

VICINITY MAP
SCALE: 1"=2000'

Howard County Monument # 2337001 Elev = 496.095
North - 49° 12' 30" East - 819.527.780
1/4" Reinforcing Rod, 0.4' Below Surface

Howard County Monument # 2337003 Elev = 476.122
North - 49° 28' 30" East - 820.255.343
Concrete Monument, 0.25' Below Surface

GENERAL NOTES:

- Subject property is zoned: NT SFLD per 10-18-93 Comprehensive Zoning Plan.
- The total area included in this submission is: 113,446 sq ft or 2.6 Acres
- The total number of lots included in this submission are: 9
- Improvement to property: Single family detached
- For driveway, driveway, driveway refer to Ho Co. Design Manual Volume 11, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

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-33-B1 and/or approved Water and Sewer Plans Contract # 34-3210-D.

SHEET INDEX

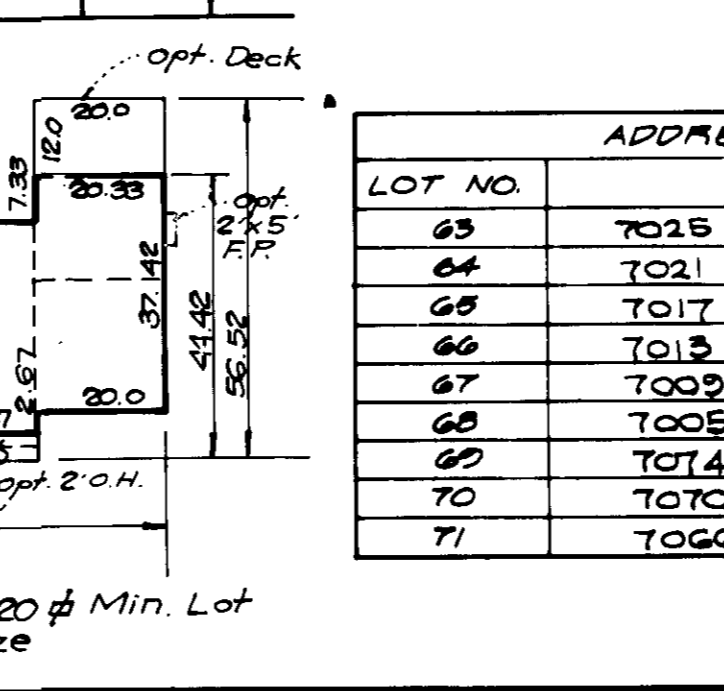
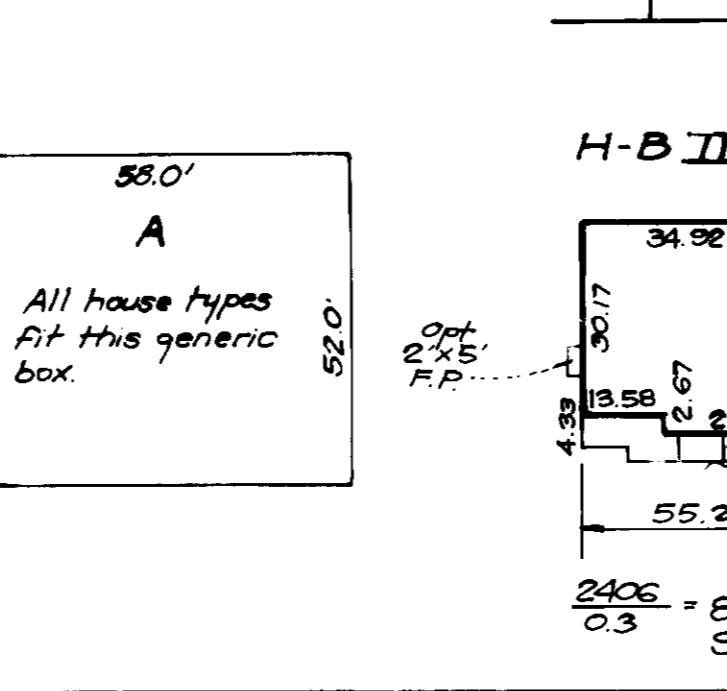
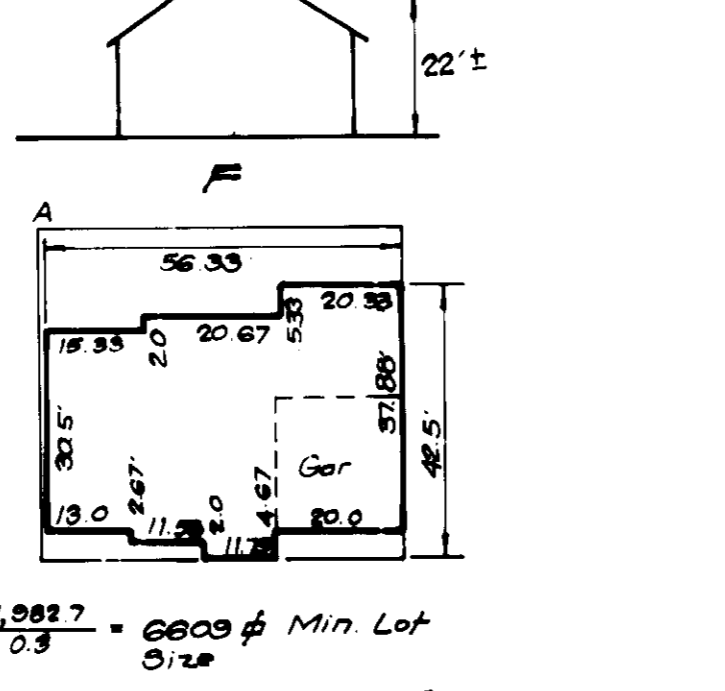
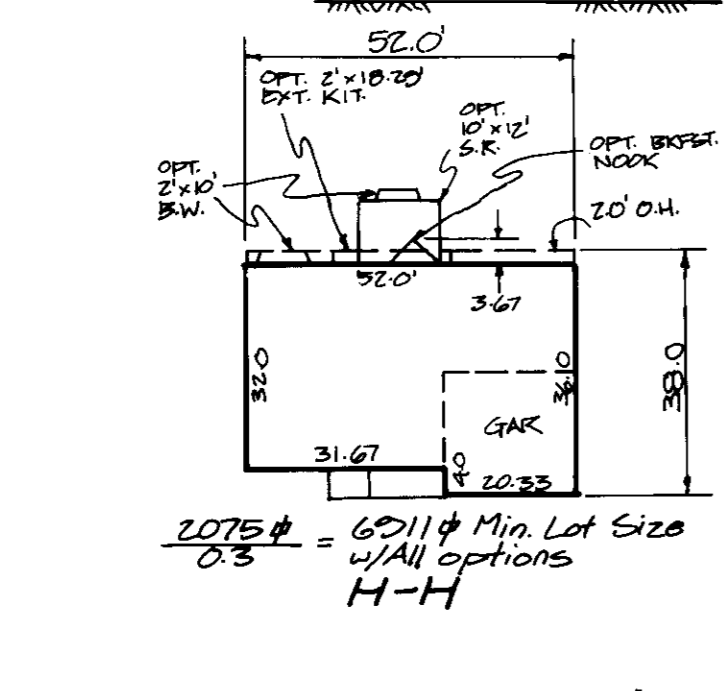
SITE DEVELOPMENT PLAN 2/1 of 3
SEDIMENT AND EROSION CONTROL PLAN 2/1 of 3

3 Add S use type 6-7-96
2 Add H-C-H-G-H-H use type; Ken Gar Box A 7-10-95
1 Rev use & grad lot 63, Add use typical 9-18-95

REVISIONS

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
Director: [Signature] 7/1/94
DATE: 7/1/94

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
[Signature] 7/1/94
DATE: 7/1/94



ADDRESS CHART

| LOT NO. | STREET ADDRESS |
|---------|----------------------|
| 63 | 7025 Best Times Path |
| 64 | 7021 |
| 65 | 7017 |
| 66 | 7013 |
| 67 | 7009 |
| 68 | 7005 |
| 69 | TOT4 Garden Walk |
| 70 | TOT0 |
| 71 | TOT6 |

OWNER/DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CO-OP
10275 LITTLE PATENT PARK
COLUMBIA, MD 21044

| | | | | | |
|------------------|--------------------------------|--------------|----------|----------------|------------|
| SUBDIVISION NAME | COLUMBIA Village of River Hill | SECTION/AREA | 2/2 PH 2 | LOTS/PARCELS | 63 thru 71 |
| PLAT NO. | 10934-10936 | BLOCK NO. | NT SFLD | TAX MAP NO. | 35 |
| WATER CODE | B-01 | SEWER CODE | 2153000 | ELECTION DIST. | 5TH |
| | | | | CONDEMN TRACT | 6035 |

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINGTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 • BALTO • (301) 621-8100 • WASH

DESIGNED: JME
DRAWN: BAL, MCB
CHECKED: JME
DATE: JUN 30, 1994

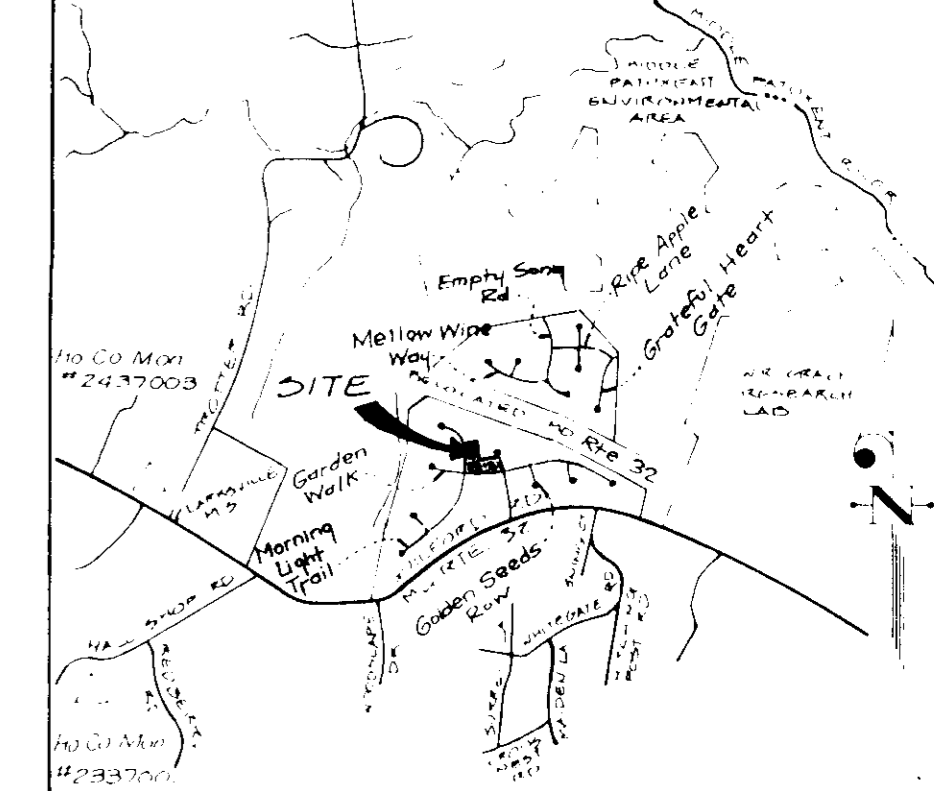
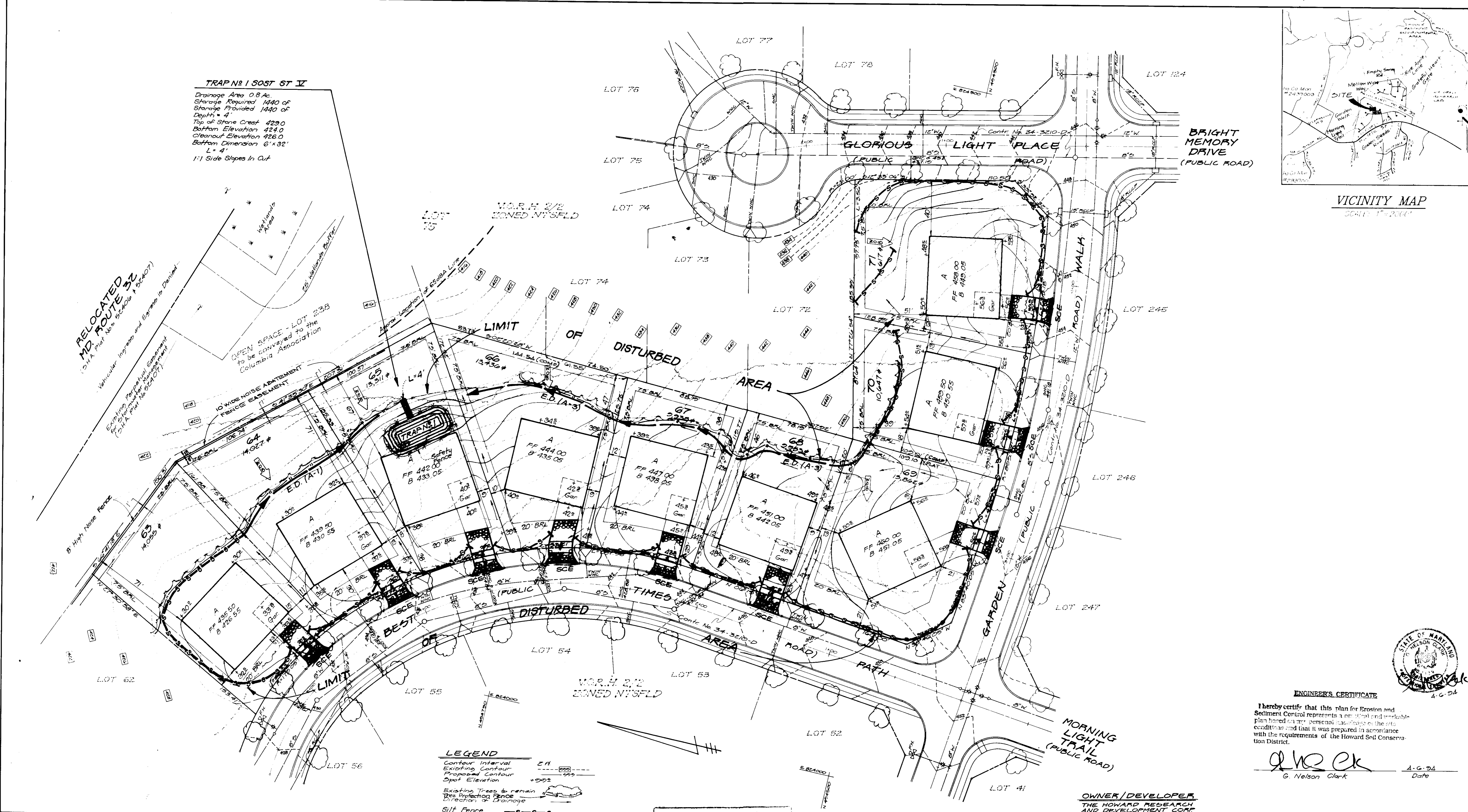
SITE DEVELOPMENT PLAN
LOT 63 thru 71
COLUMBIA
VILLAGE OF RIVER HILL
SECTION 2 AREA 2 PHASE 2
FIFTH ELECTION DISTRICT
HOWARD COUNTY MARYLAND
For HALLMARK BUILDERS, INC.
P.O. BOX 1018
COLUMBIA, MD 21044

SCALE: 1"=30'
DRAWING: 1 OF 3
JOB NO: 94-018
FILE NO: 94-018-X

TRAP NO 1 50ST ST IV
 Drainage Area 0.8 Ac.
 Storage Required 1440 of
 Storage Provided 1440 of
 Depth = 4'
 Top of Stone Crest 429.0
 Bottom Elevation 424.0
 Cleanout Elevation 426.0
 Bottom Dimension 6' x 32'
 L = 4'
 1:1 Side Slopes In Cut

**RELOCATED
 MD ROUTE 32**
 Cont. A. Plat. No. 22-017
 Vehicular Ingress and Egress is Denied
 Existing Proprietary Easement
 For Driveway Use (Plat. No. 22-017)
 Cont. A. Plat. No. 22-017

OPEN SPACE - LOT 232B
 to be conveyed to the
 Columbia Association



VICINITY MAP
 SCALE: 1" = 2000'

LEGEND
 Contour Interval 2' 0"
 Existing Contour ---
 Proposed Contour - - -
 Spot Elevation +002
 Existing Trees to remain
 Dike Protection Fence
 Direction of Drainage
 Silt Fence -S-S-S-
 Earth Dike -E.O. (A-1)-
 Stabilized Construction Entrance
 w/ Mountable Berm

Reviewed for HOWARD CO. S.C.D.
 and meets Technical Requirements
 J. A. Weyfield/jaw 6/29/94
 Signature Date
 U.S. Soil Conservation Service

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

John R. Robertson 6/29/94
 Approved Date

ENGINEER'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 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."

Signature of Developer/Builder
 A/G/94
 Date

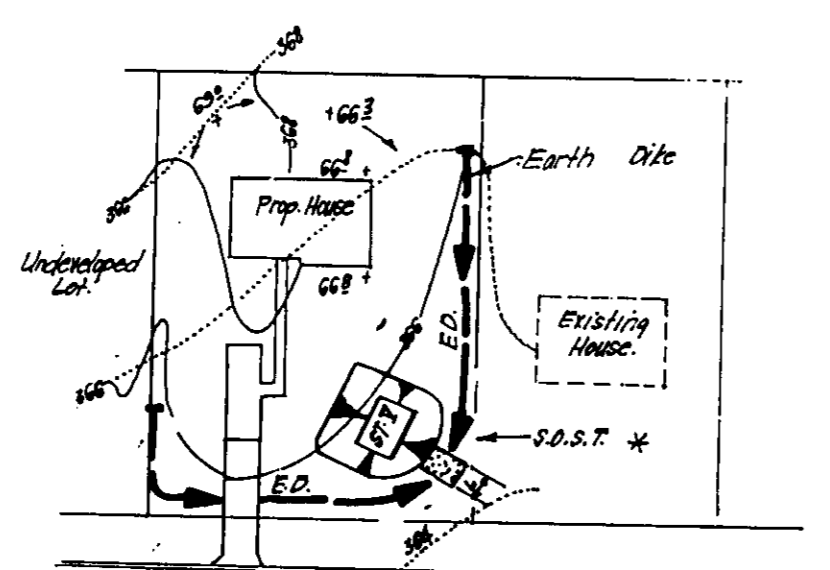
OWNER/DEVELOPER
 THE HOWARD RESEARCH
 AND DEVELOPMENT CORP.
 10875 Little Patuxent Pkwy.
 Columbia, Md. 21044

ENGINEER'S CERTIFICATE
 Thereby 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 Conserva-
 tion District.

G. Nelson Clark
 Date

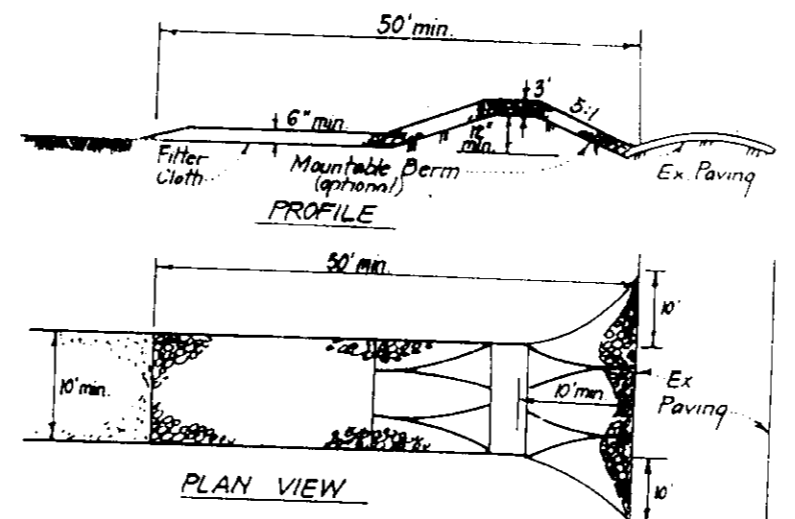
APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Director J. A. Weyfield 7/8/94
 Date
 Director Anne Summerville 7/7/94
 Date
 DIVISION OF PLANNING, DEVELOPMENT
 AND RESEARCH
 APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Director John R. Robertson 6/29/94
 Date
 Chief Bureau of Engineers 7/1/94
 Date

| | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 - BALTO • (301) 621-8100 - WASH | | |
| DESIGNED JLS | SEDIMENT & EROSION CONTROL PLAN LOTS 63 thru 71 COLUMBIA VILLAGE OF RIVER HILL SECTION 2 AREA 2 PHASE 2 FIFTH ELECTION DISTRICT HOWARD COUNTY MARYLAND For HALLMARK BUILDERS, INC. P.O. BOX 1018 COLUMBIA, MD 21044 | SCALE 1" = 30' |
| DRAWN BAL | | DRAWING 2 OF 3 |
| CHECKED JLS | | JOB NO 24-018 |
| DATE JUNE 20 1994 | | FILE NO 24-018B |
| | | SDP-24-110 |



* 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.

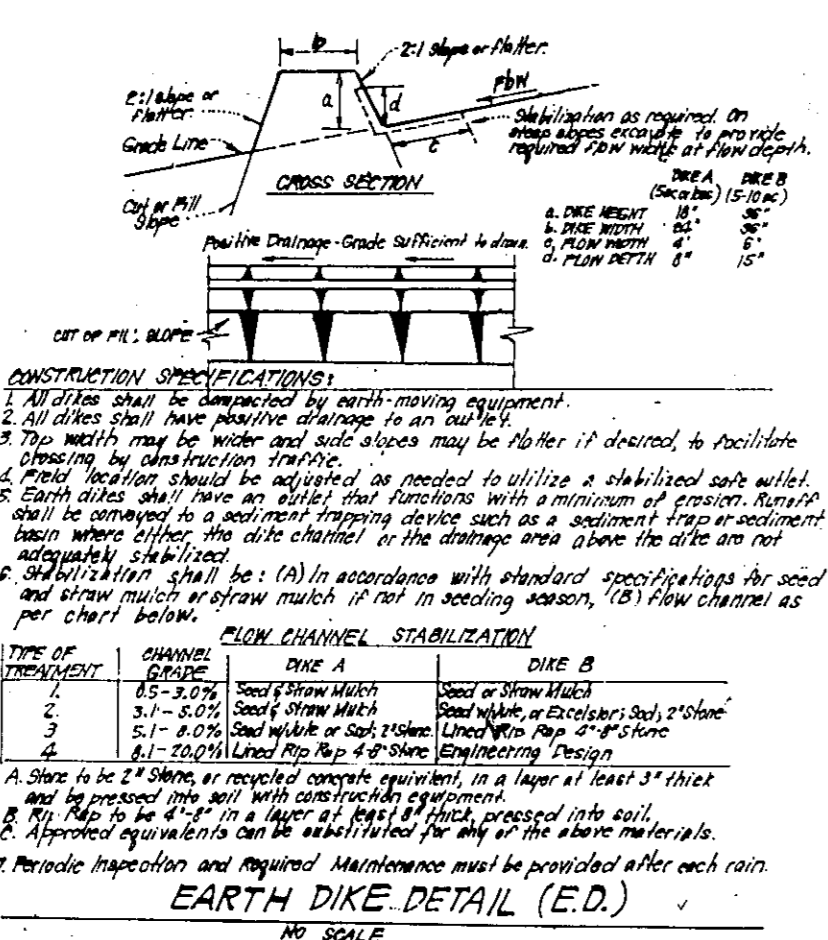
SINGLE LOT SEDIMENT CONTROL PLAN
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Stone size - Use 2" stone, or reclaimed or recycled concrete equivalent.
- Length - As required, but not less than 50 feet (except on a single residence lot where a 30 foot minimum length would apply).
- Thickness - Not less than six (6) inches.
- Width - Ten (10) feet minimum, but not less than the full width of points where ingress or egress occurs.
- Filter Cloth - Will be placed over the entire area over topkings of stone.
- Filter Cloth - All surface water flowing or directed toward construction entrances shall be piped across the entrance. If piping is impractical, a manhole must be provided.
- 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 proper use of any measures used to trap sediment. All sediment applied or tracked onto public rights-of-way must be removed immediately.
- Washing - Wheels shall be cleaned to remove sediment or use a pressure washer 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.

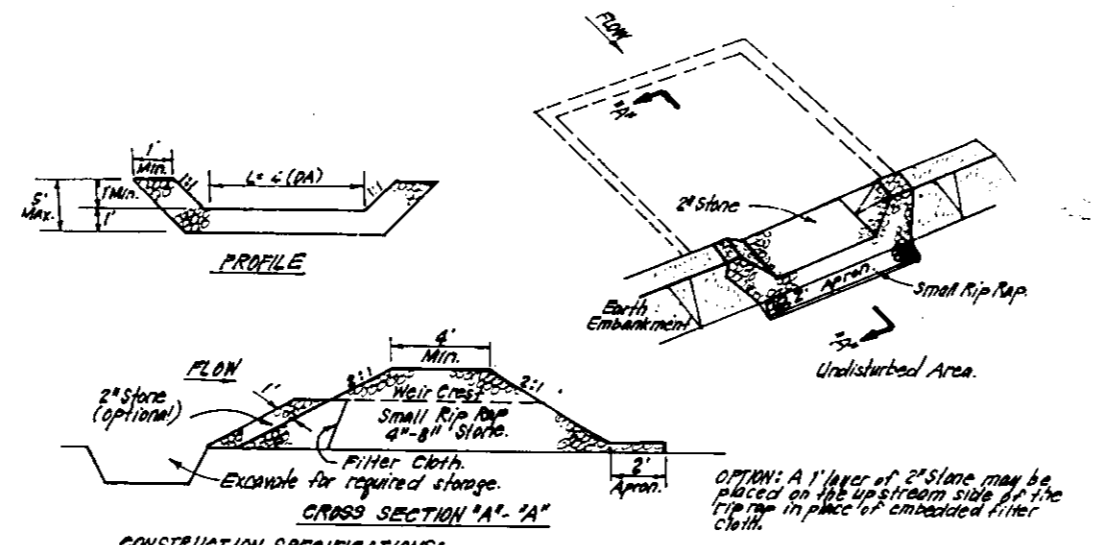
STABILIZED CONSTRUCTION ENTRANCE (SCE)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- All dikes shall be demarcated by earth-moving equipment.
- All dikes shall have a minimum slope of 1:1.
- The width may be wider and soil slopes may be flatter if desired to facilitate cleaning by construction traffic.
- Final location should be adjusted as needed to utilize a stabilized area with a minimum of 100 sq ft.
- Earth dikes shall have an outlet that discharges into a sediment trap or sediment basin when exiting the site channel. The discharge area shall be stabilized immediately.
- Stabilization shall be: (A) in accordance with standard construction practices and (B) straw mulch or straw mulch in row in seeding season. (C) flow channel as per chart below.

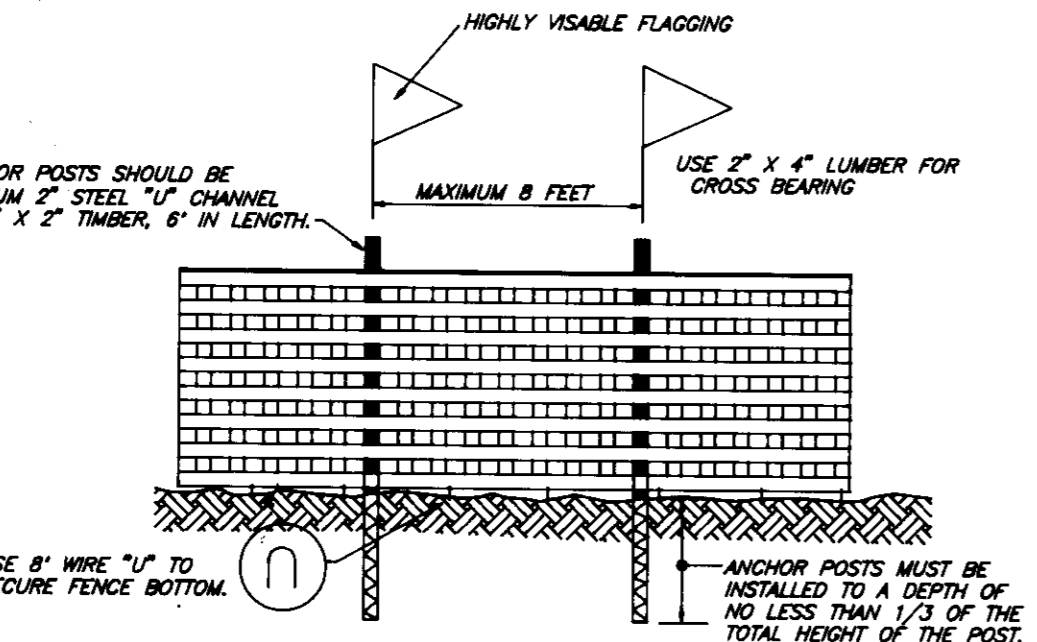
EARTH DIKE DETAIL (E.D.)
NO SCALE



CONSTRUCTION SPECIFICATIONS:

- Flow under stabilization shall be checked, guided and stripped of any vegetation and root mat. The stone shall be replaced as needed.
- The 1/8" material (the stabilization) shall be fine and other means retention as well as any other means, such as a sediment trap or sediment basin, shall be provided.
- The stone used in the outlet shall be small (1/4" to 1/2" size) and placed on the ground surface on the outlet pipe. It shall be placed in the top edge of the stone.
- Stabilization shall be in accordance with standard construction practices and (B) straw mulch or straw mulch in row in seeding season. (C) flow channel as per chart below.
- The structure shall be inspected after each rain and repairs made as needed.
- Construction operations shall be done in such a manner that erosion and water pollution is minimized.
- The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.

STONE OUTLET SEDIMENT TRAP (SOST) STV
NO SCALE



BLAZE ORANGE PLASTIC MESH TYPICAL TREE PROTECTION FENCE DETAIL
NO SCALE

NOTES:

- Forest protection device only.
- Retention area will be set as part of the review process.
- Boundaries of retention area should be staked and flagged prior to installing device.
- Root damage should be avoided.
- Protection signage may also be used.
- Device should be maintained throughout construction.

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:

- 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 the time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq ft.)
- 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.

SEDIMENT AND EROSION CONTROL NOTES

- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permit's prior to the start of any construction. (913-1885).
- 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.
- 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.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeters in accordance with Vol. I, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECS. FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seedings (Sec. 5.1) and (Sec. 5.4), temporary seedings (Sec. 5.2) and mulching (Sec. 5.2). Temporary stabilization with m. alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 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.
- SITE ANALYSIS:**
Total Area of Site: 26 Ac
Area Disturbed: 2.04 Ac
Area to be seeded or paved: 0.30 Ac
Area to be vegetatively stabilized: 1.30 Ac
Total Cut: 10.13 cu yd
Total Fill: 19.96 cu yd
Offsite Waste/Borrow Area Location: 1
- 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 necessary by the Howard County DPH Sediment Control Inspector. 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.
- All pipes to be blocked at the end of each day (see detail this sheet).
- The total amount of silt fence = 1200 LF

TEMPORARY SEEDING NOTES

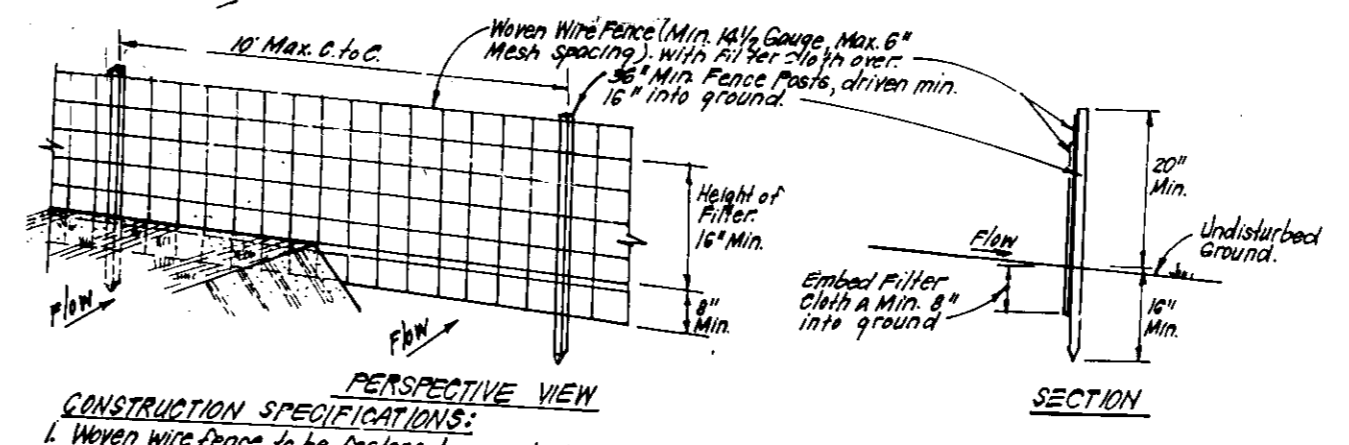
SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing, or other acceptable means before seeding, if not previously loosened.

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 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 (0.5 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.



CONSTRUCTION SPECIFICATIONS:

- Woven wire fence to be fastened securely to fence posts with wire ties or staples.
- Filter cloth to be fastened securely to woven wire fence with 1/2" staples every 36" up and down sections.
- When 2 sections of filter cloth adjoin each other, they shall be overlapped by 6" and stapled.
- Maintenance shall be performed as needed and material removed when bulges develop in silt fence.

SILT FENCE DETAIL (S)
NO SCALE

CONSTRUCTION SEQUENCE:

| NO. | DESCRIPTION | NO. OF DAYS |
|-----|------------------------------------------------------------------------------------------------------------|-------------|
| 1 | Obtain grading permit | 7 |
| 2 | Install tree protection fence | 2 |
| 3 | Install sediment and erosion control devices and stabilize | 7 |
| 4 | Excavate for foundations, rough grade and temporarily stabilize | 30 |
| 5 | Construct structures, sidewalks and driveways | 80 |
| 6 | Final grade and stabilize in accordance with Stds. and Specs. | 30 |
| 7 | Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize | 30 |

* Delay construction of houses on lot 65 See single lot sediment control detail, this sheet.

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
DATE: 7/1/94

DIRECTOR: [Signature]

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH: [Signature]

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
DATE: 7/1/94

DIRECTOR: [Signature]

CHIEF BUREAU OF ENGINEERING: [Signature]

Reviewed for HOWARD S.C.D. Name: [Signature] and meets Technical Requirements Signature: [Signature] US Soil Conservation Service

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."

[Signature] 4/6/94

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.

[Signature] G. Nelson Clark A.G. 94 Date



OWNER / DEVELOPER
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
10275 Little Patuxent Pkwy.
Columbia, Maryland 21044

CLARK • FINEFROCK & SACKETT, INC.
ENGINEERS • PLANNERS • SURVEYORS
7135 MINNISTREL WAY • COLUMBIA, MD 21045 • (410) 381-7500 - BALTO. • (301) 621-8100 - WASH.

| | | | |
|----------|---------------------------------|----------|----------|
| DESIGNED | SEDIMENT & EROSION CONTROL PLAN | SCALE | As Shown |
| DRWN | LOTS 63 thru 71 | DRAWING | 30F3 |
| BAL | COLUMBIA | JOB NO. | 34-018 |
| CHECKED | VILLAGE OF RIVER HILL | FILE NO. | 34-018SE |
| DATE | SECTION 2 AREA 2 PHASE 2 | | |
| | FIFTH ELECTION DISTRICT | | |
| | HOWARD COUNTY MARYLAND | | |
| | For: HALLMARK BUILDERS, INC. | | |
| | P.O. Box 1018 | | |
| | Columbia, MD 21044 | | |

SDP-34-110