

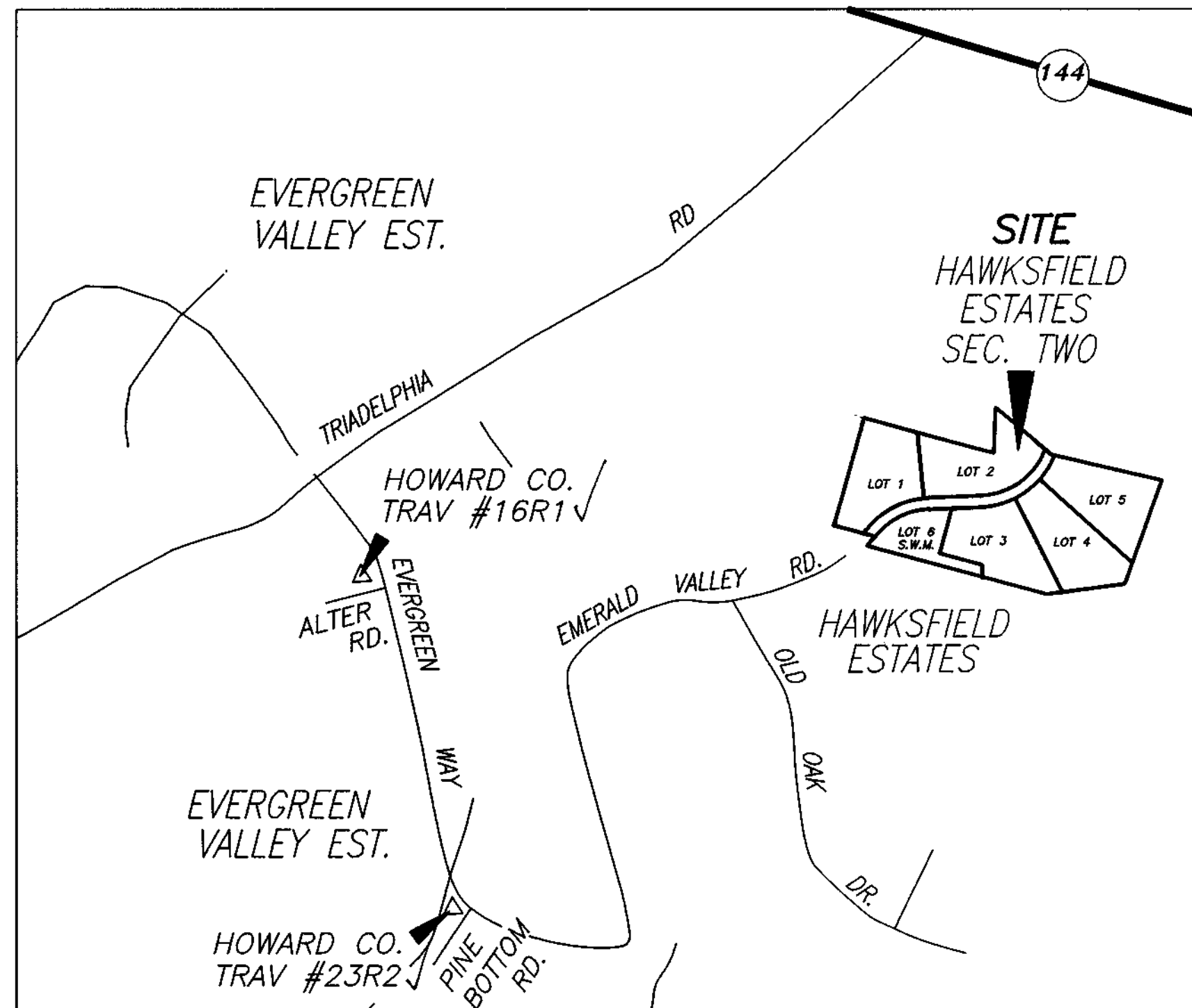
SHEET INDEX	
SHEET NO.	SHEET
1	COVER SHEET & GENERAL NOTES
2	PLAN & PROFILE - EMERALD VALLEY ROAD
3	STORM DRAIN PROFILES, STRUCTURE SCHED.
4	GRADING, EROSION, & SEDIMENT CONTROL
5	EROSION & SEDIMENT CONTROL NOTES & DTLS.
6	STREET TREE & LANDSCAPE PLAN
7	STORMWATER MANAGEMENT PLAN
8	FOREST CONSERVATION PLAN
9	DRAINAGE AREA MAP - S.W.M. EX. COND.
10	DRAINAGE AREA MAP - S.W.M. PROP. COND.
11	DRAINAGE AREA MAP - STORM DRAINS

FINAL ROAD CONSTRUCTION, GRADING AND STORMWATER MANAGEMENT PLANS

HAWKSFIELD ESTATES SECTION TWO LOTS 1-6

TAX MAP 16 BLOCK PARCELS 258 & P/O 40
THIRD ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

ROAD CLASSIFICATION CHART					
ROAD NAME	CLASSIFICATION	R/W WIDTH	DESIGN SPEED	PAVING TYPE	LIMITS
EMERALD VALLEY	LOCAL	50'	30'	PAVING - P-2 SHOULDER - P-8	15+75-25+14



VICINITY MAP
SCALE: 1" = 600'

GENERAL NOTES

- UNLESS OTHERWISE NOTED, ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
 - HOWARD COUNTY STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
 - MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, AS AMENDED.
 - SOIL CONSERVATION SERVICE 1983 MARYLAND STANDARD AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
 - SOIL CONSERVATION SERVICE 1983 MARYLAND STANDARD AND SPECIFICATIONS FOR POND CONSTRUCTION (CODE 378).
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS, DIVISION OF CONSTRUCTION INSPECTION AT 410-313-1880 AT LEAST (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
- TOPOGRAPHY SHOWN HEREON WAS FIELD-RUN BY SHANABERGER AND LANE IN FEBRUARY OF 1996.
- THE HORIZONTAL DATUM SHOWN IS BASED ON A BOUNDARY SURVEY BY SHANABERGER & LANE IN AUGUST, 1995, TIED TO NAD 83 HOWARD COUNTY CONTROL STATIONS:

HOWARD COUNTY MONUMENT NO. 16R1	N 590,004.5469	✓
	E 1,332,943.0501	
HOWARD COUNTY MONUMENT NO. 23R2	N 588,667.7714	✓
	E 1,333,263.8940	
- FOREST STAND DELINEATION AND WETLAND INVESTIGATION WAS PERFORMED BY DENNIS J. LABARE M.S. & ASSOCIATES ON MARCH 10, 1995. NO WETLANDS EXIST ON SITE.
- A GEOTECHNICAL INVESTIGATION WAS PREPARED BY MARSHALL ENGINEERING INC.
- THE PRELIMINARY PLAN (P-98-21) WAS APPROVED ON JUNE 4, 1998.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREETS AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)
- A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- PRIVATE WATER AND SEWER SHALL BE UTILIZED WITHIN THIS DEVELOPMENT.
- A TRAFFIC STUDY WAS PERFORMED BY THE TRAFFIC GROUP & APPROVED UNDER S-95-23.
- STORMWATER MANAGEMENT IS PROVIDED (BY INFILTRATION BASIN) FOR EMERALD VALLEY ROAD. STORMWATER MANAGEMENT IS NOT PROVIDED FOR RESIDENTIAL LOTS BECAUSE ALL LOTS ARE GREATER THAN 2 ACRES.
- BENCHMARKS:

TRAVERSE POINT #407:	N 590,363.4671	
	E 1,334,845.5394	
	ELEVATION: 489.91	
	DESCRIPTION: IRON PIN APPROX. 24' SOUTH OF EDGE OF STONE DRIVEWAY	
TRAVERSE POINT #408:	N 590,823.1452	
	E 1,335,163.3205	
	ELEVATION: 512.89	
	DESCRIPTION: IRON PIN APPROX. 53' LEFT OF C STA. 24+00 WITH THIS SUBMISSION.	
- FOREST CONSERVATION PLAN BY DENNIS J. LABARE, M.S. & ASSOCIATES IS INCLUDED WITH THIS SUBMISSION.
- STORMWATER MANAGEMENT IS PROVIDED FOR EMERALD VALLEY ROAD BY MEANS OF INFILTRATION BASIN AND IS TO BE OWNED AND MAINTAINED BY THE H.O.A.
- THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN.

APPROVED: DEPARTMENT OF PUBLIC WORKS

Andrew M. Deneke 4-16-99
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Cindy Hamlin 5/11/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

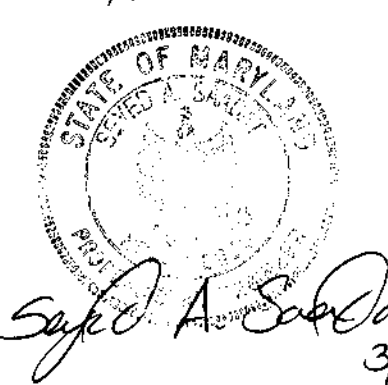
William J. Dammann 4/22/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLCOTT CITY, MD., 21043
(410)-461-9563

FOR ROADS, STORM DRAINS,
EROSION & SED. CONTROL



FOR STORMWATER
MGMT., LANDSCAPING



OWNERS/DEVELOPERS
DIGI-DATA HOLDINGS
C/O MILES AND STOCKBRIDGE
9881 BROKEN LAND PKWY.
COLUMBIA, MD. 21046



AS-BUILT
DATE: 9/21/01
PROF. L.S. #10849

**HAWKSFIELD ESTATES
SECTION TWO
LOTS 1-6**

TAX MAP 16 PARCEL 258 AND A RESUBDIVISION
OF LOT 19 HAWKSFIELD ESTATES
3RD ELECTION DIST. HOWARD CO., MD.
SCALE: 1" = 100' SEPTEMBER 12, 1998

SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLCOTT CITY, MARYLAND 21043

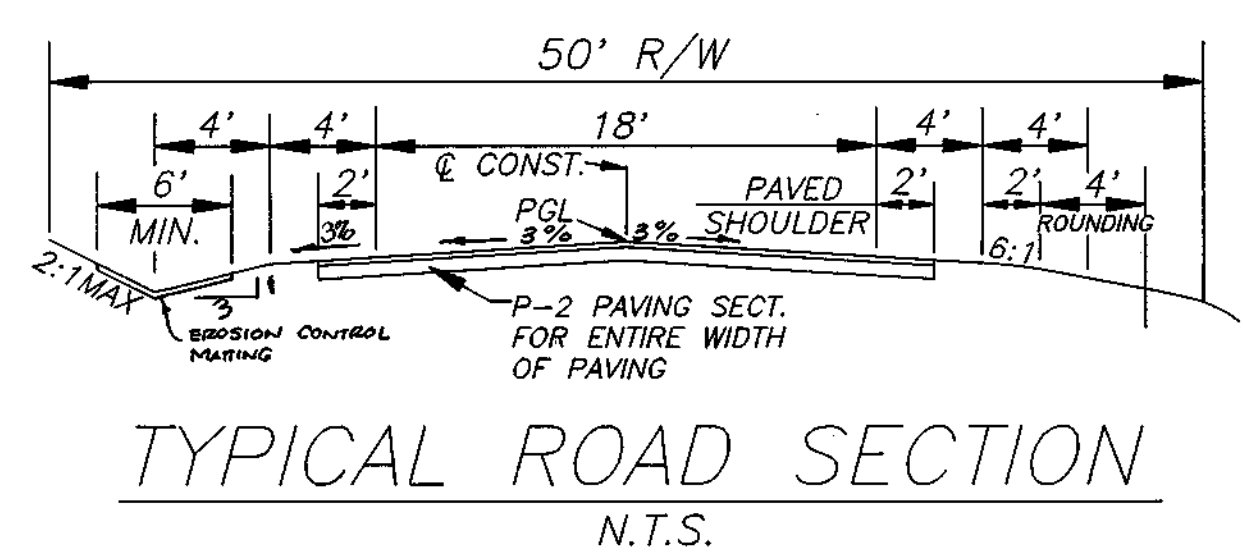
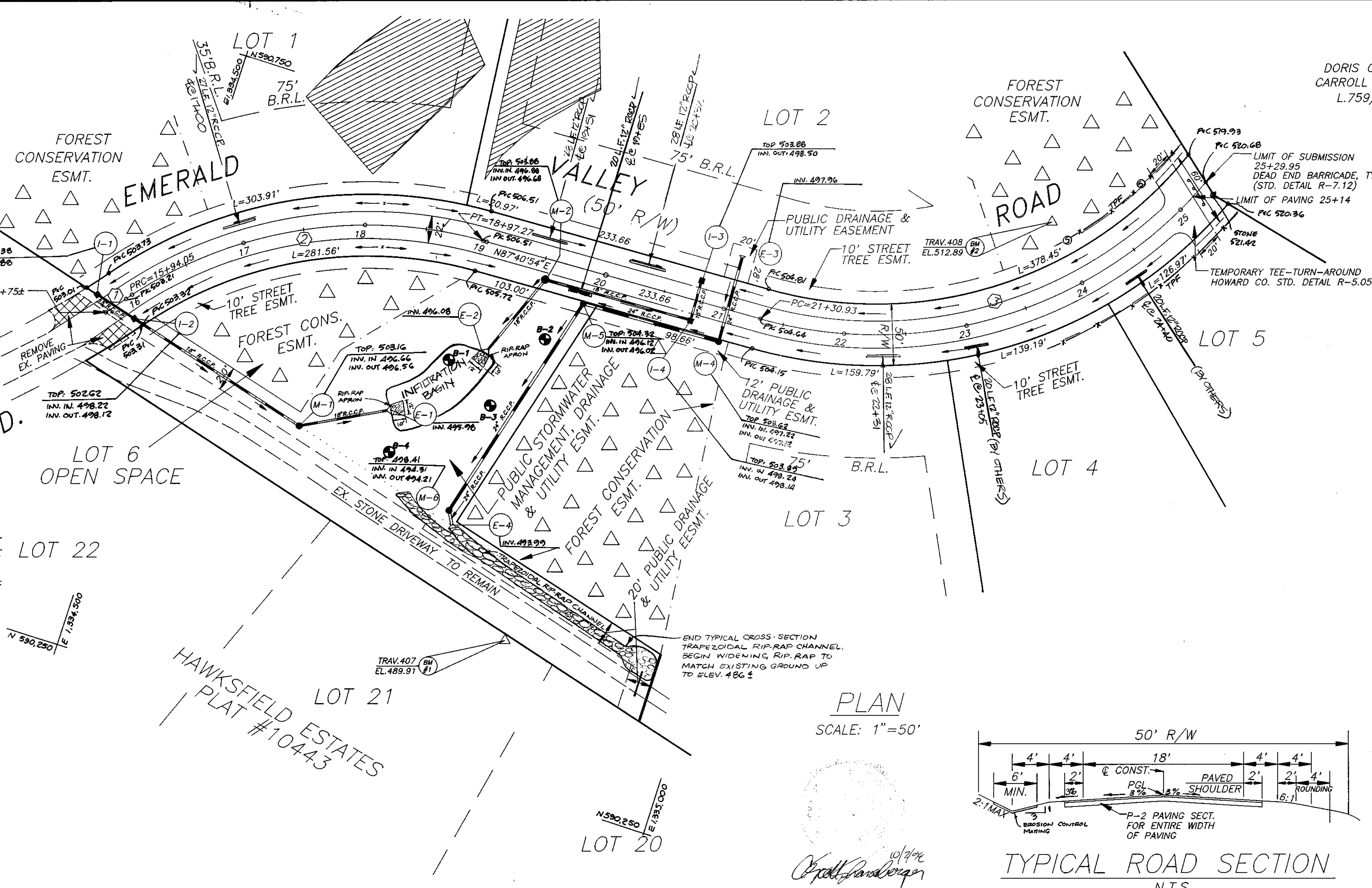
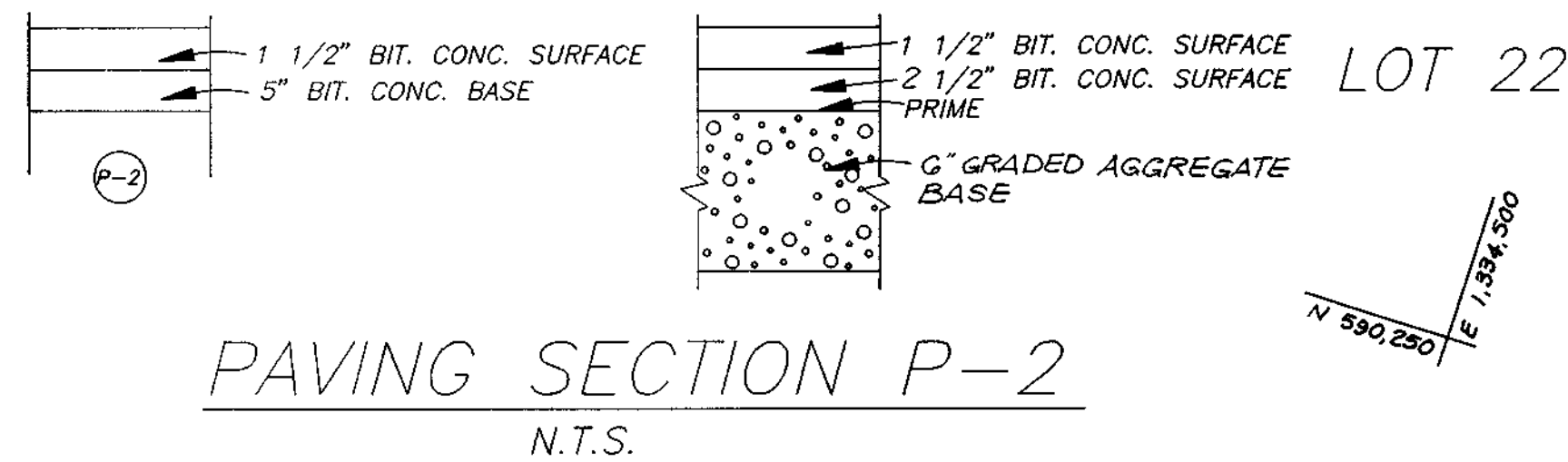
ZONED: RC-DEO
SHEET 1 OF 11
PREVIOUS FILES: S-95-23, P-98-21
(LOT 19: S-88-52, P-88-82, WP-88-72
F-90-05)

CURVE NO.	DELTA	RADIUS	LENGTH	TAN	CHORD
①	0°43'48"	850.00'	10.83'	5.42'	N38°24'31"E 10.83'
②	49°38'17"	350.00'	303.22'	161.86'	N62°51'46"E 293.83'
③	65°19'16"	350.00'	399.02'	224.36'	N55°01'16"E 377.76'

DRIVEWAY CULVERT TABLE

LOT #	ROAD STA	PIPE SIZE	PIPE LENGTH	PIPE SLOPE	INVERTS UPPER LOWER	Q10	V ₁₀	V ₂
1	17+00	12" RCCP	27'	2.20%	504.71/504.11	0.95	1.21	4.0
2	19+51	12" RCCP	28'	1.54%	504.57/504.14	1.04	1.32	4.0
3	22+31	12" RCCP	28'	0.75%	505.51/504.72	0.89	0.75	4.0
4	23+05	12" RCCP	20'	1.04%	507.23/506.84	0.48	0.61	4.0 (BY OTHERS)
5	24+40	12" RCCP	20'	2.92%	513.35/512.77	0.22	0.28	4.0 (BY OTHERS)
6	19+85	12" RCCP	20'24"	1.55%	503.67/503.26	0.87	0.47	3.6
2	20+32	12" RCCP	26'	0.54%	503.32/503.17			

EMERALD VALLEY RD. (PUBLIC ROAD) (50' R/W)



APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 4-16-99
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cecilia Hamstra 5/11/99
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Edna Dummer 4/22/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION	BY
11/2/93	1	REV. TYP PAVING SECTION	S.L.
5/3/00	2	DEL. M.D. REV. ST. DR. LAYOUT, REV. GUARDRAIL STATIONING.	S.L.
9/19/00	3	ELIMINATE GUARDRAIL	S.L.
2/22/01	4	REVISE DRIVEWAY CULVERTS	S.L.

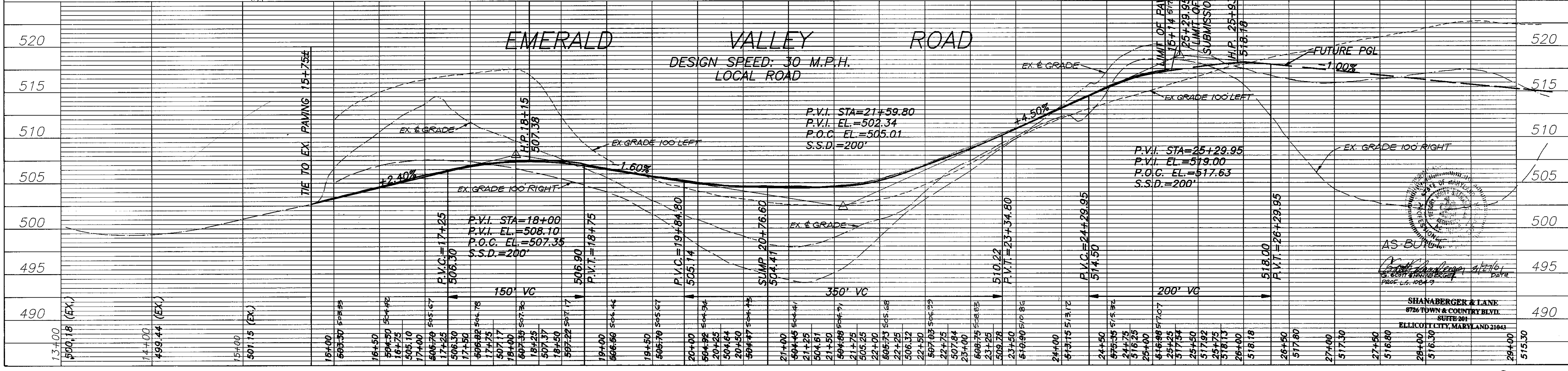
OWNERS/DEVELOPERS
 DIGI-DATA HOLDINGS
 C/O MILES AND STOCKBRIDGE
 9881 BROKEN LAND PKWY.
 COLUMBIA, MD. 21046

HAWKSFIELD ESTATES
 SECTION TWO
 LOTS 1 - 6
 ZONED: RC-DEO
 3RD ELECTION DIST. HOWARD CO., MD.

EMERALD VALLEY ROAD
 PLAN AND PROFILE

SCALE: AS SHOWN DATE: SEPT., 1998 DWG. 2 OF 11
 DES. GSS DRN. RGF CHK. GSS

SHANBERGER & LANE
 8726 TOWN & COUNTRY BLVD.
 SUITE 201
 ELLICOTT CITY, MD., 21043
 (410)-461-9563

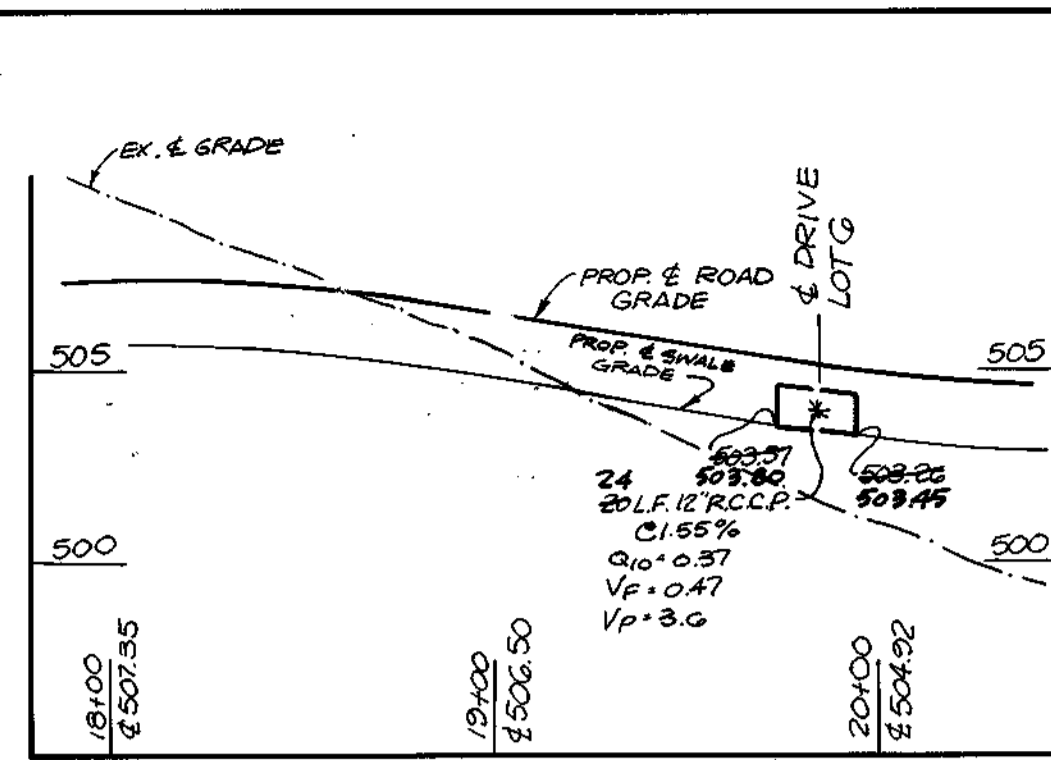


AS-BUILT

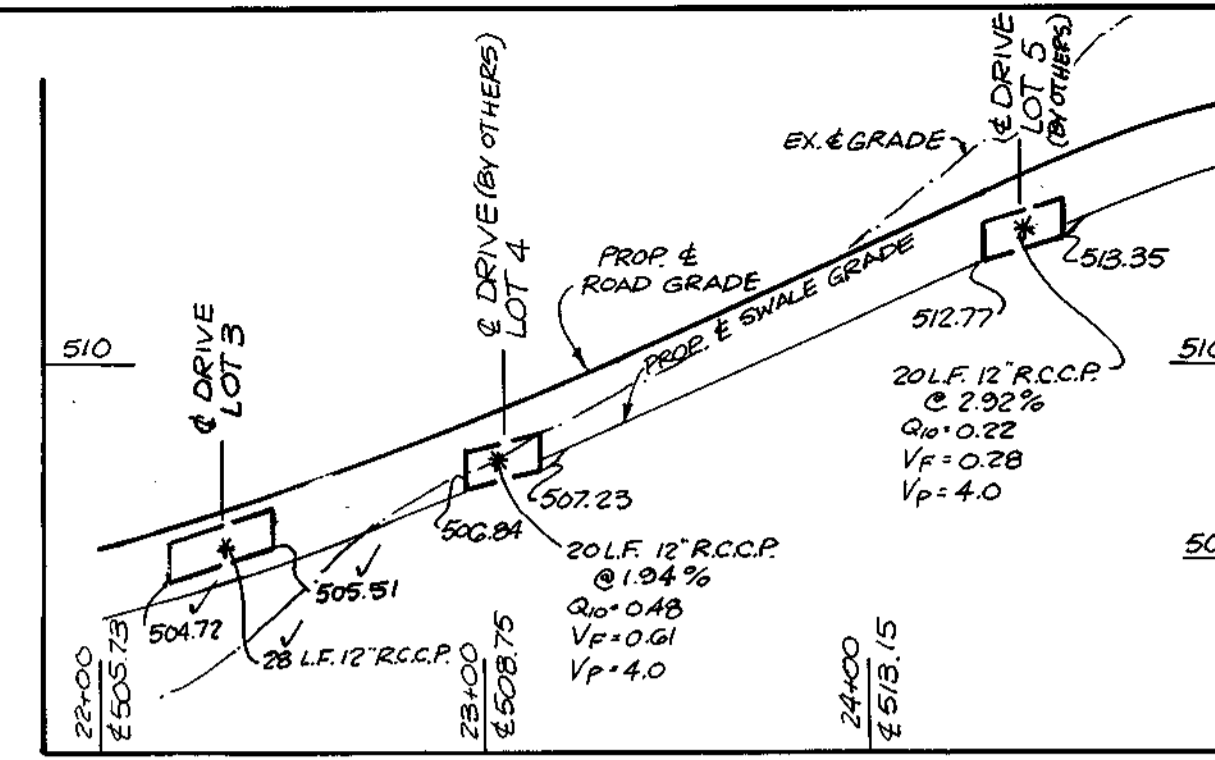
Shanberger & Lane
 8726 TOWN & COUNTRY BLVD.
 SUITE 201
 ELLICOTT CITY, MARYLAND 21043

STRUCTURE SCHEDULE

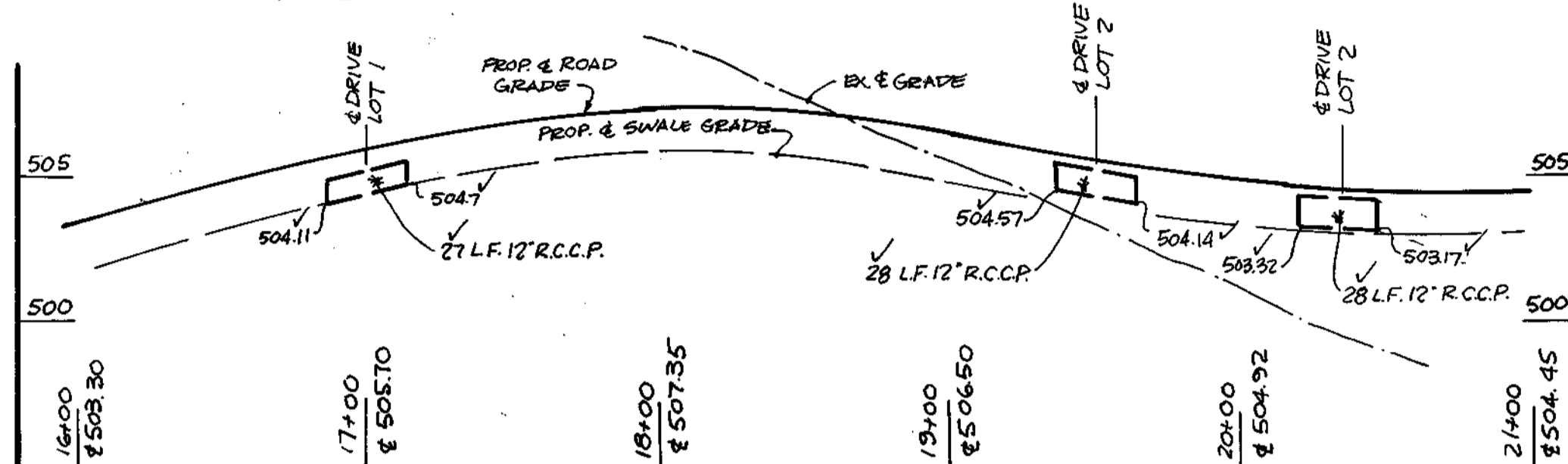
STRUCTURE NO.	TOP ELEVATION	INVERT IN	INVERT OUT	ROAD NAME	ROAD STATION	OFFSET	REMARKS
I-1	501.00	498.74	498.74	EMERALD VALLEY ROAD	15+75.66	17' L	TYPE "K" S.D. 4.12 & 4.13
I-2	501.35	498.41	498.41	EMERALD VALLEY ROAD	15+90.46	17' R	TYPE "K" S.D. 4.12 & 4.13
I-3	502.69	498.93	498.93	EMERALD VALLEY ROAD	20+76.60	17' L	TYPE "K" S.D. 4.12 & 4.13
I-4	502.69	498.42	498.42	EMERALD VALLEY ROAD	20+76.60	17' R	TYPE "K" S.D. 4.12 & 4.13
M-1	503.21	496.63	496.63	EMERALD VALLEY ROAD	N590477.41, E1334833.00		STANDARD MH S.D. G5.12
M-2	503.92	496.95	496.95	EMERALD VALLEY ROAD	19+54.09	17' R	STANDARD MH S.D. G5.12
M-4	503.75	497.35	497.35	EMERALD VALLEY ROAD	21+03.26	27' R	STANDARD MH S.D. G5.12
M-5	504.35	496.60	496.60	EMERALD VALLEY ROAD	19+89.16	27' R	STANDARD MH S.D. G5.12
M-6	498.54	494.21	494.21	EMERALD VALLEY ROAD	N590449.86, E1334769.76		STD. SHALLOW MH S.D. G5.12
E-1	-	496.00	496.00	EMERALD VALLEY ROAD	N590512.52, E1334699.28		CONC. END SECT. S.D.5.51/5.52
E-2	-	496.00	496.00	EMERALD VALLEY ROAD	N590581.37, E1334759.45		CONC. END SECT. S.D.5.51/5.52
E-3	-	497.96	498.01	EMERALD VALLEY ROAD	21+03.26	45.6' R	CONC. END SECT. S.D.5.51/5.52
E-4	-	499.99	496.00	EMERALD VALLEY ROAD	N590439.45, E1334775.74		CONC. END SECT. S.D.5.51/5.52



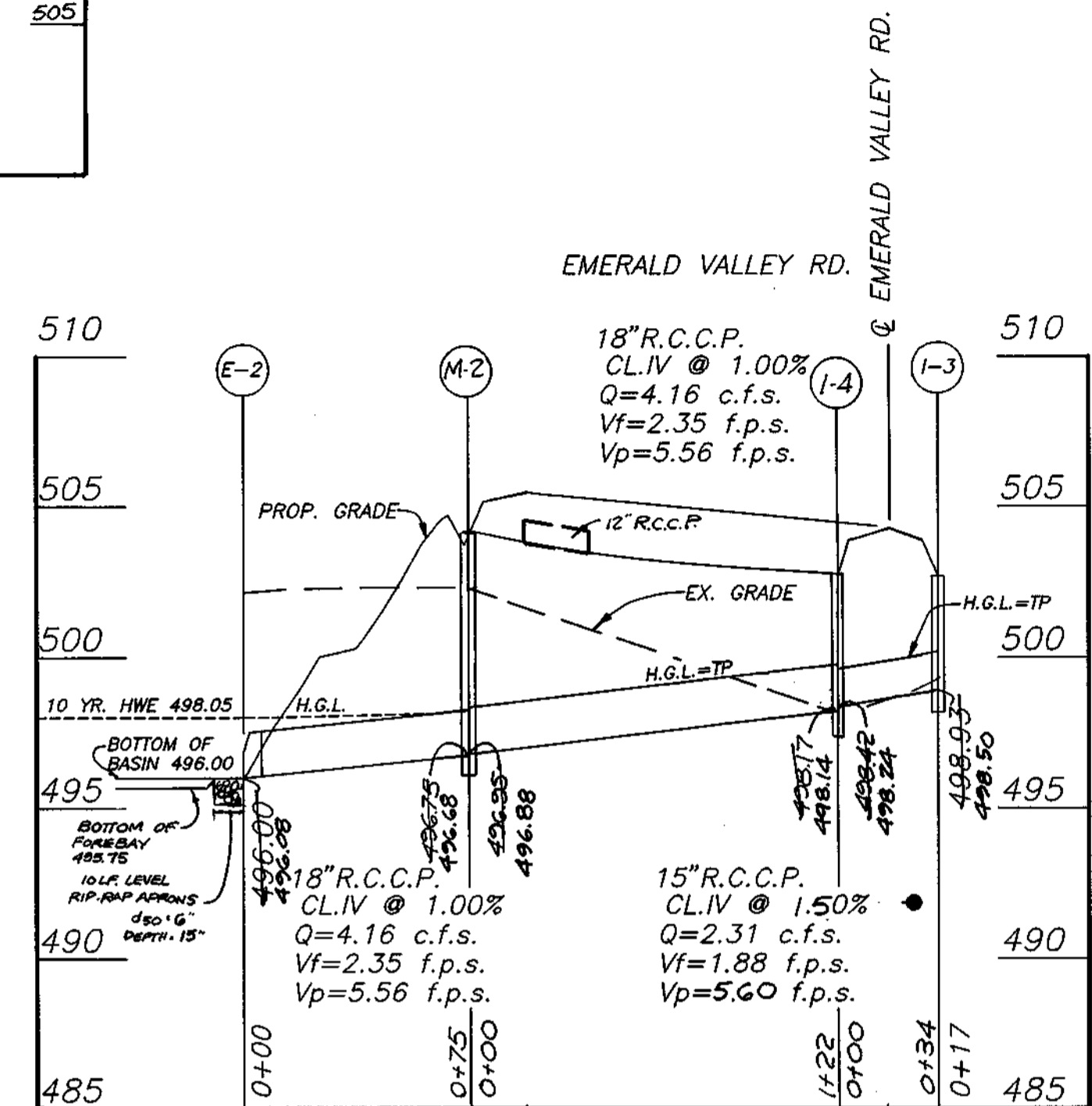
DRIVEWAY CULVERT LOT G



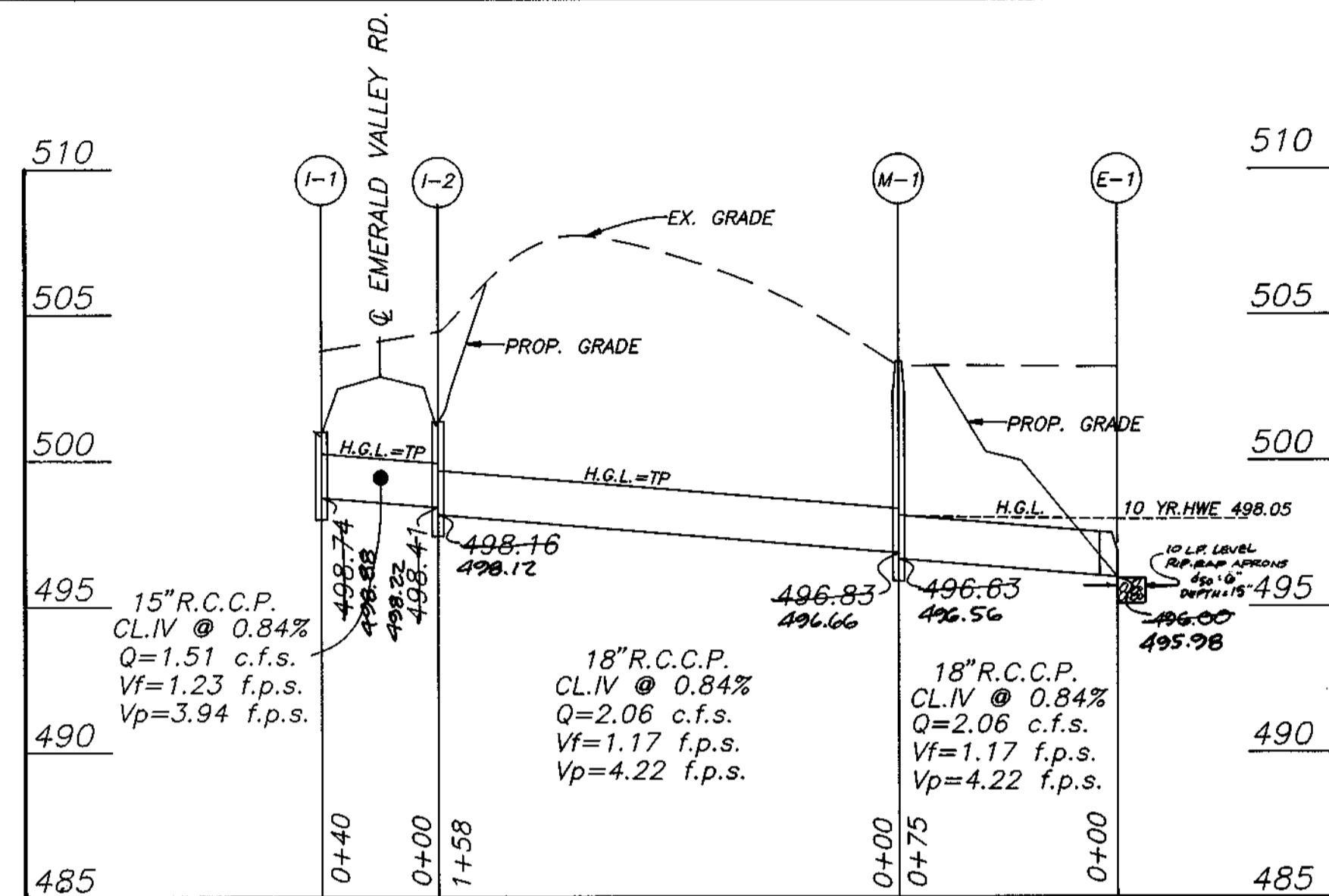
DRIVEWAY CULVERTS LOTS 3, 4 & 5



DRIVEWAY CULVERTS LOTS 1 & 2

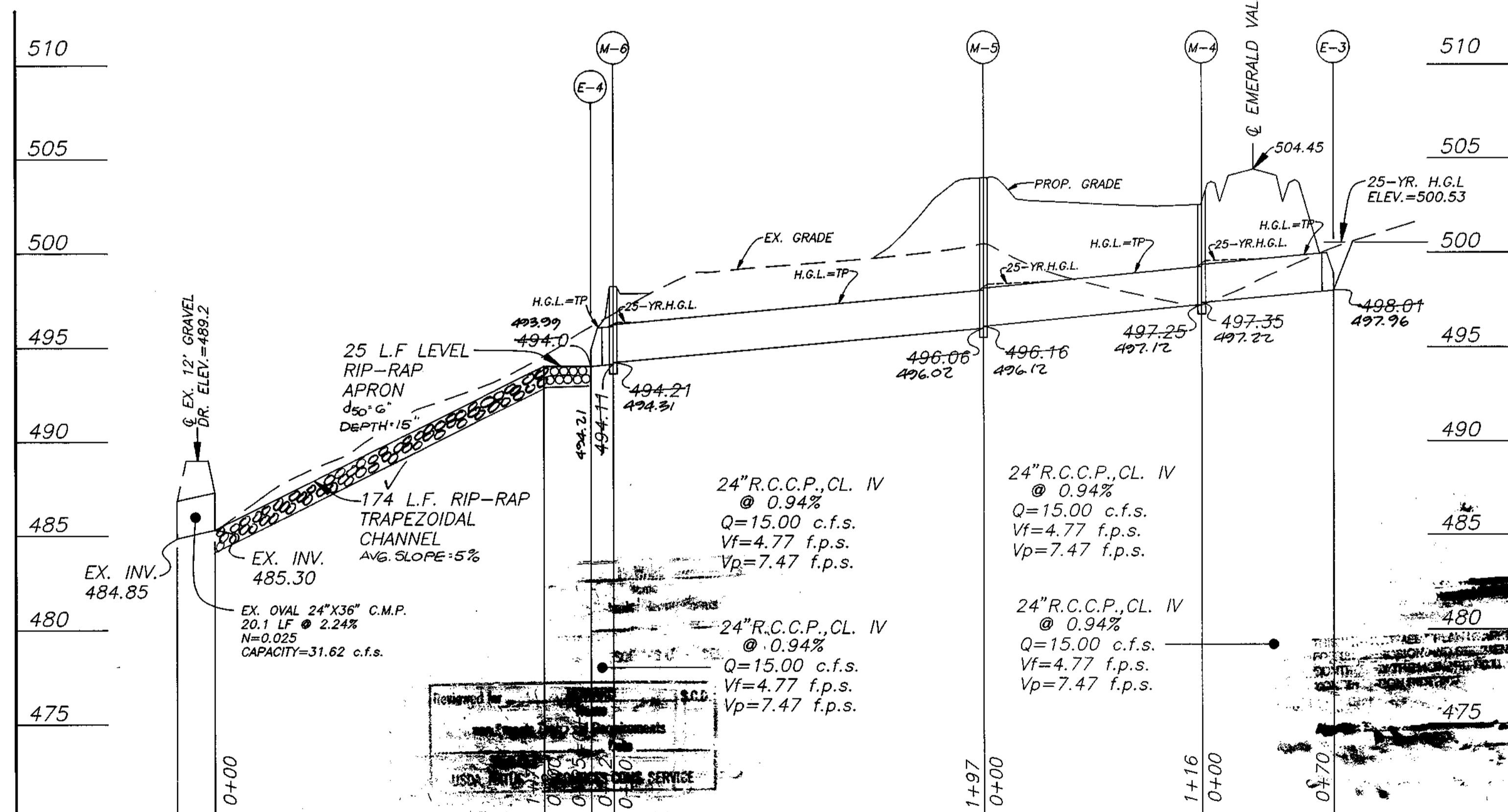
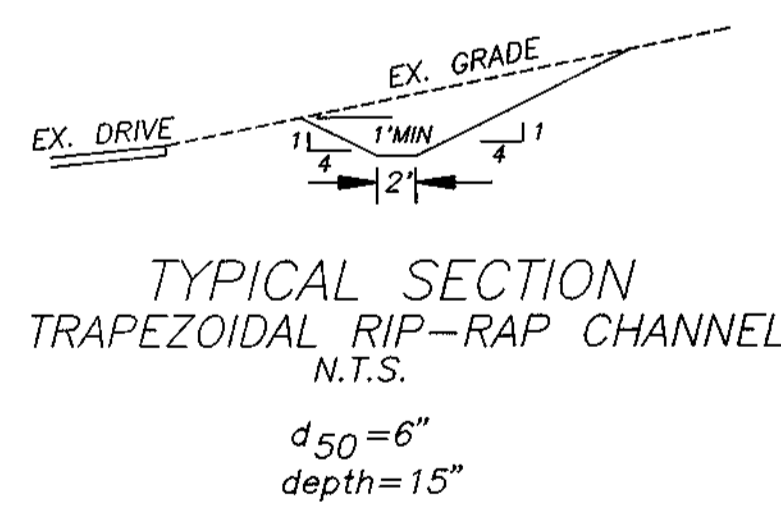


EMERALD VALLEY RD.



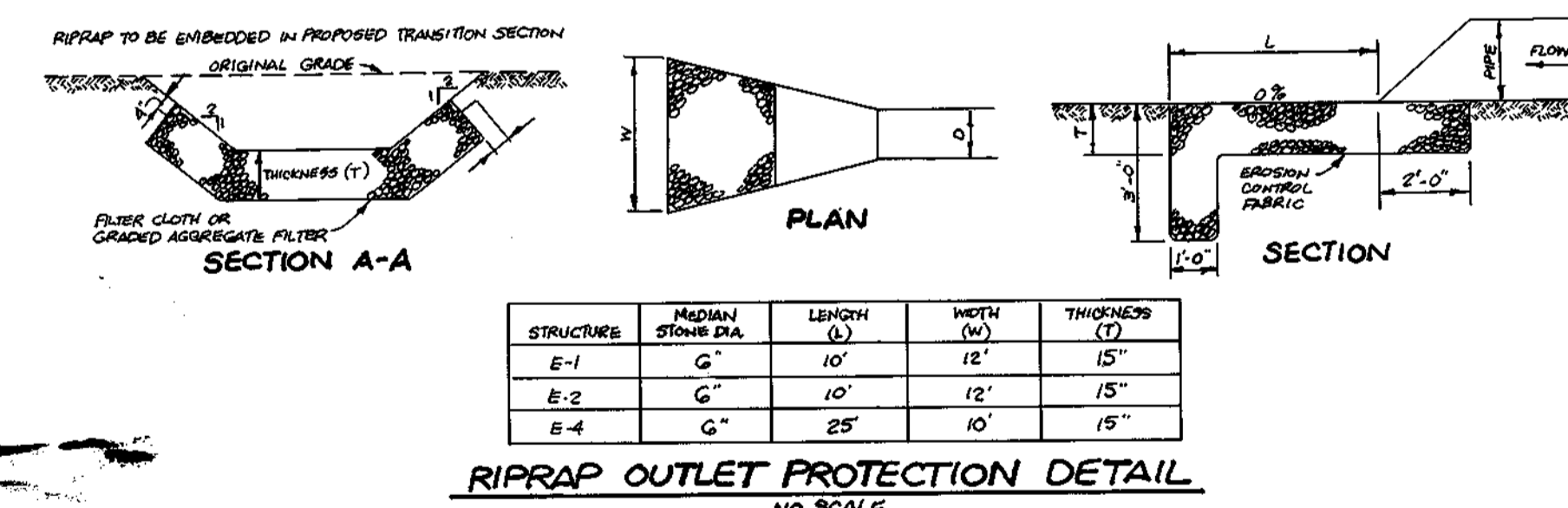
EMERALD VALLEY RD.

SIZE	TYPE	CLASS	QUANTITY
24"	ROCP	IV	3915 LF
18"	ROCP	IV	430 LF
15"	ROCP	IV	91 LF
12"	ROCP	IV	120 LF
6"	PVC	SCH 40	29 LF



EMERALD VALLEY RD.

DATE	NO.	REVISION	BY
5/3/00	1	DEL. M3 & REDRAW PROFILES	SFL
2/22/01	2	REVISE DRIVEWAY CULVERTS	SFL

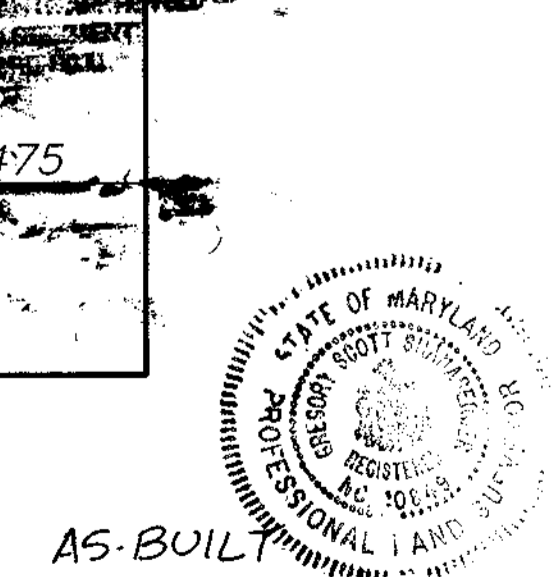


STRUCTURE	MIDIAN	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-1	G	10'	12'	15"
E-2	G	10'	12'	15"
E-4	G	25'	10'	15"

APPROVED: DEPARTMENT OF PUBLIC WORKS
Michael M. Daniels 4-16-99
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chris Hamilton 5/11/99
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John Damman 4/26/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



AS-BUILT
 SHANABERGER & LANE
 8726 TOWN & COUNTRY BLVD.
 SUITE 201
 ELLICOTT CITY, MARYLAND 21043

OWNERS/DEVELOPERS
 DIGI-DATA HOLDINGS
 C/O MILES AND STOCKBRIDGE
 9881 BROKEN LAND PKWY.
 COLUMBIA, MD. 21046

EMERALD VALLEY ROAD
 STORM DRAIN PROFILES

HAWKSFIELD ESTATES
 SECTION TWO
 LOTS 1- 6
 ZONED: RC-DEO
 3RD ELECTION DIST. HOWARD CO., MD.

SCALE AS SHOWN DATE: SEPT., 1998 DWG. 3 OF 11
 DES. GSS DRN. ROF CHK. GSS

SHANABERGER & LANE
 8726 TOWN & COUNTRY BLVD.
 SUITE 201
 ELLICOTT CITY, MD., 21043
 (410)-461-9563



SEDIMENT TRAP DATA			
TRAP #	1	2	
D.A.	0.39 AC	0.42 AC	
BOTTOM EL.	499.0	499.0	
SIDES	2:1	2:1	
CREST EL.	502.0	502.0	
CREST LEN.	6'	6'	
EMBANKMENT EL.	503.0	503.0	
*VOL. REQ'D	4717 FT ³	5,171 FT ³	
VOL. PROV'D	5792 FT ³	6,576 FT ³	
*VOL. REQ'D = SED. CON. + TEMP. SW. M.			

LEGEND	
LIMIT OF DISTURBANCE LOD
STAB. CONST. ENTR.	██████
EARTH DIKE	ED A-2
SILT FENCE	— S — S —
STANDARD INLET PROT.	□ SIP
TREE PROTECTION FENCE	— X — X —

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 4-6-99
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Conrad Hamilton 5/11/99
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chad Dammus 4/6/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CONSULTANT'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 THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Chad Dammus 4/6/99
 DATE

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Dig-Data Holdings, Inc. by D. Pfeiffer 4/6/99
 AUTHORIZED AGENT DATE

Dig-Data Holdings, Inc. 4/6/99
 SIGNATURE OF DEVELOPER DATE

DRIVEWAY ELEVATION TABLE

LOT #	STA	0+00 (E.P.)	0+10	0+20	0+30	0+40	0+50	0+60	0+70	0+80	0+90	1+00
1	18158	506.81	507.05	507.30	507.55	507.80	508.05	508.30	508.55	508.80	509.05	509.30
2	19102	506.14	506.38	506.62	506.86	507.10	507.34	507.58	507.82	508.06	508.30	508.54
3	22105	506.85	507.09	507.33	507.57	507.81	508.05	508.29	508.53	508.77	509.01	509.25
4	23105	506.62	506.86	507.10	507.34	507.58	507.82	508.06	508.30	508.54	508.78	509.02
5	24140	514.61	514.85	515.09	515.33	515.57	515.81	516.05	516.29	516.53	516.77	517.01
6	19185	504.81	505.05	505.29	505.53	505.77	506.01	506.25	506.49	506.73	506.97	507.21

OWNERS/DEVELOPERS: DIG-DATA HOLDINGS, 910 MILES + STOCKBRIDGE, 9881 BROKEN LAND PKWY, COLUMBIA, MD. 21046

HOWARD COUNTY BOARD OF EDUCATION L.2450/F.281

DATE	NO.	REVISION	BY
11/2/99	1	REV. GRADING, TEMP PIPE + DELETE	S/L
5/9/00	2	DEL. M.S., REV. ST. DRAIN LAYOUT	S/L
2/22/01	3	REVISE DRIVEWAY CULVERTS	S/L

GRADING AND SEDIMENT CONTROL PLAN

HAWKSFIELD ESTATES SECTION TWO LOTS 1-6

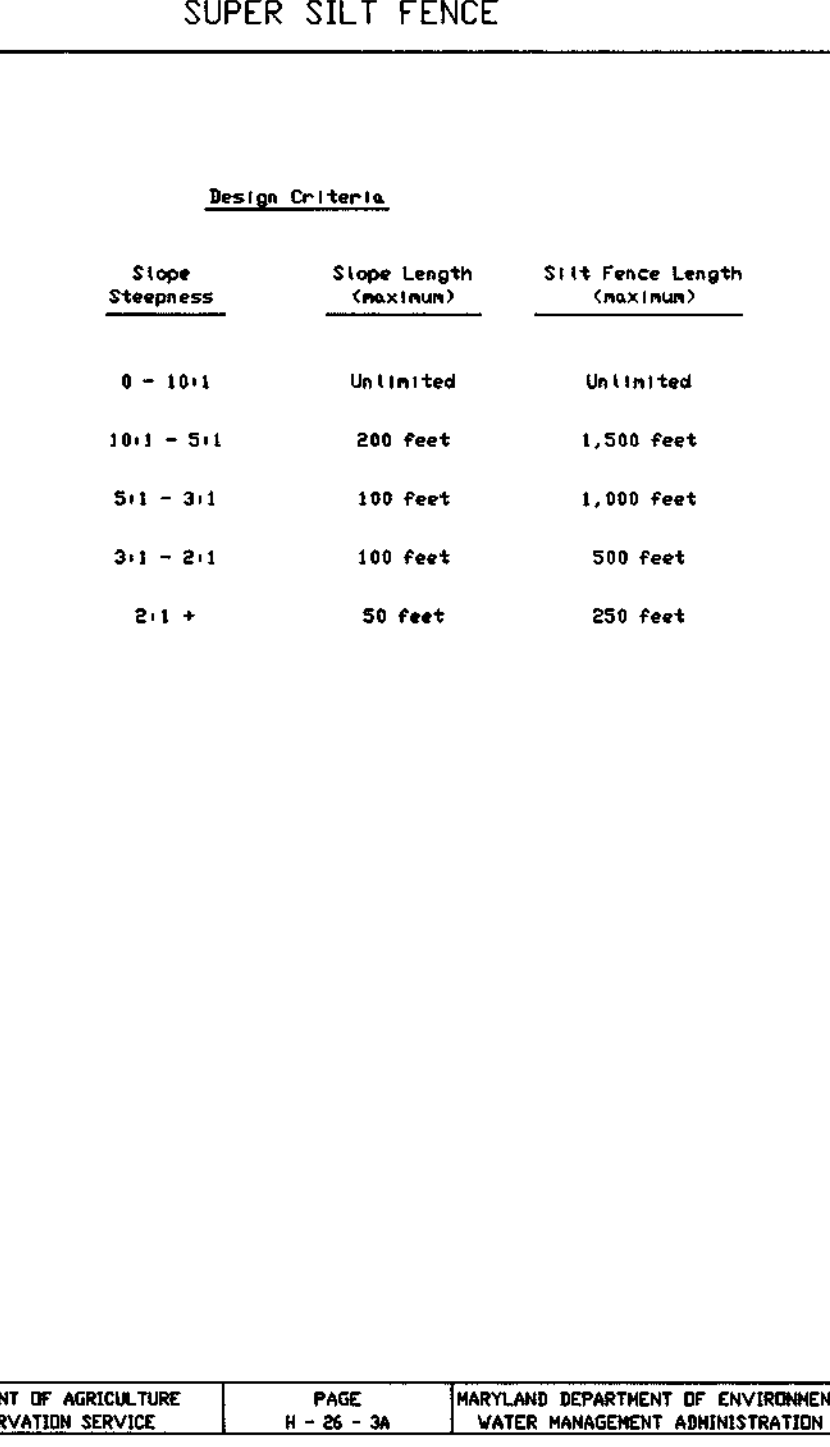
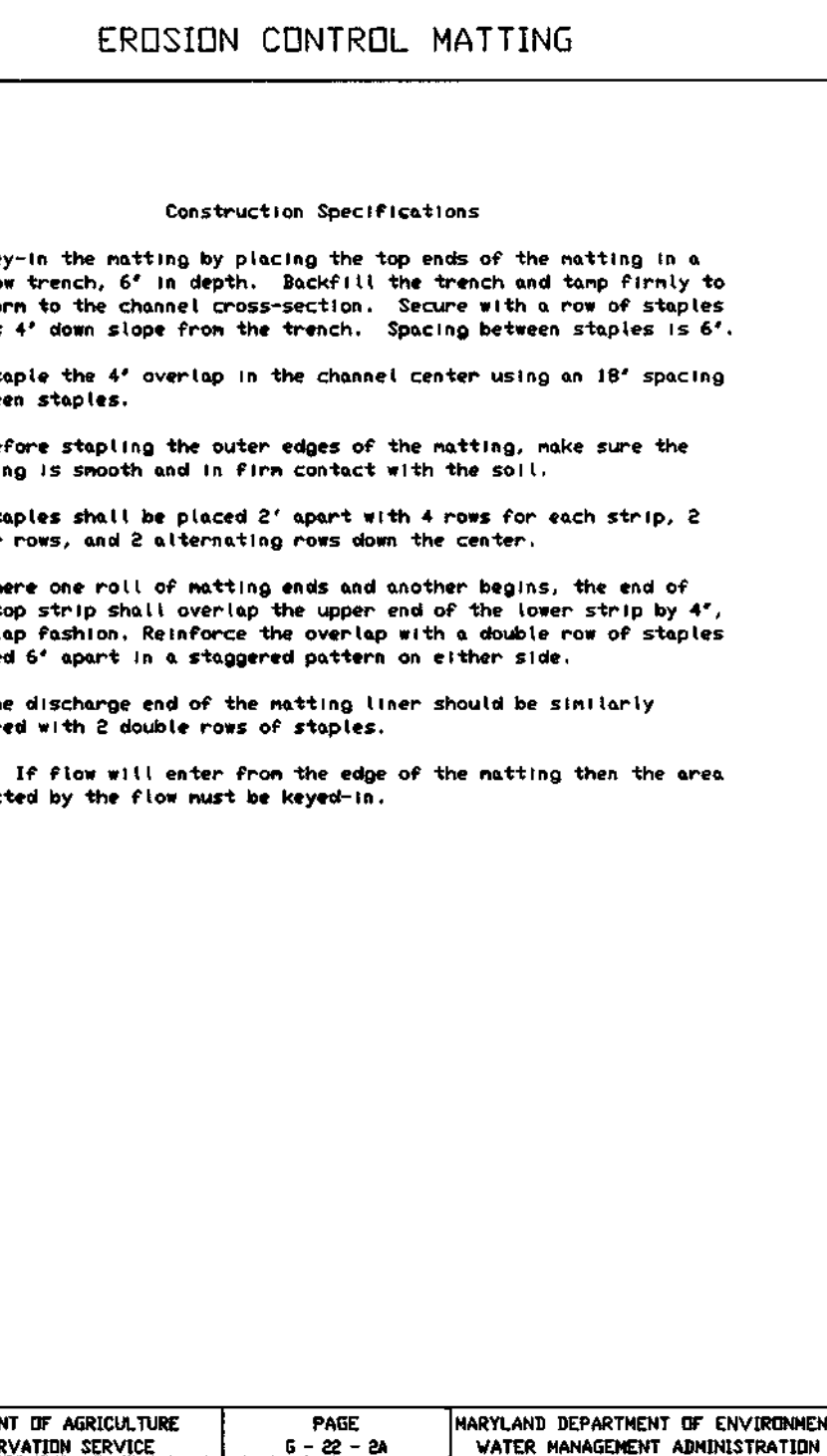
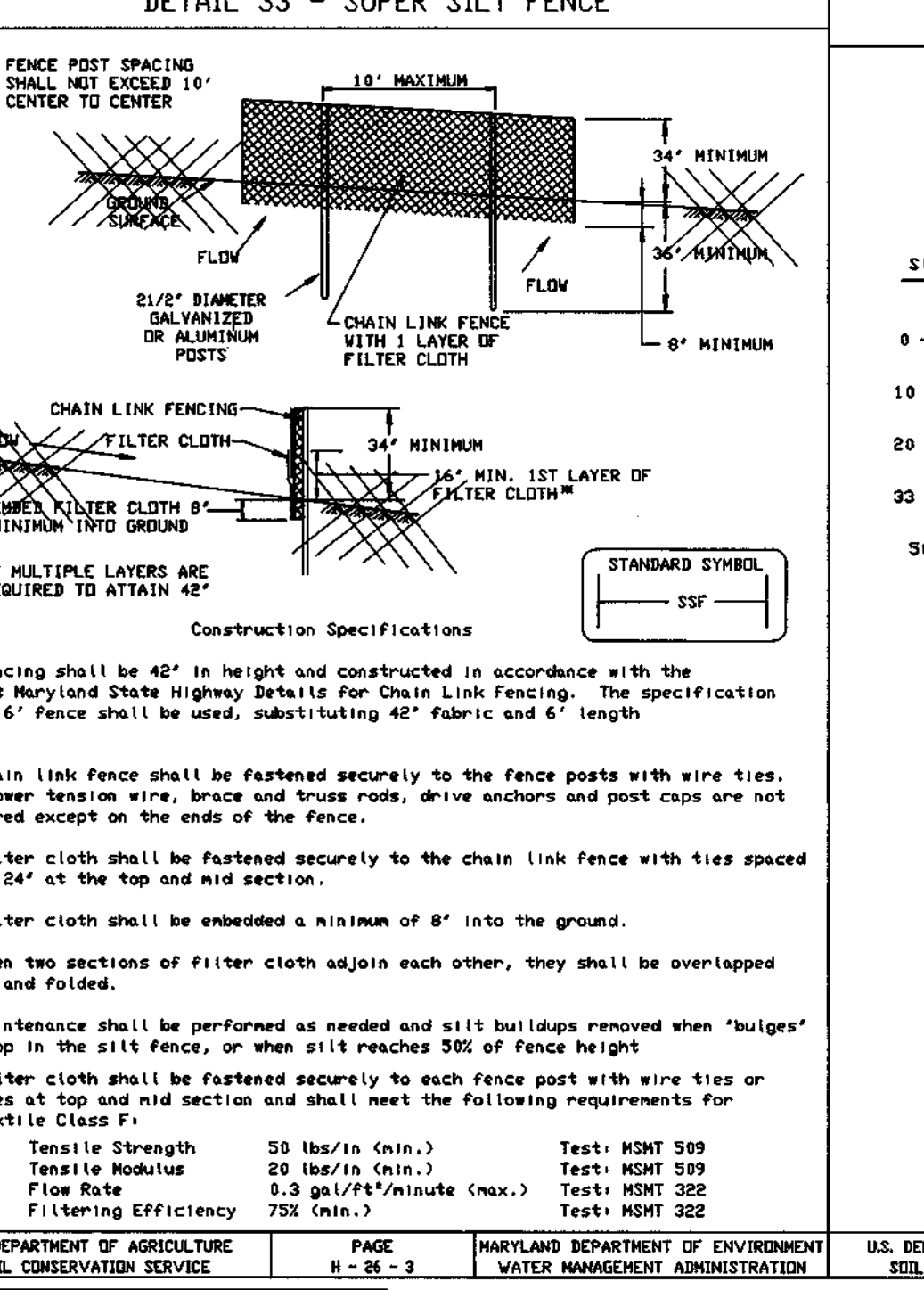
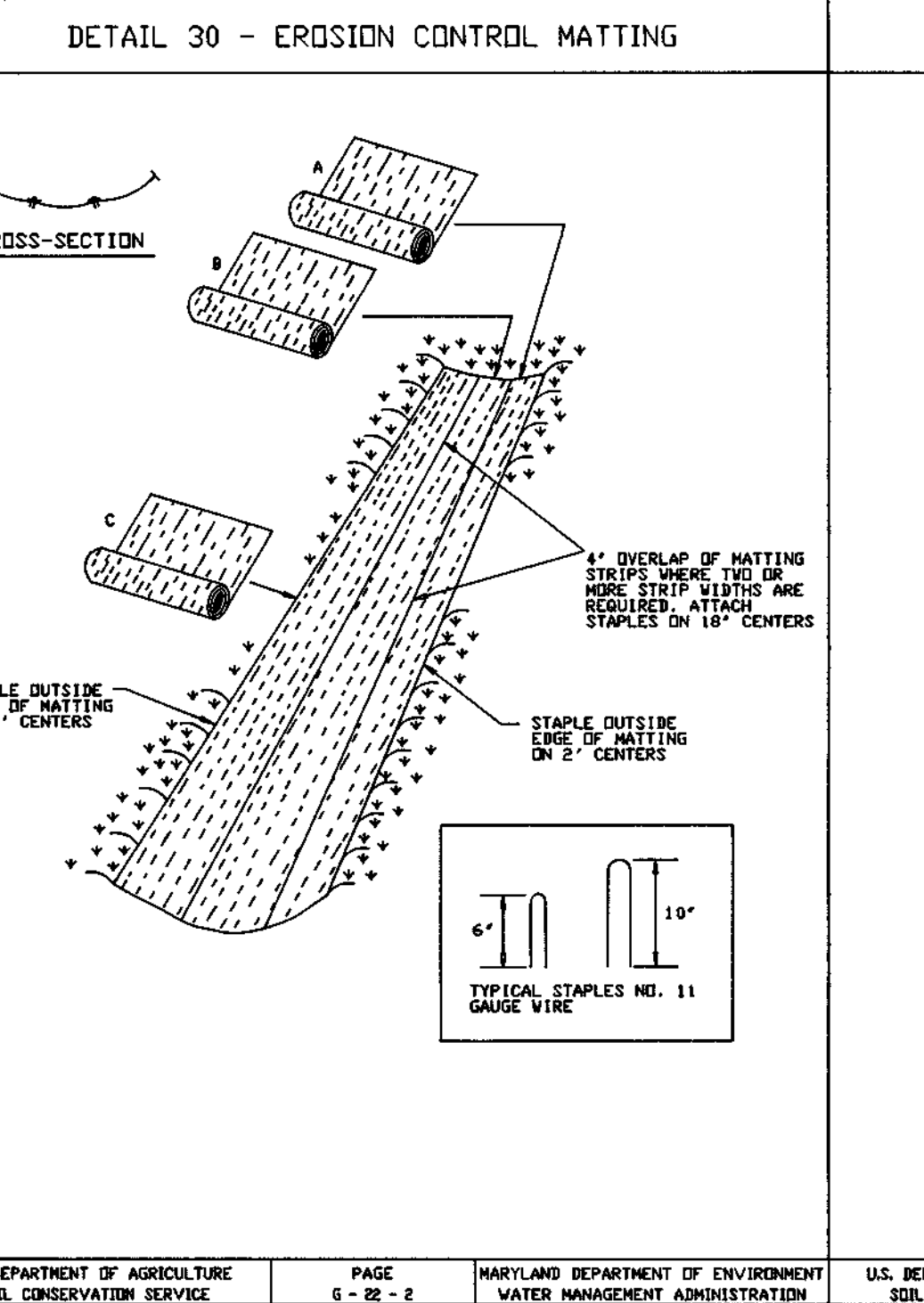
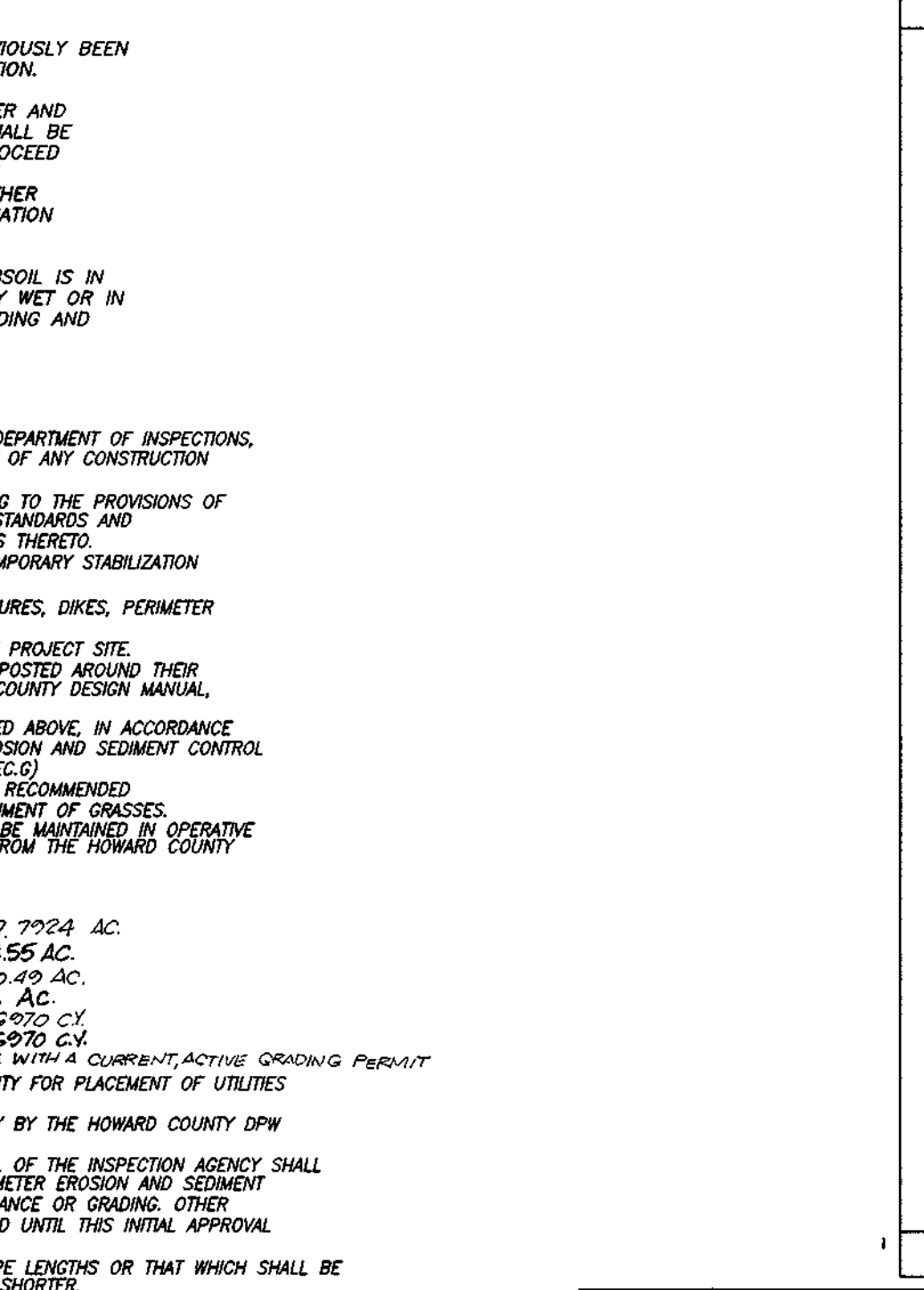
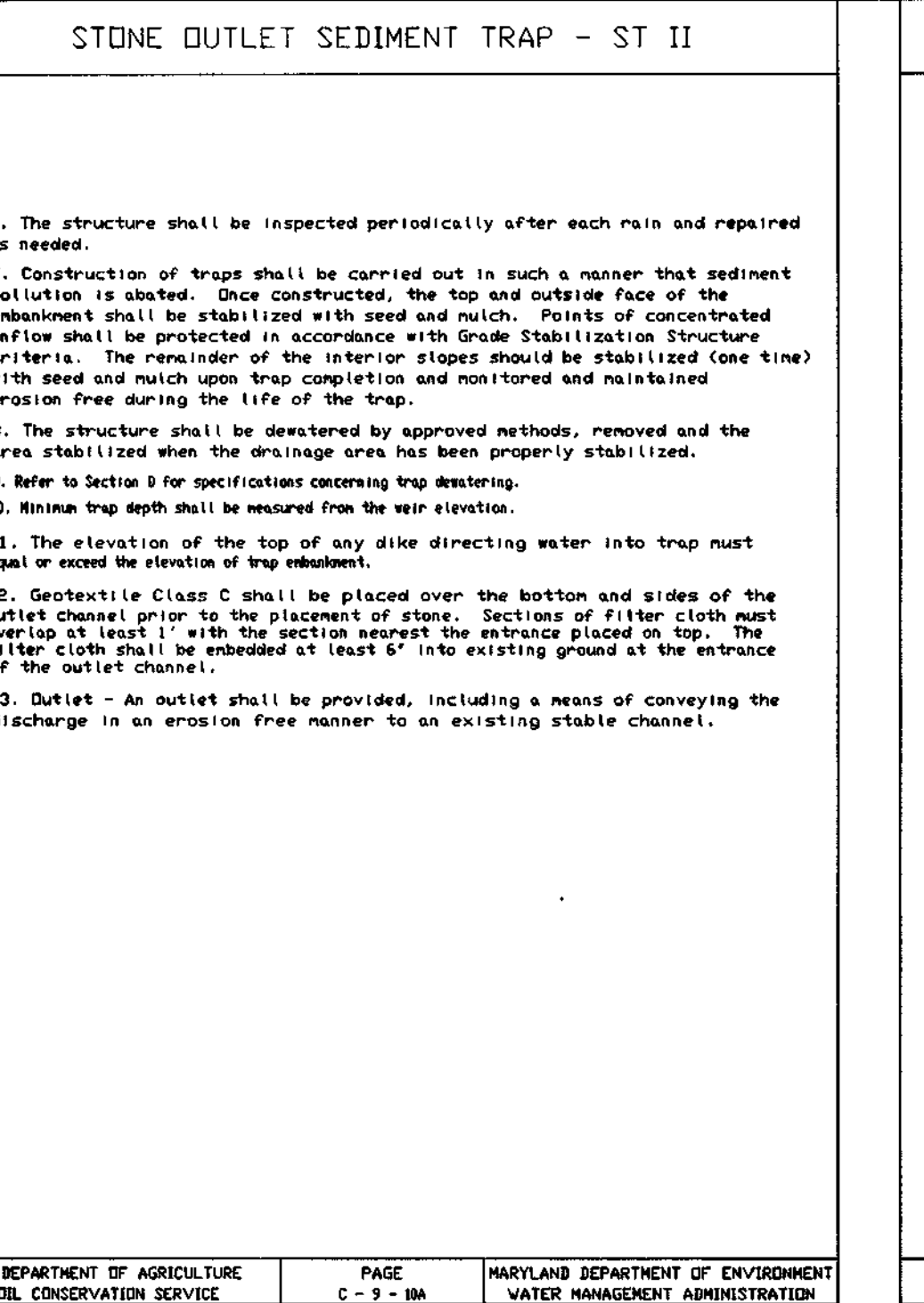
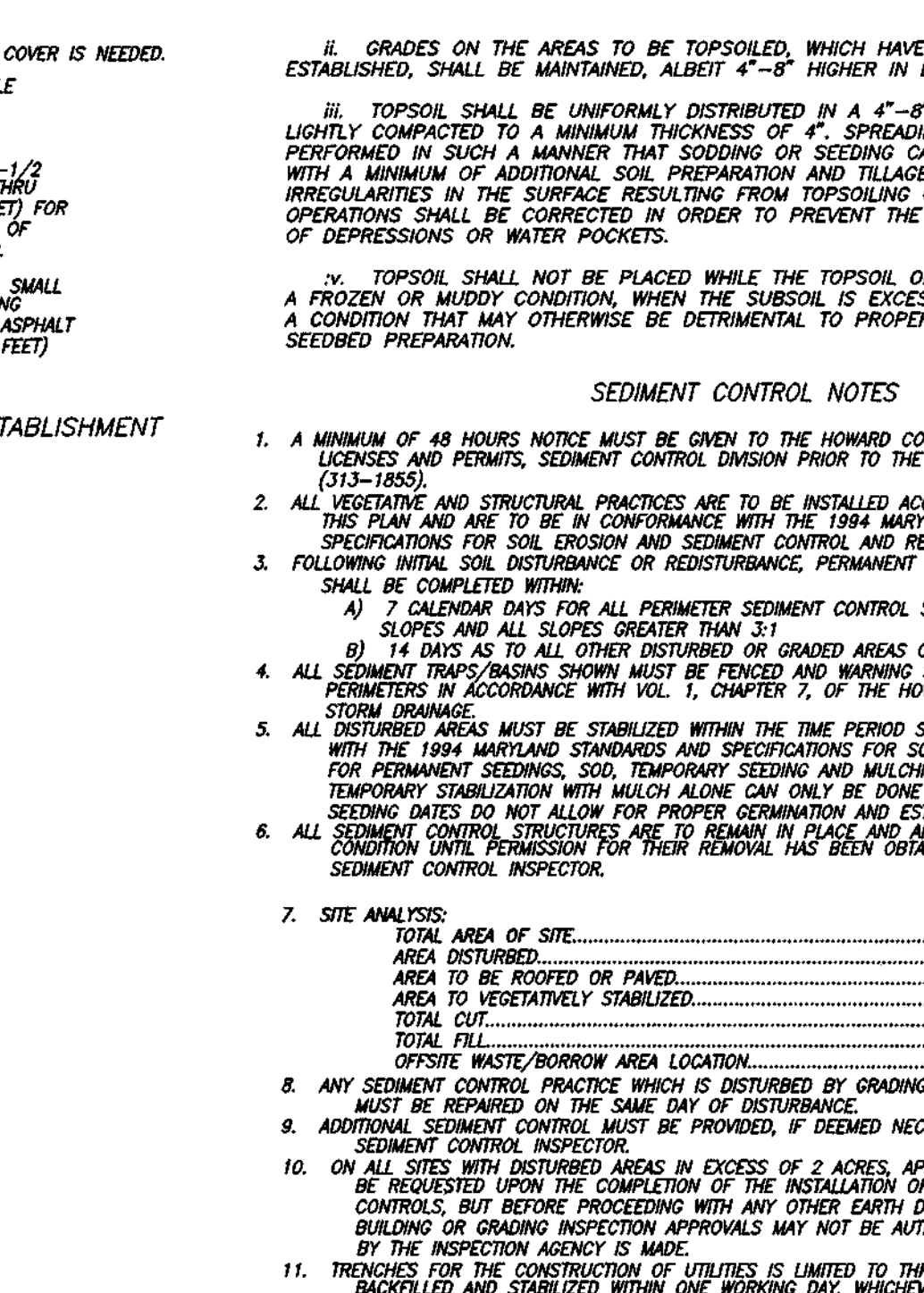
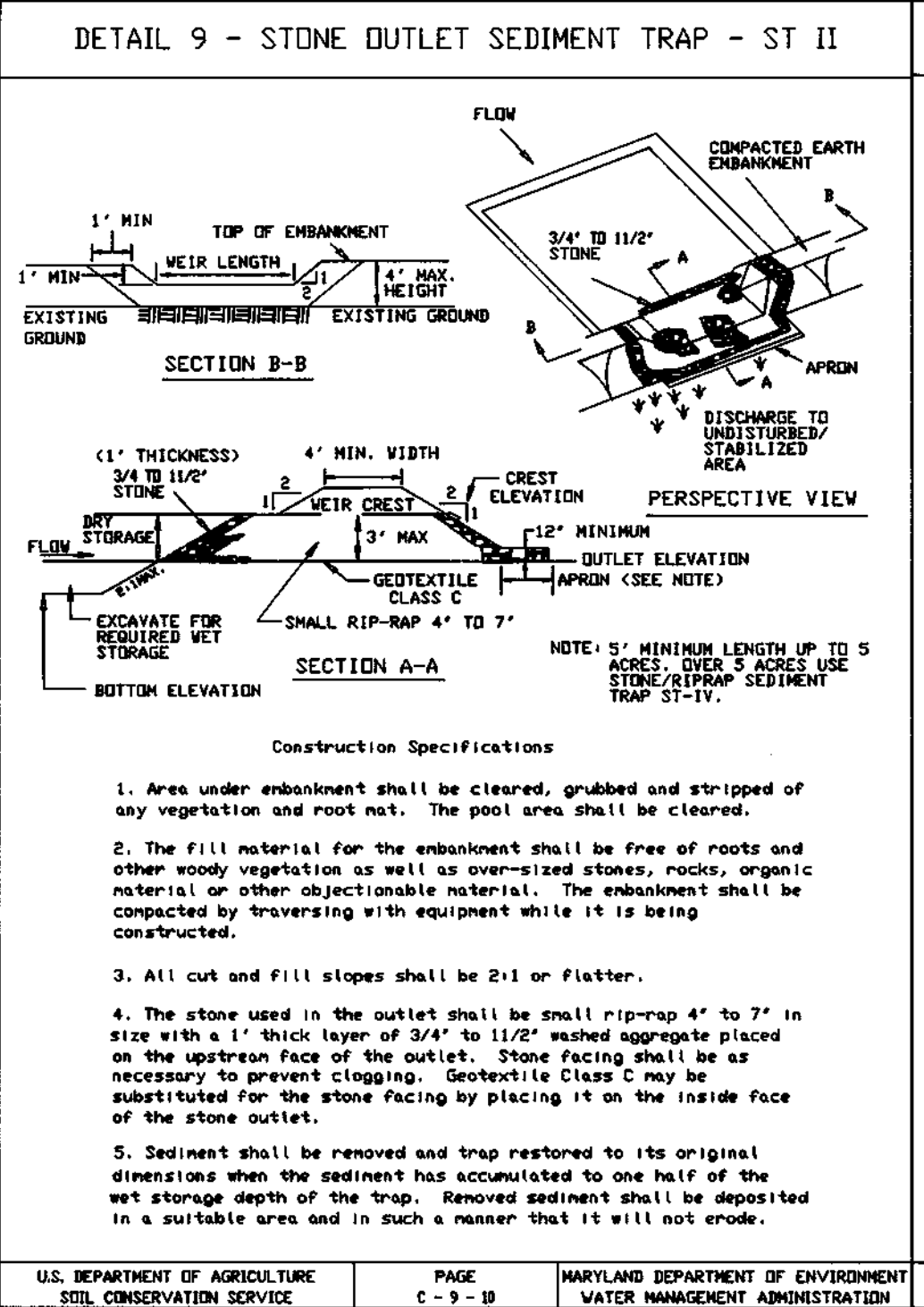
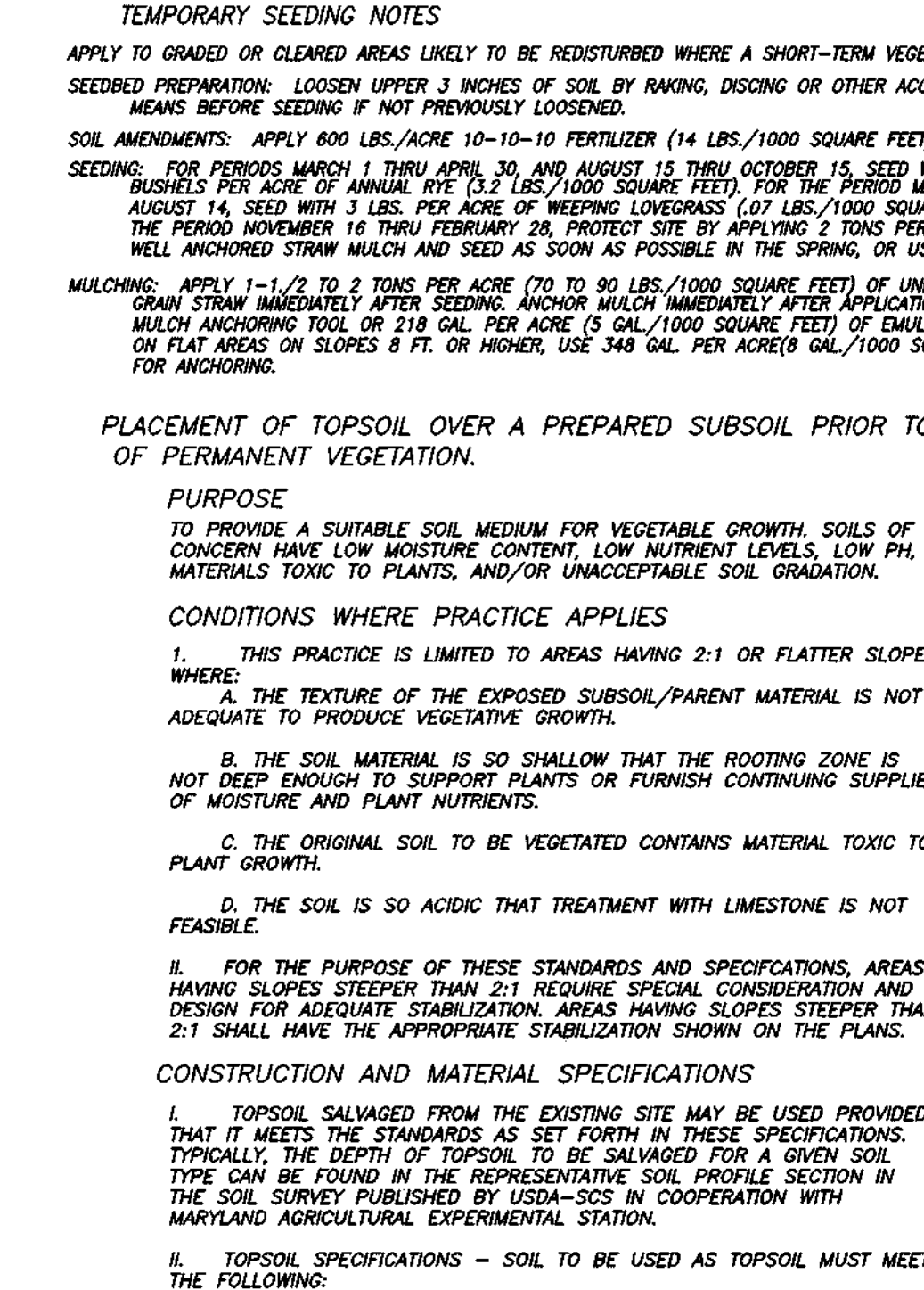
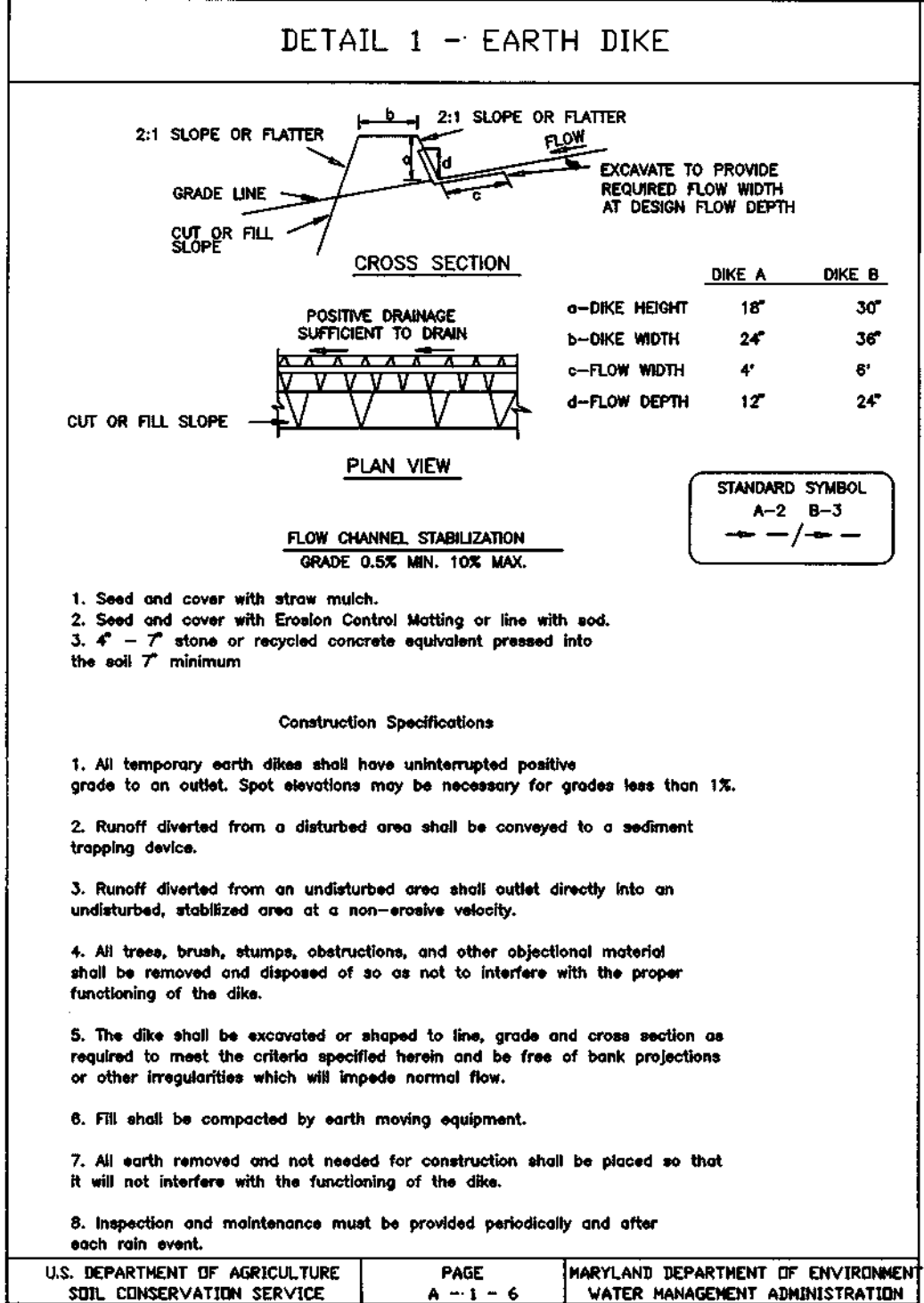
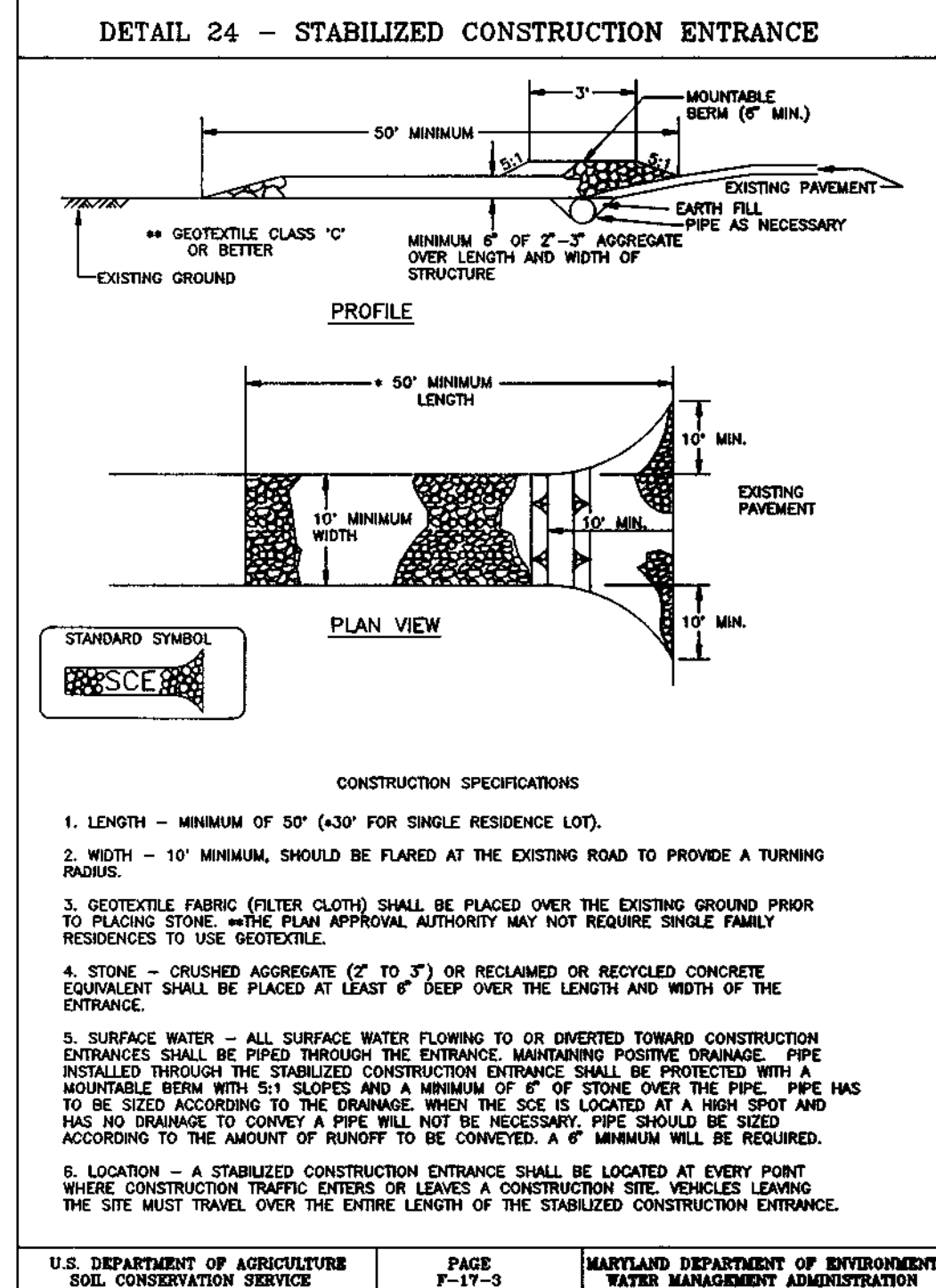
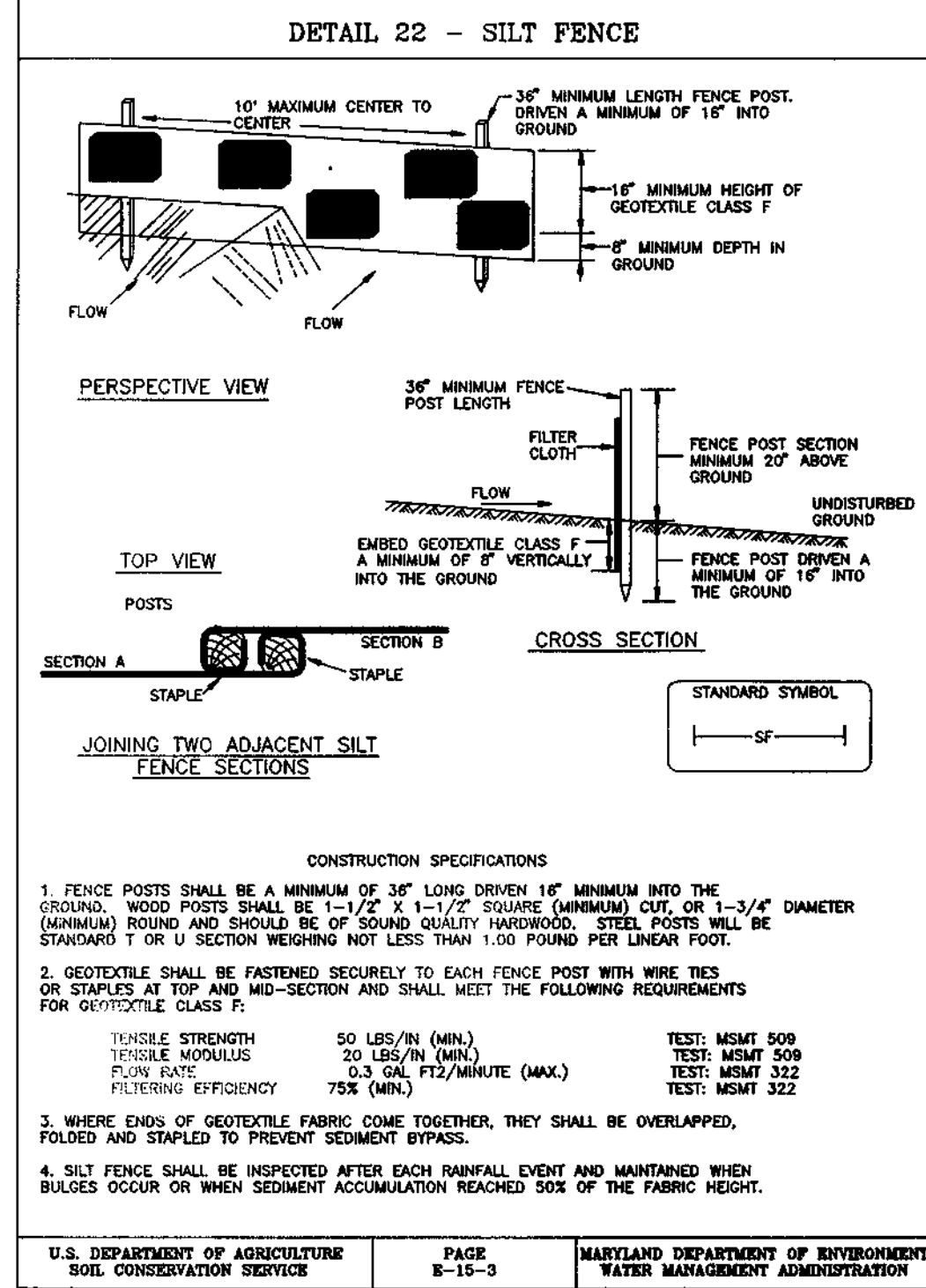
ZONED: RC-DEO

3RD ELECTION DIST. HOWARD CO., MD.

SCALE: AS SHOWN DATE: SEPT., 1998 DWG. 4 OF 11

DES. DRN. RGF. CHK. GSS

SHANABERGER & LANE
 8726 TOWN & COUNTRY BLVD. SUITE 201
 ELLICOTT CITY, MD., 21043
 (410)-461-9563



SEQUENCE OF CONSTRUCTION

- OBTAIN THE REQUIRED GRADING PERMIT.
- NOTIFY HOWARD COUNTY BUREAU OF CONSTRUCTION INSPECTION FIVE (5) WORKING DAYS BEFORE STARTING ANY CONSTRUCTION (410-313-1800).
- NOTIFY MISS UTILITY 48 HOURS BEFORE BEGINNING ANY WORK (1-800-257-7777).
- INSTALL TREE PROTECTION FENCE.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, A-2 AND B-2 EARTH DIKES, BOTH SEDIMENT TRAPS, TEMPORARY PIPE, AND TEMPORARY STONE OUTLET STRUCTURES. CONSTRUCT SUPER SILT FENCE AFTER TEMPORARY PIPE IS INSTALLED. (1 WEEK)
- ROUGH GRADE ROAD, INSTALL 3:1 PIPE SLOPE DRAINS WHEN CLOSE TO FINISHED GRADE. TEMPORARILY STABILIZE. (2 WEEKS)
- INSTALL STORM DRAINAGE SYSTEM FROM TRAPEZOIDAL RIP-RAP CHANNEL TO E-4 TO M-5 TO M-4. INSTALL STORM DRAIN FROM M-4 TO E-3 AND REMOVE TEMPORARY PIPE. ADJUST B-2 EARTH DIKE TO DIRECT FLOW TO E-3. (2 WEEKS)
- INSTALL SILT FENCE. (1 DAY)
- EXCAVATE INFILTRATION BASIN DOWN TO ELEVATION 497.0. (3 DAYS)
- CONSTRUCT REMAINING STORM DRAINS, INCLUDING 12" AUGUSTY CULVERTS. (2 WEEKS)
- FINE GRADE, PAVE AND PERMANENTLY STABILIZE ROAD. (2 WEEKS)
- EXCAVATE INFILTRATION BASIN DOWN TO ELEVATION OF 496.0, AND FOREBAY DOWN TO ELEVATION OF 495.75, AND PERMANENTLY STABILIZE. (2 DAYS)
- UPON APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT AND EROSION CONTROL DEVICES AND PERMANENTLY STABILIZE. (1 WEEK)

CONSULTANT'S CERTIFICATE

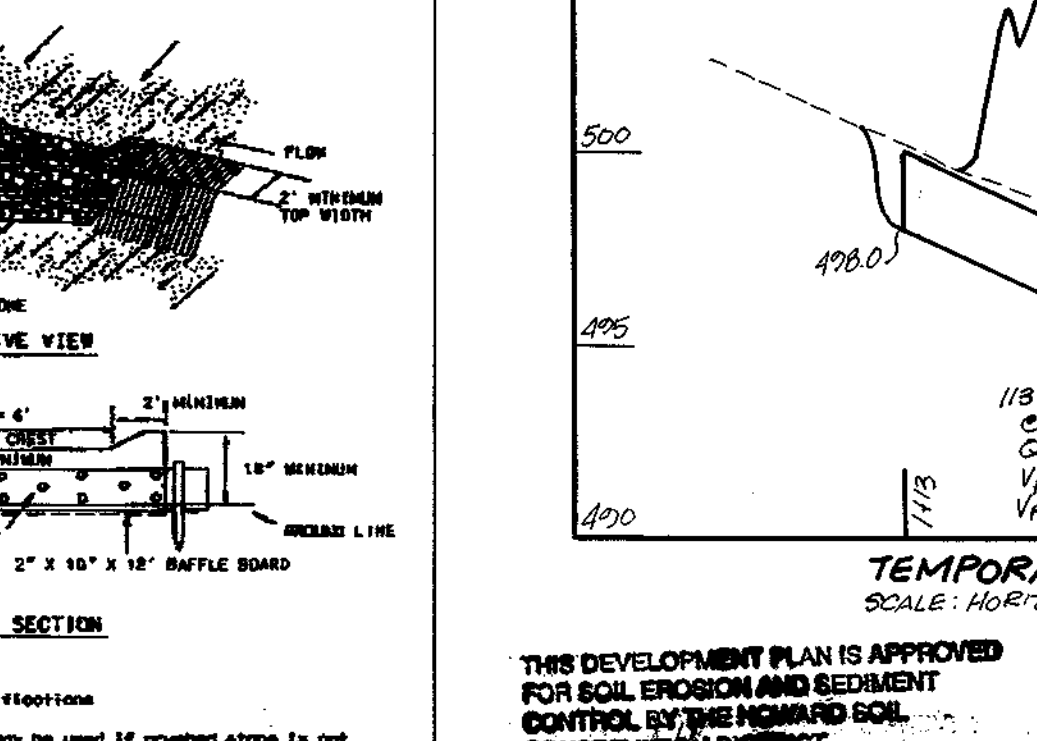
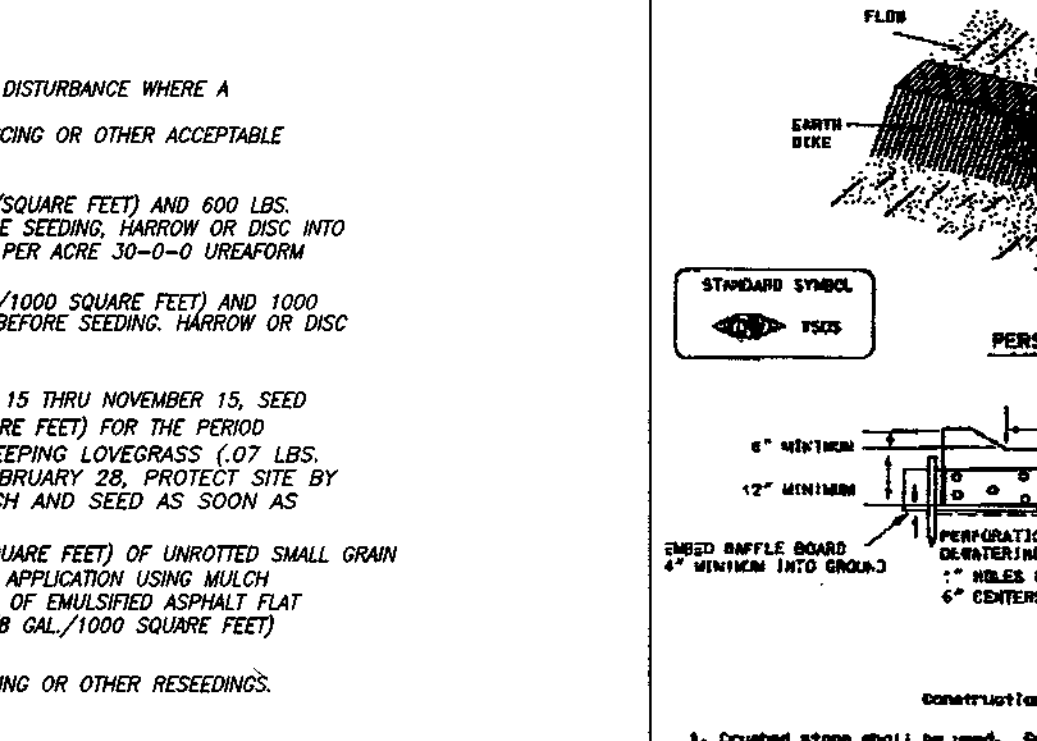
I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

SIGNATURE OF CONSULTANT: *[Signature]* DATE: *[Date]*

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

SIGNATURE OF DEVELOPER: *[Signature]* DATE: *[Date]*



SEDIMENT CONTROL NOTES AND DETAILS

HAWKSFIELD ESTATES SECTION TWO LOTS 1-6 ZONED: RC-DEO

3RD ELECTION DIST. HOWARD CO., MD.

SCALE: AS SHOWN DATE: SEPT., 1998 DWG. 5 OF 11 DES. DRN. RGF CHK. GSS

SHANABERGER & LANE 8726 TOWN & COUNTRY BLVD. SUITE 201 ELLICOTT CITY, MD., 21043 (410)-461-9563

APPROVED: DEPARTMENT OF PUBLIC WORKS

[Signature] DATE: *[Date]*

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] DATE: *[Date]*

APPROVED: DEVELOPMENT ENGINEERING DIVISION

[Signature] DATE: *[Date]*

APPROVED: DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

[Signature] DATE: *[Date]*

APPROVED: DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

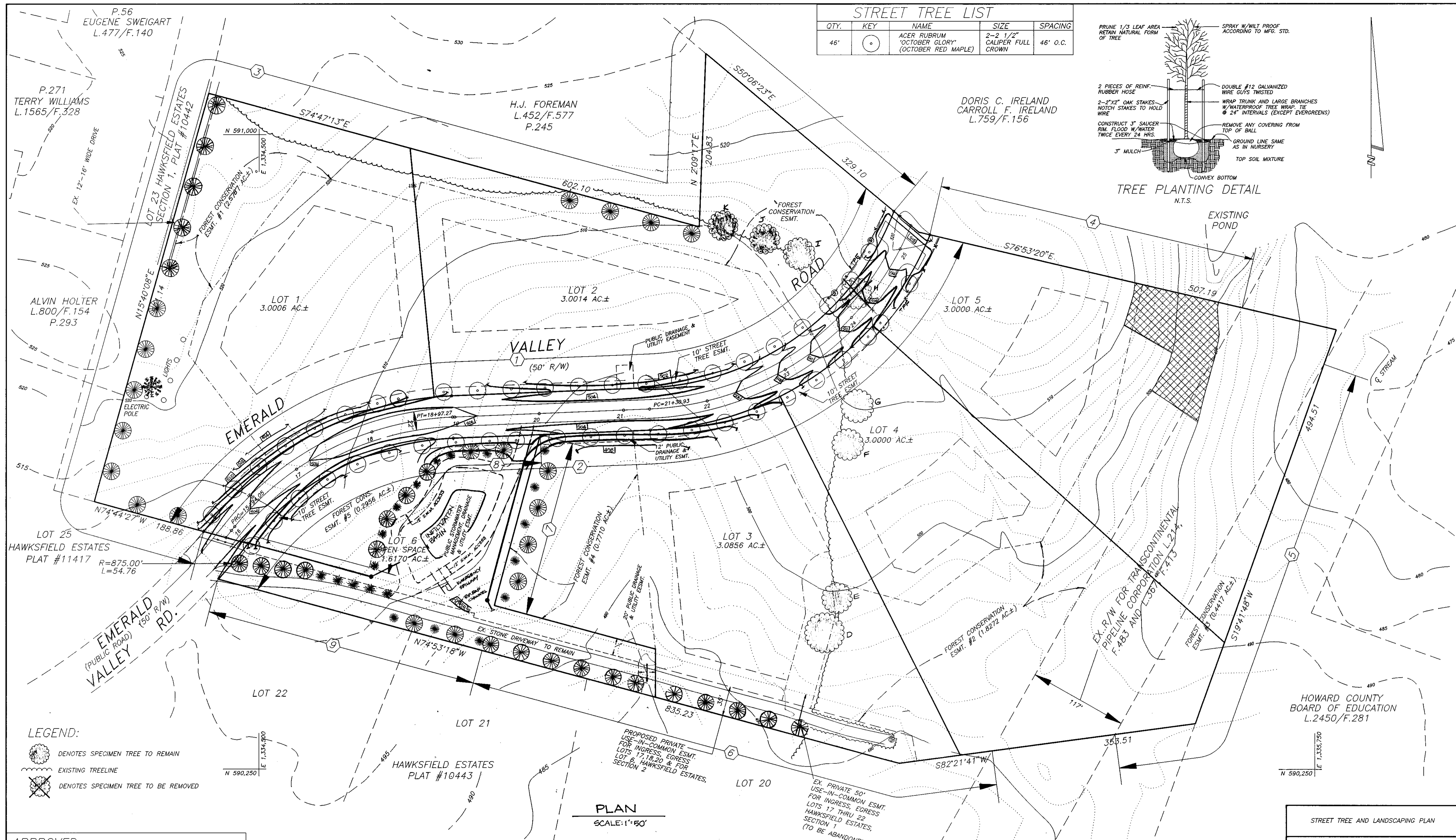
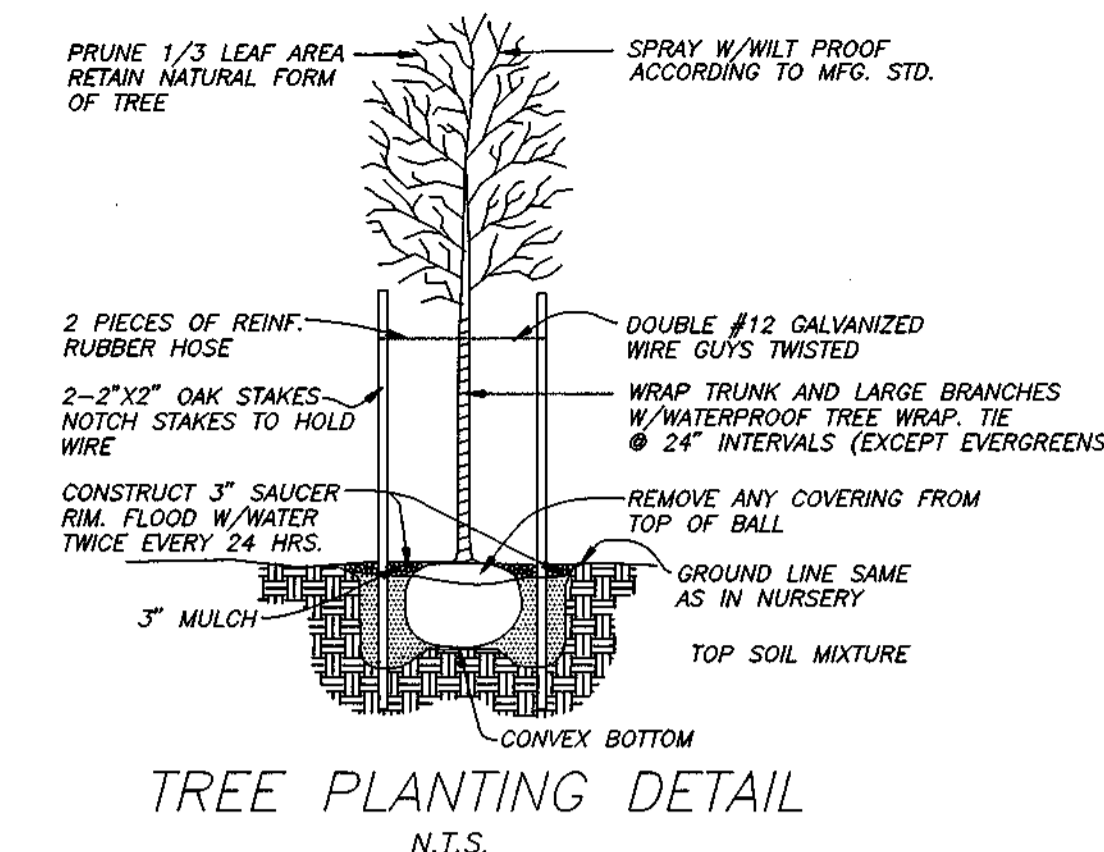
[Signature] DATE: *[Date]*

DATE	NO.	REVISION	BY
11/29/99	1	REV. SITE ANALYSIS + TEMP. PIPE	SKL

USDA, NATURAL RESOURCES CONSERVATION SERVICE

OWNERS/DEVELOPERS: DIGI-DATA HOLDINGS, C/O MILES AND STOCKBRIDGE, 9881 BROKEN LAND PRWY, COLUMBIA, MD. 21046

STREET TREE LIST				
QTY.	KEY	NAME	SIZE	SPACING
46'		ACER RUBRUM 'OCTOBER GLORY' (OCTOBER RED MAPLE)	2-2 1/2" CALIPER FULL CROWN	46' O.C.



- LEGEND:**
- DENOTES SPECIMEN TREE TO REMAIN
 - EXISTING TREELINE
 - DENOTES SPECIMEN TREE TO BE REMOVED

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 4-16-99
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Andy Hamilton 5/11/99
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

William J. ... 4/21/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SCHEDULE A--PERIMETER LANDSCAPE EDGE									
PERIMETER	1	2	3	4	5	6	7	8	9
CATEGORY	ADJ. TO ROADWAY	ADJ. TO ROADWAY	ADJ. TO PER. PROPERTIES	ADJ. TO PER. PROPERTIES	ADJ. TO PER. PROPERTIES	ADJ. TO PER. PROPERTIES	ADJ. TO S.W.M.	ADJ. TO S.W.M.	ADJ. TO S.W.M.
LANDSCAPE TYPE	NONE	NONE	A	A	A	A	B	B	B
LINEAR FT. PERIMETER	937	996	1787	380	540	630	209	200	320
CREDIT FOR EX. VEGETATION (YES, NO, LINEAR FT.) (DESCRIBE BELOW IF NEEDED)	-	-	825	380	540	0	0	0	0
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FT.) (DESCRIBE BELOW IF NEEDED)	-	-	-	-	-	-	-	-	-
NUMBER OF PLANTS REQUIRED									
SHADE TREES	-	-	16	0	0	11	4	0	6
EVERGREEN TREES	-	-	0	0	0	0	0	0	0
SHRUBS	-	-	0	0	0	0	0	0	0

LANDSCAPING PLANT LIST			
QTY.	KEY	NAME	SIZE
45		ACER RUBRUM 'OCTOBER GLORY' (OCTOBER RED MAPLE)	2-2 1/2" CALIPER FULL CROWN
20		PINUS STROBUS EASTERN WHITE PINE	6'-8" HEIGHT

The Landscape surety (\$15,900) is posted as part of the Developer's Agreement.



SEMED A. SAADAT
 PROF. ENG.#16493
 DATE 10-5-98

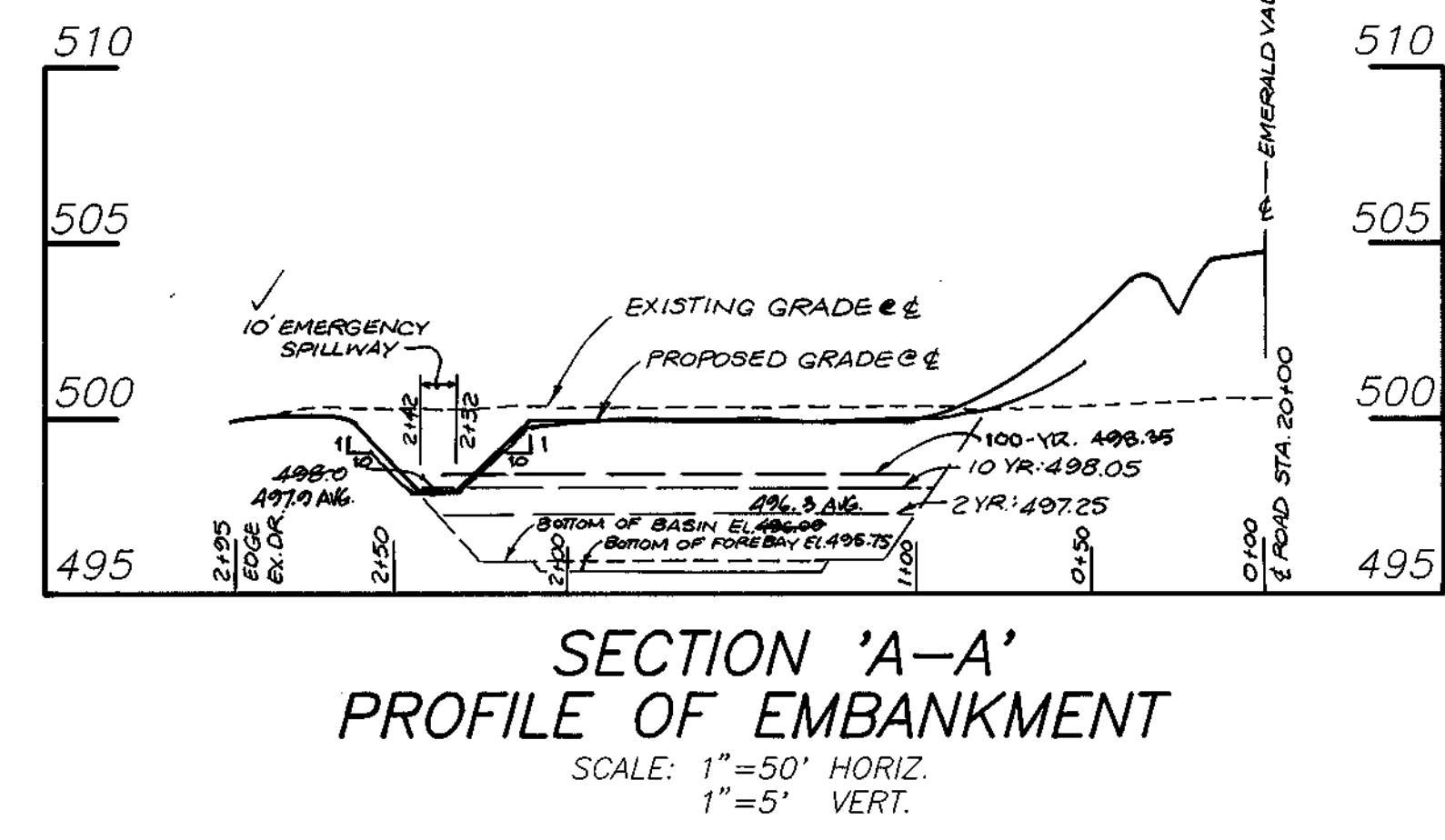
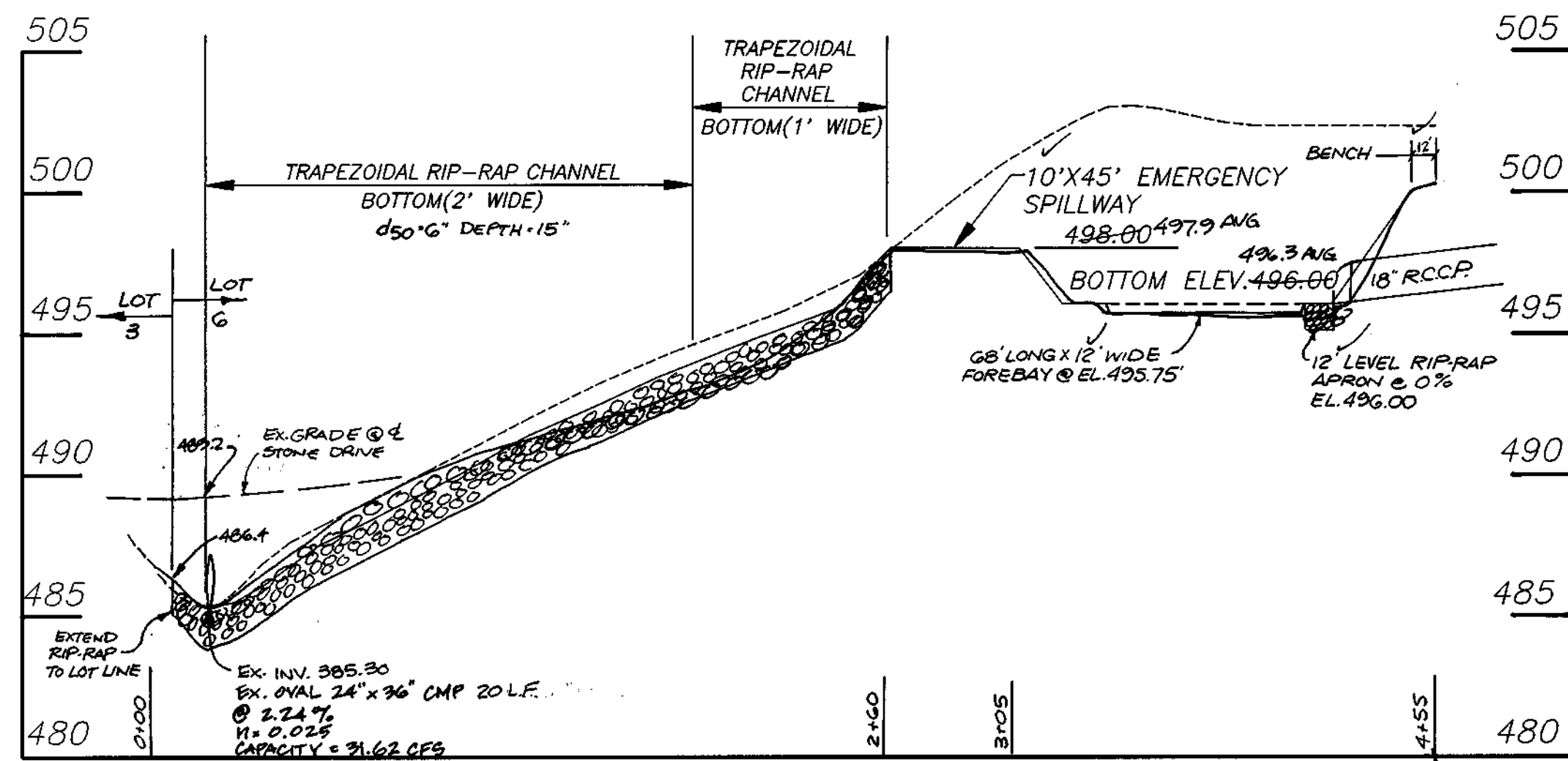
OWNERS/DEVELOPERS
 DIGI-DATA HOLDINGS
 C/O MILES AND STOCKBRIDGE
 9881 BROKEN LAND PKWY.
 COLUMBIA, MD. 21046

STREET TREE AND LANDSCAPING PLAN

HAWKSFIELD ESTATES
 SECTION TWO
 LOTS 1-6
 ZONED: RC-DEO
 3RD ELECTION DIST. HOWARD CO., MD.

SCALE: AS SHOWN DATE: SEPT., 1998 DWG. G OF 11
 DES. GAG DRN. RGF CHK. GSS

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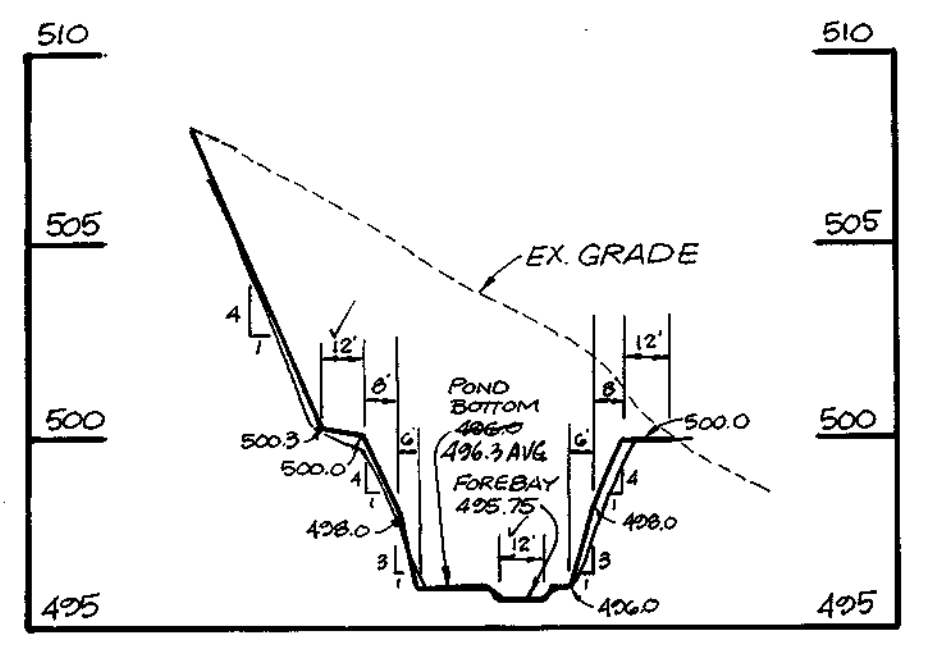
SECTION 'A-A'
PROFILE OF EMBANKMENT
SCALE: 1"=50' HORIZ.
1"=5' VERT.

BORING B-1		
ELEV	SOIL DESCRIPTION	STRA DEPTH
504.2	SURFACE	
503.9	TOPSOIL	0.3
498.7	MOIST RED MICACEOUS MEDIUM DENSE SANDY CLAY LOAM (SC)	5.5
496.2	MOIST BLACK, LIGHT TAN, BROWN MICACEOUS MEDIUM DENSE LOAM (ML)	8'
489.2	MOIST BLACK, LIGHT TAN & BROWN MICACEOUS MEDIUM DENSE TO LOOSE SANDY LOAM (SM)	15'

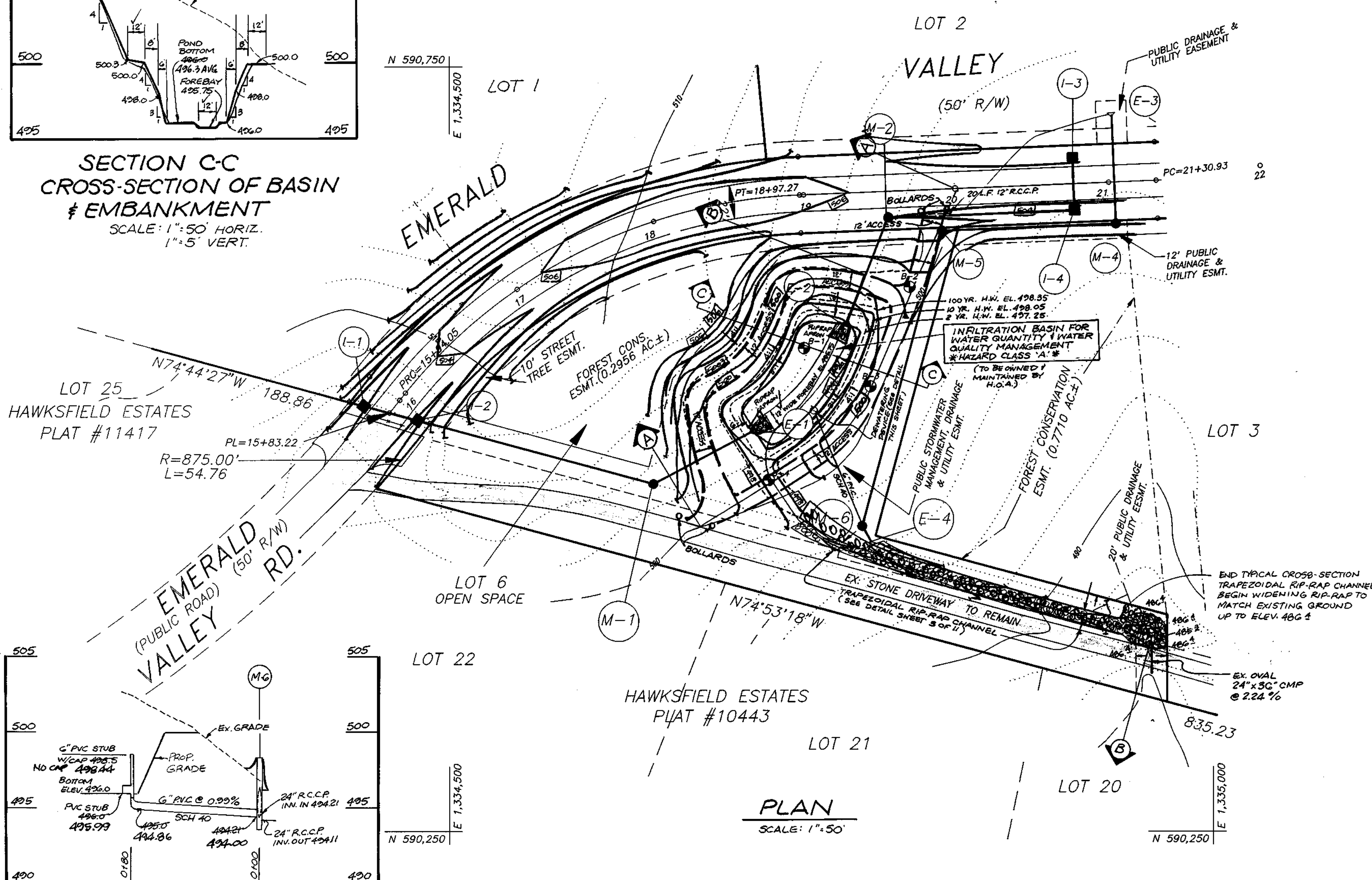
BORING B-2		
ELEV	SOIL DESCRIPTION	STRA DEPTH
500.2	SURFACE	
499.9	TOPSOIL	0.3
497.2	MOIST RED MICACEOUS MEDIUM DENSE SANDY CLAY LOAM (SC) W/TRACE ORGANICS	3'
492.2	MOIST BROWN, BLACK AND LIGHT TAN MICACEOUS MEDIUM DENSE LOAM (ML)	8'
485.2	MOIST BROWN, BLACK AND LIGHT TAN MICACEOUS MEDIUM DENSE TO LOOSE FINE TO MEDIUM SANDY LOAM (SM)	15'

NOTES: 1. NO GROUND WATER WAS ENCOUNTERED IN BORINGS B-1-B-2.
2. INFILTRATION RATE OF 1.02 IN./HR. WAS ESTABLISHED (SEE GEOTECHNICAL REPORT).

SECTION 'B-B'
PROFILE OF BASIN, EMERGENCY SPILLWAY, & OUTFALL CHANNEL
SCALE: 1"=50' HORIZ.
1"=5' VERT.



SECTION 'C-C'
CROSS-SECTION OF BASIN & EMBANKMENT
SCALE: 1"=50' HORIZ.
1"=5' VERT.



SITE PREPARATION

AREAS DESIGNATED FOR BORROW AREAS, EMBANKMENT, AND STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL. ALL TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED. CHANNEL BANKS AND SHARP BREAKS SHALL BE SLOPED TO NO STEEPER THAN 1:1.

AREAS TO BE COVERED BY THE RESERVOIR WILL BE CLEARED OF ALL TREES, BRUSH, LOGS, FENCES, RUBBISH AND OTHER OBJECTIONABLE MATERIALS. ALL TREES DESIGNATED ON THE PLANS, TREES, BRUSH AND STUMPS SHALL BE CUT APPROXIMATELY LEVEL WITH THE GROUND SURFACE. FOR DRY STORMWATER MANAGEMENT PONDS, A MINIMUM OF A 50 FOOT RADIUS AROUND THE INLET STRUCTURE SHALL BE CLEARED.

ALL CLEARED AND GRUBBED MATERIAL SHALL BE DISPOSED OF OUTSIDE AND BELOW THE LIMITS OF THE DAM AND RESERVOIR AS DIRECTED BY THE OWNER OR HIS REPRESENTATIVE. WHEN SPECIFIED, A SUFFICIENT QUANTITY OF TOPSOIL WILL BE STOCKPILED IN A SUITABLE LOCATION FOR USE ON THE EMBANKMENT AND OTHER DESIGNATED AREAS.

EARTH FILL

MATERIAL - THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREAS. IT SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6", FROZEN OR OTHER OBJECTIONABLE MATERIALS. FILL MATERIAL FOR THE CENTER OF THE EMBANKMENT AND CUT OFF TRENCH SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION GC, SC, CH, OR CL. CONSIDERATION MAY BE GIVEN TO THE USE OF MATERIALS IN THE EMBANKMENT IF DESIGN AND CONSTRUCTION ARE SUPERVISED BY A GEOTECHNICAL ENGINEER.

PLACEMENT - AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIALS SHALL BE PLACED IN MAXIMUM OF 8" THICK (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL. THE MOST PERMEABLE BORROW MATERIAL SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT. THE PRINCIPAL SPILLWAY MUST BE INSTALLED CONCURRENTLY WITH FILL PLACEMENT AND NOT EXCAVATED INTO THE EMBANKMENT.

COMPACTION - THE MOVEMENT OF THE HAULING AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSED BY NOT LESS THAN ONE TREAD TRACK OF THE EQUIPMENT OR COMPLETE PASSES OF A SHEEPSFOOT, RUBBER TIED OR VIBRATORY ROLLER. FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SUCH THAT THE REQUIRED DEGREE OF COMPACTION WILL BE OBTAINED WITH THE EQUIPMENT USED. THE FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IF FORMED INTO A BALL IT WOULD NOT CRUMBLE YET NOT BE SO WET THAT WATER CAN BE SQUEEZED OUT.

WHERE A MINIMUM REQUIRED DENSITY IS SPECIFIED, IT SHALL NOT BE LESS THAN 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN ±2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY, AND IS TO BE CERTIFIED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. ALL COMPACTION IS TO BE DETERMINED BY AASHTO METHOD T-99.

MAINTENANCE OF STORMWATER MANAGEMENT FACILITY THIS FACILITY SHOULD BE INSPECTED ANNUALLY (OR AFTER EVERY MAJOR STORM WHICH OCCURS FIRST) AND MAINTAINED AS FOLLOWS:

- CLEAN OUT ALL PIPES WHICH HAVE INFLOW TO POND.
- REMOVE ALL TRASH AND ACCUMULATED DEBRIS. RESTORE THE BOTTOM OF POND TO ORIGINAL ELEVATIONS.
- VISUALLY INSPECT ALL SIDE SLOPES INSIDE & OUTSIDE OF THE POND (INCLUDING ALL EMBANKMENTS) FOR SIGNS OF SEEPAGE & EROSION AND IF NECESSARY RESTORE TO ORIGINAL CONDITION.
- INSPECT SPILLWAY AND OTHER OUTFLOW DITCHES FOR EROSION AND REPAIR AS NECESSARY.
- REMOVE ALL TRASH & DEBRIS FROM ALL APPURTENANCES IN THE IMMEDIATE VICINITY OF THE POND.
- CLEAN OUT DEWATERING DEVICES IF PROVIDED.
- IF INFILTRATION FAILS, POND MUST BE CONVERTED TO A WET OR DRY EXTENDED DETENTION BASIN.

STRUCTURE BACKFILL

BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR OTHER MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER AND ADJACENT TO THE PIPE. AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE DRIVEN OVER ANY PART OF A CONCRETE STRUCTURE OF PIPE, UNLESS THERE IS A COMPACTED FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE.

ROCK RIPRAP

ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 905.

THE RIP RAP SHALL BE PLACED TO THE REQUIRED THICKNESS IN ONE OPERATION. THE ROCK SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THE RIPRAP IN PLACE SHALL BE REASONABLY HOMOGENEOUS WITH THE LARGER ROCKS. UNIFORMLY DISTRIBUTED AND LAYED IN CONTACT ONE TO ANOTHER WITH THE SMALLER ROCKS FILLING THE VOIDS BETWEEN THE LARGER ROCKS. FILTER CLOTH SHALL BE PLACED UNDER ALL RIPRAP AND SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 919.12.

CARE OF WATER DURING CONSTRUCTION

ALL WORK ON PERMANENT STRUCTURES SHALL BE CARRIED OUT IN AREAS FREE FROM WATER. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL TEMPORARY DIKES, LEVEES, COFFERDAMS, DRAINAGE CHANNELS, AND STREAM DIVERSIONS NECESSARY TO PROTECT THE AREAS TO BE CONSTRUCTED FROM PERMANENT WORKS. THE CONTRACTOR SHALL ALSO FURNISH, INSTALL, OPERATE, AND MAINTAIN ALL NECESSARY PUMPING AND OTHER EQUIPMENT REQUIRED FOR REMOVAL OF WATER FROM THE VARIOUS PARTS OF THE WORK AND FOR MAINTAINING THE EXCAVATIONS, FOUNDATION, AND OTHER PARTS OF THE WORK FREE FROM WATER AS REQUIRED OR DIRECTED BY THE ENGINEER FOR CONSTRUCTING EACH PART OF THE WORK. AFTER HAVING SERVED THEIR PURPOSE, ALL TEMPORARY PROTECTIVE WORKS SHALL BE REMOVED OR LEVELED AND GRADED TO THE EXTENT REQUIRED TO PREVENT OBSTRUCTION IN ANY DEGREE WHATSOEVER OF THE FLOW OF WATER TO THE SPILLWAY OR OUTLET WORKS AND SO AS NOT TO INTERFERE IN ANY WAY WITH THE OPERATION OR MAINTENANCE OF THE STRUCTURE. STREAM DIVERSIONS SHALL BE MAINTAINED UNTIL THE FULL FLOW CAN BE PASSED THROUGH THE PERMANENT WORKS. THE REMOVAL OF WATER FROM THE REQUIRED EXCAVATION AND THE FOUNDATION SHALL BE ACCOMPLISHED IN A MANNER AND TO THE EXTENT THAT WILL MAINTAIN STABILITY OF THE EXCAVATED SLOPES AND BOTTOM OF REQUIRED EXCAVATIONS AND WILL ALLOW SATISFACTORY PERFORMANCE OF ALL CONSTRUCTION OPERATIONS. DURING THE PLACING AND COMPACTION OF MATERIAL IN REQUIRED EXCAVATIONS, THE WATER LEVEL AT THE LOCATIONS BEING REFILLED SHALL BE MAINTAINED BELOW THE BOTTOM OF THE EXCAVATION AT SUCH LOCATIONS WHICH MAY REQUIRE DRAINING THE WATER TO PUMPS FROM WHICH THE WATER SHALL BE PUMPED.

STABILIZATION

ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND LEFT IN A SLIGHTLY CONDITION. ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, SPOIL AND BORROW AREAS, AND BERMS SHALL BE STABILIZED BY SEEDING, LIMING, FERTILIZING AND MULCHING IN ACCORDANCE WITH THE MARYLAND SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS FOR CRITICAL AREA PLANTING (MD-342) OR AS SHOWN ON THE ACCOMPANYING DRAWINGS.

EROSION AND SEDIMENT CONTROL

CONSTRUCTION OPERATIONS WILL BE CARRIED OUT IN SUCH A MANNER THAT EROSION WILL BE CONTROLLED AND WATER AND AIR POLLUTION MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT WILL BE FOLLOWED. CONSTRUCTION PLANS SHALL DETAIL EROSION AND SEDIMENT CONTROL MEASURES TO BE EMPLOYED DURING THE CONSTRUCTION PROCESS.

BORING B-3		
ELEV	SOIL DESCRIPTION	STRA DEPTH
500.4	SURFACE	
500.1	TOPSOIL	0.3
494.9	MOIST RED MICACEOUS LOOSE TO MED. DENSE SANDY CLAY LOAM (SC) W/TRACE ORGANICS	5.5'
492.4	MOIST BLACK, BROWN AND LIGHT TAN MICACEOUS MED. DENSE SANDY LOAM (SM)	8'
488.4	MOIST BLACK, BROWN AND LIGHT TAN MICACEOUS MED. DENSE LOAM (ML)	12'
485.4	MOIST BLACK, BROWN AND LIGHT TAN MICACEOUS LOOSE SANDY LOAM (SM)	15'

BORING B-4		
ELEV	SOIL DESCRIPTION	STRA DEPTH
501.1	SURFACE	
500.8	TOPSOIL	0.3
498.1	MOIST BLACK AND RED MICACEOUS LOOSE SANDY CLAY LOAM (SC) W/TRACE ORG.	3'
	MOIST BLACK, BROWN AND LIGHT TAN MICACEOUS DENSE TO LOOSE TO VERY DENSE SANDY LOAM (SM) W/TRACE OF ROCK FRAGMENTS FROM 3'-5'	
485.4		15'

AS-BUILT
G. SCOTT SHANABERGER
PROF. L.S. # 10849
SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLCOTT CITY, MARYLAND 21043

DATE	NO.	REVISION	BY
5/3/00	1	DEL. M-3, REV. ST. DRAIN LAYOUT	SHL

STORMWATER MANAGEMENT PLAN
HAWKSFIELD ESTATES
SECTION TWO
LOTS 1-6
ZONED: RC-DEO
3RD ELECTION DIST. HOWARD CO., MD.
SCALE AS SHOWN DATE: SEPT., 1998 DWG. 7 OF 11
DES. SHS DRN. RGF CHK. GSS
SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLCOTT CITY, MD., 21043
(410)-461-9563

S.W.M. SUMMARY TABLE							
CLASS	D.A. (Ac.)	TYPE	STORM	INFLOW	OUTFLOW	ALLOWABLE	MANAGED
'A'	2.7ac	INFILTRATION	10-YR. 7.3 C.F.S. 100-YR. 18.4 C.F.S.	1.0 C.F.S. 10.0 C.F.S.	1.2 C.F.S. 1.8 C.F.S.	2.6 C.F.S. 3.5 C.F.S.	407.25 408.05
							0.13 AC/FT. 0.24 AC/FT.

ENGINEER'S CERTIFICATE
I HEREBY CERTIFY THAT THIS STORMWATER MANAGEMENT PLAN REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
DATE 10-5-98
SIGNATURE OF ENGINEER

DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND STORMWATER MANAGEMENT PLAN AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
DATE 10/5/98
SIGNATURE OF DEVELOPER

APPROVED: DEPARTMENT OF PUBLIC WORKS
DATE 1-16-99
APPROVED: DEPARTMENT OF PLANNING AND ZONING
DATE 5/11/99
DATE 4/17/99

PLANTING SPECIFICATIONS AND NOTES

GENERAL NOTES

- This planting plan is provided in accordance with the requirements set forth by the Forest Conservation Act (Title 26, Subtitle 10, of the Annotated Code of Maryland) and the Forest Conservation Regulations (Title 26, Subtitle 10.02, of the Code of Maryland Regulations). The preparation of these plans is the responsibility of the contractor. The contractor shall be responsible for the accuracy of the information provided on this plan. The contractor shall be responsible for the accuracy of the information provided on this plan.
- This plan shall be implemented by a contractor that is knowledgeable and experienced in the methods set forth herein.
- The survival rate of the plantings shall be 75% of the total number of plantings per acre as provided by this plan.

QUALITY ASSURANCE

- Names of plant material listed conform generally with names accepted by the nursery trade. The contractor is to provide stock true to botanical and scientific name.
- Material shall be grown and delivered as to be that specified herein.
- If specified material is not available or there are other technical, logistical, financial impediments that shall necessitate the substitution of plant material, the contractor shall contact the plan preparer for permission to use equivalent material.

SITE PREPARATION AND SOILS

- Disturbance of soils should be limited to the Planting Field for each plant unless the area has been prepared with/for soil amendments and/or broadcast seeding for groundcovers, etc.
- Soil amendments should be considered for any site only after careful analysis of existing conditions. Soil samples should be analyzed by a qualified soil lab to determine the need for any amendments. Results of the soil analysis should be provided to the landscaping contractor and/or the local County Co-operative Extension Agent for interpretation. Recommendations should be followed closely. In the case of highly compacted sites that need only soil aeration or loosening treatment, a mixture of 25% leaf mold and 25% manure, the remainder being landscape topsoil, may be added. This mixture should be applied at the rate of one cubic yard per 165 square feet of area. Till deeply taking care not to bring material to the surface. Amendments should be filled in after the initial tilling. This method is particularly suitable when broadcast seeding or perennial seeds are involved.
- Soil mix for ericaceous material: Native topsoil into which the contractor shall thoroughly incorporate 30% by volume peat moss and 25% leaf mold may be mixed into soil.

PLANT STORAGE AND INSPECTION

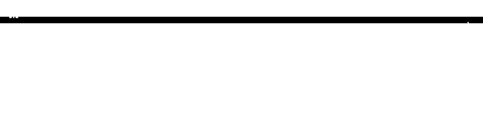
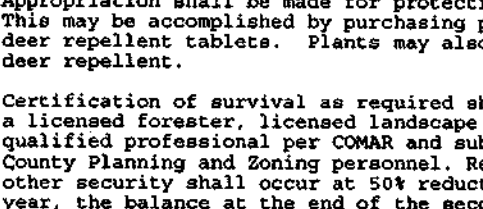
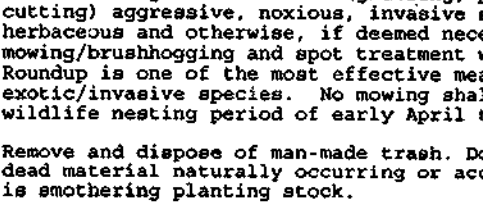
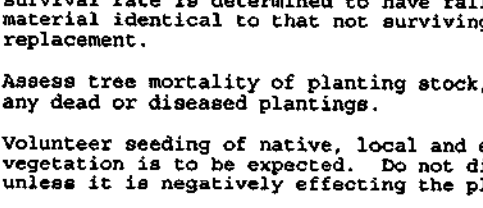
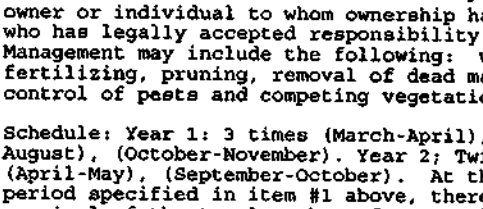
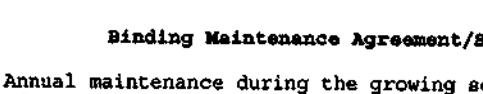
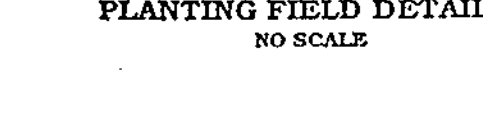
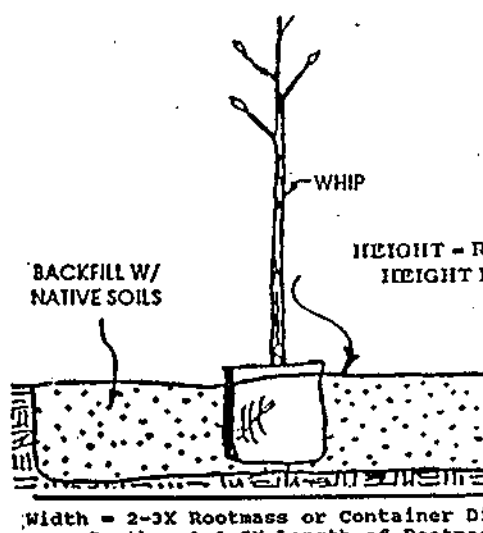
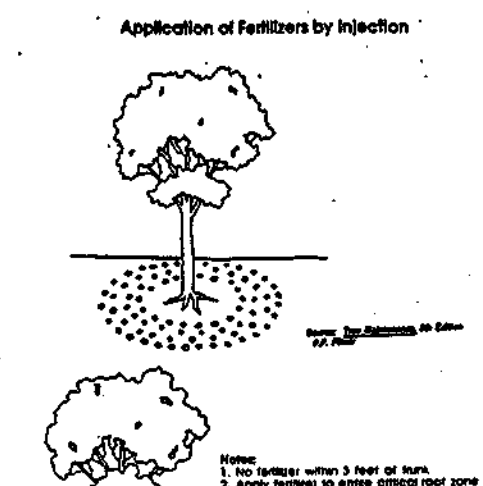
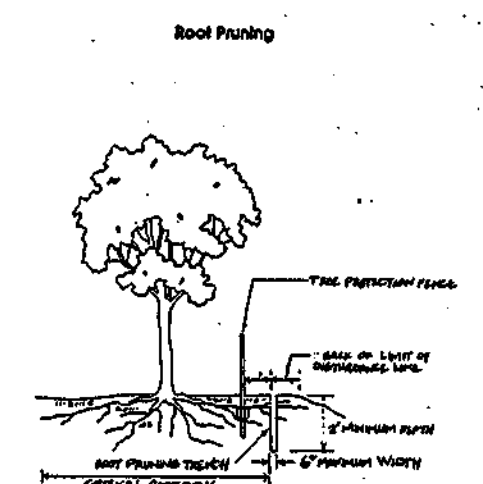
- For container grown nursery stock, planting should occur within two weeks after delivery to site.
- Planting stock should be inspected prior to planting. Plants not conforming to standard nursery specifications for size, form, and vigor, roots, trunk wounds, insects and diseases should be replaced.
- Container stock, if not planted within two weeks, may be wrapped up with mulch and watered every other day or as needed until planting. Bare root stock may NOT be delivered and left on site prior to planting.

SEASONAL PLANTING LIMITATIONS

- Planting activities shall conform with established nurseryman's practices and approximate the growing season for the geographic area. Planting of bare root stock after March 15 should be avoided unless seasonal progression is seasonally retarded by observable temperature or weather patterns and stock has been kept appropriately dormant through proper storage.
- Planting shall not take place in sub-freezing temperatures, when the ground is frozen, or when the soil is too dry or otherwise in a condition not generally accepted as satisfactory for planting and may adversely affect plant material.

PLANT INSTALLATION

- Container grown stock should be removed from the container and roots gently loosened and exposed to air. The root ball should be inspected for rot, and if necessary, the root ball should be substituted with a new one. ROOTS MAY NOT BE TRIMMED ON SITE, and should be exposed to the increased chances of soil borne diseases.
- Bare root stock should be unwrapped on-site only when ready to plant then held in water. When handled for planting, stock should be immediately dipped in Superwrap or equivalent water-holding polymer prepared with water as a slurry per manufacturer's directions. Roots must be thoroughly coated upon withdrawal from slurry. Plant stock should be immediately after dipping. If not planted immediately, wrap in burlap. Roots are not to be exposed to air.
- For trees planted in the afforestation area, contractor shall evenly disperse species in groups of two to four per species over the entire designated area to be planted on a random center spacing by species as dictated by planting density.
- Avoid planting in a straight grid pattern. Trees shall be planted on an average spacing of ten feet O.C., randomly.
- As shown on the detail view, a planting field diameter of two to three times the diameter of the root ball or container is recommended. The depth of the hole should be no more than 1-1.5 times the length of the root mass. The hole should be established with an auger. If the walls of the hole should glaze due to auger rotation, they can be scored with a spade. An auger may be "wiggle" upon withdrawal to assure no glazing occurs. Additionally, there will be loose earth in the bottom of any hole. This should be lightly tamped with the foot to keep the planting unit from settling too much.



TRIADELPHIA ROAD (PUBLIC ROAD)
R/W DEDICATED PLAT #10442

EUGENE SWEIGART L.477/F.140

TERRY WILLIAMS L.1565/F.328

ALVIN HOLTZER L.800/F.154

LOT 25 HAWKSFIELD ESTATES PLAT #11417
N74°44'27"W 188.86'
R=875.00 L=54.76'

EMERALD VALLEY RD. (PUBLIC ROAD) 50' R/W

LOT 22 HAWKSFIELD ESTATES PLAT #10443

LOT 21 HAWKSFIELD ESTATES PLAT #10443

EXISTING PRIVATE USE-IN-COMMON R/W (L.3410/F.539) & EX. PRIVATE INGRESS, EGRESS EASEMENT FOR PARCELS 56, 245, 258, 271, & 293 (L.477/F.140) (PLAT #10442) ACCESS VIA TRIADELPHIA ROAD

H.J. FOREMAN L.452/F.577

FOREST CONSERVATION ESMT. #1 (RETAINED 0.7464 AC± (REPLANTED 2.6400 AC±) TOTAL 3.3864 AC±
EX. PRIVATE USE-IN-COMMON R/W (L.3410/F.539) TO BE ABANDONED BY THIS PLAT

LOT 1 3.0006 AC±
LOT 2 3.0014 AC±
LOT 3 3.0856 AC±

LOT 4 3.0000 AC±
LOT 5 3.0800 AC±

LOT 6 OPEN SPACE 1.6170 AC±

LOT 7 3.0856 AC±

LOT 8 3.0856 AC±

FOREST PROTECTION PROCEDURES - Preconstruction Phase
Stress Reduction and Protection of Specimen Trees Located from Forest Retention Areas and General Forest Protection Areas (As They May Apply)

FOREST PROTECTION PROCEDURES - Preconstruction Phase
Evaluation Criteria
Design Considerations

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Evaluation Criteria
Design Considerations

Delimitation of the Critical Root Zone
Calculation of the CRZ for Isolated Specimen Trees:
1.5 feet of protective radius per inch of dbh for the respective trees found on the site are set forth in the table found elsewhere on this plan.

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APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. D... 4-16-99
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamilton 5/11/99
CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DEVELOPMENT ENGINEERING DIVISION
C... 4/2/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signage
SPECIMEN TREE DO NOT REMOVE
MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED

FOREST RETENTION AREA
MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED

REFORESTATION PROJECT
MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS PROHIBITED

HOWARD COUNTY PARKS AND RECREATIONS L.2227/F.110

Howard County FCW Calculations

BASIS SITE DATA	17.8K
GROSS SITE AREA	17.8K
AREA WITHIN 100 YEAR FLOODPLAIN	0
AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL	1.5K
NET TRACT AREA	16.3K
LAND USE CATEGORY (A-R, R-M, R-S, C, O, J) - 8-229	

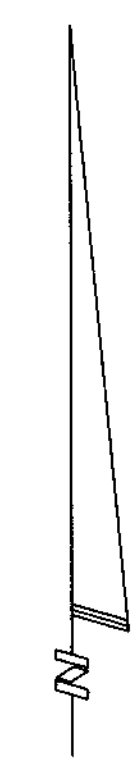
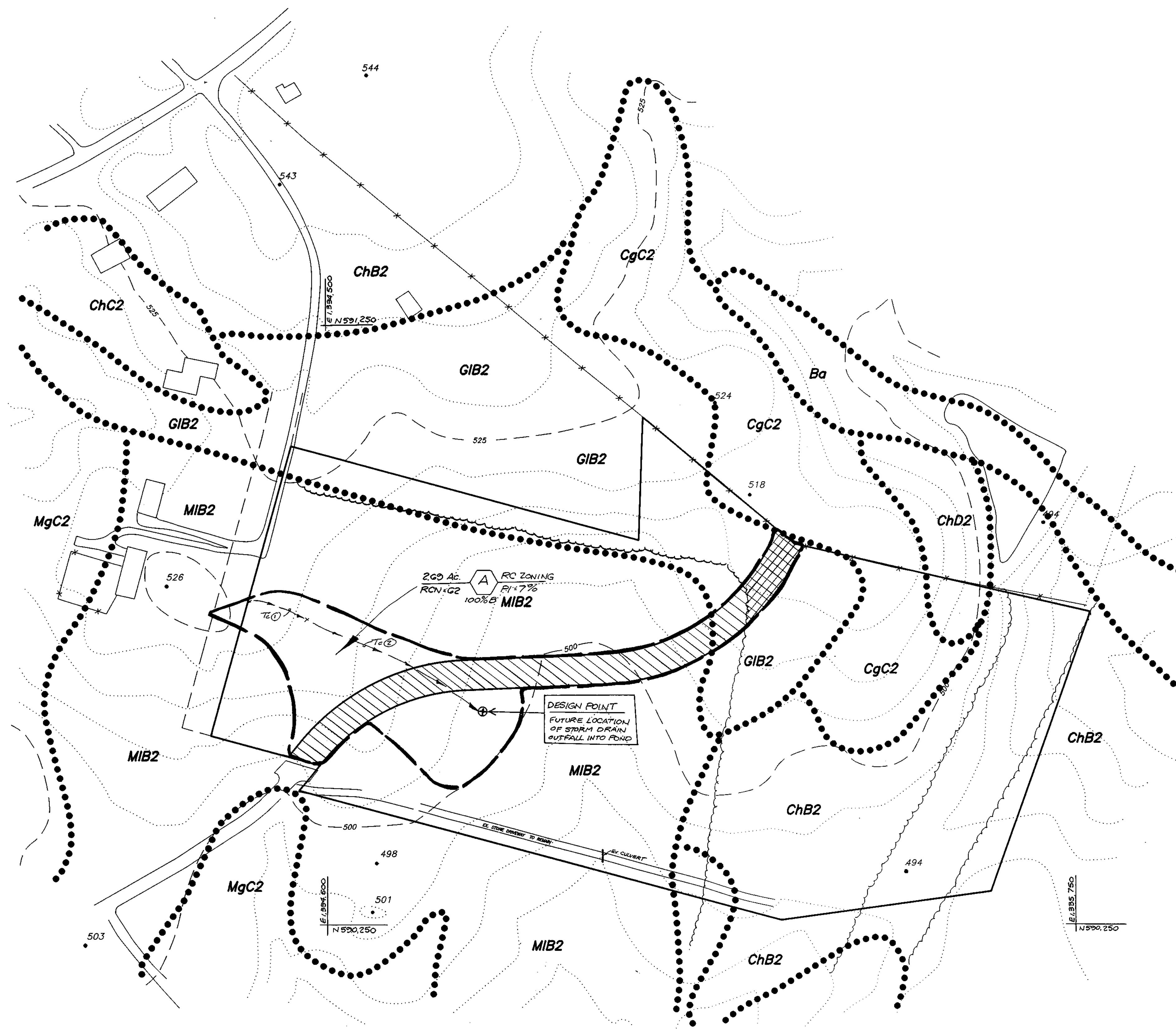
INFORMATION FOR CALCULATIONS	16.3K
A. NET TRACT AREA	16.3K
B. REFORESTATION THRESHOLD (25% x A)	4.1K
C. AFFORESTATION MINIMUM (10% x A)	1.6K
D. EXISTING FOREST ON NET TRACT AREA	5.6K
E. FOREST AREAS TO BE CLEARED	3.9K
F. FOREST AREAS TO BE RETAINED	1.7K
G. FOREST AREAS CLEARED ABOVE REFORESTATION THRESHOLD (D - B, IF B equals or is greater than A, Alternate 1)	1.1K
H. FOREST AREAS CLEARED BELOW REFORESTATION THRESHOLD (D - B, IF B is less than A, Alternate 2)	0
I. FOREST AREAS CLEARED ABOVE REFORESTATION THRESHOLD (IF APPLICABLE) (G - C) x 0.5	0.5K
J. REFORESTATION FOR CLEARING ABOVE THRESHOLD (IF APPLICABLE) (G - C) x 0.5	0.5K
K. REFORESTATION FOR CLEARING BELOW THRESHOLD (IF APPLICABLE) (G - C) x 0.5	0.5K
L. TOTAL REFORESTATION REQUIRED (G x 1.14) + (H x 2)	2.6K

LEGEND
DENOTES SPECIMEN TREE (TO REMAIN)
DENOTES SPECIMEN TREE (TO BE REMOVED)
EXISTING TREELINE
FOREST AREA TO BE PLANTED

SPECIMEN TREES
D - 42" N. RED OAK
E - 31" WHITE OAK
F - 32" S. RED OAK
G - 34" TULIP POPLAR
H - 32" N. RED OAK *
I - 32" TULIP POPLAR
J - 30" TULIP POPLAR
K - 30" TULIP POPLAR
(* DENOTES SPECIMEN TREE TO BE REMOVED)

OWNERS/DEVELOPERS
DIGI-DATA HOLDINGS
C/O MILES AND STOCKBRIDGE
9881 BROKEN LAND PKWY.
COLUMBIA, MD. 21046

SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLICOTT CITY, MD., 21043
(410)-461-9563



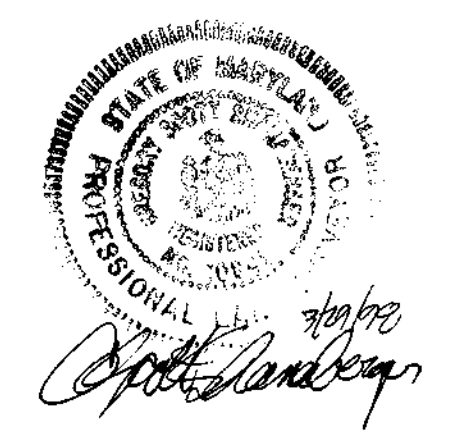
LEGEND

- WOODS (IN PROP R/W)
- MEADOW (IN PROP R/W)
- SOIL TYPES
- IMPERIOUS
- 3 ACRE LOTS (NO MANAGEMENT REQUIRED)

DRAINAGE AREA MAP
SCALE: 1"=100'

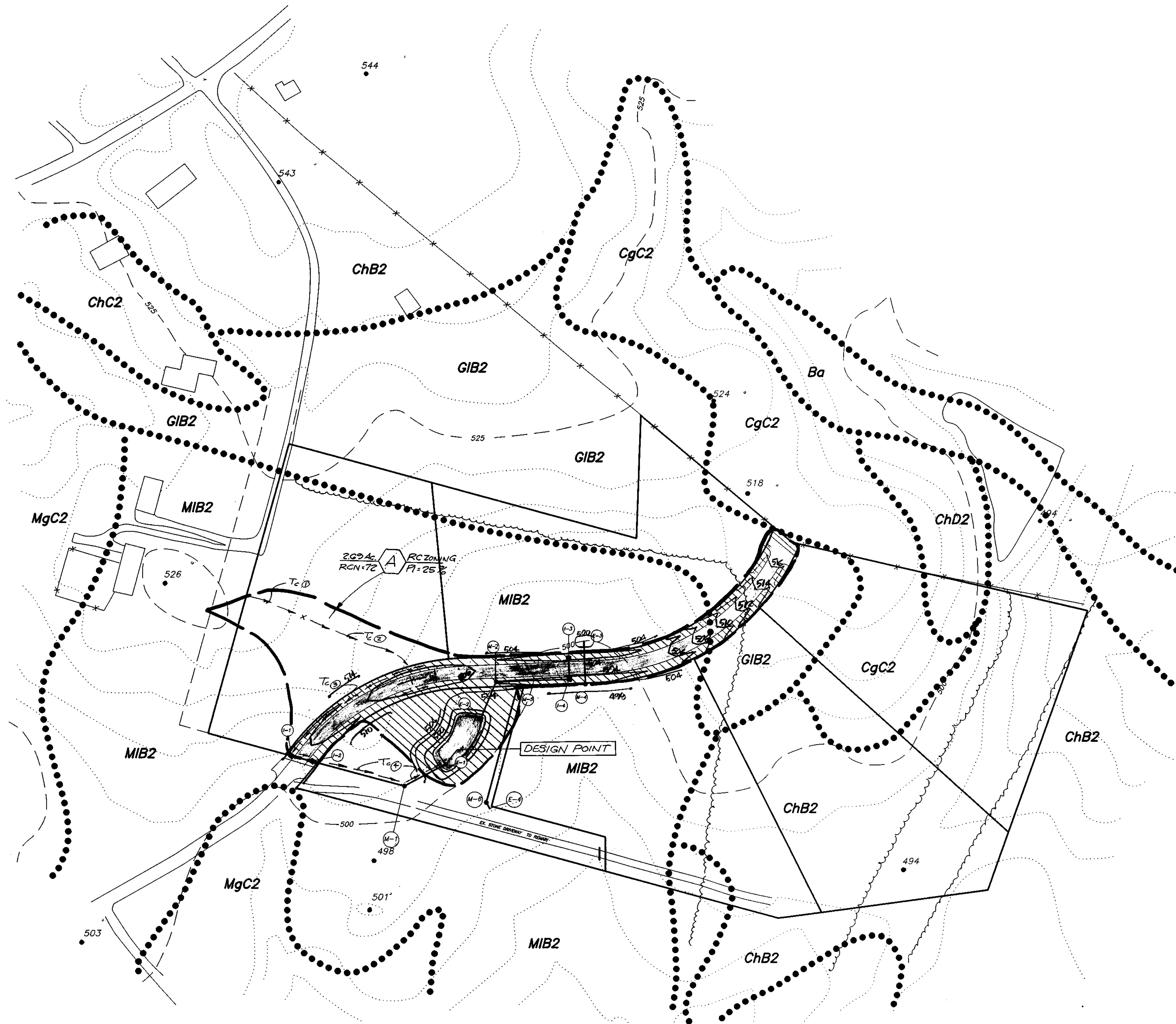
APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Danella 1-16-99
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chris Hamilton 9/1/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE
Paula Quinlan 4/2/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



OWNERS/DEVELOPERS
DIGI-DATA HOLDINGS
C/O MILES AND STOCKBRIDGE
9881 BROKEN LAND PKWY.
COLUMBIA, MD. 21046

STORMWATER MANAGEMENT DRAINAGE AREA MAP (EXISTING CONDITIONS)			
HAWKSFIELD ESTATES			
SECTION TWO			
LOTS 1- 6			
ZONED: RC-DEO			
3RD ELECTION DIST.	HOWARD CO., MD.		
SCALE: AS SHOWN	DATE: SEPT., 1998	DWG. 9 OF 11	
DES. SAs	DRN.	RGF	CHK. GSS
SHANABERGER & LANE			
8726 TOWN & COUNTRY BLVD.			
SUITE 201			
ELLCOTT CITY, MD., 21043			
(410)-461-9563			



LEGEND

- IMPERVIOUS (PAVING) / WET BASIN AREA
- LAWN
- 3 ACRE LOTS
- SOIL TYPES

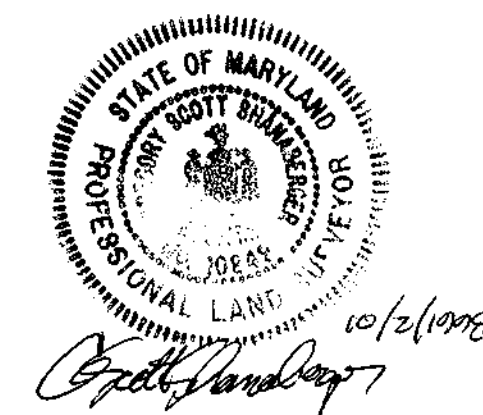
DRAINAGE AREA MAP
SCALE: 1" = 100'

ALL SOILS SHOWN ARE CLASS 'B'

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Panek 4-16-99
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamilton 5/1/99
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John Dammann 4/21/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



OWNERS/DEVELOPERS
 DIGI-DATA HOLDINGS
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 9881 BROKEN LAND PKWY.
 COLUMBIA, MD. 21046

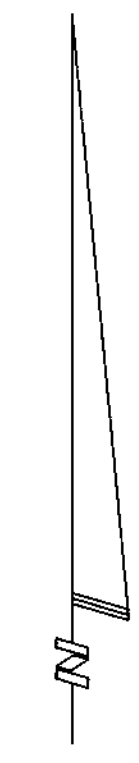
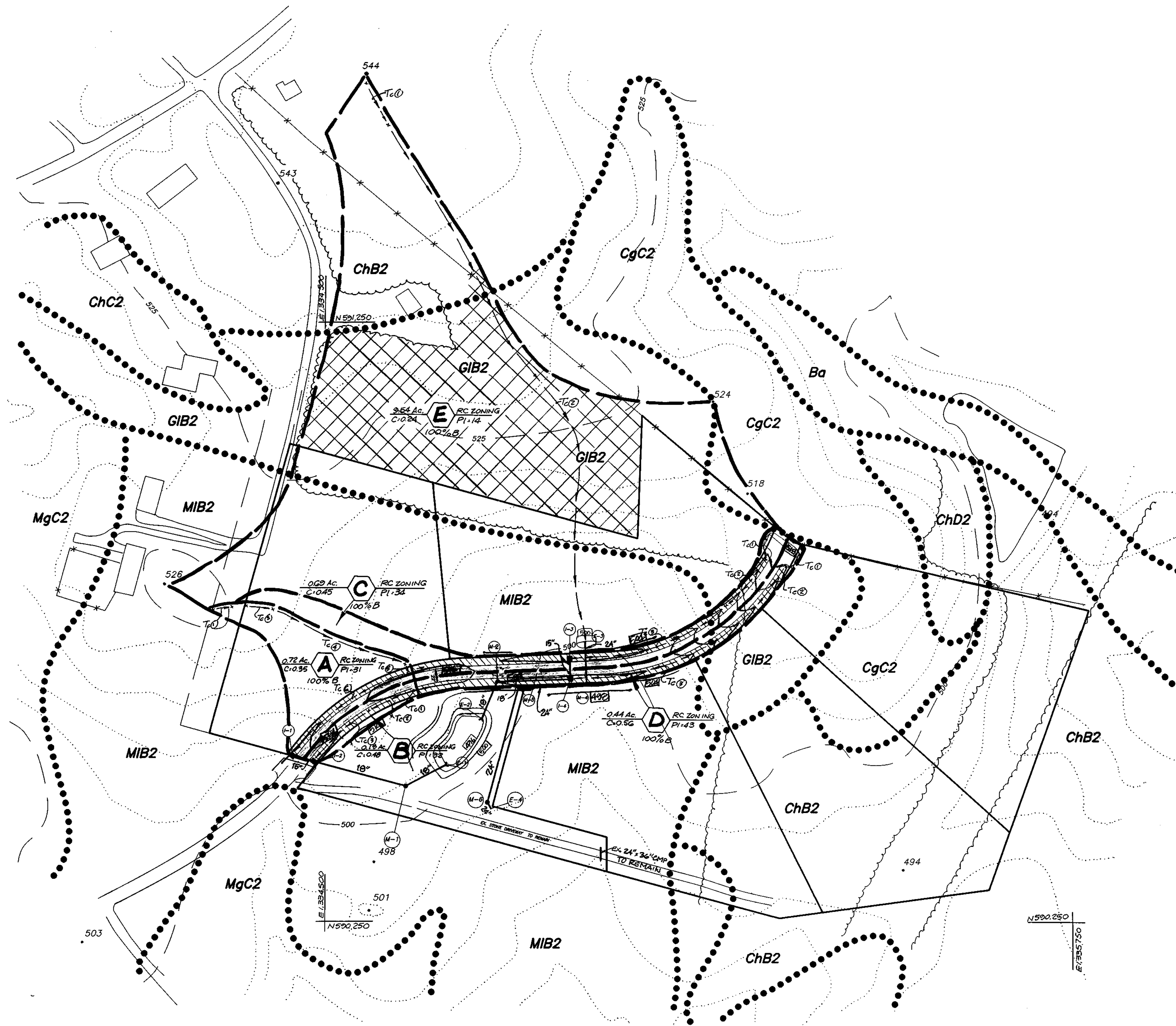
DATE	NO.	REVISION	BY
5/9/00	1	DEL. M3, REV. ST. DRAIN LAYOUT	S* L

STORMWATER MANAGEMENT DRAINAGE AREA MAP
(PROPOSED CONDITIONS)

HAWKSFIELD ESTATES
 SECTION TWO
 LOTS 1- 6
 ZONED: RC-DEO
 3RD ELECTION DIST. HOWARD CO., MD.

SCALE AS SHOWN	DATE: SEPT., 1998	DWG. 10 OF 11
DES. GSS	DRN. RGF	CHK. GSS

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LEGEND

- IMPERVIOUS SURFACES
- LAWN
- 1 ACRE LOTS
- WOODS
- SOIL TYPES

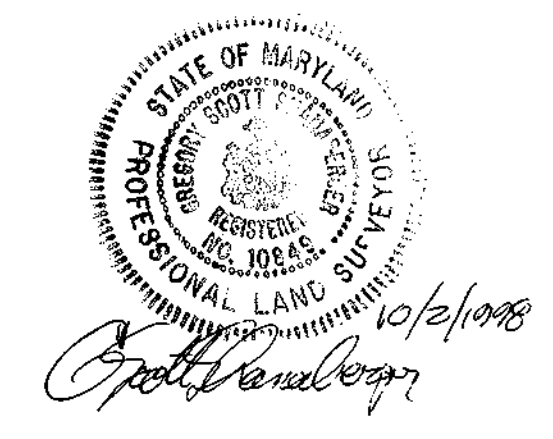
DRAINAGE AREA MAP
SCALE: 1"=100'

ALL SOILS SHOWN ARE CLASS 'B'

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Danek 4-16-99
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamlin 5/1/99
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Al Danmian 4/22/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



OWNERS/DEVELOPERS
 DIGI-DATA HOLDINGS
 C/O MILES AND STOCKBRIDGE
 9881 BROKEN LAND PKWY.
 COLUMBIA, MD. 21046

DATE	NO.	REVISION	BY
5/3/99	1	DEL. M.B. REV. ST. DRAIN LAYOUT	S-L

STORM DRAIN DRAINAGE AREA MAP

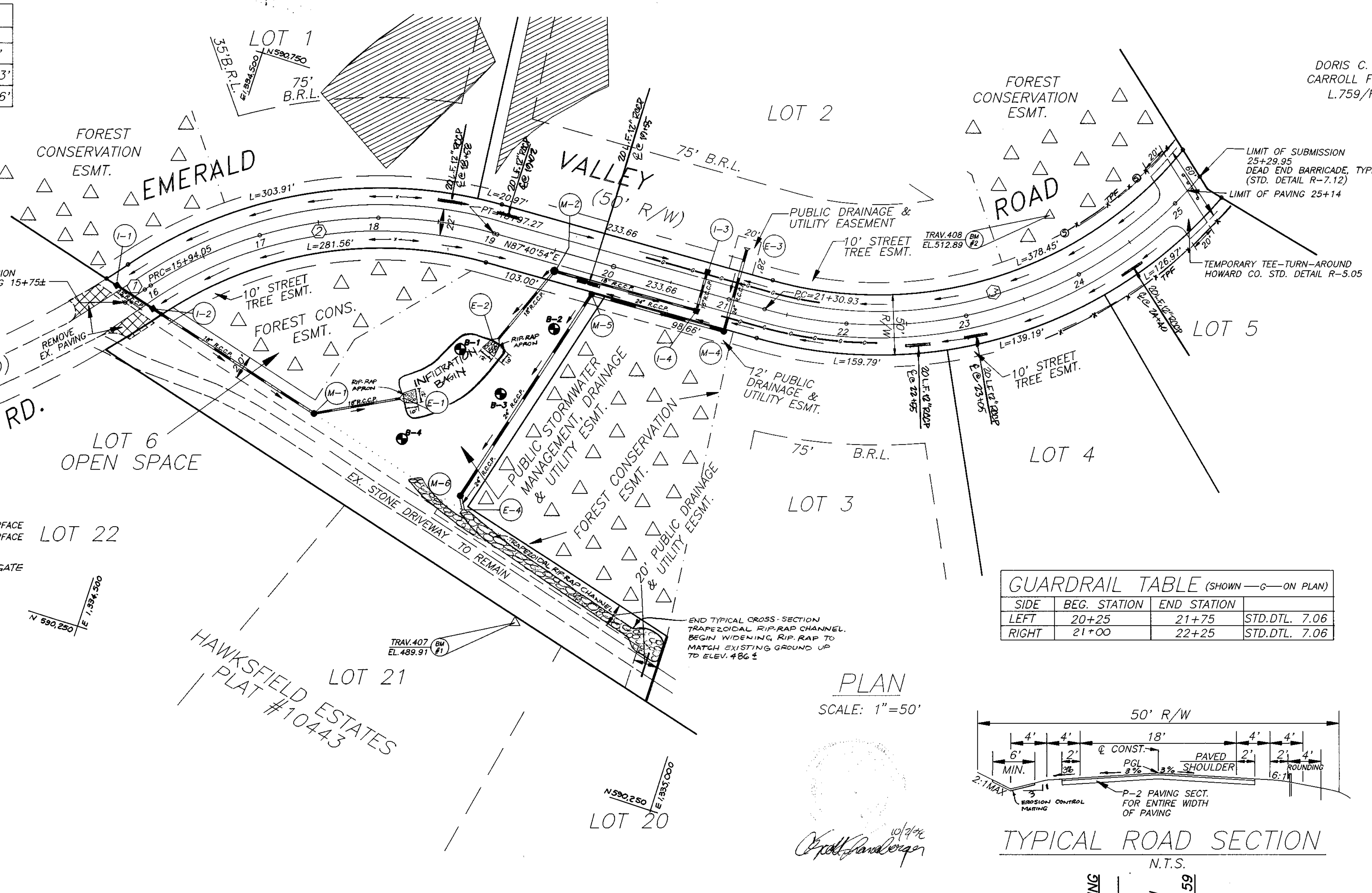
HAWKSFIELD ESTATES
 SECTION TWO
 LOTS 1-6
 ZONED: RC-DEO
 3RD ELECTION DIST. HOWARD CO., MD.

SCALE AS SHOWN	DATE: SEPT., 1998	DWG. # OF 11
DES. GSS	DRN. RGF	CHK. GSS

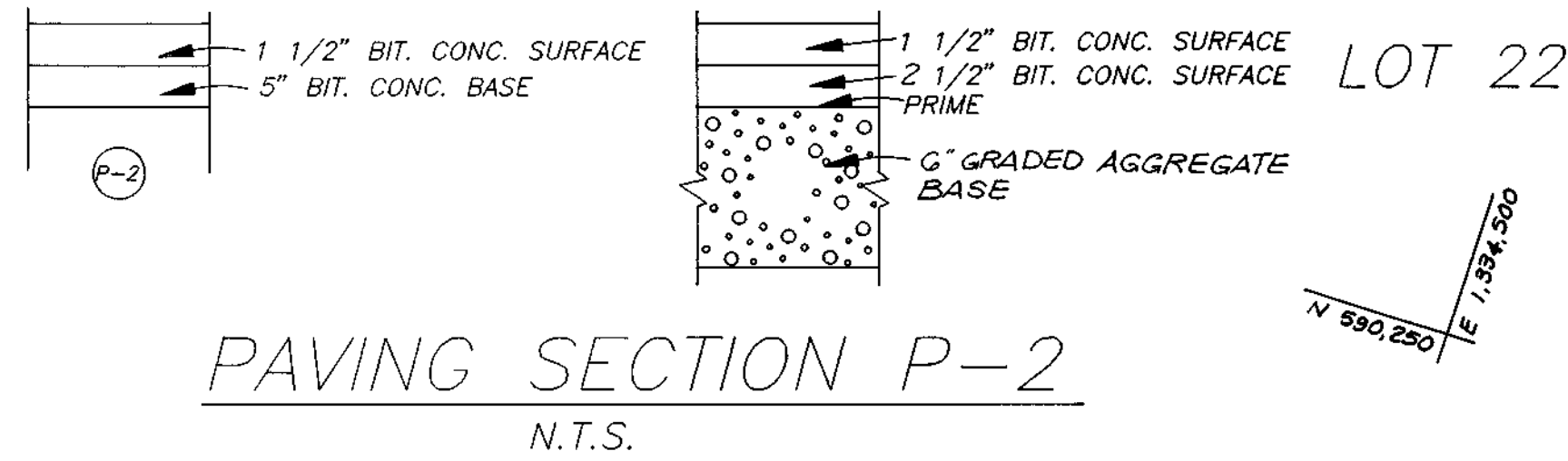
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CURVE NO.	DELTA	RADIUS	LENGTH	TAN	CHORD
①	0°43'48"	850.00'	10.83'	5.42'	N38°24'31"E 10.83'
②	49°38'17"	350.00'	303.22'	161.86'	N62°51'46"E 293.83'
③	65°19'16"	350.00'	399.02'	224.36'	N55°01'16"E 377.76'

LOT #	ROAD STA	PIPE SIZE	PIPE LENGTH	SLOPE	INVERTS UPPER	INVERTS LOWER	Q10	Vp	Vp
1	18+58	12" RCCP	20'	1.15%	505.51	505.28	0.95	1.21	4.0
2	19+02	12" RCCP	20'	1.00%	504.78	504.58	1.04	1.32	4.0
3	22+55	12" RCCP	20'	1.46%	505.43	505.14	0.99	0.75	4.0
4	23+05	12" RCCP	20'	1.94%	507.23	506.84	0.48	0.61	4.0
5	24+00	12" RCCP	20'	2.92%	513.35	512.77	0.22	0.28	4.0
6	19+85	12" RCCP	20'	1.55%	503.57	503.26	0.37	0.47	3.6



DORIS C. IRELAND
CARROLL F. IRELAND
L.759/F.156



SIDE	BEG. STATION	END STATION	STD.DTL.
LEFT	20+25	21+75	7.06
RIGHT	21+00	22+25	7.06

DATE	NO.	REVISION	BY
11/2/99	1	REV. TYP PAVING SECTION	SFL
5/5/00	2	DEL. M3, REV. ST. DR. LAYOUT, REV. GUARDRAIL STATIONING.	SFL

OWNERS/DEVELOPERS
DIGI-DATA HOLDINGS
0/0 MILES AND STOCKBRIDGE
9881 BROKEN LAND PKWY.
COLUMBIA, MD. 21046

HAWKSFIELD ESTATES
SECTION TWO
LOTS 1-6
ZONED: RC-DEO
3RD ELECTION DIST. HOWARD CO., MD.

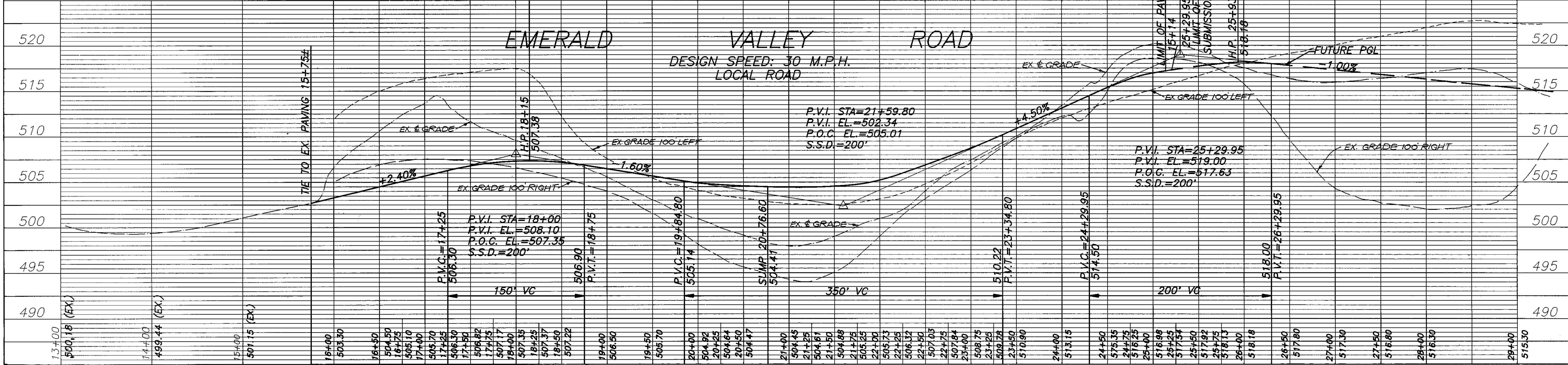
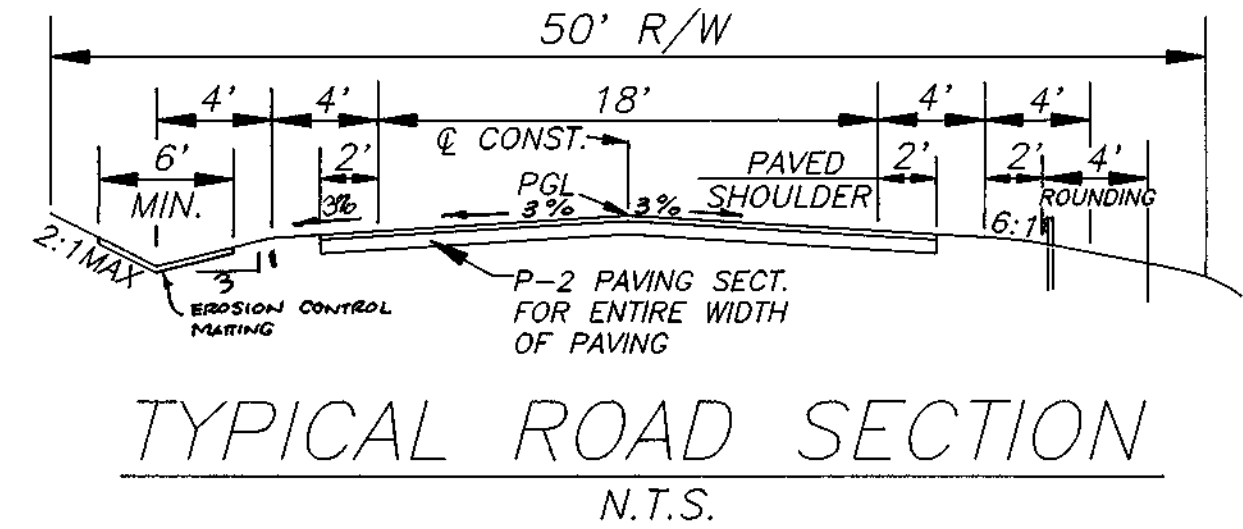
EMERALD VALLEY ROAD
PLAN AND PROFILE

SCALE AS SHOWN	DATE: SEPT., 1998	DWG. 2 OF 11
DES. GFS	DRN. RGF	CHK. GSS

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ELLCOTT CITY, MD., 21043
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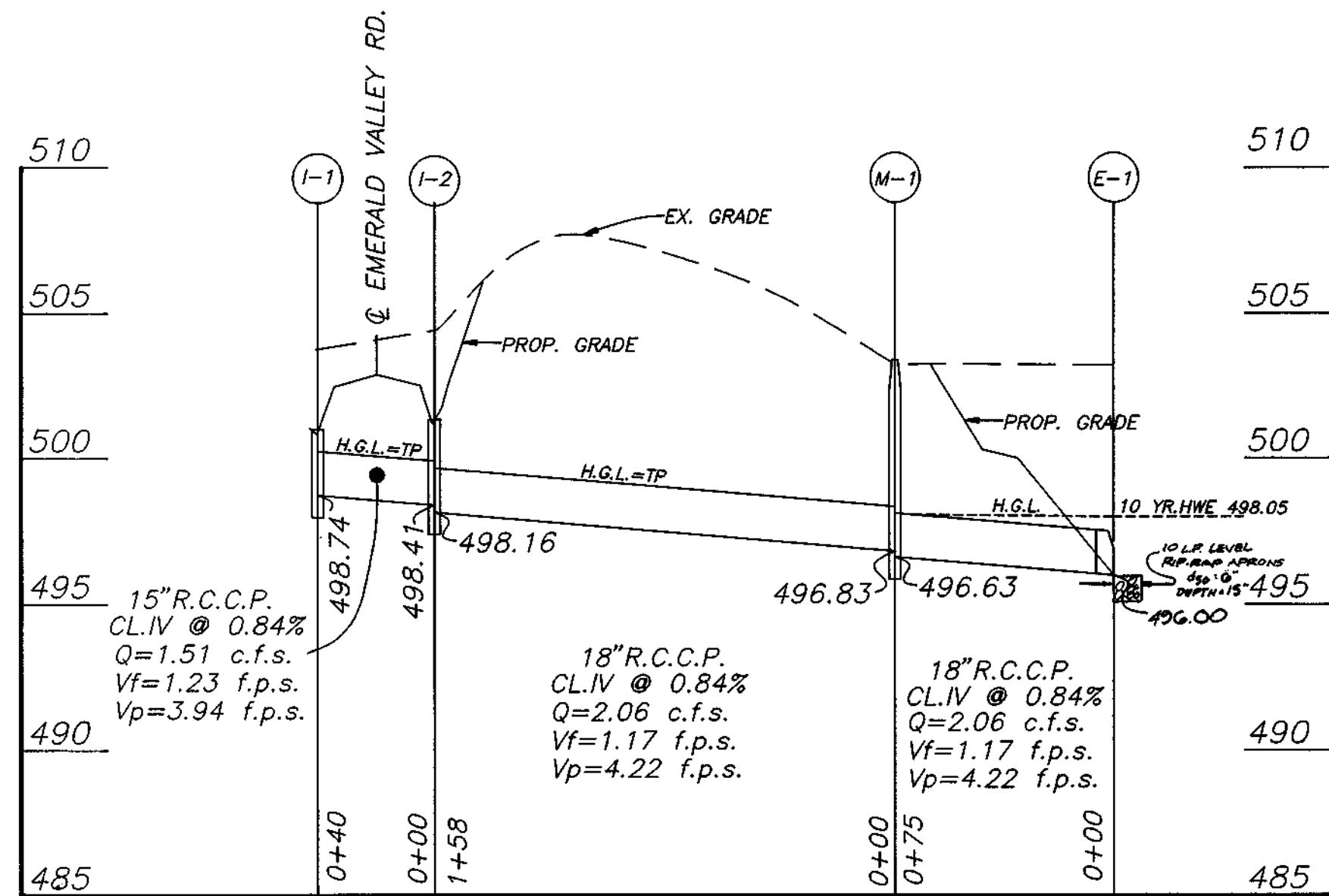
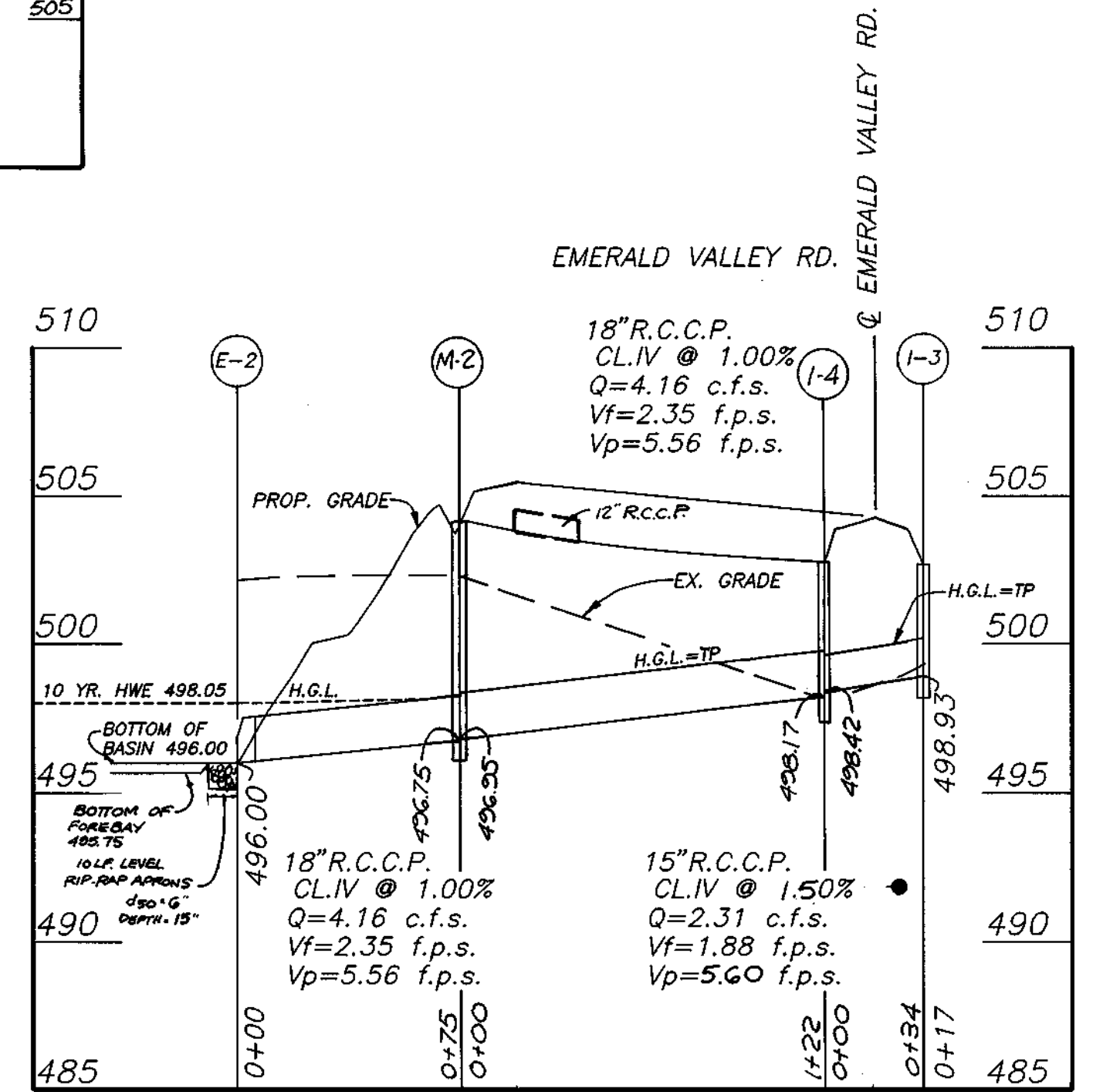
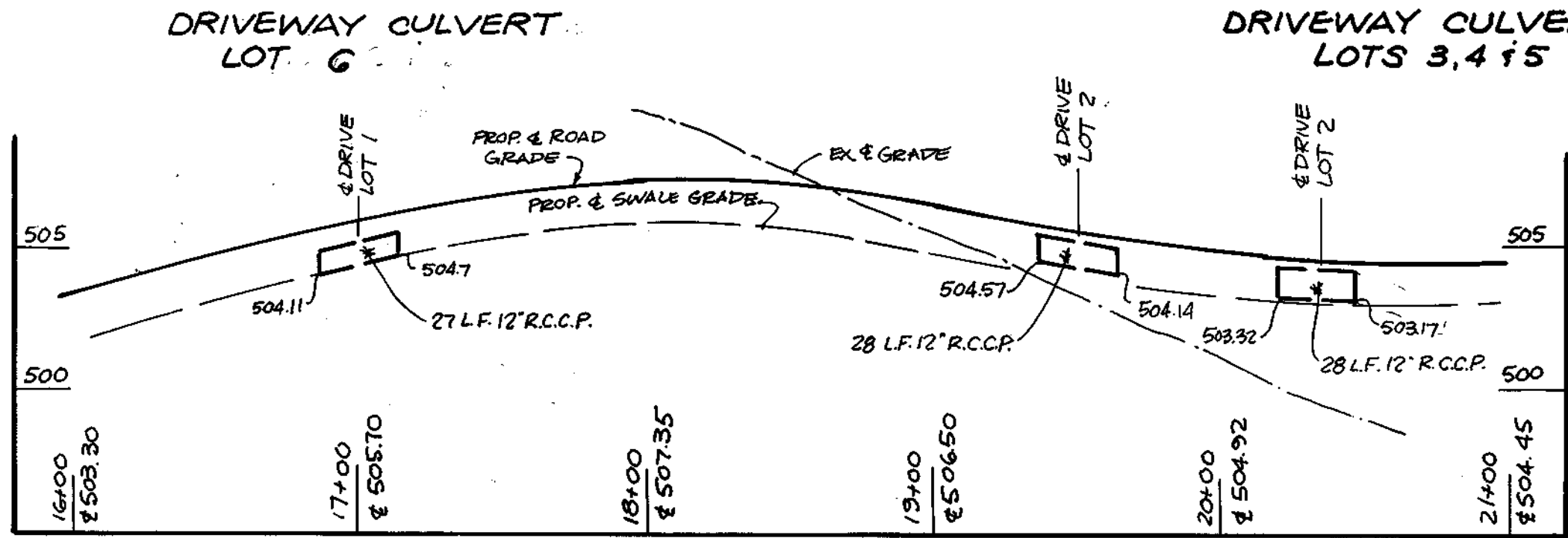
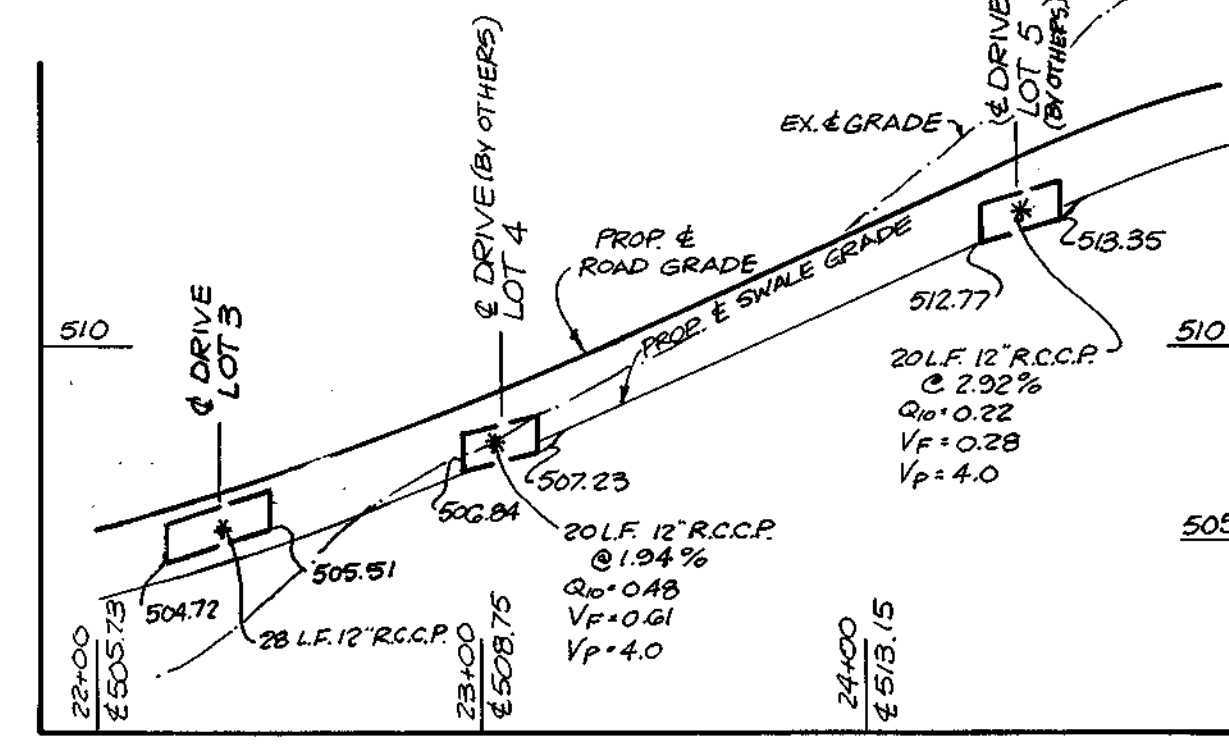
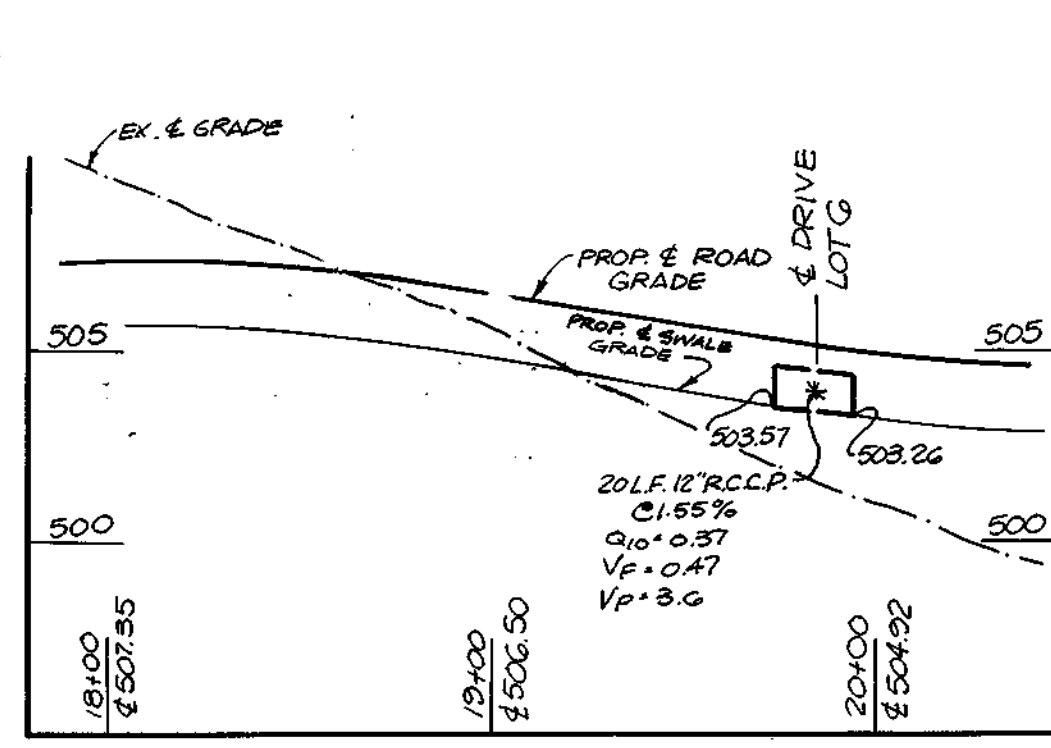
APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 4-16-99
CHIEF, BUREAU OF HIGHWAYS
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cecilia Hamstra 5/11/99
CHIEF, DIVISION OF LAND DEVELOPMENT
Edna Dumanan 4/22/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION

PLAN
SCALE: 1"=50'



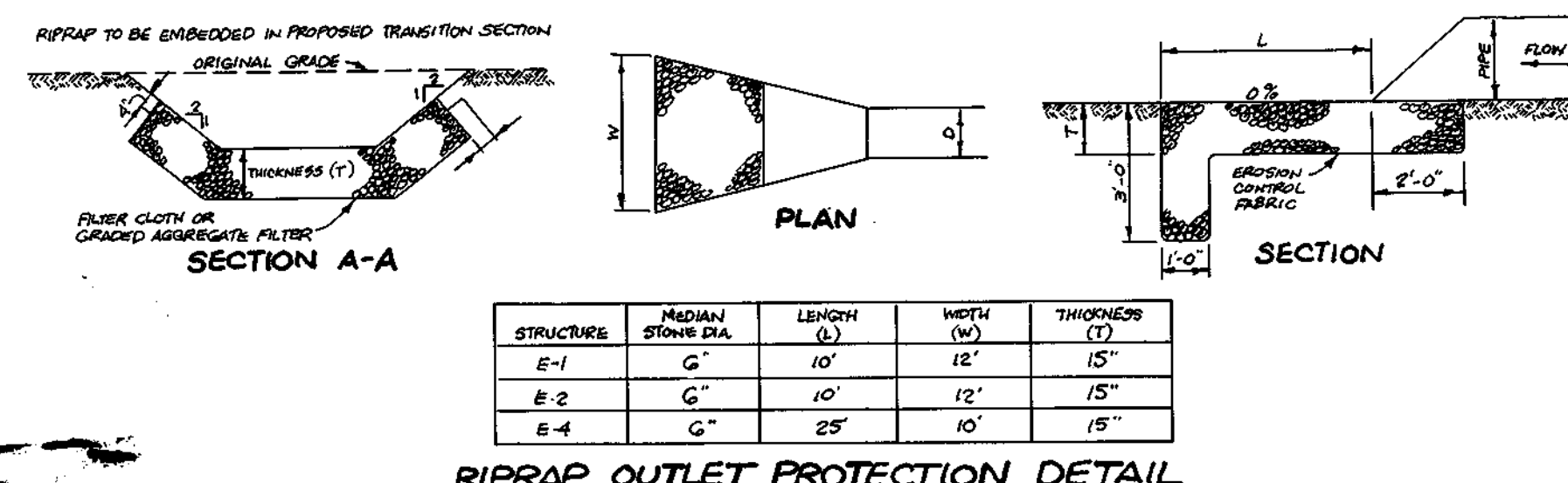
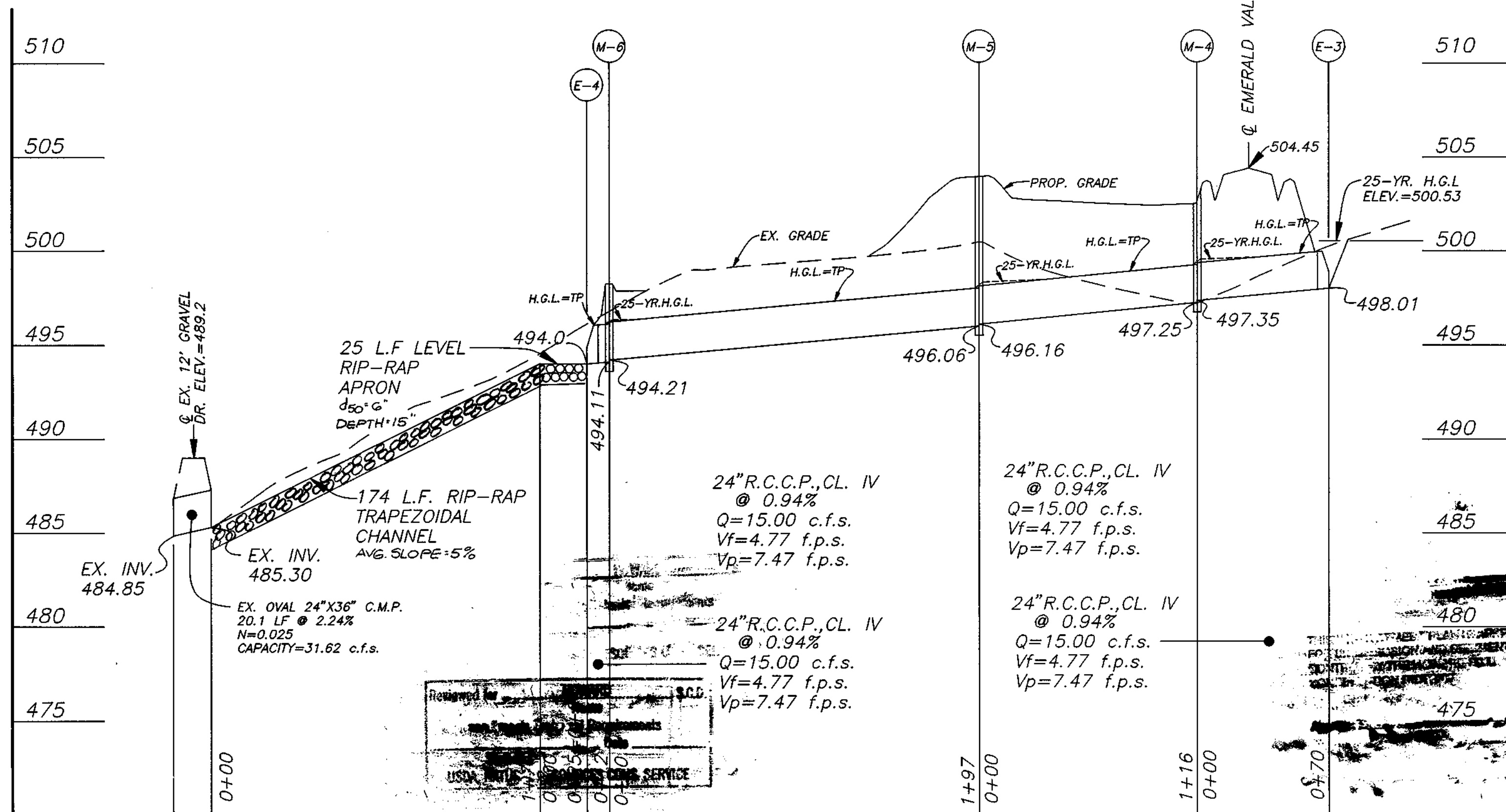
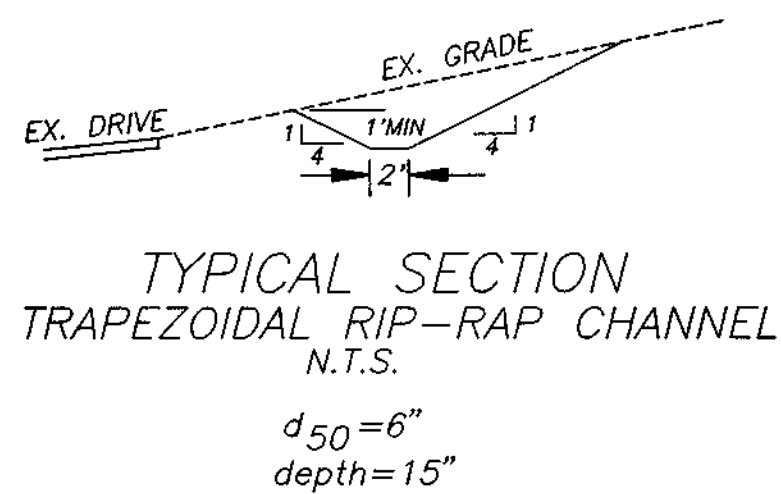
STRUCTURE SCHEDULE

STRUCTURE NO.	TOP ELEVATION	INVERT IN	INVERT OUT	ROAD NAME	ROAD STATION	OFFSET	REMARKS
L-1	501.00 THROAT	-	498.74	EMERALD VALLEY ROAD	15+75.66	17' L.	TYPE "K" S.D. 4.12 & 4.13
L-2	501.35 THROAT	498.41	498.16	EMERALD VALLEY ROAD	15+90.46	17' R.	TYPE "K" S.D. 4.12 & 4.13
L-3	502.69 THROAT	-	498.93	EMERALD VALLEY ROAD	20+76.60	17' L.	TYPE "K" S.D. 4.12 & 4.13
L-4	502.69 THROAT	498.42	498.17	EMERALD VALLEY ROAD	20+76.60	17' R.	TYPE "K" S.D. 4.12 & 4.13
M-1	503.2	496.83	496.63	N590477.41, E1334633.00			STANDARD MH S.D. G5.12
M-2	503.92	496.95	496.75	EMERALD VALLEY ROAD	19+54.09	17' R.	STANDARD MH S.D. G5.12
M-4	503.75	497.35	497.25	EMERALD VALLEY ROAD	21+03.26	27' R.	STANDARD MH S.D. G5.12
M-5	504.35	496.16	496.06	EMERALD VALLEY ROAD	19+89.16	27' R.	STANDARD MH S.D. G5.12
M-6	498.5	494.21	494.11	N590449.86, E1334769.76			STD. SHALLOW MH S.D. G5.12
E-1	-	-	-	N590512.52, E1334689.28			CONC. END SECT. S.D.5.51/5.52
E-2	-	-	-	N590581.37, E1334759.45			CONC. END SECT. S.D.5.51/5.52
E-3	-	-	-	EMERALD VALLEY ROAD	21+03.26	45.6' R.	CONC. END SECT. S.D.5.51/5.52
E-4	-	-	-	N590439.45, E1334775.74			CONC. END SECT. S.D.5.51/5.52



PIPE SCHEDULE

SIZE	TYPE	CLASS	QUANTITY
24"	RCCP	IV	3975 LF
18"	RCCP	IV	430 LF
15"	RCCP	IV	91 LF
12"	RCCP	IV	120 LF
6"	PVC	SCH 40	29 LF



DATE	NO.	REVISION	BY
5/3/00	1	DEL. M3 & REDRAW PROFILES	S/L
2/22/01	2	REVISE DRIVEWAY CULVERTS	S/L

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Feneck 4-16-99
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Andi Klamon 5/1/99
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chad Dammann 4/16/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

EMERALD VALLEY ROAD
 STORM DRAIN PROFILES

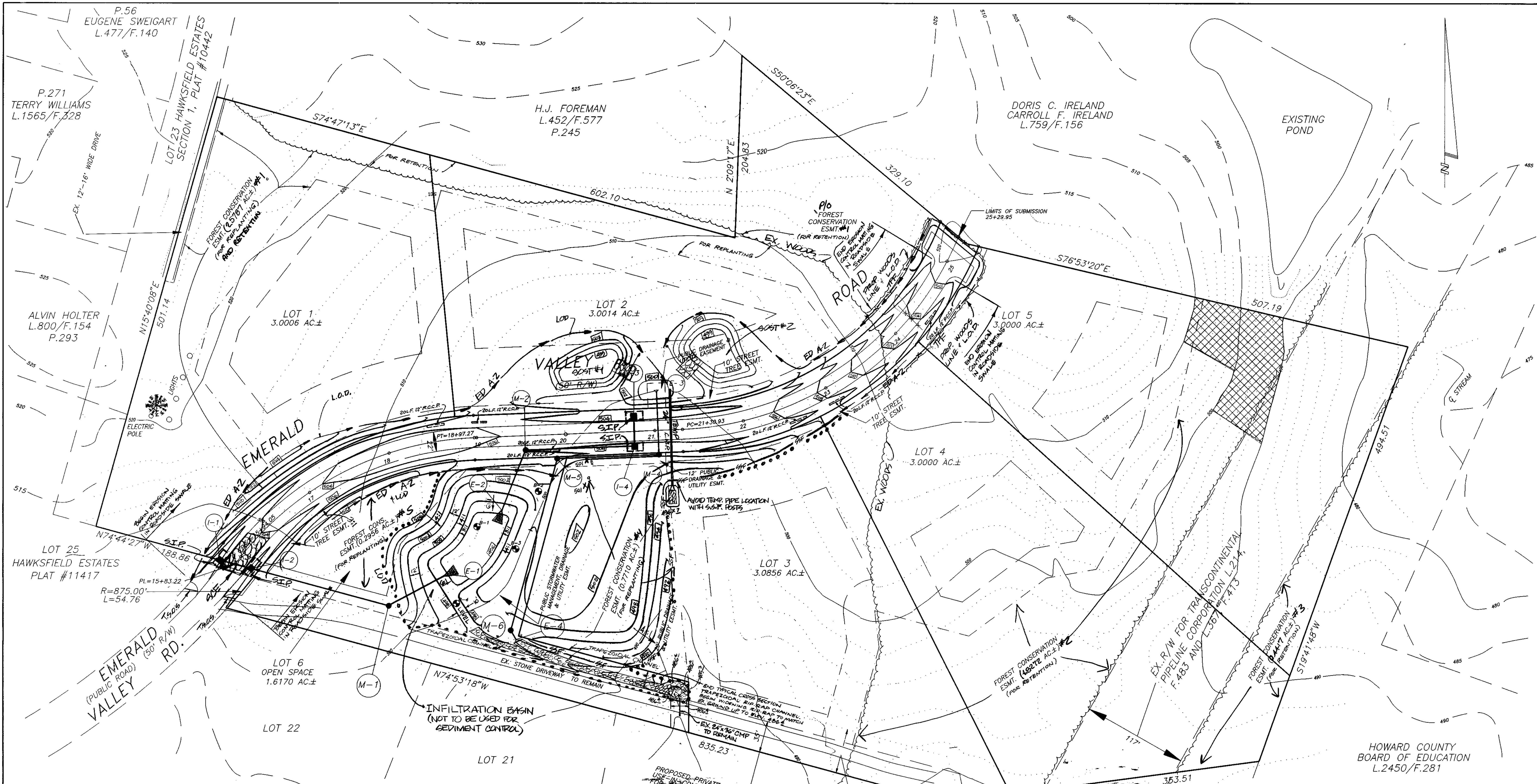
HAWKSFIELD ESTATES
 SECTION TWO
 LOTS 1-6
 ZONED: RC-DEO

3RD ELECTION DIST. HOWARD CO., MD.

SCALE: AS SHOWN DATE: SEPT., 1998 DWG. 3 OF 11
 DES. GSS DRN. RGF CHK. GSS

OWNERS/DEVELOPERS
 DIGI-DATA HOLDINGS
 C/O MILES AND STOCKBRIDGE
 9881 BROKEN LAND PKWY.
 COLUMBIA, MD. 21046

SHANABERGER & LANE
 8726 TOWN & COUNTRY BLVD.
 SUITE 201
 ELLICOTT CITY, MD., 21043
 (410)-461-9563



SEDIMENT TRAP DATA	
TRAP #	1 2
D.A.	0.39 AC 0.42 AC
BOTTOM EL.	499.0 499.0
SIDES	2:1 2:1
CREST EL.	502.0 502.0
CREST LEN.	6' 6'
EMBANKMT EL.	503.0 503.0
* VOL. REQ'D	4717 FT ³ 5171 FT ³
VOL. PROV'D	5792 FT ³ 6576 FT ³
* VOL. REQ'D = SED. CON. + TEMP. SW. M.	

LEGEND	
LIMIT OF DISTURBANCE LOD
STAB. CONST. ENTR.	□ □ □ □
EARTH DIKE	ED A-2
GILT FENCE	— S — S —
STANDARD INLET PROT.	□ SIP
TREE PROTECTION FENCE	— TPF —

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 4-16-99
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Conrad Hammit 5/11/99
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chulani 4/16/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

CONSULTANT'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 CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Keith Shanaberger 04/16/99
 DATE

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Big-Data Holdings, Inc. by A. P. ... 10/15/99
 AUTHORIZED AGENT DATE

...
 SIGNATURE OF DEVELOPER DATE

DRIVEWAY ELEVATION TABLE

LOT #	1 STA	0+00 (BP)	0+05	0+10	0+15	0+20	0+25	0+30	0+35	0+40	0+45	0+50	0+55	0+60	0+65	0+70	0+75	0+80	0+85	0+90	0+95	1+00	
1	18158	506.81	507.04	507.30	507.58	507.88	508.20	508.54	508.90	509.28	509.68	510.10	510.54	511.00	511.48	511.98	512.50	513.04	513.60	514.18	514.78	515.40	516.04
2	19102	506.14	506.38	506.64	506.92	507.22	507.54	507.88	508.24	508.62	509.02	509.44	509.88	510.34	510.82	511.32	511.84	512.38	512.94	513.52	514.12	514.74	515.38
3	22105	506.85	507.07	507.32	507.59	507.89	508.21	508.55	508.91	509.29	509.69	510.11	510.55	511.01	511.49	511.99	512.51	513.05	513.61	514.19	514.79	515.41	516.05
4	23105	500.62	500.86	501.12	501.40	501.70	502.02	502.36	502.72	503.10	503.50	503.92	504.36	504.82	505.30	505.80	506.32	506.86	507.42	507.99	508.58	509.19	509.82
5	24140	514.61	514.85	515.11	515.39	515.69	516.01	516.35	516.71	517.09	517.49	517.91	518.35	518.81	519.29	519.79	520.31	520.85	521.41	521.99	522.59	523.21	523.84
6	19185	504.81	505.05	505.31	505.59	505.89	506.21	506.55	506.91	507.29	507.69	508.11	508.55	509.01	509.49	509.99	510.51	511.05	511.61	512.19	512.79	513.41	514.04

HOWARD COUNTY BOARD OF EDUCATION L.2450/F.281

DATE	NO.	REVISION	BY
11/2/99	1	REV. GRADING, TEMP PIPE & DELETE	
5/3/00	2	DEL. M-3, REV. ST. DRAIN LAYOUT	S/L

GRADING AND SEDIMENT CONTROL PLAN

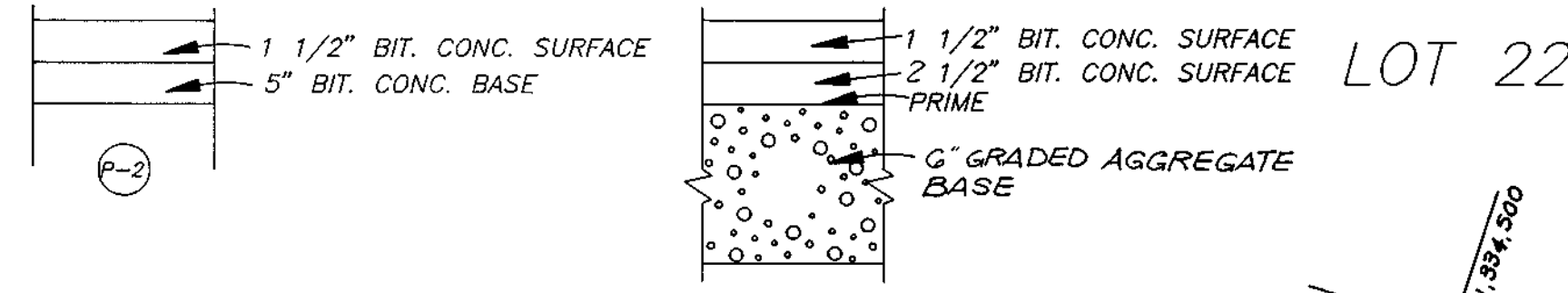
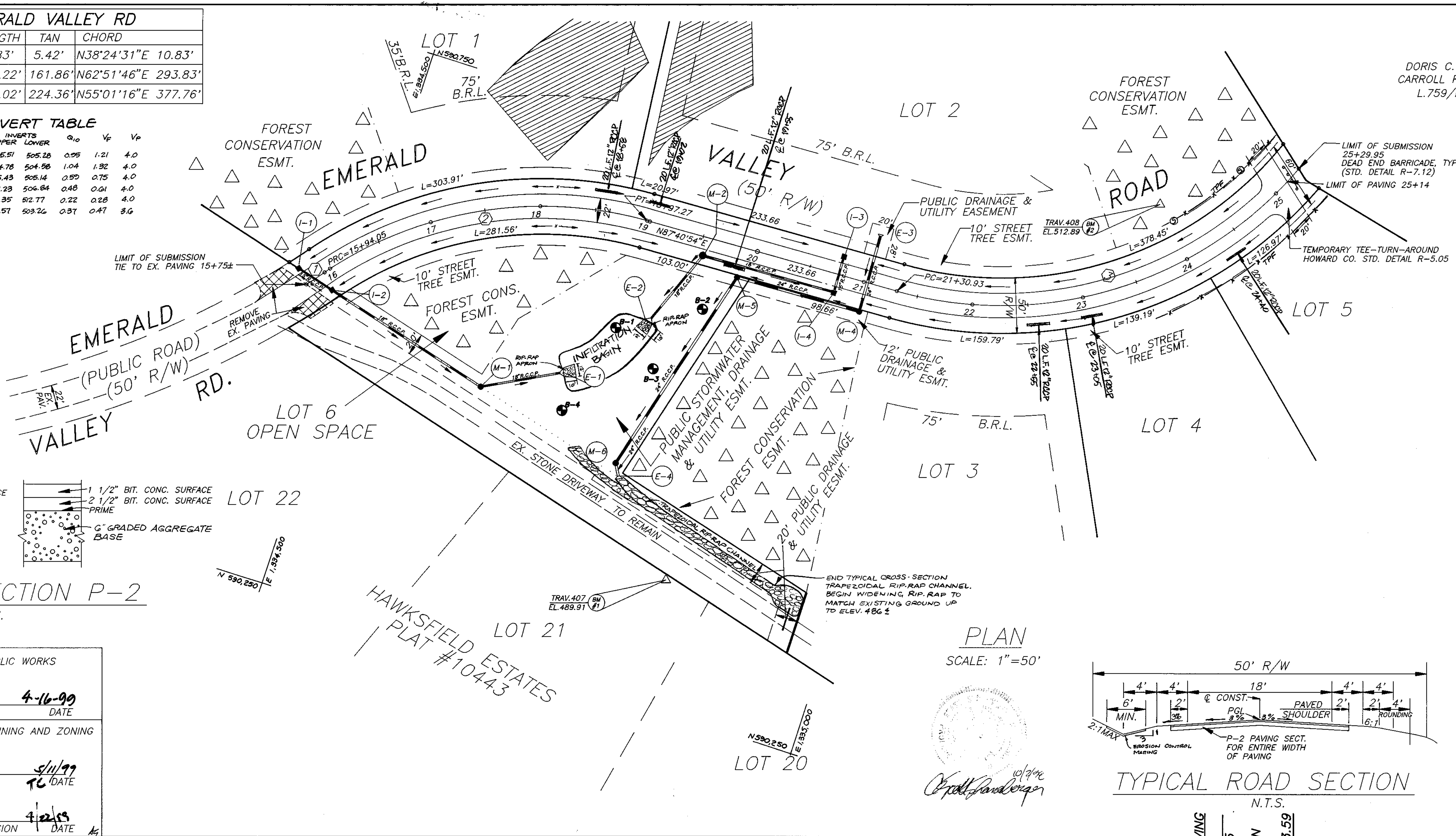
HAWKSFIELD ESTATES SECTION TWO
 LOTS 1-6
 ZONED: RC-DEO
 3RD ELECTION DIST. HOWARD CO., MD.

SCALE: AS SHOWN DATE: SEPT., 1998 DWG. 4 OF 11
 DES. DRN. RGF. CHK. GSS

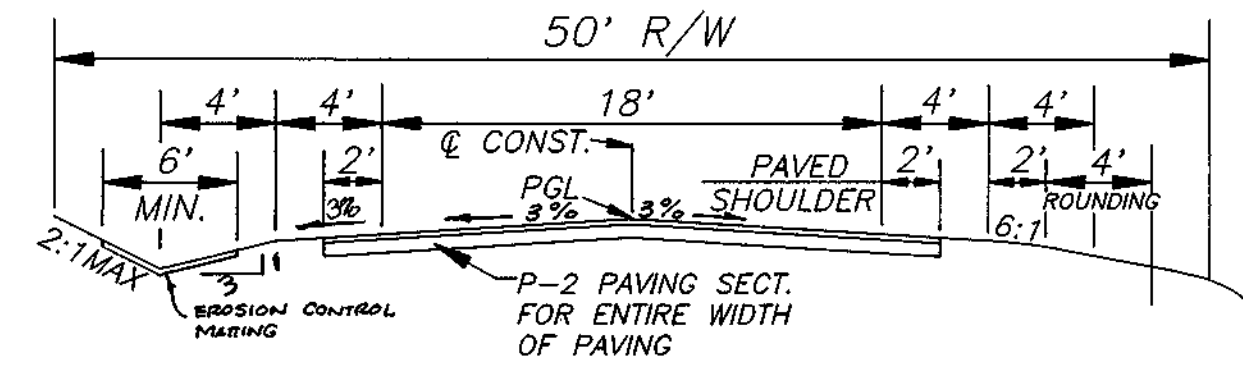
SHANABERGER & LANE
 8726 TOWN & COUNTRY BLVD.
 SUITE 201
 ELLICOTT CITY, MD, 21043
 (410)-461-9563

CURVE DATA EMERALD VALLEY RD					
CURVE NO.	DELTA	RADIUS	LENGTH	TAN	CHORD
①	0°43'48"	850.00'	10.83'	5.42'	N38°24'31"E 10.83'
②	49°38'17"	350.00'	303.22'	161.86'	N62°51'46"E 293.83'
③	65°19'16"	350.00'	399.02'	224.36'	N55°01'16"E 377.76'

DRIVEWAY CULVERT TABLE									
LOT #	ROAD STA	PIPE SIZE	PIPE LENGTH	SLOPE	INVERTS UPPER	INVERTS LOWER	Q ₁₀	V _f	V _p
1	18+58	12" RCCP	20'	1.15%	505.51	505.28	0.95	1.21	4.0
2	19+02	12" RCCP	20'	1.00%	504.78	504.58	1.04	1.82	4.0
3	22+55	12" RCCP	20'	1.46%	505.43	505.14	0.99	0.75	4.0
4	23+05	12" RCCP	20'	1.94%	507.23	506.84	0.48	0.61	4.0
5	24+40	12" RCCP	20'	2.92%	513.35	512.77	0.22	0.28	4.0
6	19+85	12" RCCP	20'	1.55%	503.57	503.26	0.97	0.47	3.6



PAVING SECTION P-2
N.T.S.



TYPICAL ROAD SECTION
N.T.S.

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Daniels 4-16-99
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamstra 5/11/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paula D. Williams 4/21/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

DATE	NO.	REVISION	BY
11/2/99	1	REV. TYP PAVING SECTION	SIL
5/3/00	2	DEL. M.B., REV. ST. DR. LAYOUT, REV. GUARDRAIL STATIONING	SIL
2/19/00	3	ELIMINATE GUARDRAIL	SIL

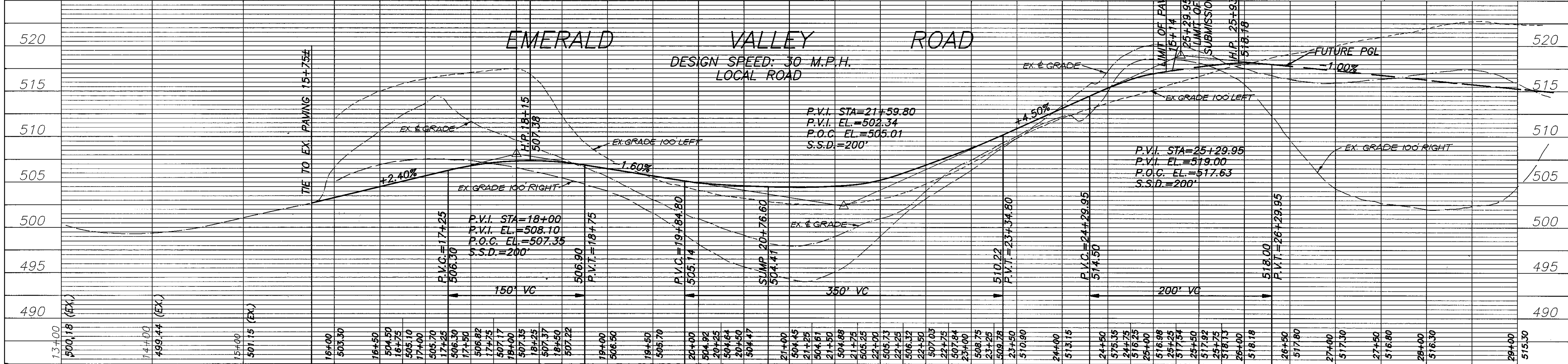
OWNERS/DEVELOPERS
DIGI-DATA HOLDINGS
0/0 MILES AND STOCKBRIDGE
9881 BROKEN LAND PKWY.
COLUMBIA, MD. 21046

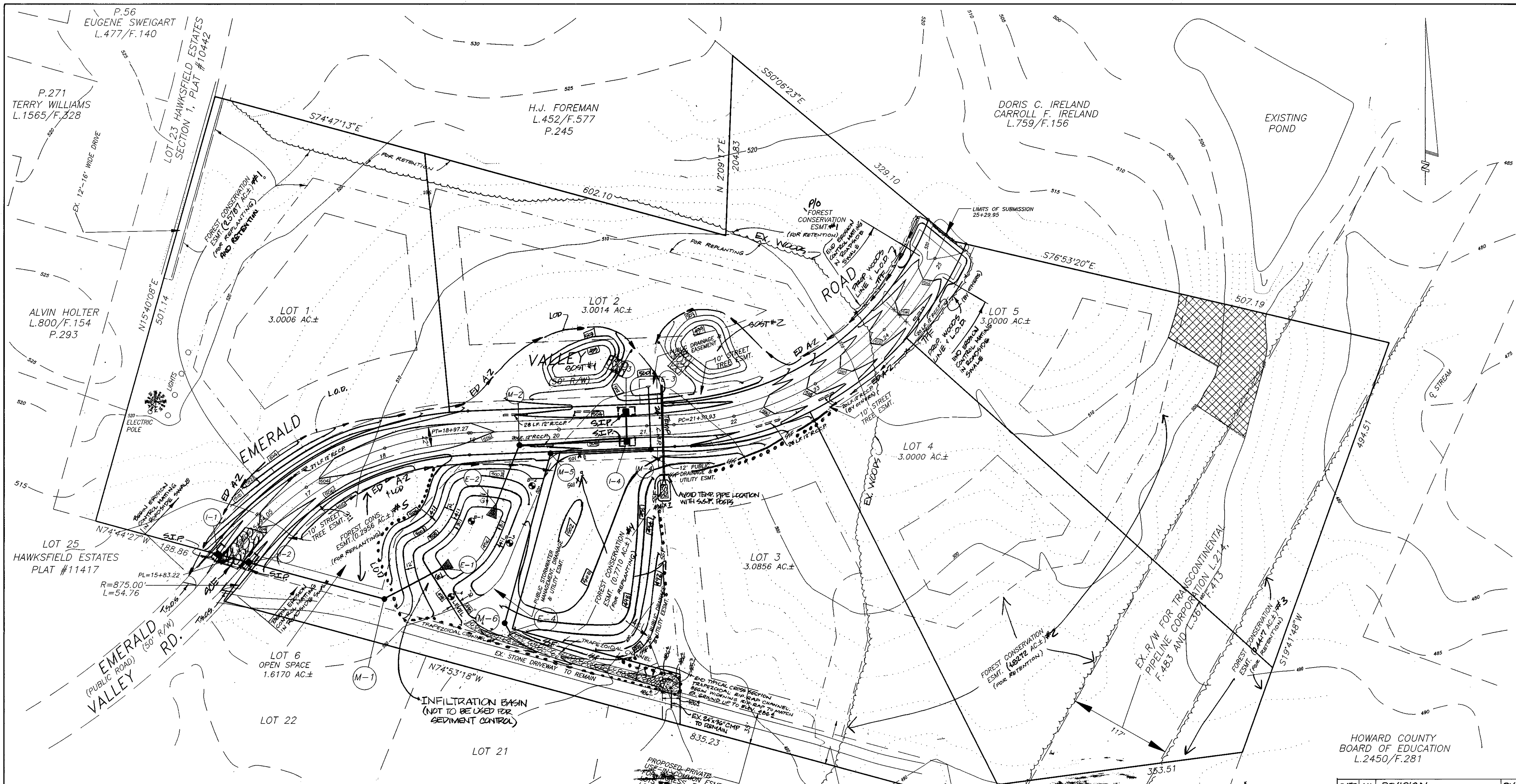
HAWKSFIELD ESTATES
SECTION TWO
LOTS 1-6
ZONED: RC-DEO
3RD ELECTION DIST. HOWARD CO., MD.

EMERALD VALLEY ROAD
PLAN AND PROFILE

SCALE: AS SHOWN DATE: SEPT., 1998 DWG. 2 OF 11
DES. GSS DRN. RGF CHK. GSS

SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLCOTT CITY, MD., 21043
(410)-461-9563





SEDIMENT TRAP DATA

TRAP #	1	2
D.A.	0.39 AC	0.42 AC
BOTTOM EL.	499.0	499.0
SIDES	2:1	2:1
CREST EL.	502.0	502.0
CREST LEN.	6'	6'
EMBANKMT EL.	503.0	503.0
* VOL. REQ'D	4717 FT ³	5171 FT ³
VOL. PROV'D	5702 FT ³	6516 FT ³

* VOL. REQ'D = SED. CAN. + TEMP. SW.M.

LEGEND

- LIMIT OF DISTURBANCE LOD
- STAB. CONST. ENTR. [Symbol] GCE
- EARTH DIKE ED A-2
- SILT FENCE [Symbol]
- STANDARD INLET PROT. [Symbol] SIP
- TREE PROTECTION FENCE [Symbol] TPF

CONSULTANT'S CERTIFICATE

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

[Signature]
DATE 4/2/99

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

Digi-Data Holdings, Inc. by *[Signature]* Authorized Agent 10/15/99
DATE 10/15/99

SIGNATURE OF DEVELOPER DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature] 4-16-99
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature] 5/1/99
CHIEF, DIVISION OF LAND DEVELOPMENT TO DATE

[Signature] 4/16/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY BOARD OF EDUCATION
L.2450/F.281

APPROVED: HOWARD COUNTY BOARD OF EDUCATION
L.2450/F.281

DRIVEWAY ELEVATION TABLE

LOT #	STA	0+00 (BP)	0+00	0+10	0+20	0+30	0+40	0+50	0+60	0+70	0+80	0+90	1+00
1	18158	506.81	507.00	507.50	507.50	507.50	507.50	507.50	507.50	507.50	507.50	507.50	507.50
2	19102	506.14	506.38	506.38	506.38	506.38	506.38	506.38	506.38	506.38	506.38	506.38	506.38
3	22195	506.85	507.07	507.07	507.07	507.07	507.07	507.07	507.07	507.07	507.07	507.07	507.07
4	23105	506.62	506.86	506.86	506.86	506.86	506.86	506.86	506.86	506.86	506.86	506.86	506.86
5	24140	514.61	514.85	514.85	514.85	514.85	514.85	514.85	514.85	514.85	514.85	514.85	514.85
6	19185	504.81	505.05	505.05	505.05	505.05	505.05	505.05	505.05	505.05	505.05	505.05	505.05

OWNERS/DEVELOPERS
DIGI-DATA HOLDINGS
910 MILES + STOCKBRIDGE
9881 BROKEN LAND PKWY.
COLUMBIA, MD. 21046

GRADING AND SEDIMENT CONTROL PLAN

HAWKSFIELD ESTATES SECTION TWO LOTS 1-6
ZONED: RC-DEO
3RD ELECTION DIST. HOWARD CO., MD.

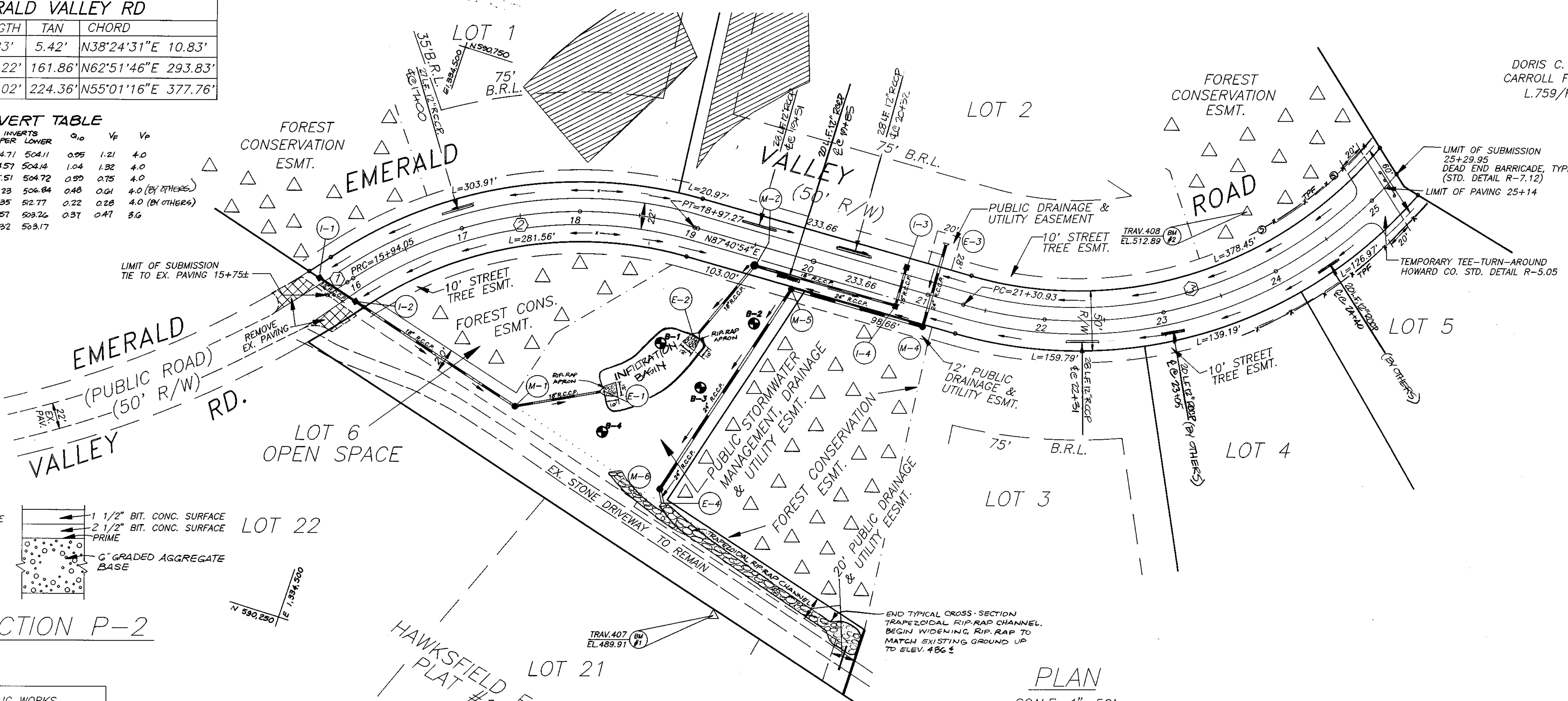
DATE	NO.	REVISION	BY
11/2/99	1	REV. GRADING, TEMP PIPE + DELETE SED. TRAP #3 DATA	S-L
5/3/00	2	DEL. M.S. REV. ST. DRAIN LAYOUT	S-L
2/22/01	3	REVISE DRIVEWAY CULVERTS	S-L

SCALE: AS SHOWN DATE: SEPT., 1998 DWG. # OF 11
DES. DRN. RGF. CHK. GSS

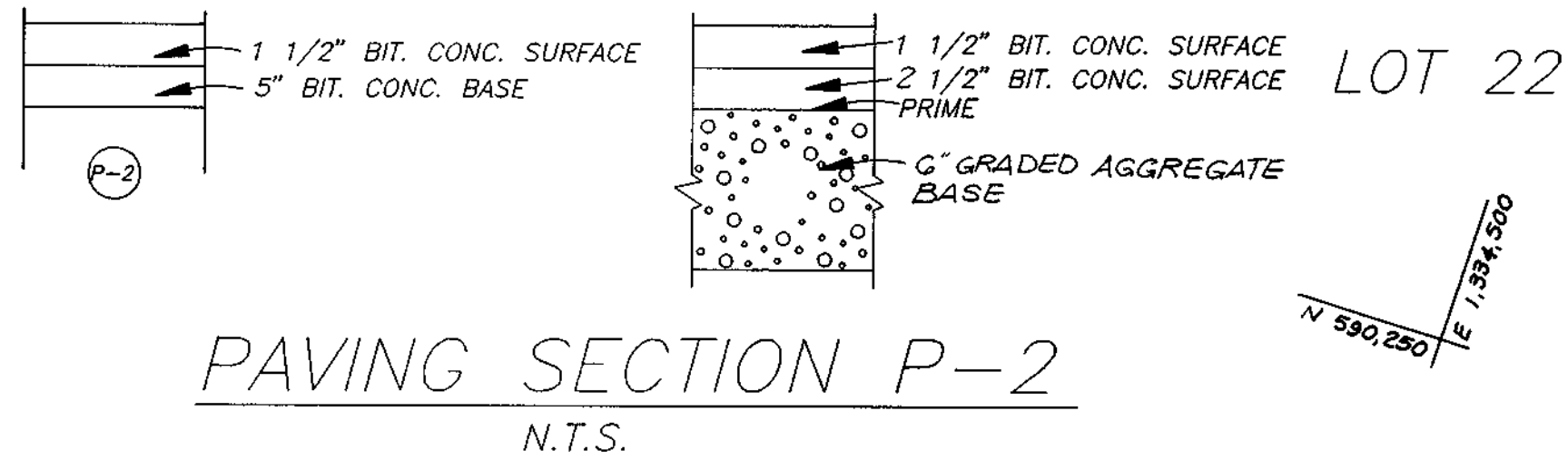
SHANABERGER & LANE
8726 TOWN & COUNTRY BLVD.
SUITE 201
ELLCOTT CITY, MD., 21043
(410)-461-9563

CURVE NO.	DELTA	RADIUS	LENGTH	TAN	CHORD
①	0°43'48"	850.00'	10.83'	5.42'	N38°24'31"E 10.83'
②	49°38'17"	350.00'	303.22'	161.86'	N62°51'46"E 293.83'
③	65°19'16"	350.00'	399.02'	224.36'	N55°01'16"E 377.76'

LOT #	ROAD STA	PIPE SIZE	PIPE LENGTH	SLOPE	INVERTS UPPER	INVERTS LOWER	Q ₁₀	V _p	V _b
1	17+00	12" RCCP	27'	2.20%	504.71	504.11	0.95	1.21	4.0
2	19+51	12" RCCP	28'	1.54%	504.57	504.14	1.04	1.92	4.0
3	22+31	12" RCCP	28'	0.75%	505.51	504.72	0.99	0.75	4.0
4	23+05	12" RCCP	20'	1.94%	507.23	506.84	0.48	0.61	4.0 (BY OTHERS)
5	24+00	12" RCCP	20'	2.92%	513.35	512.77	0.22	0.28	4.0 (BY OTHERS)
6	19+85	12" RCCP	20'	1.55%	503.57	503.26	0.37	0.47	3.6
2	20+32	12" RCCP	28'	0.54%	503.32	503.17			



DORIS C. IRELAND
CARROLL F. IRELAND
L.759/F.156



DATE	NO.	REVISION	BY
11/2/99	1	REV. TYP. PAVING SECTION	SIL
5/3/00	2	DEL. M3, REV. ST. DR. LAYOUT, REV. GUARDRAIL STATIONING.	SIL
2/1/00	3	ELIMINATE GUARDRAIL	SIL
2/22/01	4	REVISE DRIVEWAY CULVERTS	S-L

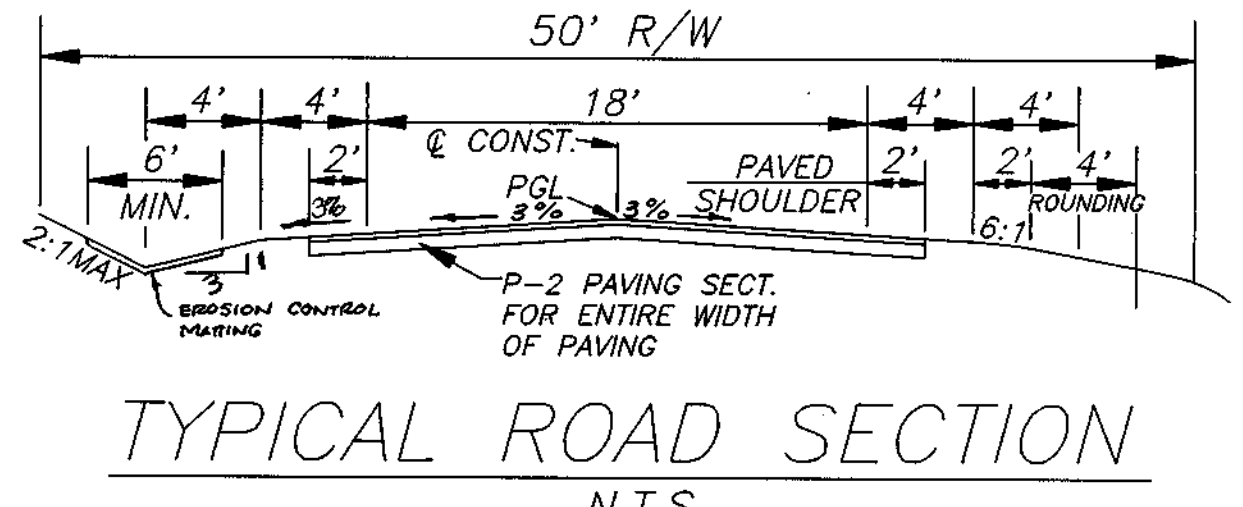
OWNERS/DEVELOPERS
DIGI-DATA HOLDINGS
0.70 MILES AND STOCKBRIDGE
9881 BROKEN LAND PKWY.
COLUMBIA, MD. 21046

APPROVED: DEPARTMENT OF PUBLIC WORKS
Andrew M. Douck 4-16-99
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamlett 5/1/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

John D. Summers 4/22/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

PLAN
SCALE: 1"=50'



HAWKSFIELD ESTATES
SECTION TWO
LOTS 1-6
ZONED: RC-DEO
3RD ELECTION DIST. HOWARD CO., MD.

EMERALD VALLEY ROAD
PLAN AND PROFILE

SCALE: AS SHOWN DATE: SEPT., 1998 DWG. 2 OF 11
DES. GFS DRN. RGF CHK. GSS

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8726 TOWN & COUNTRY BLVD.
SUITE 201
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