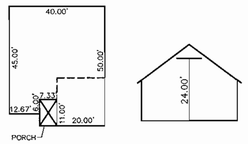
TYPICAL FOOTPRINTS



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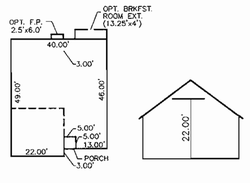

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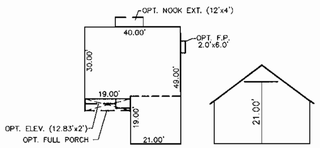

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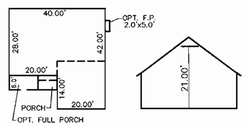

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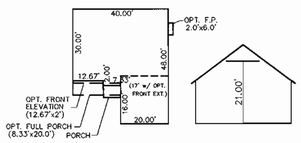
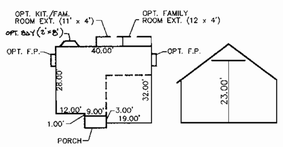
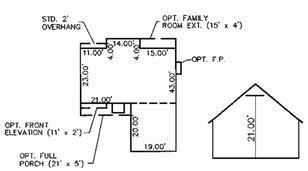


BRITTINGHAM



GARNETT II



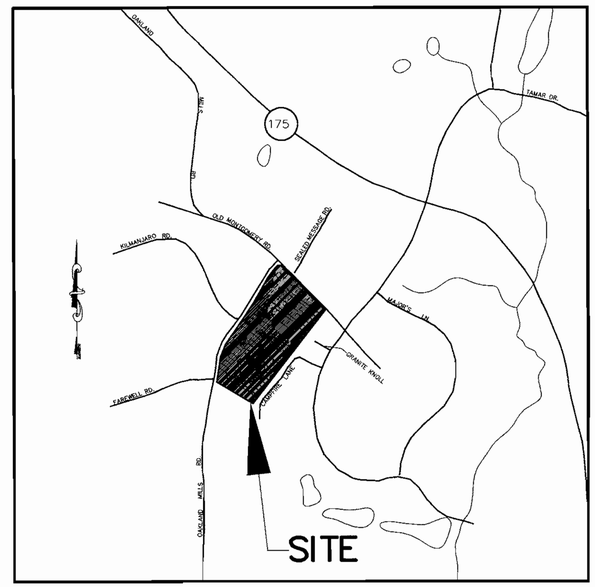
NEWBERRY

INDEX OF SHEETS

1.) TITLE SHEET
2.) SITE DEVELOPMENT PLAN SHEET (LOTS 9–43, p/o OPEN SPACE LOT 57, OPEN SPACE LOT 58)
3.) SITE DEVELOPMENT PLAN SHEET (LOTS 1–8, 44–56, 59–61, p/o OPEN SPACE LOTS 57, 62)
4.) EXISTING MASS GRADING PLAN SHEET (p/o OPEN SPACE LOTS 60–62)
5.) EXISTING MASS GRADING PLAN SHEET (p/o OPEN SPACE LOT 62)
6.) SEDIMENT CONTROL NOTES & DETAILS

BUILDER

THE RYLAND GROUP
7250 PARKWAY DRIVE – SUITE 520
HANOVER, MD 21076
(410) 712–7012



VICINITY MAP
SCALE: 1" = 1200'

LOT #	LOT SIZE	STREET ADDRESS	SHC INV @ PROP LINE	MIN. BSMT ELEV.
1	6001 S.F.	6004 HELEN DORSEY WAY	403.37	407.27
2	6174 S.F.	6008 HELEN DORSEY WAY	400.90	404.80
3	7057 S.F.	6012 HELEN DORSEY WAY	395.46	399.36
4	6000 S.F.	6016 HELEN DORSEY WAY	395.21	399.11
5	7198 S.F.	6020 HELEN DORSEY WAY	394.81	398.71
6	6626 S.F.	9004 INA COURT	400.51	404.51
7	6660 S.F.	9008 INA COURT	403.20	407.20
8	6000 S.F.	9012 INA COURT	405.69	409.69
9	6533 S.F.	9013 INA COURT	406.13	410.03
10	6420 S.F.	9009 INA COURT	403.53	407.43
11	6577 S.F.	9005 INA COURT	401.18	405.08
12	6000 S.F.	6004 CHARLES EDWARD TERRACE	399.88	403.78
13	6000 S.F.	6008 CHARLES EDWARD TERRACE	400.30	404.20
14	6000 S.F.	6012 CHARLES EDWARD TERRACE	400.73	404.63
15	6032 S.F.	6016 CHARLES EDWARD TERRACE	401.27	405.17
16	6281 S.F.	6009 CHARLES EDWARD TERRACE	400.41	404.31
17	6617 S.F.	6015 CHARLES EDWARD TERRACE	401.17	404.37
18	6015 S.F.	6021 CHARLES EDWARD TERRACE	400.40	404.30
19	6003 S.F.	6027 CHARLES EDWARD TERRACE	399.87	403.77
20	6161 S.F.	6033 CHARLES EDWARD TERRACE	399.08	403.00
21	6842 S.F.	6039 CHARLES EDWARD TERRACE	398.24	402.14
22	6415 S.F.	6059 CHARLES EDWARD TERRACE	395.50	399.35
23	6743 S.F.	6063 CHARLES EDWARD TERRACE	394.07	397.87
24	7157 S.F.	6075 CHARLES EDWARD TERRACE	393.41	397.31
25	6225 S.F.	6081 CHARLES EDWARD TERRACE	392.68	397.58
26	6000 S.F.	6087 CHARLES EDWARD TERRACE	393.98	397.88
27	6000 S.F.	6093 CHARLES EDWARD TERRACE	394.28	398.18
28	6643 S.F.	6001 CHARLES EDWARD TERRACE	396.35	400.25
29	6000 S.F.	6005 CHARLES EDWARD TERRACE	399.70	403.60
30	6636 S.F.	6020 CHARLES EDWARD TERRACE	400.90	405.00
31	6004 S.F.	6024 CHARLES EDWARD TERRACE	400.78	404.67
32	6000 S.F.	6028 CHARLES EDWARD TERRACE	399.95	403.85
33	6000 S.F.	6032 CHARLES EDWARD TERRACE	399.42	403.32
34	6000 S.F.	6036 CHARLES EDWARD TERRACE	398.88	402.78
35	6234 S.F.	6040 CHARLES EDWARD TERRACE	398.58	402.68
36	6793 S.F.	6044 CHARLES EDWARD TERRACE	398.55	402.67
37	7600 S.F.	6048 CHARLES EDWARD TERRACE	398.30	402.34
38	6299 S.F.	6052 CHARLES EDWARD TERRACE	397.73	401.57
39	6000 S.F.	6056 CHARLES EDWARD TERRACE	396.44	400.24
40	6000 S.F.	6060 CHARLES EDWARD TERRACE	395.25	399.05
41	6000 S.F.	6064 CHARLES EDWARD TERRACE	394.07	397.86
42	6000 S.F.	6068 CHARLES EDWARD TERRACE	392.10	396.00
43	6113 S.F.	6072 CHARLES EDWARD TERRACE	392.84	396.50
44	6404 S.F.	6076 CHARLES EDWARD TERRACE	392.79	396.19
45	7734 S.F.	6080 CHARLES EDWARD TERRACE	392.87	396.97
46	6314 S.F.	6084 CHARLES EDWARD TERRACE	393.03	397.00
47	6008 S.F.	6088 CHARLES EDWARD TERRACE	393.30	397.20
48	6000 S.F.	6092 CHARLES EDWARD TERRACE	393.57	397.47
49	6688 S.F.	6096 CHARLES EDWARD TERRACE	393.97	397.87
50	6000 S.F.	6015 HELEN DORSEY WAY	394.96	398.86
51	6001 S.F.	6001 HELEN DORSEY WAY	406.90	410.80
52	6688 S.F.	6005 HELEN DORSEY WAY	404.89	408.09
53	6117 S.F.	9005 NELSON WAY	404.07	407.97
54	6000 S.F.	9009 NELSON WAY	405.22	409.12
55	6000 S.F.	9004 NELSON WAY	403.80	407.70
56	6000 S.F.	9008 NELSON WAY	404.95	408.85

LEGEND

SYMBOL	DESCRIPTION
FF=412.67	FINISHED FLOOR ELEVATION
TF=402.33	FINISHED TOP OF FOOTING ELEVATION
W.O. 412x5	PROPOSED GROUND ELEVATION AT WALKOUT CONDITION
412x5	GROUND SPOT ELEVATION
STD. or REV.	UNIT DESIGNATION FROM ARCHITECTURAL PLAN
5R.	NUMBER OF RISERS – 7 1/2" EACH (INCLUDING 2 RISERS INTO HOUSE)
W/W	WINDOW WELL REQUIRED FOR BASEMENT WINDOWS IN REAR
412	PROPOSED CONTOUR
412	EXISTING GROUND CONTOUR
	DRAINAGE FLOW ARROW
	PROPERTY LINE
	RIGHT–OF–WAY
	EXISTING CURB & GUTTER
40	HOUSE NUMBERS

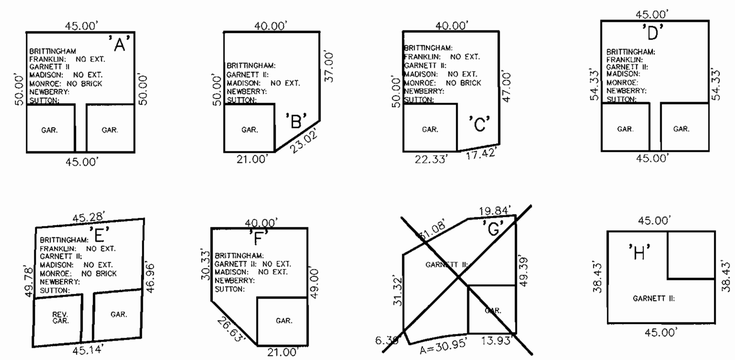
LEGEND

SYMBOL	DESCRIPTION
8" WATER	EXISTING WATER MAINS AND FIRE HYDRANTS
15" STORM	EXISTING STORM DRAINS
8" SEWER	EXISTING SEWER LINES
	STREET TREES
	PERIMETER SCREENING PER F–01–22 APPROVED BY HOWARD COUNTY ON 3–8–01
	STABILIZED CONSTRUCTION ENTRANCE
SSF	EXISTING SILT FENCE OR SUPER SILT FENCE
SF	SILT FENCE OR SUPER SILT FENCE
	EXISTING EARTH DIKE
	EARTH DIKE
	LIMIT OF DISTURBANCE
	STREET LIGHT
	STREET SIGN

GENERAL NOTES

1) AREA INCLUDED IN THIS SUBMISSION IS 18.05 +/– ACRES (786,258 S.F.).
2) PRESENT ZONING IS R–SC PER 10/18/93 COMPREHENSIVE ZONING PLAN.
3) PROPOSED USE OF PROPERTY IS SINGLE FAMILY DETACHED HOUSES.
4) TOTAL NUMBER OF LOTS INCLUDED IN THIS SUBMISSION IS 60.
5) MINIMUM LOT SIZE IS 6000 S.F.
6) DEPARTMENT OF PLANNING AND ZONING REFERENCE FILE NUMBERS ARE: S–00–02, P–00–13, F–01–22.
7) UTILITIES SHOWN AS EXISTING ARE TAKEN FROM WATER AND SEWER CONTRACT NUMBERS C–377–W&S, C–359–W&S, C–2689–D–W&S & C–374–W&S. ROAD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED ROAD DRAWINGS.
8) ANY DAMAGE TO COUNTY OWNED RIGHTS–OF–WAY SHALL BE CORRECTED AT THE DEVELOPERS EXPENSE.
9) EXISTING CONTOURS ARE BASED OFF THE MASS GRADING, WATER QUALITY, STREET TREE, GRADING AND SEDIMENT CONTROL PLANS.
10) THE COORDINATES SHOWN HEREON ARE BASED ON NAD 83', MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 36E4 AND 36E5.
11) THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/DIVISION OF CONSTRUCTION INSPECTION AT (410) 313–1880 AT LEAST 24 HOURS PRIOR TO START OF WORK.
12) THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1–800–257–7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
13) DRIVEWAY ENTRANCES ARE TO BE CONSTRUCTED PER THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, DETAILS R 6.03 AND R 6.05.
14) STORMWATER MANAGEMENT IS PROVIDED PER F–01–22.
15) THIS PLAN IS FOR HOUSE SITING AND LOT GRADING ONLY. SEE THE APPROVED CONSTRUCTION DRAWINGS FOR INSTALLATION OF UTILITIES, ROADWAYS, AND PUBLIC WALKWAYS.
16) TOTAL PROJECT AREA FOR THIS SUBMITTAL IS 25.14 Ac.
17) ALL ROADS SHOWN ON THESE PLANS ARE PUBLIC.
18) IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
19) NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT.
20) THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. APPROVAL OCCURRED UNDER THE F–01–22 PLAN and ASSOCIATED DEVELOPERS AGREEMENT. F–01–22 WAS APPROVED 3–08–01 AND THE DEVELOPER'S AGREEMENT WAS SIGNED 3–23–01.
21) FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT WERE ADDRESSED WITH THE APPROVAL OF FINAL PLAN F–01–22.
22) ALL SWALES, INCLUDING THOSE BETWEEN HOUSES ARE TO BE STABILIZED WITH EROSION CONTROL MATTING. SEE DETAIL SHEET 5.
23) EXCEPT WHERE NOTED, ALL SEDIMENT CONTROLS INSTALLED UNDER G00007373 AND G00007214 & F–01–22 SHALL REMAIN AS PART OF THIS PLAN EXCEPT WHERE NOTED TO BE REMOVED.
24) THE FOLLOWING RECORDING REFERENCES ARE CURRENT TO THIS PROJECT AT TIME OF APPROVAL AND SHOULD NOT BE CONSIDERED INCLUSIVE BEYOND THE APPROVAL DATE OF THIS PLAN.

OPEN SPACE LOTS 57–62 DEED	5403/0343 – 5403/0346
BY – LAWS	5455/0379 – 5455/0386
HOA DECLARATION OF COVENANTS, CONDITIONS & RESTRICTIONS	5455/0387–5455/0418
DECLAR. OF ESM'T & COVENANTS FOR PRIV. DRIVEWAYS	
LOT 36 & 37	5455/0367 – 5455/0372
LOT 44 & 45	5455/0373 – 5455/0378



SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT (1 WEEK)
2. INSPECT & REPAIR EXISTING SEDIMENT CONTROL MEASURES PER F–01–22 AND GP–01–78. EXISTING SEDIMENT BASIN PER GP–01–78 TO REMAIN. (8 DAYS)
3. INSTALL SEDIMENT AND EROSION CONTROL DEVICES PER PLAN. OBTAIN SEDIMENT CONTROL INSPECTOR'S APPROVAL PRIOR TO PROCEEDING. (8 DAYS)
4. CLEAR AND GRUB SITE. (4 DAYS)
5. EXCAVATE FOR FOUNDATIONS AND ROUGH GRADE. (10 DAYS)
6. CONSTRUCT DWELLING. (60 DAYS PER DWELLING)
7. FINE GRADE SITE, INSTALL DRIVEWAYS. (2 DAYS PER DRIVEWAY AND LOT.)
8. INSTALL PERMANENT SEEDING AND LANDSCAPING. (10 DAYS)
9. CONVERT EXISTING SEDIMENT BASIN TO SWM FACILITY PER F–01–22. (10 DAYS)
10. REMOVE SEDIMENT CONTROL DEVICES AFTER PERMISSION IS GRANTED BY SEDIMENT CONTROL INSPECTOR AND UPLAND AREAS HAVE BEEN STABILIZED. (2 DAYS)

NOTE: BAY WINDOWS, WINDOW WELLS, ORIELS, VESTIBULES, BALCONIES, CHIMNEYS, HEATING / AIR CONDITIONING UNITS AND EXTERIOR STAIRWAYS OR RAMPS IF NOT MORE THAN SIXTEEN FEET IN WIDTH MAY PROJECT NOT MORE THAN FOUR FEET INTO ANY REQUIRED SETBACK AREA OR REQUIRED DISTANCE BETWEEN BUILDINGS. OPEN OR ENCLOSED PORCHES OR DECKS MAY PROJECT NOT MORE THAN TEN FEET INTO REQUIRED FRONT OR REAR YARD SETBACK AREA. THIS, IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS.

MRA
MORRIS & RITCHIE ASSOC., INC.
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9090 JUNCTION DRIVE, SUITE 9
Annapolis Junction, Maryland
(410) 792–9792 – (301) 776–1690
Fax: (410) 792–7395

STATE OF MARYLAND
PIERO VAN MELLITS
No. 21875
REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Piero Van Mellits, P.E. — 5-18-01
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) — DATE
PIERO V. MELLITS

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON–SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

05/18/01
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) — DATE
Douglas E. Eshelman

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

U.S.D.A.–NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/4/01

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

HOWARD SCD — DATE 6/4/01

OWNER / DEVELOPER

THE RYLAND GROUP, INC.
7250 PARKWAY DRIVE – SUITE 520
HANOVER, MD 21076
(410) 712–7012

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/01

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/11/01

DIRECTOR — DATE 6/15/01

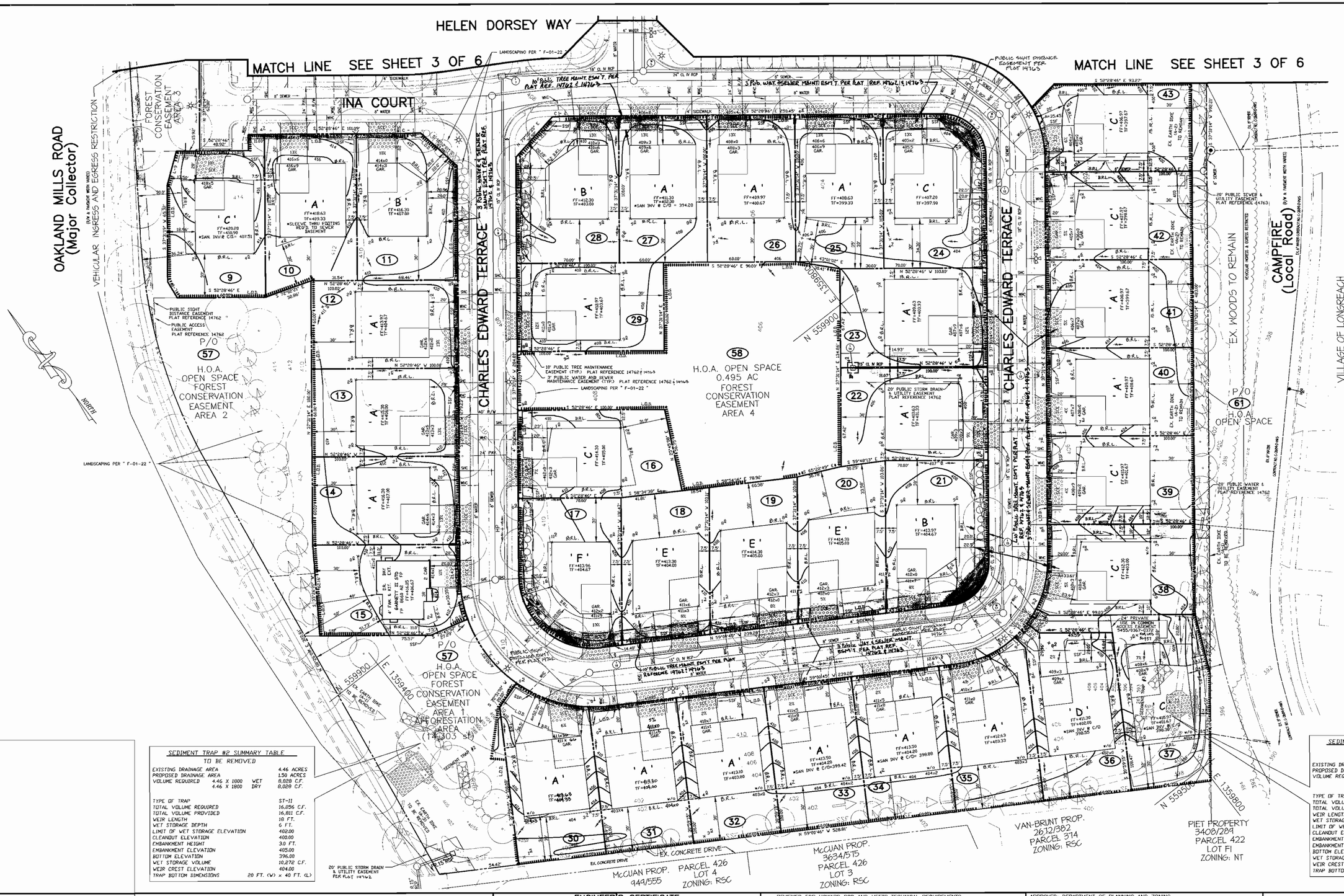
SUBDIVISION			SECTION / AREA	LOT NO.
ECKERS HOLLOW			1 / 1	1–56
PLAT NO.	BLOCK NO.	ZONE	TAX/PARCEL	ELEC. DIST.	CENSUS TR.
14761–14765	10 & 11	RSC	36 / 23	6TH	6066.02
WATER CODE			SEWER CODE	
E04			----------	

TITLE SHEET

ECKERS HOLLOW
SECTION 1, PHASE 1

LOTS 1 THRU 62 & NON–BUILDABLE LOTS A & B
TAX MAP 36, PARCEL 23, BLOCKS 10 & 11
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: 1/20/01
SHEET 1 OF 6

SDP-01-16



SEDIMENT TRAP #2 SUMMARY TABLE
TO BE REMOVED

EXISTING DRAINAGE AREA			4.46 ACRES
PROPOSED DRAINAGE AREA			1.50 ACRES
VOLUME REQUIRED	4.46 X 1800	WET	8,028 C.F.
	4.46 X 1800	DRY	8,028 C.F.
TYPE OF TRAP			ST-II
TOTAL VOLUME REQUIRED			16,056 C.F.
TOTAL VOLUME PROVIDED			16,811 C.F.
WEIR LENGTH			18 FT.
WET STORAGE DEPTH			6 FT.
LIMIT OF WET STORAGE ELEVATION			402.00
CLEANOUT ELEVATION			400.00
EMBANKMENT HEIGHT			3.0 FT.
EMBANKMENT ELEVATION			405.00
BOTTOM ELEVATION			396.00
WET STORAGE VOLUME			10,272 C.F.
WEIR CREST ELEVATION			404.00
TRAP BOTTOM DIMENSIONS			20 FT. (W) x 40 FT. (L)

SEDIMENT TRAP #3 SUMMARY TABLE
TO BE REMOVED

EXISTING DRAINAGE AREA			1.49 ACRES
PROPOSED DRAINAGE AREA			0.86 ACRES
VOLUME REQUIRED	1.49 X 1800	WET	2,682 C.F.
	1.49 X 1800	DRY	2,682 C.F.
TYPE OF TRAP			ST-II
TOTAL VOLUME REQUIRED			5,364 C.F.
TOTAL VOLUME PROVIDED			5,606 C.F.
WEIR LENGTH			18 FT.
WET STORAGE DEPTH			4.0 FT.
LIMIT OF WET STORAGE ELEVATION			397.00
CLEANOUT ELEVATION			395.50
EMBANKMENT HEIGHT			3.0 FT.
EMBANKMENT ELEVATION			400.00
BOTTOM ELEVATION			393.00
WET STORAGE VOLUME			2,941 C.F.
WEIR CREST ELEVATION			398.50
TRAP BOTTOM DIMENSIONS			13 FT. (W) x 26 FT. (L)

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STATE OF MARYLAND
PIERO VAN MELLITS
No. 21875
REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

P. V. Mellits, P.E. — 5-18-01

SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) — DATE
PIERO V. MELLITS

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

05/18/01

SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) — DATE
Douglas F. Eshelman

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

U.S.D.A. NATURAL RESOURCES CONSERVATION SERVICE — 6/4/01 DATE

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

HOWARD SCD — 6/4/01 DATE

OWNER / DEVELOPER

THE RYLAND GROUP, INC.
7250 PARKWAY DRIVE - SUITE 520
HANOVER, MD 21076
(410) 712-7012

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/01

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/11/01

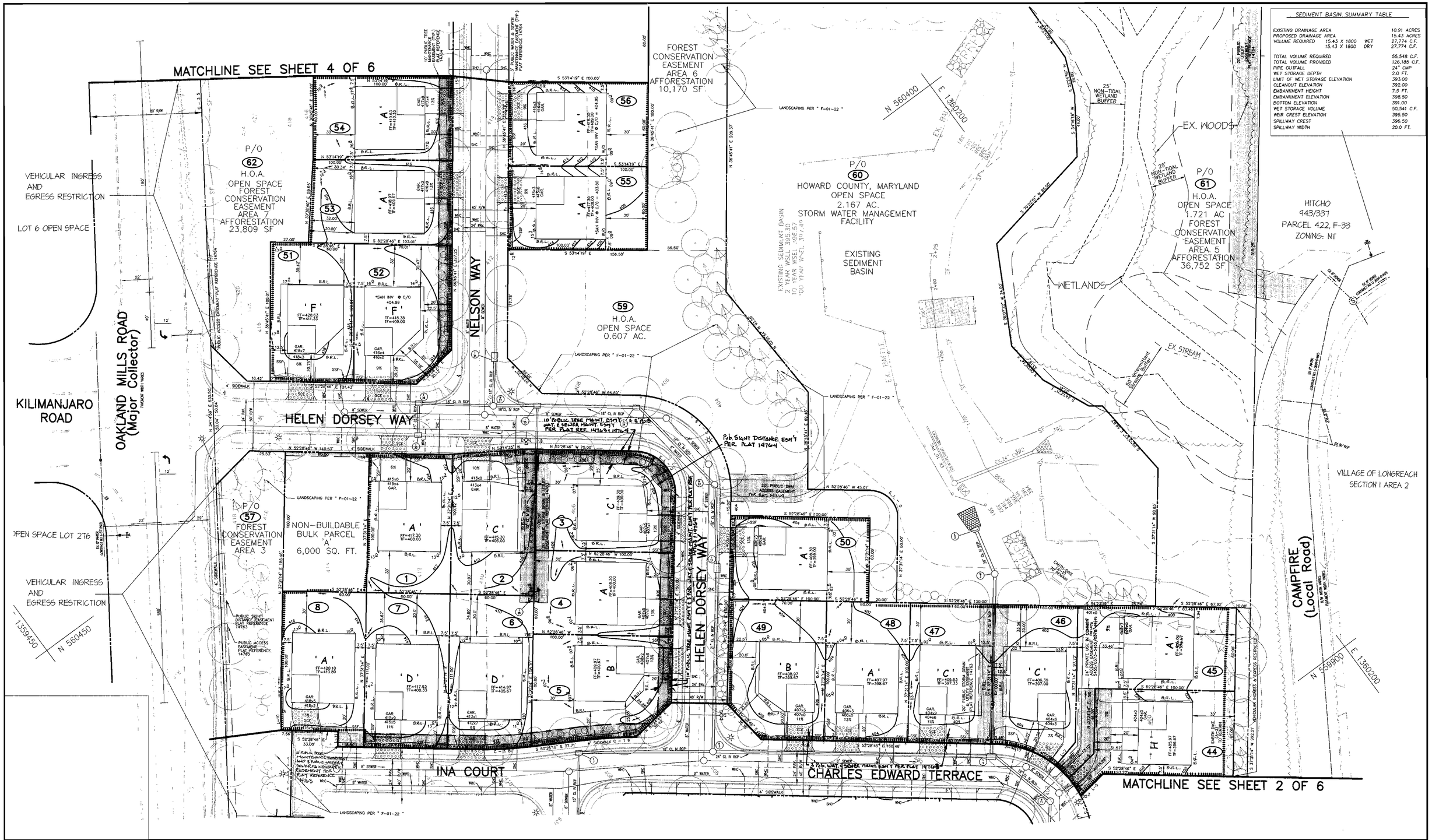
6/15/01

SUBDIVISION			SECTION / AREA	LOT NO.
ECKERS HOLLOW			1 / 1	9 - 43 58 & p/o 57 & 59
PLAT NO.	BLOCK NO.	ZONE	TAX/PARCEL	ELEC. DIST.	CENSUS TR.
14761-14765	10 & 11	RSC	36 / 23	6TH	6066.02
WATER CODE			SEWER CODE	
E04				

SITE DEVELOPMENT PLAN
LOTS 9-43, P/O OPEN SPACE LOT 57, OS LOT 58

ECKERS HOLLOW
SECTION 1, PHASE 1
LOTS 1 THRU 62 & NON-BUILDABLE LOTS A & B
TAX MAP 36
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: 1/20/01
SHEET 2 OF 6

SDP-01-16



SEDIMENT BASIN SUMMARY TABLE

EXISTING DRAINAGE AREA			10.91 ACRES
PROPOSED DRAINAGE AREA			15.43 ACRES
VOLUME REQUIRED	15.43 X 1800	WET	27,774 C.F.
	15.43 X 1800	DRY	27,774 C.F.
TOTAL VOLUME REQUIRED			55,548 C.F.
TOTAL VOLUME PROVIDED			126,185 C.F.
PIPE OUTFALL			24" CMP
WET STORAGE DEPTH			2.0 FT.
LIMIT OF WET STORAGE ELEVATION			393.00
CLEANOUT ELEVATION			392.00
EMBANKMENT HEIGHT			7.5 FT.
EMBANKMENT ELEVATION			398.50
BOTTOM ELEVATION			391.00
WET STORAGE VOLUME			50,541 C.F.
WEIR CREST ELEVATION			395.50
SPILLWAY CREST			396.50
SPILLWAY WIDTH			20.0 FT.

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Annapolis Junction, Maryland
(410) 792-9792 - (301) 776-1690
Fax: (410) 792-7395

STATE OF MARYLAND
PIERO VAN MELLITS
No. 21875
REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Piero V. Mellits, P.E. 5-18-01
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE
PIERO V. MELLITS

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

05/18/01
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE
Douglas F. Eshelman

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/8/01

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

HOWARD SCD — DATE 6/8/01

OWNER/DEVELOPER

THE RYLAND GROUP, INC
7250 PARKWAY DRIVE - SUITE 520
HANOVER, MD 21076
(410) 712-7012

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/01

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/11/01

DIRECTOR — DATE 6/15/01

SUBDIVISION			SECTION / AREA	LOT NO.
ECKERS HOLLOW			1 / 1	
PLAT NO.	BLOCK NO.	ZONE	TAX/PARCEL	ELEC. DIST.	CENSUS TR.
14761-14765	10 & 11	RSC	36 / 23	6TH	6066.02
WATER CODE			SEWER CODE	
E04				

SITE DEVELOPMENT PLAN

LOTS 1-8, 44-56, 59-61, P/O OS LOTS 57 & 62 AND NON-BUILDABLE A & B

ECKERS HOLLOW

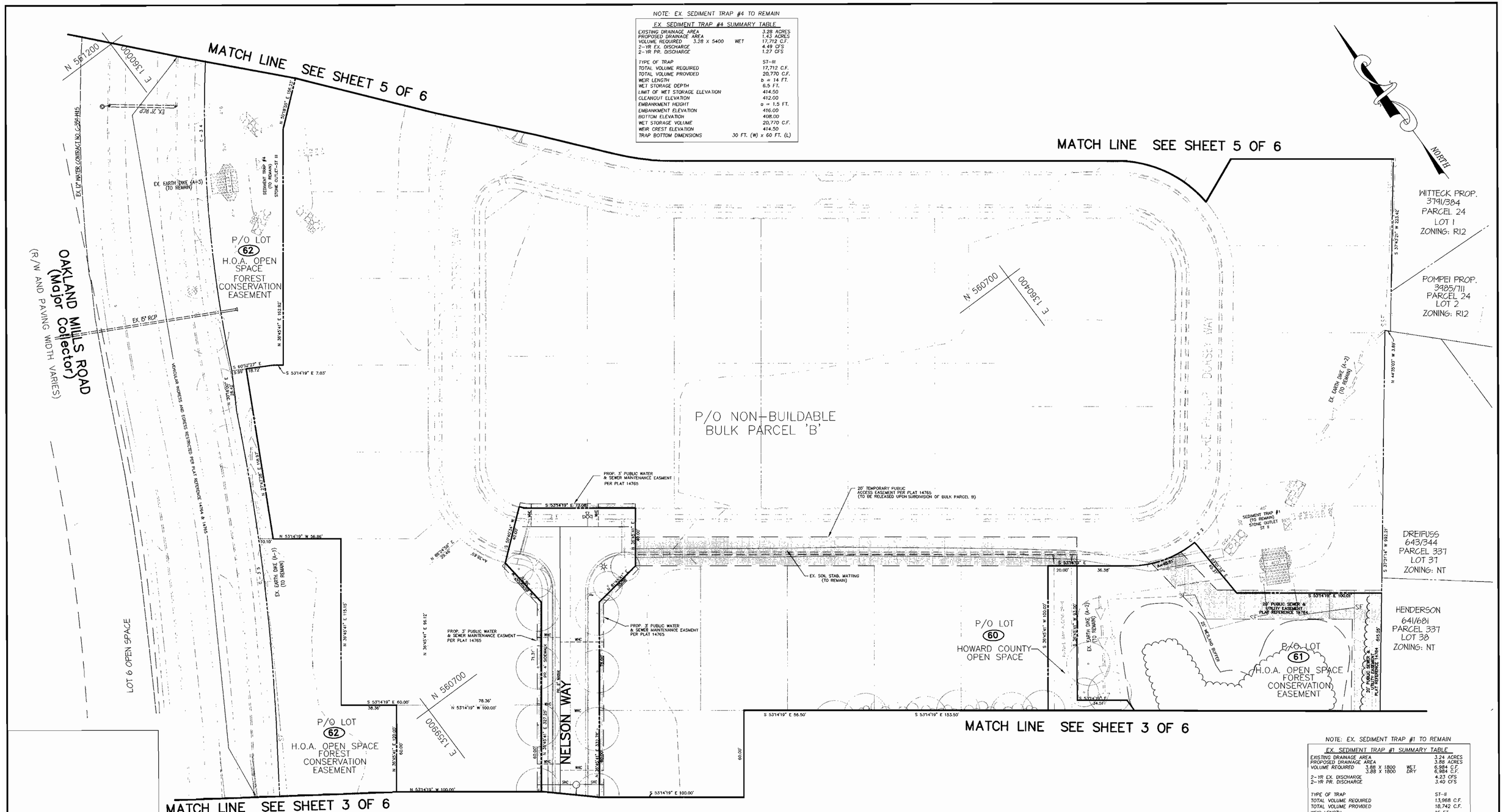
SECTION 1, PHASE 1

LOTS 1 THRU 62 & NON-BUILDABLE LOTS A & B
TAX MAP 36
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: 1/20/01
SHEET 3 OF 6

SDP-01-16

NOTE: EX. SEDIMENT TRAP #4 TO REMAIN

EX. SEDIMENT TRAP #4 SUMMARY TABLE		
EXISTING DRAINAGE AREA		3.28 ACRES
PROPOSED DRAINAGE AREA		1.43 ACRES
VOLUME REQUIRED 3.28 x 5400	WET	17,712 C.F.
2-YR EX. DISCHARGE		4.49 CFS
2-YR PR. DISCHARGE		1.27 CFS
TYPE OF TRAP		ST-III
TOTAL VOLUME REQUIRED		17,712 C.F.
TOTAL VOLUME PROVIDED		20,770 C.F.
WEIR LENGTH		b = 14 FT.
WET STORAGE DEPTH		6.5 FT.
LIMIT OF WET STORAGE ELEVATION		414.50
CLEANOUT ELEVATION		412.00
EMBANKMENT HEIGHT		a = 1.5 FT.
EMBANKMENT ELEVATION		416.00
BOTTOM ELEVATION		408.00
WET STORAGE VOLUME		20,770 C.F.
WEIR CREST ELEVATION		414.50
TRAP BOTTOM DIMENSIONS		30 FT. (W) x 60 FT. (L)



NOTE: EX. SEDIMENT TRAP #1 TO REMAIN

EX. SEDIMENT TRAP #1 SUMMARY TABLE		
EXISTING DRAINAGE AREA		3.24 ACRES
PROPOSED DRAINAGE AREA		3.88 ACRES
VOLUME REQUIRED 3.88 X 1800	WET	6,984 C.F.
3.88 X 1800	DRY	6,984 C.F.
2-YR EX. DISCHARGE		4.23 CFS
2-YR PR. DISCHARGE		3.40 CFS
TYPE OF TRAP		ST-II
TOTAL VOLUME REQUIRED		13,968 C.F.
TOTAL VOLUME PROVIDED		18,742 C.F.
WEIR LENGTH		16 FT.
WET STORAGE DEPTH		5.0 FT.
LIMIT OF WET STORAGE ELEVATION		398.00
CLEANOUT ELEVATION		396.50
EMBANKMENT HEIGHT		4.0 FT.
EMBANKMENT ELEVATION		402.00
BOTTOM ELEVATION		393.00
WET STORAGE VOLUME		7,667 C.F.
WEIR CREST ELEVATION		400.50
TRAP BOTTOM DIMENSIONS		20 FT. (W) x 40 FT. (L)

MRA
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STATE OF MARYLAND
PIERO VAN MELLITS
No. 21875
REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATE

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P. V. Mellits — 5/25/01

SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) — DATE
PIERO V. MELLITS

DEVELOPER'S CERTIFICATE

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5/24/01

SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) — DATE
ED GOLD

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

6/4/01
U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE — DATE

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

6/4/01
HOWARD SCD — DATE

OWNER / DEVELOPER

THE RYLAND GROUP, INC.
7250 PARKWAY DRIVE - SUITE 520
HANOVER, MD 21076
(410) 712-7012

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Lindy Kamille — 6/12/01
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE

6/11/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE

6/13/01
DIRECTOR — DATE

SUBDIVISION			SECTION / AREA	LOT NO.
ECKERS HOLLOW			1 / 1	P/O LOT 60 & BK. PAR. 'B'
PLAT NO.	BLOCK NO.	ZONE	TAX/PARCEL	ELEC. DIST.	CENSUS TR.
14761-14765	10 & 11	RSC	36 / 23	6TH	6066.02
WATER CODE			SEWER CODE	
E04				

EXISTING MASS GRADING PLAN

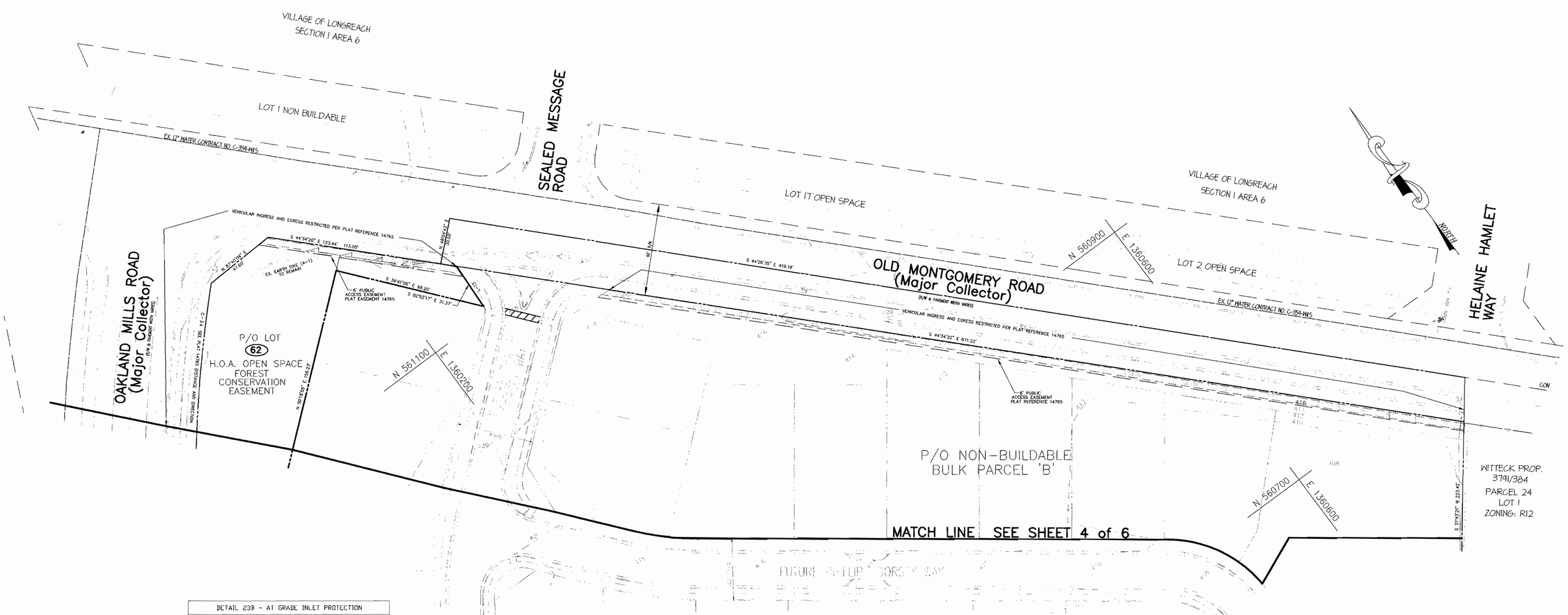
P/O OPEN SPACE LOTS 60-62 & NON-BUILDABLE B

ECKERS HOLLOW

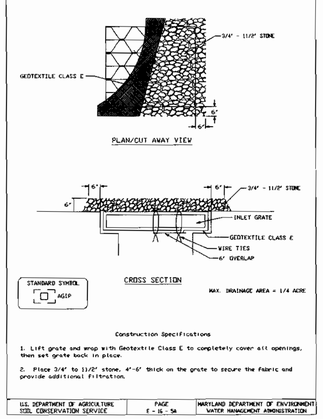
SECTION 1 , PHASE 1

LOTS 1 THRU 62 & NON-BUILDABLE LOTS A & B
TAX MAP 36
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: 1/20/01
SHEET 4 OF 6

SDP-01-16



DETAIL 23B - AT GRADE INLET PROTECTION



Construction Specifications

1. Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.

2. Place 3/4" to 1 1/2" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 16 - 5A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

STANDARDS AND SPECIFICATION FOR TOPSOIL

DEFINITION

PLACEMENT OF TOPSOIL OVER A PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION.

PURPOSE

TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH. SOILS OF CONCERN HAVE LOW MOISTURE CONTENT, LOW NUTRIENT LEVELS, LOW pH, MATERIAL TOXIC TO PLANTS, AND/OR UNACCEPTABLE SOIL GRADATION.

CONDITIONS WHERE PRACTICE APPLIES

I. THIS PRACTICE IS LIMITED TO AREAS HAVING 2:1 OR FLATTER SLOPES WHERE:

A. THE TEXTURE OF THE EXPOSED SUBSOIL/PARENT MATERIAL IS NOT ADEQUATE TO PRODUCE VEGETATIVE GROWTH.

B. THE SOIL MATERIAL IS SO SHALLOW THAT THE ROOTING ZONE IS NOT DEEP ENOUGH TO SUPPORT PLANTS OR FURNISH CONTINUING SUPPLIES OF MOISTURE AND PLANT NUTRIENTS.

C. THE ORIGINAL SOIL TO BE VEGETATED CONTAINS MATERIAL TOXIC TO PLANT GROWTH.

D. THE SOIL IS SO ACIDIC THAT TREATMENT WITH LIMESTONE IS NOT FEASIBLE.

II. FOR THE PURPOSE OF THESE STANDARDS AND SPECIFICATIONS, AREAS HAVING SLOPES STEEPER THAN 2:1 REQUIRE SPECIAL CONSIDERATION AND DESIGN FOR ADEQUATE STABILIZATION. AREA HAVING SLOPES STEEPER THAN 2:1 SHALL HAVE THE APPROPRIATE STABILIZATION SHOWN ON THE PLANS.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

I. TOPSOIL SALVAGED FROM THE EXISTING SITE MAY BE USED PROVIDED THAT IT MEETS STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. TYPICALLY, THE DEPTH OF TOPSOIL TO BE SALVAGED FOR A GIVEN SOIL TYPE CAN BE FOUND IN REPRESENTATIVES SOIL PROFILE SECTION IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENTAL STATION.

II. TOPSOIL SPECIFICATIONS-SOIL TO BE USED AS TOPSOIL MUST MEET THE FOLLOWING:

I. TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND. OTHER SOILS MAY USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVELS, STICKS, ROOTS, TRASH, OR OTHER MATERIALS LARGER THAN 1 1/2" IN DIAMETER.

II. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUICKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.

III. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SF) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

II. FOR SITE HAVING DISTURBED AREAS UNDER 5 ACRE

I. PLACE TOPSOIL (IF REQUIRED) AND APPLY SOIL AMENDMENTS AS SPECIFIED IN 20.0 VEGETATIVE STABILIZATION-SECTION I-VEGETATIVE STABILIZATION METHODS AND MATERIALS.

III. TOPSOIL APPLICATION

I. WHEN TOPSOILING, MAINTAIN NEEDED EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, EARTH DIKES, SLOPE SILT FENCE AND SEDIMENT TRAPS AND BASINS.

II. GRADES ON THE AREAS TO BE TOPSOILED, WHICH HAVE BEEN PREVIOUSLY ESTABLISHED, SHALL BE MAINTAINED, ALBEIT 4"-8" HIGHER IN ELEVATION.

III. TOPSOIL SHALL BE UNIFORMLY DISTURBED IN A 4"-8" LAYER AND LIGHTLY COMPACTED TO A MINIMUM THICKNESS OF 4". SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.

IV. TOPSOIL SHALL NOT PLACED WHILE THE TOPSOIL OR SUBSOIL IS IN A FROZEN OR MUDDY CONDITION, WHEN THE SUBSOIL IS EXCESSIVELY WET OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

VI. ALTERNATIVE FOR PERMANENT SEEDING-INSTEAD OF APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, COMPOSTED SLUDGE AND AMENDMENTS MAY BE APPLIED AS SPECIFIED BELOW:

I. COMPOSTED SLUDGE MATERIAL FOR USE A SOIL CONDITIONER FOR SITES HAVING DISTURBED AREAS OVER 5 ACRE SHALL BE TESTED TO PRESCRIBE AMENDMENTS AND FOR SITES HAVING DISTURBED AREAS UNDER 5 ACRES SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

A. COMPOSTED SLUDGE SHALL BE SUPPLIED BY, OR ORIGINATE FROM, A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT UNDER COMAR 26.04.06.

B. COMPOSTED SLUDGE SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHOROUS, AND 0.2 PERCENT POTASSIUM AND HAVE A pH OF 7.0 TO 8.0. IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED TO MEET THE REQUIREMENTS PRIOR TO USE.

C. COMPOSTED SLUDGE SHALL BE APPLIED AT A RATE OF 1 TON/1,000 SF.

II. COMPOSTED SLUDGE SHALL BE AMENDED WITH A POTASSIUM FERTILIZER APPLIED AT THE RATE OF 4LB/1,000 SF, AND 1/3 THE NORMAL LIME APPLICATION RATE.

REFERENCES: GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING. MD-VA. PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTE. REVISED 1973.

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STATE OF MARYLAND
PIERO VAN MELLITS
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ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Piero V. Mellits — 5/25/01
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) — DATE
PIERO V. MELLITS

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

5/24/01
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) — DATE
ED GOLD

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

U.S.D.A.-NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/4/01

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

HOWARD SCD — DATE 6/4/01

BUILDER

THE RYLAND GROUP
7250 PARKWAY DRIVE - SUITE 520
HANOVER, MD 21076
(410) 712-2406

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/01

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/11/01

DIRECTOR — DATE 6/13/01

SUBDIVISION			SECTION / AREA	LOT NO.
ECKERS HOLLOW			1 / 1	1-60
PLAT NO.	BLOCK NO.	ZONE	TAX/PARCEL	ELEC. DIST.	CENSUS TR.
14761-14765	10 & 11	RSC	36 / 23	6TH	6066.02
WATER CODE			SEWER CODE	
E04				

EXISTING MASS GRADING PLAN

PART OF OPEN SPACE LOT 62 & NON-BUILDABLE B

ECKERS HOLLOW

SECTION 1, PHASE 1

LOTS 1 THRU 62 & NON-BUILDABLE LOTS A & B

TAX MAP 36

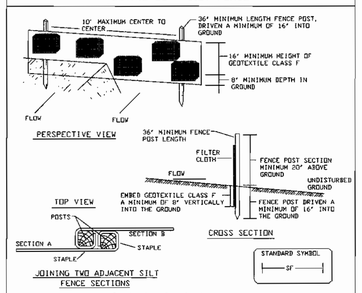
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND

SCALE: 1"=30' DATE: 1/20/01

SHEET 5 OF 6

SDP-01-16

DETAIL 22 - SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter standard T or U section weighting not less than 1.00 pond per linear foot, (minimum) round and shall be of sound quality hardwood. Steel posts will be

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SILT FENCE

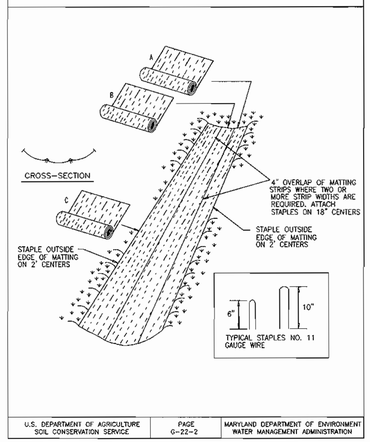
Silt Fence Design Criteria

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and sandy soils (USDA general classification system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control required.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 30 - EROSION CONTROL MATTING



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G-22-2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

EROSION CONTROL MATTING

CONSTRUCTION SPECIFICATIONS

1. KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH, 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".

2. STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.

3. BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.

4. STAPLES SHALL BE PLACED 2' APART WITH 4 ROWS FOR EACH STRIP, 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.

5. WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4", SHIPLAP FASHION. REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.

6. THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.

NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEYED-IN.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G-22-2A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

PERMANENT SEEDING NOTES

ALL DISTURBED AREA SHALL BE STABILIZED AS FOLLOWS:

SEEDBED PREPARATION:
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS:
APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1,000 SQ.F.T.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SQ.F.T) BEFORE SEEDING HARROW OR DISC. INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING APPLY 400 LBS PER ACRE 38-0-0 UREAFORM FERTILIZER (9 LBS/1,000 SQ. F.T.) AND 500 LBS. PER ACRE (11.5 LBS/1,000 SQ.F.T.) OF 10-20-20 FERTILIZER.

SEEDING:
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 100 LBS PER ACRE (2.3 LBS/1,000 SQ.F.T.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS/ACRE (1.4 LBS./1,000 SQ.F.T.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1,000 SQ.F.T.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROJECT SITE BY:
OPTION (1) - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OPTION (2) - USE 500; OPTION (3) - SEED WITH 100 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDED.

MULCHING:
APPLY 1 TO 2 TONS PER ACRE (10 TO 90 LBS./1,000 SQ.F.T.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.F.T) OF EMULSIFIED ASPHALT ON FLAT ACRES ON SLOPES 8 FEET OR HIGHER USE 348 GALLONS PER ACRE (8 GAL./1,000 SQ. F.T.) FOR ANCHORING.

MAINTENANCE:
INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

*FOR PUBLIC PONDS SUBSTITUTE CHEMUNG CROWNVETCH AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS/ACRE AS THE SEEDING REQUIREMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.

TEMPORARY SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDBED PREPARATION:
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS:
APPLY 600 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS./1,000 SQ. F.T.)

SEEDING:
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 17 BUSHEL PER ACRE OF ANNUAL RYE (3.2 LBS./ACRE OF WEEPING LOVEGRASS (.07 LBS./1,000 SQ.F.T. FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING OR USE SOD.

MULCHING:
APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS/1,000 SQ.F.T.) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GA. 1,000 SQ. F.T.) OF EMULSIFIED ASPHALT ON FLAT ACRE ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL./1,000 SQ.F.T.) FOR ANCHORING.

REFER TO THE 1988 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION

VEGETATIVE STABILIZATION METHODS AND MATERIALS

A. SITE PREPARATION

1. INSTALL EROSION AND SEDIMENT CONTROL STRUCTURES (EITHER TEMPORARY OR PERMANENT) SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, OR SEDIMENT CONTROL BASINS.

2. PERFORM ALL GRADING OPERATIONS AT RIGHT ANGLES TO THE SLOPE. FINAL GRADING AND SHAPING IS NOT USUALLY NECESSARY FOR TEMPORARY SEEDING.

3. SCHEDULE REQUIRED SOIL TESTS TO DETERMINE SOIL AMENDMENT COMPOSITION AND APPLICATION RATES FOR SITES HAVING DISTURBED AREA OVER 5 ACRES.

B. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

1. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES HAVING DISTURBED AREAS OVER 5 ACRES. SOIL ANALYSIS MAY BE PERFORMED BY THE UNIVERSITY OF MARYLAND OR A RECOGNIZED COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY ALSO BE USED FOR CHEMICAL ANALYSES.

2. FERTILIZERS SHALL BE UNIFORM IN COMPOSITION, FREE FLOWING AND SUITABLE FOR ACCURATE APPLICATION BY APPROVED EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM THE APPROPRATE APPROVAL AUTHORITY. FERTILIZERS SHALL ALL BE DELIVERED TO THE SITE FULLY LABELED ACCORDING TO THE APPLICABLE STATE FERTILIZER LAWS AND SHALL BEAR THE NAME, TRADE NAME OR TRADEMARK AND WARRANTEE OF THE PRODUCER.

3. LIME MATERIALS SHALL BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED) WHICH CONTAINS AT LEAST 50% TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE SHALL BE GROUND TO SUCH FINENESS THAT AT LEAST 50% WILL PASS THROUGH A #100 MESH SIEVE AND 98 - 100% WILL PASS THROUGH A #20 MESH SIEVE.

4. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 - 5" OF SOIL BE DISKING OR OTHER SUITABLE MEANS.

C. SEEDBED PREPARATION

1. TEMPORARY SEEDING

A. SEEDBED PREPARATION SHALL CONSIST OF LOOSENING SOIL TO A DEPTH OF 3" TO 5" BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED IT SHOULD NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPED AREAS (GREATER THAN 3:1) SHOULD BE TRACKED LEAVING THE SURFACE IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.

B. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.

C. INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 - 5" OF SOIL BY DISKING OR OTHER SUITABLE MEANS.

2. PERMANENT SEEDING

A. MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT:

1. SOIL PH SHALL BE BETWEEN 6.0 AND 7.0
2. SOLUBLE SALTS SHALL BE LESS THAN 500 PARTS PER MILLION (PPM).
3. THE SOIL SHALL CONTAIN LESS THAN 40% CLAY BUT ENOUGH FINE GRAINED MATERIAL (> 30% SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION IS IF LOVEGRASS OR SERICEA LESPEDEZA IS TO BE PLANTED, THEN A SANDY SOIL (< 30% SILT PLUS CLAY) WOULD BE ACCEPTABLE.
4. SOIL SHALL CONTAIN 1.5% MINIMUM ORGANIC MATTER BY WEIGHT.
5. SOIL MUST CONTAIN SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
6. IF THESE CONDITIONS CANNOT BE MET BY SOILS ON SITE, ADDING TOPSOIL IS REQUIRED IN ACCORDANCE WITH SECTION 21 STANDARD AND SPECIFICATION FOR TOPSOIL.

B. AREAS PREVIOUSLY GRADED IN CONFORMANCE WITH THE DRAWINGS SHALL BE MAINTAINED IN A TRUE AND EVEN GRADE, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 - 5" TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREA AND TO CREATE HORIZONTAL EROSION CHECK SLOTS TO PREVENT TOPSOIL FROM SLIDING DOWN A SLOPE.

C. APPLY SOIL AMENDMENTS AS PER SOIL TEST OR AS INCLUDED ON THE PLANS.

D. MIX SOIL AMENDMENTS INTO THE TOP 3 - 5" OF TOPSOIL BY DISKING OR OTHER SUITABLE MEANS. LAWN AREAS SHOULD BE RAKED TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION, LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE. STEEP SLOPES (STEEPER THAN 3:1) SHOULD BE TRACKED BY A DOZER LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. THE TOP 1 - 3" OF SOIL SHOULD BE LOOSE AND FRIABLE. SEEDBED LOOSENING MAY NOT BE NECESSARY ON NEWLY DISTURBED AREAS.

D. SEED SPECIFITACIONS

1. ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED SHALL BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED SHALL HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON THIS JOB.

NOTE: SEED TAGS SHALL BE MADE AVAILABLE TO THE INSPECTOR TO VERIFY TYPE AND RATE OF SEED USED.

2. INOCULANT - THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES SHALL BE A PURE CULTURE OF NITROGEN-FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. INOCULANTS SHALL NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANT AS DIRECTED ON PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75-80oF. CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.

E. METHODS OF SEEDING

1. HYDROSEEDING: APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED AND FERTILIZER), BROADCAST OR DROP SEEDER, OR A CULTIPACKER SEEDER.

A. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES AMOUNTS WILL NOT EXCEED THE FOLLOWING: NITROGEN; MAXIMUM OF 100 LBS. PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOROUS); 200 LBS/AC; K20 (POTASSIUM); 200 LBS/AC.

B. LIME - USE ONLY GROUND AGRICULTURAL LIMESTONE. UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.

C. SEED AND FERTILIZER SHALL BE MIXED ON SITE AND SEEDING SHALL BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.

2. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.

A. SEED SPREAD DRY SHALL BE INCORPORATED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON THE TEMPORARY OR PERMANENT SEEDING SUMMARIES OR TABLES 25 OR 26. THE SEEDED AREA SHALL THEN BE ROLLED WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.

B. WHERE PRACTICAL, SEED SHOULD BE APPLIED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.

3. DRILL OR CULTIPACKER SEEDING: MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.

A. CULTIPACKING SEEDERS ARE REQUIRED TO BURY TO SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST 1/4 INCH OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.

B. WHERE PRACTICAL, SEED SHOULD BE APPLIED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.

F. MULCH SPECIFICATIONS (IN ORDER OF PREFERENCE)

1. STRAW SHALL CONSIST OF THOROUGHLY THRESHED WHEAT, RYE OR OAT STRAW, REASONABLY BRIGHT IN COLOR, AND SHALL NOT BE MOSTY, MOLDY, CAKED, DECAYED, OR EXCESSIVELY DUSTY AND SHALL BE FREE OF NOXIOUS WEED SEEDS AS SPECIFIED IN THE MARYLAND SEED LAW.

2. WOOD CELLULOSE FIBER MULCH (WCFM)

A. WCFM SHALL CONSIST OF SPECIALLY PREPARED WOOD CELLULOSE PROCESSED INTO A UNIFORM FIBROUS PHYSICAL STATE.

B. WCFM SHALL BE DYED GREEN OR CONTAIN A GREEN DYE IN THE PACKAGE THAT WILL PROVIDE AN APPROPRIATE COLOR TO FACILITATE VISUAL INSPECTION OF THE UNIFORMLY SPREAD SLURRY.

C. WCFM, INCLUDING DYE, SHALL CONTAIN NO GERMINATION OR GROWTH INHIBITING FACTORS.

D. WCFM MATERIALS SHALL BE MANUFACTURED AND PROCESSED IN SUCH A MANNER THAT THE WOOD CELLULOSE FIBER MULCH WILL REMAIN IN UNIFORM SUSPENSION IN WATER UNDER AGITATION AND WILL BLEND WITH SEED, FERTILIZER AND OTHER ADDITIVES TO FORM A HOMOGENEOUS SLURRY. THE MULCH MATERIAL SHALL FORM A BLOTTER-LIKE GROUND COVER, ON APPLICATION, HAVING MOISTURE ABSORPTION AND PERCOLATION PROPERTIES AND SHALL COVER AND HOLD GRASS SEED IN CONTACT WITH THE SOIL WITHOUT INHIBITING THE GROWTH OF THE GRASS SEEDLINGS.

E. WCFM MATERIAL SHALL CONTAIN NO ELEMENTS OR COMPOUNDS AT CONCENTRATION LEVELS THAT WILL BE PHYTO-TOXIC.

F. WCFM MUST CONFORM TO THE FOLLOWING PHYSICAL REQUIREMENTS: FIBER LENGTH TO APPROXIMATELY 10 MM., DIAMETER APPROXIMATELY 1 MM., PH RANGE OF 4.0 TO 8.5, ASH CONTENT OF 1.6% MAXIMUM AND WATER HOLDING CAPACITY OF 90% MINIMUM.

NOTE: ONLY STERILE STRAW MULCH SHALL BE USED IN AREAS WHERE ONE SPECIES OF GRASS IS DESIRED.

G. MULCHING SEEDED AREAS - MULCH SHALL BE APPLIED TO ALL SEED AREA IMMEDIATELY AFTER SEEDING.

1. IF GRADING IS COMPLETED OUTSIDE OF THE SEEDING SEASON, MULCH ALONE SHALL BE APPLIED AS PRESCRIBED IN THIS SECTION AND MAINTAINED UNTIL THE SEEDING SEASON RETURNS AND SEEDING CAN BE PERFORMED IN ACCORDANCE WITH THESE SPECIFICATIONS.

2. WHEN STRAW MULCH IS USED, IT SHALL BE SPREAD OVER ALL SEEDED AREAS AT THE RATE OF 2 TONS/ACRE. MULCH SHALL BE APPLIED TO A UNIFORM LOOSE DEPTH OF BETWEEN 1" AND 2". MULCH APPLIED SHALL ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. IF A MULCH ANCHORING TOOL IS TO BE USED, THE RATE SHOULD BE INCREASED TO 2.5 TONS/ACRE.

3. WOOD CELLULOSE FIBER USED AS A MULCH SHALL BE APPLIED AT A NET DRY WEIGHT OF 1,500 LBS. PER ACRE. THE WOOD CELLULOSE FIBER SHALL BE MIXED WITH WATER, AND THE MIXTURE SHALL CONTAIN A MAXIMUM OF 50 LBS. OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

H. SECURING STRAW MULCH (MULCH ANCHORING): MULCH ANCHORING SHALL BE PERFORMED IMMEDIATELY FOLLOWING MULCH APPLICATION TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE CONE BY ONE OF THE FOLLOWING METHODS (LISTED BY PREFERENCE), DEPENDING UPON SIZE OF AREA AND EROSION HAZARD:

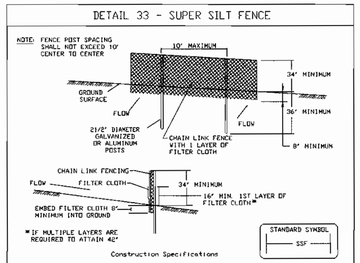
1. A MULCH ANCHORING TOOL IS A TRACTOR DRAWN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF TWO (2) INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGE AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY. IF USED ON SLOPING LAND, THIS PRACTICE SHOULD BE USED ON THE CONTOUR IF POSSIBLE.

2. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. THE FIBER BINDER SHALL BE APPLIED AT A NET DRY WEIGHT OF 750 POUNDS/ACRE. THE WOOD CELLULOSE FIBER S SHALL BE MIXED WITH WATER AND THE MOSTURE SHALL CONTAIN A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

3. APPLICATION OF LIQUID BINDERS SHOULD BE HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF BANKS. THE REMAINDER OF AREA SHOULD BE APPEAR UNIFORM AFTER BINDER APPLICATION. SYNTHETIC BINDERS - SUCH AS ACRYLIC DLR (AGRO-TACK), DCA-70, PETROSET, TERRA TAX II, TERRA TACK AR OR OTHER APPROVED EQUAL MAY BE USED AT RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH.

4. LIGHTWEIGHT PLASTIC NETTING MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. NETTING IS USUALLY AVAILABLE IN ROLLS 4' TO 15' FEET WIDE AND 300 3,000 FEET LONG.

DETAIL 33 - SUPER SILT FENCE



Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.

2. Chain link fence shall be fastened securely to the fence posts with wire ties. The tower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 8" into the ground.

5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height

7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft²/minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

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DETAIL 33 - SUPER SILT FENCE

Design Criteria

Slope	Slope Steepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	Unlimited	Unlimited
10 - 20%	10:1 - 5:1	200 Feet	1,500 Feet
20 - 33%	5:1 - 3:1	100 Feet	1,000 Feet
33 - 50%	3:1 - 2:1	100 Feet	500 Feet
50% +	2:1 +	50 Feet	250 Feet

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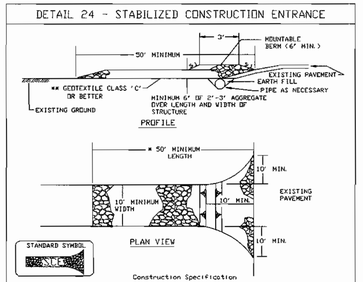
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

3. Geotextile Fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

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SEDIMENT CONTROL NOTES

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.

3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABLIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

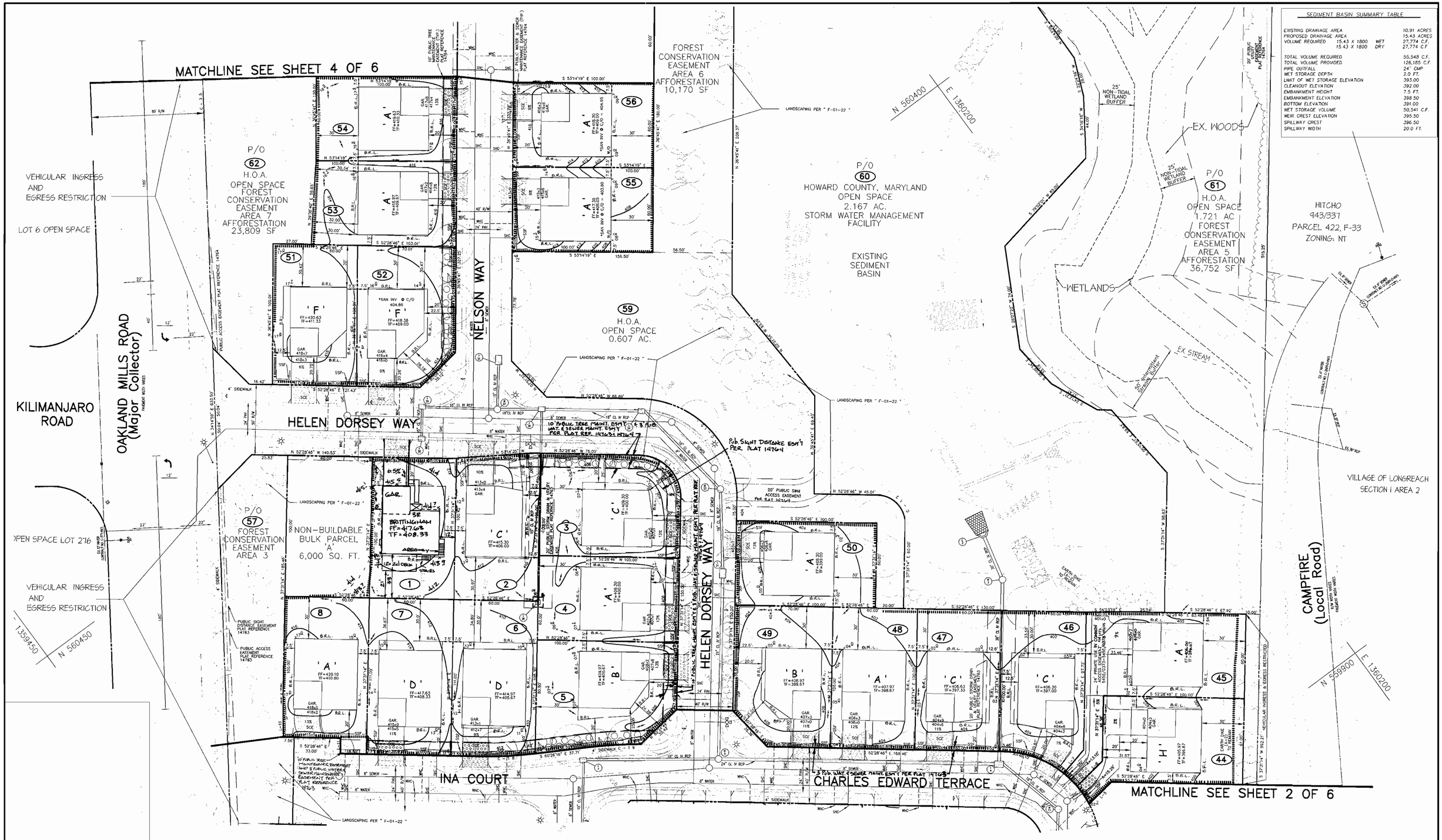
5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50), AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

6. 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.

7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

8. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

9. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGEN



SEDIMENT BASIN SUMMARY TABLE		
EXISTING DRAINAGE AREA		10.91 ACRES
PROPOSED DRAINAGE AREA		15.43 ACRES
VOLUME REQUIRED 15.43 X 1800	WET	27,774 C.F.
15.43 X 1800	DRY	27,774 C.F.
TOTAL VOLUME REQUIRED		55,548 C.F.
TOTAL VOLUME PROVIDED		126,185 C.F.
PIPE OUTFALL		24" CMP
WET STORAGE DEPTH		2.0 FT.
LIMIT OF WET STORAGE ELEVATION		393.00
CLEANOUT ELEVATION		392.00
EMBANKMENT HEIGHT		7.5 FT.
EMBANKMENT ELEVATION		398.50
BOTTOM ELEVATION		391.00
WET STORAGE VOLUME		50,541 C.F.
WEIR CREST ELEVATION		395.50
SPILLWAY CREST		396.50
SPILLWAY WIDTH		20.0 FT.

MRA

MORRIS & RITCHIE ASSOC., INC.
ENGINEERS, PLANNERS, SURVEYORS, AND LANDSCAPE ARCHITECTS
9090 JUNCTION DRIVE, SUITE 9
Annapolis Junction, Maryland
(410) 792-9792 - (301) 776-1690
Fax: (410) 792-7395

DATE	REVISION
10-18-01	REV. GRADING FOR LOT 1

STATE OF MARYLAND
PIERO VAN MELLITS
No. 21875
REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Piero V. Mellits, P.E. 5-18-01
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) DATE
PIERO V. MELLITS

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

05/18/01
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) DATE
Douglas F. Eshelman

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

6/8/01
U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE DATE

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

6/8/01
HOWARD SCD DATE

OWNER/DEVELOPER

THE RYLAND GROUP, INC.
7250 PARKWAY DRIVE - SUITE 520
HANOVER, MD 21076
(410) 712-7012

APPROVED: DEPARTMENT OF PLANNING AND ZONING

6/12/01
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

6/11/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

6/15/01
DIRECTOR DATE

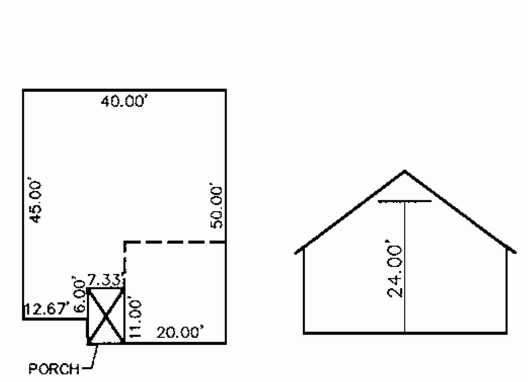
SUBDIVISION		SECTION / AREA	LOT NO.
ECKERS HOLLOW		1 / 1	
PLAT NO.	BLOCK NO.	ZONE	TAX/PARCEL
14761-14765	10 & 11	RSC	36 / 23
ELEC. DIST.	CENSUS TR.		
6TH	6066.02		
WATER CODE		SEWER CODE	
E04			

SITE DEVELOPMENT PLAN
LOTS 1-8, 44-56, 59-61, P/O OS LOTS 57 & 62
AND NON-BUILDABLE A & B

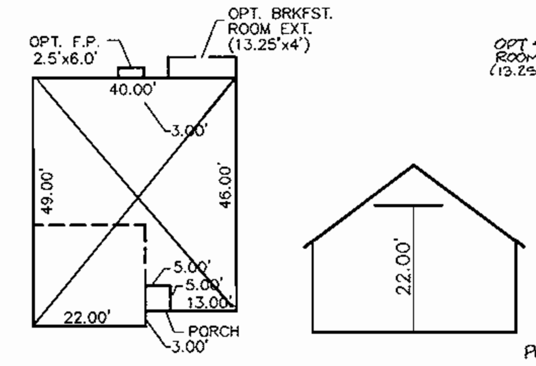
ECKERS HOLLOW
SECTION 1, PHASE 1
LOTS 1 THRU 62 & NON-BUILDABLE LOTS A & B
TAX MAP 36
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: 1/20/01
SHEET 3 OF 6

SDP-01-16

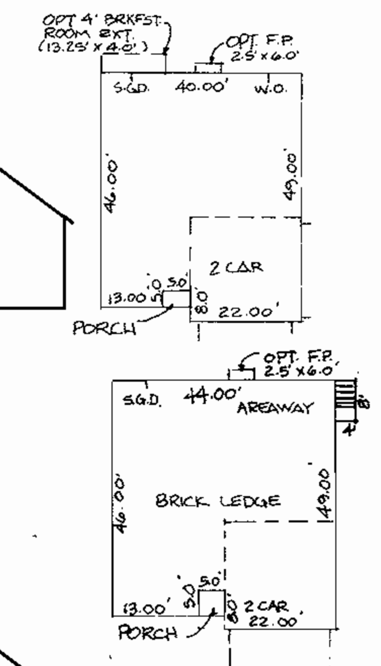
TYPICAL FOOTPRINTS



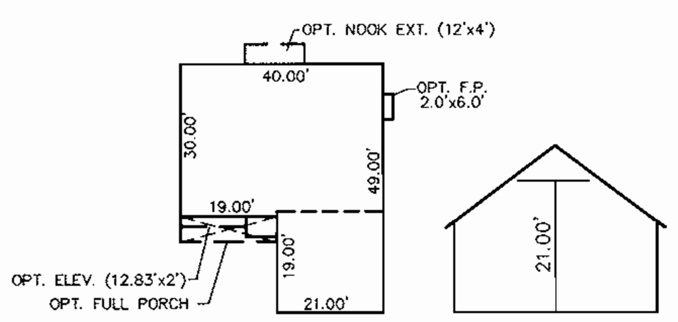
MONROE



FRANKLIN



CUSTOM FRANKLIN W/4' SIDE EXT. LOT41



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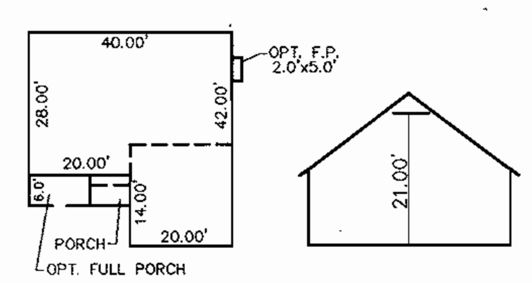

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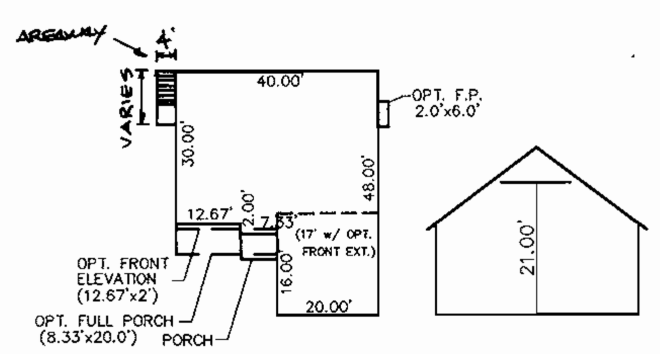
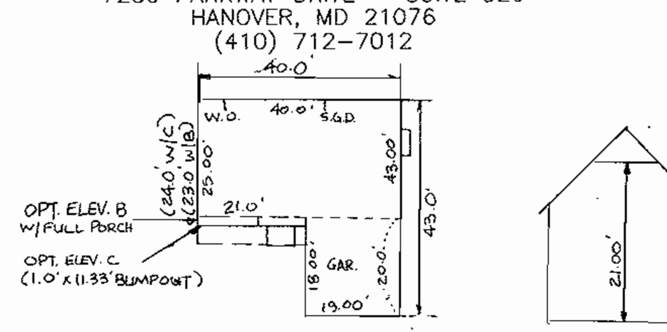


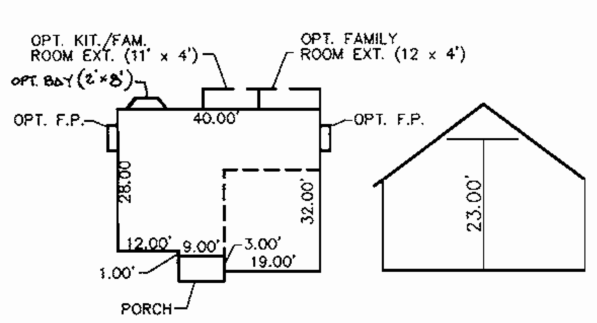
BRITTINGHAM

BUILDER

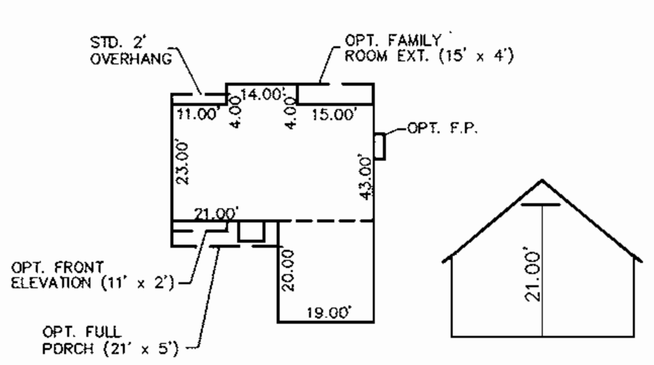
THE RYLAND GROUP
7250 PARKWAY DRIVE – SUITE 520
HANOVER, MD 21076
(410) 712-7012



NEWBERRY II



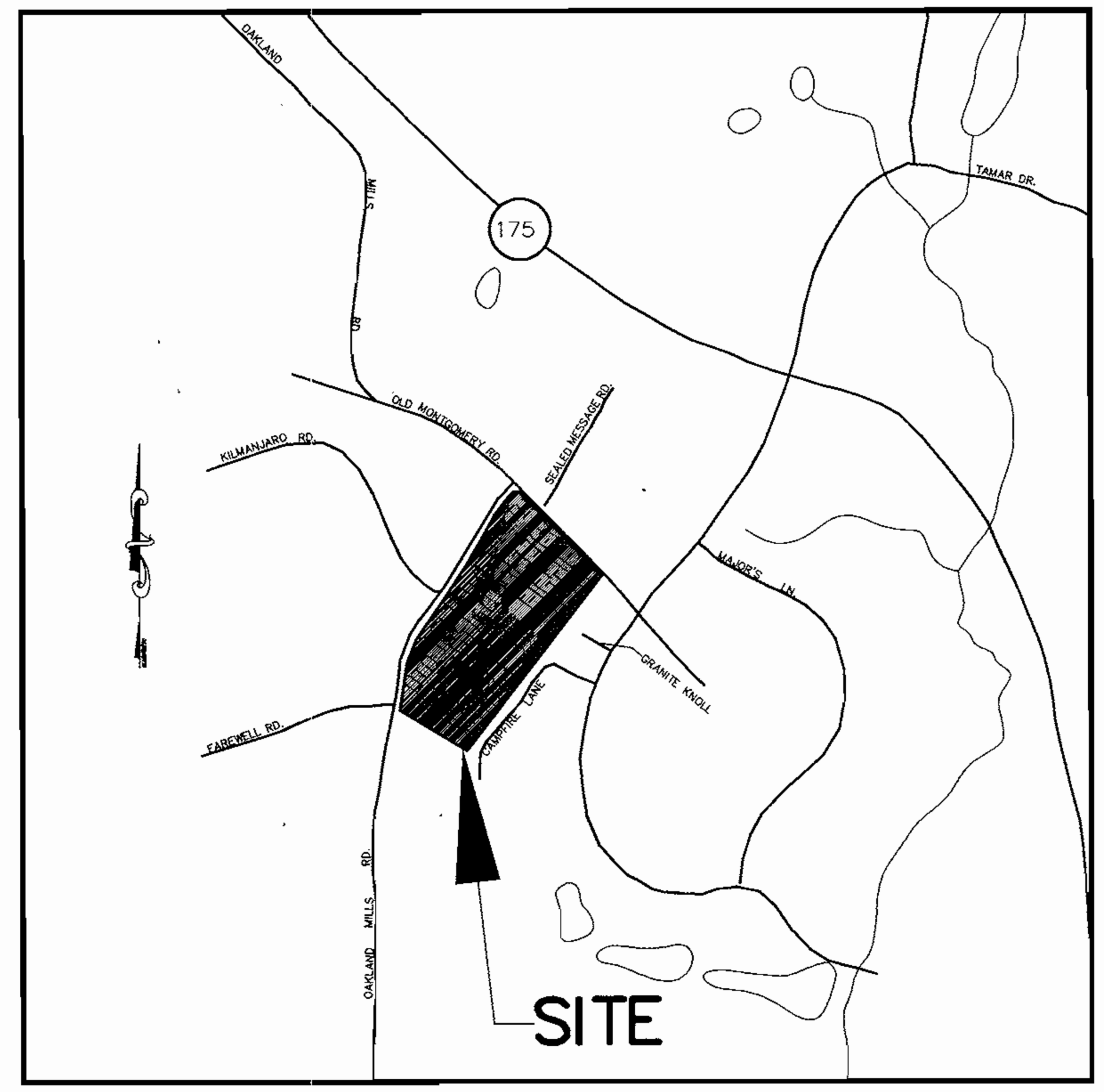
GARNETT II



NEWBERRY

INDEX OF SHEETS

1.) TITLE SHEET
2.) SITE DEVELOPMENT PLAN SHEET (LOTS 9–43, p/o OPEN SPACE LOT 57, OPEN SPACE LOT 58)
3.) SITE DEVELOPMENT PLAN SHEET (LOTS 1–8, 44–56, 59–61, p/o OPEN SPACE LOTS 57, 62)
4.) EXISTING MASS GRADING PLAN SHEET (p/o OPEN SPACE LOTS 60–62)
5.) EXISTING MASS GRADING PLAN SHEET (p/o OPEN SPACE LOT 62)
6.) SEDIMENT CONTROL NOTES & DETAILS



VICINITY MAP
SCALE: 1" = 1200'

LOT #	LOT SIZE	STREET ADDRESS	SHC INV @ PROP LINE	MIN. BSMT ELEV.
1	6001 S.F.	6004 HELEN DORSEY WAY	403.37	407.27
2	6174 S.F.	6008 HELEN DORSEY WAY	400.90	404.80
3	7057 S.F.	6012 HELEN DORSEY WAY	395.46	399.36
4	6000 S.F.	6016 HELEN DORSEY WAY	395.21	399.11
5	7198 S.F.	6020 HELEN DORSEY WAY	394.81	398.71
6	6626 S.F.	9004 INA COURT	400.51	404.51
7	6660 S.F.	9008 INA COURT	403.20	407.20
8	6000 S.F.	9012 INA COURT	405.69	409.69
9	6533 S.F.	9013 INA COURT	406.13	410.03
10	6420 S.F.	9009 INA COURT	403.53	407.43
11	6577 S.F.	9005 INA COURT	401.18	405.08
12	6000 S.F.	6004 CHARLES EDWARD TERRACE	399.88	403.78
13	6000 S.F.	6008 CHARLES EDWARD TERRACE	400.30	404.20
14	6000 S.F.	6012 CHARLES EDWARD TERRACE	400.73	404.63
15	6032 S.F.	6016 CHARLES EDWARD TERRACE	401.27	405.17
16	6281 S.F.	6009 CHARLES EDWARD TERRACE	400.41	404.31
17	6617 S.F.	6015 CHARLES EDWARD TERRACE	401.17	404.37
18	6015 S.F.	6021 CHARLES EDWARD TERRACE	400.40	404.30
19	6003 S.F.	6027 CHARLES EDWARD TERRACE	399.87	403.77
20	6161 S.F.	6033 CHARLES EDWARD TERRACE	399.08	403.00
21	6842 S.F.	6039 CHARLES EDWARD TERRACE	398.24	402.14
22	6415 S.F.	6059 CHARLES EDWARD TERRACE	395.50	399.35
23	6743 S.F.	6063 CHARLES EDWARD TERRACE	394.07	397.87
24	7157 S.F.	6075 CHARLES EDWARD TERRACE	393.41	397.31
25	6225 S.F.	6081 CHARLES EDWARD TERRACE	393.68	397.58
26	6000 S.F.	6087 CHARLES EDWARD TERRACE	393.98	397.88
27	6000 S.F.	6093 CHARLES EDWARD TERRACE	394.28	398.18
28	6643 S.F.	6001 CHARLES EDWARD TERRACE	396.35	400.25
29	6000 S.F.	6005 CHARLES EDWARD TERRACE	399.70	403.60
30	6636 S.F.	6020 CHARLES EDWARD TERRACE	400.90	405.00
31	6004 S.F.	6024 CHARLES EDWARD TERRACE	400.78	404.67
32	6000 S.F.	6028 CHARLES EDWARD TERRACE	399.95	403.85
33	6000 S.F.	6032 CHARLES EDWARD TERRACE	399.42	403.32
34	6000 S.F.	6036 CHARLES EDWARD TERRACE	398.88	402.78
35	6234 S.F.	6040 CHARLES EDWARD TERRACE	398.58	402.68
36	6793 S.F.	6044 CHARLES EDWARD TERRACE	398.55	402.67
37	7600 S.F.	6048 CHARLES EDWARD TERRACE	398.30	402.34
38	6299 S.F.	6052 CHARLES EDWARD TERRACE	397.73	401.57
39	6000 S.F.	6056 CHARLES EDWARD TERRACE	396.44	400.24
40	6000 S.F.	6060 CHARLES EDWARD TERRACE	395.25	399.05
41	6000 S.F.	6064 CHARLES EDWARD TERRACE	394.07	397.86
42	6000 S.F.	6068 CHARLES EDWARD TERRACE	392.10	396.00
43	6113 S.F.	6072 CHARLES EDWARD TERRACE	392.84	396.50
44	6404 S.F.	6076 CHARLES EDWARD TERRACE	392.79	396.19
45	7734 S.F.	6080 CHARLES EDWARD TERRACE	392.87	396.97
46	6314 S.F.	6084 CHARLES EDWARD TERRACE	393.03	397.00
47	6008 S.F.	6088 CHARLES EDWARD TERRACE	393.30	397.20
48	6000 S.F.	6092 CHARLES EDWARD TERRACE	393.57	397.47
49	6688 S.F.	6096 CHARLES EDWARD TERRACE	393.97	397.87
50	6000 S.F.	6015 HELEN DORSEY WAY	394.96	398.86
51	6001 S.F.	6001 HELEN DORSEY WAY	406.90	410.80
52	6688 S.F.	6005 HELEN DORSEY WAY	404.89	408.09
53	6117 S.F.	9005 NELSON WAY	404.07	407.97
54	6000 S.F.	9009 NELSON WAY	405.22	409.12
55	6000 S.F.	9004 NELSON WAY	403.80	407.70
56	6000 S.F.	9008 NELSON WAY	404.95	408.85

LEGEND

SYMBOL	DESCRIPTION
FF=412.67	FINISHED FLOOR ELEVATION
TF=402.33	FINISHED TOP OF FOOTING ELEVATION
W.O. 412x5	PROPOSED GROUND ELEVATION AT WALKOUT CONDITION
412x5	GROUND SPOT ELEVATION
STD. or REV.	UNIT DESIGNATION FROM ARCHITECTURAL PLAN
5R.	NUMBER OF RISERS – 7 1/2" EACH (INCLUDING 2 RISERS INTO HOUSE)
W/W	WINDOW WELL REQUIRED FOR BASEMENT WINDOWS IN REAR
412	PROPOSED CONTOUR
410	EXISTING GROUND CONTOUR
	DRAINAGE FLOW ARROW
	PROPERTY LINE
	RIGHT–OF–WAY
	EXISTING CURB & GUTTER
(40)	HOUSE NUMBERS

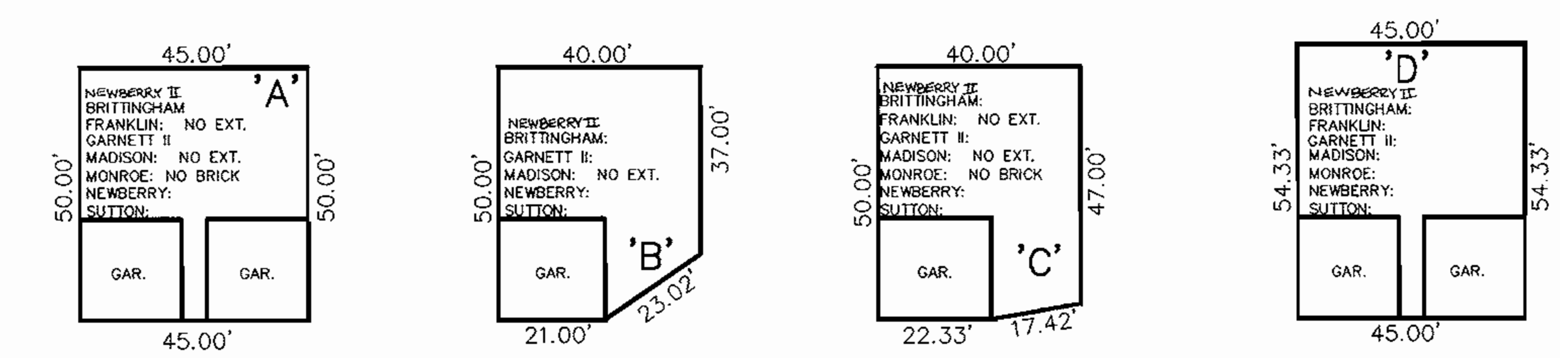
LEGEND

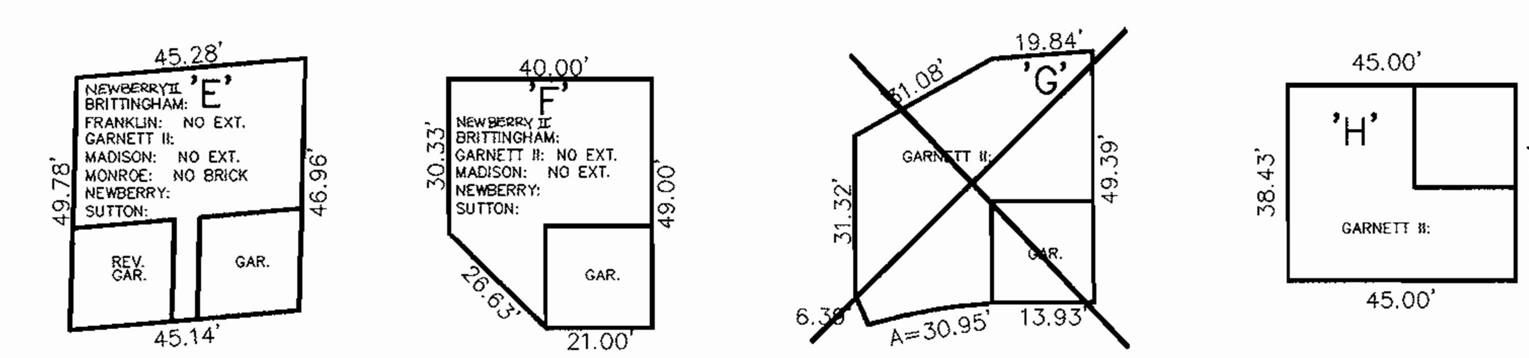
SYMBOL	DESCRIPTION
8" WATER	EXISTING WATER MAINS AND FIRE HYDRANTS
15" STORM	EXISTING STORM DRAINS
8" SEWER	EXISTING SEWER LINES
	STREET TREES
	PERIMETER SCREENING PER F–01–22 APPROVED BY HOWARD COUNTY ON 3–8–01
SCE 406x5	STABILIZED CONSTRUCTION ENTRANCE
SSF——SF	EXISTING SILT FENCE OR SUPER SILT FENCE
SSF——SF	SILT FENCE OR SUPER SILT FENCE
	EXISTING EARTH DIKE
	EARTH DIKE
	LIMIT OF DISTURBANCE
	STREET LIGHT
	STREET SIGN

GENERAL NOTES

1) AREA INCLUDED IN THIS SUBMISSION IS 18.05 +/– ACRES (786,258 S.F.).
2) PRESENT ZONING IS R–SC PER 10/18/93 COMPREHENSIVE ZONING PLAN.
3) PROPOSED USE OF PROPERTY IS SINGLE FAMILY DETACHED HOUSES.
4) TOTAL NUMBER OF LOTS INCLUDED IN THIS SUBMISSION IS 60.
5) MINIMUM LOT SIZE IS 6000 S.F.
6) DEPARTMENT OF PLANNING AND ZONING REFERENCE FILE NUMBERS ARE: S–00–02, P–00–13, F–01–22.
7) UTILITIES SHOWN AS EXISTING ARE TAKEN FROM WATER AND SEWER CONTRACT NUMBERS C–377–W&S, C–359–W&S, C–2689–D–W&S & C–374–W&S. ROAD CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED ROAD DRAWINGS.
8) ANY DAMAGE TO COUNTY OWNED RIGHTS–OF–WAY SHALL BE CORRECTED AT THE DEVELOPERS EXPENSE.
9) EXISTING CONTOURS ARE BASED OFF THE MASS GRADING, WATER QUALITY, STREET TREE, GRADING AND SEDIMENT CONTROL PLANS.
10) THE COORDINATES SHOWN HEREON ARE BASED ON NAD 83', MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 36E4 AND 36E5.
11) THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/DIVISION OF CONSTRUCTION INSPECTION AT (410) 313–1880 AT LEAST 24 HOURS PRIOR TO START OF WORK.
12) THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1–800–257–7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
13) DRIVEWAY ENTRANCES ARE TO BE CONSTRUCTED PER THE HOWARD COUNTY DESIGN MANUAL VOLUME IV, DETAILS R 6.03 AND R 6.05.
14) STORMWATER MANAGEMENT IS PROVIDED PER F–01–22.
15) THIS PLAN IS FOR HOUSE SITING AND LOT GRADING ONLY. SEE THE APPROVED CONSTRUCTION DRAWINGS FOR INSTALLATION OF UTILITIES, ROADWAYS, AND PUBLIC WALKWAYS.
16) TOTAL PROJECT AREA FOR THIS SUBMITTAL IS 25.14 Ac.
17) ALL ROADS SHOWN ON THESE PLANS ARE PUBLIC
18) IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
19) NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT.
20) THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. APPROVAL OCCURRED UNDER THE F–01–22 PLAN and ASSOCIATED DEVELOPERS AGREEMENT. F–01–22 WAS APPROVED 3–08–01 AND THE DEVELOPER'S AGREEMENT WAS SIGNED 3–23–01.
21) FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT WERE ADDRESSED WITH THE APPROVAL OF FINAL PLAN F–01–22.
22) ALL SWALES, INCLUDING THOSE BETWEEN HOUSES ARE TO BE STABILIZED WITH EROSION CONTROL MATTING. SEE DETAIL SHEET 5.
23) EXCEPT WHERE NOTED, ALL SEDIMENT CONTROLS INSTALLED UNDER G00007373 AND G00007214 & F–01–22 SHALL REMAIN AS PART OF THIS PLAN EXCEPT WHERE NOTED TO BE REMOVED.
24) THE FOLLOWING RECORDING REFERENCES ARE CURRENT TO THIS PROJECT AT TIME OF APPROVAL AND SHOULD NOT BE CONSIDERED INCLUSIVE BEYOND THE APPROVAL DATE OF THIS PLAN.

OPEN SPACE LOTS 57–62 DEED	5403/0343 – 5403/0346
BY – LAWS	5455/0379 – 5455/0386
HOA DECLARATION OF COVENANTS, CONDITIONS & RESTRICTIONS	5455/0387–5455/0418
DECLAR. OF ESM'T & COVENANTS FOR PRIV. DRIVEWAYS	
LOT 36 & 37	5455/0367 – 5455/0372
LOT 44 & 45	5455/0373 – 5455/0378





SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT (1 WEEK)
2. INSPECT & REPAIR EXISTING SEDIMENT CONTROL MEASURES PER F–01–22 AND GP–01–78. EXISTING SEDIMENT BASIN PER GP–01–78 TO REMAIN. (8 DAYS)
3. INSTALL SEDIMENT AND EROSION CONTROL DEVICES PER PLAN. OBTAIN SEDIMENT CONTROL INSPECTOR'S APPROVAL PRIOR TO PROCEEDING. (8 DAYS)
4. CLEAR AND GRUB SITE. (4 DAYS)
5. EXCAVATE FOR FOUNDATIONS AND ROUGH GRADE. (10 DAYS)
6. CONSTRUCT DWELLING. (60 DAYS PER DWELLING)
7. FINE GRADE SITE, INSTALL DRIVEWAYS. (2 DAYS PER DRIVEWAY AND LOT.)
8. INSTALL PERMANENT SEEDING AND LANDSCAPING. (10 DAYS)
9. CONVERT EXISTING SEDIMENT BASIN TO SWM FACILITY PER F–01–22. (10 DAYS)
10. REMOVE SEDIMENT CONTROL DEVICES AFTER PERMISSION IS GRANTED BY SEDIMENT CONTROL INSPECTOR AND UPLAND AREAS HAVE BEEN STABILIZED. (2 DAYS)

NOTE: BAY WINDOWS, WINDOW WELLS, ORIELS, VESTIBULES, BALCONIES, CHIMNEYS, HEATING / AIR CONDITIONING UNITS AND EXTERIOR STAIRWAYS OR RAMPS IF NOT MORE THAN SIXTEEN FEET IN WIDTH MAY PROJECT NOT MORE THAN FOUR FEET INTO ANY REQUIRED SETBACK AREA OR REQUIRED DISTANCE BETWEEN BUILDINGS. OPEN OR ENCLOSED PORCHES OR DECKS MAY PROJECT NOT MORE THAN TEN FEET INTO REQUIRED FRONT OR REAR YARD SETBACK AREA. THIS, IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS.

MRA
MORRIS & RITCHIE ASSOC., INC.
ENGINEERS, PLANNERS, SURVEYORS, AND LANDSCAPE ARCHITECTS
9090 JUNCTION DRIVE, SUITE 9
Annapolis Junction, Maryland
(410) 792–9792 – (301) 776–1690
Fax: (410) 792–7395

DATE	REVISION
10-18-01	ADD AREAWAY TO BRITTINGHAM.
8-03-01	ADD CUSTOM FRANKLIN (MRA)
6-29-01	FLIP FRANKLIN
6-29-01	ADD NEWBERRY II (MRA)

STATE OF MARYLAND – PIERO VAN MELLITS No. 21875 – REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

P. V. Mellits, P.E. — 5-18-01
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) — DATE
PIERO V. MELLITS

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

[signature] — 05/18/01
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) — DATE
Douglas F. Eshelman

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.
Jim Myers / CS — 6/4/01
U.S.D.A.–NATURAL RESOURCES CONSERVATION SERVICE — DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[signature] — 6/4/01
HOWARD SCD — DATE

OWNER / DEVELOPER

THE RYLAND GROUP, INC.
7250 PARKWAY DRIVE – SUITE 520
HANOVER, MD 21076
(410) 712–7012

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamilton — 6/12/01
CHIEF, DIVISION OF LAND DEVELOPMENT — DATE
[signature] — 6/11/01
CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE
[signature] — 6/15/01
DIRECTOR — DATE

SUBDIVISION			SECTION / AREA		LOT NO.
ECKERS HOLLOW			1 / 1		1–56
PLAT NO.	BLOCK NO.	ZONE	TAX/PARCEL	ELEC. DIST.	CENSUS TR.
14761–14765	10 & 11	RSC	36 / 23	6TH	6066.02
WATER CODE			SEWER CODE		
E04			————		

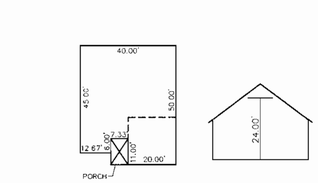
TITLE SHEET

ECKERS HOLLOW
SECTION 1, PHASE 1

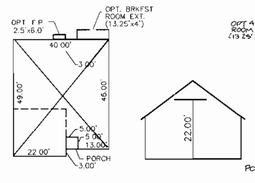
LOTS 1 THRU 62 & NON–BUILDABLE LOTS A & B
TAX MAP 36, PARCEL 23, BLOCKS 10 & 11
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: 1/20/01
SHEET 1 OF 6

SDP-01-16

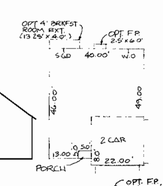
TYPICAL FOOTPRINTS

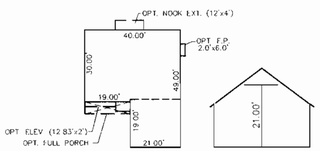


MONROE



FRANKLIN





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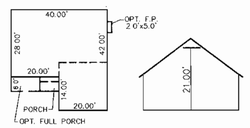

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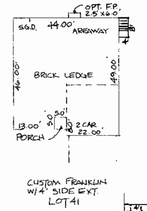
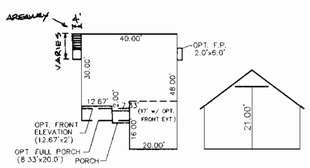
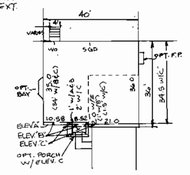


CUSTOM FRANKLIN W/4' SIDE EXT. LOT 41



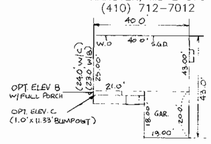
BRITTINGHAM



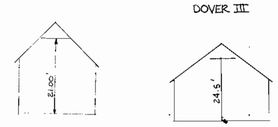
DOVER III

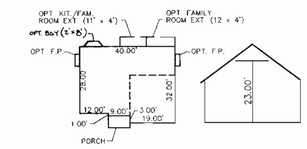
BUILDER

THE RYLAND GROUP
7250 PARKWAY DRIVE – SUITE 520
HANOVER, MD 21076
(410) 712-7012

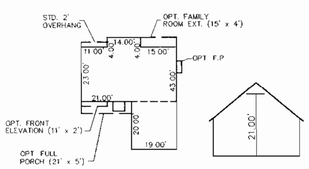


NEWBERRY II





GARNETT II

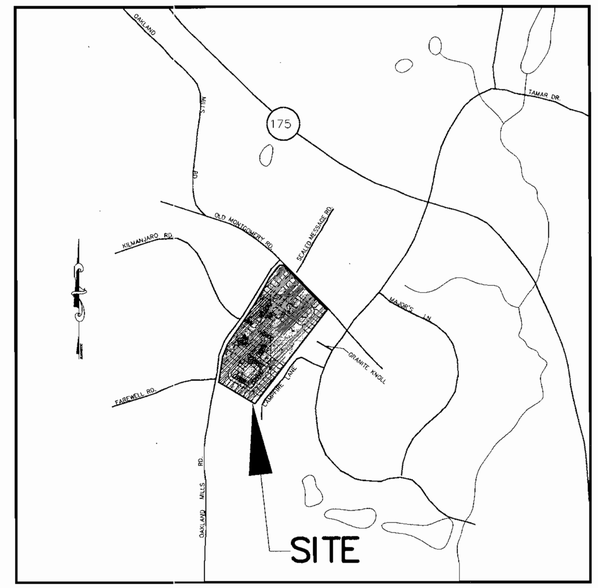


NEWBERRY

LOT #	LOT SIZE	STREET ADDRESS	SHC INV @ PROP LINE	MIN. BSMT ELEV.
1	6001 S.F.	6004 HELEN DORSEY WAY	403.37	407.27
2	6174 S.F.	6008 HELEN DORSEY WAY	400.90	404.80
3	7057 S.F.	6012 HELEN DORSEY WAY	395.46	399.36
4	6000 S.F.	6016 HELEN DORSEY WAY	395.21	399.11
5	7198 S.F.	6020 HELEN DORSEY WAY	394.81	398.71
6	6626 S.F.	9004 INA COURT	400.51	404.51
7	6660 S.F.	9008 INA COURT	403.20	407.20
8	6000 S.F.	9012 INA COURT	405.69	409.69
9	6533 S.F.	9013 INA COURT	406.13	410.03
10	6420 S.F.	9009 INA COURT	403.53	407.43
11	6577 S.F.	9005 INA COURT	401.18	405.08
12	6000 S.F.	6004 CHARLES EDWARD TERRACE	399.88	403.78
13	6000 S.F.	6008 CHARLES EDWARD TERRACE	400.30	404.20
14	6000 S.F.	6012 CHARLES EDWARD TERRACE	400.73	404.63
15	6032 S.F.	6016 CHARLES EDWARD TERRACE	401.27	405.17
16	6281 S.F.	6009 CHARLES EDWARD TERRACE	400.41	404.31
17	6617 S.F.	6015 CHARLES EDWARD TERRACE	401.17	404.37
18	6015 S.F.	6021 CHARLES EDWARD TERRACE	400.40	404.30
19	6003 S.F.	6027 CHARLES EDWARD TERRACE	399.87	403.77
20	6161 S.F.	6033 CHARLES EDWARD TERRACE	399.08	403.00
21	6842 S.F.	6039 CHARLES EDWARD TERRACE	398.24	402.14
22	6415 S.F.	6059 CHARLES EDWARD TERRACE	395.50	399.35
23	6743 S.F.	6063 CHARLES EDWARD TERRACE	394.07	397.87
24	7157 S.F.	6075 CHARLES EDWARD TERRACE	393.41	397.31
25	6225 S.F.	6081 CHARLES EDWARD TERRACE	393.68	397.58
26	6000 S.F.	6087 CHARLES EDWARD TERRACE	393.98	397.88
27	6000 S.F.	6093 CHARLES EDWARD TERRACE	394.28	398.18
28	6643 S.F.	6001 CHARLES EDWARD TERRACE	396.35	400.25
29	6000 S.F.	6005 CHARLES EDWARD TERRACE	399.70	403.60
30	6636 S.F.	6020 CHARLES EDWARD TERRACE	400.90	405.00
31	6004 S.F.	6024 CHARLES EDWARD TERRACE	400.78	404.67
32	6000 S.F.	6028 CHARLES EDWARD TERRACE	399.95	403.85
33	6000 S.F.	6032 CHARLES EDWARD TERRACE	399.42	403.32
34	6000 S.F.	6036 CHARLES EDWARD TERRACE	398.88	402.78
35	6234 S.F.	6040 CHARLES EDWARD TERRACE	398.58	402.68
36	6793 S.F.	6044 CHARLES EDWARD TERRACE	398.55	402.67
37	7600 S.F.	6048 CHARLES EDWARD TERRACE	398.30	402.34
38	6299 S.F.	6052 CHARLES EDWARD TERRACE	397.73	401.57
39	6000 S.F.	6056 CHARLES EDWARD TERRACE	396.44	400.24
40	6000 S.F.	6060 CHARLES EDWARD TERRACE	395.25	399.05
41	6000 S.F.	6064 CHARLES EDWARD TERRACE	394.07	397.86
42	6000 S.F.	6068 CHARLES EDWARD TERRACE	392.10	396.00
43	6113 S.F.	6072 CHARLES EDWARD TERRACE	392.84	396.50
44	6404 S.F.	6076 CHARLES EDWARD TERRACE	392.79	396.19
45	7734 S.F.	6080 CHARLES EDWARD TERRACE	392.87	396.97
46	6314 S.F.	6084 CHARLES EDWARD TERRACE	393.03	397.00
47	6008 S.F.	6088 CHARLES EDWARD TERRACE	393.30	397.20
48	6000 S.F.	6092 CHARLES EDWARD TERRACE	393.57	397.47
49	6688 S.F.	6096 CHARLES EDWARD TERRACE	393.97	397.87
50	6000 S.F.	6015 HELEN DORSEY WAY	394.96	398.86
51	6001 S.F.	6001 HELEN DORSEY WAY	406.90	410.80
52	6688 S.F.	6005 HELEN DORSEY WAY	404.89	408.09
53	6117 S.F.	9005 NELSON WAY	404.07	407.97
54	6000 S.F.	9009 NELSON WAY	405.22	409.12
55	6000 S.F.	9004 NELSON WAY	403.80	407.70
56	6000 S.F.	9008 NELSON WAY	404.95	408.85

INDEX OF SHEETS

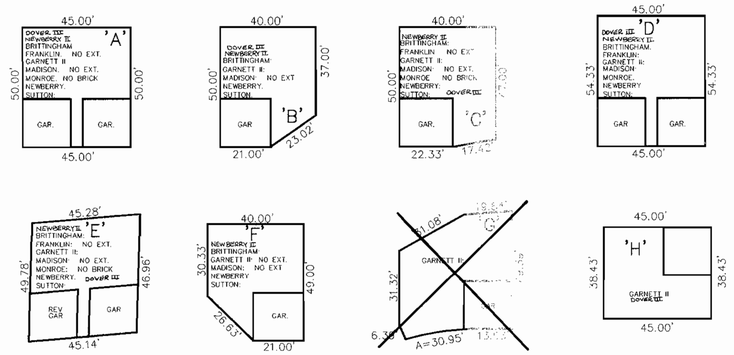
1.) TITLE SHEET
2.) SITE DEVELOPMENT PLAN SHEET (LOTS 9–43, p/o OPEN SPACE LOT 57, OPEN SPACE LOT 58)
3.) SITE DEVELOPMENT PLAN SHEET (LOTS 1–8, 44–56, 59–61, p/o OPEN SPACE LOTS 57, 62)
4.) EXISTING MASS GRADING PLAN SHEET (p/o OPEN SPACE LOTS 60–62)
5.) EXISTING MASS GRADING PLAN SHEET (p/o OPEN SPACE LOT 62)
6.) SEDIMENT CONTROL NOTES & DETAILS



VICINITY MAP
SCALE: 1" = 1200'

GENERAL NOTES

1) AREA INCLUDED IN THIS SUBMISSION IS 18.05 +/- AC[illegible]
2) PRESENT ZONING IS R-SC PER 10/18/93 COMPREHE[illegible] PLAN.
3) PROPOSED USE OF PROPERTY IS SINGLE FAMILY DET[illegible]
4) TOTAL NUMBER OF LOTS INCLUDED IN THIS SUBMISS[illegible]
5) MINIMUM LOT SIZE IS 6000 S.F.
6) DEPARTMENT OF PLANNING AND ZONING REFERENC[illegible] AREA: S-00-02, P-00-13, F-01-22.
7) UTILITIES SHOWN AS EXISTING ARE TAKEN FROM WA[illegible] CONTRACT NUMBERS C-377-W&S, C-359-W&S, C-[illegible] C-374-W&S. ROAD CONSTRUCTION SHALL BE IN ACCORDANCE WI[illegible] ROAD DRAWINGS.
8) ANY DAMAGE TO COUNTY OWNED RIGHTS-OF-WAY S[illegible] CORRECTED AT THE DEVELOPERS EXPENSE.
9) EXISTING CONTOURS ARE BASED OFF THE MASS GRADIN[illegible] QUALITY, STREET TREE, GRADING AND SEDIMENT CONTROL PLANS.
10) THE COORDINATES SHOWN HEREON ARE BASED ON N[illegible] AND COORDINATE SYSTEM AS PROJECTED BY HOWARD COU[illegible] CONTROL STATIONS NO. 36E4 AND 36E5.
11) THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PU[illegible] WORKS/DIVISION OF CONSTRUCTION INSPECTION AT (410) 313-1880 A[illegible] HOURS PRIOR TO START OF WORK.
12) THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-8[illegible] 7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
13) DRIVEWAY ENTRANCES ARE TO BE CONSTRUCTED PER THE [illegible] COUNTY DESIGN MANUAL VOLUME IV, DETAILS R 6.03 AND R 6.0[illegible]
14) STORMWATER MANAGEMENT IS PROVIDED PER F-01-22.
15) THIS PLAN IS FOR HOUSE SITING AND LOT GRADING O[illegible] APPROVED CONSTRUCTION DRAWINGS FOR INSTALLA[illegible] ROADWAYS, AND PUBLIC WALKWAYS.
16) TOTAL PROJECT AREA FOR THIS SUBMITTAL IS 25.1[illegible]
17) ALL ROADS SHOWN ON THESE PLANS ARE PUBLIC.
18) IN ACCORDANCE WITH SECTION 128 OF THE HOWARD CO[illegible] ZONING REGULATIONS BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT [illegible] THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO [illegible] PORCHES DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MOR[illegible] FEET INTO THE FRONT OR REAR YARD SETBACK.
19) NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED [illegible] REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS AND FOREST CONSERVATION EASEMENT.
20) THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WI[illegible] PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCA[illegible] APPROVAL OCCURRED UNDER THE F-01-22 PLAN and ASSOCIATED DEVELOP[illegible] AGREEMENT. F-01-22 WAS APPROVED 3-08-01 AND THE DEVELOPER'S AGREEM[illegible] SIGNED 3-23-01.
21) FOREST CONSERVATION OBLIGATIONS FOR THIS PROJECT [illegible] ADDRESSED WITH THE APPROVAL OF FINAL PLAN F-01-22.
22) ALL SWALES, INCLUDING THOSE BETWEEN HOUSES ARE TO BE STABILIZED WITH EROSION CONTROL MATTING. SEE DETAIL SHEET 5.
23) EXCEPT WHERE NOTED, ALL SEDIMENT CONTROLS INSTA[illegible] UNDER 60000737B AND 60000721 [illegible] F-01-22 SHALL REMAIN AS PART OF THIS PLAN EXCE[illegible] NOTED TO BE REMOVED.
24) THE FOLLOWING RECORDING REFERENCES ARE CURRENT [illegible] PROJECT AT TIME OF APPROVAL AND SHOULD NOT BE CONSIDERED INCLUSIVE BEYOND THE [illegible] APPROVAL DATE OF THIS PLAN.
OPEN SPACE LOTS 57-62 DEED — 5403/0343 - 5403/0346
BY - LAWS — 5455/0379 - 5455/0386
HOA DECLARATION OF COVENANTS, CONDITIONS & RESTRIC[illegible] — 5455/0387-5455/0418
DECLAR. OF ESM'T & COVENANTS FOR PRIV. DRIVEWAYS
LOT 36 & 37 — 5455/0367 - 5455/0372
LOT 44 & 45 — 5455/0373 - 5455/0378



LEGEND

SYMBOL	DESCRIPTION
FF=412.67	FINISHED FLOOR ELEVATION
TF=402.33	FINISHED TOP OF FOOTING ELEVATION
WO 412x5	PROPOSED GROUND ELEVATION AT WALKOUT CONDITION
412x5	GROUND SPOT ELEVATION
STD. or REV.	UNIT DESIGNATION FROM ARCHITECTURAL PLAN
5R.	NUMBER OF RISERS – 7 1/2" EACH (INCLUDING 2 RISERS INTO HOUSE)
W/W	WINDOW WELL REQUIRED FOR BASEMENT WINDOWS IN REAR
412	PROPOSED CONTOUR
	EXISTING GROUND CONTOUR
	DRAINAGE FLOW ARROW
	PROPERTY LINE
	RIGHT-OF-WAY
	EXISTING CURB & GUTTER
40	HOUSE NUMBERS

LEGEND

SYMBOL	DESCRIPTION
8" WATER	EXISTING WATER MAINS AND FIRE HYDRANTS
15" STORM	EXISTING STORM DRAINS
8" SEWER	EXISTING SEWER LINES
	STREET TREES
	PERIMETER SCREENING PER F-01-22 APPROVED BY HOWARD COUNTY ON 3-8-01
SCE 406x5	STABILIZED CONSTRUCTION ENTRANCE
	EXISTING SILT FENCE OR SUPER SILT FENCE
SSF	SILT FENCE OR SUPER SILT FENCE
	EXISTING EARTH DIKE
	EARTH DIKE
	LIMIT OF DISTURBANCE
	STREET LIGHT
	STREET SIGN

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT (1 WEEK)
2. INSPECT & REPAIR EXISTING SEDIMENT CONTROL MEASURES [illegible] F-01-22 AND GP-01-78. EXISTING SEDIMENT BASIN PER GP-01-78 TO REMAIN. (6 DAYS)
3. INSTALL SEDIMENT AND EROSION CONTROL DEVICES PER PLAN. [illegible] SEDIMENT CONTROL INSPECTOR'S APPROVAL PRIOR TO PROCEEDING. (8 DAYS)
4. CLEAR AND GRUB SITE. (4 DAYS)
5. EXCAVATE FOR FOUNDATIONS AND ROUGH GRADE. (10 DAYS)
6. CONSTRUCT DWELLING. (60 DAYS PER DWELLING)
7. FINE GRADE SITE, INSTALL DRIVEWAYS. (2 DAYS PER DRIVEWAY AND LOT)
8. INSTALL PERMANENT SEEDING AND LANDSCAPING. (10 DAYS)
9. CONVERT EXISTING SEDIMENT BASIN TO SWM FACILITY PER [illegible] (10 DAYS)
10. REMOVE SEDIMENT CONTROL DEVICES AFTER PERMISSION IS GRANTED BY SEDIMENT CONTROL INSPECTOR AND UPLAND AREAS HAVE BEEN STABILIZED. (2 DAYS)

NOTE: BAY WINDOWS, WINDOW WELLS, ORIELS, VESTIBULES, BALCONIES, CHIMNEYS, HEATING / AIR CONDITIONING UNITS AND EXTERIOR STAIRWAYS OR RAMPS [illegible] THAN SIXTEEN FEET IN WIDTH MAY PROJECT NOT MORE THAN FOUR FEET INTO ANY REQUIRED SETBACK AREA OR REQUIRED DISTANCE BETWEEN BUILDINGS. OPEN OR ENCLOSED PORCHES OR DECKS MAY PROJECT NOT MORE THAN TEN FEET INTO REQUIRED FRONT OR REAR [illegible] SETBACK AREA. THIS, IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS.

MRA

MORRIS & RITCHIE ASSOC., INC.
ENGINEERS, PLANNERS, SURVEYORS, AND LANDSCAPE ARCHITECTS
9090 JUNCTION DRIVE, SUITE 9
Annapolis Junction, Maryland
(410) 792-9792 – (301) 776-1690
Fax: (410) 792-7395

DATE	REVISION
1-25-02	ADD DOVER III
10-18-01	ADD ARRAWAY TO BRITTINGHAM.
8-03-01	ADD CUSTOM FRANKLIN (MRA)
6-29-01	FLIP FRANKLIN
6-29-01	ADD NEWBERRY II (MRA)

STATE OF MARYLAND — PIERO VAN NELLITS No. 21875 — REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Piero V. Mellits, P.E. — 5-18-01
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) — DATE
PIERO V. MELLITS

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

05/18/01
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) — DATE
Douglas F. Eshelman

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/4/01

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

HOWARD SCD — DATE 6/4/01

OWNER / DEVELOPER

THE RYLAND GROUP, INC.
7250 PARKWAY DRIVE – SUITE 520
HANOVER, MD 21076
(410) 712-7012

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/01

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/11/01

DIRECTOR — DATE 6/15/01

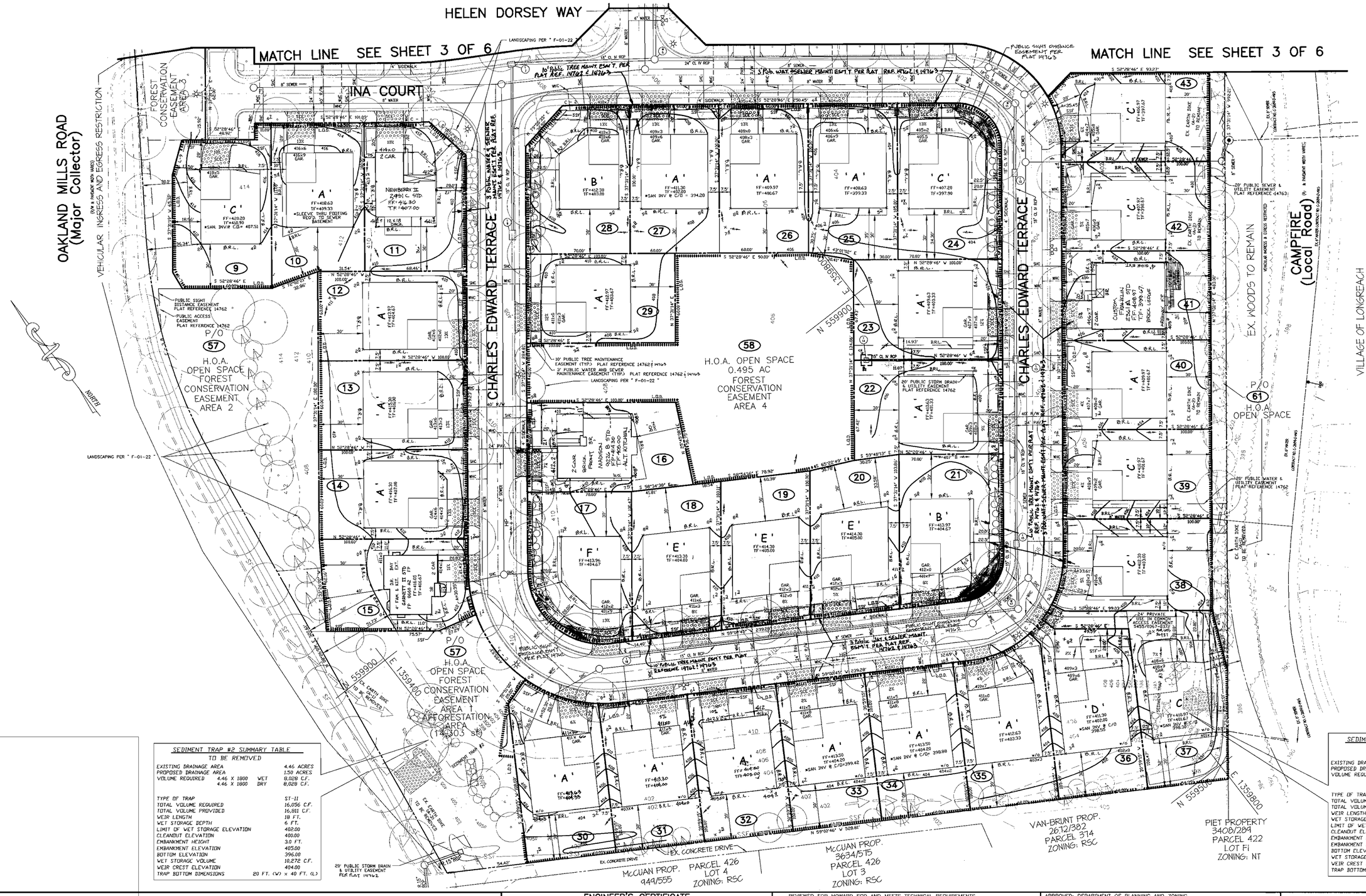
SUBDIVISION			SECTION / AREA	LOT NO.
ECKERTS HOLLOW			1 / 1	1-56
PLAT NO.	BLOCK NO.	ZONE	TAX/PARCEL	ELEC. DIST	CENSUS TR.
14761-14765	10 & 11	RSC	36 / 23	6TH	6066.02
WATER CODE			SEWER CODE	
E04			----------	

TITLE SHEET

ECKERTS HOLLOW
SECTION 1, PHASE 1

LOTS 1 THRU 62 & NON-BUILDABLE LOTS A & B
TAX MAP 36, PARCEL 23, BLOCKS 10 & 11
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1"=[illegible] DATE: 1/20/01
SHEET 1 OF 6

SDP-01-16



SEDIMENT TRAP #2 SUMMARY TABLE			
TO BE REMOVED			
EXISTING DRAINAGE AREA			4.46 ACRES
PROPOSED DRAINAGE AREA			1.50 ACRES
VOLUME REQUIRED	4.46 X 1800	WET	8,028 C.F.
	4.46 X 1800	DRY	8,028 C.F.
TYPE OF TRAP			ST-II
TOTAL VOLUME REQUIRED			16,056 C.F.
TOTAL VOLUME PROVIDED			16,911 C.F.
WEIR LENGTH			18 FT.
WET STORAGE DEPTH			6 FT.
LIMIT OF WET STORAGE ELEVATION			402.00
CLEANOUT ELEVATION			400.00
EMBANKMENT HEIGHT			3.0 FT.
EMBANKMENT ELEVATION			405.00
BOTTOM ELEVATION			396.00
WET STORAGE VOLUME			10,872 C.F.
WEIR CREST ELEVATION			404.00
TRAP BOTTOM DIMENSIONS			20 FT. (W) x 40 FT. (L)

SEDIMENT TRAP #3 SUMMARY TABLE			
TO BE REMOVED			
EXISTING DRAINAGE AREA			1.49 ACRES
PROPOSED DRAINAGE AREA			0.86 ACRES
VOLUME REQUIRED	1.49 X 1800	WET	2,682 C.F.
	1.49 X 1800	DRY	2,682 C.F.
TYPE OF TRAP			ST-II
TOTAL VOLUME REQUIRED			5,364 C.F.
TOTAL VOLUME PROVIDED			5,606 C.F.
WEIR LENGTH			12 FT.
WET STORAGE DEPTH			4.0 FT.
LIMIT OF WET STORAGE ELEVATION			397.00
CLEANOUT ELEVATION			395.50
EMBANKMENT HEIGHT			3.0 FT.
EMBANKMENT ELEVATION			400.00
BOTTOM ELEVATION			393.00
WET STORAGE VOLUME			2,941 C.F.
WEIR CREST ELEVATION			398.50
TRAP BOTTOM DIMENSIONS			13 FT. (W) x 26 FT. (L)

MRA

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9090 JUNCTION DRIVE, SUITE 9
Annapolis Junction, Maryland
(410) 792-9792 – (301) 776-1690
Fax: (410) 792-7395

2-13-02	RAISE 1158' (MRA)
8-20-01	ADD CUSTOM FRANKLIN LOT 41 (MRA)
7-11-01	ADD MADISON LOT 16 (MRA)
6-29-01	SITE NEWBERRY II ON LOT 11 (MRA)
DATE	REVISION

STATE OF MARYLAND
PIERO VAN MELLITS
No. 21875
REGISTERED PROFESSIONAL ENGINEER

ENGINEER'S CERTIFICATE

"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Piero V. Mellits, P.E. — 5-18-01
SIGNATURE OF ENGINEER (PRINT NAME BELOW SIGNATURE) — DATE
PIERO V. MELLITS

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

05/18/01
SIGNATURE OF DEVELOPER (PRINT NAME BELOW SIGNATURE) — DATE
Douglas F. Eshelman

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS.

U.S.D.A. - NATURAL RESOURCES CONSERVATION SERVICE — DATE 6/4/01

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

HOWARD SCD — DATE 6/4/01

OWNER / DEVELOPER

THE RYLAND GROUP, INC.
7250 PARKWAY DRIVE – SUITE 520
HANOVER, MD 21076
(410) 712-7012

APPROVED: DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT — DATE 6/12/01

CHIEF, DEVELOPMENT ENGINEERING DIVISION — DATE 6/11/01

DATE 6/15/01

SUBDIVISION			SECTION / AREA	LOT NO. 9 – 43	
ECKERS HOLLOW			1 / 1	58 & p/o 57 & 59	
PLAT NO.	BLOCK NO.	ZONE	TAX/PARCEL	ELEC. DIST.	CENSUS TR.
14761-14765	10 & 11	RSC	36 / 23	6TH	6066.02
WATER CODE			SEWER CODE		
E04					

SITE DEVELOPMENT PLAN

LOTS 9-43, P/O OPEN SPACE LOT 57, OS LOT 58

ECKERS HOLLOW

SECTION 1, PHASE 1

LOTS 1 THRU 62 & NON-BUILDABLE LOTS A & B
TAX MAP 36
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1"=30' DATE: 1/20/01
SHEET 2 OF 6

SDP-01-16