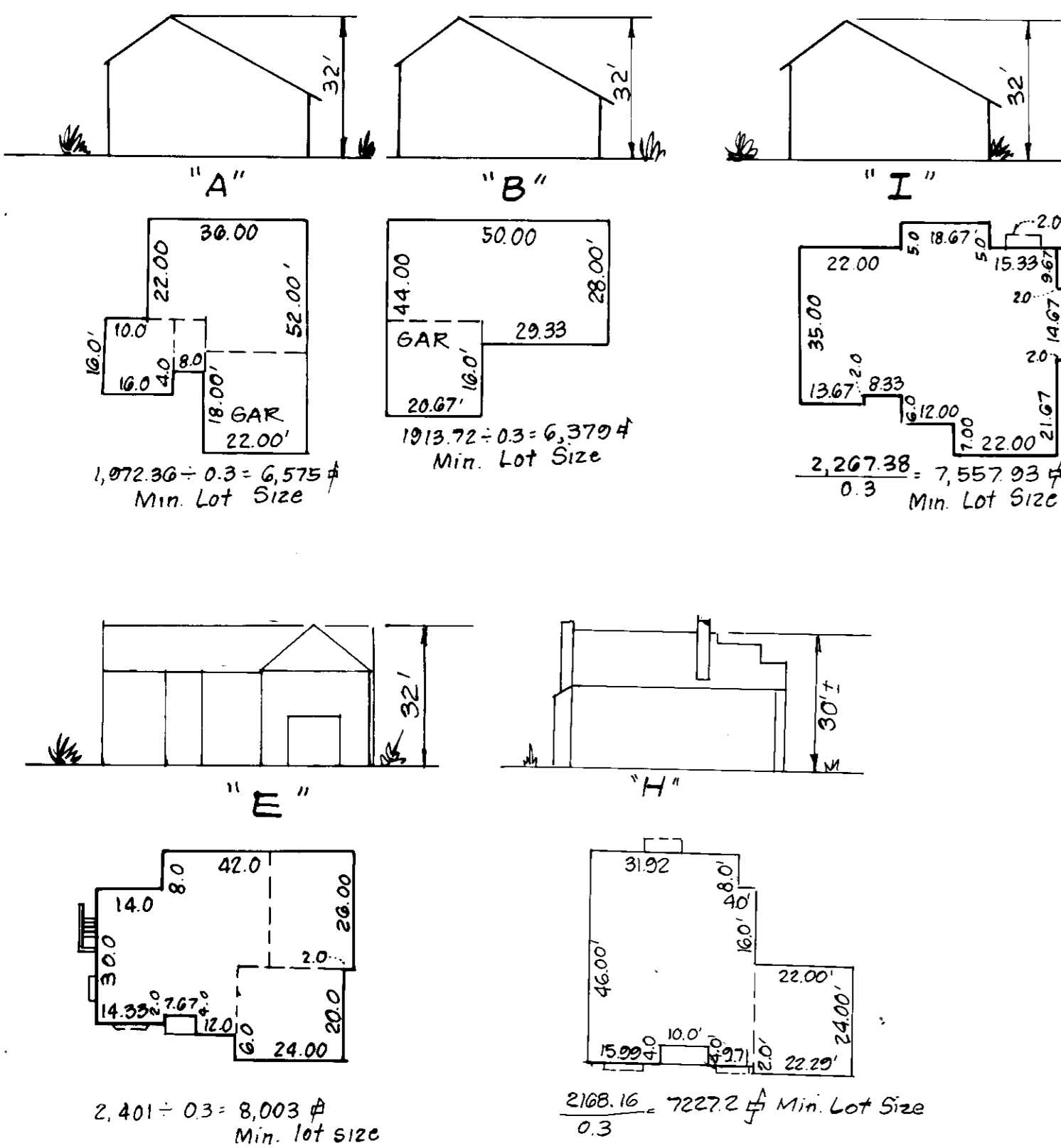


DRIVEWAY ABUTTING CLOSED SECTION WITHOUT CONCRETE SIDEWALK

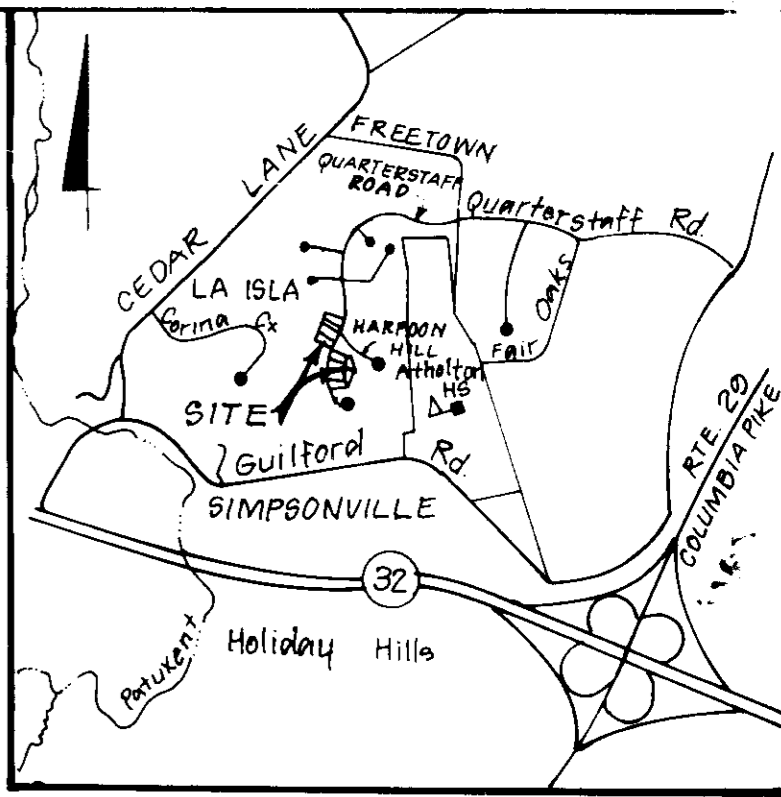
TYPICAL HOUSES

Scale: 1"=30'
Note: All units have 1'-10" eaves front & rear



LEGEND

1. Contour Interval
 2. Existing Contour
 3. Proposed Contour
 4. Spot Elevation
 5. Direction of Drainage
 6. Existing Trees to be saved
- 2 Ft. = 1/8" (contour interval)
 2 Ft. = 1/8" (spot elevation)
 Construction Fence for the protection of existing trees to remain.



VICINITY MAP
Scale: 1"=2000'

GENERAL NOTES

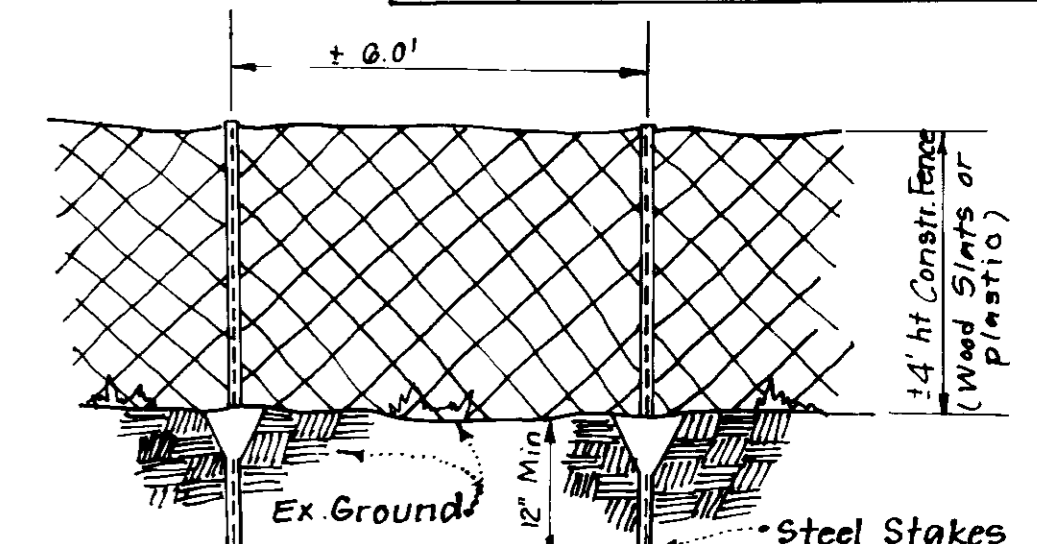
1. Subject property zoned NT & R20 as per 8-2-85 Comprehensive Zoning Plan
2. The coordinates shown herein are based on The Maryland State Grid System & derived from the following Howard County Control Stations 243001 and 244001.
3. The roadways are public.
4. Total area included in this submission: 3.40 Ac
5. Total number of lots: 10
6. Any damage to county-owned rights-of-way shall be corrected at the Developer's expense.
7. Reference plans: 3-88-115, P.B. Case 243, WP 88-71 P. 88-76, F. 90-36
8. The Contractor or Developer shall contact the Construction Inspection Division 24 hours in advance of commencement of work at 7:30-2:30.
9. The existing topography shown was taken from Road Construction Plans prepared by John E. Harms, Jr. and Associates, Inc. F. 80-96.
10. This subdivision is subject to Section 18, 122 B of the Howard County Code.
11. Minimum building setback restrictions from property lines and the right-of-way of any public road or street to be in accordance with the recorded final development plan criteria phase 205 - Part 1
12. Stormwater Management provided under F. 90-96
13. 10' Tree maintenance easement on all road frontages.

SPECIAL NOTES

1. All road construction, storm drainage facilities and public water & sewer are shown for reference only. Use approved plans for all phases of construction.
2. Construction fence shall be placed at the limit of disturbance adjacent to existing trees to remain.

ADDRESS CHART

LOT NO.	STREET ADDRESS
62	10648 Quarterstaff Road
63	10652
64	10656
65	10660 Quarterstaff Road



TYPICAL TREE PROTECTION FENCE DETAIL

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
HOWARD COUNTY HEALTH DEPARTMENT

[Signature] 4-25-90
DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

[Signature] 4-27-90
DATE

DIRECTOR
CHIEF DIVISION OF COMMUNITY PLANNING & LAND DEVELOPMENT

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

[Signature] 4-23-90
DATE

DIRECTOR
CHIEF BUREAU OF ENGINEERING

NO.	REVISION	Date
1.	Rev. hse. of qrd. Lot 62 from E (rev.) to I (rev.) and Lot 64 from B+ (rev.) to H.	7-3-91
2.	Rev. hse. of qrd. lot 65	9-19-91



OWNER/DEVELOPER: HOWARD RESEARCH & DEVELOPMENT LAND CO 10275 Little Patuxent Pkwy Columbia, MD 21044	Subdivision Name: COLUMBIA Village of Hickory Ridge Plat No: 93394310 Block No: 17, 18, 23 Zone: INTFLD Water Code: E 29	Sect./Area: G 0 Tax Map No: 35 Elec. Dist: 5 Sewer Code: 65B0000	Lots: 62-65 Census: 1760530
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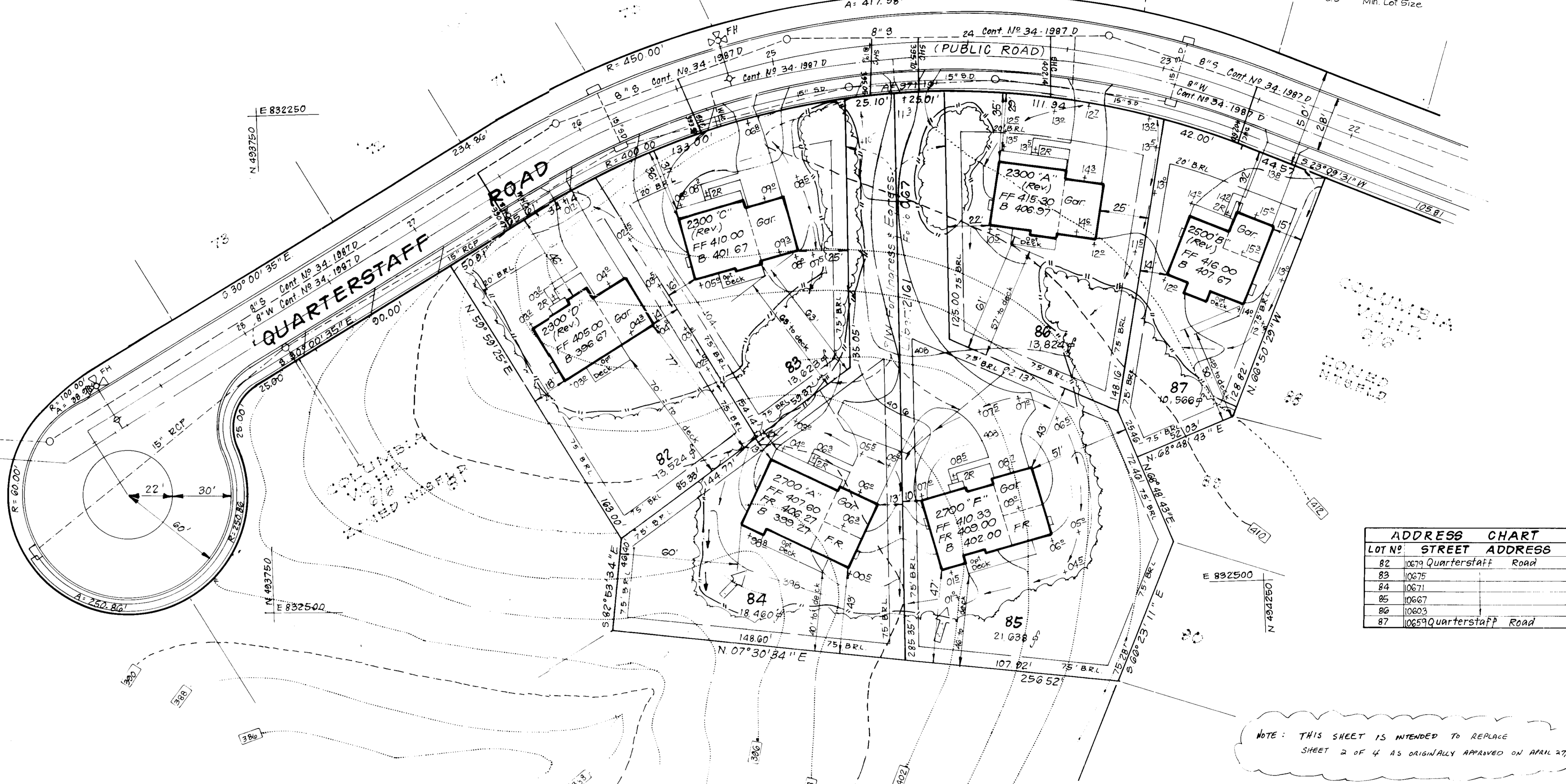
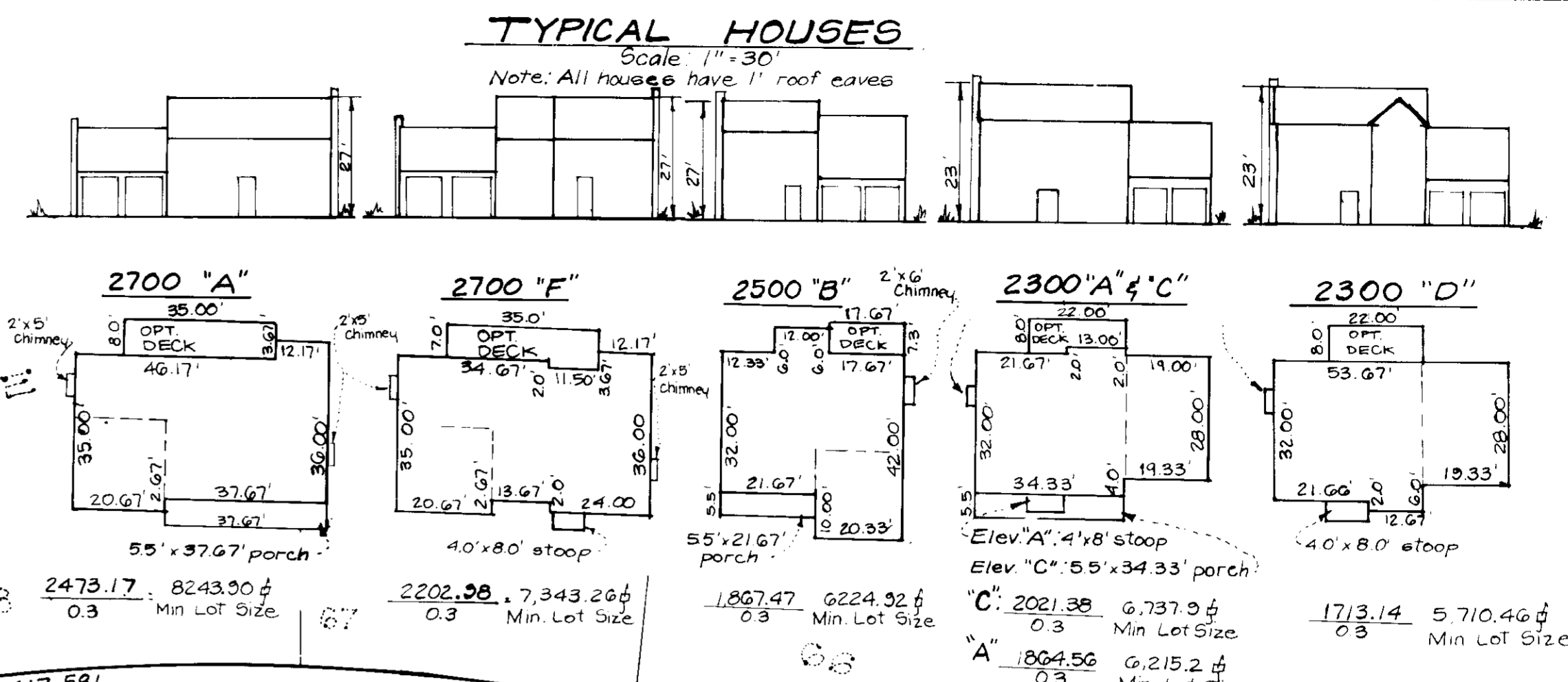
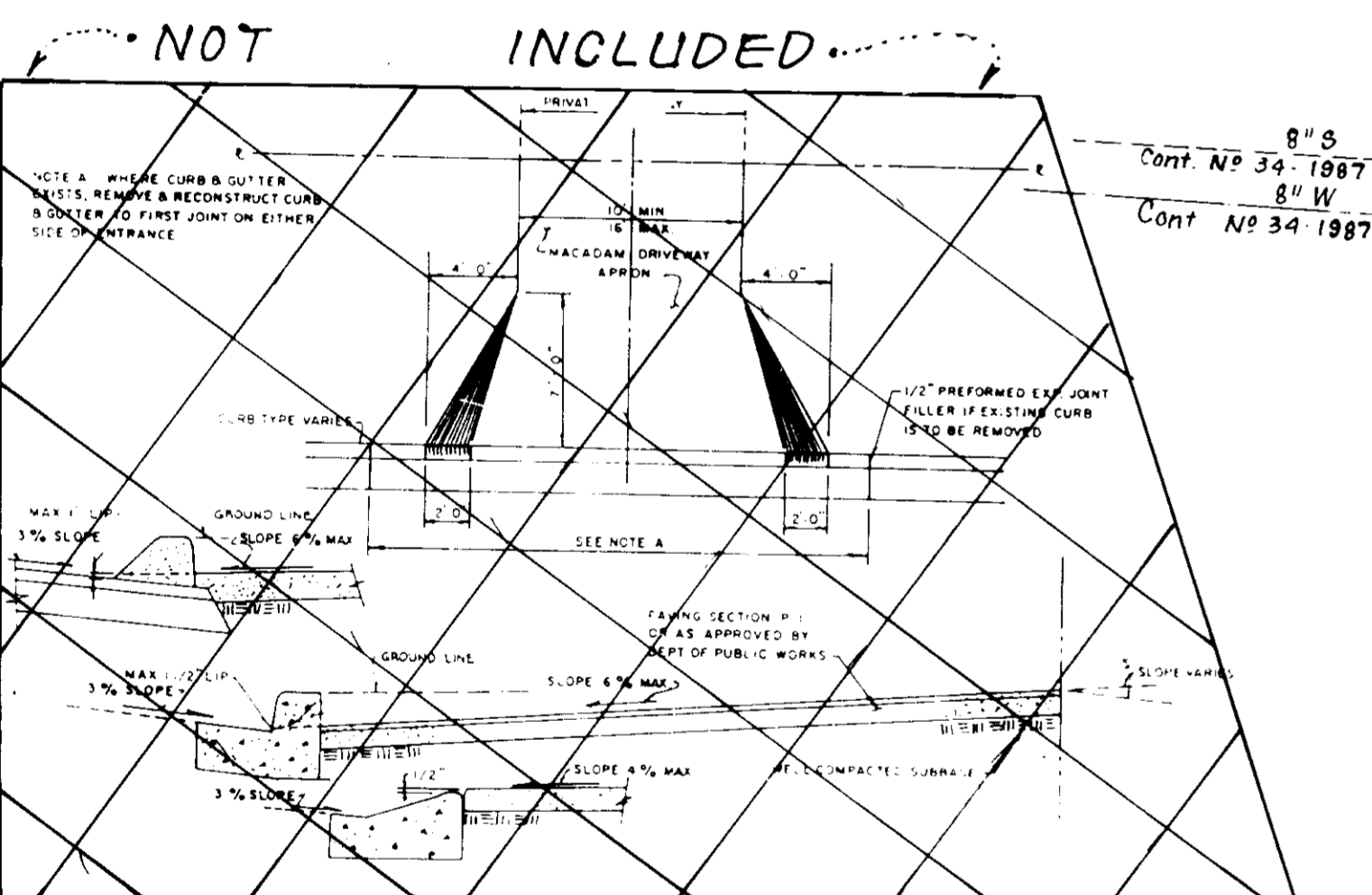
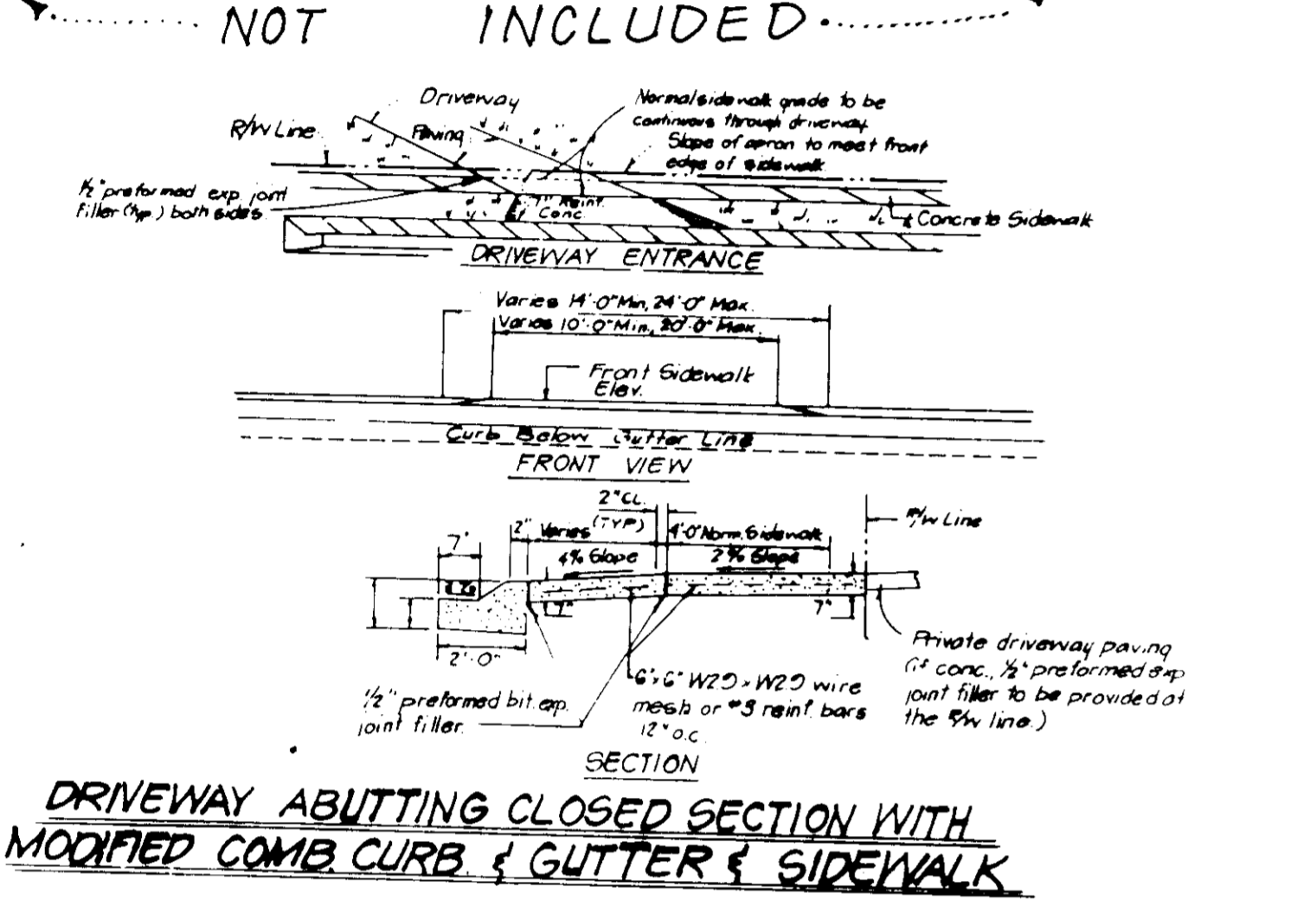
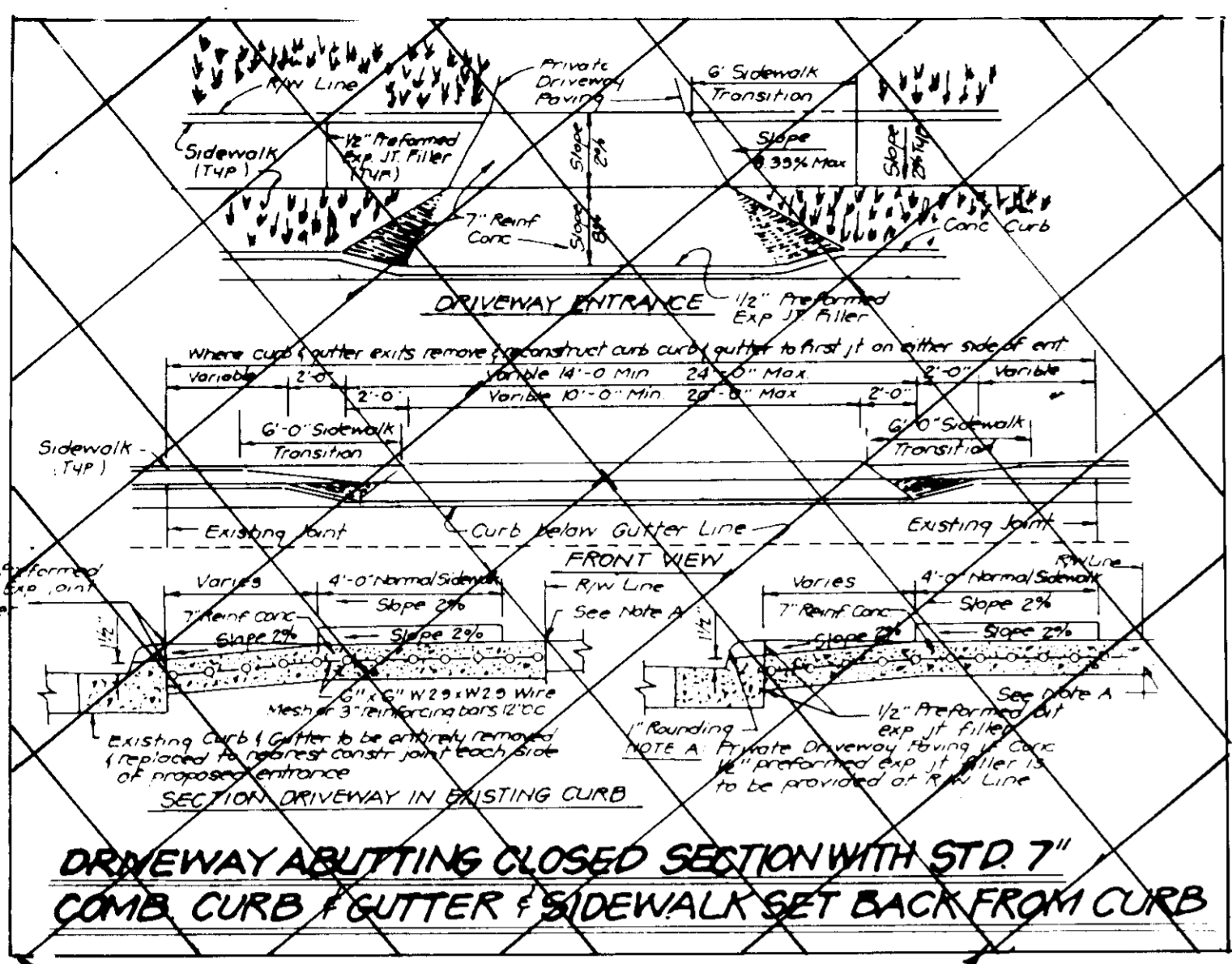
CLARK • FINFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS

DESIGNED: VLP
DRAWN: GFB
CHECKED: JME
DATE: Feb 9, 1990

SITE DEVELOPMENT PLAN
LOTS 62-65, 82-87
COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION G AREA G
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1"=30'
DRAWING: 1 of 4
JOB NO: 90-022
FILE NO: 90-022X

For: R.G. GOODIER BUILDERS
11207 MCGEE WAY
ELLCOTT CITY, MD 21043



LOT #	STREET ADDRESS
82	10679 Quarterstaff Road
83	10675
84	10671
85	10667
86	10663
87	10659 Quarterstaff Road

NOTE: THIS SHEET IS INTENDED TO REPLACE SHEET 2 OF 4 AS ORIGINALLY APPROVED ON APRIL 27, 1990.

LOT #	GROSS AREA	MINUS PIPE STEM	MIN. LOT SIZE
84	18,460	2,701	15,759
85	21,638	2,500	19,138

NOTE: The information contained herein is the same as shown on previously approved SDP 90-152 with the following exceptions:
 1. House types and grading have been revised on lots 82-87 for Mark Builders. The sediment and erosion control measures as previously approved will not be affected, the grading is substantially the same as originally approved, the building setbacks comply with Howard County zoning and subdivision regulations, and the lots have the same geometric configuration as shown on the respective recorded subdivision record plat.



APPROVED FOR: *James M. Boyd* 8/21/90
 APPROVED: *Ronald J. Taylor* 9-4-90
 APPROVED: *Donald J. Seaman* 8/17/90
 APPROVED: *...* 8-11-90

CLARK • FINEROCK & SACKETT, INC.
 7135 MINSTREL WAY • COLUMBIA MD 21045 • (301) 581-7500 BALTO • (301) 621-8100 WASH
REVISED SITE DEVELOPMENT PLAN
 LOTS 82-85, 82-87
COLUMBIA VILLAGE OF HICKORY RIDGE
 SECTION 6 AREA G
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 For: R.C. Goodier Builders, Inc.
 11207 McGehee Way
 Ellicott City, Maryland 21043
 July 9, 1990
 S.D.P. 90-152

- 1. 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 redistribution, 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 shall 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 seeding (Sec. 33) and (Sec. 24), temporary seeding (Sec. 30) and mulching (Sec. 32). Temporary stabilization with mulch shall only be done when recommended seeding data 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: 3406 Acres
 - Area Disturbed: 248 Acres
 - Area to be seeded or paved: 248 Acres
 - Area to be vegetatively stabilized: 162 Acres
 - Total Cut: 2412 Cu. Yds
 - Total Fill: 752 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 DEW 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 "hard-packed" basins, 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 13-95).
- 13. The total amount of straw bale dikes/silt fence equals 1345 L.F.

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, disking 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. Narrow 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. Narrow 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 (1.5 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 as soon as possible in the spring. Option (2) Use seed. 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 unwrotted 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

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

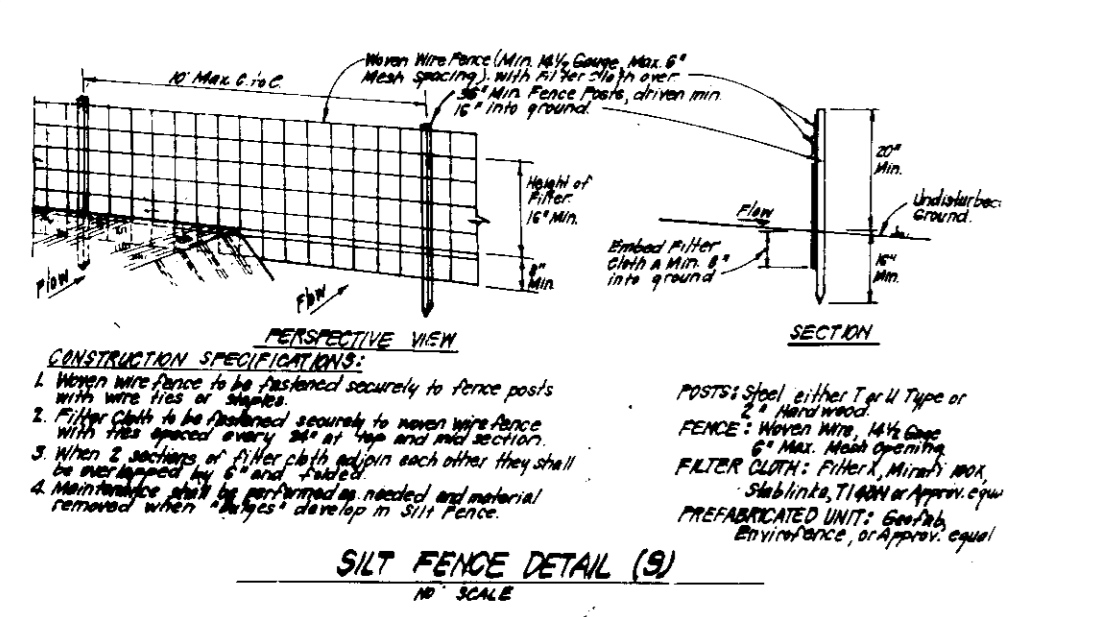
Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft)

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 35 bushels per acre of annual rye (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 seed.

Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unwrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes, 8 ft or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

James J. Ryan 4-23-90
DIRECTOR

APPROVED HOWARD COUNTY DEPT. OF PLANNING & ZONING

James J. Ryan 4-23-90
DIRECTOR

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

James J. Ryan 4-23-90
DIRECTOR

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

James J. Ryan 4-23-90
DIRECTOR

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 necessary permits required in the construction project will have a Certificate of Attendance at a Dept. of Natural Resources Approved by the Program for the Control of Sediment and Erosion before beginning. This program also authorizes periodic on-site inspection by the Howard Soil Conservation District or their authorized agents, as deemed necessary."

William J. Ryan 2/13/90
Signature of Developer/Builder Date



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 2-13-90
G. Nelson Clark Date

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS

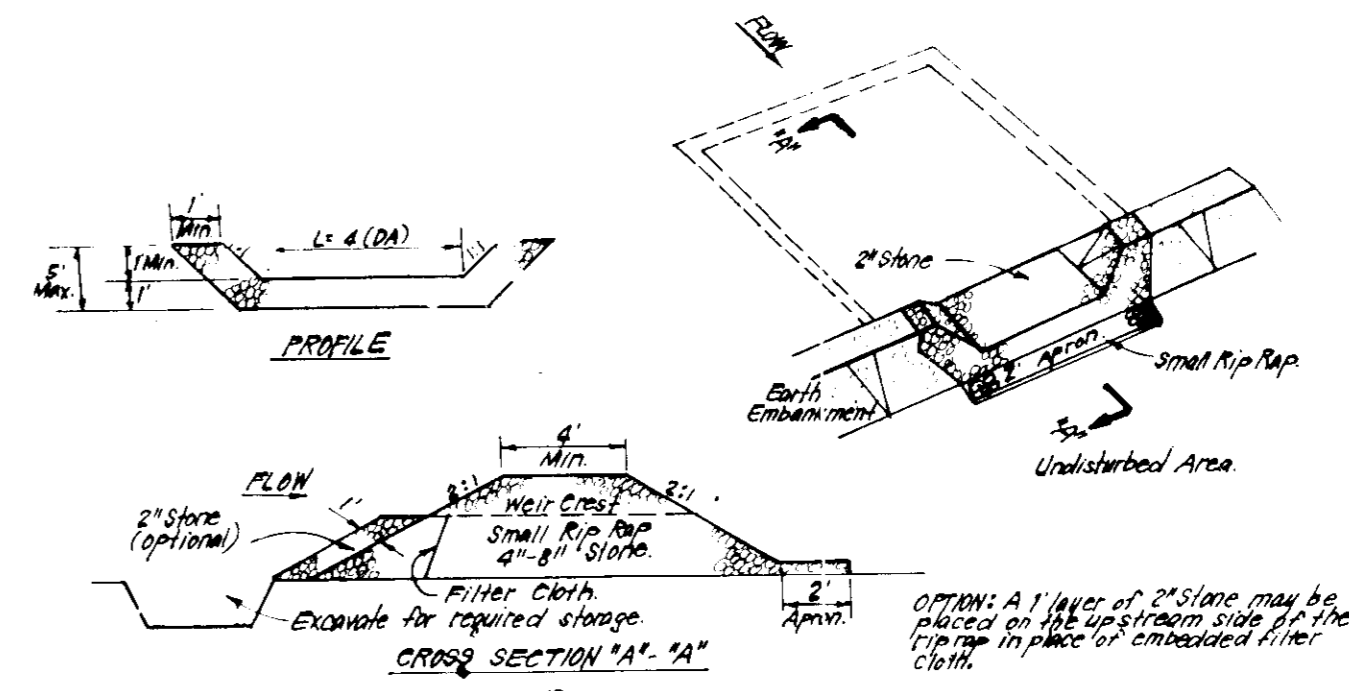
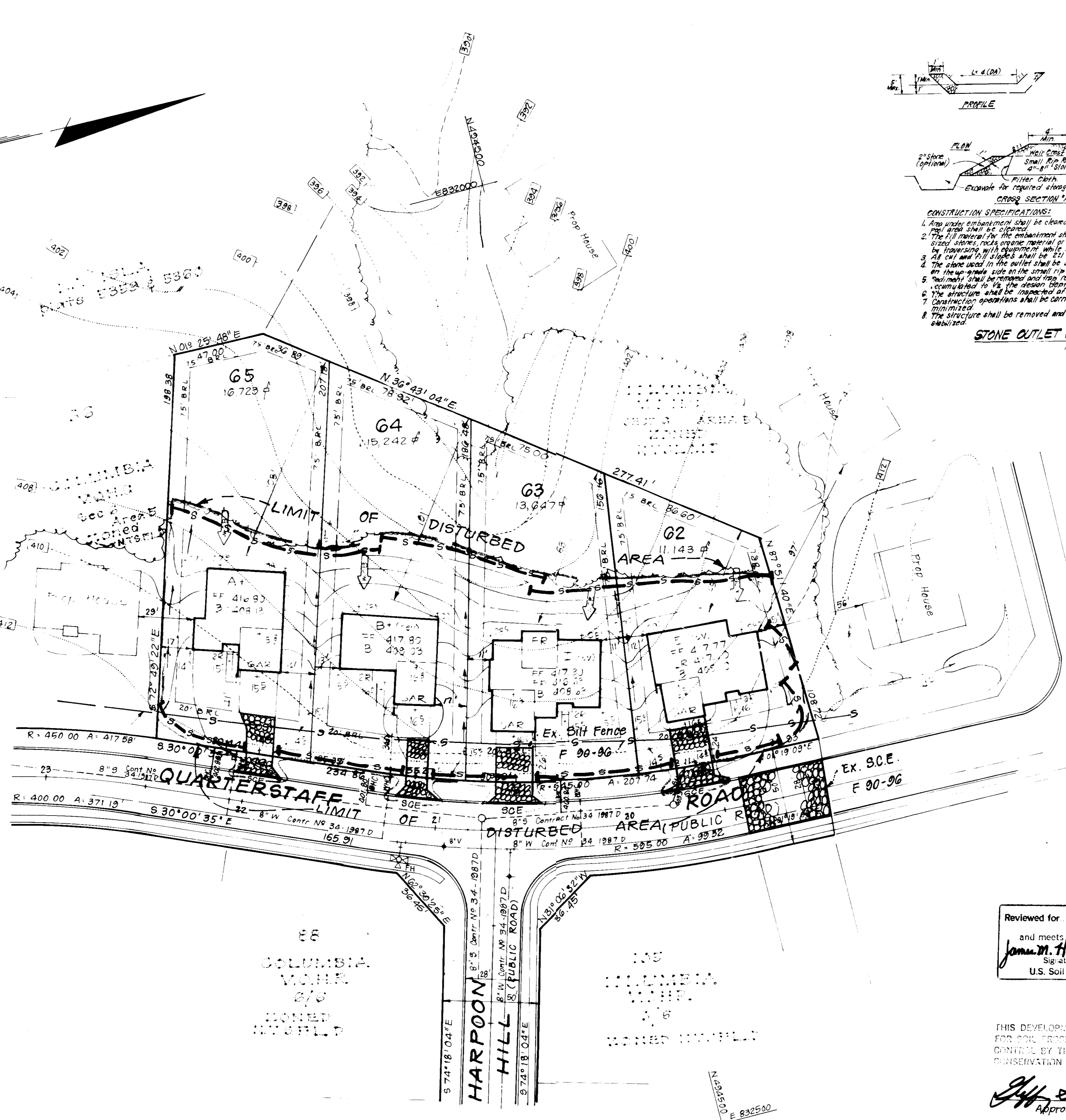
DESIGNED: KIWM
DRAWN: GES
DATE: 2-8-90

SEDIMENT AND EROSION CONTROL PLAN
LOTS 62-65, 82-87
COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 6 AREA G
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

SCALE: 1"=30'
DRAWING: 3 of 4
JOB NO.: 00-022
FILE NO.: 00-022 SE1

OWNER/DEVELOPER
HOWARD RESEARCH & DEVELOPMENT LAND CO.
10275 LITTLE PATENT RD.,
Columbia, Md 21044

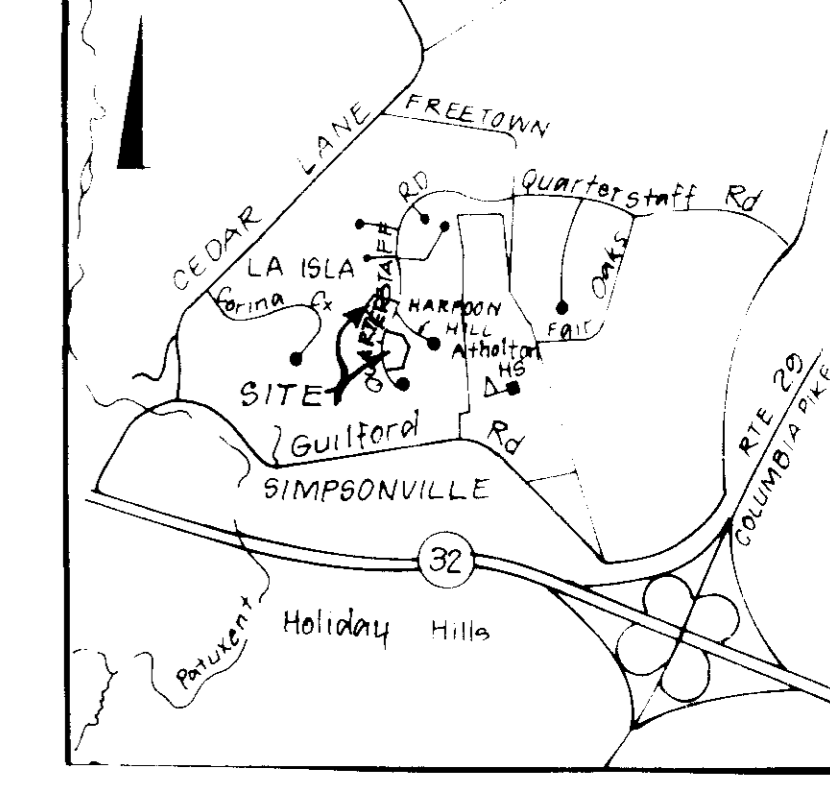
DATE: 2-8-90
For: RC GOODIER BUILDERS
11207 MCGEE WAY
ELLCOTT CITY, MD 21043



CONSTRUCTION SPECIFICATIONS:

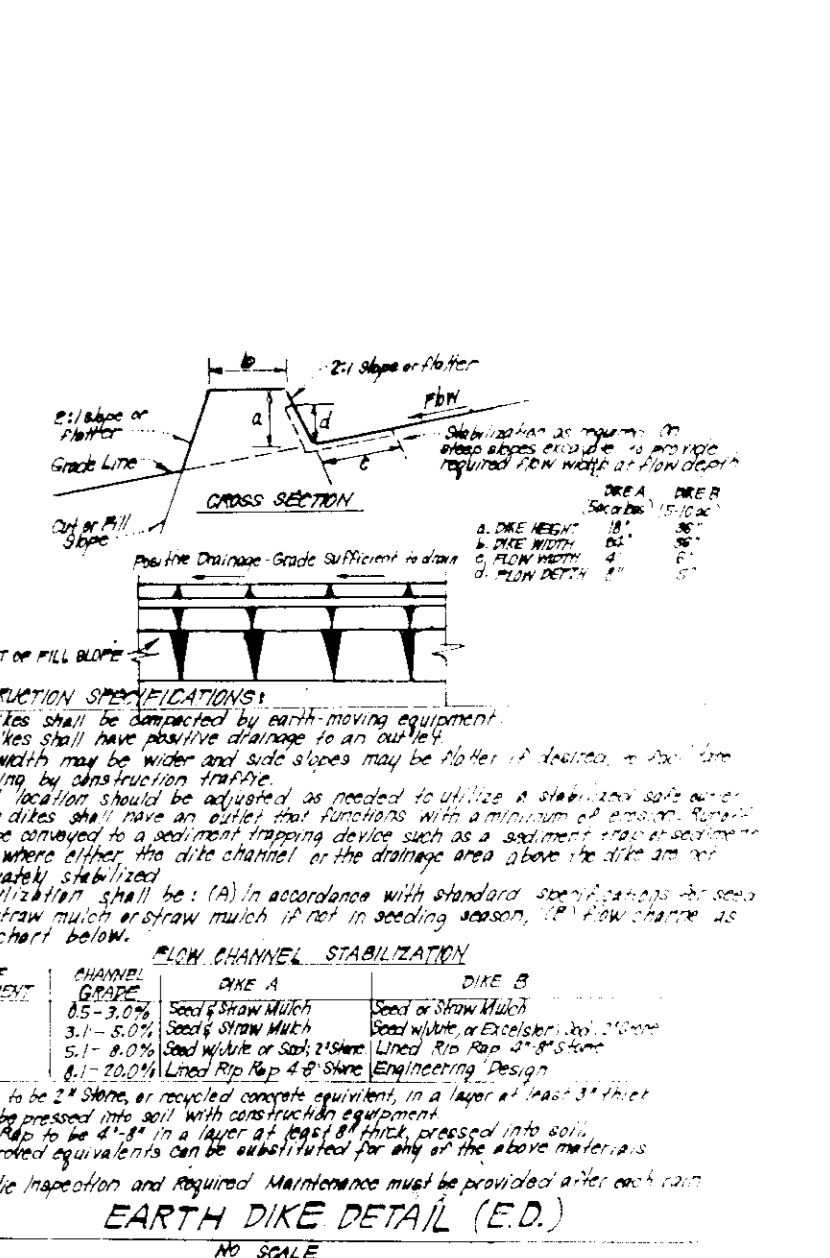
1. Area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The soil area shall be compacted.
2. The fill material for the embankment shall be free of roots and other woody vegetation as well as over sized stones, rocks, refuse material or other objectionable material. The embankment shall be compacted by traversing with equipment while it is being constructed.
3. All cut and fill slopes shall be 2:1 or flatter.
4. The stone used in the outlet shall be small rip rap 4"-8" along with 1" thickness of 2" aggregate placed on the up-slope side on the small rip rap of embankment if rip rap is in place of embankment.
5. Sediment shall be removed and trap restored to its original condition when the sediment has accumulated to 1/2 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.) STY. NO SCALE



LEGEND

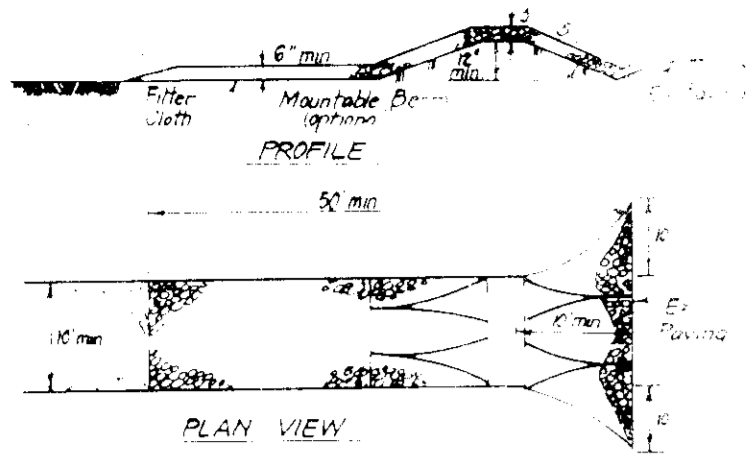
1	CONTOUR INTERVAL	2 FT
2	EXISTING CONTOUR	(dotted line)
3	PROPOSED CONTOUR	(solid line)
4	SPOT ELEVATION	(number)
5	DIRECTION OF DRAINAGE	(arrow)
6	WALK-OUT BASEMENT	(dashed line)
7	SILT FENCE	(line with 'S' markers)
8	EARTH DIKE	(line with 'E' markers)
9	STABILIZED CONSTRUCTION ENTRANCE	(line with 'S' markers)



CONSTRUCTION SPECIFICATIONS:

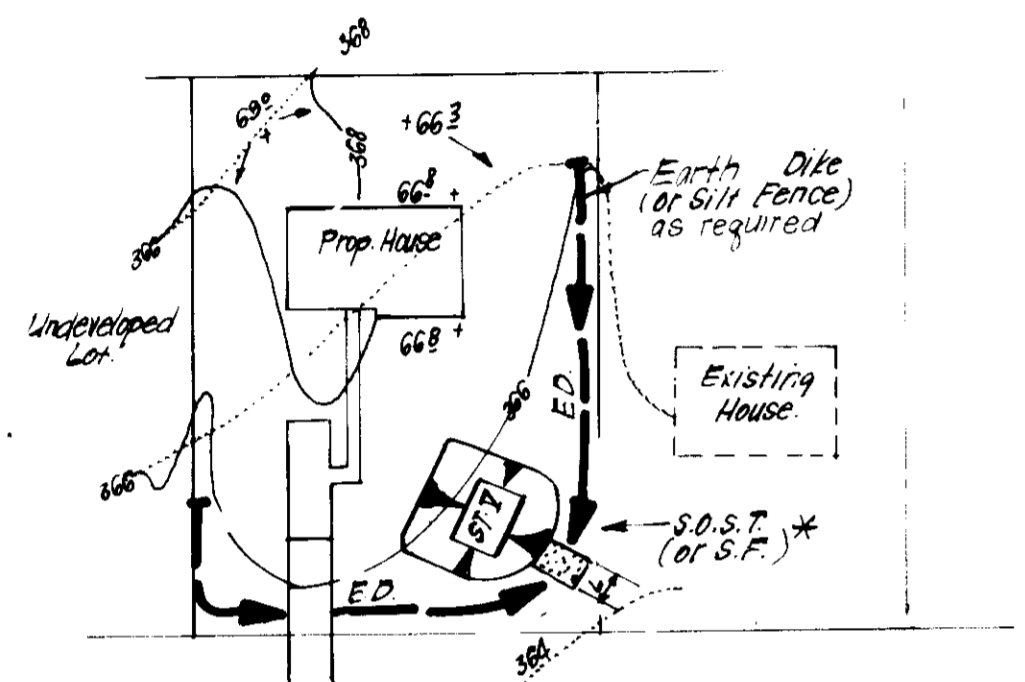
1. Embankment shall be constructed by earthmoving equipment.
2. All fill shall be compacted to an optimum moisture content.
3. The width of the embankment shall be 4 feet at the top.
4. The height of the embankment shall be 2 feet.
5. The slope of the embankment shall be 2:1 on both sides.
6. The top of the embankment shall be finished to a true grade.
7. The embankment shall be inspected after each rain and repairs made as needed.
8. The embankment shall be removed and the area stabilized when the drainage area has been properly stabilized.

EARTH DIKE DETAIL (E.D.) NO SCALE



- CONSTRUCTION SPECIFICATIONS**
- Stone size: Use 2" stone or rounded crushed stone of the same size.
 - Length: As required to meet the 10' minimum length of stone structure at where a 30' minimum depth is required.
 - Thickness: Not less than six (6) inches.
 - Width: Ten (10) foot minimum, but not less than the width of water where ingress or egress occurs.
 - Filter: Cloth will be placed over the entire area of the stone structure. Filter will not be required over a single family residence.
 - Surface Water: All surface water flowing over the stone structure entrance shall be directed across the entrance in a direction of maximum slope with 5" steel mesh will be permitted.
 - Maintenance: The entrance shall be maintained in a condition which will prevent trapping or blocking of sediment particles with rocks. The mesh requires periodic top dressing with additional stone as concrete deforms and repair and/or cleaning of any mesh used in this sediment structure shall be done immediately.
 - Warning: Wheels shall be cleaned to remove sediment prior to entrance onto public roads of new. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 - Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE 'SCE'



* NOTE: Single lot detail can not be utilized if any two lots sharing common property lines are to be disturbed at the same time or on any lots showing a sediment trap.

SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE

S.O.S.T. (ST.V) Pp 16, 17	LOT SIZE	VAC	VAC	AC
1	2	3	4	5
2	3	4	5	6
3	4	5	6	7
4	5	6	7	8
5	6	7	8	9
6	7	8	9	10
7	8	9	10	11
8	9	10	11	12
9	10	11	12	13
10	11	12	13	14
11	12	13	14	15
12	13	14	15	16
13	14	15	16	17
14	15	16	17	18
15	16	17	18	19
16	17	18	19	20
17	18	19	20	21
18	19	20	21	22
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94	95	96	97	98
95	96	97	98	99
96	97	98	99	100

NO OF DAYS

- CONSTRUCTION SEQUENCE:**
- Obtain Grading Permit and Install Sediment and Erosion Control Devices and Stabilize.
 - Excavate for foundations and Rough Grade & Temporarily Stabilize.
 - Construct Structures, Sidewalks and Driveways.
 - Final Grade and stabilize in accordance with Specs. & Specs.
 - Upon approval of the sediment control inspector remove sediment and erosion controls and stabilize.
- * Delay construction of house on Lot 84 until Trap No 1 is removed.

7
30
180
30
7

DEVELOPER'S/BUILDERS CERTIFICATE

"I/We certify that all development and construction will be done according to this plan of development and also 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 deemed necessary."

Kevin Cooper
Signature of Developer/Builder

2/13/90
Date

TRAP No 1 S.O.S.T. (ST V)

1.70 Ac	3060 cf
4'	3080 cf
	3050
	390.0
	302.0
	51' x 10'



ENGINEER'S CERTIFICATE

I hereby certify that this plan for Erosion and Sediment Control represents a practical and workable plan, has been prepared in accordance with the requirements of the Howard Soil Conservation District.

G. Nelson Clark
G. Nelson Clark
DATE: 2-13-90

Reviewed for: **HOWARD** S.C.D.
Name
and meets Technical Requirements
James M. Johnson
Signature Date 2/13/90
U.S. Soil Conservation Service

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

G. Nelson Clark
Approved Date 2/13/90

OWNER/DEVELOPER:
HOWARD RESEARCH & DEVELOPMENT LAND CO
2075 Little Bluestem Pkwy
Columbia, Md. 21044

CLARK • FINEFROCK • SACKS, INC.

SEDIMENT AND EROSION CONTROL PLAN
LOTS 62-65, 82-87
COLUMBIA
VILLAGE OF HICKORY RIDGE
SECTION 6 AREA 6
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
For Goodier Builders
1207 McGee Way
Ellicott City, Md. 21043

11-30
4 of 4
90-022
90-022BE

James E. Lee 4-23-90
William E. Kelly 4-23-90
COMMUNITY PLANNING COM
LAND DEVELOPMENT