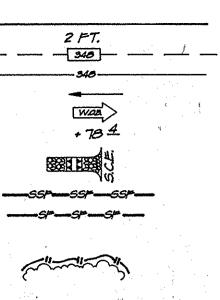


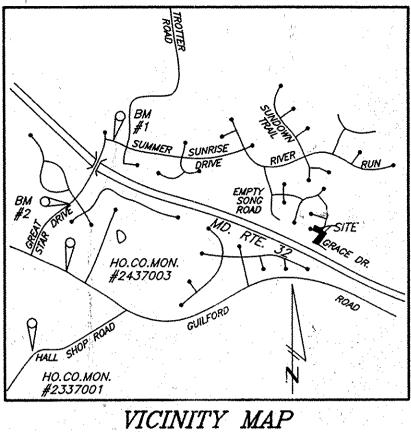


LEGEND

CONTOUR NTERVAL EXISITING CONTOUR PROPOSED CONTOUR DRECTION OF DRANAGE WALK OUT BASEMENT SPOT ELEVATION STABLIZED CONSTRUCTION ENTRANCE

SUPER SLT FENCE SLT FENCE LIMIT OF DISTURBED AREA TREE PROTECTION FENCE EXISTING TREES TO REMAIN





Scale : 1"=2000'

BENCHMARKS

Railroad spike in pole #525680 Trotter Road Elev. 393.27 N. 496697.02 E. 822026.81 BM #1

Railroad spike in Poplar Elevation 438.92 N. 495551.90 E. 820727.80 BM #2

> Reviewed for HOWARD S.C.D. neets Technical Requirements Synature Valo Date Nature Rectored Conservation Service THIS DEVELOPMENT FLAN IS APPROVED

FOR SOL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOL CONSERVATION DISTRICT. m Rebutson 11/26/97

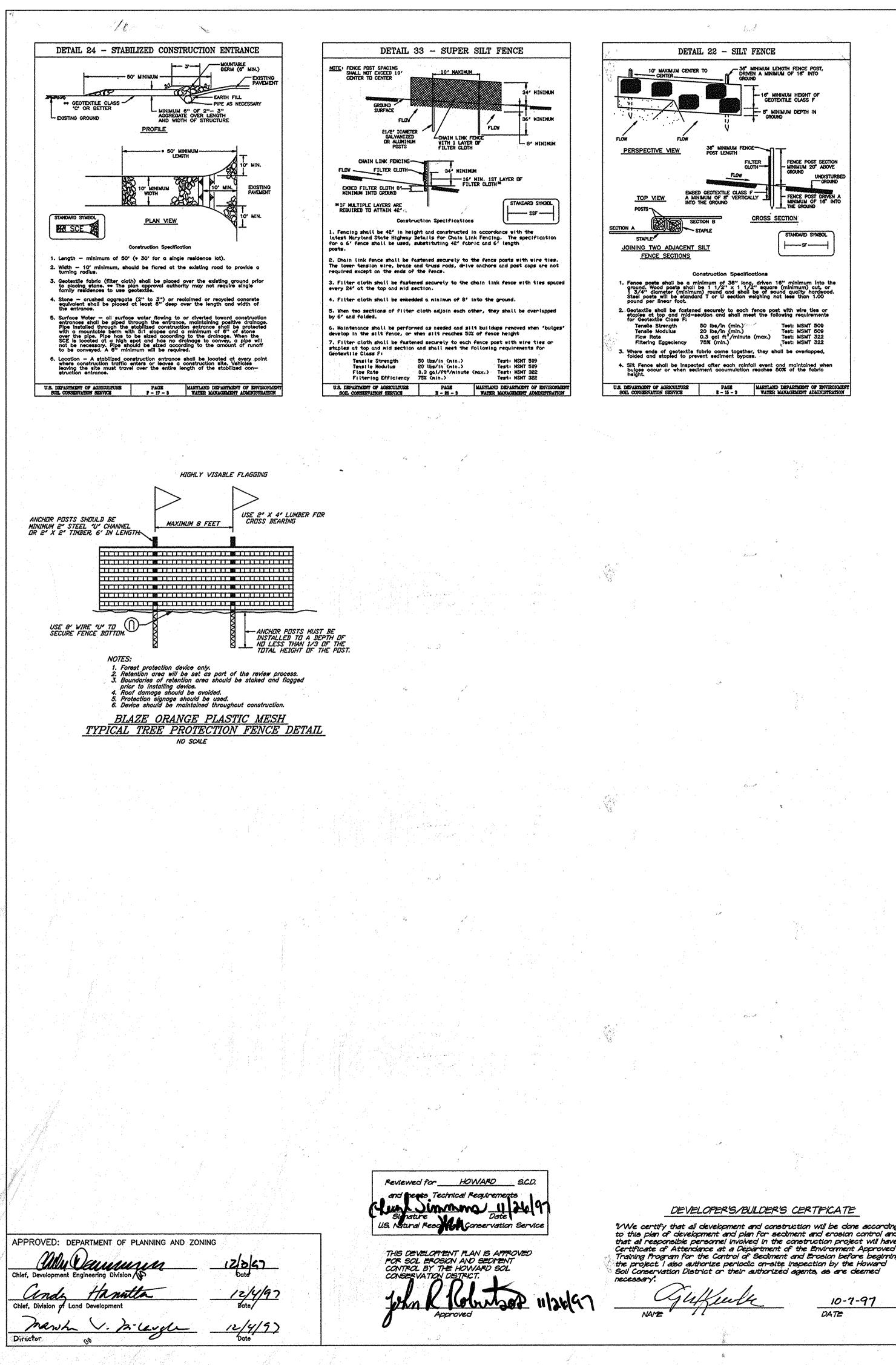
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OWNER / DEVELOPER

THE HOWARD RESEARCH AND DEVELOPMENT CORP. 10275 LITTLE PATUXENT PARKWAY COLUMBIA, MARYLAND 21044

SUBDIVISION NAME	· · · ·	•	SECTION/ARE	EA LOTS,	PARCELS	and the second second
COLUMBIA VI	LLAGE OF	RIVER HILL	TWO/SI	X 26-30	0 AND 40-43	
PLAT NO.	BLOCK NO.	ZONE	TAX MAP NO.			
12395		NT-SFMD	35	5TH	6055	
WATER CODE	12	T A	SEWER CODE 6640000		· ·	
		· ·		S • SURVEYC	DRS	
7135 MINST	REL WAY	COLUMBIA, MD.	21045 • (41	0) 381-7500	BALTO. • (301)	621-8100 - WASH
DESIGNED	SEDIN			ND CON	TROL-PL	AN SCALE
DRAWN			COLUI	MBIA		DRAWING
ZH/t	ļ	TLLAGE				3 <i>ô</i> f4
CHECKED			I 2 AREA 5th) FLFC	A 6 PHA STION DIST	2	JOB NO.
TD				Y, MARYLA		96-160
DATE	FOR: PATRI				• ·	FILE NO.
0¢t.97	COLUM	30X 1018 IBIA, MARYLAND .	21044	an an taon 1990. An taon amin' a		96-160-9E

SDP 98-39



DETAIL 22 - SILT FENCE - 36" MINIMUM LENGTH FENCE POST, DRIVEN A MINIMUM OF 16" INTO GROUND - 16" MINIMUM HEIGHT GEOTEXTILE CLASS F 8" MINIMUM DEPTH IN GROUND

1. A

36" MINEMUM FENCE-FENCE POST SECTION FILTER FLOW UNDISTURB ENBED GEOTEXTILE CLASS I A MINIMUM OF 8" VERTICAL INTO THE GROUND FENCE POST DRM MINIMUM OF 16 THE GROUND CROSS SECTION STANDARD SYMBOL

_____s-___ **Construction Specifications** 1. Fence posts shall be a minimum of 36" long, driven 16" minimum into the ground. Wood posts shall be 1 $1/2" \times 1 1/2"$ square (minimum) out, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighing not less than 1.00 pound linear foot. Geotextile shall be fastened securely to each fence post with wire ties or stoples at top and mid-section and shall meet the following requirements for Geotextile Class F:
 50 ibs/in (min.)
 Test: MSMT 509

 20 ibs/in (min.)
 Test: MSMT 509

 0.3 goi ft*/minute (mox.)
 Test: MSMT 322

 75% (min.)
 Test: MSMT 322

 Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass. Sit Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reaches 50% of the fabrio height.

21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation. Purpose

To provide a suitable soil medium for vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or inacceptable soll 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 subsoli/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. Topsoll shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other solls may be used if recommended by an agronomist or a soll scientist and approved by the appropriate approval authority. Regardless, topsoll shall not be a mixture of contrasting textured of ball contain loam than 5% by where of subsolis and shall contain less than 5% by volume of cinders, stones, sig, coarse fragments, gravel, sticks, roots, trash, or other materials larger that 1 and $1/2^{\circ}$ in diameter diameter.

Topsoil must be free of plants or plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutsedge, poison hy, thistle, or others as specified.

iii. Where the subsoll is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-B 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.

II. For sites having disturbed areas under 5 acres: i. Place topsail (if required) and apply soll amendments as specified in <u>20.0 Vegetative Stabilization</u> Section I – Vegetative Stabilization Methods and Materials.

- 11. 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:

 pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 Drganic content of topsoil shall be not less than 1.5 percent by weight.
 Topsoil having soluble salt content greater than 500 parts per million shall be placed on soil soil which has been treated with soil stenilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phyto-taxic 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.

natural topsoil.

ii. Place topsoil (if required) and apply soil ammendments specified in 20.0 Vegetative Stabilization-Section I-Vegetative Stabilization ation Methods and Materials.

V. Topsoll 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.

Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4"
 S" 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. or water pockets.

iv. Topsoil shall not be place 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.

DEVELOPER'S/BUILDER'S CERTIFICATE

to this plan of development and plan for sectiment and erosion control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sectiment and Brosion before beginning the project I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed

10-7-97 DATE

PERMANENT SEEDING NOTES

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

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

- SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schedules: 1) Preferred-Apply 2 tons per acre dolomitic limestone (92 lbs/ 100 sq.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 the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq.ft.)
- 2) Acceptable-Apply 2 tons per acre dolomatic limestone (92 lbs/ 1000 sq.ft.) and apply 1000 lbs. per acre 10-10-10- fertilizer (23 lbs./1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil.
- SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs/1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq.ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.
- MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.
- MAINTENANCE: Inspect all seeded areas and make needed repairs replacements and reseedings.

TEMPORARY SEEDING NOTES

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

- 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 nye (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 1 thru February 28, protect site by applying 2 tons per acre of well anchared straw mulch and seed as soon as possible in the spring, or use sod.
- MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq.ft.) for anchoring.
- REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT

ENGNEERS CERTIFICATE

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 of the Howard Soil Conservation

10-7-97

I hereby certify that this plan for Sectment and

SEDIMENT AND EROSION CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313–1855).
- 2. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECS. FDR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- 3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) T calendar days for all perimeter sediment control stuctures, dikes, perimeter slopes and all slopes greater than 3:1
 b) 14 days as to all other disturbed or graded areas on the project site.
- 4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol.1, Chapter 7, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above, in accordance with the 1994 MARYLAND STAND-ARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings, sod, temporary seeding and mulching (Sec G). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control inspector. 7. SITE ANALYSIS: 1.95 ACRES 1.69 ACRES
- Total Area of Site: ______ Area Disturbed: ______ Area to be roofed or paved:-_____ Area to be vegetatively stabilized: ____ Total Cut: _____ Total Fill : Offsite Waste/Borrow Area Location: ___ 1.00 976 CY 895 CY
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed neces-sary 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
- 11. Trenches for the construction of utilities is limited to three pipe lengths or that which shall be back-filled and stabilized within one working day, whichever is shorter.
- * It is the responsibility of the contractor to identify the spoil/borrow site and notify and gain approval from the sediment control inspector of the site and it's grading permit number at the time of construction.

CONSTRUCTION SEQUENCE:

* Delay construction of houses on lots:____

CONSTRUCTION SEQUENCE.	NO. OF DAYS
1. Obtain grading permit.	7
2. Install tree protection fence 3. Install sediment and erosion control devices and stabilize	Z
3. Install sediment and erosion control devices and stabilize.	
4. Excavate for foundations, rough grade and temporarily stabilize.	
5. Construct structures, sidewalks and driveways.	60
 Final grade and stabilize in accordance with Stds. and Specs. Upon approval of the sediment control inspector, remove 	
sediment and erosion control devices and stabilize.	7

N/A

. 4.	OWNER	/ DEV	ELOPE	R
THE	HOWARD RESE	ARCH AND	DEVELOPME	NT CORP.
	10275 LIT	TLE PATUXE	NT PARKWA	Y 2010 - 1
	COLUME	NA, MARYLA	ND 21044	

			$r_{\rm eff} = 1.000$ km s $^{-1}$ m s $^{-1}$ m s $^{-1}$	
	ENGINEE	ERS • PLANNERS		
7135 MINST	REL WAY • COLUMBIA, MD	21045 • (410) 381-7	7500 BALT. • (301) 621-	-8100 WASH.
DESIGNED		& EROSION -CON DTS 26-30 AND 4	40-43	SCALE NONE
DRAWN		COLUMBL	4	DRAWING
BLP		E OF RIV	1085° - 54	4 OF 4
CHECKED		ON 2 AREA 6 F		JOB NO.
TD		(5th) ELECTION L ARD COUNTY, MAR		96–160
DATE	FOR: PATRIOT HO	OMES		FILE NO.
OCT. 1997	P.O. BOX S COLUMBIA,	1018 MARYLAND 21044		96-160-5E
	SDP 9	98-39		