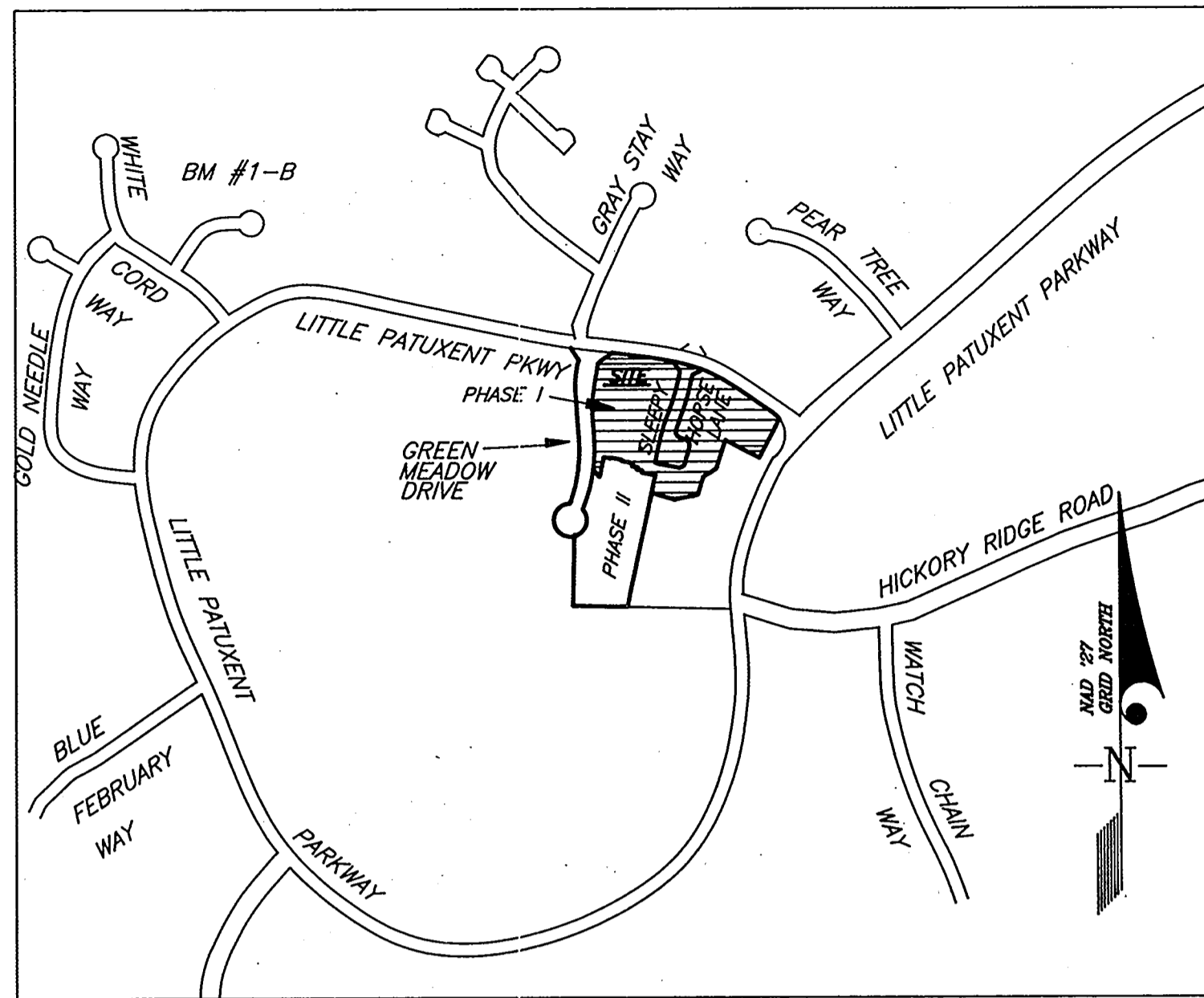
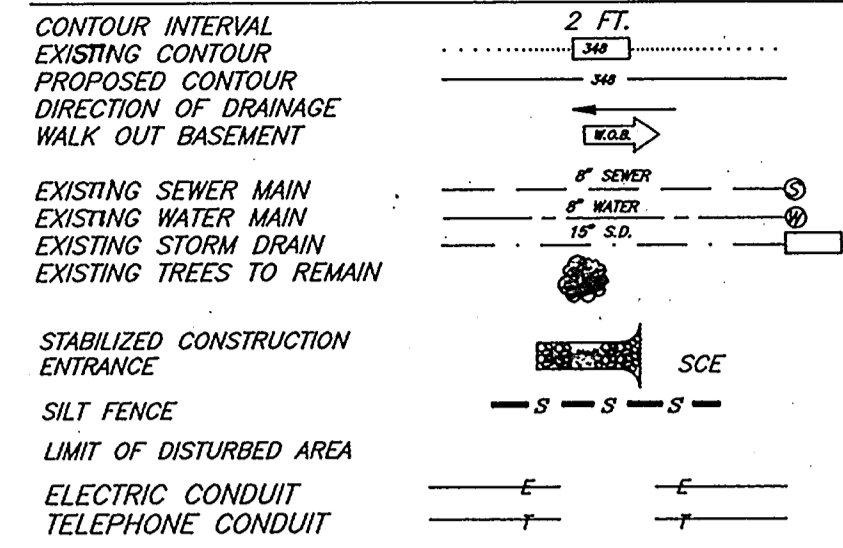


LEGEND



VICINITY MAP
SCALE: 1" = 600'

LOT AREA TABLE			
LOT NO.	AREA	LOT NO.	AREA
M-2	2160 SF	M-30	2232 SF
M-3	1804 SF	M-31	1980 SF
M-4	1804 SF	M-32	1980 SF
M-5	2106 SF	M-33	1892 SF
M-6	2052 SF	M-34	1901 SF
M-7	1760 SF	M-35	2290 SF
M-8	1804 SF	M-36	2237 SF
M-9	1804 SF	M-37	1814 SF
M-10	2160 SF	M-38	1886 SF
M-11	2123 SF	M-39	1868 SF
M-12	1800 SF	M-40	1924 SF
M-13	1761 SF	M-41	2289 SF
M-14	1829 SF	M-42	2106 SF
M-15	1812 SF	M-43	1716 SF
M-16	1865 SF	M-44	1628 SF
M-17	2177 SF	M-45	1584 SF
M-18	2052 SF	M-46	1496 SF
M-19	1672 SF	M-47	1562 SF
M-20	1672 SF	M-48	1518 SF
M-21	1760 SF	M-49	2079 SF
M-22	2089 SF	M-50	2315 SF
M-23	1932 SF	M-51	2090 SF
M-24	1666 SF	M-52	2090 SF
M-25	1683 SF	M-53	1980 SF
M-26	1771 SF	M-54	1980 SF
M-27	1771 SF	M-55	2091 SF
M-28	1683 SF	M-56	2104 SF
M-29	2066 SF	M-57	2489 SF

SITE ANALYSIS:

- Subject property is zoned: NT-SFA per 8.2.85 comprehensive zoning plan, FDP phase 181-A-III Part II
- Unit type proposed: Single family attached
- Number of units allowed: 56
- Number of units provided: 56
- Number of parking spaces required: 112 (2 per unit)
- Number of parking spaces provided: 141 (Total)
- Driveways & Garage: 54
- Area tabulation: Court 87
 - a) Total area of the parcel: 5.75 acres or 250,470 S.F.
 - b) Total lot area: 2.16 acres or 94,272 S.F.
 - c) Open space & private parking: 2.65 acres or 46.0%
 - d) Public road area: 0.62 acres or 10.7%
- Building coverage permitted: N/A
- Building coverage proposed: 1.32 acres or 13.8%

GENERAL NOTES:

- The existing topography shown was taken from approved road construction plan F-93-110 prepared by Clark Finetrock & Sackett, Inc.
- Department of Planning & Zoning reference file numbers are: SP-93-12, WP 93-35, F-93-120 and F-93-110
- All roadways are existing. Sleepy Horse Lane is public and with two private courts.
- The coordinates shown hereon are based upon plat meridian for Village of Hickory Ridge, Section 3 Area 4 Parcels K, L and M as recorded on Plat 5873 and 5874.
- The contractor shall notify the Department of Public Works/Bureau of Construction Inspection at (410) 313-1870 at least (5) working days 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.
- Utilities shown as existing are taken from approved water and sewer plan, Contract #34-3269-D, approved road construction plans F-93-110.
- Storm water management is provided off site in a regional storm water management facility as shown on F-83-120.
- WP-93-5B approved 1-27-93 to waive section 16.129.2 waiving the requirement of sidewalk on both sides of all streets in a S.F.A. project and 16.115 (b)(5) to permit private drives to exceed 200 feet in length.
- No clearing, grading or construction is permitted within wetlands and stream buffers or forest conservation areas.
- Vehicular ingress & egress into public right of way of Little Patuxent Pkwy. is restricted except at locations approved by Howard County Office of Planning & Zoning.
- Public water and sewer is to be utilized.
- Any damage to county owned right of way to be corrected at the developers expense.
- The area included in this submission is located on Tax Map No. 35, Parcel 395.
- All materials and construction is to be in accordance with the Howard County road construction codes and specifications.
- The minimum building setback restrictions from the property lines and the right of ways of any public road to be in accordance with the Final Development Plan, Phase 118-A-III, Part II recorded 3-8-93.
- Wetland evaluation prepared by Geotechnology Associates, Inc. on May 5, 1992.
- Information concerning underground utilities was obtained from available records, but the contractor must determine the exact location of utilities by digging test pits, by hand at all crossings prior to construction.
- The Contractor or developer agrees to work with the Department of Licenses and Permits to resolve any problem with roof water discharge.
- Installation of traffic control devices shall be in accordance with the latest edition of the "Manual of Uniform Traffic Control".
- Bench marks taken from a topographic survey prepared by Fisher Collins and Carter, Inc. F-93-67.
- A traffic study was prepared by the Traffic Group Inc., on Jan. 27, 1993.
- Environmental analysis was submitted with previously approved Preliminary Equivalent Sketch Plan SP-93-12.
- Limit of submission includes lots M-2 thru M-57
- Garages cannot be made into living space because the minimum required includes each garage.
- In accordance with the Criteria of FDP Phase 181-A-III, PART II, the front setbacks for lots M-11 through M-17 & M-30 through M-41 have been reduced from 30 feet to 20 feet. This setback reduction is permissible because the units on these lots have integral garages.
- For driveway entrance details refer to Hb. Co. Design Manual Volume II "Std. Details R.6.05".

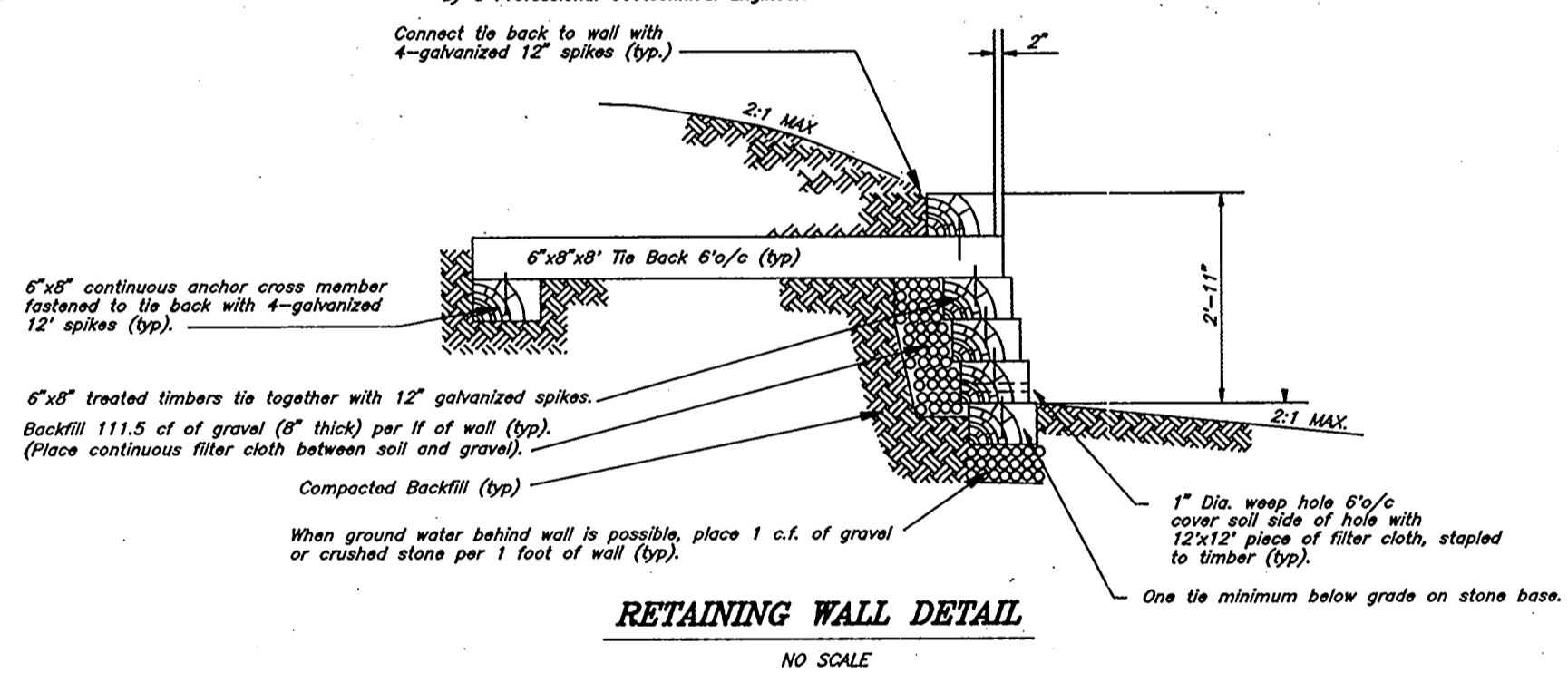
STREET ADDRESS CHART

Lot No.	STREET ADDRESS
M-2	12217 BONNET BRIM COURSE
M-3	12215 BONNET BRIM COURSE
M-4	12213 BONNET BRIM COURSE
M-5	12211 BONNET BRIM COURSE
M-6	12209 BONNET BRIM COURSE
M-7	12207 BONNET BRIM COURSE
M-8	12205 BONNET BRIM COURSE
M-9	12203 BONNET BRIM COURSE
M-10	12201 BONNET BRIM COURSE
M-11	12200 SLEEPY HORSE LANE
M-12	12203 SLEEPY HORSE LANE
M-13	12205 SLEEPY HORSE LANE
M-14	12207 SLEEPY HORSE LANE
M-15	12209 SLEEPY HORSE LANE
M-16	12211 SLEEPY HORSE LANE
M-17	12213 SLEEPY HORSE LANE
M-18	12215 SLEEPY HORSE LANE
M-19	12217 SLEEPY HORSE LANE
M-20	12219 SLEEPY HORSE LANE
M-21	12221 SLEEPY HORSE LANE
M-22	12223 SLEEPY HORSE LANE
M-23	12225 SLEEPY HORSE LANE
M-24	12227 SLEEPY HORSE LANE
M-25	12229 SLEEPY HORSE LANE
M-26	12231 SLEEPY HORSE LANE
M-27	12233 SLEEPY HORSE LANE
M-28	12235 SLEEPY HORSE LANE
M-29	12237 SLEEPY HORSE LANE
M-30	12222 SLEEPY HORSE LANE
M-31	12220 SLEEPY HORSE LANE
M-32	12218 SLEEPY HORSE LANE
M-33	12216 SLEEPY HORSE LANE
M-34	12214 SLEEPY HORSE LANE
M-35	12212 SLEEPY HORSE LANE
M-36	12210 SLEEPY HORSE LANE
M-37	12208 SLEEPY HORSE LANE
M-38	12206 SLEEPY HORSE LANE
M-39	12204 SLEEPY HORSE LANE
M-40	12202 SLEEPY HORSE LANE
M-41	12200 SLEEPY HORSE LANE
M-42	12201 GREEN SHOOT COURT
M-43	12203 GREEN SHOOT COURT
M-44	12205 GREEN SHOOT COURT
M-45	12207 GREEN SHOOT COURT
M-46	12209 GREEN SHOOT COURT
M-47	12211 GREEN SHOOT COURT
M-48	12213 GREEN SHOOT COURT
M-49	12215 GREEN SHOOT COURT
M-50	12217 GREEN SHOOT COURT
M-51	12219 GREEN SHOOT COURT
M-52	12221 GREEN SHOOT COURT
M-53	12223 GREEN SHOOT COURT
M-54	12225 GREEN SHOOT COURT
M-55	12227 GREEN SHOOT COURT
M-56	12229 GREEN SHOOT COURT
M-57	12231 GREEN SHOOT COURT

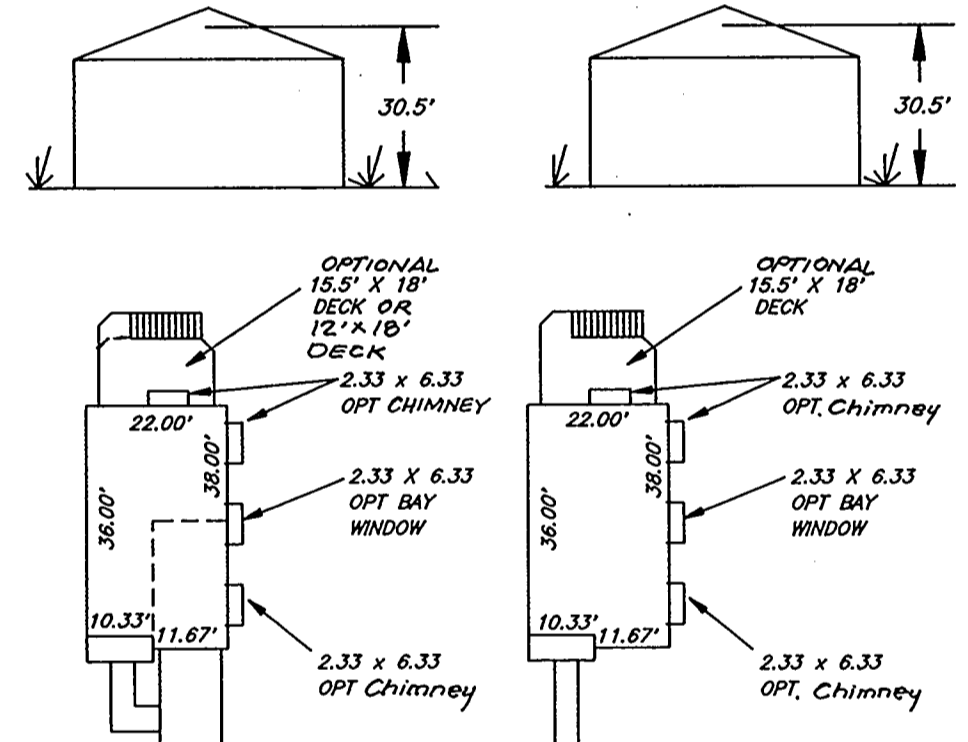
SEWER HOUSE CONNECTION TABLE

LOT NO.	INV AT P.L.	MIN. CELLAR ELEV.
M-2	416.8	420.0
M-3	416.7	419.9
M-4	416.0	419.2
M-5	415.9	419.1
M-6	419.4	422.6
M-7	419.4	422.6
M-8	420.4	423.6
M-9	420.4	423.6
M-10	420.4	423.6
M-11	424.4	427.6
M-12	423.6	426.8
M-13	422.7	425.9
M-14	421.4	424.6
M-15	420.5	423.7
M-16	419.1	422.3
M-17	418.4	421.6
M-18	412.9	416.0
M-19	412.2	415.3
M-20	411.3	414.4
M-21	410.5	413.7
M-22	410.2	413.3
M-23	409.1	412.1
M-24	408.9	411.9
M-25	408.8	412.0
M-26	408.5	411.7
M-27	408.4	411.6
M-28	408.3	411.4
M-29	408.5	411.7
M-30	410.2	413.4
M-31	411.4	414.7
M-32	413.5	416.9
M-33	415.4	418.7
M-34	416.1	419.4
M-35	416.9	420.1
M-36	418.9	422.2
M-37	419.6	422.8
M-38	420.9	424.2
M-39	422.0	425.3
M-40	422.5	425.9
M-41	424.1	427.4
M-42	421.8	424.9
M-43	421.6	424.7
M-44	418.5	421.6
M-45	418.3	421.4
M-46	418.2	421.3
M-47	418.4	421.6
M-48	418.9	422.0
M-49	419.1	422.3
M-50	418.4	421.4
M-51	416.6	419.8
M-52	415.4	418.6
M-53	414.1	417.3
M-54	412.8	416.0
M-55	411.2	414.4
M-56	410.0	413.2
M-57	408.6	411.8

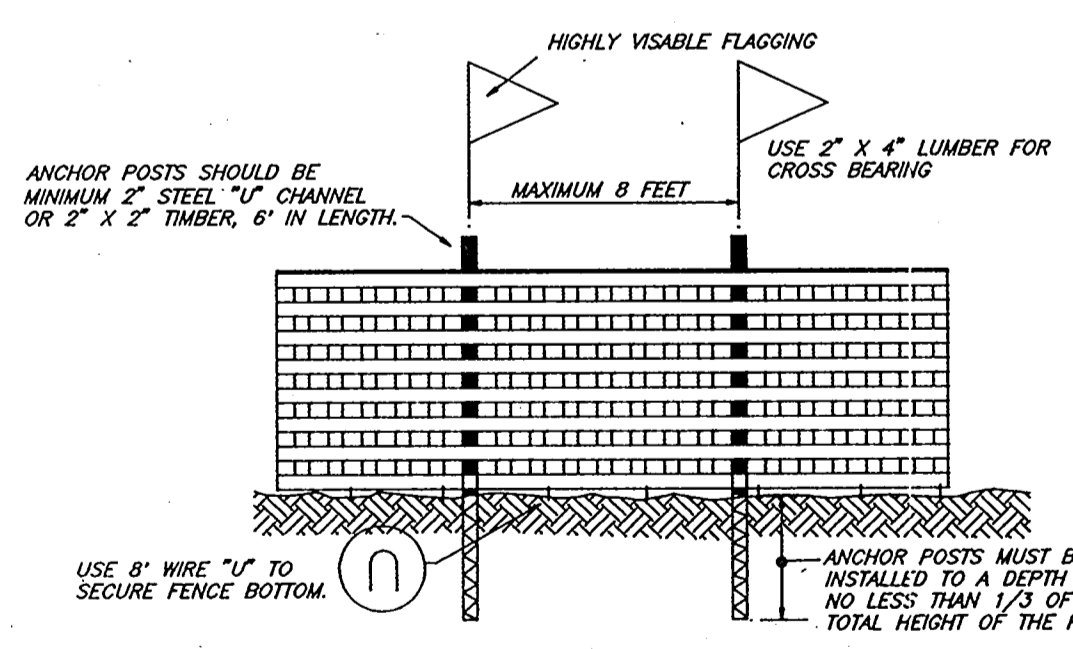
NOTE:
 1. Timbers shall be either:
 a) CCA treated railroad ties.
 b) CCA treated landscaping timbers (40 lb/cf retention)
 2. Hardware shall be hot dipped galvanized.
 3. Weepholes with or without gravel drains are minimum measure for groundwater, a drain system should be designed and utilized.
 4. Design shall be verified for site specific soil condition by a Professional Geotechnical Engineer.



RETAINING WALL DETAIL
NO SCALE



TYPICAL HOUSES
SCALE: 1" = 30'



TYPICAL TREE PROTECTION FENCE DETAIL
NO SCALE

BENCH MARKS

B M NO. 1-A ELEV. = 406.30
 Square Cut in top of inlet at rear of Cul-De-Sac, Green Meadow Drive.

B M NO. 1-B ELEV. = 420.94
 Square Cut in top of inlet slab at N.W. intersection of Little Patuxent Parkway and Green Meadow Drive. (SEE VICINITY MAP)

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

Joyce M. Bond 8/31/93
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING AND ZONING

Gregory K. Smith 9/14/93
 DIRECTOR DATE

Gina Trimmery 9/13/93
 CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

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

James J. ... 8/21/93
 DIRECTOR DATE

Charles J. ... 8/27/93
 CHIEF BUREAU OF ENGINEERING DATE

APPROVED
 PLANNING BOARD
 of HOWARD COUNTY

DATE: 7-8-93

OWNER:
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044

SUBMISSION NAME		SECTION/AREA	LOTS/PARCELS
COLUMBIA VILLAGE OF HICKORY RIDGE		3/4	M-2 THRU M-57
FLAT NO.	BLOCK NO.	ZONE	TAX MAP NO.
10937	4	SFA N.T.	35
WATER CODE		ELECTION DIST.	CENSUS TRACT
I-15		5TH	6056
SEWER CODE		65930000	

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

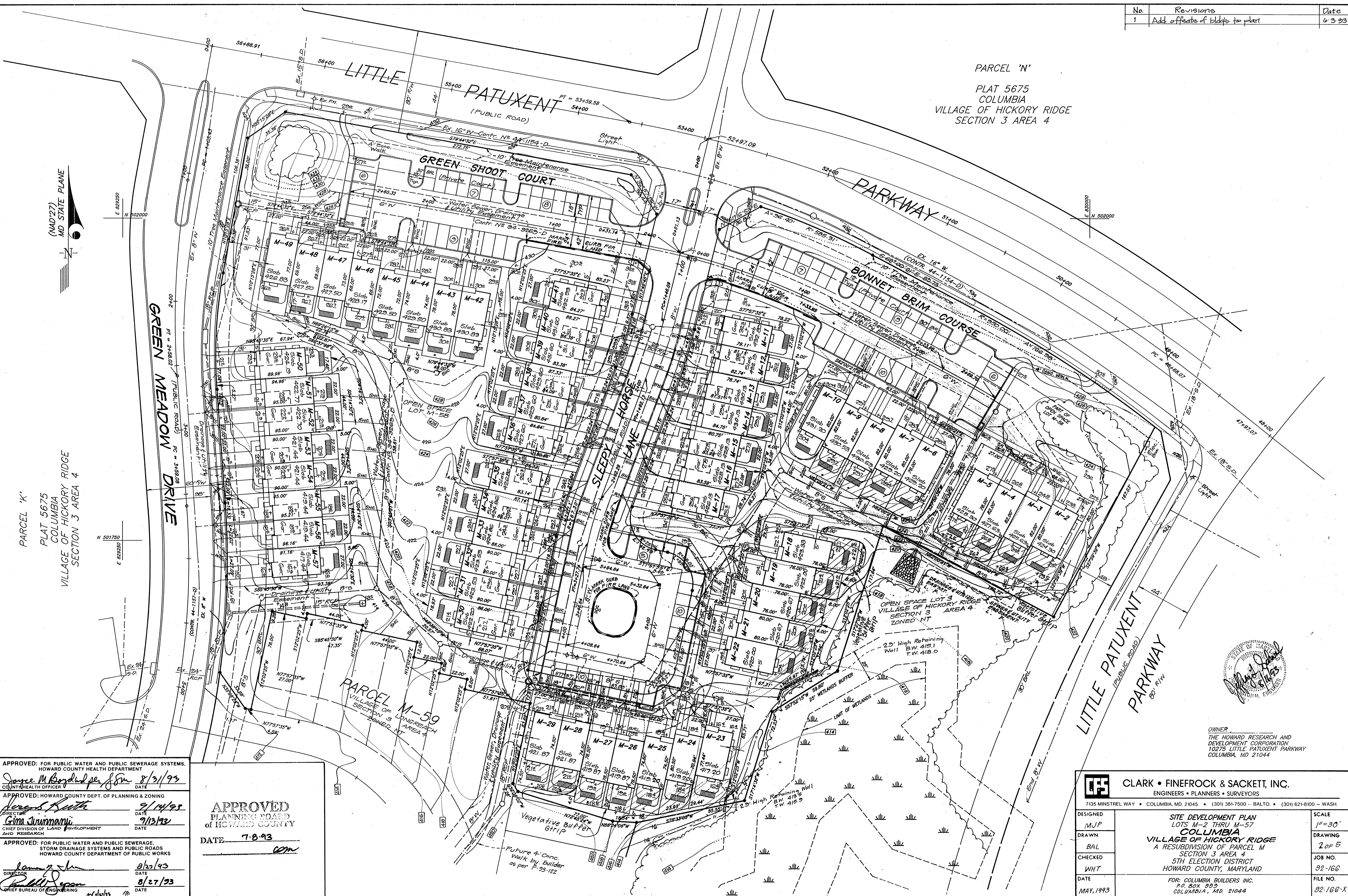
7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 • BALTO. • (301) 621-8100 • WASH.

DESIGNED	MJP	SCALE	As Shown
DRAWN	KIWM	DRAWING	10F5
CHECKED	WHT	JOB NO.	92-166
DATE	MAY, 1993	FILE NO.	92-166-X

SITE DEVELOPMENT PLAN
 LOTS M-2 THRU M-57
COLUMBIA VILLAGE OF HICKORY RIDGE
 A RESUBDIVISION OF PARCEL M
 SECTION 3 AREA 4
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

FOR: COLUMBIA BUILDERS INC.
 P.O. BOX 999
 COLUMBIA, MD. 21044

No.	Revisions	Date
1	Add effects of bltts to plan	6-3-93



PARCEL 'K'
 PLAT 5675
 COLUMBIA
 VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 4

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS,
 HOWARD COUNTY HEALTH DEPARTMENT
 Director: *James M. Boyd* per *John* 8/31/93
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Director: *David Smith* 9/14/93
Gina Summari 9/13/93
 CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

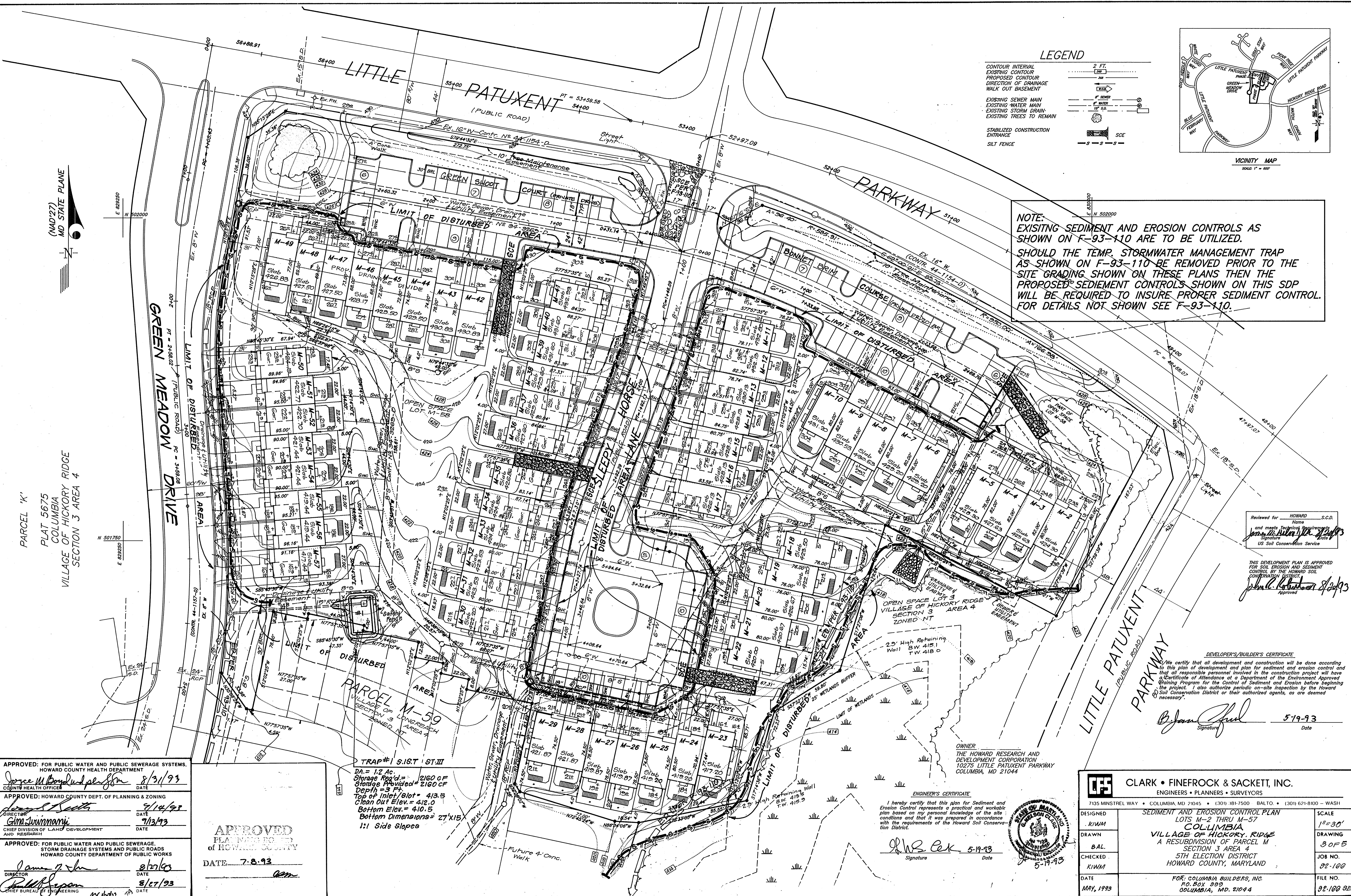
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE,
 STORM DRAINAGE SYSTEMS AND PUBLIC ROADS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Director: *James M. Boyd* 8/27/93
John 8/27/93
 CHIEF BUREAU OF ENGINEERING DATE

APPROVED
 PLANNING BOARD
 OF HOWARD COUNTY
 DATE 7-8-93



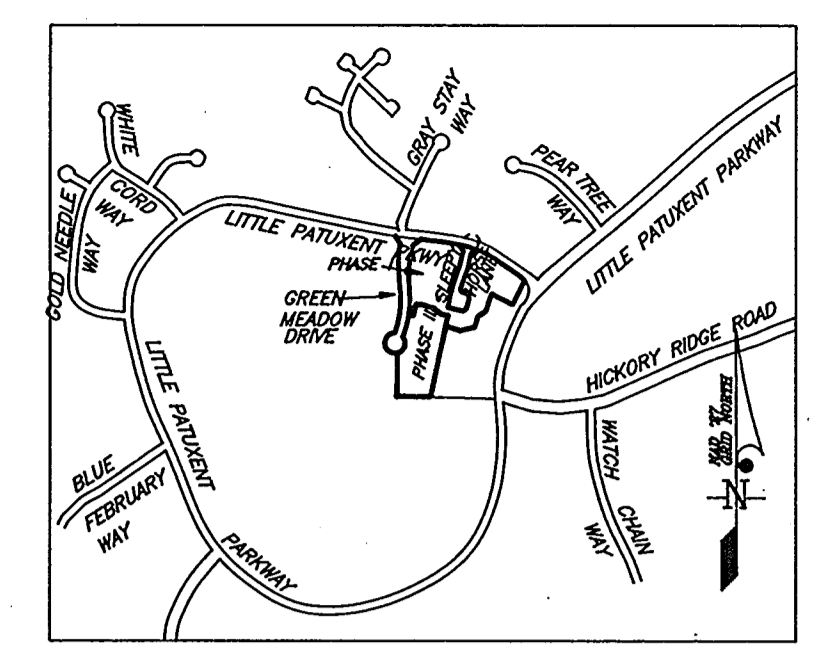
OWNER
 THE HOWARD RESEARCH AND
 DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044

CLARK • FINEFROCK & SACKETT, INC. ENGINEERS • PLANNERS • SURVEYORS 7135 MINSTREL WAY • COLUMBIA, MD 21045 • (301) 381-7500 - BALTO. • (301) 621-8100 - WASH.		SCALE 1"=30' DRAWING 2 OF 5 JOB NO. 92-166 FILE NO. 92.166-X
DESIGNED MJP DRAWN BAL CHECKED WHT DATE MAY, 1993	SITE DEVELOPMENT PLAN LOTS M-2 THRU M-57 COLUMBIA VILLAGE OF HICKORY RIDGE A RESUBDIVISION OF PARCEL M SECTION 3 AREA 4 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: COLUMBIA BUILDERS INC. P.O. BOX 399 COLUMBIA, MD 21044	



LEGEND

- CONTOUR INTERVAL 2 FT.
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DIRECTION OF DRAINAGE
- WALK OUT BASEMENT
- EXISTING SEWER MAIN
- EXISTING WATER MAIN
- EXISTING STORM DRAIN
- EXISTING TREES TO REMAIN
- STABILIZED CONSTRUCTION ENTRANCE
- SILT FENCE



NOTE:
 EXISTING SEDIMENT AND EROSION CONTROLS AS SHOWN ON F-93-110 ARE TO BE UTILIZED.
 SHOULD THE TEMP. STORMWATER MANAGEMENT TRAP AS SHOWN ON F-93-110 BE REMOVED PRIOR TO THE SITE GRADING SHOWN ON THESE PLANS THEN THE PROPOSED SEDIMENT CONTROLS SHOWN ON THIS SDP WILL BE REQUIRED TO INSURE PROPER SEDIMENT CONTROL. FOR DETAILS NOT SHOWN SEE F-93-110.

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

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

DEVELOPER'S/BUILDER'S CERTIFICATE
 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
 5-19-93
 Date

OWNER
 THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MD 21044

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
 5-19-93
 Date



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 County Health Officer
 Date 8/31/93

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Director
 Date 9/14/93

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Director
 Date 8/27/93

APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE 7-8-93

TRAP#1 S.I.S.T. ST.III
 DA = 1.2 Ac.
 Storage Req'd = 2160 CF
 Storage Provided = 2160 CF
 Depth = 3 FT.
 Top of Inlet/Slot = 413.5
 Clean Out Elev. = 412.0
 Bottom Elev. = 410.5
 Bottom Dimensions = 27'x15'
 1:1 Side Slopes

SEDIMENT AND EROSION CONTROL NOTES

- 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. (B13-2437).
 - 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. 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 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.
 - 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:	5.75Ac
Area Disturbed:	4.80Ac
Area to be roofed or paved:	1.50Ac
Area to be vegetatively stabilized:	2.70Ac
Total Cut:	460 CY
Total Fill:	5000 CY
Offsite Waste/Borrow Area 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 DPW 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.
 - If houses are to be constructed on an "as sold" basis, at random, Single Family Sediment Control, as shown below shall be implemented.
 - The total amount of silt fence= 2220 LF
- * 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.

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), before seeding, and 500 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 (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. For the period May 1 thru August 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 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 unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using on flat areas, 100 to 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt for anchoring. 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 reseeding.

TEMPORARY SEEDING NOTES

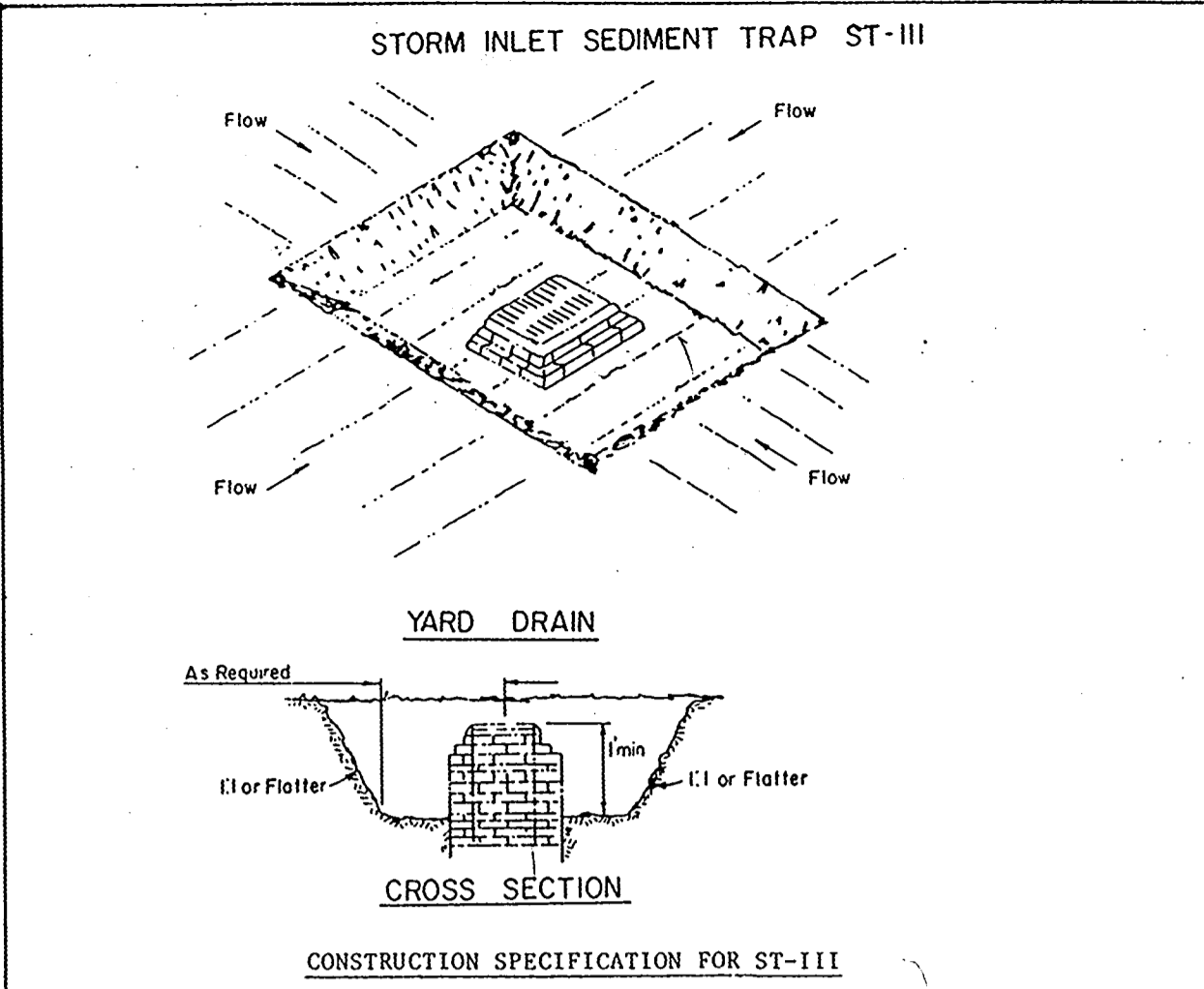
SEEDBED PREPARATION: Loosen upper three inches of soil by raking, discing, or other acceptable means before seeding, if not previously loosened.

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

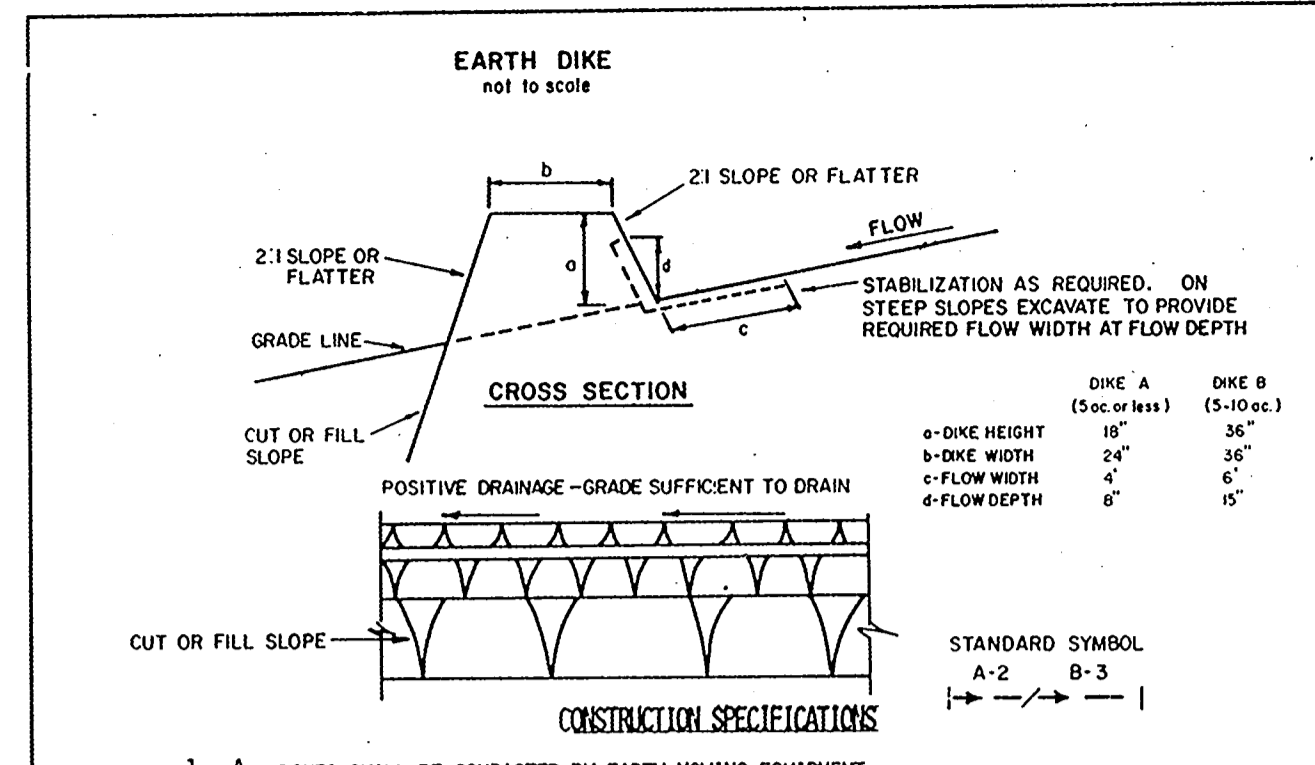
SEEDING: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, 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 on flat areas, 100 to 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt for anchoring. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

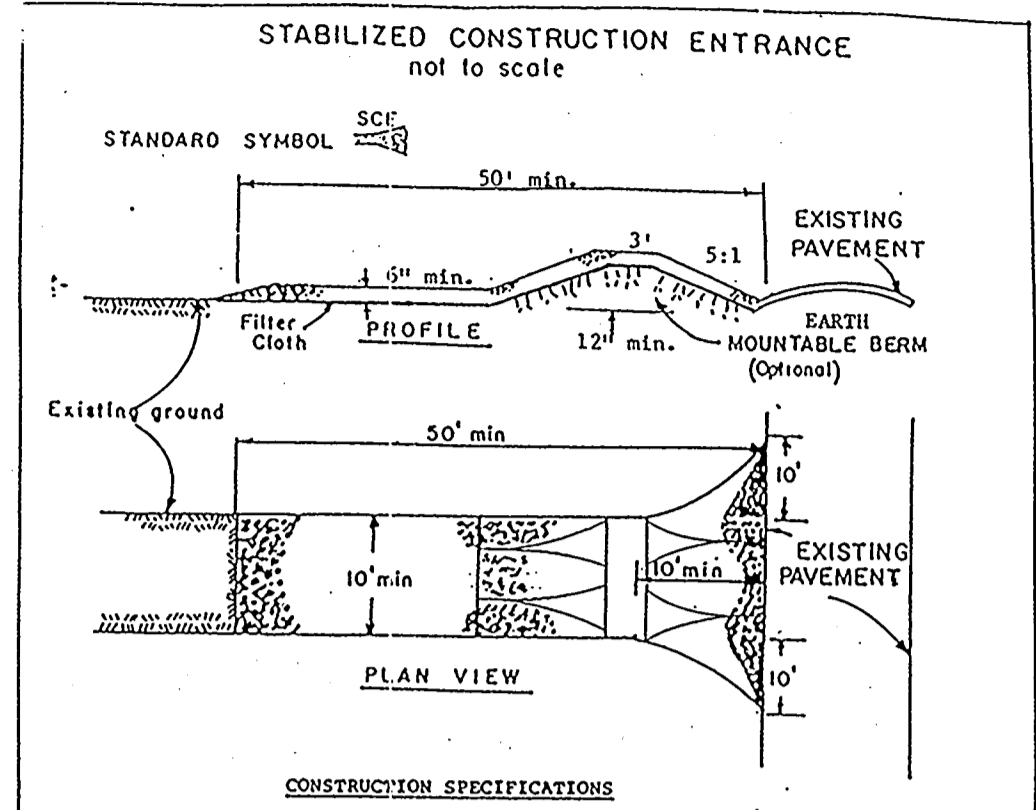
REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



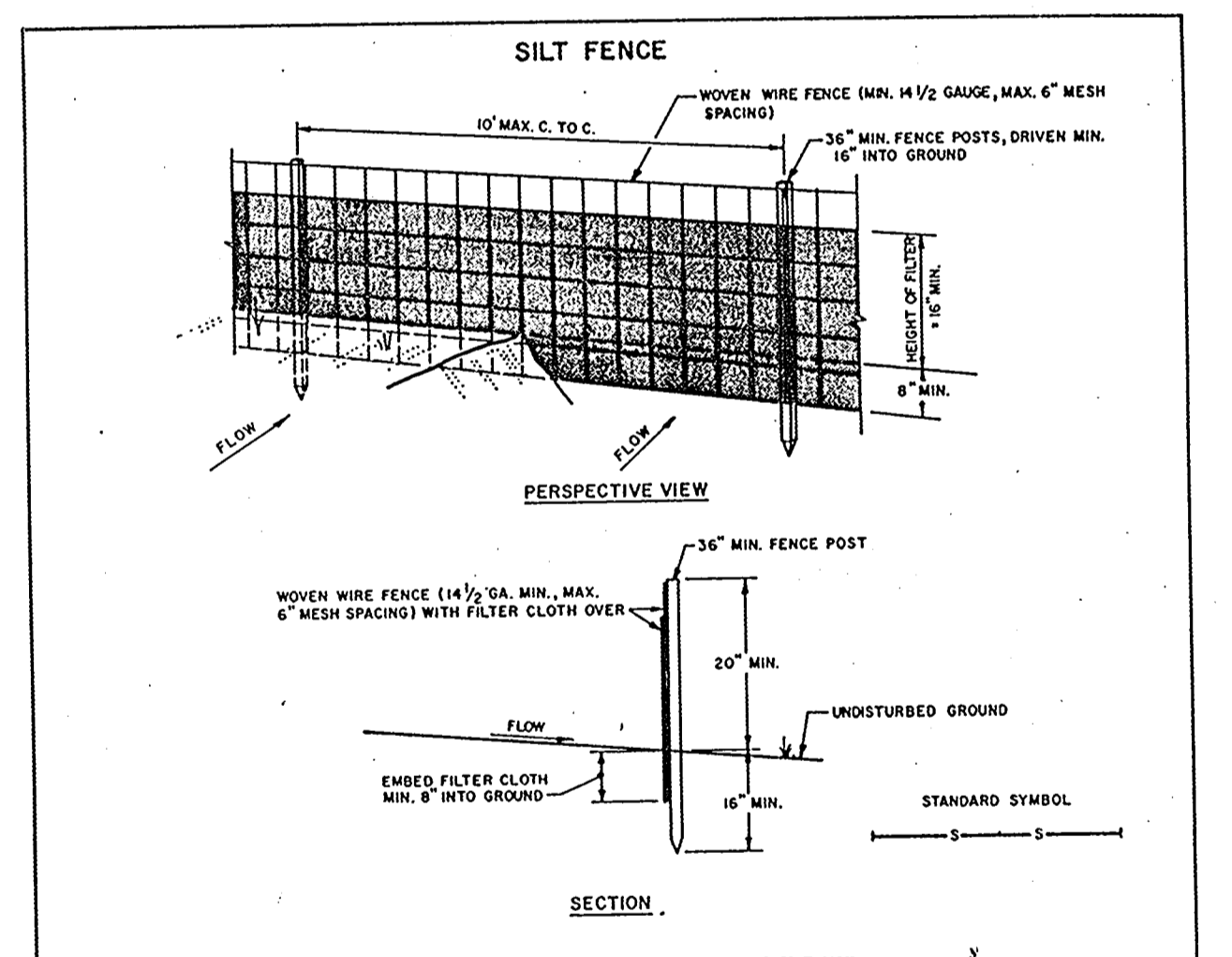
- Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
 - The volume of sediment storage shall be 1800 cubic feet per acre of contributory drainage.
 - The structure shall be inspected after each rain and repairs made as needed.
 - Construction operations shall be carried out in such a manner that erosion and water pollution shall be minimized.
 - The sediment trap shall be removed and the area stabilized when the constructed drainage area has been properly stabilized.
 - All cut slopes shall be 1:1 or flatter.
- Maximum Drainage Area: 3 Acres
- | | | |
|---------------------------------------------------------------------------------------|------------------------------|----------------------------|
| U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND | STORM INLET
SEDIMENT TRAP | STANDARD DRAWING
ST-III |
|---------------------------------------------------------------------------------------|------------------------------|----------------------------|



- ALL DIKES SHALL BE COMPACTED BY EARTH-MOVING EQUIPMENT.
 - ALL DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
 - TOP WIDTH MAY BE WIDER AND SIDE SLOPES MAY BE FLATTER IF DESIRED TO FACILITATE CROSSING BY CONSTRUCTION TRAFFIC.
 - FIELD LOCATION SHOULD BE ADJUSTED AS NEEDED TO UTILIZE A STABILIZED SAFE OUTLET.
 - 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.
 - 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 THE CHART BELOW.
- | TYPE OF TREATMENT | CHANNEL GRADE | DIKE A | DIKE B |
|-------------------|---------------|-------------------------|----------------------------------------------|
| 1 | 5-3.0% | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2 | 3.1-5.0% | SEED AND STRAW MULCH | SEED USING JUTE, OR EXCELISOR; SOD; 2" STONE |
| 3 | 5.1-8.0% | SEED WITH JUTE, OR SOD; | LINED RIP-RAP 4-8" |
| 4 | 8.1-20% | LINED RIP-RAP 4-8" | ENGINEERING DESIGN |
- A. STONE TO BE 2 INCH STONE, OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3 INCHES IN THICKNESS AND BE PRESSED INTO THE SOIL WITH CONSTRUCTION EQUIPMENT.
 B. RIP-RAP TO BE 1/2 INCHES IN A LAYER AT LEAST 3 INCHES THICKNESS AND PRESSED INTO THE SOIL.
 C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.
- | | | |
|---------------------------------------------------------------------------------------|------------|--------------------------|
| U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND | EARTH DIKE | STANDARD DRAWING
ED-1 |
|---------------------------------------------------------------------------------------|------------|--------------------------|



- 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) foot minimum, but not less than the full width at points where ingress or egress occurs.
 - 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.
 - 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.
 - 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 cleaning of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 - 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.
 - Periodic inspection and needed maintenance shall be provided after each rain.
- | | | |
|-------------------|----------------------------------|--------------------------|
| SOIL CONSERVATION | STABILIZED CONSTRUCTION ENTRANCE | Standard Drawing
SC-1 |
|-------------------|----------------------------------|--------------------------|



- 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 TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 - When two sections of filter cloth adjoin each other they shall be overlapped by six inches and folded.
 - MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
- POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
 FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING
 FILTER CLOTH: FILTER X, MIRAFL 100, STABILINKA 1000 OR APPROVED EQUAL.
 PREFABRICATED UNIT: GEORFAB, ENVIROFENCE, OR APPROVED EQUAL.
- | | | |
|---------------------------------------------------------------------------------------|------------|--------------------------|
| U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND | SILT FENCE | STANDARD DRAWING
SF-1 |
|---------------------------------------------------------------------------------------|------------|--------------------------|

* NOTE:
 EXISTING SEDIMENT AND EROSION CONTROLS AS SHOWN ON F-93-110 ARE TO BE UTILIZED. SHOULD THE TEMP. STORMWATER MANAGEMENT TRAP AS SHOWN ON F-93-110 BE REMOVED PRIOR TO THE SITE GRADING SHOWN ON THESE PLANS THEN THE PROPOSED SEDIMENT CONTROLS SHOWN ON THIS SDP WILL BE REQUIRED TO INSURE PROPER SEDIMENT CONTROL. FOR DETAILS NOT SHOWN SEE F-93-110.

* CONSTRUCTION SEQUENCE:

	NO. OF DAYS
A. Obtain grading permit	7
B. Install tree protection fence.	14
C. Install sediment and erosion control devices and stabilize.	14
D. Excavate for foundations, rough grade and temporarily stabilize.	90
E. Construct structures, sidewalks and driveways.	90
F. Final grade and stabilize in accordance with Stds. and Specs.	14
G. Upon approval of the sediment control inspector, remove sediment and erosion control devices and stabilize.	7

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT
 Director: *James M. Boydland* per *John* 8/31/93
 COUNTY HEALTH OFFICER

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 Director: *Joseph Smith* 9/14/93
 DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Director: *Gina Juvimmarvi* 9/13/93
 CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE, STORM DRAINAGE SYSTEMS AND PUBLIC ROADS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Director: *James M. Boydland* 8/27/93
 DATE

CHIEF BUREAU OF ENGINEERING

APPROVED PLANNING BOARD OF HOWARD COUNTY
 DATE 7-8-93

Reviewed for HOWARD S.C.D. Name
 and meets Technical Requirements
James M. Boydland 8/24/93
 Signature Date
 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.
James M. Boydland 8/24/93
 Approved Date

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.
Blaine 5-19-93
 Signature Date



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

DESIGNED	SEDIMENT AND EROSION CONTROL DETAILS	SCALE
KIWM	LOTS M-2 THRU M-57	As Shown
DRAWN	COLUMBIA	DRAWING
KIWM	VILLAGE OF HICKORY RIDGE	40FB
CHECKED	A RESUBDIVISION OF PARCEL M	JOB NO.
KIWM	SECTION 3 AREA A	92-166
DATE	5TH ELECTION DISTRICT	FILE NO.
MAY, 1998	HOWARD COUNTY, MARYLAND	92-100-8E

FOR: COLUMBIA BUILDERS INC.
 P.O. BOX 999
 COLUMBIA, MD. 21044

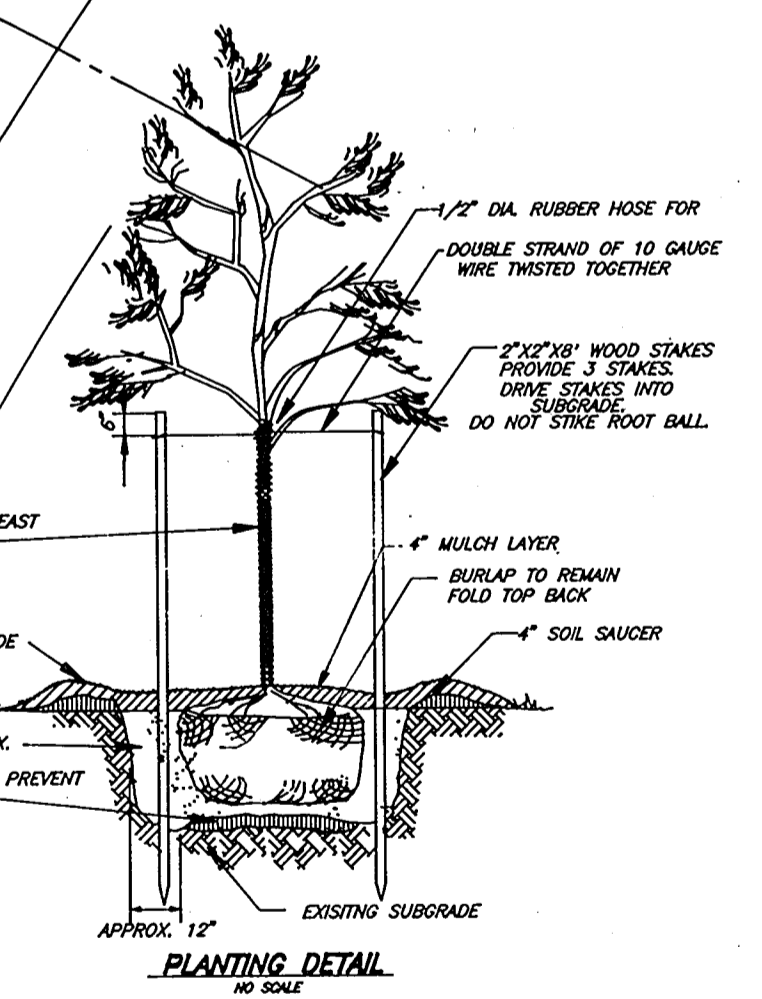


PARCEL 'K'
 PLAT 5675
 COLUMBIA
 VILLAGE OF HICKORY RIDGE
 SECTION 3 AREA 4

PLANT SCHEDULE				
KEY	PLANT NAME	SIZE	QNTY.	REMARKS
Shade Trees				
⊙	Acer rubrum "Red Sunset" Red Sunset Maple	2 1/2" x 3" Cal. 12-14' Ht.	11	B & B Heavy Heads
⊙	Quercus Rubra Red Oak	2 1/2" x 3" Cal. 12-14' Ht.	22	B & B Heavy Heads
⊙	Zelkova serrata "Green Vase" Green Vase Zelkova	2 1/2" x 3" Cal. 12-14' Ht.	24	B & B Heavy Heads
FLOWERING/EVERGREEN TREES				
⊙	Cornus florida rubra Pink Flowering Dogwood	2"-2 1/2" Cal. 8"-10" Ht.	9	B & B Heavy Heads
⊙	Magnolia soulangeana Saucer Magnolia	2"-2 1/2" Cal. 8"-10" Ht.	12	B & B Heavy Heads
⊙	Malus x "American Beauty" American Beauty Crab	2"-2 1/2" Cal. 8"-10" Ht.	23	B & B Heavy Heads
⊙	Prunus serrulata "Kwanzan" Kwanzan Cherry	2"-2 1/2" Cal. 8"-10" Ht.	48	B & B Heavy Heads
⊙	Cupressocyparis Leylandii Leyland Cypress	6" Ht.	7	B & B Heavy Heads
⊙	Pinus strobus Eastern White Pine	6"-8" Ht.	12	B & B Heavy Heads
⊙	Picea abies Norway Spruce	6"-8" Ht.	49	B & B Heavy Heads
⊙	Pinus thunbergii Japanese Black Pine	8"-10" Ht.	10	B & B Heavy Heads
⊙	Indicates existing street trees to remain			
⊙	Indicates proposed trees as street trees per F-93-119			

- NOTES
- All planting shall be done in accordance with Columbia, H.R.D. planting specifications.
 - Contractor shall verify location of all underground utilities prior to digging.
 - Final location of plant material may vary per final field conditions.
 - This plan supersedes plantings shown on F-93-110.
 - This plan has been prepared in accordance with the New Town Alternative Compliance provisions of section 10-124 of the Ho. Co. Code and the Landscape Manual.

Financial surety for the required 94 landscape trees (in the amount of \$9400.00) is part of the builder's grading permit application.



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 Joyce M. Bonded per [Signature] 8/31/93
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPT. OF PLANNING & ZONING
 [Signature] 9/14/93
 DIRECTOR DATE

Gina Trummari 7/13/93
 CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

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

[Signature] 8/27/93
 DIRECTOR DATE

[Signature] 8/27/93
 CHIEF BUREAU OF ENGINEERING DATE

APPROVED
 PLANNING BOARD
 of HOWARD COUNTY
 DATE 7-8-93

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

DESIGNED	MJP	LANDSCAPE PLAN AND DETAILS LOTS M-2 THRU M-57 COLUMBIA VILLAGE OF HICKORY RIDGE A RESUBDIVISION OF PARCEL M SECTION 3 AREA 4 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND FOR: COLUMBIA BUILDERS INC. P.O. BOX 999 COLUMBIA, MD 21044	SCALE 1" = 30'
DRAWN	MJP		DRAWING 5 OF 5
CHECKED	WHT		JOB NO. 92-1066
DATE	5-20-93		FILE NO. 92-1066 LS

