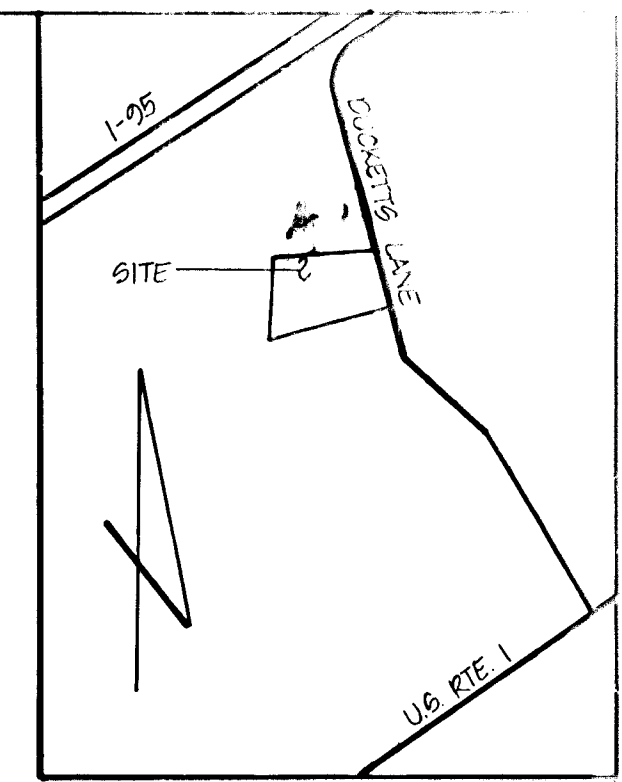
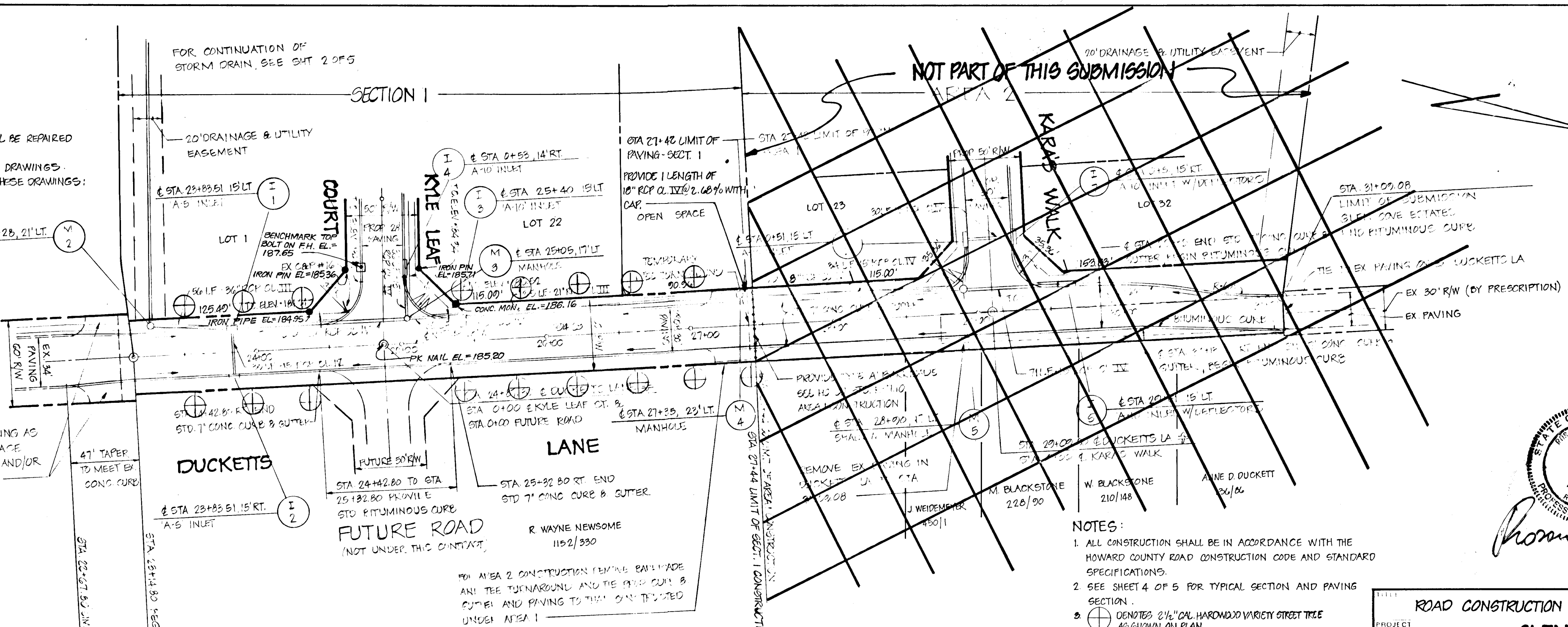


GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD CO. DESIGN MANUAL, VOL. III, I.E., STD. SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
2. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
3. THE CONTRACTOR SHALL TEST PIT EX. UTILITIES AT LEAST 5 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
4. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST 5 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS:
 MISS. UTILITY 599-0100 BELL TELEPHONE SYSTEM 393-3649
 LONG DISTANCE CABLE DIVISION 393-3553 OR 3554
 BALTO. GAS & ELECTRIC CO. 599-8000 EXT. 691
 HOWARD CO. BUREAU OF UTILITIES 992-2366
 HOWARD CO. CONSTRUCTION/INSPECTION SURVEY DIVISION 792-7272
 (GAINS NOTICE PRIOR TO COMMENCEMENT OF WORK.)
5. ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD CO. STANDARDS.
6. ALL STREET CURB RETURNS SHALL HAVE 30' RADII UNLESS OTHERWISE NOTED.
7. STORM DRAIN TRENCHES WITHIN ROAD R/W SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD CO. DESIGN MANUAL, VOL. III, I.E., STD. SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
8. INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKINGS, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1971 EDITION.
9. PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
10. DESIGN TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS: ALL 50' R/W = 30 MPH
11. ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
12. ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION.
13. ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
14. PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
15. SUBJECT PROPERTY ZONED R-12 PER 10-3-77 COMPREHENSIVE ZONING PLAN.
16. TOP TAKEN FROM FIELD RUN SURVEY DATED
17. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
18. ALL STORM DRAIN PIPE BEDDINGS SHALL BE CLASS 'B' AS SHOWN IN FIG. 11.4, VOL. I OF HOWARD CO. DESIGN MANUAL UNLESS OTHERWISE NOTED.



VICINITY MAP
SCALE 1"=100'



OWNER & DEVELOPER
 DUCKETT LANE, INC.
 68 WAYNE NEWSOME
 P.O. BOX 30
 COLUMBIA, MARYLAND 21045

- NOTES:**
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
 2. SEE SHEET 4 OF 5 FOR TYPICAL SECTION AND PAVING SECTION.
 3. ⊕ DENOTES 2 1/2" CAL. HARDWOOD VARIETY STREET TREE AS SHOWN ON PLAN.

APPROVED DEPARTMENT OF PUBLIC WORKS
Melville E. Jones 10-5-84
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING
James J. Boender 9-28-84
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE

ROAD CONSTRUCTION PLAN DUCKETTS LANE - STA. 23+14.8 TO 31+09.08
GLEN COVE ESTATES - SECT. 1 - AREA 1

LOCATION: 1ST ELECTION DISTRICT TAX MAP: 97 HOWARD COUNTY, MARYLAND
 DATE: APRIL, 1984 DESIGN BY: JJB
 SCALE: AS SHOWN JOB NO.: 83031 DRAWING NO.: 1 OF 5

boender associates
 COURTHOUSE SQUARE
 ELLICOTT CITY, MARYLAND 21043
 BALTIMORE 301 465-7777

engineers
 surveyors
 planners

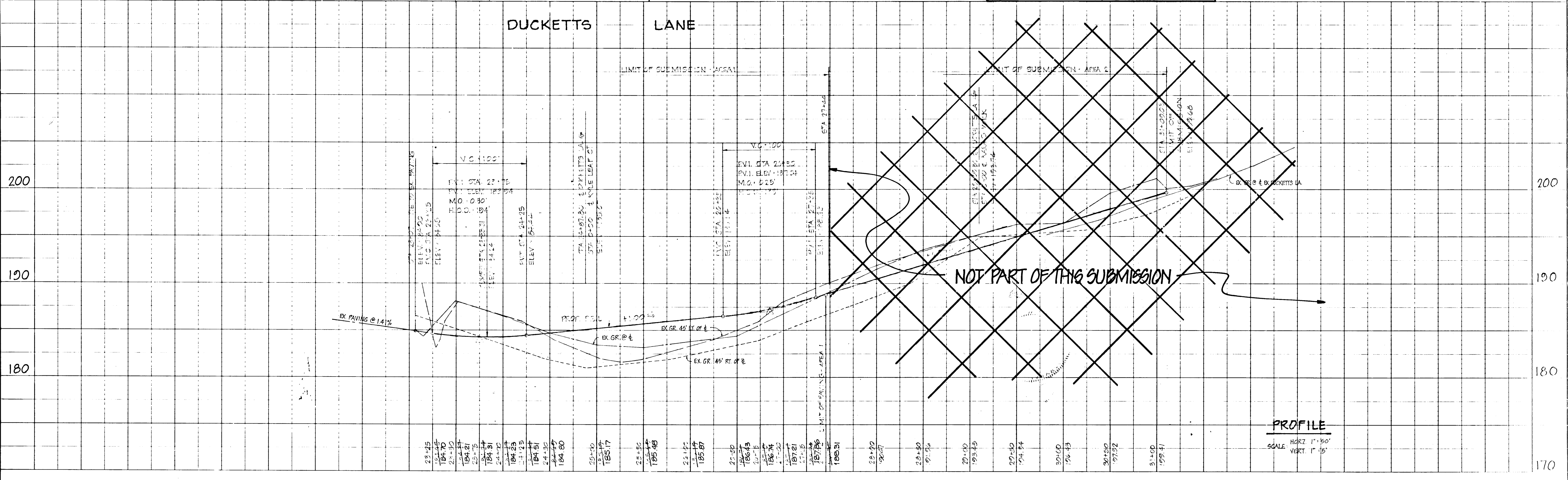
INDEX OF SHEETS

SYNG NO.	TITLE
1 OF 5	ROAD CONSTRUCTION PLAN - DUCKETTS LANE
2 OF 5	ROAD CONSTRUCTION PLAN - KYLE LEAF COURT
3 OF 5	DRAINAGE AREA MAP
4 OF 5	PROFILES AND DETAILS
5 OF 5	EQUIPMENT CONTROL PLAN & GRADING PLAN

PLAN
SCALE 1"=50'

REV. 8-30-84 OF REVISED FOR SECT. 1 SUBMITTAL

DUCKETTS LANE

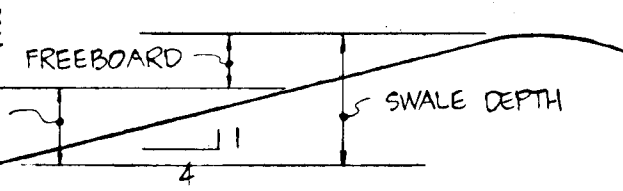


PROFILE
SCALE HORIZ 1"=50'
VERT 1"=5'

SWALE	D.A.	C	Z	Q ₁₀	DESIGN d	V	S	n	FREEBOARD	SWALE DEPTH	SIDE SLOPES
1	25 AC	0.43	57	61 CFS	0.71	3.3 FPS	2.50%	0.033	2.20'	1.0'	4:1
2	15 AC	0.43	57	25 CFS	0.45	3.3 FPS	4.60%	0.033	0.30'	0.75'	4:1

GRASSED SWALE DETAIL

NOT TO SCALE



JEROME J. BUJANOWSKI
012/312

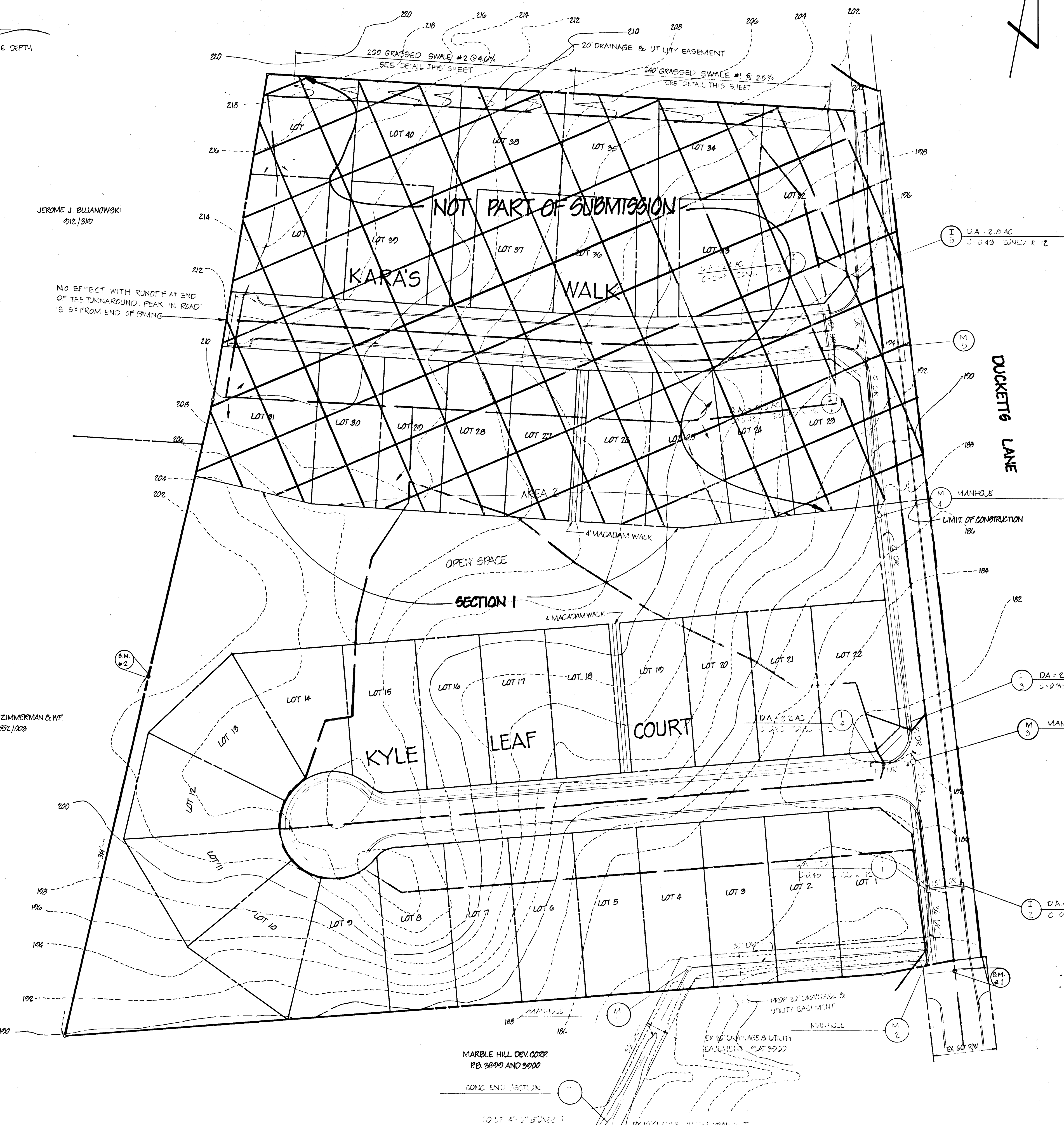
NO EFFECT WITH RUNOFF AT END
OF TEE TURNAROUND. PEAK IN ROAD
IS 5' FROM END OF PAVING

BENCHMARKS

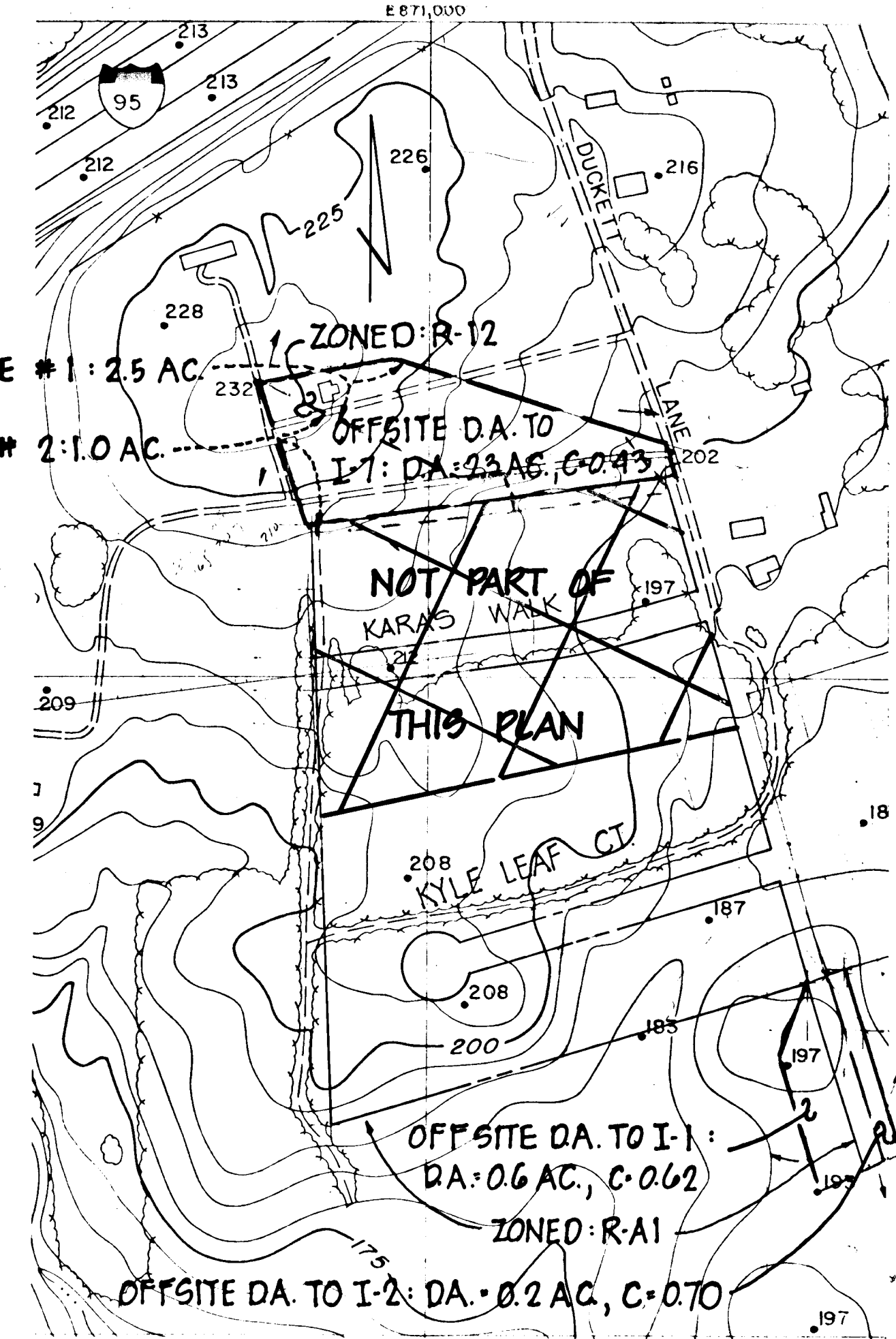
B.M. #1 - ELEV. 184.93 - P.K. NAIL SET
IN CENTER OF DUCKETTS LA.
AT EDGE OF EX. PAVING.

B.M. #2 - ELEV. 200.86 - IRON PIPE IN
CONC. ON PROPERTY LINE
OPPOSITE OF DUCKETTS LA.
IRON PIPE BEING 344' FROM
PROPERTY CORNER ADJACENT
TO MARBLE HILL.

JAMES W. ZIMMERMAN & W.F.
552/023



DA SWALE # 1: 25 AC
DA SWALE # 2: 1.0 AC



OFFSITE DRAINAGE AREA MAP

SCALE 1" = 200'
FROM HO. CO. AERIAL TOPO 9/17 225-46

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER _____ DATE _____

APPROVED - HOWARD COUNTY OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR _____ DATE _____
Acting *Sonia Flynn* 9-28-84
CHIEF, DIVISION OF LAND DEVELOPMENT
AND ZONING ADMINISTRATION

APPROVED - HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS

William J. ... 05-84
CHIEF, BUREAU OF ENGINEERING

REVIEWED FOR HOWARD B.C.D. AND MEETS TECHNICAL
REQUIREMENTS.

M.H.S.M. 9-28-84
U.S. SOIL CONSERVATION SERVICE

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

William J. ... 9/28/84
SOIL CONSERVATION DISTRICT

OWNER & DEVELOPER
DUCKETT LANE INC.
96 WAYNE NEWBOME
P.O. BOX 39
COLUMBIA, MARYLAND 21046

Francis J. ... 8/30/84

STATE OF MARYLAND
REGISTERED PROFESSIONAL ENGINEER
No. 10781

DRAINAGE AREA MAP
GLEN COVE ESTATES - SECT. 1 - AREA 1

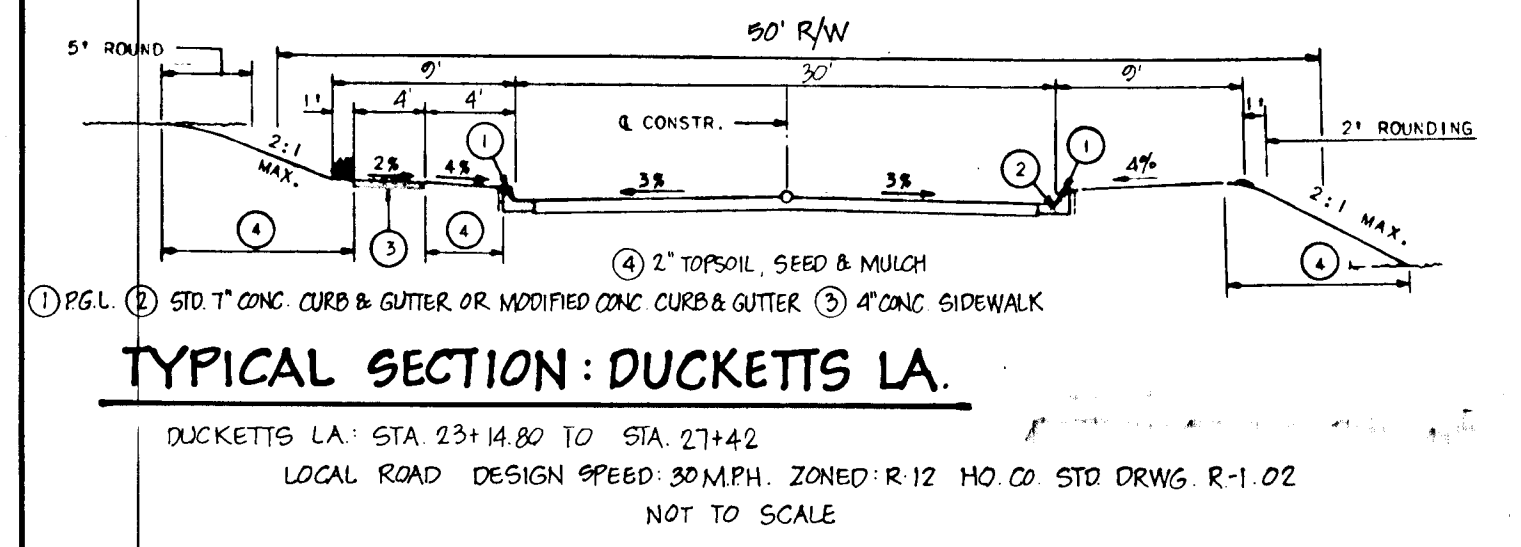
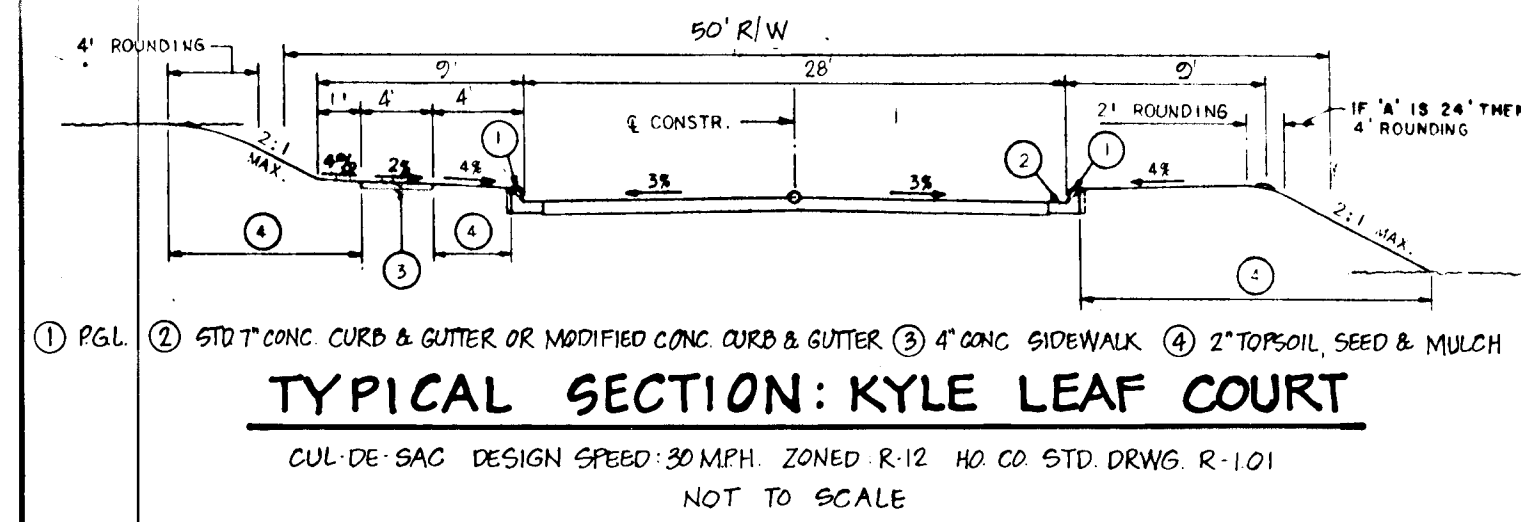
1st ELECTION DISTRICT TAX MAP 37 HOWARD COUNTY, MD

APRIL, 1984 1" = 60' J.J.B. J.J.B./D.M.P. 9 OF 9 B2031

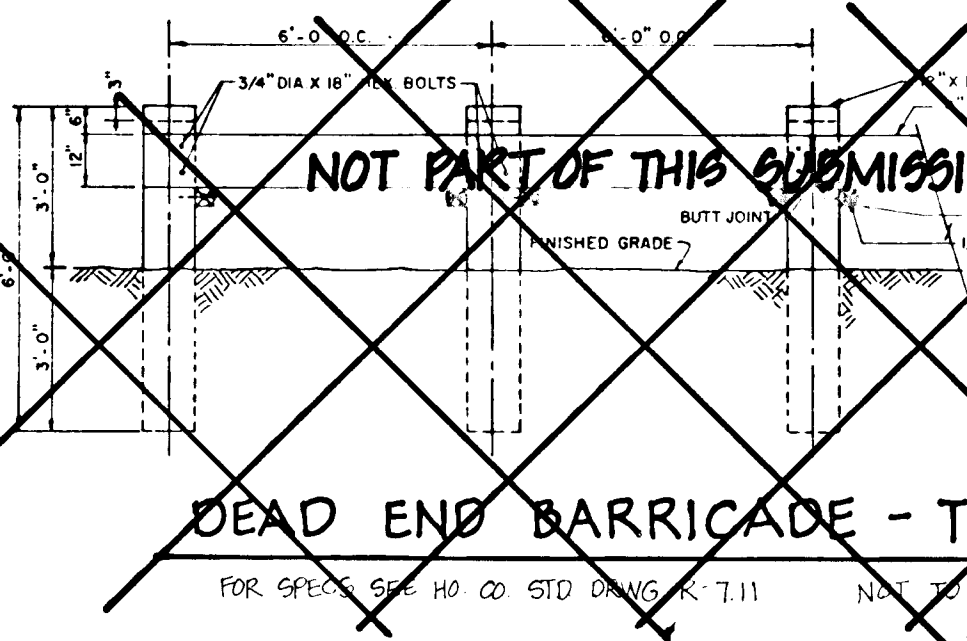
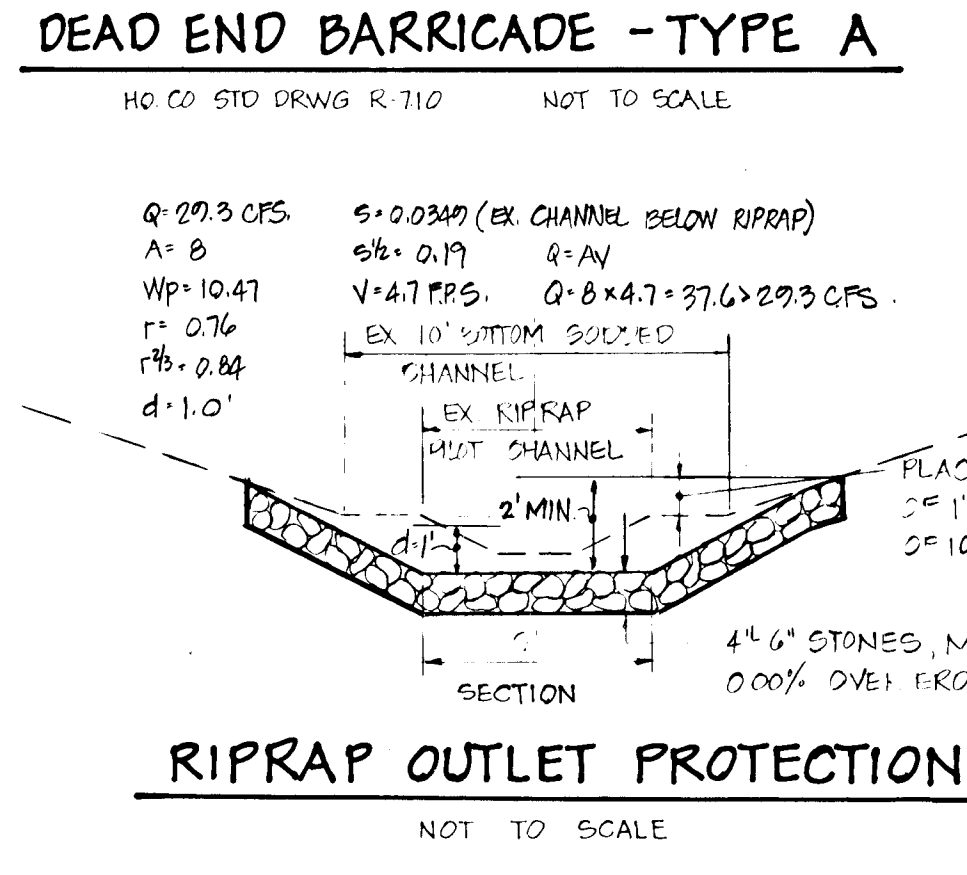
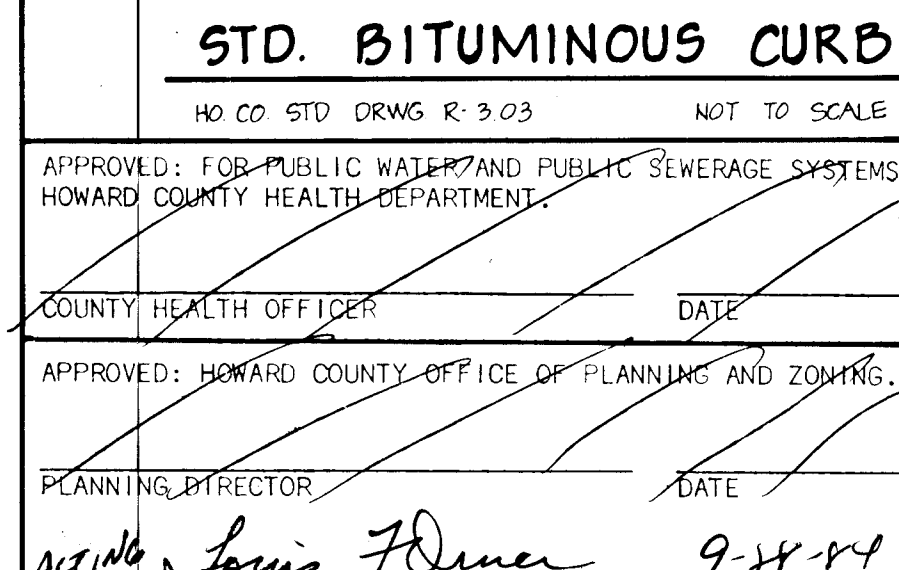
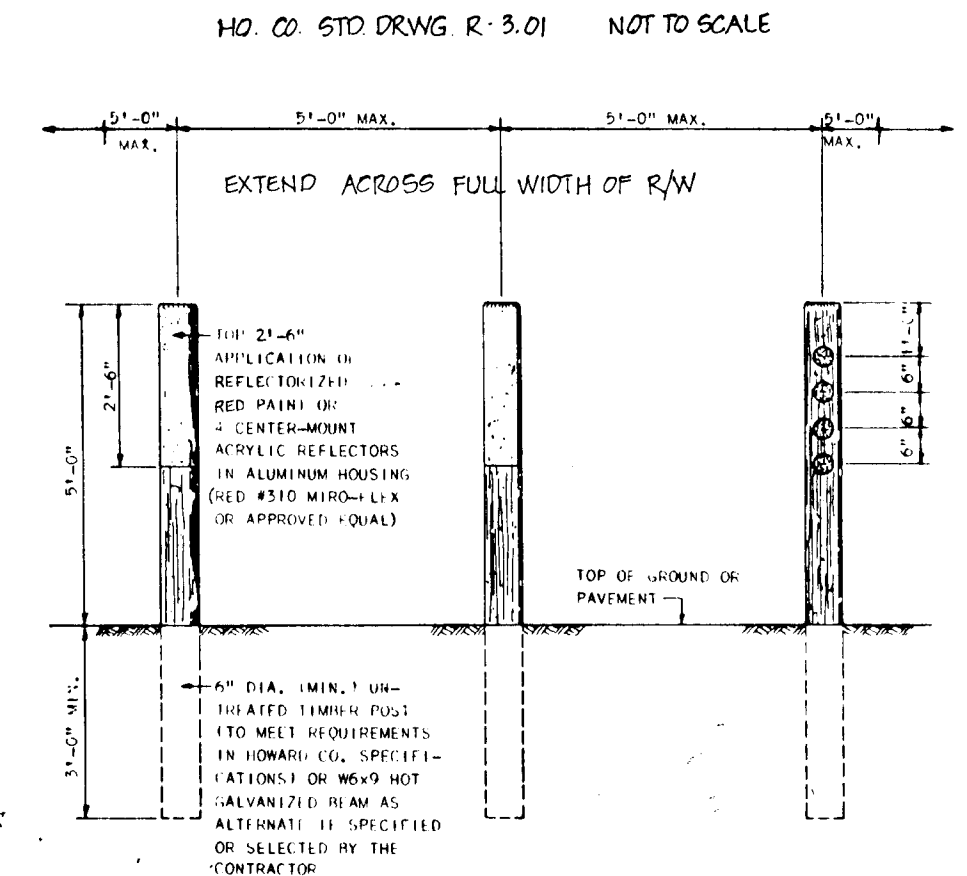
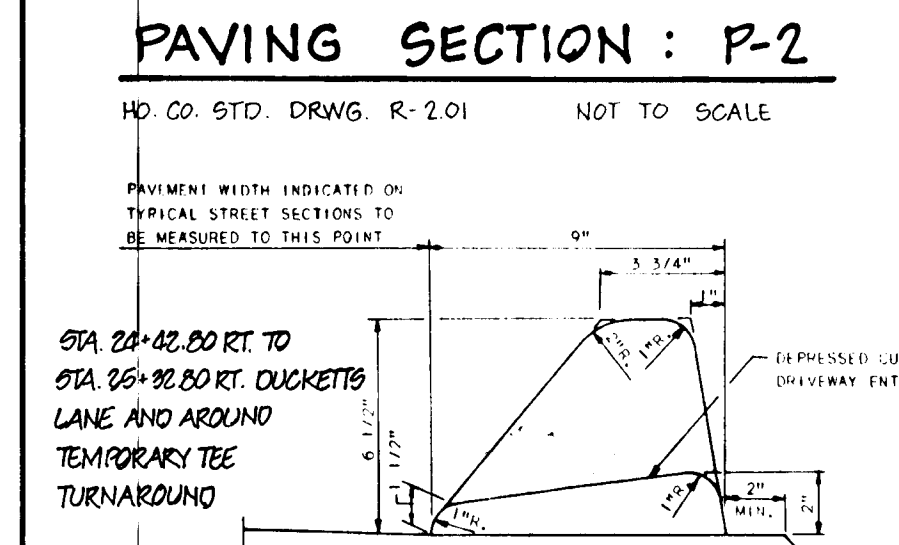
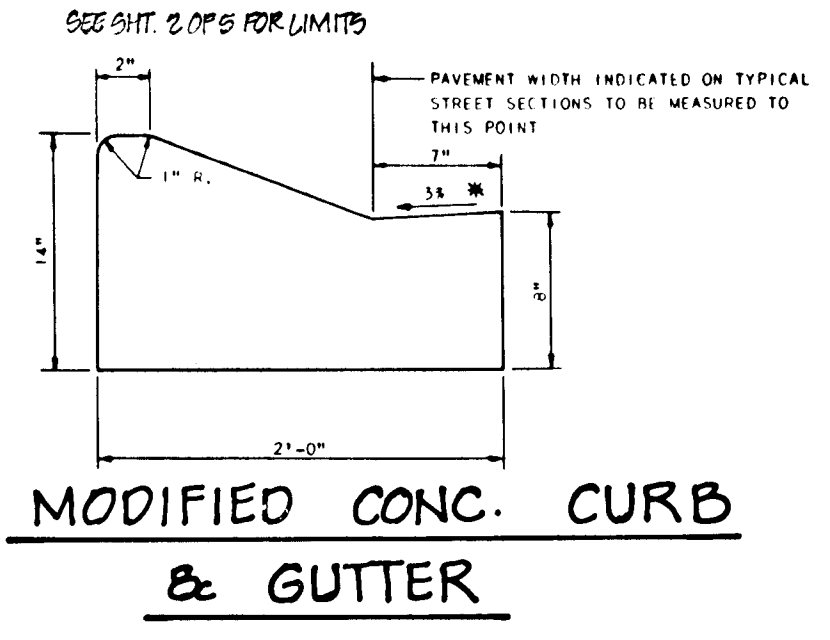
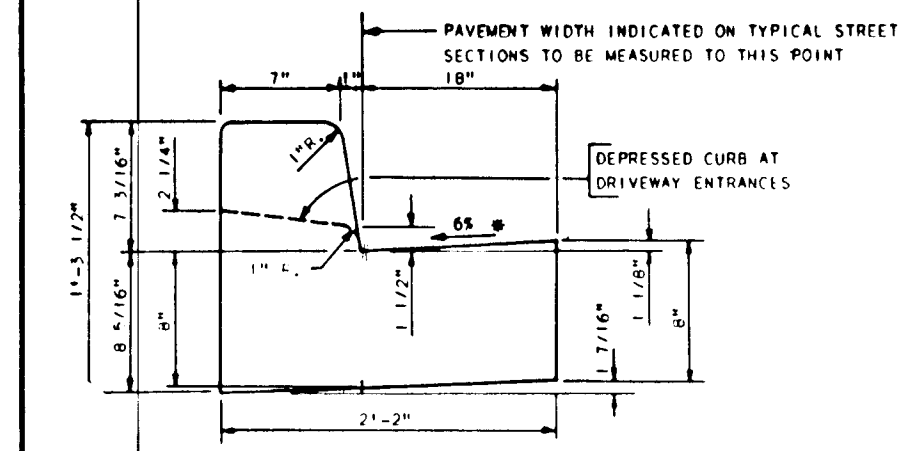
boender associates engineers
3565 ELLICOTT MILLS DRIVE surveyors
ELlicOTT CITY, MARYLAND 21043 planners
301.465.7777

REV. 8-30-84 OP. REVISED FOR SECT. 1 SUBMITTAL

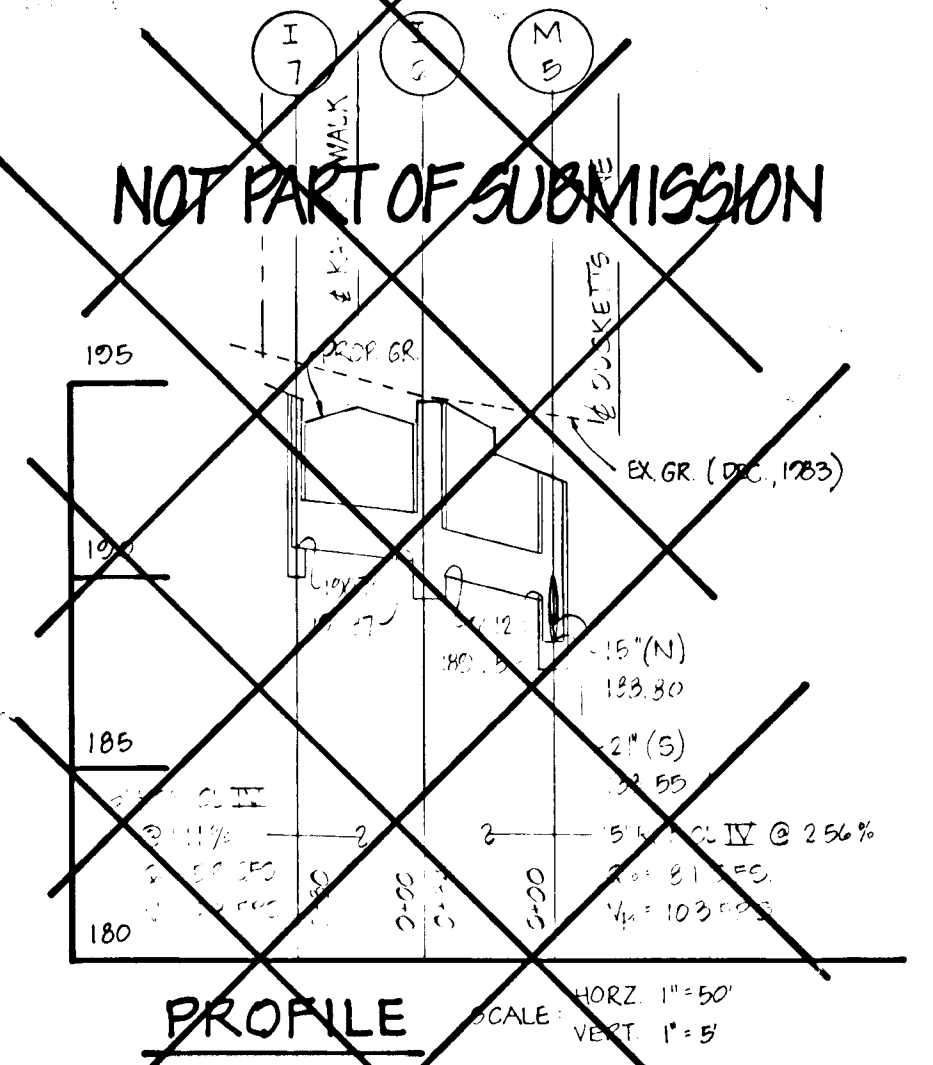
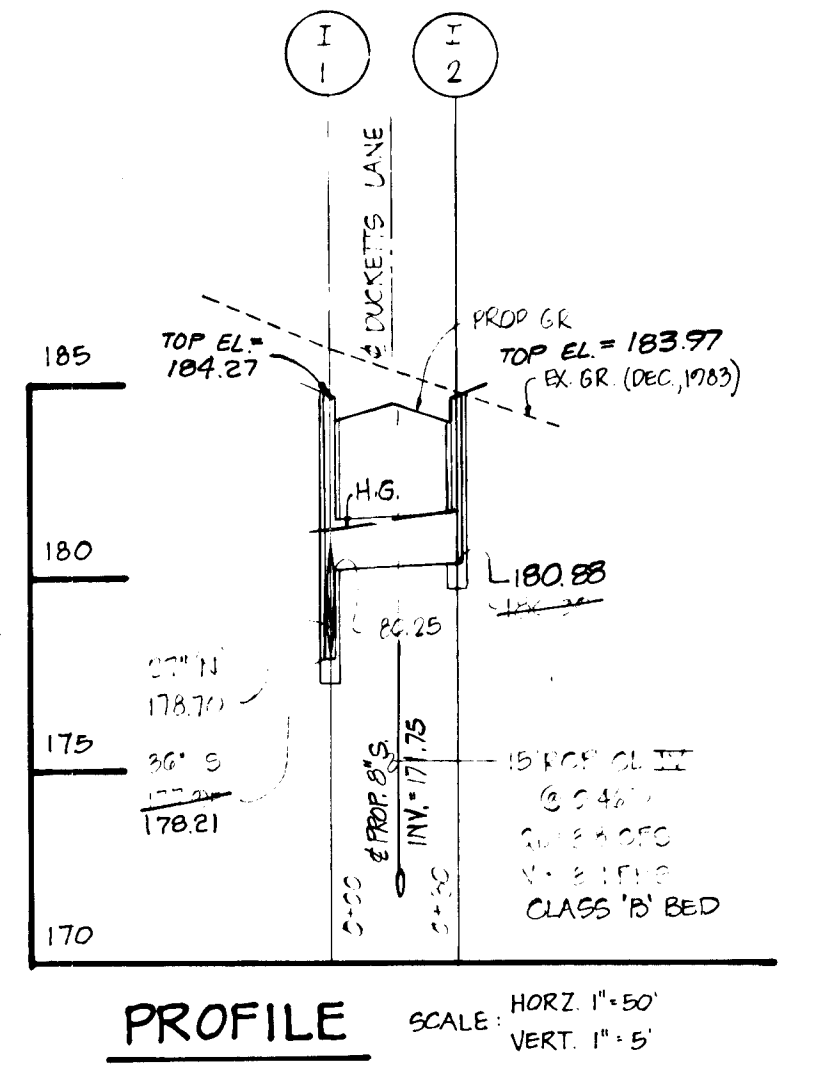
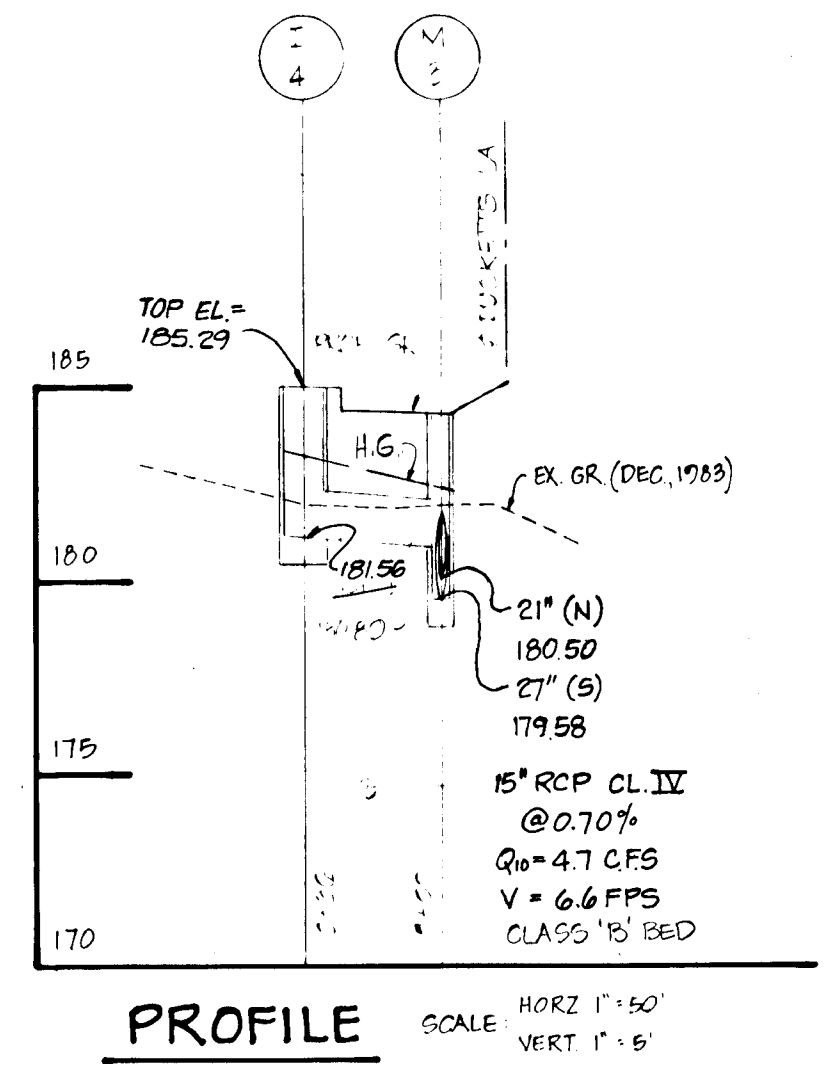
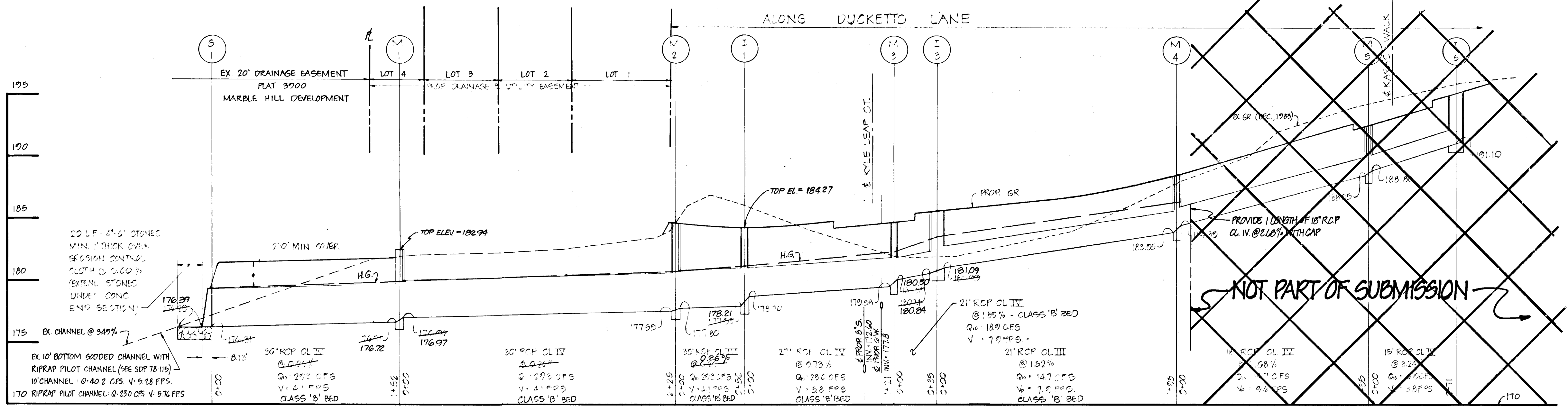
AS-BUILT F84-100



DUCKETTS LANE EXCEPT AT FUTURE ROAD CONNECTION (SEE BITUMINOUS CURB DETAIL, THIRD SHEET, FOR LIMITS) AND KYLE LEAF COURT TO STA. 0+60, RT. AND TO STA. 0+49, LT. (SEE PLAN SHEET, 2 OF 5)

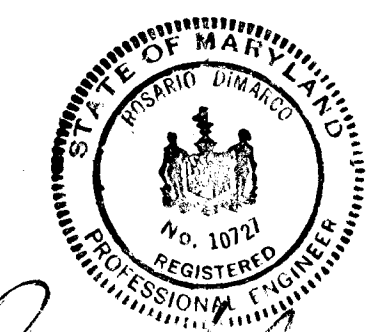


APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS.
 HOWARD COUNTY HEALTH DEPARTMENT
 COUNTY HEALTH OFFICER: _____ DATE: _____
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
 PLANNING DIRECTOR: _____ DATE: _____
 APPROVED: _____ DATE: _____
 DEPARTMENT OF PUBLIC WORKS. HOWARD COUNTY
 CHIEF, BUREAU OF ENGINEERING: _____ DATE: _____
 REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.
 U.S. SOIL CONSERVATION SERVICE: _____ DATE: _____
 THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 SOIL CONSERVATION DISTRICT: _____ DATE: _____



STRUCTURE SCHEDULE					
NO	TYPE	INV IN	INV OUT	TOP EL	REMARKS
1-1	A10 INLET	178.70	178.21	184.27	HO CO STD. DRWG. R-301
1-2	A10 INLET W/ DEFLECTORS	180.25	180.85	183.97	HO CO STD. DRWG. SD4.02
1-3	A10 INLET	181.09	180.84	185.80	HO CO STD. DRWG. SD4.02
1-4	A10 INLET	-	181.56	183.80	HO CO STD. DRWG. SD4.02
-	A10 INLET W/ DEFLECTORS	-	191.10	195.26	HO CO STD. DRWG. SD4.02 & SD4.83
I-6	A10 INLET	190.37	190.12	194.55	HO CO STD. DRWG. SD4.02
I-7	A10 INLET W/ DEFLECTORS	-	190.70	194.55	HO CO STD. DRWG. SD4.02 & SD4.83
M-1	MANHOLE SHALLOW	176.97	176.72	182.94	HO CO STD. DRWG. G5.05
M-2	MANHOLE SHALLOW	177.80	177.55	184.82	HO CO STD. DRWG. G5.05
M-3	MANHOLE SHALLOW	180.08	179.58	184.34	HO CO STD. DRWG. G5.05
M-4	MANHOLE SHALLOW	184.09	183.95	188.64	HO CO STD. DRWG. G5.05
M-5	MANHOLE SHALLOW	180.80	180.55	192.55	HO CO STD. DRWG. G5.05
M-6	MANHOLE SHALLOW	189.25	176.37	179.33	HO CO STD. DRWG. G5.05

OWNER & DEVELOPER
 DUCKETT LANE INC
 96 WAYNE NEWSOME
 PO BOX 30
 COLUMBIA, MD 21046



TITLE: PROFILES AND DETAILS
PROJECT: GLEN COVE ESTATES-SECT. I-AREA I
 LOCATION: 1ST ELECTION DISTRICT TAX MAP: 37 HOWARD CO, MD
 DATE: APRIL 1984 SCALE: AS SHOWN DESIGNER: JJB DRAWN BY: JJB CHECKED BY: R.D.M. DRAWING NO.: 4 OF 5 JOB NO.: 83091
boender associates engineers, surveyors, planners
 3565 A COURT SQUARE
 ELLICOTT CITY, MARYLAND 21043
 301-465-7777

SEDIMENT CONTROL NOTES

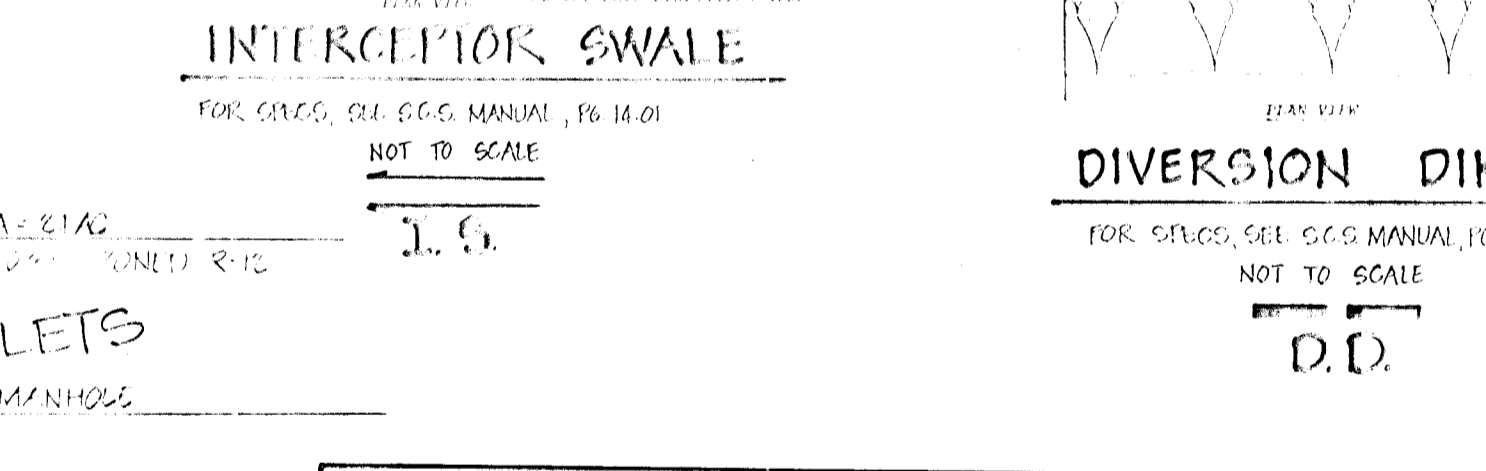
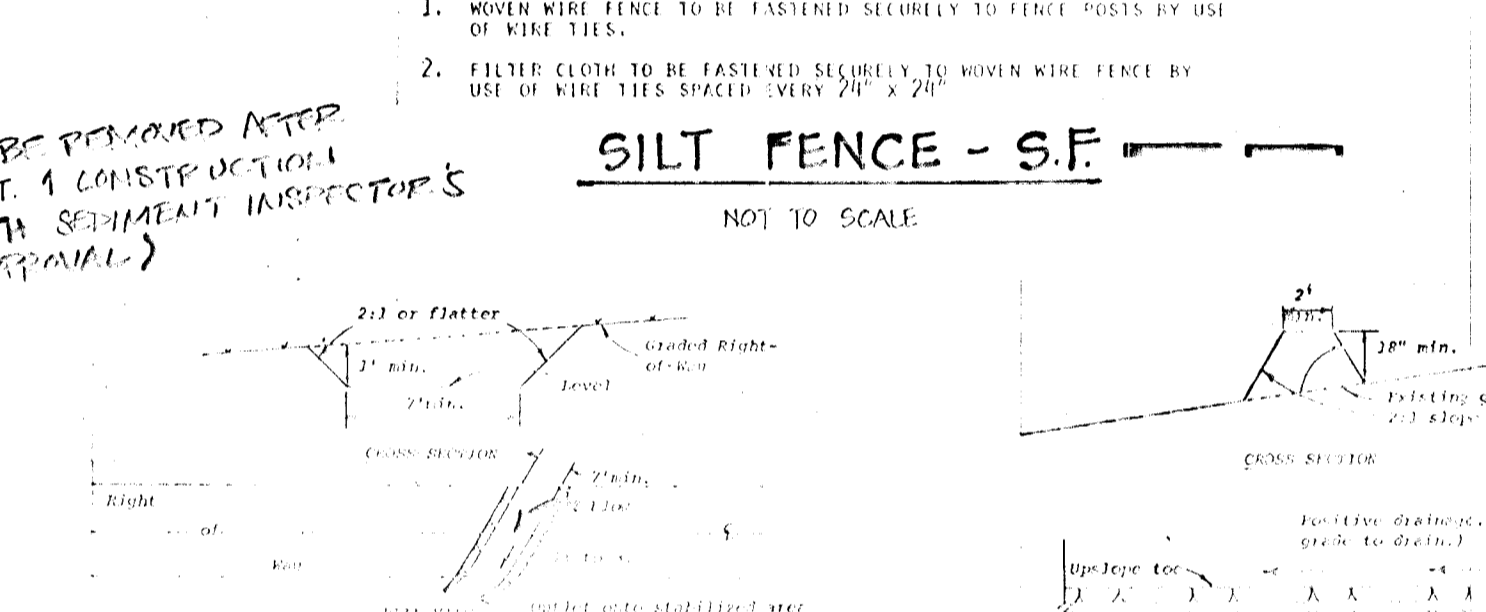
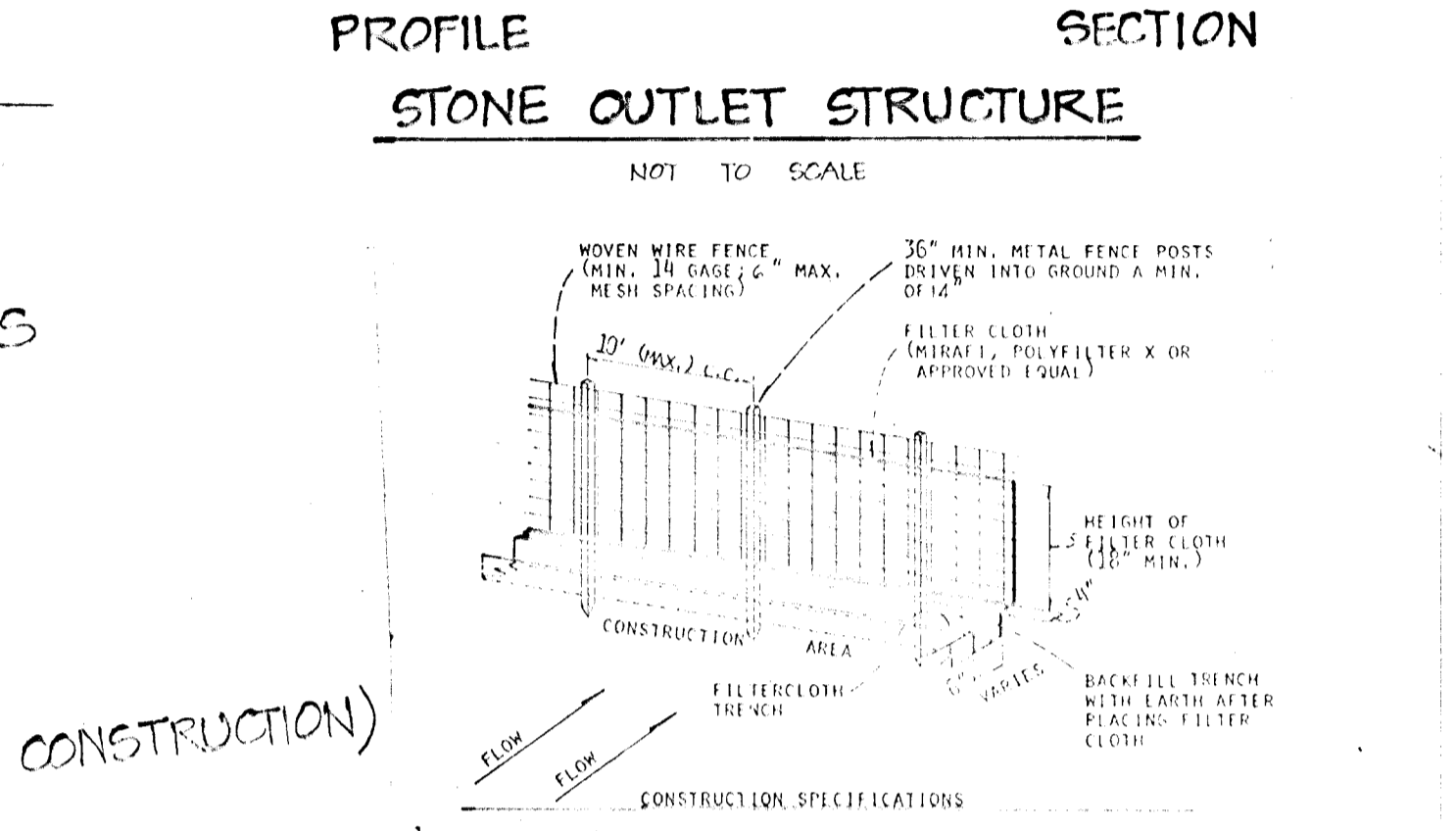
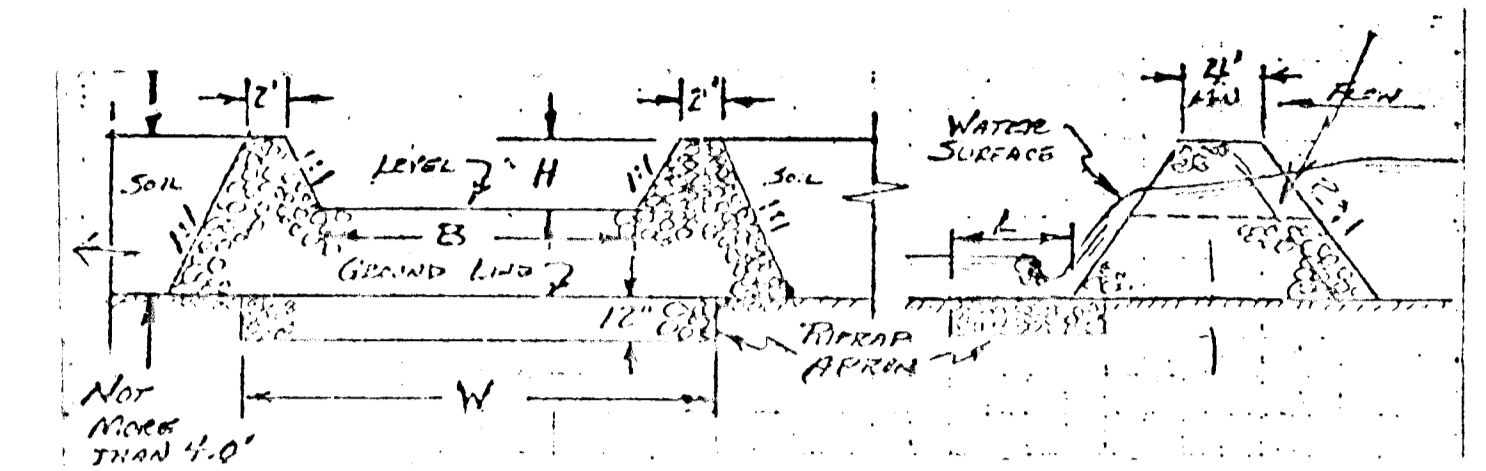
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS," PREPARED BY THE U.S.D.A. SOIL CONSERVATION SERVICE, APPLIED FOR GRADING PERMIT.
 NOTIFY THE BUREAU OF LICENSE INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS.
 CONSTRUCTION SHALL ADHERE TO THE CONSTRUCTION SEQUENCE.
 CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM.
 ELEVATIONS MARKED THUS (X) SHALL BE FINISHED GRADE.
 ANY EXCESS MATERIAL SHALL BE STOCKPILED IN A CLEARED LOCATION ON SITE WHICH IS PROTECTED BY SEDIMENT CONTROL STRUCTURE(S). MAXIMUM FILL SLOPE SHALL BE 3:1. STOCKPILED MATERIAL SHALL BE STABILIZED ACCORDING TO SEEDING SPECIFICATIONS BELOW.
 SEDIMENT CONTROL STRUCTURES SHALL BE REMOVED ONLY WITH PERMISSION OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.
 STABILIZATION MEASURES:
 TEMPORARY STABILIZATION:
 APPLY: 2000 LBS./AC. OR 46 LBS. OF PULVERIZED DOLOMIC LIMESTONE. 500 LBS./AC. OR 11.5 LBS./1000 SQ. FT. OF 10-10-10 FERTILIZER. PLANT WITH RYEGRASS AT 40 LBS./AC. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.
 PERMANENT STABILIZATION:
 APPLY: 2000 LBS./AC. OF PULVERIZED DOLOMIC LIMESTONE. 500 LBS./AC. OF 10-10-10 FERTILIZER.
 SEED: 85 LBS./AC. OF KENTUCKY 31 TALL FESCUE. 40 LBS./AC. OF KENTUCKY BLUE GRASS. 25 LBS./AC. OF ANNUAL RYEGRASS.
 NOTE: SEEDING MAY BE DONE BETWEEN MARCH 1 - MAY 1, OR AUG. 1 - OCT. 1 ONLY. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.
 MULCH: 2 TONS/AC. OF UNWEATHERED WHEATSTRAW. TIE MULCH DOWN WITH 480 GAL./AC. OF LIQUID ASPHALT.

SITE ANALYSIS

SECTION 1
 TOTAL AREA: 6.0 AC±
 AREA PAVED: 0.8 AC±
 AREA DISTURBED: 2.7 AC±
 AREA UNDISTURBED: 5.9 AC±
 AREA REVEGETATED: 1.9 AC±

SEDIMENT TRAP SCHEDULE											
TRAP	DA-AC	Q-CFS	VOLUME (CU YD)	TRAP SIZE	TRAP EL.	SPILLWAY ELEV.	SPILLWAY SIZE (L'xW')	APRON SIZE (L'xW')	APRON ELEV.	APRON WIDTH	APRON LENGTH
1	4.9	11.0	21.09	52'x28'	102.0	102.0	11'x1'	1'x6'	102.0	21'	6'

PEAK DISCHARGE Q-CFS	VELOCITY @ CRITICAL DEPTH-FPS	WEIR		RIPRAP APRON		ROCK SIZE	TRAP NO.
		LENGTH 'B'	HEIGHT 'H'	WIDTH 'W'	LENGTH 'L'		
11.0	3.3	15'	1'	21'	6'	3'-6" SURGE OR MD. NO. 1 STONE	1

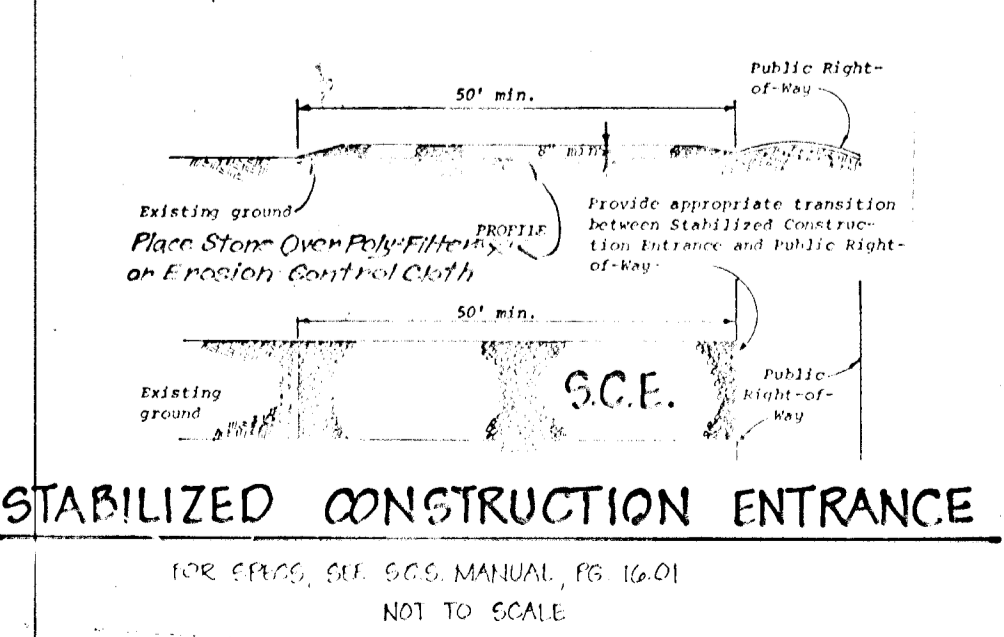
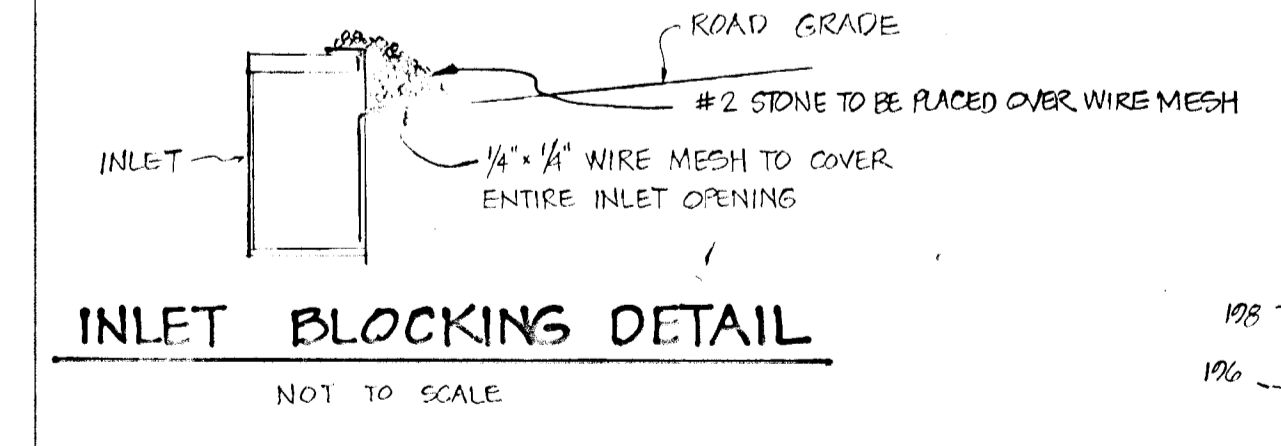


CONSTRUCTION SEQUENCE

- SECTION 1**
- OBTAIN GRADING AND BUILDING PERMIT.
 - NOTIFY THE HOWARD COUNTY BUREAU OF LICENSES, INSPECTIONS AND PERMITS AND CONSTRUCTION INSPECTION/SURVEY DIVISION 24 HOURS PRIOR TO GRADING OPERATIONS.
 - INSTALL TEMPORARY SEDIMENT CONTROL MEASURES (O.D., S.F., TRAP NO. 1, S.C.E., MOUNTABLE BERM) - 3 DAYS
 - ROUGH GRADE SITE. INSTALL I.S., APPLY TEMPORARY STABILIZATION MEASURES - 5 DAYS
 - INSTALL UTILITIES. BLOCK ALL INLETS - 14 DAYS
 - STABILIZE ROADS WITH BASE COURSE - 2 DAYS
 - PAVE ROADS. FIN. GRADE AND APPLY PERMANENT STABILIZATION MEASURES - 5 DAYS
 - REMOVE TEMPORARY SEDIMENT CONTROL MEASURES WITH APPROVAL OF THE SEDIMENT INSPECTOR.
- AREA 2**
- OBTAIN GRADING AND BUILDING PERMIT.
 - NOTIFY THE HOWARD COUNTY BUREAU OF LICENSES, INSPECTIONS AND PERMITS AND CONSTRUCTION INSPECTION/SURVEY DIVISION 24 HOURS PRIOR TO GRADING OPERATIONS.
 - INSTALL ALL TEMPORARY SEDIMENT CONTROL MEASURES (O.D., S.F., TRAP NO. 2, S.C.E., MOUNTABLE BERM) - 3 DAYS
 - ROUGH GRADE SITE. INSTALL I.S., APPLY TEMPORARY STABILIZATION MEASURES - 5 DAYS
 - INSTALL UTILITIES. BLOCK ALL INLETS - 14 DAYS
 - STABILIZE ROADS WITH BASE COURSE - 2 DAYS
 - PAVE ROADS. FIN. GRADE AND APPLY PERMANENT STABILIZATION MEASURES - 5 DAYS
 - REMOVE TEMPORARY SEDIMENT CONTROL MEASURES WITH APPROVAL OF THE SEDIMENT INSPECTOR.

APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS
 [Signature] 10/5/89
 CHIEF, BUREAU OF ENGINEERING
 [Signature] 9/28/89
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

JAMES W. ZIMMERMAN & WF
 552,1023



NOTE: STRAW BALE DIKES (S.C.S. MANUAL, PG. 13.01) MAY BE SUBSTITUTED FOR SILT FENCE (S.F.) WITH APPROVAL OF SEDIMENT INSPECTOR.

633

REVIEWED FOR HOWARD S.C.A. AND MEETS TECHNICAL REQUIREMENTS
 [Signature] 9/28/89
 U.S. SOIL CONSERVATION SERVICE
 THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 9/28/89
 U.S. SOIL CONSERVATION DISTRICT

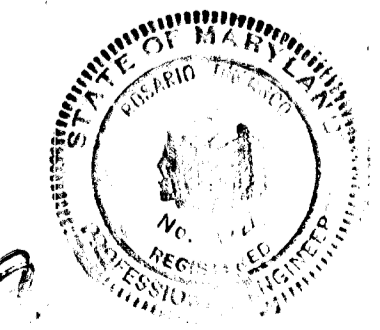
REV. 6-30-84 OP. REVISED FOR SECT. 1 SUBMITTAL
 REV. 6-13-84 S.D.K. PER S.C.S. COMMENTS

DEVELOPER'S CERTIFICATE
 I 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 REASONABLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROGRAM WILL HAVE A CERTIFICATE OF ATTENDANCE AS A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINS THE WORK. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT OFFICIALS AND AGENCIES, AS ARE DEEMED NECESSARY.
 [Signature] 4/25/89
 DATE

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 8/30/89
 ENGINEER DATE

OWNER & DEVELOPER
 LUCKY LANE INC.
 66 WYNE NEWBOME
 PO BOX 290
 COLUMBIA, MARYLAND 21046

SEDIMENT CONTROL & GRADING PLAN
GLEN COVE ESTATES - SECT. 1 - AREA 1
 LOT ELECTION DISTRICT TAX MAP: 87 HOWARD COUNTY, MD.
 FEB. 1984 J.J.B. J.J.B./D.M.P. S.D.P.S.
boender associates engineers/surveyors/planners
 2665 ELLIOTT MILLS DRIVE
 ELLICOTT CITY, MARYLAND 21117
 301.466.7177
 AS-BUILT F.P.A. 10-



SEDIMENT CONTROL NOTES

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS." PREPARED BY THE U.S.D.A. SOIL CONSERVATION SERVICE. APPLY FOR GRADING PERMIT.

NOTIFY THE BUREAU OF LICENSE INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS.

CONSTRUCTION SHALL ADHERE TO THE CONSTRUCTION SEQUENCE. CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM. ELEVATIONS MARKED THUS (X) SHALL BE FINISHED GRADE.

ANY EXCESS MATERIAL SHALL BE STOCKPILED IN A CLEARED LOCATION ON SITE WHICH IS PROTECTED BY SEDIMENT CONTROL STRUCTURE(S). MAXIMUM FILL SLOPE SHALL BE 3:1. STOCKPILED MATERIAL SHALL BE STABILIZED ACCORDING TO SEEDING SPECIFICATIONS BELOW.

SEDIMENT CONTROL STRUCTURES SHALL BE REMOVED ONLY WITH PERMISSION OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.

STABILIZATION MEASURES

TEMPORARY STABILIZATION:
 APPLY: 2000 LBS./AC. OR 46 LBS. OF PULVERIZED DOLOMIC LIMESTONE. 500 LBS./AC. OR 11.5 LBS./1000 SQ. FT. OF 10-10-10 FERTILIZER. PLANT WITH RYEGRASS AT 40 LBS./AC. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.

PERMANENT STABILIZATION:
 APPLY: 2000 LBS./AC. OF PULVERIZED DOLOMIC LIMESTONE. 500 LBS./AC. OF 10-10-10 FERTILIZER.
 SEED: 85 LBS./AC. OF KENTUCKY 31 TALL FESCUE.
 40 LBS./AC. OF KENTUCKY BLUE GRASS.
 25 LBS./AC. OF ANNUAL RYEGRASS.

NOTE: SEEDING MAY BE DONE BETWEEN MARCH 1 - MAY 1, OR AUG. 1 - OCT. 1 ONLY. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.

MULCH: 2 TONS/AC. OF UNWEATHERED WHEATSTRAW. TIE MULCH DOWN WITH 480 GAL./AC. OF LIQUID ASPHALT.

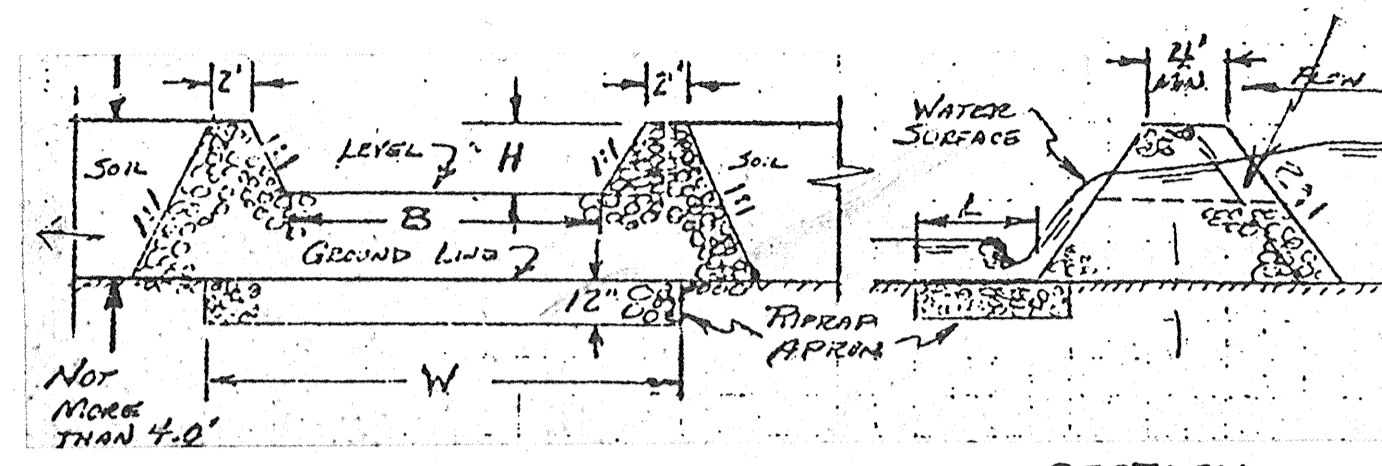
SITE ANALYSIS

SECTION 1
 TOTAL AREA: 8.0 AC ±
 AREA PAVED: 0.8 AC ±
 AREA DISTURBED: 2.7 AC ±
 AREA UNDISTURBED: 5.3 AC ±
 AREA REVEGETATED: 1.9 AC ±

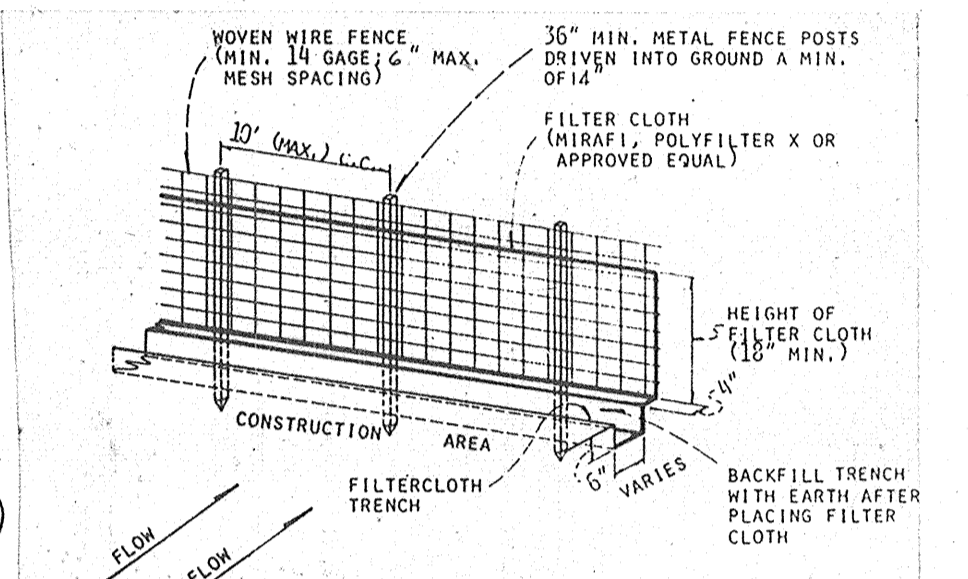
AREA 2
 TOTAL AREA: 5.6 AC ±
 AREA PAVED: 0.0 AC ±
 AREA DISTURBED: 1.0 AC ±
 AREA UNDISTURBED: 3.7 AC ±
 AREA REVEGETATED: 1.2 AC ±

TRAP	DA - AC	Q - CFS	VOLUME - CF	REQ'D	PROVIDED	DOT. SIZE	DOT. EL.	SPILLWAY ELEV.	REANDUT ELEV.	SPILLWAY SIZE	APRON SIZE
										LENGTH	DEPTH
1	4.5	11.0	8100	8328	100' x 20'	182.0	185.0	183.5	15'	1'	21' x 8'
2	6.1	15.0	10700	11460	91' x 32'	180.0	181.0	187.0	15'	1'	21' x 8'

PEAK DISCHARGE Q - CFS	VELOCITY @ CRITICAL DEPTH - FPS	WEIR		RIFRAP		APRON	ROCK SIZE	TRAP NO.
		LENGTH	HEIGHT	WIDTH	LENGTH			
11.0	3.3	15'	1'	21'	8'		3'-0" SURGE OR MD. NO. 1 STONE	1
15.0	3.3	15'	1'	21'	8'		3'-0" SURGE OR MD. NO. 1 STONE	2

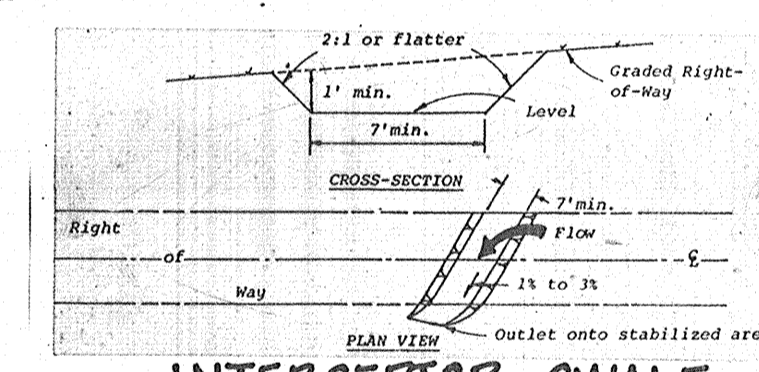


PROFILE SECTION
STONE OUTLET STRUCTURE
 NOT TO SCALE

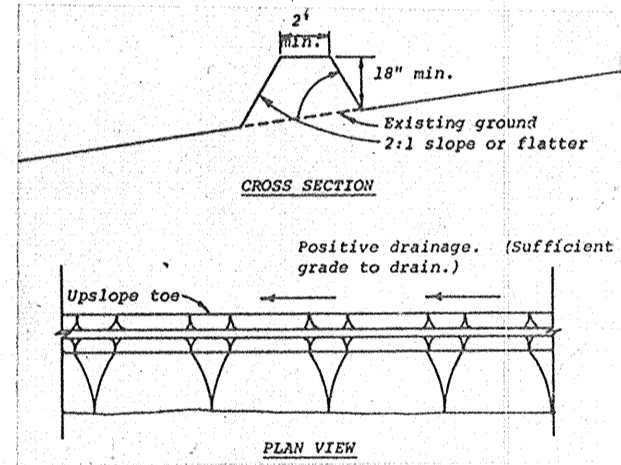


CONSTRUCTION SPECIFICATIONS
 1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS BY USE OF WIRE TIES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE BY USE OF WIRE TIES SPACED EVERY 24" X 24"

SILT FENCE - S.F.
 NOT TO SCALE



INTERCEPTOR SWALE
 FOR SPECS, SEE S.C.S. MANUAL, PG. 14-01
 NOT TO SCALE



DIVERSION DIKE
 FOR SPECS, SEE S.C.S. MANUAL, PG. 10-01
 NOT TO SCALE

CONSTRUCTION SEQUENCE

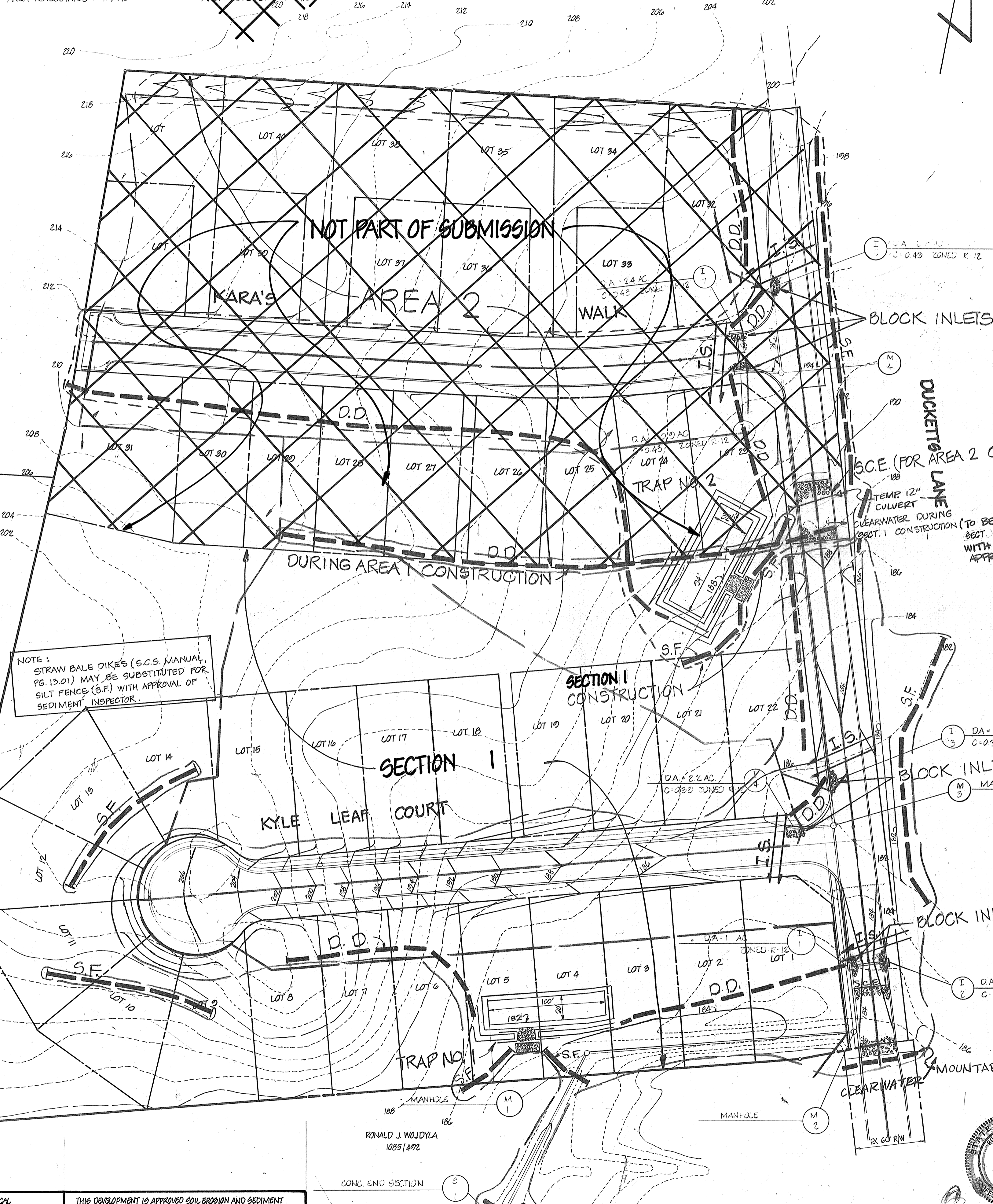
- SECTION 1**
1. OBTAIN GRADING AND BUILDING PERMIT.
 2. NOTIFY THE HOWARD COUNTY BUREAU OF LICENSES, INSPECTIONS AND PERMITS AND CONSTRUCTION INSPECTION/SURVEYS DIVISION 24 HOURS PRIOR TO GRADING OPERATIONS.
 3. INSTALL TEMPORARY SEDIMENT CONTROL MEASURES (D.D., S.F., TRAP NO. 1, S.C.E., MOUNTABLE BERM) - 3 DAYS
 4. ROUGH GRADE SITE. INSTALL I.S., APPLY TEMPORARY STABILIZATION MEASURES - 5 DAYS
 5. INSTALL UTILITIES. BLOCK ALL INLETS. - 14 DAYS
 6. STABILIZE ROADS WITH BASE COURSE. - 2 DAYS
 7. PAVE ROADS. FINE GRADE AND APPLY PERMANENT STABILIZATION MEASURES. - 5 DAYS
 8. REMOVE TEMPORARY SEDIMENT CONTROL MEASURES WITH APPROVAL OF THE SEDIMENT INSPECTOR.

- AREA 2**
1. OBTAIN GRADING AND BUILDING PERMIT.
 2. NOTIFY THE HOWARD COUNTY BUREAU OF LICENSES, INSPECTIONS AND PERMITS AND CONSTRUCTION INSPECTION/SURVEYS DIVISION 24 HOURS PRIOR TO GRADING OPERATIONS.
 3. INSTALL TEMPORARY SEDIMENT CONTROL MEASURES (D.D., S.F., TRAP NO. 2, S.C.E., MOUNTABLE BERM) - 3 DAYS
 4. ROUGH GRADE SITE. INSTALL I.S., APPLY TEMPORARY STABILIZATION MEASURES - 5 DAYS
 5. INSTALL UTILITIES. BLOCK ALL INLETS. - 14 DAYS
 6. STABILIZE ROADS WITH BASE COURSE. - 2 DAYS
 7. PAVE ROADS. FINE GRADE AND APPLY PERMANENT STABILIZATION MEASURES. - 5 DAYS
 8. REMOVE TEMPORARY SEDIMENT CONTROL MEASURES WITH APPROVAL OF THE SEDIMENT INSPECTOR.

NOTES:
 TEMPORARY SEDIMENT CONTROL MEASURES TO BE MAINTAINED AS NECESSARY TO ASSURE SEDIMENT AND EROSION CONTROL.

ALL SEDIMENT CONTROL TRAPS AND DEVICES ARE NOT TO BE ALTERED OR REMOVED UNTIL THEIR RESPECTIVE DRAINAGE AREAS ARE COMPLETELY STABILIZED.

NOTE:
 STRAW BALE DIKES (S.C.S. MANUAL, PG. 13-01) MAY BE SUBSTITUTED FOR SILT FENCE (S.F.) WITH APPROVAL OF SEDIMENT INSPECTOR.

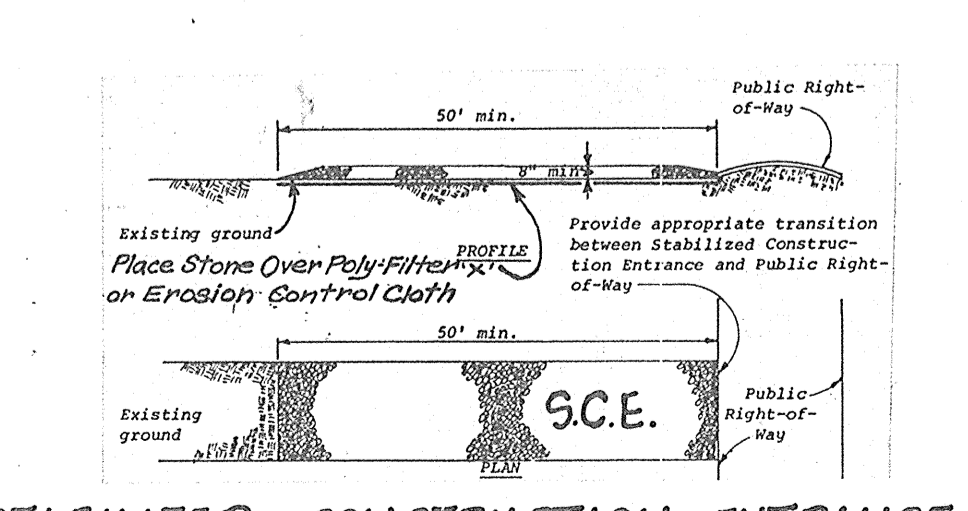
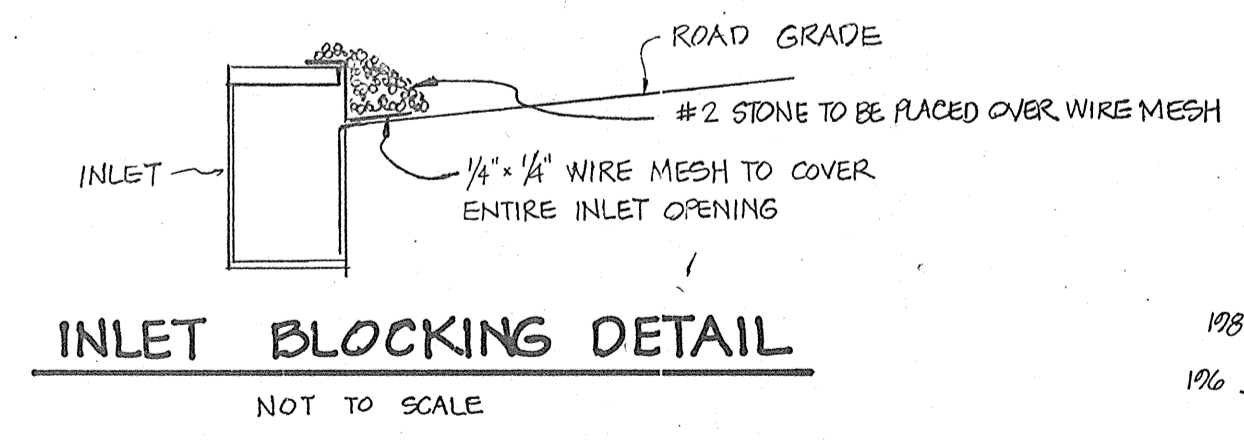


APPROVED: HOWARD COUNTY DEPT. OF PUBLIC WORKS

[Signature] 10/5/84
 CHIEF, BUREAU OF ENGINEERING

[Signature] 9/25/84
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

JAMES W. ZIMMERMAN & W.F.
 592/1028



STABILIZED CONSTRUCTION ENTRANCE
 FOR SPECS, SEE S.C.S. MANUAL, PG. 16-01
 NOT TO SCALE

DEVELOPER'S CERTIFICATE

I 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 INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT ON THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.

[Signature] 4/25/84
 DEVELOPER DATE

ENGINEER'S CERTIFICATE

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

[Signature] 8/30/84
 ENGINEER DATE

OWNER & DEVELOPER
 DUCKETT LANE INC.
 96 WAYNE NEWBOME
 P.O. BOX 90
 COLUMBIA, MARYLAND 21046

TITLE SEDIMENT CONTROL & GRADING PLAN
PROJECT GLEN COVE ESTATES - SECT. I - AREA 1
LOCATION 1ST ELECTION DISTRICT TAX MAP: 37 HOWARD COUNTY, MD.
DATE FEB. 1984 **SCALE** 1" = 60' **DESIGN BY** J.J.B. **DRAWN BY** J.J.B./D.M.P. **CHECKED BY** J.J.B. **JOB NO.** 89091
DRAWING NO. 5 OF 5

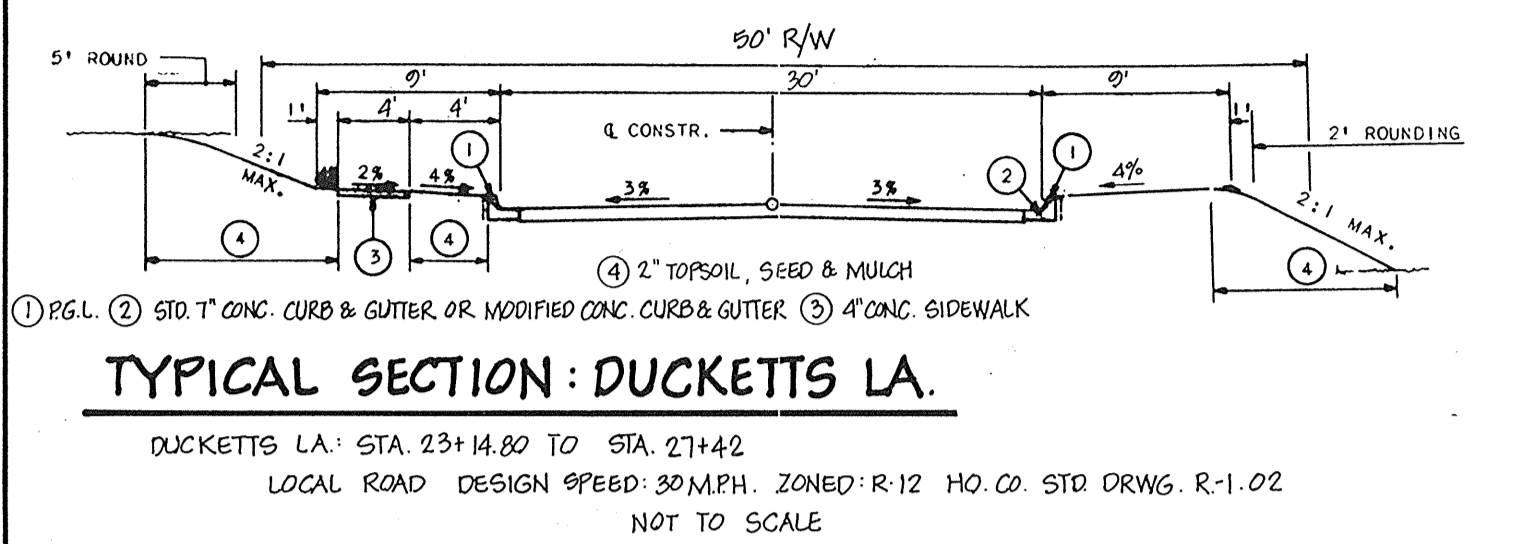
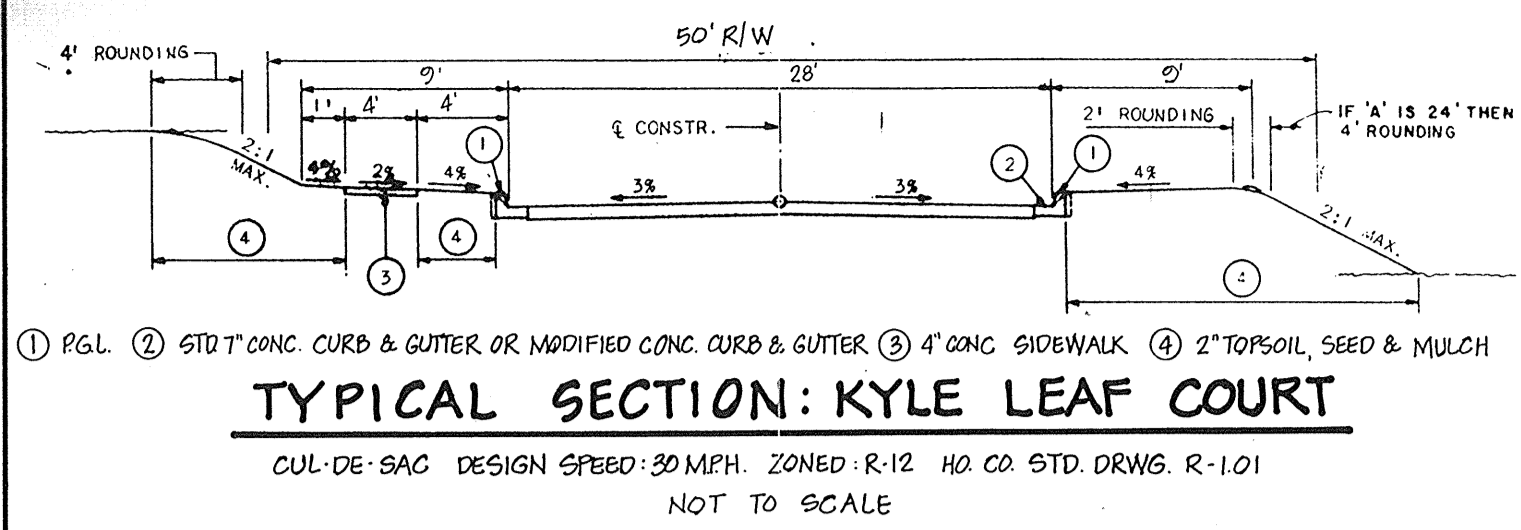
boender associates engineers, surveyors, planners
 3965 ELLICOTT MILLS DRIVE
 ELLICOTT CITY, MARYLAND 21043
 301-465-7777



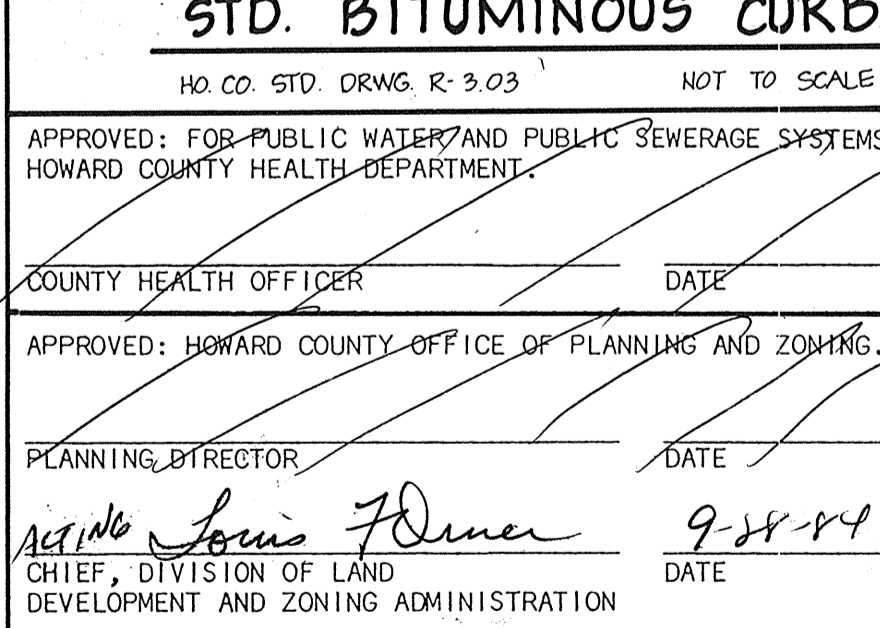
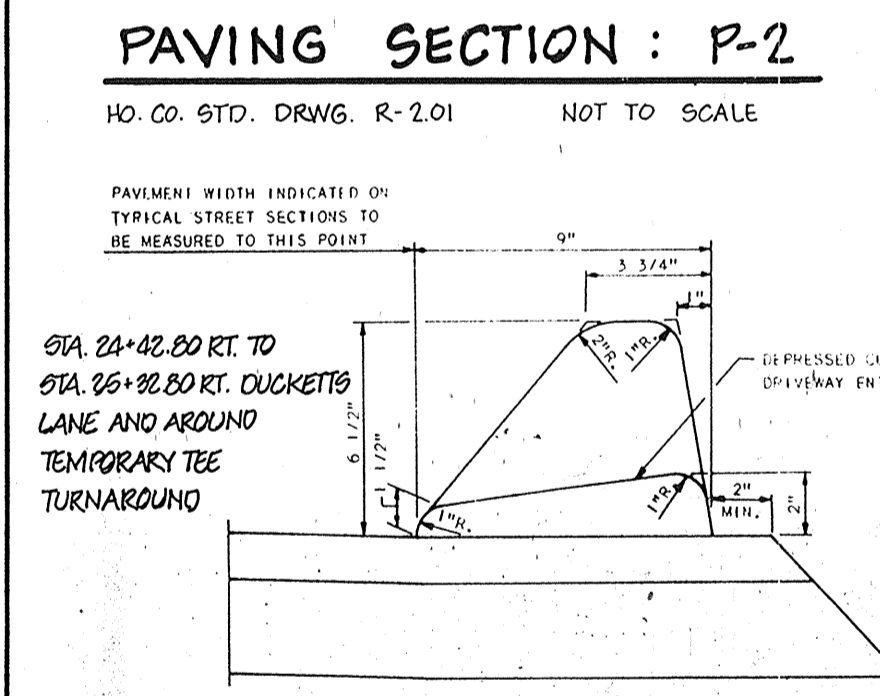
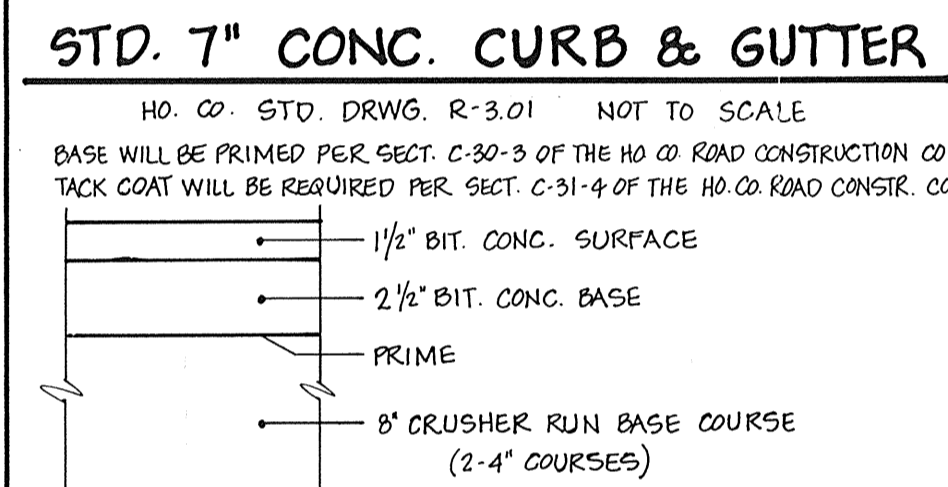
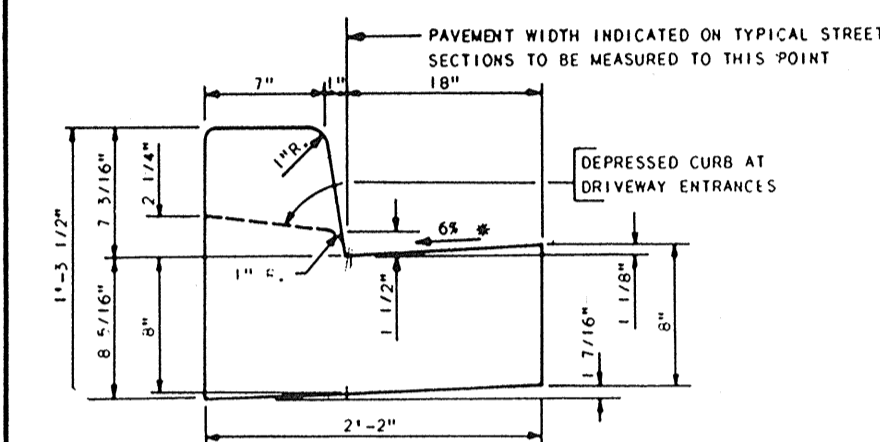
REV. 6-30-84 OR REVISED FOR SECT. 1 SUBMITTAL
 REV. 6-13-84 S.D.K. PER S.C.S. COMMENTS

REVIEWED FOR HOWARD S.C.S. AND MEETS TECHNICAL REQUIREMENTS
[Signature] 9-28-84
 U.S. SOIL CONSERVATION SERVICE DATE

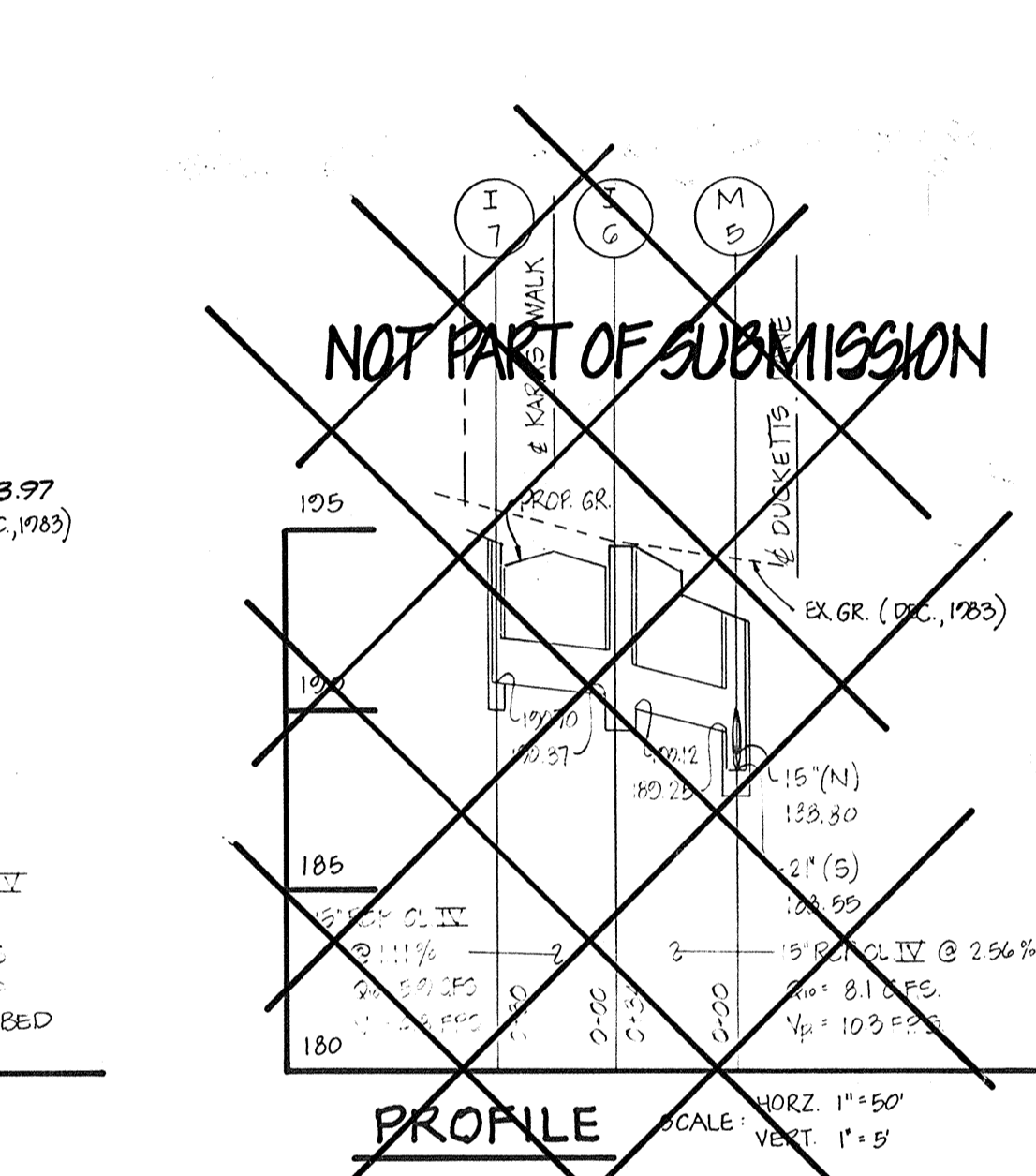
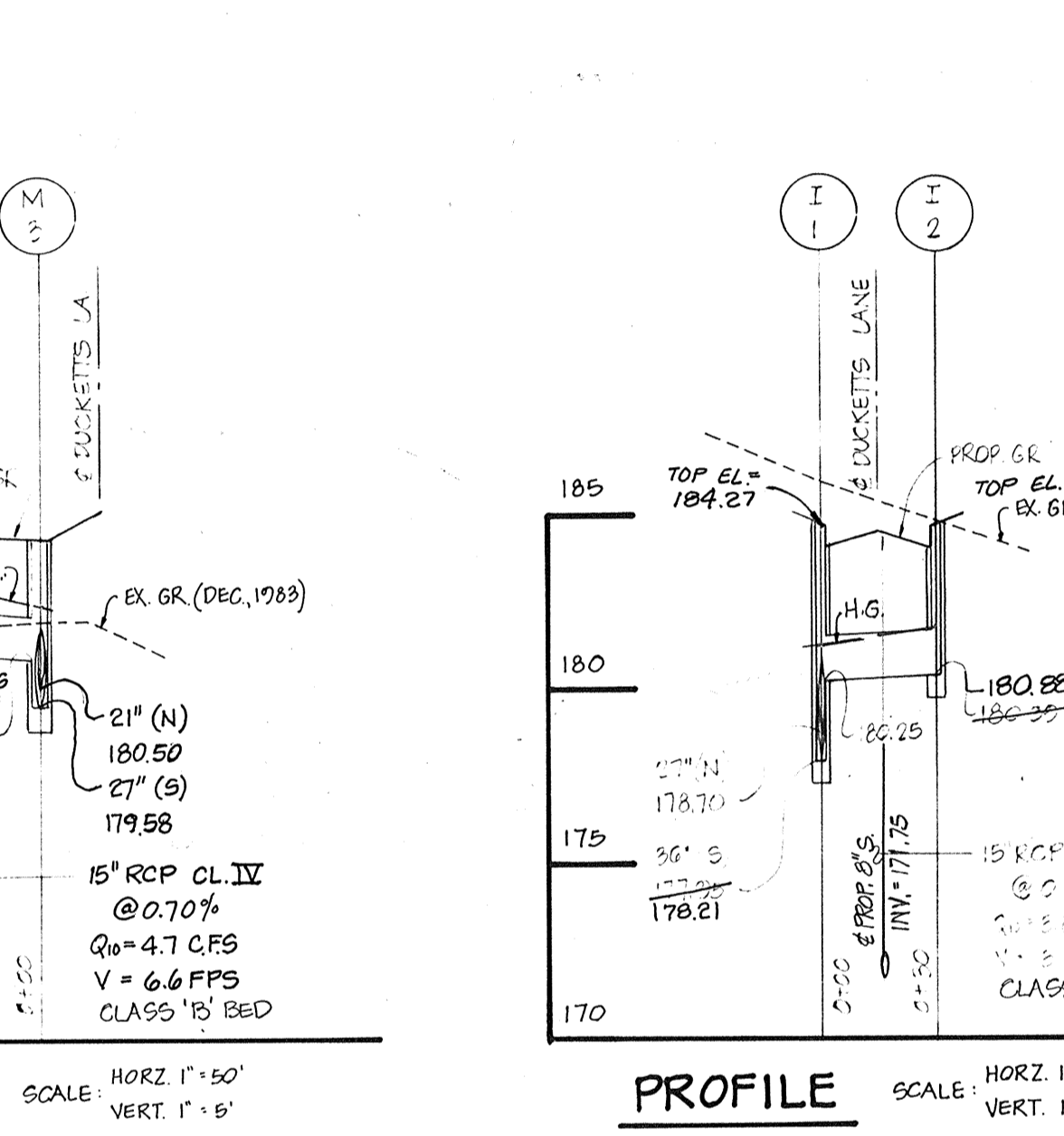
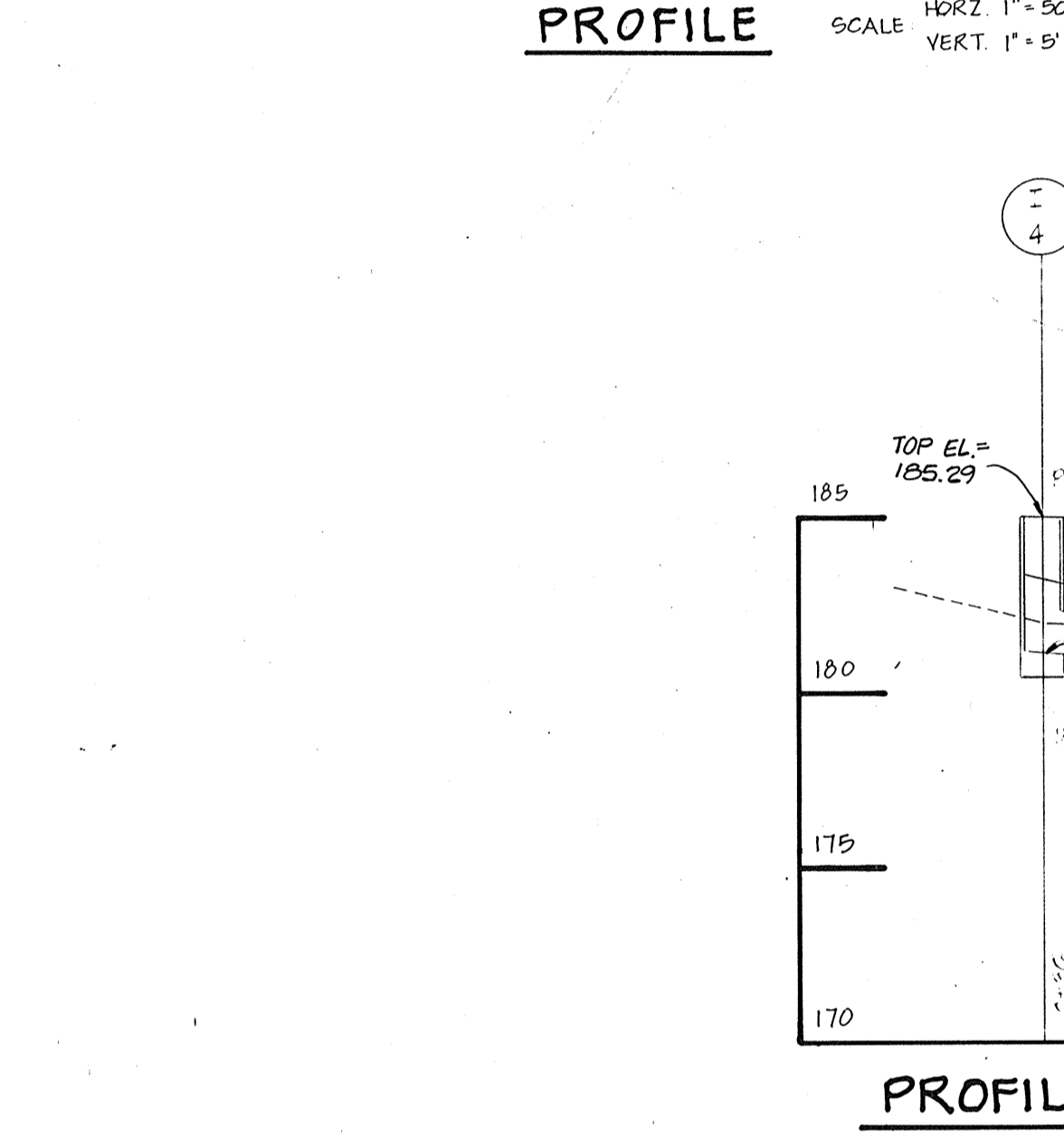
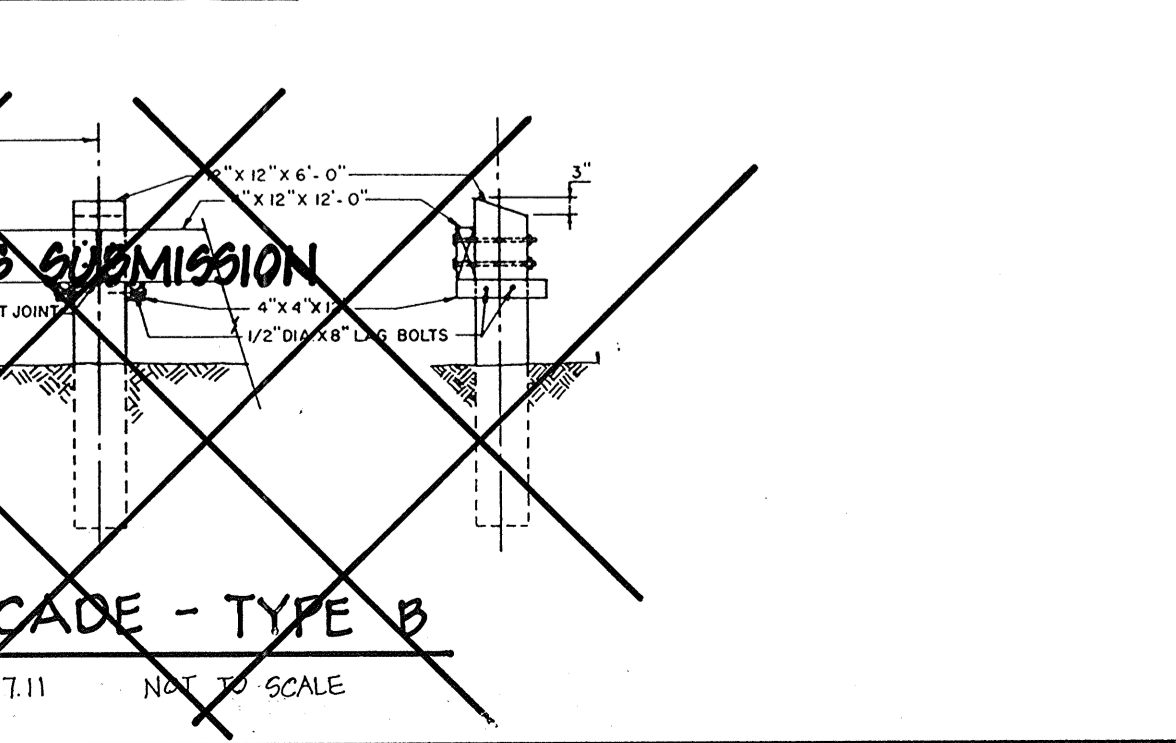
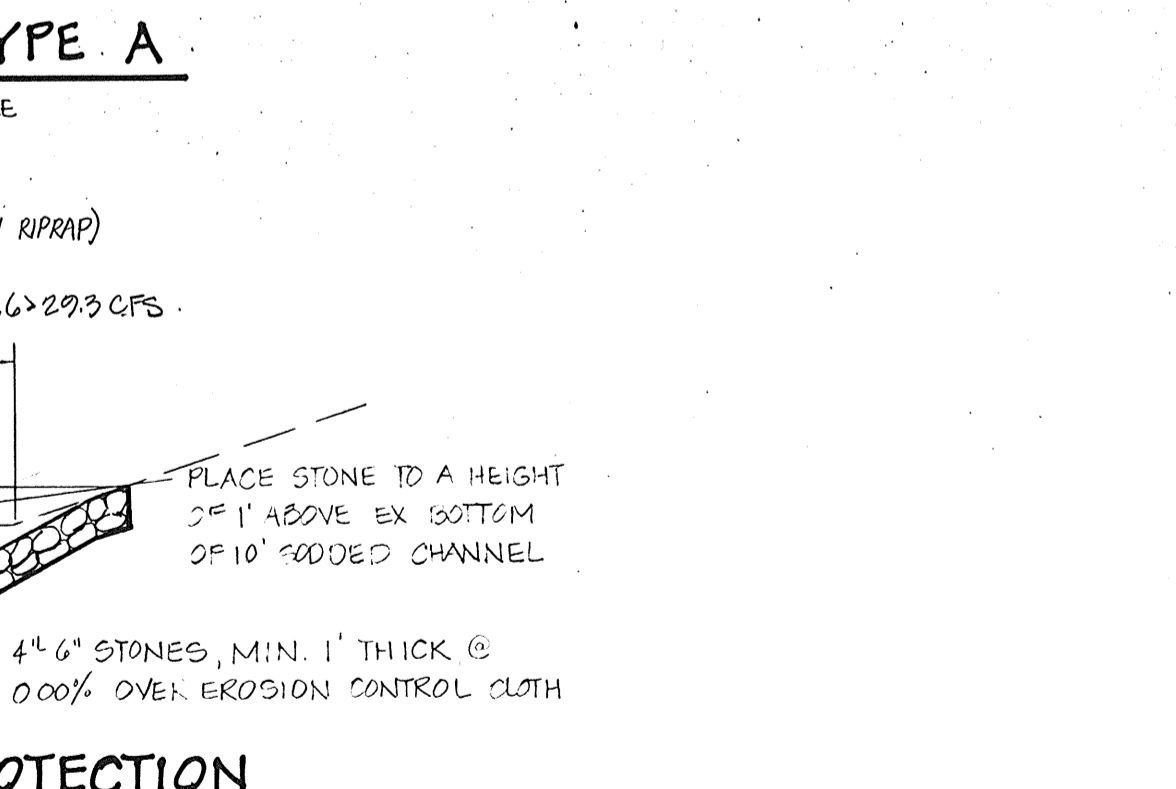
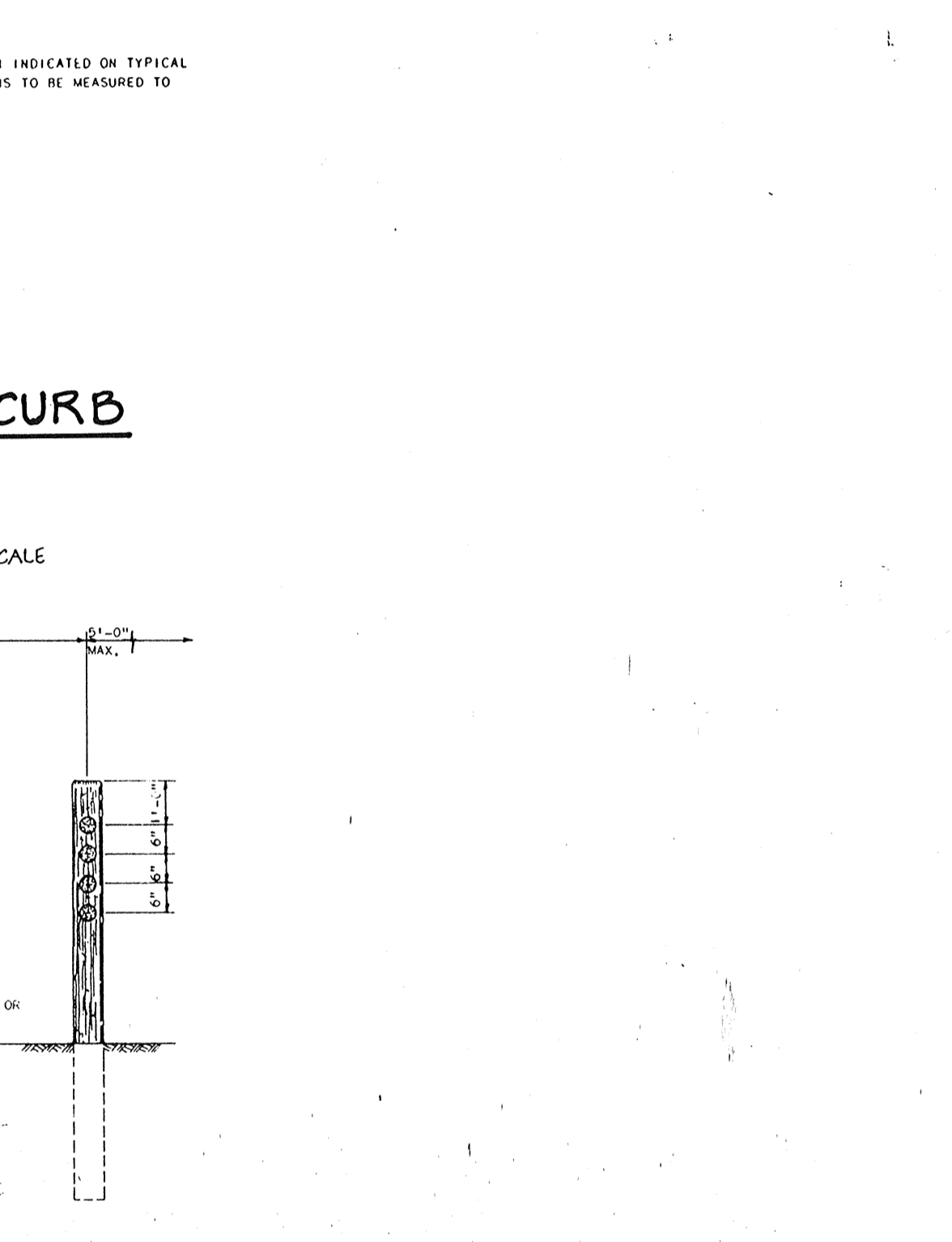
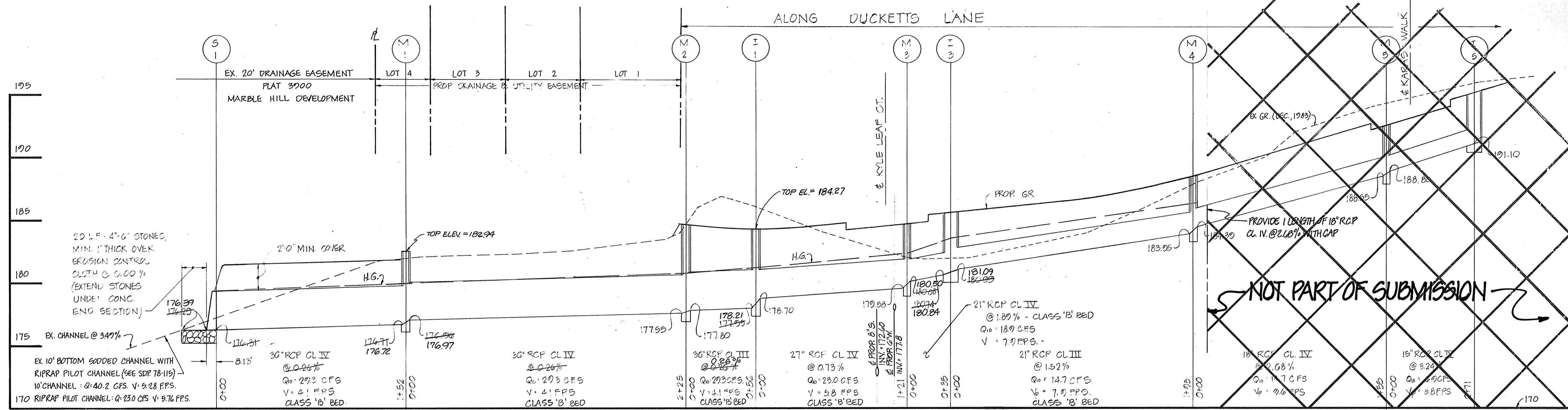
THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 9/28/84
 SOIL CONSERVATION DISTRICT DATE



DUCKETTS LANE EXCEPT AT FUTURE ROAD CONNECTION (SEE BITUMINOUS CURB DETAIL, THIS SHEET, FOR LIMITS) AND KYLE LEAF COURT TO STA. 0+50, RT. AND TO STA. 0+49, LT. (SEE PLAN SHEET 2 OF 5)



APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT. COUNTY HEALTH OFFICER: [Signature] DATE: [Blank]. APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING. PLANNING DIRECTOR: [Signature] DATE: 9-28-84. CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION. APPROVED: DEPARTMENT OF PUBLIC WORKS, HOWARD COUNTY. CHIEF, BUREAU OF ENGINEERING: [Signature] DATE: 10-5-84. REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS. U.S. SOIL CONSERVATION SERVICE: [Signature] DATE: 9-28-84. THIS DEVELOPMENT IS APPROVED SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. SOIL CONSERVATION DISTRICT: [Signature] DATE: 9/28/84.



STRUCTURE SCHEDULE						
NO	TYPE	INV IN	INV OUT	TOP EL.	REMARKS	
I-1	A-0 INLET - SHALLOW	176.70	178.21	184.27	HO CO. STD. DRWG. SD-401	
I-2	A-0 INLET - SHALLOW	180.85	180.85	183.97	HO CO. STD. DRWG. SD-402	
I-3	A-0 INLET	181.09	180.84	183.80	HO CO. STD. DRWG. SD-402	
I-4	A-0 INLET	178.21	178.21	183.55	HO CO. STD. DRWG. SD-402	
I-5	A-0 INLET W/ DEFLECTORS	191.10	191.10	192.26	HO CO. STD. DRWG. SD-402 & SD-403	
I-6	A-0 INLET	190.37	190.12	194.55	HO CO. STD. DRWG. SD-402	
I-7	A-0 INLET W/ DEFLECTORS	-	190.70	194.55	HO CO. STD. DRWG. SD-402 & SD-403	
M-1	MANHOLE - SHALLOW	176.97	176.72	182.94	HO CO. STD. DRWG. G-505	
M-2	MANHOLE	177.80	177.55	184.88	HO CO. STD. DRWG. G-501	
M-3	MANHOLE - SHALLOW	180.00	179.58	184.34	HO CO. STD. DRWG. G-505	
M-4	MANHOLE - SHALLOW	184.39	183.95	188.64	HO CO. STD. DRWG. G-505	
M-5	MANHOLE - SHALLOW	180.80	180.55	192.55	HO CO. STD. DRWG. G-505	
S-1	SOIL EROSION PROTECTION	-	176.97	179.33	HO CO. STD. DRWG. SD-351	

OWNER & DEVELOPER
DUCKETT LANE INC
% WAYNE NEWSOME
PO BOX 30
COLUMBIA, MD. 21046

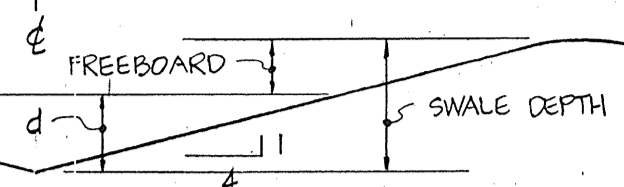


TITLE: PROFILES AND DETAILS
PROJECT: GLEN COVE ESTATES-SECT. I-AREA I
LOCATION: 1ST ELECTION DISTRICT TAX MAP: 37 HOWARD CO., MD.
DATE: APRIL 1984 SCALE: AS SHOWN DESIGN BY: J.J.B. DRAWN BY: J.J.B. CHECKED BY: R.D.M. DRAWING NO.: 4 OF 5 JOB NO.: 83091
boender associates engineers/surveyors/planners
3565 - A COURT SQUARE
ELLCOTT CITY, MARYLAND 21043
301-465-7777

SWALE	D.A.	C	I ₁₀	Q ₁₀	GRADED SWALE DATA		n	FREEBOARD	SWALE DEPTH	SIDE SLOPES	
					DESIGN d	V					
1	2.5 AC	0.43	5.7	61 CFS	0.71	3.3 FPS	2.50%	0.033	0.20'	1.0'	4:1
2	1.0 AC	0.43	5.7	2.5 CFS	0.45	3.3 FPS	4.60%	0.033	0.30'	1.0'	4:1

GRASSSED SWALE DETAIL

NOT TO SCALE



JEROME J. BULANOWSKI
012/310

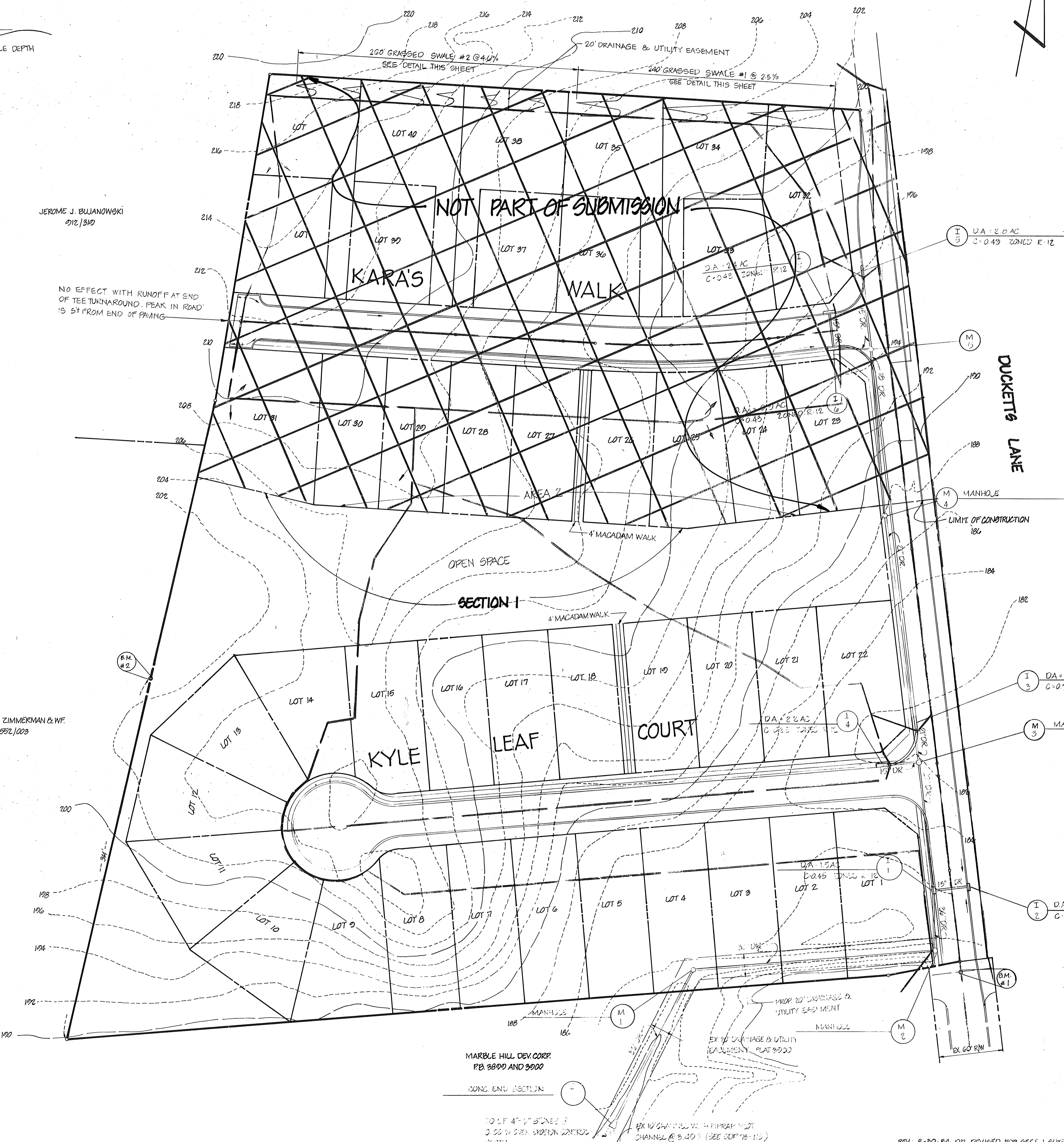
NO EFFECT WITH RUNOFF AT END OF THE TURNAROUND. PEAK IN ROAD IS 5' FROM END OF PAVING.

BENCHMARKS

B.M. #1 - ELEV. 184.93 - P.K. NAIL SET IN CENTER OF DUCKETTS LA. AT EDGE OF EX. PAVING.

B.M. #2 - ELEV. 200.86 - IRON PIPE IN CONC. ON PROPERTY LINE OPPOSITE OF DUCKETTS LA. IRON PIPE BEING 34' FROM PROPERTY CORNER ADJACENT TO MARBLE HILL.

JAMES W. ZIMMERMAN & WF
952/1008



DUCKETTS LANE

MANHOLE

MANHOLE

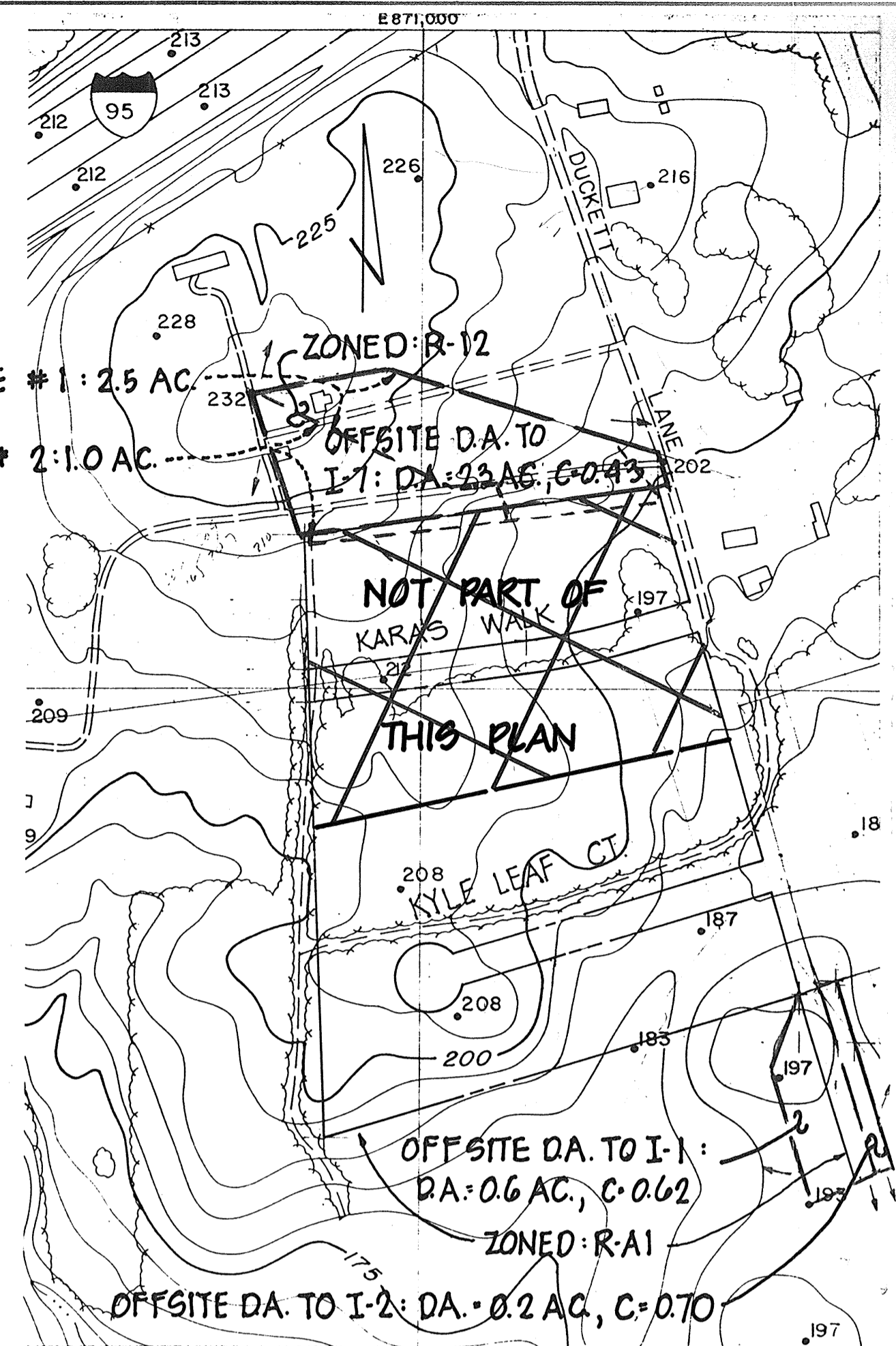
MANHOLE

MANHOLE

MANHOLE

MANHOLE

MANHOLE



OFFSITE DRAINAGE AREA MAP

SCALE: 1" = 200'
FROM HO. CO. AERIAL TOPO SHIT. 225-46

DA SWALE #1: 2.5 AC
DA SWALE #2: 1.0 AC
ZONED: R-12
OFFSITE DA. TO I-1: DA: 2.3 AC, C: 0.43
OFFSITE DA. TO I-1: DA: 0.6 AC, C: 0.62
ZONED: R-1
OFFSITE DA. TO I-2: DA: 0.2 AC, C: 0.70

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER _____ DATE _____

APPROVED - HOWARD COUNTY OFFICE OF PLANNING AND ZONING

PLANNING DIRECTOR _____ DATE _____
ACTING *Lois Flynn* 9-28-84
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

APPROVED: HOWARD COUNTY
DEPARTMENT OF PUBLIC WORKS

William K. ... 10-5-84
CHIEF, BUREAU OF ENGINEERING DATE

REVIEWED FOR HOWARD G.C.O. AND METS TECHNICAL REQUIREMENTS

William K. ... 9-28-84
U.S. SOIL CONSERVATION SERVICE DATE

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

Stephen L. ... 9/28/84
SOIL CONSERVATION DISTRICT DATE



OWNER & DEVELOPER
DUCKETT LANE INC.
16 WAYNE NEWBOME
P.O. BOX 99
COLUMBIA, MARYLAND 21046

TITLE: DRAINAGE AREA MAP

PROJECT: GLEN COVE ESTATES-SECT. I-AREA I

LOCATION: 1st ELECTION DISTRICT TAX MAP: 37 HOWARD COUNTY, MD.

DATE: APRIL, 1984 SCALE: 1" = 60' DESIGN BY: J.J.B. DRAWN BY: J.W.D./D.M.P. CHECKED BY: J.W.D. DRAWING NO.: 3 OF 3 JOB NO.: 88021

boender associates engineers, surveyors, planners
3565 ELLICOTT MILLS DRIVE
ELLICOTT CITY, MARYLAND 21043
301-465-7777

AS-BUILT F 84-180

REV: 8-30-84 OP. REVISED FOR SECT. I SUBMITTAL

