

BUCKS HAVEN MANOR

FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Anna Krumholz 12/9/94
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
John D. Dorman 12/1/94
 CHIEF, LAND DEVELOPMENT DIVISION DATE

Robert M. C. Coker 11-30-94
 CHIEF, BUREAU OF HIGHWAYS DATE

Paul J. Sporn 12/2/94
 CHIEF, BUREAU OF ENGINEERING DATE

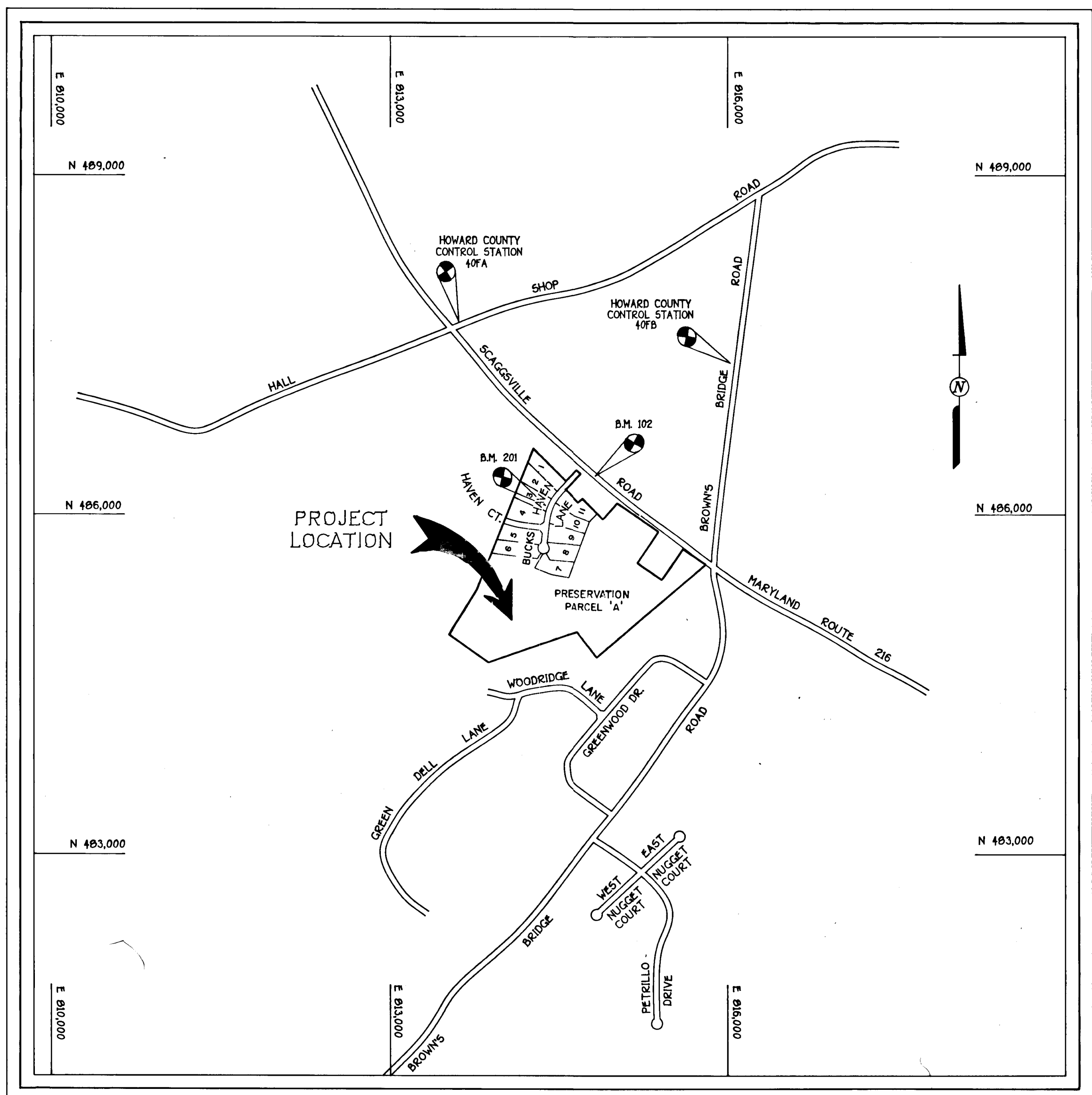
SHEET INDEX

SHEET No.	DESCRIPTION
1	TITLE SHEET
2	BUCKS HAVEN LANE PLAN AND PROFILE HAVEN COURT PLAN
3	HAVEN COURT PLAN AND PROFILE
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6	LANDSCAPE PLAN AND DRAINAGE AREA MAP
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**OPERATION AND MAINTENANCE SCHEDULE
OF HOME OWNERS ASSOCIATION OWNED AND MAINTAINED
STORMWATER MANAGEMENT FACILITIES 1 AND 2
INFILTRATION WATER QUALITY POND**

HOME OWNERS ASSOCIATION'S MAINTENANCE RESPONSIBILITIES:

- 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.
- DEBRIS AND LITTER SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
- WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, SEDIMENT SHOULD BE REMOVED FROM THE POND. APPROVAL OF THE DEPARTMENT OF PUBLIC WORKS IS REQUIRED.



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 CONSTRUCTION INSPECTION DIVISION AT (410) 313-1870 AT LEAST FIFTEEN (15) 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.
 - PROJECT BACKGROUND:
LOCATION: TAX MAP 40, PARCEL 13B
ZONING: "RR-DEO"
ELECTION DISTRICT: FIFTH
TOTAL TRACT AREA: 47.640 Acs
NUMBER OF PROPOSED BUILDABLE LOTS: 11
 - TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
 - FIELD RUN SURVEY PERFORMED ON OR ABOUT JUNE 12, 1993 BY FISHER, COLLINS & CARTER, INC.
 - COORDINATES BASED ON NAD'83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATION No. 40FB AND No. 40FA.
- | | |
|------|-----------------|
| 40FB | N 548,470.3198 |
| | E 1,326,000.807 |
| 40FA | N 548,106.8658 |
| | E 1,328,421.402 |
- PRIVATE WATER AND PRIVATE SEWER SYSTEMS ARE TO BE UTILIZED FOR THIS SITE.
 - ANY DAMAGE TO ANY PUBLIC RIGHTS-OF-WAY, PAVING OR UTILITIES WILL BE CORRECTED AT CONTRACTORS EXPENSE.
 - A FEE-IN-LIEU OF PROVIDING STORM WATER MANAGEMENT FOR THE ROADWAYS WAS APPROVED ON APRIL 12, 1994.
 - SKETCH PLAN FILE REFERENCE 594-12 WAS APPROVED ON DECEMBER 2, 1993.
 - PRELIMINARY PLAN FILE REFERENCE P94-18 WAS APPROVED ON JULY 2, 1994.
 - THIS PROJECT IS SUBJECT TO WPA-84 APPROVED ON MAY 28, 1994 TO WAIVE SECTION 16 (196)(5) TO PERMIT THE CONSTRUCTION OF BUCKS HAVEN LANE WITHOUT THE REQUIRED TRUNCATION AT MARYLAND ROUTE 216, AND TO WAIVE SECTION 16.12(2)(D) TO ALLOW THE EXISTING DRIVEWAY FROM PRESERVATION PARCEL 'A' TO CONTINUE ACCESS ONTO MARYLAND ROUTE 216.
 - FINAL PLAN FILE REFERENCE FOR MINOR SUBDIVISION PLAT F94-17, LOTS 1-4, WAS APPROVED ON OCTOBER 6, 1993 AND APPROVED BY HOWARD COUNTY ON DECEMBER 2, 1993.
 - THE TRAFFIC STUDY WAS PREPARED BY STREET TRAFFIC STUDIES, LTD. ON AUGUST 18, 1993 AND APPROVED BY HOWARD COUNTY ON DECEMBER 2, 1993.
 - THIS PROJECT IS IN CONFORMANCE WITH A.D.A. CRITERIA.

BENCH MARKS

B.M. 102	ELFV. 467.16
P.K. NAIL SET IN EDGE OF PAVING AT MARYLAND ROUTE 216 N 547010.244 E 1327241.933	
B.M. 201	ELFV. 462.07
REBAR AND CAP SET FLUSH WITH GROUND ON LOT 2 N 547000.554 E 1326758.514	

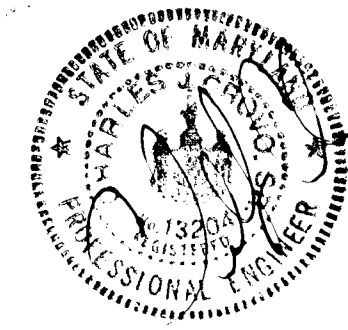
THE HORIZONTAL AND VERTICAL CONTROL IS BASED ON THE FOLLOWING HOWARD COUNTY CONTROL GEODETIC CONTROL STATIONS:

40 FB	N 548,470.3198	E 1,326,000.807
40 FA	N 548,106.8658	E 1,328,421.402

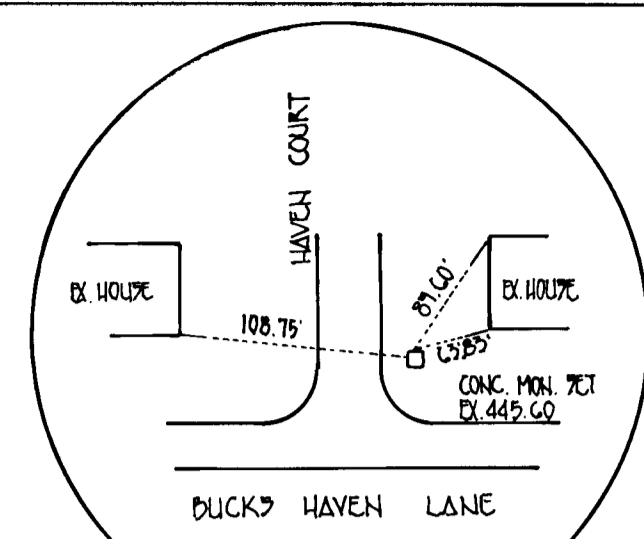
LOTS 1 thru 11 AND PRESERVATION PARCEL 'A'

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 9171 BALTIMORE NATIONAL PIKE, SUITE 100
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2855

OWNER & DEVELOPER
 Mrs. CATHERINE CLEVENGER
 12455 ROUTE 216
 HIGHLAND, MARYLAND 20777



1717



PRESERVATION PARCEL 'A'
PUBLIC STORM WATER QUALITY FACILITY, ACCESS, DRAINAGE AND UTILITY BASEMENT

PUBLIC ACCESS, DRAINAGE AND UTILITY BASEMENT

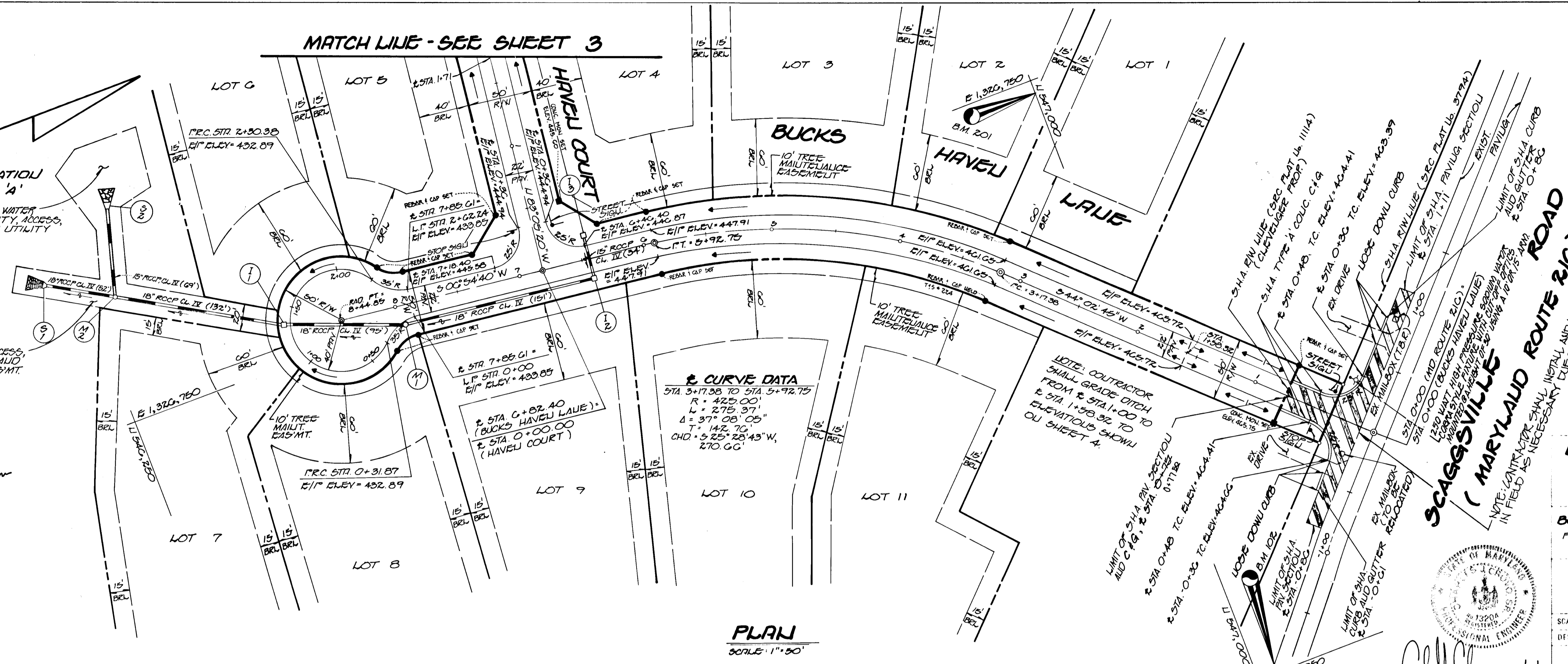
APPROVED
DEPARTMENT OF PUBLIC WORKS

Andrew M. Conkle 12/1/94
CHIEF, LAND DEVELOPMENT DIVISION DATE

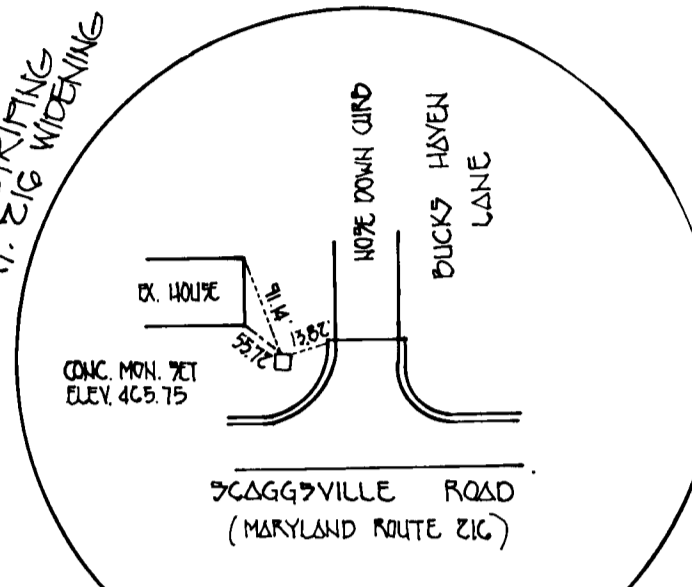
Andrew M. Conkle 11/30/94
CHIEF, BUREAU OF HIGHWAYS DATE

Paul D. Jepsen 12/2/94
DEPARTMENT OF PUBLIC WORKS DATE

Gina Swinmank 12/9/94
ADJ. RESEARCH DATE



DENOTES S.H.A. PAVING SECTION, SEE DETAIL, SHEET 5.



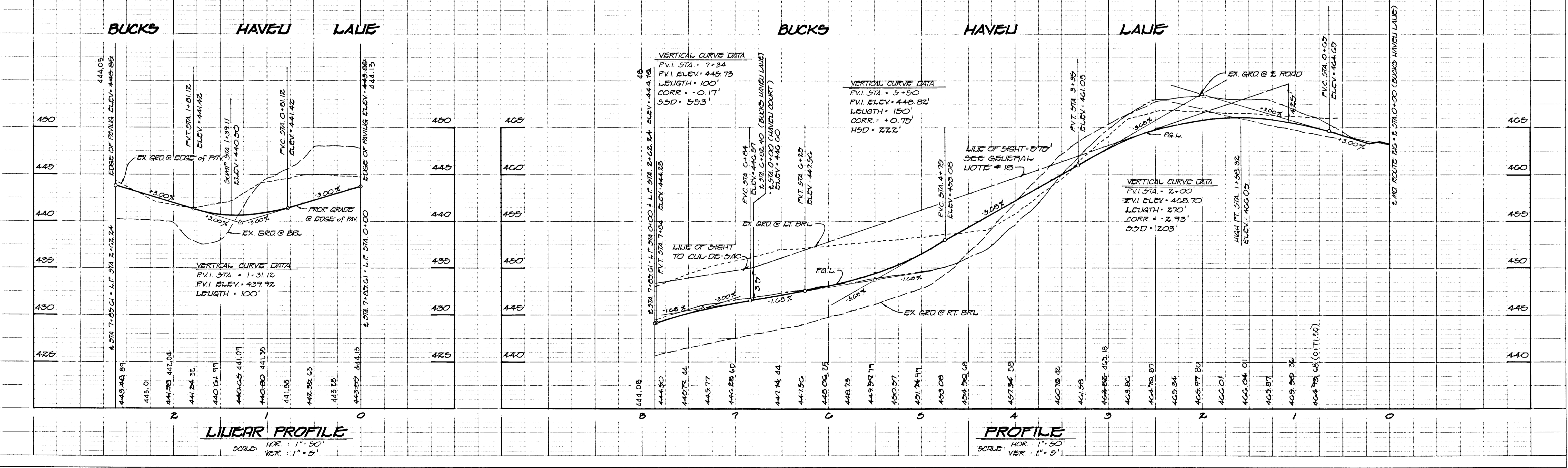
BUCKS HAVEN MAJOR
LOTS 1-11 AND PARCEL "A"
TAX MAP: 40 PARCEL: 106
5th ELECT. DISTRICT HOWARD CO., MD.

BUCKS HAVEN LAUE **HAVEN COURT**
PLAN AND PROFILE

OWNER AND DEVELOPER:
CATHERINE CLEVELAND
12459 ROUTE 210
HIGHLAND, MARYLAND 20777

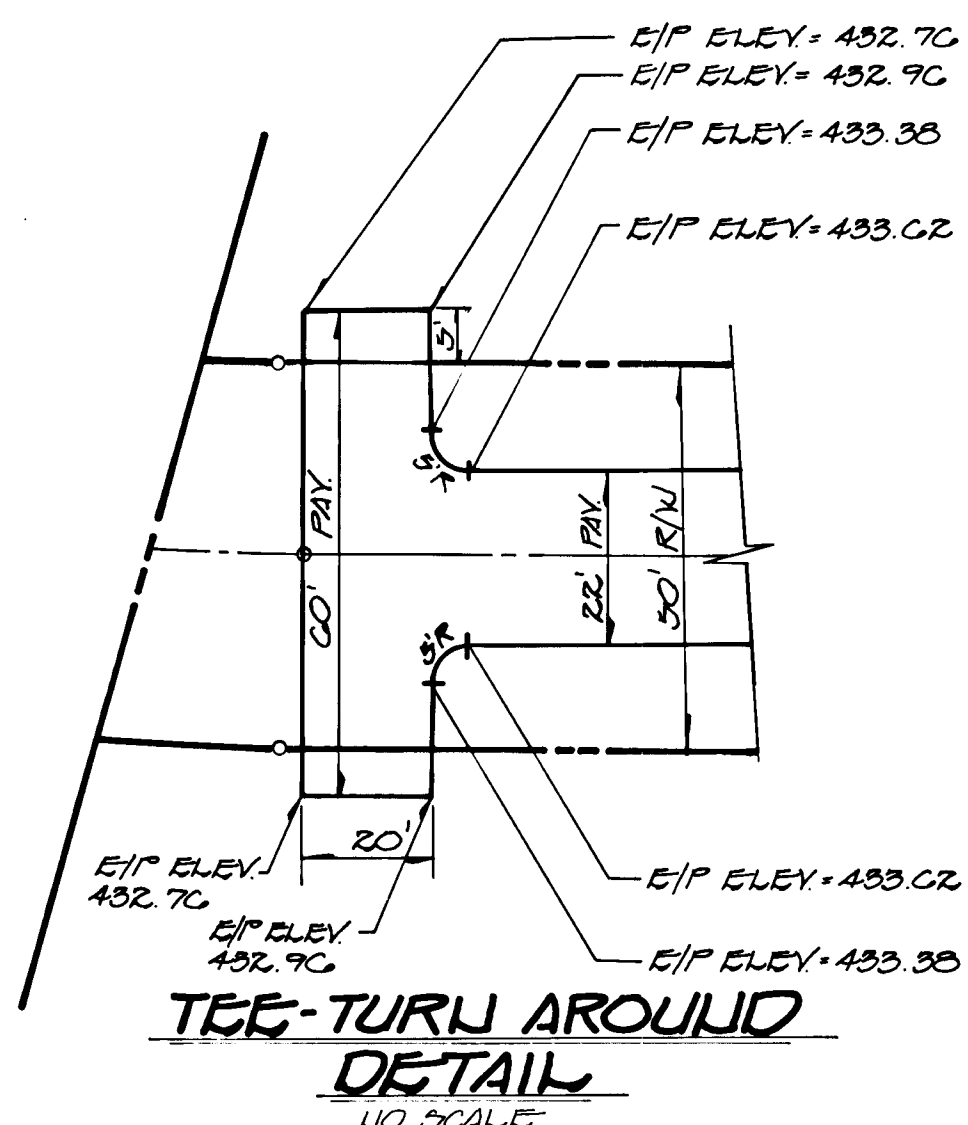
SCALE AS SHOWN DATE: 6-30-94 DWG NO: 2 OF 7
DES: C. CROVO DRN: J. LAMKE CIV: C. CROVO

FISHER, COLLINS AND GARDNER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
CHARLES J. CROVO SR. DATE: 7/12/94



DATE: _____
 BY: _____
 SURVEYED: _____
 GRADES CHECKED: _____
 B.M.'S NOTED: _____
 STRUCTURE NOTATIONS CHKD: _____
 NOTE BOOK NO. _____

DATE: _____
 BY: _____
 SURVEYED: _____
 GRADES CHECKED: _____
 B.M.'S NOTED: _____
 STRUCTURE NOTATIONS CHKD: _____
 NOTE BOOK NO. _____



2 CURVE DATA
 STA. 3+02.43 TO STA. 3+78.89
 R = 325.00'
 L = 10.40'
 Δ = 02° 54' 07"
 CHD = U 04° 32' 25" W, 10.40'
 T = 0.23'

CONSTRUCT TEMP TEE-TURN AROUND, DRWG. R-505 AND TYPE "C" DEAD END BARRIAGE, DRWG. R-712. LENGTH OF BARRIAGE = 27'.

PLAN
 SCALE: 1" = 50'

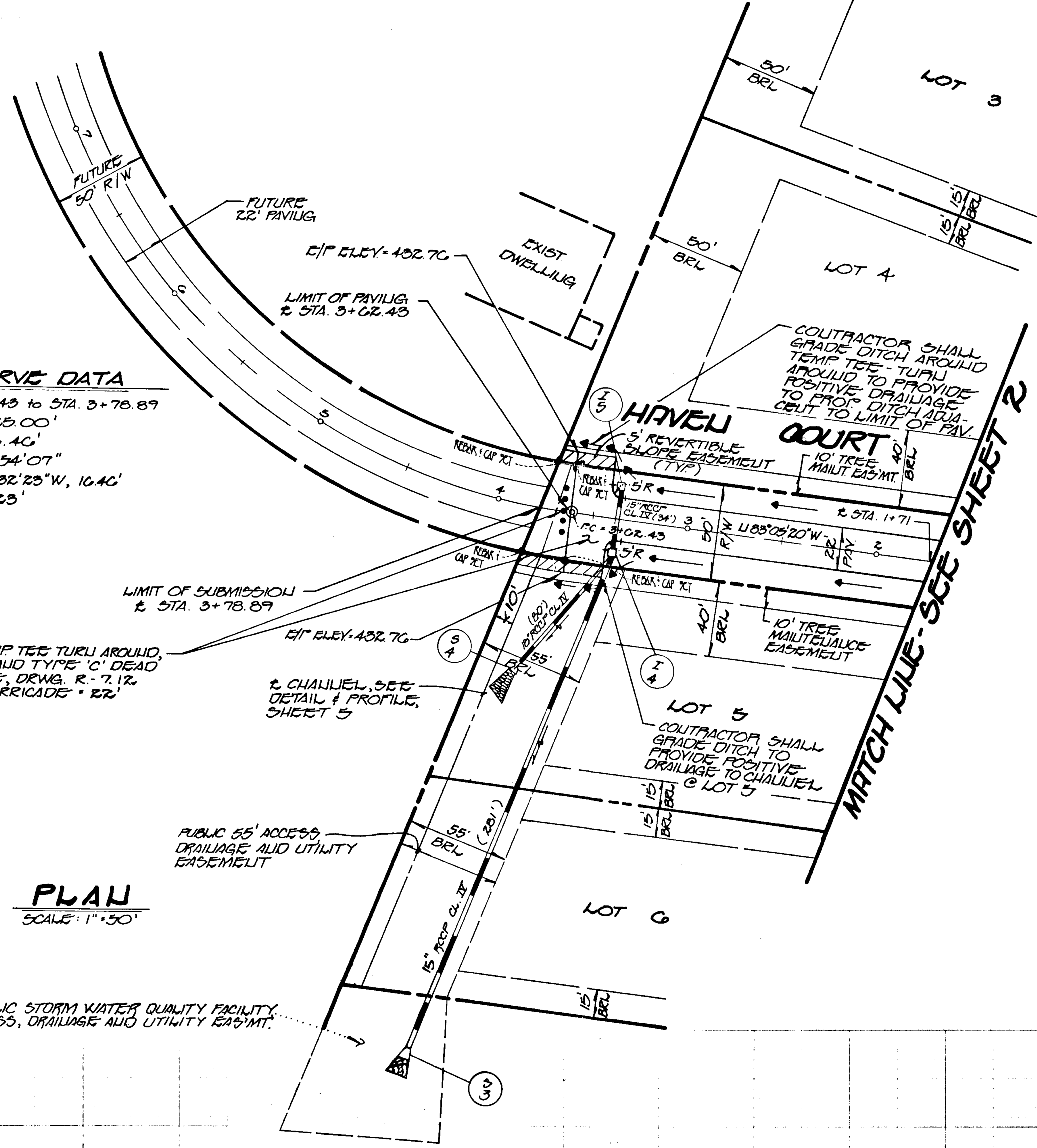
PUBLIC STORM WATER QUALITY FACILITY ACCESS, DRAINAGE AND UTILITY EASMENT.

APPROVED: *[Signature]* 12/1/94
 DEPARTMENT OF PUBLIC WORKS
 COUNTY DIVISION

APPROVED: *[Signature]* 11-30-94
 DEPARTMENT OF PUBLIC WORKS
 COUNTY DIVISION

APPROVED: *[Signature]* 12/2/94
 DEPARTMENT OF PUBLIC WORKS
 COUNTY DIVISION

APPROVED: *[Signature]* 12/9/94
 DEPARTMENT OF PLANNING AND ZONING
 LABO DEVELOPMENT AND RESEARCH



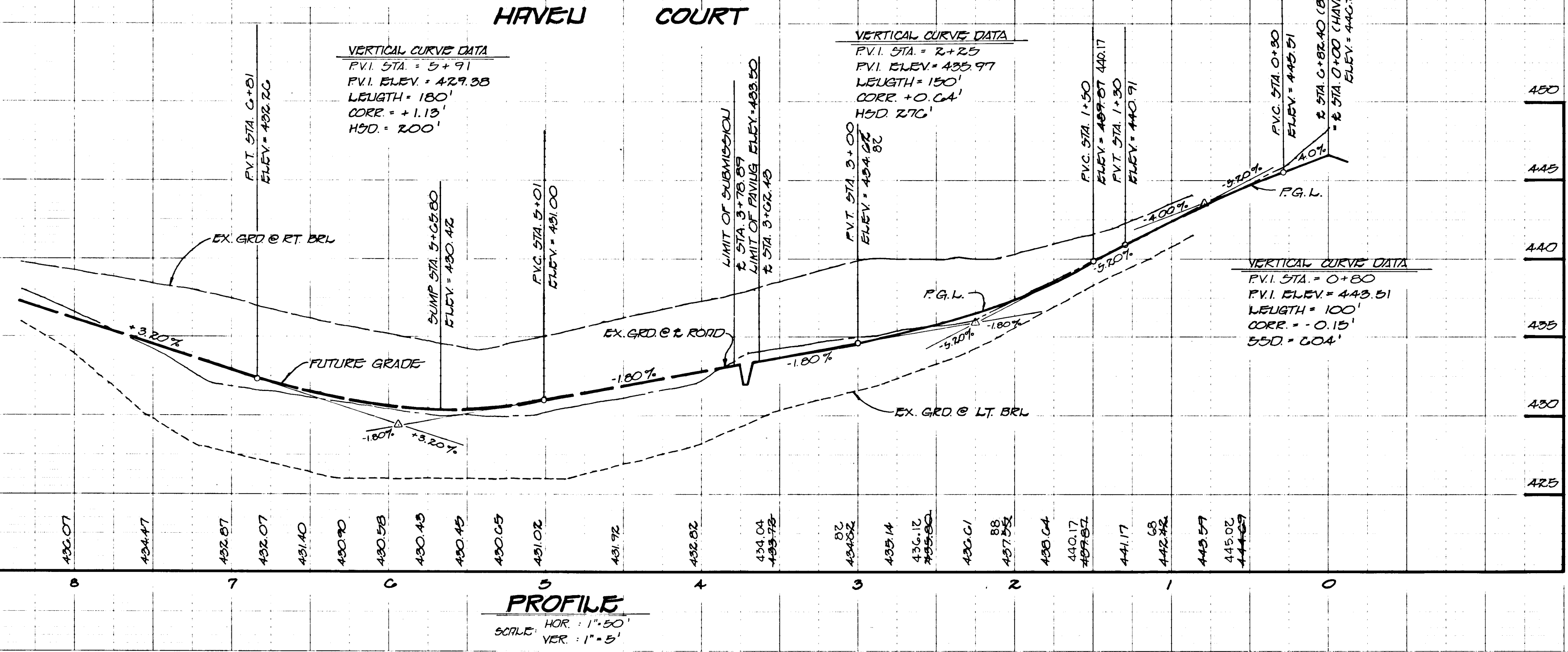
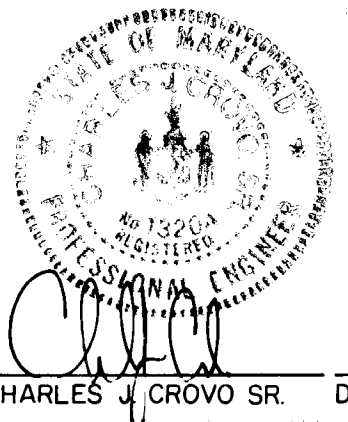
BUCKS HAVELI MAJOR
 LOTS 1-11 AND PARCEL "A"
 TAX MAP: 40 PARCEL: 108
 5th. ELECT. DISTRICT HOWARD CO., MD.

HAVELI COURT
 PLAN AND PROFILE

OWNER AND DEVELOPER:
 CATHERINE CLEVELANDER
 12347 ROUTE 210
 HIGHLAND, MARYLAND 20717

SCALE AS SHOWN DATE: 6-30-94 DWG. NO. 3 OF 7
 DES. C. CROVO DRN. J. WAMKE ENG. C. CROVO

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 9171 BALTO. WAT. PIKE, SUITE 100, BLURDOTT CITY, MD 21042



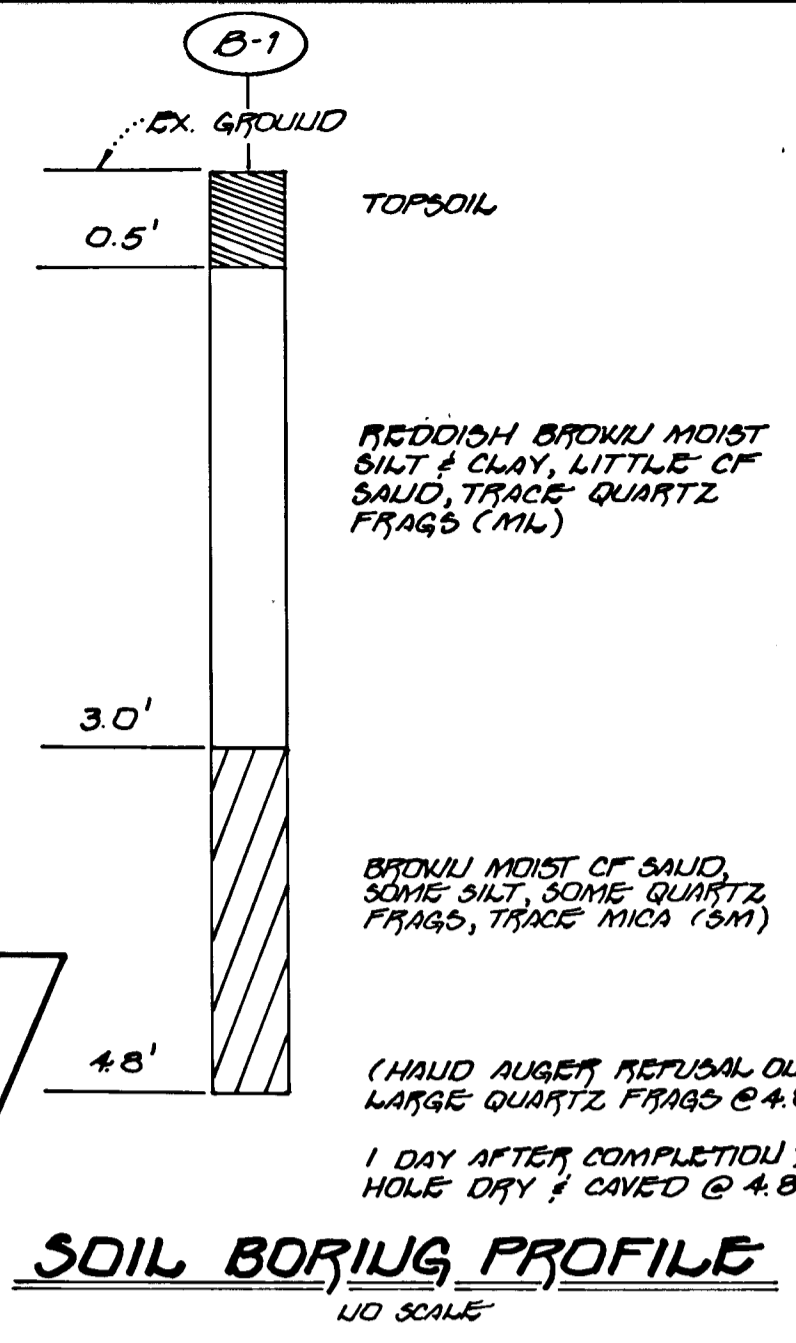
PROFILE
 HOR: 1" = 50'
 VER: 1" = 5'

1717

WATER QUALITY POND No. 2 (CLASS A)
 REQUIRED VOLUME - 327 CF ±
 PROVIDED VOLUME - 836 CF ±
 POND INVERT - 420.00
 WATER CREST ELEV. - 422.75 (9" OF R.I.P. RAMP)
 TOP OF DAM ELEV. - 423.00
 WIDTH - 2.0'
 BOTTOM DIMENSION - 18' x 15'
 WATER CREST WIDTH - 10'
 SIDE SLOPES - 2:1

STONE OUTLET SEDIMENT TRAP
 DRAINAGE AREA - 1.0 AC ±
 STORAGE REQ'D - 1800 cu. ft.
 STORAGE PROVIDED - 2090 cu. ft.
 WEIR CREST ELEV. - 432.00
 BOTTOM ELEV. - 428.50
 DEPTH - 2.50'
 SIDE SLOPES - 2:1
 TOP EMBANKMENT - 433.00
 CLEAN-OUT ELEV. - 429.75
 WEIR LENGTH - 4'

WATER QUALITY POND No. 1 (CLASS A)
 REQUIRED VOLUME - 853 CF ±
 PROVIDED VOLUME - 875 CF ±
 POND INVERT - 431.00
 WATER CREST ELEV. - 433.75 (9" OF R.I.P. RAMP)
 TOP OF DAM ELEV. - 434.00
 WIDTH - 1.0'
 BOTTOM DIMENSION - 33' x 23'
 WATER CREST WIDTH - 10'
 SIDE SLOPES - 2:1



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

DEVELOPER'S CERTIFICATE
 I HAVE CERTIFIED 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 INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR ITS AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

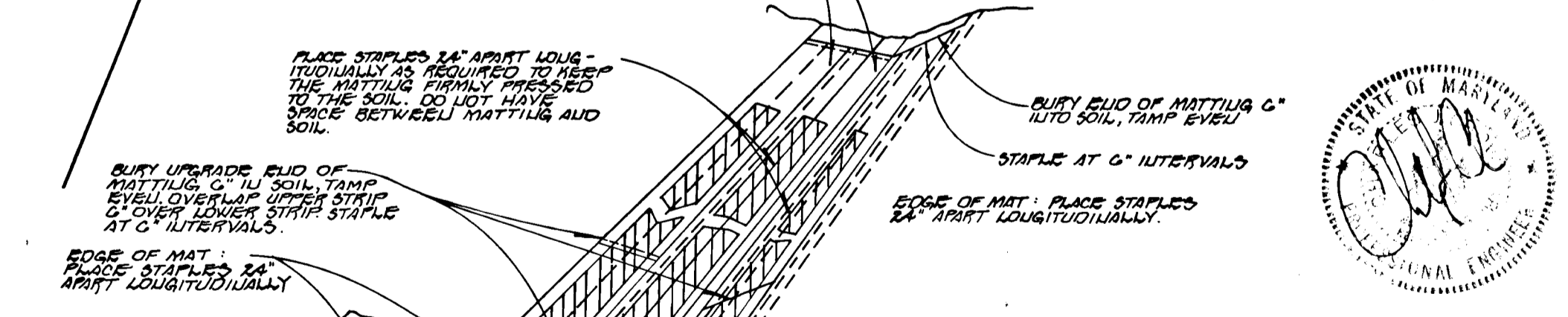
REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS:
 Patricia England, JPM 11/2/94
 U.S. SOIL CONSERVATION DISTRICT

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 Heddy Schomberg, JPM 11/18/94
 APPROVED DEPARTMENT OF PLANNING AND ZONING
 Anna Surmanicko 12/9/94
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH
 APPROVED DEPARTMENT OF PUBLIC WORKS
 John Deppan 12/2/94
 CHIEF, BUREAU OF ENGINEERING
 APPROVED HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Andrew M. Daniels 11-30-99
 CHIEF, BUREAU OF HIGHWAYS

LEGEND

- L.O.D. LIMIT OF DISTURBANCE
- EARTH DIKE
- SILT FENCE
- S.H.A. PAVING SECTION
- STREET TREE SEE DETAIL, SHEET 7
- DOUBLE ROW SILT FENCE

NOTE: MAT WIDTH IS 48" ± 1" SPECIFICALLY FOR SOIL STABILIZATION MATTING. FOR DETAILS OF MAT USE SEE M.S. SPECIFICATIONS. WHEN TOPSOIL IS SPECIFIED IN THE AREA TO BE STABILIZED SOIL STABILIZATION MATTING IS TO BE CONSTRUCTED EXCEPT IN THOSE AREAS WHERE SOIL STABILIZATION MATTING IS NOT REQUIRED PRIOR TO THE INSTALLATION OF THE MATTING.



STREET TREE, GRADING AND SEDIMENT CONTROL PLAN

BUCKS HAVEN MANOR
 FORMERLY 'BUCKS HAVEN' (594-12)
 LOTS 1 - 11 and PRESERVATION PARCEL 'A'
 A RESUBDIVISION OF THE CLEVENGER PROPERTY - LOTS 1-4

F94-17
 ZONED: RR-DEO
 TAX MAP No. 40 PARCEL No. 130
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Scale: 1" = 50'
 DATE: JUNE 30, 1994
 SHEET 4 OF 7

FISHER, COLLINS & CARTER, INC.
 11717
 11717 NATIONAL PKY. SUITE 100
 ELICOTT CITY, MARYLAND 21042
 (410) 281-2255

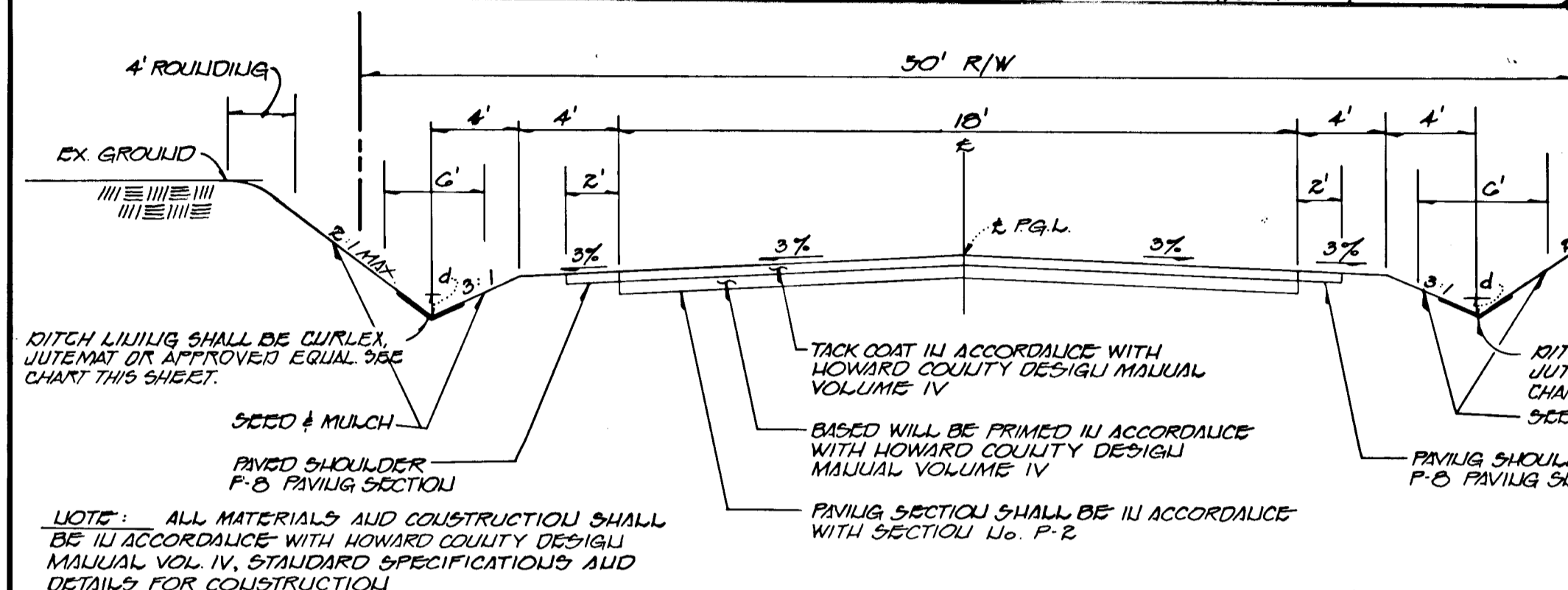
OWNER & DEVELOPER
 MRS. LAURENCE LEEVINGER
 12455 ROUTE 216
 HIGHLAND, MARYLAND 20777

STRUCTURE SCHEDULE

STRUCTURE NO.	TOP ELEV.	I.L.V. I.U.	I.L.V. OUT	ROAD NAME	ROAD STA.	OFFSET FROM E	TYPE	REMARKS
I-1	439.11	435.90	435.74	BUCKS HAVEN LAUE	LP 1+39.11	6' FROM EDGE OF PAVING	K	S.O. 4.13
I-2	445.54	442.01	441.78	BUCKS HAVEN LAUE	2+04.5	17' LEFT	K	S.O. 4.13
I-3	445.54	442.01	441.78	BUCKS HAVEN LAUE	2+04.5	17' RIGHT	K	S.O. 4.13
M-1	442.35	438.06	438.23	BUCKS HAVEN LAUE	2+79.2	10' LEFT	STANDARD MANHOLE	G. 5.01
S-1	435.94	434.02	434.25			1.540, 227.222 1.320, 228.782	STANDARD MANHOLE	S.O. 5.51

* U.L.V. (L.S. THROUGH ELEVATION)
TOP OF GRATE IS 1.25' ABOVE THROAT ELEVATION

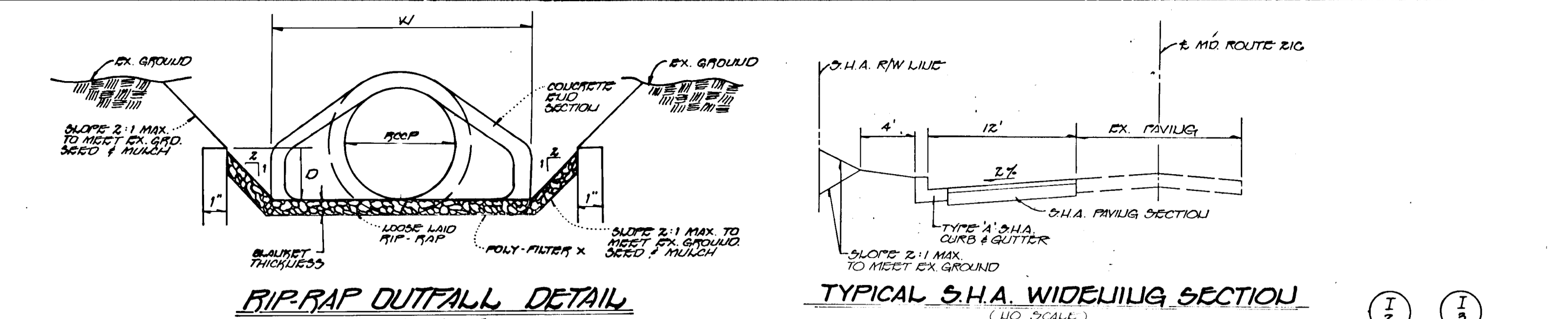
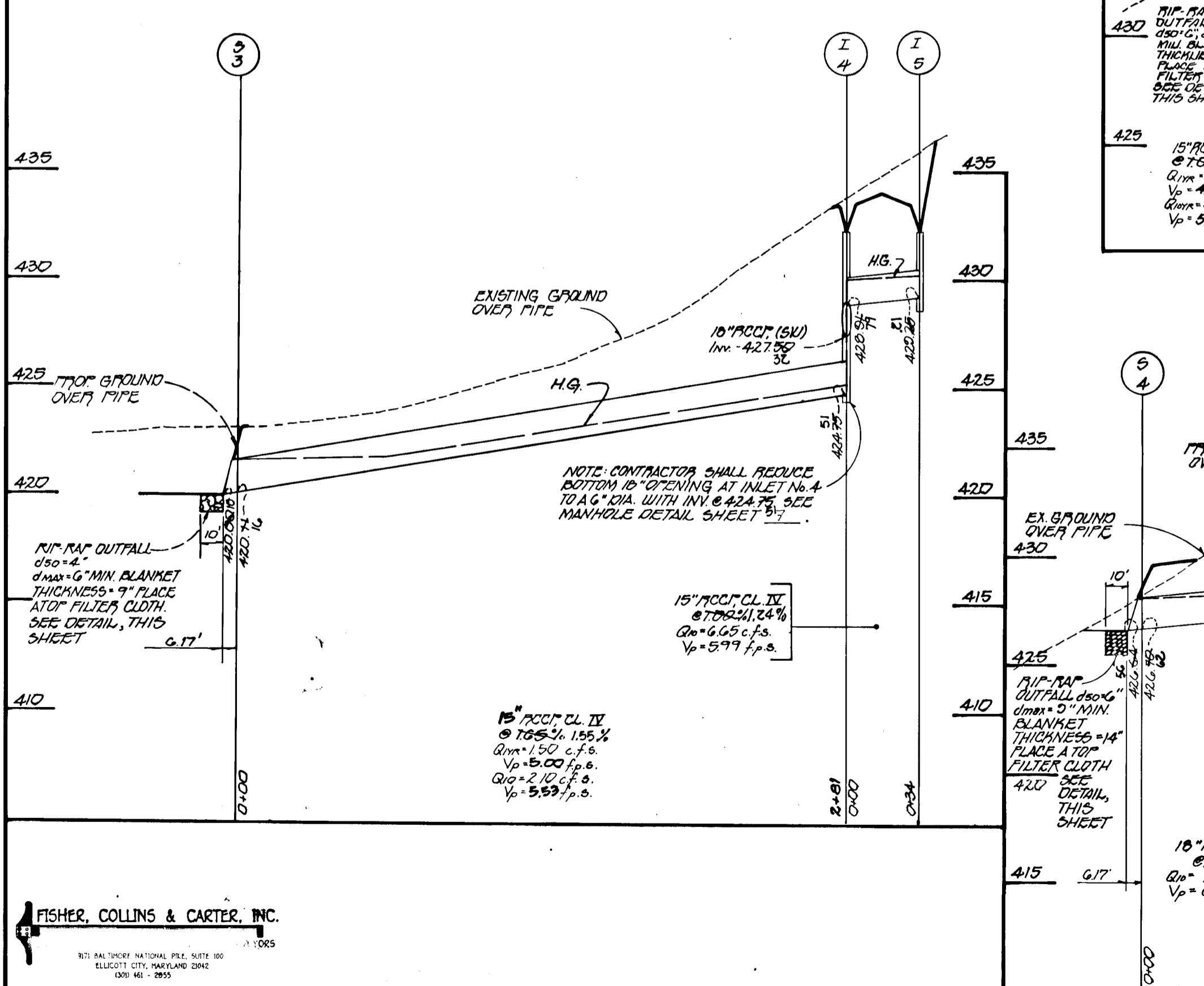
I-4	432.26	420.79	424.76	HAVEN COURT	2+30	17' LEFT	K	S.O. 4.13
I-5	432.26	429.25	429.25	HAVEN COURT	2+30	17' RIGHT	K	S.O. 4.13
M-2	430.00	434.39	438.73			N 540, 271.850 E 1,320, 050.495	STANDARD MANHOLE	G. 5.01
S-2	433.31	432.00	432.00			N 540, 270.552 E 1,320, 054.158	STANDARD MANHOLE	S.O. 5.51
S-3	421.76	420.74	420.09			N 540, 352.487 E 1,320, 311.705	CONV. END SECTION	S.O. 5.51
S-4	428.79	426.78	426.04			N 540, 352.481 E 1,320, 305.360	CONV. END SECTION	S.O. 5.51



ROAD NAME	CLASSIFICATION	DESIGN SPEED	ZONING	STATION LIMITS
BUCKS HAVEN LAUE	CUL-DE-SAC	30 M.P.H.	RR-DEO	STA. 0+00 TO STA. 8+44.85
HAVEN COURT	LOCAL ROAD	30 M.P.H.	RR-DEO	STA. 0+00 TO STA. 3+02.43

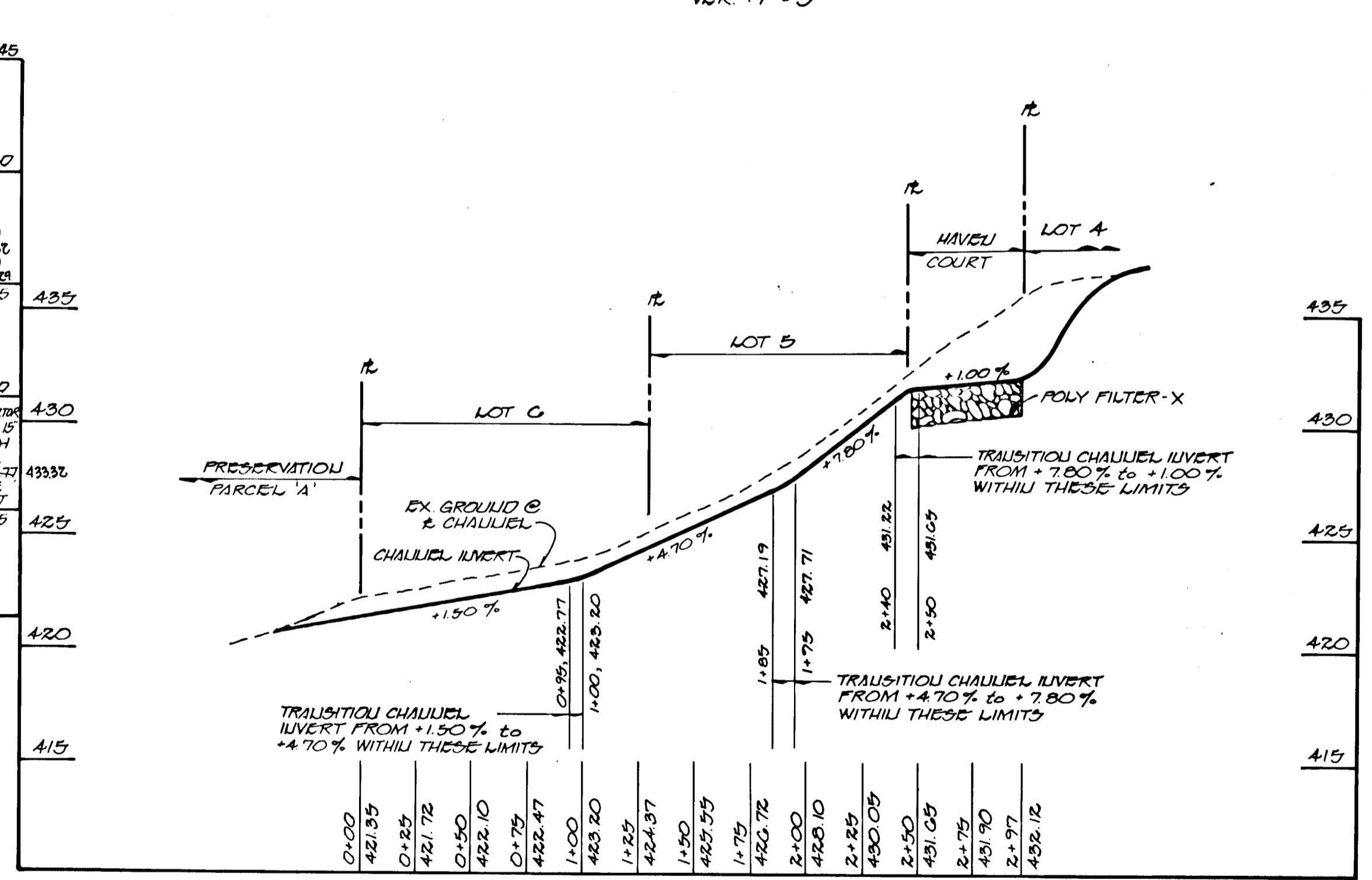
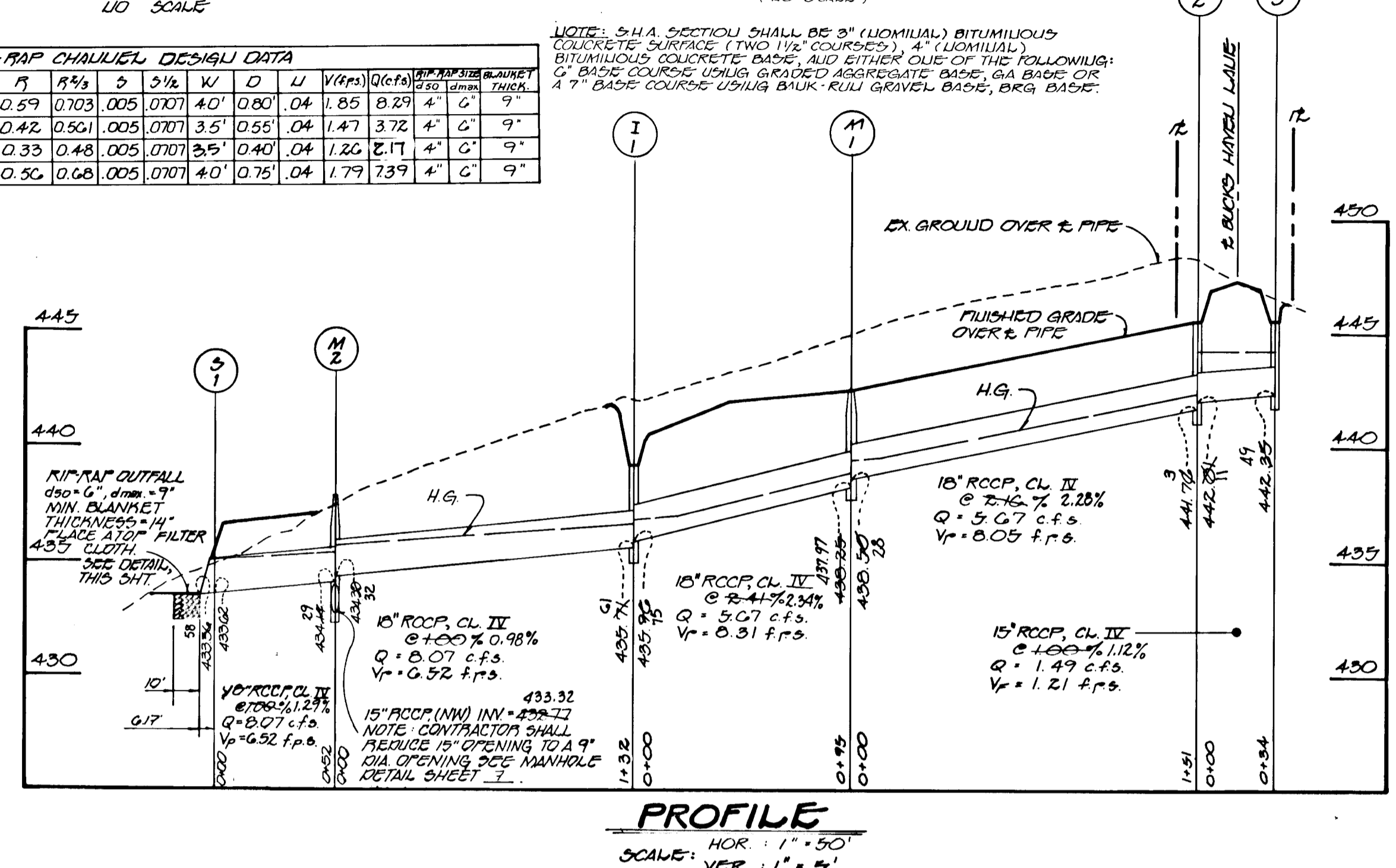
DITCH LINING CHART

ROAD	FROM	TO	LOCATION	d
BUCKS HAVEN LAUE	2+25	6+00	RIGHT OF E	0.50'
BUCKS HAVEN LAUE	2+00	6+40	LEFT OF E	0.90'
BUCKS HAVEN LAUE	6+45	7+85 G1	LEFT OF E	0.65'
BUCKS HAVEN LAUE	0+00 L.P.	2+02.24 L.P.	CUL-DE-SAC	0.65'
BUCKS HAVEN LAUE	7+12	7+85 G1	RIGHT OF E	0.65'
HAVEN COURT	0+20	2+75	LEFT OF E	0.45'
HAVEN COURT	0+20	3+36	RIGHT OF E	1.05'



RIP-RAP CHANNEL DESIGN DATA

STRUCTURE	AREA	PERIMETER	R	R ^{2/3}	S	S ^{3/2}	Q	V	D	U	V(U)	(U/V)	(U/V) ²	BLANKET THICK.
S-1	4.48	7.58	0.59	0.703	0.005	0.007	4.0'	0.80'	0.4	1.85	0.29	4'	9"	
S-2	2.53	5.90	0.42	0.501	0.005	0.007	3.5'	0.58'	0.4	1.47	0.32	4'	9"	
S-3	1.72	5.27	0.33	0.48	0.005	0.007	3.5'	0.40'	0.4	1.20	0.17	4'	9"	
S-4	4.13	7.35	0.50	0.68	0.005	0.007	4.0'	0.75'	0.4	1.79	0.39	4'	9"	



CHANNEL DESIGN DATA

STATION	A	P	R	R ^{2/3}	S	S ^{3/2}	Q	V	D	U	V(U)	(U/V)	(U/V) ²	BLANKET THICK.
0+00 to 0+95	2.01'	4.76'	0.4205	0.5013	1.50%	0.1225	0.03	0.02'	0.85 c.f.s.	0.41	0.29	4'	9"	
1+00 to 1+85	1.31'	4.02'	0.3859	0.4730	4.70%	0.2108	0.03	0.45'	0.77 c.f.s.	0.79	0.32	4'	9"	
1+95 to 2+40	1.12'	3.10'	0.2903	0.4444	7.80%	0.2792	0.03	0.40'	0.87 c.f.s.	0.19	0.39	4'	9"	
2+50 to 2+97	2.83'	5.94'	0.5108	0.6390	1.00%	0.1000	0.04	0.79'	0.71 c.f.s.	0.37	0.29	4'	9"	

ENGINEER'S CERTIFICATE

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

SIGNATURE OF ENGINEER: *[Signature]* DATE: 7/12/94

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/WE 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: 6/29/94

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

SIGNATURE OF REVIEWER: *[Signature]* DATE: 11/15/94

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

SIGNATURE OF APPROVED: *[Signature]* DATE: 11/15/94

APPROVED DEPARTMENT OF PLANNING AND ZONING

SIGNATURE: *[Signature]* DATE: 12/9/94

APPROVED DEPARTMENT OF PUBLIC WORKS

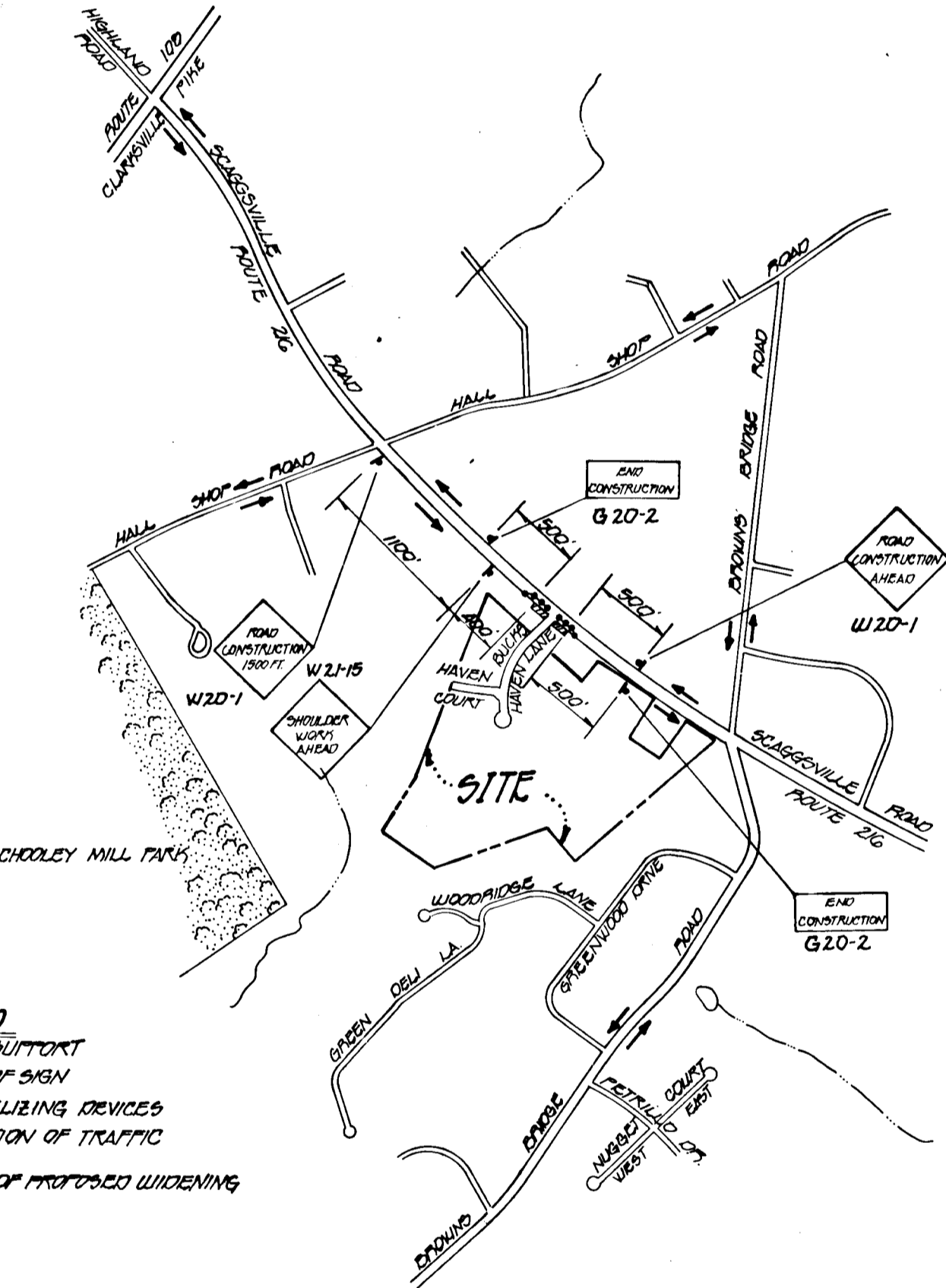
SIGNATURE: *[Signature]* DATE: 12/2/94

APPROVED DEPARTMENT OF PUBLIC WORKS

SIGNATURE: *[Signature]* DATE: 12/1/94

APPROVED DEPARTMENT OF PUBLIC WORKS

SIGNATURE: *[Signature]* DATE: 11-30-94



TRAFFIC CONTROL PLAN FOR WIDENING OF MARYLAND ROUTE 216
SCALE: 1"=100'

ROAD SECTIONS, DETAILS AND STORM DRAIN PROFILES

BUCKS HAVEN MANOR

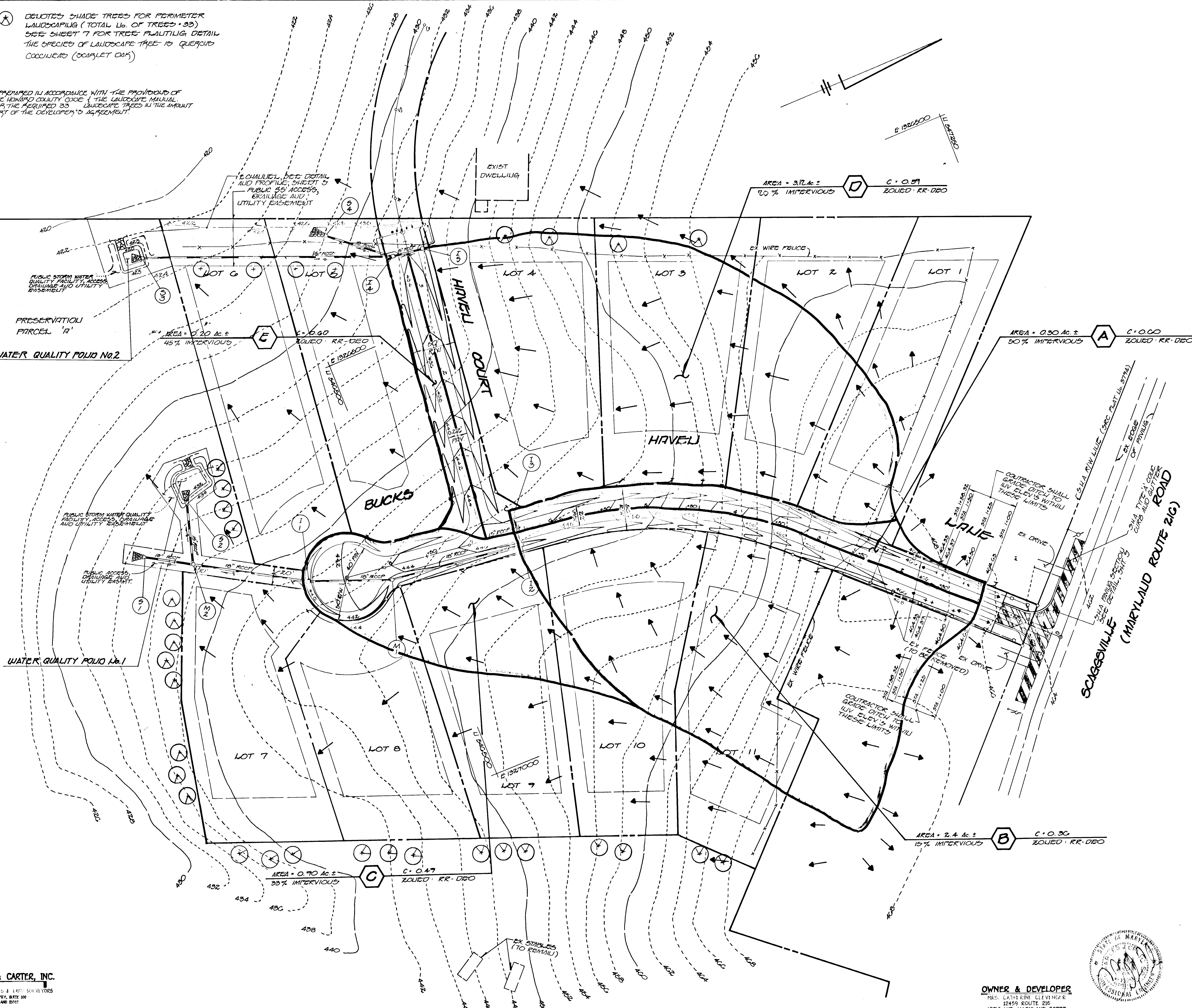
FORMERLY 'BUCKS HAVEN' (594-12)
LOTS I-II AND PRESERVATION PARCEL 'A'
A RESUBDIVISION OF THE CLEVENGER PROPERTY - LOTS I-4

F94-17
ZONED: RR-DEO
TAX MAP No. 40 PARCEL No. 138
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

Scale AS SHOWN
DATE: JUNE 30, 1994
SHEET 5 OF 7

NOTE: (A) DENOTES SHADE TREES FOR PERIMETER LANDSCAPING (TOTAL LB. OF TREES = 33) SEE SHEET 7 FOR TREE PLANTING DETAIL THE SPECIES OF LANDSCAPE TREE IS QUERCUS COCCINEA (COBBLER OAK)

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 15.12.4 OF THE HOWARD COUNTY CODE (THE LANDSCAPE MANUAL FINANCIAL SURETY FOR THE REQUIRED 33 LANDSCAPE TREES IN THE AMOUNT OF \$3,300.00 IS PART OF THE DEVELOPER'S AGREEMENT.)



ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 SIGNATURE OF ENGINEER: *[Signature]* DATE: 7/12/94

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 DEEMED NECESSARY.
 SIGNATURE OF DEVELOPER: *[Signature]* DATE: 6/23/94

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 PATRICIA EGGLESTON *[Signature]* 11/18/94
 U.S. SOIL CONSERVATION DISTRICT

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED: ARTHUR SCHMIDT *[Signature]* 11/18/94
 DISTRICT HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 OLGA STRANIMANN *[Signature]* 12/19/94
 CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: DEPARTMENT OF PUBLIC WORKS
 KENNETH J. GONN *[Signature]* 12/2/94
 CHIEF, BUREAU OF ENGINEERING

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 M. J. DUNN *[Signature]* 12/1/94
 CHIEF, LAND ACQUISITION DIVISION

APPROVED: BUREAU OF HIGHWAYS
 ANDREW M. DANFLO *[Signature]* 11-30-94
 CHIEF, BUREAU OF HIGHWAYS

LANDSCAPE PLAN AND DRAINAGE AREA MAP
BUCKS HAVEN MANOR
 FORMERLY 'BUCKS HAVEN' (594-12)
 LOTS 1-11 and PRESERVATION PARCEL 'A'
 A RESUBDIVISION OF THE CLEVENGER PROPERTY - LOTS 1-4

F94-17
 ZONED: RR-DEO
 TAX MAP No. 40 PARCEL No. 138
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

OWNER & DEVELOPER
 MRS. CATHY KINE CLEVENGER
 12459 ROUTE 216
 HIGHLAND, MARYLAND 20777

Scale: 1" = 50'
 DATE: JUNE 30, 1994
 SHEET 6 OF 7

FISHER, COLLINS & CARTER, INC.
 LAND DESIGN, ENGINEERING, PLANNING & LAND SURVEYORS
 871 BALTIMORE NATIONAL PKY., SUITE 100
 ELK LANE CITY, HAVRELAND, MD 21753
 410-386-2555



1717

F 95-04

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Gina Sammons 12/19/94
 CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH

APPROVED: DEPARTMENT OF PUBLIC WORKS
Robert S. Brown 12/13/94
 CHIEF, BUREAU OF ENGINEERING

APPROVED: DEPARTMENT OF PUBLIC WORKS
Chris Demaris 12/1/94
 CHIEF, LAND DISTRICT DIVISION

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.

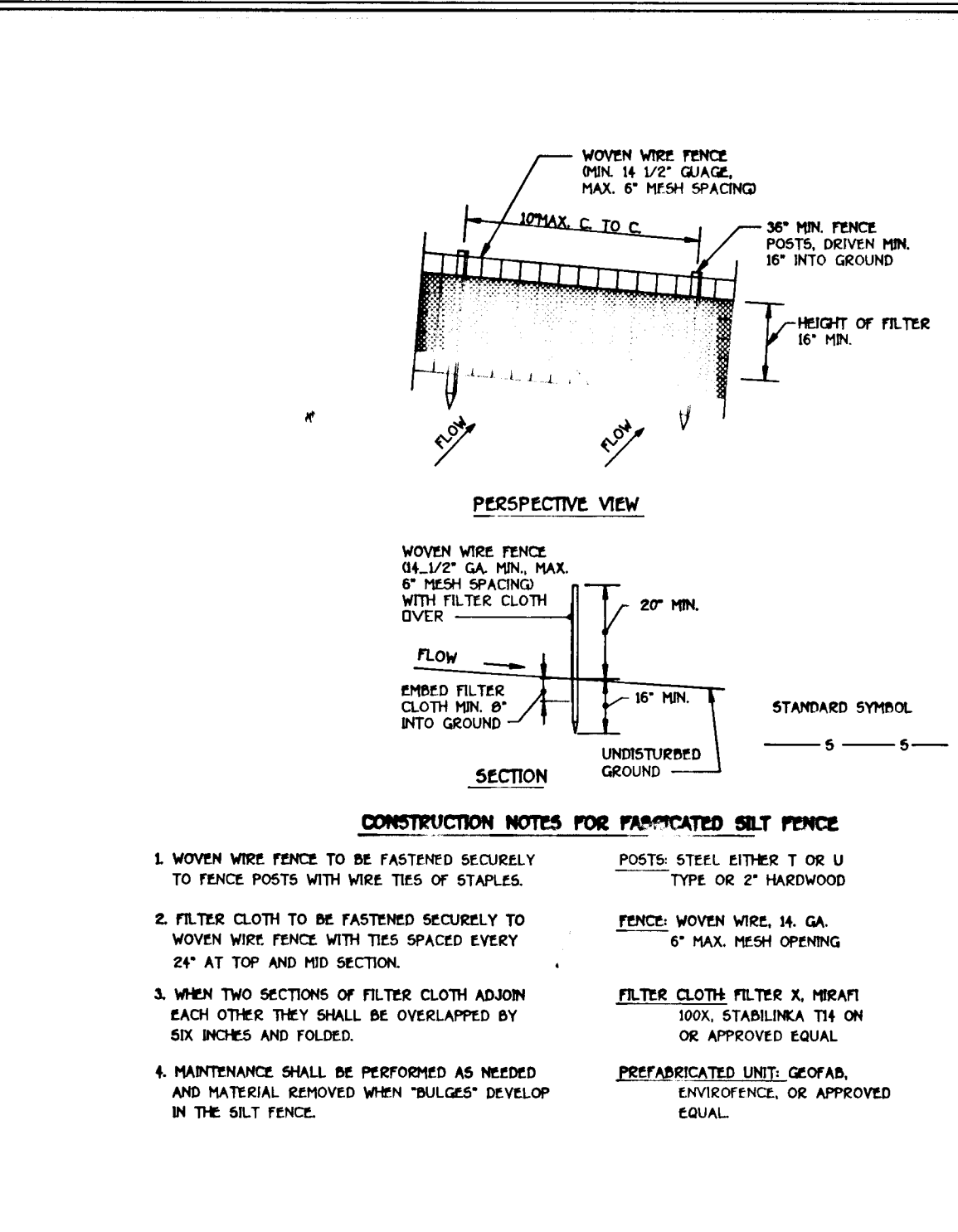
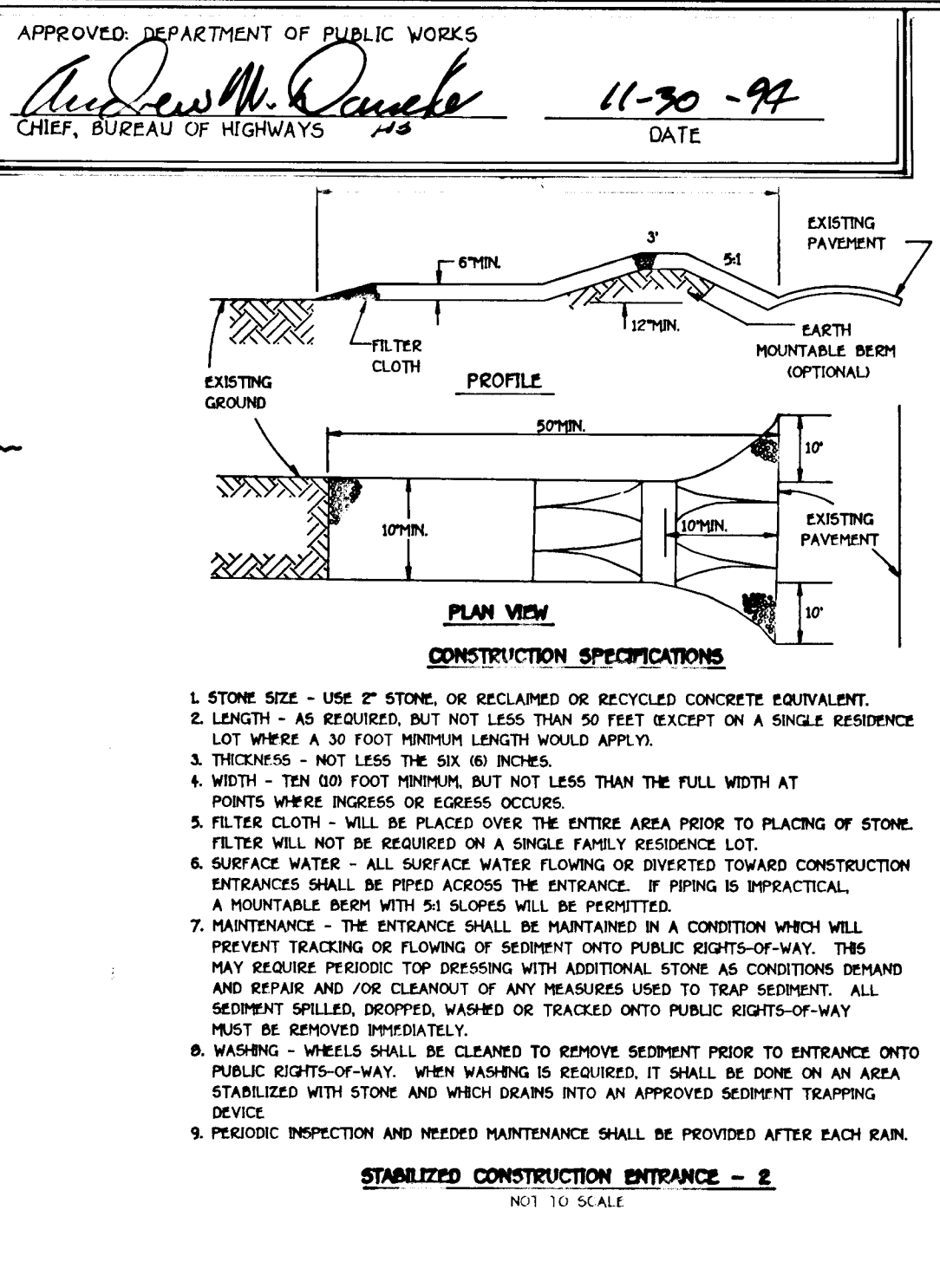
Wm. J. Schmitt 7/2/94
 SIGNATURE OF ENGINEER

I HEREBY 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.

Robert S. Brown 12/13/94
 SIGNATURE OF DEVELOPER

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Patricia Englund 11/18/94
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Heather Schmitt 11/18/94
 DISTRICT SOIL CONSERVATION



SEEDING CONTROL NOTES

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (992-2437).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL GREATER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS (SEC. 50) AND TEMPORARY SEEDINGS (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	47.64	ACRES
AREA DISTURBED	2.00	ACRES
AREA TO BE ROOFED OR PAVED	0.77	ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.23	ACRES
TOTAL CUT	6,500	CYDYS.
TOTAL FILL	6,500	CYDYS.
- OFFSITE WASTE/BORROW AREA LOCATION: N/A
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

PERMANENT SEEDING NOTES

ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:

SEEDING PREPARATION

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

SOIL AMENDMENTS

APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1,000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER (14 LBS./1,000 SQ.FT.) BEFORE SEEDING HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS. PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS./1,000 SQ.FT.) AND 500 LBS. PER ACRE (11.5 LBS./1,000 SQ.FT.) OF 10-20-20 FERTILIZER.

SEEDING

FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 12, SEED WITH 100 LBS. PER ACRE (2.3 LBS./1,000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE, FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS./ACRE (1.4 LBS./1,000 SQ.FT.) KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1,000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28, PROJECT SITE BY: OPTION (1) TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING; OPTION (2) - USE 500; OPTION (3) - SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDING.

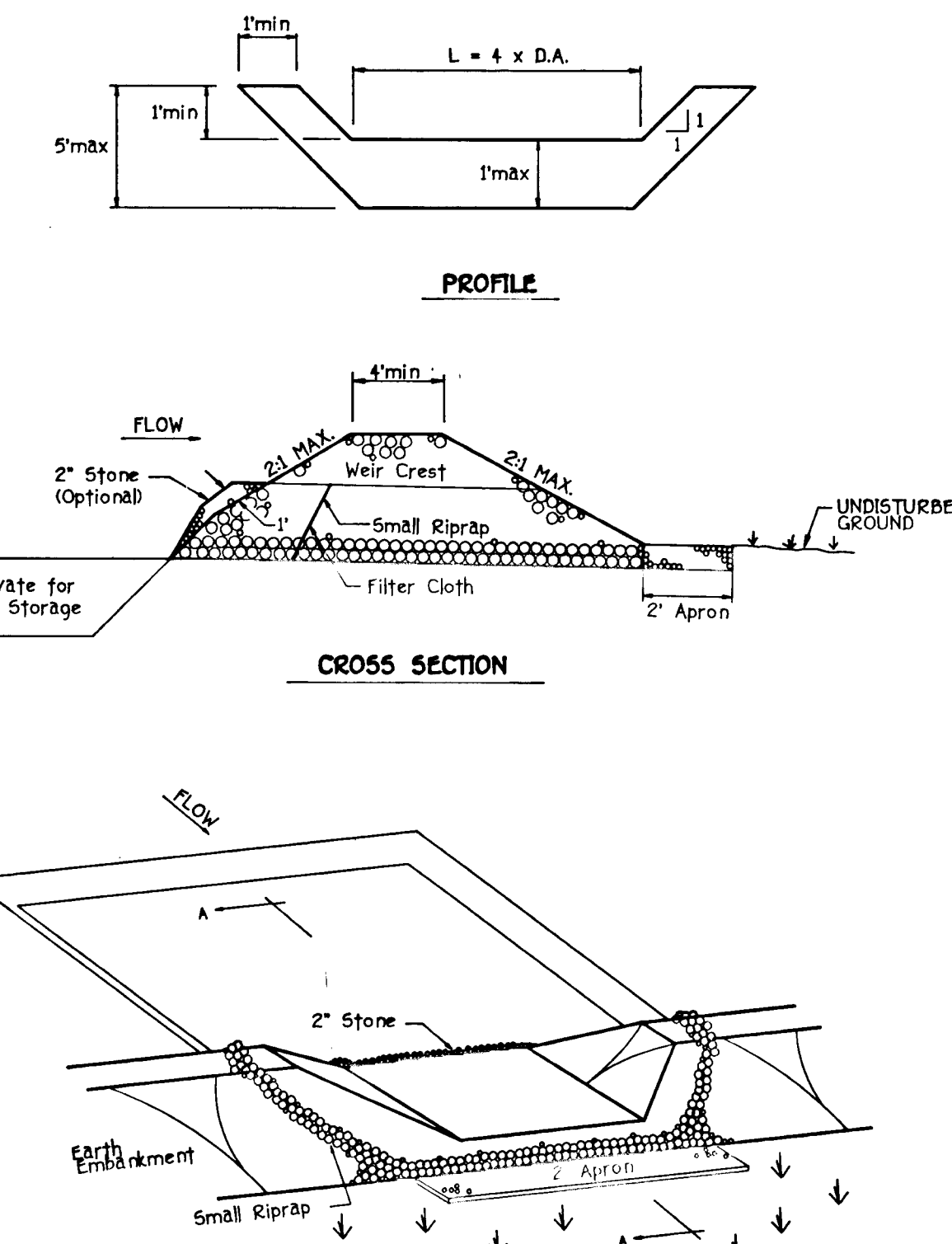
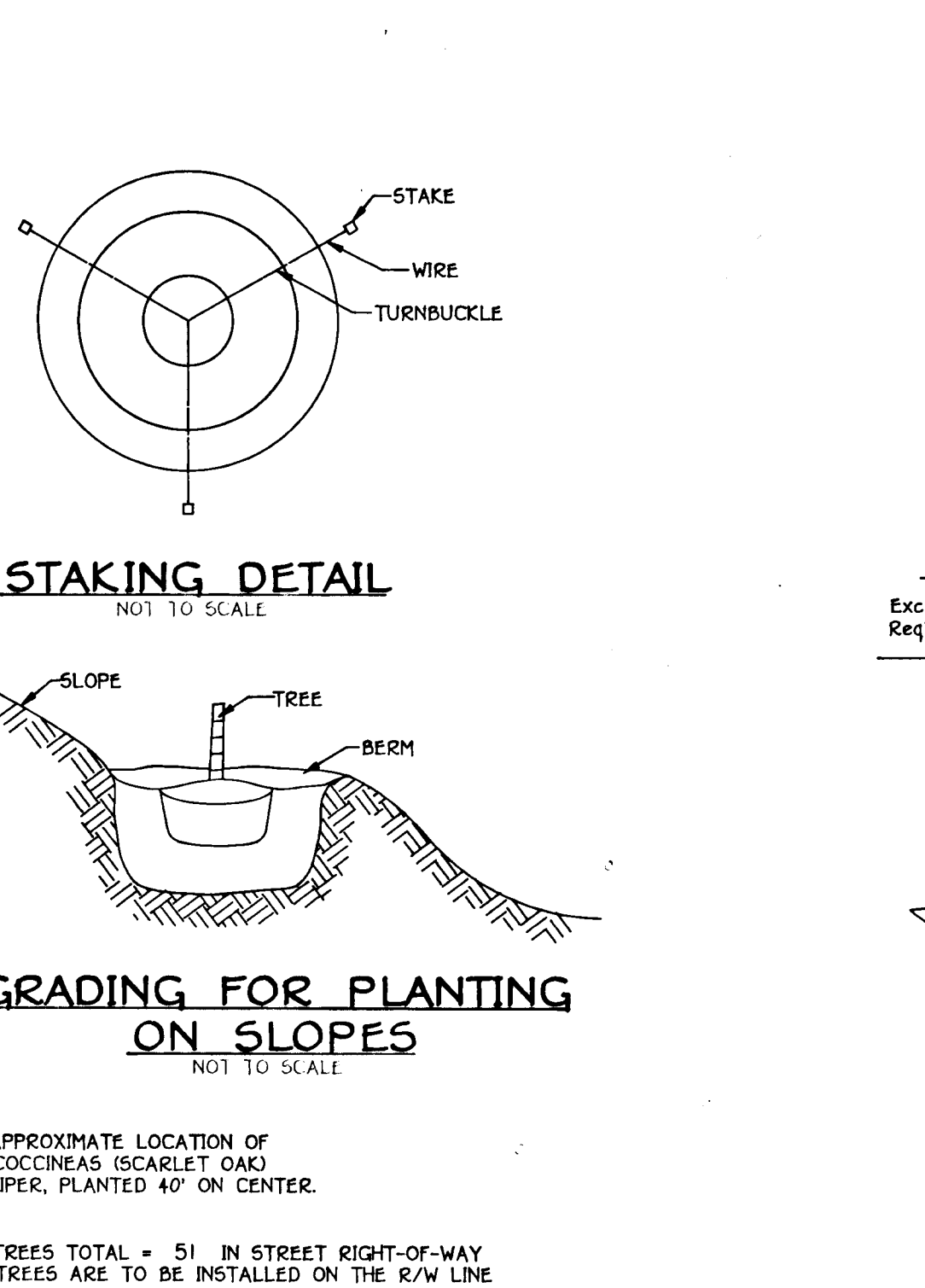
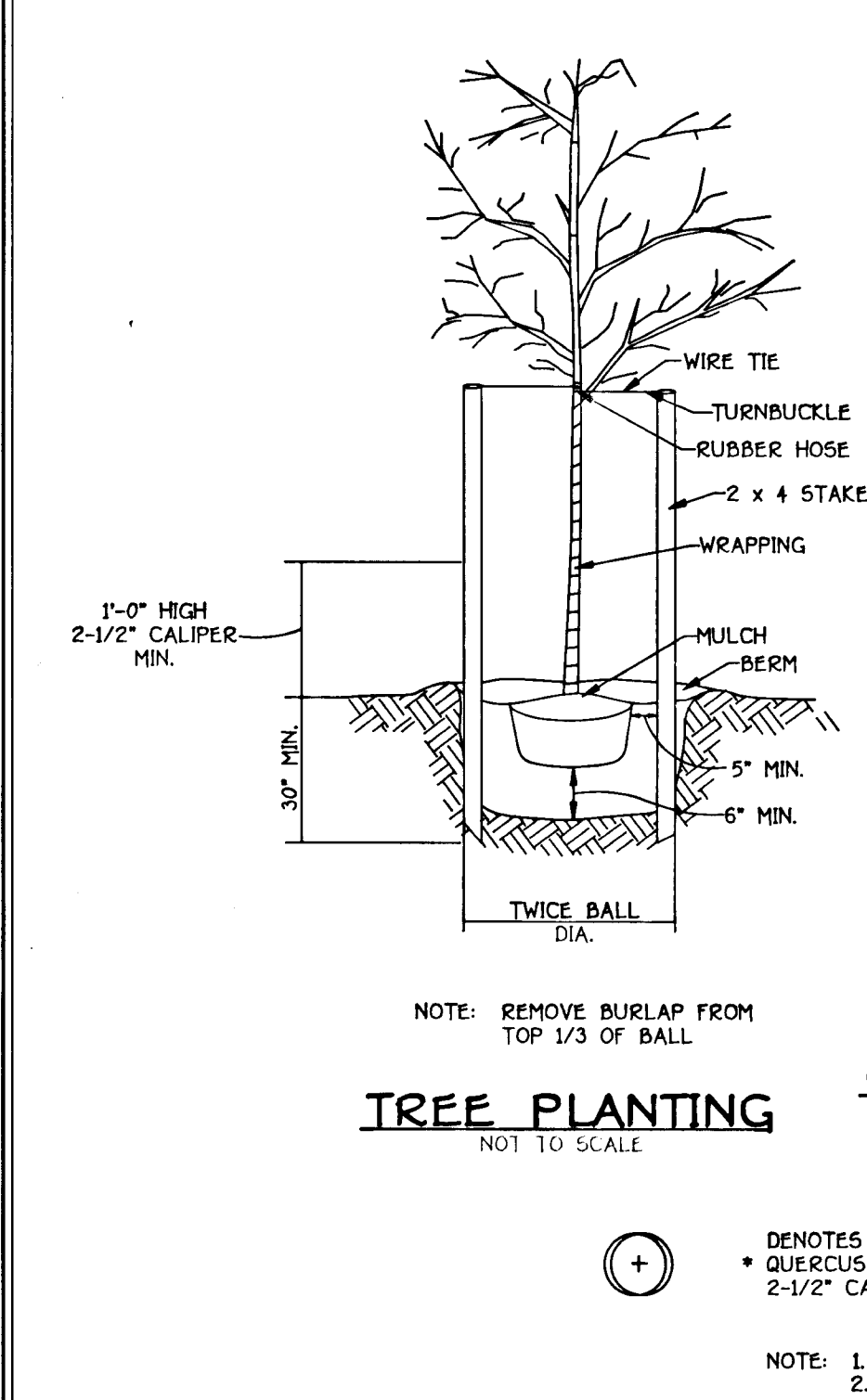
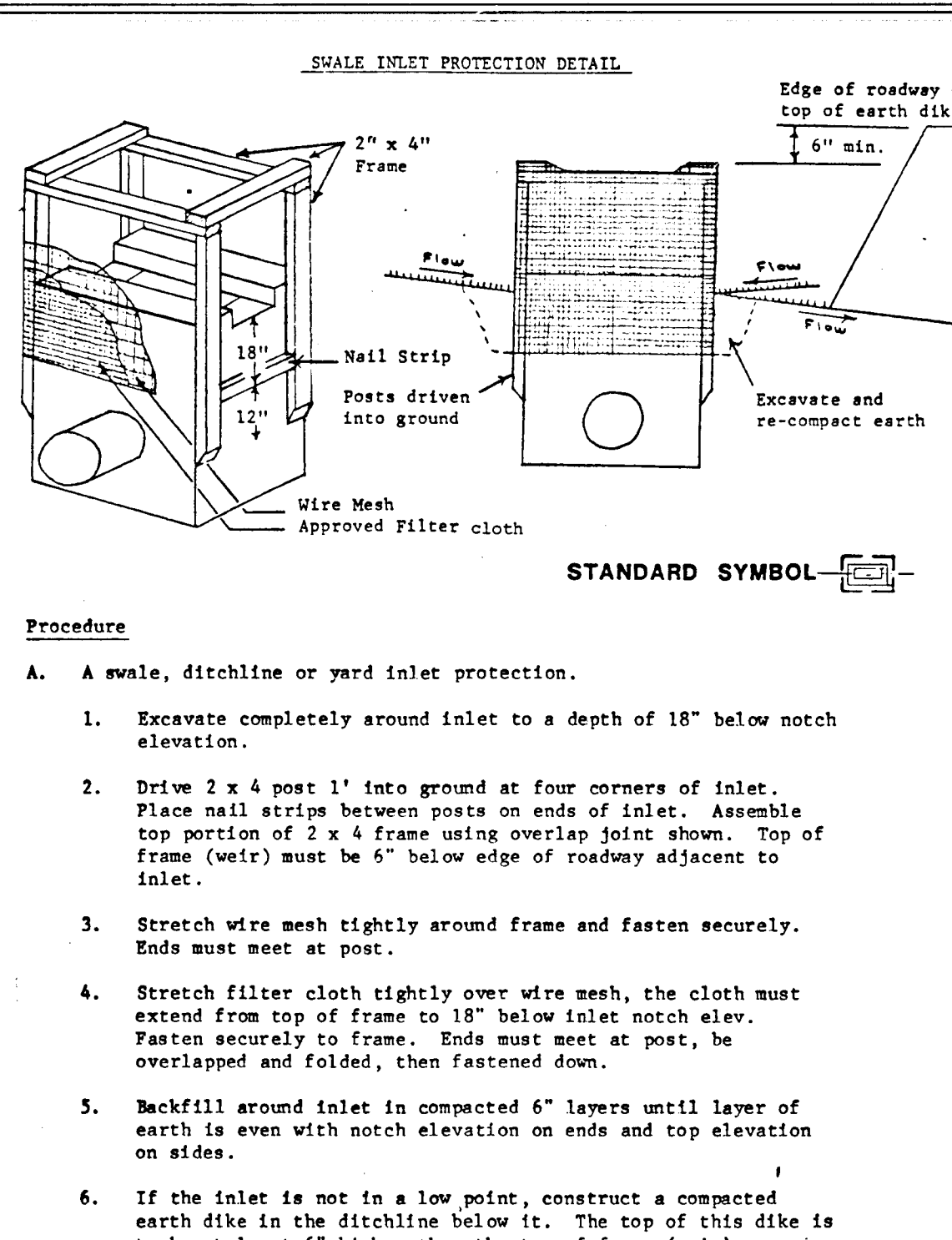
MULCHING

APPLY 10 TO 2 TONS PER ACRE (10 TO 90 LBS./1,000 SQ.FT.) OF UNROTATED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE (5 GAL./1,000 SQ.FT.) OF EITHER SLOPED ASPHALT ON FLAT AREAS, ON SLOPES 6 FEET OR HIGHER USE 340 GALLONS PER ACRE (8 GAL./1,000 SQ.FT.) FOR ANCHORING.

MAINTENANCE

INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

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



MAHOLE CHART

STRUCTURE NO.	DIAMETER OF OPENING
M-2	4"
I-4	6"

MODIFIED STANDARD M.H. DETAIL

PLATE DETAIL (SECTION 'A-A')

TYPICAL STRUCTURE DETAIL FOR MANHOLE No. 2 AND INLET No. 4
 (NO SCALE)

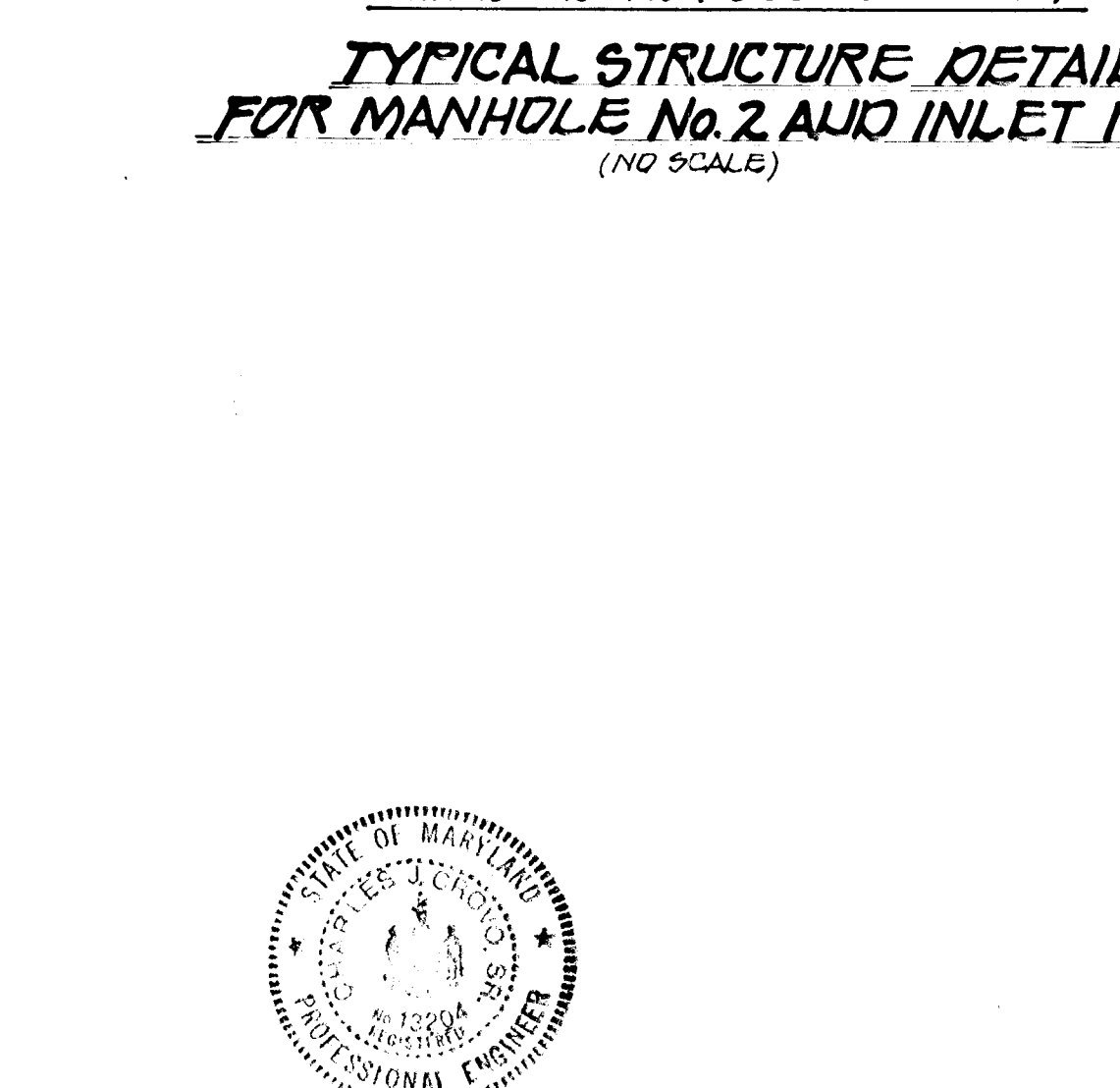
STREET TREE SCHEDULE

SYMBOL	BOTANICAL AND COMMON NAME	SIZE AND ROOT	COMMENTS
(+)	QUERCUS COCCINEAS SCARLET OAK	MIN. 2 1/2" CALIPER B AND B	40' APART ON PUBLIC R/W

* NOTE: STREET TREE TYPE IS ONLY A RECOMMENDATION THIS MAY BE REVISED TO A COUNTY ACCEPTABLE EQUIPMENT.

- SEQUENCE OF CONSTRUCTION**
- OBTAIN GRADING PERMIT (1 DAY)
 - NOTIFY MISS UTILITY 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE S.H.A. DISTRICT PERMIT INSPECTOR OF HOWARD COUNTY BEFORE BEGINNING ANY WORK AT (410) 694-2025. NOTIFY HOWARD COUNTY OFFICE OF CONSTRUCTION/INSPECTION DIVISION AT (410) 313-1800, 24 HOURS BEFORE STARTING ANY WORK (1 DAY)
 - INSTALL ALL TRAFFIC CONTROL DEVICES AS SHOWN ON TRAFFIC CONTROL PLAN FOR WIDENING OF MARYLAND ROUTE 216. (1 DAY)
 - CONSTRUCT ALL S.H.A. PAVING AND TYPE 'A' CONCRETE CURB & GUTTER AT THE INTERSECTION OF BUCKS HAVEN LANE AND MARYLAND ROUTE 216. (3 DAYS)
 - UPON COMPLETION OF THIS WORK NOTIFY THE S.H.A. DISTRICT PERMIT INSPECTOR OF HOWARD COUNTY AT (410) 694-2025. UPON APPROVAL REMOVE ALL TRAFFIC DEVICES IN THIS AREA. (1 DAY)
 - INSTALL SEDIMENT CONTROL MEASURES, STONE CONSTRUCTION ENTRANCE, STONE OUTLET SEDIMENT TRAP, EARTH DIKES, SILT FENCE, INLET PROTECTION AND STABILIZE WITH TEMPORARY SEEDING. (3 DAYS)
 - GRADE ROADS TO SUBGRADE AND INSTALL STORM DRAINS AND WATER QUALITY POND No. 2, PLUS THE PIPE FROM I-4 TO 5-3. DO NOT CONSTRUCT THE S.O. FROM MH 2 TO 5-2 OR W.Q. POND No. 1. (2 WEEKS)
 - CONSTRUCT CHANNELS ALONG THE FRONT OF LOTS 5, 6, AND STABILIZE WITH PERMANENT SEEDING. CONSTRUCT RIPRAP CHANNELS AT THE LIMIT OF HUNTER COURT.
 - 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.
 - SEDIMENT TRAP SHALL BE REMOVED FROM THE STONE OUTLET SEDIMENT TRAP ONCE THE CLEANOUT ELEVATION HAS BEEN REACHED. SEDIMENT MUST BE PLACED UPHILL FROM THE TRAP. SEE PLANS FOR CLEANOUT ELEVATIONS. (1 DAY)
 - INSTALL ROAD BASE COURSE. (2 DAYS)
 - REMOVE SEDIMENT FROM ROADWAYS AND DRESS STONE CONSTRUCTION ENTRANCE AS REQUIRED AND STABILIZE ALL DISTURBED AREAS. (2 DAYS)
 - FLUSH STORM DRAIN SYSTEM TO REMOVE ANY TRAPPED SEDIMENT AND AFTER THE SYSTEM IS CLEAR, UNPLUG THE S.O. FROM I-4 TO 5-3
 - APPLY TACK COAT TO SUB-BASE AND LAY SURFACE COURSE. (4 DAYS)
 - REMOVE ALL SEDIMENT CONTROL MEASURES UPON SEDIMENT CONTROL INSPECTORS APPROVAL EXCEPT SILT FENCE BELOW WATER QUALITY POND No. 1.
 - ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING AND REMOVE SILT FENCE BELOW WATER QUALITY POND No. 1 (2 DAYS)

- OWNER AND DEVELOPER**
- Mrs. CATHERINE CLEVEGER
 12459 ROUTE 216
 HIGHLAND, MARYLAND 20777
- SEQUENCE OF CONSTRUCTION**
- THE AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
 - THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING.
 - ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
 - THE STONE USED IN THE OUTLET SHALL BE SMALL RIPRAP 4"-6" ALONG WITH A 1" THICKNESS OF 2" AGGREGATE PLACED ON THE UP-GRADE SIDE OF THE SMALL RIPRAP OR EMBEDDED FILTER CLOTH IN THE RIPRAP.
 - SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP.
 - THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRED AS NEEDED.
 - CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION IS MINIMIZED.
 - THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.



SEQUENCE OF CONSTRUCTION

- THE AREA UNDER EMBANKMENT SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. THE POOL AREA SHALL BE CLEARED.
- THE FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING.
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