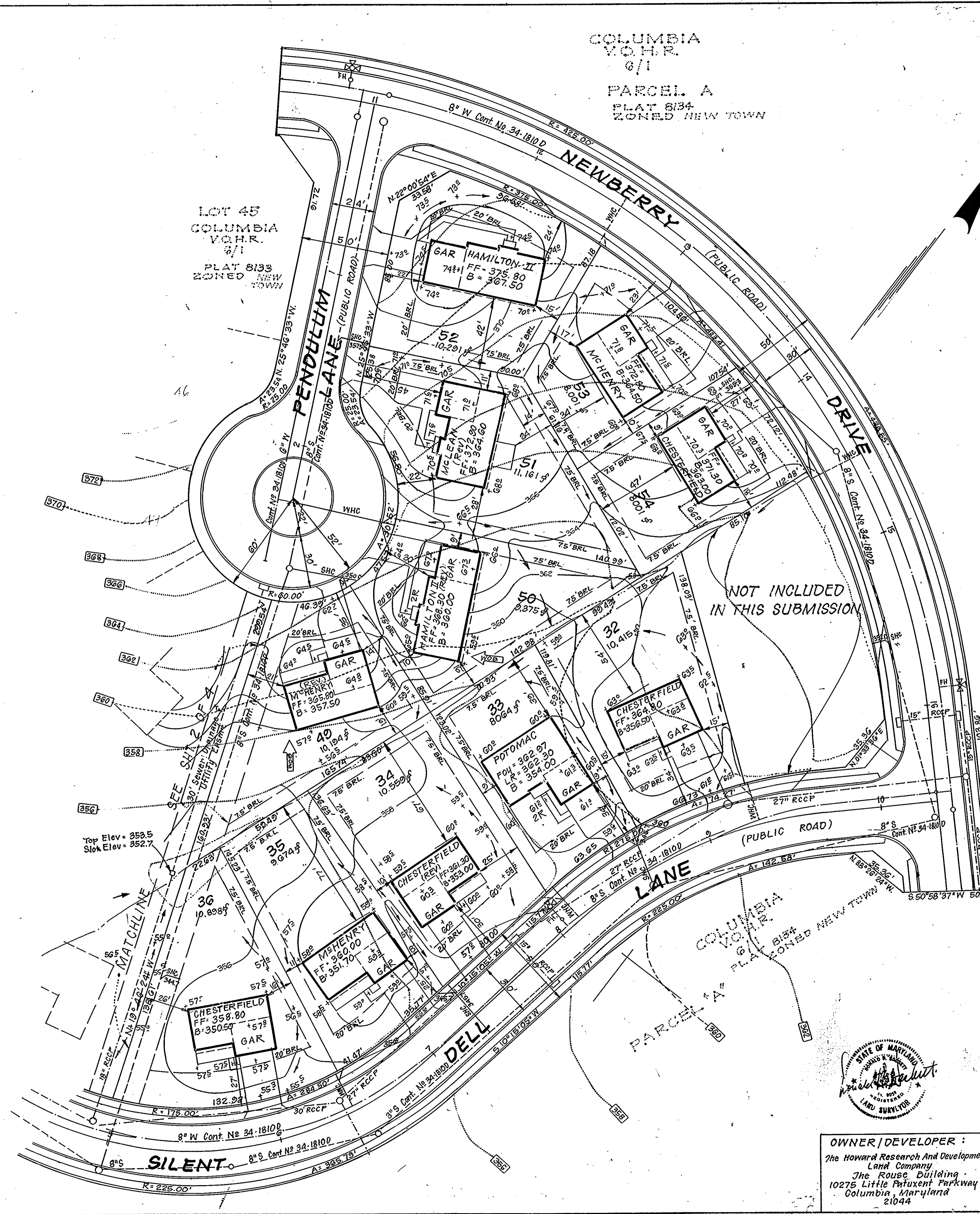
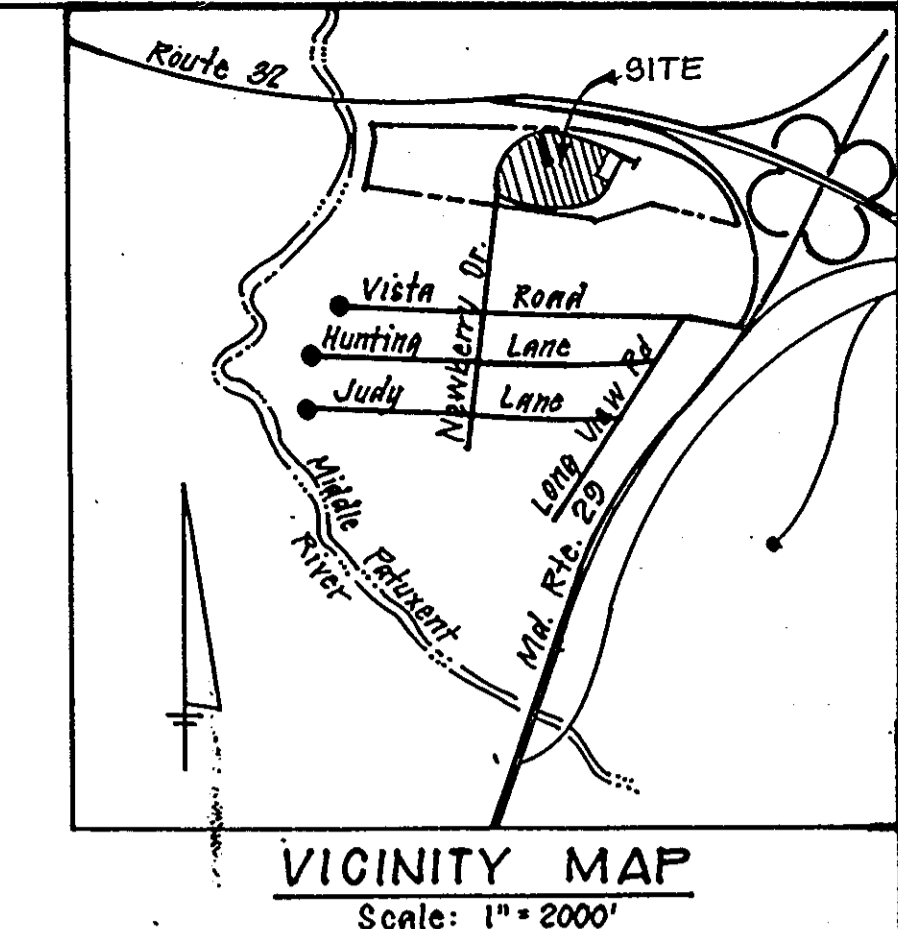


Lot No	STREET ADDRESS
32	6996 SILENT DELL LANE
33	6980 " " " "
34	6964 " " " "
35	6970 " " " "
36	6974 " " " "
37	6980 " " " "
38	6984 " " " "
39	6988 " " " "
40	6992 " " " "
41	6991 NEWBERRY DRIVE
42	6987 " " " "
43	6983 " " " "
44	6979 " " " "
45	6975 " " " "
46	6906 PENDULUM LANE
47	6910 " " " "
48	6914 " " " "
49	6915 " " " "
50	6915 " " " "
51	6907 " " " "
52	6903 " " " "
53	6963 NEWBERRY DRIVE
54	6959 " " " "

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: [Signature] DATE: 1-9-89
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR: [Signature] DATE: 1-26-89
 CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT: [Signature] DATE: 1-27-89
 APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR: [Signature] DATE: 1-14-89
 CHIEF BUREAU OF ENGINEERING: [Signature] DATE: 1-14-89



COLUMBIA V.C.H.R. 6/1
 PARCEL A
 PLAT 8134
 ZONED NEW TOWN



LEGEND
 CONTOUR INTERVAL 2 FT
 EXISTING CONTOUR 1500
 PROPOSED CONTOUR 1500
 SPOT ELEVATION +605
 DIRECTION OF DRAINAGE
 WALK-OUT BASEMENT

- GENERAL NOTES**
1. Subject property is zoned New Town.
 2. Coordinates are based upon the Maryland State Plane Coordinate System.
 3. All roads are public and existing.
 4. Any damage to county owned rights-of-ways to be corrected at the Developer's Expense.
 5. Total area included: 5.53 Ac.
 6. Total number of lots: 23
 7. Reference Final Development Plan Phase 198 Plot 305AA-971 thru 305AA-974.
 8. Maximum Building Coverage: 30%
 9. The Contractor or developer shall contract the Construction Inspection Survey Division 24 hours in advance of commencement of work at 792-2630.
 10. The existing topography was taken from plans prepared by Century Eng'g.
 11. Reference Nos 587-73, V.P. 88-23, P. 88-31, P. 88-195.

- SPECIAL NOTES**
1. Approved road construction plans shall be used for all public utilities.
 2. Public water and sewer shown for reference only. For more detailed information see contract no. 34-1810-D.
 3. The water and sewer house connections not included in a Developers Agreement shall conform to Howard Co. Plumbing Code. The on-site WHC shall be 1/2\"/>

BUILDING RESTRICTION LINES:
 FRONT - 20'
 REAR - 75'
 SIDES - 75'

SUBDIVISION NAME - COLUMBIA VILLAGE OF HICKORY RIDGE	SECT/AREA 6	LOTS: 32-54
PLAT No 8134	Block # 41	Zone # 41
Water Code: E-22	Sewer Code: 0480000	

CLARK • FINEFROCK & SACKETT, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 381-7500 - BALTO • (301) 621-8100 - WASH

SITE DEVELOPMENT PLAN
 LOTS 32-54
COLUMBIA
 VILLAGE OF HICKORY RIDGE
 SECTION 6 - AREA 1
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DESIGNED: VHL
 DRAWN: GS
 CHECKED: VHL/UME
 DATE: Nov., 1988

SCALE: 1" = 30'
 DRAWING: 1 of 4
 JOB NO.: 88-094
 FILE NO.: 88-094 X

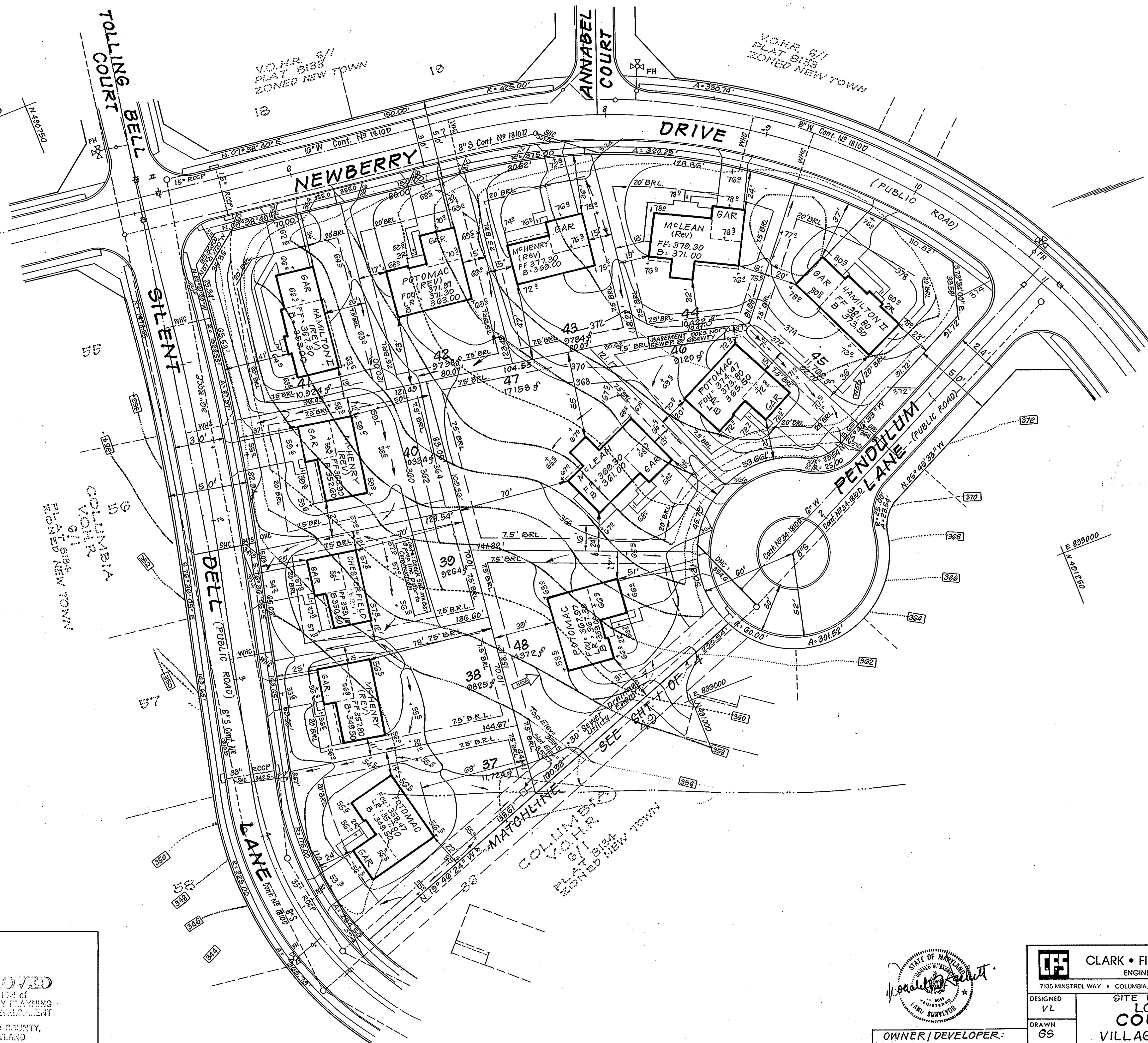
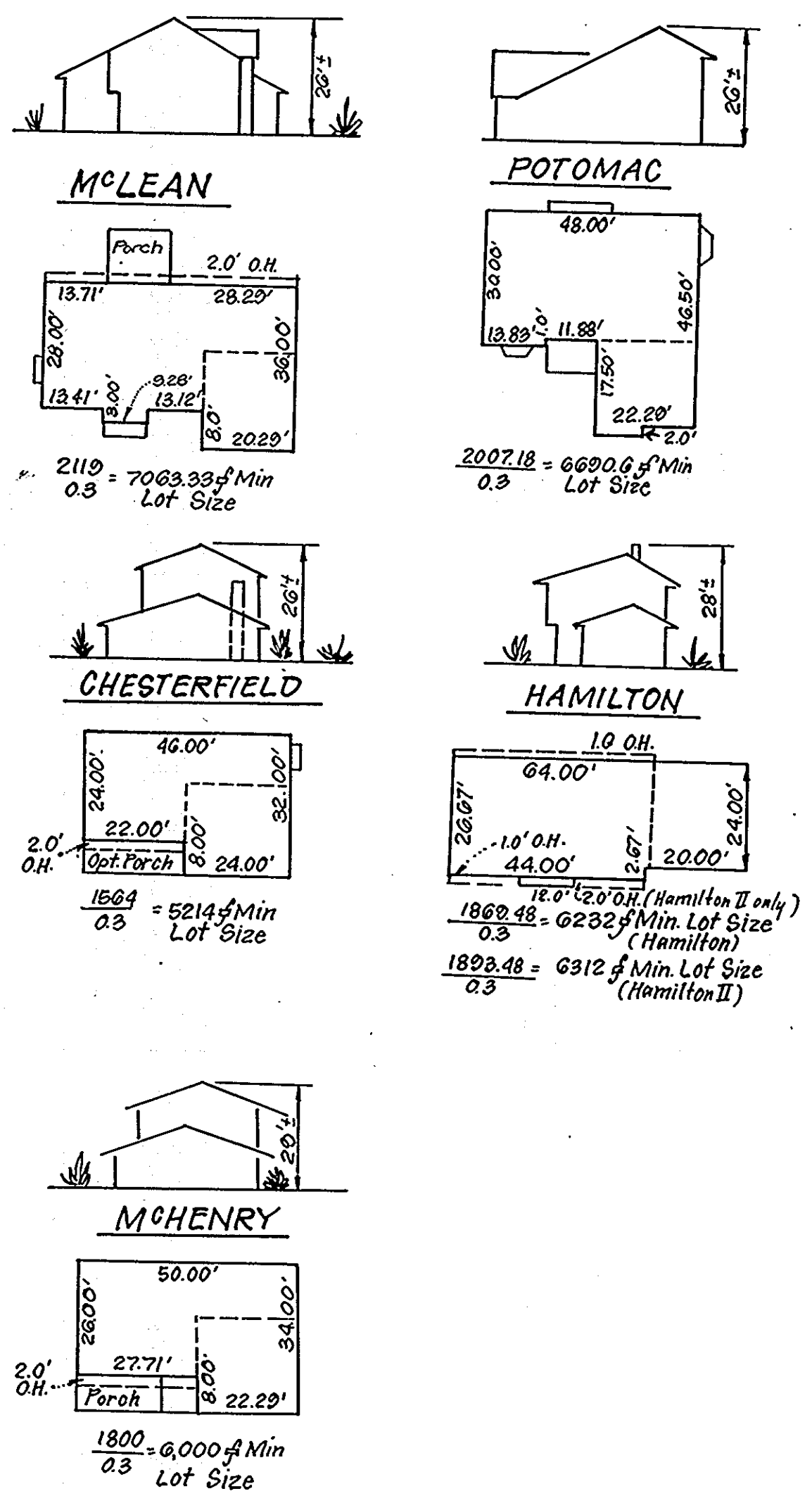
FOR: THE RYLAND GROUP, INC.
 7130 MINSTREL WAY SUITE 215
 COLUMBIA, MD. 21045

OWNER/DEVELOPER:
 The Howard Research And Development Land Company
 The Rouse Building
 10275 Little Patuxent Parkway
 Columbia, Maryland 21044

SDP-89-92

TYPICAL HOUSES

SCALE: 1"=30'
 Note: All units have 1' roof eaves front & rear.



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 DATE 1-9-89

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 DATE 1-26-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DATE 1-4-89

APPROVED
 OFFICE OF
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY,
 MARYLAND
 DATE 12-1-88



OWNER/DEVELOPER:
 The Howard Research And
 Development Land Company
 The Rouse Building
 10275 Little Patuxent Pkwy
 Columbia, Maryland 21044

CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.		
DESIGNED VL	SITE DEVELOPMENT PLAN LOTS 32-54 COLUMBIA VILLAGE OF HICKORY RIDGE SECTION G AREA I 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1"=30'
DRAWN GS		DRAWING 2 of 4
CHECKED VL		JOB NO. 88-004
DATE Nov. 1988	FOR: THE RYLAND GROUP, INC. 7130 MINSTREL WAY SUITE 215 COLUMBIA, MARYLAND 21045	FILE NO. 88-004X
SDP 89-92		

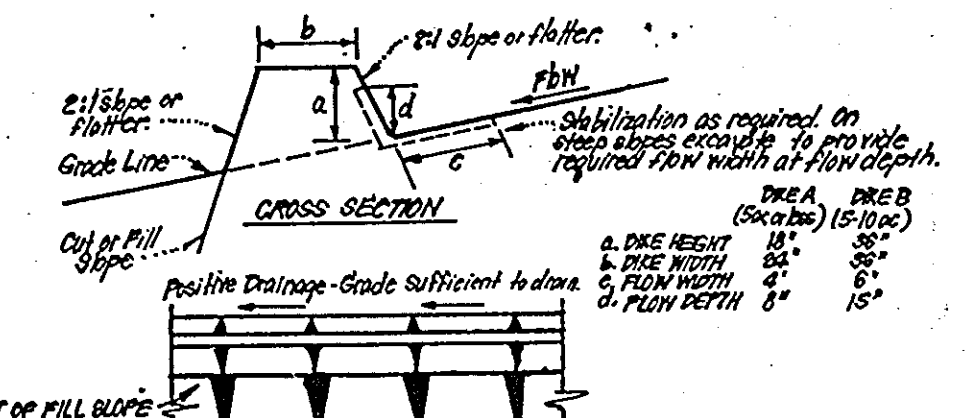
DEVELOPER'S/BUILDERS CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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."

Thomas W. Simpson
Signature of Developer/Builder
11-2-88
Date

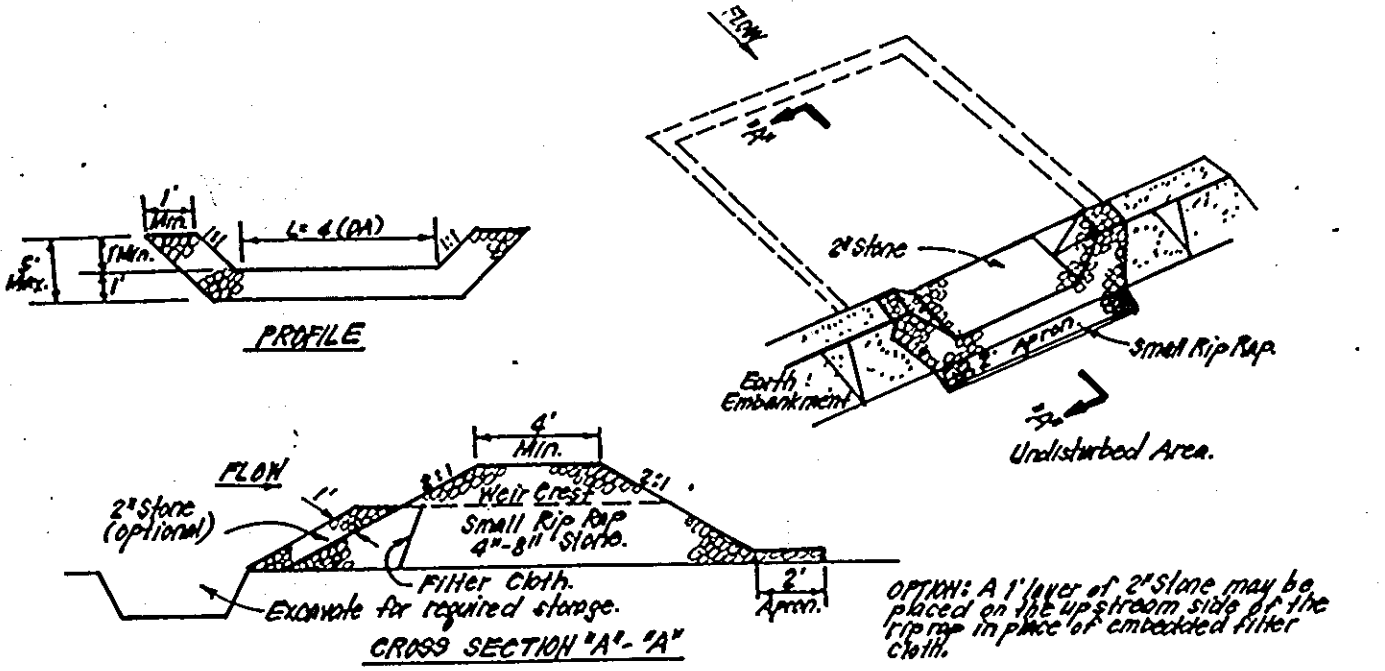
Reviewed for HOWARD S.C.D.
Name
and meets Technical Requirements
Thomas W. Simpson
Signature
Date
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Thomas W. Simpson 11/2/88
APPROVED Date



TRAP #2 S.O.S.T. ST V
D.A. = 2.6 Ac.
Storage Required = 26 x 1800 = 4680 OF
Storage Provided = 4680 OF
Depth = 5'
Top of stone crest = 355.0
Bottom Elev = 350.0
Clearout Elev = 352.0
Bottom Elev = 61' x 14'
* 1:1 Side Slopes in cut

TRAP #1 S.I.S.T. ST III
D.A. = 3.5 Ac.
Storage Required = 3.5 x 1800 = 6300 OF
Storage Provided = 6300 OF
Depth = 4'
910' Elev = 353.2
910' Elev = 342.2
Clearout Elev = 351.2
Bottom Elev = 41' x 21'
* 1:1 Side Slopes in cut
Brick Shut Slots on N, S & E Sides



CONSTRUCTION SPECIFICATIONS:
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The area shall be compacted.
2. The filter material for the embankment shall be free of roots and other woody vegetation as well as over sized stones, rocks, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed.
3. All cut and fill slopes shall be 1:1.
4. The stone used in the outlet shall be small rip rap 4" x 4" along with 1" thickness of 2" aggregate placed on the upstream side on the small rip rap or embedded filter cloth in the rip rap.
5. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to the design depth of the trap.
6. The structure shall be inspected after each rain and repairs made as needed.
7. Construction operations shall be carried out in such a manner that erosion and water pollution is minimized.
8. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (S.O.S.T.) ST V
NO SCALE

CONSTRUCTION SPECIFICATIONS:
1. All ditches shall be constructed by earth-moving equipment.
2. All ditches shall have positive 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. Final location should be adjusted as needed to utilize a stabilized safe outlet.
5. Earth ditches 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 water enters the ditch channel or the drainage area above the ditch and runoff is 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 other plans.

FLOW CHANNEL STABILIZATION

TYPE OF TREATMENT	CHANNEL	DITCH A	DITCH B
1	15-30%	Seed or Straw Mulch	Seed or Straw Mulch
2	31-50%	Seed or Straw Mulch	Seed or Straw Mulch
3	51-70%	Seed or Straw Mulch	Seed or Straw Mulch
4	71-90%	Seed or Straw Mulch	Seed or Straw Mulch

A. Stone to be 2" 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 4" x 4" or a layer of 1/2" 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

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER *John P. ...* 1-9-89
APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING & ZONING
PLANNING DIRECTOR *...* 1-26-89
CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT, *LKS*
APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DIRECTOR *James P. ...* 1-16-89
CHIEF BUREAU OF ENGINEERING *...* 1-4-89

APPROVED
DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE 12-1-88
LKS

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
G. Nelson Clark 11-4-88
Date

OWNER/DEVELOPER:
The Howard Research And Development Land Company
The Rouse Building
10275 Little Patuxent Pkwy
Columbia, Maryland
21044

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINSTREL WAY • COLUMBIA, MD. 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED <i>JLS</i>	SEDIMENT AND EROSION CONTROL PLAN LOTS 32-54 COLUMBIA VILLAGE OF HICKORY RIDGE SECTION 6 AREA 1 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND	SCALE 1" = 30'
DRAWN <i>GS</i>		DRAWING 3 of 4
CHECKED <i>JLS</i>		JOB NO. 88-004
DATE Nov. 1988		FILE NO. 88-004SE

FOR: THE RYLAND GROUP, INC.
7130 MINSTREL WAY SUITE 215
COLUMBIA, MD. 21045

PERMANENT SEEDING NOTES

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

Seeded 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/1000 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 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 dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.6 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre of well anchored straw mulch and seed 28, protect site by 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 3 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

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

TEMPORARY SEEDING NOTES

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

Seeded Preparation: 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 (14 lbs/1000 sq ft)

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

Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 3 ft. or higher, use 348 gal 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.

- SEDI-MENT 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. (992-2437)
 - 2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - 3) Following initial soil disturbance or redisturbance permanent or temporary stabilization shall be completed within a 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, 14 days as to all other disturbed or graded areas on the project site.
 - 4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
 - 5) All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 51) and (Sec. 52), temporary seedings (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	5.592 Acres
Area Disturbed	5.622 Acres
Area to be roofed or paved	1.26 Acres
Area to be vegetatively stabilized	4.27 Acres
Total Cut	11,225 Cu. Yds
Total Fill	7,220 Cu. Yds
Offsite waste/borrow area location	Undetermined
 - 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 DEP 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) If houses are to be constructed on an "As-Built" basis, at random, Single Lot Sediment Control as shown below shall be implemented.
 - 12) All pipes to be blocked at the end of each day (see detail below). N/A
 - 13) The total amount of straw bale dikes/silt fence equals 0 L.F.

CONSTRUCTION SEQUENCE

	No. of Days
1. Obtain grading permit	7
2. Install Sediment and Erosion Control Measures	14
3. Clear and Rough grade site	30
4. Construct houses, driveways and Walks	180
5. Fine grade and stabilize and disturbed area onsite in accordance with stas. and specs.	30
6. Upon approval of the sediment control inspector remove sediment & erosion control measures and stabilize.	30

* Houses on Lots 37 & 38 not to be constructed until permission to remove traps #2 is obtained from the sediment control inspector and the areas draining to the traps have been permanently stabilized.

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 erosion and sediment control and that all responsible personnel involved in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources 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."

Signature of Developer/Builder: *Harold W. ...* Date: 11-2-88

Reviewed for: **HOWARD COUNTY S.C.D.**
Name: *Howard County S.C.D.*
and meets Technical Requirements
Signature: *...* Date: 12-23-88
U.S. Soil Conservation Service

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

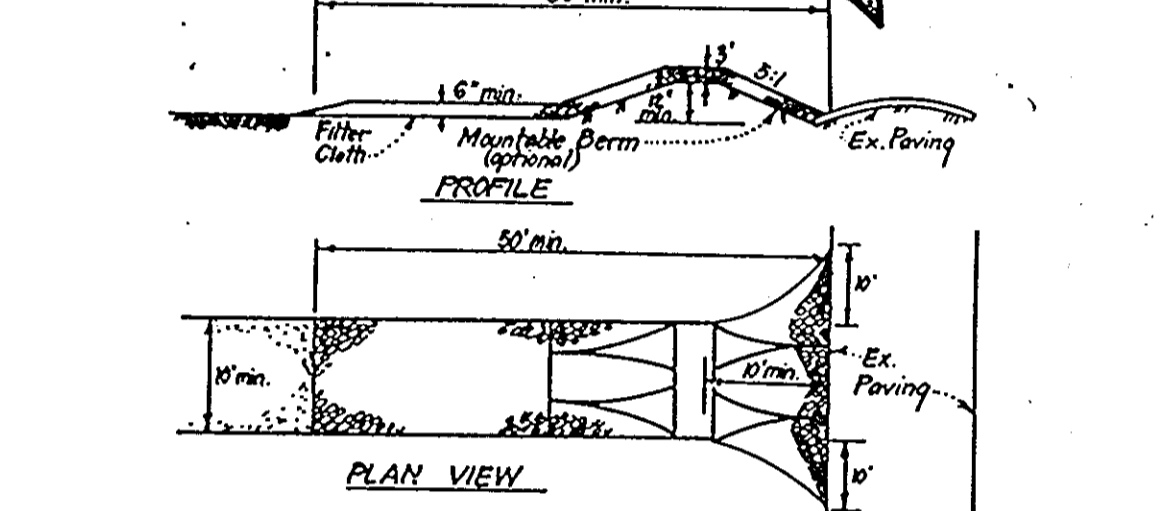
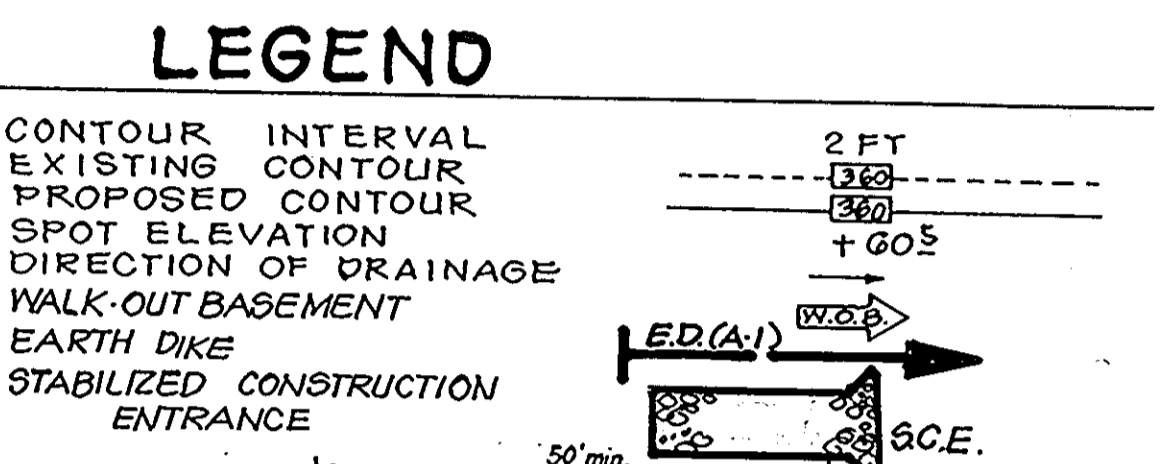
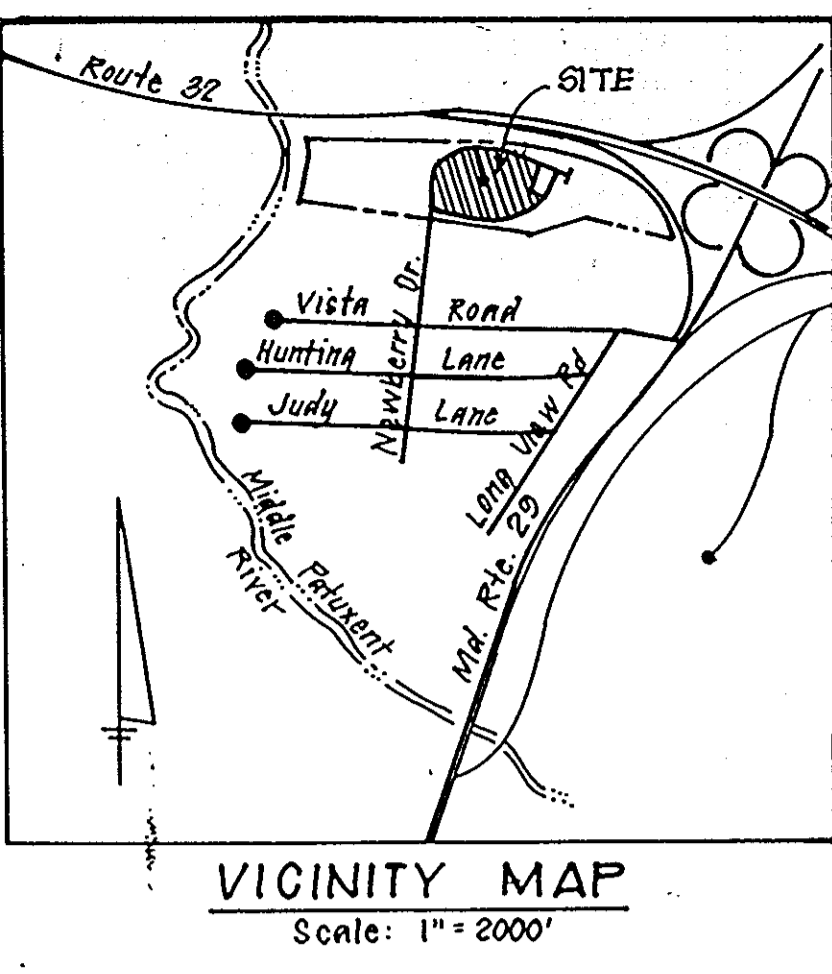
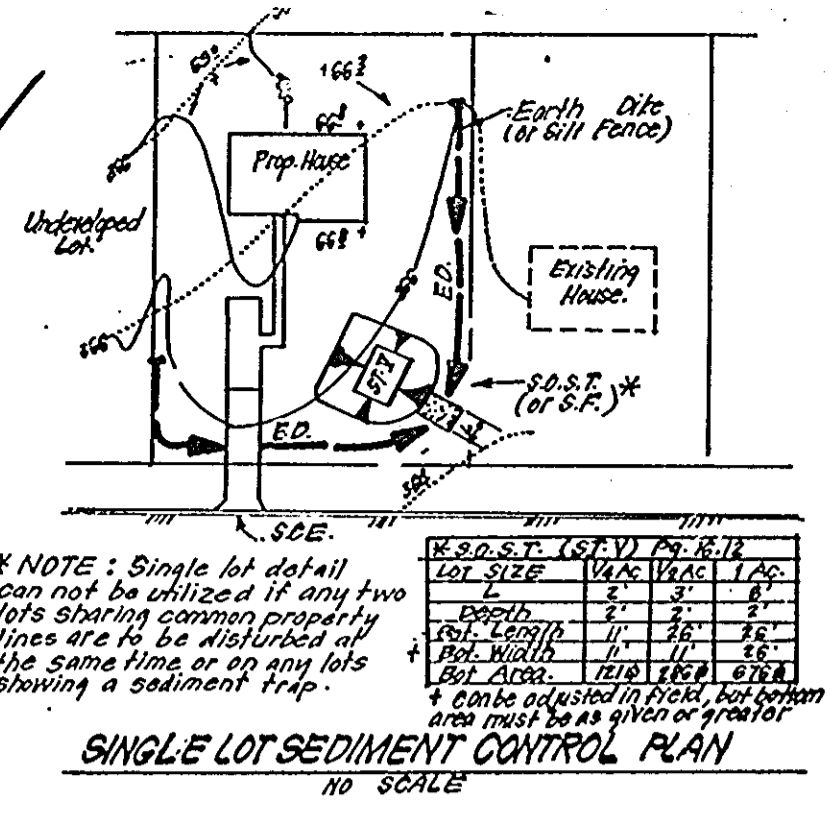
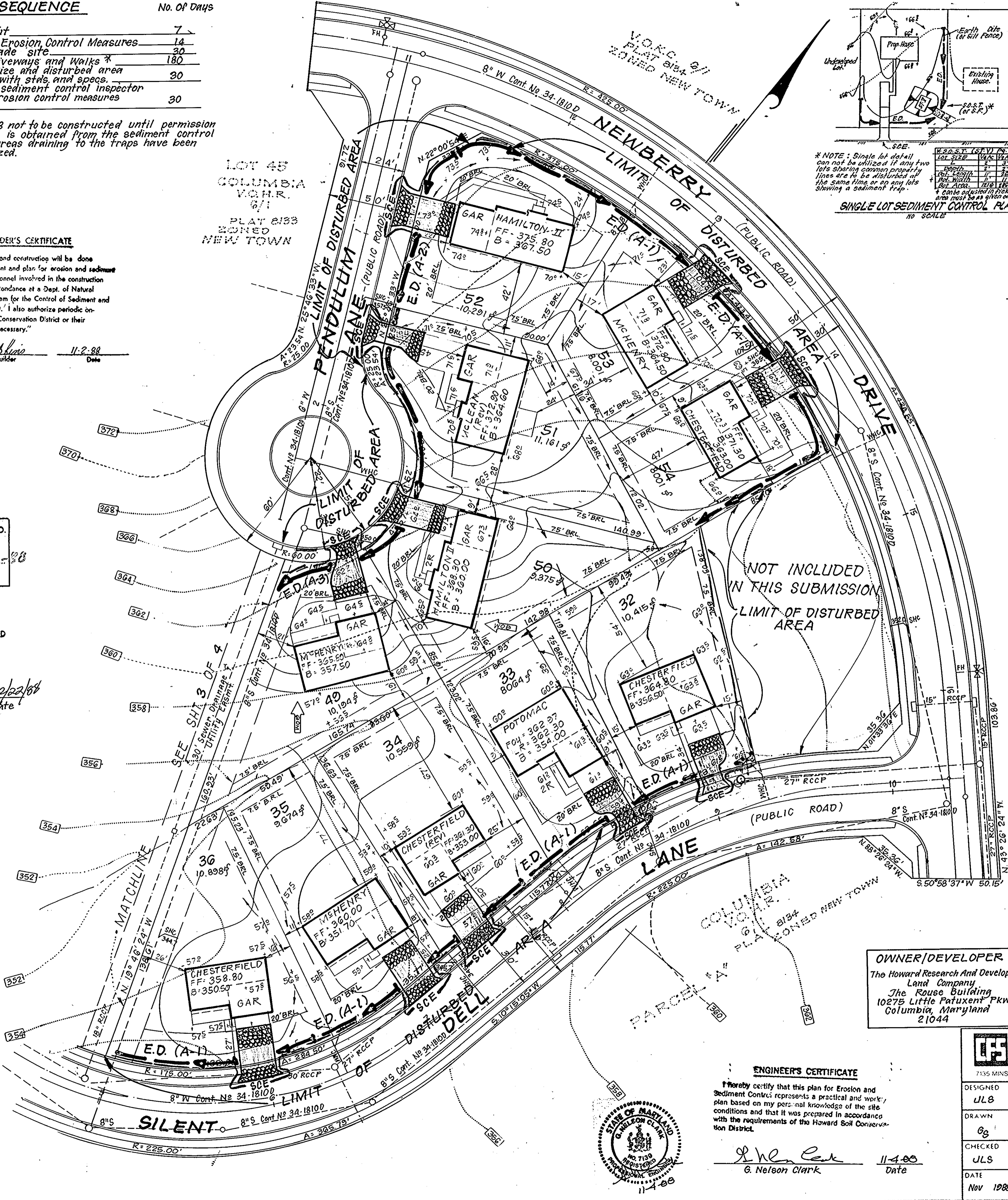
Approved: *Stephen L. ...* Date: 12/23/88

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT
DATE: 1-9-89

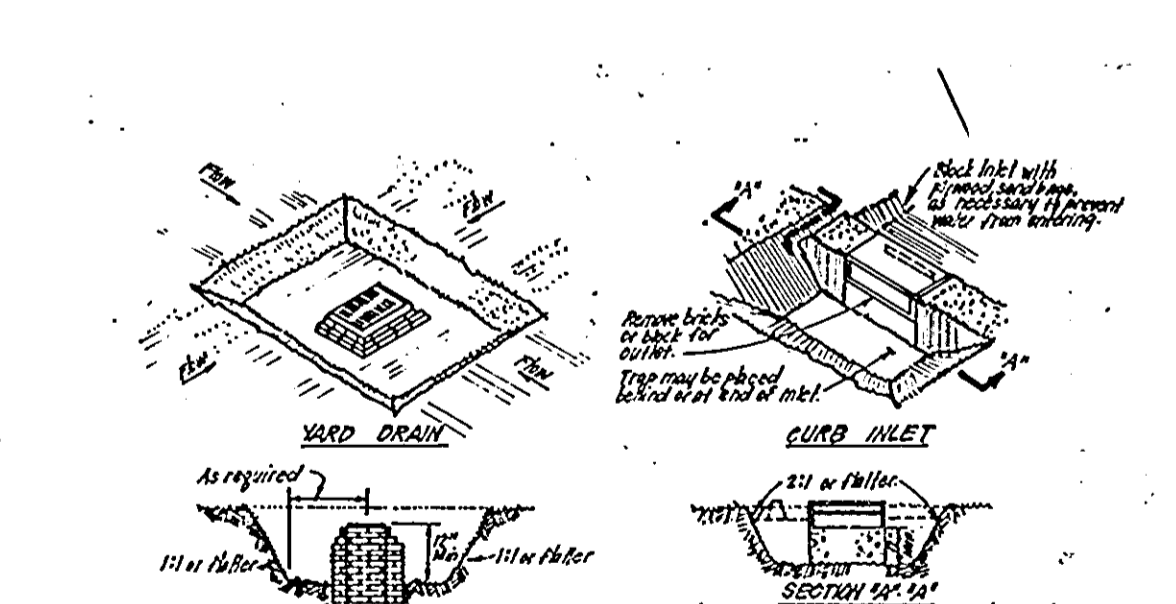
APPROVED: FOR HOWARD COUNTY OFFICE OF PLANNING & ZONING
DATE: 1-26-89

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 1-14-89

APPROVED DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT
HOWARD COUNTY, MARYLAND
DATE: 12-1-88



- CONSTRUCTION SPECIFICATIONS:**
1. Stone size - Use 2" stone, or crushed 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) foot 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 required to flow through construction entrances shall be piped across the entrance. If piping is impractical, a manual silt berm with 5:1 slope will be permitted.
 7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or blowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and/or repair of cleanout and any measures used to trap sediment. All sediment applied, 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.



OWNER/DEVELOPER:
The Howard Research And Development Land Company
The Rouse Building
10275 Little Patuxent Pkwy.
Columbia, Maryland
21044

ENGINEER'S CERTIFICATE
I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
G. Nelson Clark
Date: 11-4-88

CLARK • FINEPROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BALTO. • (301) 671-8100 - WASH.	
DESIGNED: JLB	SCALE: 1" = 30'
DRAWN: Gg	DRAWING: 4 OF 4
CHECKED: JLS	JOB NO.: 88-094
DATE: Nov 1988	FILE NO.: 88-094-SF
FOR: THE RYLAND GROUP, INC. 7130 MINSTREL WAY, SUITE 215 COLUMBIA, MD. 21045	