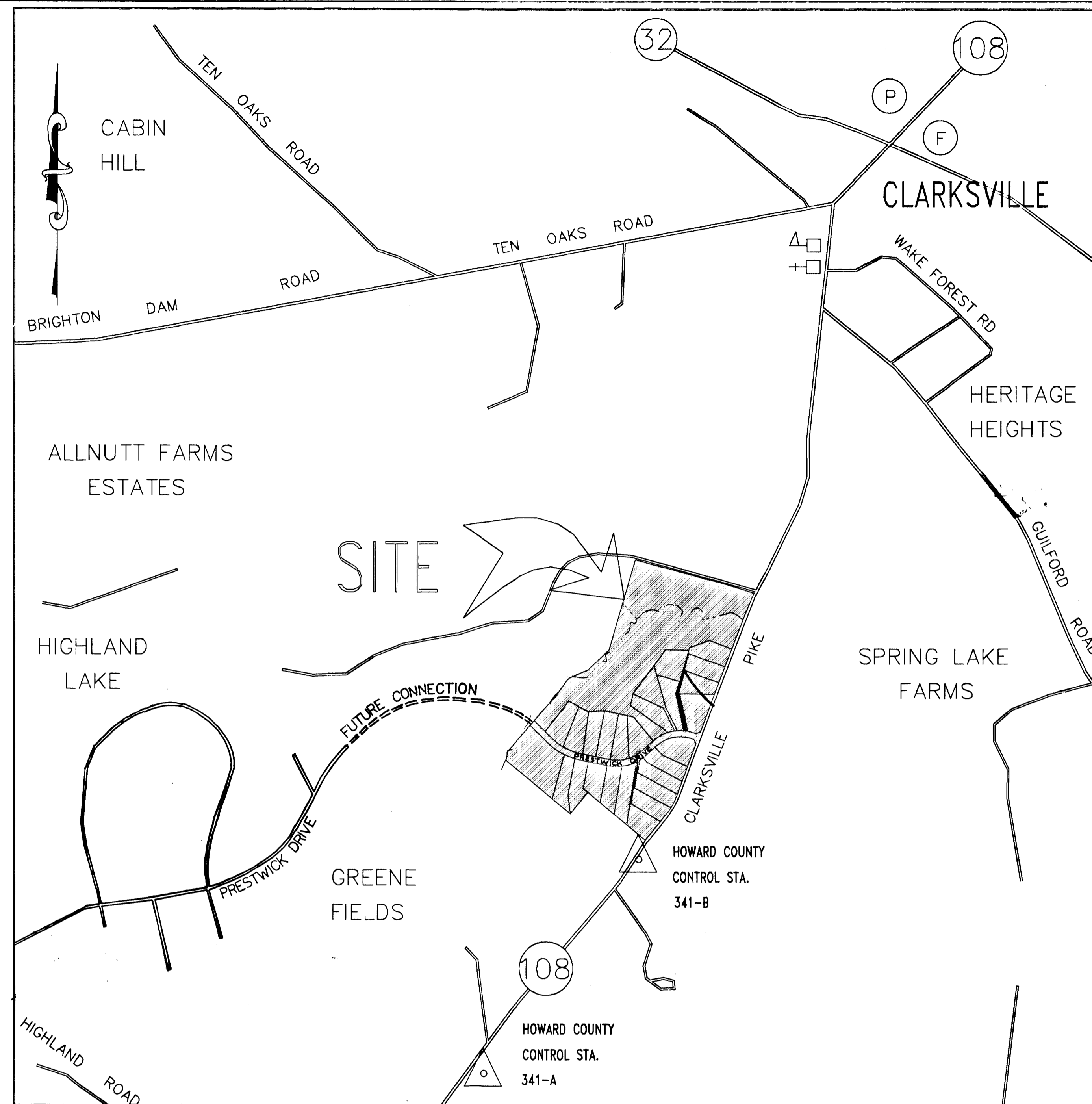


GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARD AND SPECIFICATION OF THE HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS CONSTRUCTION INSPECTION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
- THE CONTRACTOR SHALL NOTIFY MISS UTILITY AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORKS.
- PROJECT BACKGROUND:
 - TAX MAP 34, PARCEL 84 & 134, LIBER 2117, FOLIO 005 & LIBER 1721, FOLIO 503
 - TOTAL AREA OF SUBDIVISION = 51.975 ACRES
 - NUMBER OF PROPOSED LOTS = 25 BUILDABLE, 2 OPEN SPACE, & 1 PRESERVATION PARCEL
 - SKETCH PLAN WAS APPROVED ON JUNE 21, 1994 UNDER S-94-38
 - PRELIMINARY PLAN WAS APPROVED ON FEB. 27, 1995 UNDER P-95-09
 - THIS PLAN IS SUBJECT TO WP 95-100, APPROVED ON JUNE 9, 1995, WHICH ALLOWED GRADING WITHIN THE WETLAND & STREAM BUFFER.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREETS AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO PLACEMENT OF ANY ASPHALT.
- BOUNDARY AND TOPOGRAPHIC SURVEY PERFORMED BY JOHN MELLEMA, SR. INC. ON APRIL, 1994
- HORIZONTAL AND VERTICAL DATUM ARE BASED ON MARYLAND STATE COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY CONTROL STA. (NAD 83) 341A AND 341B.
- LIGHT POLES AND FIXTURES SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III, ROAD AND BRIDGES.
- RETENTION POND IS PROPOSED FOR WATER QUANTITY & WATER QUALITY.
- WETLANDS DELINEATED BY WILDMAN ENVIRONMENTAL SERVICES ON MARCH 12, 1994.
- GEOTECHNICAL REPORT WAS PREPARED BY INVESTIGATIVE TESTING & ENGINEERING ON MARCH, 1996
- EXISTING UTILITIES ARE BASED ON HOWARD COUNTY AS BUILT PLANS AND THE TOPOGRAPHIC SURVEY BY JOHN MELLEMA, INC.
- 95% COMPACTION IN FILL SHALL BE IN ACCORDANCE WITH AASHTO T-180 REQUIREMENT.

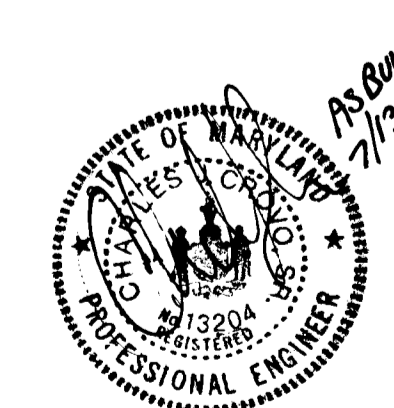
INDEX	
1	COVER SHEET
2-3	PLAN & PROFILE - PRESTWICK DRIVE
4	PLAN AND PROFILE - MD 108
5-6	CROSS-SECTIONS - MD 108
7	DRAINAGE AREA MAP
8	STORMWATER MANAGEMENT POND DETAILS
9	DRAINAGE PROFILES
10	GRADING PLAN / LANDSCAPE PLAN
11-12	SEDIMENT CONTROL PLAN & SOILS MAP
13	SEDIMENT CONTROL NOTES AND DETAILS
	GENERAL NOTES FOR POND



LOCATION PLAN

SCALE 1" = 600'

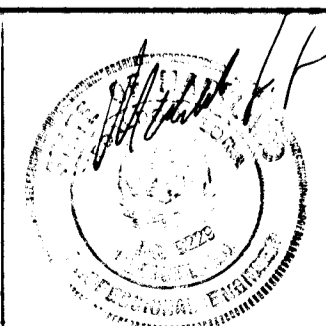
WINDY KNOLLS
 LOTS 1 thru 27 & PARCEL A
 ROAD CONSTRUCTION DRAWING
 HOWARD COUNTY, MARYLAND
 DEPARTMENT OF PUBLIC WORKS



APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
 OF PLANNING AND DESIGN
 Gina Summery, LAND DEVELOPMENT AND RESEARCH, 9/21/95
 David Yaman, DEVELOPMENT ENGINEERING DR., 9/13/95
 APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
 Joseph D. Donk's, HIGHWAYS, 7-1-95

DES :	MLL	BY	NO.	REVISION	DATE
DRN :	JER				
CHK :	MLL				
DATE :	12-12-94				

Victoria Engineering Inc.
 CONSULTING ENGINEERS-LAND PLANNERS-SURVEYORS
 8307 MAIN ST., ELLICOTT CITY, MD.
 410-465-0400



DEVELOPER :
 LAND DESIGN & DEVELOPMENT INC.
 10605 HICKORY RIDGE ROAD
 COLUMBIA, MD. 21045

OWNERS:
 PAUL DUNCAN
 AMERICAN PROPERTIES INC.
 10605 HICKORY RIDGE ROAD
 COLUMBIA, MD. 21044

JOEL M. ABRAMSON, ESO.
 9175 GUILFORD RD.
 SUITE 301
 COLUMBIA, MD. 21046

DAVID TAYMAN DVM
 10788 HICKORY RIDGE RD.
 COLUMBIA, MD. 21044

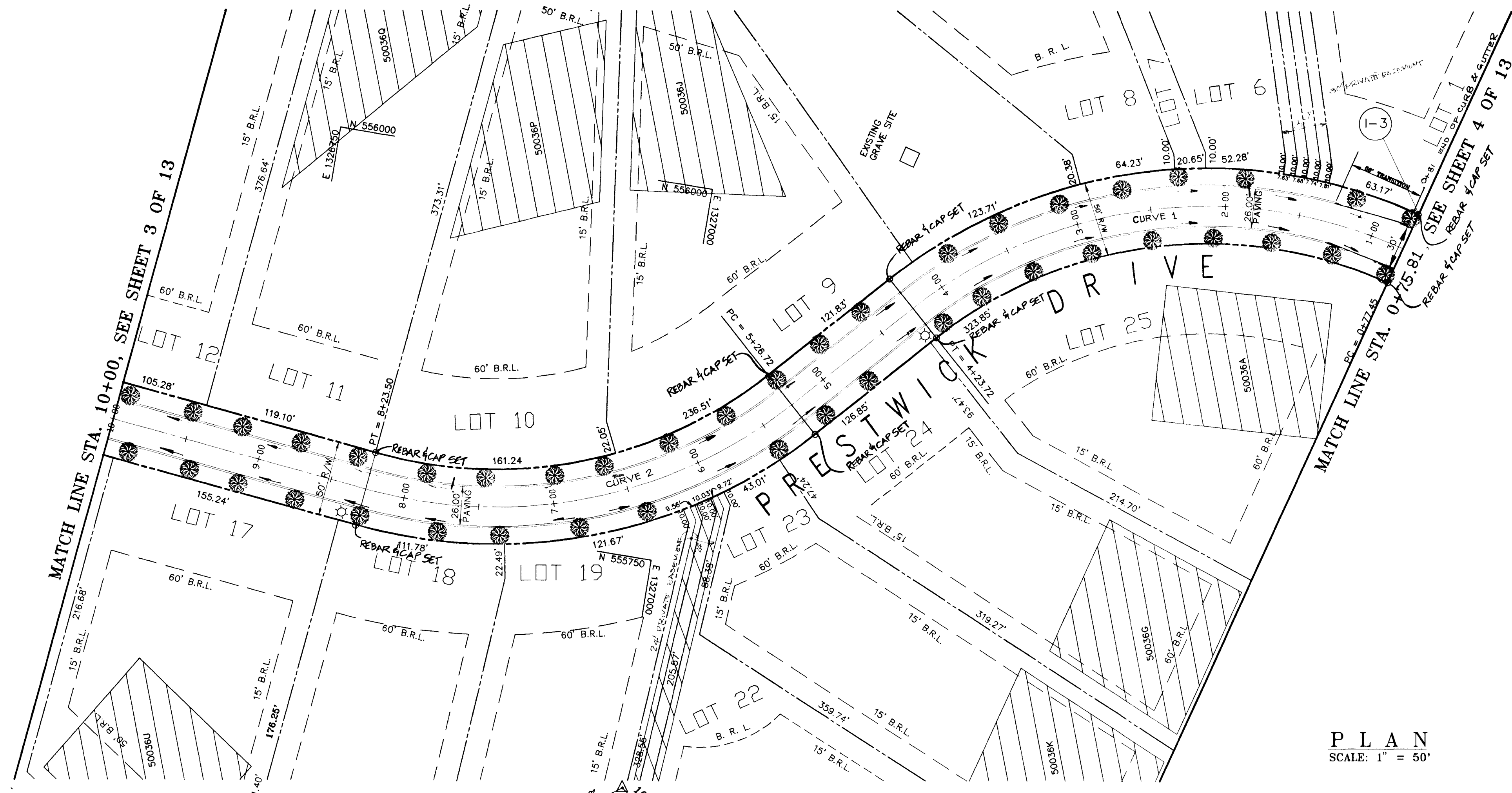
RICHARD B. TALKIN, ESO.
 9175 GUILFORD RD.
 SUITE 301
 COLUMBIA, MD. 21046

COVER SHEET
WINDY KNOLLS
 LOTS 1 THRU 27 & PARCEL A
 TAX MAP 34 PARCEL 84 & 134
 5th ELECTION DISTRICT HOWARD COUNTY

SCALE AS SHOWN
 SHEET 1 OF 13

F-95-148

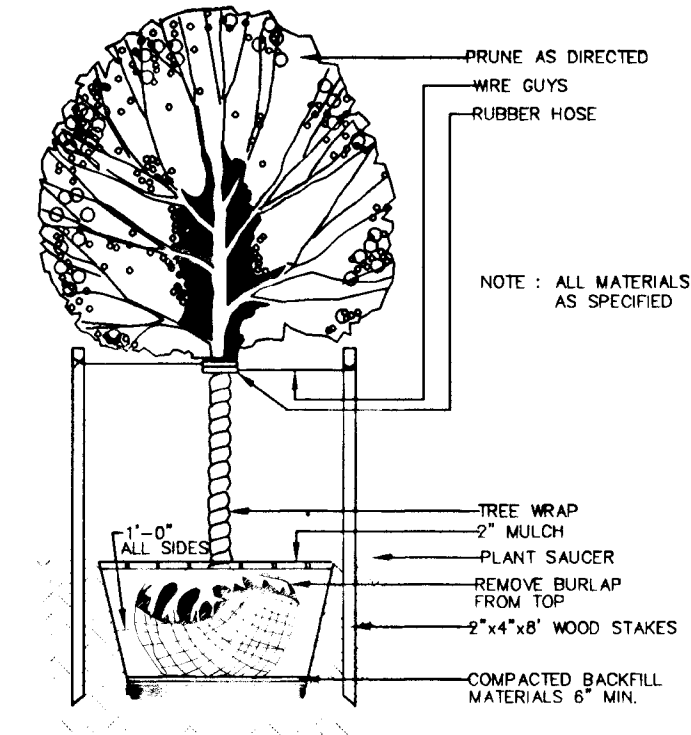
1750
 E. VANCE WINDY KNOLLS COVER Non Map 27 11 13 28



HIGH POINT ELEV = 444.67
 HIGH POINT STA = 6+84.67
 PVI STA = 6+00
 PVI ELEV = 453.14
 S.S.D. = 210.00'
 CORRECTION = 9.52'

PVI STA = 2+010
 PVI ELEV = 414.14
 H.L.S.D. = 210.00'
 CORRECTION = 2.38'

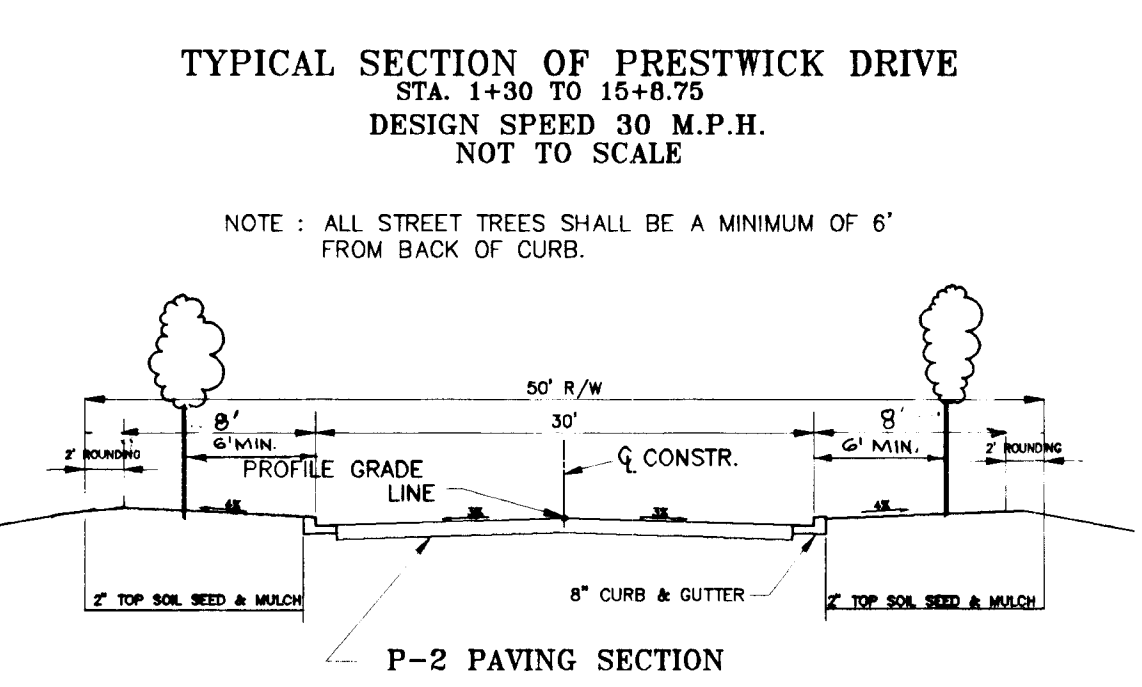
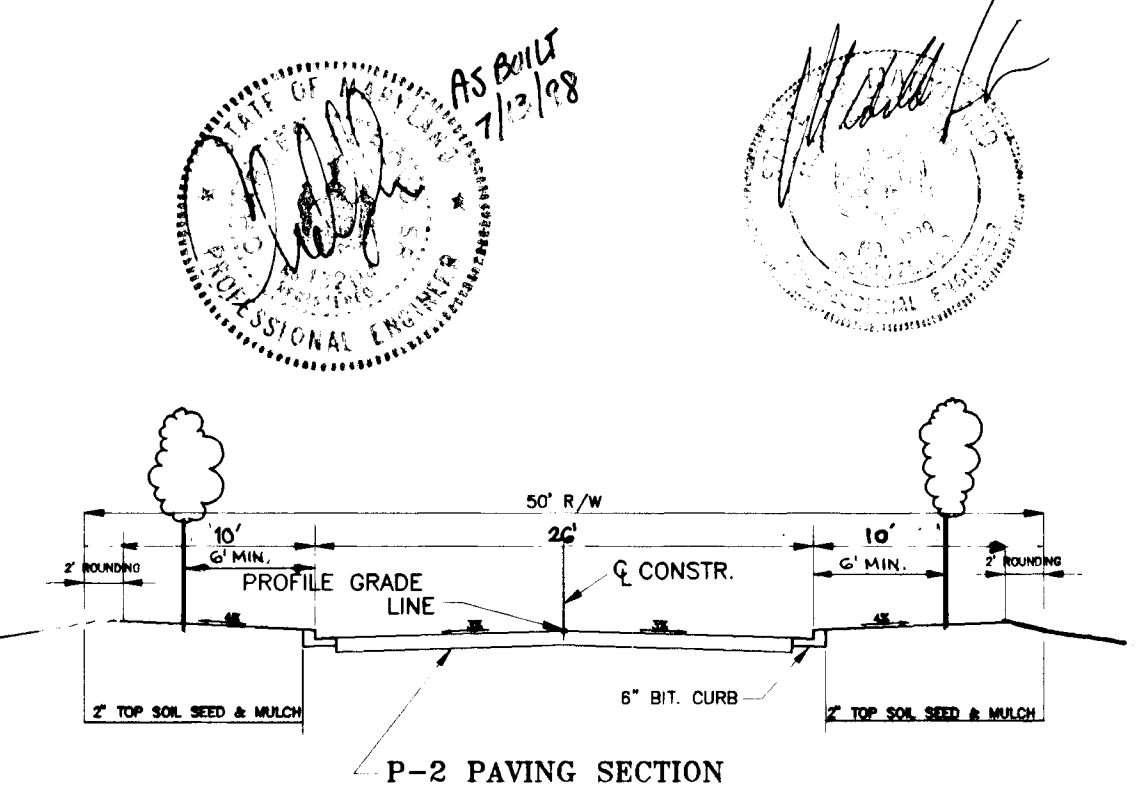
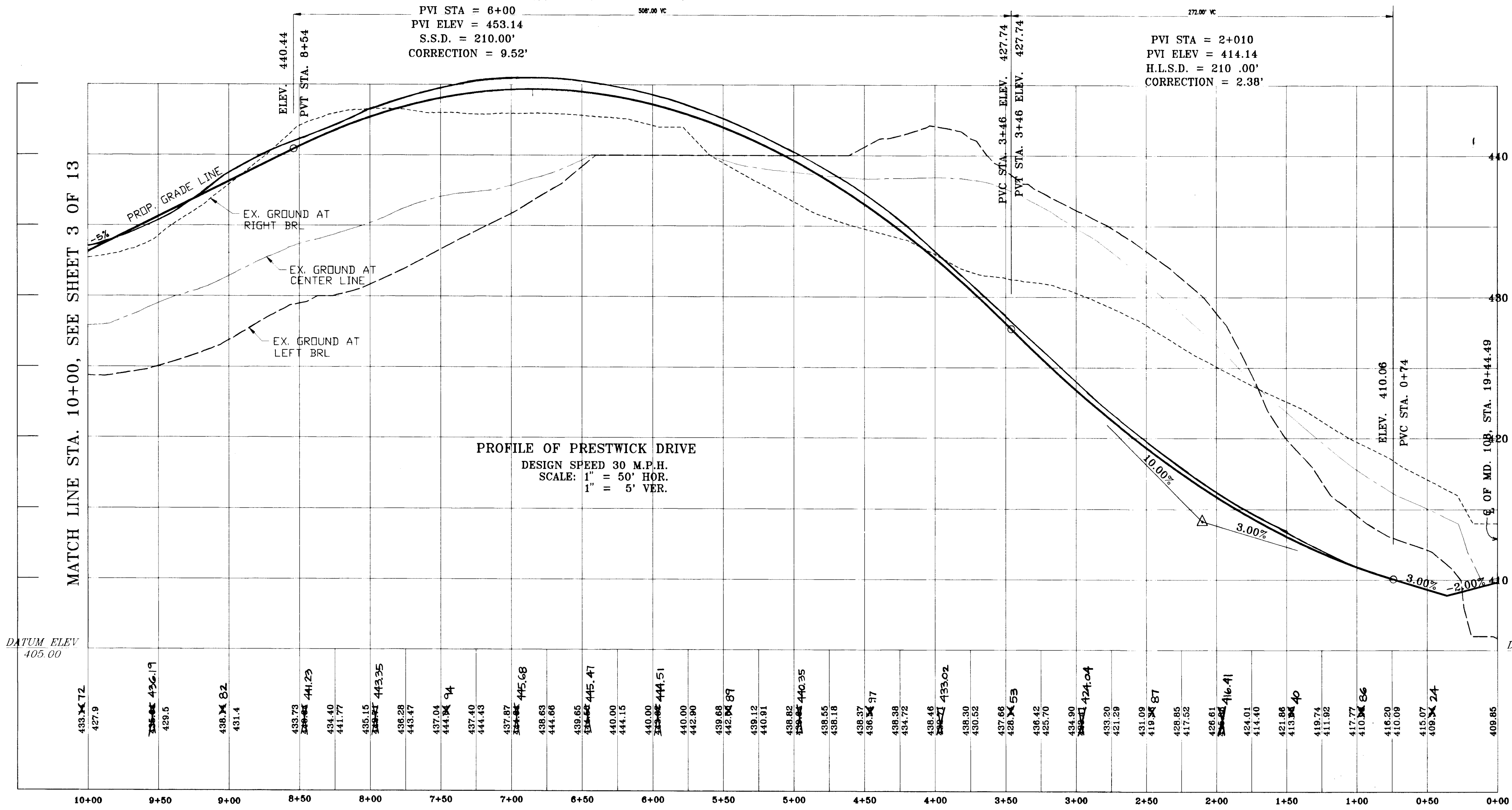
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
1	316.00	347.91	193.96'	330.61'	S 73°45'28" W	62°04'56"
2	316.00	296.78	160.35'	285.99'	S 69°07'20" W	53°48'40"



TYPICAL DECIDUOUS TREE PLANTING DETAIL
 NOT TO SCALE

- LEGEND:
- 8" CURB AND GUTTER (SHA STD.)
 - 6" BITUMINOUS CURB
 - DRAINAGE FLOW
- NOTE: MAINTAIN 20' SPACING BETWEEN STREET LIGHTS AND STREET TREES.

- STREET LIGHT LEGEND:
- 250 WATTS HIGH PRESSURE SODIUM VAPOR PENDANT MOUNTED FIXTURE WITH CUT OFF OPTICS MOUNTED AT A HEIGHT OF 30' USING A 15" ARM ON A BREAKAWAY TRANSFORMER BASE GALVANIZED STEEL POLE. LOCATED 6' BEHIND THE CURB; TO BE INSTALLED BY HOWARD COUNTY.
 - 100 WATTS "TRADITIONARE" HIGH PRESSURE SODIUM VAPOR LAMP POST FIXTURE ON A BLACK FIBERGLASS POLE. LOCATED 3' FROM THE CURB.



STREET TREES SCHEDULE

SYMBOL	LOCATION	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE
(Tree symbol)	PRESTWICK DR.	ACER RUBRUM	OCTOBER GLORY	43	2 1/2 CAL
(Tree symbol)		QUERCUS ROBUR	RED MAPLE		

NOTE: MAINTAIN 20' SPACING BETWEEN STREET LIGHTS AND TREES.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Anna Jannony, 9/21/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 John M. Rancho, 9-2-95
 CHIEF, BUREAU OF HIGHWAYS

NO.	DATE	REVISION	BY

Voria Engineering Inc.
 CONSULTING ENGINEERS
 8307 MAIN ST., HISTORIC ELLICOTT CITY, MD.
 410-465-0400

PLAN AND PROFILE
 PRESTWICK DRIVE
 STA. 0+00 TO 10+25

WINDY KNOLLS
 LOTS 1 THRU 27 & PARCEL "A"

DATE: 6-7-96 SCALE: 1"=50' SHEET 2 OF 13
 DESIGN BY: MLL DRAWN BY: AVG CHECKED BY: MLL

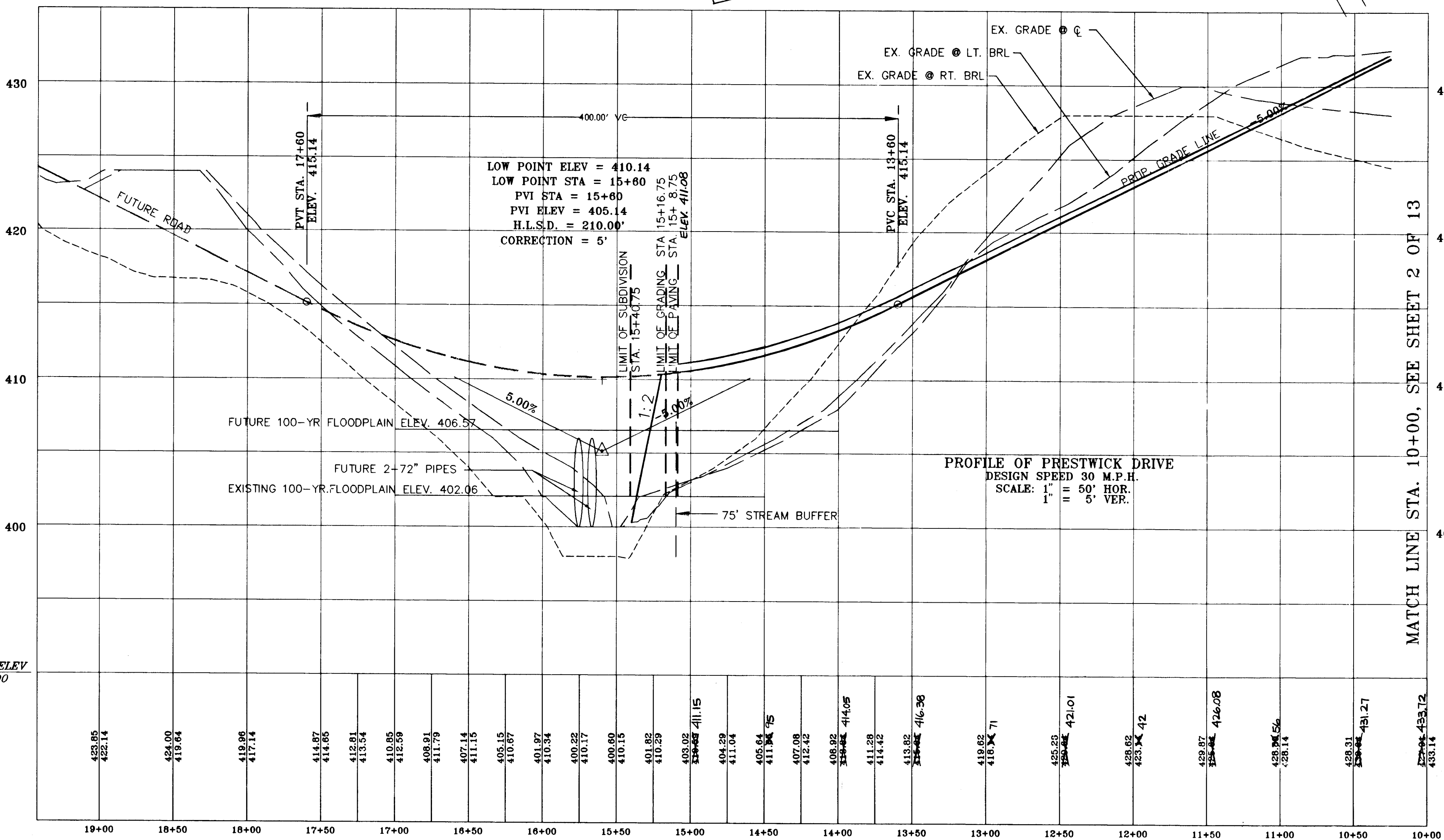
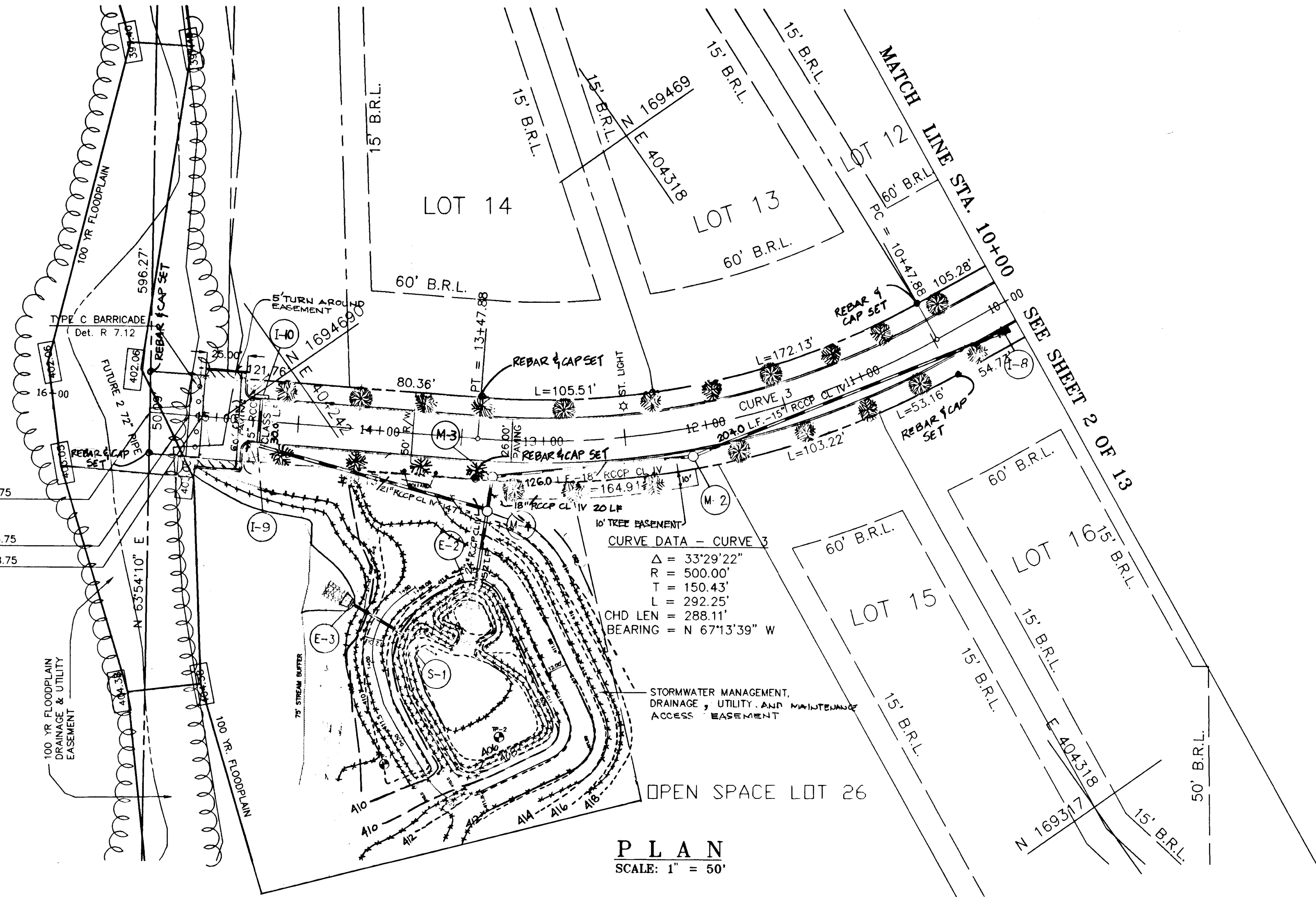
1750
 C. LONG KNOLLS PARCEL 1, REPT. 001, 38-56-1995

F-95-148

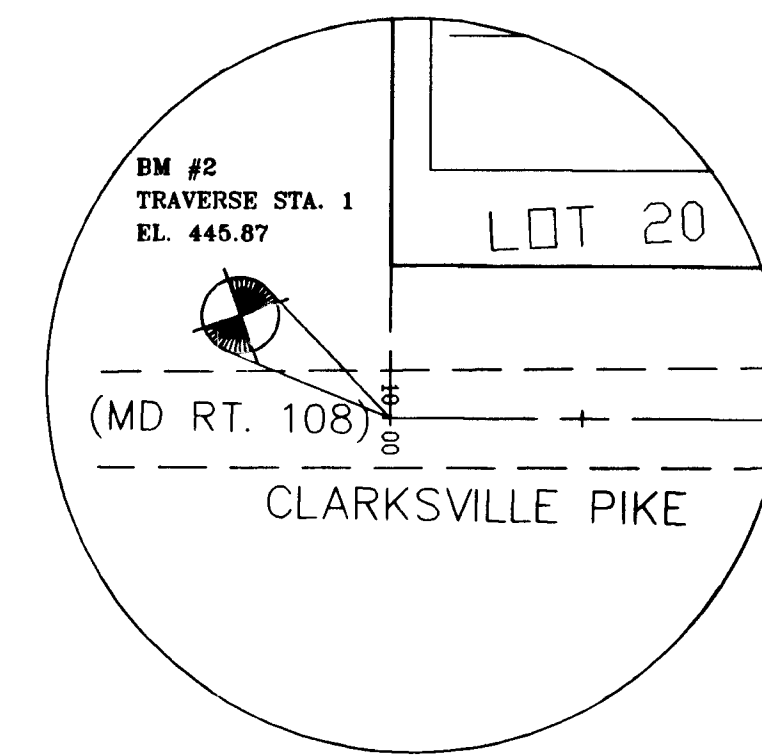
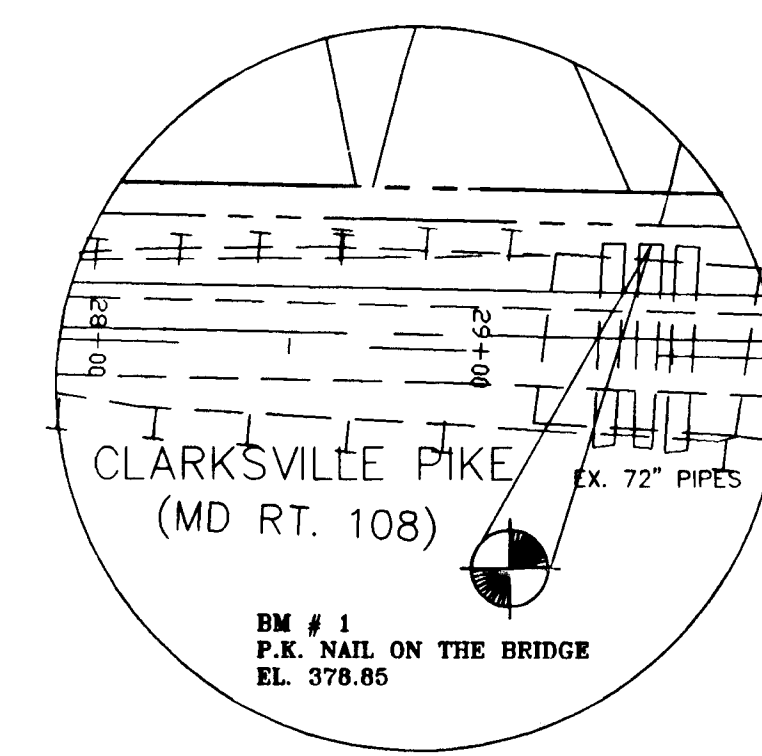
FUTURE EXTENSION

19+40.75 19+00 18+00 17+00

LIMIT OF SUBDIVISION STA. 15+40.75
 LIMIT OF GRADING STA. 15+16.75
 LIMIT OF PAVING STA. 15+8.75



Signature
 9/21/95
 7/2/98



STREET TREES SCHEDULE

SYMBOL	LOCATION	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE
●	PRESTWICK DR.	ACER RUBRUM	OCTOBER GLORY	23	2 1/2" CAL.
●		OCTOBER GLORY	RED MAPLE		

NOTE: MAINTAIN 20' SPACING BETWEEN STREET LIGHTS AND TREES

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Olga Suvinnami 9/21/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH SA DATE

Signature 9/14/95
 CHIEF, DEVELOPMENT ENGINEERING DIVISION: JS DATE

APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 9-11-95
 CHIEF, BUREAU OF HIGHWAYS HS DATE

NO.	DATE	REVISION	BY

Orion Engineering Inc.
 CONSULTING ENGINEERS
 8307 MAIN ST., HISTORIC ELLICOTT CITY, MD.
 410-465-0400

PLAN AND PROFILE
 PRESTWICK DRIVE
 STA. 10+25 TO 19+40.75

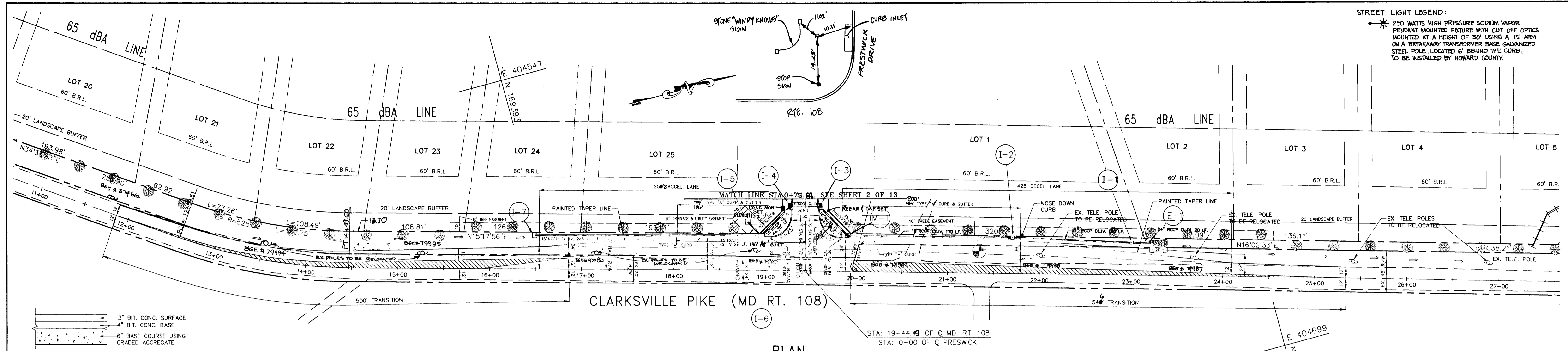
WINDY KNOLLS
 LOTS 1 THRU 27 & PARCEL A

DATE: 06-07-95 SCALE: 1"=100' SHEET 3 OF 13
 DESIGN BY: MLL DRAWN BY: AVG CHECKED BY: MLL

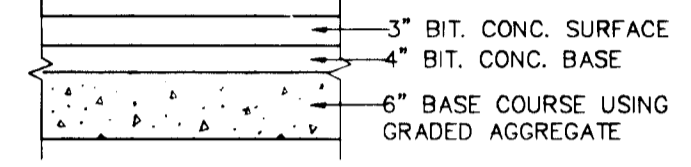
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C:\DING\WORK\WINDY KNOLLS\PLAN SET 7 01:38:02 1995

F-95-148

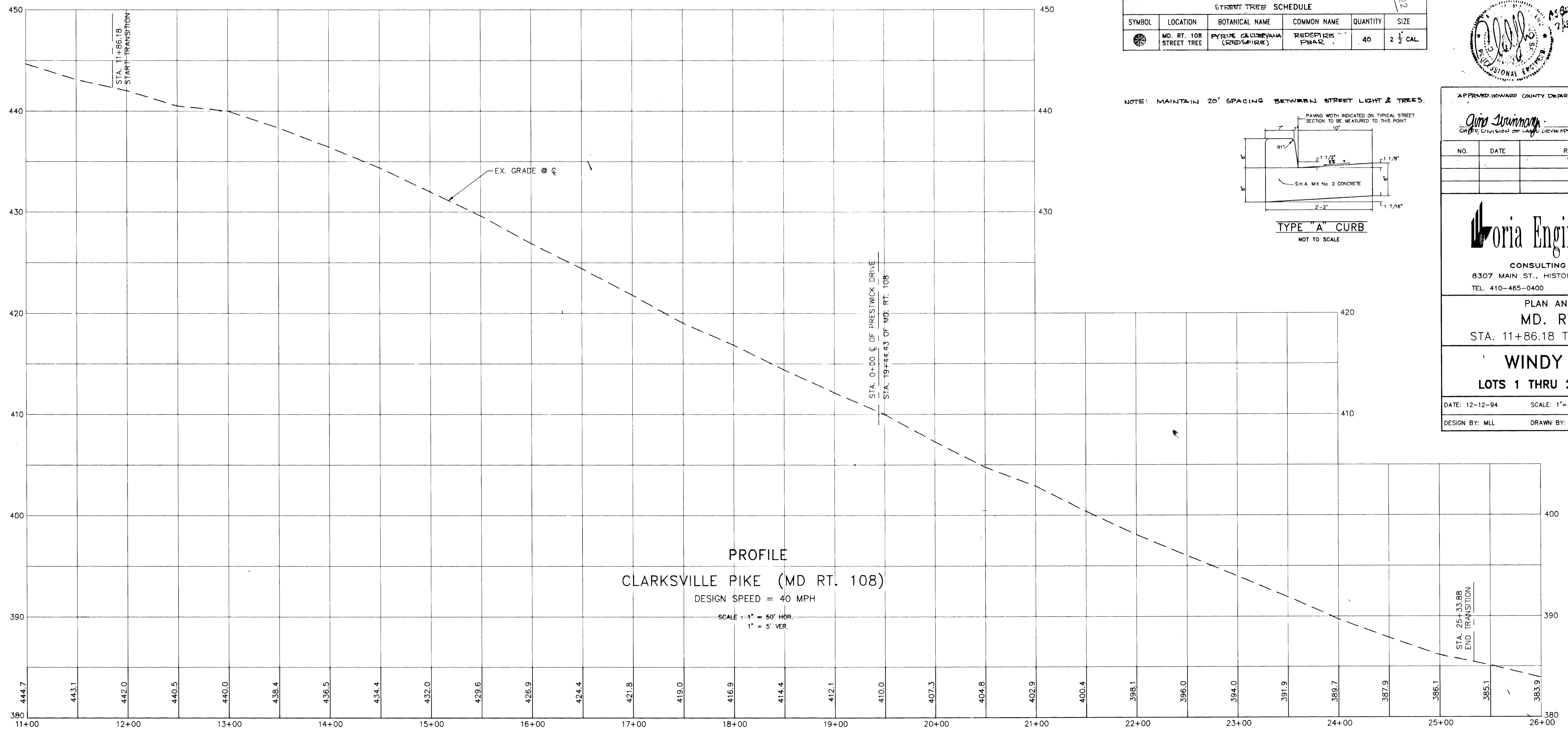


STREET LIGHT LEGEND:
 * 250 WATT HIGH PRESSURE SODIUM VAPOR PENDANT MOUNTED FIXTURE WITH CUT OFF OPTICS MOUNTED AT A HEIGHT OF 30' USING A 15' ARM ON A BREAKAWAY TRANSFORMER BASE GALVANIZED STEEL POLE LOCATED 6' BEHIND THE CURB TO BE INSTALLED BY HOWARD COUNTY.



CLARKSVILLE PIKE (MD RT. 108)

PLAN
SCALE: 1" = 50'

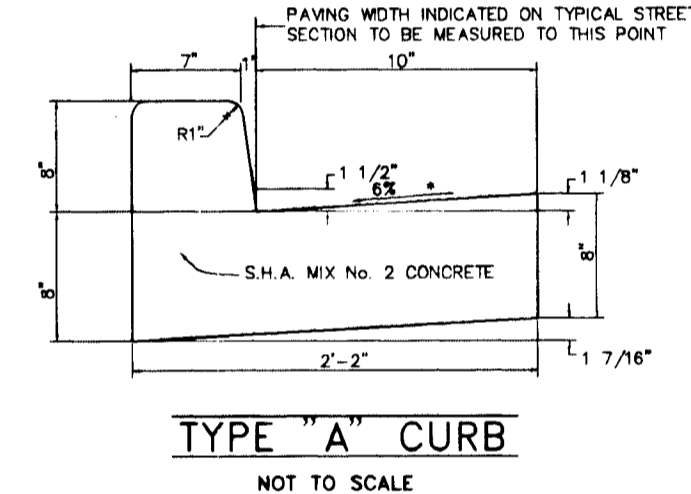


PROFILE
CLARKSVILLE PIKE (MD RT. 108)
DESIGN SPEED = 40 MPH
SCALE: 1" = 50' HOR.
1" = 5' VER.

STREET TREE SCHEDULE

SYMBOL	LOCATION	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE
(Symbol)	MD. RT. 108 STREET TREE	PYRUS CALLERYANA (REDSPIRE)	REDSPIRE PEAR	40	2 1/2 CAL

NOTE: MAINTAIN 20' SPACING BETWEEN STREET LIGHT & TREES.



NOTE: FOR INFORMATION ONLY



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
 Date: 9/24/95
 Chief, Division of Land Development & Research: SA

NO.	DATE	REVISION	BY

Virginia Engineering Inc.
 CONSULTING ENGINEERS
 8307 MAIN ST., HISTORIC ELLICOTT CITY, MD.
 TEL. 410-465-0400 FAX 410-465-0489

PLAN AND PROFILE
 MD. RT. 108
 STA. 11+86.18 TO STA. 25+33.88

WINDY KNOLLS
 LOTS 1 THRU 27 & PARCEL "A"

DATE: 12-12-94 SCALE: 1"=50' SHEET 4 OF 13
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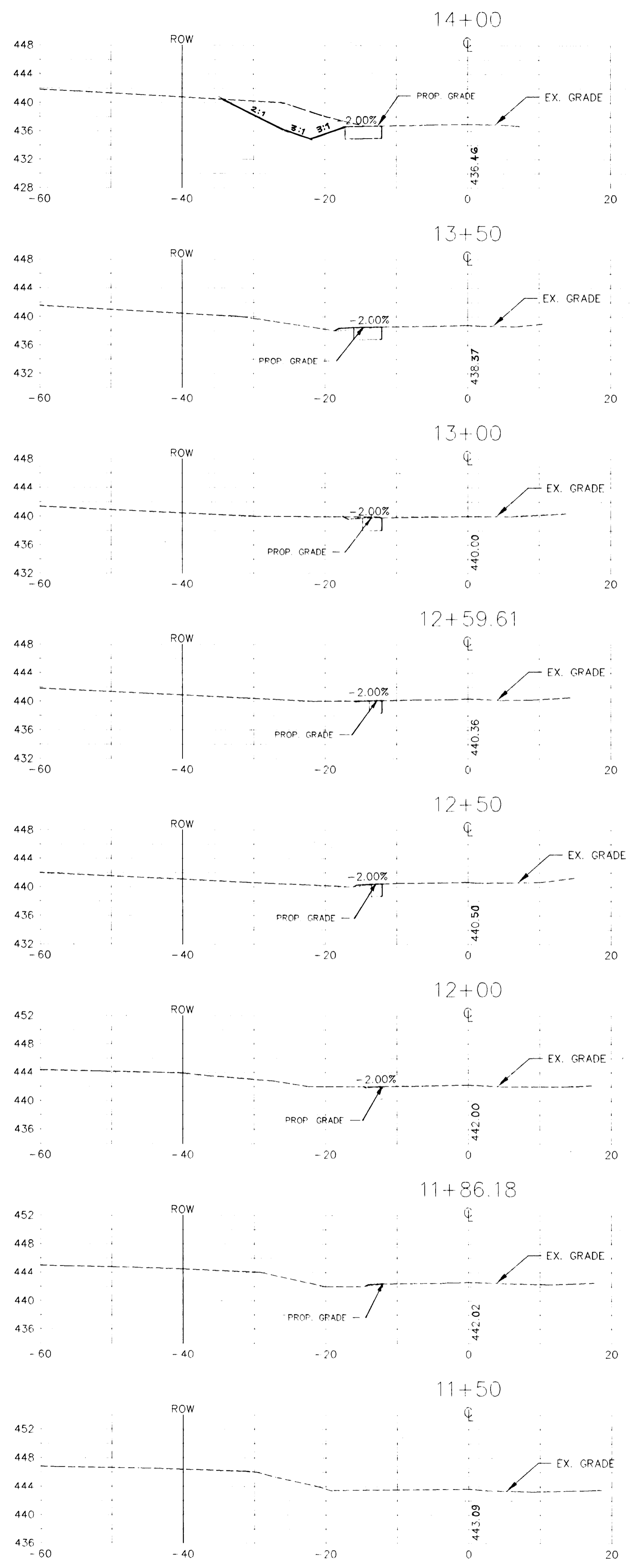
1750

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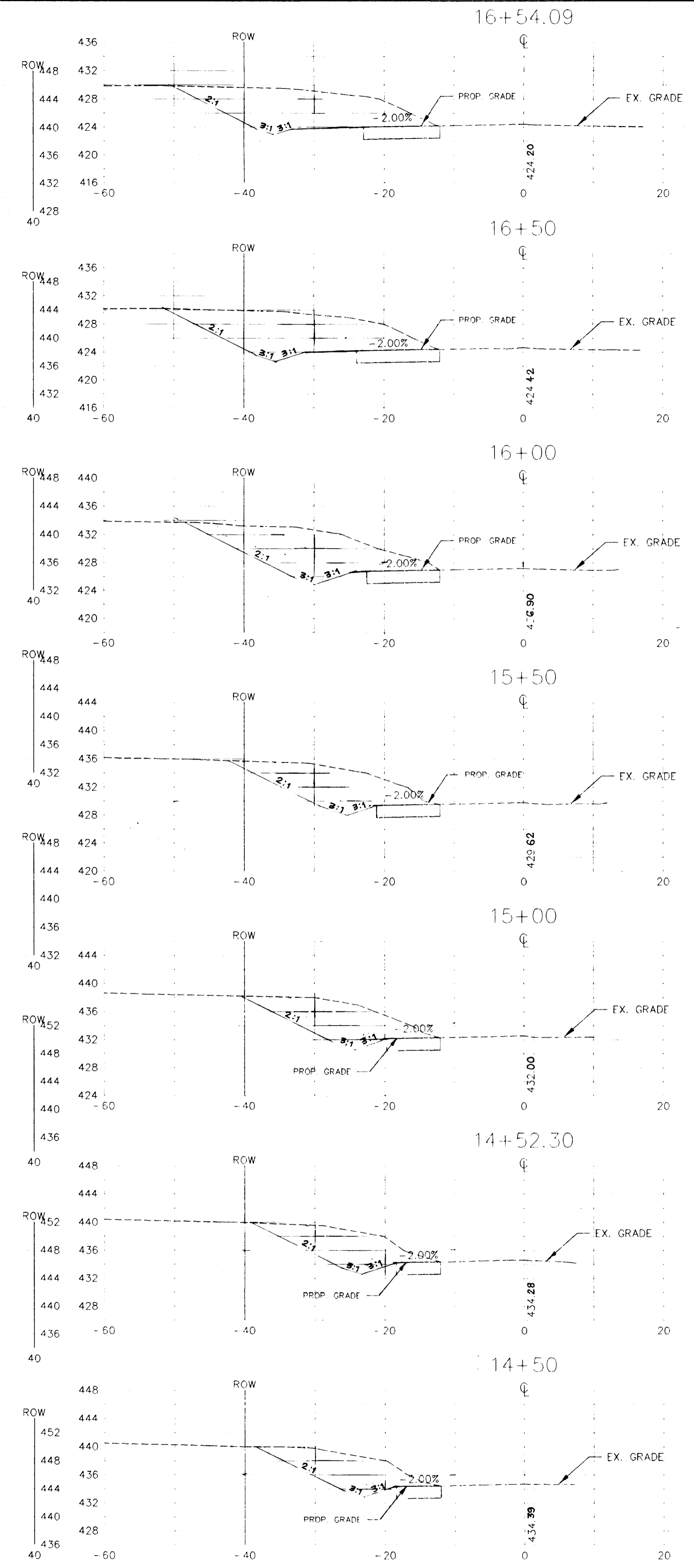


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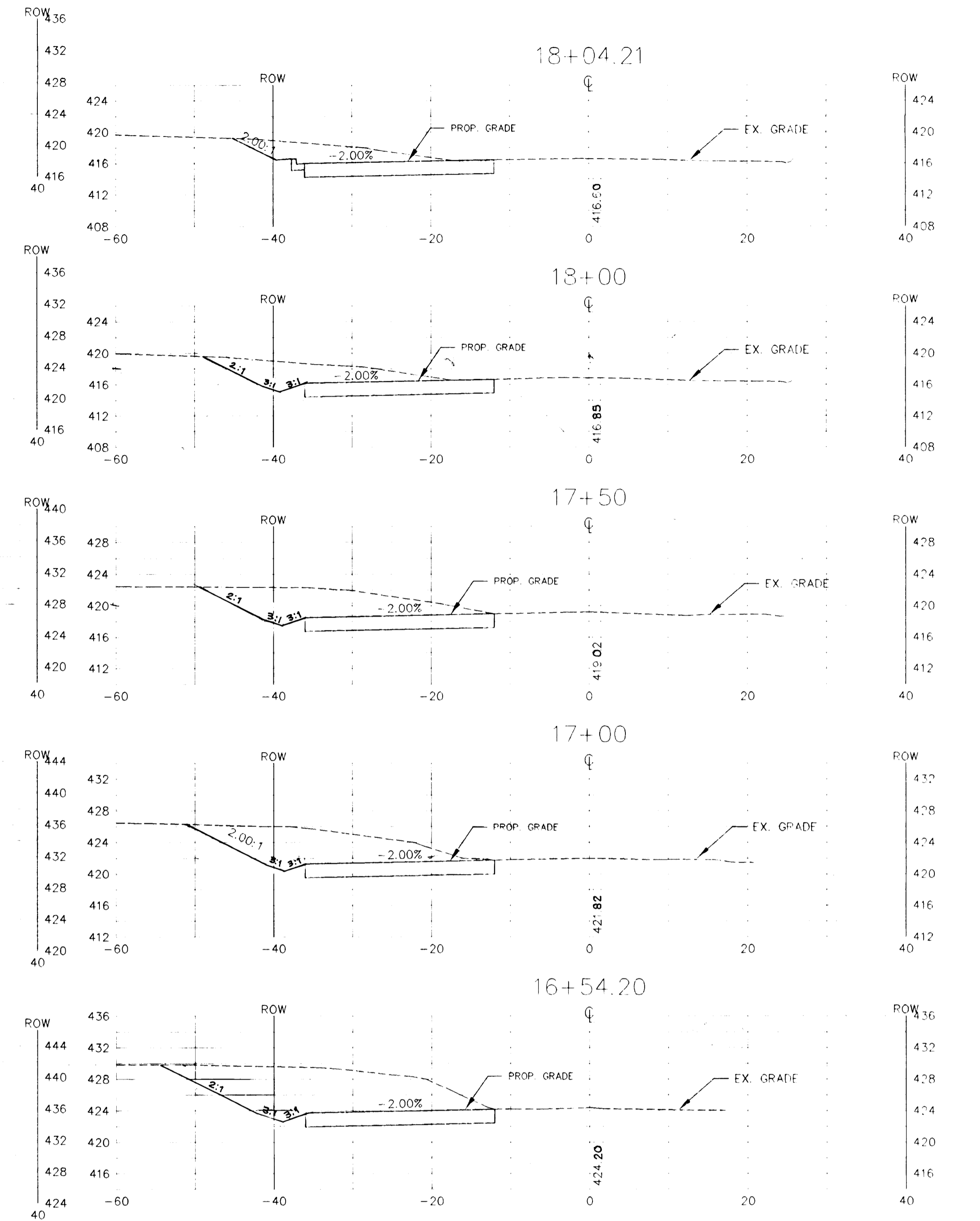
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SCALE: 1" = 10' HOR.
1" = 10' VER.



SCALE: 1" = 10' HOR.
1" = 10' VER.



SCALE: 1" = 10' HOR.
1" = 10' VER.

FOR INFORMATION ONLY

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING

Gina Swirnam
CHIEF, DIVISION OF LAND DEVELOPMENT & RESEARCH 9/21/95

NO.	DATE	REVISION

PROJECT: WINDY KNOLLS
LOTS 1 THRU 27 & PARCEL A

LOCATION: TAX MAP 34, PARCEL 84 & 134
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: MD. RT. 108 ROADWAY IMPROVEMENTS
CROSS SECTIONS

DEVELOPER:

OWNER:

PAUL DUNCAN
AMERICAN PROPERTIES INC.
10805 HICKORY RIDGE RD.
COLUMBIA, MD. 21044

JOEL M. ARRAMSON, ESO
9175 GULFORD RD.
SUITE 301
COLUMBIA, MD. 21046

OSKAR SCHULZ
13474 OPEN SPACE COURT
HIGHLAND, MD. 20777

RICHARD B. TALKIN, ESO
9175 GULFORD RD.
SUITE 301
COLUMBIA, MD. 21046

DAVID TAYMAN, CDM
10788 HICKORY RIDGE RD.
COLUMBIA, MD. 21044

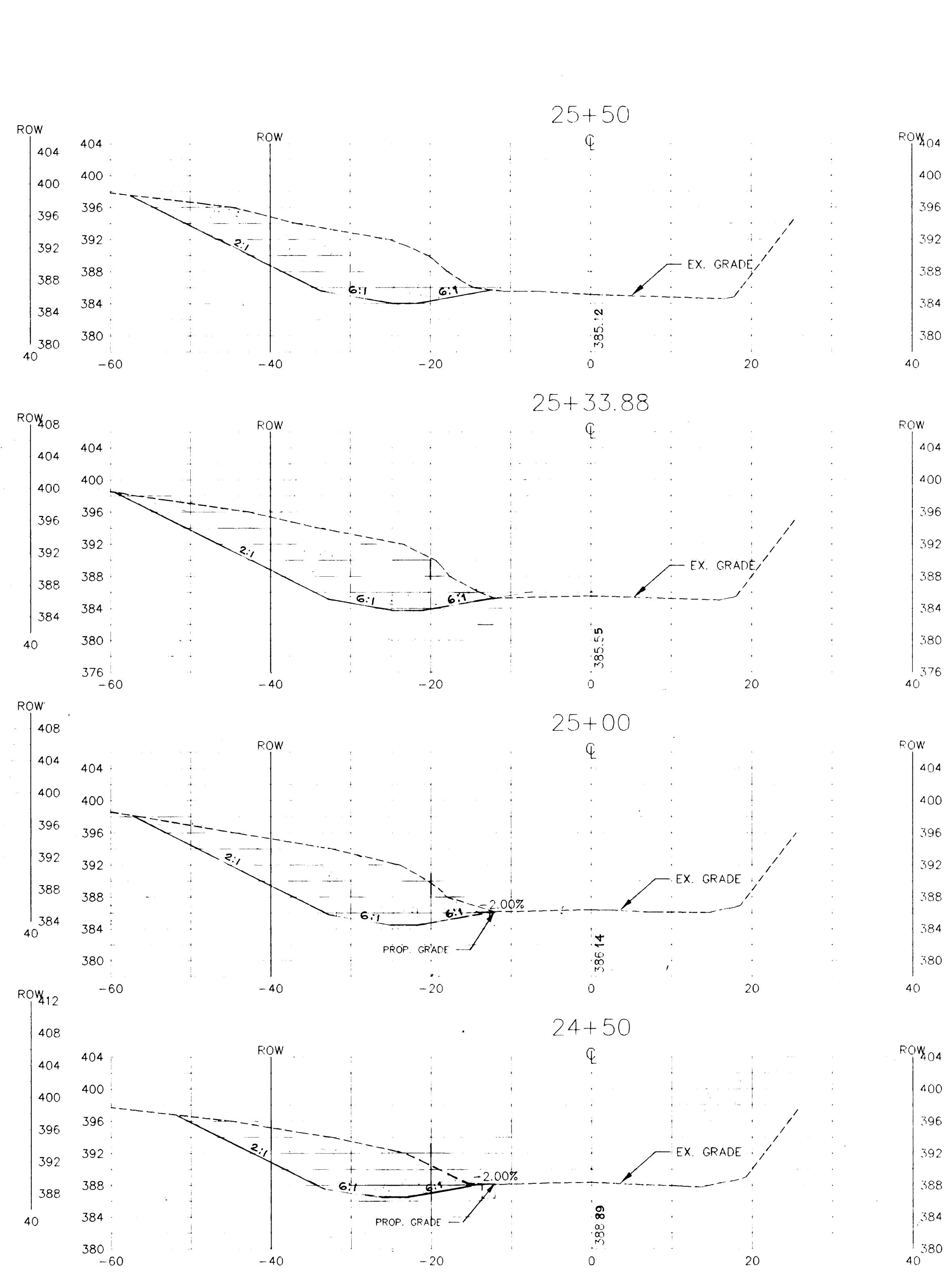
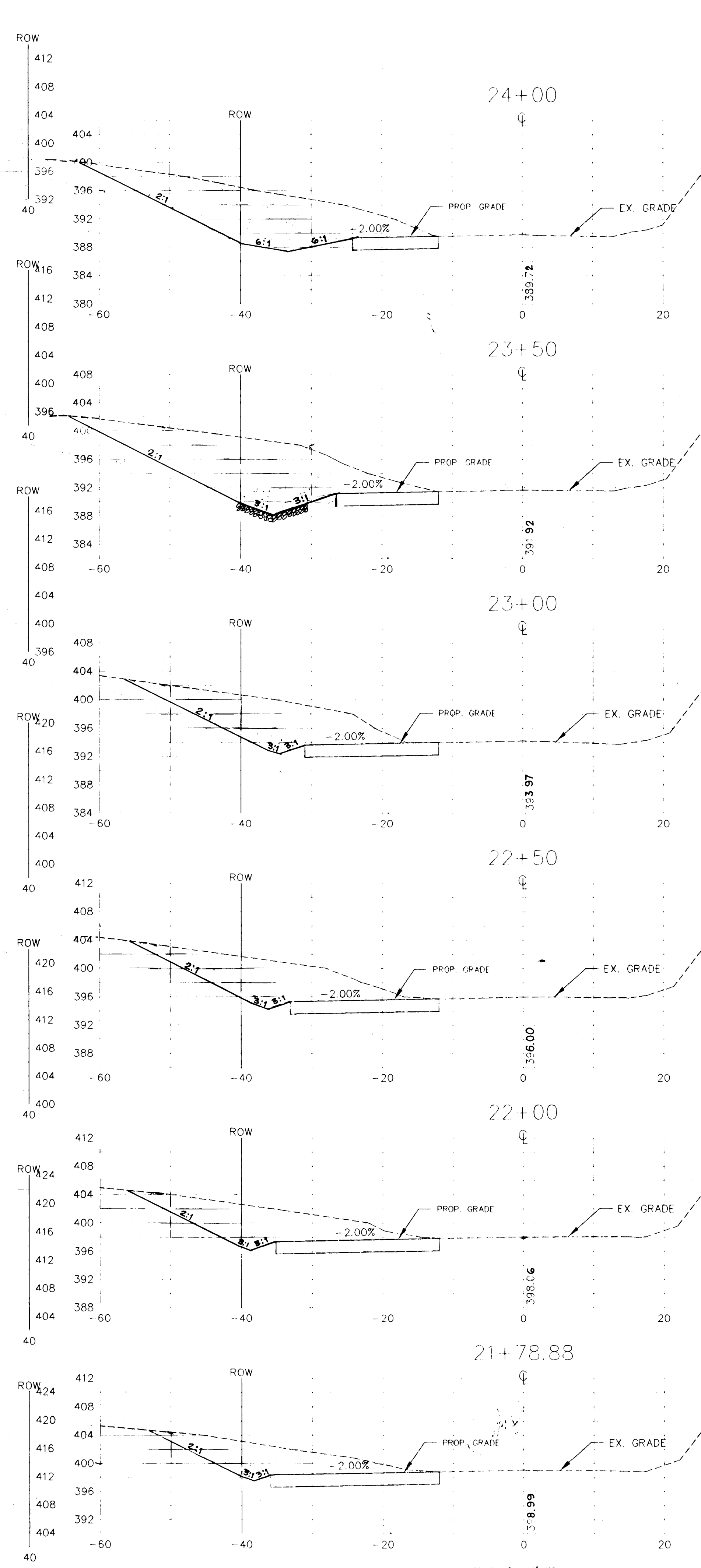
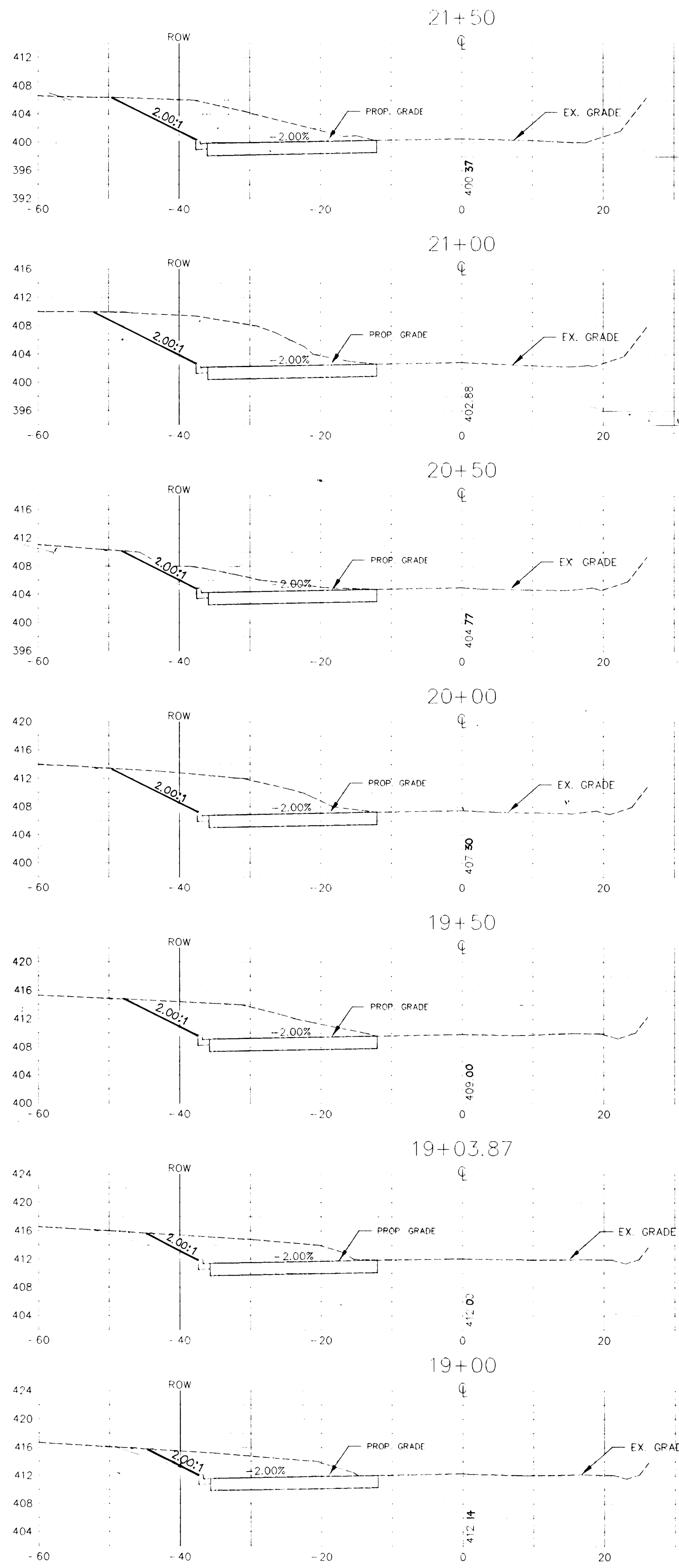
LAND DESIGN & DEVELOPMENT INC.
10805 HICKORY RIDGE RD.
COLUMBIA, MD. 21044

Orion Engineering Inc
CONSULTING ENGINEERS
8307 WINN STREET

TEL: 410-465-0400

DESIGN: MLL	CHECKED: MLL	DATE: 12-12-94	PROJ. NO.:
DRAWN: AVG	APPROVED: MLL	SCALE: AS SHOWN	SHEET 5 OF 15





SCALE: 1" = 10' HOR
1" = 0' VER.

SCALE: 1" = 10' HOR
1" = 0' VER.



OWNER :
 PAUL DUNCAN
 AMERICAN PROPERTIES INC.
 10895 HICKORY RIDGE RD.
 COLUMBIA, MD. 21044
 OSKAR SCHULZ
 13474 OPEN SPACE COURT
 HIGHLAND, MD. 20777
 DAVID TAYMAN CIVIL
 10788 HICKORY RIDGE RD.
 COLUMBIA, MD. 21044

JOEL M. ABRAMSON, ESO
 9175 GUILFORD RD.
 SUITE 301
 COLUMBIA, MD. 21046
 RICHARD B. TALKIN, ESO
 9175 GUILFORD RD.
 SUITE 301
 COLUMBIA, MD. 21046

SCALE: 1" = 10' HOR
1" = 0' VER. FOR INFORMATION ONLY

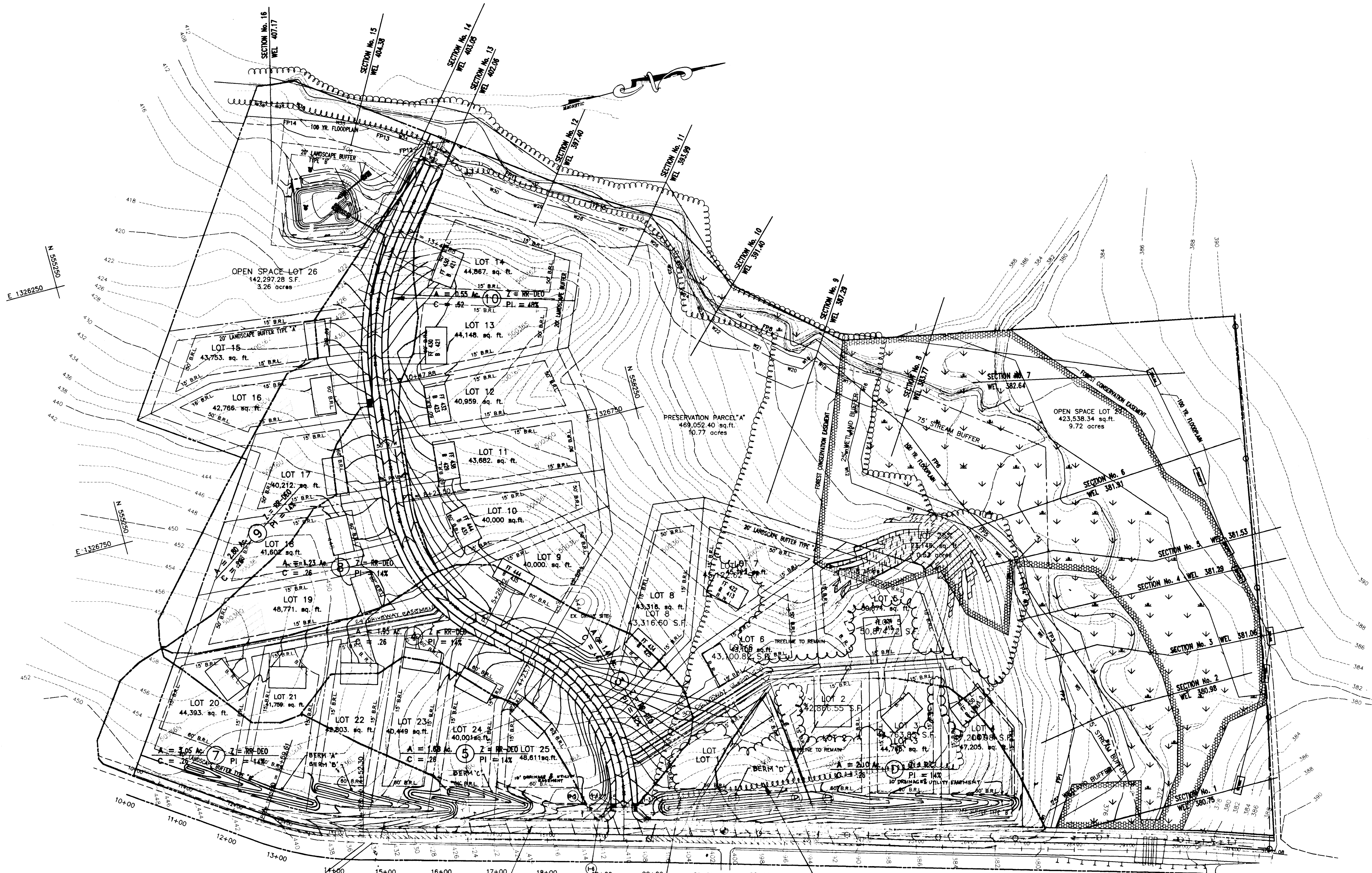
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING & ZONING
Gina Dunning
 CHIEF, DIVISION OF PLANNING & ZONING
 DATE: 9/21/95

NO.	DATE	REVISION
PROJECT : WINDY KNOLLS LOTS 1 THRU 27 & PARCEL A		
LOCATION : TAX MAP 34, PARCEL 24 & 134 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE : MD. RT. 108 ROADWAY IMPROVEMENTS CROSS SECTIONS		
DEVELOPER :		
LAND DESIGN & DEVELOPMENT INC. 10895 HICKORY RIDGE RD. COLUMBIA, MD. 21044		Worio Engineering Inc. CONSULTING ENGINEERS 8307 MAIN STREET HISTORIC ELLICOTT CITY, MD. 21043
DESIGN: MLL	CHECKED: MLL	DATE: 12-12-94
DRAWN: AVG	APPROVED: MLL	SCALE: AS SHOWN
		PROJ. NO.: SHEET 6 OF 13

TEL 410-465-0400 FAX 410-465-0489

1750

C:\DWG\K1\K151\108.RD.DWG, PLOT: 17, 14, 09, 1994



CLARKSVILLE PIKE (MD. 108)
 PLAN
 SCALE: 1" = 100'

$A = 0.36 \text{ Ac.}$ $Z = RR-DEO$
 $C = 0.55$ $PI = 35\%$

$A = 1.1 \text{ Ac.}$ $Z = RR-DEO$
 $C = 0.24$ $PI = 14\%$

$A = 0.23 \text{ Ac.}$ $Z = RR-DEO$
 $C = 0.46$ $PI = 30\%$

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Uma Sumitran 9/21/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH JPA DATE

Abdul Durrani 9/15/95
 CHIEF, DEVELOPMENT ENGINEERING DIVISION PA DATE

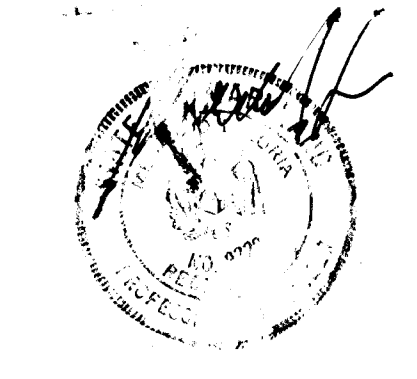
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Richard M. Demko 9-11-95
 CHIEF, BUREAU OF HIGHWAYS JPA DATE

NO.	DATE	REVISION	BY
1	2-27-96	ADDITION OF EARTH BERM ALONG RT. 108	DTA

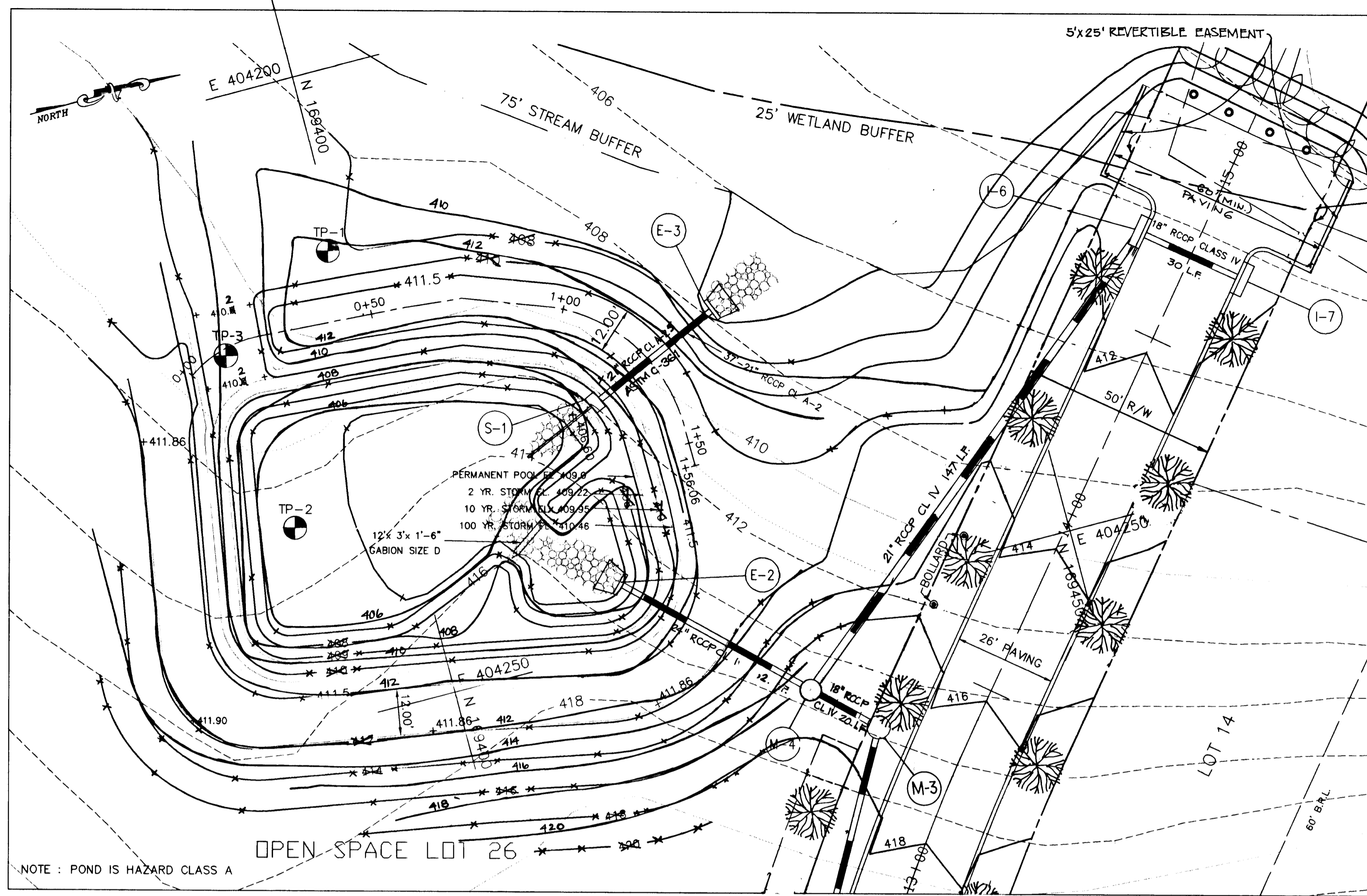
Voria Engineering Inc.
 CONSULTING ENGINEERS
 8307 MAIN ST., HISTORIC ELLICOTT CITY, MD.
 410-465-0400

DRAINAGE AREA MAP
 WINDY KNOLLS
 LOTS 1 THRU 27 & PARCEL A

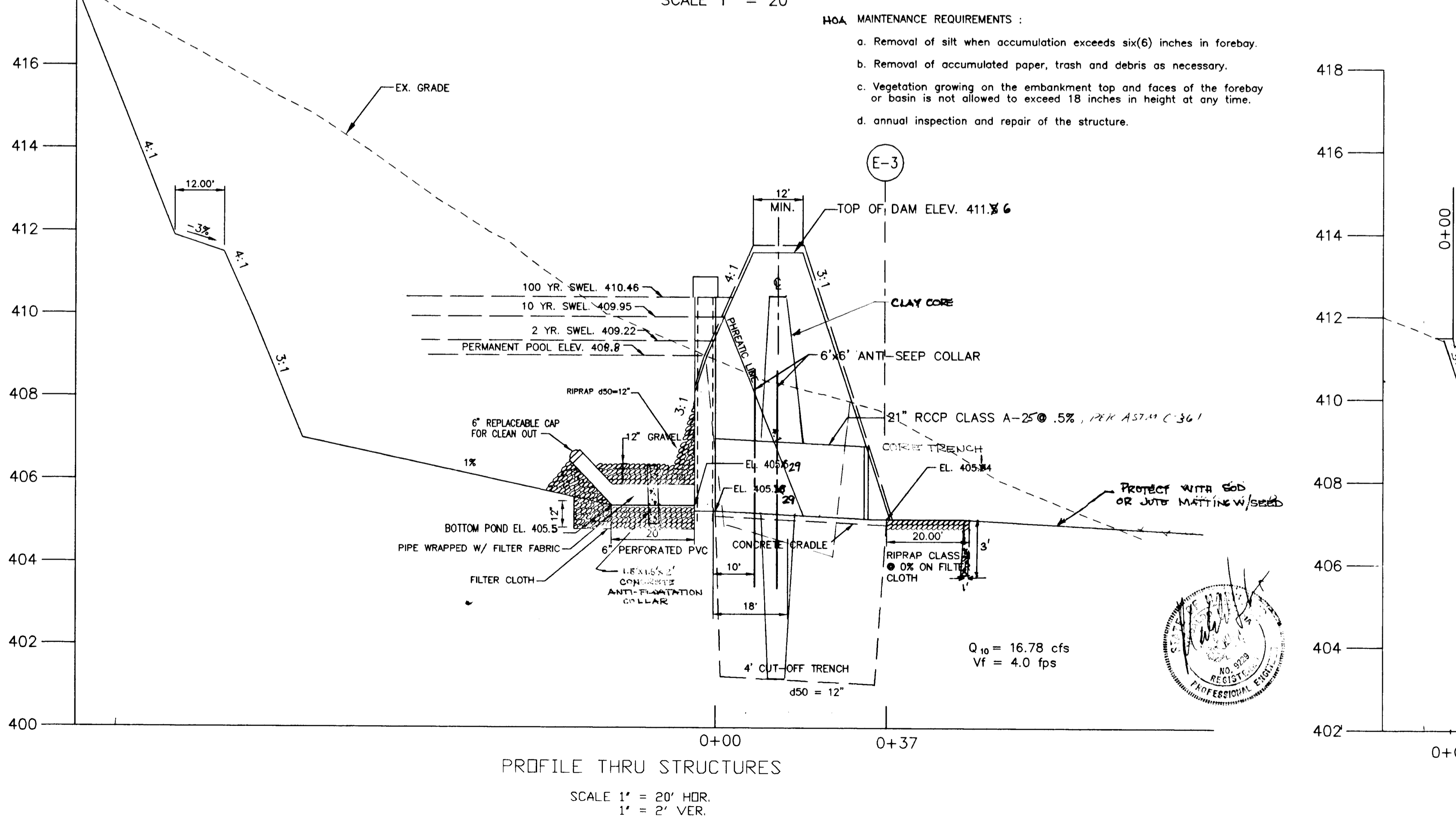
DATE: 06-22-95 SCALE: 1" = 100' SHEET 7 OF 13
 DESIGN BY: DTA DRAWN BY: AVG CHECKED BY: MLL



1750
 C. LONG KNOLLS/DAM No. 24, 25, 26, 46, 47, 1995

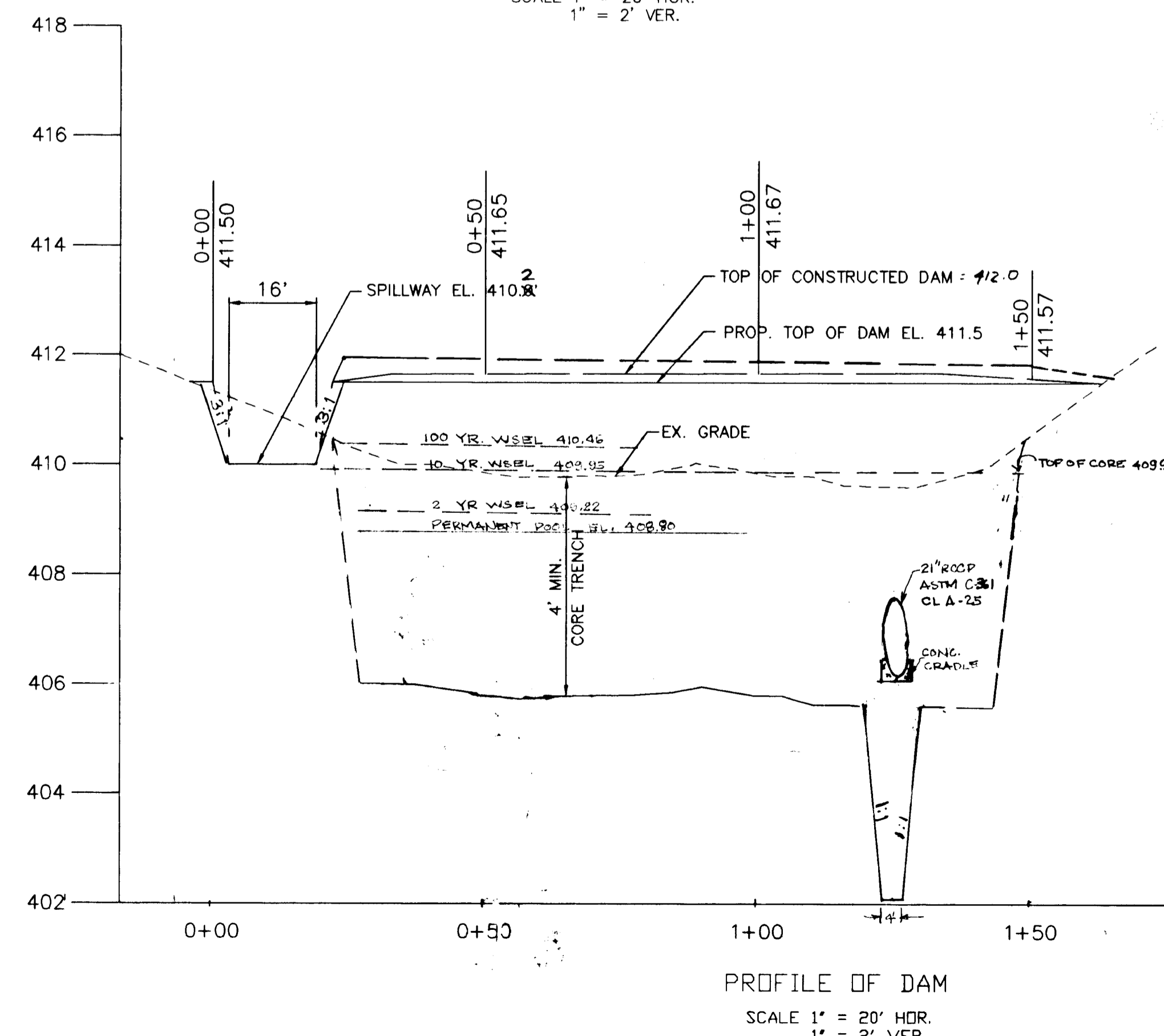


NOTE: POND IS HAZARD CLASS A
 OPEN SPACE LOT 26
 STORMWATER MANAGEMENT POND (PUBLIC MAINTAINED RETENTION POND)
 SCALE 1" = 20'

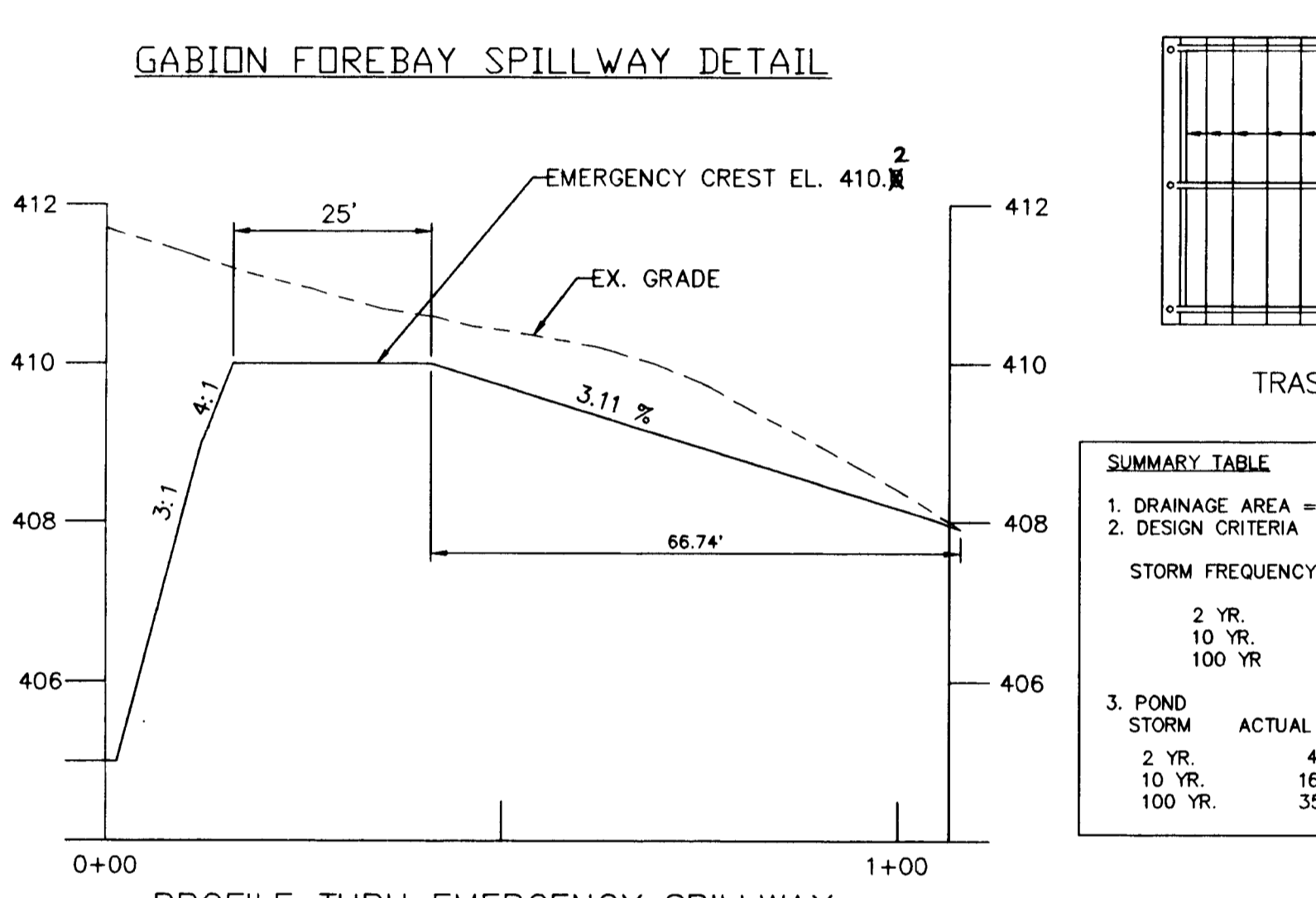
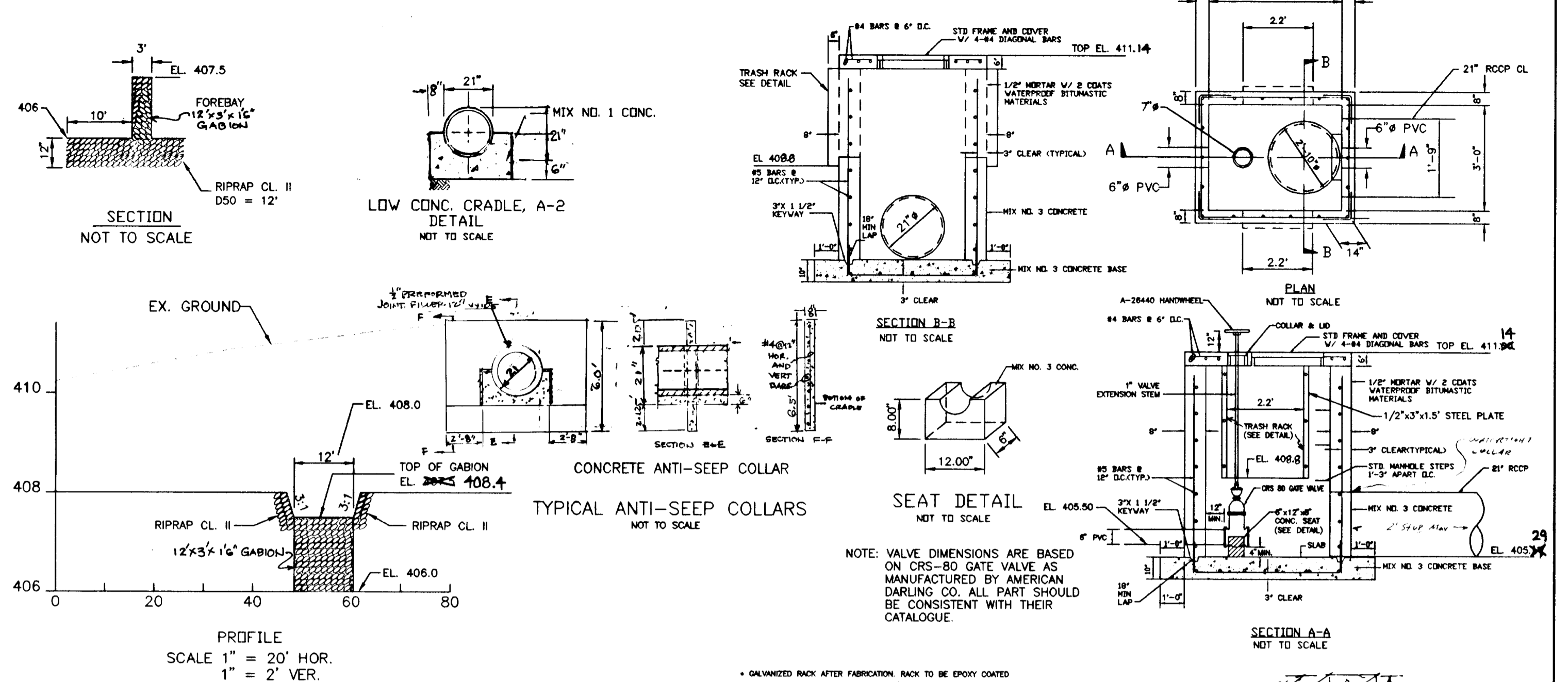


PROFILE THRU STRUCTURES
 SCALE 1" = 20' HOR.
 1" = 2' VER.

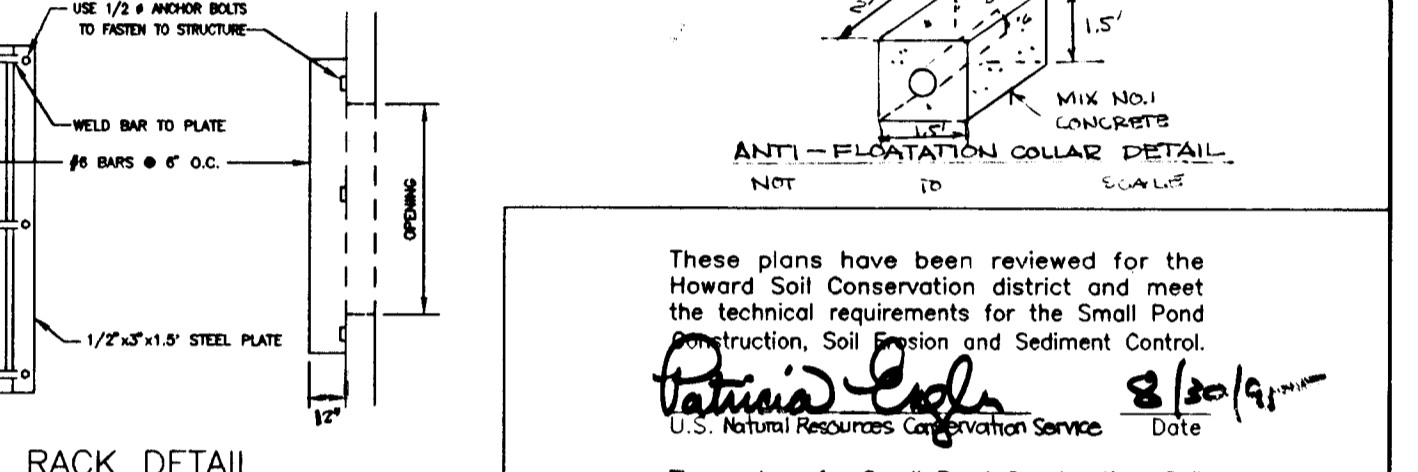
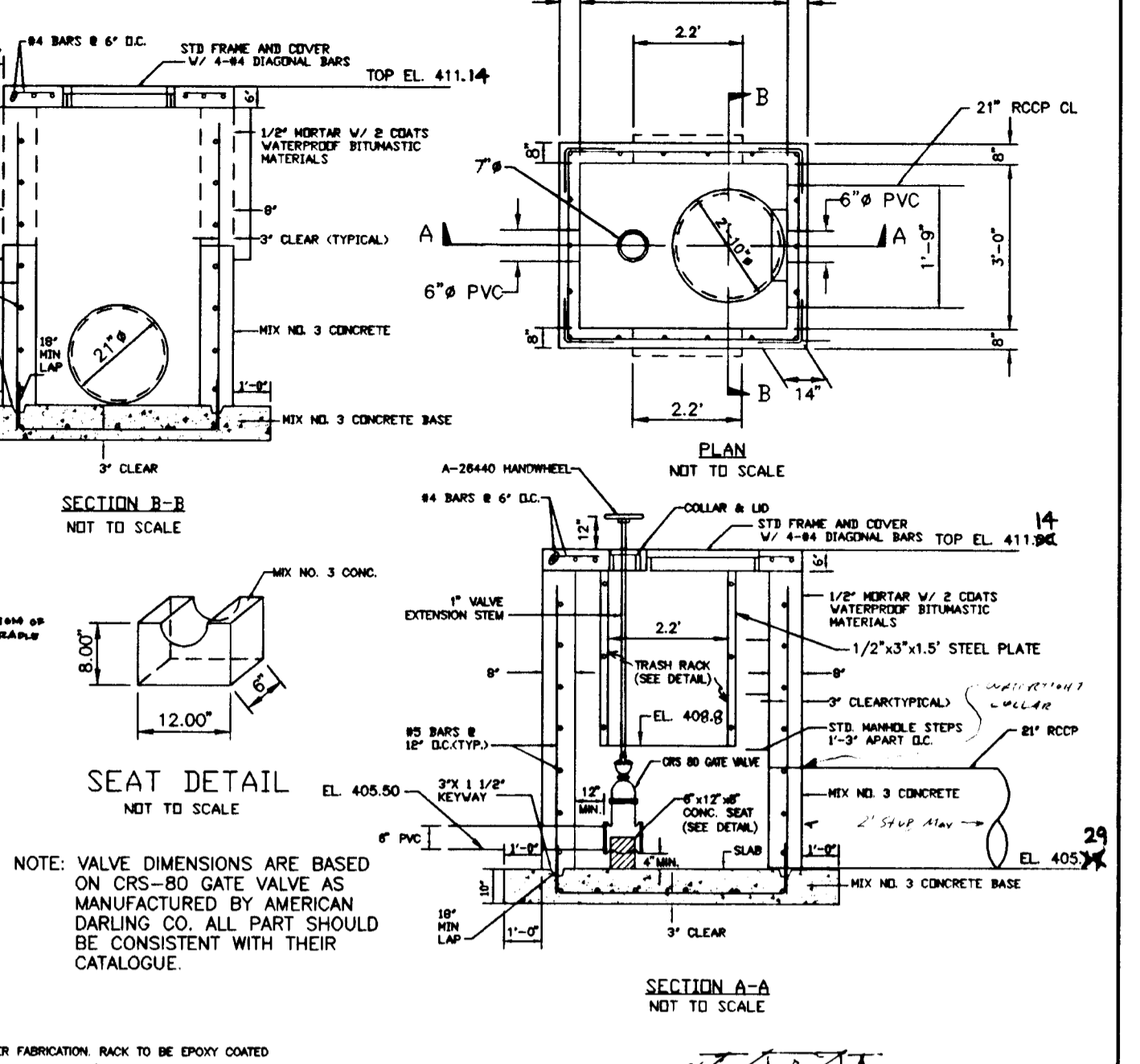
- MAINTENANCE REQUIREMENTS:**
- Removal of silt when accumulation exceeds six(6) inches in forebay.
 - Removal of accumulated paper, trash and debris as necessary.
 - Vegetation growing on the embankment top and faces of the forebay or basin is not allowed to exceed 18 inches in height at any time.
 - annual inspection and repair of the structure.



PROFILE OF DAM
 SCALE 1" = 20' HOR.
 1" = 2' VER.



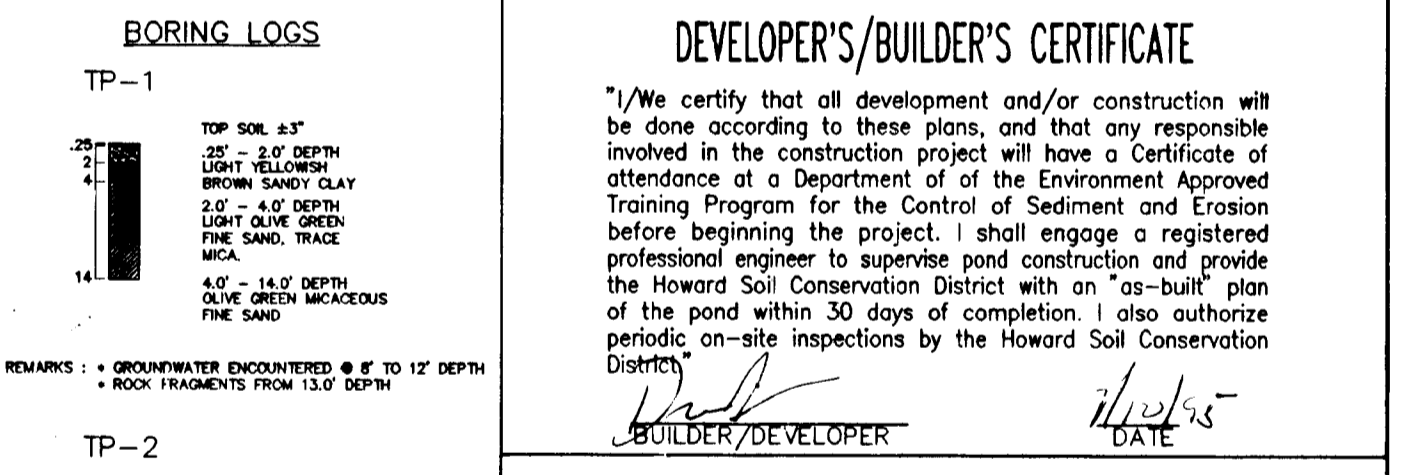
PROFILE THRU EMERGENCY SPILLWAY
 SCALE 1" = 20' HOR.
 1" = 2' VER.



TRASH RACK DETAIL
 NOT TO SCALE

SUMMARY TABLE

1. DRAINAGE AREA = 10.02 ACRES			
2. DESIGN CRITERIA			
STORM FREQUENCY	ALLOWABLE RELEASE, cfs	INFLWS	
2 YR.	5 cfs	7 cfs	
10 YR.	17 cfs	20 cfs	
100 YR.	N/A	38 cfs	
3. POND STORAGE			
STORM	ACTUAL DISCHARGE	ELEVATION	STORAGE
2 YR.	4.74 cfs	409.22	10 ACRE-FT
10 YR.	16.78 cfs	409.95	22 ACRE-FT
100 YR.	35.48 cfs	410.46	38 ACRE-FT



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Anna Summery 9/21/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

Robert J. Zelmer 8/30/95
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Lawrence M. Demko 9/11/95
 CHIEF, BUREAU OF HIGHWAYS

NO.	DATE	REVISION	BY

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for the Small Pond Construction, Soil Erosion and Sediment Control.

Patricia Cash 8/30/95
 U.S. Natural Resources Conservation Service

These plans for Small Pond Construction, Soil Erosion and Sediment Control meet the requirements of the Howard County Soil Conservation District.

Robert J. Zelmer 8/30/95
 Howard Soil Conservation District

ENGINEER'S CERTIFICATE

"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my 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 J. Zelmer
 SIGNATURE OF ENGINEER DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

"I/We certify that all development and/or construction will be done according to these plans, and that any responsible 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."

Anna Summery 9/21/95
 DEVELOPER/BUILDER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Anna Summery 9/21/95
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

Robert J. Zelmer 8/30/95
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Lawrence M. Demko 9/11/95
 CHIEF, BUREAU OF HIGHWAYS

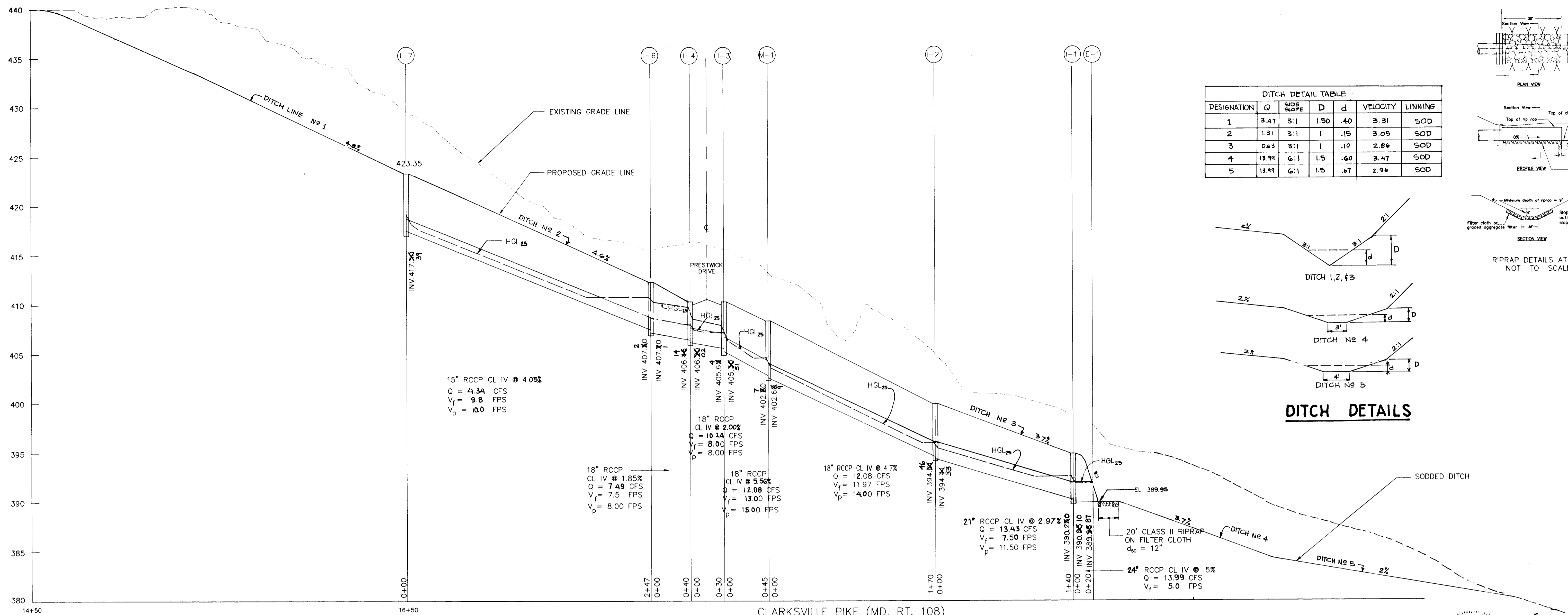
Voria Engineering Inc.
 CONSULTING ENGINEERS
 8307 MAIN ST., HISTORIC ELLICOTT CITY, MD.
 410-485-0400

STORM WATER MANAGEMENT POND
 PLAN AND DETAILS

WINDY KNOLLS
 LOTS 1 THRU 27 & PARCEL A

DATE: 06-02-95 SCALE: 1" = 20' SHEET 8 OF 13
 DESIGN BY: DTA DRAWN BY: AVG CHECKED BY: MLL

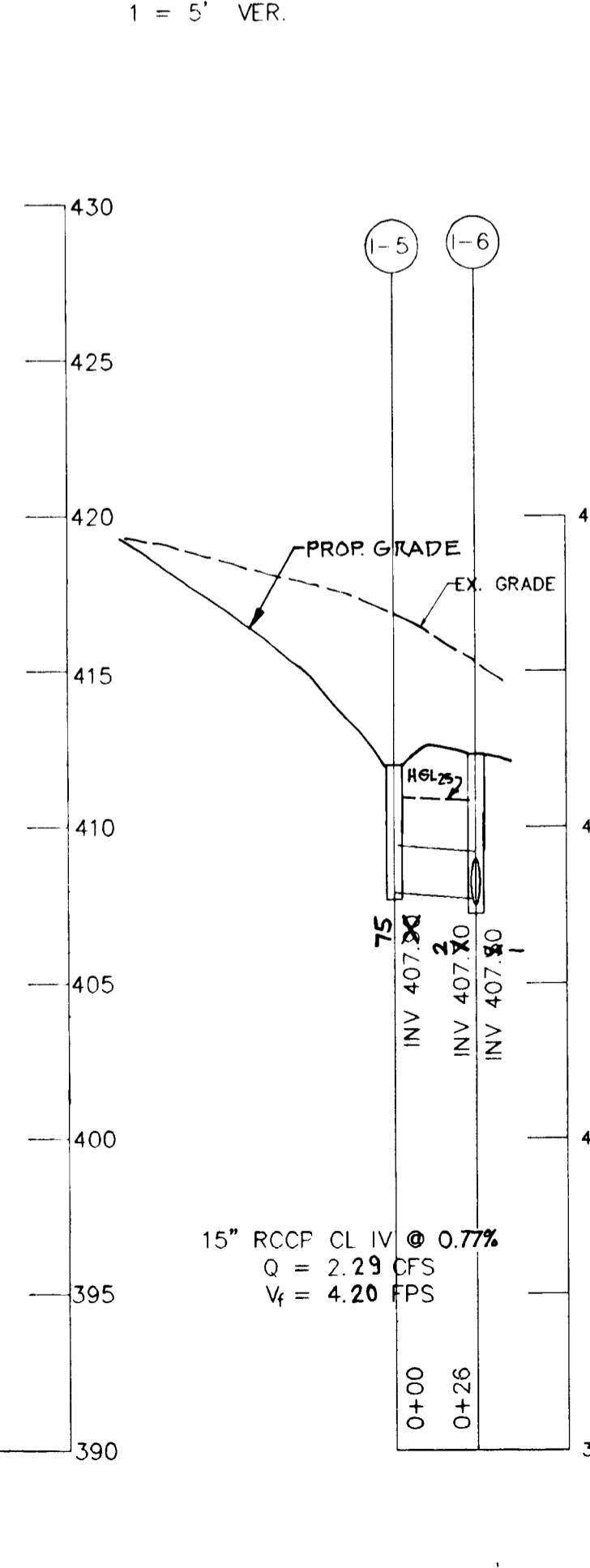
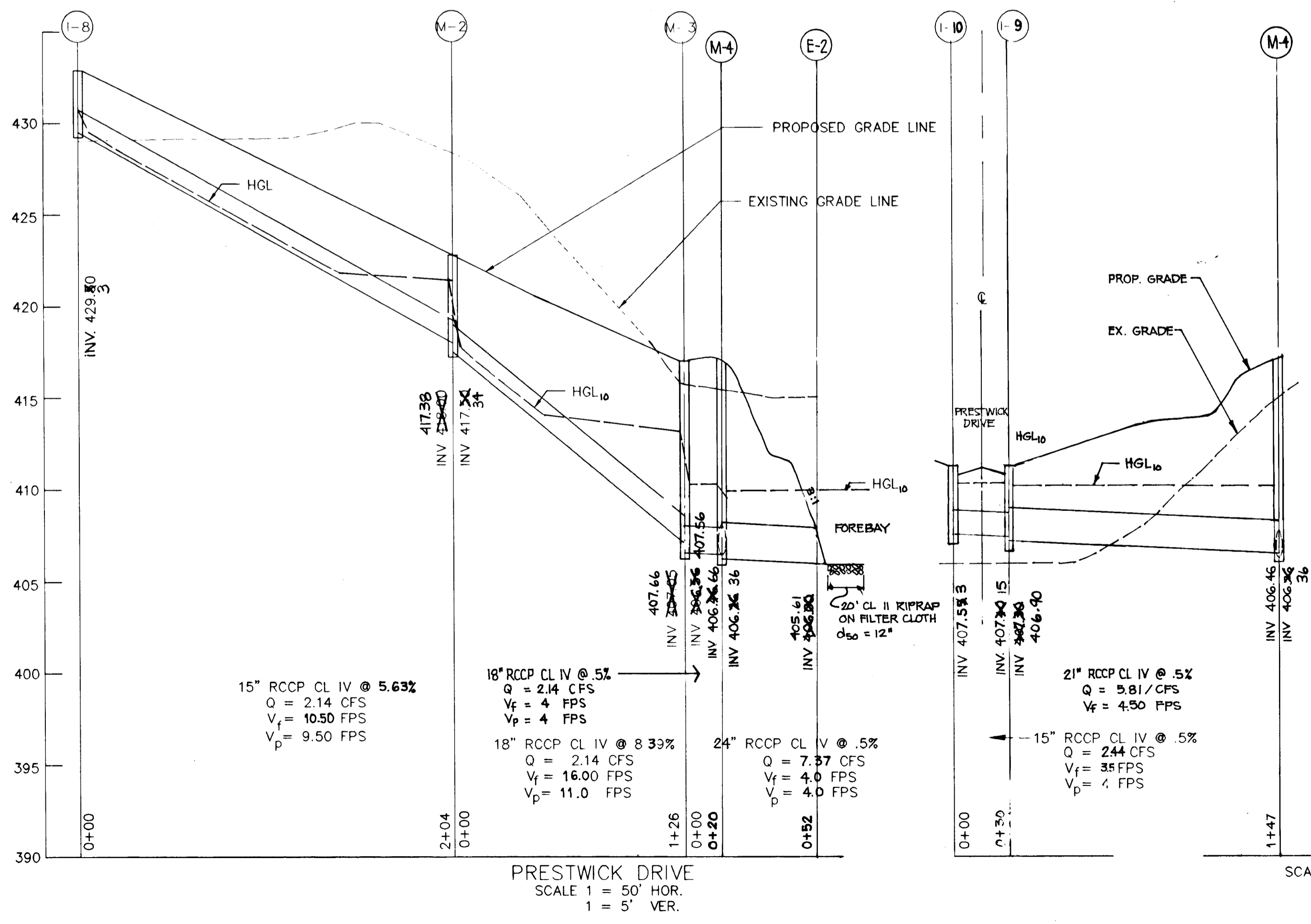
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DESIGNATION	Q	SIDE SLOPE	D	d	VELOCITY	LINNING
1	3.47	3:1	1.50	.40	3.31	SOD
2	1.91	3:1	1	.15	3.05	SOD
3	0.3	3:1	1	.10	2.86	SOD
4	13.99	6:1	1.5	.60	3.47	SOD
5	13.99	6:1	1.5	.67	2.96	SOD

DITCH DETAILS

CLARKSVILLE PIKE (MD. RT. 108)
SCALE 1" = 50' HOR.
1" = 5' VER.



NUMBER	TYPE	INVERT IN	INVERT OUT	TOP EL.	REMARKS	LOCATION
I-1	K-INLET	380.20	380.20	395.10	MD STATE STD. No. MD 378.05	STA 23+00 OF MD 108 56.00' LEFT
I-2	C O G	394.34	394.33	399.69	MD STATE STD. No. MD 374.51 L=15'	STA 21+70 OF MD 108 98.25' LEFT
I-3	A-10	405.68	405.51	410.29	HOWARD COUNTY SD 4.02 W=2'-6"	STA 0+64 OF PRESTWICK DR. 16.92' RIGHT
I-4	A-10	406.34	406.00	406.36	HOWARD COUNTY SD 4.02 W=2'-6"	STA 0+64 OF PRESTWICK DR. 16.92' LEFT
I-5	K-INLET		407.30	412.20	HOWARD COUNTY SD 4.12 (SINGLE OPENING)	STA 0+52 OF PRESTWICK DR. 63.0' LEFT
I-6	C O G	407.30	407.30	412.20	MD STATE STD. No. MD 374.51, L=15'	STA 18+92 OF MD 108 88.25' LEFT
I-7	K-INLET		417.80	423.04	MD STATE STD. No. MD 378.05	STA 16+47 OF MD 108 36' LEFT
I-8	A-10		429.30	433.96	HOWARD COUNTY SD 4.32 W=2'-6"	STA 10+07 PRESTWICK DRIVE 14.92' LEFT
I-9	TYPE S-COMB	427.30	415.15	411.35	HOWARD COUNTY SD 4.32 DEPRESSED	STA 14+73.45 PRESTWICK DRIVE 14.92' LEFT
I-10	A-10		407.53	411.35	HOWARD COUNTY SD 4.02 W=2'-6"	STA 14+73.45 PRESTWICK DRIVE 14.92' LEFT
M-4	STD MH	406.36	406.36	416.01	HOWARD COUNTY G. 5.04	STA 13+31 OF PRESTWICK DRIVE 42.5' LEFT
M-1	STD MH	402.80	402.80	407.85	MD STATE STD. No. MD 383.01	STA 19+91 OF MD 108 38' LEFT
M-2	STD MH	417.38	417.38	423.06	HOWARD COUNTY G. 5.04	STA 11+11 OF PRESTWICK DRIVE 15' LEFT
M-3	STD MH	406.56	406.56	417.38	HOWARD COUNTY G. 5.04	STA 13+30 OF PRESTWICK DRIVE 22.5' LEFT
E-1	CONCRETE END SECTION	389.36	389.36	391.180	MD STATE STD. No. MD 368.02	STA 23+19.63 OF MD 108 35' LEFT
E-2	CONCRETE END SECTION	405.34	405.34	407.41	HOWARD COUNTY SD 5.21	STA 13+43 OF PRESTWICK DRIVE 95' LEFT
E-3	TYPE C ENDWALL	405.34	405.34	408.36	HOWARD COUNTY SD 5.21	N 555790, E 1326150
S-1	SEE PLAN	405.29	405.29	411.14	SEE PLAN	N 555760, E 1326200



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development and Research
 Date: 9/21/95
 Date: 9/15/95
 Date: 9-11-95

NO.	DATE	REVISION	BY
1	2-27-96	ADDITION OF EARTH BERM ALONG RTE. 108	DTA

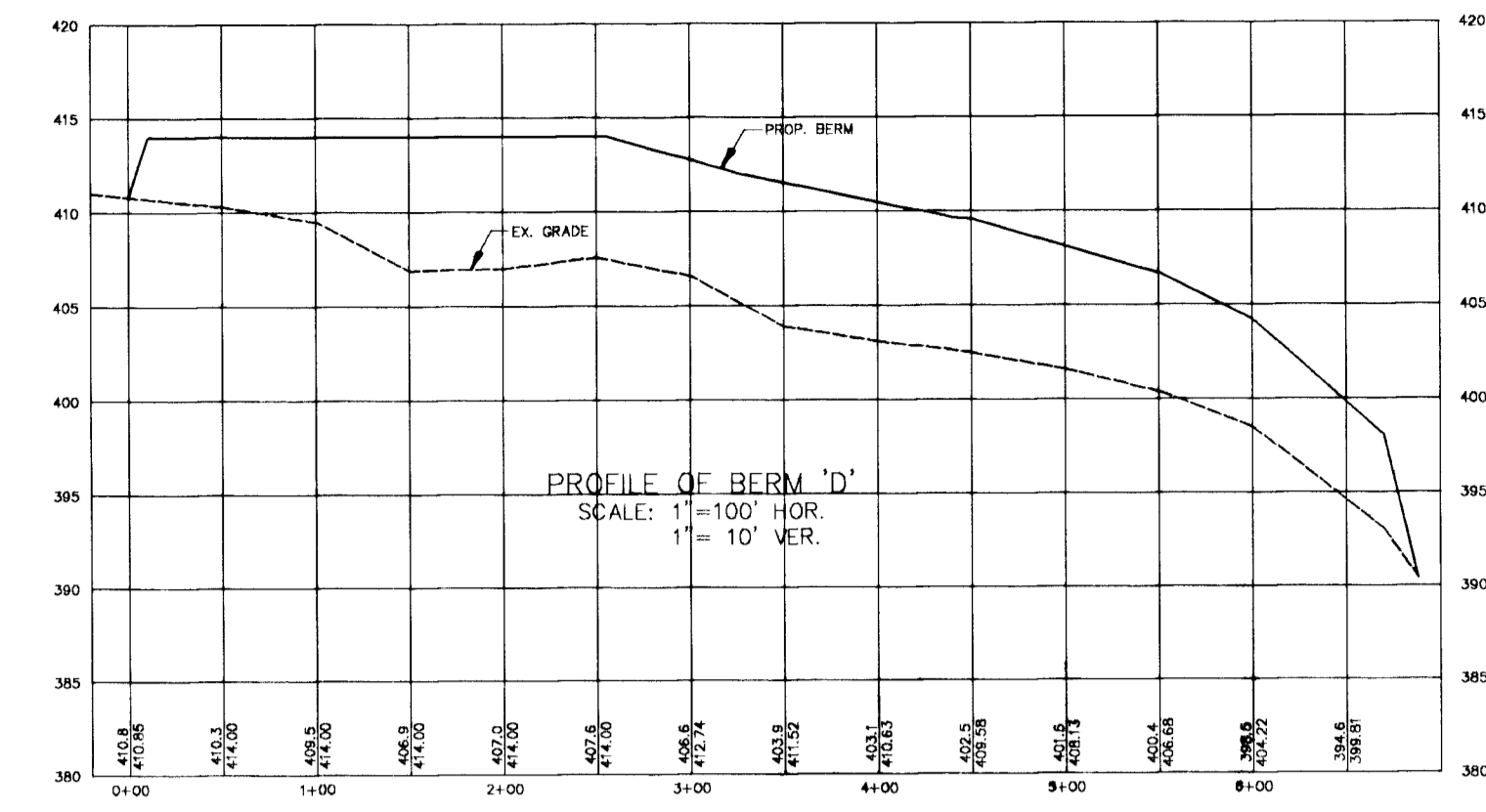
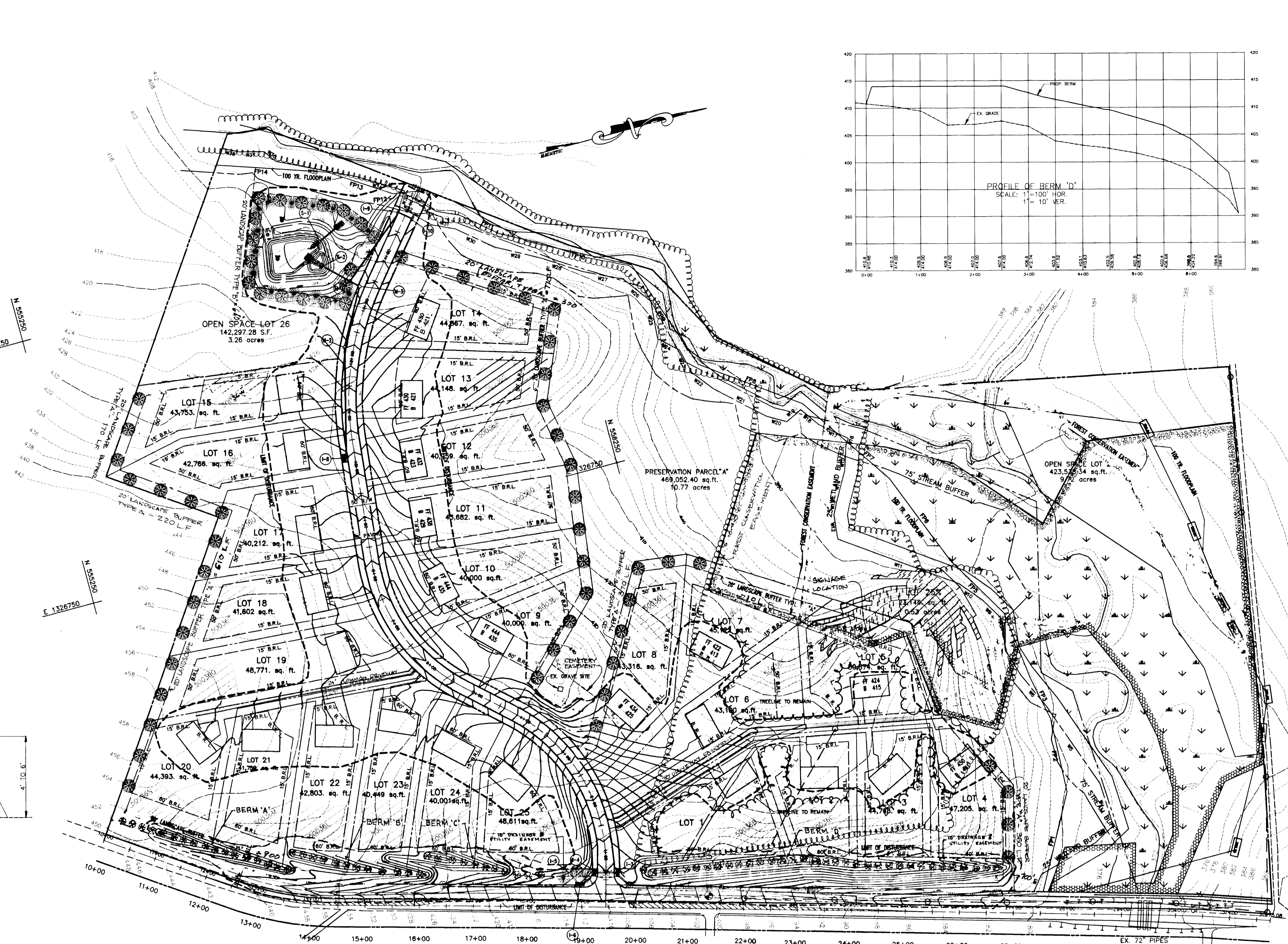
Coria Engineering Inc.
 CONSULTING ENGINEERS
 8307 MAIN ST., HISTORIC ELLICOTT CITY, MD.
 410-485-0400

TITLE: DRAINAGE PROFILES AND DETAILS
 CLARKSVILLE PIKE AND PRESTWICK DRIVE
 PROJECT: WINDY KNOLLS
 LOTS 1 THRU 27 & PARCEL "A"
 04-06-95 SCALE: AS SHOWN SHEET 2 OF 13
 DESIGN BY: MLL DRAWN BY: DTA CHECKED BY: MLL

1750

Forest Conservation Area
REFORESTATION PROJECT
Trees for Your Future

SIGNAGE DETAIL
FOREST RETENTION AREA
MACHINERY DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED
VIOLATION AS PERMITTED BY THE MARYLAND FOREST CONSERVATION ACT OF 1991



SCHEDULE A
PERIMETER LANDSCAPE EDGE

Category	Adjacent to Perimeter Properties	MD. RT. 108
Landscape Type	A	B
Linear Feet of Roadway Frontage/Perimeter	3510	1600
Credit for Existing Vegetation	600	0
Credit for Wall, Fence or Berm	0	0
Number of Plants Required		
Shade Trees	47	32
Evergreen Trees	0	40
Shrubs	0	0
Number of Plants Provided		
Shade Trees	47	32
Evergreen Trees	0	40

SCHEDULE D
STORMWATER MANAGEMENT AREA LANDSCAPING

Linear Feet of Perimeter	730
Number of Trees Required	
Shade Trees	14
Evergreen Trees	18
Credit for Existing Vegetation (No, Yes and %)	NO
Credit for Other Landscaping (No, Yes and %)	NO
Number of Trees Provided	
Shade Trees	14
Evergreen Trees	18
Other Trees (2:1 substitution)	

NOTE:
1. PERIMETER LANDSCAPE EDGES ON LOTS (TYPE A OR TYPE B, AS SHOWN ON THIS PLAN) ARE THE RESPONSIBILITY OF THE DEVELOPER AND ARE BONDED WITH THIS PLAN.
2. MAINTAIN 20' SPACING BETWEEN STREET LIGHTS AND STREET TREES

PLANT SCHEDULE

SYMBOL	LOCATION	BOTANICAL NAME	COMMON NAME	QUANTITY	SIZE
○	PERIMETER	QUERCUS ALBIDA	WHITE OAK	47	2 1/2" CAL.
●	MD. 108	QUERCUS COCCINEA	SCARLET OAK	32	2 1/2" CAL.
○	MD. 108	PINUS STRUBUS	WHITE PINE	46	6"-8" HT.
○	STORM WATER MANAGEMENT	QUERCUS PUBESCENS	WILLOW OAK	14	2 1/2" CAL.
○	STORM WATER MANAGEMENT	PINUS RESINOSA	WHITE PINE	18	6"-8" HT.

TOTAL SHADE TREES = 47+32+14 = 93
TOTAL EVERGREEN TREES = 40+18 = 58

NOTES:
1. THIS PLANTING PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL.
2. FINANCIAL SURETY FOR THE REQUIRED 131 LANDSCAPE TREES IN THE AMOUNT OF \$15,000 IS PART OF THE DEVELOPER'S ASSUREMENT.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Gino Surranom 9/21/95
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH
John Dameron 9/23/95
CHIEF, DEVELOPMENT ENGINEERING DIVISION
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Jendry 9/21/95
CHIEF, BUREAU OF HIGHWAYS

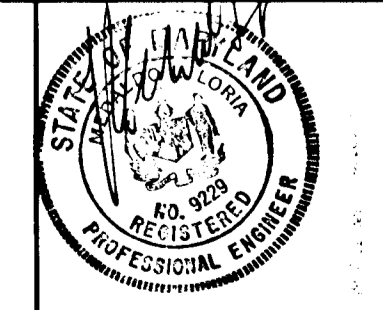
GRADING PLAN AND LANDSCAPE PLAN
WINDY KNOLLS
LOTS 1 THRU 25
TAX MAP 34 PARCELS 84 & 134 5TH ELECTION DISTRICT, HOWARD COUNTY, MD
DATE: 6-22-95 SCALE: 1"=100' SHEET 10 OF 13

1750
C:\DWG\WINDYKNOLLS\1750.DWG, 09/22/95, 11:23:15AM

NO.	DATE	REVISION	BY
1	2-27-96	ADDITION OF EARTH BERMS ALONG RTE. 108	DTA

DRAWN BY: AVG DATE: _____
DESIGN BY: AVG DATE: _____
CHECKED BY: MLL DATE: _____
APPROVED BY: MLL DATE: _____

Voria Engineering Inc.
CONSULTING ENGINEERS
8307 MAIN ST., HISTORIC ELLICOTT CITY, MD.
410-465-0400

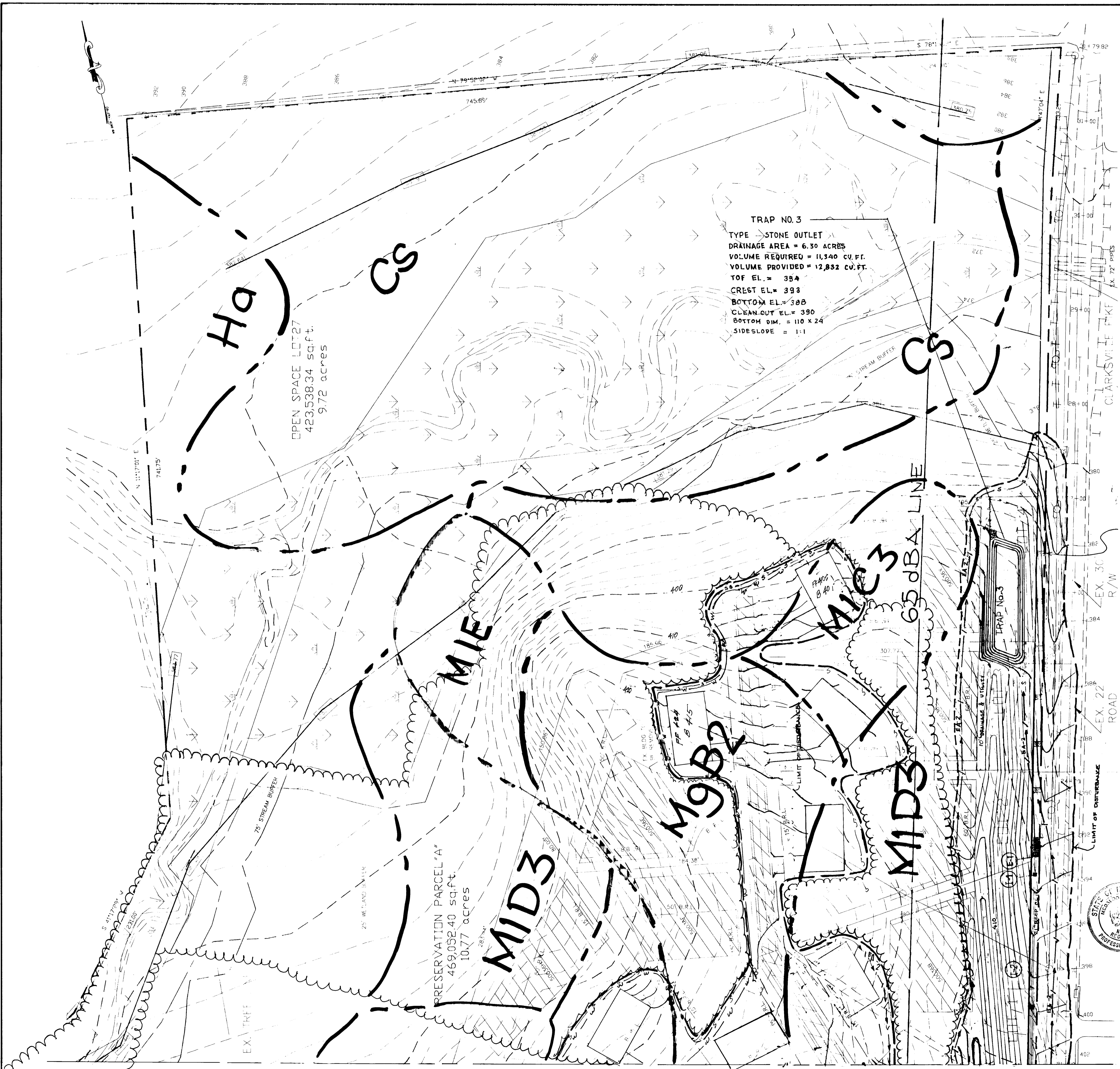


DEVELOPER:
LAND DESIGN & DEVELOPMENT INC.
10805 HICKORY RIDGE ROAD
COLUMBIA, MARYLAND 21044

OWNERS:
PAUL DUNCAN
AMERICAN PROPERTIES INC.
10805 HICKORY RIDGE RD.
COLUMBIA, MD. 21044
OSKAR SCHULZ
13474 OPEN SPACE COURT
HIGHLAND, MD. 20777
JOEL M. ABRAMSON, ESO.
9175 GUILFORD RD.
SUITE 301
COLUMBIA, MD. 21046
RICHARD B. TALKIN, ESO.
9175 GUILFORD RD.
SUITE 301
COLUMBIA, MD. 21046

DAVID TAYMAN, DVM
10788 HICKORY RIDGE RD.
COLUMBIA, MD. 21044

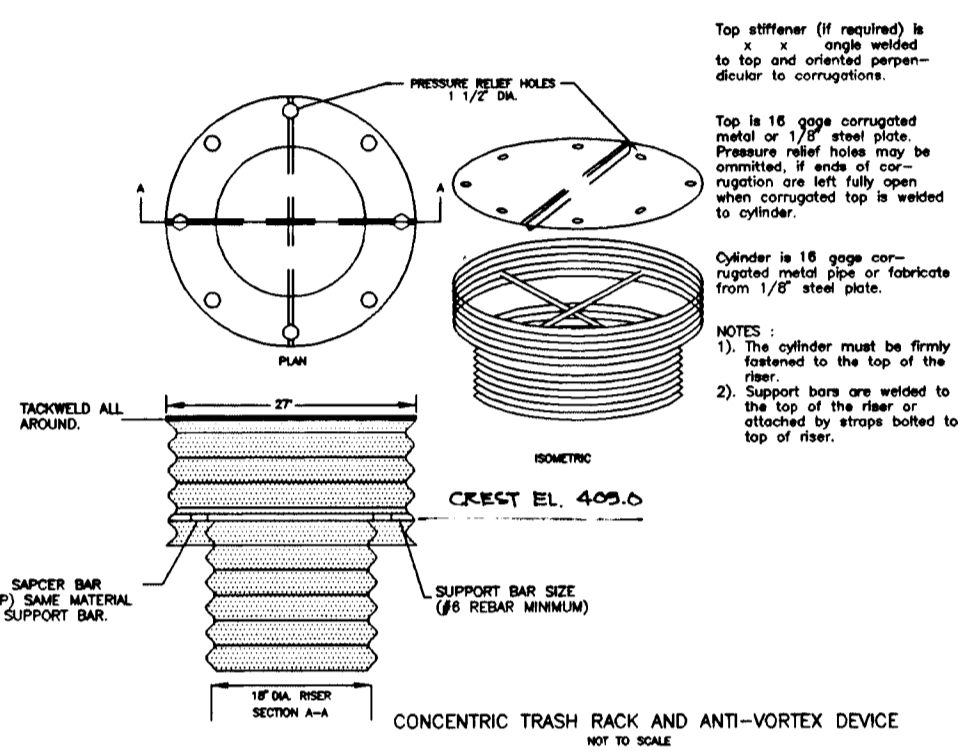
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TRAP NO. 3
 TYPE → STONE OUTLET
 DRAINAGE AREA = 6.30 ACRES
 VOLUME REQUIRED = 11,340 CU.FT.
 VOLUME PROVIDED = 12,832 CU.FT.
 TOP EL. = 384
 CREST EL. = 383
 BOTTOM EL. = 388
 CLEAN OUT EL. = 390
 BOTTOM DIM. = 110 X 24
 SIDE SLOPE = 1:1

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit.
 2. Install blaze orange plastic wire mesh. For Tree Protection.
 3. Install temporary 8" PVC as shown.
 4. Install all Sediment Control Measures as shown on the Plan such as Stone Construction Entrances, Earth Dikes and Silt Fence and Berm along Flestwick Drive.
 5. Grade along Md. Route 108 (as shown) from Sta 21+00 to 21+50. Grade Ditch from 12+50 to 18+50. Grade only what can be stabilized in one day. Stabilize Swale with SOP. Stabilize all Disturbed Areas.
 6. Grade road and construct all drainage system and utilities. Connect temporary 8" PVC to M-1.
 7. Stabilize all disturbed areas. Remove temporary 8" PVC & block connection to M-1 with concrete.
8. Remove all sediment control measures after approval from the Howard County Sediment Control Inspector.



FOR SEDIMENT & EROSION CONTROL ONLY

LEGEND:

EX. GRADE	---
PROP. GRADE	---
TREELINE	☁
TREELINE TO BE SAVED	☁
PERCOLATION AREA	▨
CLEAN WATER DIVERSION DIKE	—/—
SILT FENCE	—S—S—
BLAZE ORANGE PLASTIC WIRE MESH TREE PROTECTION	—W—W—
LIMIT OF DISTURBANCE	---
STONE CONSTRUCTION ENTRANCE	▨

RISER BASE DETAIL
 NOT TO SCALE

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for the Soil and Sediment Control.

Tatiana Goh 8/23/95
 U.S. Natural Resources Conservation Service District

These plans for Soil and Sediment Control meet the requirements of the Howard County Soil Conservation District.

Robert Zichow 8/23/95
 Howard Soil Conservation District

ENGINEER'S CERTIFICATE

I hereby certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site and conditions and it was prepared in accordance with the requirements of Howard Soil Conservation District.

Walter H. [Signature] 8/23/95
 SIGNATURE OF ENGINEER DATE

DEVELOPER'S/BUILDER'S CERTIFICATE

I/We certify that all development and construction will be done in accordance with this plan, and that any responsible personnel involved in the construction will have a Certificate of Attendance at the Department of the Environment Approved Training Program for the Control of Sediment before beginning the project. I also authorize periodic inspection by the Howard Soil Conservation Service.

[Signature] 8/23/95
 BUILDER/DEVELOPER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Gina Stummarty 9/21/95
 CHIEF, PLANNING AND ZONING

Chad Rasmussen 9/13/95
 CHIEF, DEVELOPMENT ENGINEER

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. Daniels 9-11-95
 CHIEF, BUREAU OF HIGHWAYS

NO. DATE
 1 2-27-96 ADDITION OF EARTH BERM ALONG RT. 108 DTA

WINDY KNOWLES
 ENGINEERING INC.

SEDIMENT CONTROL PLAN

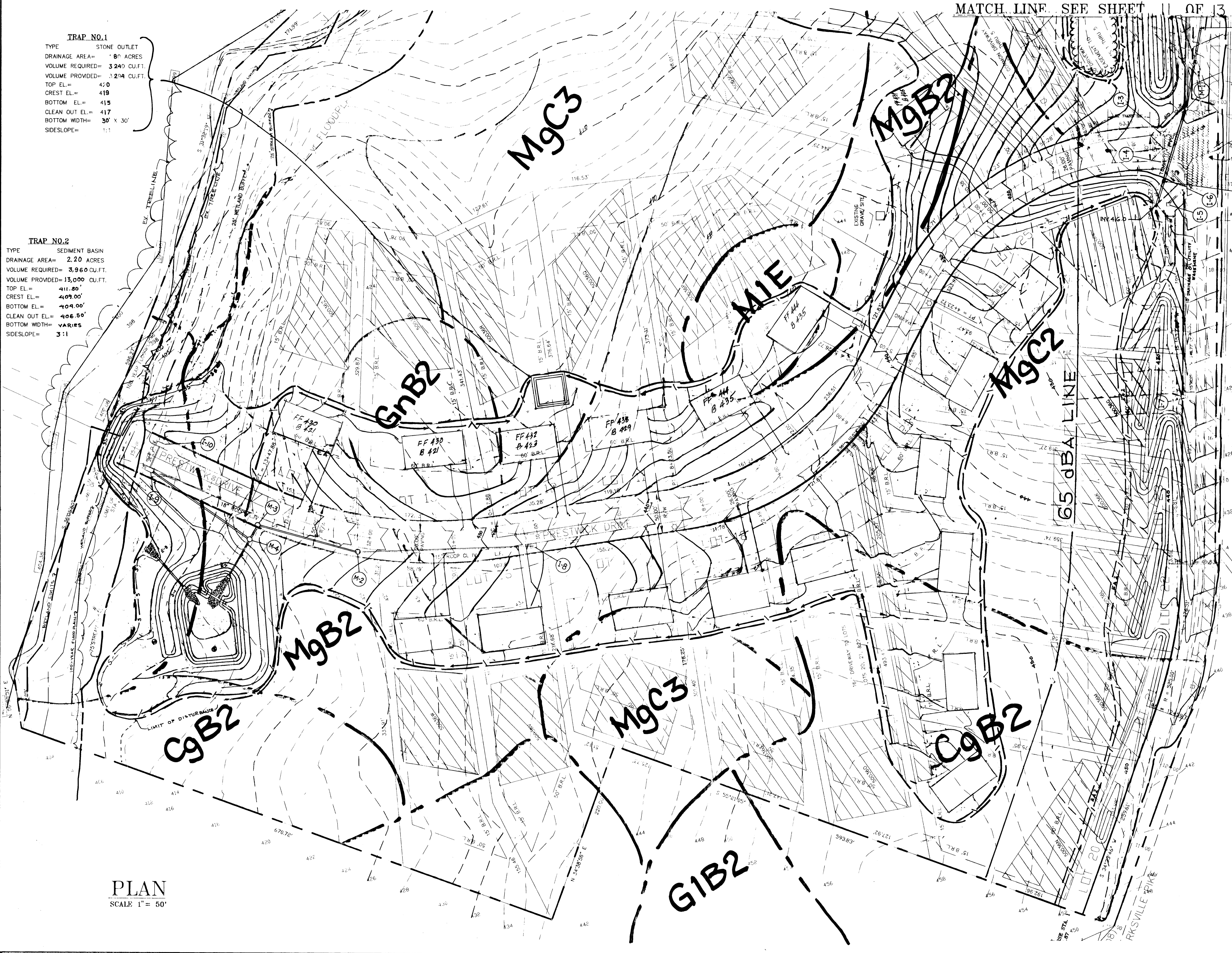
WINDY KNOWLES
 LOTS 1 THRU 27 & PARCEL A

DATE: 8-13-95 SCALE: 50' SHEET 11 OF 13
 DESIGN BY: MLL DRAWN BY: JER CHECKED BY: MLL

MATCH LINE, SEE SHEET 12 OF 13

TRAP NO.1
 TYPE STONE OUTLET
 DRAINAGE AREA= .80 ACRES
 VOLUME REQUIRED= 3,240 CU.FT.
 VOLUME PROVIDED= 3,294 CU.FT.
 TOP EL.= 420
 CREST EL.= 419
 BOTTOM EL.= 415
 CLEAN OUT EL.= 417
 BOTTOM WIDTH= 30' X 30'
 SIDESLOPE= 1:1

TRAP NO.2
 TYPE SEDIMENT BASIN
 DRAINAGE AREA= 2.20 ACRES
 VOLUME REQUIRED= 3,960 CU.FT.
 VOLUME PROVIDED= 13,000 CU.FT.
 TOP EL.= 411.50'
 CREST EL.= 409.00'
 BOTTOM EL.= 404.00'
 CLEAN OUT EL.= 406.50'
 BOTTOM WIDTH= VARIES
 SIDESLOPE= 3:1



INV. 403
 STA. 0+00 OF PRESTWICK DRIVE
 SCE
 12-1/4" V.B.
 INV. IN = 412
 INV. OUT = 408

These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for the Soil and Sediment Control.
Patricia E. [Signature] 9/30/95
 U.S. National Resource Conservation Service Date
 These plans for Soil and Sediment Control meet the requirements of the Howard County Soil Conservation District.
Robert Ziehm [Signature] 8/30/95
 Howard Soil Conservation District Date

REGISTERED PROFESSIONAL ENGINEER'S CERTIFICATE
 I hereby certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site and conditions and it was prepared in accordance with the requirements of Howard Soil Conservation District.
[Signature] 9/1/95
 SIGNATURE OF ENGINEER DATE

DEVELOPER'S/BUILDER'S CERTIFICATE
 I/We certify that all development and construction will be done in accordance with this plan, and that any responsible personnel involved in the construction will have a Certificate of Attendance at the Department of the Environment Approved Training Program for the Control of Sediment before beginning the project. I also authorize periodic inspection by the Howard Soil Conservation Service.
[Signature] 9/1/95
 BUILDER/DEVELOPER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF ENVIRONMENT AND PLANNING
Gina Summery [Signature] 9/21/95
 CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH JFR DATE
John [Signature] 9/13/95
 CHIEF DEVELOPMENT ENGINEER JR. DATE
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels [Signature] 9-11-95
 CHIEF, BUREAU OF HIGHWAYS HS DATE

NO.	DATE	REVISION	BY
1	2-27-96	ADDITION OF FORTH BEAM ALONG RT. 100	DTA

Coria Engineering Inc.
 CONSULTING ENGINEERS
 407 VAN ST. #2000 ELLSWORTH, MD.
 410-465-0400

SEDIMENT CONTROL PLAN
WINDY KNOLLS
 LOTS 1 THRU 27 & PARCEL A
 DATE: 8-15-95 SCALE: 1" = 50' SHEET 12 OF 13
 DESIGN BY: MLL DRAWN BY: JEPK CHECKED BY: MLL

1750

PLAN
 SCALE 1" = 50'

