

SHEET INDEX	
SHEET No.	DESCRIPTION
1	TITLE SHEET
2	OLD FREDERICK ROAD PLAN AND PROFILE
3	HOLLY SPRINGS COURT PLAN AND PROFILE
4	STREET TREE, GRADING AND SEDIMENT CONTROL PLAN
5	LANDSCAPE & FOREST CONSERVATION PLAN
6	STORM DRAIN PROFILES
7	DRAINAGE AREA MAP
8	SEDIMENT CONTROL NOTES AND DETAILS
9	TRAFFIC CONTROL PLAN AND DETAIL SHEET
10	S.W.M. NOTES AND DETAILS
11	OFF-SITE FORESTATION PLAN - REINHARDT PROPERTY

**FINAL ROAD CONSTRUCTION, GRADING, STORMDRAINS AND
STORMWATER MANAGEMENT PLANS**

REINHARDT PROPERTY

LOTS 1 THRU 20

ZONING "R-20"

TAX MAP NO. 18 PARCEL NO. 9 GRID NO. 7

**SECOND ELECTION DISTRICT
HOWARD COUNTY, MARYLAND**

APPROVED: DEPARTMENT OF PUBLIC WORKS
Howard Gill 12/18/00
 CHIEF, BUREAU OF HIGHWAYS DATE

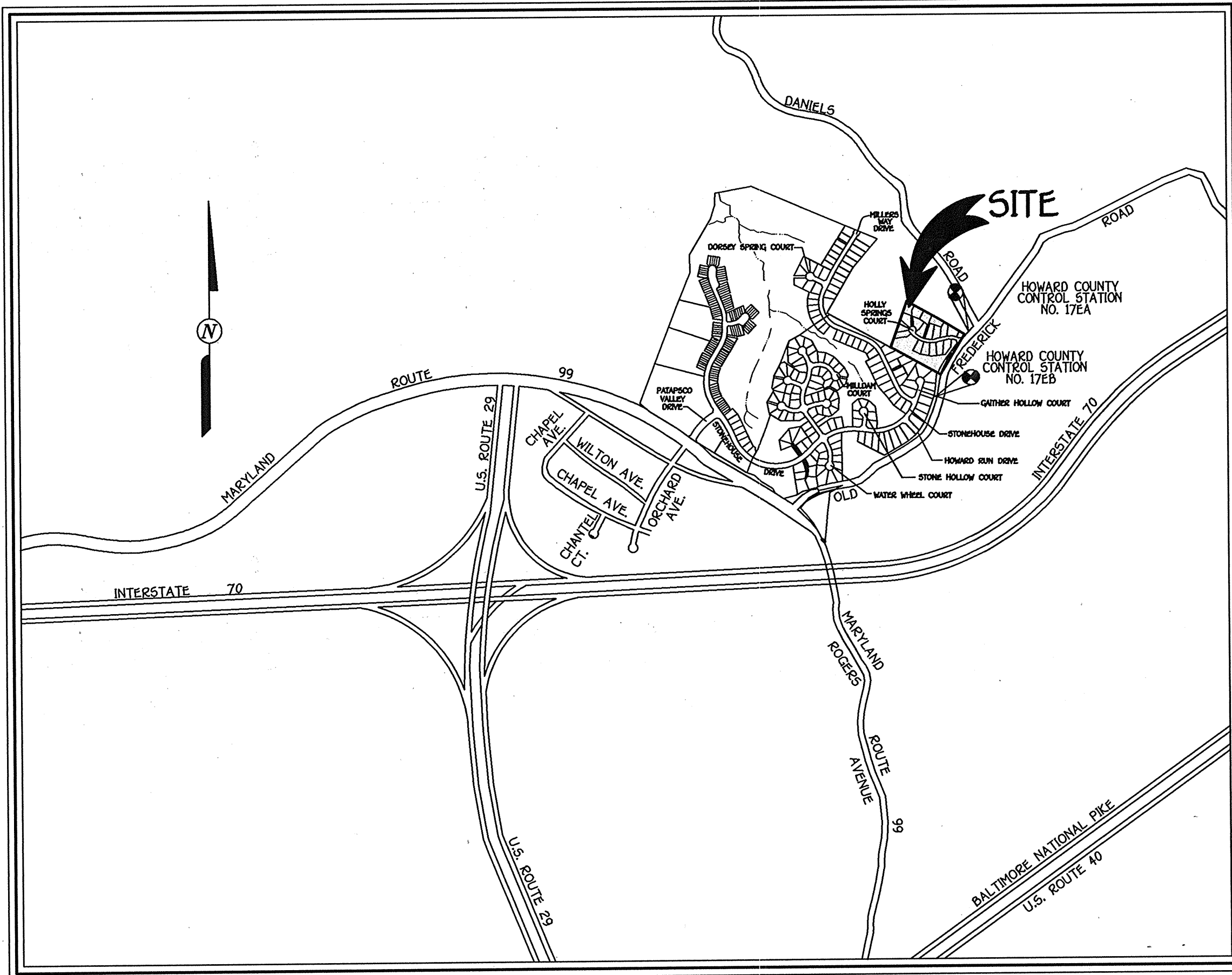
APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cindy Hamula 12/15/00
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Walter Dammann 12/12/00
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

ROAD CLASSIFICATION CHART		
ROAD NAME	CLASSIFICATION	R/W WIDTH
HOLLY SPRINGS COURT	PUBLIC ACCESS PLACE	40'

TRAFFIC CONTROL SIGNS				
STREET NAME	CL. STATION	OFFSET	POSTED SIGN	SIGN CODE
HOLLY SPRINGS COURT	0+33	26'L	STOP	R2-1
HOLLY SPRINGS COURT	1+00	12'R	SPEED LIMIT 25	R2-1
HOLLY SPRINGS COURT	1+35	12'R	ROAD NARROWS	W5-1
HOLLY SPRINGS COURT	1+95	12'L	ROAD NARROWS	W5-1
HOLLY SPRINGS COURT	3+20	12'R	ROAD NARROWS	W5-1
HOLLY SPRINGS COURT	3+90	12'L	ROAD NARROWS	W5-1
HOLLY SPRINGS COURT	4+82	12'R	ROAD NARROWS	W5-1
HOLLY SPRINGS COURT	5+55	12'L	ROAD NARROWS	W5-1
OLD FREDERICK ROAD	2+50	12'L	SIDE ROAD	W2-2
OLD FREDERICK ROAD	-2+50	12'R	SIDE ROAD	W2-2
HOLLY SPRINGS COURT	1+55 3+40 5+15	0'R	"OM-3R" OBJECT MARKER	
HOLLY SPRINGS COURT	1+75 3+60 5+35	0'L	"OM-3R" OBJECT MARKER	
HOLLY SPRINGS COURT	1+55 3+40 5+15	0'L	"OM-3L" OBJECT MARKER	
HOLLY SPRINGS COURT	1+75 3+60 5+35	0'R	"OM-3L" OBJECT MARKER	

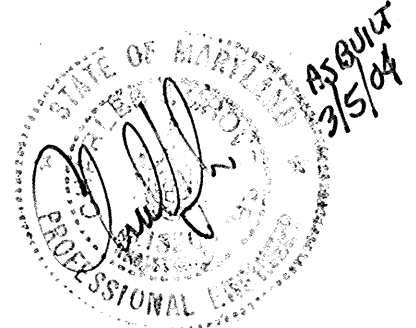
STREET LIGHT CHART				
DWG. No.	STREET NAME	STATION	OFF-SET	FIXTURE/POLE TYPE
3	HOLLY SPRINGS COURT	0+30	30'R	150-WATT H.P.S. VAPOR PENDANT (CUT-OFF) MOUNTED AT 30' ON BRONZE FIBERGLASS POLE USING A 12' ARM
3	HOLLY SPRINGS COURT	1+65 3+50 5+25	9'R 9'R 9'R	100-WATT "TRADITIONAIRE" H.P.S. VAPOR FIXTURE POST TOP FIXTURE MOUNTED ON A 14-FOOT BLACK FIBERGLASS POLE.
3	HOLLY SPRINGS COURT	L.P. STA. 0+55 = E. STA. 6+50	2' BEHIND CURB	100-WATT "TRADITIONAIRE" H.P.S. VAPOR FIXTURE POST TOP FIXTURE MOUNTED ON A 14-FOOT BLACK FIBERGLASS POLE.



VICINITY MAP
SCALE 1" = 1200'

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS / BUREAU OF ENGINEERING / CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 AT LEAST (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- 2 FOOT CONTOUR TOPOGRAPHY AND EXISTING CONDITIONS BASED ON FIELD RUN SURVEY PREPARED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT AUGUST 1998.
- COORDINATES BASED ON NAD '83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 17EA AND NO. 17EB.
 17EA-N 10160.5724 (METERS)
 E 41372.7247 (METERS)
 17EB-N 100598.8448 (METERS)
 E 413227.8979 (METERS)
- PUBLIC WATER AND SEWER WILL BE USED WITHIN THE PROJECT, CONTRACT NO. 14-3824-D AND LOCATED IN THE PATAPSCO DRAINAGE AREA.
- THE TRAFFIC STUDY WAS PREPARED BY THE TRAFFIC GROUP AND APPROVED BY HOWARD COUNTY UNDER S 98-08.
- BACKGROUND INFORMATION:
 A. SUBDIVISION NAME: REINHARDT PROPERTY
 B. TAX MAP NO.: 18
 C. PARCEL NO.: 9
 D. ZONING: R-20
 E. ELECTION DISTRICT: SECOND
 F. TOTAL TRACT AREA: 10.311 AC. +
 G. NO. OF BUILDABLE LOTS: 18
 H. NO. OF PARCELS: 0
 I. NO. OF OPEN SPACE LOTS: 2
 J. PRELIMINARY PLAN APPROVAL DATE: JUNE 4, 1999
 K. PREVIOUS FILE NOS.: 598-08 AND P99-11
 L. TOTAL AREA OF OPEN SPACE REQUIRED: (10.311 x 30%) = 3.093
 M. TOTAL AREA OF OPEN SPACE PROVIDED: 3.099 AC. +
- REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE TO BE PROVIDED AT THE JUNCTION OF THE PIPE / FLAG STEM AND THE ROAD R/W AND NOT ONTO THE PIPE / FLAG STEM DRIVEWAY.
- NO CEMETERIES EXIST ON THE PROPERTY.
- ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T-180.
- THE FOREST WAS DELINEATED BY ECO-SCIENCE PROFESSIONALS, INC. AND APPROVED UNDER S 98-08.
- THE FOREST CONSERVATION EASEMENT(S) HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- STORMWATER MANAGEMENT FACILITY:
 TYPE - RETENTION S.W.M. POND (WATER QUANTITY AND WATER QUALITY BY RETENTION)
 OWNER - PRIVATE HOMEOWNERS ASSOCIATION
 MAINTENANCE - PRIVATE HOMEOWNERS ASSOCIATION
- STREET LIGHTS WILL BE REQUIRED IN THE DEVELOPMENT IN ACCORDANCE WITH THE DESIGN MANUAL. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLE SELECTED SHALL BE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY DESIGN MANUAL, VOLUME III (1993) AND AS MODIFIED BY "GUIDELINES FOR STREET LIGHTS IN RESIDENTIAL DEVELOPMENTS (JUNE 1993)". THE JUNE 1993 POLICY INCLUDES GUIDELINES FOR LATERAL AND LONGITUDINAL PLACEMENT. A MINIMUM OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- THE STORMWATER MANAGEMENT MARYLAND DAM SAFETY DIVISION PERMIT NO. 15 99-PO-2127.
- UPON CONSTRUCTION OF HOLLY SPRINGS COURT, THE DRIVEWAY TO THE EXISTING HOUSE ON LOT 4 WILL BE REMOVED FROM OPEN SPACE LOT 14.

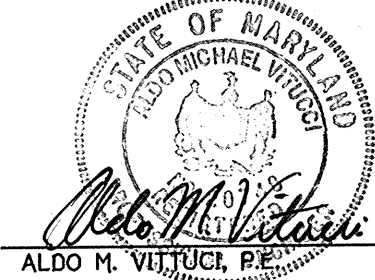


Aldo M. Vitucci 11-1-00

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21114
 (410) 461-2225

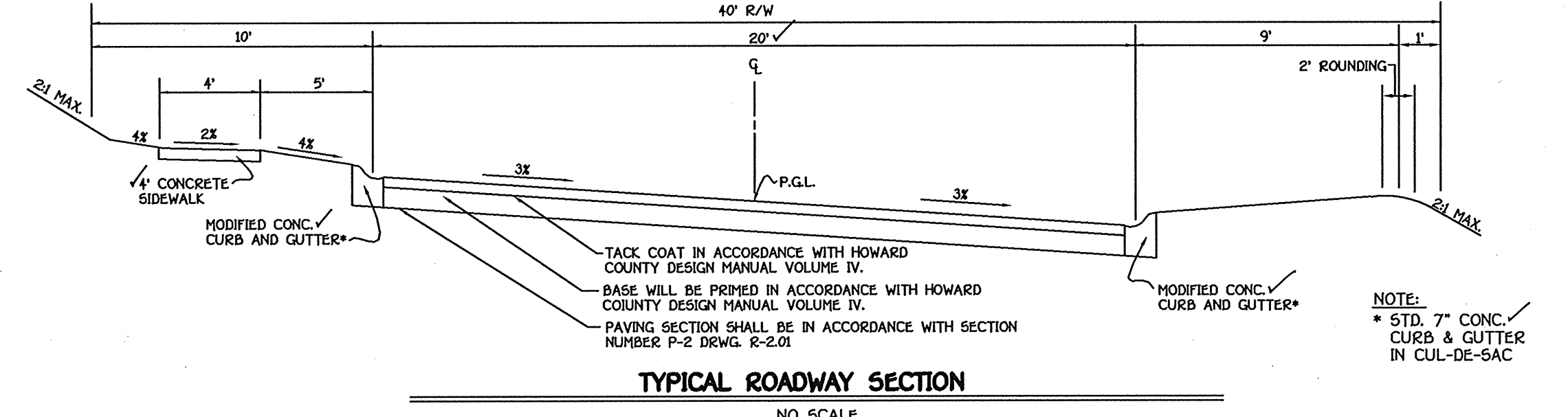
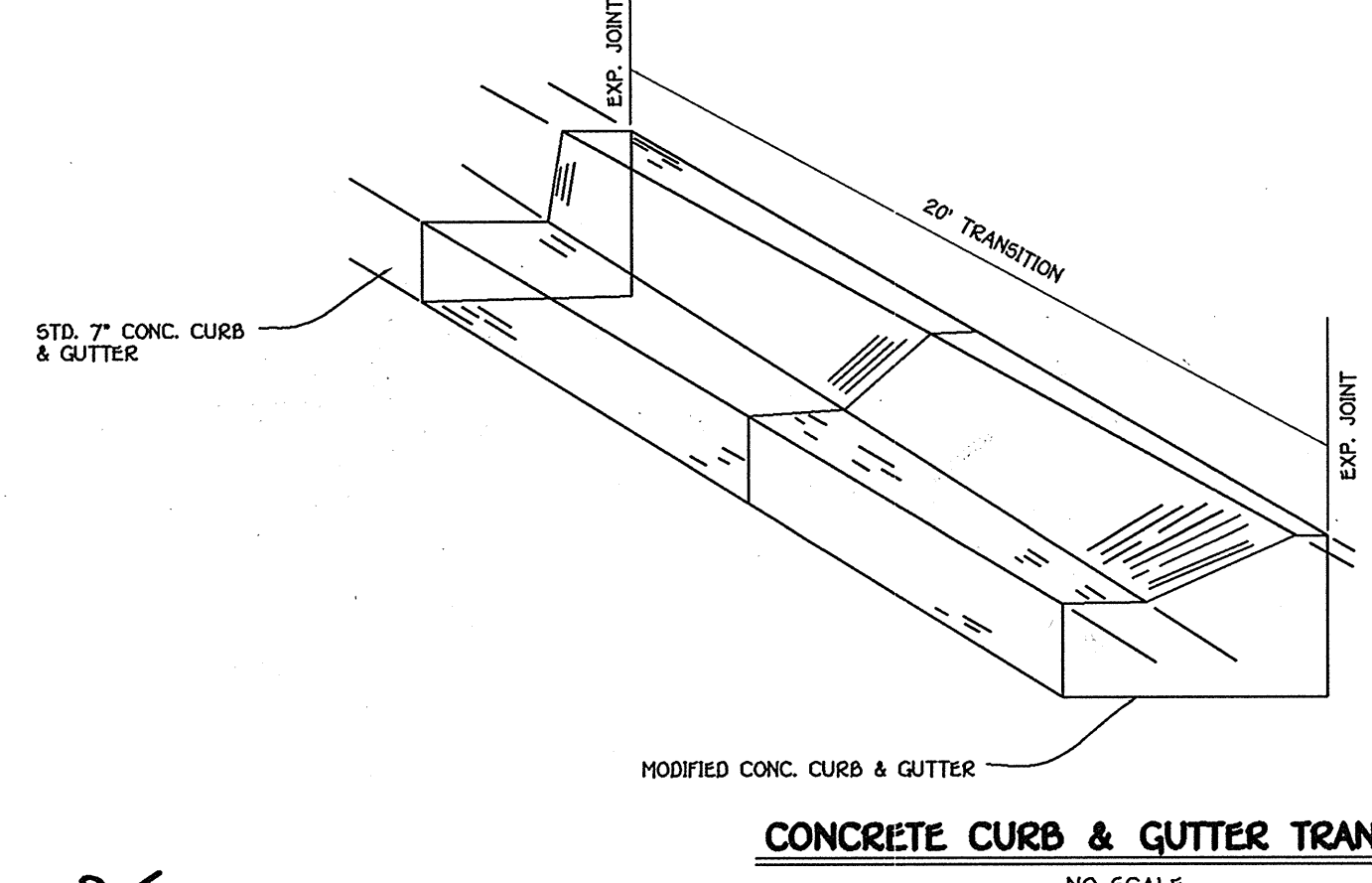
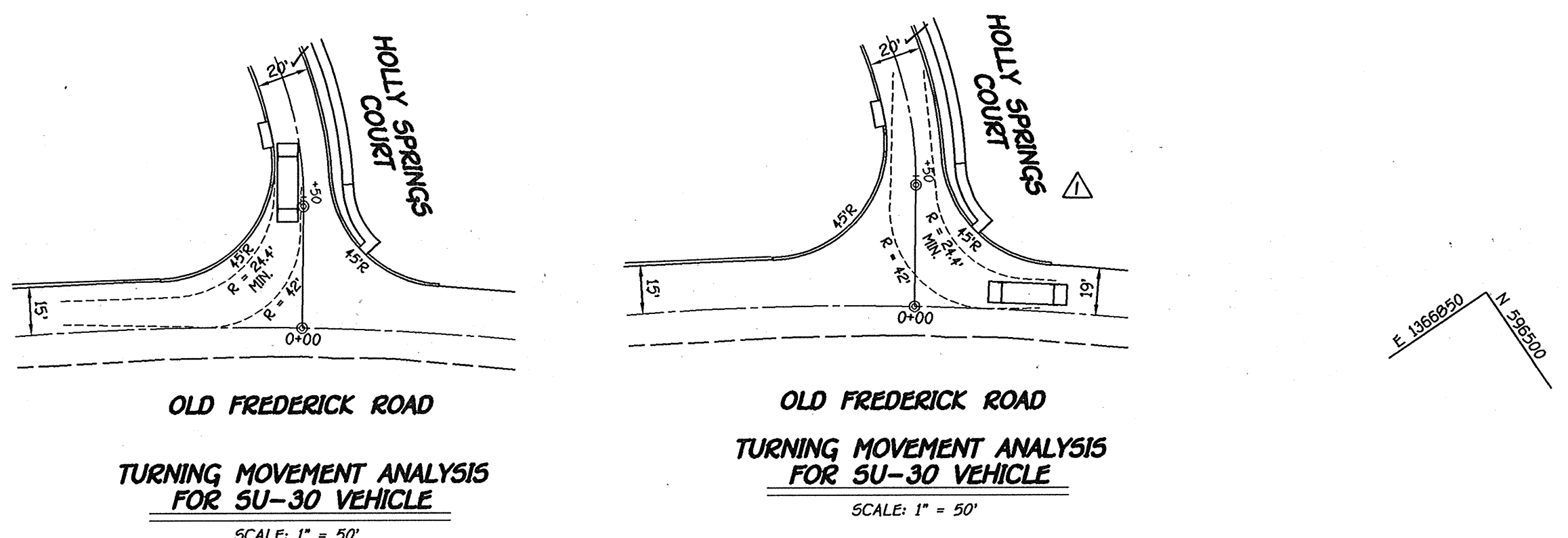
OWNER
 MR. & MRS. ROBERT REINHARDT, SR.
 8524 OLD FREDERICK ROAD
 ELLICOTT CITY, MD. 21043

DEVELOPER
 REINHARDT PROPERTY II, LLC
 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MD. 21042

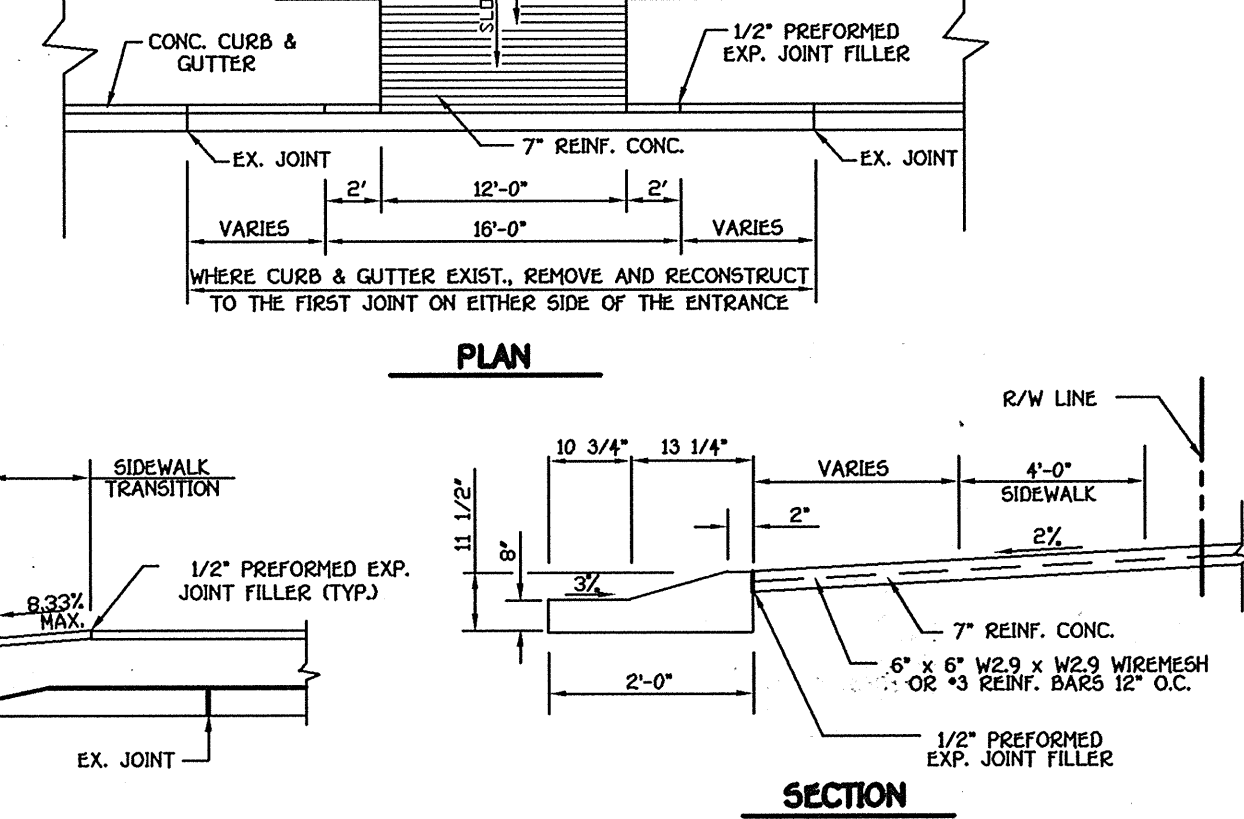
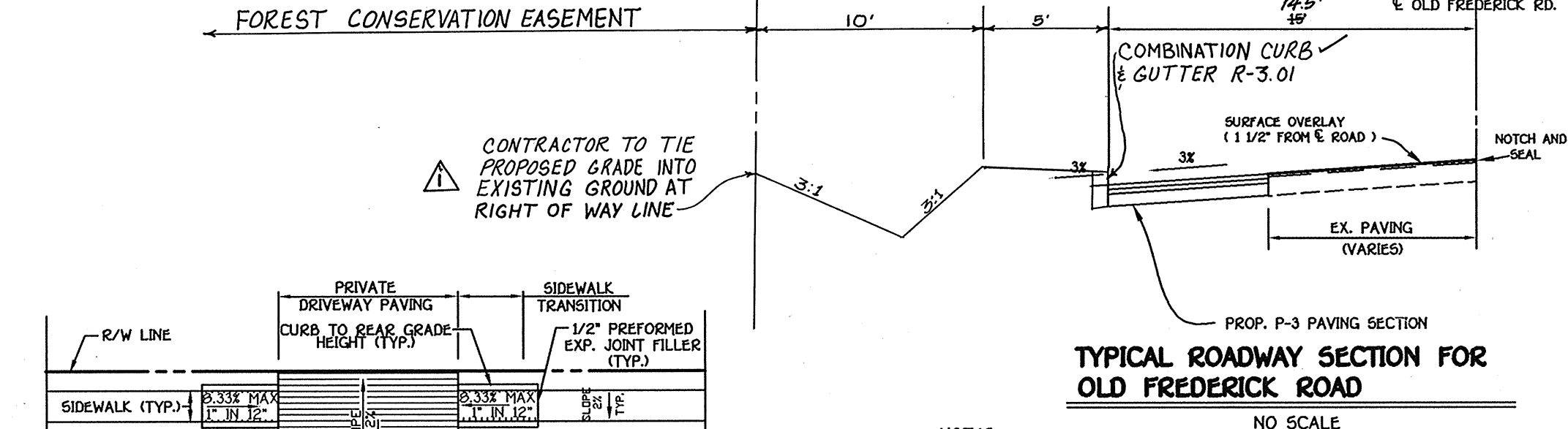
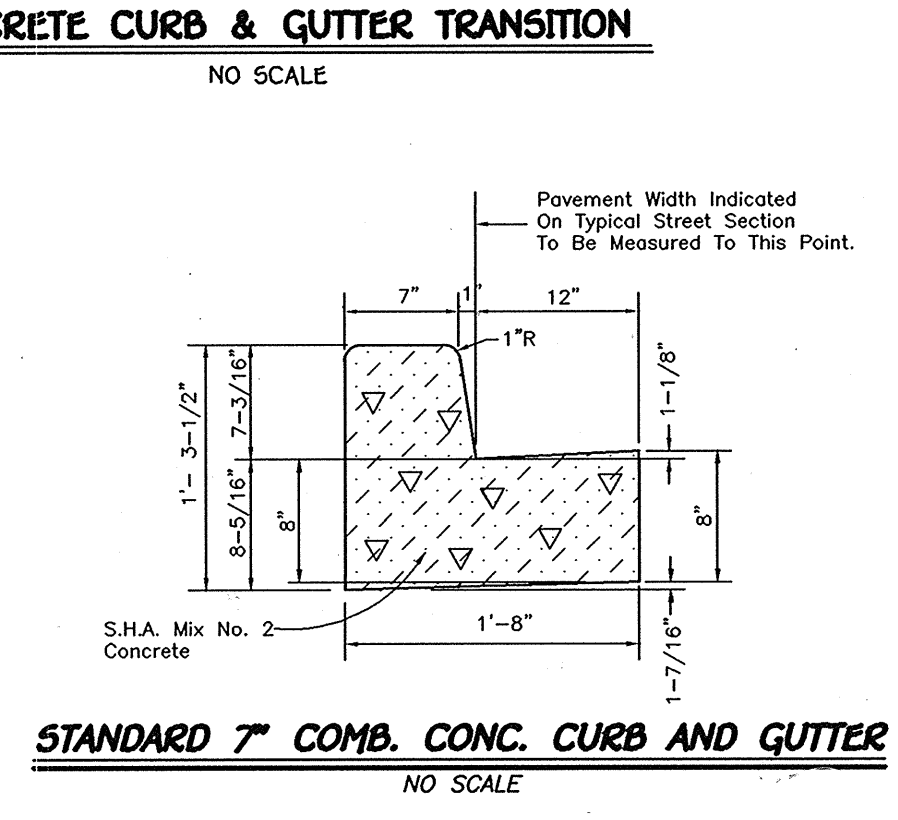


11-20-00
DATE

REINHARDT PROPERTY
 LOTS 1 THRU 20
 ZONED: R-20
 TAX MAP NO. 18 PARCEL NO. 9 GRID NO. 7
 2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 DATE: SEPTEMBER 1, 2000
 SHEET 1 OF 11



ROADWAY INFORMATION CHART						
ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	STATION LIMITS	R/W	PAVING SECTION
HOLLY SPRINGS COURT	PUBLIC ACCESS PLACE	20 MPH	R-20	0+00 TO 6+88.09	40'	P-2



REINHARDT PROPERTY
Lots 1 thru 20
Tax Map No. 18 Parcel No. 9 Grid No. 7
Second Election District Howard County, Maryland

OWNER
MR. & MRS. ROBERT REINHARDT, SR.
2524 OLD FREDERICK ROAD
ELLCOTT CITY, MD. 21043

DEVELOPER
REINHARDT PROPERTY II, LLC
10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MD. 21042

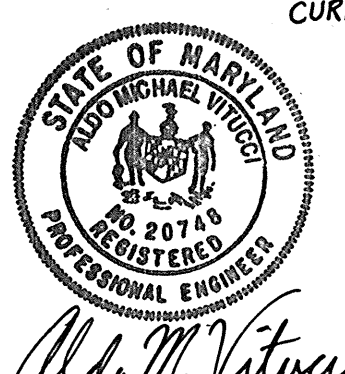
SCALE: AS SHOWN DATE: SEPT. 1, 2000 DWG. NO. 2 OF 11
DES. A.M.V. DRN. J.C.L. CHK. A.M.V.

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
4100 461 - 2925

APPROVED DEPARTMENT OF PLANNING AND ZONING
Cindy Hamble 12/15/10
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED DEPARTMENT OF PLANNING AND ZONING
Chris Dorman 12/12/00
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

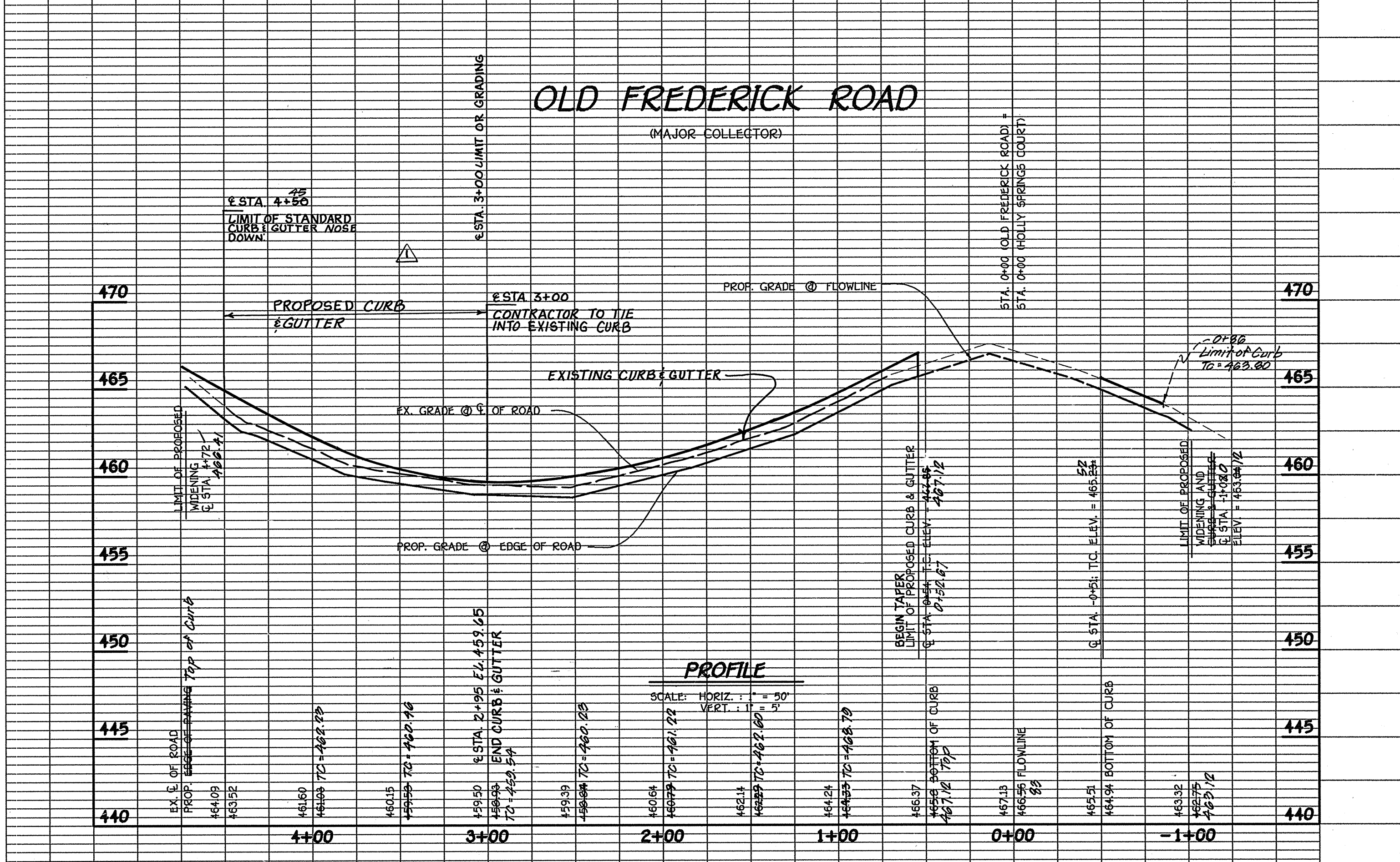
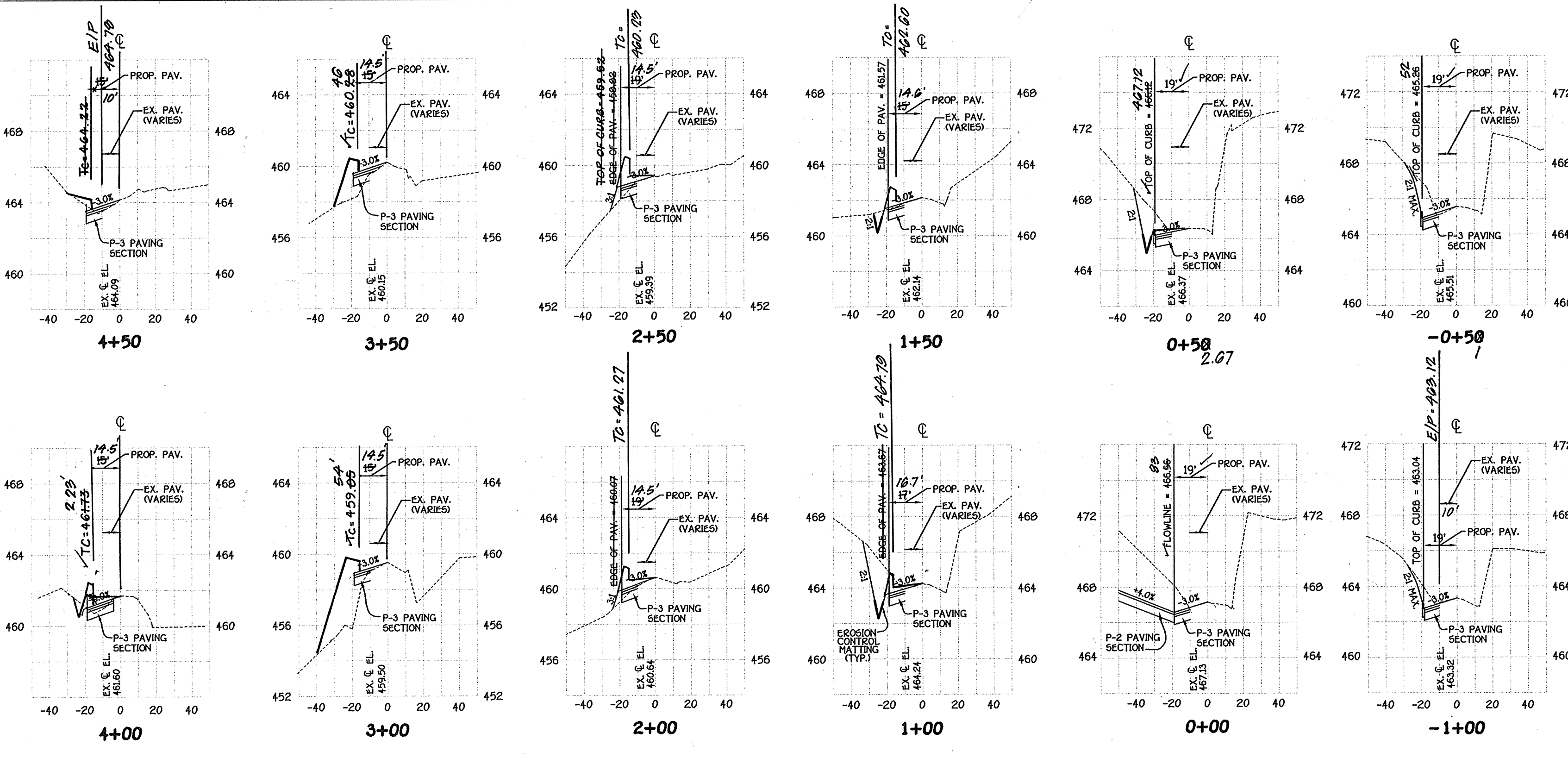
APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Howard's Silk for 12/15/10
CHIEF, BUREAU OF HIGHWAYS DATE

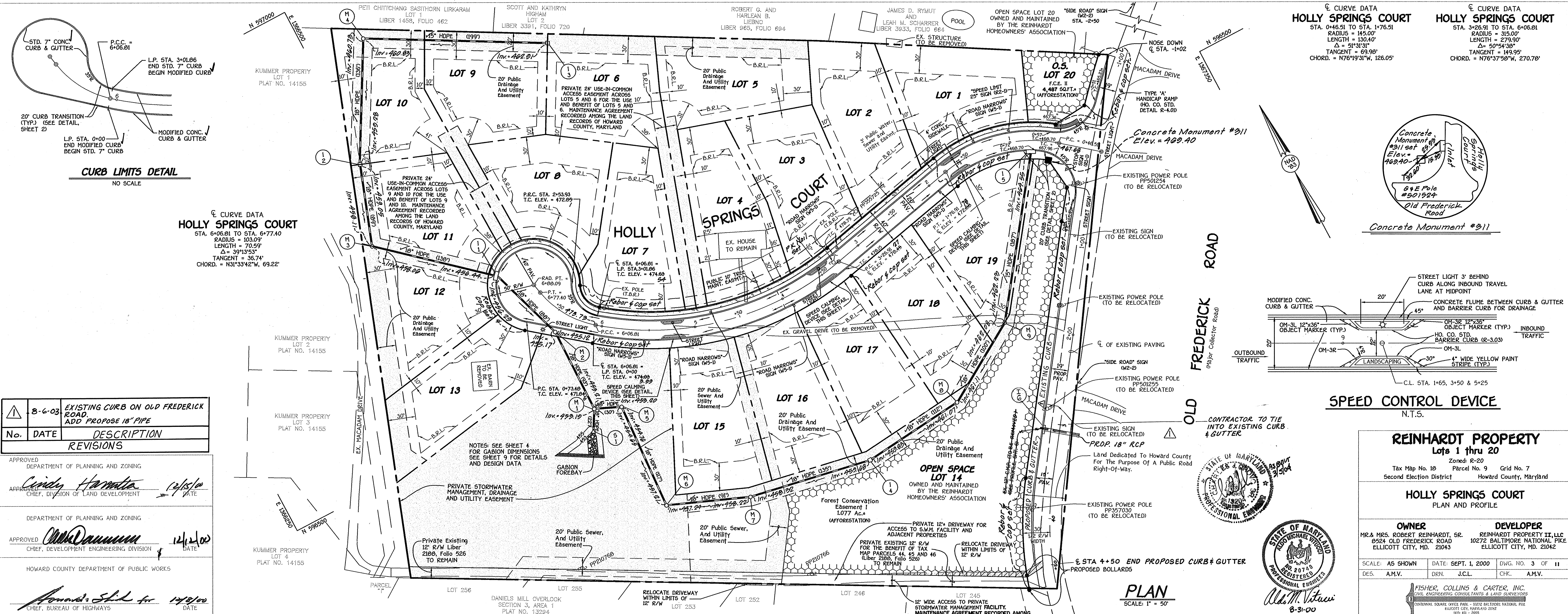


OLD FREDERICK ROAD
(Major Collector Road)

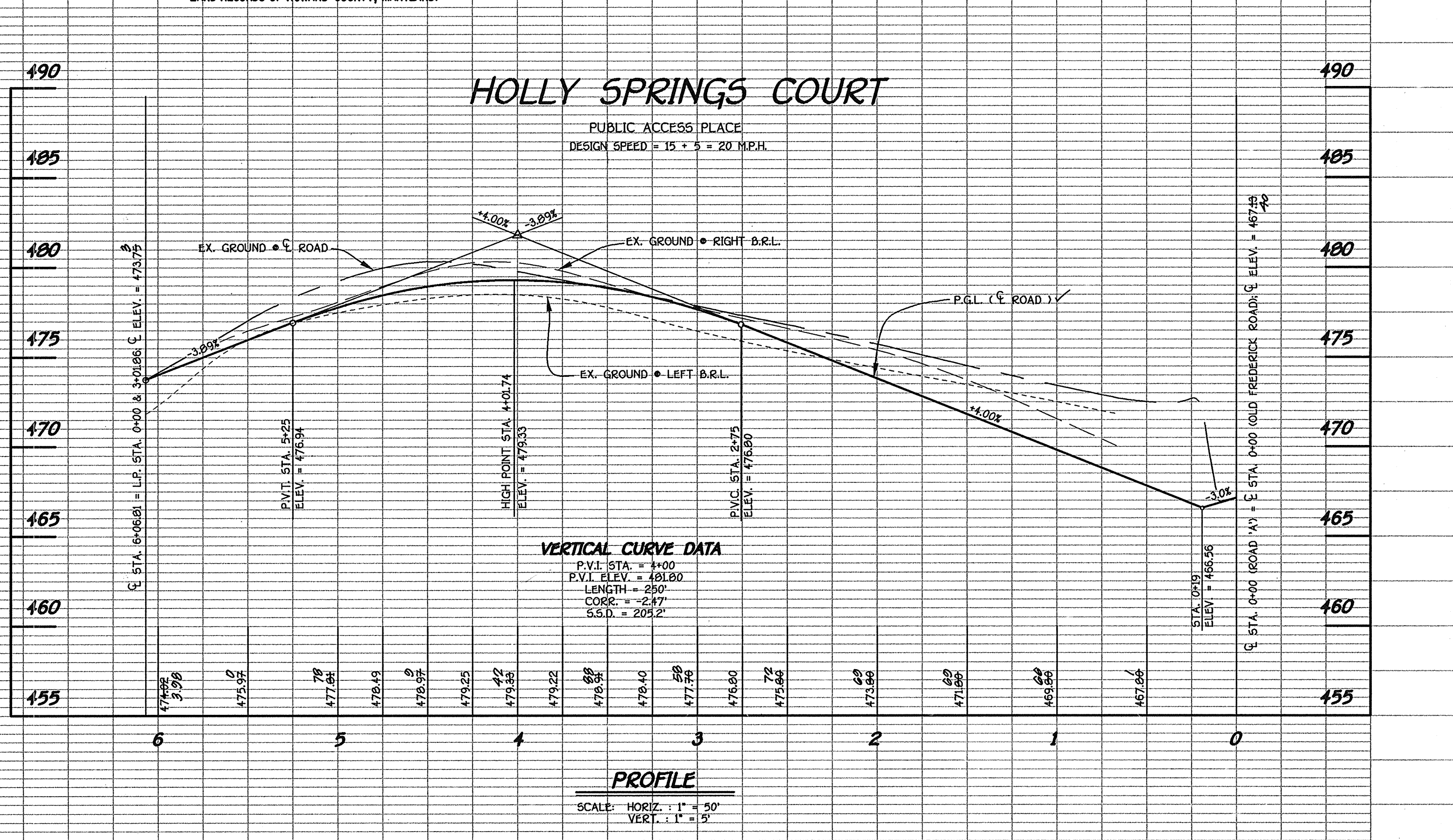
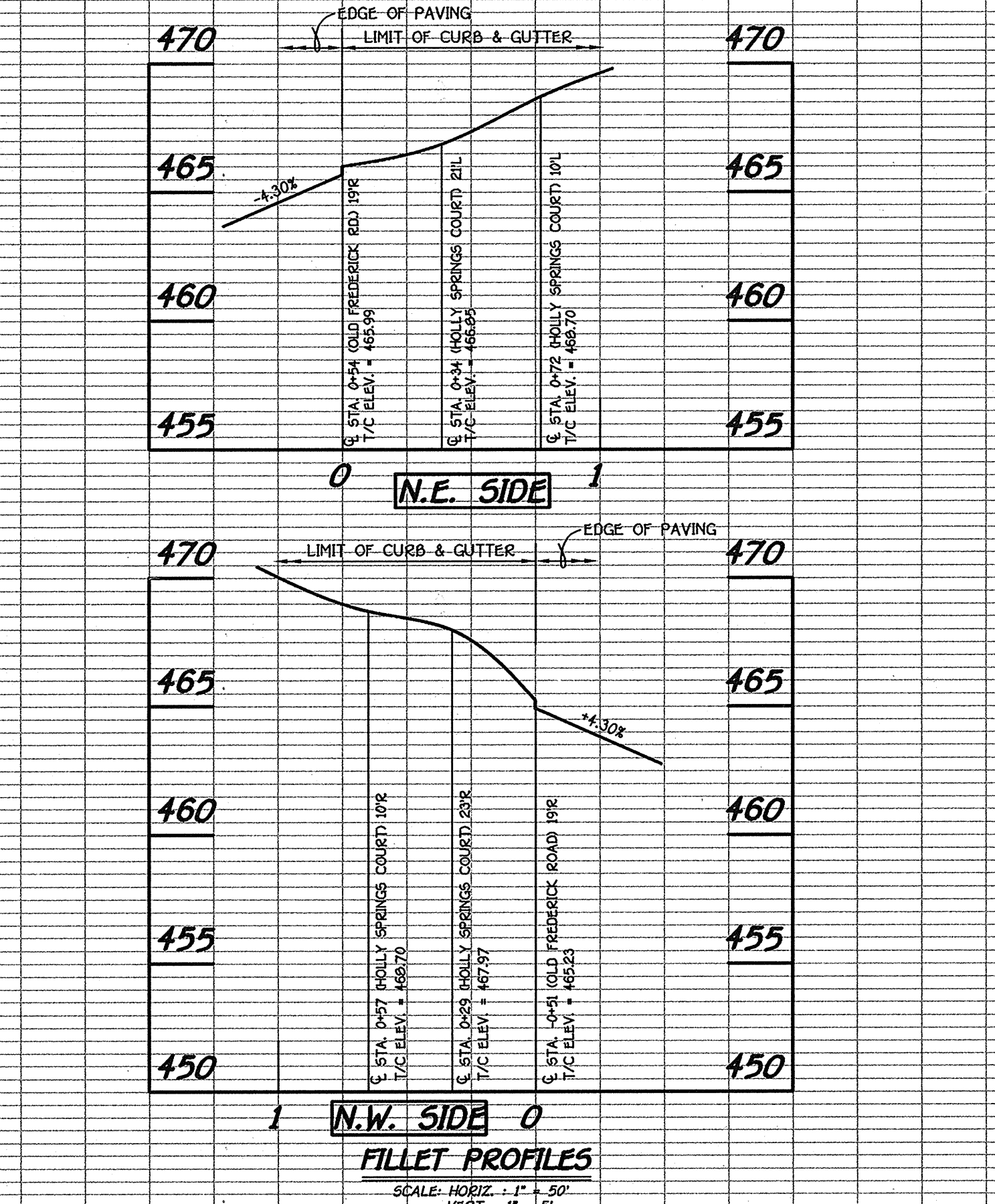
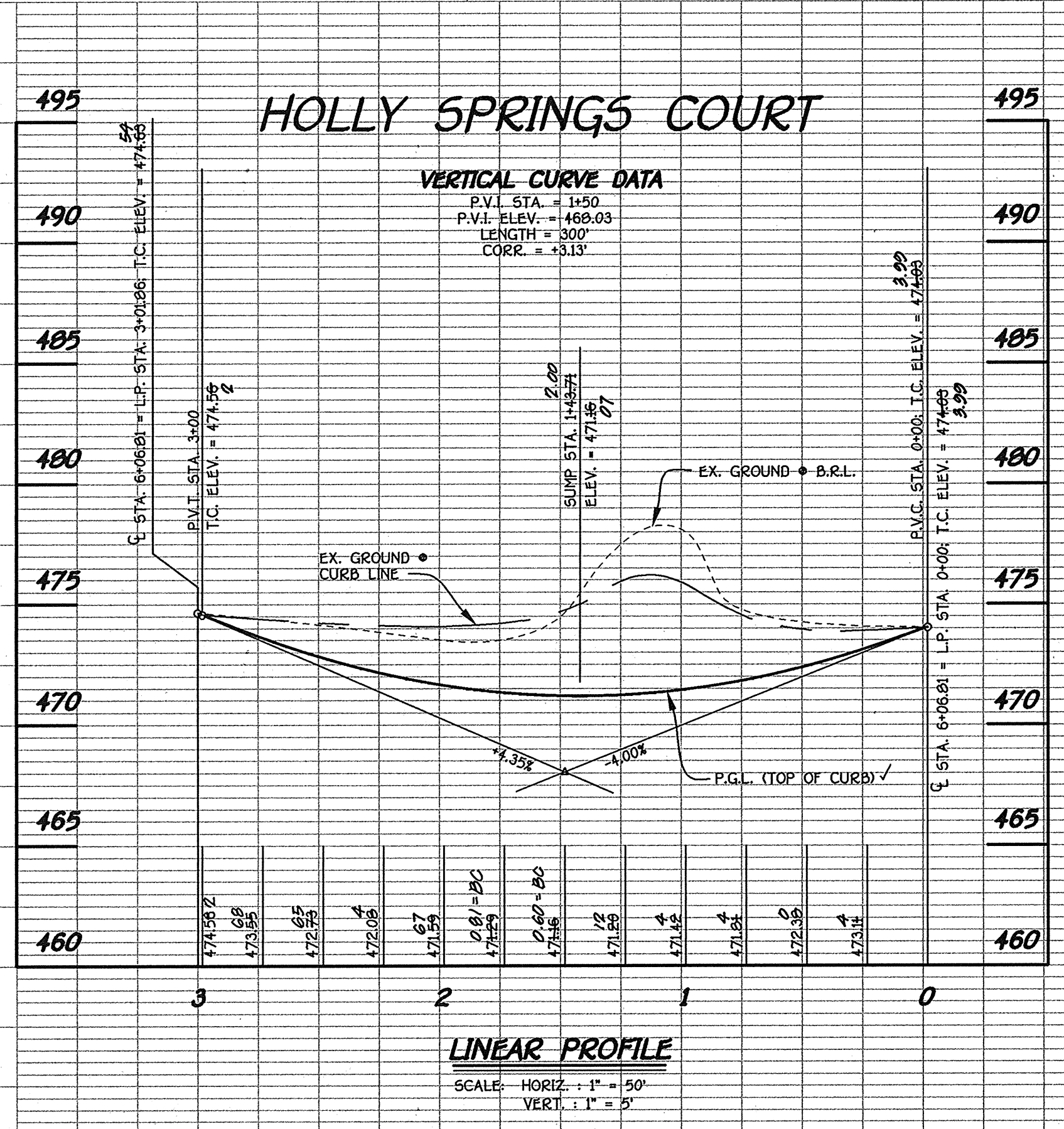
PLAN
SCALE: 1" = 50'

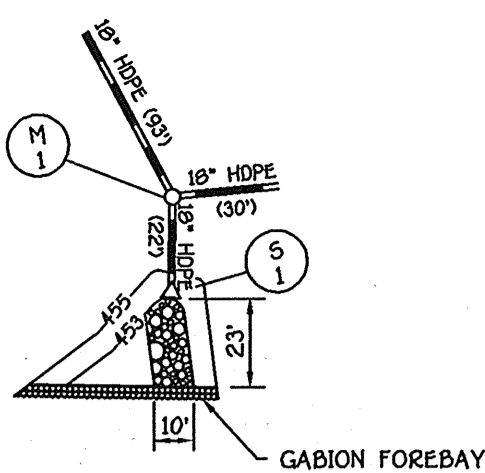
No.	DATE	DESCRIPTION
8-6-03		REVISE CROSS SECTION AND ROADWAY CHART.
		REVISION





No.	DATE	DESCRIPTION
8-6-03		EXISTING CURB ON OLD FREDERICK ROAD. ADD PROPOSE 18" PIPE
REVISIONS		
APPROVED DEPARTMENT OF PLANNING AND ZONING		
<i>Cindy Hammit</i> 12/15/00		DATE
DEPARTMENT OF PLANNING AND ZONING		
<i>Chris Dammann</i> 12/14/00		DATE
APPROVED CHIEF, DEVELOPMENT ENGINEERING DIVISION		
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS		
<i>Howard S. Hill</i> 12/14/00		DATE
CHIEF, BUREAU OF HIGHWAYS		





BREACH CHANNEL SECTION 'A-A'

NO SCALE

STREET TREE SCHEDULE			
SYMBOL	BOTANICAL AND COMMON NAME	SIZE	COMMENTS
○	PLATANUS OCCIDENTALIS LONDON PLANETREE	2 1/2" - 3" CAL.	40' APART ON PUBLIC R/W

NOTE: STREET TREE TYPE IS ONLY A RECOMMENDATION AND MAY BE REVISED TO AN ACCEPTABLE COUNTY EQUIVALENT FROM THE HOWARD COUNTY LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 45 STREET TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$13,500.00.

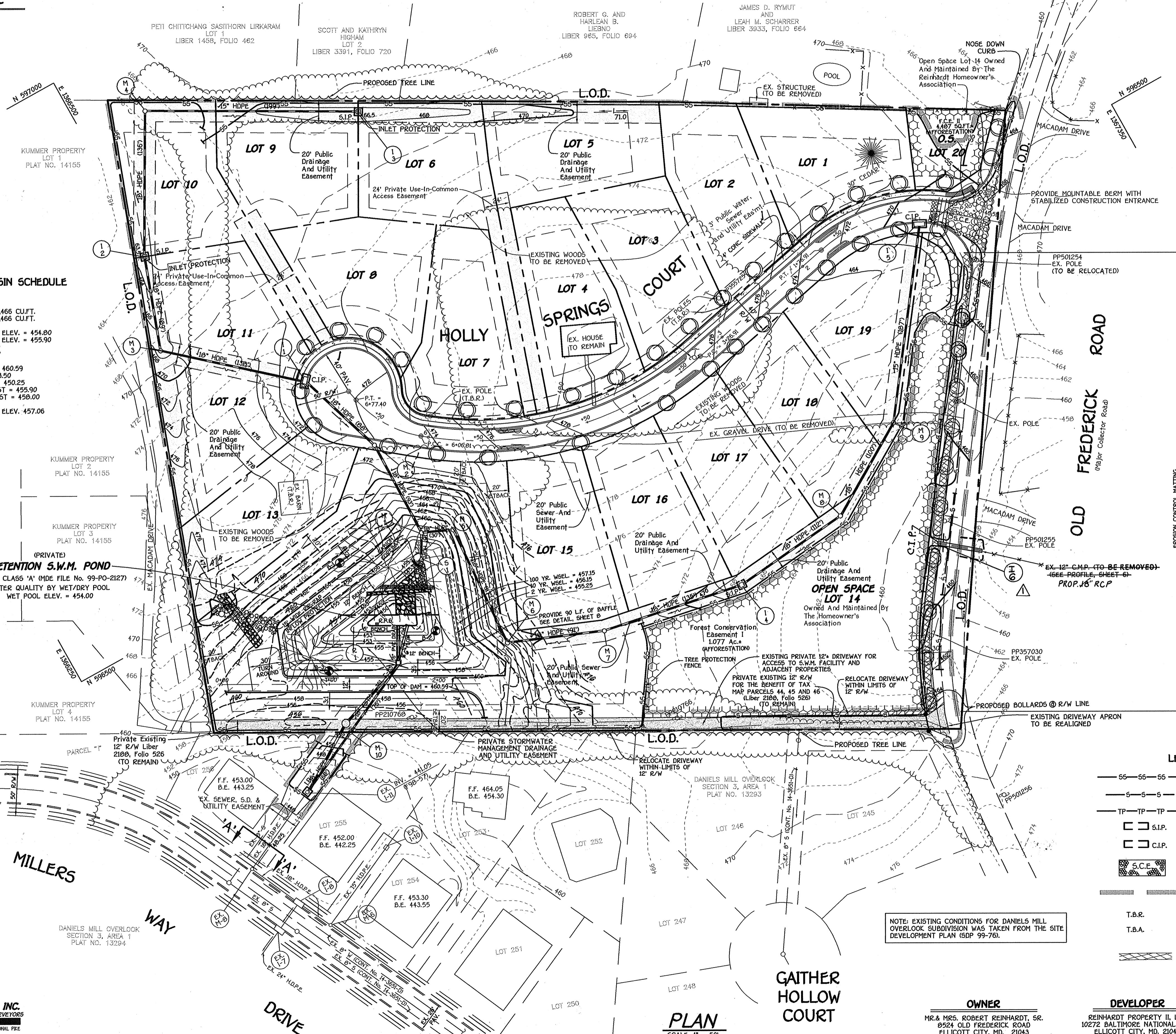
OUTFALL DETAIL

SCALE: 1" = 50'

TEMPORARY SEDIMENT BASIN SCHEDULE

INITIAL D.A. = 3.90 AC*
FINAL D.A. = 6.37 AC*
STORAGE REQUIRED:
WET = 1900 x 6.37 = 11,466 CU.FT.
DRY = 1900 x 6.37 = 11,466 CU.FT.
STORAGE PROVIDED:
WET = 11,496 CU.FT. AT ELEV. = 454.80
DRY = 11,600 CU.FT. AT ELEV. = 455.90
BOTTOM ELEV. = 450.00
STORAGE DEPTH = 4.80'
SIDE SLOPES = 3:1
TOP OF EMBANKMENT = 460.59
CLEAN-OUT ELEV. = 453.50
INV. OF 6" LOW FLOW = 450.25
TEMP. 2 YR. WEIR CREST = 455.90
TEMP. 10 YR. WEIR CREST = 450.00
Q2 EXISTING = 1.3 CFS
Q2 PROPOSED = 1.7 AT ELEV. 457.05

DETENTION S.W.M. POND
HAZARD CLASS 'A' (MDE FILE No. 99-PO-2127)
WATER QUALITY BY WET/DRY POOL
WET POOL ELEV. = 454.00



NOTE: EXISTING CONDITIONS FOR DANIELS MILL OVERLOOK SUBDIVISION WAS TAKEN FROM THE SITE DEVELOPMENT PLAN (SDP) 99-765.

PLAN
SCALE: 1" = 50'

OWNER
MR. & MRS. ROBERT REINHARDT, SR.
6524 OLD FREDERICK ROAD
ELLICOTT CITY, MD. 21043

DEVELOPER
REINHARDT PROPERTY II, LLC
10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MD. 21042

By The Developer:
"I/We Certify That All Development And/Or Construction Will Be Done According To These Plans, And That Any Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of The Environment Approved Training Program For The Control Of Sediment And Erosion Before Beginning The Project. I Shall Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Maryland Dept. of the Environment With An "As-Built" Plan Of The Pond Within 30 Days Of Completion. I Also Authorize Periodic On-Site Inspections By The Maryland Dept. of the Environment."
Signature Of Developer: [Signature] 11-20-00 Date

Printed Name Of Developer:
By The Engineer:
"I Certify That This Plan For Erosion And Sediment Control Represents A Practical And Workable Plan Based On My Personal Knowledge Of The Site Conditions. 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 Construction."
Signature Of Engineer: [Signature] 11-19-00 Date

Printed Name Of Engineer:
These Plans Have Been Reviewed For The Howard Soil Conservation District And Meet The Technical Requirements For Soil Erosion And Sediment Control.
Signature: [Signature] 11/20/00 Date

USDA Natural Resource Conservation Service
These Plans For Soil Erosion And Sediment Control Meet The Requirements Of The Howard Soil Conservation District.
Signature: [Signature] 11/20/00 Date

Approved: Department Of Public Works
Chief, Bureau Of Highways
Signature: [Signature] 12/17/00 Date

Approved: Department Of Planning And Zoning
Chief, Division Of Land Development
Signature: [Signature] 12/15/00 Date

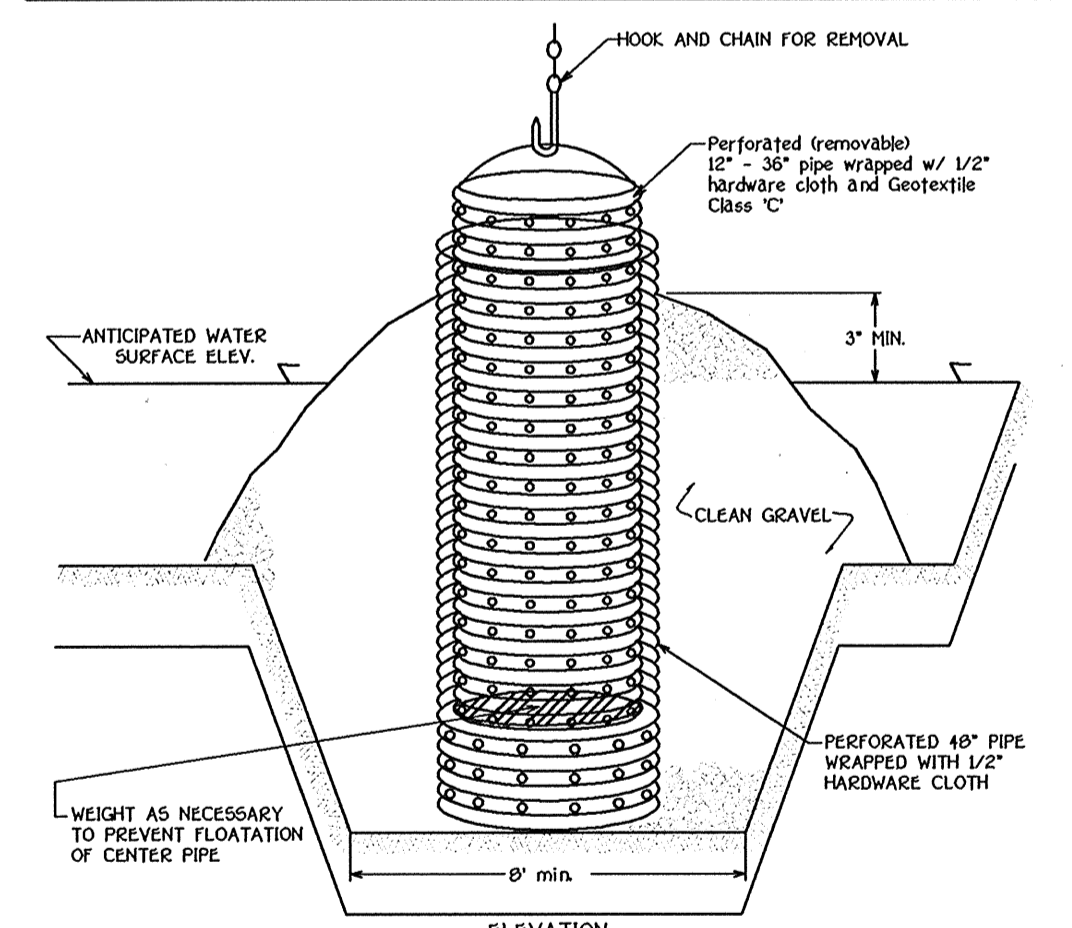
Chief, Development Engineering Division
Signature: [Signature] 12/12/00 Date

AS-BUILT CERTIFICATION
I Herby Certify That The Facility Shown On This Plan Was Constructed As Shown On The "As-Built" Plans And Meets The Approved Plans And Specifications.

Signature: [Signature] 13204 P.E. No. 315104 Date

Certify Means To State Or Declare A Professional Opinion Based Upon Onsite Inspections And Material Tests Which Are Conducted During Construction. The Onsite Inspections And Material Tests Are Those Inspections And Tests Deemed Sufficient And Appropriate Commonly Accepted Engineering Standards. Certify Does Not Mean Or Imply A Guarantee By The Engineer Nor Does An Engineer's Certification Relieve Any Other Party From Meeting Requirements Imposed By Contract, Employment, Or Other Means, Including Meeting Commonly Accepted Industry Practices.

REMOVABLE PUMPING STATION



- Construction Specifications
- The outer pipe should be 40" dia. or shall in any case be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with 1/2" hardware cloth to prevent backfill material from entering the perforations.
 - After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.
 - The inside of the pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 30" in diameter. The perforations shall be 1/2" x 6" slots or 1" diameter holes 6" on center. The center pipe shall be wrapped with 1/2" hardware cloth first, then wrapped again with Geotextile Class C.
 - The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.

No.	DATE	DESCRIPTION
1	8-6-03	REVISE GRADING ON FREDERICK ROAD, ADD PROPOSE 18" PIPE

Street Tree, Grading and Sediment Control Plan
REINHARDT PROPERTY
Lots 1 thru 20
Zoned R-20
Tax Map No. 18, Parcel No. 9, Grid No. 7
Second Election District Howard County, Maryland
Date: September 1, 2000
Sheet 4 of 11

LANDSCAPE SCHEDULE				
QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
59	(Symbol)	ACER RUBRUM "RED SUNSET"	RED SUNSET RED MAPLE	2 1/2"-3" MIN.
39	(Symbol)	PINUS STROBUS	WHITE PINE	6'-8" HT.

NOTE: THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED 98 LANDSCAPING TREES HAS BEEN POSTED AS PART OF THE DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$23,950.00.

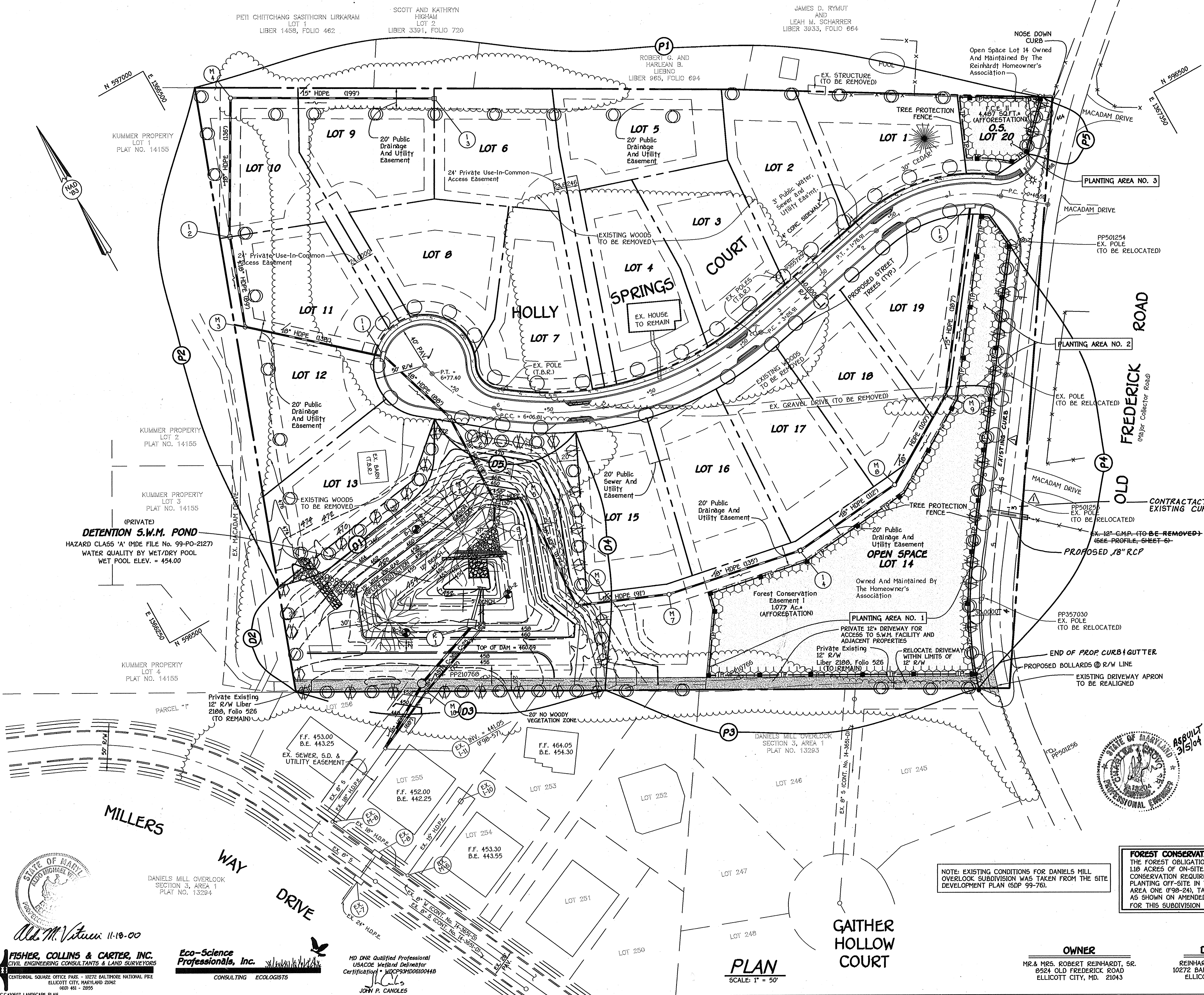
SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING					
LINEAR FEET OF TYPE "B" PERIMETER	D1: 231 L.F.	D2: 100 L.F.	D3: 302 L.F.	D4: 250 L.F.	D5: 138 L.F.
NUMBER OF TREES REQUIRED:					
SHADE TREES	5	2	6	5	3
EVERGREEN TREES	6	3	8	6	3
CREDIT FOR EXISTING VEGETATION (NO, YES AND %)	NO	NO	NO	NO	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO	NO	NO	NO	NO
NUMBER OF TREES PROVIDED:					
SHADE TREES	5	2	6	5	3
EVERGREEN TREES	6	3	8	6	3
OTHER TREES (2:1 SUBSTITUTION)					

SCHEDULE A PERIMETER LANDSCAPE EDGE						
PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NUMBER OF PLANTS REQUIRED AND PROVIDED
						SHADE TREES
P-1	ADJACENT TO PERIMETER	A	830 L.F.	NO	NO	14
P-2	ADJACENT TO PERIMETER	A	495 L.F.	NO	NO	8
P-3	ADJACENT TO PERIMETER	A	364 L.F.	YES (00%)	NO	5
P-4	ADJACENT TO ROADWAY	B	435 L.F.	NO	NO	9
P-5	ADJACENT TO ROADWAY	B	60 L.F.	NO	NO	2

Approved: Department of Public Works
 Chief, Bureau of Highways
 Date: 12/15/04

Approved: Department of Planning and Zoning
 Chief, Division of Land Development
 Date: 12/15/04

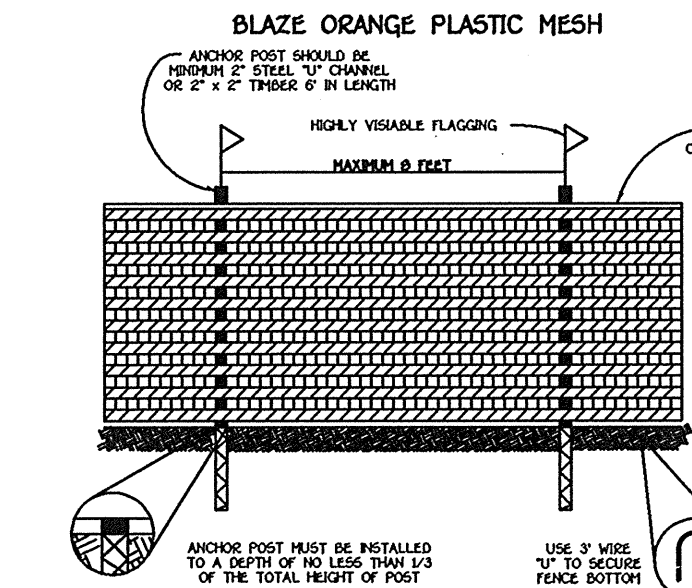
Chief, Development Engineering Division
 Date: 12/12/04



No.	DATE	DESCRIPTION
1	8-6-03	EXISTING CURB ON OLD FREDERICK ROAD. ADD PROPOSE 18" PIPE.

REVISIONS

TOTAL NUMBER OF STREET TREES SHOWN FOR THIS SUBDIVISION = 45 TREES, SEE SHEET 4 FOR SURETY AMOUNT.

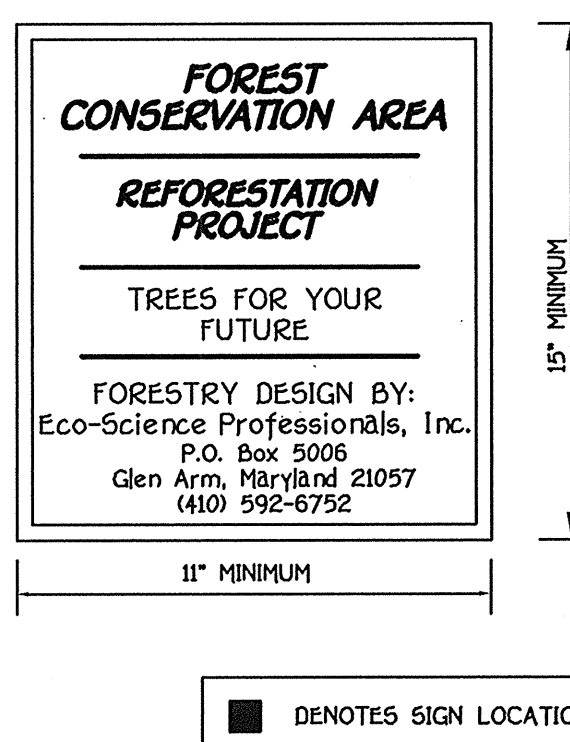


NOTES:
 1. FOREST PROTECTION MESH ONLY.
 2. PROTECTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 3. BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 4. ROOT DAMAGE SHOULD BE AVOIDED.
 5. PROTECTIVE STRUCTURE SHALL BE USED.
 6. DEVICE SHOULD BE MAINTAINED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

TREE PROTECTION DETAIL

FOREST CONSERVATION WORKSHEET					
NET TRACT AREA:					
A. TOTAL TRACT AREA:	10.3				
B. AREA WITHIN 100 YEAR FLOODPLAIN:	0.00				
C. AREA TO REMAIN IN AGRICULTURAL PRODUCTION:	0.00				
D. NET TRACT AREA:	10.30				
LAND USE CATEGORY: (from table B.2.1, page 40, manual)					
INPUT THE NUMBER "1" UNDER THE APPROPRIATE LAND USE ZONING, AND LIMIT TO ONLY ONE ENTRY.					
ARA	HDR	IDA	HDR	MPD	CIA
0	0	0	1	0	0
E. AFFORESTATION THRESHOLD:		15% X D = 1.55			
F. CONSERVATION THRESHOLD:		20% X D = 2.06			
EXISTING FOREST COVER:					
G. EXISTING FOREST COVER (excluding floodplain):	1.40				
H. AREA OF FOREST ABOVE AFFORESTATION THRESHOLD:	0.00				
I. AREA OF FOREST ABOVE CONSERVATION THRESHOLD:	0.00				
BREAK EVEN POINT:					
J. FOREST RETENTION ABOVE THRESHOLD WITH NO MITIGATION:	0.00				
K. CLEARING PERMITTED WITHOUT MITIGATION:	0.00				
PROPOSED FOREST CLEARING:					
L. TOTAL AREA OF FOREST TO BE CLEARED:	1.40 (cannot exceed existing forest cover)				
M. TOTAL AREA OF FOREST TO BE RETAINED:	0.00				
PLANTING REQUIREMENTS:					
N. REFORESTATION FOR CLEARING ABOVE CONSERVATION THRESHOLD:	0.00	1.00	1.00		
P. REFORESTATION FOR CLEARING BELOW CONSERVATION THRESHOLD:	0.00	2.90	1.00		
Q. CREDIT FOR RETENTION ABOVE CONSERVATION THRESHOLD:	0.00	2.90	1.00		
R. TOTAL REFORESTATION REQUIRED:	2.90	1.00	1.00		
S. TOTAL AFFORESTATION REQUIRED:	0.15				
T. TOTAL REFORESTATION AND AFFORESTATION REQUIRED:	2.95				

PROPOSED SIGNAGE



PLANTING SCHEDULE			
QTY.	SPECIES	SIZE	SPACING
PLANTING AREA NO. 1 (0.95 AC.)			
54	ACER RUBRUM - RED MAPLE	2 1/2" - 3" CAL	**
35	CORNUS FLORIDA - FLOWERING DOGWOOD	8" - 10" HT.	**
55	FRAXINUS AMERICANA - WHITE ASH	2 1/2" - 3" CAL	**
60	LIRIODENDRON TULIPIFERA - POPLAR	2 1/2" - 3" CAL	**
54	QUERCUS ALBA - WHITE OAK	2 1/2" - 3" CAL	**
25	ROBINIA PSEUDO - ACACIA	2 1/2" - 3" CAL	**
30	VIBURNUM PRUNIFOLIUM - BLACKCHAW	30" - 36" B.T.	**
PLANTING AREA NO. 2 (0.125 AC.)			
7	ACER RUBRUM - RED MAPLE	2 1/2" - 3" CAL	**
6	QUERCUS ALBA - WHITE OAK	2 1/2" - 3" CAL	**
21	CORNUS AMOMUM - SILKY DOGWOOD	30" - 36" B.T.	SHRUB MASS IN GROUPS OF 3 PLANTS RANDOMLY LOCATED IN PLANTING AREA
PLANTING AREA NO. 3 (0.1 AC.)			
5	ACER RUBRUM - RED MAPLE	2 1/2" - 3" CAL	**
5	QUERCUS ALBA - WHITE OAK	2 1/2" - 3" CAL	**
21	CORNUS AMOMUM - SILKY DOGWOOD	30" - 36" B.T.	SHRUB MASS IN GROUPS OF 3 PLANTS RANDOMLY LOCATED IN PLANTING AREA

KEY:
 CONT. - CONTAINER GROWN B.T. - BRANCHED TRANSPLANT
 ** - TREES AND SHRUBS SHALL BE PLANTED, ON AVERAGE, AT A SPACING OF 20 FEET ON CENTER, NOT IN A GRID PATTERN

NOTE:
 TURF GRASS IS NOT PERMITTED TO REMAIN IN PLANTING AREAS 2 AND 3. MULCH OR APPROPRIATE GROUNDCOVER SHALL BE USED IN THESE AREAS. PLANTING AREA 1 SHALL BE ALLOWED TO DEVELOP A NATURAL HERBACEOUS COMMUNITY.

Landscaping and Forest Conservation Plan
REINHARDT PROPERTY
 Lots 1 thru 20
 Zoned R-20
 Tax Map No. 18, Parcel No. 9, Grid No. 7
 Second Election District Howard County, Maryland
 Date: SEPTEMBER 1, 2000
 Sheet 5 of 11

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 1100 4th St., Baltimore, MD 21202
 (410) 461-2000

Eco-Science Professionals, Inc.
 CONSULTING ECOLOGISTS
 1100 4th St., Baltimore, MD 21202
 (410) 461-2000

MD DNR Qualified Professional
 USACOE Wetland Delimitation
 Certification # W029000100418
 JOHN P. CANOLES

PLAN
 SCALE: 1" = 50'

OWNER
 MR. & MRS. ROBERT REINHARDT, SR.
 8524 OLD FREDERICK ROAD
 ELLICOTT CITY, MD. 21043

DEVELOPER
 REINHARDT PROPERTY II, LLC
 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MD. 21042

NOTE:
 SEE SHEET 11 FOR THE REQUIRED OFF-SITE FOREST CONSERVATION PLANTING PLAN.

STRUCTURE SCHEDULE

STRUCTURE NO.	TOP ELEVATION	INV. IN	INV. OUT	ROAD NAME	ROAD STA.	OFFSET	TYPE	REMARKS
I-1	471.42	456.73	456.40	HOLLY SPRINGS CT.	L.P. STA. 1+43.71	5.92	A-10	S.D. 4.41 (WIDTH = 4')
I-2	** 463.50	459.50	459.25				OPEN END GRATE	S.D. 4.36
I-3	** 466.50		463.00				OPEN END GRATE	S.D. 4.36
I-4	** 466.50	460.16	459.94				OPEN END GRATE	S.D. 4.36
I-5	469.00		465.00	HOLLY SPRINGS CT.	C.L. STA. 0+79.31	10.43	A-10	S.D. 4.41 (WIDTH = 4')
I-6	458.60	457.30	454.80	OLD FREDERICK RD.	C.L. STA. 3+05.15	15.21	A-10	S.D. 4.02
M-1	458.00	453.94	453.20				STD. MANHOLE	G - 5.12
M-2	472.90	455.60	455.35	HOLLY SPRINGS CT.	L.P. STA. 0+41.30	5.94	STD. MANHOLE	G - 5.12 & G - 5.15
M-3	467.50	458.36	458.06				STD. MANHOLE	G - 5.12
M-4	466.50	461.41	460.86				STD. MANHOLE	G - 5.12
M-5	461.00	455.25	455.00				STD. MANHOLE	G - 5.12
M-6	456.00	457.92	457.72				STD. MANHOLE	G - 5.12
M-7	473.50	458.90	458.65				STD. MANHOLE	G - 5.12 & G - 5.15
M-8	456.00	461.25	461.00				STD. MANHOLE	G - 5.12
M-9	466.00	462.29	462.00				STD. MANHOLE	G - 5.12
M-10	456.31	445.00	443.75				STD. MANHOLE	G - 5.12
S-1	454.52	453.02	453.02				HDPE END SECTION	** A.D.S. FLARED END SECTION
R-1	458.00	458.00	458.00				CONC. RISER	

* DENOTES CENTERLINE OF ROAD TO FACE OF INLET
 ** DENOTES TOP OF GRATE
 *** - A.D.S. - ADVANCED DRAINAGE SYSTEMS
 LONDON, OHIO
 1-800-733-9554

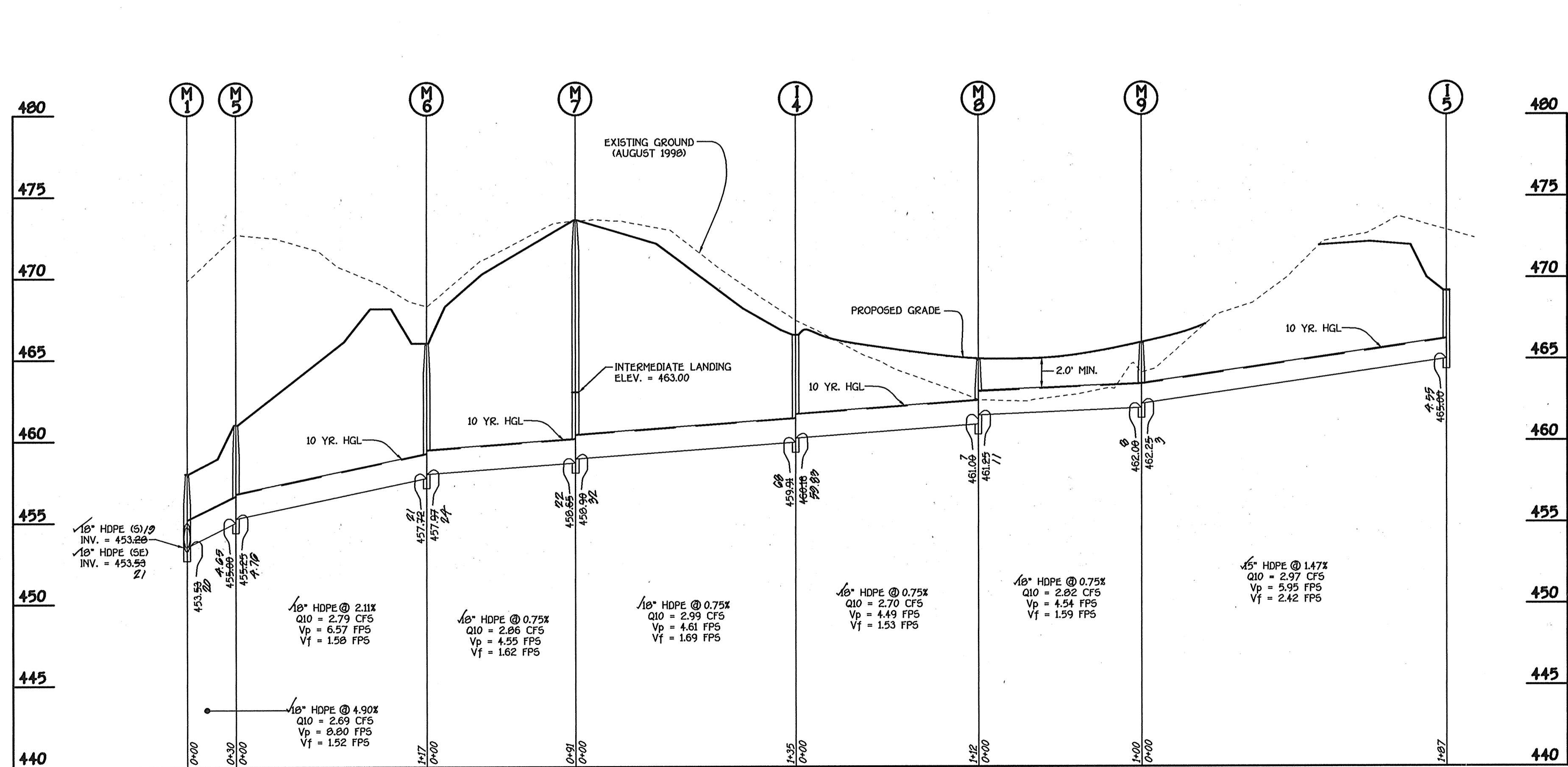
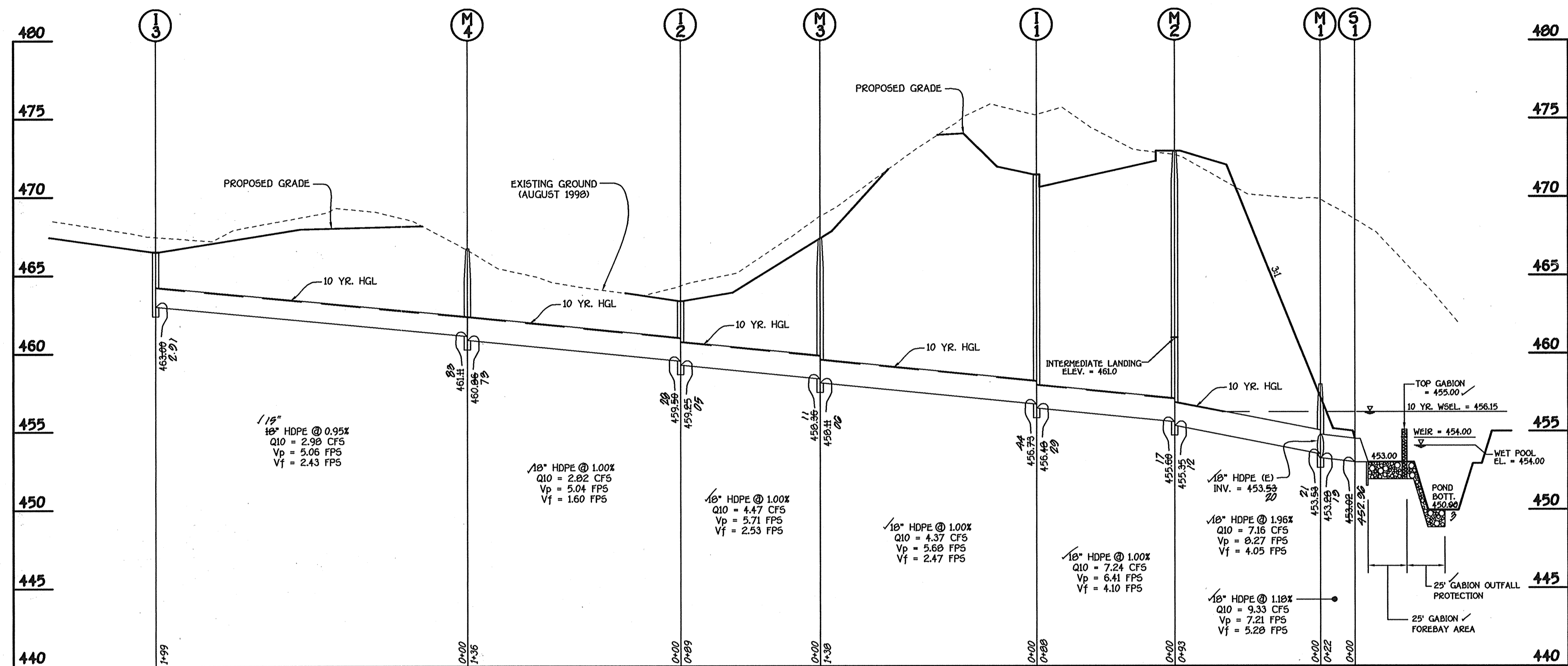
SIZE	MATERIAL	LENGTH
15"	HDPE	386'
18"	HDPE	1219'
18"	ASTM C-361, C-25	75'
18"	RCP CL. 4	363.50'

NOTE: FOR STORM DRAIN RUN R-1 TO EX. I-1, SEE SHEET 10.

Approved: Department Of Public Works
 Chief, Bureau Of Highways
 Date: 12/15/00

Approved: Department Of Planning And Zoning
 Chief, Division Of Land Development
 Date: 12/12/00

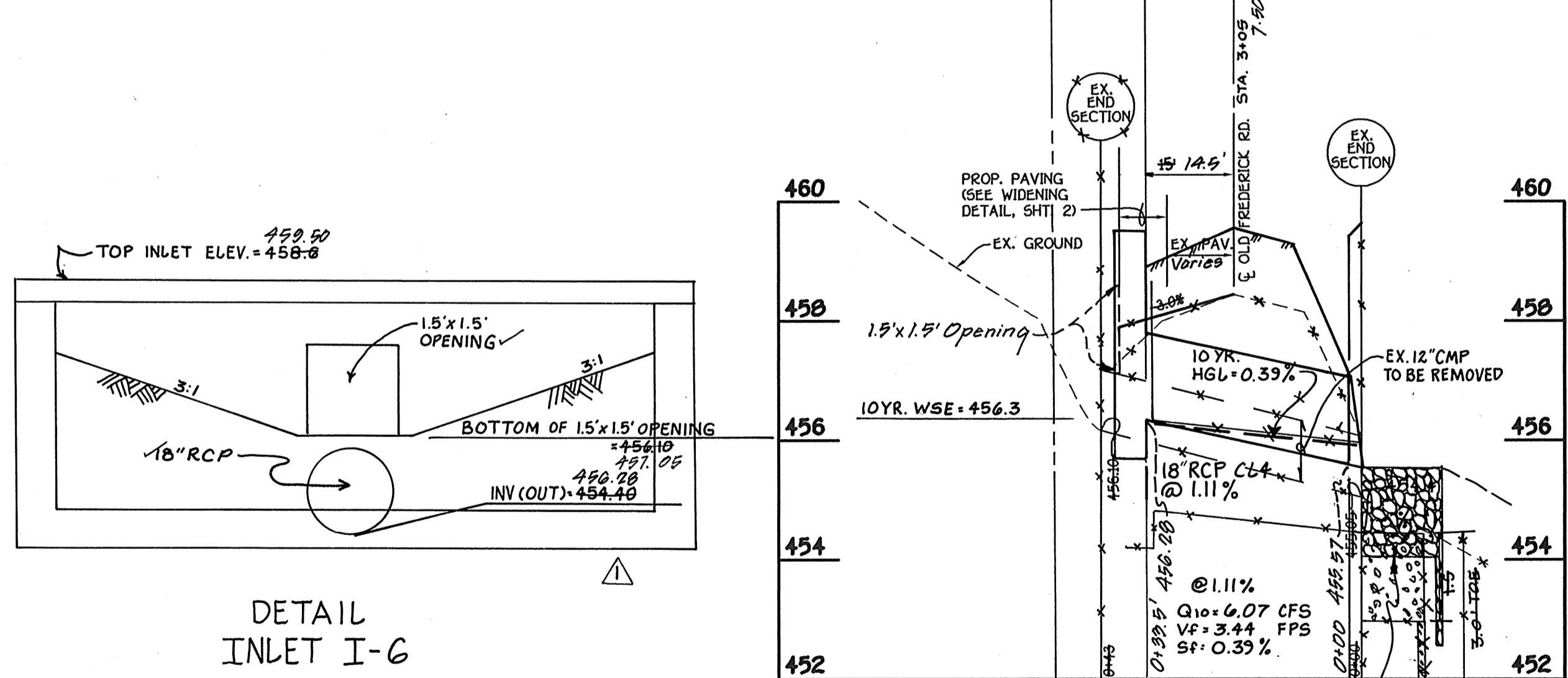
Chief, Development Engineering Division



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

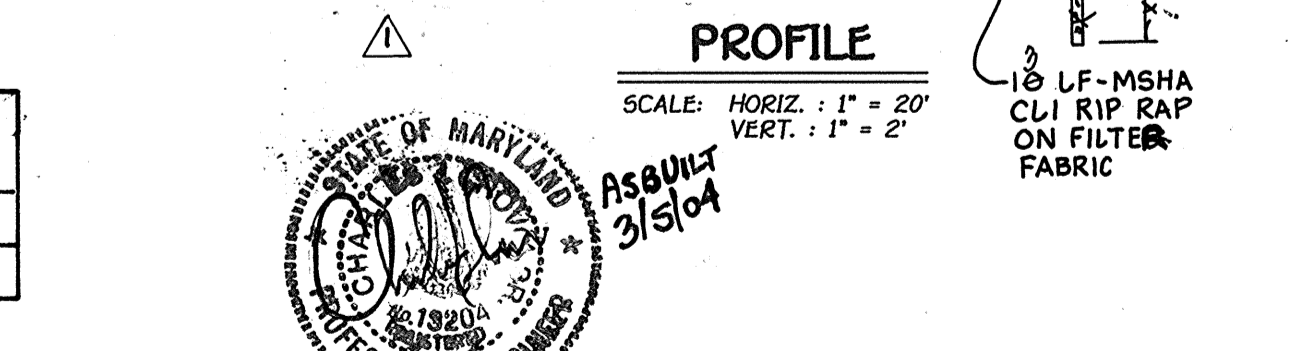
PROFILE

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



DETAIL INLET I-6
 SCALE: 1" = 2' (Not to Scale)

No.	DATE	DESCRIPTION
8-6-03		ADD DETAIL INLET I-6
		REVISE PROFILE
		REVISIONS



PROFILE
 SCALE: HORIZ. : 1" = 20'
 VERT. : 1" = 2'

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21114
 410-461-2855

OWNER
 MR. & MRS. ROBERT REINHARDT, SR.
 8524 OLD FREDERICK ROAD
 ELLICOTT CITY, MD. 21043

DEVELOPER
 REINHARDT PROPERTY II, LLC
 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MD. 21042

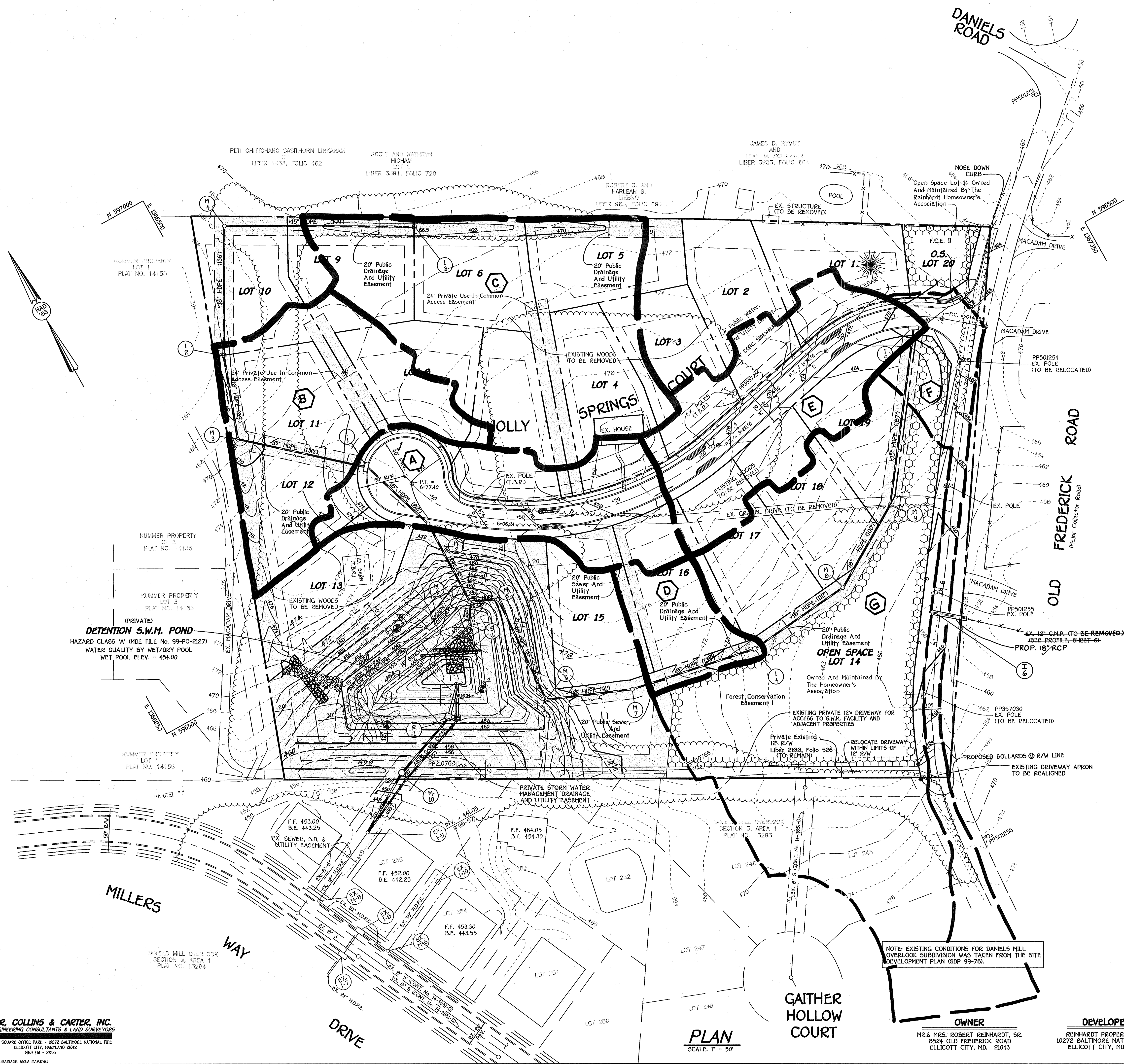


Storm Drain Profiles
REINHARDT PROPERTY
 Lots 1 thru 20
 Zoned: R-20
 Tax Map No. 1B Parcel No. 9 Grid No. 7
 Second Election District Howard County, Maryland
 Date: September 1, 2000
 Sheet 6 of 11

Approved: Department Of Public Works
Howard St. Don 12/15/00
 Chief, Bureau Of Highways Date

Approved: Department Of Planning And Zoning
Cindy Hamilton 12/15/00
 Chief, Division Of Land Development Date

Chris Damman 12/12/00
 Chief, Development Engineering Division Date

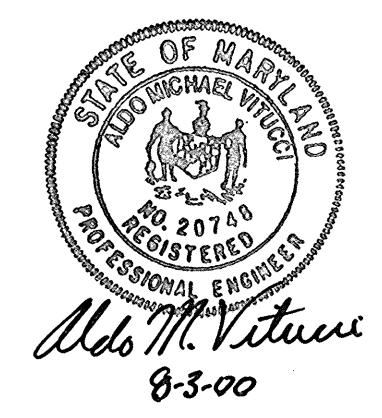


STRUCTURE NO.	DRAINAGE AREA DATA			
	DRAINAGE AREA	AREA	C ²	% IMP.
I-1	A	0.83 AC.	0.56	R-20 53%
I-2	B	0.96 AC.	0.32	R-20 67%
I-3	C	1.53 AC.	0.29	R-20 13%
I-4	D	0.29 AC.	0.25	R-20 6%
I-5	E	0.92 AC.	0.49	R-20 42%
I-6	F	0.58 AC.	0.69	R-20 76%

▲	B-6-03
---	--------

(PRIVATE)
DETENTION S.W.M. POND
 HAZARD CLASS 'A' (MDE FILE No. 99-PO-2127)
 WATER QUALITY BY WET/DRY POOL
 WET POOL ELEV. = 454.00

NOTE: EXISTING CONDITIONS FOR DANIELS MILL OVERLOOK SUBDIVISION WAS TAKEN FROM THE SITE DEVELOPMENT PLAN (SDP 99-76).



Storm Drain Drainage Area Map
REINHARDT PROPERTY
 Lots 1 thru 20
 Zoned: R-20
 Tax Map No. 18, Parcel No. 9, Grid No. 7
 Second Election District - Howard County, Maryland
 Date: September 1, 2000
 Sheet 7 of 11

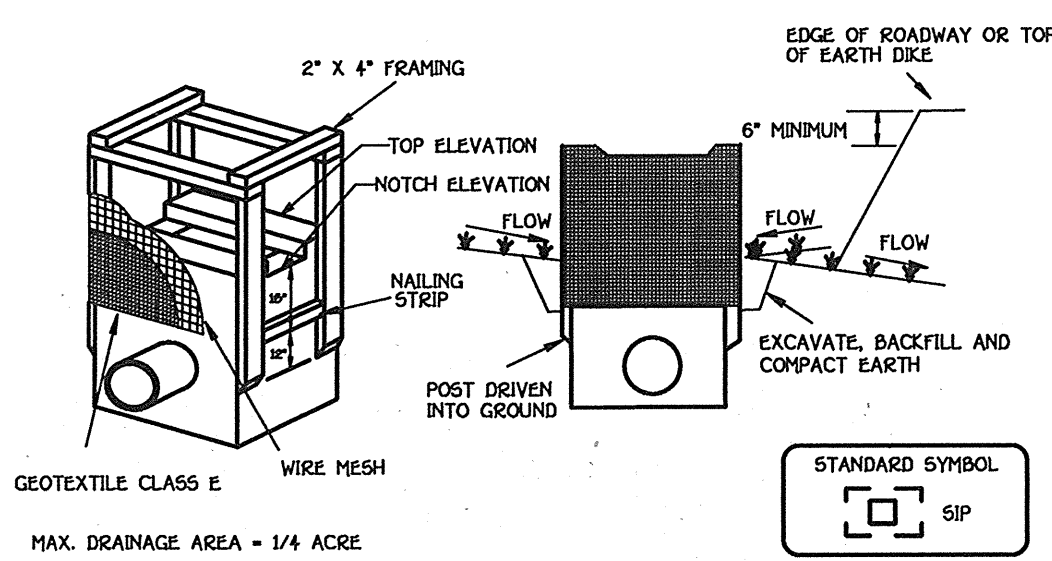
FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTURIAL SQUARE OFFICE PARK - 10222 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 4100 461 - 2855

PLAN
 SCALE: 1" = 50'

OWNER
 MR. & MRS. ROBERT REINHARDT, SR.
 9524 OLD FREDERICK ROAD
 ELLICOTT CITY, MD. 21043

DEVELOPER
 REINHARDT PROPERTY II, LLC
 9524 OLD FREDERICK ROAD
 ELLICOTT CITY, MD. 21042

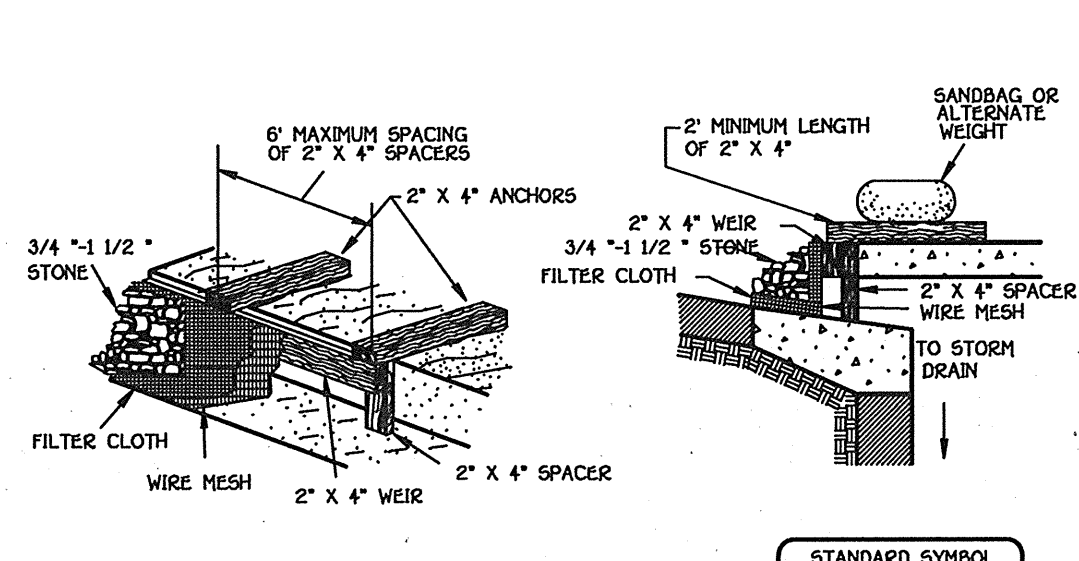
STANDARD INLET PROTECTION



MAX. DRAINAGE AREA = 1/4 ACRE
Construction Specifications

- Excavate completely around the inlet to a depth of 18" below the notch elevation.
- Drive the 2" x 4" construction grade lumber posts 1' into the ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the 2" x 4" frame using the overlap joint shown on detail 20A. The top of the frame (weir) must be 6" below adjacent roadways where flooding and safety issues may arise.
- Stretch the 1/2" x 1/2" wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a post.
- Stretch the Geotextile Class E tightly over the wire mesh with the geotextile extending from the top of the frame to 18" below the inlet notch elevation. Fasten the geotextile firmly to the frame. The ends of the geotextile must meet at a post, be overlapped and folded, then fastened down.
- Backfill around the inlet in compacted 6" layers until the layer of earth is level with the notch elevation on the ends and top elevation on the sides.
- If the inlet is not in a ramp, construct a compacted earth dike across the ditch line directly below it. The top of the earth dike should be at least 6" higher than the top of the frame.
- The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clogged.

CURB INLET PROTECTION (COG OR COS INLETS)



MAX. DRAINAGE AREA = 1/4 ACRE
Construction Specifications

- Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
- Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.
- Securely nail the 2" x 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4" apart).
- Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
- The assembly shall be placed so that the end spacers are a minimum 1' beyond both ends of the throat opening.
- Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.
- This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
- Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

STANDARDS AND SPECIFICATIONS FOR TOPSOIL

Definition
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose
To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unsuitable soil gradation.

Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these standards and specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- Topsoil salvaged from the existing site may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experiment Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of clods, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnson grass, nutsedge, poison ivy, thistle, or others as specified.
 - Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-9 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the planting procedures.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- For sites having disturbed areas over 5 acres:
 - On soil meeting topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No acid or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

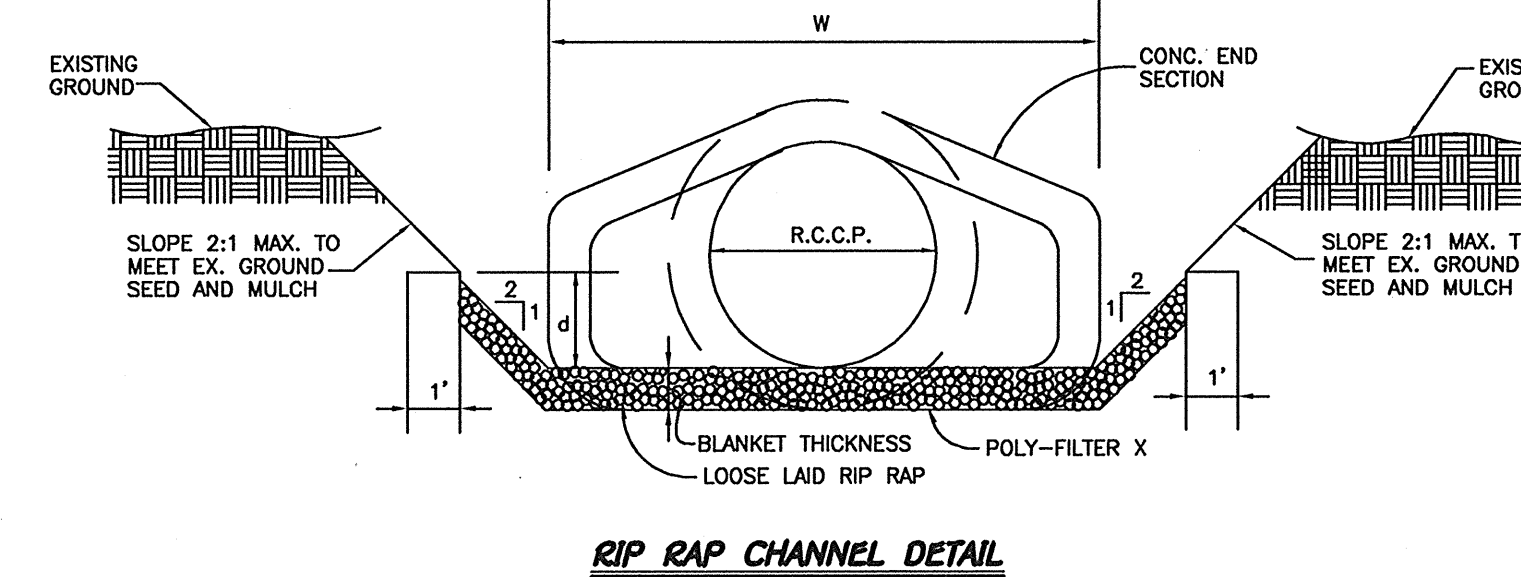
V. Topsoil Application

- When topsoiling, maintain needed erosion and sediment control practices such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Basins.
- Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 6" higher in elevation.
- Topsoil shall be uniformly distributed in a 4" - 6" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and needed preparation.

VI. Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

- Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guideline Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes, Revised 1975.



RIP-RAP CHANNEL DESIGN DATA
NO SCALE

STRUCTURE	AREA	WETTED PERIMETER	R	R 2/3	S	S 1/2	W	d	N	V (F.P.S.)	Q (C.F.S.)	BLANKET THICKNESS	DIA
S-1	2.38	4.52	0.628	0.650	0.005	0.0707	4.0'	0.48'	0.035	7.21	9.33	9.5"	19"

CONSTRUCTION SPECIFICATIONS FOR RIP-RAP OUTFALLS

- The subgrade for the filter, riprap or gabion shall be prepared to the required lines and grades. Any fill required in the subgrade shall be compacted to a density of approximately that of the surrounding undisturbed material.
- The rock or gravel shall conform to the specified grading limits when installed respectively in the riprap or filter.
- Filter cloth shall be protected from punching, cutting or tearing. Any damage other than an occasional small hole shall be repaired by placing another piece of cloth over the damaged part or by completely replacing the cloth. All overlaps for repairs or for joining two pieces of cloth shall be a minimum of one foot.
- Stone for the riprap or gabion outlets may be placed by equipment. Both shall each be constructed to the full course thickness in one operation and in such a manner as to avoid displacement of underlying materials. The stone for riprap or gabion outlets shall be delivered and placed in a manner that will insure that it is reasonably homogeneous with the smaller stones and spalls filling the voids between the larger stones. Riprap shall be placed in a manner to prevent damage to the filter blanket or filter cloth. Hand placement will be required to the extent necessary to prevent damage to the permanent works.

ENGINEER'S CERTIFICATE
I hereby certify that this plan was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer in the State of Maryland.
Signature of Engineer: *Rob M. Stuenkel*
Date: 8-3-00

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.
Signature of Developer: *Wm O'S*
Date: 11/29/00

Reviewed for Howard County Soil Conservation District and Meets Technical Requirements.
Signature: *D.G. Campbell*
Date: 11/28/00
U.S.D.A. - Natural Resources Conservation Service

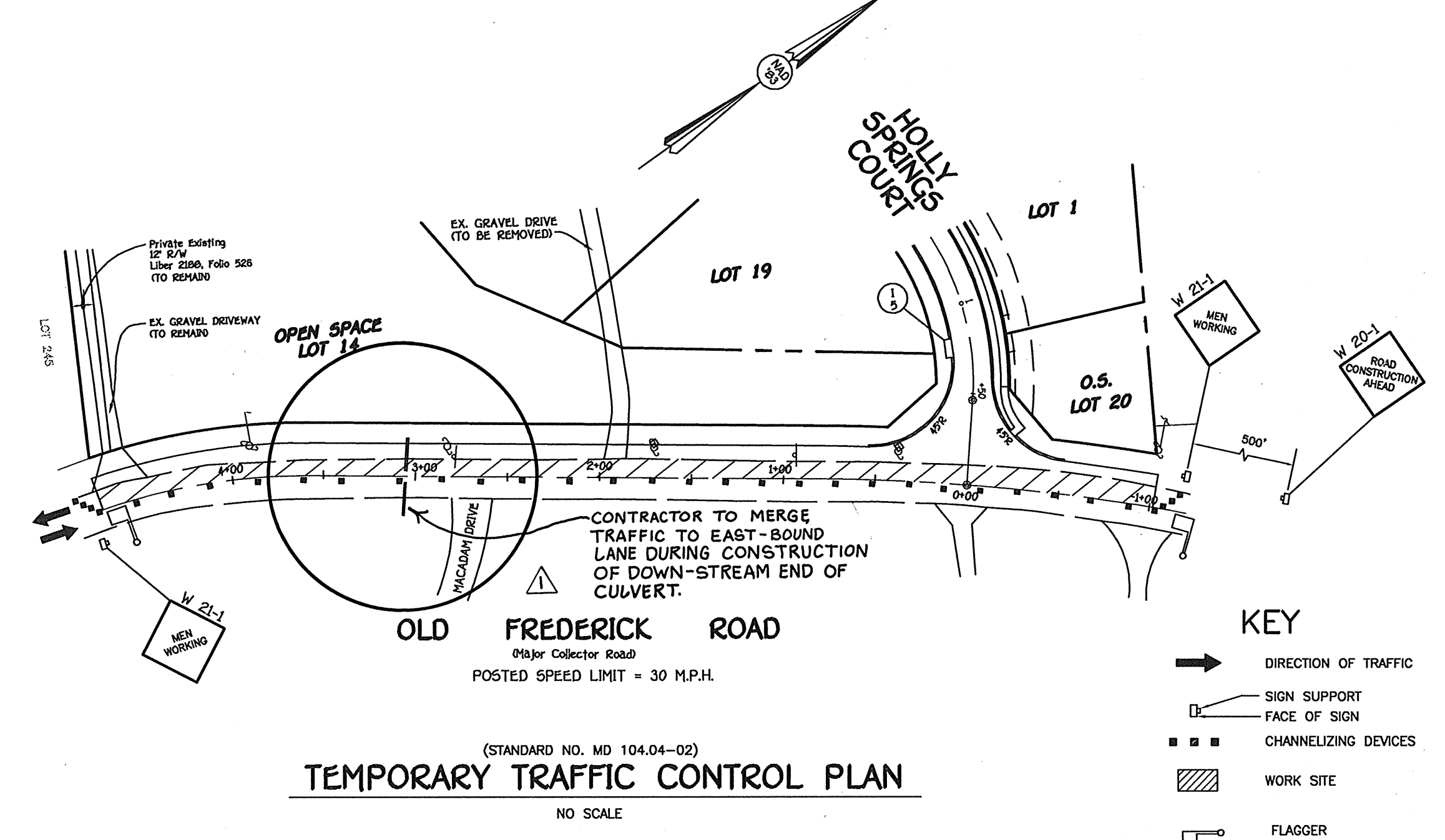
Approved: This Development Is Approved For Erosion And Sediment Control By The Howard Soil Conservation District.
Signature: *John A...*
Date: 11/28/00
District Howard Soil Conservation Dist.

Approved: Department of Planning And Zoning
Signature: *Andy Hamilton*
Date: 12/15/00
Chief, Division Of Land Development

Approved: Howard County Department Of Public Works
Signature: *Howard...*
Date: 12/15/00
Chief, Bureau Of Highways

MAINTENANCE OF TRAFFIC SPECIAL PROVISIONS

- GENERAL**
- THE PURPOSE OF THIS PORTION OF THE SPECIAL PROVISION IS TO SET FOR THE TRAFFIC CONTROL REQUIREMENTS NECESSARY FOR THE SAFE AND EFFICIENT MAINTENANCE TO TRAFFIC WITHIN WORK AREAS, AND TO MINIMIZE ANY INCONVENIENCES TO THE TRAVELING PUBLIC AND THE CONTRACTOR AND/OR PERMITTEE.
 - PROPERTY TRAFFIC CONTROL THROUGH WORK AREAS IS ESSENTIAL FOR INSURING THE SAFETY AND THAT OF HIGHWAY WORKERS HAS THE HIGHEST PRIORITY OF ALL TASKS WITHIN THIS PROJECT. THE PROPERTY APPLICATION OF THE APPROVED TRAFFIC CONTROL PLAN (TCP) WILL PROVIDE THE DESIRED LEVEL OF SAFETY.
 - THROUGHOUT THESE SPECIAL PROVISIONS, ANY MENTION OF THE TCP SHALL BE IMPLIED TO INCLUDE ANY COMBINATION OF TYPICAL TRAFFIC CONTROL STANDARDS WHICH FLOW FROM THE OVERALL TCP FOR THIS PROJECT WHICH HAS BEEN APPROVED BY THE APPROPRIATE SHA TRAFFIC ENGINEER.
 - THE CONTRACTOR AND/OR PERMITTEE SHALL BE REQUIRED TO ADHERE TO THE PROVISIONS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES MUTCD, 1998 EDITION, ESPECIALLY PART VI, AND TO SECTION 814 OF THE MARYLAND DOT STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS (JANUARY, 1992), INCLUDING ALL REVISIONS AND SUPPLEMENTS TO EACH.
 - THE CONTRACTOR AND/OR PERMITTEE SHALL BE REQUIRED TO ADHERE TO THE REQUIREMENTS SET FORTH IN THE TCP AND THESE SPECIAL PROVISIONS, UNLESS OTHERWISE DIRECTED BY THE ENGINEER. ANY REQUESTS TO MAKE MINOR CHANGES TO THE TCP OR THE SPECIAL PROVISIONS WITH REGARD TO THE TRAFFIC CONTROL ITEMS SHALL BE MADE IN WRITING TO THE ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO THE PROPOSED SCHEDULING CHANGE. THE CONTRACTOR AND/OR PERMITTEE SHALL HAVE WRITTEN APPROVAL OF THE ENGINEER PRIOR TO THE IMPLEMENTATION OF ANY CHANGE.
 - NO WORK SHALL BEGIN ON ANY WORK ACTIVITY OR WORK PHASE UNTIL ALL REQUIRED TRAFFIC CONTROL PATTERNS AND DEVICES INDICATED ON THE TCP FOR THAT ACTIVITY OR PHASE ARE COMPLETELY AND CORRECTLY IN PLACE TO HAVE BEEN CHECKED FOR APPROVED USAGE.
 - GENERAL AND SPECIFIC WARNING SIGNS SHALL ONLY BE IN PLACE WHEN SPECIFIC WORK TASKS AND ACTIVITIES ARE ACTUALLY UNDERWAY OR CONDITIONS EXIST THAT POSE A POTENTIAL HAZARD TO THE PUBLIC, AND ANY ADDITIONAL SIGNING HAS BEEN APPROVED BY THE APPROPRIATE SHA TRAFFIC ENGINEER. NOTE: THE PRACTICE OF PLACING SIGNING AND OTHER TRAFFIC CONTROL DEVICES IN ADDITION TO THOSE INDICATED ON THE APPROVED TCP IS NOT PERMITTED.
 - THE CONTRACTOR AND/OR PERMITTEE SHALL PROVIDE, MAINTAIN IN NEW CONDITION, AND MOVE WHEN NECESSARY, OR AS DIRECTED BY THE ENGINEER, ALL TRAFFIC CONTROL DEVICES USED FOR THE GUIDANCE AND PROTECTION OF MOTORISTS, PEDESTRIANS, AND WORKERS.
 - ALL TRAFFIC CONTROL DEVICES REQUIRED BY THE TCP SHALL BE KEPT IN GOOD CONDITION, FULLY PERFORMING AS SET FORTH IN THE TCP, THE MUTCD, AND/OR SECTION 814 OF THE SPECIFICATIONS. FOR REFLECTIVE DEVICES, A PARTICULAR DEVICE IS ASSUMED TO HAVE FAILED TO MEET MINIMUM OPERATIONAL STANDARDS WHEN THE DEVICE NO LONGER HAS RETRO-REFLECTANCE CAPABILITY OF AT LEAST 60% OF THE SPECIFIED MINIMUM VALUE OVER AT LEAST 50% OF THE VISIBLE REFLECTING SURFACE.
 - ALL TRAFFIC CONTROL DEVICES NOT REQUIRED FOR THE SAFE CONDUCT OF THIS PROJECT, AND/OR INDIVIDUAL TYPICAL TRAFFIC CONTROL STANDARDS, THE CONTRACTOR AND/OR PERMITTEE HAS THE OPTION OF PREPARING AND SUBMITTING A TCP, WHOLLY OR IN PART, OF HIS OWN DESIGN, FOLLOWING GUIDELINES SET FORTH IN THE MUTCD AND PRESCRIBED BY THE ADMINISTRATION. THE TCP DEVELOPED BY THE CONTRACTOR AND/OR PERMITTEE SHALL NOT BE IMPLEMENTED UNTIL ADVANCE WRITTEN APPROVAL IS OBTAINED FROM THE ENGINEER. TOPS MAY BE IMPLEMENTED WITHIN A SINGLE PROJECT OR JOINTLY BETWEEN TWO OR MORE PROJECTS. IN SITUATIONS WHERE TOPS ARE JOINTLY IMPLEMENTED, CARE SHALL BE EXERCISED TO PRESENT CORRECT AND NON-CONFLICTING GUIDANCE TO THE TRAVELING PUBLIC.
 - THROUGHOUT THESE SPECIAL PROVISIONS, WHERE SPEED OF TRAFFIC IS NOTED, THIS MEANS THE POSTED SPEED OR PREVAILING TRAVEL SPEED, WHICHEVER IS HIGHER, UNLESS OTHERWISE NOTED.
 - TRAFFIC SHALL BE MAINTAINED AT ALL TIMES THROUGHOUT THE ENTIRE LENGTH OF THE PROJECT, UNLESS OTHERWISE NOTED. NO TRAVEL LANE OTHER THAN THOSE DESIGNATED FOR POSSIBLE CLOSURE IN THE TCP SHALL BE CLOSED WITHOUT OBTAINING PRIOR APPROVAL FROM THE ENGINEER. ALL INGRESS AND EGRESS TO THE WORK AREA BY THE CONTRACTOR AND/OR PERMITTEE SHALL BE PERFORMED WITH THE FLOW OF TRAFFIC.



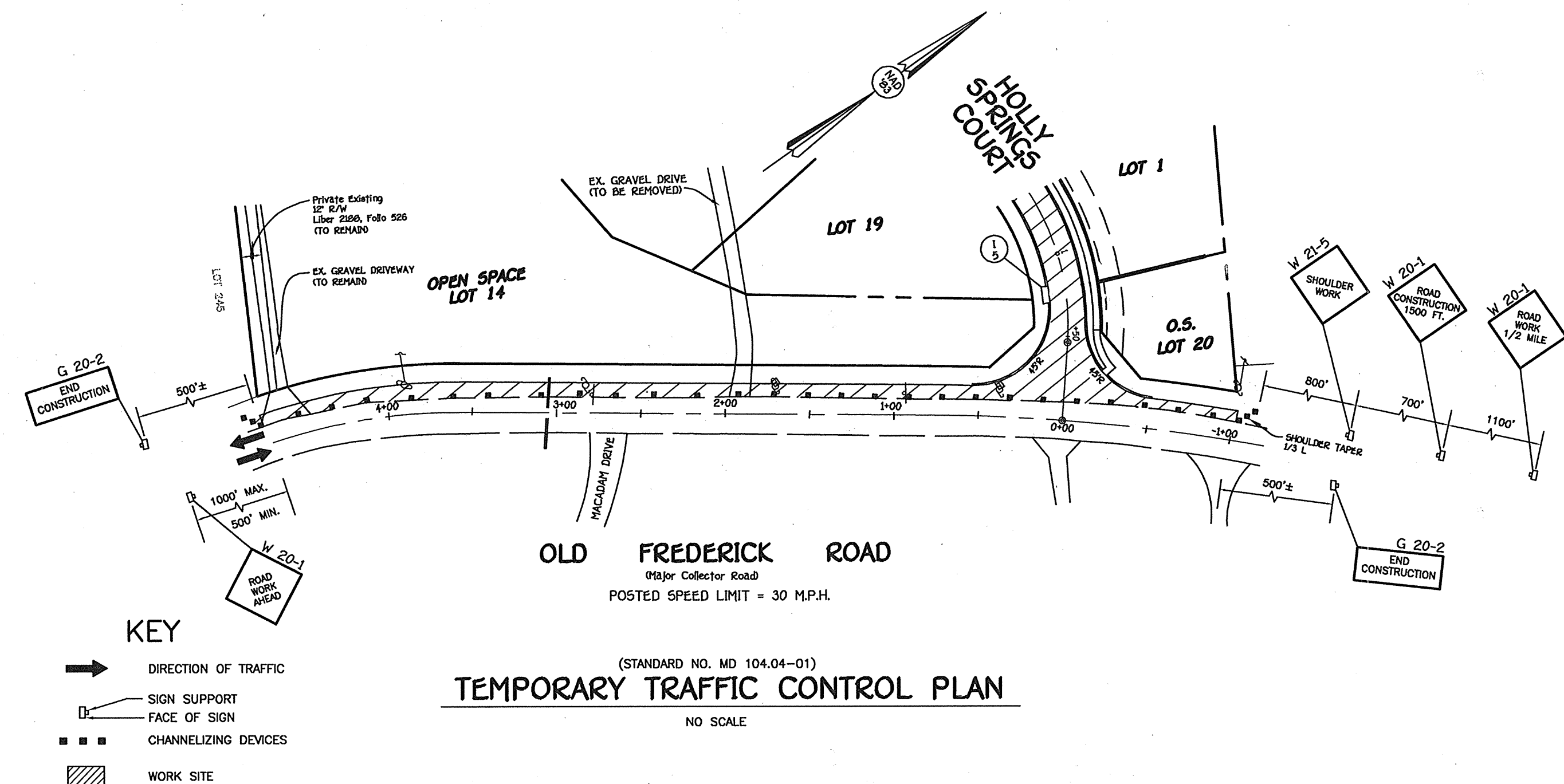
TEMPORARY TRAFFIC CONTROL PLAN
NO SCALE

SEQUENCE OF CONSTRUCTION

- OBTAIN A GRADING PERMIT.
- NOTIFY "MIS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION AT 410-313-1330 24 HOURS BEFORE STRATING WORK.
- RELOCATE POLES ALONG OLD FREDERICK ROAD. (1 week)
- CLEAR AND GRUB FOR SEDIMENT CONTROL MEASURES. INSTALL STABILIZED CONSTRUCTION ENTRANCE. (1 week)
- INSTALL SUPER-SILT FENCE AND SILT FENCE. (3 days)
- OBTAIN PERMISSION OF THE SEDIMENT CONTROL INSPECTOR PRIOR TO PROCEED.
- GRADE ROADS TO PROPOSED SUBGRADE AND INSTALL STORM DRAIN SYSTEM AND S.W.M. POND. THE ROAD OUTFALL TO EXISTING STOPSHOULDER ON ADJACENT PROPERTY AT EXISTING 1:1 STABILIZE ALL DISTURBED AREAS. IMMEDIATELY UPON COMPLETION OF GRADING AS SHOWN ON THESE PLANS. (4 weeks)
- THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON ALL SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS.
- INSTALL BASE COURSE FOR THE PROPOSED ROAD AND WIDENING ALONG OLD FREDERICK ROAD. (1 week)
- STABILIZE ALL DISTURBED AREAS AND OBTAIN PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED.
- APPLY TACK COAT TO SUB-BASE AND LAY SURFACE COURSE. (1 week)
- WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE DEVICES MAY BE REMOVED AND THE REMAINING AREAS PROXIMATE TO FINAL GRADE. STABILIZE ALL REMAINING AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (2 weeks)
- NOTIFY HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS FOR A FINAL INSPECTION OF THE COMPLETED PROJECT.

REVISIONS

No.	DATE	DESCRIPTION
1	8-6-03	ADD NOTE



TEMPORARY TRAFFIC CONTROL PLAN
NO SCALE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 8022 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MARYLAND 21042
410-481-2955

OWNER
MR. & MRS. ROBERT REINHARDT, SR.
8524 OLD FREDERICK ROAD
ELICOTT CITY, MD. 21043

DEVELOPER
REINHARDT PROPERTY III, LLC
10272 BALTIMORE NATIONAL PIKE
ELICOTT CITY, MD. 21042

Traffic Control Plan and Detail Sheet
REINHARDT PROPERTY
Lots 1 thru 20
Zoned R-20
Tax Map No. 1B, Parcel No. 9, Grid No. 7
Second Election District, Howard County, Maryland
Date: September 1, 2000
Sheet 9 of 11

BORING B-1		
DEPTH	DESCRIPTION OF MATERIALS	REMARKS
SURFACE	TOPSOIL	
0.4	BROWN TO REDDISH BROWN, MOIST, SILT AND CLAY, AND OF SAND, LITTLE ROCK FRAGS, TRACE MICA (SD)	
3.0	BROWN, FRESH TAN, AND GRAY MOIST, MUCKY OF SAND, SOME SILT, LITTLE ROCK FRAGS, DECOMPOSED ROCK (SD)	AT COMPLETION, HOLE DRY AND CAVED AT 13.5'
12.0	BROWN-GRAY, MOIST, OF SAND, SILT, TRACE MICA, DECOMPOSED ROCK (SD)	1 DAY AFTER COMPLETION, HOLE DRY AND CAVED AT 13.5'
15.0	BOTTOM OF HOLE AT 15.0'	

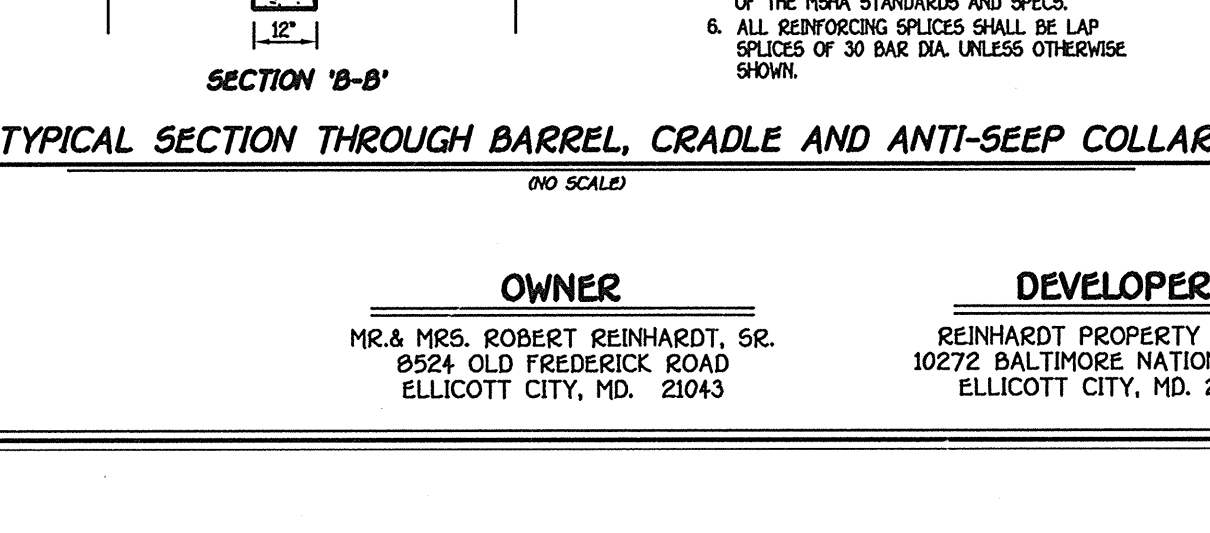
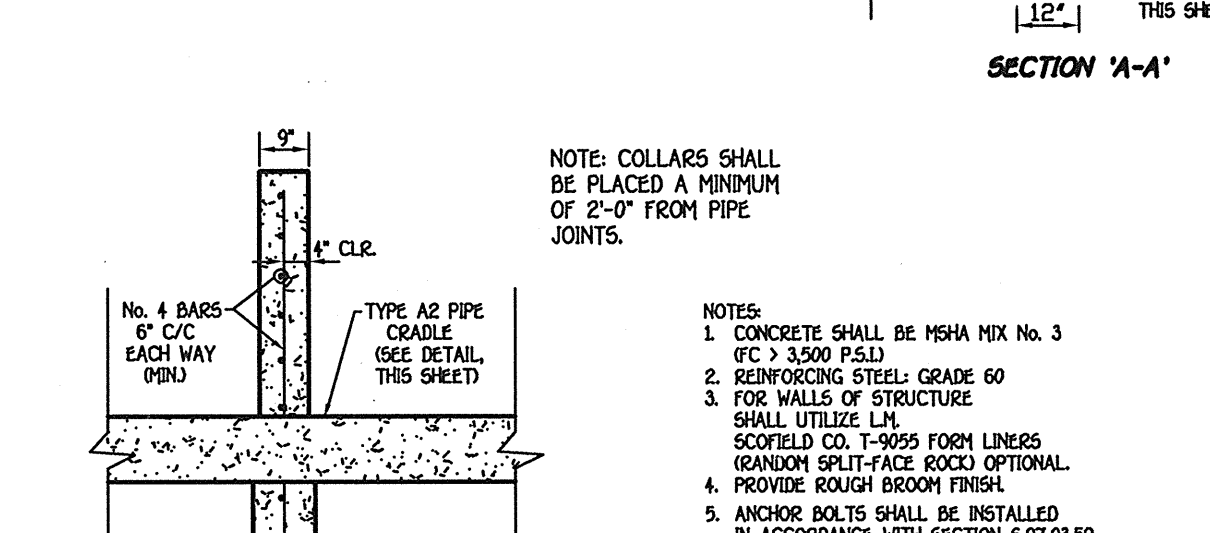
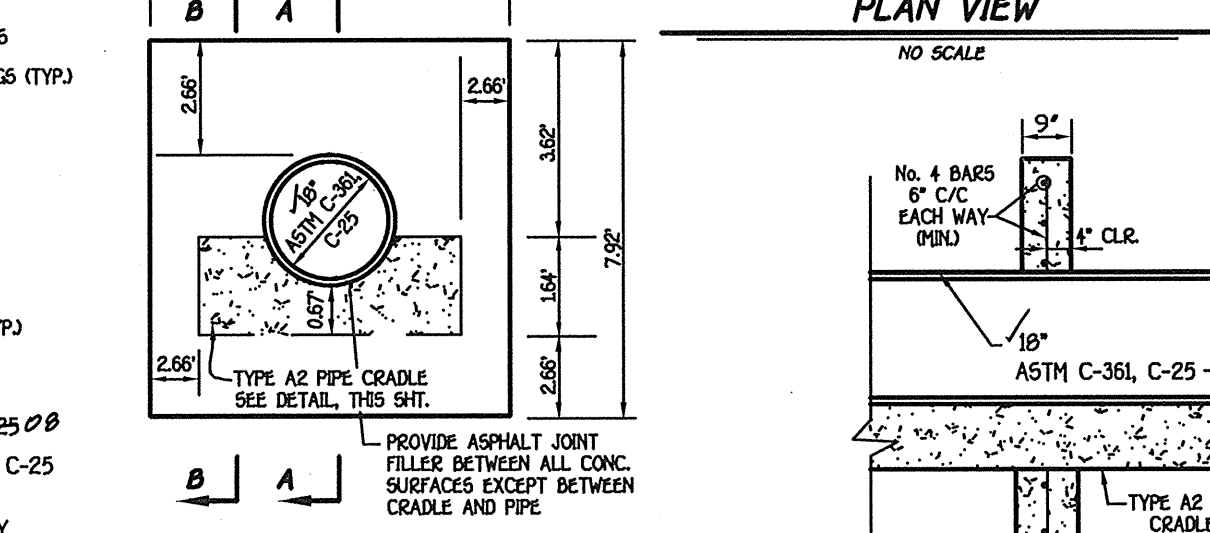
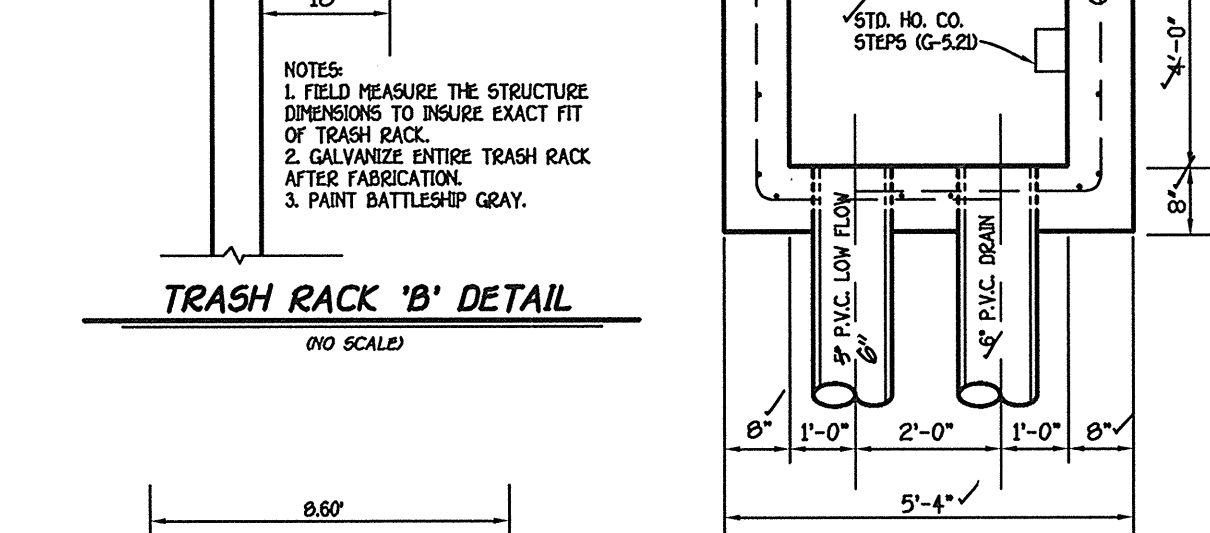
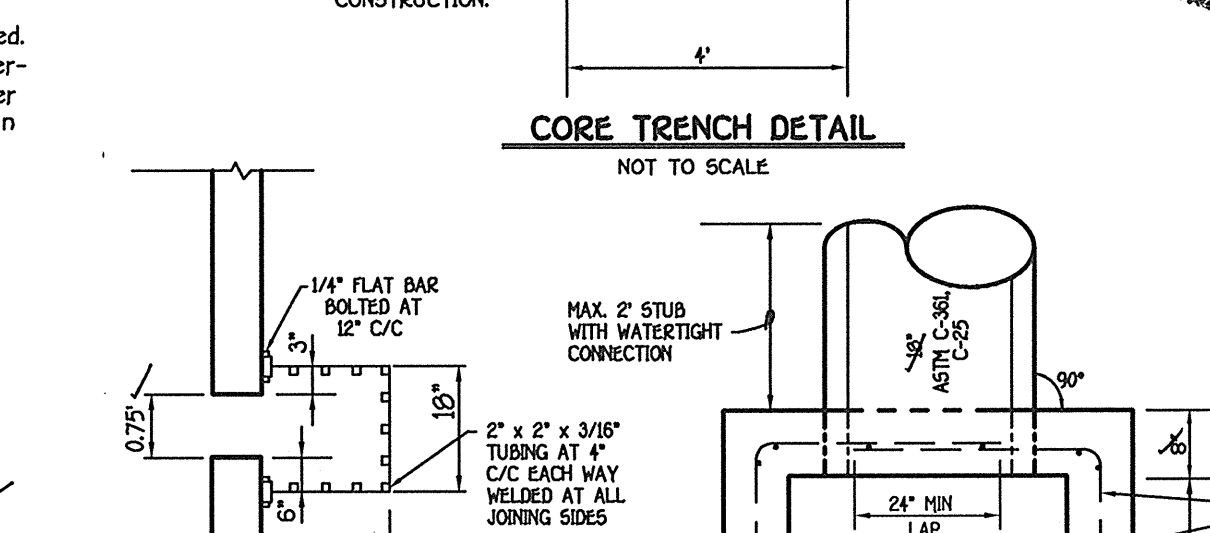
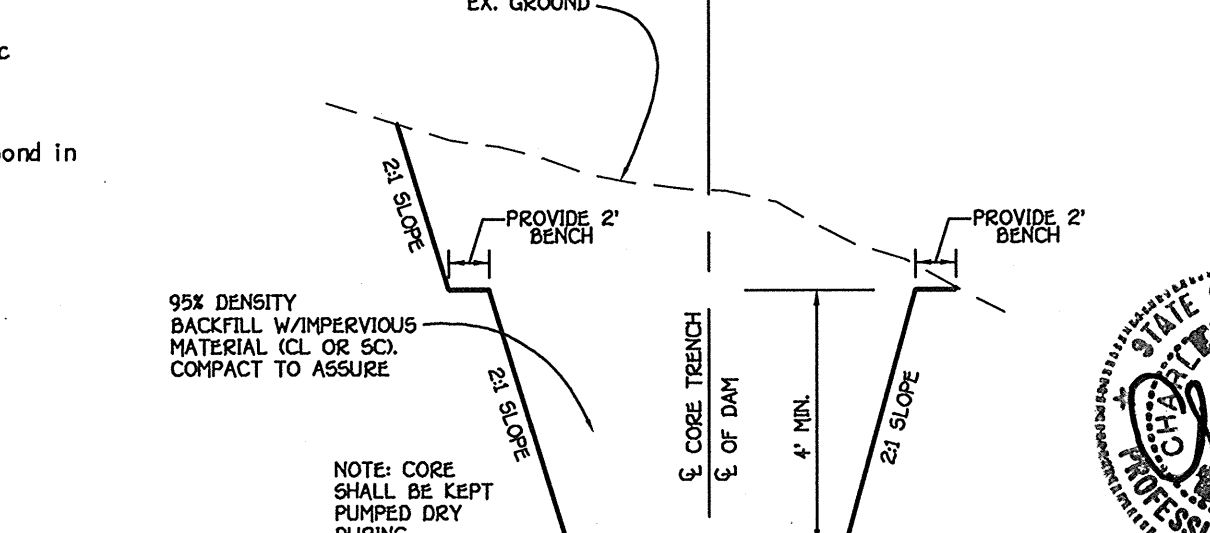
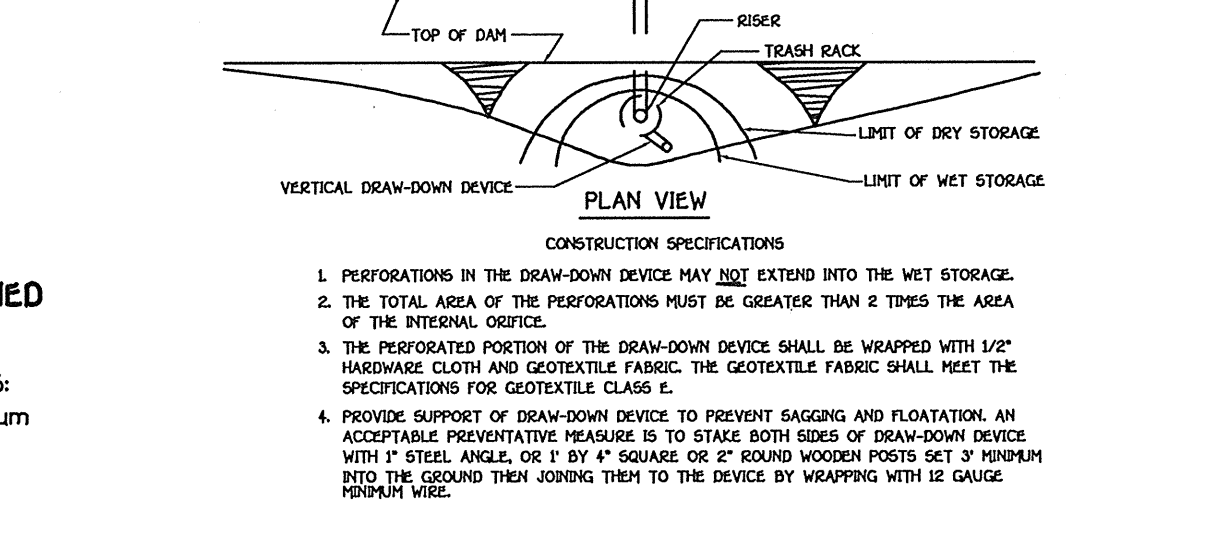
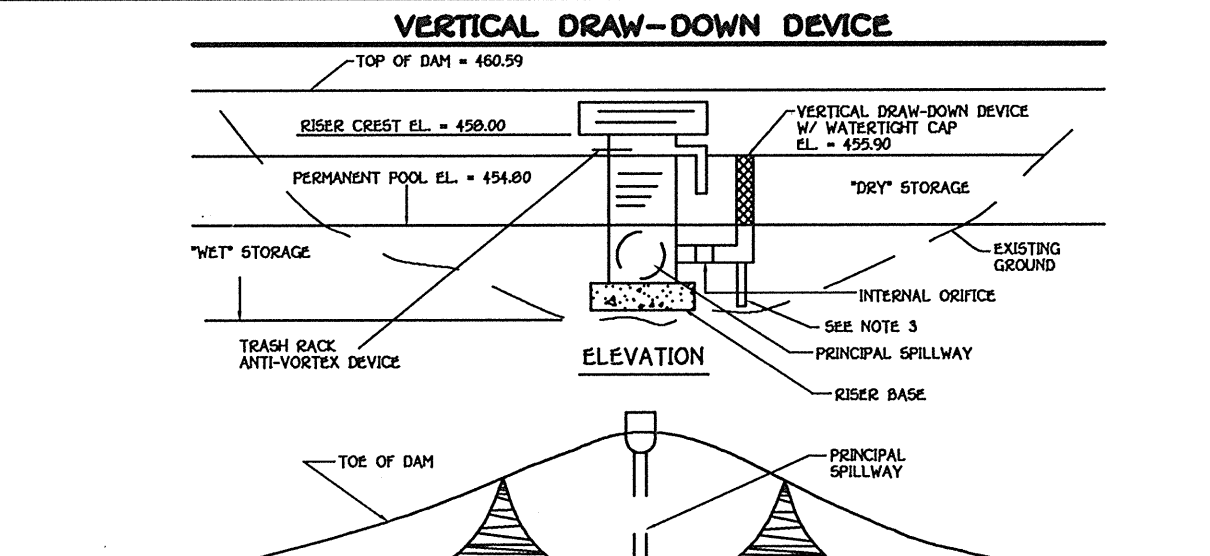
BORING B-2		
DEPTH	DESCRIPTION OF MATERIALS	REMARKS
SURFACE	TOPSOIL	
0.4	BROWN TO REDDISH BROWN, MOIST, SILT AND CLAY, AND OF SAND, LITTLE ROCK FRAGS, TRACE MICA (SD)	
2.5	REDDISH BROWN, MOIST, CLAYEY SILT, AND OF SAND, LITTLE ROCK FRAGS, DECOMPOSED ROCK (SD)	AT COMPLETION, HOLE DRY AND CAVED AT 14.5'
7.0	BROWN, TAN AND GRAY, MOIST, MUCKY OF SAND, AND SOME SILT, TRACE ROCK FRAGS, DECOMPOSED ROCK (SD)	1 DAY AFTER COMPLETION, HOLE DRY AND CAVED AT 14.5'
15.0	BOTTOM OF HOLE AT 15.0'	

BORING B-3		
DEPTH	DESCRIPTION OF MATERIALS	REMARKS
SURFACE	TOPSOIL	
0.4	BROWN - GRAY, MOIST, CLAYEY SILT, AND OF SAND, TRACE ROCK FRAGS, TRACE MICA (SD)	
3.0	BROWN, MOIST, SILT AND CLAY, SOME OF SAND, SOME ROCK FRAGS, TRACE MICA (DECOMPOSED ROCK) (SD)	AT COMPLETION, HOLE DRY AND CAVED AT 14.5'
7.0	BROWN, TAN AND GRAY, MOIST, MUCKY OF SAND, SOME SILT, TRACE ROCK FRAGS, TRACE MICA (DECOMPOSED ROCK) (SD)	1 DAY AFTER COMPLETION, HOLE DRY AND CAVED AT 14.5'
12.0	REDDISH BROWN AND GRAY, MOIST, MUCKY OF SAND, AND SILT, DECOMPOSED ROCK (SD)	
15.0	BOTTOM OF HOLE AT 15.0'	

370 - 12 Foot SPECIFICATIONS
 These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.
Site Preparation
 Areas designated for borrow areas, embankment, and structural work 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 material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface. For dry slopes and bottom of reservoir, a minimum of a 50 foot radius around the crest 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 to be placed 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 material. Fill material for the center of the embankment and cut off trench shall conform to Unified Soil Classification CC, CL or C. Consideration may be given to the use of other 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 material shall be placed in minimum 12 inch thick horizontal layers not less than one third the width of the embankment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot roller, tined 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 will 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 percent dry density with a moisture content within 2% of the optimum. Each layer of fill shall be compacted in maximum 12 inch thick lifts and to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.
Cut Off Trench - The cutoff trench shall be excavated into impervious material to a minimum depth to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers or hand tampers to assure minimum density and minimum permeability.
Structure Backfill
 Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjacent 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 be placed in layers 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 or pipe, unless there is a connected fill of 24" or greater over the structure or pipe.
Pipe Conduits
 Where a minimum required density is specified, it shall not be less than 95 percent dry density with a moisture content within 2% of the optimum. Each layer of fill shall be compacted in maximum 12 inch thick lifts and to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:
 1. Materials - Reinforced concrete pipe shall have bell and gasket joints with rubber gaskets and shall equal or exceed ASTM D2083 Class III.
 2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 1/2" of its outside diameter with a minimum thickness of 3 inches or as shown on the drawings.
 3. Laying pipe - Bell and gasket pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are made for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the river.
 4. Backfilling shall conform to "Structure Backfill".
 5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
Polyvinyl Chloride (PVC) Pipe - All of the following criteria shall apply for polyvinyl chloride (PVC) pipe:
 1. Materials - PVC pipe shall be PVC-1220 or PVC-1222 conforming to ASTM D-1785 or ASTM D-2241.
 2. Joints and connections to anti-seep collars shall be completely watertight.
 3. Bedding - The pipe shall be firmly and uniformly bedded throughout its entire length. Where rock or soft spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
 4. Backfilling shall conform to "Structure Backfill".
 5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.
Concrete
 Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 608; Mix No. 3.
Rock Riprap
 Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 905.

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 occupied by the permanent works. The contractor shall also maintain, 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 upriver 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 excavation and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the location being worked shall be maintained below the bottom of the excavation at such location which may require dewatering 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 rough condition. All exposed surfaces of the embankment, spillway, pool 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 035-342 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 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.



By The Developer:
 I/We Certify That All Development And/Or Construction Will Be Done According To These Plans, And That Any Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Attendance At A Department Of The Environment Approved Training Program For The Control Of Sediment And Erosion During The Project. I Shall Engage A Registered Professional Engineer To Supervise Pond Construction And Provide The Maryland Dept. Of The Environment With An "As-Built" Plan Of The Pond Within 30 Days Of Completion. I Also Authorize Periodic Inspections By The Maryland Dept. Of The Environment.
 Signature of Developer: [Signature] Date: 12-20-00
 Printed Name of Developer: [Name]
 By The Engineer:
 I Certify That This Plan For Erosion And Sediment Control Represents A Practical And Workable Plan Based Upon The Best Knowledge Of The Site And Suitable Conditions. This Plan Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District. I Have Notified The Developer Of The Requirements Of A Registered Professional Engineer To Supervise Construction.
 Signature of Engineer: [Signature] Date: 11-19-00
 Printed Name of Engineer: [Name]
 Approved Department of Public Works: [Signature] Date: [Date]
 Chief, Bureau of Highways: [Signature] Date: [Date]
 Approved Department of Planning And Zoning: [Signature] Date: 12/15/00
 Chief, Division of Land Development: [Signature] Date: [Date]
 Chief, Development Engineering Division: [Signature] Date: [Date]

AS-BUILT CERTIFICATION
 I Herby Certify That This Plan Was Constructed As Shown On The "As-Built" Plans And Meets The Approved Plans And Specifications.
 Signature: [Signature] Date: 12/04
 P.E. No. 31564
 Date: [Date]
 Certify Means To State Or Declare A Professional Opinion Based Upon Onsite Inspections And Material Tests Which Are Conducted During Construction. The Onsite Inspections And Material Tests Are Those Inspections And Tests Deemed Sufficient And Appropriate Commonly Accepted Engineering Standards. Certify Does Not Mean Or Imply A Guarantee Or An Engineer's Certification. Certification Relieve Any Other Party From Meeting Requirements Imposed By Contract, Employment, Or Other Means, Including Meeting Commonly Accepted Industry Practices.

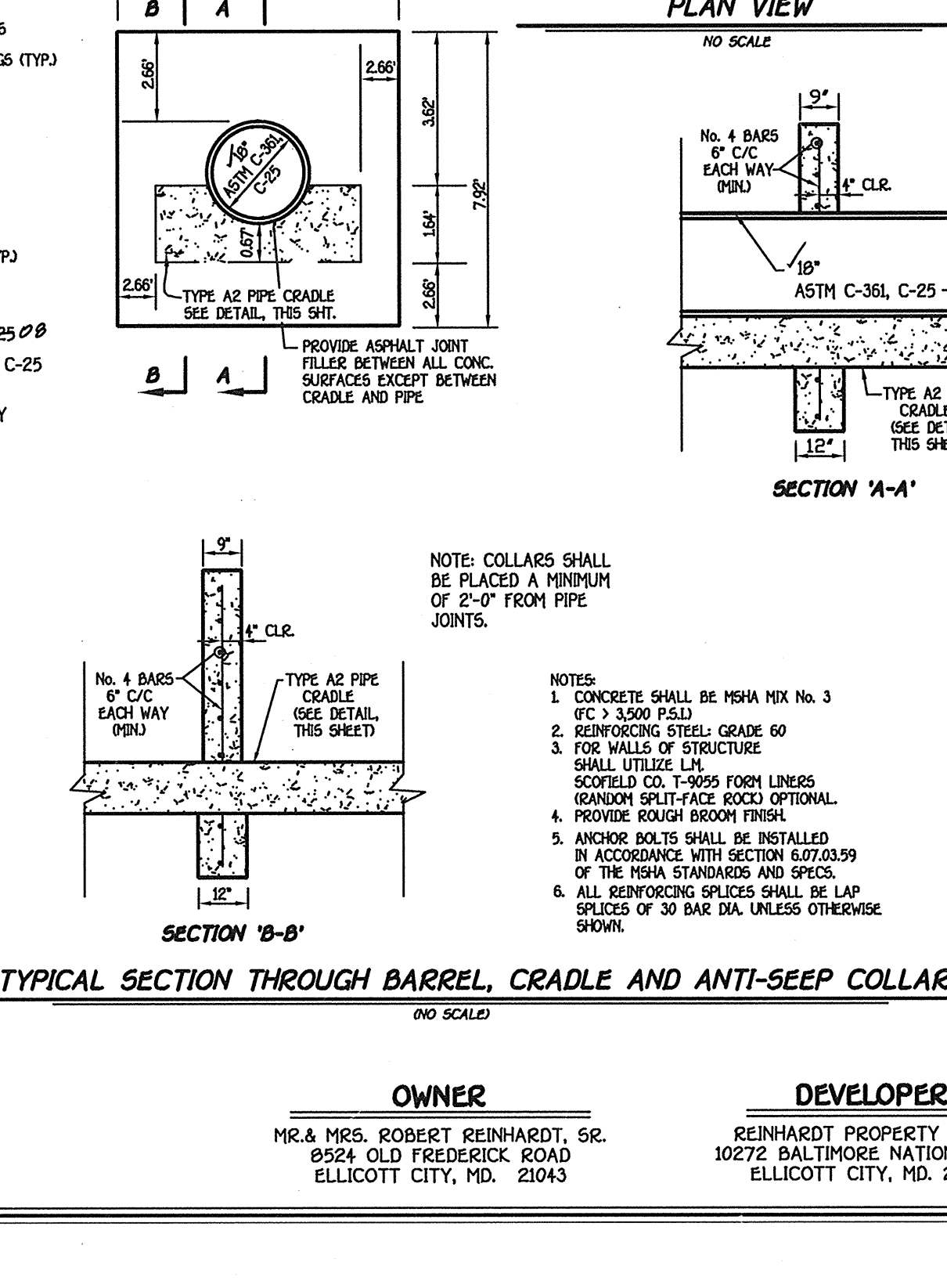
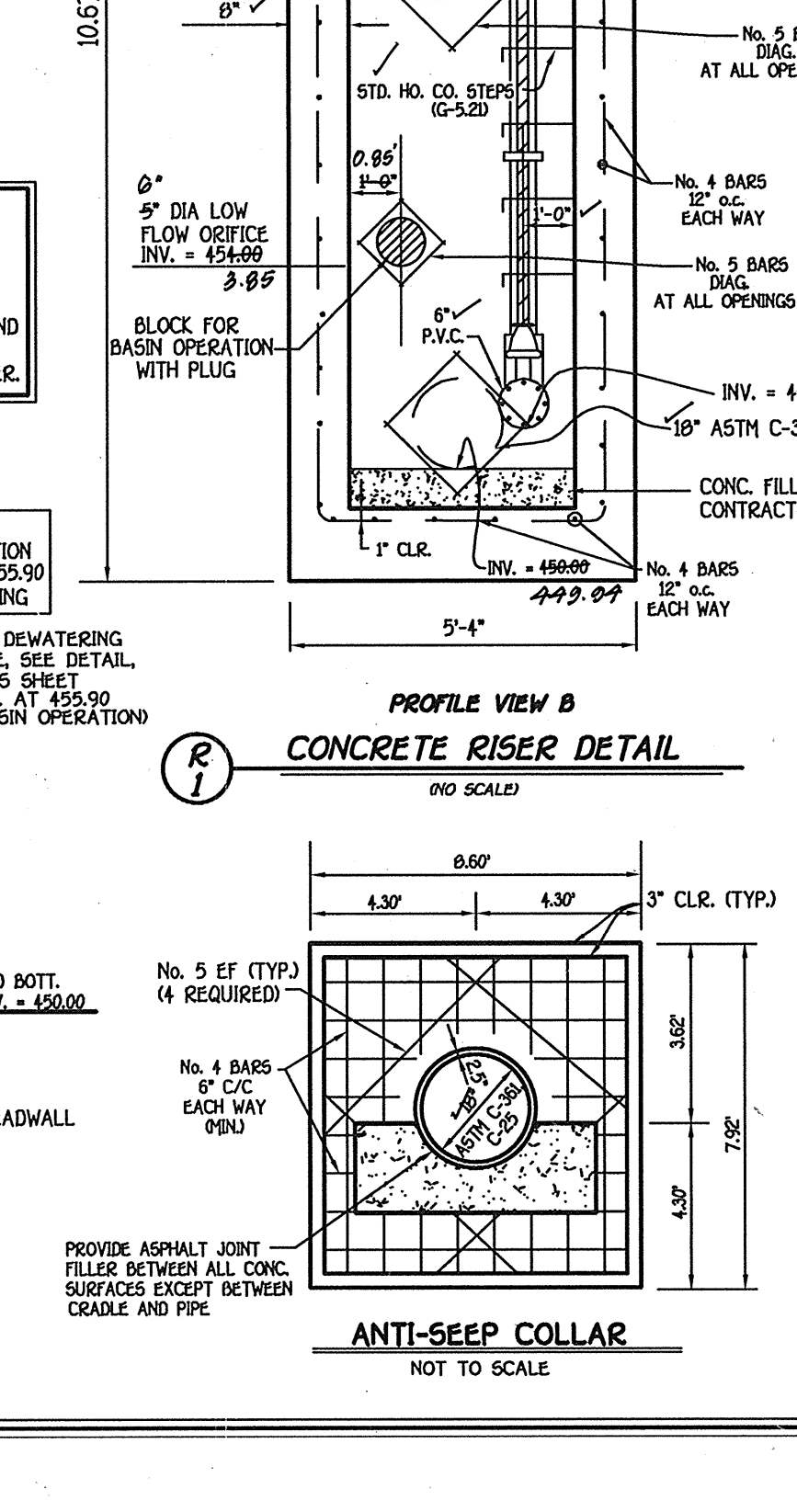
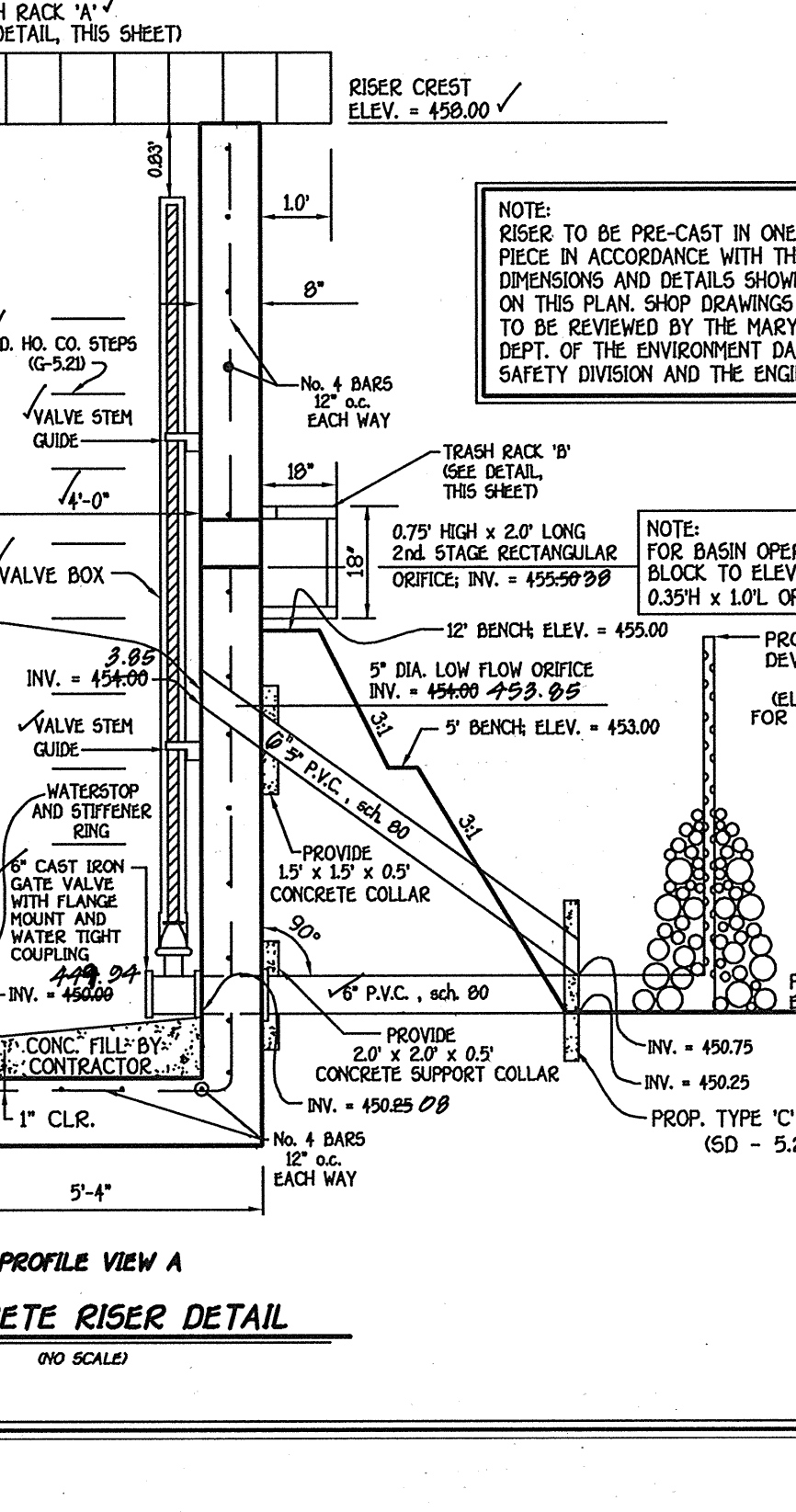
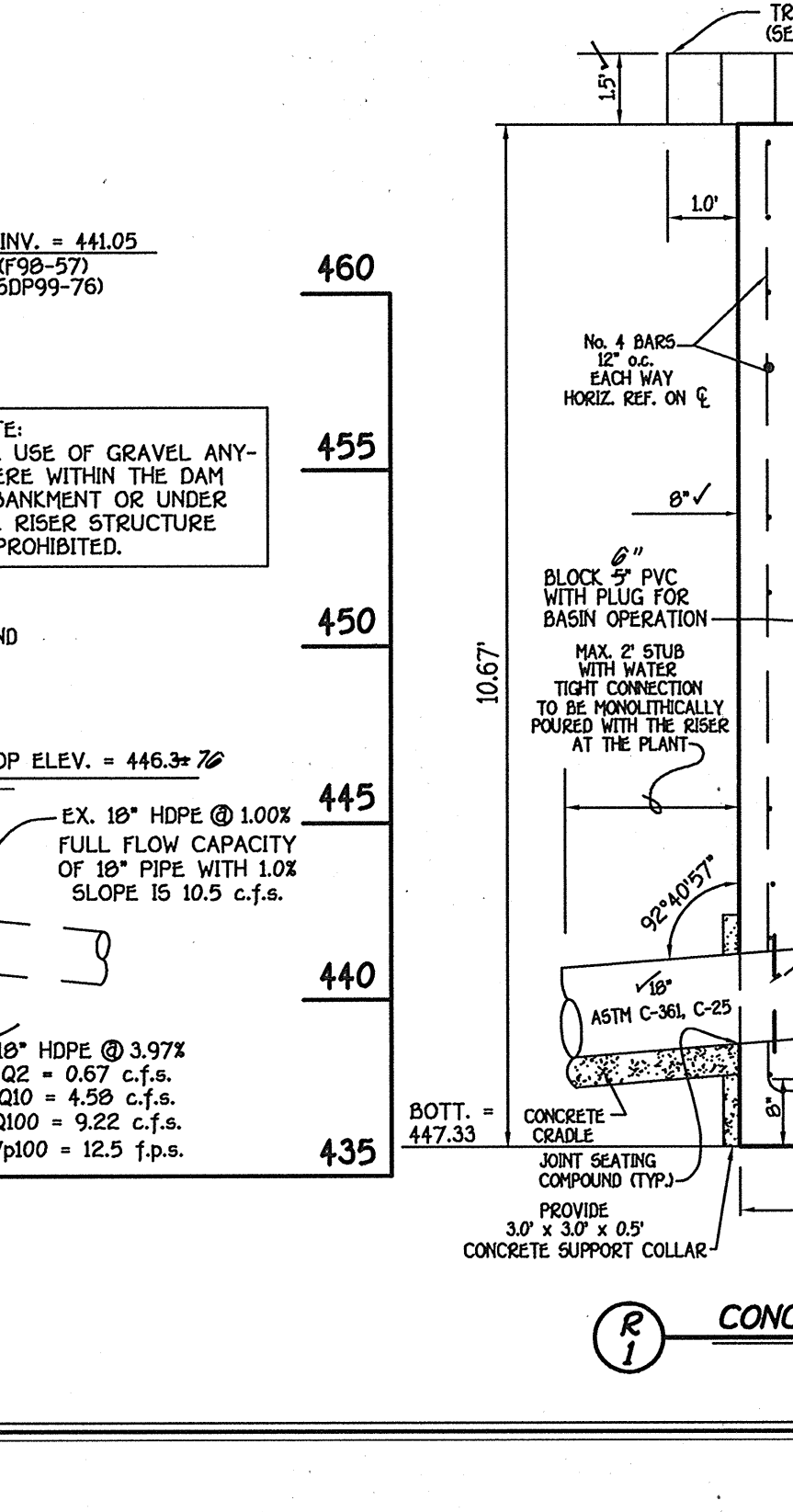
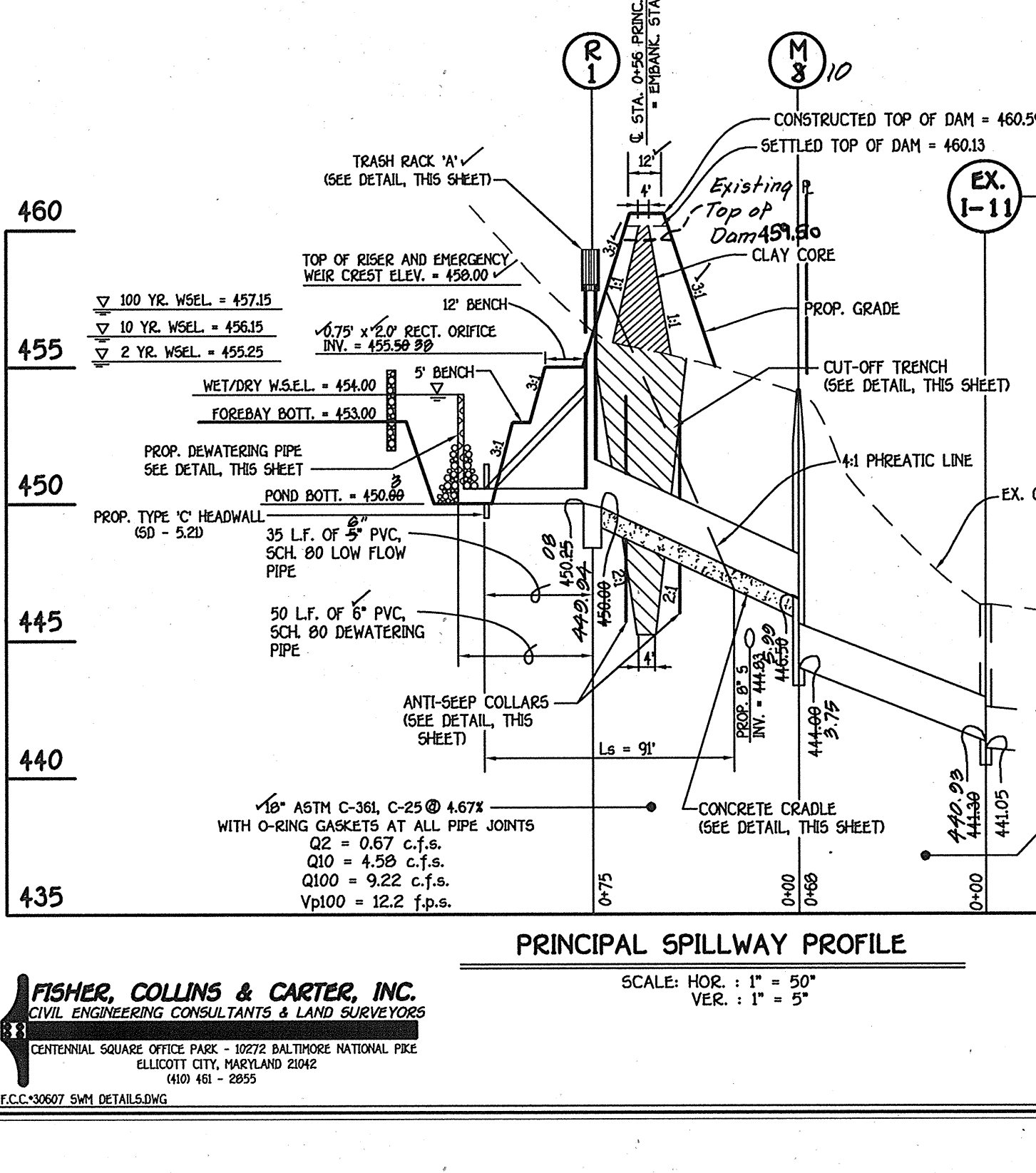
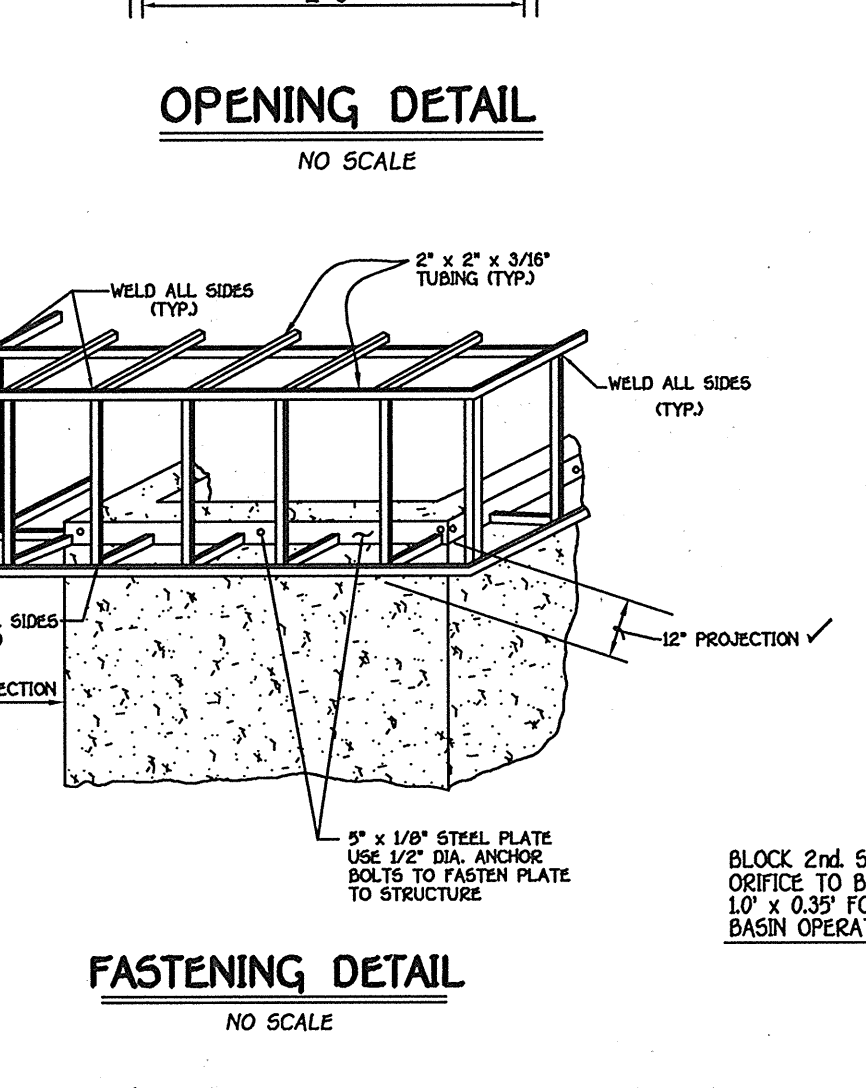
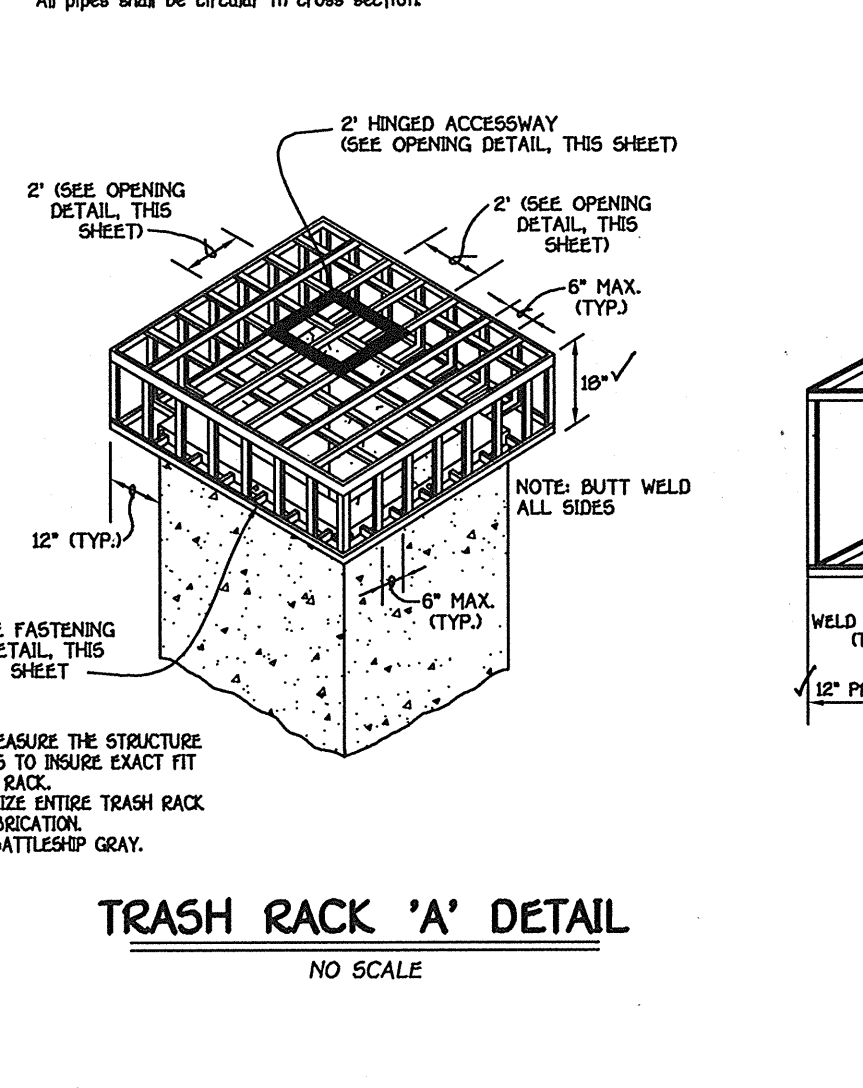
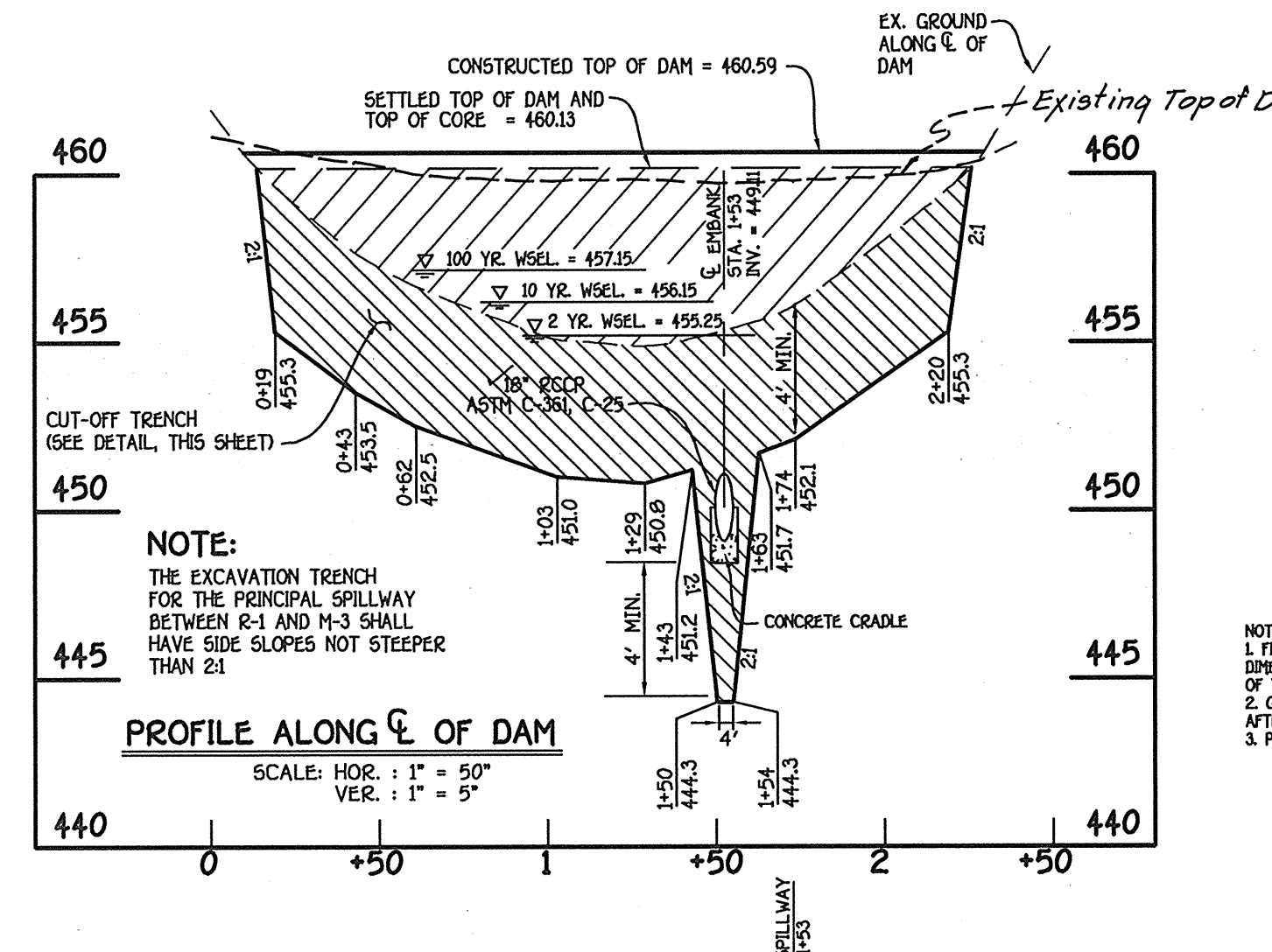
OPERATION, MAINTENANCE AND INSPECTION
 Inspection of the ponds shown hereon shall be performed at least annually, in accordance with the checklist and requirements contained within USGS, SCS "Standards And Specifications For Ponds" (MD-378). The pond owner and his heirs, successors, or assigns shall be responsible for the safety of the pond and the continued operation, maintenance, inspection and maintenance thereof. The pond owner shall promptly notify the Soil Conservation District of any observations that may be indications of distress such as excessive seepage, turbid seepage, sliding or slumping.
OPERATION, MAINTENANCE AND INSPECTION SCHEDULE OF HOME OWNERS ASSOCIATION OWNED AND MAINTAINED STORMWATER MANAGEMENT FACILITY
 HOME OWNERS ASSOCIATION'S MAINTENANCE RESPONSIBILITIES:
 1. Top and side slopes of the embankment shall be mowed a minimum of two (2) times a year, once in June and once in September. Other side slopes and maintenance access should be mowed as needed.
 2. Debris and litter next to the outlet structure shall be removed during regular mowing operations and as needed.
 3. When deemed necessary for aesthetic reasons, sediment should be removed from the pond. Approval of the Department of Public Works is required.
OPERATION AND MAINTENANCE SPECIFICATIONS
 I hereby certify that I will operate and maintain the completed pond in accordance with the following:
 1. Periodic inspections of the facility will be made to identify potential problems that may affect its safety. These inspections will be made after periods of heavy rainfall and at least twice annually. Inspection reports shall be kept until the next subsequent inspection. Inspection items to be looked at include:
 A. Spillway and outlet works
 B. Rip-rap
 C. Vegetative cover
 D. Cracks in the fill
 E. Slope failures and
 F. Seepage and other signs of distress.
 2. Problems identified during inspections will be promptly corrected. Major problems will be brought to the attention of the soil conservation district and the dam safety division of the Maryland Water Resources Administration. As a very minimum, grassy vegetation will be maintained in a dense and healthy state, and woody vegetation will not be permitted to grow on the embankment.
NOTES
 1. Concrete shall conform to the Maryland D.O.T.S.H.A. Standard Specifications for construction and materials, 1992, Mix No. 6, except that Type III Cement and A.S.T.M. C. 33 No. 8 coarse AGG. shall be used.

DESIGN SUMMARY

DESIGN STORM	ALLOWABLE RELEASE RATE	FACILITY INFLOW	FACILITY DISCHARGE	WATER SURFACE ELEVATION	STORAGE VOLUME (ACFT)
2 YEAR	0.25 c.f.s.	6.75 c.f.s.	0.67 c.f.s.	455.25	0.17
10 YEAR	6.10 c.f.s.	17.81 c.f.s.	4.58 c.f.s.	456.15	0.43
100 YEAR	* 10.5 c.f.s.	31.32 c.f.s.	9.22 c.f.s.	457.15	0.77

STORAGE = HEIGHT PRODUCT = 5.5
 WATERSHED AREA TO FACILITY (ACRES): 6.37
 * 10.5 c.f.s. IS THE FLOW THAT THE EXISTING 18" DIA. PIPE ON 1.0% SLOPE AT EXISTING I-11 CAN RECEIVE FROM THE POND

GEOTECHNICAL RECOMMENDATIONS FOR EMBANKMENT AND CUT-OFF TRENCH CONSTRUCTION
 THE SITE SHOULD BE STRIPPED OF TOPSOIL AND ANY OTHER UNSUITABLE MATERIALS FROM THE EMBANKMENT OR STRUCTURE AREA IN ACCORDANCE WITH SOIL CONSERVATION GUIDELINES. AFTER STRIPPING OPERATIONS HAVE BEEN COMPLETED, THE EXPOSED SUBGRADE MATERIALS SHOULD BE PROPERLY COVERED WITH A DUMP TRUCK OR OTHER EQUIPMENT TO PREVENT THE OCCURRENCE OF A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE FOR AREAS THAT ARE NOT ACCESSIBLE TO A DUMP TRUCK. THE EXPOSED MATERIALS SHOULD BE OBSERVED AND TESTED BY A GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE UTILIZING A DYNAMIC CONE PENETROMETER, ANY EXCESSIVELY SOFT OR LOOSE MATERIALS IDENTIFIED BY PROCEEDING OR PENETROMETER TESTING SHOULD BE EXCAVATED TO SUITABLE FIRM SOIL, AND THEN GRADUALLY RE-ESTABLISHED BY BACKFILLING WITH SUITABLE SOIL.
 A REPRESENTATIVE OF THE GEOTECHNICAL ENGINEER SHOULD BE PRESENT TO MONITOR PLACEMENT AND COMPACTION OF FILL FOR THE EMBANKMENT AND CUT-OFF TRENCH IN ACCORDANCE WITH MARYLAND SOIL CONSERVATION SPECIFICATION 378 SOILS CONSIDERED SUITABLE FOR THE CENTER OF EMBANKMENT AND CUT-OFF TRENCH SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION CC, CL OR C. ALL FILL MATERIALS MUST BE PLACED AND COMPACTED IN ACCORDANCE WITH US SCS 378 SPECIFICATIONS.



STORMWATER MANAGEMENT NOTES AND DETAILS
REINHARDT PROPERTY
 Lots 1 thru 20
 Zoned: R-20
 Tax Map No. 18, Parcel No. 9, Grid No. 7
 Second Election District Howard County, Maryland
 Date: September 1, 2000
 Sheet 10 of 11
OWNER
 MR. & MRS. ROBERT REINHARDT, SR.
 10722 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MD. 21043
DEVELOPER
 REINHARDT PROPERTY II, LLC
 10722 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MD. 21042

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 481 - 2855
 FCC-0007 5/01 DETAILS/01

PLANTING SPECIFICATIONS AND NOTES

SITE PREPARATION AND SOILS

1. PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS. SEE PLAN FOR LOCATIONS.
2. DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
3. SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
4. SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
5. BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANT STORAGE AND INSPECTION

1. FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
2. FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
3. PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
4. UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.

PLANT INSTALLATION

1. THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOIL SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
2. PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
3. CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THROUGH EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
4. CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENED FROM THE SOIL IF THE ROOTS ENIRCLE THE ROOT BALL. SUBSTITUTION IS STRONGLY RECOMMENDED.
5. U-SHAPED OR KINKED ROOT SYSTEMS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
6. FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
7. FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FOUR (4), PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
8. AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LIST TO OBTAIN A MORE NATURAL APPEARANCE.
9. NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.

FERTILIZING

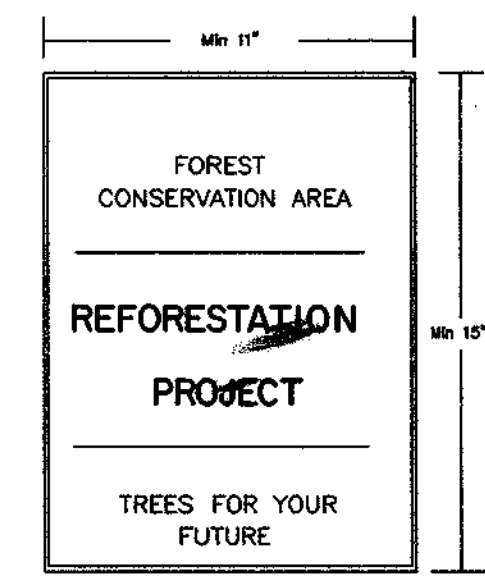
1. DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING. DOING SO MAY CAUSE A SPLURT OF CANDIDY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
2. NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
3. IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWEED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.

MAINTENANCE SCHEDULE

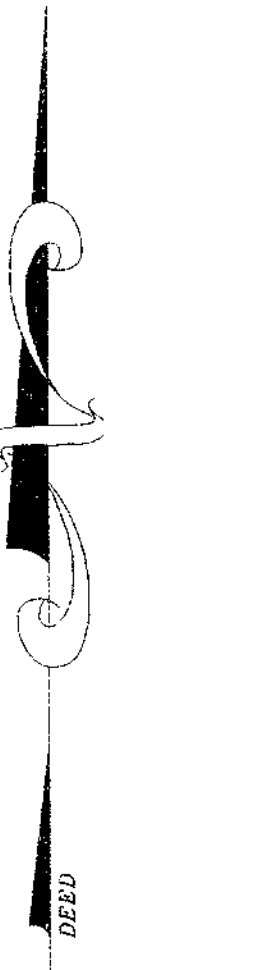
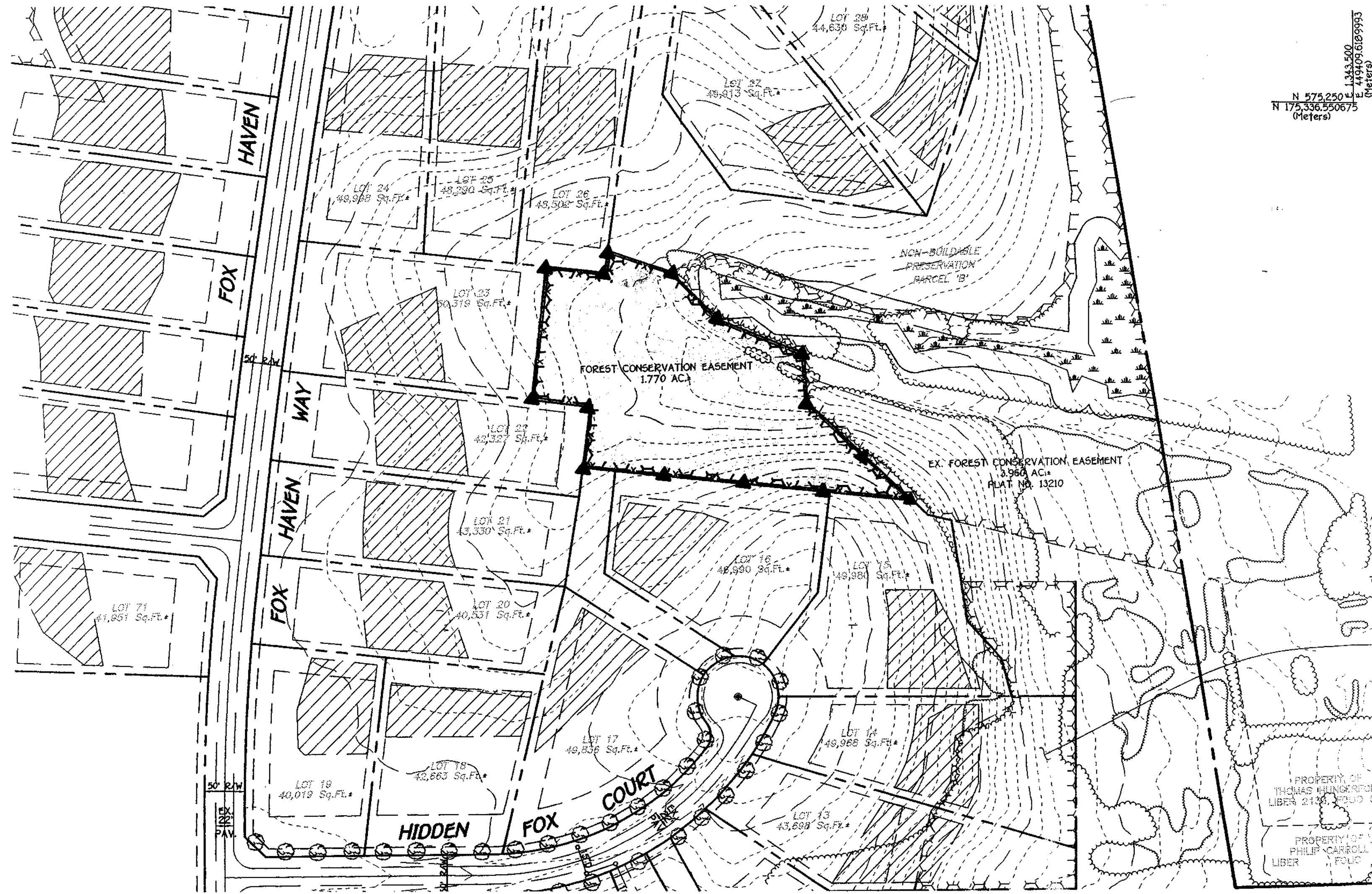
1. ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD.
2. ASSESS TREE MORTALITY OF PLANTING STOCK. REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
3. VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY EFFECTING THE PLANTED STOCK.
4. REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
5. REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
6. A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MAINTENANCE PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.

SUPERVISION

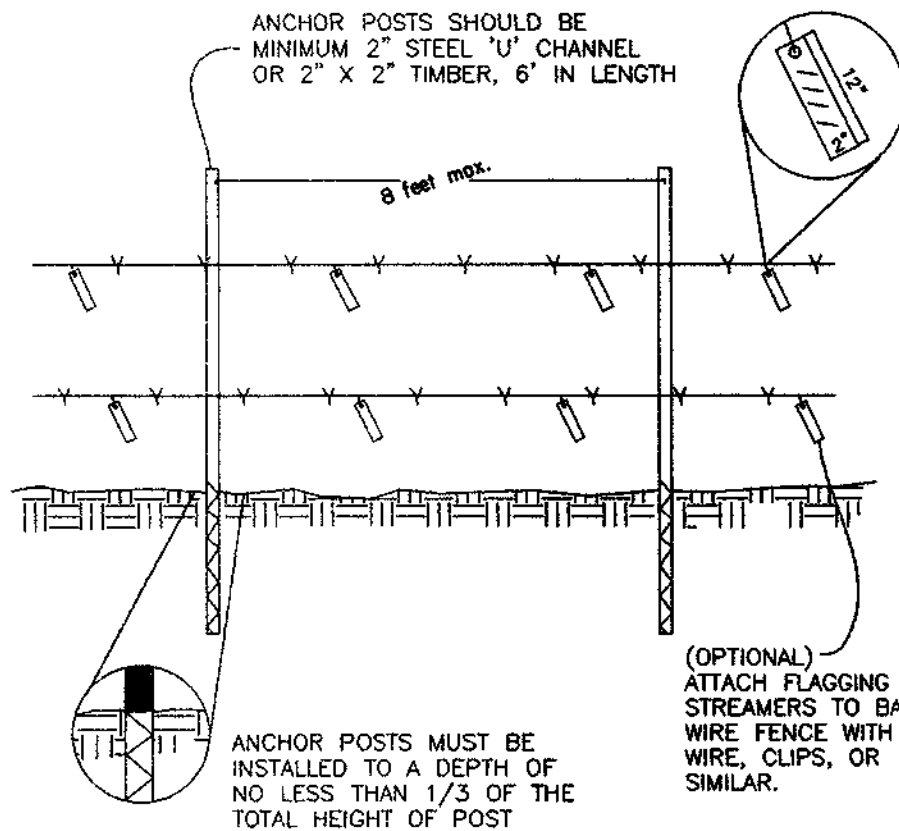
1. ALL FOREST CONSERVATION ACTIVITIES SHALL BE DONE UNDER THE DIRECT SUPERVISION OF SOMEONE FROM THE DESIGN TEAM OR OTHER QUALIFIED PROFESSIONAL AS DETERMINED BY THE REQUIREMENTS OF COMAR 08.18.01 AND THE MARYLAND DEPARTMENT OF NATURAL RESOURCES, PUBLIC LANDS AND FORESTRY DIVISION.



SIGNAGE DETAIL
NOT TO SCALE



PROTECTIVE FENCE DETAIL
TWO STRAND BARBED WIRE

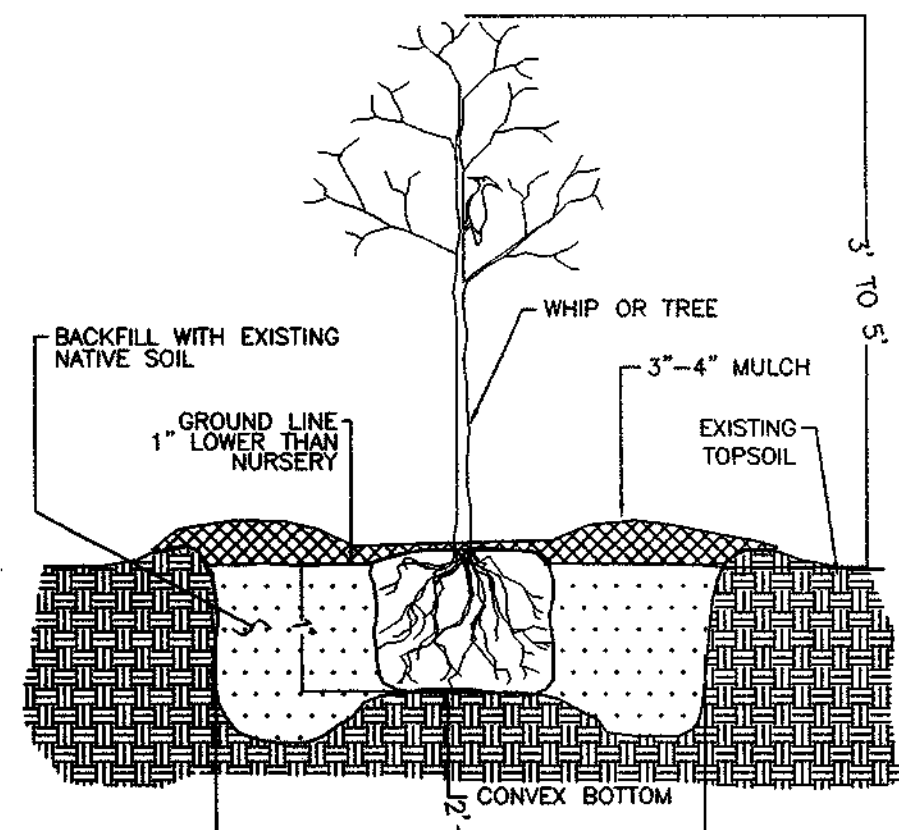


1. FOREST PROTECTION DEVICE ONLY.
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
4. ROOT DAMAGE SHOULD BE AVOIDED.
5. PROTECTIVE SIGNAGE MAY ALSO BE USED.
6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.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

REFORESTATION PLANT LIST

QTY.	SPECIES	SHADE TOL.	MOIST. REGIME	WET. STATUS	MIN.O.C. SIZE & SPACING	REMARKS
65	Prunus serotina Wild Black Cherry	I	M	FACU	11' 3'-5' HEIGHT	CONT/BROOT
65	Robinia pseudoacacia Black Locust	VI	D-M	FACU	11' 3'-5' HEIGHT	CONT/BROOT
65	Quercus prinus Chestnut Oak	MT	D-M	FACU	11' 3'-5' HEIGHT	CONT/BROOT
65	Quercus rubra Red Oak	MT	D-M	UPL	11' 3'-5' HEIGHT	CONT/BROOT
65	Fraxinus americana White Ash	MT	D-M	FACU	11' 3'-5' HEIGHT	CONT/BROOT
65	Nyssa sylvatica Black Gum	T	M-W	FAC	11' 3'-5' HEIGHT	CONT/BROOT
65	Juglans nigra Black Walnut	VI	M	FACU	11' 3'-5' HEIGHT	CONT/BROOT
65	Acer rubrum Red Maple	VI	D-W	FAC	11' 3'-5' HEIGHT	CONT/BROOT
65	Cercis canadensis Eastern Redbud	T	M	UPL	11' 3'-5' HEIGHT	CONT/BROOT
65	Diospyros virginiana Persimmon	I	D-M	UPL	11' 3'-5' HEIGHT	CONT/BROOT

Quantities Of Individual Species And Species Composition May Change Depending On Availability At Time Of Planting. Total Quantity Of Trees For Entire Easement Area Will Not Change.



TREE PLANTING DETAIL
CONTAINER GROWN

General Notes

1. The Forest Conservation Easement Has Been Established As An Offsite Forest Mitigation Area, Per Section 16.1216 Of The Howard County Forest Conservation Act. No Clearing, Grading Or Construction Is Permitted Within The Forest Conservation Easement; However, Forest Management Practices As Defined In The Deed Of Forest Conservation Easement Are Allowed.
2. [Symbol] Denotes Forest Conservation Easement.
3. [Symbol] Denotes Forest Conservation Sign (see detail, this sheet)
4. [Symbol] Denotes Protective Fence (see detail, this sheet)

DEVELOPER

REINHARDT PROPERTY II, LLC
10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MD. 21042

OWNER

MR. & MRS. ROBERT REINHARDT, SR.
8524 OLD FREDERICK ROAD
ELLCOTT CITY, MD. 21043

THIS PLAN IS FOR
FOREST CONSERVATION EASEMENT
PLANTING PURPOSES ONLY

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Linda Stewart 12/15/00
Chief, Division of Land Development Date

APPROVED: DEPARTMENT OF PUBLIC WORKS
Howard St. Hill 12/15/00
Chief, Bureau of Highways Date

PROJECT: **REINHARDT PROPERTY**
LOTS 1 THRU 20
ZONED: R-20
TAX MAP NO. 18 PARCEL NO. 9 GRID NO. 7
2ND ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1" = 100' DATE: OCTOBER 9, 2000

TITLE: **OFF-SITE REFORESTATION PLAN**

AREA: **PLANTING WITHIN NON-BUILDABLE PRESERVATION PARCEL 'B', GATHER HUNT, SECTION ONE, AREA ONE**

TITLE: **REFORESTATION PLANTING PLAN**
DETAILS AND SPECIFICATIONS

WILDMAN
ENVIRONMENTAL SERVICES
4747 BONNIE BRANCH RD.
ELLCOTT CITY, MD. 21043
PHONE: (410) 313-8999
FAX: (410) 313-9099

DESIGNED BY: R.B.W.
PROJECT NO.
DATE: 10/24/2000
SCALE: 1" = 100'
SHEET NO. 11 OF 11

MD. DNR QUALIFIED PROFESSIONAL
Ronald B. Wilman 12/20/00
RONALD B. WILMAN DATE

PLANTING SPECIFICATIONS AND NOTES

SITE PREPARATION AND SOILS

1. PROTECTION FENCING AND SILT FENCES FOR SEDIMENT AND EROSION CONTROL ARE TO BE INSTALLED AS A FIRST ORDER OF BUSINESS. SEE PLAN FOR LOCATIONS.
2. DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT. AS SHOWN ON THE DETAIL VIEW, A PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
3. SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
4. SOIL MIX FOR ERICACEOUS MATERIAL: SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
5. ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PLANT STORAGE AND INSPECTION

1. FOR CONTAINER GROWN NURSERY STOCK PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
2. FOR BALL AND BURLAP NURSERY STOCK PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
3. PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
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1. THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
2. PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE EXISTING ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
3. CARE SHALL BE TAKEN WHEN DIGGING PLANTING FIELDS NOT TO CHOP THRU LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
4. CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENEED FROM THE SOIL. IF THE ROOTS ENIRCLE THE ROOT BALL, SUBSTITUTION IS STRONGLY RECOMMENDED. J-SHAPED OR KINKED ROOT STOCKS SHOULD ALSO BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
5. FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
6. FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FOUR (4), PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
7. AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.
8. NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON, DUE TO THE WELL DRAINED NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.

FERTILIZING

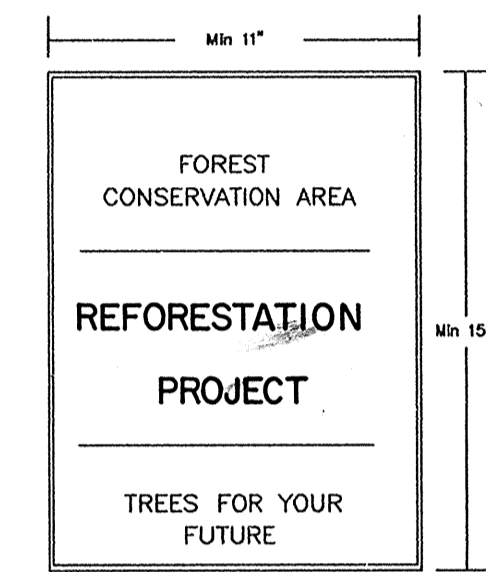
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2. NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
3. IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWEED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.

MAINTENANCE SCHEDULE

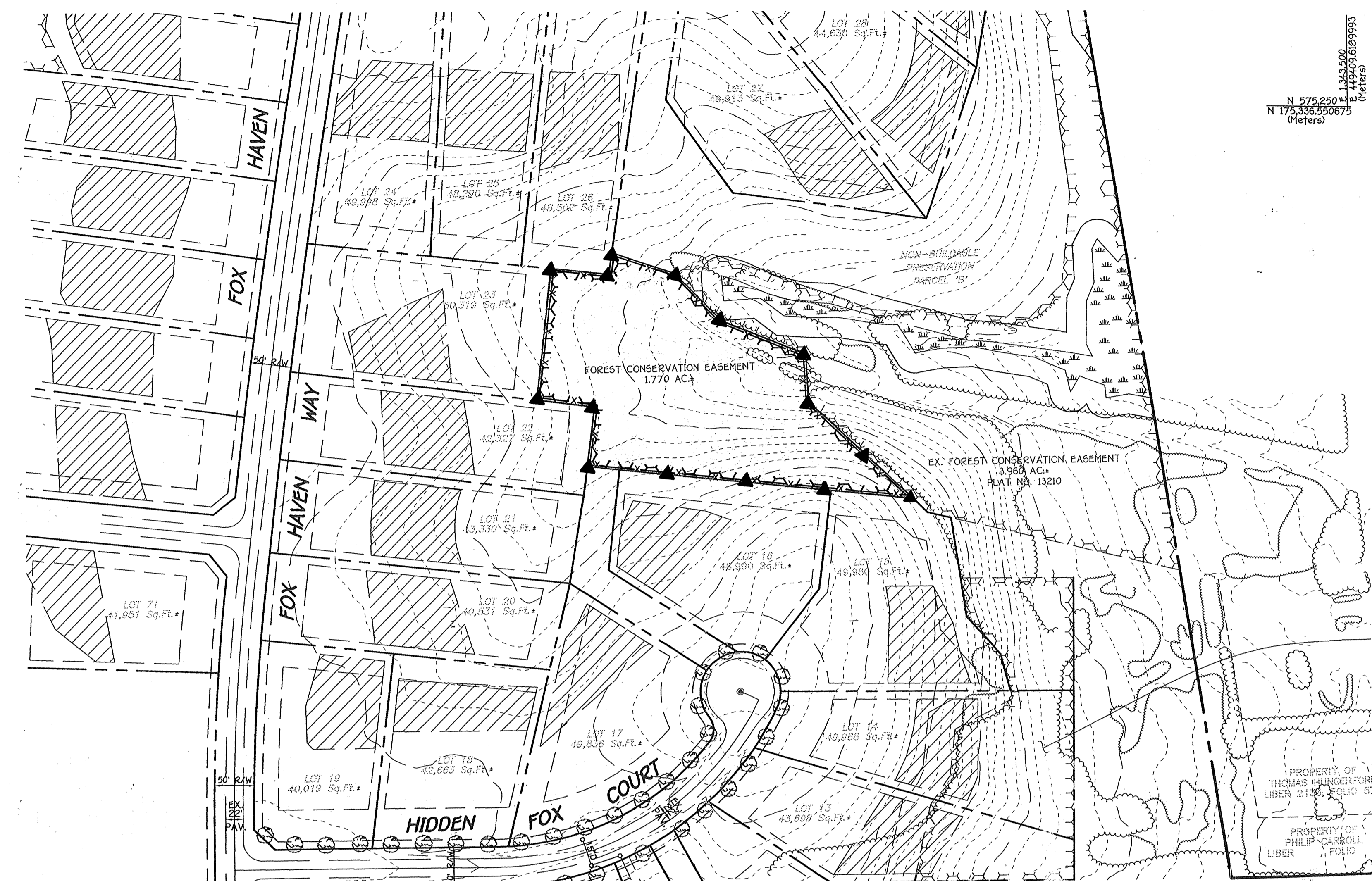
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4. REMOVE THROUGH MANUAL MEANS (GRUBBING, PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED NURSERY STOCK.
5. REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT REMOVE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
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SUPERVISION

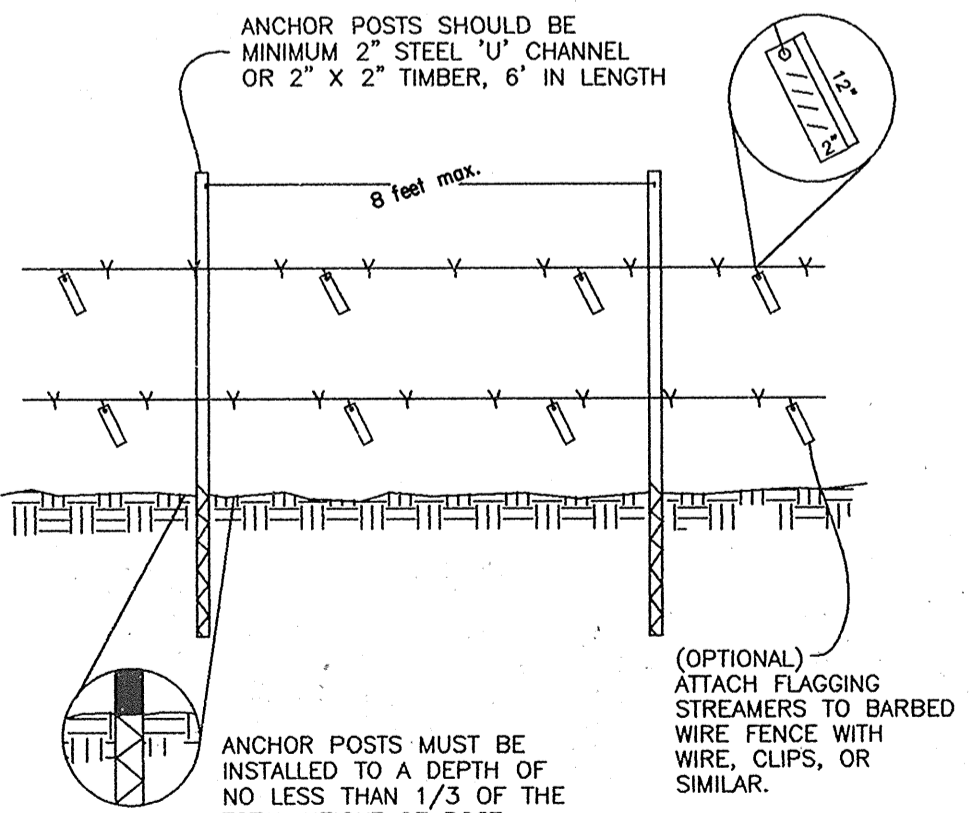
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SIGNAGE DETAIL
NOT TO SCALE



PROTECTIVE FENCE DETAIL
TWO STRAND BARBED WIRE

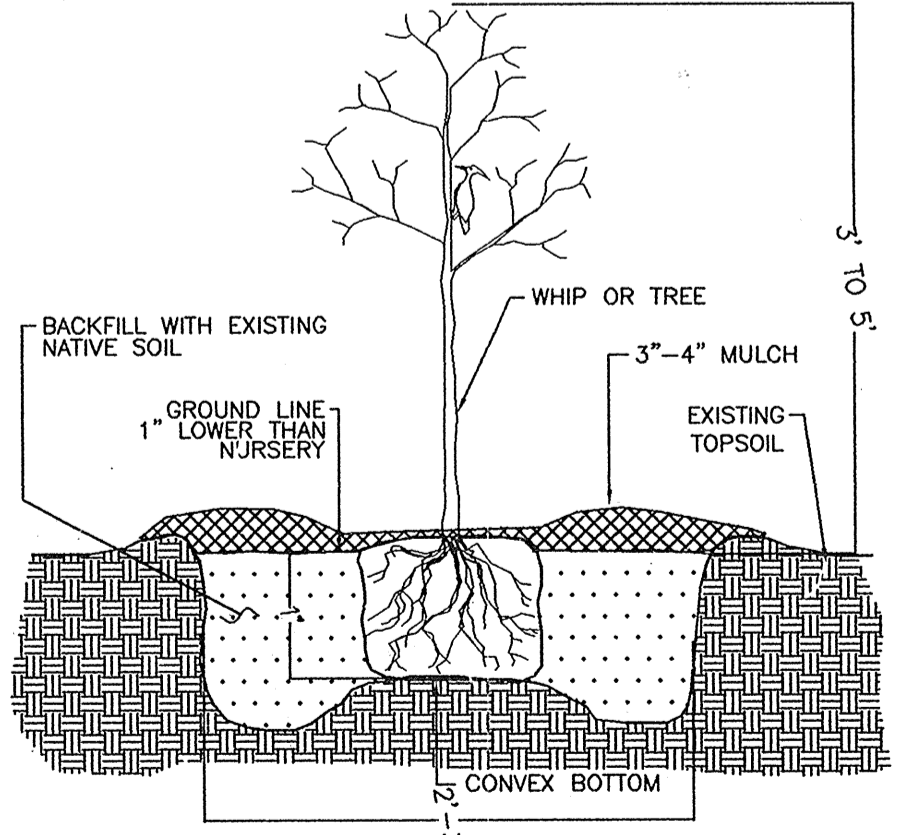


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REFORESTATION PLANT LISTS

QTY.	SPECIES	SHADE TOL.	MOIST. REGIME	WET. STATUS	MIN.O.C.	SIZE & HEIGHT	REMARKS
65	Prunus serotina Wild Black Cherry	I	M	FACU	11'	CONT/BROOT 3'-5' HEIGHT	
65	Robinia pseudoacacia Black Locust	VI	D-M	FACU	11'	CONT/BROOT 3'-5' HEIGHT	
65	Quercus prinus Chestnut Oak	MT	D-M	FACU	11'	CONT/BROOT 3'-5' HEIGHT	
65	Quercus rubra Red Oak	MT	D-M	UPL	11'	CONT/BROOT 3'-5' HEIGHT	
65	Fraxinus americana White Ash	MT	D-M	FACU	11'	CONT/BROOT 3'-5' HEIGHT	
65	Nyssa sylvatica Black Gum	T	M-W	FAC	11'	CONT/BROOT 3'-5' HEIGHT	
65	Juglans nigra Black Walnut	VT	M	FACU	11'	CONT/BROOT 3'-5' HEIGHT	
65	Acer rubrum Red Maple	VT	D-W	FAC	11'	CONT/BROOT 3'-5' HEIGHT	
65	Cercis canadensis Eastern Redbud	T	M	UPL	11'	CONT/BROOT 3'-5' HEIGHT	
65	Diospyros virginiana Persimmon	I	D-M	UPL	11'	CONT/BROOT 3'-5' HEIGHT	

Quantities of individual species and species composition may change depending on availability at time of planting. Total quantity of trees for entire easement area will not change.



TREE PLANTING DETAIL
CONTAINER GROWN

General Notes

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2. Denotes Forest Conservation Easement.
3. Denotes Forest Conservation Sign (see detail, this sheet)
4. Denotes Protective Fence (see detail, this sheet)

DEVELOPER

REINHARDT PROPERTY II, LLC
10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MD. 21042

OWNER

MRS. MRS. ROBERT REINHARDT, SR.
6924 FREDERICK ROAD,
ELLCOTT CITY, MD. 21043

THIS PLAN IS FOR
FOREST CONSERVATION EASEMENT
PLANTING PURPOSES ONLY

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Cinda Hanota 12/15/10
Chief, Division of Land Development Date

APPROVED: DEPARTMENT OF PUBLIC WORKS
Howard Shick 12/16/10
Chief, Bureau of Highways Date

PROJECT:
REINHARDT PROPERTY
LOTS 1 THRU 20
ZONED: R-20
TAX MAP NO. 18 PARCEL NO. 9 GRID NO. 7
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
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AREA:
PLANTING WITHIN NON-BUILDABLE PRESERVATION PARCEL 'B',
GAITHER HUNT, SECTION ONE, AREA ONE

TITLE:
REFORESTATION PLANTING PLAN
DETAILS AND SPECIFICATIONS

WILDMAN
ENVIRONMENTAL SERVICES
4147 BONNIE BRANCH RD.
ELLCOTT CITY, MD. 21043
PHONE: (410) 313-9999
FAX: (410) 313-9999

DESIGNED BY: R.B.W.
DRAWN BY:
PROJECT NO.
DATE: 10/24/2000
SCALE: 1" = 100'
SHEET NO. 11 OF 11