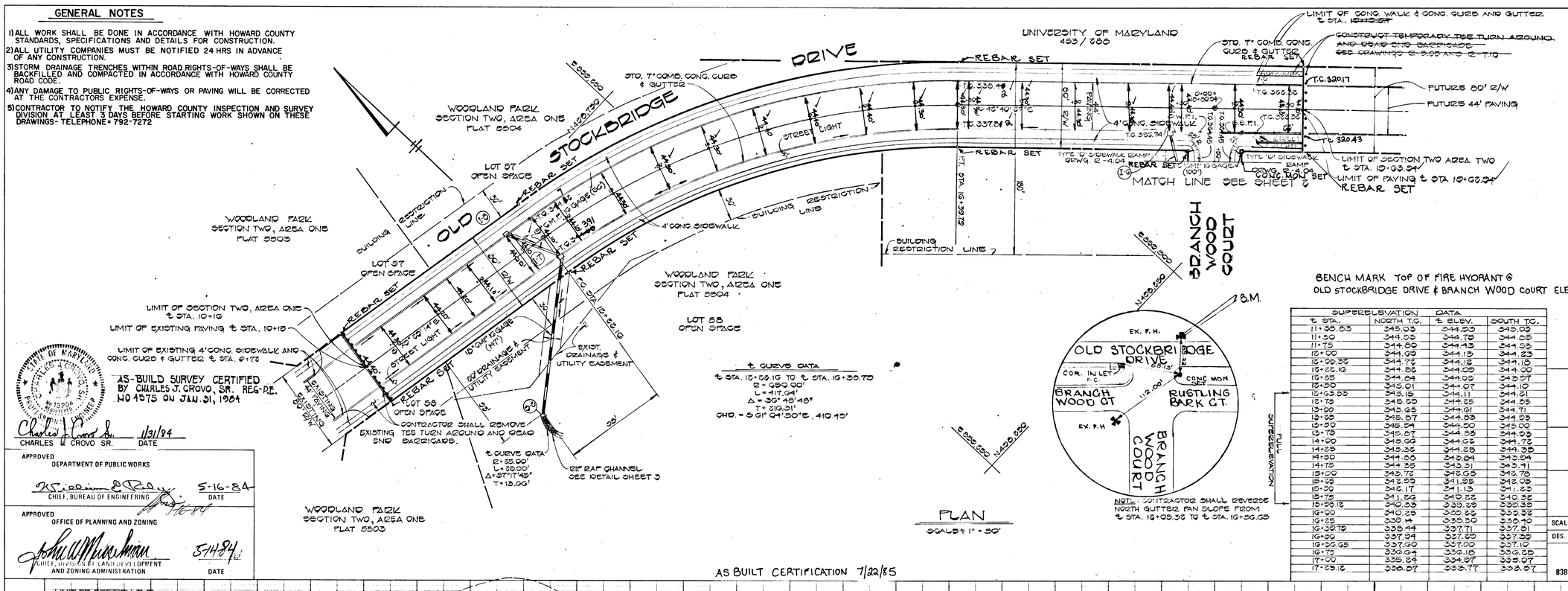
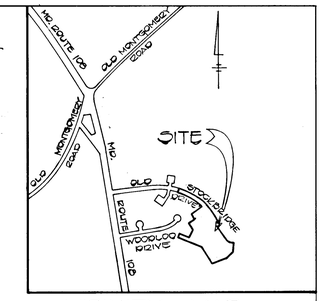
GENERAL NOTES

1) ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2) ALL UTILITY COMPANIES MUST BE NOTIFIED 24 HRS IN ADVANCE OF ANY CONSTRUCTION.
3) STORM DRAINAGE TRENCHES WITHIN ROAD RIGHTS-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
4) ANY DAMAGE TO PUBLIC RIGHTS-OF-WAYS OR PAVING WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
5) CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION AND SURVEY DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS- TELEPHONE: 792-7272





VICINITY MAP
SCALE: 1" = 1000'

BENCH MARK TOP OF FIRE HYDRANT @ OLD STOCKBRIDGE DRIVE & BRANCH WOOD COURT ELEV. 325.50

NOTE: CONTRACTOR SHALL REVERSE NORTH GUTTER PAN SLOPE FROM ℄ STA. 16+05.36 TO ℄ STA. 16+56.65

PLAN
SCALE: 1" = 50'

AS-BUILD SURVEY CERTIFIED BY CHARLES J. CROVO, SR. REG-P.E. NO 4575 ON JAN. 31, 1984

STATE OF MARYLAND CHARLES J. CROVO No. 13208 PROFESSIONAL ENGINEER

Charles J. Crovo Sr. 1/31/84
CHARLES J. CROVO SR. DATE

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 5-16-84

APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 5-14-84

SUPERELEVATION DATA			
℄ STA.	NORTH T.C.	℄ ELEV.	SOUTH T.C.
11+08.83	345.93	344.90	345.00
11+50	349.03	344.78	344.85
11+75	344.80	344.43	344.53
12+00	344.69	344.13	344.23
12+06.33	344.72	344.16	344.16
12+22.16	344.82	344.00	344.00
12+25	344.84	344.09	343.97
12+50	345.01	344.07	344.10
12+63.55	345.16	344.11	344.51
12+75	345.29	344.25	344.55
13+00	345.65	344.61	344.71
13+25	345.87	344.83	344.93
13+50	345.94	344.90	345.00
13+75	345.87	344.93	344.93
14+00	345.66	344.86	344.76
14+25	345.36	344.68	344.38
14+50	344.85	343.84	343.94
14+75	344.55	343.51	343.41
15+00	343.72	342.96	342.76
15+25	342.89	341.95	342.05
15+50	342.17	341.13	341.23
15+75	341.56	340.23	340.33
15+96.12	340.93	339.53	339.53
16+00	340.85	339.53	339.53
16+25	339.14	338.30	338.40
16+30.70	338.44	337.71	337.81
16+50	337.94	337.55	337.55
16+56.65	337.60	337.00	337.10
16+75	336.64	336.16	336.26
17+00	335.24	334.97	335.07
17+23.12	333.67	333.77	333.67

WOODLAND PARK
SECTION TWO, AREA TWO
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

OLD STOCKBRIDGE DRIVE
PLAN AND PROFILE

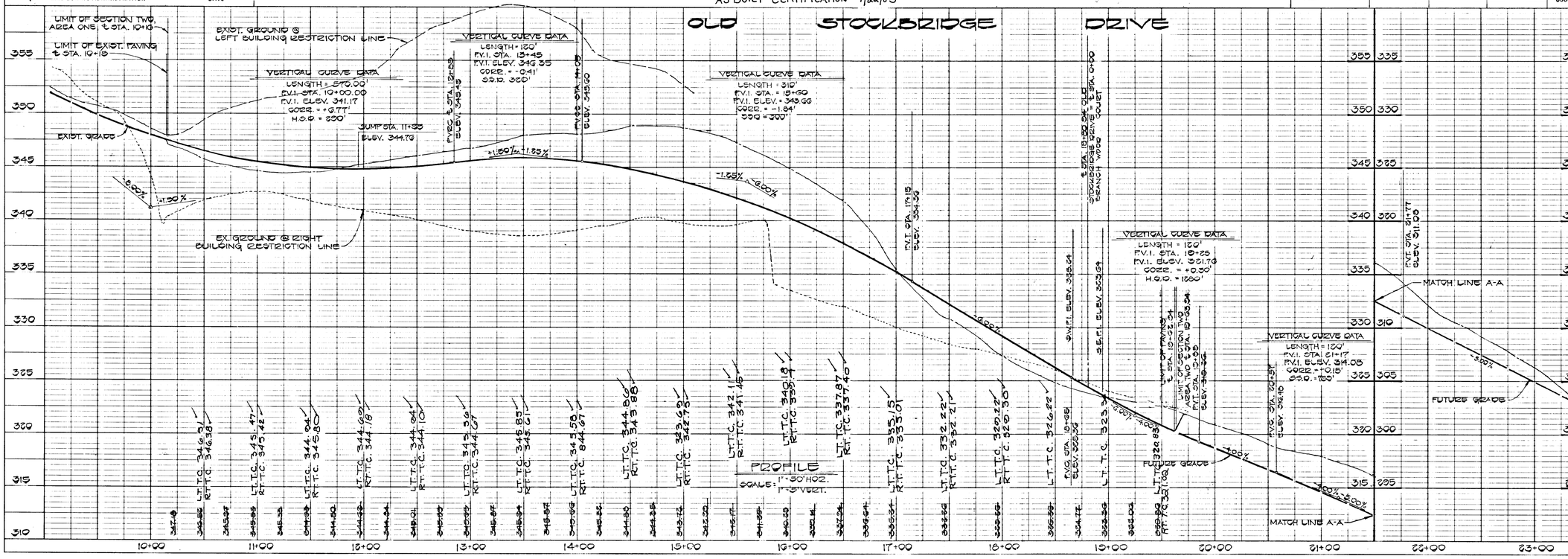
OWNER AND DEVELOPER
CHATEAU WOODLAND INC.
8100 WOODED GLEN COURT
ELLICOTT CITY, MD. 21043

SCALE AS SHOWN	DATE JAN. 31, 1984	DWG. NO. 1 OF 5
DES. C. CROVO	DRN. A. BOGDAN	CHK. R. B. CARTER

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

PLAN	BY	DATE
SURVEYED		
PLOTTED		
ALIGNMENT CHECKED		
P/P INVT CHECKED		
NOTE BOOK NO.		

AS BUILT CERTIFICATION 7/22/85

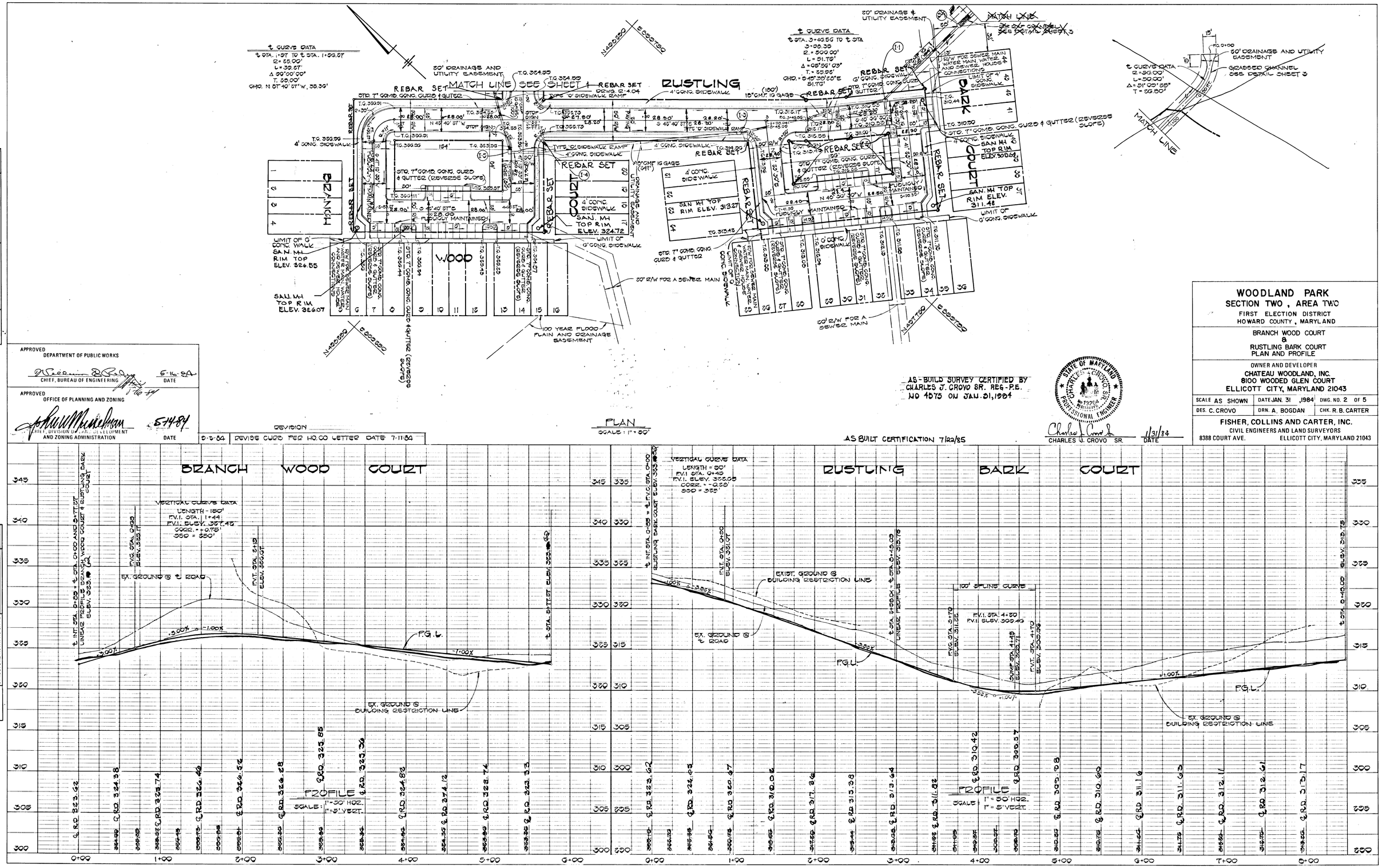


PROFILE	BY	DATE
SURVEYED		
PLOTTED		
GRADES CHECKED		
B.M. NOTED		
STRUCTURE NOTATNS CHKD		
NOTE BOOK NO.		

#976

1/31/84 AS-BUILT

F 84-113



AS-BUILD SURVEY CERTIFIED BY CHARLES J. CROVO SR. REG-P.E. NO 4575 ON JAN. 31, 1984

AS BUILT CERTIFICATION 7/22/85

CHARLES J. CROVO SR. 1/31/84 DATE

WOODLAND PARK
SECTION TWO, AREA TWO
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

BRANCH WOOD COURT
&
RUSTLING BARK COURT
PLAN AND PROFILE

OWNER AND DEVELOPER
CHATEAU WOODLAND, INC.
8100 WOODED GLEN COURT
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE JAN. 31, 1984	DWG. NO. 2 OF 5
DES. C. CROVO	DRN. A. BOGDAN	CHK. R. B. CARTER

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING 5-16-84 DATE

APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION 5-14-84 DATE

REVISION
9-3-84 REVISE CURB PER HO.CO LETTER DATE 7-11-84

PLAN
NOTE BOOK NO.
SURVEYED
PLOTTED
ALIGNMENT CHECKED
RT. OF WAY CHECKED
BY DATE

PROFILE
NOTE BOOK NO.
SURVEYED
PLOTTED
GRADES CHECKED
B.M.'s NOTED
STRUCTURE NOTATNS CHKD
BY DATE

#976

1/31/84 AS BUILT

F84-113

RIP RAP CHANNEL DESIGN DATA @ S-1

A = 5.70 ft² | S = 1.00%
P = 8.00' | S½ = 0.100
R = 0.7125 | n = 0.04
R⅔ = 0.7486 | W = 8'
d = 0.55'

$V = \frac{1.486}{0.04} \times 0.7486 \times 0.1000 = 2.70$ fps

Q = 5.70 ft² x 2.70 fps = 15.8 cfs
STONE SIZE MIN. 5" DIA.

RIP RAP CHANNEL DESIGN DATA @ S-2

A = 2.02 ft² | S = 2.00%
P = 6.32' | S½ = 0.1414
R = 0.4146 | n = 0.04
R⅔ = 0.5560 | W = 4'
d = 0.52'

$V = \frac{1.486}{0.04} \times 0.5560 \times 0.1414 = 2.02$ fps

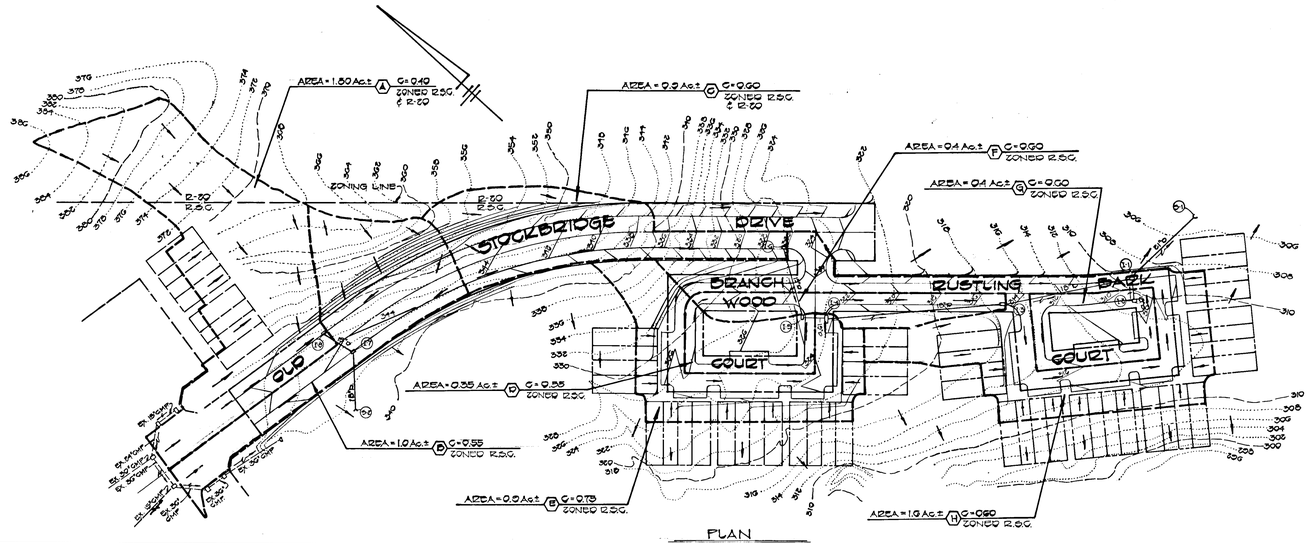
Q = 2.02 ft² x 2.02 fps = 7.7 cfs
STONE SIZE MIN. 4" DIA.

GRASSED CHANNEL DESIGN DATA @ S-1

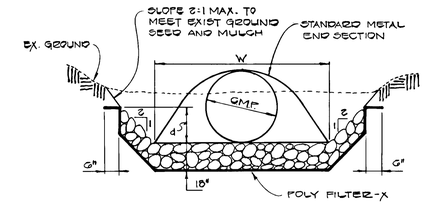
A = 4.04 ft² | S = 1.00%
P = 8.22' | S½ = 0.1000
R = 0.5045 | n = 0.03
R⅔ = 0.6830

$V = \frac{1.486}{0.03} \times 0.6830 \times 0.1000 = 3.38$ cfs

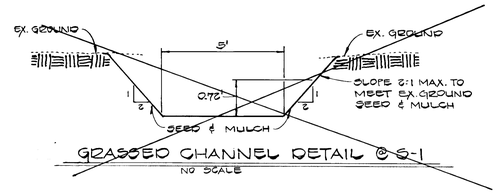
Q = 1.04 ft² x 3.38 fps = 15.7 cfs



PLAN
SCALE 1" = 100'



RIP RAP CHANNEL DETAIL
NO SCALE



GRASSED CHANNEL DETAIL @ S-1
NO SCALE

STRUCTURE SCHEDULE

NO.	TYPE	INV. IN	INV. OUT	℄ STATION	℄ TOP ELEV.	REMARKS	℄ TOP ELEV.	INV. IN	INV. OUT
I-1	A-5	~~304.57~~	~~303.75~~	4+45 ROAD 'C'	~~305.54~~	DRWG. SD-4.01	310.31	305.31	303.01
I-2	A-5	-	~~305.25~~	4+45 ROAD 'C'	~~305.54~~	DRWG. SD-4.01	309.93		305.45
I-3	A-5 WITH DEFLECTORS	~~312.75~~	~~310.55~~	2+03.43 ROAD 'C'	~~313.40~~	DRWG. SD-4.01 & SD-4.03	315.05	310.65	310.55
I-4	A-10	~~319.45~~	~~318.02~~	0+35.27 ROAD 'B'	~~323.54~~	DRWG. SD-4.02	323.53	318.47	318.02
I-5	A-5	~~319.45~~	~~319.35~~	0+35.27 ROAD 'B'	~~323.54~~	DRWG. SD-4.01	323.50	319.05	318.04
I-6	A-5 WITH DEFLECTORS	-	~~321.75~~	10+30.94 ROAD 'A'	~~327.57~~	DRWG. SD-4.01 & SD-4.03	327.06	—	321.26
I-7	A-5	~~339.24~~	339.24	12+25.22 ROAD 'A'	~~343.67~~	DRWG. SD-4.01	343.21	339.36	339.24
I-8	A-5	-	~~341.35~~	11+95 ROAD 'A'	~~344.65~~	DRWG. SD-4.01	344.68	—	341.26
S-1	STD. METAL END SECT.	-	~~337.50~~		~~339.25~~	DRWG. SD-5.01	—	—	
S-2	STD. METAL END SECT.	-	~~332.50~~	-	333.50	DRWG. SD-5.01	333.86		332.36

ROAD 'A' - OLD STOCKBRIDGE DRIVE
ROAD 'B' - BRANCH WOOD COURT
ROAD 'C' - RUSTLING BARK COURT

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 5-16-84

APPROVED
OFFICE OF PLANNING AND ZONING
DIRECTOR — DATE 5-21-84
ADMINISTRATOR AND ZONING ADMINISTRATION

AS-BUILT SURVEY CERTIFIED BY CHARLES J. CROVO SR. REG-P.E. NO 4575 ON JAN. 31, 1984

STATE OF MARYLAND — CHARLES J. CROVO — No. 4575 — REGISTERED PROFESSIONAL ENGINEER

Charles J. Crovo Sr. 1/31/84
CHARLES J. CROVO SR. DATE

AS BUILT CERTIFICATION 7/22/85

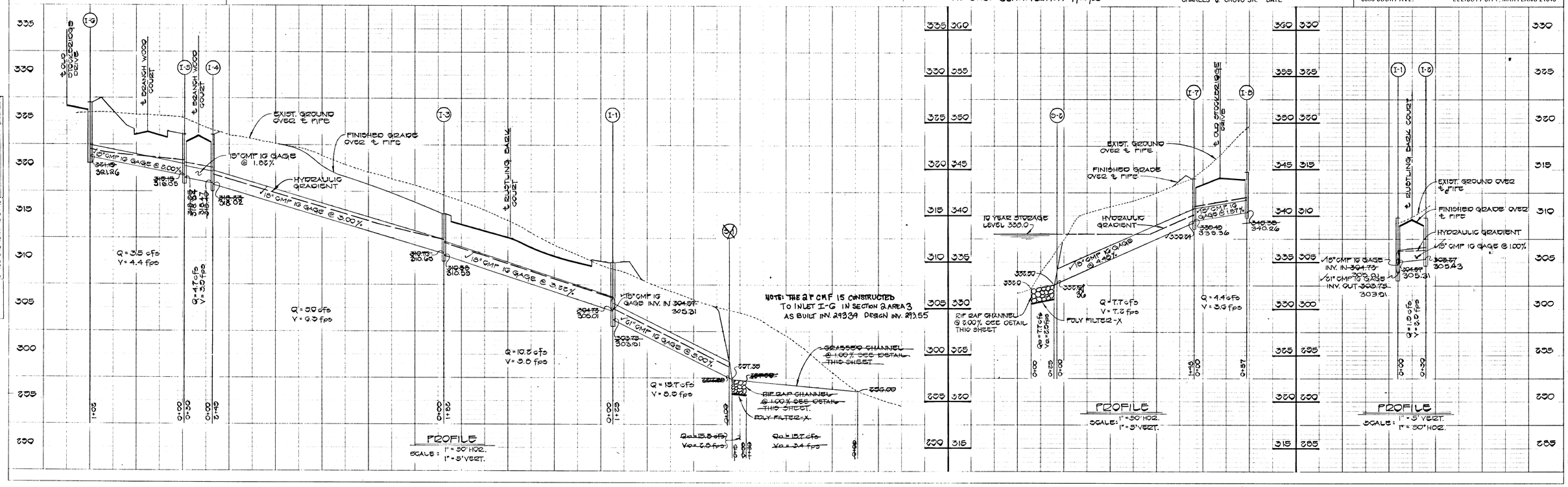
WOODLAND PARK
SECTION TWO, AREA TWO
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

DRAINAGE AREA MAP AND STORM DRAIN PROFILES

OWNER AND DEVELOPER
CHATEAU WOODLAND, INC.
8100 WOODED GLEN COURT
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE JAN. 31, 1984	DWG. NO. 3 OF 5
DES. C. CROVO	DRN A. BOGDAN	CHK. R. B. CARTER

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043



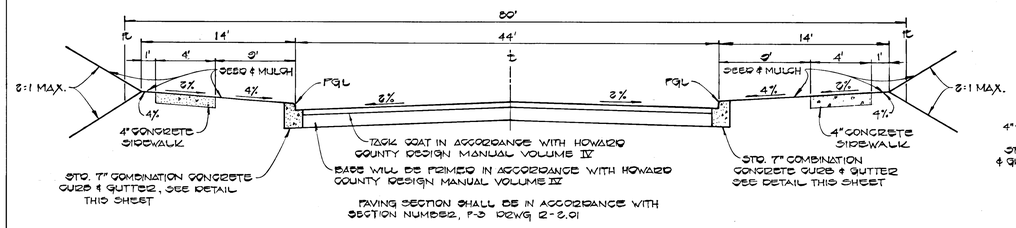
#976

1/31/84 AS BUILT

F 84-113

OLD STOCKBRIDGE DRIVE

TYPE OF TRAFFICWAY MAJOR COLLECTOR — DESIGN SPEED 40 M.P.H. — ZONED R.S.C.



PAVING SECTION SHALL BE IN ACCORDANCE WITH SECTION NUMBER, P-3 DRWG 2-2.01

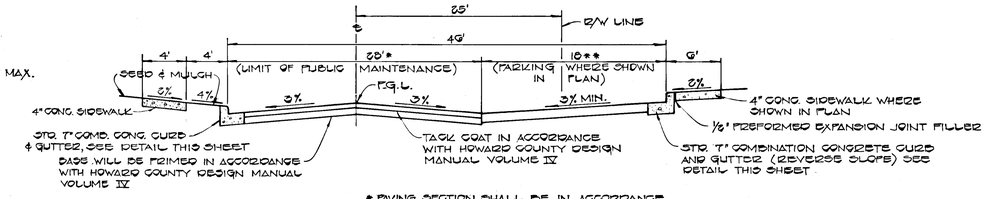
TYPICAL ROADWAY SECTION

NO SCALE

ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.

BRANCH WOOD COURT AND RUSTLING BARK COURT

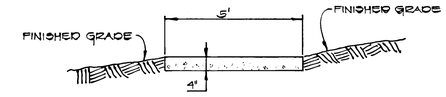
TYPE OF TRAFFICWAY - CULDESAC RESIDENTIAL - DESIGN SPEED - 30 MPH
ZONED - RSC



* PAVING SECTION SHALL BE IN ACCORDANCE WITH SECTION NUMBER P-2 DRWG 2-2.01
** PAVING SECTION SHALL BE IN ACCORDANCE WITH SECTION NUMBER P-1 DRWG. 2-2.01

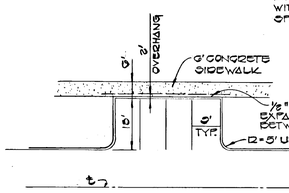
TYPICAL SECTION - PARKING ADJACENT TO PUBLIC ROAD

NO SCALE



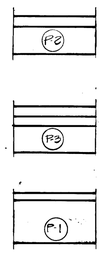
MACADAM WALKWAY DETAIL

NO SCALE



TYPICAL PARKING DETAIL

NO SCALE



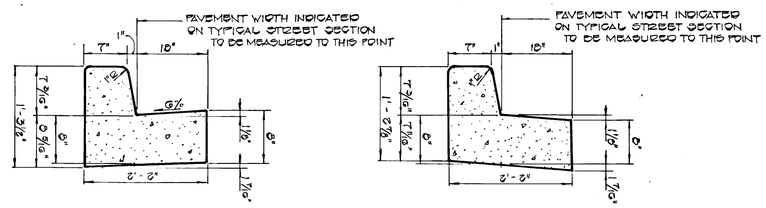
1 1/2" BIT. CONC. SURFACE
5" BIT. CONC. BASE

1 1/2" BIT. CONC. SURFACE
1 1/2" BIT. CONC. BASE
5" BIT. CONC. BASE

1" BIT. CONC. SURFACE
4" BIT. CONC. BASE

PAVING SECTIONS P-1, P-2, P-3

NO SCALE



STANDARD & REVERSE SLOPE 7" COMB. CONC. CURB & GUTTER

NO SCALE

PLAN		BY	DATE
NOTE BOOK NO.	SURVEYED ____ PLOTTED ____ ALIGNMENT CHECKED ____ RT. OF WAY CHECKED ____		

APPROVED
DEPARTMENT OF PUBLIC WORKS
CHIEF, BUREAU OF ENGINEERING — DATE 5-16-84

APPROVED
OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 5-14-84

STATE OF MARYLAND — CHARLES W. CROVO, JR. — No. 13208 — REGISTERED PROFESSIONAL ENGINEER

Charles W. Crovo Sr. — CHARLES W. CROVO SR. — 1/31/84 DATE

REVISION #1 2-17-84 PAVING SECTIONS

WOODLAND PARK
SECTION TWO, AREA TWO
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

ROAD SECTIONS AND DETAILS

OWNER AND DEVELOPER
CHATEAU WOODLAND INC.
8100 WOODED GLEN COURT
ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN	DATE JAN 31, 1984	DWG. NO. 4 OF 5
DES. C. CROVO	DRN. A. BOGDAN	CHK. R. B. CARTER

FISHER, COLLINS AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

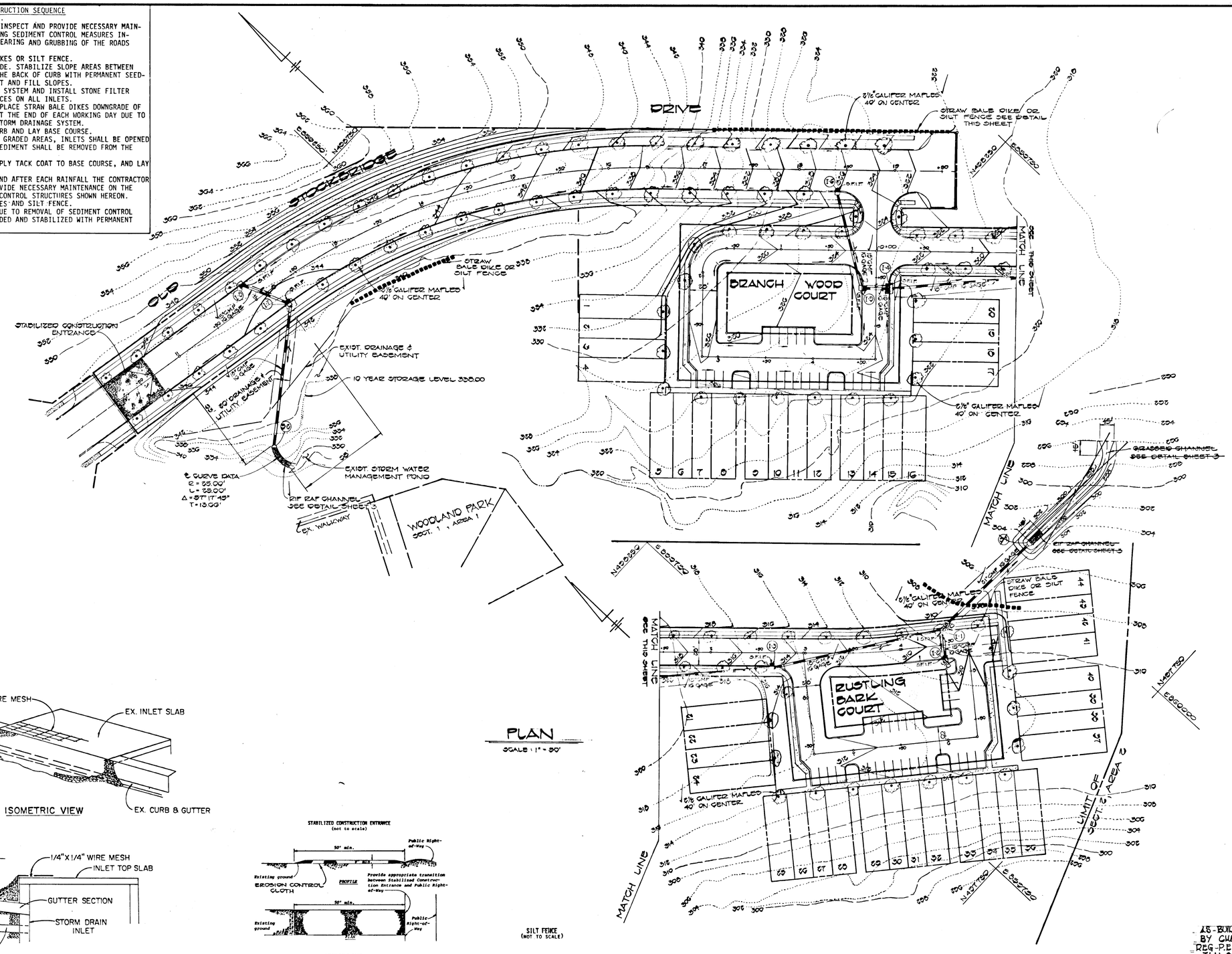
PROFILE		BY	DATE
NOTE BOOK NO. ____	SURVEYED ____ PLOTTED ____ GRADES CHECKED ____ B.M.'s NOTED ____ STRUCTURE NOTATIONS CHK'D ____		

#976

F 84-113

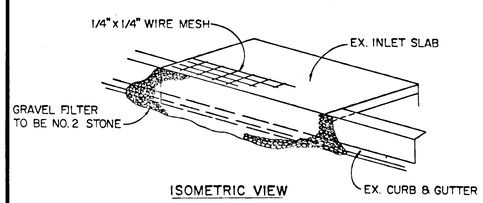
CONSTRUCTION SEQUENCE

1. OBTAIN GRADING PERMIT.
2. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE EXISTING SEDIMENT CONTROL MEASURES INSTALLED DURING THE CLEARING AND GRUBBING OF THE ROADS UNDER GP84-35.
3. INSTALL STRAW BALE DIKES OR SILT FENCE.
4. GRADE ROADS TO SUBGRADE. STABILIZE SLOPE AREAS BETWEEN EXISTING GROUND AND THE BACK OF CURB WITH PERMANENT SEEDING ALONG WITH THE CUT AND FILL SLOPES.
5. CONSTRUCT STORM DRAIN SYSTEM AND INSTALL STONE FILTER INLET PROTECTION DEVICES ON ALL INLETS.
6. THE CONTRACTOR SHALL PLACE STRAW BALE DIKES DOWNGRADE OF ANY DISTURBED AREAS AT THE END OF EACH WORKING DAY DUE TO CONSTRUCTION OF THE STORM DRAINAGE SYSTEM.
7. CONSTRUCT CONCRETE CURB AND LAY BASE COURSE.
8. UPON STABILIZATION OF GRADED AREAS, INLETS SHALL BE OPENED AND ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE STORM DRAIN SYSTEM.
9. CLEAN BASE COURSE, APPLY TACK COAT TO BASE COURSE, AND LAY SURFACE COURSE.
10. DURING CONSTRUCTION AND AFTER EACH RAINFALL THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN HEREON.
11. REMOVE STRAW BALE DIKES AND SILT FENCE.
12. ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED WITH PERMANENT SEEDING.

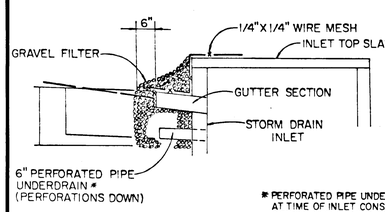


PLAN

SCALE: 1" = 30'



ISOMETRIC VIEW



SECTION VIEW

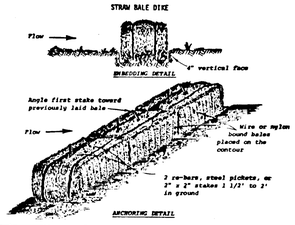
* PERFORATED PIPE UNDERDRAIN TO BE INSTALLED AT TIME OF INLET CONSTRUCTION. DO NOT INSTALL PERFORATED PIPE AND STONE BELOW GROUND IF INLET AND/OR PAVING ARE CONSTRUCTED

STONE FILTER INLET PROTECTION DETAIL

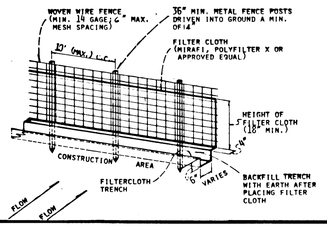
NO SCALE

STABILIZED CONSTRUCTION ENTRANCE
(not to scale)

STRAW BALE DIKE



SILT FENCE
(NOT TO SCALE)



SITE ANALYSIS

TOTAL AREA OF SECTION 2, AREA 2	11.125 Ac.±
IMPERVIOUS AREA	1.625 Ac.±
AREA TO BE VEGETATED	1.625 Ac.±
UNDISTURBED AREA	7.874 Ac.±

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

SIGNATURE OF ENGINEER — DATE 1/31/84

DEVELOPER'S CERTIFICATE

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

SIGNATURE OF DEVELOPER — DATE 1/31/84

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

U.S. SOIL CONSERVATION SERVICE — DATE 5-10-84

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

DISTRICT HOWARD SOIL CONSERVATION DISTRICT — DATE 5-10-84

APPROVED: DEPARTMENT OF PUBLIC WORKS.

CHIEF, BUREAU OF ENGINEERING — DATE 5-16-84

APPROVED: OFFICE OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION — DATE 5-14-84

SEDIMENT CONTROL NOTES

1. SPECIFICATIONS FOR THE SEDIMENT CONTROL DETAILS INCLUDED IN THE U.S.D.A. SOIL CONSERVATION SERVICE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS."
2. THE DEVELOPER SHALL NOTIFY THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS AT LEAST 24 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION SHOWN HEREON (992-2433).
3. SEDIMENT CONTROL STRUCTURES TO BE CONSTRUCTED PRIOR TO ANY ON-SITE GRADING OR DISTURBANCE TO ANY EXISTING SURFACE MATERIAL, AND ARE TO BE STABILIZED AS SOON AS CONSTRUCTED.
4. ALL SEDIMENT CONTROL STRUCTURES TO REMAIN IN, PLACE UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS (992-2433).
5. ALL GRADED AREAS NOT TO BE SODDED SHALL BE STABILIZED BY SEEDING AND MULCHING IN ACCORDANCE WITH THE FOLLOWING:
   1. SITE PREPARATION
      A. HARROW OR DISC IN AREAS PROPOSED TO BE SEEDED THE FOLLOWING MATERIALS
         1) PULVERIZED LIMESTONE AT 2 TONS/ACRE.
         2) COMMERICAL FERTILIZER 10-10-10 AT 3/4 TONS/ACRE.
         3) SUPER PHOSPHATE AT 600 LBS./ACRE.
   2. SEEDING
      A. SOW THE FOLLOWING SEED MIXTURE AT THE RATE OF 200 LBS./ACRE WITH A MECHANICAL SPREADER.
         1) TEMPORARY: ITALIAN OR PERENNIAL RYE GRASS.
         2) PERMANENT: 40% MARION BLUE GRASS, 40% DAKOTA BLUE GRASS AND 20% PENN LAWN CREEPING FESCUE.
      B. THE SEEDED AREA SHALL THEN BE RAKED WITH A YORK RATE (A MINIMUM OF 2 PASSES) COVERED AND COMPACTED WITH CULTIPACKER OR OTHER APPROVED METHOD.
   3. MULCHING
      A. SEEDED AREAS SHALL BE UNIFORMLY MULCHED IMMEDIATELY AFTER SEEDING WITH UNWEATHERED SMALL GRAIN STRAW AT THE RATE OF 1 1/2-2 TONS/ACRE.
      B. TIE MULCH DOWN WITH LIQUID ASPHALT AT 0.1 GAL./S.Y. OR EMULSIFIED ASPHALT AT 0.04 GAL./S.Y. OR MULCH NETTING.
6. A GRADING PLAN MUST BE DEVELOPED BY THE BUILDER AND APPROVED BEFORE BEGINNING CONSTRUCTION OF DWELLINGS.

AS-BUILT SURVEY CERTIFIED BY CHARLES J. CROYO, SR. REG.-P.E. NO 4570 ON JAN. 31, 1984

AS BUILT CERTIFICATION 7/22/85

STATE OF MARYLAND — CHARLES J. CROYO — No. 4570 — REGISTERED PROFESSIONAL ENGINEER

STREET TREE

GRADING AND SEDIMENT CONTROL PLAN

WOODLAND PARK

SECTION TWO, AREA TWO

FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SHEET 5 OF 5

DEVISIONS

9-4-84	REVISE CURB TO HO. CO COMMENTS DATED 7-11-84
8-29-85	REVISE PATHWAY SYSTEM

OWNER & DEVELOPER

CHATEAU WOODLAND INC.
8100 WOODED GLEN COURT
ELLICOTT CITY, MARYLAND 21043

FISHER, COLLINS AND CARTER, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLICOTT CITY, MARYLAND 21043
TELEPHONE: (301) 461-2855

#976

1/31/84 AS-BUILT

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