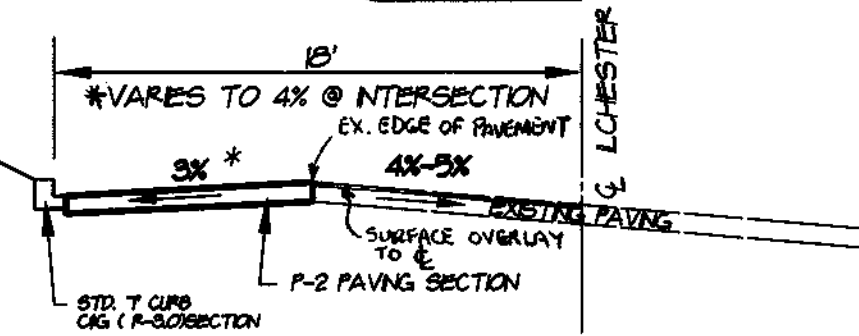


TYPICAL ROAD WIDENING SECTION

NOT TO SCALE
REFERENCE STANDARD DETAIL R 1001



Street Light Legend

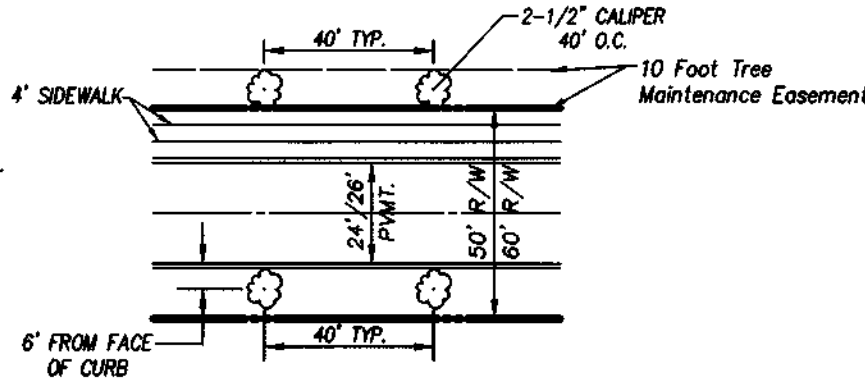
CRESTWOOD LANE STA. CHRT, 17'R	150'-WATT HPS VAPOR TENDANT FIXTURE (OPTION?) MOUNTED AT 20' ON A 14'-FOOT BLACK FIBERGLASS POLE WITH A 12" ARM.	ANGLE ARM AS SHOWN ON PLAN
CRESTWOOD LANE Sta. 3496 o/s 16' Rt.	100-watt "Traditionaire" HPS vapor post top fixture on 14-foot black fiberglass pole	Street light shall be placed 2'-4" from back of curb
CRESTWOOD LANE Sta. 8+71 o/s 16' Lt.	100-watt "Traditionaire" HPS vapor post top fixture on 14-foot black fiberglass pole	Street light shall be placed 2'-4" from back of curb
CRESTWOOD LANE Sta. 12+09 o/s 16' Lt.	100-watt "Traditionaire" HPS vapor post top fixture on 14-foot black fiberglass pole	Street light shall be placed 2'-4" from back of curb
CRESTWOOD LANE Sta. 18+02 o/s 16' Lt.	100-watt "Traditionaire" HPS vapor post top fixture on 14-foot black fiberglass pole	Street light shall be placed 2'-4" from back of curb
CRESTWOOD LANE Sta. 20+13 o/s 16' Lt.	100-watt "Traditionaire" HPS vapor post top fixture on 14-foot black fiberglass pole	Street light shall be placed 2'-4" from back of curb

- Street Tree Notes**
- STREET TREE TABULATION
 - CRESTWOOD LANE 4,110 LINEAR FEET OF RIGHT-OF-WAY 103 STREET TREES REQUIRED (4,110 LF / ONE TREE PER 40 LF) 105 STREET TREES PROVIDED
 - THE DEVELOPER WILL BE RESPONSIBLE FOR THE PROPOSED STREET TREES AT THE TIME OF CONSTRUCTION OF CRESTWOOD LANE.

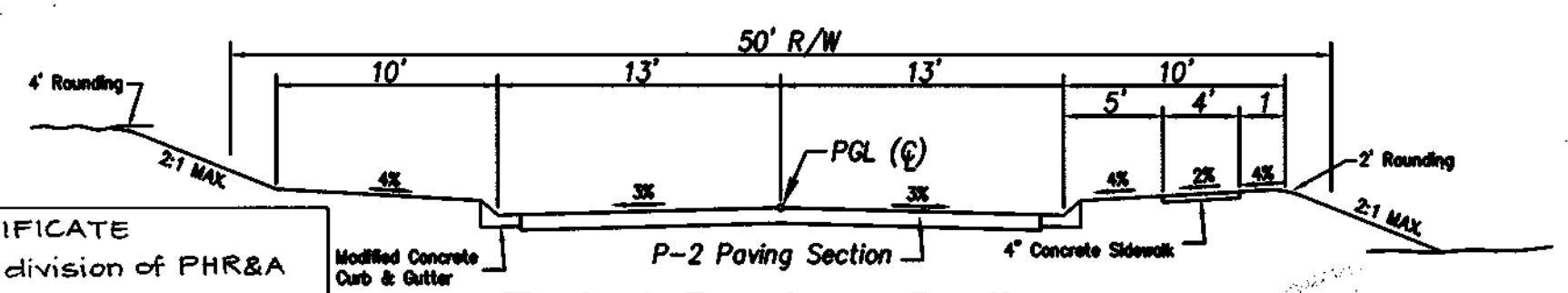
Street Tree Legend

Botanical Name	Common Name	Size	Root	Quantity	Symbol
ACER RUBRUM	RED MAPLE	2-1/2" CAL.	B & B	105	(Symbol)

- LEGEND**
- 4x4 STOP SIGN POST
 - CONCRETE MONUMENT SET
 - POWER POLE #55482
 - TREE
 - REBAR & CAP SET# 300



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



Typical Roadway Section
CRESTWOOD LANE

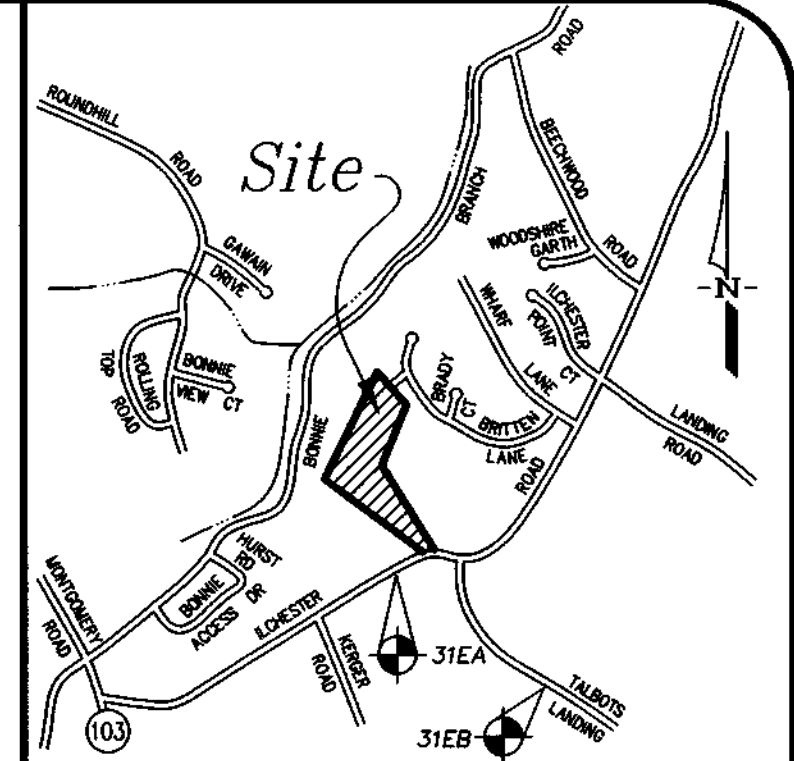
Not to Scale
Sta. 0+00 to Sta. 20+93.96
Local Road, 250-1000 ADT
Design Speed: 30 mph

AS-BUILT CERTIFICATE
BY: RIEMEE MEGGEE, a division of PHR&A

CHRISTOPHER J. REID #19949
DATE: 1.19.01

General Notes:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (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 BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JAN. 1998)". A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM AN AERIAL SURVEY WITH TWO (2) FOOT CONTOUR INTERVALS PREPARED BY HARFORD AERIAL SURVEYS, INC. DATED MARCH 22, 1989.
- THE COORDINATES SHOWN HEREON ARE BASED UPON HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENTS Nos. 31EA AND 31EB.
- WATER IS PUBLIC. CONTRACT NO. 14-3680-D DRAINAGE AREA: PATAPSCO
- SEWER IS PUBLIC. CONTRACT NO. 14-3680-D DRAINAGE AREA: PATAPSCO
- STORMWATER MANAGEMENT SHALL BE PROVIDED BY AN EXTENDED DETENTION FACILITY TO BE PRIVATELY OWNED AND MAINTAINED BY THE HOMEOWNERS ASSOCIATION. DESIGN MANUAL WAIVERS HAVE BEEN APPROVED FOR CONSTRUCTION OF SWM FACILITY PER LETTER FROM DED, DATED 05/29/98.
- EXISTING UTILITIES ARE BASED ON HOWARD COUNTY CONTRACT DRAWINGS AND SOME SUPPLEMENTAL FIELD SURVEY INFORMATION. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONFIRM THE EXISTING UTILITIES WITHIN THE LIMITS OF CONSTRUCTION.
- THERE IS NO FLOODPLAIN ON THIS SITE.
- THERE ARE NO WETLANDS ON THIS SITE.
- NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT HOWARD COUNTY DESIGN MANUAL, VOLUME IV
- PROJECT BACKGROUND INFORMATION:
 - SUBDIVISION NAME: CRESTWOOD
 - TAX MAP: 31
 - GRID: 9 & 15
 - PARCEL: 252
 - ELECTION DISTRICT: 1st
 - TOTAL TRACT AREA: 17.87 ACRES
 - NUMBER OF PROPOSED LOTS: 29 (BUILDABLE) 2 (OPEN SPACE)
- WATER QUALITY TREATMENT FOR ROOF TOPS NOT DRAINING TO THE PROPOSED S.W.M. FACILITY SHALL REQUIRE DRY WELLS. FINAL SIZING OF THE DRY WELLS SHALL BE DETERMINED AT THE SITE DEVELOPMENT PLAN STAGE. BUILDER SHALL BE RESPONSIBLE FOR CONSTRUCTION OF THE DRY WELLS.
- THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN.

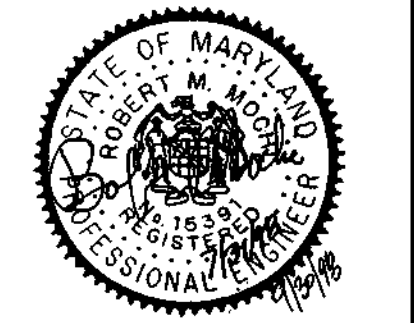


Vicinity Map
Scale: 1" = 2000'

ENGINEER / SURVEYOR
R.M. MOCHI GROUP, P.C.
10120 A Old National Pike
Jomsville, Maryland 21754
(410) 865-5858
Attn: Mr. Robert Mochi, P.E.

OWNER / DEVELOPER
ODC / ILCHESTER PROPERTIES, L.L.C.
231 E. Baltimore Street, 10th Floor
Baltimore, Maryland 21202
(410) 332-0006
Attn: Mr. Bradley T. Tavel

PREVIOUS DPZ FILE NOS:
SKETCH PLAN S-89-97
PRELIMINARY PLAN P-90-16
WAIVER PETITION WP-89-190
FINAL PLAN F-90-173
SKETCH PLAN S-96-13
PRELIMINARY PLAN P-96-04
(APPROVAL DATE: 11/20/97)



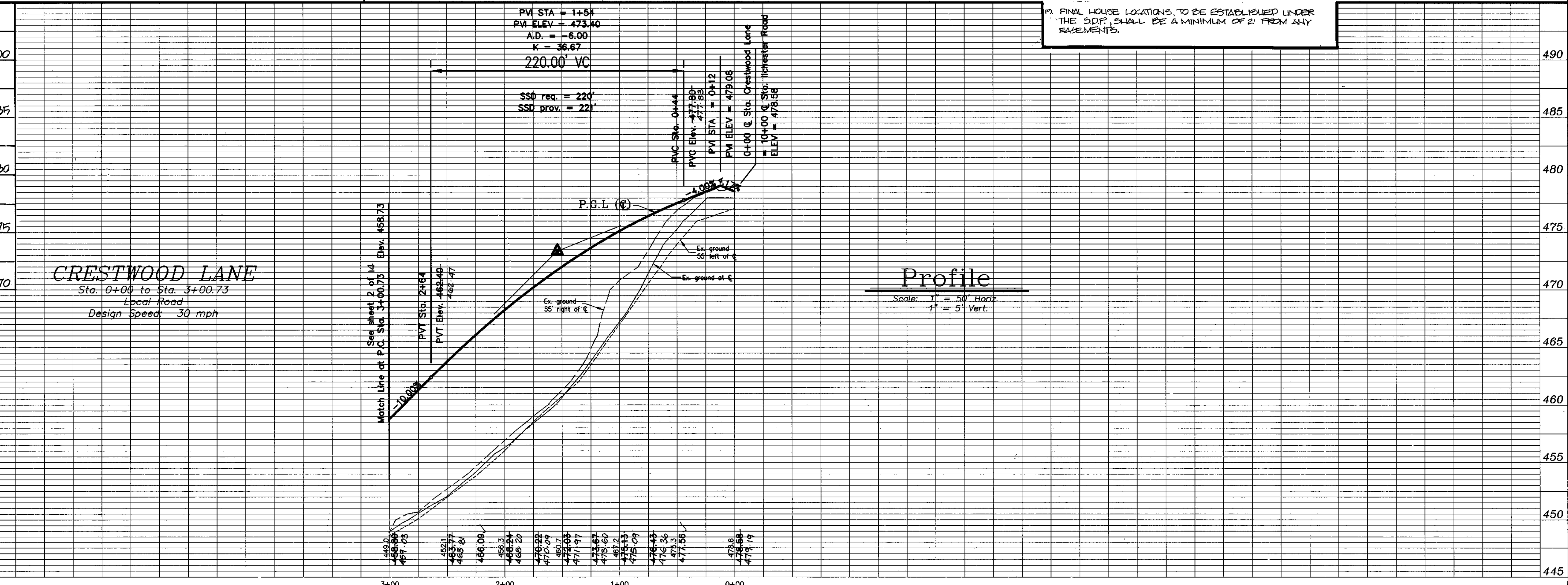
Curve Data
STA. 0+18.00 to STA. 1+81.69
Radius = 395.00'
Length = 163.69'
Tan = 83.04'
Delta = 23°44'38"
Chord = N 25°05'11" W, 162.52'

APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 10-26-98
CHIEF, BUREAU OF HIGHWAYS
APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Cindy Hamlett 4/16/99
CHIEF, DIVISION OF LAND DEVELOPMENT
Mike Dammicus 1/2/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION

- INDEX OF SHEETS**
- CRESTWOOD LANE - PLAN AND PROFILE
 - CRESTWOOD LANE - PLAN AND PROFILE
 - CRESTWOOD LANE - PLAN AND PROFILE
 - GRADING, SEDIMENT CONTROL + LANDSCAPE
 - GRADING, SEDIMENT CONTROL + LANDSCAPE
 - S.W.M. PROFILE AND DETAILS
 - S.W.M. PROFILE AND DETAILS
 - S.W.M. PROFILE AND DETAILS
 - STORM DRAIN PROFILES
 - GRADING, SEDIMENT CONTROL NOTES & DETAILS
 - FOREST CONSERVATION PLAN
 - FOREST CONSERVATION PLAN
 - FOREST CONSERVATION PLAN
 - DRAINAGE AREA MAP

R/W #8 CONC. MONUMENT
ELEV. 477.69
NO SCALE

Plan
Scale: 1" = 50'



CRESTWOOD
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT No. 1
Crestwood Lane - Plan and Profile

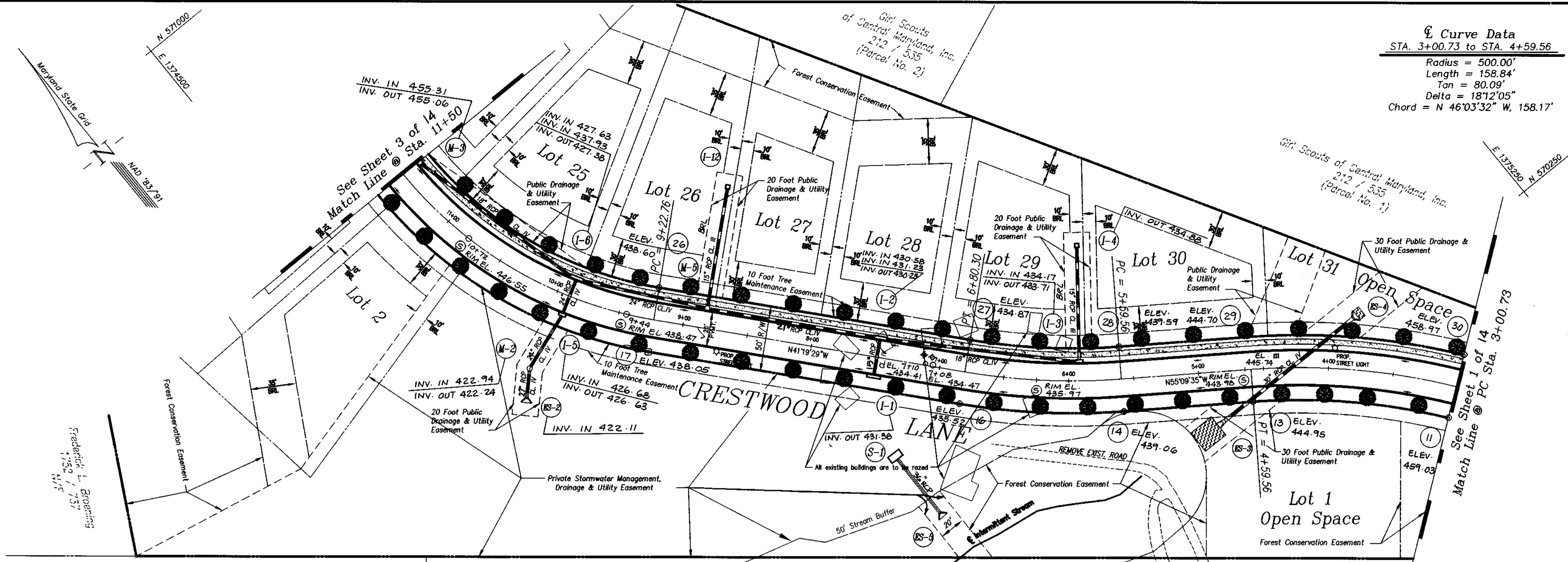
1 OF 14

REVISIONS

NO.	DATE	DESCRIPTION	BY	CHKD.
1	7/22/98	ISSUED FOR PERMITS	JLM	JLM
2	7/26/98	REVISION PER DPZ COMMENTS	JLM	JLM
3	8/11/98	REVISION PER DPZ COMMENTS	JLM	JLM
4	8/11/98	REVISION PER DPZ COMMENTS	JLM	JLM
5	8/11/98	REVISION PER DPZ COMMENTS	JLM	JLM
6	8/11/98	REVISION PER DPZ COMMENTS	JLM	JLM
7	8/11/98	REVISION PER DPZ COMMENTS	JLM	JLM
8	8/11/98	REVISION PER DPZ COMMENTS	JLM	JLM
9	8/11/98	REVISION PER DPZ COMMENTS	JLM	JLM
10	8/11/98	REVISION PER DPZ COMMENTS	JLM	JLM

PROJECT: 88004.13
DATE: Feb. 98
ENGINEERING: JLM
APPROVAL: RMM

P.O. Box 10
New Market, MD 21774-0010
10120 A Old National Pike
Jomsville, MD 21754-9706
(301) 865-5858
Fax: (301) 865-5111



Curve Data
 STA. 3+00.73 to STA. 4+59.56
 Radius = 500.00'
 Length = 158.84'
 Tan = 80.09"
 Delta = 1812.05"
 Chord = N 46°03'32" W, 158.17'

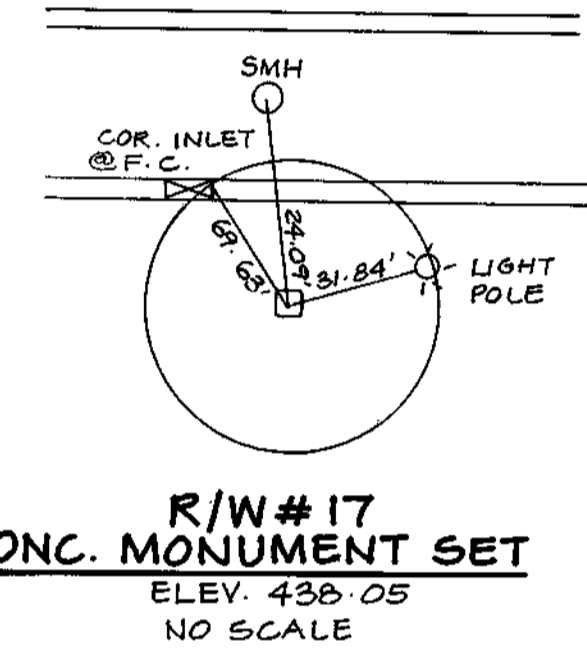
Curve Data
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 Radius = 500.00'
 Length = 120.73'
 Tan = 60.66"
 Delta = 1350.06"
 Chord = N 48°14'32" W, 120.44'

Curve Data
 STA. 9+22.76 to STA. 13+05.65
 Radius = 316.00'
 Length = 382.89'
 Tan = 218.91"
 Delta = 6925.29"
 Chord = N 06°36'45" W, 359.90'

- LEGEND**
- ⊕ WATER VALVE
 - ⊙ SEWER MANHOLE
 - CONC. MONUMENT SET
 - STA. POINT
 - REBAR & CAP SET # 300

ENGINEER / SURVEYOR
 R.M. MOCHI GROUP, P.C.
 10120 A Old National Pike
 Ijamsville, Maryland 21754
 (410) 865-5859
 Attn: Mr. Robert Mochi, P.E.

OWNER / DEVELOPER
 ODC / ILCHESTER PROPERTIES, L.L.C.
 231 E. Baltimore Street, 10th Floor
 Baltimore, Maryland 21202
 (410) 332-0006
 Attn: Mr. Bradley T. Tavel



AS-BUILT CERTIFICATE
 BY: RIEMER MUEGGE, a division of PHR & A, P.C.

CHRISTOPHER J. REID # 19949 DATE 1.19.01

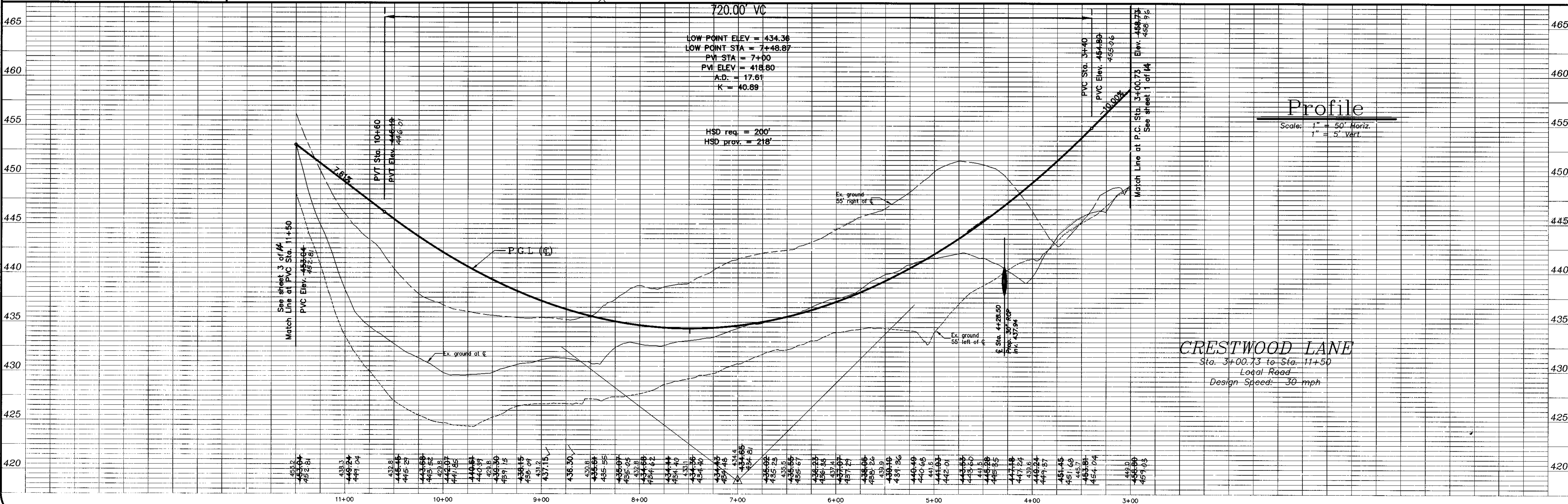
APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Charles W. O'Brien 10-26-98 DATE
 CHIEF, BUREAU OF HIGHWAYS

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Cindy Henretta 11/14/98 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED:
Mike... 11/14/98 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Charles W. O'Brien
 1817 / 100
 N/S
 Lot 2
 Arnold-O'Brien Subdivision
 Plat 7608

Plan
 Scale: 1" = 50'



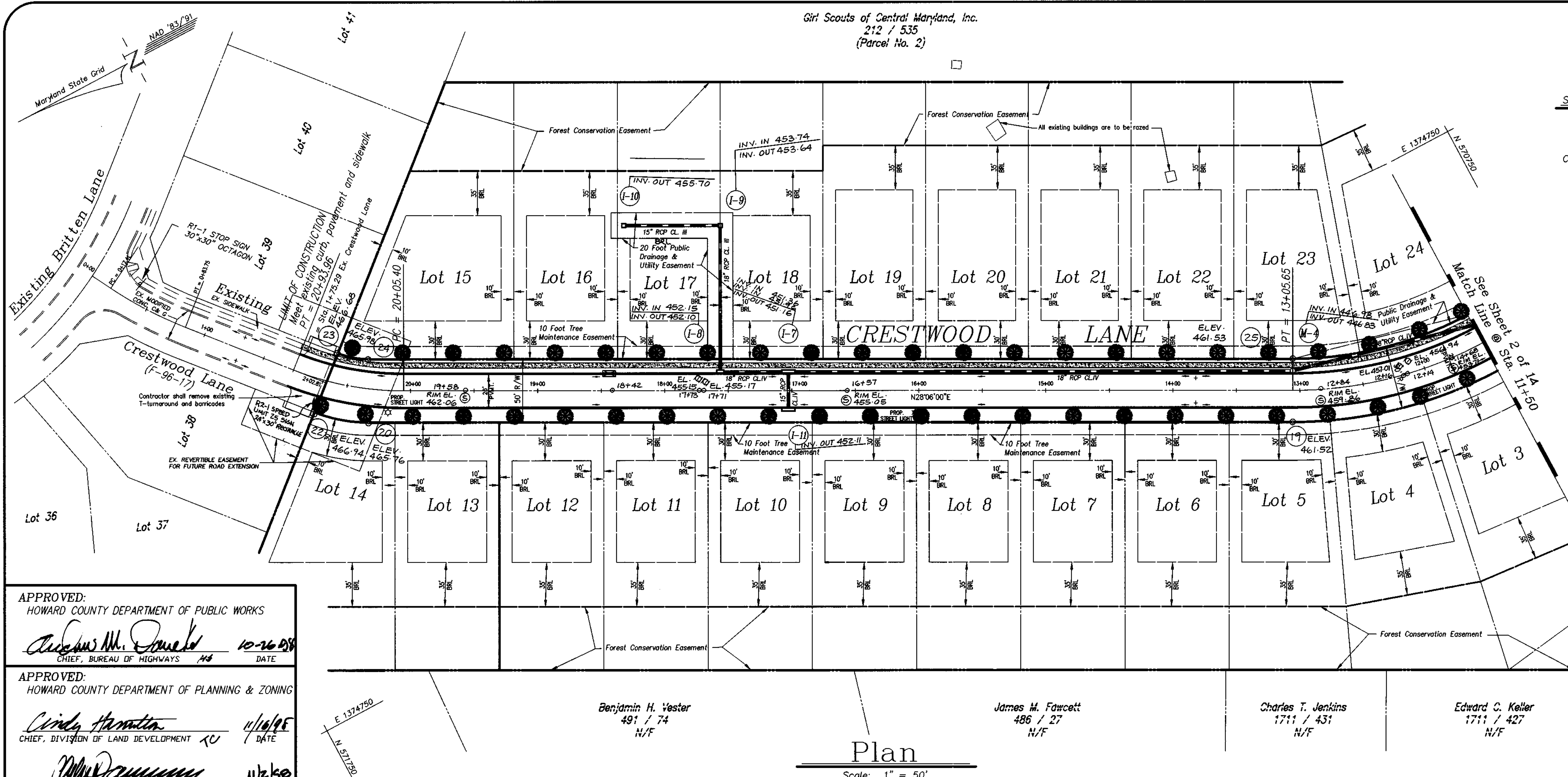
project	date	description	scale
98004-18	Feb. 98	engineering	JLM/JEM
98004-18	7/22/98	approval	JLM
	7/22/98	approval	JLM
			1" = 50'

no.	description	revisions	date
1	REVISED PER DPT. 1 & 2 CD COMMENTS		7/22/98
2	REVISED PER DPT. COMMENTS		7/22/98
3	SUBMITTED TO HOWARD COUNTY DPZ		7/22/98

ELECTION DISTRICT No. 1
CRESTWOOD
 HOWARD COUNTY, MARYLAND
 Crestwood Lane - Plan and Profile

R.M. MOCHI GROUP, P.C.
 P.O. Box 10
 New Market, MD 21774-0010
 (410) 865-5858
 Fax: (410) 865-5111

Girl Scouts of Central Maryland, Inc.
212 / 535
(Parcel No. 2)



Curve Data
STA. 9+22.76 to STA. 13+05.65
Radius = 316.00'
Length = 382.89'
Tan = 218.91'
Delta = 69°25'29"
Chord = N 06°36'45" W, 359.90'

Curve Data
STA. 20+05.40 to STA. 20+93.96
Radius = 234.94'
Length = 88.56'
Tan = 44.81'
Delta = 21°35'54"
Chord = N 38°53'57" E, 88.04'

- LEGEND**
- ⊙ SEWER MANHOLE
 - ⊕ WATER VALVE
 - ⊠ STORM DRAIN INLET
 - CONC. MONUMENT SET
 - STA. POINT
 - REBAR & CAP SET # 300

ENGINEER / SURVEYOR
R.M. MOCHI GROUP, P.C.
10120 A Old National Pike
Jaysville, Maryland 21754
(410)865-5858
Attn: Mr. Robert Mochi, P.E.

OWNER / DEVELOPER
ODC / ILCHESTER PROPERTIES, L.L.C.
231 E. Baltimore Street, 10th Floor
Baltimore, Maryland 21202
(410) 332-0006
Attn: Mr. Bradley T. Tavel

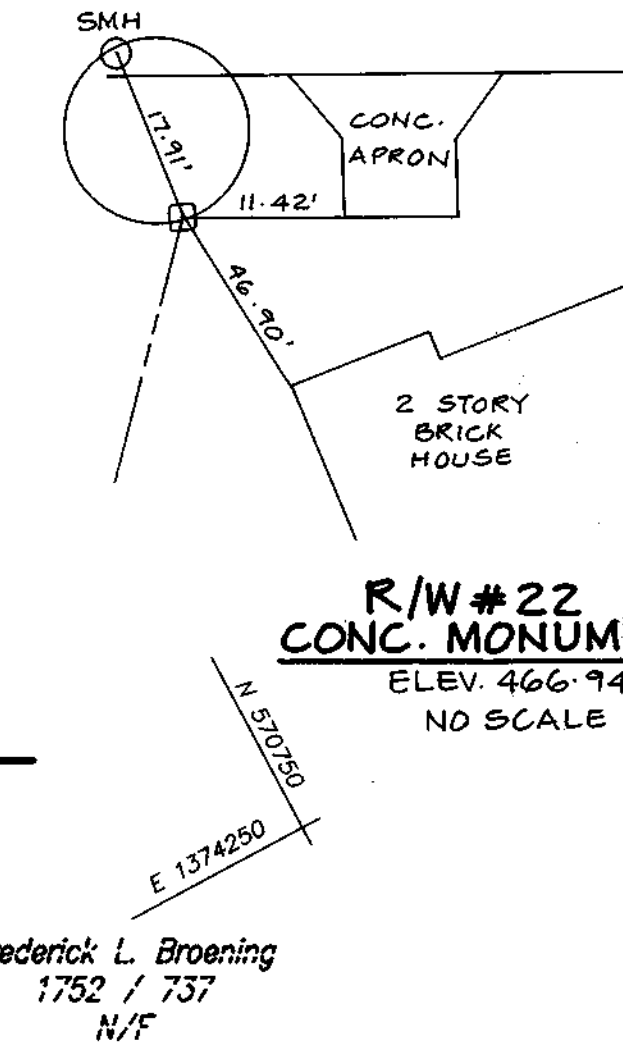
APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Spivey 10-26-08
CHIEF, BUREAU OF HIGHWAYS /H/ DATE

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Cindy Hamilton 11/16/08
CHIEF, DIVISION OF LAND DEVELOPMENT /V/ DATE

Mike [Signature] 11/2/08
CHIEF, DEVELOPMENT ENGINEERING DIVISION /E/ DATE

Benjamin H. Vester 491 / 74 N/F
James M. Fawcett 486 / 27 N/F
Charles T. Jenkins 1711 / 431 N/F
Edward C. Keller 1711 / 427 N/F

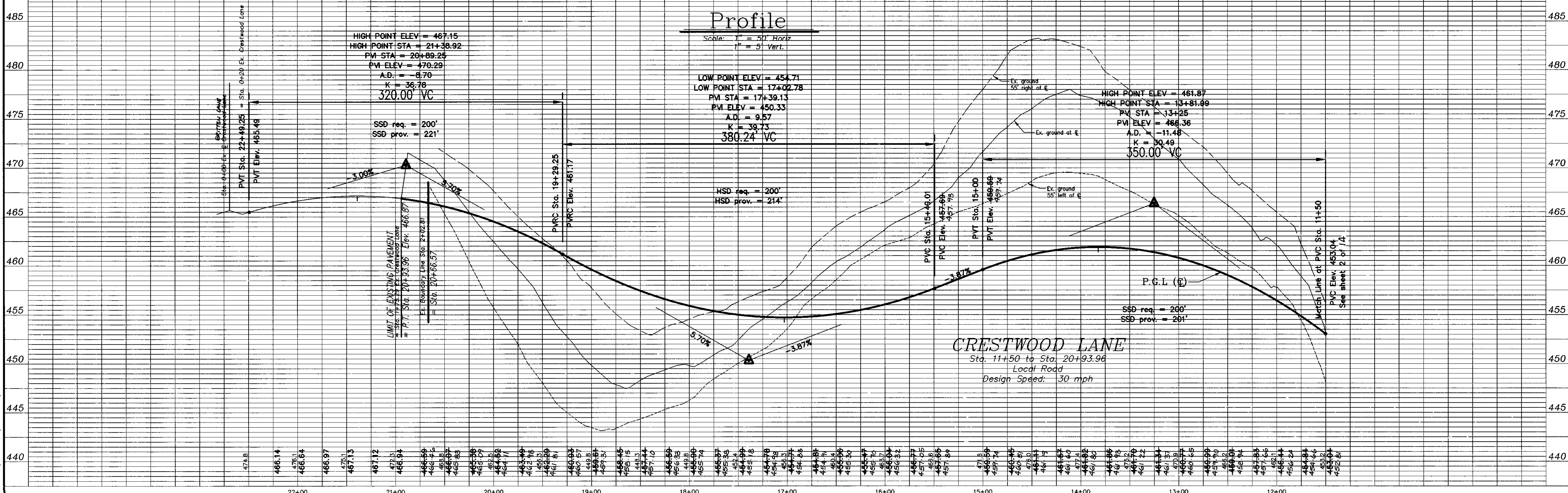
Plan
Scale: 1" = 50'



AS-BUILT CERTIFICATE
BY: RM OF PHR&A, P.C.
STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER J. REID #19949
DATE: 7.19.11



R/W #22
CONC. MONUMENT SET
ELEV. 466.94
NO SCALE



Project	Date	Engineering	Approval
98004-13	Feb. '08	JLM/JEM	JLM
9/23/08	7/26/08		

Revised	Description	Date
1	REVISED PER DTA, L&C COMMENTS	7/26/08
2	SUBMITTED TO HOWARD COUNTY DPZ	7/26/08

CRESTWOOD
HOWARD COUNTY, MARYLAND
ELECTION DISTRICT No. 1
Crestwood Lane - Plan and Profile

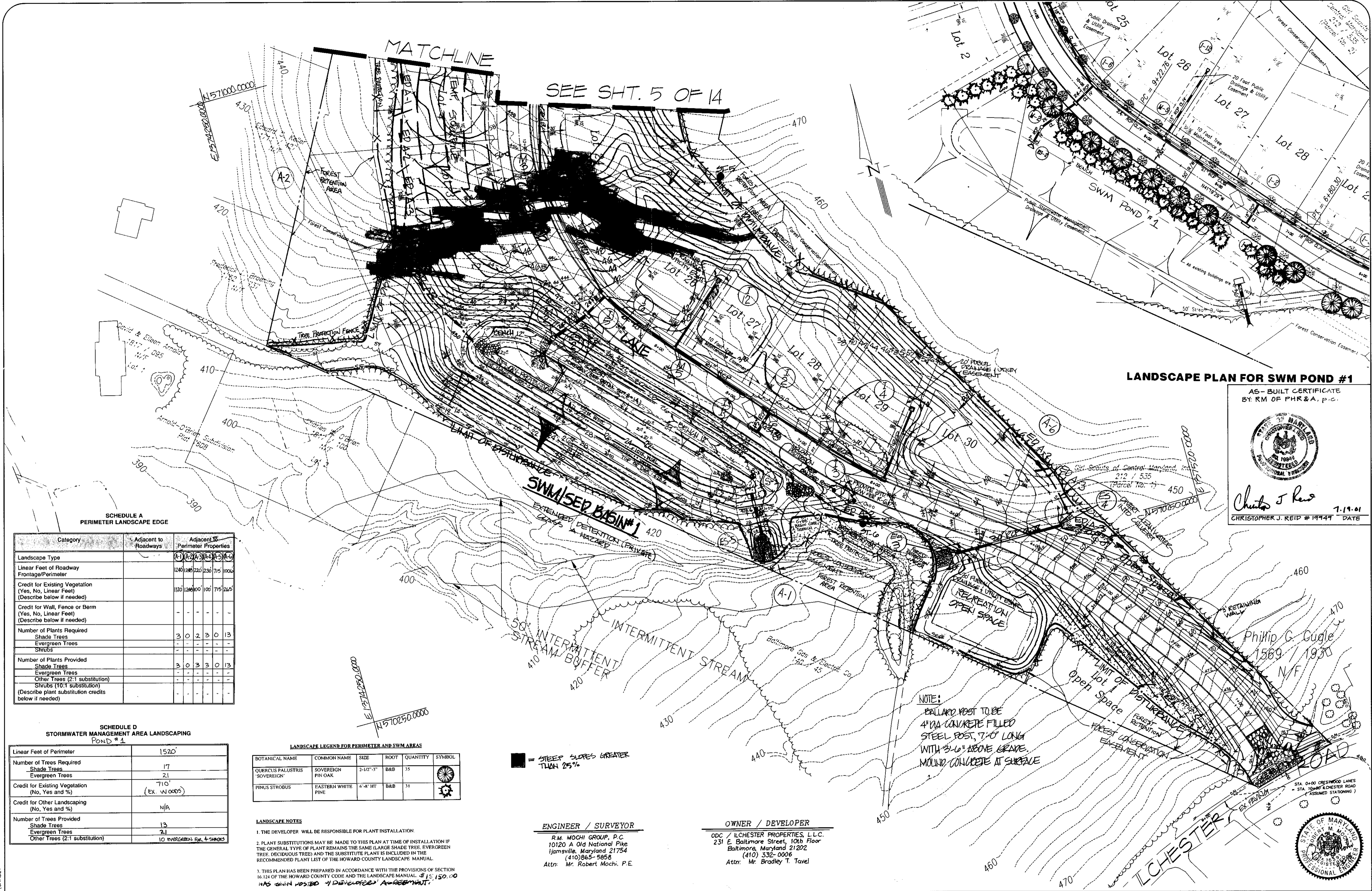
R.M. MOCHI GROUP, P.C.
P.O. Box 10
New Market, MD 21774-0010
10120 A Old National Pike
Jaysville, MD 21754-9705
(301) 865-5858
Fax: (301) 865-5111

project	98004.13	date	Feb. '98
illustration	GEM	engineering	PFB
scale	1" = 50'	approval	RAM

no.	0	date	7/29/98
description	REVISIONS	no.	0
revisions	7/29/98	no.	0
submitted to	HOWARD COUNTY DEP.	no.	0

LANDSCAPE PLAN
CRESTWOOD
 ELECTION DISTRICT No. 1
 HOWARD COUNTY, MARYLAND
 Grading & Sediment Control Plan

RM MOCHI GROUP, P.C.
 P.O. Box 10
 New Market, MD 21774-0010
 10120 A Old National Pike
 Joppa, MD 21754-9706
 (301) 865-5858
 Fax: (301) 865-5111



LANDSCAPE PLAN FOR SWM POND #1

AS-BUILT CERTIFICATE
 BY: RM OF P.H.R. & A., P.C.

 Christopher J. Reid
 7-19-01
 CHRISTOPHER J. REID #19944 DATE

SCHEDULE A PERIMETER LANDSCAPE EDGE

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type	(A)(2)(3)(4)(5)(6)	(A)(2)(3)(4)(5)(6)
Linear Feet of Roadway Frontage/Perimeter	1240/2480	220/715
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	1020/1200	100/715
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	-	-
Number of Plants Required		
Shade Trees	3	0
Evergreen Trees	0	2
Shrubs	0	3
Number of Plants Provided		
Shade Trees	3	0
Evergreen Trees	0	3
Other Trees (2:1 substitution)	-	-
Shrubs (10:1 substitution)	-	-
(Describe plant substitution credits below if needed)		

SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING POND #1

Linear Feet of Perimeter	1520'
Number of Trees Required	17
Shade Trees	17
Evergreen Trees	21
Credit for Existing Vegetation (No, Yes and %)	710' (EX. IN 0005)
Credit for Other Landscaping (No, Yes and %)	N/A
Number of Trees Provided	13
Shade Trees	13
Evergreen Trees	21
Other Trees (2:1 substitution)	10 EVERGREENS FOR 4 SHRUBS

LANDSCAPE LEGEND FOR PERIMETER AND SWM AREAS

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	QUANTITY	SYMBOL
QUERCUS PALUSTRIS 'SOVEREIGN'	SOVEREIGN PIN OAK	2-1/2" - 3"	B&B	35	
PINUS STROBUS	EASTERN WHITE PINE	6" - 8" HT	B&B	31	

LANDSCAPE NOTES

- THE DEVELOPER WILL BE RESPONSIBLE FOR PLANT INSTALLATION.
- PLANT SUBSTITUTIONS MAY BE MADE TO THIS PLAN AT TIME OF INSTALLATION IF THE GENERAL TYPE OF PLANT REMAINS THE SAME (LARGER SHADE TREE, EVERGREEN TREE, DECIDUOUS TREE) AND THE SUBSTITUTE PLANT IS INCLUDED IN THE RECOMMENDED PLANT LIST OF THE HOWARD COUNTY LANDSCAPE MANUAL.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16-124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. \$1,150.00 HAS BEEN POSTED IN DISCUSSION AGREEMENT.

ENGINEER / SURVEYOR
 R.M. MOCHI GROUP, P.C.
 10120 A Old National Pike
 Joppa, Maryland 21754
 (410) 865-5858
 Attn: Mr. Robert Mochi, P.E.

OWNER / DEVELOPER
 ODC / ILCHESTER PROPERTIES, L.L.C.
 231 E. Baltimore Street, 10th Floor
 Baltimore, Maryland 21202
 (410) 332-0006
 Attn: Mr. Bradley T. Tavel

NOTE:
 BALLARD POST TO BE 4" DIA CONCRETE FILLED STEEL POST, 7'-0" LONG WITH 3'-0" ABOVE GRADE. MOUND CONCRETE AT SURFACE.

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Cindy Hamilton
 CHIEF, DIVISION OF LAND DEVELOPMENT
 11/6/98
 DATE

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Robert W. Zich
 CHIEF, BUREAU OF HIGHWAYS
 10-26-98
 DATE

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 Robert W. Zich
 HOWARD SOIL CONSERVATION DISTRICT
 10/13/98
 DATE

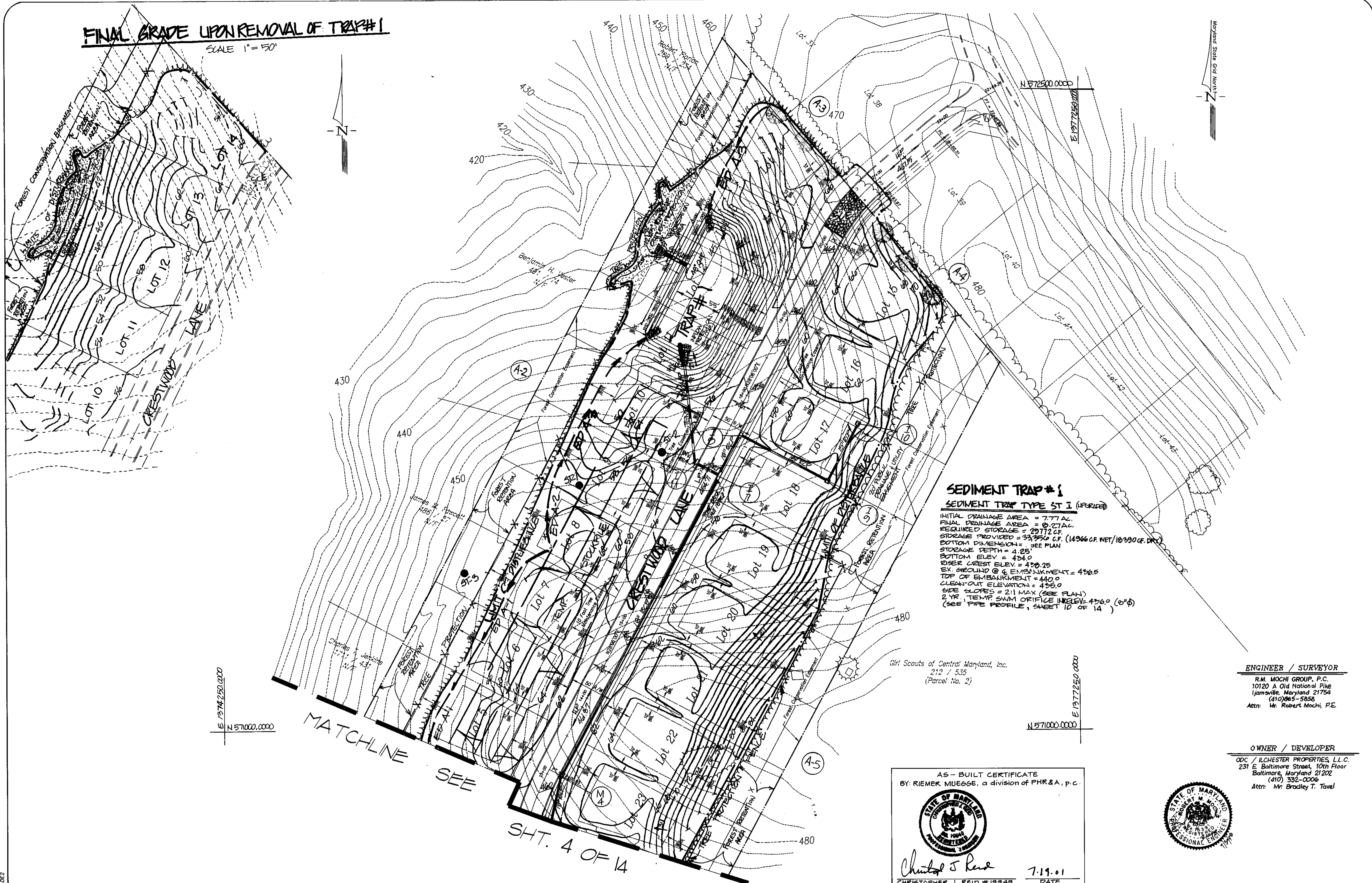
APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
 Cheryl Simmons
 USDA - NATURAL RESOURCES CONSERVATION SERVICE
 10/13/98
 DATE

DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done according to these plans, and that any 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.
 Bradley Tavel
 Signature of Developer
 9-30-98
 Date

ENGINEER'S CERTIFICATE
 I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.
 Robert W. Mochi, P.E.
 9/30/98
 Date

FINAL GRADE UPON REMOVAL OF TRAP# 1

SCALE 1" = 50'



SEDIMENT TRAP # 1
SEDIMENT TRAP TYPE ST I (UPGRADED)
 INITIAL DRAINAGE AREA = 7.77 AC.
 FINAL DRAINAGE AREA = 0.27 AC.
 REQUIRED STORAGE = 29772 CF.
 STORAGE PROVIDED = 33750 CF. (14966 CF. NET / 18784 CF. DR.)
 BOTTOM DIMENSIONS = SEE PLAN
 STORAGE DEPTH = 4.25'
 BOTTOM ELEV = 424.0
 RISER CREST ELEV. = 430.25
 EX. SLOPE @ 6' EMBANKMENT = 450.5
 TOP OF EMBANKMENT = 440.0
 CLEAN-OUT ELEVATION = 435.0
 SIDE SLOPES = 2:1 MAX (SEE PLAN)
 2 YR. TEMP SWM ORIFICE IN ELEV. 436.0 (6"Ø)
 (SEE PIPE PROFILE, SHEET 10 OF 14)

Old Scouts of Central Maryland, Inc.
 212 / 535
 (Parcel No. 2)

ENGINEER / SURVEYOR
 R.M. MOCHI GROUP, P.C.
 10120 A Old National Pike
 Jammesville, Maryland 21754
 (410) 865-5858
 Attn: Mr. Robert Mochi, P.E.

OWNER / DEVELOPER
 ODC / ILCHESTER PROPERTIES, L.L.C.
 231 E. Baltimore Street, 10th Floor
 Baltimore, Maryland 21202
 (410) 332-0206
 Attn: Mr. Bradley T. Tavel

AS-BUILT CERTIFICATE
 BY: RIEMER MUEGGE, a division of PHR&A, p.c.

Christopher J. Reid 7-19-01
 CHRISTOPHER J. REID #19949 DATE



APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Cindy Hamilton 11/6/01
 CHIEF, DIVISION OF LAND DEVELOPMENT TC DATE

William Dammann 11/2/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Stephen M. Daniels 10-26-01
 CHIEF, BUREAU OF HIGHWAYS AS DATE

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zichner 11/13/98
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Clayton Simmons 11/13/98
 STATE - NATURAL RESOURCES CONSERVATION SERVICE DATE

DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done according to these plans, and that any 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Bradley T. Tavel 3-3-98
 Signature of Developer Date

ENGINEER'S CERTIFICATE
 I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

Robert Mochi 3-10-98
 Robert Mochi, P.E. Date

Project	date	engineering	approval
98004.13	Feb. '98	FFB	RMM
Illustration	scale	1" = 50'	
CEM			

REVISED PER DEP. AND S&P COMMENTS	DATE	DESCRIPTION
2	7/17/01	SUBMITTED TO HOWARD COUNTY DEP.
1	2/25/98	
0		

LANDSCAPE PLAN
CRESTWOOD
 HOWARD COUNTY, MARYLAND
 ELECTION DISTRICT No. 1
 Grading and Sediment Control Plan

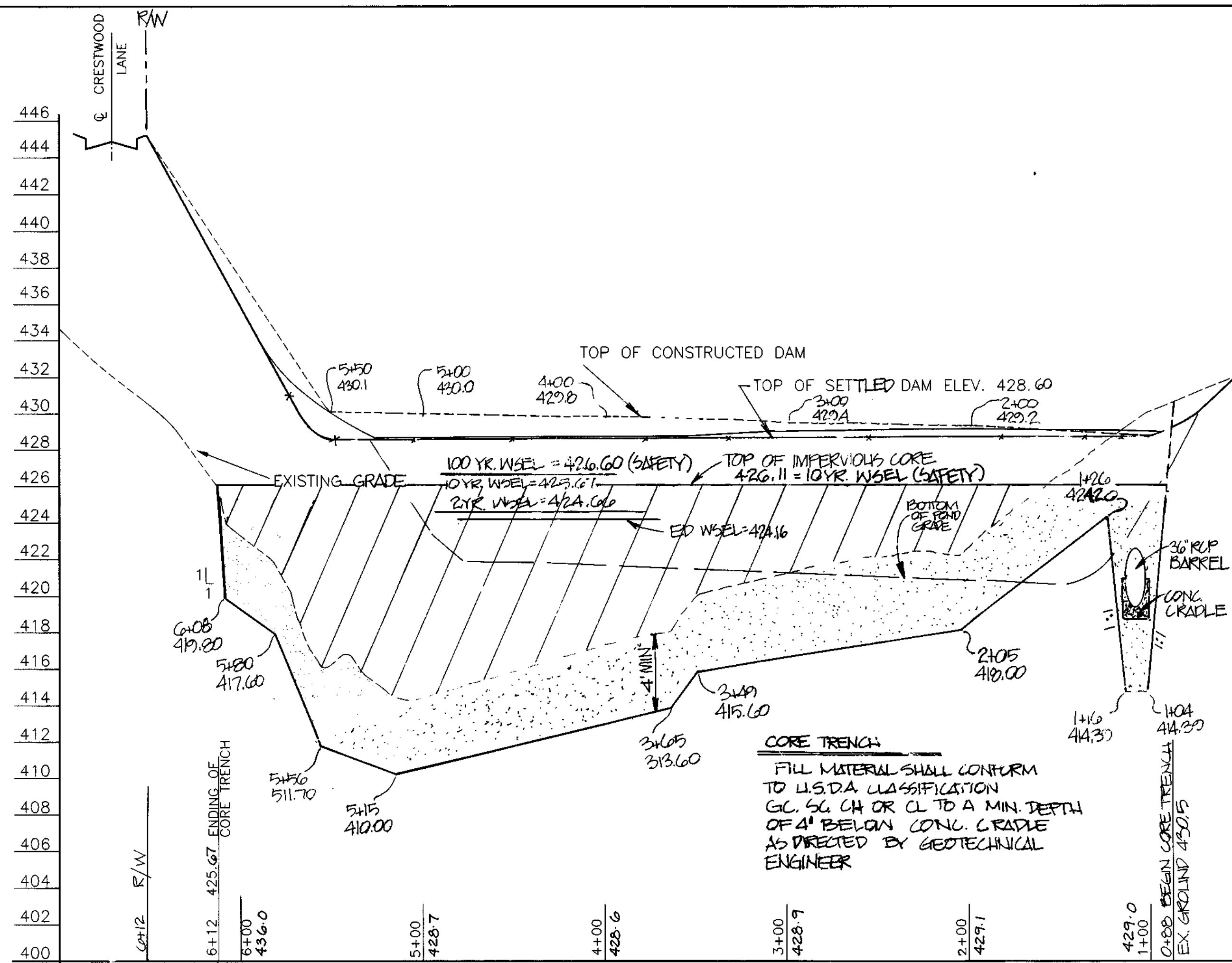
R.M. MOCHI GROUP, P.C.
 P.O. Box 10
 New Market, MD 21774-0010
 10120 A Old National Pike
 Jammesville, MD 21754-9706
 (301) 865-5858
 Fax: (301) 865-5111

SWM SUMMARY TABLE

DESIGN POINT #1							
EXIST. DRAINAGE AREA TO DESIGN PT (AC)	ALLOWABLE DISCHARGE (CFS)	PROP. DRAINAGE AREA TO DESIGN PT (AC)	PROP. D.A. TO SWM POND #1 (AC)	INFLOW DISCHARGE (CFS)	OUTFLOW DISCHARGE (CFS)	POND ELEV. STORAGE (FT)	OVERALL DISCHARGE @ DESIGN PT (CFS)
Q ₁ 17.28	8.3	23.55	18.8	12.9	0.9	424.64/30.64	15.2
Q ₂ 17.28	---	---	---	25.0	6.1	425.20/30.67	21.6
Q ₃ 17.28	24.8	23.55	18.8	37.6	16.9	425.67/30.64	20.7
Q ₄ 17.28	---	23.55	18.8	69.5	64.6	426.26/30.68	4.9

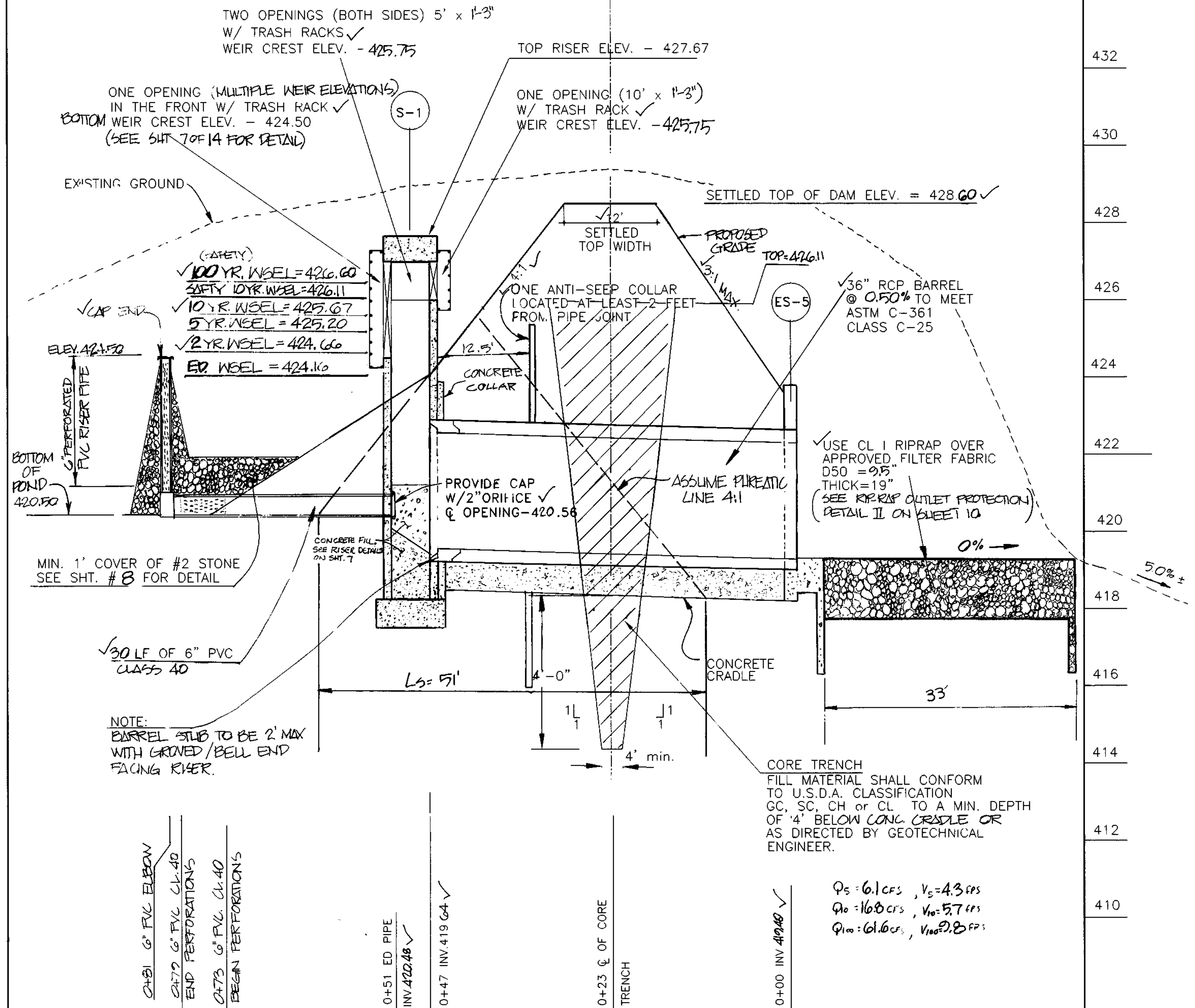
DESIGN POINT #2			
EXIST. DRAINAGE AREA TO DESIGN PT (AC)	ALLOWABLE DISCHARGE (CFS)	PROP. DRAINAGE AREA TO DESIGN PT (AC)	PROP. DISCHARGE AT DESIGN PT (CFS)
Q ₁ 8.76	3.4	2.14	3.1
Q ₂ 8.76	13.3	2.14	7.5
Q ₃ 8.76	27.0	2.14	12.7

STORMWATER MANAGEMENT STRUCTURE SCHEDULE					
NUMBER	TYPE	LOCATION	INVERT OUT	ELEVATION	REMARKS
ES-5	CONC. HEADWALL FOR 36" PIPE	ROAD CL STA 6+61 O/S 10' L	419.42	427.67 (TOP)	HO. CO. STD. VOL. IV SD. 5.11
S-1	PRECAST	ROAD CL STA. 7+20 O/S 75' L	419.64	427.67 (TOP)	PRECAST



PROFILE ALONG C_L OF THE DAM

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



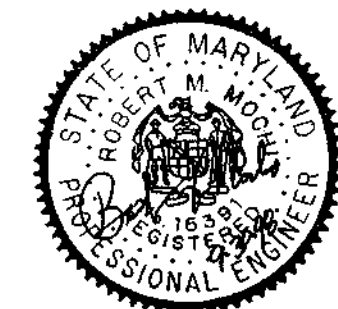
AS-BUILT CERTIFICATE
BY: RIEMER MUEGGE, a division of PHR&A, p.c.



Christopher J. Reid 7.19.01
CHRISTOPHER J. REID #19949 DATE

PRINCIPAL SPILLWAY PROFILE FOR SWM POND #1

SCALE: HORIZ. 1" = 10'
VERT. 1" = 2'



ENGINEER / SURVEYOR

R.M. MOCHI GROUP, P.C.
10120 A Old National Pike
Hornsville, Maryland 21794
(410)865-5858
Attn: Mr. Robert Mochi, P.E.

OWNER / DEVELOPER

QDC / ILCHESTER PROPERTIES, L.L.C.
231 E. Baltimore Street, 10th Floor
Baltimore, Maryland 21202
(410) 332-0006
Attn: Mr. Bradley T. Tavel

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Cindy Hammit 11/14/98
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Robert W. Ziehm 10-26-98
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

Robert W. Ziehm 10/13/98
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Cheryl Simmons 10/13/98
NATURAL RESOURCES CONSERVATION SERVICE DATE

DEVELOPER'S CERTIFICATE
/We certify that all development and construction will be done according to these plans, and that any 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Bradley T. Tavel 9-20-98
Signature of Developer Date

ENGINEER'S CERTIFICATE
I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

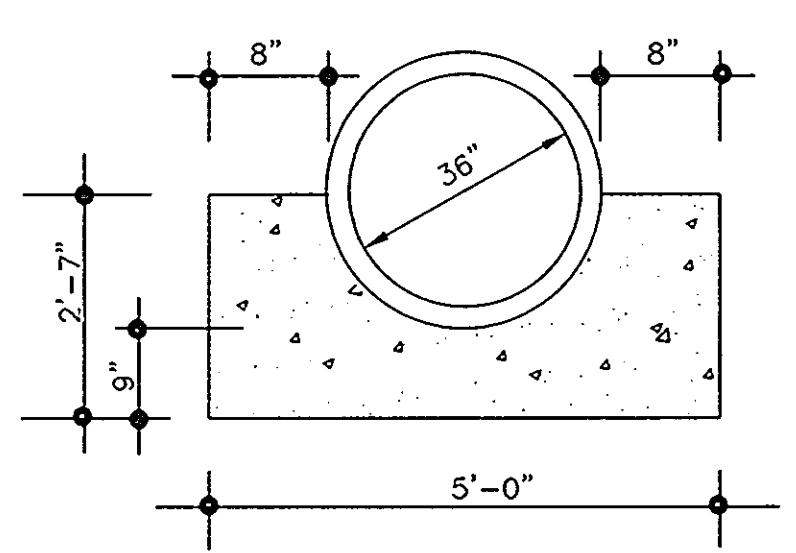
Robert M. Mochi, P.E. 9/24/98
Signature of Engineer Date

Project	9800413	Date	02/98
Illustration	YL/PFB	Engineering	YL/PFB
Score	0	Approval	AS SHOWN
Revisions		AS SHOWN	RMM

Project	9800413	Date	02/98
Illustration	YL/PFB	Engineering	YL/PFB
Score	0	Approval	AS SHOWN
Revisions		AS SHOWN	RMM

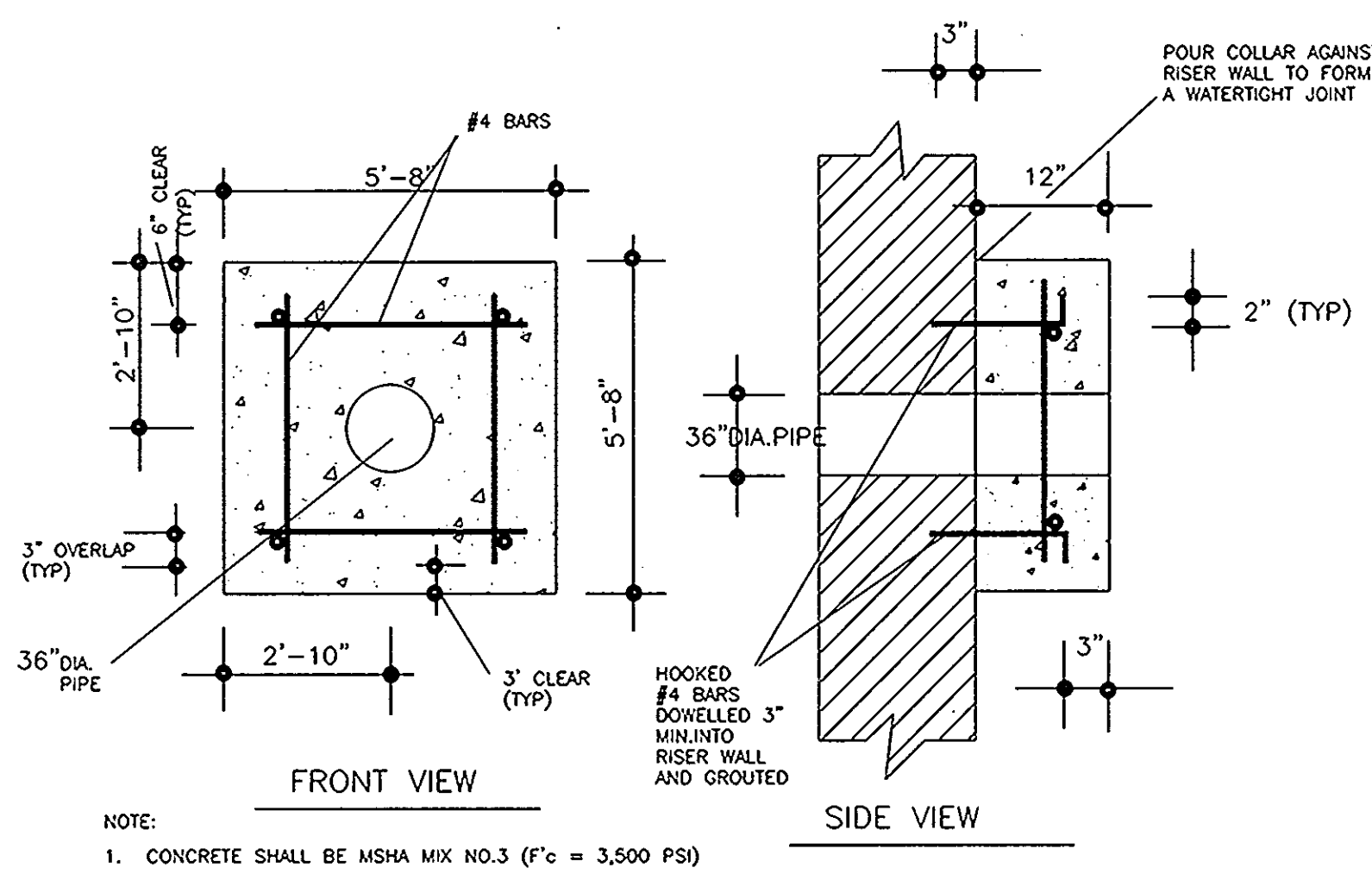
ELECTION DISTRICT 1
HOWARD COUNTY, MD
SWM PROFILE & DETAILS

R.M. MOCHI GROUP, P.C.
10120 A Old National Pike
Hornsville, Maryland 21794
(410) 865-5858
Fax: (410) 865-5111



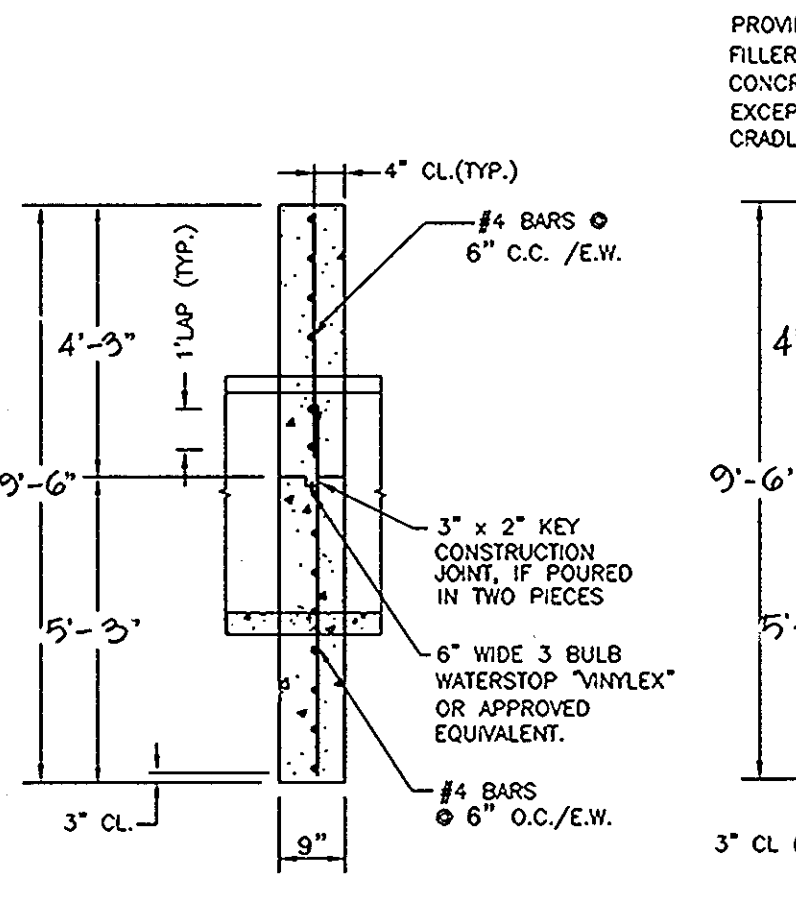
CONCRETE CRADLE
NOT TO SCALE

NOTES:
1. POUR CONCRETE AGAINST UNDISTURBED EARTH.
2. CONCRETE SHALL BE MSHA MIX NO. 3 (F_c = 3,500 PSI).
3. BARRYL MAY BE PLACED ON PRECAST CONCRETE BLOCKS PRIOR TO CRADLE POUR.
4. POURING AN ADDITIONAL 4" TO 6" THICK "MUDMATT" MAY BE ACCEPTABLE IF SUBCONDITIONS ARE WET AND WITH APPROVAL OF GEOTECHNICAL ENGINEER.
5. IF ALL OF CONCRETE CRADLE CANNOT BE POURED AT ONE TIME, ONE HORIZONTAL JOINT IS ALLOWED. PLACE A MINIMUM OF THREE (3) - 6" LONG #4 REBAR DOVELS TO CONNECT POURS.
6. IF A CRADLE HORIZONTAL JOINT IS USED, DO NOT LOCATE WITHIN 2" OF PIPE JOINT.

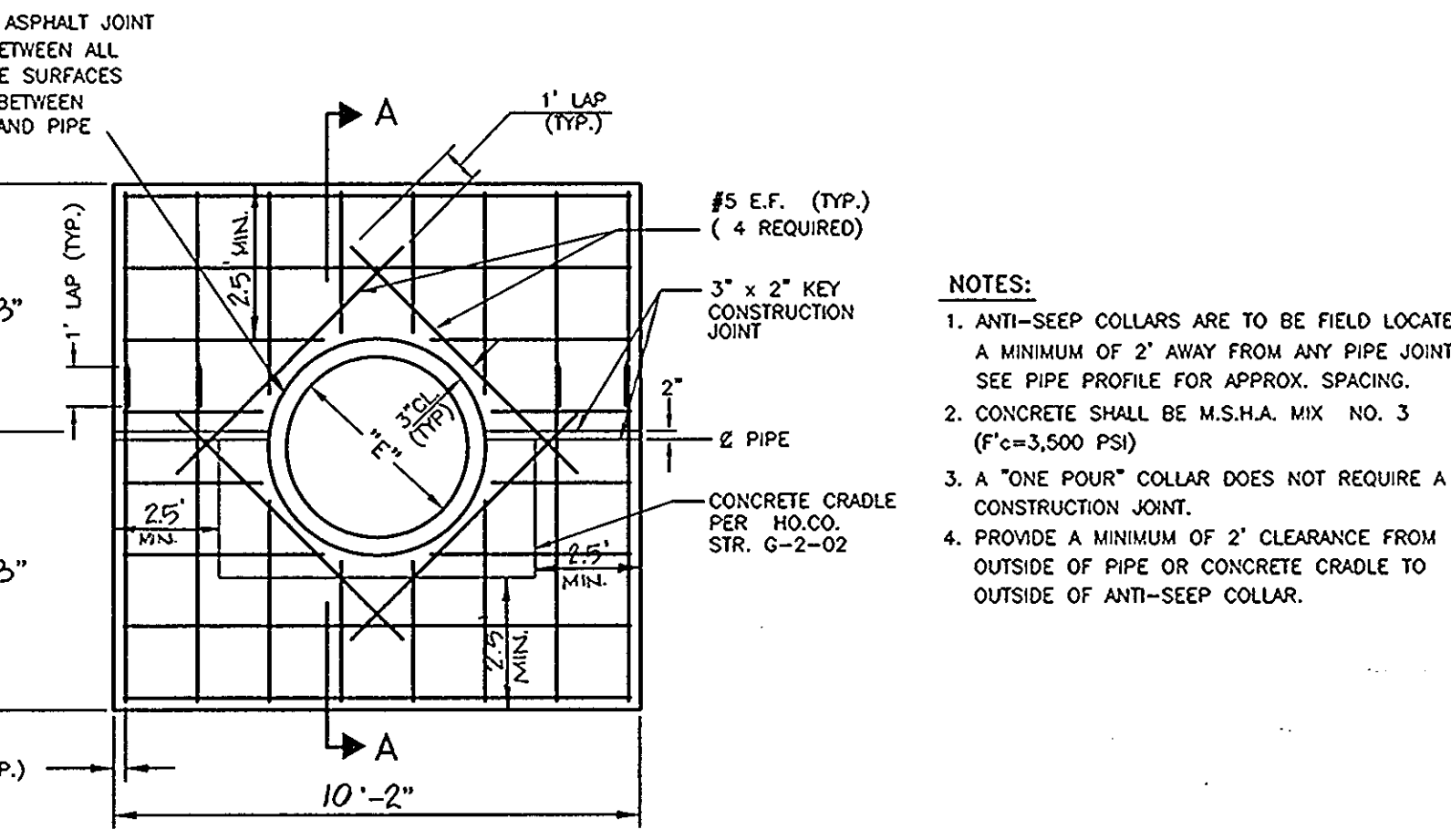


CONCRETE COLLAR
NOT TO SCALE

NOTE:
1. CONCRETE SHALL BE MSHA MIX NO. 3 (F_c = 3,500 PSI)



SECTION A-A

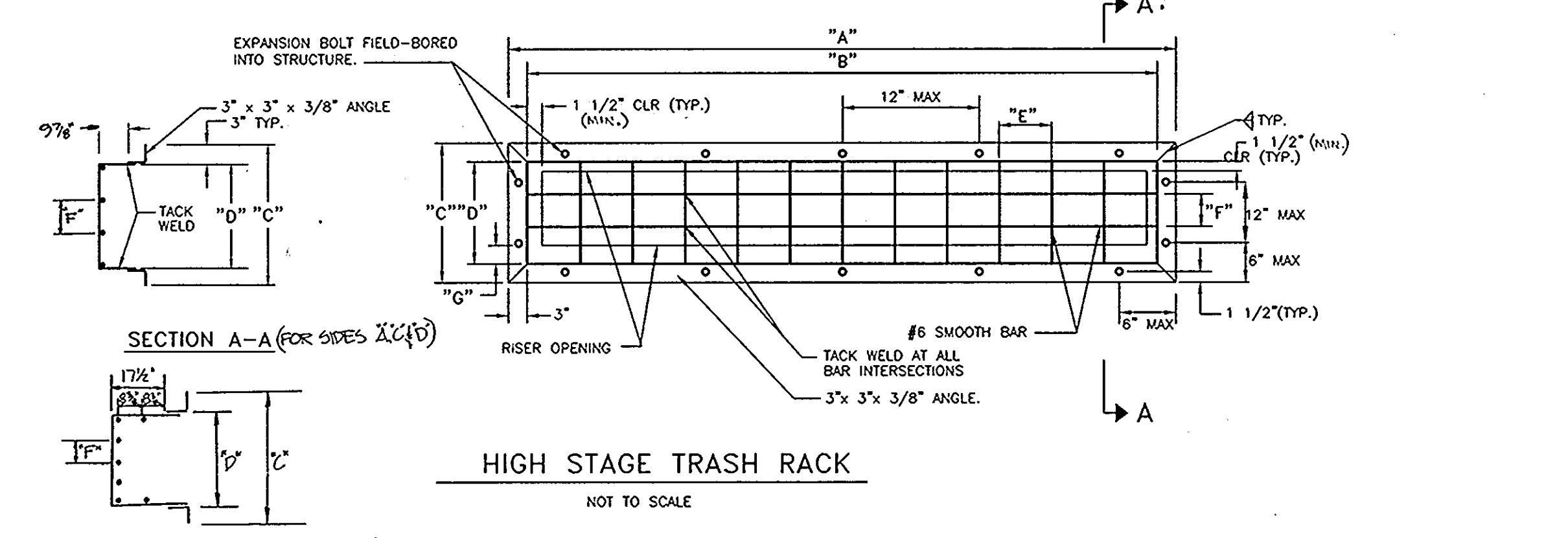


CONCRETE ANTI-SEEP COLLAR
NOT TO SCALE

NOTES:
1. ANTI-SEEP COLLARS ARE TO BE FIELD LOCATED A MINIMUM OF 2' AWAY FROM ANY PIPE JOINT. SEE PIPE PROFILE FOR APPROX. SPACING.
2. CONCRETE SHALL BE M.S.H.A. MIX NO. 3 (F_c = 3,500 PSI)
3. A "ONE POUR" COLLAR DOES NOT REQUIRE A CONSTRUCTION JOINT.
4. PROVIDE A MINIMUM OF 2" CLEARANCE FROM OUTSIDE OF PIPE OR CONCRETE CRADLE TO OUTSIDE OF ANTI-SEEP COLLAR.

LOCATION OF TRASH RACK	QTY.	A	B	C	D	E	F	G	NOTES
AS-BUILT SIDE "A"	1	5'-10 1/8"	5'-4 1/4"	2'-2 1/4"	1'-8 1/4"	6 3/8"	6 3/8"	3 3/4"	4 Hor. Bars, 11 Vert. Bars
AS-BUILT SIDE "B"	1	11'-0"	10'-6"	3'-4 3/8"	2'-10 3/8"	8 3/8"	8 3/8"	3 1/8"	7 Hor. Bars, 10 Vert. Bars
AS-BUILT SIDE "C"	1	5'-10 1/8"	5'-4 1/4"	2'-2 1/4"	1'-8 1/4"	6 3/8"	6 3/8"	3 3/4"	4 Hor. Bars, 11 Vert. Bars
AS-BUILT SIDE "D"	1	11'-0"	10'-6"	2'-2 1/4"	1'-8 1/4"	8 3/8"	6 3/8"	3 3/4"	4 Hor. Bars, 16 Vert. Bars

NOTES:
1. TRASH RACK TO BE HOT-DIPPED GALVANIZED AFTER ASSEMBLY AND PRIOR TO INSTALLATION.
2. VERTICAL BARS TO BE PLACED ON OUTSIDE OF HORIZONTAL BARS.



HIGH STAGE TRASH RACK
NOT TO SCALE

HEILS - CARMES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Crestwood, Lots 1-32, Howard County, Maryland
Boring # B-3 Job # 02127A

ELEV.	SOIL DESCRIPTION	DEPTH (FEET)	DIAMETER (INCHES)	REMARKS
425.5	Surface	0.0		
425.0	Brown, moist, heavy sandy silty clay, trace organics (M)	1.5	3.3	
424.1	White to Orange, moist to very moist, medium dense to very dense sand, fine gravel, trace lenses of silt and clay (SM)	2.5	10.35, 27	Groundwater encountered at 13.5' while drilling
423.5	White, Black, a bit of Orange, moist to very moist, medium dense, fine silty sand, and clay (SC)	5.0	13.8, 5	
422.1	White to Green, moist to very moist, medium dense, fine silty sand, silt gravel, trace clay (SM)	7.5	7.1, 9	
421.7	White to Green, moist to very moist, medium dense, fine silty sand, silt gravel, trace clay (SM)	8.5	5.5, 7	
421.3	White to Green, moist to very moist, medium dense, fine silty sand, silt gravel, trace clay (SM)	12.0	5.8, 9	
419.5	B.O.H. - 15'	15.0	5.7, 8	

HEILS - CARMES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

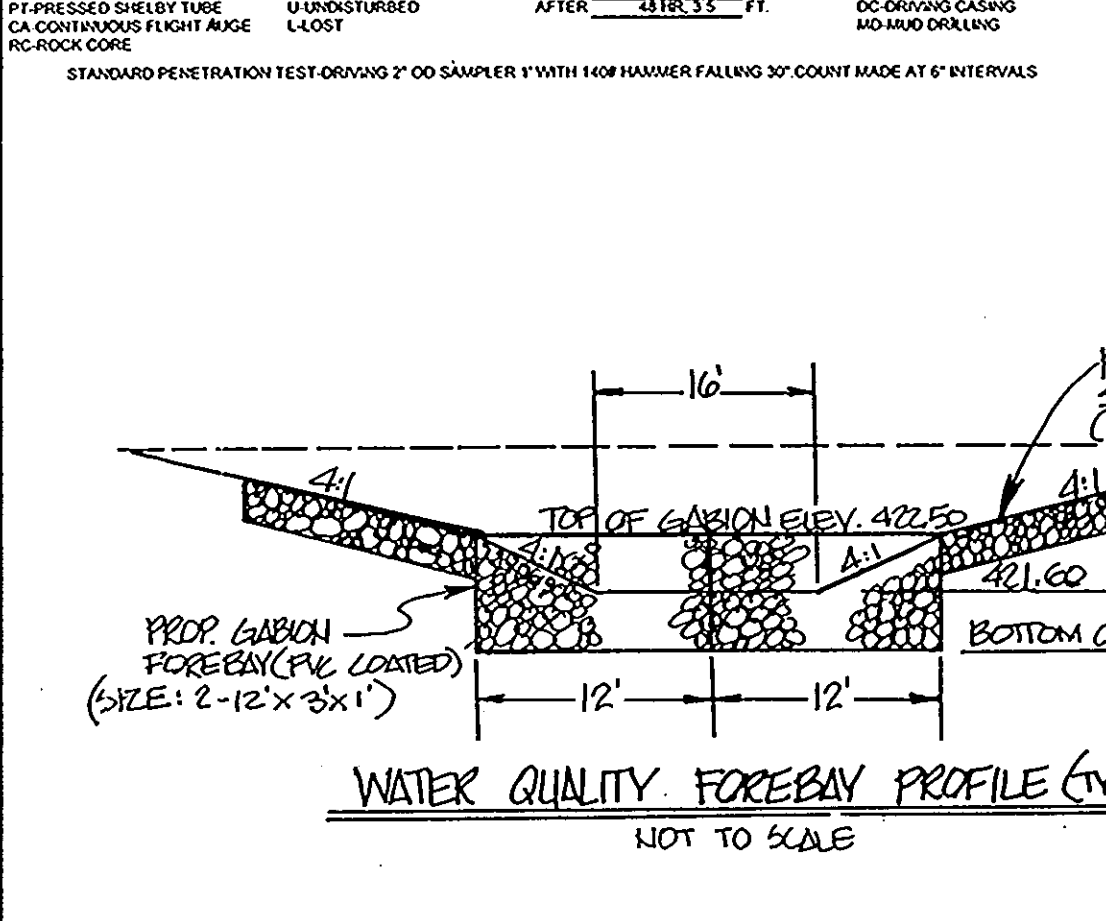
Project Name: Crestwood, Lots 1-32, Howard County, Maryland
Boring # B-2 Job # 02127A

ELEV.	SOIL DESCRIPTION	DEPTH (FEET)	DIAMETER (INCHES)	REMARKS
425.5	Surface	0.0		
424.1	Gray, brown, very moist, silty clayey SL, little sand (CL-4)	1.5	1.2, 3	
423.5	Brown to Gray Brown, moist to very moist, medium dense sand and clayey SL, trace sand (SC-SL)	2.5	3.7, 9	Groundwater not encountered while drilling
422.1	White, Black, a bit of Orange, moist to very moist, medium dense, fine silty sand, and clay (SC)	5.0	5.9, 11	
421.7	White to Green, moist to very moist, medium dense, fine silty sand, silt gravel, trace clay (SM)	5.5	5.5, 7	
421.3	White to Green, moist to very moist, medium dense, fine silty sand, silt gravel, trace clay (SM)	12.0	5.8, 9	
419.5	B.O.H. - 15'	15.0		

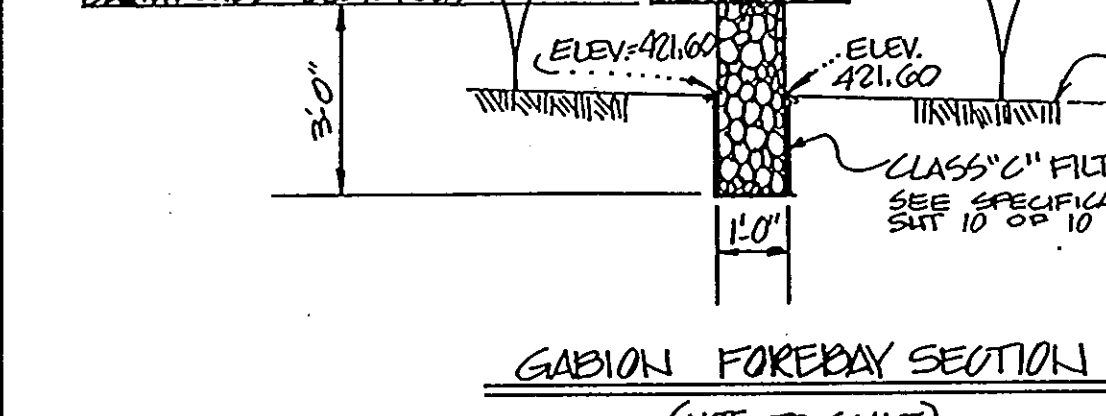
HEILS - CARMES ENGINEERING ASSOCIATES, INC. RECORD OF SOIL EXPLORATION Page 1 of 1

Project Name: Crestwood, Lots 1-32, Howard County, Maryland
Boring # B-1 Job # 02127A

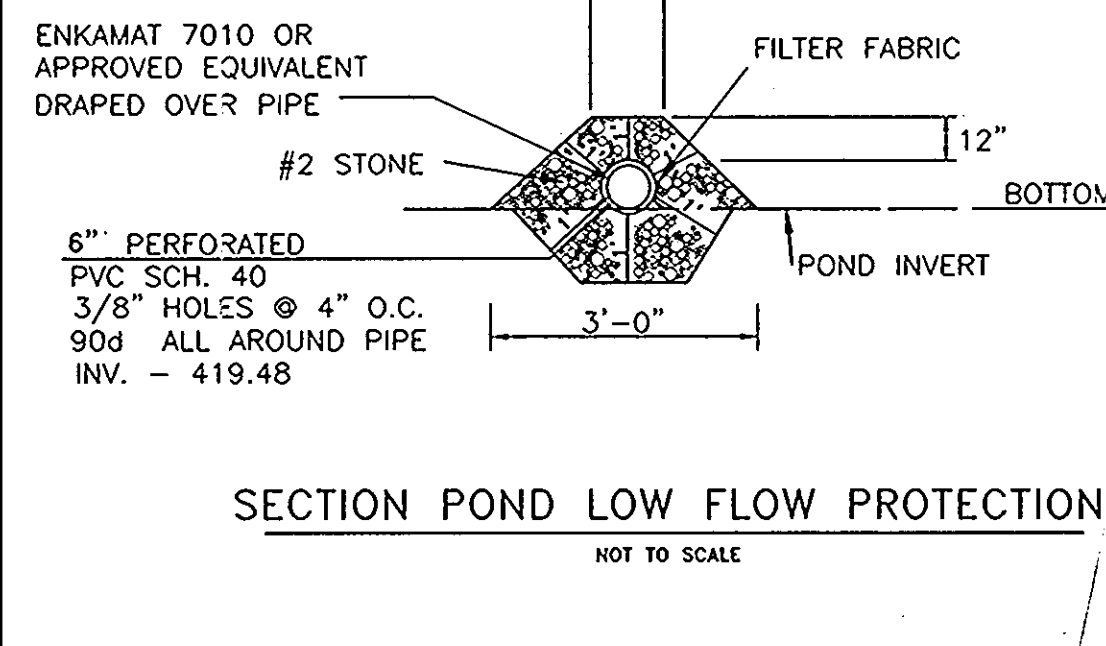
ELEV.	SOIL DESCRIPTION	DEPTH (FEET)	DIAMETER (INCHES)	REMARKS
425.5	Surface	0.0		
424.1	Gray, brown, very moist, silty clayey SL, little sand (CL-4)	1.5	1.5, 7	
423.5	Orange Brown, very moist silty clayey SL, trace sand (CL)	2.5	10.7, 7	Groundwater not encountered while drilling
422.1	Orange Brown and Gray (mottled), moist to very moist, silty clay, silty sand lenses (SC)	5.0	6.7, 9	
421.7	White to Orange Brown, moist to very moist, medium dense sand, some fine gravel, trace to little SL and Clay (SM)	5.5	5.7, 8	
421.3	White to Orange Brown, moist to very moist, medium dense sand, some fine gravel, trace to little SL and Clay (SM)	12.0	5.7, 8	
419.5	B.O.H. - 15'	15.0		



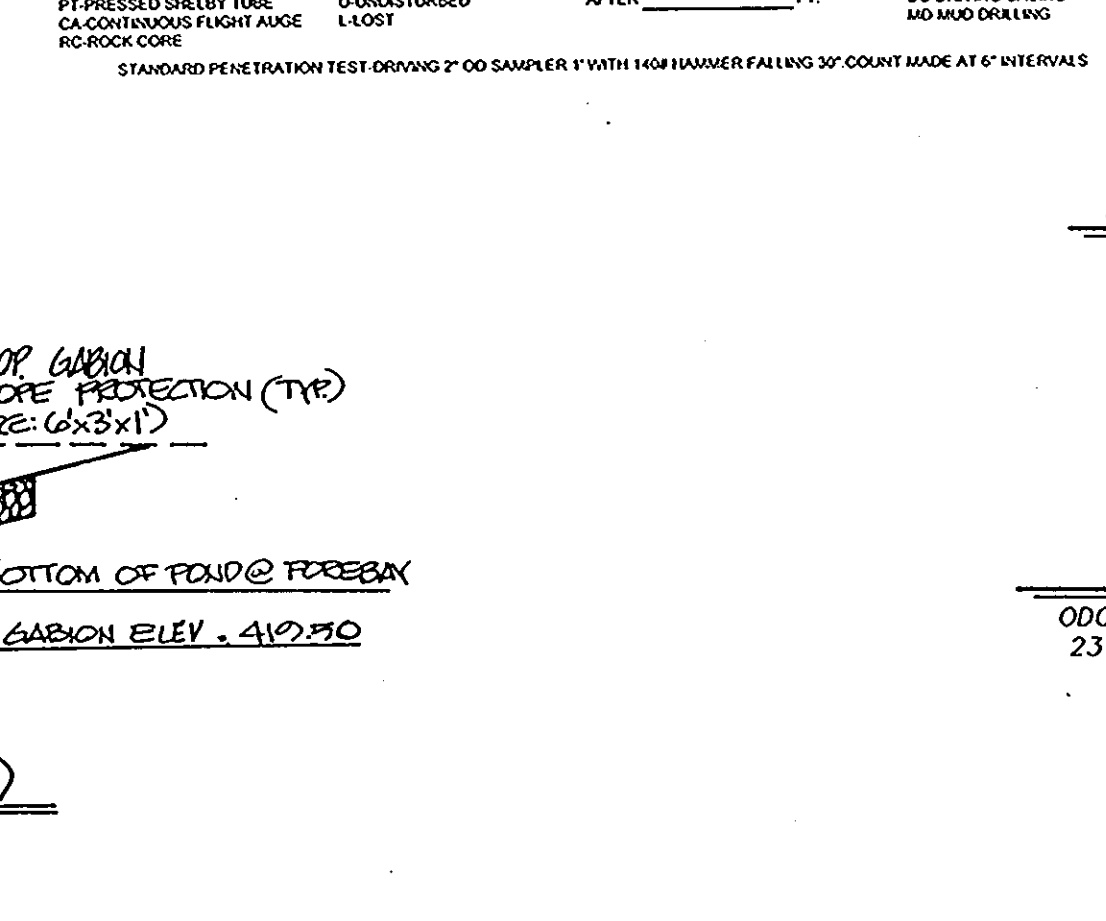
WATER QUALITY FOREBAY PROFILE (TYP)
NOT TO SCALE



GABION FOREBAY SECTION
(NOT TO SCALE)



SECTION POND LOW FLOW PROTECTION
NOT TO SCALE



CULVERT PROFILE (ES-3 TO ES-4)
SCALE: HOR. = 1" = 50' VER. = 1" = 5'

ENGINEER / SURVEYOR
R.M. MOCHI GROUP, P.C.
10120 A Old National Pike
Jomsville, Maryland 21754
(410) 865-5858
Attn: Mr. Robert Mochi, P.E.

OWNER / DEVELOPER
ODC / ILCHESTER PROPERTIES, L.L.C.
231 E. Baltimore Street, 10th Floor
Baltimore, Maryland 21202
(410) 332-0006
Attn: Mr. Bradley T. Tavel

AS-BUILT CERTIFICATE
BY: RIEMER MUEGGE, a division of PHR&A, P.C.

STATE OF MARYLAND
PROFESSIONAL ENGINEER
CHRISTOPHER J. REID #19949
DATE: 7.19.01

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Cecily Hamilton
CHIEF, DIVISION OF LAND DEVELOPMENT
10/16/98

APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Conner
CHIEF, BUREAU OF HIGHWAYS
10-26-99

APPROVED:
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Robert W. Zifon
HOWARD SOIL CONSERVATION DISTRICT
10/13/98

APPROVED:
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
Cheryl Simmons
USDA - NATIONAL RESOURCES CONSERVATION SERVICE
10/13/98

DEVELOPER'S CERTIFICATE
I/we certify that all development and construction will be done according to these plans, and that any 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.
Bradley Tavel
Signature of Developer
9-30-98
Date

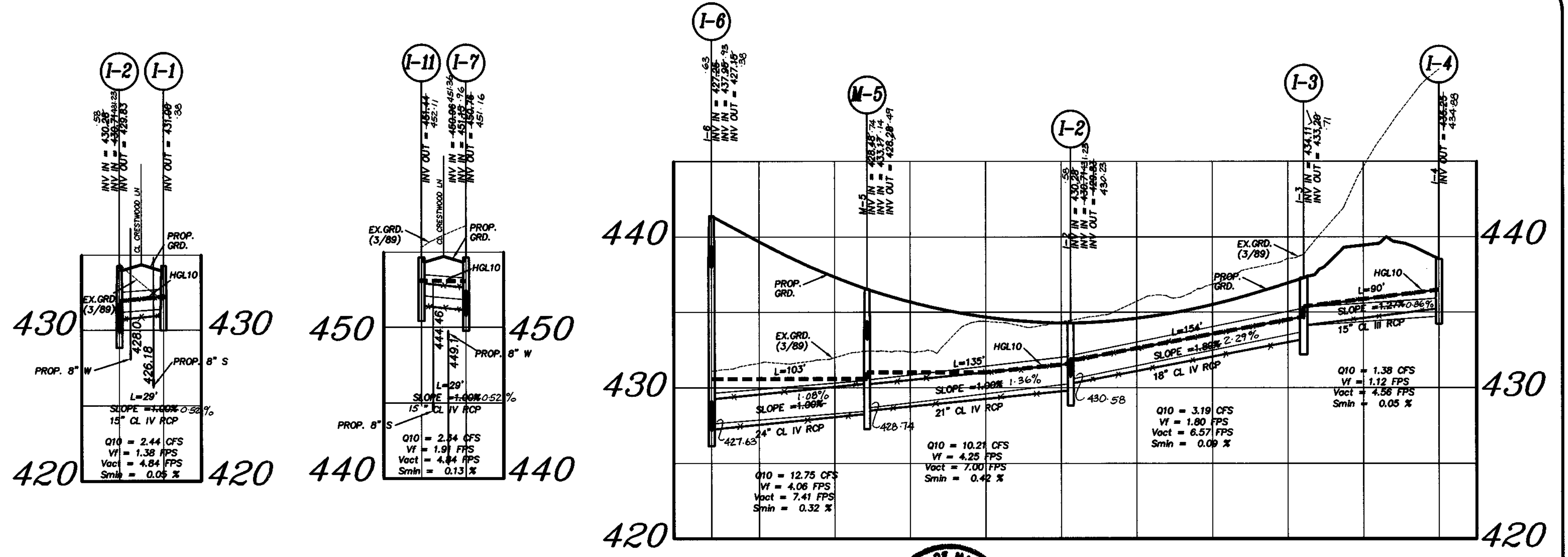
ENGINEER'S CERTIFICATE
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Robert M. Mochi, P.E.
Date: 7/17/01

PROJECT DATE: 02/98
PROJECT NO: 9800A.13
DRAWING NO: 7
SCALE: AS SHOWN
REVISIONS: 1. REVISED PER DPTZ AND SLD COMMENTS 7/17/98
2. REVISED PER DPZ COMMENTS 7/17/98
3. SUBMITTED TO HOWARD COUNTY DPZ 2/12/00

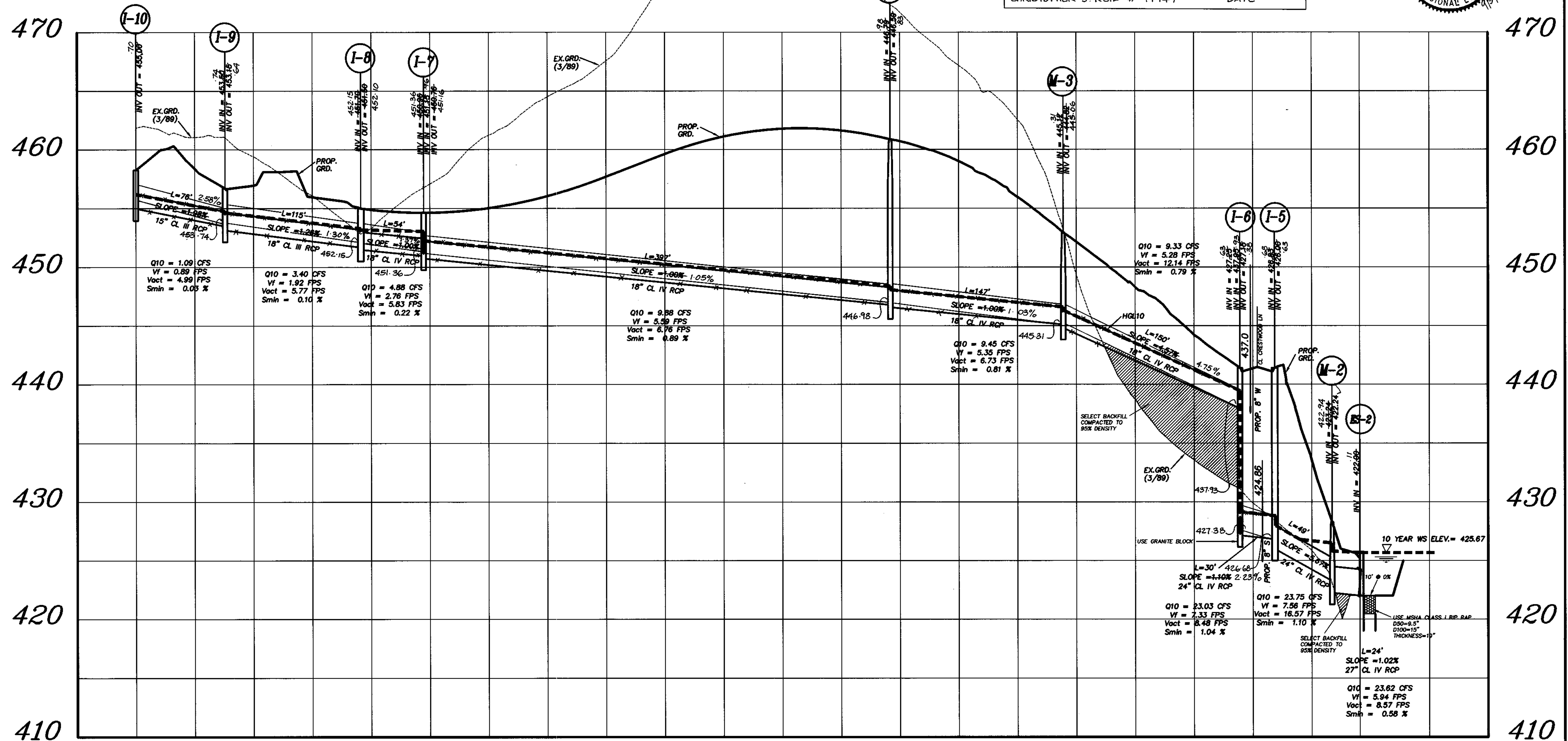
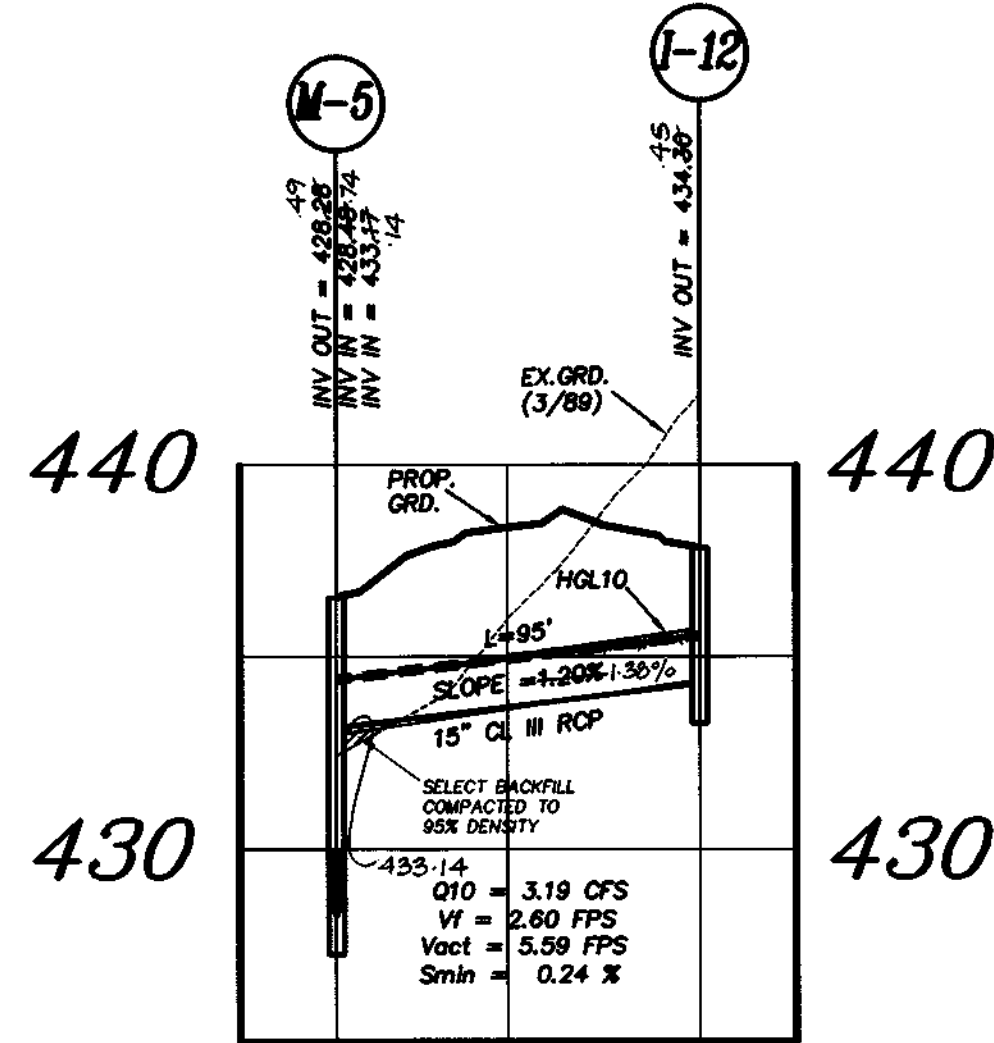
STATE OF MARYLAND
PROFESSIONAL ENGINEER
R.M. MOCHI GROUP, P.C.
10120 A Old National Pike
Jomsville, Maryland 21754
(410) 865-5858
FAX: (410) 865-5811

CRESTWOOD
ELECTION DISTRICT 1
SWM - PROFILE & DETAILS
8 OF 14
F-98-115

STORM DRAIN STRUCTURE SCHEDULE						
No.	Type	Location		Elevation	Remarks	
I-1	A-10	STA. 7+48.87	O/S 14.75 L	434.65	TC	SD 4.02
I-2	A-10	STA. 7+48.87	O/S 14.75 R	434.65	TC	SD 4.02
I-3	A-10	STA. 5+91.75	O/S 14.75 R	437.67	TC	SD 4.02
I-4	Precast Open End Grate	N 570434.90	E 1374957.37	438.50	THROAT	SD 4.36
I-5	A-5	STA. 9+90.00	O/S 14.75 L	441.76	TC	SD 4.01
I-6	A-10	STA. 9+90.00	O/S 14.75 R	441.76	TC	SD 4.02
I-7	A-10	STA. 17+02.78	O/S 14.75 R	455.00	TC	SD 4.02
I-8	A-5	STA. 17+56.32	O/S 14.75 R	455.36	TC	SD 4.01
I-9	Precast Open End Grate	N 571289.85	E 1374954.69	456.50	THROAT	SD 4.36
I-10	Precast Open End Grate	N 571356.77	E 1374990.43	458.00	THROAT	SD 4.36
I-11	A-10	STA. 17+02.78	O/S 14.75 R	455.00	TC	SD 4.02
I-12	Precast Open End Grate	N 570639.25	E 1374777.66	437.80	THROAT	SD 4.36
M-2	4'-0" Precast Manhole	N 570627.25	E 1374571.73	428.29	RIM	G 5.12
M-3	4'-0" Precast Manhole	N 570803.48	E 1374606.01	452.95	RIM	G 5.12
M-4	4'-0" Precast Manhole	N 570946.23	E 1374641.42	468.35	RIM	G 5.12
M-5	4'-0" Precast Manhole	N 570576.85	E 1374706.70	436.54	RIM	G 5.12
ES-2	Type "A" Endwall Circular Pipe	N 570610.54	E 1374555.16	425.75	TW	SD 5.11
ES-3	Concrete End Section Circular Pipe	STA. 4+82.58	O/S 38.02 L	433.61	TW	SD 5.51
ES-4	Type "A" Endwall Circular Pipe	STA. 3+83.59	O/S 40.00 R	446.00	TW	SD 5.11



CERTIFICATE
 BY REID AND ASSOCIATES, INC.
 Division of Patton Harris Rust & Assoc.
 CHRISTOPHER J. REID # 199429
 7.19.01
 DATE



FOR ALL PROFILES
 VERT SCALE: 1"=5'
 HORIZ SCALE: 1"=50'

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 [Signature] 10-26-98
 CHIEF, BUREAU OF HIGHWAYS MS DATE

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 [Signature] 4/12/01
 CHIEF, DIVISION OF LAND DEVELOPMENT RC DATE

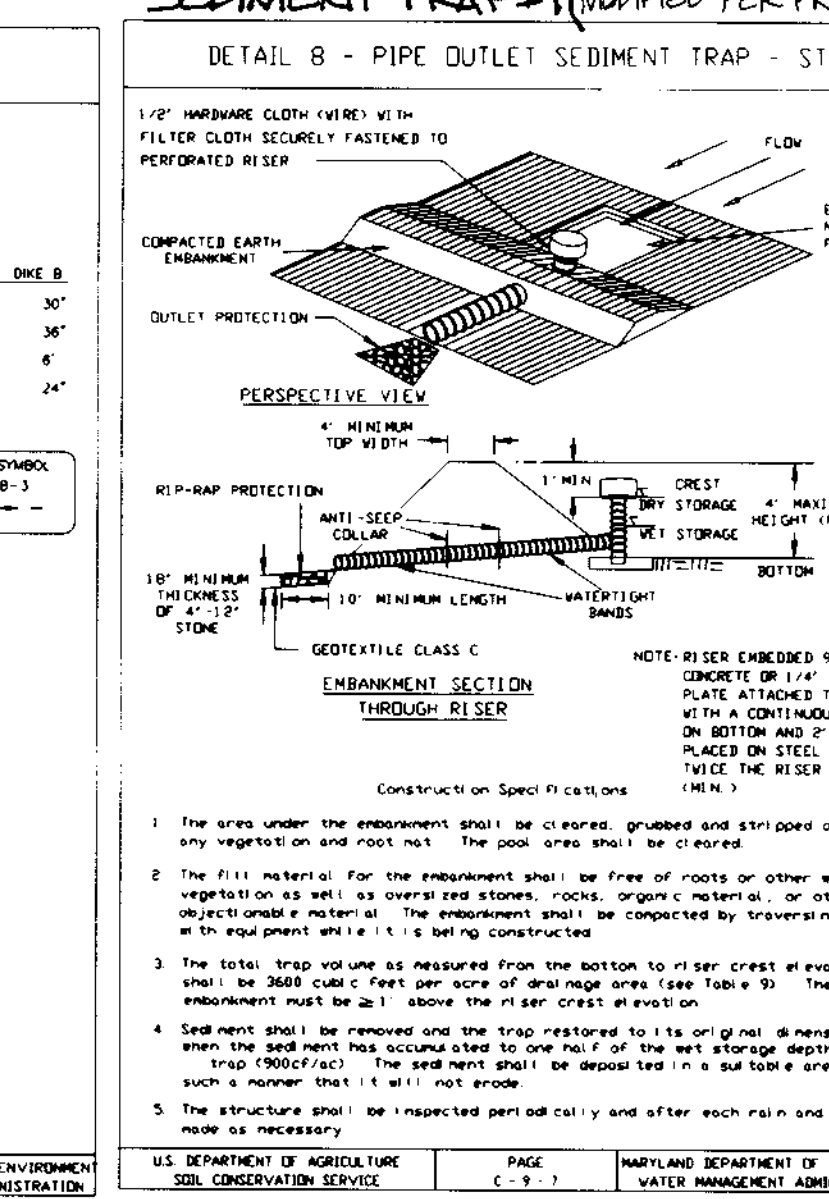
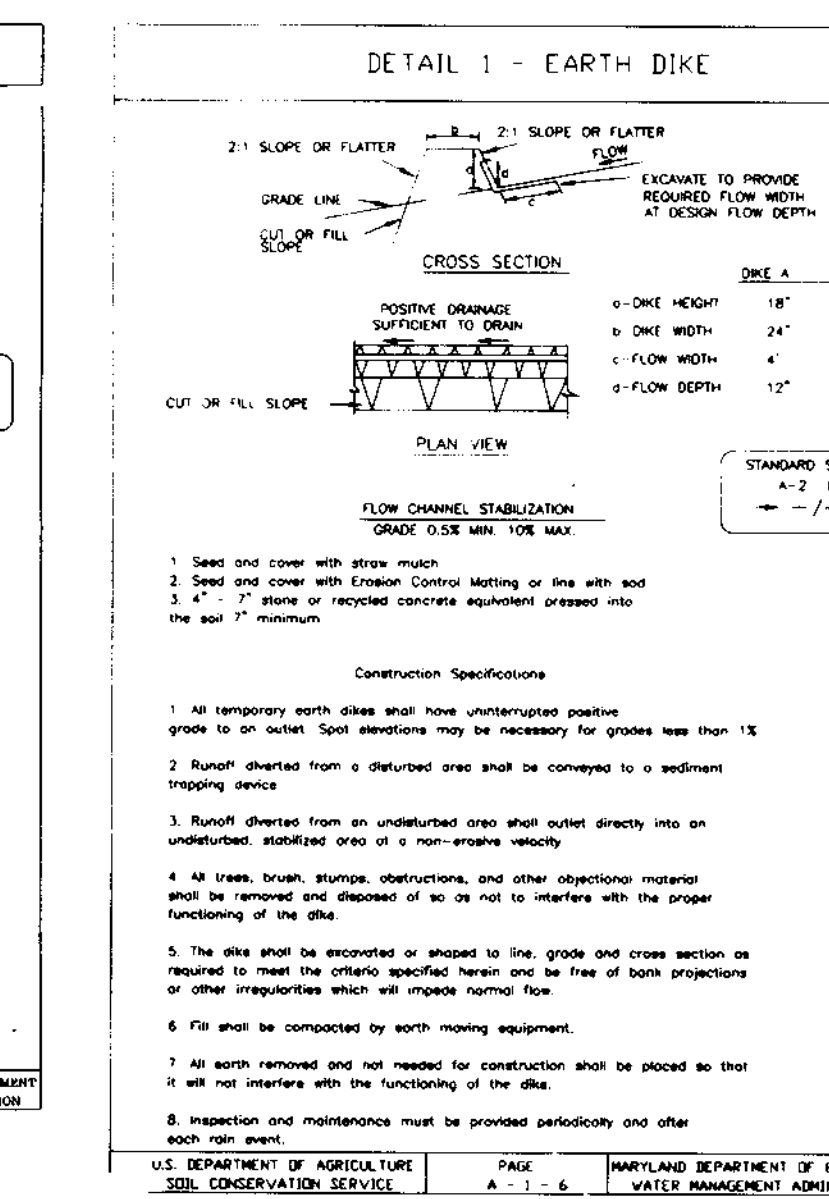
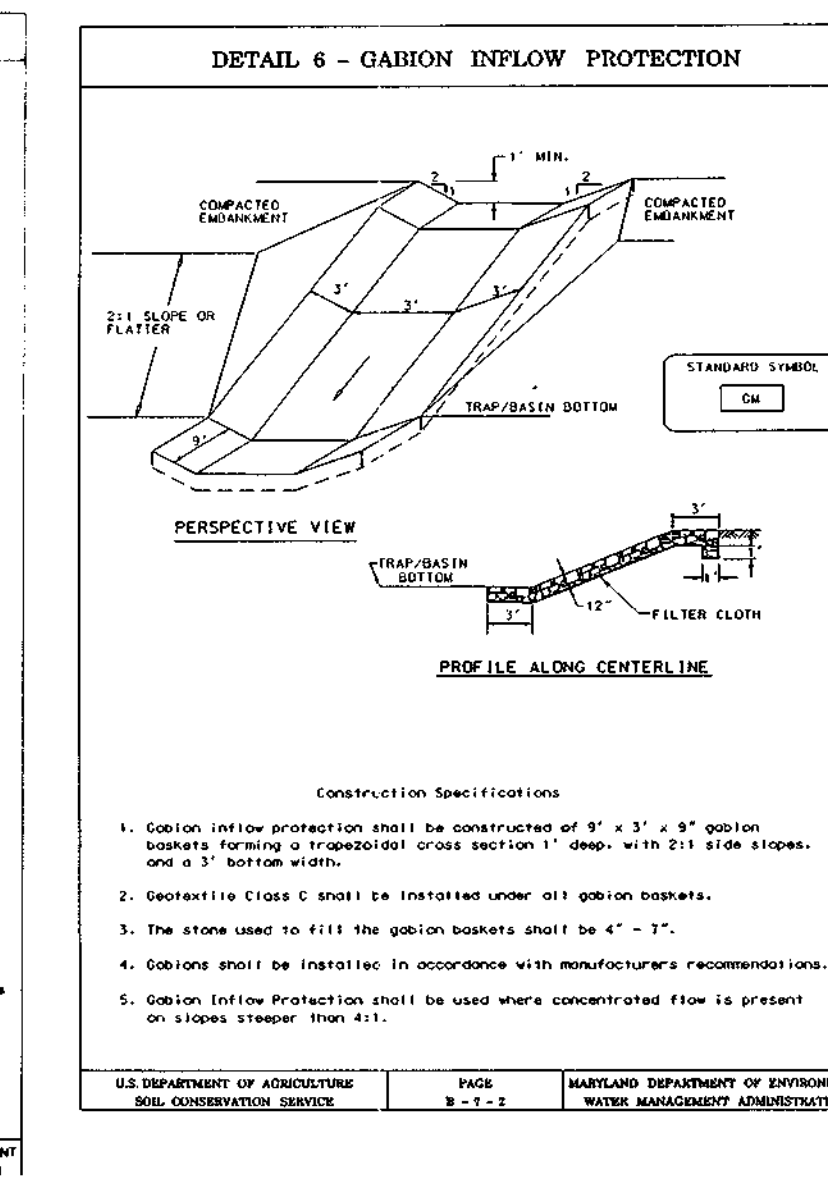
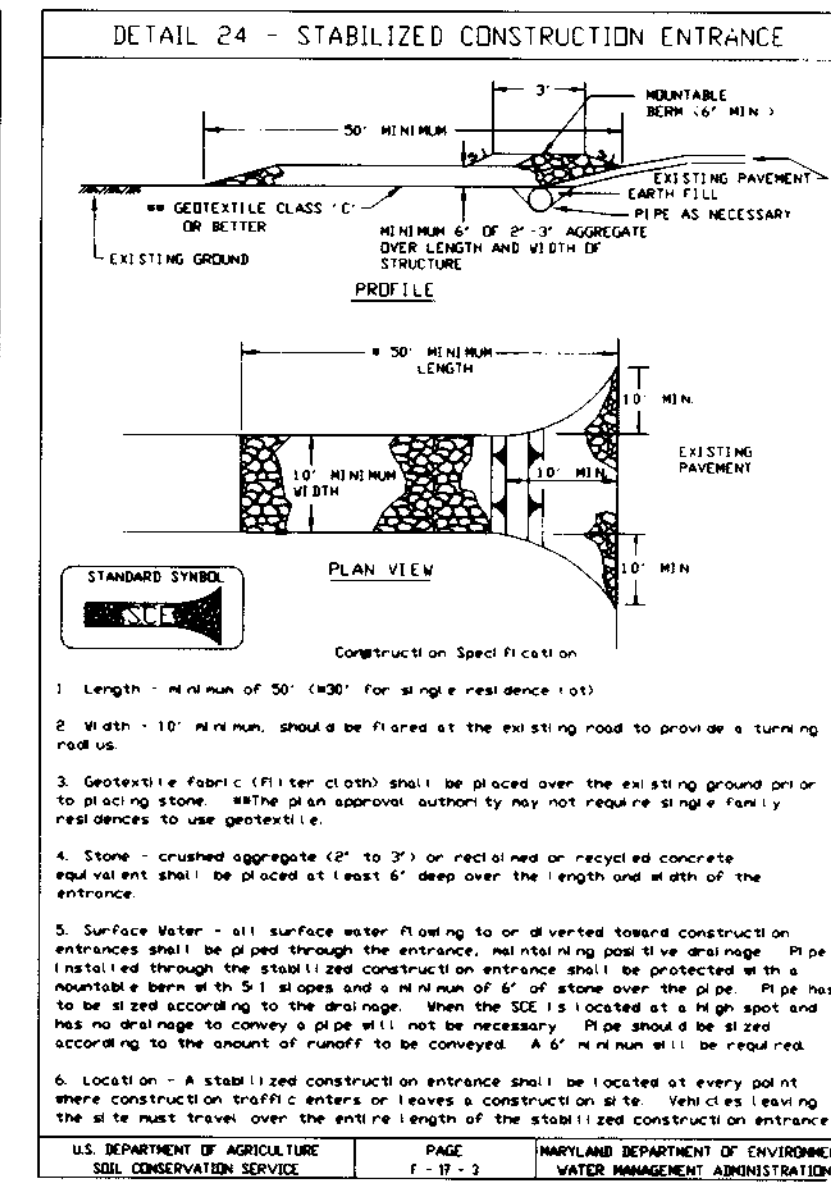
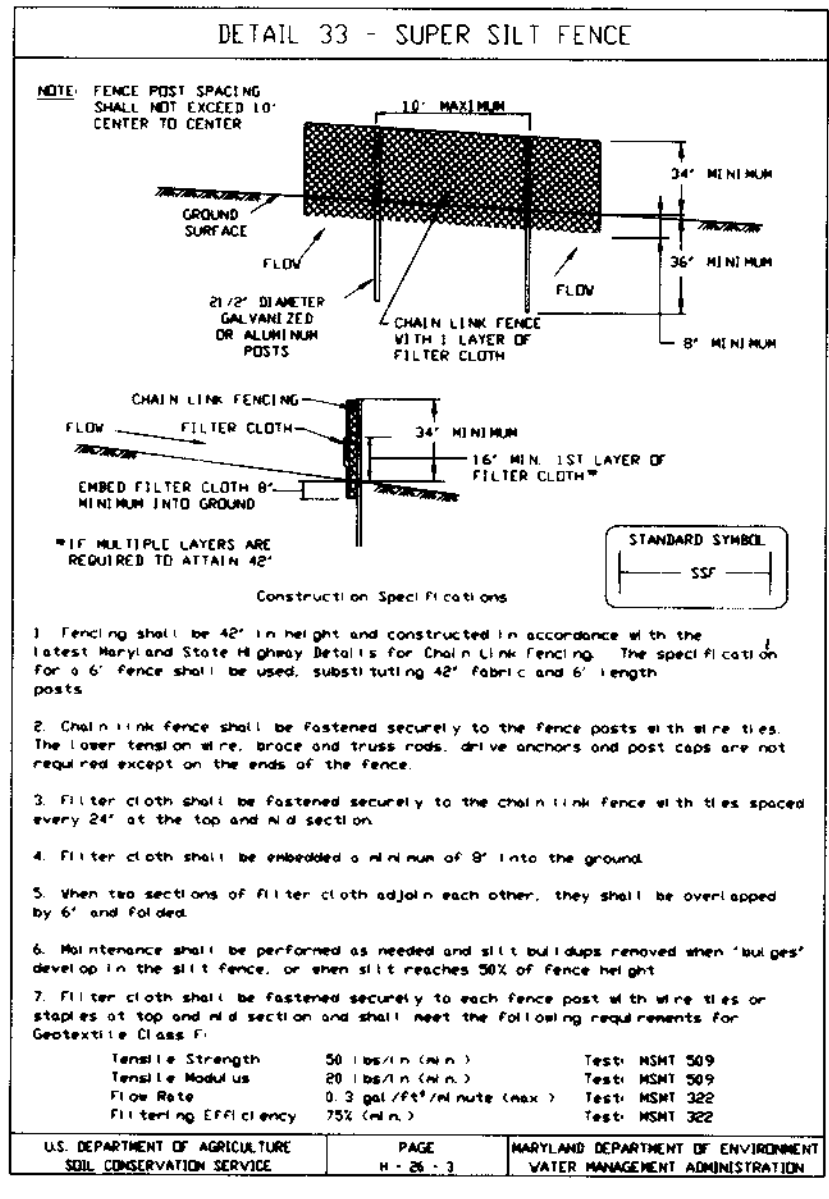
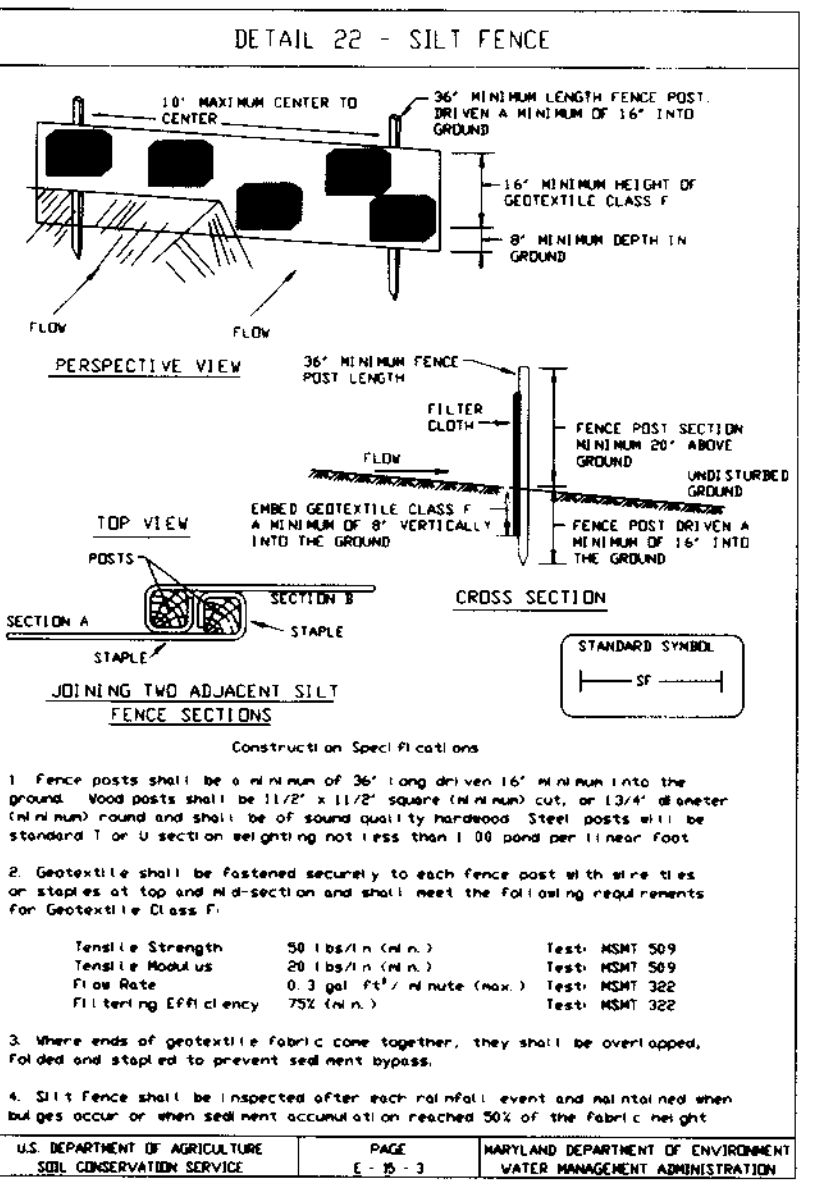
[Signature] 11/2/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Project	98004.13	date	July '98
Illustration	JMZ	engineering	MMZ
Scale	as shown	approval	RMK

REMOVED PER DPZ AND SCD COMMENTS
 7/27/98
 SUBMITTED TO HOWARD COUNTY DPZ
 2/26/98
 description
 revisions

ELECTION DISTRICT NO. 1
 HOWARD COUNTY, MARYLAND
 CRESTWOOD
 STORM DRAIN PROFILES

R.M. MOCHI GROUP, P.C.
 P.O. Box 10
 New Market, MD 21774-0010
 (301) 895-5888
 Fax: (301) 895-3111



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

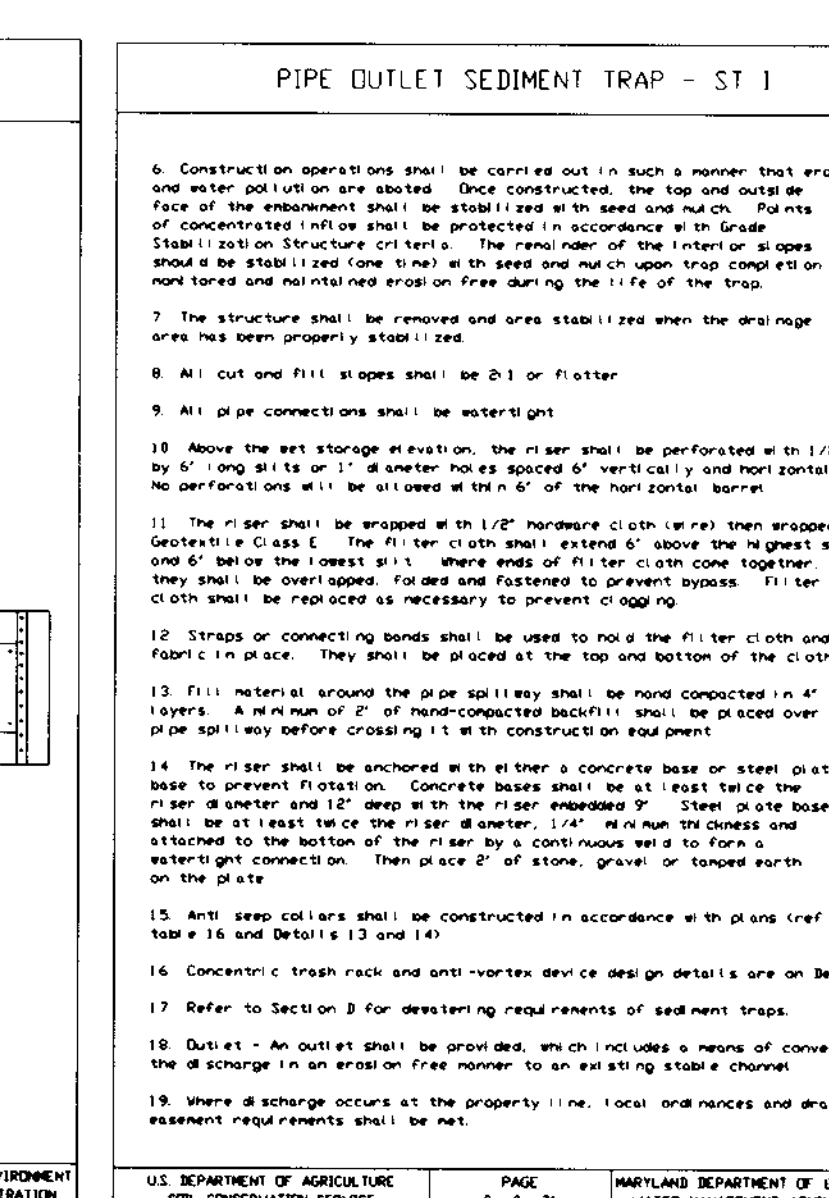
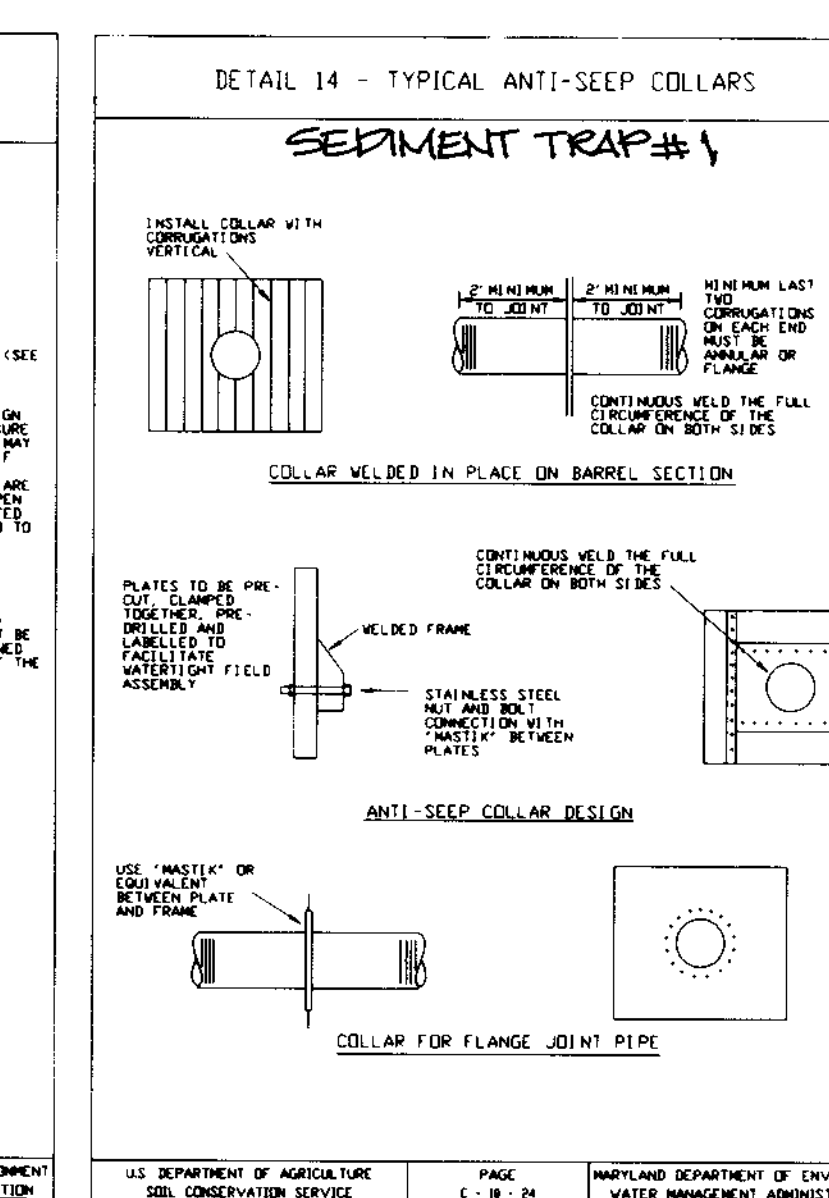
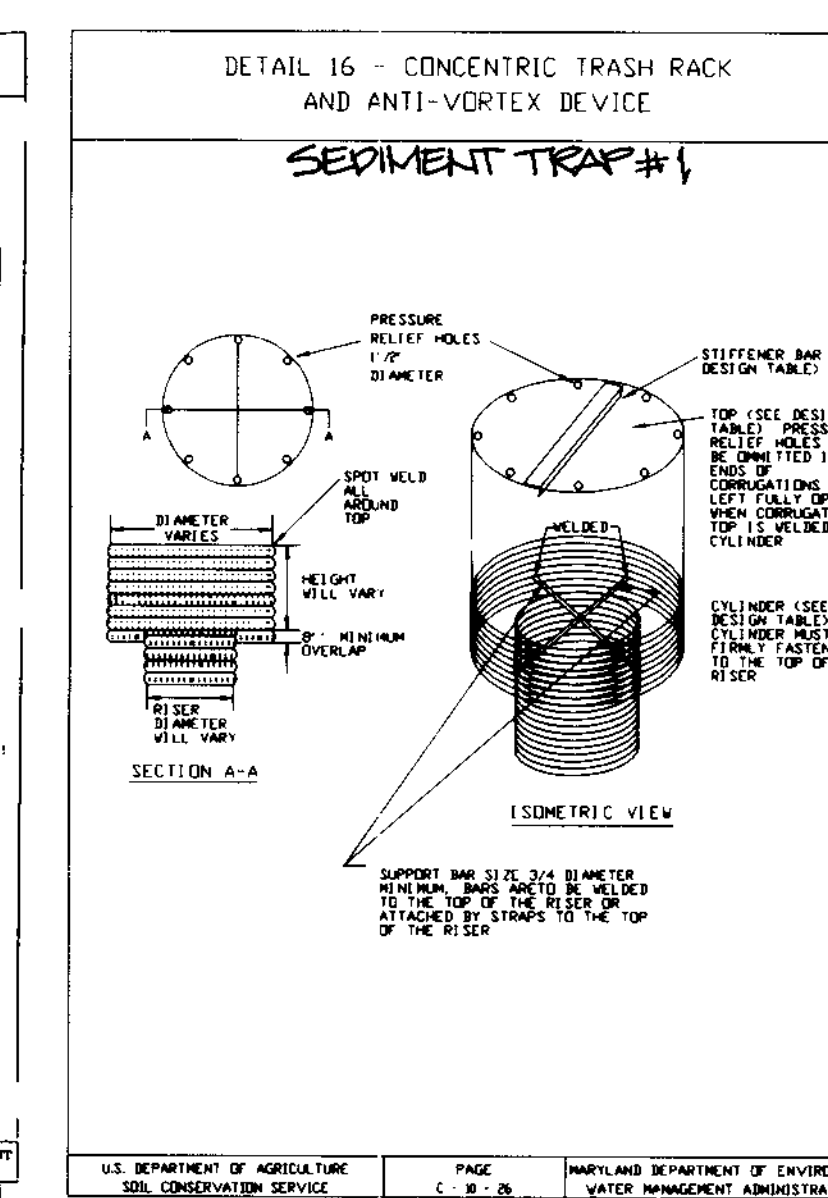
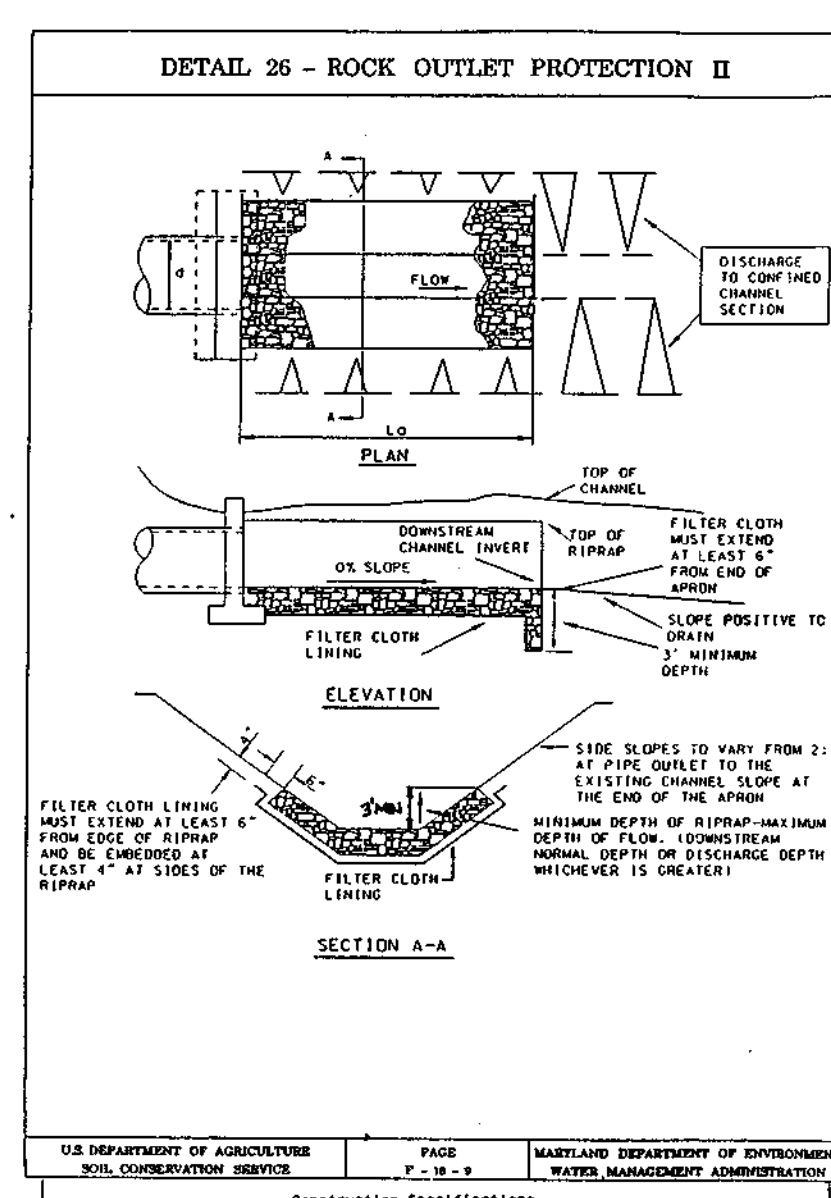
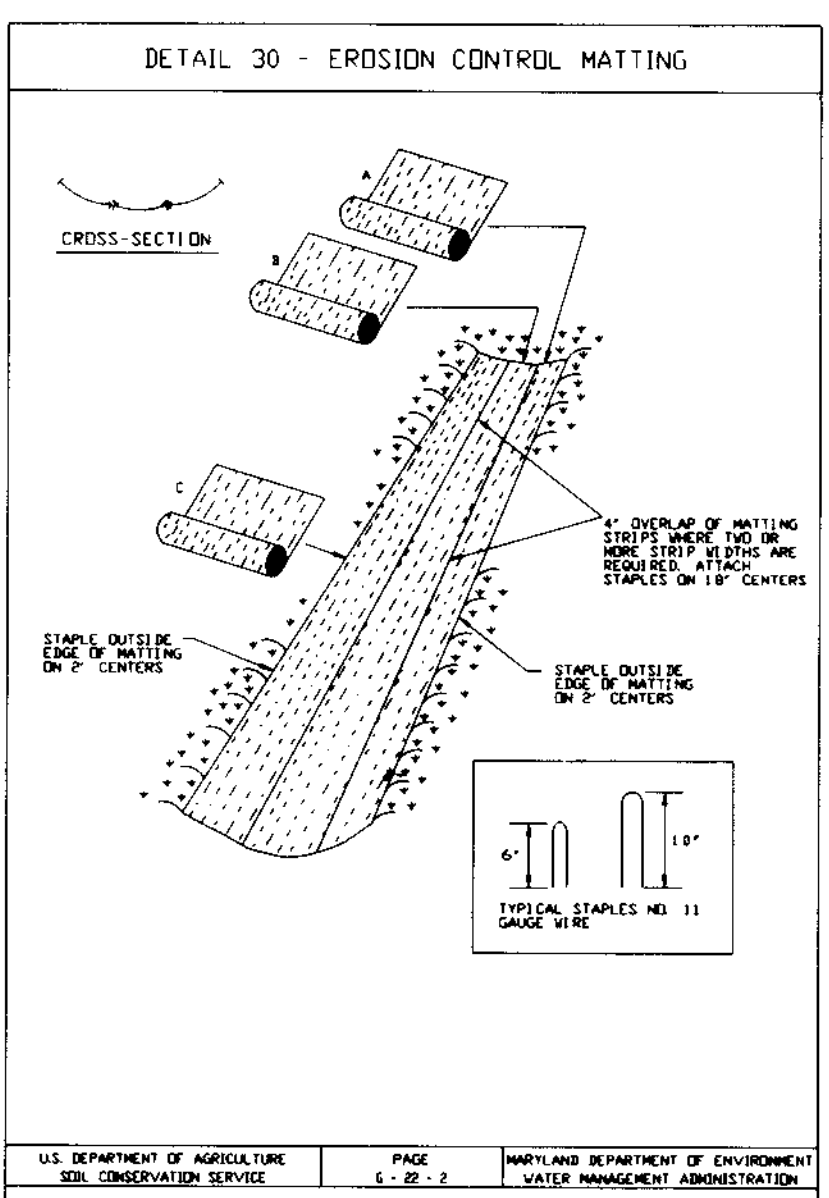
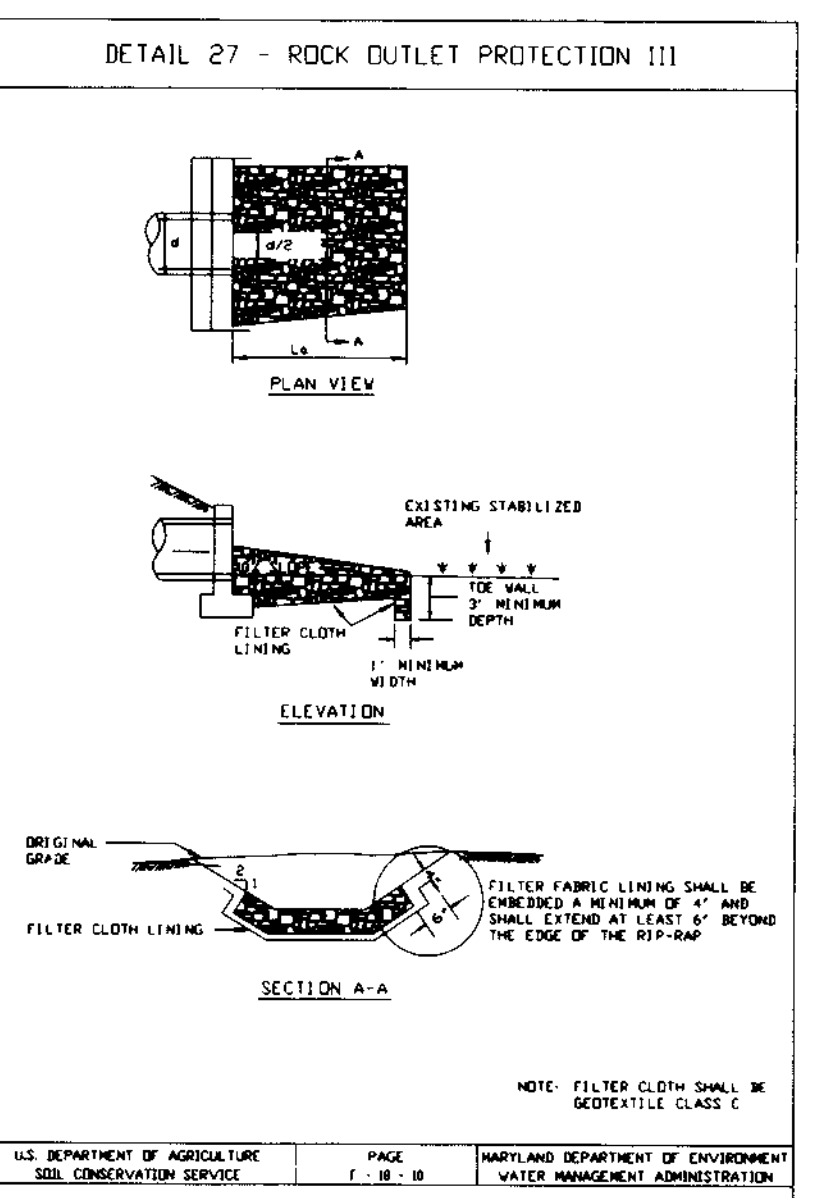
Soil Amendments: In lieu of soil test recommendations, use on the following schedules:

- 1) 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 urea-form fertilizer (9 lbs/1000 sf).
- 2) 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 unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal/acre (5 gal/1000 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gal/acre (8 gal/1000 sf) for anchoring.

Maintenance: Inspect all seeded areas and make needed repairs, replacements and reseedings.



TEMPORARY SEEDING NOTES

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

Seeded Area: 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 bushels per acre of annual ryegrass (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 unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal/acre (5 gal/1000 sf) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gal/acre (8 gal/1000 sf) for anchoring.

Refer to the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment Control for rate and methods not covered.

Table 28 Stone Size

SIZE RANGE	D ₅₀	D ₈₅	AASHTO	WEIGHT
NUMBER 57	3/8" - 1/2"	1/2" - 3/4"	M-4.3	N/A
NUMBER 1	2" - 3"	2 1/2" - 3"	M-4.3	N/A
RIP-RAP	4" - 7"	5 1/2" - 7"	N/A	N/A
CLASS I	N/A	9" - 15"	N/A	1500 max
CLASS II	N/A	16" - 24"	N/A	1000 max
CLASS III	N/A	25" - 34"	N/A	2000 max

* This classification is to be used on the inside face of stone outlets and check dams.

** This classification is to be used when ever small rip-rap is required. The State Highway Administration designation for this stone is Stone for Gabion (1945 01 04).

Stone For Gabion Baskets

BASKET THICKNESS	SIZE OF INDIVIDUAL STONES
INCHES	MM
6	35
9	125
12	300
18	460
24	610

Table 29 Geotextile Fabric

CLASS	APPROXIMATE OPENING SIZE	TENSILE STRENGTH	BURST STRENGTH
	MM	LB MIN	PSI MIN
A	0.30	500	500
B	0.60	300	320
C	0.30	200	320
D	0.60	90	145
E	0.30	90	145
F (SILT FENCE)	0.40-0.80*	90	190

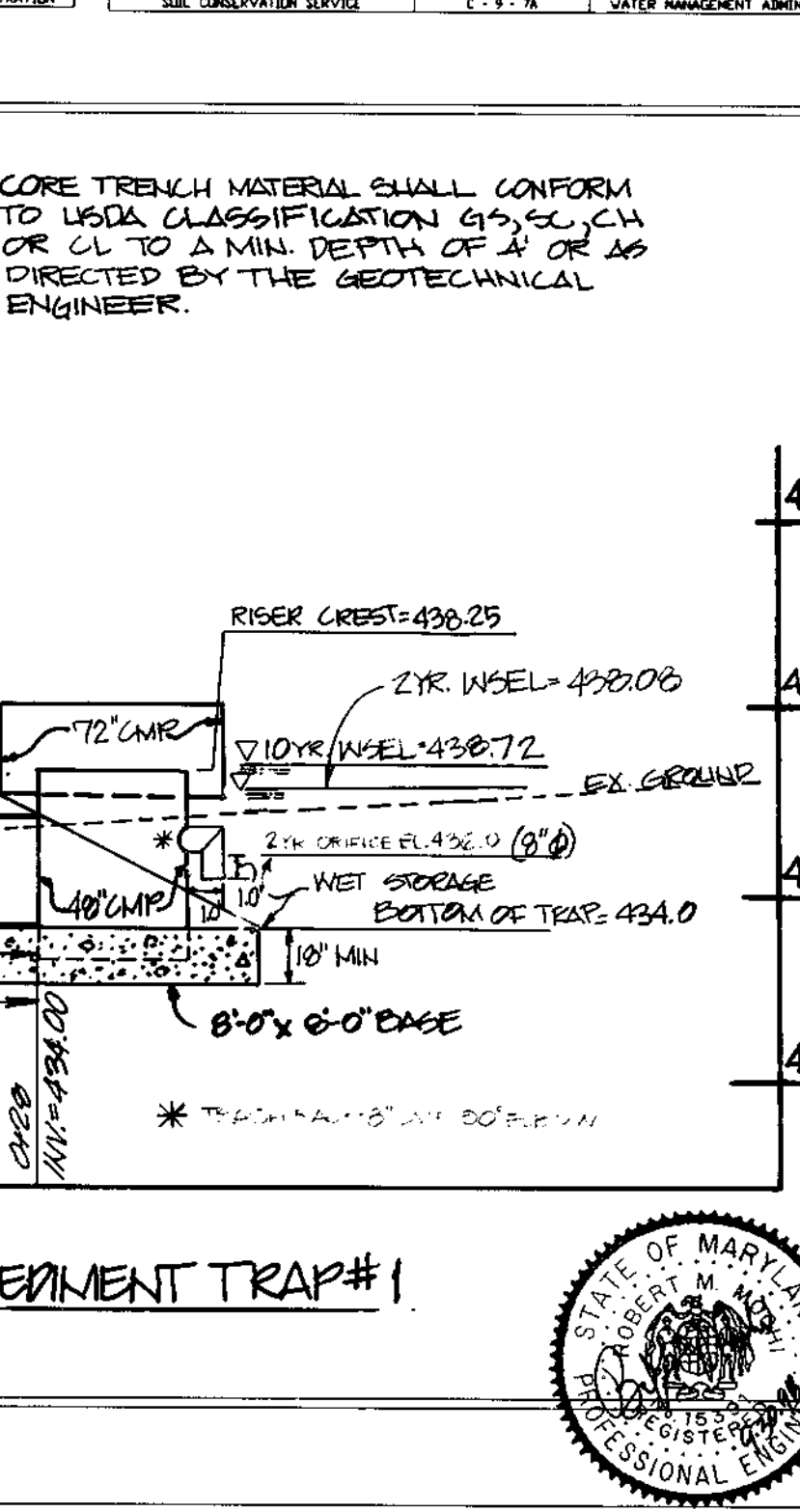
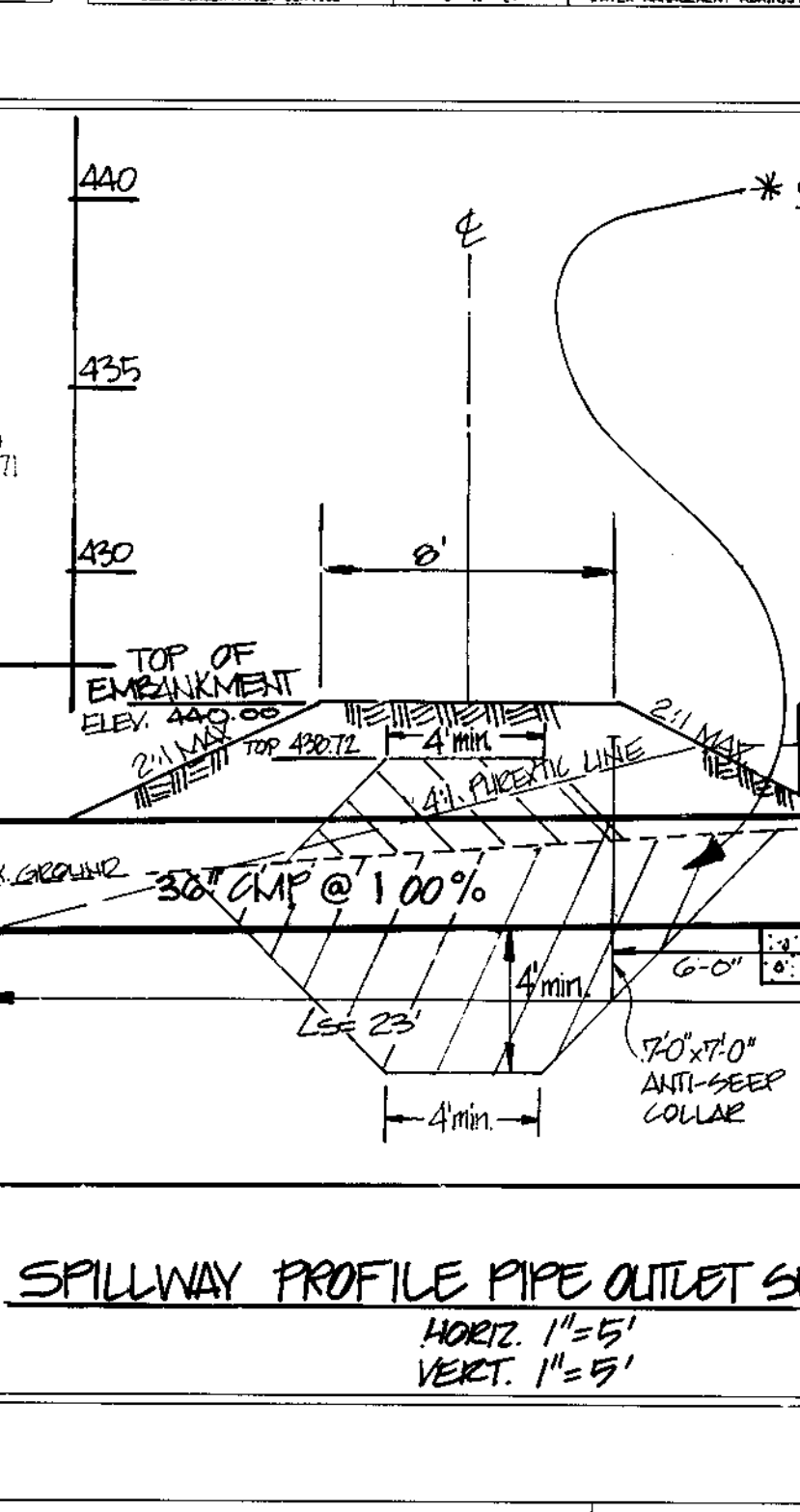
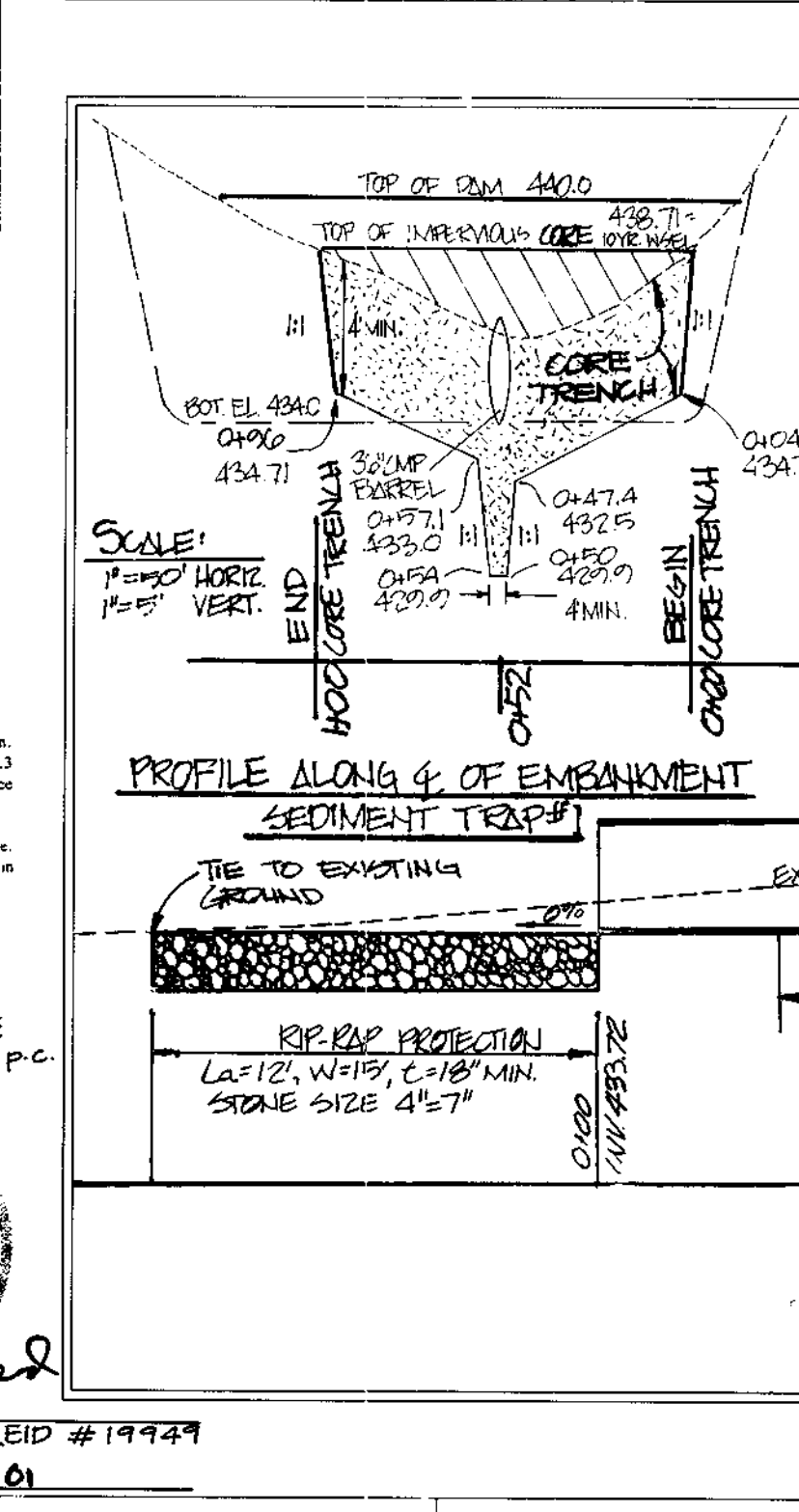
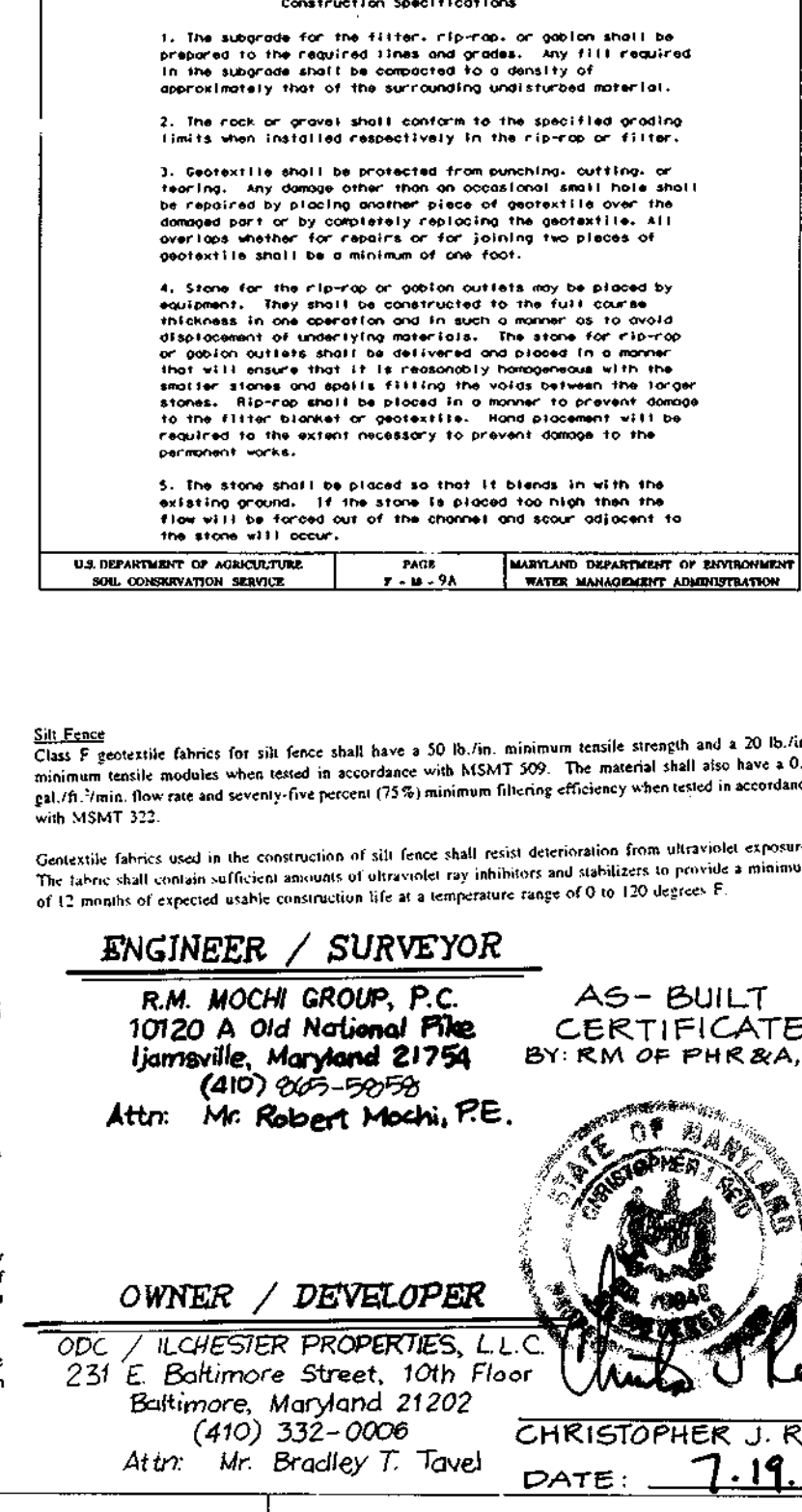
USDA Spec CW-0213

The properties shall be determined in accordance with the following procedures:

- Apparent opening size: MSMT 323
- Grab tensile strength: ASTM D 1682, 4x8 specimens, 1.2" clamp, 12" min. strain rate in both principal directions of possible fabric.
- Burst strength: ASTM D 3786

The fabric shall be inert to commonly encountered chemicals and hydrocarbons, and will be rot and mildew resistant. It shall be manufactured from fibers consisting of long chain synthetic polymers, and composed of a minimum of 85% by weight of polypropylene, polyethylene, or polyethylene. The geotextile fabric shall resist deterioration from ultraviolet exposure.

In addition, Class A and strength E shall have a 0.01 cm/min, minimum permeability when tested in accordance with MSMT 301, and an apparent minimum elongation of 20 percent (20%) when tested in accordance with the grab tensile strength requirements listed above.



SEQUENCE OF CONSTRUCTION

1. OBTAIN ALL REQUIRED PERMITS, APPROVALS AND LICENSES FROM THE APPROPRIATE AGENCIES.
2. NOTIFY HOWARD COUNTY CONSTRUCTION INSPECTION DIVISION (410-313-1880) AT LEAST 72 HOURS PRIOR TO STARTING WORK.
3. INSTALL STABILIZED CONSTRUCTION ENTRANCES.
4. INSTALL ALL SEDIMENT AND EROSION CONTROL MEASURES AND DEVICES FOR CONSTRUCTION OF THIS PLAN. ALL SEDIMENT CONTROL DEVICES ARE TO BE INSPECTED DAILY AND AFTER EACH RAINFALL. REPAIR DEFICIENT DEVICES AS REQUIRED.
5. INSTALL APPROPRIATE MEASURES FOR THE PROTECTION OF TREE SAVE AREAS THROUGHOUT SITE.
6. INSTALL SILT FENCE AS SHOWN BELOW SWMSWEDIMENT BASIN #1 AND SEDIMENT TRAP #1. CLEAR AND GRUB AREAS FOR SWMSWEDIMENT BASIN #1 AND SEDIMENT TRAP #1.
7. CONSTRUCT CORE TRENCH WITH SUITABLE MATERIAL FOR SWMSWEDIMENT BASIN #1 AS VERIFIED BY A PROFESSIONAL ENGINEER.
8. CONSTRUCT PRINCIPLE SPILLWAY PRE-CAST STRUCTURE, BARREL, ANTI-SLEEP COLLAR AND OUTLET ALL PER PLANS.
9. UPON OBTAINING PROPER INSPECTIONS AND CERTIFICATIONS, BACKFILL PRINCIPAL SPILLWAY. INSTALL 10" OF TEMPORARY MANAGEMENT ORIFICE (INV ELEV. 424.25) IN PRE-CAST STRUCTURE, IF NOT PROVIDED. BRICK WEIRS SHUT TO ELEVATION 423.75.
10. COMPLETE EMBANKMENT FILLS AND EXCAVATE FOR POND VOLUMES PER PLAN DELAY FOREBAY GABION INSTALLATION UNTIL SEDIMENT BASIN IS CONVERTED TO A SWAMP POND.
11. CONSTRUCT TEMPORARY SEDIMENT TRAP #1.
12. CONSTRUCT SWMSWEDIMENT BASIN #1 AND SEDIMENT TRAP #1.
13. CLEAR AND GRUB REMAINDER OF SITE. MASS GRADE SITE.
14. CONSTRUCT STORM DRAINS TO SWMSWEDIMENT BASIN #1.
15. DIVERT FLOWS ENTERING INLETS I-7 THROUGH I-11 TO SEDIMENT TRAP #1 WITH A TEMPORARY 18" STORM DRAIN DIVERTER. BRICK SHUT 18" OUTLET PIPE AT I-7.
16. CONSTRUCT ROADS.
17. UPON STABILIZATION OF ALL DISTURBED AREAS, CLEAN AND FLOOD STORM DRAINAGE. CONVERT SEDIMENT BASIN TO SWAMP POND AND CONSTRUCT FOREBAY TO TEMPORARY DIVERTER. REMOVE ALONG WITH THE BRICKED WEIRS. GRADE SEDIMENT TRAP #1 FOR FINAL GRADING INSET AND STABILIZE.
18. NOTE: SEDIMENT CONTROLS MAY BE LEFT IN PLACE FOR HOUSE CONSTRUCTION.
19. NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS FOR FINAL INSPECTION OF COMPLETED PROJECT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Andy Hamilton
CHIEF, DIVISION OF LAND DEVELOPMENT

DATE: 11/2/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Robert M. Mochi
CHIEF, BUREAU OF HIGHWAYS

DATE: 10-26-98

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Christopher J. Reid
DATE: 7-19-01

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Robert M. Mochi
DATE: 10/13/98

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done according to these plans, and that any 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Robert M. Mochi
DATE: 9-20-98

ENGINEER'S CERTIFICATE

I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

Robert M. Mochi
DATE: 11/2/98

AS-BUILT 7/17/01

F-98-115

CRESTWOOD
HOWARD COUNTY, MARYLAND
Grading & Sediment Control Notes and Details

ELECTION DISTRICT No. 1

PROJECT: 98004.13
DATE: Feb. '98
DESIGNED BY: RMM
CHECKED BY: GDM
APPROVED BY: RMM

REVIEWED FOR PERMITS AND LOCAL COMMUNITY CONCERNS BY: RMM
SUBMITTED TO HOWARD COUNTY DEPT. OF PUBLIC WORKS: 11/2/98

P.O. Box 10
New Market, MD 21774-0010
10200 A Old National Pike
Apopka, FL 32709-5706

(301) 865-5858
Fax: (301) 865-5111

10 OF 14

- LEGEND**
- TREE PROTECTION FENCE — X — X —
 - L.O.D. LINE ————
 - SPECIMEN TREE ● ST-2
 - REFORESTATION AREA
 - 15% TO 25% SLOPES [diagonal hatching]
 - 25% SLOPES AND UP [cross-hatching]

FOREST RETENTION AREA 1 - 1.57 ACRES

FOREST RETENTION AREA 2 - 1.18 ACRES

SEE S-12 of 14

LANDSCAPE PLAN FOR SWM POND #1

AS-BUILT CERTIFICATE
BY: RIEMER MUEGGE, a division of
Patton Harris Rust & Assoc., p.c.



Christopher J. Reid
7-19-01
CHRISTOPHER J. REID #19947 DATE

SIGNATURE BLOCK

Matthew V. Smith
Matthew V. Smith, Environmental Scientist
Qualified Professional Status As
Per the Forest Conservation Act

**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Landscape Type		(A) (B) (C) (D) (E) (F)
Linear Feet of Roadway Frontage/Perimeter	1240 (240) 220	220 715 1000
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	1020 (240) 100	100 715 265
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	-	-
Number of Plants Required		
Shade Trees	3	0 2 3 0 13
Evergreen Trees		
Shrubs		
Number of Plants Provided		
Shade Trees	3	0 3 3 0 13
Evergreen Trees		
Other Trees (2:1 substitution)		
Shrubs (10:1 substitution)		
(Describe plant substitution credits below if needed)		

Forest Conservation Plan Prepared By:



AMERICAN LAND CONCEPTS
238 B MAIN STREET
REISTERSTOWN, MARYLAND 21136
PHONE: (410)-526-2668 FAX: (410)-526-2970

LANDSCAPE LEGEND FOR PERIMETER AND SWM AREAS

BOTANICAL NAME	COMMON NAME	SIZE	ROOT	QUANTITY	SYMBOL
QUERCUS RUBRA	NORWICH RED OAK	2-1/2" DBH	BAR	15	[Symbol]
QUERCUS PRINUS	CHINKY OAK	2-1/2" DBH	BAR	15	[Symbol]
QUERCUS RUBRA	NORWICH RED OAK	3-6" DBH	BAR	1	[Symbol]
QUERCUS VELUTINA	BLACK OAK	3-6" DBH	BAR	1	[Symbol]
QUERCUS ALBA	WHITE OAK	3-6" DBH	BAR	1	[Symbol]

SPECIMEN TREE LIST

NO.	COMMON NAME	BOTANICAL NAME	SIZE	CONDITION	CUT
1	Norwich Red Oak	Quercus rubra	3-6"	Good Condition	CUT
2	Yellow Poplar	Liriodendron tulipifera	4-5"	Forked 10' up, Fair Condition	CUT
3	Chinko Oak	Quercus prinus	3-6"	Good Condition	SAVE
4	Norwich Red Oak	Quercus rubra	3-6"	Good Condition	CUT
5	Black Oak	Quercus velutina	3-6"	Good Condition	SAVE
6	White Oak	Quercus alba	3-6"	Good Condition	SAVE

Note: The remaining 3.74 acres of required reforestation is to be accounted for in a fee-in-lieu payment of \$48,874.32 to Howard County.

ENGINEER / SURVEYOR

R.M. MOCHI GROUP, P.C.
10120 A Old National Pike
Jamsville, Maryland 21754
(410) 865-5858
Attn: Mr. Robert Mochi, P.E.

OWNER / DEVELOPER

ODC / ILCHESTER PROPERTIES, L.L.C.
231 E. Baltimore Street, 10th Floor
Baltimore, Maryland 21202
(410) 332-0006
Attn: Mr. Bradley T. Tavel

NOTE:
BALLARD POST TO BE
4" DIA CONCRETE FILLED
STEEL POST, 7'-0" LONG
WITH 3'-6" ABOVE GRADE
MOUND CONCRETE AT SURFACE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Chris Hamilton
11/19/98
10/26/98

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. Gander
10-26-98

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT

Robert W. Gilmour
10/13/98

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Paul Simmons
10/13/98

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to these plans, and that any responsible personnel involved in the construction project will have a Certificate of Attendance of a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Bradley Tavel
9-29-98

ENGINEER'S CERTIFICATE
I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

Robert M. Mochi
9/29/98

PROJECT	98004.13	DATE	Feb '98
ILLUSTRATION	JKE	ENGINEERING	PFB
SCALE	1" = 50'	APPROVAL	MS

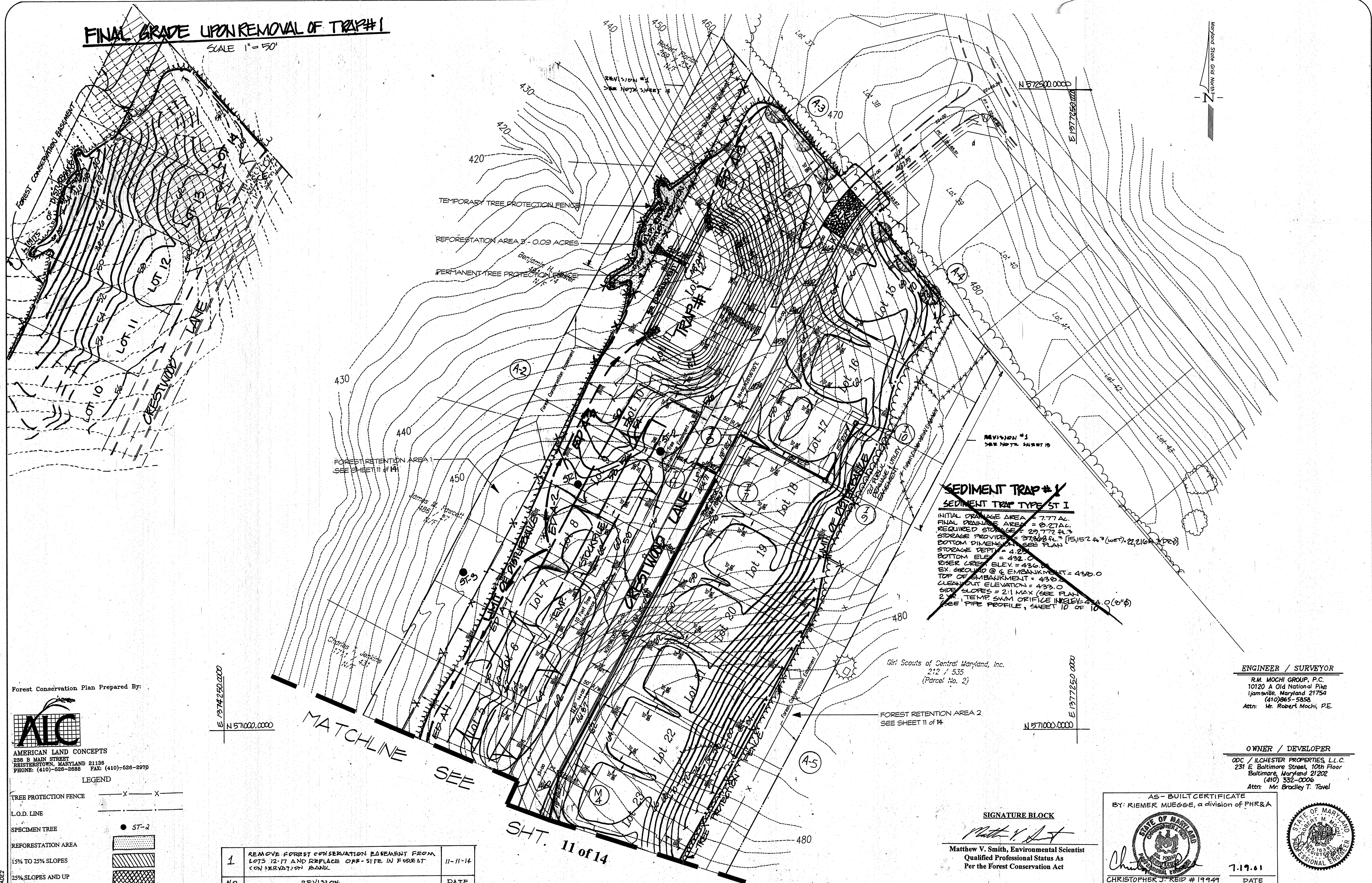
NO.	0	DATE	2/22/98
DESCRIPTION	SUBMITTED TO HOWARD COUNTY DPZ		
REVISIONS			

FOREST CONSERVATION PLAN
ELECTION DISTRICT No. 1
CRESTWOOD
HOWARD COUNTY, MARYLAND
Grading & Sediment Control Plan

R.M. MOCHI GROUP, P.C.
P.O. Box 10
New Market, MD 21774-0010
10120 A Old National Pike
Jamsville, MD 21754-0706
(301) 865-5858
Fax: (301) 865-5111

FINAL GRADE UPON REMOVAL OF TRAP#1

SCALE 1" = 50'



SEDIMENT TRAP #1
SEDIMENT TRAP TYPE ST I
 INITIAL DRAINAGE AREA = 7.77 AC.
 FINAL DRAINAGE AREA = 0.27 AC.
 REQUIRED STORAGE = 29,772 cu ft.
 STORAGE PROVIDED = 37,200 cu ft. (15,152 cu ft. (wet), 22,100 cu ft. (dry))
 BOTTOM DIMENSION SEE PLAN
 STORAGE DEPTH = 4.00 FT.
 BOTTOM ELEV. = 432.0
 RISER CREST ELEV. = 436.0
 EX. GROUND @ EMBANKMENT = 430.0
 TOP OF EMBANKMENT = 430.0
 CLEANOUT ELEVATION = 433.0
 SIDE SLOPES = 2:1 MAX (SEE PLAN)
 2' x 2' TEMP SWIM ORIFICE IN ELEV. 434.0 (2' x 2')
 SEE PIPE PROFILE, SHEET 10 OF 10

Forest Conservation Plan Prepared By:



AMERICAN LAND CONCEPTS
 238 B MAIN STREET
 RISTERTOWN, MARYLAND 21136
 PHONE: (410)-528-2888 FAX: (410)-528-2970

- LEGEND**
- TREE PROTECTION FENCE — X — X —
 - L.O.D. LINE ———
 - SPECIMEN TREE ● ST-2
 - REFORESTATION AREA
 - 15% TO 25% SLOPES [diagonal hatching]
 - 25% SLOPES AND UP [cross-hatching]

E 1374250.000
 N 571000.000

E 1377250.000
 N 571000.000

NO.	REVISION	DATE
1	REMOVE FOREST CONSERVATION EASEMENT FROM LOTS 12-17 AND REPLACE OFF-SITE IN FOREST CONSERVATION BANK	11-11-14

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Cinda Hamilton 1/16/98
 CHIEF, DIVISION OF LAND DEVELOPMENT

John P. ... 1/12/98
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED:
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Robert M. ... 12-26-98
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. ... 10/13/98
 HOWARD SOIL CONSERVATION DISTRICT

APPROVED: THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Chief ... 10/13/98
 USDA - NATURAL RESOURCES CONSERVATION SERVICE

DEVELOPER'S CERTIFICATE

I/We certify that all development and construction will be done according to these plans, and that any 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 shall engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District.

Bradley T. Tavel 9-30-98
 Signature of Developer Date

ENGINEER'S CERTIFICATE

I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in accordance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion.

Robert M. Mochi 9/24/98
 Robert M. Mochi, P.E. Date

SIGNATURE BLOCK

Matthew V. Smith
 Matthew V. Smith, Environmental Scientist
 Qualified Professional Status As
 Per the Forest Conservation Act

AS-BUILT CERTIFICATE
 BY: RIEMER MUEGGE, a division of PHR&A

Christopher J. Reid
 CHRISTOPHER J. REID # 19949
 DATE 7.19.01



ENGINEER / SURVEYOR
 R.M. MOCHI GROUP, P.C.
 10120 A Old National Pike
 Jamsville, Maryland 21754
 (410)865-5858
 Attn: Mr. Robert Mochi, P.E.

OWNER / DEVELOPER
 ODC / ILCHESTER PROPERTIES, L.L.C.
 231 E. Baltimore Street, 10th Floor
 Baltimore, Maryland 21202
 (410) 331-0006
 Attn: Mr. Bradley T. Tavel

Project	date
98004.13	Feb. '98
Illustration	engineering
JCF	PFB
scale	1" = 50'
no.	revisions
0	2/26/98
SUBMITTED TO HOWARD COUNTY DPZ	

FOREST CONSERVATION PLAN

CRESTWOOD

ELECTION DISTRICT No. 1

HOWARD COUNTY, MARYLAND

Grading and Sediment Control Plan

R.M. MOCHI GROUP, P.C.
 P.O. Box 10
 New Market, MD 21774-0010
 10120 A Old National Pike
 Jamsville, MD 21754-5706
 (410) 865-5858
 Fax: (202) 865-5711

FOREST CONSERVATION WORKSHEET CRESTWOOD

I. BASIC SITE DATA		ACRES (1/10)
GROSS SITE AREA		19.90
AREA WITHIN 100 YEAR FLOODPLAIN		0.0
AREA WITHIN AG USE OR PRESERVATION PARCEL (IF APPLICABLE)		0.0
NET TRACT AREA		17.9
LAND USE CATEGORY (R-RLD, R-RMD, R-S, C/1/0, I)	RR/RC	

II. INFORMATION FOR CALCULATIONS		ACRES (1/10)
A. NET TRACT AREA		17.9
B. REFORESTATION THRESHOLD (20% X A)		3.6
C. AFFORESTATION MINIMUM (15% X A)		2.7
D. EXISTING FOREST ON NET TRACT AREA		17.5
E. FOREST AREAS TO BE CLEARED		14.2
F. FOREST AREAS TO BE RETAINED		3.3

III. DETERMINING REQUIREMENTS: AFFORESTATION OR REFORESTATION

1. Reforestation
If existing forest areas equal or exceed the afforestation minimum (if D equals or is more than C), and clearing of forest areas is proposed, reforestation requirements may apply.
GO TO SECTION IV

If existing forests exceed the afforestation minimum (if D equals or is more than C) and no clearing of existing forest resources is proposed, no reforestation is required. No further calculations are needed.

2. Afforestation
If existing forest area are less than the afforestation minimum (if D is less than C), afforestation requirements apply.
GO TO SECTION V

NOTE: THIS WORKSHEET IS A REFINEMENT OF THE WORKSHEET APPROVED BY RESOLUTION 48.

IV. REFORESTATION CALCULATIONS		ACRES (1/10 acre)
A. NET TRACT AREA		17.9
B. REFORESTATION THRESHOLD (20% X A)		3.6
D. EXISTING FOREST ON NET TRACT AREA		17.5
E. FOREST AREAS TO BE CLEARED		14.2
F. FOREST AREAS TO BE RETAINED		3.3
G. FOREST AREAS CLEARED ABOVE REFORESTATION THRESHOLD (D-F, if F equals or is greater than B, Alternate 1) (D-B, if F is less than B, Alternate 2)		13.9
H. FOREST AREAS CLEARED BELOW REFORESTATION THRESHOLD (B-F, if applicable)		0.3
I. FOREST AREAS RETAINED ABOVE REFORESTATION THRESHOLD (F-B, Retention Credit, if applicable)		0.0

Select the alternative that applies:

1. Clearing above the threshold only
If forest areas to be retained equal or are greater than the reforestation threshold (if F equals or is greater than B), the following calculations apply:
REFORESTATION FOR CLEARING ABOVE THRESHOLD
 $G \times 1/4$ 0.0
CREDIT FOR FOREST AREAS RETAINED ABOVE THRESHOLD
 $I = \text{Retention Credit}$ 0.0
TOTAL REFORESTATION REQUIRED
 $(G \times 1/4) - I$ 0.0
If the total reforestation requirement is equal to or less than 0, no reforestation is required.

2. Clearing below the threshold
If forest areas to be retained are less than the reforestation threshold (if F is less than B), the following calculations apply:
REFORESTATION FOR CLEARING ABOVE THRESHOLD
 $G \times 1/4$ 3.5
CREDIT FOR FOREST AREAS RETAINED ABOVE THRESHOLD
 $H \times 2$ 0.6
TOTAL REFORESTATION REQUIRED
 $(G \times 1/4) + (H \times 2)$ 4.1
Since clearing occurs below the threshold, no forest retention credit is possible.

I. INTRODUCTION

This forest conservation plan has been prepared to facilitate development of Crestwood and comply with the Howard County Forest Conservation Act.

II. CONSTRUCTION SEQUENCE

1. Install tree protection devices around existing trees to remain as per Forest Conservation Plan.
2. Regrade site as per the Grading Plan.
3. Install plantings as per the Section One Forest Conservation Plan, sheet 11, 12 of 14. See notes and details this sheet.
4. Upon stabilization of the site and with the permission of the county sediment control inspector, remove temporary tree protection devices.

III. PLANTING SPECIFICATIONS

1. The proposed project shall be constructed in a manner which will not violate Maryland's Water Quality Standards as set forth in COMAR 26.08.02.
2. Protection devices as shown on this sheet shall be in place prior to any grading or land clearing.
3. All construction materials not used in the project shall be removed and disposed of in a manner which will prevent their entry into the waters of this State.
4. Sediment transport into adjacent waters of the State shall be minimized.
5. During the construction period, all persons involved in the project shall use sanitary facilities and adhere to sanitary wastewater disposal practices as approved by the local health department.
6. Disturbances of wetlands and waterways shall be avoided or minimized through the use of other practical alternatives.
7. All stock will be planted as received. No root or top pruning will be done at the site. Stock not meeting specifications shall be returned to the supplier.
8. All planting stock shall be protected from sunscald, desiccation, and structural damage during shipment to the site. Delivery of materials will be no sooner than one week prior to planting. Materials held for planting will be moistened and placed in cool, shaded areas until ready for placement. During planting all materials will be kept moist with the roots protected from desiccation.
9. Plant Materials
 - a. All trees shall conform to the sizes indicated. Nomenclature shall conform to standardized plant names. All nursery stock shall be in accordance with standard nursery stock, as set forth in the latest approved standards of the American Nursery Standards Association, Inc.
 - b. Substitutions in plant species, size, quantities or other materials, shall be made only with written approval by Howard County Forestry/Landscape Division.
10. Plant Material Quality
 - a. All trees shall be sound, healthy, vigorous, well-branched, and free from plant diseases, pests, eggs, or larvae. Plants shall be nursery grown. No heeled - cold storage or collected stock will be accepted.
 - b. The Landscape Contractor shall be responsible for selecting plant materials of the size and characteristics indicated on the plant list on the drawing and of the quality specified. The contractor shall not accept nor deliver to the site any plants which have broken branches, leaders, or otherwise damaged roots, root balls or containers, or trunks. Plants shall not have any dead or diseased areas.
 - c. The Contractor shall be required to guarantee all plant materials for a period of one year after installation is completed and approved.
 - d. Plant material shall be replaced if the survival rate falls below 100 trees/acre or 75% of total, whichever is greater. A tree shall be replaced when the main leader has died back and 25% of the crown is dead.
 - e. Container Grown Stock
 1. An established container grown tree shall be grown in a container for a sufficient time to develop root mass that will retain its shape and hold together when removed from the container.
 2. The container shall be sufficiently rigid to hold the ball shape protecting the root mass during shipping.
 3. The size of container-grown stock is measured by height and width of plant.
 4. All container-grown trees shall be treated in the following manner prior to planting: using a knife or sharp blade, make 4-5 cuts 1" deep the length of the root ball to cut all circling roots.
 5. All container-grown plants shall be grouped and watered daily until they are planted.
 6. Plant shall be growing in a container for minimum 180 days before delivery.
 - f. Balled & Burlapped
 1. Balled and burlapped plants shall be dug with firm natural balls of earth, free of noxious weed matter.
 2. Ball sizes shall be in accordance with American Association of Nurserymen Specifications.

3. Caliper and height measurement: in size grading B & B trees, caliper shall take precedence over height. Caliper of trunk shall be taken 6" above the ground level (up to and including 4" caliper size).
11. Clean-Up After Planting
 - a. At the completion of the job, the Contractor shall remove all excess materials from the job site and clean up all areas affected by this work or storage of materials. The Contractor shall replace or repair, at no cost to the Owners, all site areas or surrounding items damaged by work of his contract. All paved areas and walkways shall be left broom-clean.
12. Planting soil for all plant materials shall consist of 100% soil excavated from the planting area.
13. Mulching material for trees shall be well-aged, fine shredded hardwood, dark brown in color, and free of noxious weed seeds. Material shall be mulching grade; uniform in size and free of foreign matter.
14. The Contractor shall make the necessary arrangements to obtain clean freshwater for use during planting operations and the subsequent maintenance period.
15. Plant List
The Landscape Contractor shall furnish all plants in quantities and sizes necessary to complete the work shown on the drawing.
16. Plants:
 - a. All plants shall be carefully handled at all times so that roots are protected from breakage, and from sun and drying winds and from freezing temperatures.
17. Plant Layout
The Contractor shall layout and stake or suitably mark the outline of all plants as nearly as possible to the dimensions and configurations shown on the plan.
18. Tree pits for container stock shall be dug as indicated on the Tree Planting Detail on this sheet. Tree pits for B & B stock shall be dug as indicated on the Tree Planting Details on this sheet.
19. All plants shall be set straight or plumb, in locations shown on the drawings and at such a level that after settlement, normal or natural relationship of the crown on the plant with the adjacent ground surface shall be established.
20. Backfilling
All trees shall be backfilled and tamped to two-thirds depth of the pit and thoroughly watered.
21. Mulching
May be done as soon as backfilling has been completed. Mulch to the limit of the plant pits to a depth of two (2) inches around shrubs and over shrub beds.
22. Pruning After Planting
Pruning shall be done by experienced personnel. Any broken or damaged branches shall be removed.
23. Maintenance
Vegetation demonstrating immediate stress or dieback will be replaced. In addition, soil and climatic factors will be analyzed in relation to plant growth. The following maintenance techniques will be utilized.
 - a. Begin maintenance immediately after each item is planted and continue through guarantee period.
 - b. Maintain plants in a healthy growing condition by watering, pruning, spraying, weeding, and other necessary maintenance operations.
 - c. Replace impaired or dead plants promptly during specified planting season.
 - d. Remove soil ridges from around watering basins prior to end of maintenance period.
 - e. Keep plants straight upright through the contract period and until final inspection and acceptance.
 - f. Water when soil moisture is below optimum level for best plant growth.

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Chris Hamilton 11/1/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Richard M. Daniels 10/26/99
CHIEF, BUREAU OF HIGHWAYS DATE

W.D. Summers 11/2/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

PLANT LIST

TOTAL TREES: 147

QTY.	COMMON NAME	BOTANICAL NAME
21	RED MAPLE	Acer rubrum
21	WHITE ASH	Fraxinus americana
21	BLACK GUM	Nyssa sylvatica
21	YELLOW POPLAR	Liriodendron tulipifera
21	ARROWWOOD	Viburnum dentatum
21	SILKY DOGWOOD	Cornus amomum
21	WINTERBERRY HOLLY	Ilex verticillata

Required Reforestation Area: 4.1 acres
On-site Reforestation Area: 0.36 acres

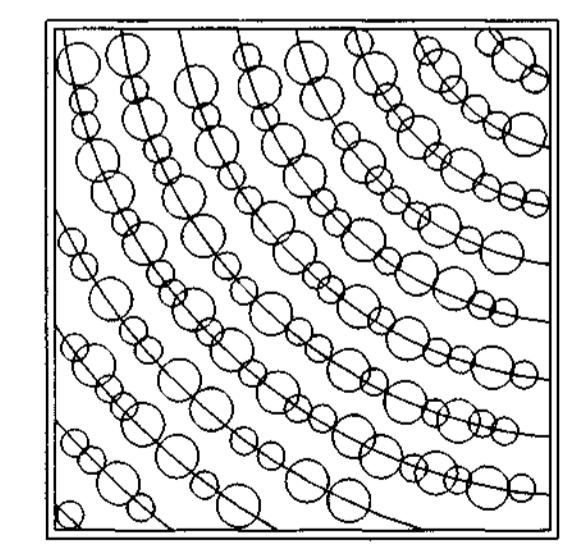
Minimum Quantity: 144 Plants @ 11' x 11' Spacing

Tree Specifications: Whips
24"-30" in height

Note: The remaining 3.74 acres of required reforestation is to be accounted for in a fee-in-lieu payment to Howard County.

CURVILINEAR RANDOMIZED PLANTING

PLANT LOCATIONS WILL BE DETERMINED BY A QUALIFIED FORESTRY PROFESSIONAL FROM AMERICAN LAND CONCEPTS UTILIZING THE FOLLOWING METHODOLOGY



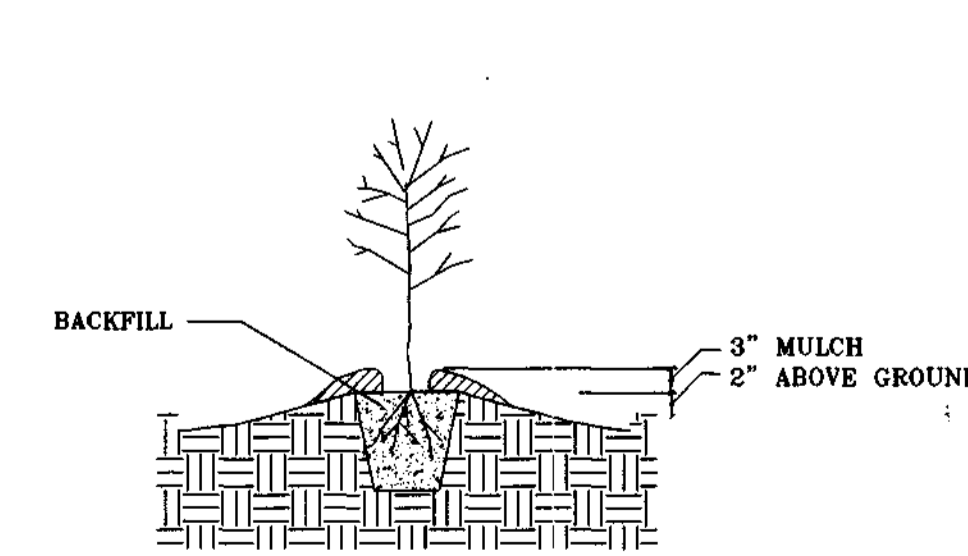
PLANT PLACEMENT DETAIL
NOT TO SCALE

1. MIX TREE AND SHRUB SPECIES IN THE STAGING AREA.
2. THE QUALIFIED FORESTRY PROFESSIONAL WILL SET THE GUIDE CURVILINEAR LINE.
3. SET PARALLEL CURVILINEAR LINES AT 9' INTERVALS.
4. TREES AND SHRUBS WILL BE PLANTED AT RANDOM SPACING ALONG THE CURVILINEAR LINES UTILIZING THE FOLLOWING RANDOM NUMBERS AS FOOT SPACING ALONG LINE.

RANDOM NUMBER LIST FOR PLANTS:
9, 6, 8, 8, 7, 1, 3, 4, 7, 9, 8, 0, 6, 2, 1, 6, 6, 2, 2, 3, 8, 6, 0, 8, 5, 0, 2, 4, 3, 2, 5, 3, 3, 4, 2, 4, 2, 8, 4, 6, 9, 4, 7, 7, 1, 7, 5, 1, 1, 2, 3, 0, 4, 8, 5, 6, 2, 1, 7, 3, 0, 2, 1, 3, 2, 1, 4, 8, 7, 8, 9, 2, 2, 2, 8, 1, 1, 6, 7, 8, 3, 8, 6, 3, 5, 2

CONTAINER WHIP PLANTING DETAIL

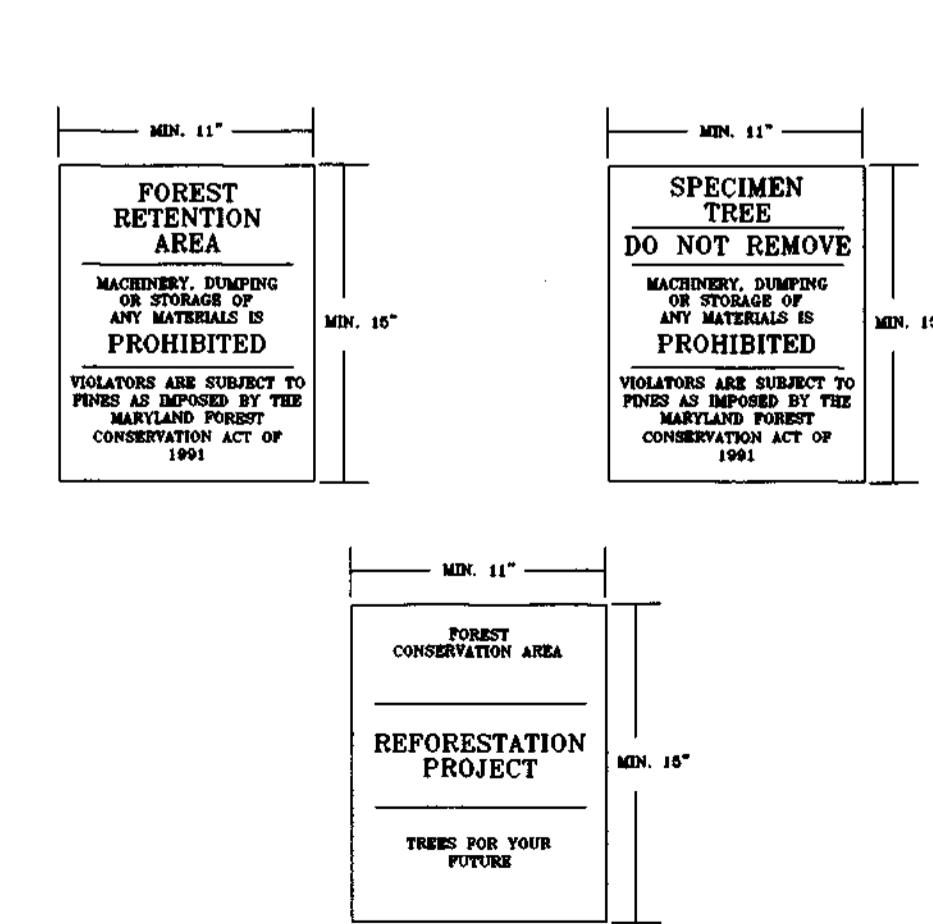
NOT TO SCALE



BACKFILL
3" MULCH
2" ABOVE GROUND

TREE SIGNAGE

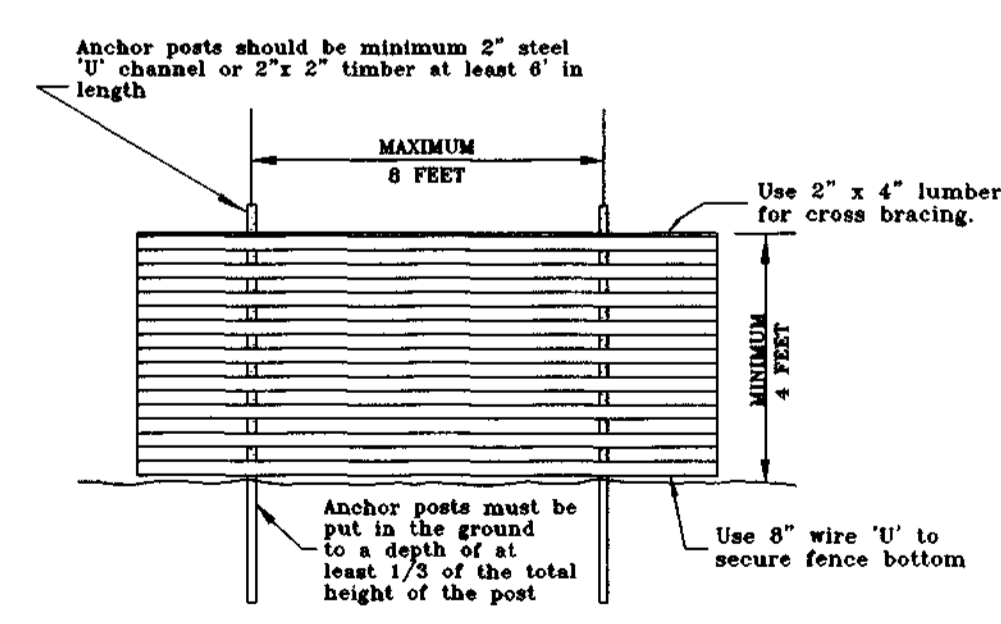
NOT TO SCALE



Note: Signage is to be placed at 100 foot intervals along the retention/reforestation boundaries, and around specimen trees.

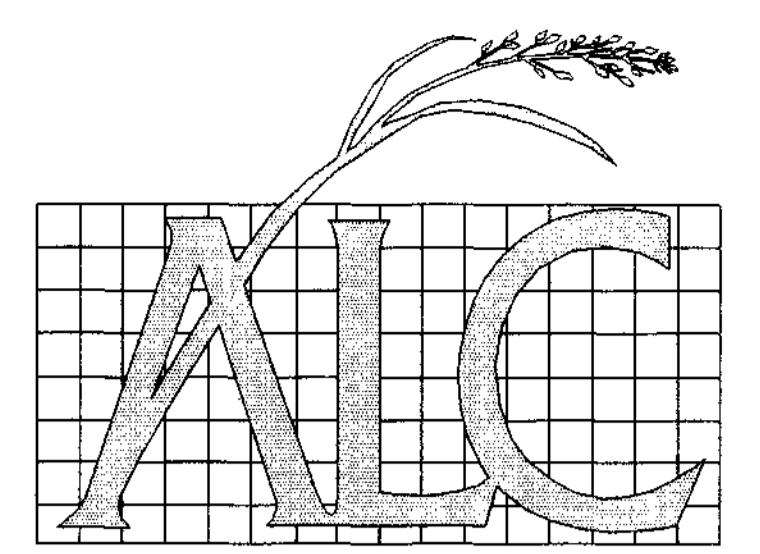
TREE PROTECTION FENCE

BLAZE ORANGE PLASTIC MESH
NOT TO SCALE



- GENERAL NOTES
1. FOREST PROTECTION DEVICE ONLY
 2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 4. SOOT DAMAGE SHOULD BE AVOIDED.
 5. PROTECTIVE SIGNAGE MAY ALSO BE USED.
 6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

Source: Prince George's County, Maryland; Wood-Band Conservation Manual



AMERICAN LAND CONCEPTS
238 B MAIN STREET
REISTERSTOWN, MARYLAND 21136
PHONE: (410)-526-2688 FAX: (410)-526-2970

CERTIFICATE
Christopher J. Reid
CHRISTOPHER J. REID #19949 7.19.01
DATE

CRESTWOOD
FOREST CONSERVATION
NOTES AND DETAILS
LOT 1-31
ELECTION DISTRICT NUMBERS 1
HOWARD COUNTY, MARYLAND

ENGINEER:

R.M. MOCHI GROUP
P.O. Box 10
New Market, MD 21774-0010
10120 A Old National Pike
Jaysville, MD 21754-9706
(301) 865-5858
Fax: (301) 865-5111

SIGNATURE BLOCK

Matthew V. Smith
MATTHEW V. SMITH, ENVIRONMENTAL SCIENTIST
QUALIFIED PROFESSIONAL STATUS AS
PER THE FOREST CONSERVATION ACT

C:\R13\DRAWINGS\CRESTWOOD NOTES.DWG
DRAWN BY: JFK SCALE: N.T.S.
DESIGNED BY: MVS DATE: JULY 1998
CHECKED BY: MVS SHEET 13 OF 14

FOREST CONSERVATION WORKSHEET CRESTWOOD

I. BASIC SITE DATA		ACRES (1/10)
GROSS SITE AREA		19.90
AREA WITHIN 100 YEAR FLOODPLAIN		0.0
AREA WITHIN AG USE OR PRESERVATION PARCEL (IF APPLICABLE)		0.0
NET TRACT AREA		17.9
LAND USE CATEGORY (R-RLD, R-RMD, R-S, C/1/0, I)	RR/RC	
II. INFORMATION FOR CALCULATIONS		
A. NET TRACT AREA		17.9
B. REFORESTATION THRESHOLD (20% X A)		3.6
C. AFFORESTATION MINIMUM (15% X A)		2.7
D. EXISTING FOREST ON NET TRACT AREA		17.5
E. FOREST AREAS TO BE CLEARED		14.2
F. FOREST AREAS TO BE RETAINED		3.3

III. DETERMINING REQUIREMENTS: AFFORESTATION OR REFORESTATION

1. Reforestation

If existing forest areas equal or exceed the afforestation minimum (if D equals or is more than C), and clearing of forest areas is proposed, reforestation requirements may apply.

GO TO SECTION IV

If existing forests exceed the afforestation minimum (if D equals or is more than C) and no clearing of existing forest resources is proposed, no reforestation is required. No further calculations are needed.

2. Afforestation

If existing forest area are less than the afforestation minimum (if D is less than C), afforestation requirements apply.

GO TO SECTION V

NOTE: THIS WORKSHEET IS A REFINEMENT OF THE WORKSHEET APPROVED BY RESOLUTION 46.

IV. REFORESTATION CALCULATIONS		ACRES (1/10 acre)
A. NET TRACT AREA		17.9
B. REFORESTATION THRESHOLD (20% X A)		3.6
D. EXISTING FOREST ON NET TRACT AREA		17.5
E. FOREST AREAS TO BE CLEARED		14.2
F. FOREST AREAS TO BE RETAINED		3.3
G. FOREST AREAS CLEARED ABOVE REFORESTATION THRESHOLD (D-F, if F equals or is greater than B, Alternate 1) (D-B, if F is less than B, Alternate 2)		13.9
H. FOREST AREAS CLEARED BELOW REFORESTATION THRESHOLD (B-F, if applicable)		0.3
I. FOREST AREAS RETAINED ABOVE REFORESTATION THRESHOLD (F-B, Retention Credit, if applicable)		0.0

Select the alternative that applies:

1. Clearing above the threshold only

If forest areas to be retained equal or are greater than the reforestation threshold (if F equals or is greater than B), the following calculations apply:

REFORESTATION FOR CLEARING ABOVE THRESHOLD $G \times 1/4$	0.0
CREDIT FOR FOREST AREAS RETAINED ABOVE THRESHOLD $I = \text{Retention Credit}$	0.0
TOTAL REFORESTATION REQUIRED $(G \times 1/4) - I$	0.0

If the total reforestation requirement is equal to or less than 0, no reforestation is required.

2. Clearing below the threshold

If forest areas to be retained are less than the reforestation threshold (if F is less than B), the following calculations apply:

REFORESTATION FOR CLEARING ABOVE THRESHOLD $G \times 1/4$	3.5
CREDIT FOR FOREST AREAS RETAINED ABOVE THRESHOLD $H \times 2$	0.6
TOTAL REFORESTATION REQUIRED $(G \times 1/4) + (H \times 2)$	4.1

Since clearing occurs below the threshold, no forest retention credit is possible.

I. INTRODUCTION

This forest conservation plan has been prepared to facilitate development of Crestwood and comply with the Howard County Forest Conservation Act.

II. CONSTRUCTION SEQUENCE

1. Install tree protection devices around existing trees to remain as per Forest Conservation Plan.
2. Regrade site as per the Grading Plan.
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4. Upon stabilization of the site and with the permission of the county sediment control inspector, remove temporary tree protection devices.

III. PLANTING SPECIFICATIONS

1. The proposed project shall be constructed in a manner which will not violate Maryland's Water Quality Standards as set forth in COMAR 26.08.02.
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 3. The size of container-grown stock is measured by height and width of plant.
 4. All container-grown trees shall be treated in the following manner prior to planting: using a knife or sharp blade, make 4-5 cuts 1" deep the length of the root ball to cut all circling roots.
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 1. Balled and burlapped plants shall be dug with firm natural balls of earth, free of noxious weed matter.
 2. Ball sizes shall be in accordance with American Association of Nurserymen Specifications.

3. Caliper and height measurement: in size grading B & B trees, caliper shall take precedence over height. Caliper of trunk shall be taken 6" above the ground level (up to and including 4" caliper size).

11. Clean-Up After Planting
 - a. At the completion of the job, the Contractor shall remove all excess materials from the job site and clean up all areas affected by this work or storage of materials. The Contractor shall replace or repair, at no cost to the Owners, all site areas or surrounding items damaged by work of his contract. All paved areas and walkways shall be left broom-clean.
12. Planting soil for all plant materials shall consist of 100% soil excavated from the planting area.
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15. Plant List

The Landscape Contractor shall furnish all plants in quantities and sizes necessary to complete the work shown on the drawing.
16. Plants:
 - a. All plants shall be carefully handled at all times so that roots are protected from breakage, and from sun and drying winds and from freezing temperatures.
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The Contractor shall layout and stake or suitably mark the outline of all plants as nearly as possible to the dimensions and configurations shown on the plan.
18. Tree pits for container stock shall be dug as indicated on the Tree Planting Detail on this sheet. Tree pits for B & B stock shall be dug as indicated on the Tree Planting Details on this sheet.
19. All plants shall be set straight or plumb, in locations shown on the drawings and at such a level that after settlement, normal or natural relationship of the crown on the plant with the adjacent ground surface shall be established.
20. Backfilling

All trees shall be backfilled and tamped to two-thirds depth of the pit and thoroughly watered.
21. Mulching

May be done as soon as backfilling has been completed. Mulch to the limit of the planting pits to a depth of two (2) inches around shrubs and over shrub beds.
22. Pruning After Planting

Pruning shall be done by experienced personnel. Any broken or damaged branches shall be removed.
23. Maintenance

Vegetation demonstrating immediate stress or dieback will be replaced. In addition, soil and climatic factors will be analyzed in relation to plant growth. The following maintenance techniques will be utilized.

 - a. Begin maintenance immediately after each item is planted and continue through guarantee period.
 - b. Maintain plants in a healthy growing condition by watering, pruning, spraying, weeding, and other necessary maintenance operations.
 - c. Replace impaired or dead plants promptly during specified planting season.
 - d. Remove soil ridges from around watering basins prior to end of maintenance period.
 - e. Keep plants straight upright through the contract period and until final inspection and acceptance.
 - f. Water when soil moisture is below optimum level for best plant growth.

1	REMOVE FOREST CONSERVATION EASEMENT FROM LOTS 12-17 AND REPLACE OFF-SITE IN FOREST CONSERVATION BANKS	11-11-14
NO	REVISION	DATE

APPROVED:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. Danale 10/2/98
CHIEF, BUREAU OF HIGHWAYS

APPROVED:
HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Cindy Hamilton 11/16/98
CHIEF, DIVISION OF LAND DEVELOPMENT

John D. ... 11/2/98
CHIEF, DEVELOPMENT ENGINEERING DIVISION

PLANT LIST

TOTAL TREES: 147

QTY.	COMMON NAME	BOTANICAL NAME
21	RED MAPLE	Acer rubrum
21	WHITE ASH	Fraxinus americana
21	BLACK GUM	Nyssa sylvatica
21	YELLOW POPLAR	Liriodendron tulipifera
21	ARROWWOOD	Viburnum dentatum
21	SILKY DOGWOOD	Cornus amomum
21	WINTERBERRY HOLLY	Ilex verticillata

Required Reforestation Area: 4.1 acres
On-site Reforestation Area: 0.36 acres

Minimum Quantity: 144 Plants/@ 11' x 11' Spacing

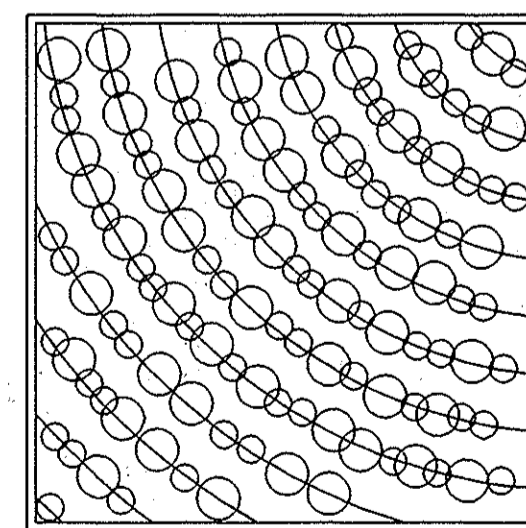
Tree Specifications: Whips
24"-30" in height

Note: The remaining 3.74 acres of required reforestation is to be accounted for in a fee-in-lieu payment to Howard County.

NOTE:
FOREST CONSERVATION EASEMENTS REMOVED FROM LOTS 12-17 IN AMOUNT OF 0.07 ACRES AND REPLACED IN OFF-SITE FOREST CONSERVATION BANKS QUARTZ HILL (SDP10-100) 1.18 ACRES AND FOREVER A FARM (SDP14-005) 0.24 ACRES FOR A TOTAL OF 1.42 ACRES

CURVILINEAR RANDOMIZED PLANTING

PLANT LOCATIONS WILL BE DETERMINED BY A QUALIFIED FORESTRY PROFESSIONAL FROM AMERICAN LAND CONCEPTS UTILIZING THE FOLLOWING METHODOLOGY



PLANT PLACEMENT DETAIL
NOT TO SCALE

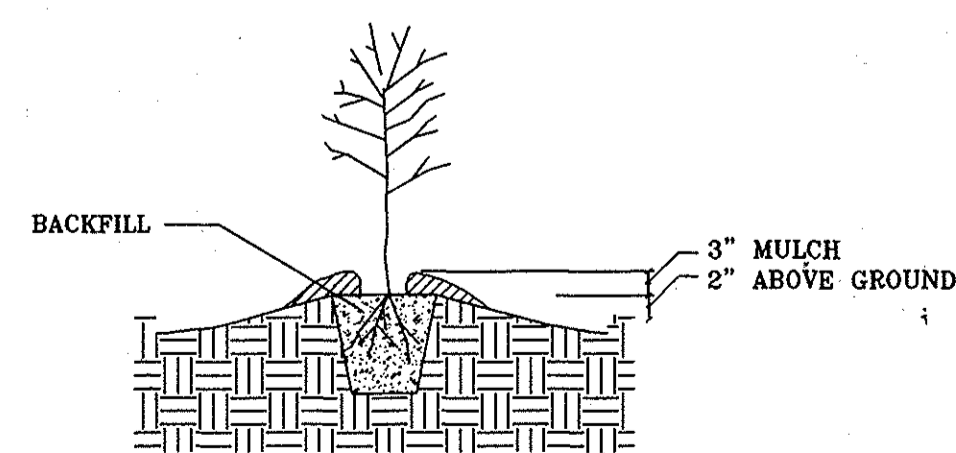
1. MIX TREE AND SHRUB SPECIES IN THE STAGING AREA.
2. THE QUALIFIED FORESTRY PROFESSIONAL WILL SET THE GUIDE CURVILINEAR LINE.
3. SET PARALLEL CURVILINEAR LINES AT 9' INTERVALS.
4. TREES AND SHRUBS WILL BE PLANTED AT RANDOM SPACING ALONG THE CURVILINEAR LINES UTILIZING THE FOLLOWING RANDOM NUMBERS AS FOOT SPACING ALONG LINE.

RANDOM NUMBER LIST FOR PLANTS:

9. 6. 8. 8. 7. 1. 3. 4. 7. 9. 8. 0. 6. 2. 1. 6. 6. 2. 2. 3. 8. 6. 0. 8. 5. 0. 2. 4. 3.
2. 5. 3. 3. 4. 2. 4. 2. 8. 4. 6. 9. 4. 7. 7. 1. 7. 5. 1. 1. 2. 3. 0. 4. 8. 5. 6. 2. 1.
7. 3. 0. 2. 1. 3. 2. 1. 4. 8. 7. 8. 9. 2. 2. 2. 8. 1. 1. 6. 7. 8. 3. 8. 6. 3. 5. 2

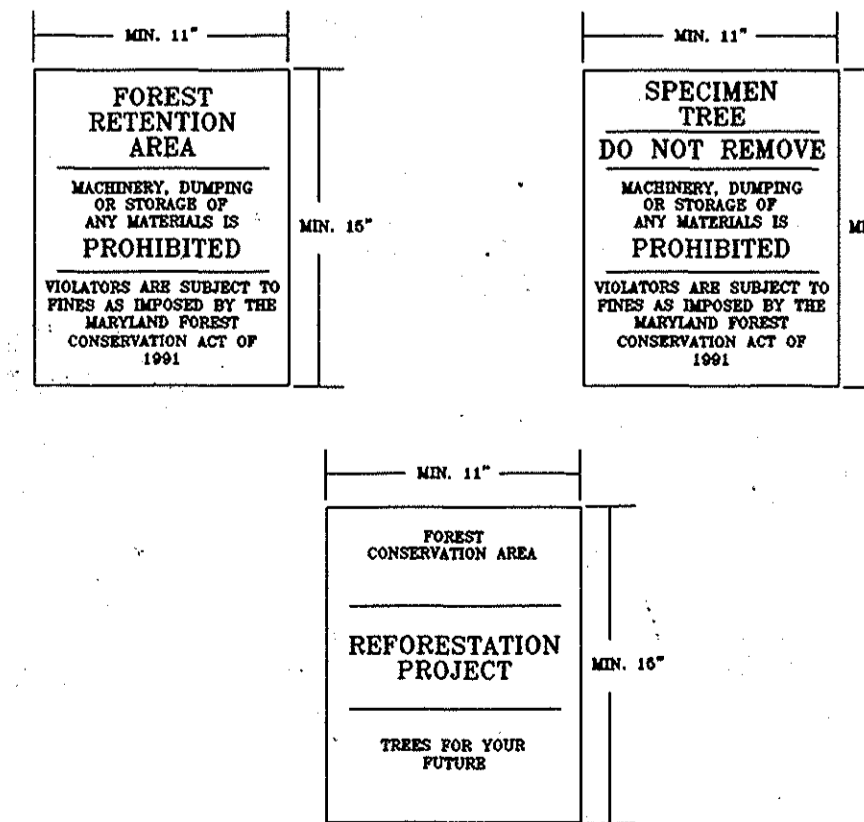
CONTAINER WHIP PLANTING DETAIL

NOT TO SCALE



TREE SIGNAGE

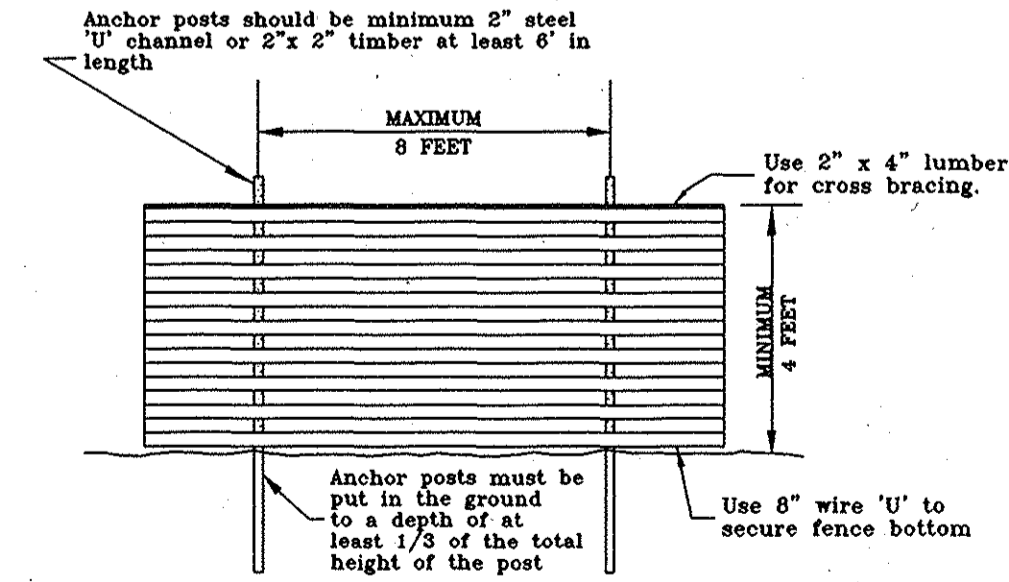
NOT TO SCALE



Note: Signage is to be placed at 100 foot intervals along the retention/reforestation boundaries, and around specimen trees.

TREE PROTECTION FENCE

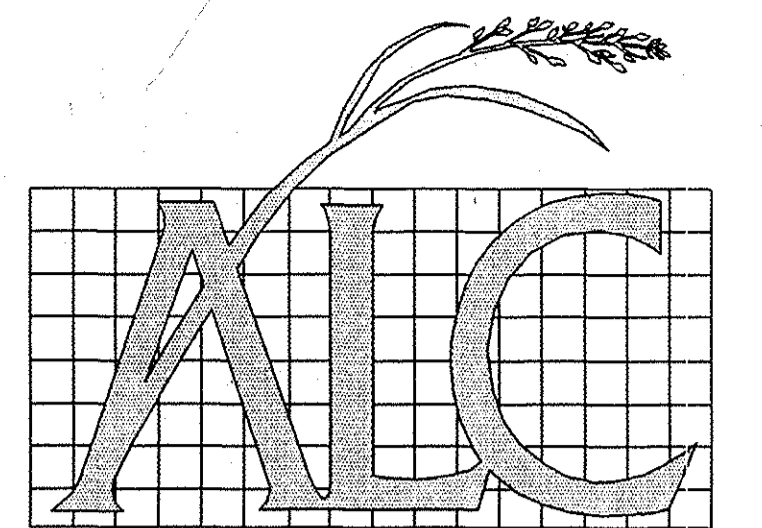
BLAZE ORANGE PLASTIC MESH
NOT TO SCALE



GENERAL NOTES

1. FOREST PROTECTION DEVICE ONLY
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
4. ROOT DAMAGE SHOULD BE AVOIDED.
5. PROTECTIVE SIGNAGE MAY ALSO BE USED.
6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

Source: Prince George's County, Maryland: Woodland Conservation Manual



AMERICAN LAND CONCEPTS

238 B MAIN STREET
REISTERSTOWN, MARYLAND 21136
PHONE: (410)-526-2688 FAX: (410)-526-2970



CRESTWOOD
FOREST CONSERVATION
NOTES AND DETAILS
LOT 1-31
ELECTION DISTRICT NUMBERS 1
HOWARD COUNTY, MARYLAND

ENGINEER:

R.M. MOCHI GROUP

P.O. Box 10
New Market, MD 21774-0010
10120 A Old National Pike
Ipswich, MD 21754-5706
(301) 865-8858
Fax: (301) 865-5111

SIGNATURE BLOCK

Matthew V. Smith
MATTHEW V. SMITH, ENVIRONMENTAL SCIENTIST
QUALIFIED PROFESSIONAL STATUS AS
PER THE FOREST CONSERVATION ACT

C:\R13\DRAWINGS\CRESTWOOD NOTES.DWG

DRAWN BY: JFK SCALE: N.T.S.
DESIGNED BY: MVS DATE: JULY 1998
CHECKED BY: MVS SHEET 13 OF 14

