SEDIMENT AND EROSION CONTROL NOTES

1. A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (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 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL.
3. Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
4. All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol.1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
5. All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec.51) sod (Sec.54), temporary seeding (Sec.50) and mulching (Sec 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. SITE ANALYSIS:

Total Area of Site:	0.319 Ac
Area Disturbed:	0.321 Ac
Area to be roofed or paved:	0.088 Ac
Area to be vegetatively stabilized:	0.233 Ac
Total Cut:	357 c.y.
Total Fill:	57 c.y.
Offsite Waste/Borrow Area Location:	*

8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment control must be provided, if deemed necessary by the Howard County DPW Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.
11. All pipes to be blocked at the end of each day (see detail this sheet).
12. The total amount of silt fence= 237 l.f.

* 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:

	NO. OF DAYS
1. Obtain grading permit	7
2. Install tree protection fence.	7
3. Install sediment and erosion control devices and stabilize.	14
4. Excavate for foundations, rough grade and temporarily stabilize.	30
5. Construct structures, sidewalks and driveways.	60
6. Final grade and stabilize in accordance with Stds. and Specs.	14
7. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	7

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 sqft.) 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 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 60lbs 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 50 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, repalcements and reseedings.

TEMPORARY SEEDING NOTES

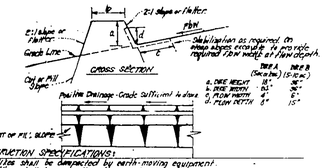
SEEDBED PREPARARTION: Loosen upper three inches of soil by raking, discing,or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: Apply 600 lbs per acre 10–10–10 fertilizer (14lbs/1000 sq ft).

SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchorsd 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 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



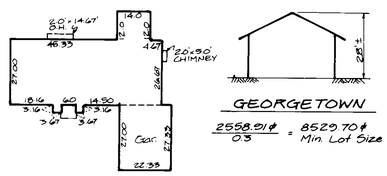
CONSTRUCTION SPECIFICATIONS:
1. All dikes shall be compacted by earth-moving equipment.
2. All dikes shall have adequate drainage to an outlet.
3. Top width may be wider and side slopes may be flatter if desired, to facilitate crossing by construction traffic.
4. Flow velocities should be adjusted as needed to utilize a stabilized safe outlet.
5. Earth dikes shall have an outlet that functions with a minimum of erosion. Runoff shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either the dike channel or the drainage area above the dike are not adequately stabilized.
6. Stabilization shall be: (A) in accordance with standard specifications for seed and straw mulch or straw mulch if not in seeding season, (B) flow channel as per chart below.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL GRADE	DIKE A	DIKE B
1.	0.5–3.0%	Seed & Straw Mulch	Seed w/ Straw Mulch
2.	3.1– 5.0%	Seed & Straw Mulch	Sod w/Mulch, or October, Sod, 2"Stone
3.	5.1– 8.0%	Sod w/Mulch or Sod, 2"Stone	Lined, Rip Rap, 6"-8"Stone
4.	8.1– 15.0%	Lined Rip Rap, 6"-8"Stone	Engineering Design

A. Stone to be 2"-8"stone, or recycled concrete equivalent, in a layer at least 3" thick and be pressed into soil with construction equipment.
B. Rip Rap to be 6"-8" in a layer at least 24" thick, pressed into soil.
C. Approved equivalents can be substituted for any of the above materials.
7. Periodic inspection and required Maintenance must be provided after each rain.

EARTH DIKE DETAIL (E.D.)
NO SCALE

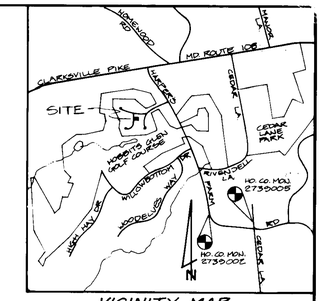


GEORGETOWN

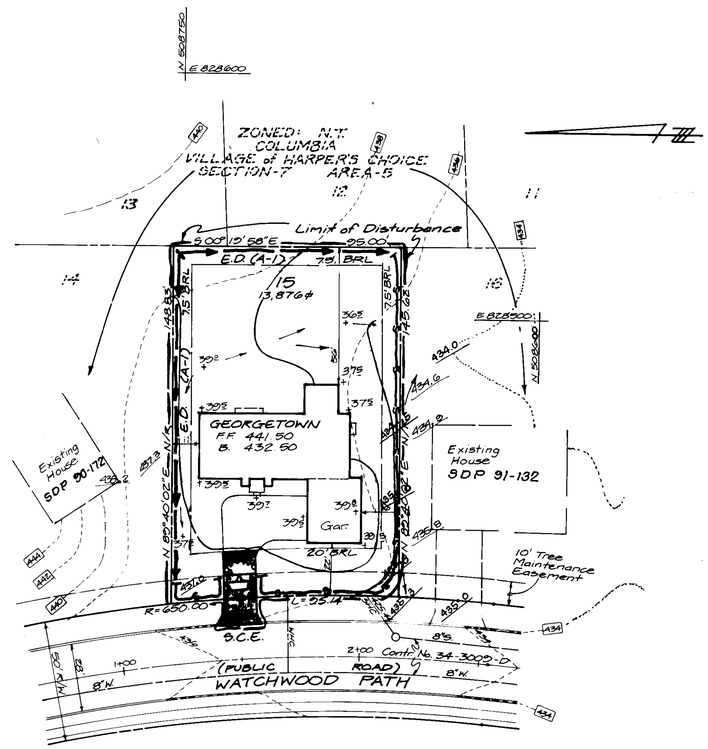
2558.91¢ / 0.3 = 8529.70¢ Min. Lot Size

LEGEND

Contour Interval 2 Ft.
Existing Contour 410
Proposed Contour 410
Spot Elevation +10.3
Direction of Drainage
Silt Fence S S
Earth Dike E.D. (A-1)
Limit of Disturbance
Stabilized Construction Entrance S.C.E.
Existing Stop Elevation 435.8



VICINITY MAP
SCALE: 1" = 2000'



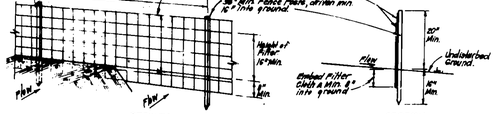
GENERAL NOTES:

1. Subject property is zoned: NT per 10-18-93 Comprehensive Zoning Plan.
2. The total area included in this submission is : 13,876¢ or 0.32Ac
3. The total number of lots included in this submission are: 1
4. Improvement to property : Single family detached
5. The maximum lot coverage permitted is: 30%
6. Department of Planning and Zoning reference file numbers are: S-88-101, P-88-15, F-90-06, WP88-14, FDP 204
7. Utilities shown as existing are taken from approved water and sewer plan Contract #34-3009-D, approved road construction plans F-90-06, and actual field survey.
8. Any damage to county owned rights-of-way shall be corrected at the developer's expense.
9. For driveway entrance detail see Ho. Co. Std. Detail R-6.05
10. All roadways are public and existing.
11. The existing topography shown was field-run by Clark, Finefrock and Sackett on Dec. 6, 1994.
12. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System – Howard County Monument Nos.: 2739002 and 2739005
13. 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.
14. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
15. Storm Water Management requirements have been waived per D.P.W. Action dated Sept. 6, 1988
16. SHC elevations shown are located at the property line.
17. Under certain conditions, decks and porches may only extend 3 feet into front and rear setback areas as stated in FDP Phase 204, chimneys and bay windows up to 10 feet in width may project up to 4 feet into the required setbacks.

ADDRESS CHART	
Lot	Street Address
15	5105 Watchwood Path

SPECIAL NOTES:

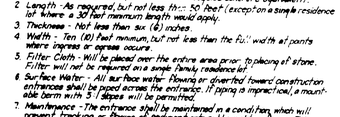
This plan is for house siting and lot grading only. Improvements shown within the rights-of-way on this S.D.P. are not to be used for construction. For construction, see approved Road Construction Plans F-90-06 and/or approved Water and Sewer Plans Contract #34-3009-D



CONSTRUCTION SPECIFICATIONS:
1. Woven wire fence to be fastened securely to fence posts with wire ties or staples.
2. Filter cloth to be fastened securely to woven wire fence with ties spaced every 10' at top and mid section.
3. When 2 sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
4. Maintenance shall be performed as needed and sediment removed when bulges develop to 1/2 fence.
5. Silt Fence to be stabilized at 3' to 5' intervals

POSTS: Steel, either T or U Type or Hardwood
FENCE: Woven Wire, 14½ Gauge, 6" Max. Mesh Opening
FILTER CLOTH: Filter X, Mirafi 100X, Stabilinka T140N or Approv. equal
PREFABRICATED UNIT: GeoFab, Enviofence, or approv. equal

SILT FENCE DETAIL (9)
NO SCALE



CONSTRUCTION SPECIFICATIONS:
1. Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
2. Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply.
3. Thickness - Not less than six (6) inches.
4. Width - Ten (10) feet minimum, but not less than the full width at points where ingress or egress occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slopes will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE

OWNER / DEVELOPER

HOWARD RESEARCH AND DEVELOPMENT CORP.
10275 Little Patuxent Parkway
Columbia, Maryland 21044

SUBDIVISION NAME			SECTION/AREA	LOT#/PARCELS
Village of Harper's Choice			7/5	15
PLAT NO.	BLOCK NO.	ZONE	TAX MAP NO.	ELECTION DIST.	CENSUS TRACT
9317	G	N.T	20	5th	6055
WATER CODE			SEWER CODE	
1-03			6740000	

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

DIRECTOR — DATE 2/13/95

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 2/10/95

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 2/7/95

CHIEF BUREAU OF ENGINEERING — DATE 2/6/95

Reviewed for HOWARD S.C.D. and meets Technical Requirements
Signature — Date 2/1/95
US Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Approved — 2/1/95

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for sediment 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 Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as are deemed necessary".

John F. McDonough III — 12-12-94 Date
John F. McDonough III
Nantucket Island Homes

ENGINEER'S CERTIFICATE

I hereby 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 of the Howard Soil Conservation District.

G. Nelson Clark — 12-16-94 Date

STATE OF MARYLAND — G. NELSON CLARK — NO. 7139 — REGISTERED PROFESSIONAL ENGINEER

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 – BALTO. • (301) 621-8160 – WASH.

DESIGNED VLP	SITE DEVELOPMENT PLAN and SEDIMENT & EROSION CONTROL PLAN LOT 15 COLUMBIA VILLAGE OF HARPERS CHOICE SECTION 7 AREA 5 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN MCR		DRAWING 1 OF 1
CHECKED JMW		JOB NO. 94-225
DATE 12-16-94	For NANTUCKET ISLAND HOMES 8835-P Columbia 100 Pkwy. Columbia, MD 20145	FILE NO. 94-225x

SD.P 95-53