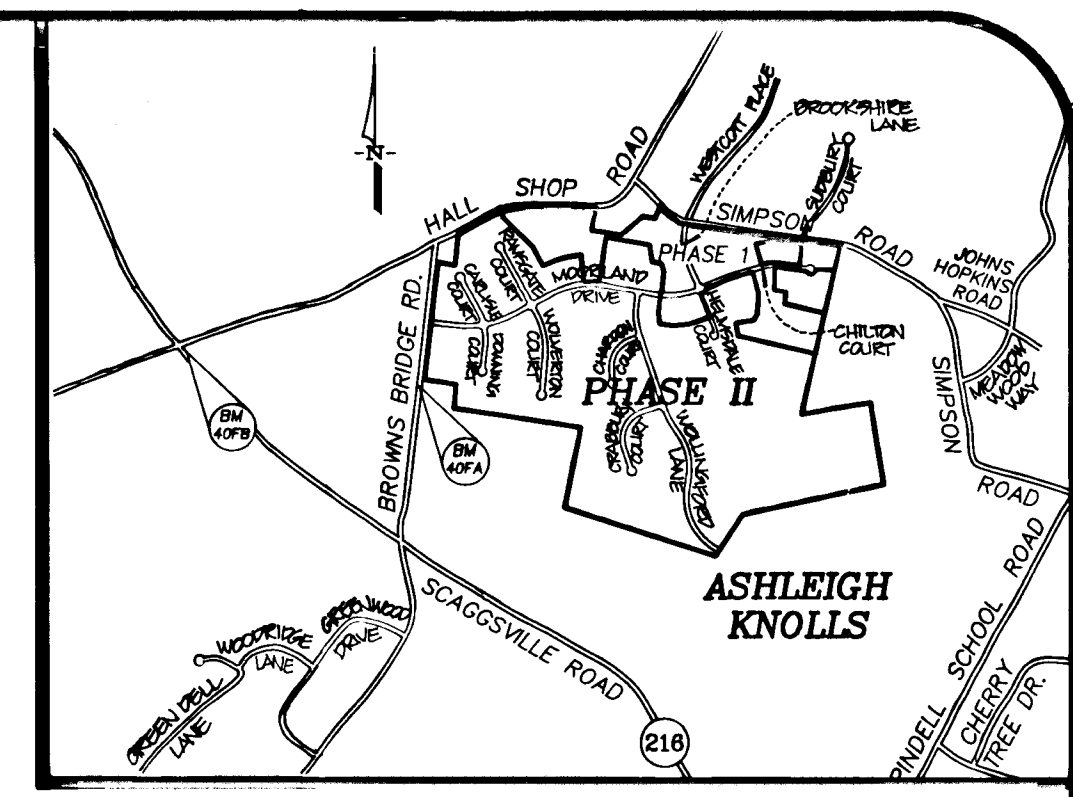


ROADS, STORM DRAIN & GRADING ASHLEIGH KNOLLS PHASE 2

ELECTION DISTRICT NO. 5 HOWARD COUNTY, MARYLAND



Vicinity Map
Scale: 1" = 2000'

date	1/10/94
project	89027-06
illustration	engineering
scale	TIP
revision	LUC
description	approval
revisions	JBM

date	1/14/94
project	89027-06
illustration	engineering
scale	TIP
revision	LUC
description	approval
revisions	JBM

ASBUILT
 PHASE 2
ASHLEIGH KNOLLS
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT NO. 5
 COVER SHEET

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (410) 461-0078 D.C. Metro: (301) 621-5768 Fax: (410) 750-6340

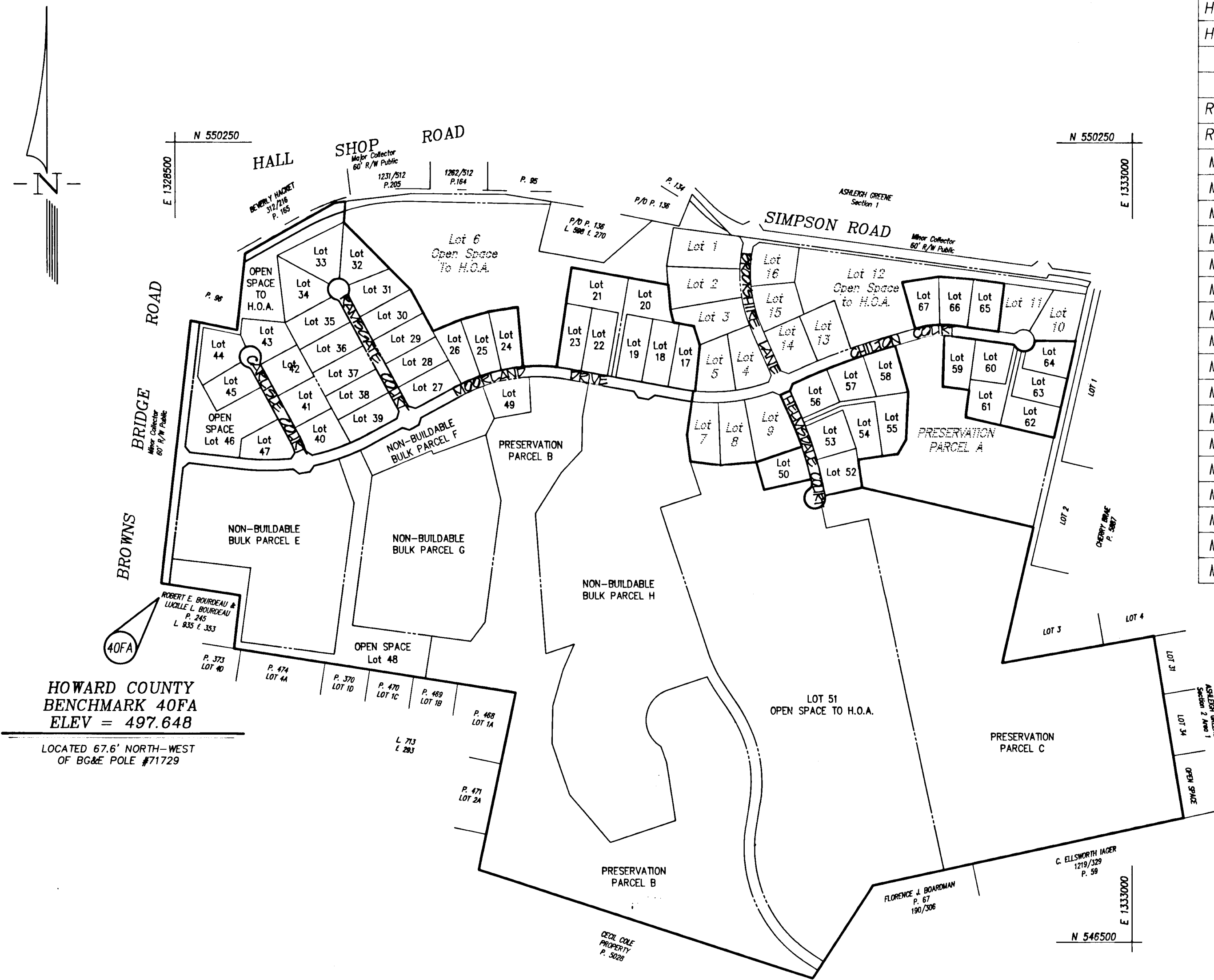
SHEET INDEX

1. COVER SHEET
2. MOORLAND DRIVE : PLAN & PROFILE
3. MOORLAND DRIVE : PLAN & PROFILE
4. CARLISLE COURT : PLAN & PROFILE
5. RAMSGATE COURT : PLAN & PROFILE
6. HELMSDALE COURT : PLAN & PROFILE
7. GRADING & SEDIMENT CONTROL PLAN
8. GRADING & SEDIMENT CONTROL PLAN
9. GRADING & SEDIMENT CONTROL PLAN
10. GRADING & SEDIMENT CONTROL PLAN
11. STORM DRAIN PROFILES
12. STORM DRAIN PROFILES & DETAILS
13. DRAINAGE AREA MAP
14. SEDIMENT CONTROL NOTES & DETAILS
15. SEDIMENT CONTROL DETAILS

SEWER MANHOLE / RIGHT-OF-WAY INFORMATION			
Helmsdale Ct.	3+62	12'R	Sewer Manhole 493.67
Helmsdale Ct.	3+58	11'R	Sewer Valve 493.69
Helmsdale Ct.	2+04	26'L	Sewer Valve 496.41
Helmsdale Ct.	0+51	15.5'L	Sewer Manhole 501.19
Helmsdale Ct.	0+52	12'R	Sewer Valve 501.07
Helmsdale Ct.	0+52	19.5'L	Sewer Valve 501.43
Helmsdale Ct.	0+58	15.5'R	Sewer Valve 501.99
Carlisle Ct.	3+00	11'R	Sewer Manhole 494.80
Carlisle Ct.	5+57	12'R	Sewer Manhole 490.50
Ramsgate Ct.	3+48	13'R	Sewer Manhole 499.40
Ramsgate Ct.	6+88	12'R	Sewer Manhole 493.40
Moorland Dr.	1+29	12'R	Sewer Manhole 482.20
Moorland Dr.	6+00	7.5'R	Sewer Manhole 490.82
Moorland Dr.	6+03.50	9'R	Sewer Manhole 490.96
Moorland Dr.	6+04.50	3'R	Sewer Valve 491.02
Moorland Dr.	6+04.50	13'R	Sewer Valve 490.90
Moorland Dr.	6+10	8'R	Sewer Manhole 491.06
Moorland Dr.	9+55	11'R	Sewer Manhole 497.10
Moorland Dr.	11+53	24.5'R	Sewer Manhole 494.76
Moorland Dr.	11+55	30'R	Sewer Valve 495.07
Moorland Dr.	17+45	12'R	Sewer Valve 488.34
Moorland Dr.	17+50	11'R	Sewer Manhole 488.48
Moorland Dr.	17+55	12'R	Sewer Valve 488.32
Moorland Dr.	23+22	16'R	Sewer Valve 495.56
Moorland Dr.	23+25	21'R	Sewer Valve 495.28
Moorland Dr.	23+26	14'R	Sewer Manhole 495.90
Moorland Dr.	23+30	15'R	Sewer Valve 495.70

GENERAL NOTES:

1. PROJECT BACKGROUND:
TAX MAP: 41 P/O PARCEL 137 AND 174
ZONING: R-R
ELECTION DISTRICT: 5th
TOTAL TRACT AREA: 382.95 AC.±
PHASE 2 AREA: 220,220 AC.±
NUMBER OF PROPOSED LOTS (PHASE 2): 40 BUILDABLE, 3 OPEN SPACE, 2 PRES. PARCEL
PRELIMINARY EQUIVALENT SKETCH PLAN APPROVED MARCH 11, 1993 SP-93-04
2. SUBJECT PROPERTY ZONED R-R PER 9/18/92 COMPREHENSIVE ZONING PLAN.
3. SEE DEPARTMENT OF PLANNING AND ZONING FILE NO'S S-88-80, P-89-025, SP-93-04, WP-93-68, WP-94-02.
4. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
5. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
6. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS.
7. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
MISS UTILITY 1-800-257-7777
BELL TELEPHONE SYSTEM 393-3649
LONG DISTANCE CABLE DIVISION 393-3553 OR 3554
BALTIMORE GAS AND ELECTRIC CO. 539-8000
HOWARD COUNTY BUREAU OF UTILITIES 313-4900
HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (24 HOUR NOTICE PRIOR TO COMMENCEMENT OF WORK) 313-1880
COLONIAL PIPELINE 795-1390
8. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
9. STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOL. IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, 1990 AMENDMENTS.
10. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, 1988 EDITION. ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
11. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM.
12. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
13. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
14. TOPO TAKE FROM AERIAL SURVEY DATED 10/22/93 PREPARED BY WINGS AERIAL MAPPING.
15. ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIGURE 11.4 VOLUME I OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
16. THE PAVEMENT DETAILS SHOWN ON THESE PLANS REFLECT THE HOWARD COUNTY MINIMUM STANDARD PAVEMENT SECTIONS AND ARE NOT BASED ON SITE SPECIFIC CONDITIONS. PRIOR TO PAVING, THE FINAL PAVING SECTIONS SHALL BE DETERMINED BY A QUALIFIED GEOTECHNICAL ENGINEER BASED ON IN-SITU TESTING OF THE FINISHED SUBGRADE. ANY PAVEMENT SECTIONS DETERMINED BY THE GEOTECHNICAL ENGINEER THAT IS LESS THAN THE HOWARD COUNTY MINIMUM STANDARD, SHALL FIRST BE APPROVED BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. THE TESTING AND GEOTECHNICAL ENGINEER SHALL BE FURNISHED BY THE OWNER.
17. FLOODPLAIN INFORMATION PREPARED BY MILDENBERG, MOCHI & ASSOCIATES, INC., NOVEMBER 1992. APPROVED MARCH 11, 1993 BY HOWARD COUNTY.
18. WETLAND INFORMATION PREPARED BY ENVIRONMENTAL SYSTEMS ANALYSIS, INC., OCTOBER 1992. APPROVED MARCH 11, 1993 BY HOWARD COUNTY.
19. TRAFFIC STUDY PREPARED BY LEE CUNNINGHAM & ASSOCIATES, INC., DECEMBER 1992. APPROVED MARCH 11, 1993 BY HOWARD COUNTY.
20. WATER AND SEWER SERVICE SHALL BE PRIVATE WELL & SEPTIC.
21. THIS PROJECT CONFORMS TO THE LATEST EDITION OF THE AMERICANS WITH DISABILITIES ACT.
22. ALL DRIVEWAYS SHALL HAVE A 12" CMP DRIVEWAY CULVERT PLACED AS SHOWN IN HOWARD COUNTY STANDARD DETAIL R6.06, UNLESS OTHERWISE INDICATED ON THE GRADING AND SEDIMENT CONTROL PLAN.
23. THE PAYMENT OF PEE-IN-LIEU OF PROVIDING STORMWATER MANAGEMENT FOR THE ROAD WAS APPROVED ON JULY 19, 1993. THE LOTS WERE DETERMINED TO BE EXEMPT FROM STORMWATER MANAGEMENT REQUIREMENT.
24. ROAD IMPROVEMENT PEE-IN-LIEU LETTER APPROVED ON FEBRUARY 25, 1994.
25. DRIVEWAY CULVERTS REFERENCED ON THIS PLAN ARE FOR INFORMATIONAL PURPOSES ONLY. DRIVEWAY CULVERTS ARE NOT TO BE CONSTRUCTED AS A PORTION OF THESE CONSTRUCTION PLANS.



LOCATION MAP
SCALE 1" = 400'

- ### LEGEND
- PLAN
- CENTERLINE ROADWAY
 - RIGHT-OF-WAY
 - PROPERTY LINE
 - EASEMENT
 - PROPOSED STORM DRAIN
 - EXISTING STORM DRAIN
 - PROPOSED SPOT ELEVATION
 - LIMIT OF WETLANDS
 - 25' WETLAND BUFFER
 - CENTERLINE STREAM
 - 75' STREAM BUFFER
 - 100 YEAR FLOODPLAIN
 - PROPOSED CONTROL
 - EXISTING CONTROL
 - EARTH DIKE
 - SILT FENCE
 - LIMIT OF DISTURBANCE
 - TEMPORARY SWALE
 - DRAINAGE DITCH
 - FENCE LINE
 - SAFETY FENCE
 - SEWER EASEMENT
- PROFILE
- EXISTING GROUND @ CENTERLINE
 - EXISTING GROUND @ LEFT PRL
 - EXISTING GROUND @ RIGHT PRL
 - PROPOSED GRADE LINE

HOWARD COUNTY
BENCHMARK 40FB
ELEV = 505.297

LOCATED 100± NORTH OF INTERSECTION
OF MD. RT. 216 AND HALL SHOP ROAD.
MONUMENT IS 10.5' TO EDGE OF PAVEMENT,
2" BELOW SURFACE.

HOWARD COUNTY
BENCHMARK 40FA
ELEV = 497.648

LOCATED 67.6' NORTH-WEST
OF BG&E POLE #71729

APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John D. ... 5/13/94
CHIEF, LAND DEVELOPMENT DIVISION

Robert M. ... 5/23/94
CHIEF, BUREAU OF HIGHWAYS

Paul ... 5/23/94
CHIEF, BUREAU OF ENGINEERING

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Anna ... 5/26/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

OWNER/DEVELOPER
WINCHESTER HOMES, INC.
6305 Ivy Lane, Suite 700
Greenbelt, Maryland 20770
(301) 474-4411
ATTN: Mr. Ralph Bice, III

ENGINEER
MILDENBERG, MOCHI & ASSOC., INC.
3300 North Ridge Road, Suite 235
Ellicott City, Maryland 21043
(410) 461-0078
ATTN: Mr. Robert Mochi, P.E.

ROAD NAME	PAVING TYPE	ROAD CLASS.	DESIGN SPEED	LIMITS
MOORLAND DRIVE	P-2	LOCAL ROAD	30 MPH	0+00 TO 25+17.22
CARLISLE COURT	P-2	CUL-DE-SAC	30 MPH	0+00 TO 5+55.23
RAMSGATE COURT	P-2	CUL-DE-SAC	30 MPH	0+00 TO 6+87.32
HELMSDALE COURT	P-2	CUL-DE-SAC	30 MPH	0+49.75 TO 5+72.17

ASBUILT 06-20-97

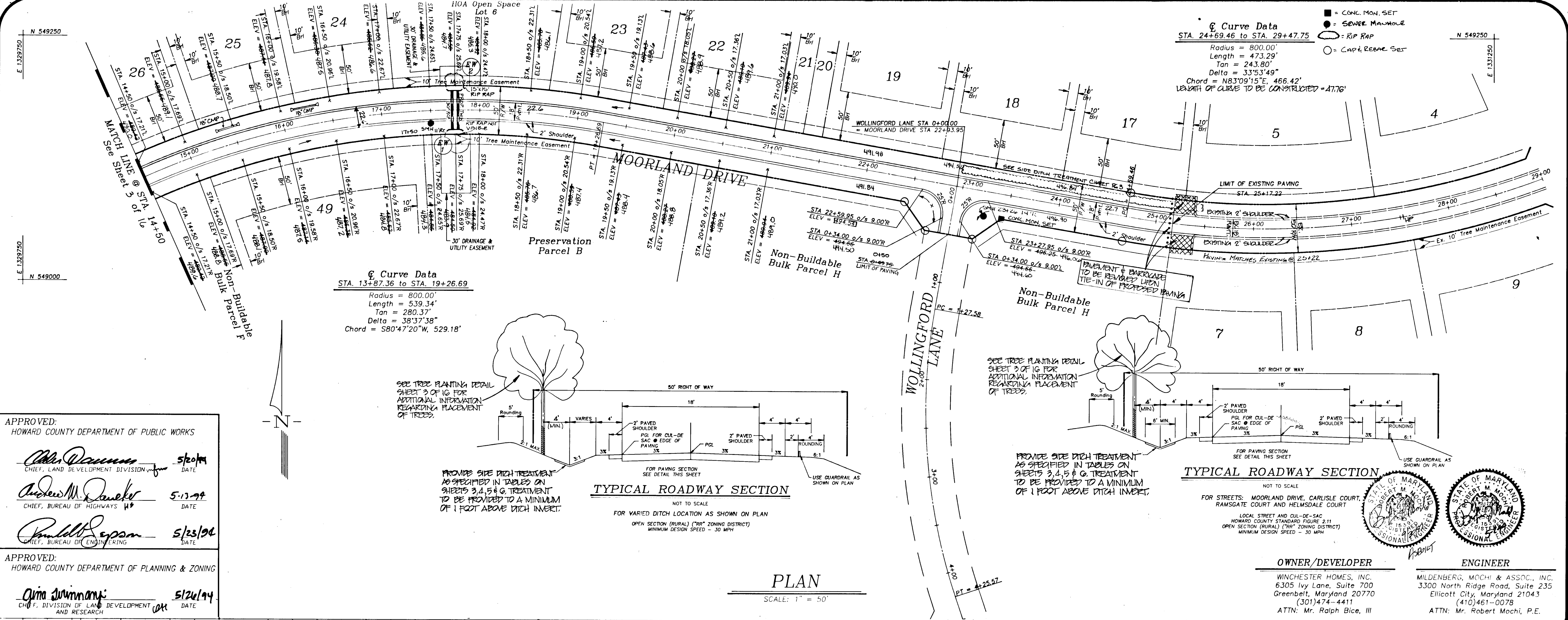
1669

Project	89027-06	Date	1/10/94
Illustration	Engineering	TYP/JBM	JBM
Scale	1" = 50'	Approval	JBM

Revised	0	Date	1/11/94
Description	REVISED - ORIGINAL ROADWAY SECTION PER DPA	Revised	JBM
Revised	0	Date	1/11/94
Description	REVISED - ORIGINAL ROADWAY SECTION PER DPA	Revised	JBM

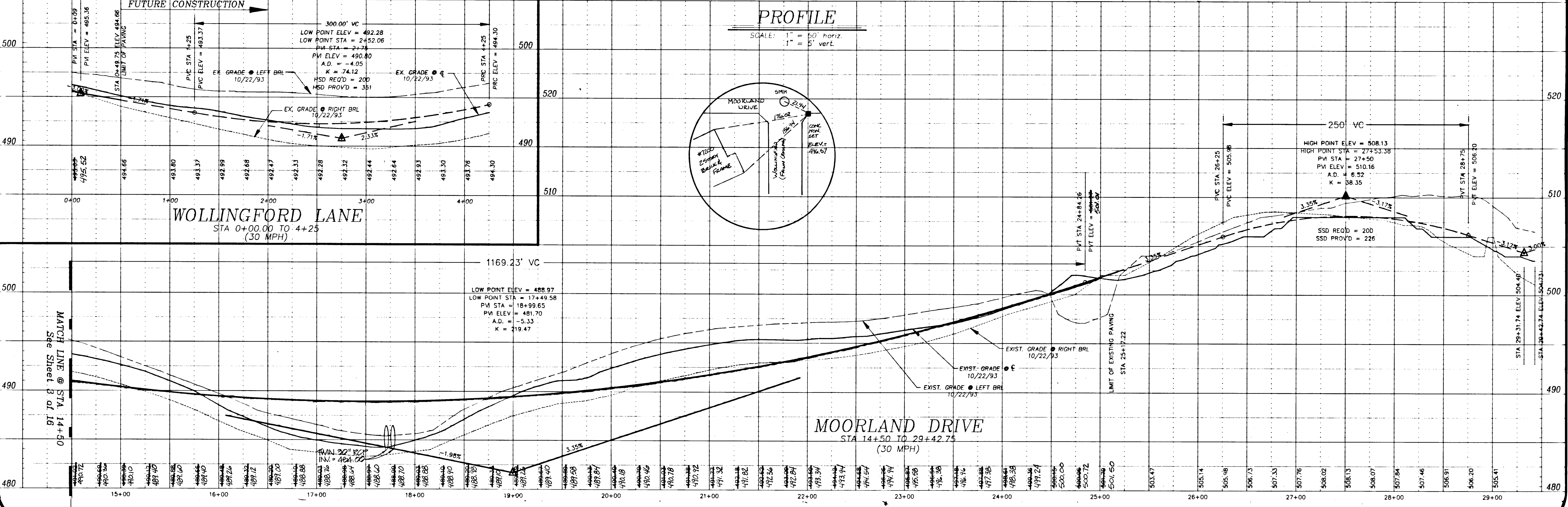
ASHLEIGH KNOLLS
 PHASE 2
 MOORLAND DRIVE: PLAN & PROFILE (14+50 TO 25+17.22)
 ELECTION DISTRICT No. 5
 HOWARD COUNTY, MARYLAND

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS - SURVEYORS - PLANNERS
 3100 North Ridge Road, Suite 700, Ellicott City, Maryland 21043-2150
 (410) 461-0018 D.C. Metro: (301) 621-5768 Fax: (410) 750-6340



APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Chief, Land Development Division
 Andrew M. Daneker
 Chief, Bureau of Highways
 Paul R. Lippman
 Chief, Bureau of Engineering

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Chief, Division of Land Development and Research



1669

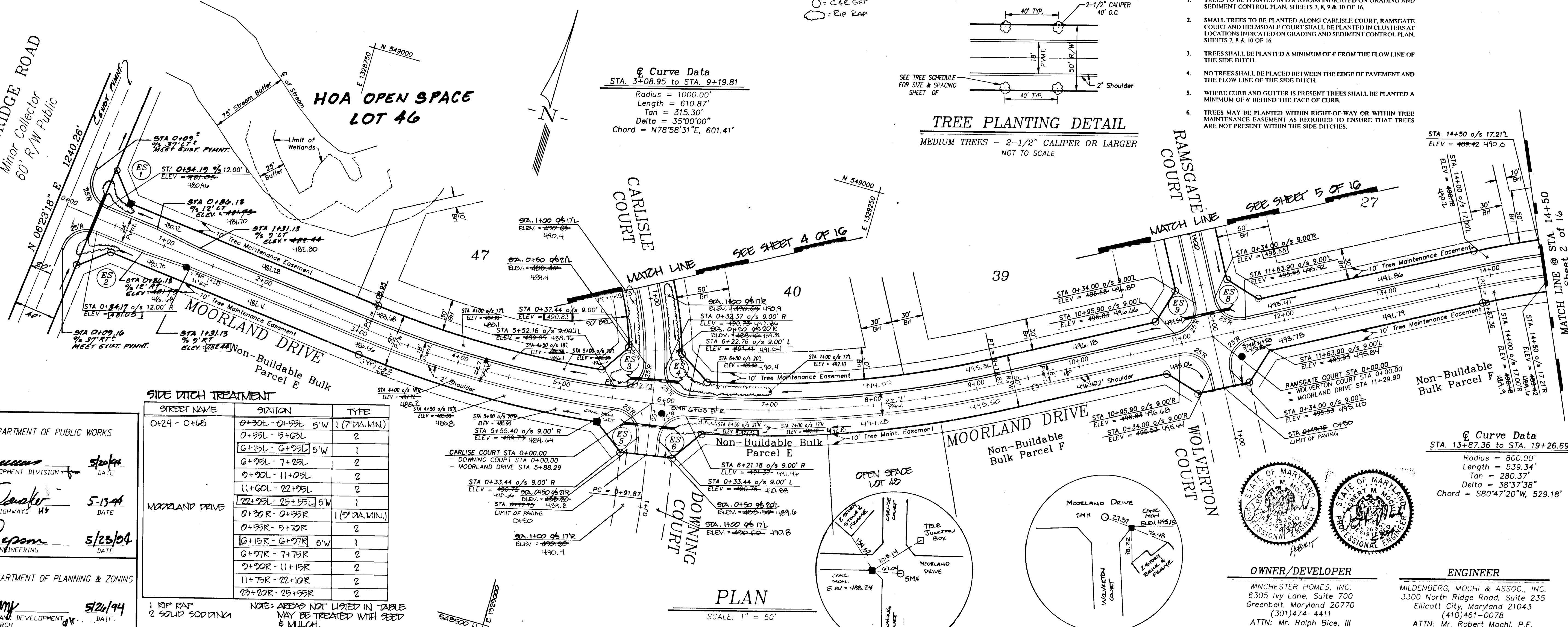
BROWNS BRIDGE ROAD
Minor Collector
60' R/W Public

HOA OPEN SPACE
LOT 46

Curve Data
STA. 3+08.95 to STA. 9+19.81
Radius = 1000.00'
Length = 610.87'
Tan = 315.30'
Delta = 35°00'00"
Chord = N78°58'31"E, 601.41'

TREE PLANTING DETAIL
MEDIUM TREES - 2-1/2" CALIPER OR LARGER
NOT TO SCALE

- TREE PLANTING NOTES:
- TREES TO BE PLANTED IN LOCATIONS INDICATED ON GRADING AND SEDIMENT CONTROL PLAN, SHEETS 7, 8 & 10 OF 16.
 - SMALL TREES TO BE PLANTED ALONG CARLISLE COURT, RAMSGATE COURT AND HEMSDALE COURT SHALL BE PLANTED IN CLUSTERS AT LOCATIONS INDICATED ON GRADING AND SEDIMENT CONTROL PLAN, SHEETS 7, 8 & 10 OF 16.
 - TREES SHALL BE PLANTED A MINIMUM OF 4' FROM THE FLOW LINE OF THE SIDE DITCH.
 - NO TREES SHALL BE PLACED BETWEEN THE EDGE OF PAVEMENT AND THE FLOW LINE OF THE SIDE DITCH.
 - WHERE CURB AND GUTTER IS PRESENT TREES SHALL BE PLANTED A MINIMUM OF 6' BEHIND THE FACE OF CURB.
 - TREES MAY BE PLANTED WITHIN RIGHT-OF-WAY OR WITHIN TREE MAINTENANCE EASEMENT AS REQUIRED TO ENSURE THAT TREES ARE NOT PRESENT WITHIN THE SIDE DITCHES.



SIDE DITCH TREATMENT

STREET NAME	STATION	TYPE
MOORLAND DRIVE	0+24 - 0+65	0+30L - 0+55L 5'W 1 (7" DIA. MIN.)
	0+55L - 0+62L	2
	0+62L - 0+95L 5'W	1
	0+95L - 7+25L	2
	7+25L - 11+05L	2
	11+05L - 22+95L	2
	22+95L - 25+95L 5'W	1
	0+30R - 0+55R	1 (7" DIA. MIN.)
	0+55R - 5+70R	2
	5+70R - 6+77R 5'W	1
	6+77R - 7+75R	2
	7+75R - 11+15R	2
	11+15R - 22+10R	2
	22+10R - 25+95R	2

1 RIP RAP
2 SOLID SODDING
NOTE: AREAS NOT LISTED IN TABLE MAY BE TREATED WITH SEED & MULCH.

APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chad Deane
CHIEF, LAND DEVELOPMENT DIVISION
DATE: 5/20/94

David M. Casper
CHIEF, BUREAU OF HIGHWAYS
DATE: 5-13-94

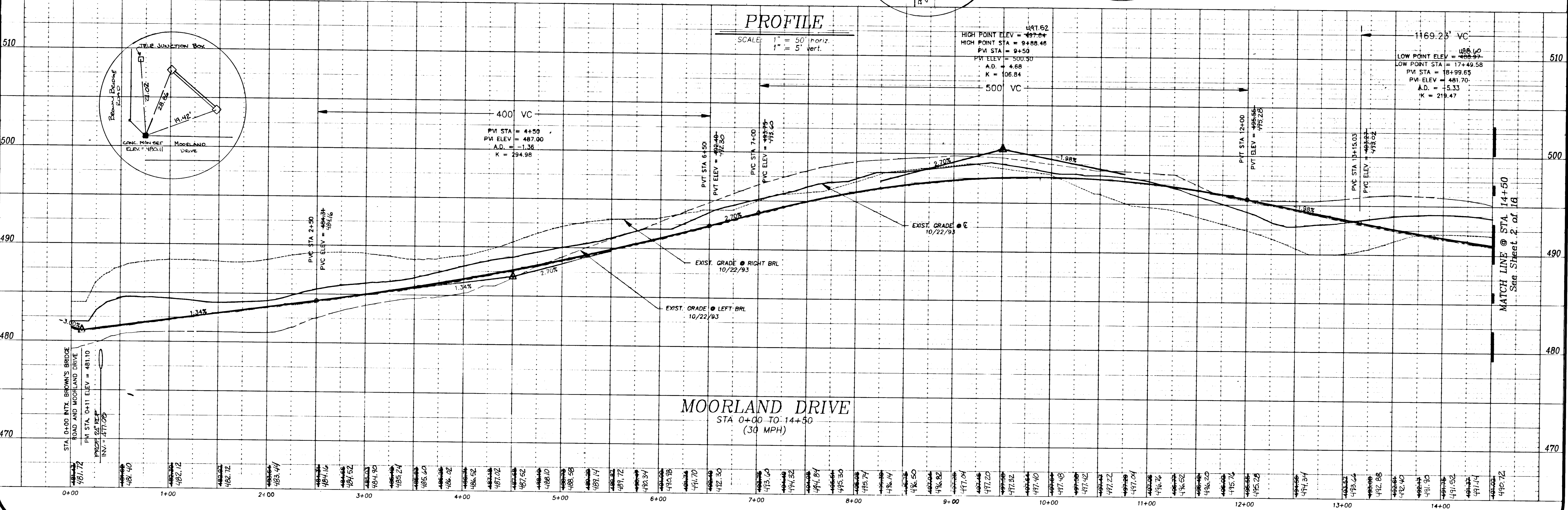
Paul W. Sisson
CHIEF, BUREAU OF ENGINEERING
DATE: 5/23/94

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

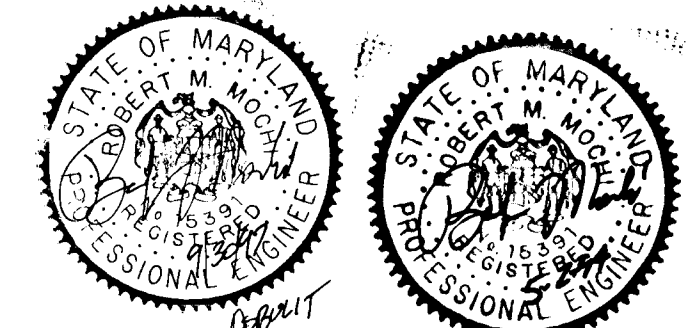
Jim Summery
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH
DATE: 5/26/94

PLAN
SCALE: 1" = 50'

PROFILE
SCALE: 1" = 50' horiz.
1" = 5' vert.



MOORLAND DRIVE
STA 0+00 TO 14+50
(30 MPH)



OWNER/DEVELOPER: WINCHESTER HOMES, INC.
6305 Ivy Lane, Suite 700
Greenbelt, Maryland 20770
(301)474-4411
ATTN: Mr. Ralph Bice, III

ENGINEER: MILDENBERG, MOCHI & ASSOC., INC.
3300 North Ridge Road, Suite 235
Ellicott City, Maryland 21043
(410)461-0078
ATTN: Mr. Robert Mochi, P.E.

Project	date	1/10/94
Illustration	engineering	JBM
Approval	TIP/JBM	JBM
Scale	1" = 50'	

Revised	date	5/10/94
1	description	REMOVED SIDE DITCH TREATMENT TABLE FROM DRAWING
2	description	REMOVED SIDE DITCH TREATMENT TABLE FROM DRAWING
3	description	1ST SUBMITTAL TO HOWARD COUNTY DEP.
4	description	REVISED
5	description	REVISED
6	description	REVISED
7	description	REVISED
8	description	REVISED
9	description	REVISED
10	description	REVISED

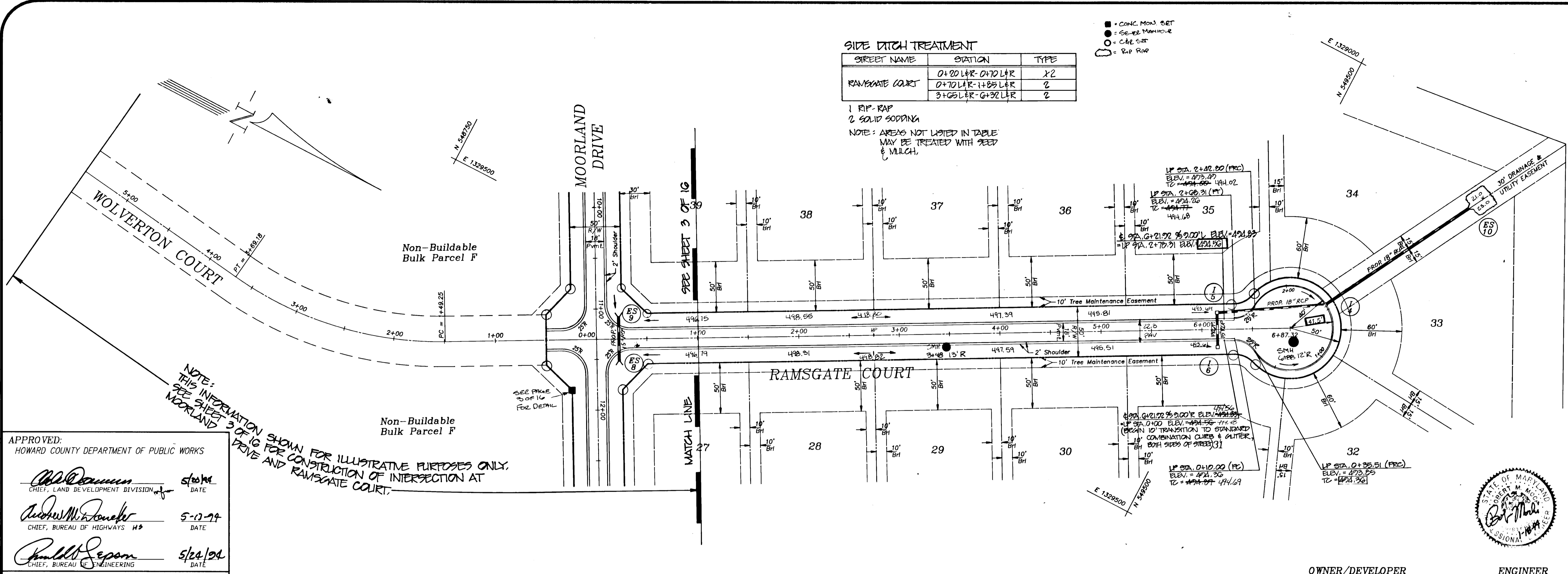
PHASE 2
ASHLEIGH KNOLLS
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT No. 5
MOORLAND DRIVE: PLAN & PROFILE (0+00 TO 14+50)

MILDENBERG MOCHI & ASSOCIATES, INC.
ENGINEERS - SURVEYORS - PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(410) 461-0078 D.C. Metro: (301) 621-5768 Fax: (410) 750-6340

SIDE DITCH TREATMENT

STREET NAME	STATION	TYPE
RAMSGATE COURT	0+20 L&R - 0+70 L&R	X2
	0+70 L&R - 1+85 L&R	2
	3+65 L&R - 6+32 L&R	2

1 RIP-RAP
 2 SOLID SOODING
 NOTE: AREAS NOT LISTED IN TABLE MAY BE TREATED WITH REED & MULCH.



APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] DATE 5/20/94
 [Signature] DATE 5-17-94
 [Signature] DATE 5/22/94

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] DATE 5/22/94

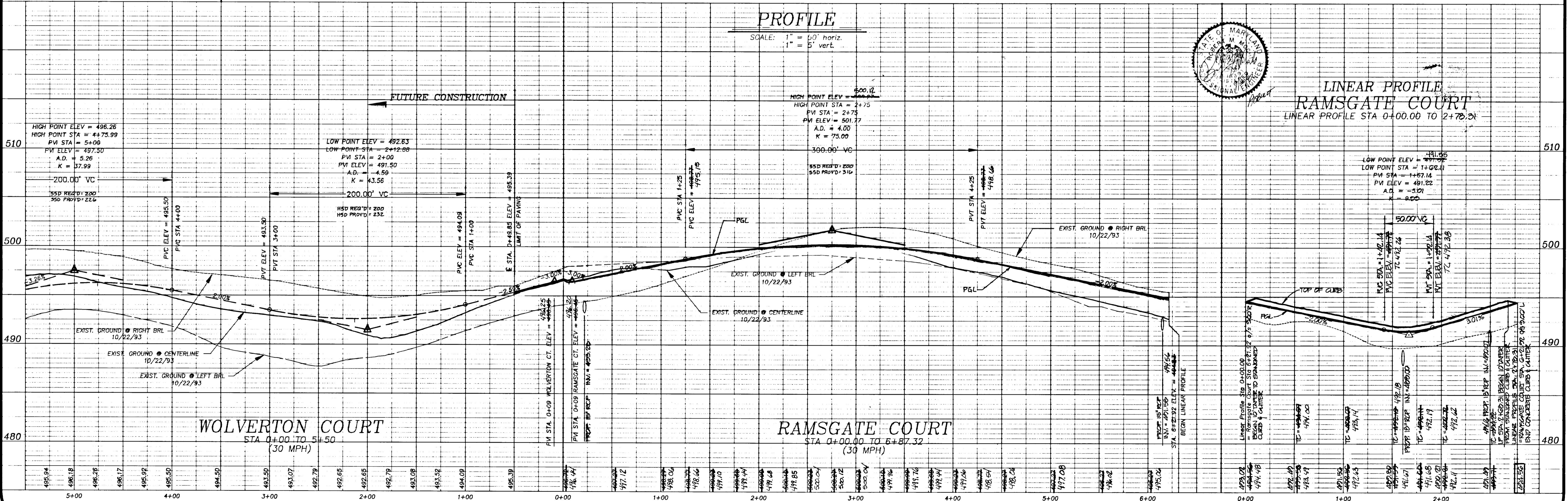
NOTE: THIS INFORMATION SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. SEE SHEET 3 OF 16 FOR CONSTRUCTION OF INTERSECTION AT DRIVE AND RAMSGATE COURT.

PLAN

SCALE: 1" = 50'

PROFILE

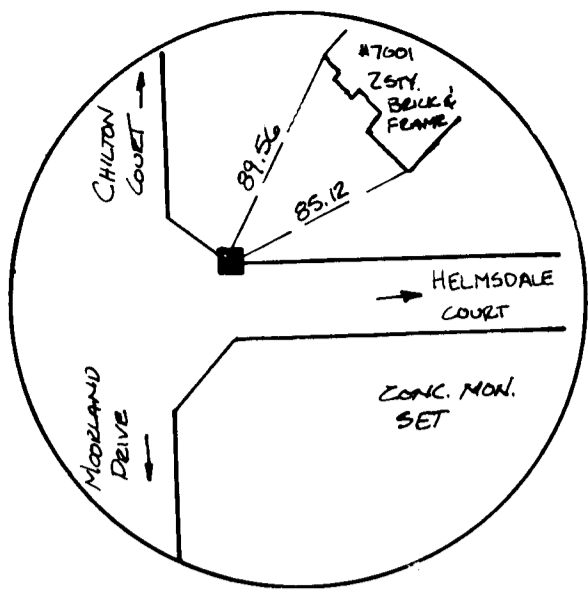
SCALE: 1" = 50' horiz.
 1" = 5' vert.



OWNER/DEVELOPER
 WINCHESTER HOMES, INC.
 6305 Ivy Lane, Suite 700
 Greenbelt, Maryland 20770
 (301)474-4411
 ATTN: Mr. Ralph Bice, III

ENGINEER
 MILDENBERG, MOCHI & ASSOC., INC.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410)461-0078
 ATTN: Mr. Robert Mochi, P.E.

1669



Curve Data
 STA. 1+85.80 to STA. 4+89.83
 Radius = 1500.00'
 Length = 304.03'
 Tan = 152.54'
 Delta = 11°36'47"
 Chord = N 17°59'16" W, 303.51'

Curve Data
 STA. 4+95.92 to STA. 5+54.66
 Radius = 106.37'
 Length = 58.75'
 Tan = 30.14'
 Delta = 31°38'40"
 Chord = N 03°38'27" W, 58.00'

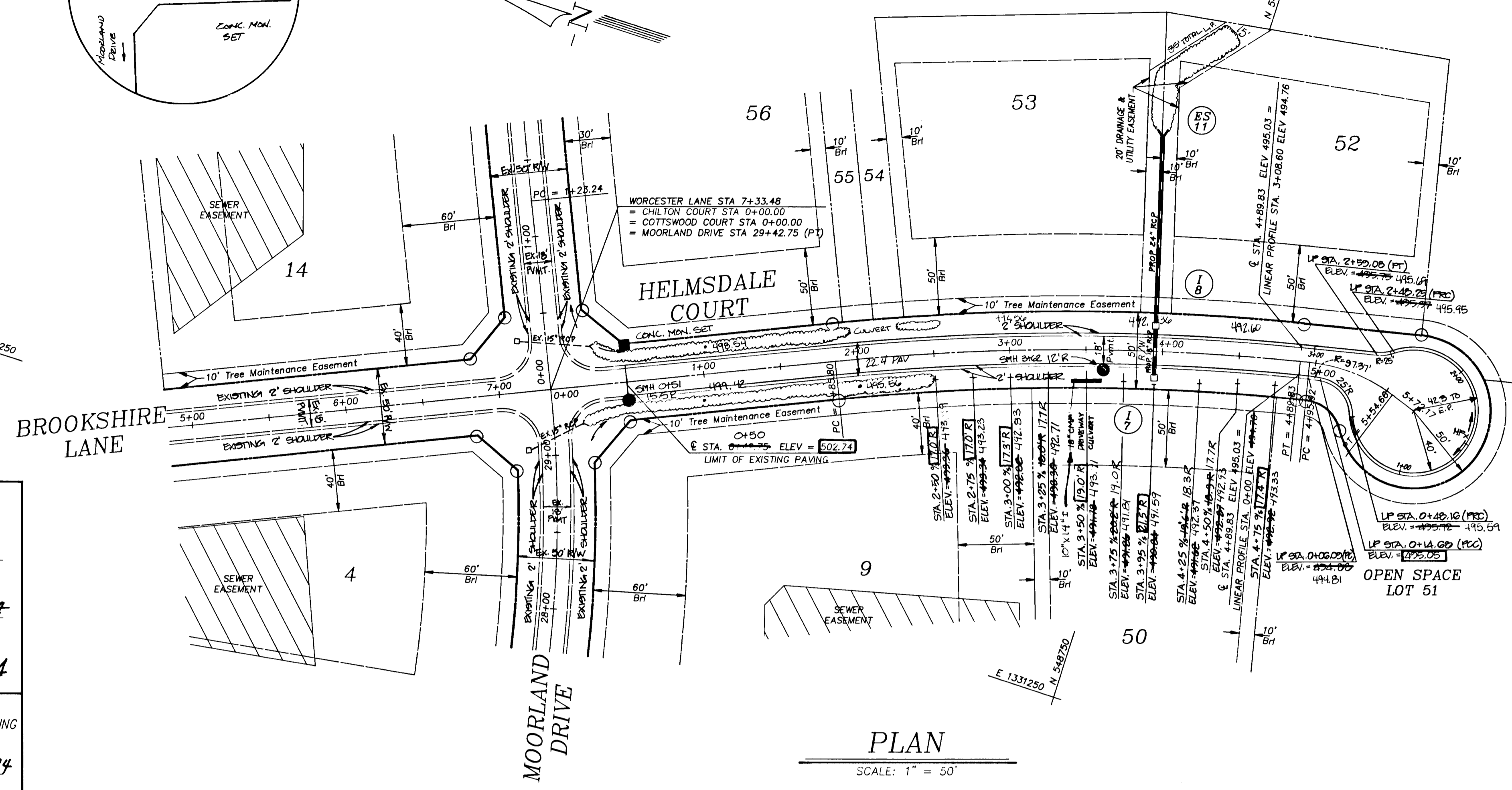
- Conc. Mon. Set
- C & E Set
- Sewer Manholes
- Rip Rap

SIDE DITCH TREATMENT

ROAD NAME	STATION	TYPE
HELMSDALE COURT	0+25 L - 2+50 L SW	1
	2+50 L - 5+10 L	2
	0+14 R - 2+50 R SW	1

1 RIP RAP
 2 SOIL SODDING
 NOTE: AREAS NOT LISTED IN TABLE
 MAY BE TREATED WITH GRASS
 & MULCH.

NOTE: I-7 INLET & DITCH MODIFIED IN FIELD,
 DOES NOT MEET PLAN.

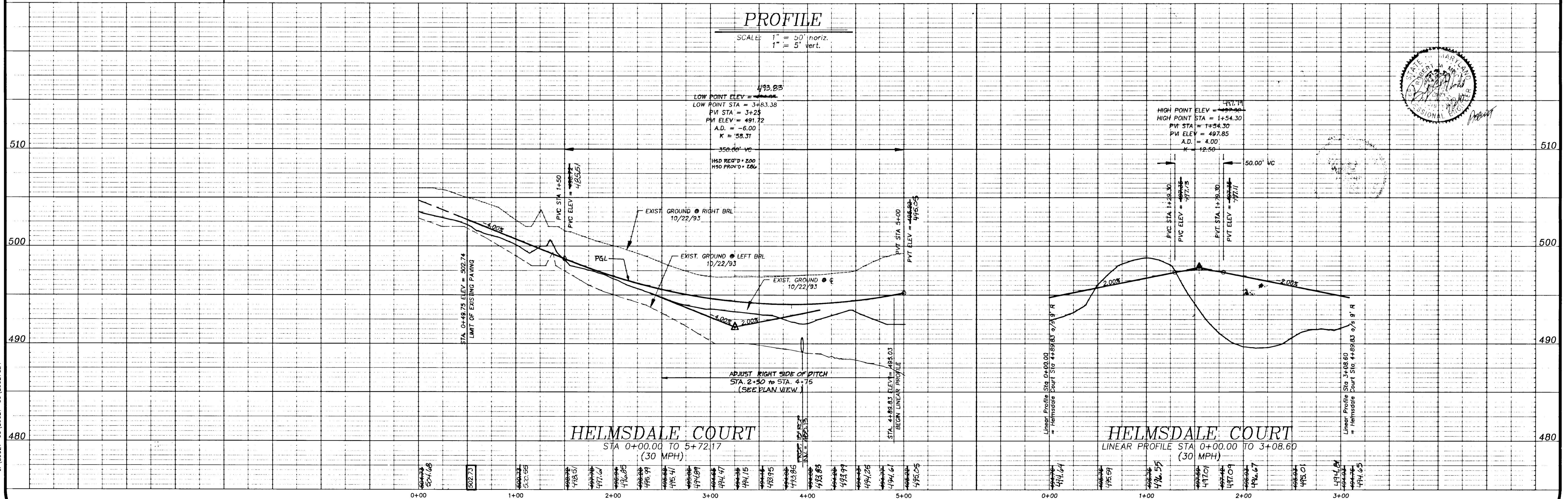


PLAN

SCALE: 1" = 50'

PROFILE

SCALE: 1" = 50' horiz.
 1" = 5' vert.



APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

John Deacon 5/20/94
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Andrew M. Danek 5-13-94
 CHIEF, BUREAU OF HIGHWAYS DATE

Paul J. Lepore 5/23/94
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Quina Swinney 5/26/94
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

OWNER/DEVELOPER
 WINCHESTER HOMES, INC.
 6305 Ivy Lane, Suite 700
 Greenbelt, Maryland 20770
 (301)474-4411
 ATTN: Mr. Ralph Bice, III

ENGINEER
 MILDENBERG, MOCHI & ASSOC., INC.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410)461-0078
 ATTN: Mr. Robert Mochi, P.E.



project	date	1/10/94
89027-06	engineering	
illustration	TJP/JBM	
YSL/LJG	approval	
scale	1" = 50'	
date		

1	REVISION	DATE
2	REVISION	DATE
3	REVISION	DATE
4	REVISION	DATE
5	REVISION	DATE
6	REVISION	DATE
7	REVISION	DATE
8	REVISION	DATE
9	REVISION	DATE
10	REVISION	DATE

ASHLEIGH KNOLLS
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 5
 HELMSDALE COURT: PLAN & PROFILE (0+49.75 TO 5+72.17)

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland, 21043-3550
 (410) 461-0078 D.C. Metro: (301) 621-5768 Fax: (410) 750-6340

ASBUILT 06-20-97

PROJECT	89027.06	DATE	1/4/94
ILLUSTRATION	LIG/BLP	ENGINEERING	TIP
SCALE	1" = 50'	APPROVAL	RAM

NO.	1	DATE	11/7/93
DESCRIPTION	REVISE PER HOWARD CO. AND COUNTY DEPT. OF PUBLIC WORKS	REVISIONS	
NO.	2	DATE	1/17/94
DESCRIPTION	REVISE PER HOWARD CO. AND COUNTY DEPT. OF PUBLIC WORKS	REVISIONS	

ASHLEIGH KNOLLS
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 6
PHASE 2
GRADING AND SEDIMENT CONTROL PLAN

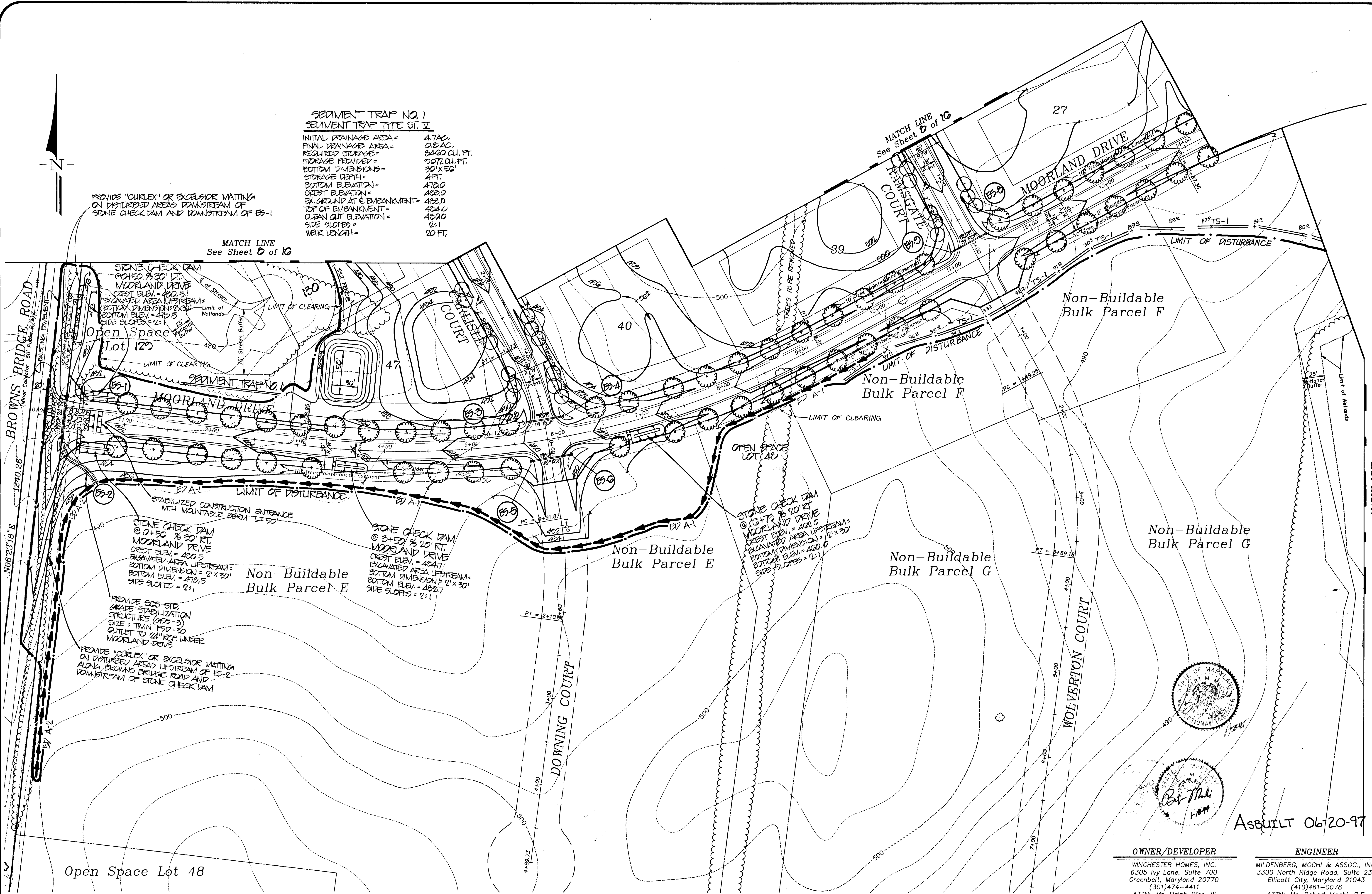
MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • ARCHITECTS • PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (410) 461-0078 D.C. Metro: (301) 621-5768 Fax: (410) 750-6340

SEDIMENT TRAP NO. 1
SEDIMENT TRAP TYPE ST. V

INITIAL DRAINAGE AREA = 4.7 AC.
 FINAL DRAINAGE AREA = 0.2 AC.
 REQUIRED STORAGE = 8460 CU. FT.
 STORAGE PROVIDED = 9072 CU. FT.
 BOTTOM DIMENSIONS = 30' X 50'
 STORAGE DEPTH = 4 FT.
 BOTTOM ELEVATION = 478.0
 CREST ELEVATION = 482.0
 EX. GROUND AT E. EMBANKMENT = 482.0
 TOP OF EMBANKMENT = 484.0
 CLEAN OUT ELEVATION = 483.0
 SIDE SLOPES = 2:1
 WEIR LENGTH = 20 FT.

PROVIDE "CURLIX" OR EXCESSOR MATTING ON DISTURBED AREAS DOWNSTREAM OF STONE CHECK DAM AND DOWNSTREAM OF ES-1

MATCH LINE
 See Sheet 0 of 1G



Open Space Lot 48

OWNER/DEVELOPER
 WINGHESTER HOMES, INC.
 6305 Ivy Lane, Suite 700
 Greenbelt, Maryland 20770
 (301) 474-4411
 ATTN: Mr. Ralph Bice, III

ENGINEER
 MILDENBERG, MOCHI & ASSOC., INC.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410) 461-0078
 ATTN: Mr. Robert Mochi, P.E.

ASBUILT 06-20-97

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William M. Danner 5/20/94
 CHIEF, LAND DEVELOPMENT DIVISION

Robert M. Mochi 5-13-94
 CHIEF, BUREAU OF HIGHWAYS

Paul M. Sisson 5/23/94
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Gina J. Johnson 5/26/94
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

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

John L. Robertson 5/6/94
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Patricia Englund 5/8/94
 U. S. SOIL CONSERVATION DISTRICT

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this 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 onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.

William M. Danner 1/18/94
 Signature of Developer 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 County Soil Conservation District.

Robert M. Mochi 1-18-94
 Robert M. Mochi, P.E. Date

1669

1669

4-18027-001-89027-0618902785C1



SEDIMENT TRAP NO. 2
SEDIMENT TRAP TYPE ST. V

INITIAL DRAINAGE AREA = 3.5 AC.
FINAL DRAINAGE AREA = 2.2 AC.
REQUIRED STORAGE = 7500 CU. FT.
STORAGE PROVIDED = 8576 CU. FT.
BOTTOM DIMENSIONS = 45' X 55'
STORAGE DEPTH = 4 FT.
BOTTOM ELEVATION = 475.0
CREST ELEVATION = 480.0
EX. GROUND AT EMBANKMENT = 481.0
TOP OF EMBANKMENT = 481.0
CLEAN CUT ELEVATION = 471.0
SIDE SLOPES = 2:1
WEIR LENGTH = 10 FT.

SEDIMENT TRAP NO. 4
SEDIMENT TRAP TYPE ST. V

INITIAL DRAINAGE AREA = 5.0 AC.
FINAL DRAINAGE AREA = 5.0 AC.
REQUIRED STORAGE = 5000 CU. FT.
STORAGE PROVIDED = 5076 CU. FT.
BOTTOM DIMENSIONS = 30' X 50'
STORAGE DEPTH = 4 FT.
BOTTOM ELEVATION = 450.0
CREST ELEVATION = 455.0
EX. GROUND AT EMBANKMENT = 455.1
TOP OF EMBANKMENT = 456.0
CLEAN CUT ELEVATION = 450.0
SIDE SLOPES = 2:1
WEIR LENGTH = EX. A-2 OF 10 FT.

SEDIMENT TRAP NO. 3
SEDIMENT TRAP TYPE ST. V

INITIAL DRAINAGE AREA = 2.3 AC.
FINAL DRAINAGE AREA = 1.5 AC.
REQUIRED STORAGE = 4140 CU. FT.
STORAGE PROVIDED = 5676 CU. FT.
BOTTOM DIMENSIONS = 20' X 20'
STORAGE DEPTH = 4 FT.
BOTTOM ELEVATION = 481.0
CREST ELEVATION = 486.0
EX. GROUND AT EMBANKMENT = 486.0
TOP OF EMBANKMENT = 481.0
CLEAN CUT ELEVATION = 482.0
SIDE SLOPES = 2:1
WEIR LENGTH = 10 FT.

NOTE: CONTRACTOR TO INSTALL SAFETY FENCE AROUND SEWER EXPOSEMENT PRIOR TO COMMENCEMENT OF CONSTRUCTION.



OWNER/DEVELOPER
WINCHESTER HOMES, INC.
6305 Ivy Lane, Suite 700
Greenbelt, Maryland 20770
(301)474-4411
ATTN: Mr. Ralph Bice, III

ENGINEER
MILDENBERG, MOCHI & ASSOC., INC.
3300 North Ridge Road, Suite 235
Ellicott City, Maryland 21043
(410)461-0078
ATTN: Mr. Robert Mochi, P.E.

ASBUILT 06-20-97

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Michael Dawson 5/2/94
CHIEF, LAND DEVELOPMENT DIVISION
DATE

Andrew M. Daniels 5-13-94
CHIEF, BUREAU OF HIGHWAYS
DATE

Paul L. Sisson 5/23/94
CHIEF, BUREAU OF ENGINEERING
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Gina Tomamiano 5/24/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH
DATE

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

John P. Rhetor 5/6/94
HOWARD COUNTY SOIL CONSERVATION DISTRICT
DATE

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Patricia Englund 5/6/94
J. S. SOIL CONSERVATION DISTRICT
DATE

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this 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 onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.

David M. 1/18/94
Signature of Developer 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 County Soil Conservation District.

Bob Mochi 1-18-94
Robert M. Mochi, P.E. Date

project	1/4/94	date	1/4/94
illustration	BLP	illustration	BLP
scale	1" = 50'	scale	1" = 50'
approval	LIG	approval	LIG
revisions		revisions	

no.	2	no.	1
description	REVISED PER HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	description	REVISED PER HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
date	1/17/94	date	1/17/94

ASBUILT
PHASE 2
ASHLEIGH KNOLLS
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT No. 6
GRADING AND SEDIMENT CONTROL PLAN

MILDENBERG, MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland, 21043-3350
(410) 461-0078 Fax: (410) 756-6340

8 OF 16
F9478



SEDIMENT TRAP NO. 5
 SEDIMENT TRAP TYPE ST.V
 INITIAL DRAINAGE AREA = 1.5 AC.
 FINAL DRAINAGE AREA = 4.1 AC.
 REQUIRED STORAGE = 7380 CU. FT.
 STORAGE PROVIDED = 7372 CU. FT.
 BOTTOM DIMENSIONS = 20' x 60'
 STORAGE DEPTH = 4 FT.
 BOTTOM ELEVATION = 480.0
 CREST ELEVATION = 485.0
 EX. GROUND AT EMBANKMENT = 485.5
 TOP OF EMBANKMENT = 486.0
 CLEAN CUT ELEVATION = 482.0
 SIDE SLOPES = 2:1
 WEIR LENGTH = 17 FT.

SEDIMENT TRAP NO. 6
 SEDIMENT TRAP TYPE ST.V
 INITIAL DRAINAGE AREA = 5.0 AC.
 FINAL DRAINAGE AREA = 1.7 AC.
 REQUIRED STORAGE = 9000 CU. FT.
 STORAGE PROVIDED = 9552 CU. FT.
 BOTTOM DIMENSIONS = 20' x 75'
 STORAGE DEPTH = 4 FT.
 BOTTOM ELEVATION = 478.0
 CREST ELEVATION = 483.0
 EX. GROUND AT EMBANKMENT = 483.0
 TOP OF EMBANKMENT = 484.0
 CLEAN CUT ELEVATION = 480.0
 SIDE SLOPES = 2:1
 WEIR LENGTH = 20 FT.

SEDIMENT TRAP NO. 7
 SEDIMENT TRAP TYPE ST.V
 INITIAL DRAINAGE AREA = 4.8 AC.
 FINAL DRAINAGE AREA = 1.3 AC.
 REQUIRED STORAGE = 8640 CU. FT.
 STORAGE PROVIDED = 9072 CU. FT.
 BOTTOM DIMENSIONS = 30' x 90'
 STORAGE DEPTH = 4 FT.
 BOTTOM ELEVATION = 481.0
 CREST ELEVATION = 486.0
 EX. GROUND AT EMBANKMENT = 486.0
 TOP OF EMBANKMENT = 487.0
 CLEAN CUT ELEVATION = 483.0
 SIDE SLOPES = 2:1
 WEIR LENGTH = 20 FT.

SEDIMENT TRAP NO. 8
 SEDIMENT TRAP TYPE ST.V
 INITIAL DRAINAGE AREA = 1.2 AC.
 FINAL DRAINAGE AREA = 5.0 AC.
 REQUIRED STORAGE = 3000 CU. FT.
 STORAGE PROVIDED = 3552 CU. FT.
 BOTTOM DIMENSIONS = 20' x 75'
 STORAGE DEPTH = 4 FT.
 BOTTOM ELEVATION = 482.0
 CREST ELEVATION = 487.0
 EX. GROUND AT EMBANKMENT = 487.0
 TOP OF EMBANKMENT = 488.0
 CLEAN CUT ELEVATION = 484.0
 SIDE SLOPES = 2:1
 WEIR LENGTH = 20 FT.

SEDIMENT TRAP NO. 9
 SEDIMENT TRAP TYPE ST.V
 INITIAL DRAINAGE AREA = 2.8 AC.
 FINAL DRAINAGE AREA = 2.4 AC.
 REQUIRED STORAGE = 5040 CU. FT.
 STORAGE PROVIDED = 5558 CU. FT.
 BOTTOM DIMENSIONS = 20' x 50'
 STORAGE DEPTH = 3.5 FT.
 BOTTOM ELEVATION = 484.0
 CREST ELEVATION = 488.5
 EX. GROUND AT EMBANKMENT = 488.5
 TOP OF EMBANKMENT = 489.5
 CLEAN CUT ELEVATION = 485.5
 SIDE SLOPES = 2:1
 WEIR LENGTH = 12 FT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 5/2/94
 CHIEF, LAND DEVELOPMENT DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 5/13/94
 CHIEF, BUREAU OF PERMITS

APPROVED: BUREAU OF ENGINEERING
 [Signature] 5/23/94
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 5/26/94
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 [Signature] 5/6/94
 CHIEF, SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 [Signature] 5/6/94
 U.S. SOIL CONSERVATION SERVICE

ASBUILT 06-20-97

DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this 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 onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.
 [Signature] 1/1/94
 Signature of Developer

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 County Soil Conservation District.
 [Signature] 1/1/94
 Robert M. Mochi, P.E.

OWNER/DEVELOPER
 WINCHESTER HOMES, INC.
 6305 Ivy Lane, Suite 700
 Greenbelt, Maryland 20770
 (301)474-4411
 ATTN: Mr. Ralph Bice, III

ENGINEER
 MILDENBERG, MOCHI & ASSOC., INC.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410)461-0078
 ATTN: Mr. Robert Mochi, P.E.

ASHLEIGH KNOLLS
 PHASE 2
 ASBUILT
 ELECTION DISTRICT No. 6
 HOWARD COUNTY, MARYLAND
 GRADING AND SEDIMENT CONTROL

Project Date: 1/4/94
 Illustration: LIG/BLP
 Scale: 1" = 50'
 Project No.: 88027-06
 Date: 1/17/94
 Description: REVISED PER HOWARD COUNTY COMMENTS DATED 1/16/94
 1st SUBMITTAL TO HOWARD COUNTY DPZ

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (410) 461-0078 D.C. Metro: (301) 621-5768 Fax: (410) 750-6340

9 OF 16
 F9478

project	89027.06	date	1/4/94
illustration	LIC/BLP	engineering	TIP
scale	1" = 50'	approval	RMM

revision	description	date
1	ADDED BY RIP OUT FULL A PRESERVATION - LOT 50	1/17/94
2	REVISED PER HOWARD CO SOIL CONSERVATION DISTRICT	1/17/94
3	REVISED PER HOWARD CO SOIL CONSERVATION DISTRICT	1/17/94

ASBUILT PHASE 2
ASHLEIGH KNOLLS
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 6
GRADING AND SEDIMENT CONTROL

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (410) 461-0078 D.C. Metro: (301) 621-5768 Fax: (410) 750-6340



SEDIMENT TRAP NO. 10
 SEDIMENT TRAP TYPE ST-VI
 INITIAL DRAINAGE AREA = 2.4 AC.
 FINAL DRAINAGE AREA = 2.1 AC.
 REQUIRED STORAGE = 4300 CU.FT.
 STORAGE PROVIDED = 5632 CU.FT.
 BOTTOM DIMENSION = 20' X 40'
 STORAGE DEPTH = 1' APT.
 BOTTOM ELEVATION = 473.0'
 CREST ELEVATION = 473.0'
 EX. GROUND AT EMBANKMENT = 473.0'
 TOP OF EMBANKMENT = 473.0'
 CLEAN CUT ELEVATION = 475.0'
 SIDE SLOPES = 2:1
 WEIR LENGTH = 19 FT.

SEDIMENT TRAP NO. 11
 SEDIMENT TRAP TYPE ST-VI
 INITIAL DRAINAGE AREA = 9.3 AC.
 FINAL DRAINAGE AREA = 7.82 AC.
 REQUIRED STORAGE = 31,984 CU.FT.
 STORAGE PROVIDED = 65' X 125'
 STORAGE DEPTH = 3.6 FT.
 BOTTOM ELEVATION = 473.0'
 RISER CREST ELEV. = 482.0'
 EX. GROUND AT EMBANKMENT = 476.8'
 TOP OF EMBANKMENT = 482.0'
 CLEAN CUT ELEVATION = 474.8'
 SIDE SLOPES = 2:1
 2 YR. SWIM ORIFICE ELEV. = 476.65'
 (SEE DETAILS, SHEET 16 OF 16)

OWNER/DEVELOPER
 WINCHESTER HOMES, INC.
 6305 Ivy Lane, Suite 700
 Greenbelt, Maryland 20770
 (301) 474-4411
 ATTN: Mr. Ralph Bice, III

ENGINEER
 MILDENBERG, MOCHI & ASSOC., INC.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410) 461-0078
 ATTN: Mr. Robert Mochi, P.E.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

 5/24/94
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

 5-13-94
 DATE

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

 5/6/94
 DATE

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

 5/6/94
 DATE

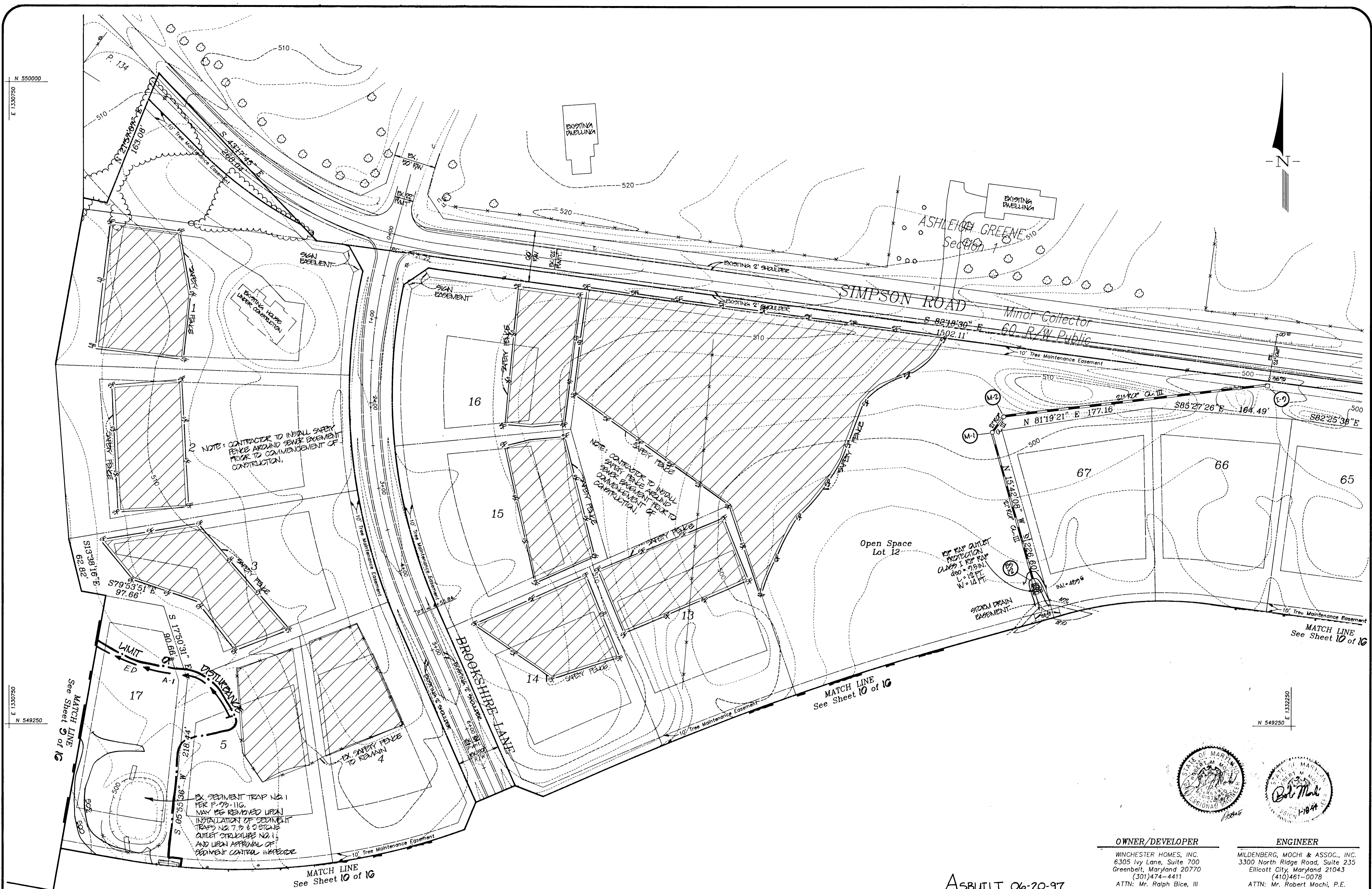
DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this project will have a certificate of attendance at a Department of the Environment approved training program for the control of sediment and erosion before beginning the project. I also authorize periodic onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.

 1/8/94
 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 County Soil Conservation District.

 1-18-94
 Date

1609



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chad O'Connor 5/26/94
 CHIEF, BUREAU OF PUBLIC WORKS
Andrew M. Daniels 5-13-94
 CHIEF, BUREAU OF HIGHWAYS
Donald J. Sporn 5/23/94
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
John J. Summerville 5/26/94
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
John R. Robertson 5/6/94
 HOWARD COUNTY SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Patricia Engler 5/6/94
 U.S. SOIL CONSERVATION SERVICE

DEVELOPER'S CERTIFICATE
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Asbuilt 1/18/94
 Signature of Developer 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 County Soil Conservation District.
Robert M. Mochi 1-18-94
 Robert M. Mochi, P.E. Date

OWNER/DEVELOPER
 WINCHESTER HOMES, INC.
 6305 Ivy Lane, Suite 700
 Greenbelt, Maryland 20770
 (301)474-4411
 ATTN: Mr. Ralph Bice, III

ENGINEER
 MILDENBERG, MOCHI & ASSOC., INC.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410)461-0078
 ATTN: Mr. Robert Mochi, P.E.

ASBUILT 06-20-97

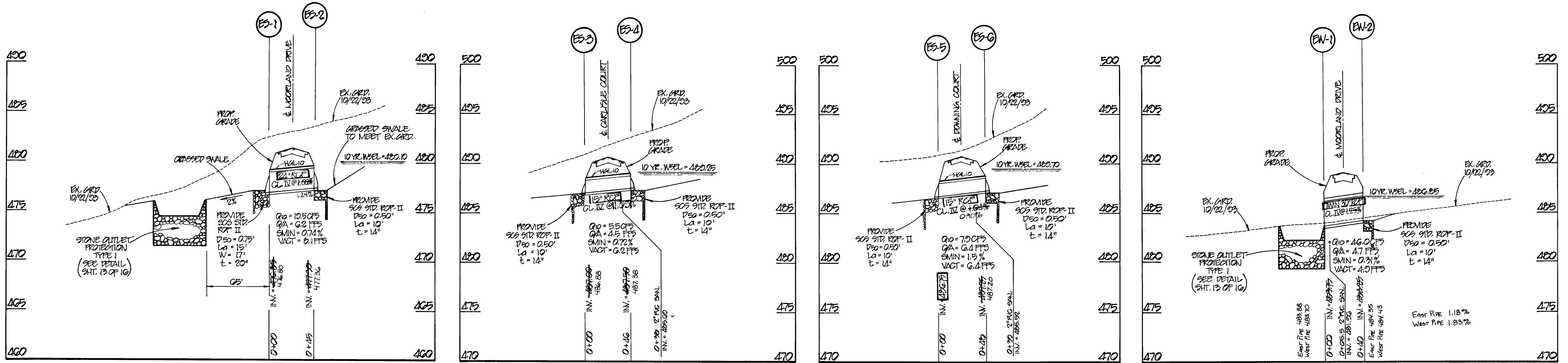
Project: 89027.06
 date: 1/4/94
 illustration: LIG/BLP
 scale: 1" = 50'
 approval: JMM

NO. 0
 description: 1st SUBMITTAL TO HOWARD COUNTY DEP
 date: 1/17/94
 revisions: 1/21/94 (REVISED)
 4/10/94 (REVISED)
 5/21/94 (REVISED)

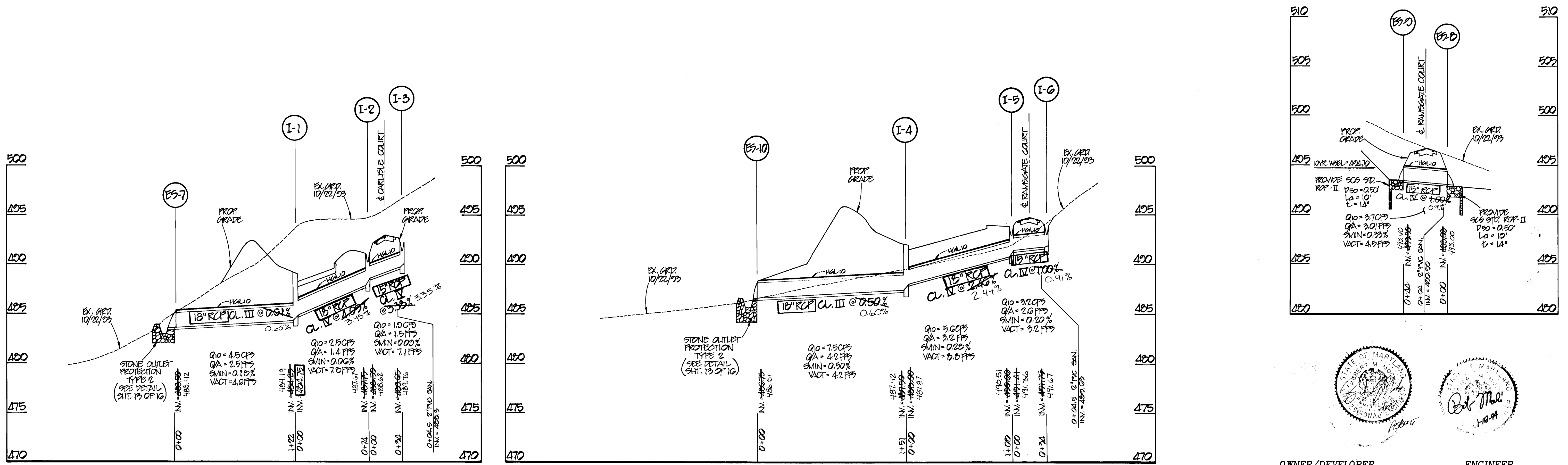
Asbult
 PHASE 2
 ASHLEIGH KNOLLS
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 6
 GRADING AND SEDIMENT CONTROL PLAN

MILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS • SURVEYORS • PLANNERS
 3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
 (410) 461-0078 Fax: (410) 750-6540

1669



PROFILE SCALE
 VERT. : 1" = 5'
 HORIZ. : 1" = 50'



OWNER/DEVELOPER
 WINCHESTER HOMES, INC.
 6305 Ivy Lane, Suite 700
 Greenbelt, Maryland 20770
 (301)474-4411
 ATTN: Mr. Ralph Bice, III

ENGINEER
 MILDENBERG, MOCHI & ASSOC., INC.
 3300 North Ridge Road, Suite 235
 Ellicott City, Maryland 21043
 (410)461-0078
 ATTN: Mr. Robert Mochi, P.E.

ASBUILT 06-20-97

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 5/6/94
 CHIEF, LAND DEVELOPMENT DIVISION
 [Signature] 5-13-99
 CHIEF, BUREAU OF HIGHWAYS
 [Signature] 5/23/94
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 5/26/94
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 [Signature] 5/6/94
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 [Signature] 5/6/94
 U. S. SOIL CONSERVATION SERVICE

DEVELOPER'S CERTIFICATE
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 [Signature] 1/18/94
 Signature of Developer 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 County Soil Conservation District.
 [Signature] 1-18-94
 Robert M. Mochi, P.E. Date

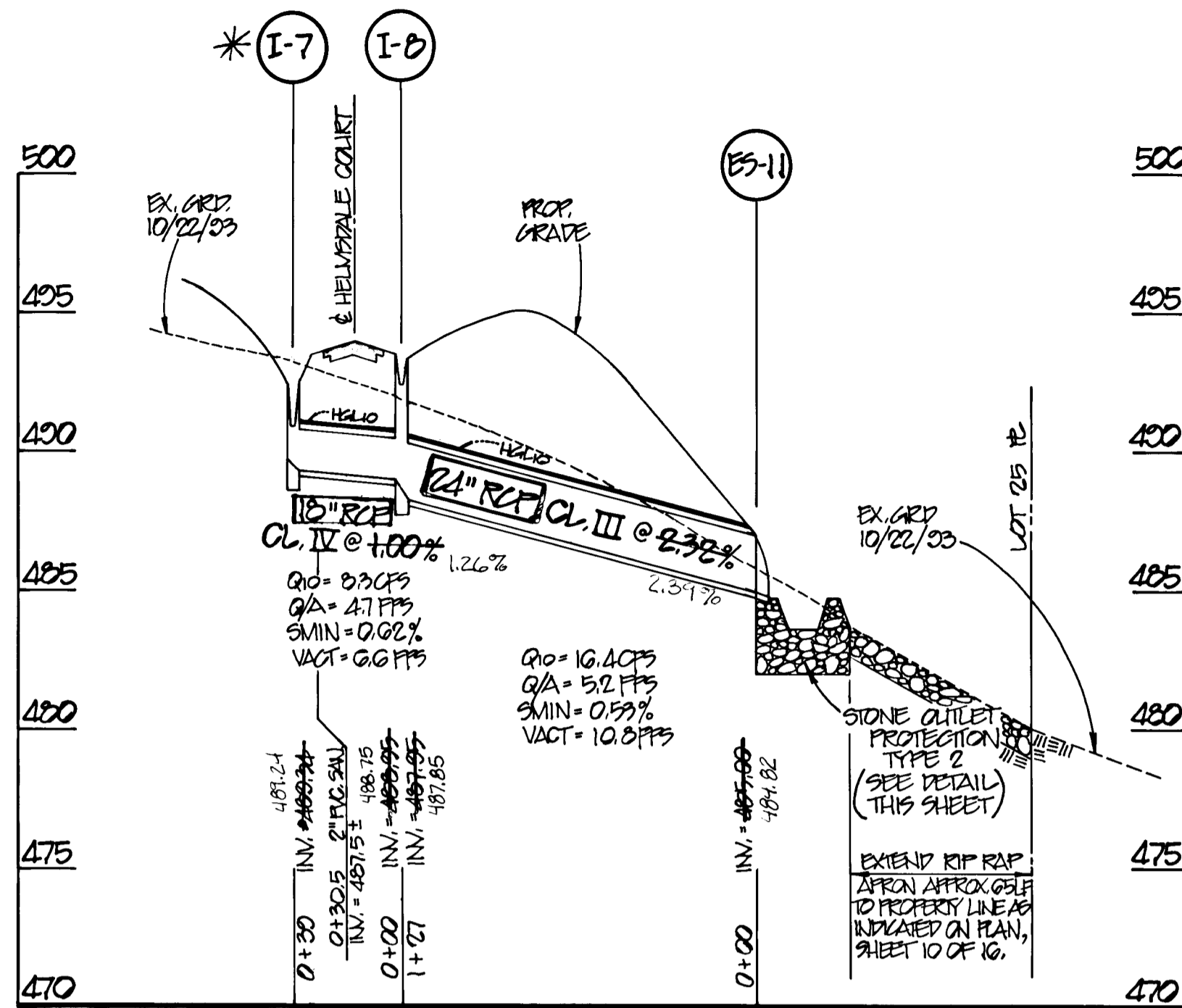
1669

ASBUILT PHASE 2 ASHLEIGH KNOLLS HOWARD COUNTY, MARYLAND ELECTION DISTRICT No. 6 STORM DRAIN PROFILES

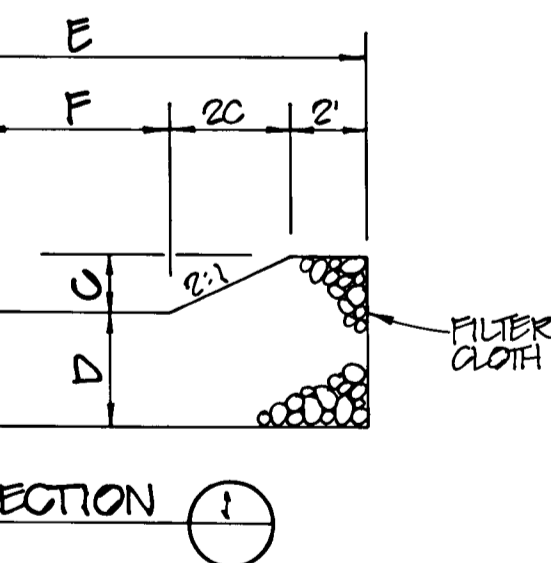
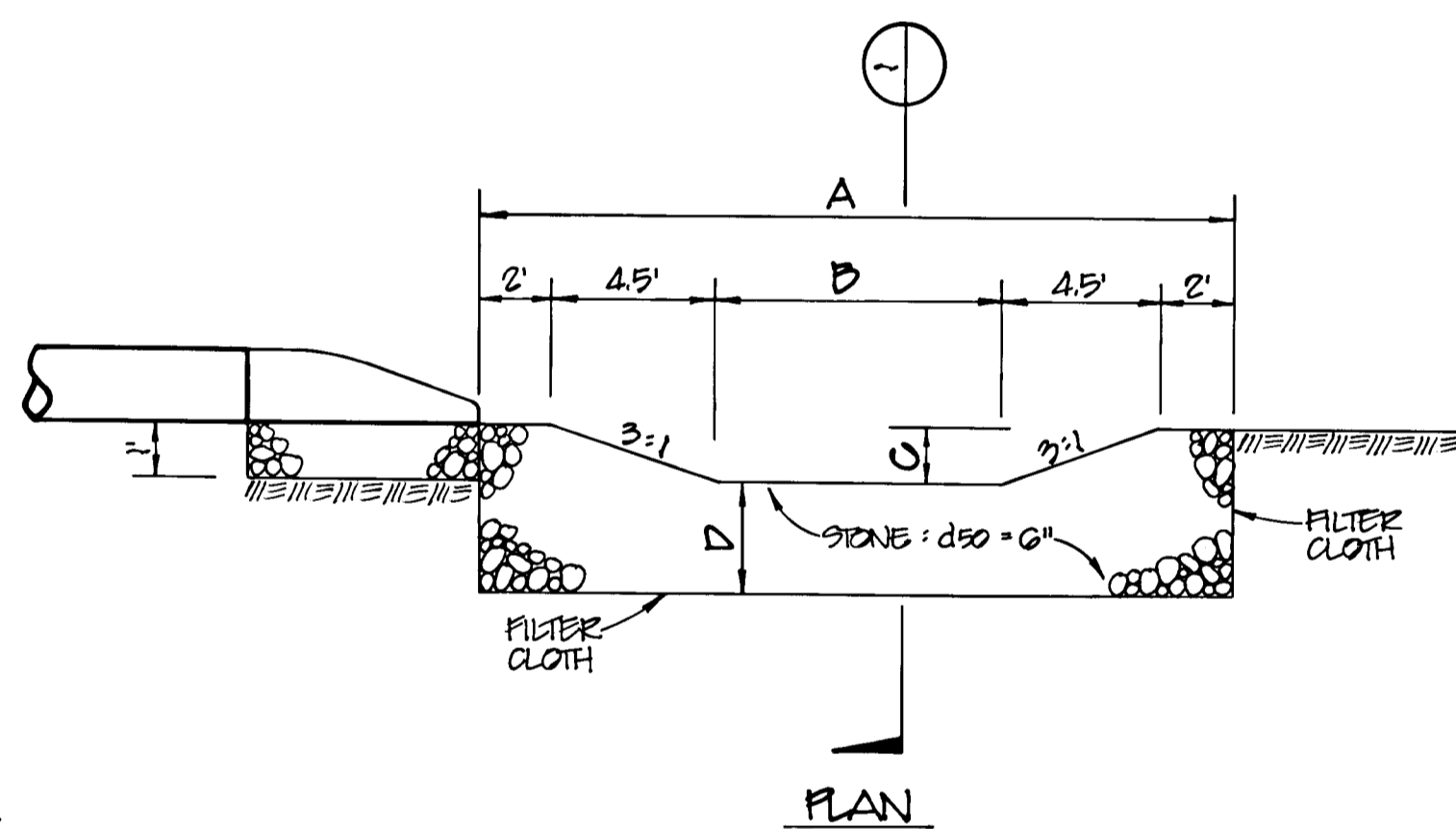
project	89027.06	date	1/4/94
illustration	LIG/BLP	engineering	TJP
scale	1/4" = 10'	approval	
revision		description	
no.	1	date	1/17/94
no.	0	description	1st SUBMITTAL TO HOWARD COUNTY DEP

12 OF 16

F 24-78

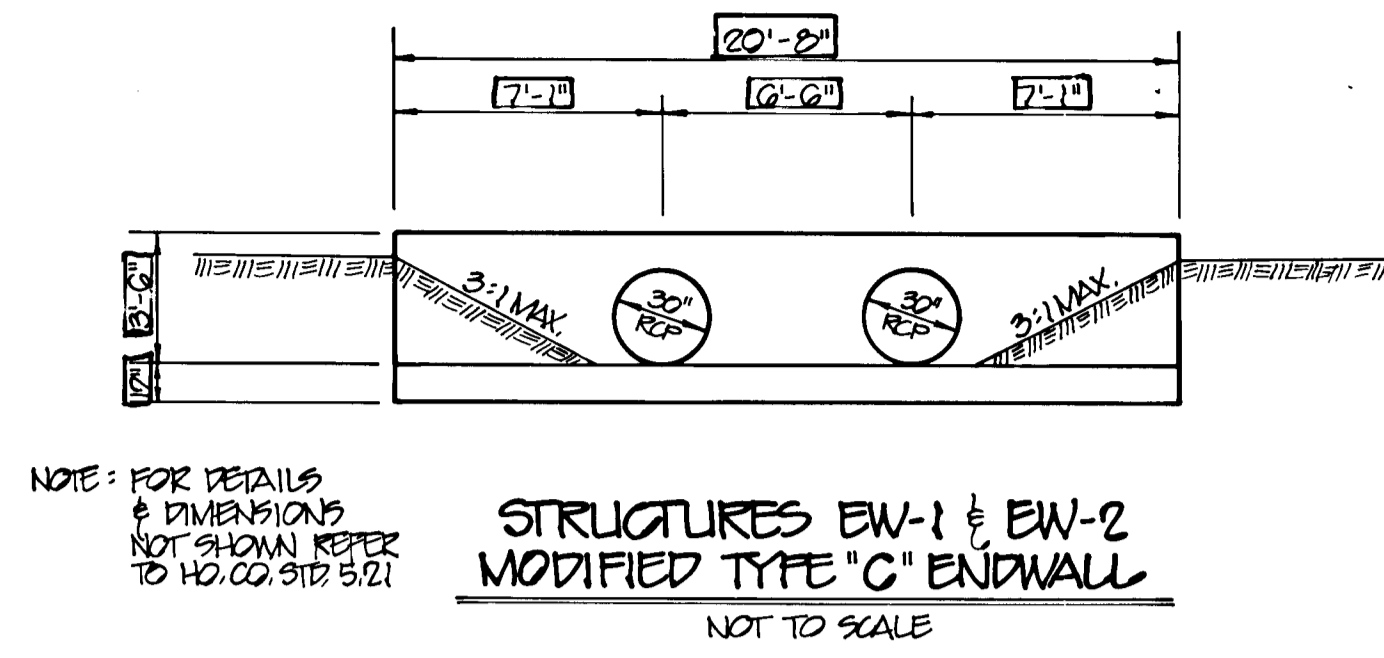


PROFILE SCALE
VERT. 1" = 5'
HORIZ. 1" = 30'

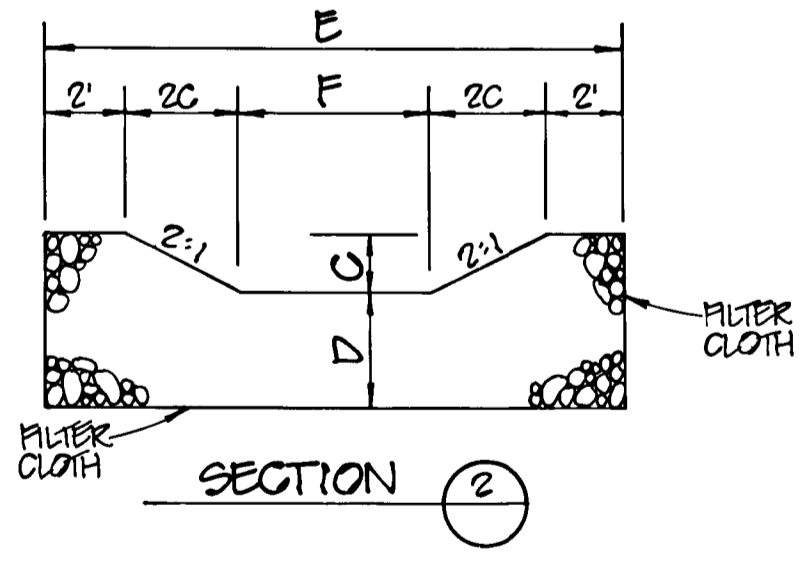
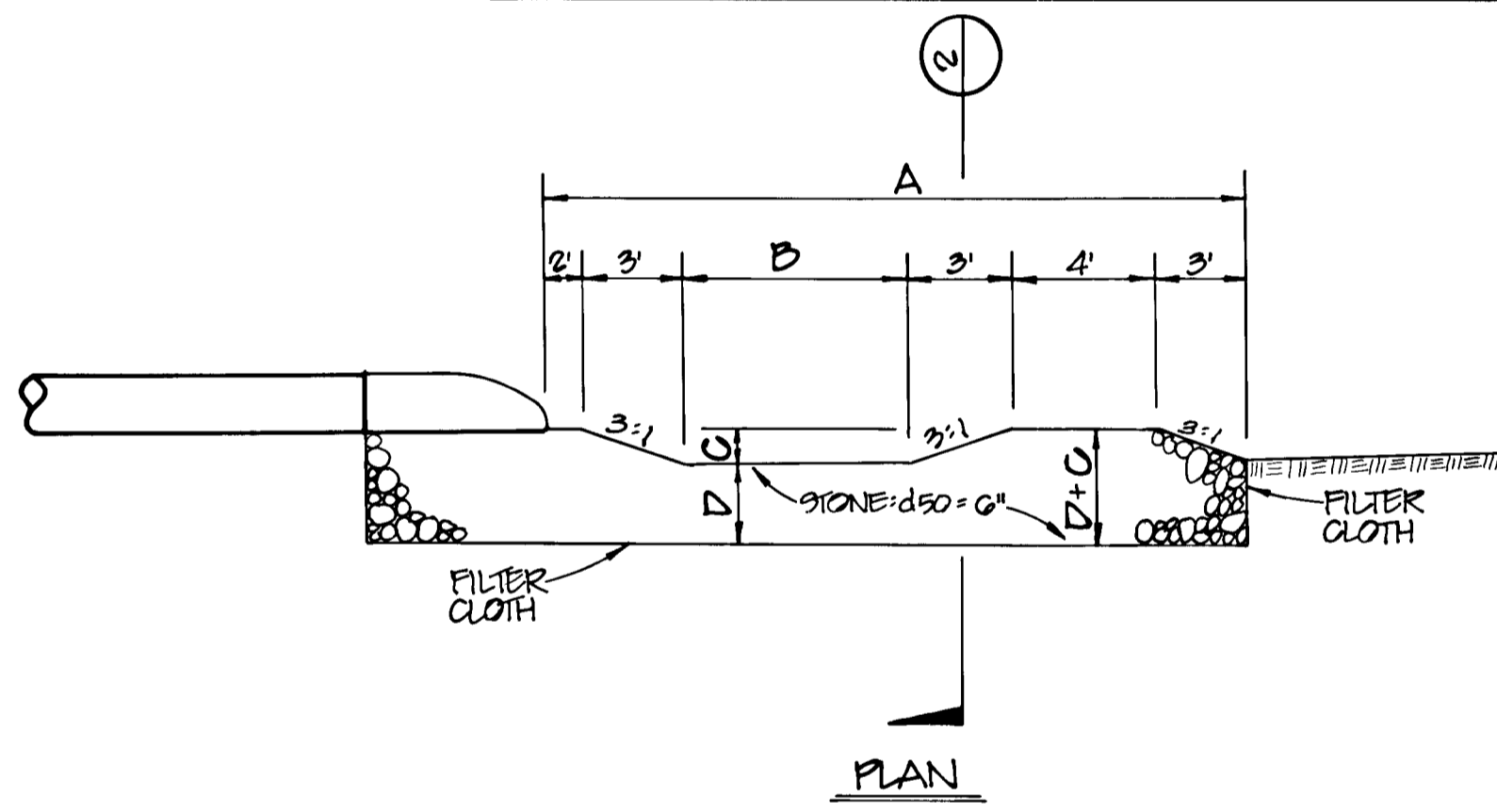
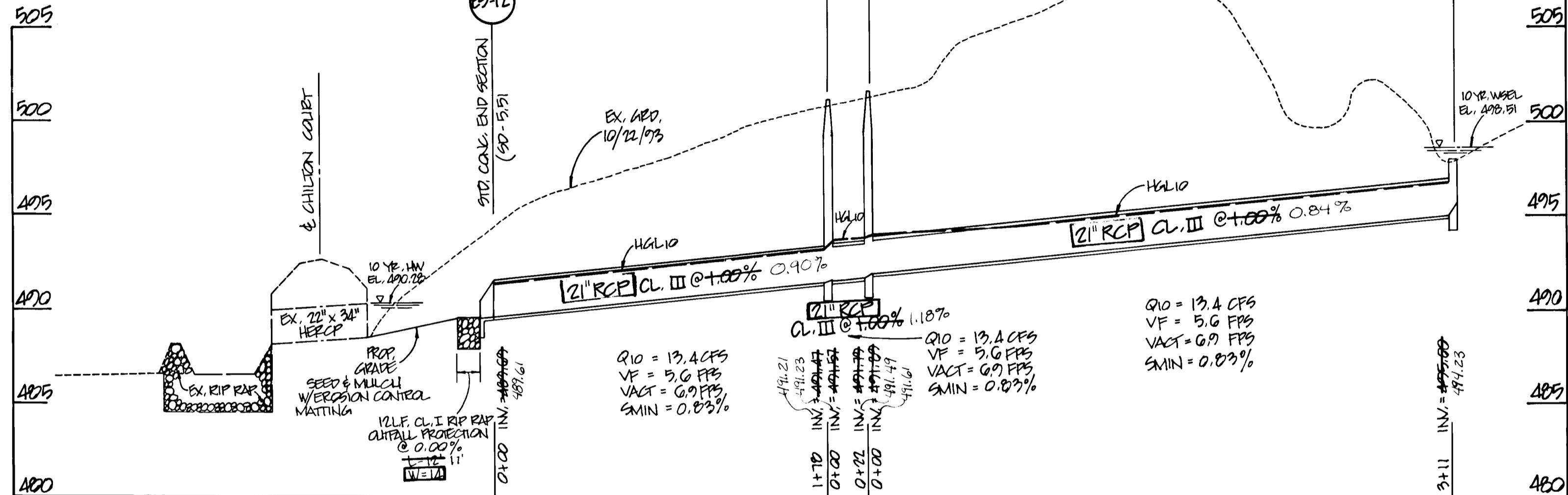


STRUCTURE NO.	A	B	C	D	E	F
ES-1	5'	4'	1.5'	3'	1.5'	5'
EW-1	4'	3'	1.5'	3'	2'	10'

STONE OUTLET PROTECTION (TYPE 1)
NOT TO SCALE



**STRUCTURES EW-1 & EW-2
MODIFIED TYPE 'C' ENDWALL**
NOT TO SCALE



STRUCTURE NO.	A	B	C	D	E	F
ES-7	20'	5'	1'	1.5'	20'	12'
ES-10	20'	5'	1'	1.5'	20'	12'
ES-11	25'	10'	1'	1.5'	20'	10'

STONE OUTLET PROTECTION (TYPE 2)
NOT TO SCALE

STRUCTURE SCHEDULE				
NO.	TYPE	LOCATION	ELEVATION	REMARKS
ES-1	END SECTION	0+30 WOODLAND DRIVE 9% 23' LT.	INV. = 476.85 476.80	STD. 5.51
ES-2	END SECTION	0+30 WOODLAND DRIVE 9% 22' RT.	INV. = 477.30 477.40	STD. 5.51
ES-3	END SECTION	0+22 CARLETON COURT 9% 23' LT.	INV. = 487.00 486.90	STD. 5.51
ES-4	END SECTION	0+22 CARLETON COURT 9% 23' RT.	INV. = 487.50 487.40	STD. 5.51
ES-5	END SECTION	0+22 DOWNING COURT 9% 24' RT.	INV. = 486.75 486.70	STD. 5.51
ES-6	END SECTION	0+22 DOWNING COURT 9% 24' LT.	INV. = 487.25 487.20	STD. 5.51
ES-7	END SECTION	0+22 CARLETON COURT 9% 120' RT.	INV. = 489.00 483.40	STD. 5.51
I-1	A-S INLET	L.P. 2+43.55 CARLETON COURT 9% 0'	T.C. = 489.00 488.90	STD. 4.01
I-2	K INLET	L.P. 3+02.97 CARLETON COURT 9% 0' RT.	NOTCH EL. = 489.80 489.80	STD. 4.12
I-3	K INLET	L.P. 0+35 CARLETON COURT 9% 0' RT.	NOTCH EL. = 489.00 490.70	STD. 4.12
ES-10	END SECTION	L.P. 1+55.33 RAMSGATE COURT 9% 170' RT.	INV. = 487.50 486.50	STD. 5.51
I-4	A-S INLET	L.P. 1+02.11 RAMSGATE COURT 9% 0'	T.C. = 481.50 482.10	STD. 4.01
I-5	K INLET	0+25 RAMSGATE COURT 9% 17' LT.	NOTCH EL. = 489.00 489.00	STD. 4.12
I-6	K INLET	0+25 RAMSGATE COURT 9% 17' RT.	NOTCH EL. = 489.00 489.00	STD. 4.12
ES-9	END SECTION	0+22 RAMSGATE COURT 9% 22' LT.	INV. = 489.50 493.40	STD. 5.51
ES-8	END SECTION	0+22 RAMSGATE COURT 9% 22' RT.	INV. = 489.00 489.00	STD. 5.51
EW-2	ENDWALL	17+75 WOODLAND DRIVE 9% 22' LT.	484.30 INV. = 484.25 484.40	SEE DETAIL
EW-1	ENDWALL	17+75 WOODLAND DRIVE 9% 20' RT.	483.90 INV. = 483.75 483.70	SEE DETAIL
I-7	K INLET	3+75 HELMSTALE COURT 9% 17' RT.	NOTCH EL. = 492.00 492.00	STD. 4.12
I-8	K INLET	3+25 HELMSTALE COURT 9% 17' LT.	NOTCH EL. = 489.00 492.15	STD. 4.12
ES-11	END SECTION	3+25 HELMSTALE COURT 9% 120' LT.	INV. = 489.00 484.82	STD. 5.51

NOTES: 1. ALL STANDARDS REFER TO HOWARD COUNTY STANDARD DETAILS UNLESS OTHERWISE SHOWN.
2. RIM ELEVATION MAY BE ADJUSTED IN THE FIELD TO MATCH EXISTING GRADE WITH APPROVAL OF ENGINEER.

I-7	K-INLET	N 54°06'45" GD E 199°22'30" 80	496.31 NOTCH EL. = 490.75	STD. 4.12
M-1	STANDARD PRECAST MANHOLE	N 54°09'01" 87 E 199°17'01" 84	RIM = 501.82(1) 500.81	STD. 2.15.12
M-2	STANDARD PRECAST MANHOLE	N 54°06'09" 80 E 199°17'14" 80	RIM = 501.76(1) 501.49	STD. 2.15.12
ES-12	END SECTION	N 54°04'20" 51 E 199°19'50" 01	INV. = 489.00 489.61	STD. 5.11

OWNER/DEVELOPER
WINCHESTER HOMES, INC.
6305 Ivy Lane, Suite 700
Greenbelt, Maryland 20770
(301)474-4411
ATTN: Mr. Ralph Bice, III

ENGINEER
MILDENBERG, MOCHI & ASSOC., INC.
3300 North Ridge Road, Suite 235
Ellicott City, Maryland 21043
(410)461-0078
ATTN: Mr. Robert Mochi, P.E.

ASBUILT 06-20-97

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John Damms 5/21/97
CHIEF, LAND DEVELOPMENT DIVISION
Andrew M. Daniels 5-13-97
CHIEF, BUREAU OF HIGHWAYS
Paul J. Sporn 5/23/97
CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Quina Summerville 5/26/97
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
John R. Pletcher 5/6/97
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Patricia Englund 5/6/97
U. S. SOIL CONSERVATION SERVICE

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this 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 onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.
K. Bice 1/18/97
Signature of Developer

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 County Soil Conservation District.
Bob Mochi 1-18-97
Robert M. Mochi, P.E.

Project	date	engineering	TJP	approval	RMK
88027-06	1/10/94				

Project	date	description	revisions
88027-06	1/10/94	ASBUILT	1

ASBUILT PHASE 2
ASHLEIGH KNOLLS
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT No. 5
STORM DRAIN PROFILES AND DETAILS

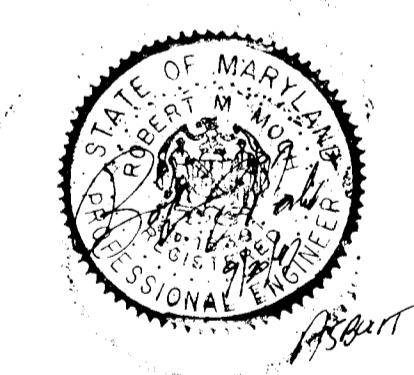
MILDENBERG, MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(410) 461-0078 D.C. Metro: (301) 621-5768 Fax: (410) 750-8340

1669

189027-00 189027-06 1890276DA



PLAN SCALE
1" = 200'



OWNER/DEVELOPER
WINCHESTER HOMES, INC.
6205 Ivy Lane, Suite 700
Greenbelt, Maryland 20770
(301) 474-4411
ATTN: Mr. Ralph Bice, III

ENGINEER
MILDENBERG, MOCHI & ASSOCIATES, INC.
3300 North Ridge Road, Suite 235
Ellicott City, Maryland 21043
(410) 461-0078
Attn: Mr. Robert M. Mochi, P.E.

ASBUILT 06-20-97

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Michael J. Daniels 5/16/94
CHIEF, LAND DEVELOPMENT DIVISION
Andrew M. Daniels 5-13-94
CHIEF, BUREAU OF HIGHWAYS
Paul M. Johnson 5/23/94
CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Jim Swannery 5/26/94
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

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

John P. Denton 5/6/94
HOWARD COUNTY SOIL CONSERVATION DISTRICT

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Patricia Engler 5/6/94
U.S. SOIL CONSERVATION SERVICE

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this 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 onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.

Ralph Bice 1/18/94
Signature of Developer 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 County Soil Conservation District.

Robert M. Mochi 1-18-94
Robert M. Mochi, P.E. Date

Project	1/4/94
date	1/4/94
illustration	engineering
TIP	approval
BLP	scale
scale	1"=200'
date	1/7/94
description	revisions
no.	

1	APPROVED LOT 10 (CECIL PROPERTY) FROM 15 TO 10 (RETAINED) 5/1/94
2	REMOVED FROM HOWARD COUNTY SOIL CONSERVATION DISTRICT 4/10/94
3	1st SUBMITTAL TO HOWARD COUNTY DEPT 1/7/94
no.	

ASBUILT
PHASE 2
ASHLEIGH KNOLLS
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT No. 6
DRAINAGE AREA MAP

MILDENBERG, MOCHI & ASSOCIATES, INC.
ENGINEERS • SURVEYORS • PLANNERS
3300 North Ridge Road, Suite 235, Ellicott City, Maryland 21043-3350
(410) 461-0078 D.C. Metro: (301) 621-5768 Fax: (410) 750-6340

SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Office of Inspections and Permits prior to the start of any construction. (313-1855)
- 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 Specifications for Soil Erosion and Sediment Control.
- Following initial soil disturbances or redistribution, permanent or temporary stabilization shall be completed within: a) 72 hours for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 5 calendar days to all other disturbed or graded areas on the project site.
- 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 (Phase 2): 219.3 AC ±
Area to be Disturbed: 40.3 AC ±
Area to be roofed or paved: 57 AC ±
Area to be vegetatively stabilized: 26.6 AC ±
Total Cut: 44,777 CY
Total Fill: 21,020 CY
Offsite Waste/Borrow Area Location: NA
- 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 controls must be provided, if deemed necessary by the Howard County DLP Sediment Control Inspector.
- Quantities and estimates shown are for sediment control purposes only. Contractor shall prepare his/her own quantity estimates to his/her satisfaction.

PERMANENT SEEDING NOTES

- Apply to graded or cleared area not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding. (If not previously loosened)
- Soil Amendments:** In lieu of soil test recommendations, use on the following schedules:
- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureiform fertilizer (9 lbs/1000 sf).
 - Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sf) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sf) before seeding. Harrow or disc into upper three inches of soil.
- Seeding:** For the periods March 1 through April 30 and August 1 through October 15, seed with 60 lbs per acre (1.4 lbs/1000 sf) of Kentucky 31 Tall Fescue. For the period May 1 through July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (0.05 lbs/1000 sf) of Weeping Lovegrass. During the period of October 16 through 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 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 sf) 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 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.
- Maintenance:** Inspect all seeded areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

- Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.
- Seeded Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding. (If not previously loosened)
- Soil Amendments:** Apply 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sf).
- Seeding:** For periods March 1 through April 30 and from August 15 through November 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sf). For the period May 1 through August 14, seed with 3 lbs per acre of Weeping Lovegrass (0.07 lbs/1000 sf). For the period November 16 through 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 sf) 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 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sf) for anchoring.
- Refer to the 1983 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.

STANDARD AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION OF CHANNELS AND STEEP SLOPES

Definition
Installing jute or excelsior matting on a prepared seed - or planting - bed of a channel or steep slope to be stabilized with vegetation.

Purpose
To aid in controlling erosion on critical sites during establishment period of protective vegetation.

Conditions Where Practice Applies
In channels where designed flow exceeds 3.5 feet per second; on short, steep slopes where erosion is likely to be high and planting is likely to be slow; or establish adequate protective cover; on tidal or stream banks where moving water is likely to wash out new vegetative plantings.

MATERIALS

- Jute mat** shall be cloth of a uniform plain weave of undyed and unbleached single jute yarn, 48 inches in width plus or minus 1 inch and weighing an average of 1.2 pounds per linear yard of cloth with a tolerance of plus or minus 5 percent, with approximately 78 very ends per width of cloth and 41 very ends per linear yard of cloth. The yarn shall be of a loosely twisted construction having an average twist or not less than 1.6 turns per inch and shall not vary in thickness by more than one-half of its normal diameter.
- Excelsior mat** shall be wood excelsior, 48 inches in width plus or minus 1 inch and weighing 0.8 pounds per square yard plus or minus 10 percent. The excelsior material shall be covered with a netting to facilitate handling and to increase strength.
- Glass fiber matting** of bonded textile glass fibers with an average fiber diameter of 8 to 12 microns, 2 to 4 inch strands of fiber bonded with phenol formaldehyde resin. Mat shall be roll type, water permeable, minimum thickness 1/4 inch, maximum thickness 1/2 inch, density not less than 3 pounds per cubic foot.
- Staples** - staples for anchoring soil stabilizing materials shall be No. 11 gauge wire or heavier. Their length shall be 6 to 10 inches. Use the longer staples on loose, unstable soils.

INSTALLATION REQUIREMENTS

Site Preparation: After site has been shaped and graded to approved design, prepare a friable seedbed relatively free from clods and rocks more than 1/4 inches in diameter, and any foreign material that will prevent contact of the protective mat with the soil surface.

Planting: Lime, fertilize, and seed in accordance with seeding or other type of planting plan, except when using jute matting on a seeded area, apply approximately one-half the seed after laying the mat. The protective matting can be laid over sprigged areas where small grass plants have been planted. Where ground covers are to be planted, lay the protective matting first and then plant through the matting according to design of planting.

Erosion Stops: (For use on steep, highly erodible watercourses) Erosion stops are made of glass fiber strips, excelsior matting strips or tightly folded jute matting blanket or strips. They are placed in narrow trenches 6 to 12 inches deep across the channel and left flush with the soil surface. They are to cover the full cross-section of designed flow.

How Used: Under jute or excelsior matting.

Location:

- Approximately 3 feet down channel from point of entry of a concentrated flow such as from culverts, tributary channels or diversions.
- At points where change in gradient or course of channel occurs.
- Spacing of erosion stops on long slopes will vary from 20 to 100 feet depending upon the erodibility of the soil and velocity and volume of flow.

Installation:
Erosion stops should extend beyond the channel liner to full design cross-section of the channel to check any rills that might form outside the channel lining.

The trench may be dug with a spade or a mechanical trencher making sure that the down slope face of the trench is flat; it should be uniform and perpendicular to line of flow to permit proper installation and stapling of the glass fiber matting.

The erosion stop should be deep enough to penetrate solid material or below level of filling in sandy soils. In general, erosion stops will vary from 6 to 12 inches in depth.

The erosion stop mats should be wide enough to allow a minimum of 2 inch turnover at bottom of trench for stapling while maintaining the top edge flush with channel surface.

Tamp back fill firmly and to a uniform gradient of channel.

Erosion Stop Detail

If seeding has been done prior to installation of erosion stops, reseed disturbed areas prior to placement of channel liner.

Laying Jute Matting: (If instructions have been followed, all needed erosion stops will have been installed, and the jute matting will be laid on a friable seedbed free from clods, rocks, roots, etc., that might cause bridging.)

Most channels will require multiple widths of jute matting, two widths being the most commonly used. Jute matting starting at the upper end of the channel allowing a 4 inch overlap of matting along center of channel.

Securing Jute Matting: Bury the top ends of jute matting in a narrow trench, minimum of 6 inch depth, similar to that used for erosion stops. Backfill trench and tamp firmly to conform to channel cross-section. Secure with a row of staples about 4 inches down slope from the trench. Spacing between staples is 6 inches.

Next, staple the 4 inch overlap in channel center using an 18 inch spacing between staples. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil. Staples shall be placed 2 feet apart along the outer edge of matting.

Where one roll of jute matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4 inches, ship-lap fashion.

Where matting crosses erosion stops, reinforce with a double row of staples spaced six (6) inches apart in a staggered pattern on either side of erosion stop. Likewise, overlaps joining the length of matting top and the discharge end of the matting liner should be similarly secured with 2 double rows of staples.

Laying and Securing Excelsior Matting: Same seeded preparation as for jute matting with the exception that all seeding must be completed before laying excelsior matting.

Bury top ends of excelsior matting in a trench as described for jute matting. As the blankets are unrolled down slope, the matting must be on top with the wood fibers in contact with the soil. Butt snugly at the ends and sides before stapling.

Using two (2) foot spacing between staples, excelsior matting shall be secured with four rows for each strip, with one row along each edge and alternating parallel rows down the center. The stapling over erosion stops, entrance and discharge ends of matting and butted end joints shall be the same as described for jute matting.

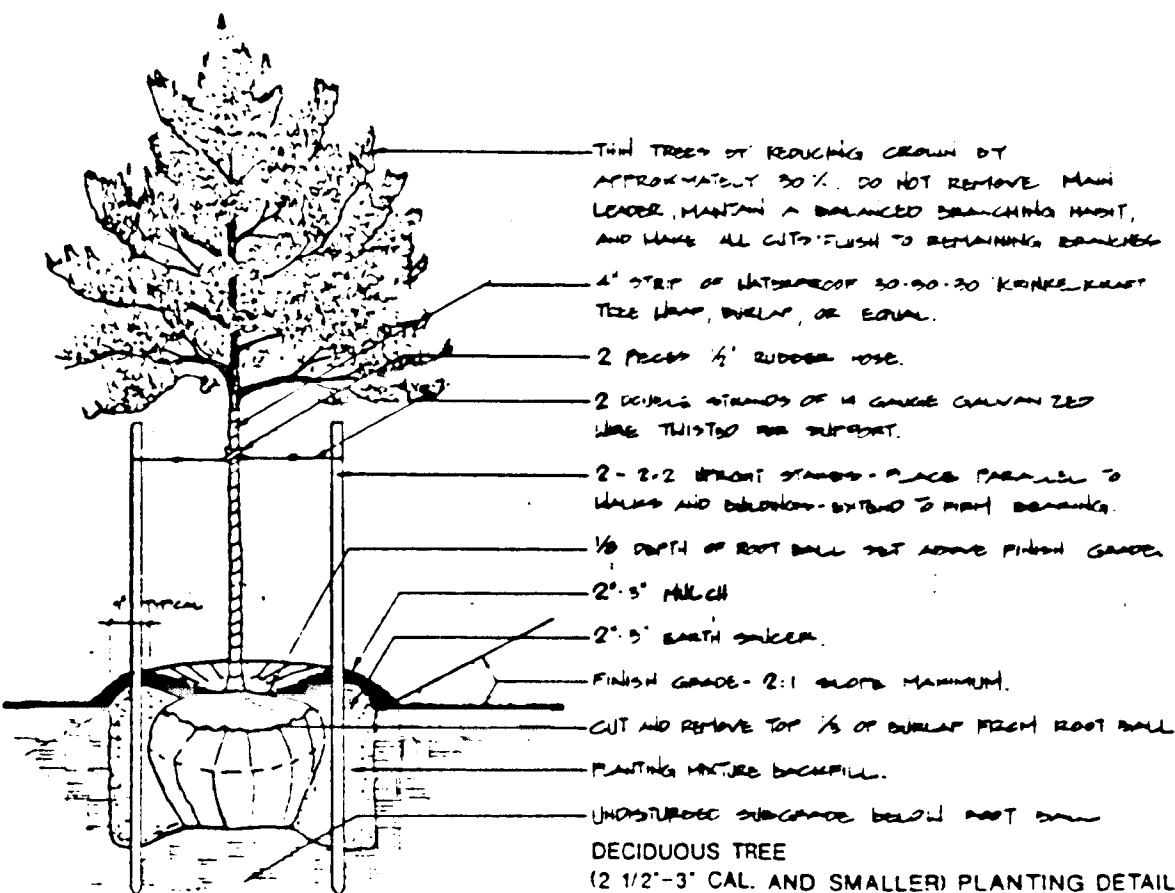
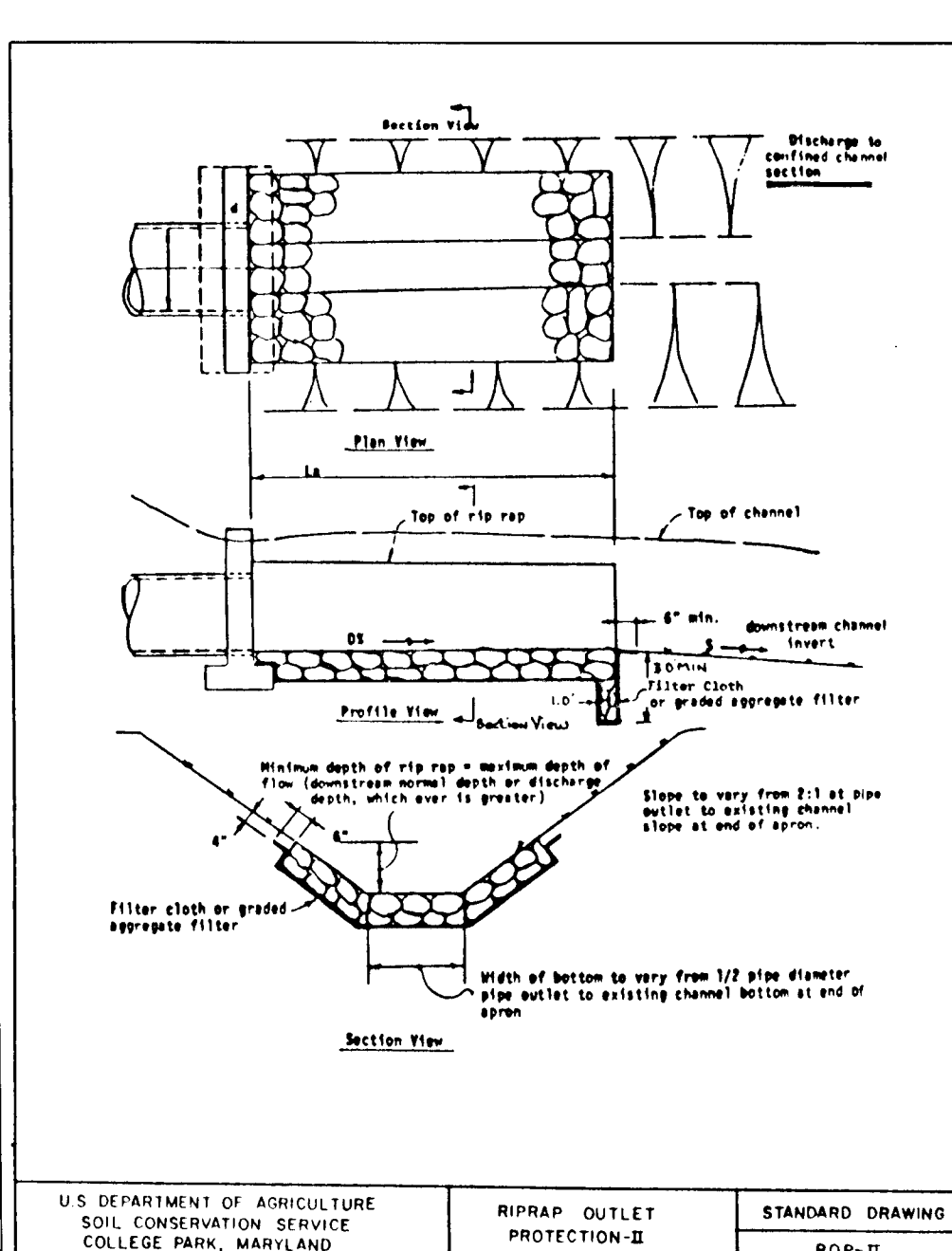
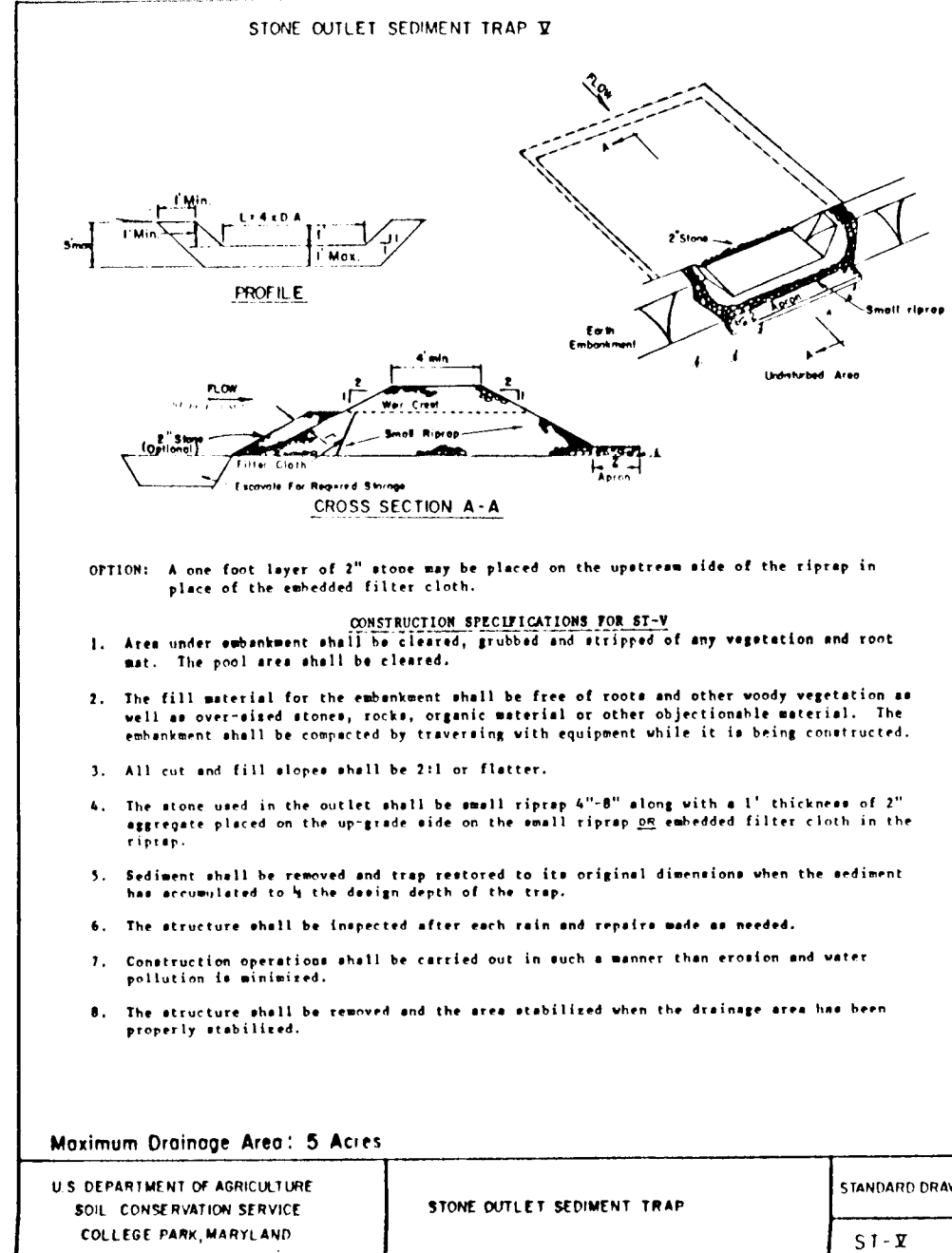
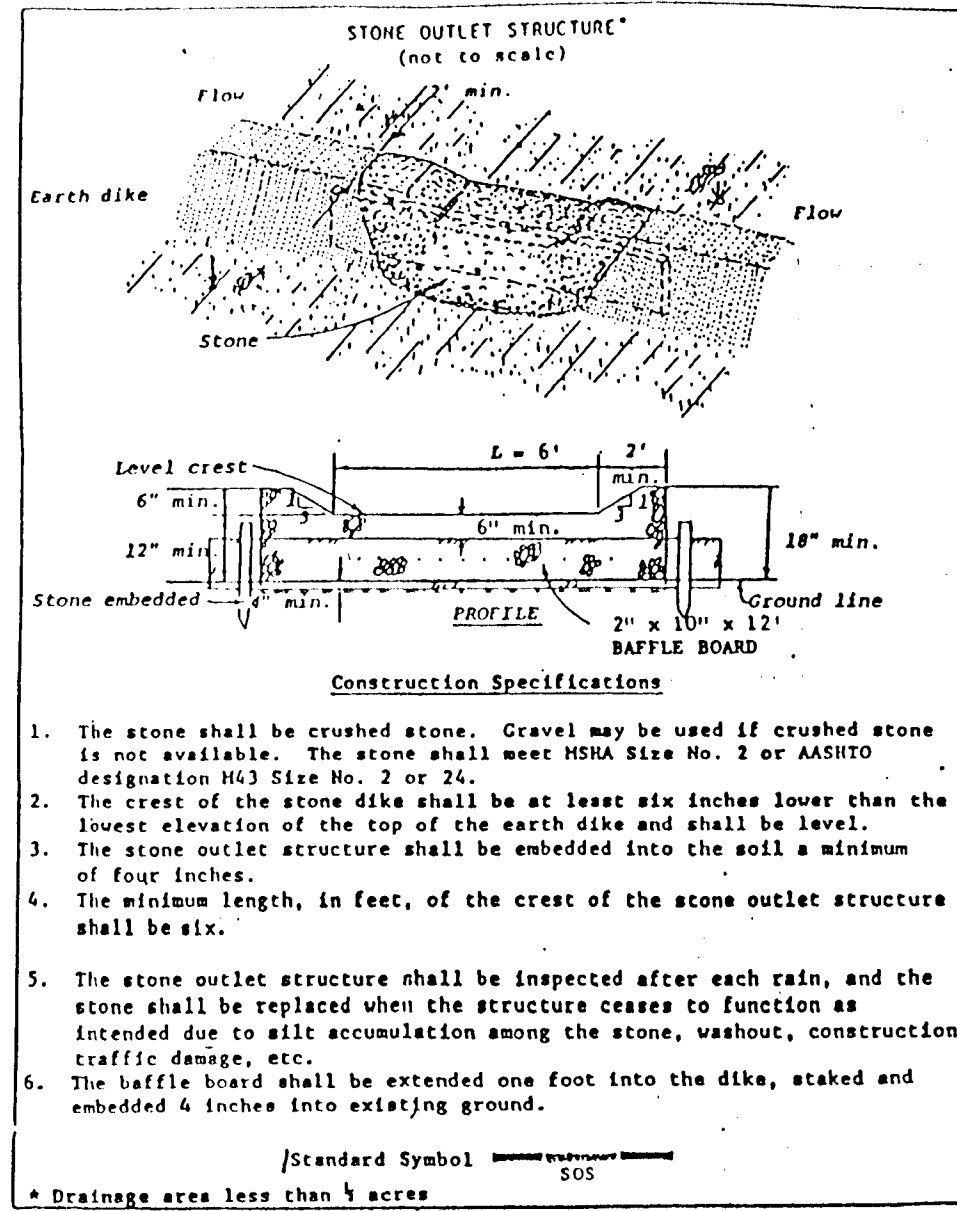
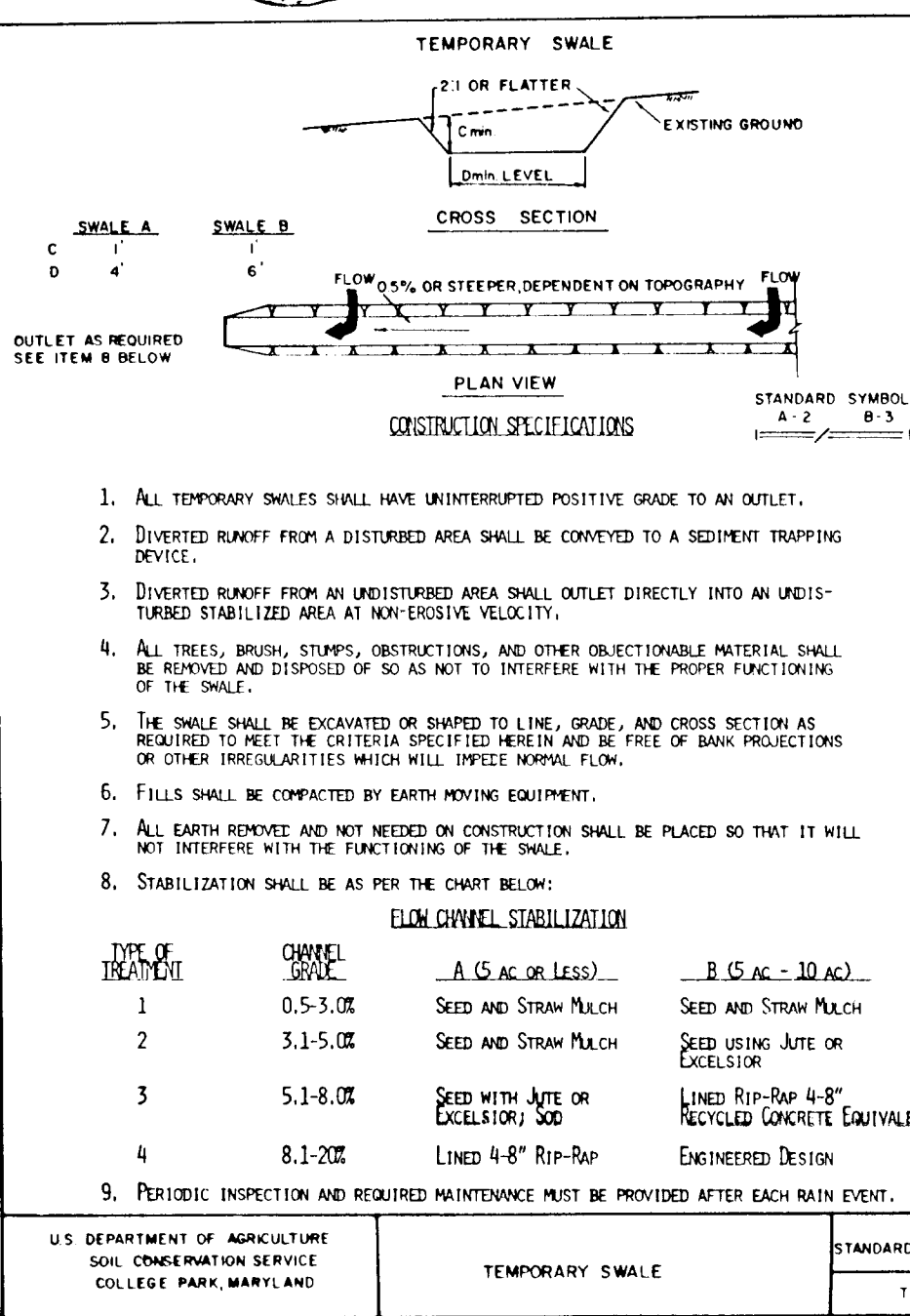
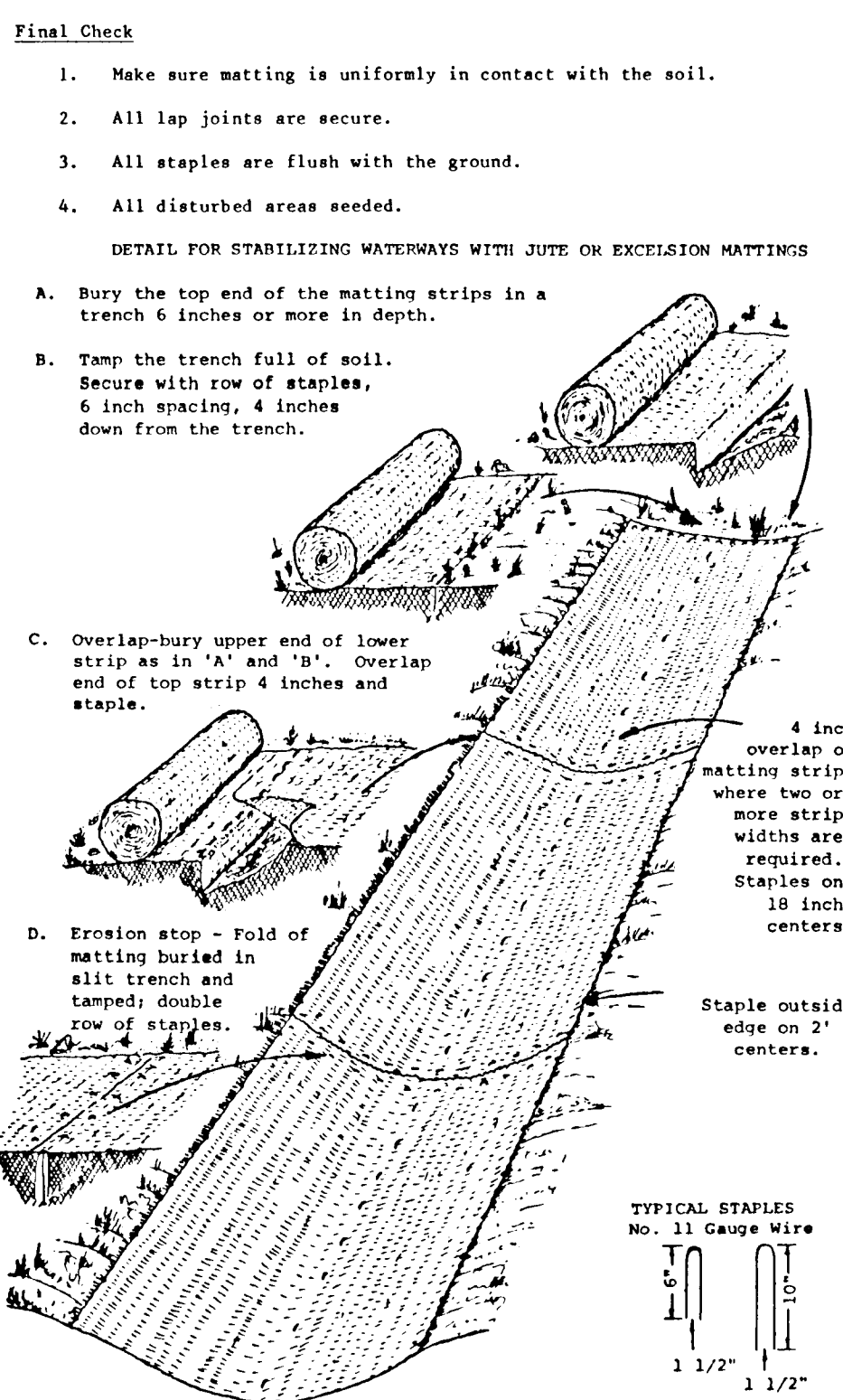
Final Check

- Make sure matting is uniformly in contact with the soil.
- All lap joints are secure.
- All staples are flush with the ground.
- All disturbed areas seeded.

DETAIL FOR STABILIZING WATERWAYS WITH JUTE OR EXCELSIOR MATTINGS

- Bury the top end of the matting strips in a trench 6 inches or more in depth.
- Tamp the trench full of soil. Secure with row of staples, 6 inch spacing, 4 inches down from the trench.
- Overlap-bury upper end of lower strip as in 'A' and 'B'. Overlap end of top strip 4 inches and staple.
- Overlap of matting strips where two or more strip widths are required. Staples on 18 inch centers.
- Staple outside edge on 2' centers.

Typical Staples
No. 11 Gauge Wire
1 1/2" x 1 1/2"



TREE SCHEDULE

STREET NAME	TREE SIZE	SPACING	TYPE	SYMBOL	QUANTITY
MOORELAND DRIVE	2 1/2" CALIPER MEDIUM TREE	40' O.C.	RANCO PEAR	○	103
CARLUKE COURT	2 1/2" CALIPER SMALL TREE	40' BETWEEN	FLOWERING CRABAPPLE	○	44
WELLSDALE COURT	2 1/2" CALIPER SMALL TREE	40' BETWEEN	FLOWERING CRABAPPLE	○	45
KAMGATE COURT	2 1/2" CALIPER SMALL TREE	40' BETWEEN	FLOWERING CRABAPPLE	○	56

1669

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 5/20/94
 [Signature] 5-13-94
 [Signature] 5/23/94

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 5/26/94

APPROVED: THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 [Signature] 5/16/94

APPROVED: REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 [Signature] 5/16/94

DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done in accordance with this plan of development and plan for erosion and sediment control and that all responsible personnel involved in the construction of this 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 onsite inspection by the Howard County Soil Conservation District or their authorized agents, as are deemed necessary.
 [Signature] 4/13/94
 Signature of Developer

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 County Soil Conservation District.
 [Signature] 5-2-94
 Robert Mochi, P.E.
 ENGINEER

PROJECT: 89027-06
 DATE: 1/16/94
 DRAWN BY: MAST
 CHECKED BY: TIP
 SCALE: AS SHOWN
 APPROVAL: [Signature]

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT BY: [Signature] 4/16/94
 DATE: 1/17/94
 SUBMITTED TO: HOWARD COUNTY DEP. OF PUBLIC WORKS
 REVISIONS: [Signature]

ASBUILT PHASE 2
 ASHLEIGH KNOLLS
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 5
 SEDIMENT CONTROL NOTES AND DETAILS

U.S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE
 COLLEGE PARK, MARYLAND
 20740
 (301) 497-5666
 (410) 461-0078
 FAX: (410) 750-6340

ILDENBERG, MOCHI & ASSOCIATES, INC.
 ENGINEERS - PLANNERS - ARCHITECTS
 3300 North Ridge Road, Suite 235
 Greenbelt, Maryland 20776
 (301) 474-4411

15 OF 16
 F 2478

