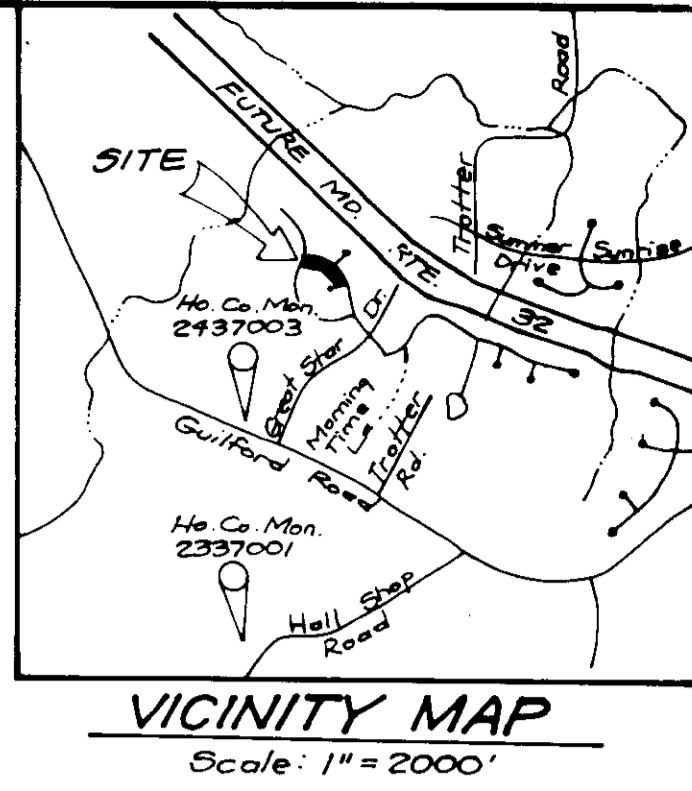


**LEGEND**

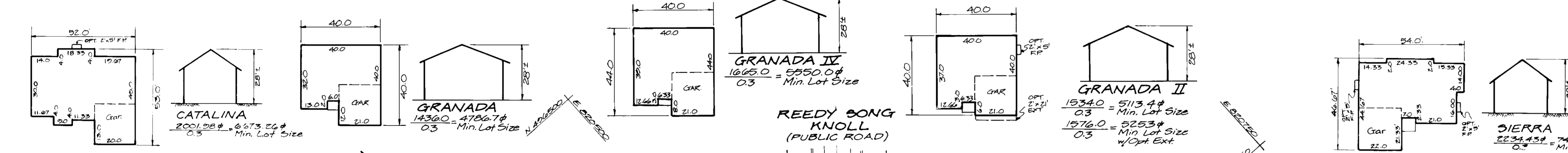
Contour Interval 2 FT  
 Existing Contour  $\text{---}$   
 Proposed Contour  $\text{---}$   
 Spot Elevation  $\text{---}$   
 Direction of Drainage  $\text{---}$   
 Walk out Basement  $\text{---}$   
 Trees to be Saved  $\text{---}$   
 Minimum Cellar Elevation M.C.E.

ADDRESS CHART	
LOT No.	STREET ADDRESS
19	6447 WESTERN STAR RUN
20	6443
21	6439
22	6435
23	6431



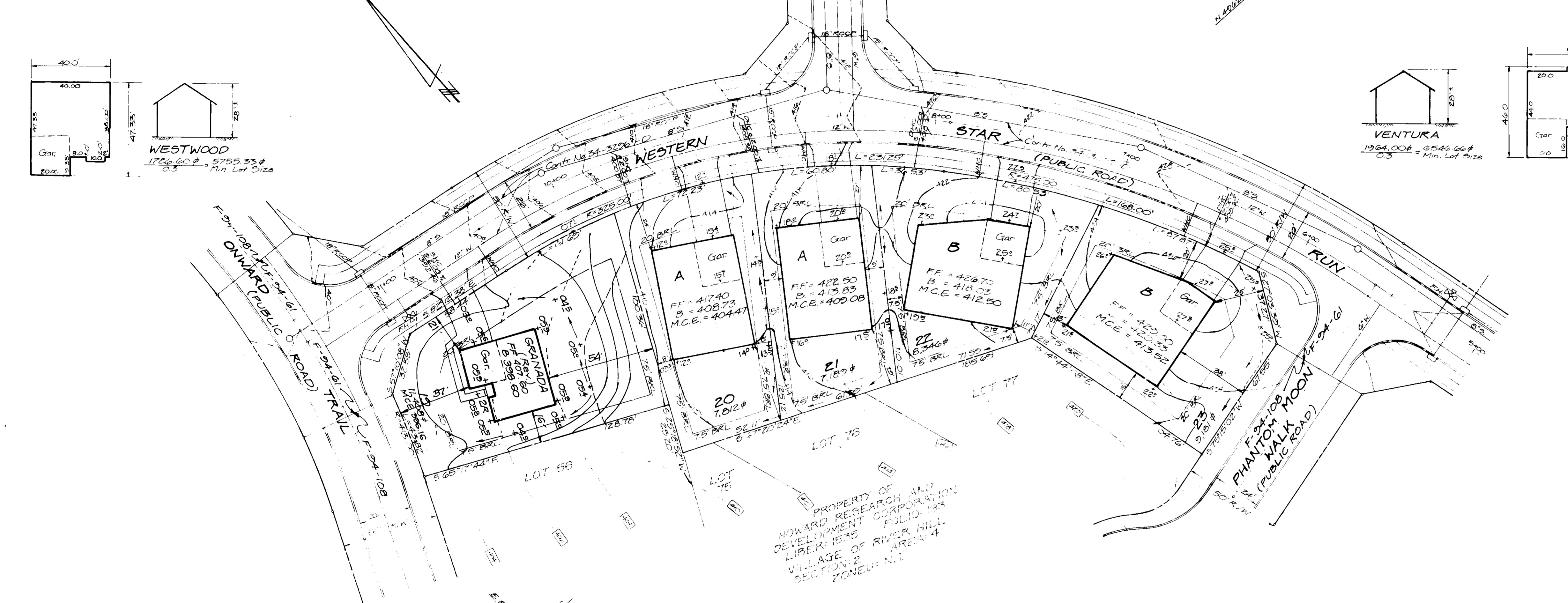
**BENCHMARKS**

- Howard County Monument No. 2337001 - Elev. = 426.095  
 North: 4516.12, East: 81952.783  
 3/4 Reinforcing Rod, 0.6' Below Surface
- Howard County Monument No. 2437003 - Elev. = 472.122  
 North: 404285.231, East: 820385.343  
 Concrete Monument, 0.25' Below Surface



**GENERAL NOTES:**

- Subject property is zoned: NT per 10-18-93 Comprehensive Zoning Plan.
- The total area included in this submission is: 1.0 Ac.
- The total number of lots included in this submission are: 5
- Improvement to property: Single family detached
- The maximum lot coverage permitted is: 30%
- Department of Planning and Zoning reference file numbers are: 9-21-03, F-24-01, F-24-02, F-24-03, F-24-04, F-24-05, F-24-06, F-24-07, F-24-08, F-24-09, F-24-10, F-24-11, F-24-12, F-24-13, F-24-14, F-24-15, F-24-16, F-24-17, F-24-18, F-24-19, F-24-20, F-24-21, F-24-22, F-24-23, F-24-24, F-24-25, F-24-26, F-24-27, F-24-28, F-24-29, F-24-30, F-24-31, F-24-32, F-24-33, F-24-34, F-24-35, F-24-36, F-24-37, F-24-38, F-24-39, F-24-40, F-24-41, F-24-42, F-24-43, F-24-44, F-24-45, F-24-46, F-24-47, F-24-48, F-24-49, F-24-50, F-24-51, F-24-52, F-24-53, F-24-54, F-24-55, F-24-56, F-24-57, F-24-58, F-24-59, F-24-60, F-24-61, F-24-62, F-24-63, F-24-64, F-24-65, F-24-66, F-24-67, F-24-68, F-24-69, F-24-70, F-24-71, F-24-72, F-24-73, F-24-74, F-24-75, F-24-76, F-24-77, F-24-78, F-24-79, F-24-80, F-24-81, F-24-82, F-24-83, F-24-84, F-24-85, F-24-86, F-24-87, F-24-88, F-24-89, F-24-90, F-24-91, F-24-92, F-24-93, F-24-94, F-24-95, F-24-96, F-24-97, F-24-98, F-24-99, F-24-100.
- Utilities shown as existing are taken from approved water Part III and sewer plan Contract #34-3226-D, approved road construction plans F-24-61, and actual field survey.
- Any damage to county owned rights-of-way shall be corrected at the developer's expense.
- Western Star Run is public and existing, per F-24-61. Phantom Moon Walk and Onward Trail are public and existing, per F-24-108. The existing topography shown was field-mapped by Clark, Finerock and Sackett Inc. on Nov. 6, 1994 (see F-24-108) and from local construction Plans 18-10-CR-1, 2/4-F-24-108 for Lot 19. The coordinates shown herein are based upon the Maryland State Plane Coordinate System which is based upon the Maryland State Plane Coordinate System - Howard County Monument Nos.: 2337001 and 2437003.
- 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.
- The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work.
- Under certain conditions, decks and porches may only extend 3 feet into front and rear setback areas as stated in F-24-61. In Phase 200-A, Part III, chimney and bay windows up to 10 feet in width may project up to 4 feet into the required setbacks.
- Owner House Connection elevations shown are located at the property line.
- For driveway entrance details refer to Ho. Co. Design Manual Volume II, 3/41 Details R-6.03
- The Stormwater Management facilities proposed for this site are Class 'A' Hazard facilities. In the event of a failure of the embankment, damage will be limited to floodplains and Open Space. Water Quality is provided by oversized rip-rap pads sized to store 1/2 inch from the roadways. As per F-24-61



**SPECIAL NOTES:**

This plan is for house sizing 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-24-61 and/or approved Water and Sewer Plans Contract #1-24-3226-D

**SHEET INDEX**

SITE DEVELOPMENT PLAN	1 of 2
SEWER & WATER CONTROL PLAN	2 of 2

**OWNER / DEVELOPER**

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

NO.	REVISIONS	DATE
1	Rev. hse & grad. lot 19	2/13/95
2	Add Granada, Granada II, Granada III, Vista hse. types	2/11/95
3	Rev. Box location lot 23 per Ho. Co. Comments	1-16-95
4	Rev. over Ho. Co. Comment, after date 1-23-94	12/20/94

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING

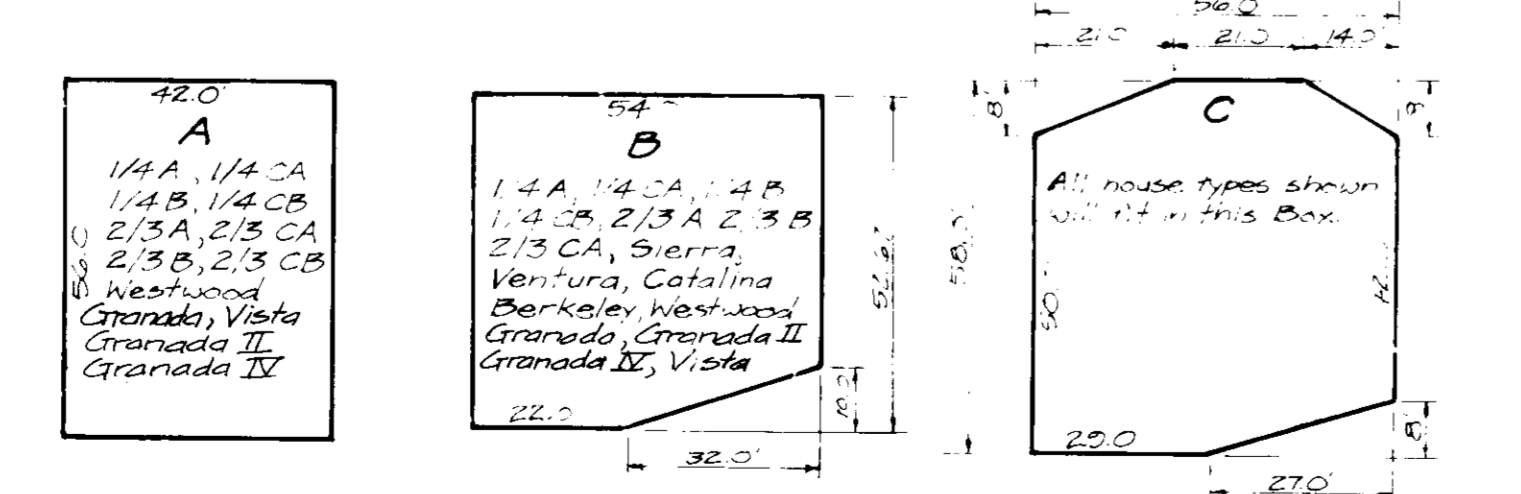
*[Signature]* 2/1/95  
 DIRECTOR DATE

*[Signature]* 2/1/95  
 CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS

*[Signature]* 1/26/95  
 DIRECTOR DATE

*[Signature]* 1/25/95  
 CHIEF BUREAU OF ENGINEERING DATE



**CLARK • FINEROCK & SACKETT, INC.**  
 ENGINEERS • PLANNERS • SURVEYORS

7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.

DESIGNED	MJP	SCALE	1"=30'
DRAWN	MCR	DRAWING	1 OF 2
CHECKED	gmc	JOB NO.	94-210
DATE	12-20-94	FILE NO.	94-210X

**SITE DEVELOPMENT PLAN**  
 LOTS 19 thru 23  
**COLUMBIA VILLAGE OF RIVER HILL**  
 SECTION 2 AREA 3 PHASE I  
 5TH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND

For: ALLAN HOMES, INC.  
 10260 Old Columbia Rd.  
 Columbia, MD 21046

**SEDIMENT AND EROSION CONTROL NOTES**

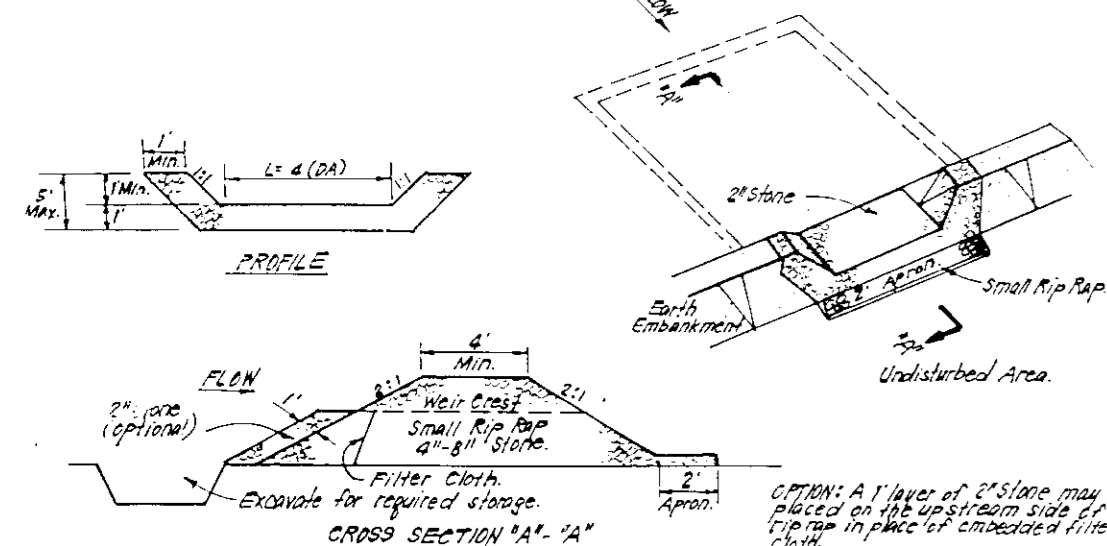
- A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permitting prior to the start of any construction. (913-1885).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND 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. 1, 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. 51) and (Sec. 54), temporary seedings (Sec. 50) and mulching (Sec. 53). Temporary stabilization with mulch 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:	1.0 AC.
Area Disturbed:	1.0 AC.
Area to be roofed or paved:	0.35 AC.
Area to be vegetatively stabilized:	0.65 AC.
Total Fill:	
Off-site Waste/Borrow Yea Location:	
- 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 DEP 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 = 0.

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.	NO. OF DAYS
1	7
2	7
3	14
4	30
5	30
6	14
7	7



**CONSTRUCTION SPECIFICATIONS:**

- Any water embankment shall be cleared, graded and stripped of any vegetation and root mat. The top of the embankment shall be free of roots and other woody vegetation as well as any debris.
- The filter material for the embankment shall be fine of roots and other woody vegetation as well as any debris.
- The filter material shall be placed in layers of 6" to 8" and shall be compacted by hand.
- The filter material shall be placed in layers of 6" to 8" and shall be compacted by hand.
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**STONE OUTLET SEDIMENT TRAP (S.O.S.T.) STV.**

**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/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.)

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 (14 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 meadow leysgrass. 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 (20 to 30 lbs./1000 sq ft) of unrattled 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.

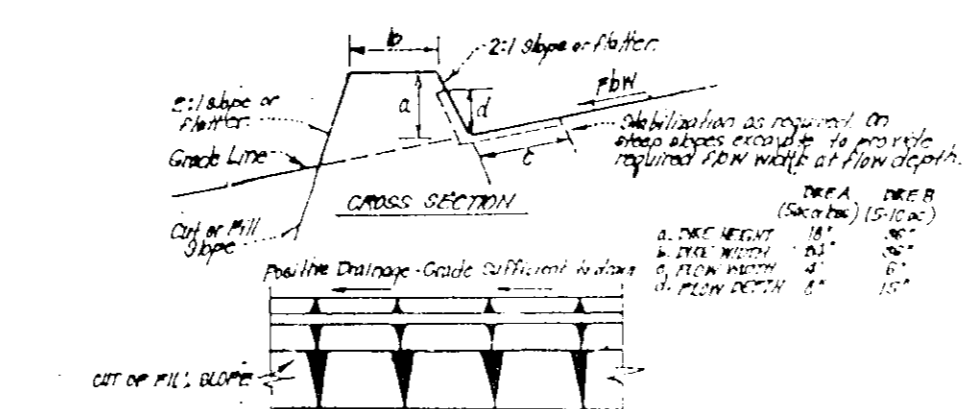
**SEEDBED PREPARATION:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding, if not previously loosened.

**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 from August 15 thru November 15, seed with 2 1/2 bushels per acre of annual ryegrass (3.2 lbs./1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of meadow leysgrass (0.7 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 (20 to 30 lbs./1000 sq ft) of unrattled 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.

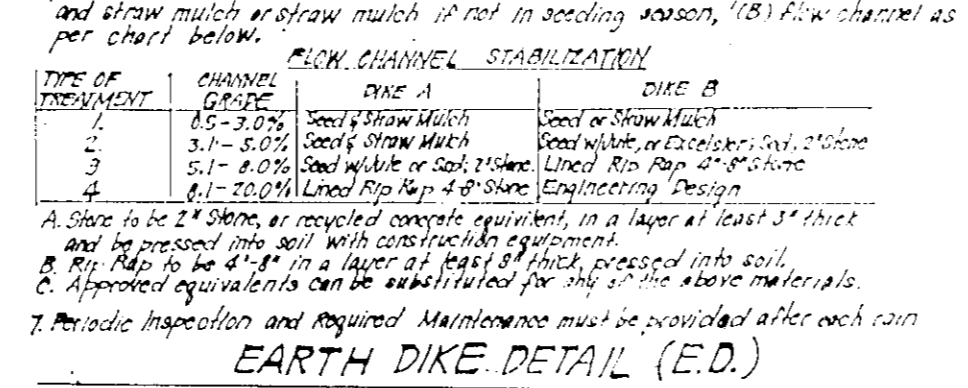
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



**CONSTRUCTION SPECIFICATIONS:**

- Earth dikes shall be constructed by earth-moving equipment.
- All dikes shall have positive drainage to an outlet.
- Top width may be wider and side slopes may be higher if dictated by facilitate dewatering by construction drainage.
- Final location should be adjusted as needed to utilize a stabilized area within 5' of the dike.
- Earth dikes shall have an outlet that functions with a minimum of erosion. Outlet shall be conveyed to a sediment trapping device such as a sediment trap or sediment basin where either, the site channel or the drainage area above the dike are not adequately stabilized.
- Stabilization shall be (A) in accordance with standard specifications for seed and straw mulch or (B) in accordance with standard specifications for sod and straw mulch or (C) in accordance with standard specifications for sod and straw mulch or (D) in accordance with standard specifications for sod and straw mulch.

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



**EARTH DIKE DETAIL (E.D.)**

TYPE OF TREATMENT	CHANNEL SIZE	SIDE SLOPE
1	12" - 18"	3:1
2	18" - 24"	3:1
3	24" - 30"	3:1
4	30" - 36"	3:1
5	36" - 42"	3:1
6	42" - 48"	3:1
7	48" - 54"	3:1
8	54" - 60"	3:1
9	60" - 66"	3:1
10	66" - 72"	3:1
11	72" - 78"	3:1
12	78" - 84"	3:1
13	84" - 90"	3:1
14	90" - 96"	3:1
15	96" - 102"	3:1
16	102" - 108"	3:1
17	108" - 114"	3:1
18	114" - 120"	3:1
19	120" - 126"	3:1
20	126" - 132"	3:1
21	132" - 138"	3:1
22	138" - 144"	3:1
23	144" - 150"	3:1
24	150" - 156"	3:1
25	156" - 162"	3:1
26	162" - 168"	3:1
27	168" - 174"	3:1
28	174" - 180"	3:1
29	180" - 186"	3:1
30	186" - 192"	3:1
31	192" - 198"	3:1
32	198" - 204"	3:1
33	204" - 210"	3:1
34	210" - 216"	3:1
35	216" - 222"	3:1
36	222" - 228"	3:1
37	228" - 234"	3:1
38	234" - 240"	3:1
39	240" - 246"	3:1
40	246" - 252"	3:1
41	252" - 258"	3:1
42	258" - 264"	3:1
43	264" - 270"	3:1
44	270" - 276"	3:1
45	276" - 282"	3:1
46	282" - 288"	3:1
47	288" - 294"	3:1
48	294" - 300"	3:1
49	300" - 306"	3:1
50	306" - 312"	3:1
51	312" - 318"	3:1
52	318" - 324"	3:1
53	324" - 330"	3:1
54	330" - 336"	3:1
55	336" - 342"	3:1
56	342" - 348"	3:1
57	348" - 354"	3:1
58	354" - 360"	3:1
59	360" - 366"	3:1
60	366" - 372"	3:1
61	372" - 378"	3:1
62	378" - 384"	3:1
63	384" - 390"	3:1
64	390" - 396"	3:1
65	396" - 402"	3:1
66	402" - 408"	3:1
67	408" - 414"	3:1
68	414" - 420"	3:1
69	420" - 426"	3:1
70	426" - 432"	3:1
71	432" - 438"	3:1
72	438" - 444"	3:1
73	444" - 450"	3:1
74	450" - 456"	3:1
75	456" - 462"	3:1
76	462" - 468"	3:1
77	468" - 474"	3:1
78	474" - 480"	3:1
79	480" - 486"	3:1
80	486" - 492"	3:1
81	492" - 498"	3:1
82	498" - 504"	3:1
83	504" - 510"	3:1
84	510" - 516"	3:1
85	516" - 522"	3:1
86	522" - 528"	3:1
87	528" - 534"	3:1
88	534" - 540"	3:1
89	540" - 546"	3:1
90	546" - 552"	3:1
91	552" - 558"	3:1
92	558" - 564"	3:1
93	564" - 570"	3:1
94	570" - 576"	3:1
95	576" - 582"	3:1
96	582" - 588"	3:1
97	588" - 594"	3:1
98	594" - 600"	3:1
99	600" - 606"	3:1
100	606" - 612"	3:1
101	612" - 618"	3:1
102	618" - 624"	3:1
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104	630" - 636"	3:1
105	636" - 642"	3:1
106	642" - 648"	3:1
107	648" - 654"	3:1
108	654" - 660"	3:1
109	660" - 666"	3:1
110	666" - 672"	3:1
111	672" - 678"	3:1
112	678" - 684"	3:1
113	684" - 690"	3:1
114	690" - 696"	3:1
115	696" - 702"	3:1
116	702" - 708"	3:1
117	708" - 714"	3:1
118	714" - 720"	3:1
119	720" - 726"	3:1
120	726" - 732"	3:1
121	732" - 738"	3:1
122	738" - 744"	3:1
123	744" - 750"	3:1
124	750" - 756"	3:1
125	756" - 762"	3:1
126	762" - 768"	3:1
127	768" - 774"	3:1
128	774" - 780"	3:1
129	780" - 786"	3:1
130	786" - 792"	3:1
131	792" - 798"	3:1
132	798" - 804"	3:1
133	804" - 810"	3:1
134	810" - 816"	3:1
135	816" - 822"	3:1
136	822" - 828"	3:1
137	828" - 834"	3:1
138	834" - 840"	3:1
139	840" - 846"	3:1
140	846" - 852"	3:1
141	852" - 858"	3:1
142	858" - 864"	3:1
143	864" - 870"	3:1
144	870" - 876"	3:1
145	876" - 882"	3:1
146	882" - 888"	3:1
147	888" - 894"	3:1
148	894" - 900"	3:1
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155	936" - 942"	3:1
156	942" - 948"	3:1
157	948" - 954"	3:1
158	954" - 960"	3:1
159	960" - 966"	3:1
160	966" - 972"	3:1
161	972" - 978"	3:1
162	978" - 984"	3:1
163	984" - 990"	3:1
164	990" - 996"	3:1
165	996" - 1002"	3:1
166	1002" - 1008"	3:1
167	1008" - 1014"	3:1
168	1014" - 1020"	3:1
169	1020" - 1026"	3:1
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172	1038" - 1044"	3:1
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179	1080" - 1086"	3:1
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181	1092" - 1098"	3:1
182	1098" - 1104"	3:1
183	1104" - 1110"	3:1
184	1110" - 1116"	3:1
185	1116" - 1122"	3:1
186	1122" - 1128"	3:1
187	1128" - 1134"	3:1
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210	1266" - 1272"	3:1
211	1272" - 1278"	3:1
212	1278" - 1284"	3:1
213	1284" - 1290"	3:1
214	1290" - 1296"	3:1
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224	1350" - 1356"	3:1
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241	1452" - 1458"	3:1
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243	1464" - 1470"	3:1
244	1470" - 1476"	3:1
245	1476" - 1482"	3:1
246	1482" - 1488"	3:1
247	1488" - 1494"	3:1
248	1494" - 1500"	3:1
249	1500" - 1506"	3:1
250	1506" - 1512"	3:1
251		