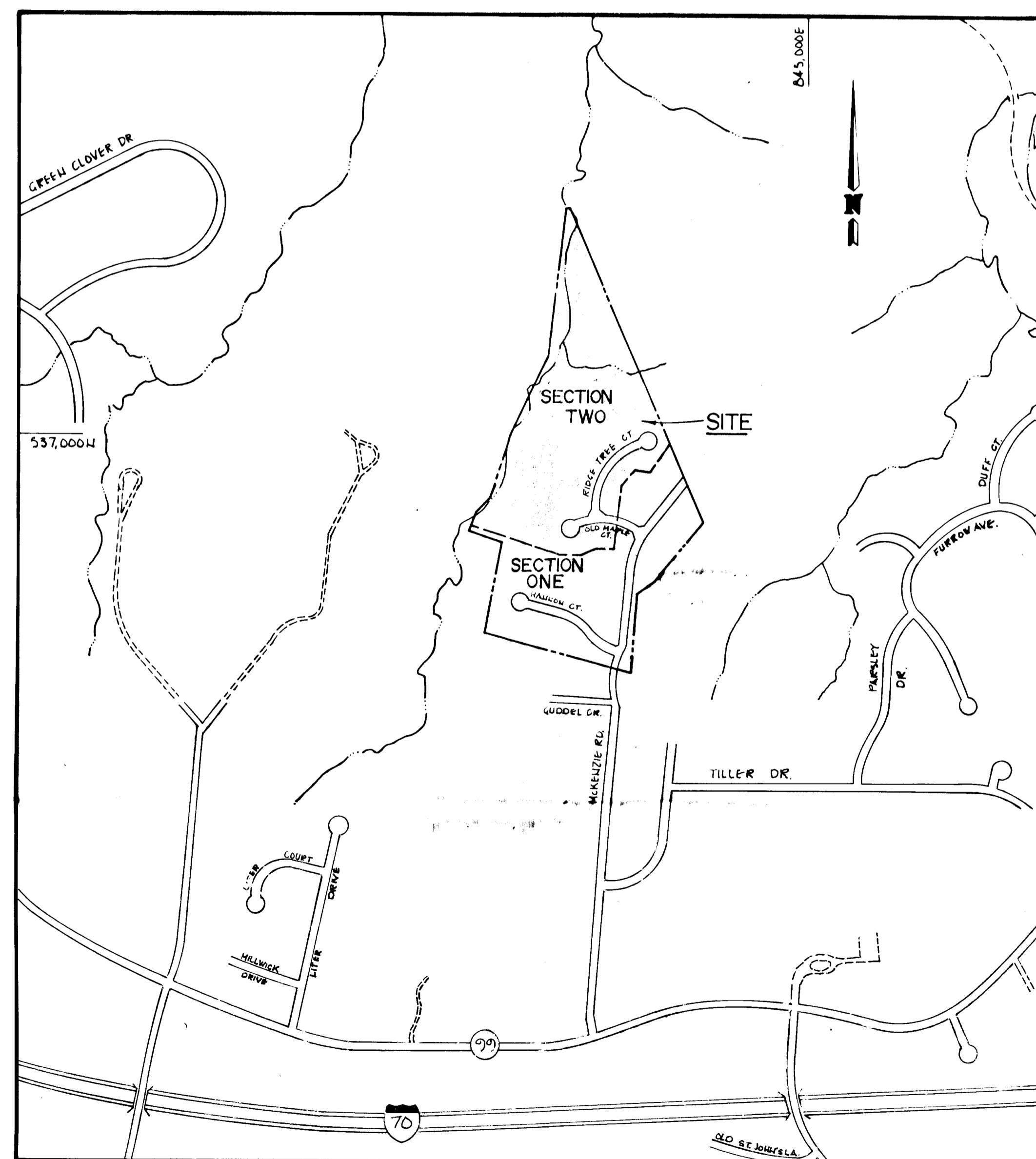


McKENZIE'S DISCOVERY SECTION TWO HOWARD COUNTY, MARYLAND FINAL ROAD CONSTRUCTION PLANS

INDEX

1. TITLE SHEET
2. OLD MAPLE COURT PLAN AND PROFILE
3. RIDGE TREE COURT PLAN AND PROFILE
4. STORM DRAIN PROFILE AND DETAIL
5. DAMAGE AREA MAP AND S.E.C. KEY SHEET
6. STREET TREE GRADING AND SEDIMENT CONTROL
7. STREET TREE GRADING AND SEDIMENT CONTROL
8. SEDIMENT CONTROL DETAIL SHEET
9. DETAIL SHEET



VICINITY MAP
SCALE: 1" = 600'

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. CALL "MISS UTILITY" 48 HOURS IN ADVANCE OF CONSTRUCTION- 1-800-257-7777
3. STORM DRAINAGE TRENCHES WITHIN ROAD RIGHT-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS & SPECIFICATIONS, VOLUME III.
4. ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTORS EXPENSE.
5. CONTRACTOR TO NOTIFY THE HOWARD COUNTY INSPECTION DIVISION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWING TELEPHONE 792-7272
6. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION, CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE.
7. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, 1978 EDITION.
8. NO STRUCTURE IS TO BE CONSTRUCTED ON OPEN SPACE LOTS 18 AND 55 AT A DISTANCE LESS THAN THE ZONING REGULATIONS ALLOW.

NO.	REVISION	BY	DATE
1	AS PER HOWARD CO. COMMENTS.	W.M.M.B.	3-17-87

JOHN E. HARMS JR. AND ASSOCIATES INC.
CONSULTING ENGINEERS - ARCHITECTS - SURVEYORS

9030 RED BRANCH ROAD SUITE 100
COLUMBIA MARYLAND 21045 TELEPHONE (301) 740-5200

SMALLWOOD
PROPERTY
H46/596
P664

BENCH MARKS
BENCH MARK NO. 4 - RAILROAD
SPIKE E. SIDE OF 20" TWIN
MAPLE ELEV. 459.50

SECTION 2

SECTION I

MT HEBRON, INC.
336/101 405/396
P.395

OPEN SPACE
LOT 55

OPEN SPACE
LOT 31

MAPLE COURT
ST. 317.95 TO STA. 3153.35
TRANSITION CURB & GUTTER

± CURVE DATA
STA. 3+17.95 TO STA. 3+199.14
Δ = 26° 21' 54"
R = 175.77'
T = 41.33'
L = 81.19'
CHD = S77°08'19"W
80.41'

± CURVE DATA
STA. 0+73.63 TO STA. 3+17.95
Δ = 35° 00' 00"
R = 400.00'
T = 126.12'
L = 244.35'
CHD = N72°07'44"W
240.56'

PLAN
SCALE: 1" = 50'

NOTE: FOR PLAN LOCATIONS OF
PROPOSED INLETS &
MANHOLES, SEE
STRUCTURE SCHEDULE
ON SHEET 4 OF 9.

McKENZIE'S DISCOVERY
SECTION TWO LOTS 33-55
TAX MAP NO. 17 PARCELS 4, 172, 360
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**OLD MAPLE COURT
PLAN & PROFILE**

OWNER SULIN ENTERPRISES, LTD.	DEVELOPER TALLES CONSTRUCTION	
1133 GREENWOOD ROAD PIKESVILLE, MARYLAND 21208		
SCALE AS SHOWN	DATE: DEC., 1986	SHEET 2 OF 3
DES. JAB	DRN. J.M.M.	CHK. R.W.V.

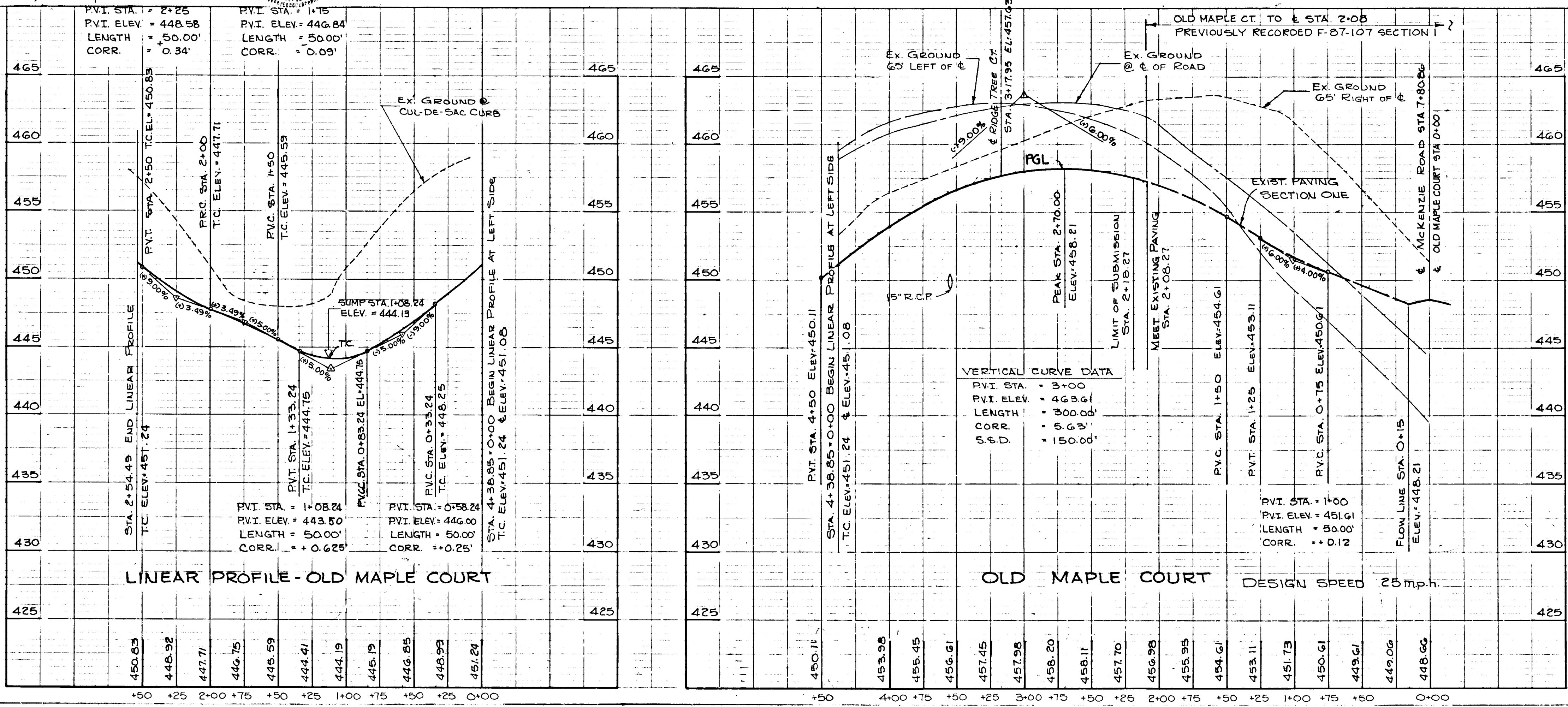
JOHN E. HARMS JR. AND ASSOCIATES, INC.
CONSULTING ENGINEERS - ARCHITECTS - SURVEYORS
9030 RED BRANCH ROAD SUITE 100
COLUMBIA, MARYLAND 21045 TELE. (301) 740-5200

APPROVED: DEPARTMENT OF PUBLIC WORKS.

CHIEF, BUREAU OF ENGINEERING
DATE: 5-27-87

APPROVED: OFFICE OF PLANNING AND ZONING

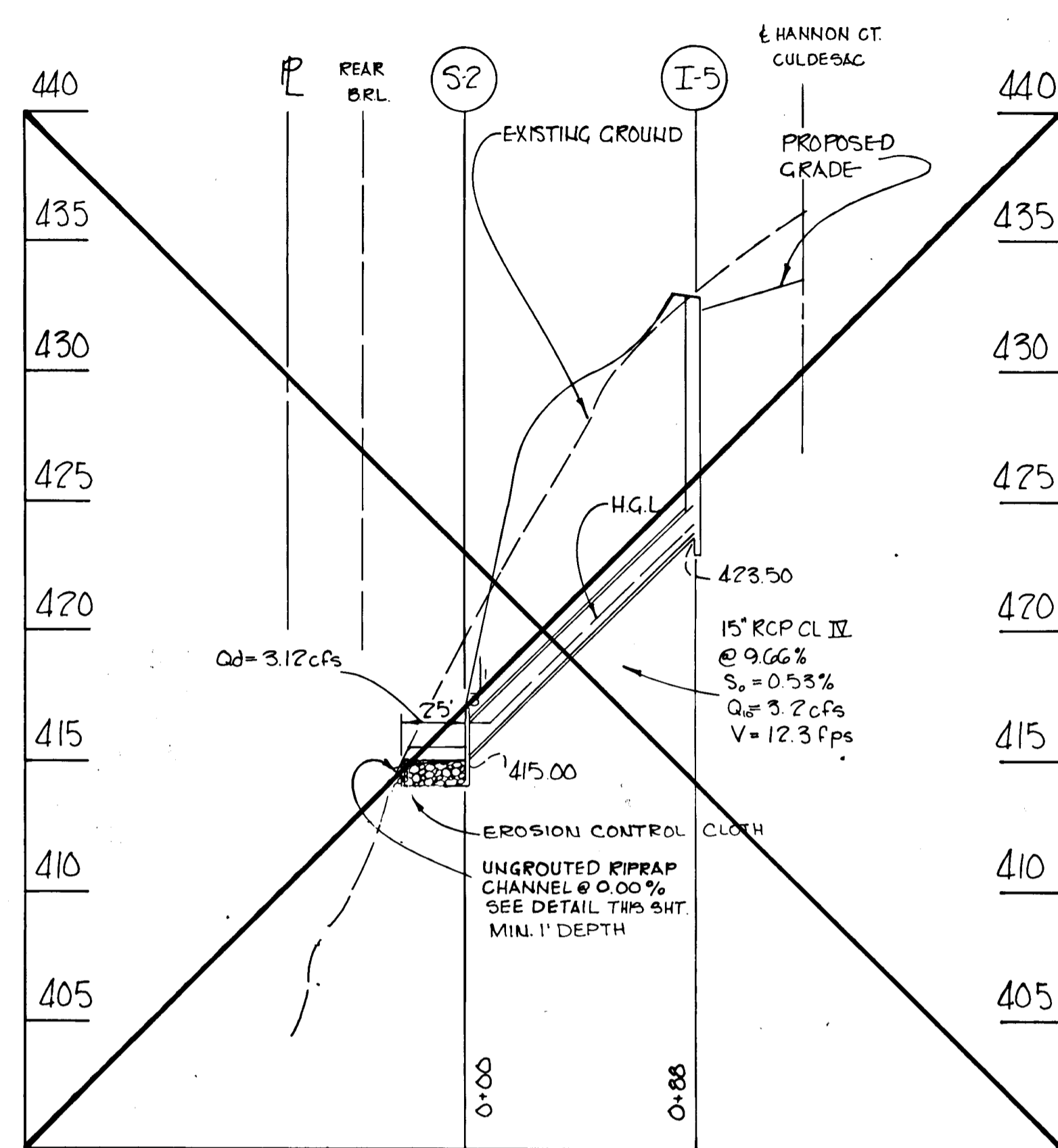
CHIEF, DIVISION OF LAND DEVELOPMENT
AND ZONING ADMINISTRATION
DATE: 5-22-87



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

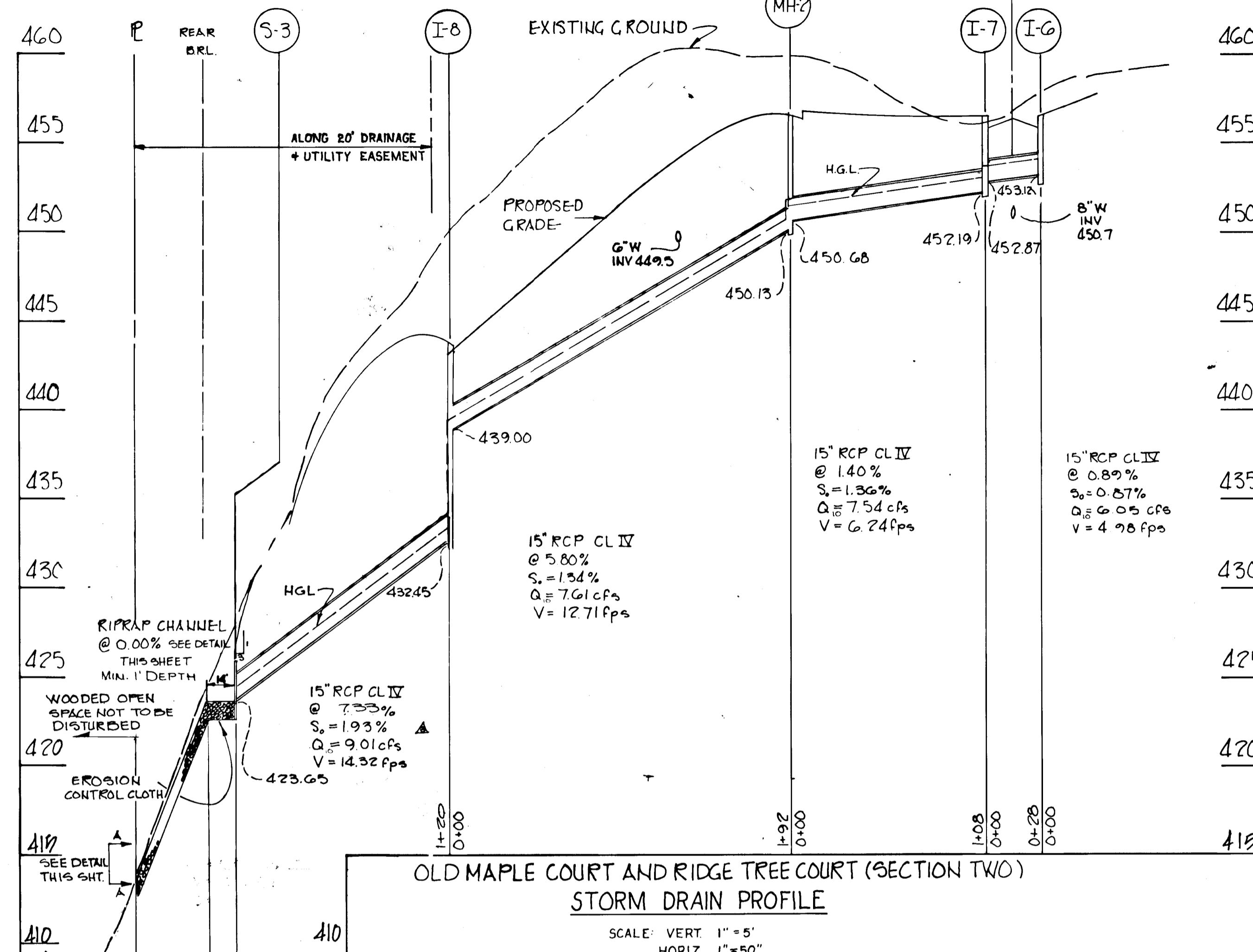
PLAN
REVISED
NOTED
CHECKED
NO.

PROFILE
REVISED
NOTED
CHECKED
NO.



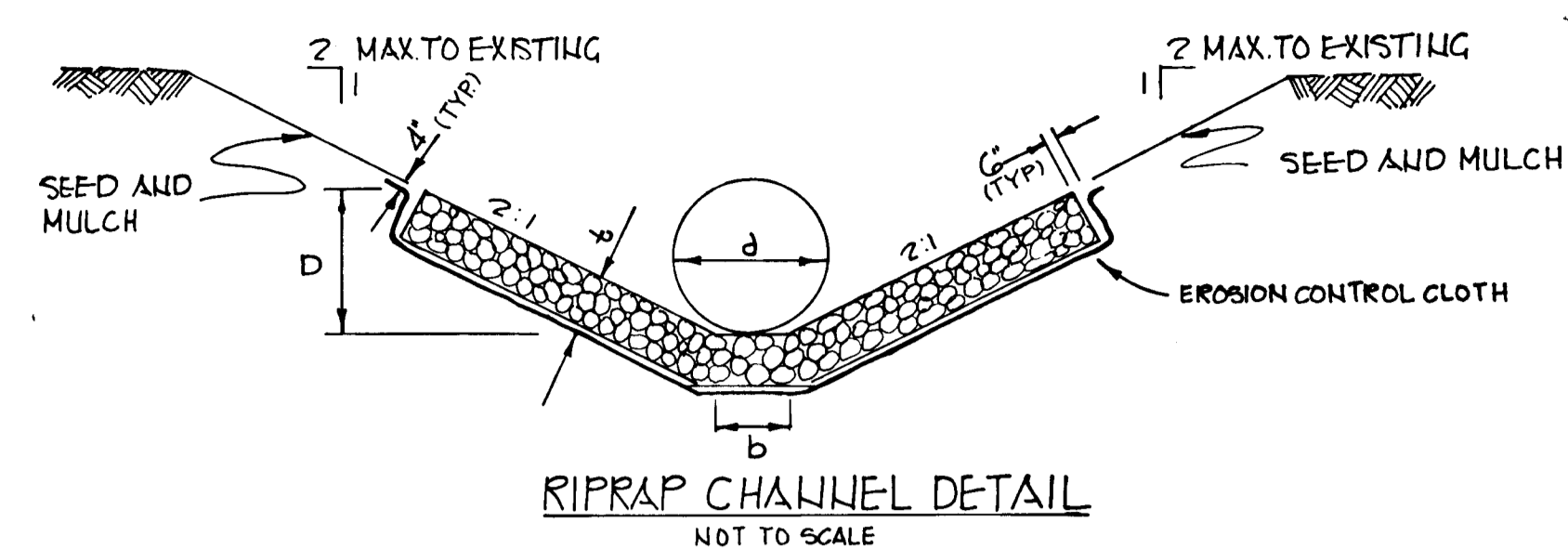
HANNON COURT (SECTION ONE)
STORM DRAIN PROFILE

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



OLD MAPLE COURT AND RIDGE TREE COURT (SECTION TWO)
STORM DRAIN PROFILE

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



SECTION ONE RIPRAP CHANNEL DESIGN DATA (N=0.04)

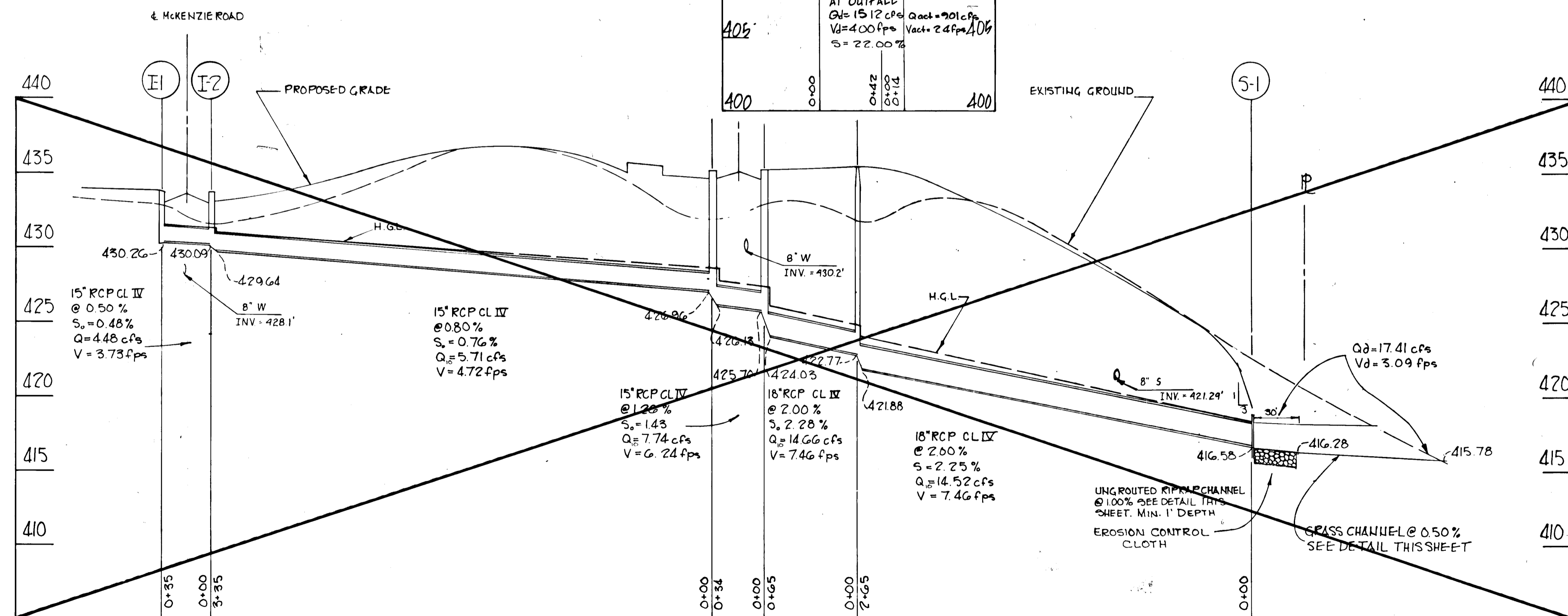
STRUC	A	P	R _H	R _{2/3}	S	S _{1/2}	Q	V	d	D	b	t	d ₅₀	d _{max}
S-1	5.63	7.46	0.75	0.83	0.01	0.10	17.41 cfs	3.09 fps	18"	15"	0.75'	1.0'	4"	8"
S-2	1.12	3.20	0.30	0.44	0.00	—	3.12 cfs	—	15"	0.40'	2.0'	—	4"	8"

STRUC	A	P	R _H	R _{2/3}	S	S _{1/2}	Q	V	d	D	b	t	d ₅₀	d _{max}
S-3	1.15	4.23	0.35	0.50	0.27	0.92	9.9 cfs	7.79 fps	15"	0.90'	2.0'	1.4'	3"	8"

STRUCTURE SCHEDULE SECTION

STRUC	TYPE	INVERT IN	INVERT OUT	TOP ELEVATION	ROAD STA	REMARKS
I-6	TYPE "A-10" INLET	—	453.12	456.56	± STA 1+16.77 RIDGE TREE CT.	HOWARD CO. STD SD. 4.02
MH-2	STANDARD MANHOLE	439.00	434.45	456.66	± RT STA 3+40 OLD MAPLE CT.	3% CROSS SLOPE HOWARD CO. STD 68.01
I-7	TYPE "A-5" INLET	452.87	452.19	456.56	± STA 1+11.67 RIDGE TREE CT.	HOWARD CO. STD SD. 4.01
I-8	TYPE "A-5" INLET	439.00	432.45	443.64	L.C.P. STA 1+08.24 OLD MAPLE CT.	HOWARD CO. STD SD. 4.01
S-3	TYPE "C" END WALL	—	—	—	SEE PLAN PROFILE	HOWARD CO. STD SD. 5.21 15"

* RCP DETAIL ROP I



McKENZIE ROAD (SECTION ONE)
STORM DRAIN PROFILE

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

REVIEWED FOR: Howard S.C.D.
NAME
AND MEETS TECHNICAL REQUIREMENTS
John M. [Signature] 5-21-87
SIGNATURE DATE
U.S. SOIL CONSERVATION SERVICE

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

Stephen L. Fuku 5/21/87
APPROVED BY DATE

DEVELOPER'S CERTIFICATE

"I/We certify that all development and construction will be done according to this plan, and that any 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."

Stephen L. Fuku 5-19-87
Signature of Developer Date

ENGINEER'S CERTIFICATE

"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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

William [Signature] 5/18/87
Signature of Engineer Date

APPROVED: DEPARTMENT OF PUBLIC WORKS.
[Signature] 5-27-87
CHIEF, BUREAU OF ENGINEERING DATE
APPROVED: OFFICE OF PLANNING AND ZONING
[Signature] 5-27-87
CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION DATE



McKENZIE'S DISCOVERY
SECTION TWO

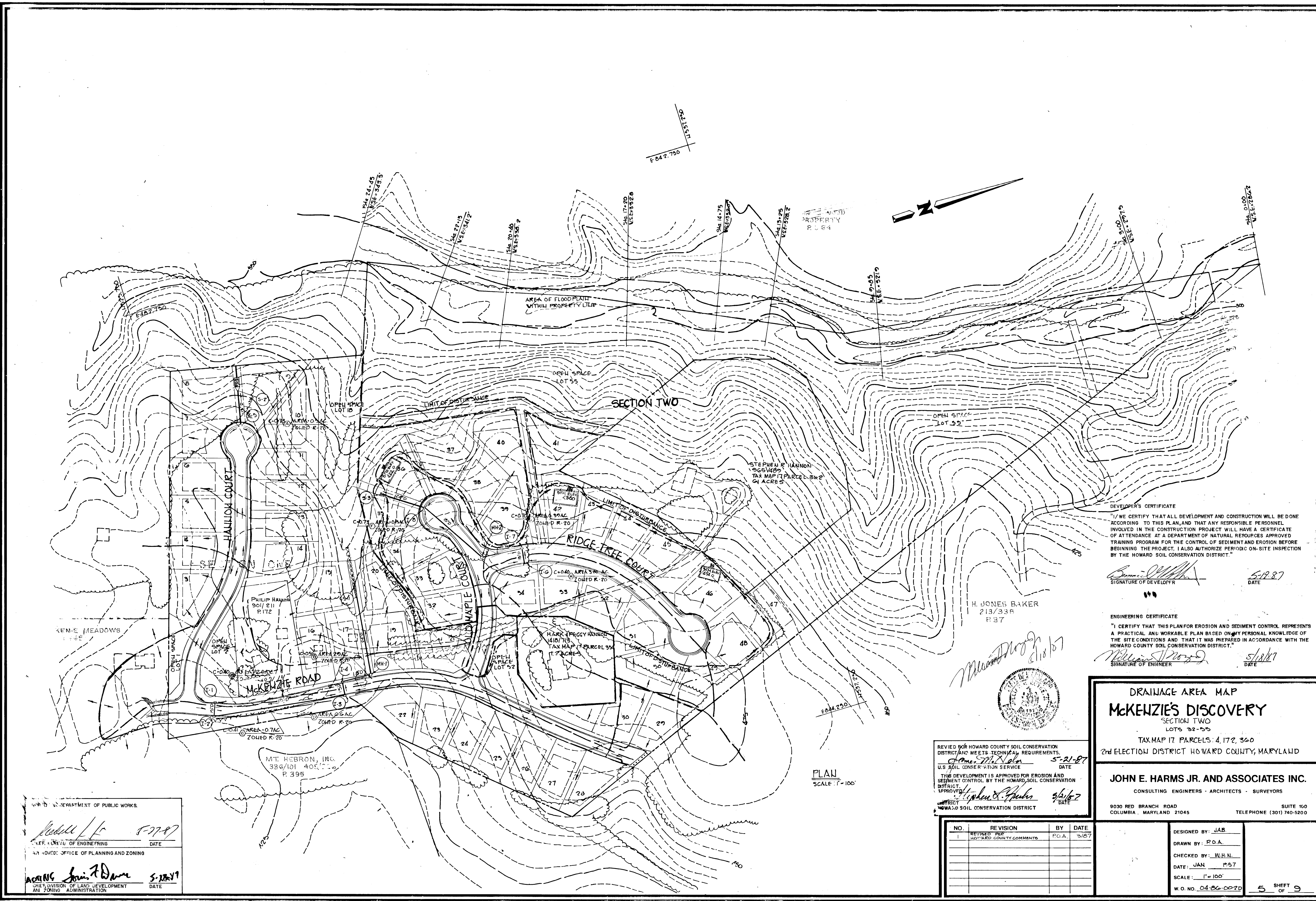
LOTS 52-55
TAX MAP 10.17 PARCELS 4,172 & 520
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

JOHN E. HARMS JR. AND ASSOCIATES INC.
CONSULTING ENGINEERS - ARCHITECTS - SURVEYORS

8030 RED BAYVIEW ROAD SUITE 100
COLUMBIA, MARYLAND 21045 TELEPHONE (301) 740-5200

NO.	REVISION	BY	DATE
1	AS PER HOWARD CO. COMMENTS	N.M.M.	3-11-87
2	ADDED SECTION A	P.O.A.	4-21-87
3	AS PER HOWARD CO. COMMENTS	P.O.A.	10/27/87

DESIGNED BY: R.H.V.
DRAWN BY: P.O.A.
CHECKED BY: J.A.B.
DATE: JAN 1987
SCALE: AS SHOWN
W.O. NO. 4 SHEET 2



DEVELOPER'S CERTIFICATE
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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."

Signature
 SIGNATURE OF DEVELOPER
 5/19/87
 DATE

ENGINEERING CERTIFICATE
 "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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."

Signature
 SIGNATURE OF ENGINEER
 5/18/87
 DATE

H. JONES BAKER
 213/338
 P. 37

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Signature
 U.S. SOIL CONSERVATION SERVICE
 DATE 5-21-87
 THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
Signature
 APPROVED
 DATE 5/16/87
 DISTRICT
 HOWARD COUNTY SOIL CONSERVATION DISTRICT

DRAINAGE AREA MAP
McKENZIE'S DISCOVERY
 SECTION TWO
 LOTS 32-55
 TAX MAP 17 PARCELS 4, 172, 360
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

JOHN E. HARMS JR. AND ASSOCIATES INC.
 CONSULTING ENGINEERS - ARCHITECTS - SURVEYORS
 9030 RED BRANCH ROAD SUITE 100
 COLUMBIA, MARYLAND 21045 TELEPHONE (301) 740-5200

NO.	REVISION	BY	DATE
1	REVISED PER HOWARD COUNTY COMMENTS	P.O.A.	5/18/87

DESIGNED BY: JAB
 DRAWN BY: P.O.A.
 CHECKED BY: W.H.N.
 DATE: JAN 1987
 SCALE: 1"=100'
 W.O. NO. 04-86-0020
 5 SHEET OF 9

DEPARTMENT OF PUBLIC WORKS
Signature
 CHIEF OF ENGINEERING
 DATE 5-21-87
 APPROVED: OFFICE OF PLANNING AND ZONING
Signature
 CHIEF DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION
 DATE 5-21-87

PLAN
 SCALE 1"=100'

1261

SMALLWOOD PROPERTY
1146/696

FOR CONTINUATION SEE SHEET 7 OF 9

STABILIZED CONSTRUCTION ENTRANCE w/ MOUNTABLE BERM SCE-1

H. JONES BAKER
713/338

MT HEBRON INC
386/101 405/396

TYPE OF TREE
PIN OAK (QUERCUS PALUSTRIS) 2 1/2" CALIPER
PLANTED 40' ON CENTER

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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."
Signature of Developer 5/18/87
SIGNATURE OF DEVELOPER DATE

ENGINEERING CERTIFICATE
"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 AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."
Signature of Engineer 5/18/87
SIGNATURE OF ENGINEER DATE

DEVELOPER: TALLEY CONSTRUCTION
1133 GREENWOOD ROAD
PIKESVILLE, MARYLAND 21208
PHONE: (301) 486-5350

OWNER: SULLIVAN ENTERPRISES, LTD.
1133 GREENWOOD ROAD
PIKESVILLE, MARYLAND 21208
PHONE: (301) 486-5350

STREET TREE, GRADING AND SEDIMENT CONTROL
McKENZIE'S DISCOVERY
SECTION TWO
LOTS 32-55
TAX MAP NO 17 PARCELS 4, 172, 360
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

JOHN E. HARMS JR. AND ASSOCIATES INC.
CONSULTING ENGINEERS - ARCHITECTS - SURVEYORS
9030 RED BRANCH ROAD
COLUMBIA, MARYLAND 21045 SUITE 160
TELEPHONE (301) 740-5200

NO.	REVISION	BY	DATE
1	REVISED PER HOWARD COUNTY COMMENTS	P.O.A.	5/18/87
2	AS PER HOWARD CO. COMMENTS	W.M.M.	5-17-87

DESIGNED BY: O.A.B.
DRAWN BY: J.L.R.
CHECKED BY: W.H.N.
DATE: JAN 1987
SCALE: 1" = 50'
W.O. NO. 04-EG-0020
6 SHEET OF 9

- NOTES:
- DURING GRADING OPERATIONS INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL EXISTING RESIDENCES ON A CONTINUOUS BASIS.
 - EXISTING TREES, SHRUB AND OTHER VEGETATION DISTURBED ON HANNON'S PROPERTY DURING DRIVEWAY RELOCATION AND GRADING TO BE REPLACED WITH COMPARABLE PLANTS.
 - THE CONTRACTOR IS RESPONSIBLE TO SAVE CERTAIN BUILDINGS, TREES AND SHRUBS AS THE DEVELOPER SEES FIT IN THE FIELD. ALL BUILDINGS, SHRUBS OR TREES TO BE SAVED ARE TO BE FLAGGED AND MARKED ACCORDINGLY.

CONTOURS LEGEND
--- EXISTING GRADES
--- MASS GRADING (REF GP-87-20)
--- FINAL GRADING

NOTE: TOPOGRAPHY SHOWN HEREON BASED ON AERIAL TOPO DONE BY POTOMAC SURVEYS.

SEDIMENT CONTROL DEVICE LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	S.C.E.	STABILIZED CONSTRUCTION ENTRANCE
	A-2 (TYP)	EARTH DIKE
	S	SILT FENCE
	-	FLOW OF RUNOFF
	-	DRAINAGE DIVIDE
	I.P.D.	INLET PROTECTION DEVICE



SECTION 10 ONE

PLAN
SCALE: 1" = 50'

REVISED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Signature of Stephen L. Huber 5/21/87
DATE
USDA SOIL CONSERVATION SERVICE
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: *Signature of Stephen L. Huber* 5/18/87
DATE
DISTRICT HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS.
Signature of Michael H. F-7707
DATE
CHIEF, BUREAU OF ENGINEERING
APPROVED: OFFICE OF PLANNING AND ZONING
Signature of Stephen L. Huber 5/18/87
DATE
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION



1261

SEDIMENT CONTROL NOTES

- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- 2) 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.
- 3) 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 slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- 4) 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.
- 5) 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. 51) and (Sec. 54), temporary seedings (Sec. 50) and mulching (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.
- 6) 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.
- 7) Site Analysis:
Total Area of Site: 43 Acres
Area Disturbed: 63.0 Acres
Area to be reseeded or planted: 63.0 Acres
Area to be vegetatively stabilized: 6.4 Acres
Total Cut: 100 Cu. Yds
Total Fill: 0 Cu. Yds
Offsite waste/borrow area Location: END OF RIDGE TREE CT.
- 8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- 9) Additional sediment controls must be provided, if deemed necessary by the Howard County DPM sediment control inspector.
- 10) 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

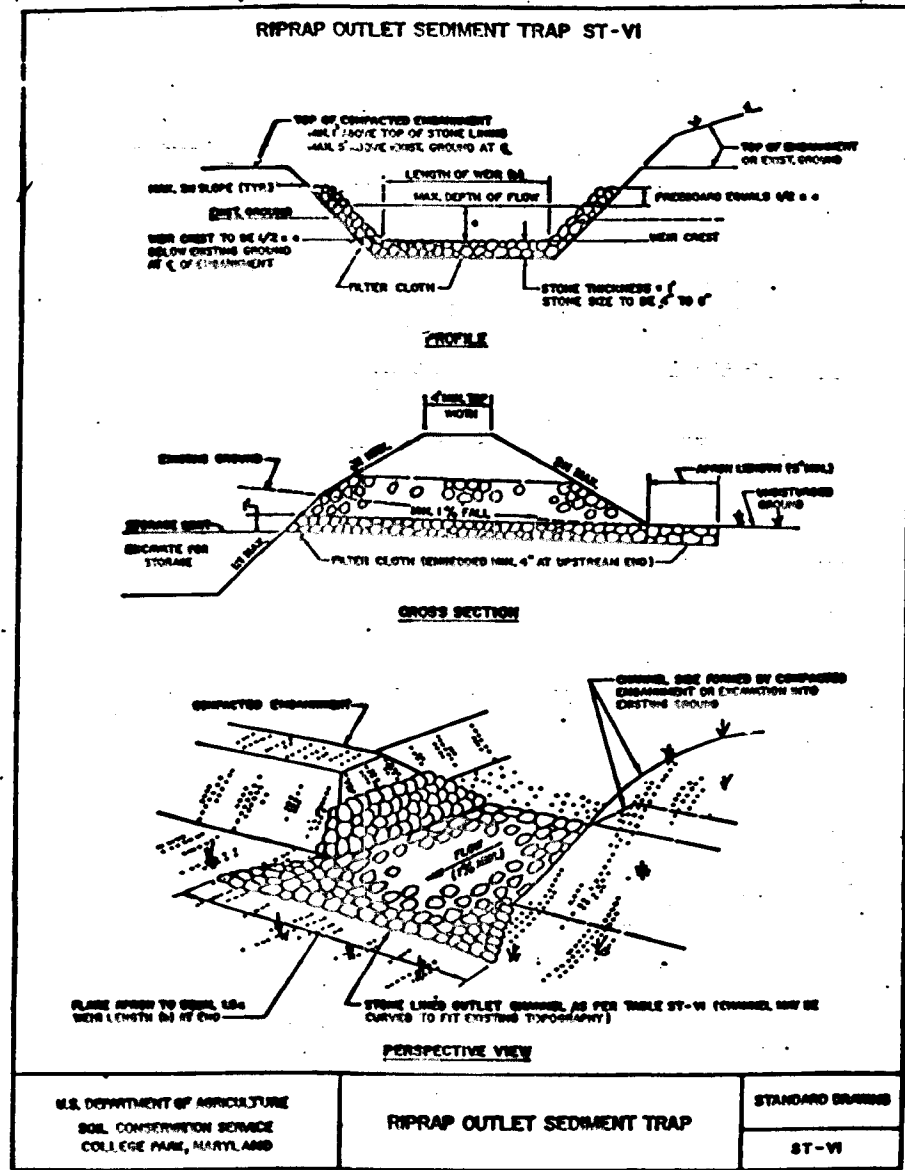
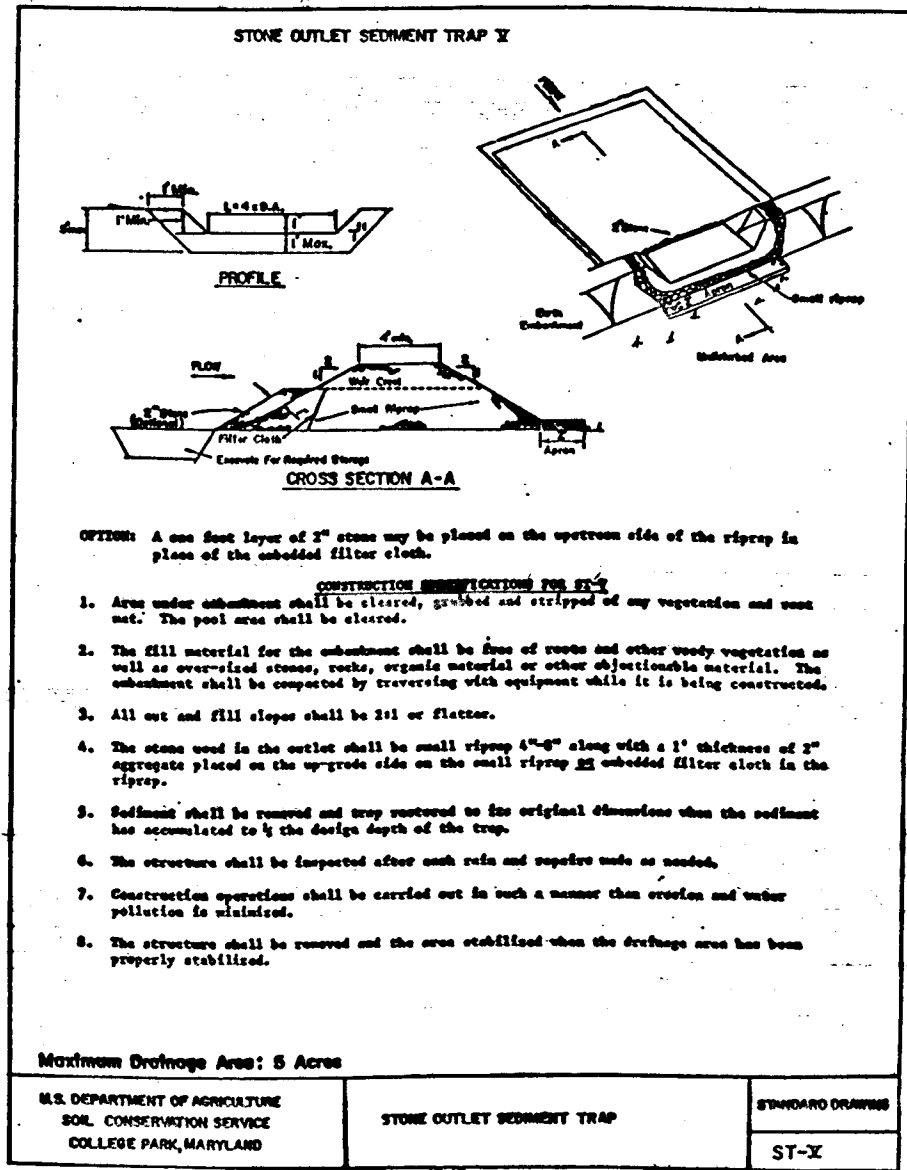
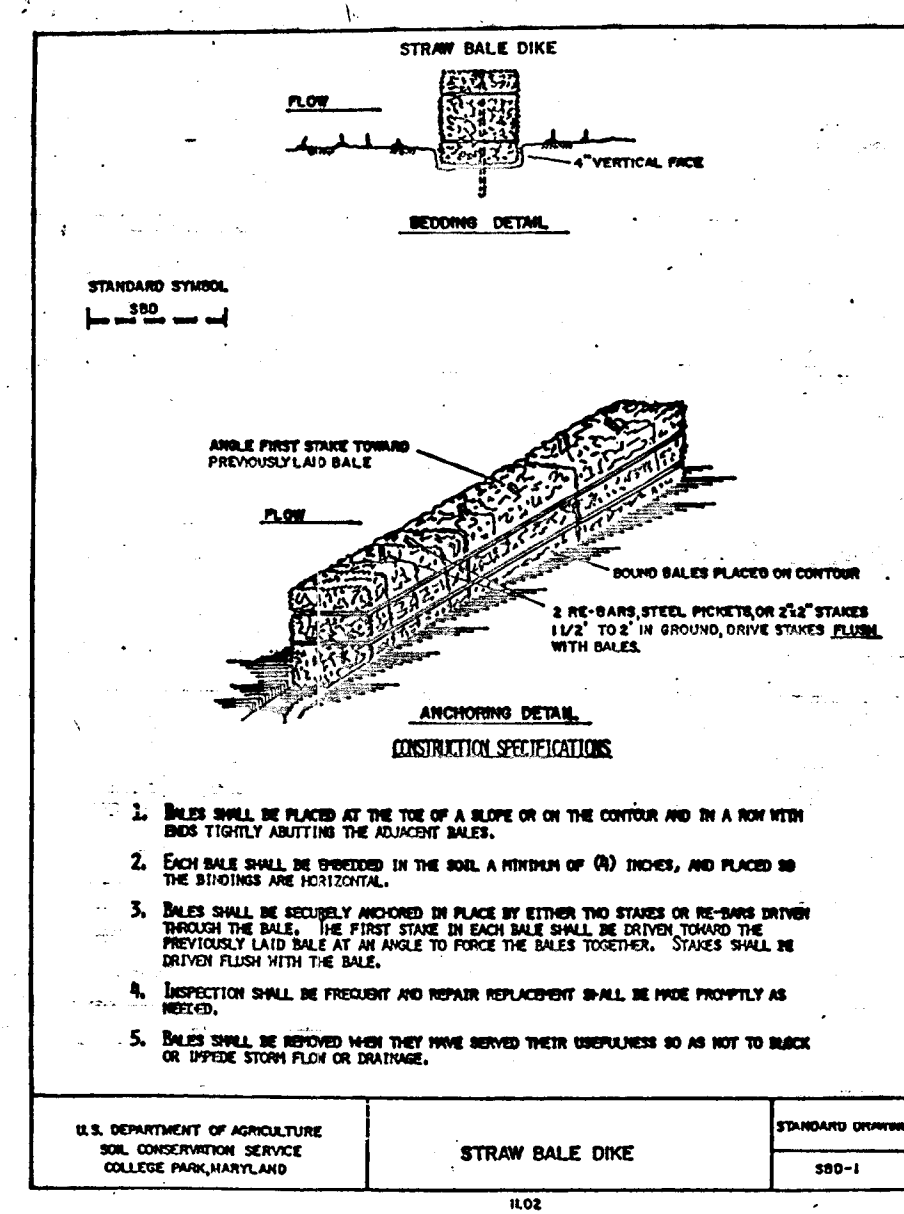
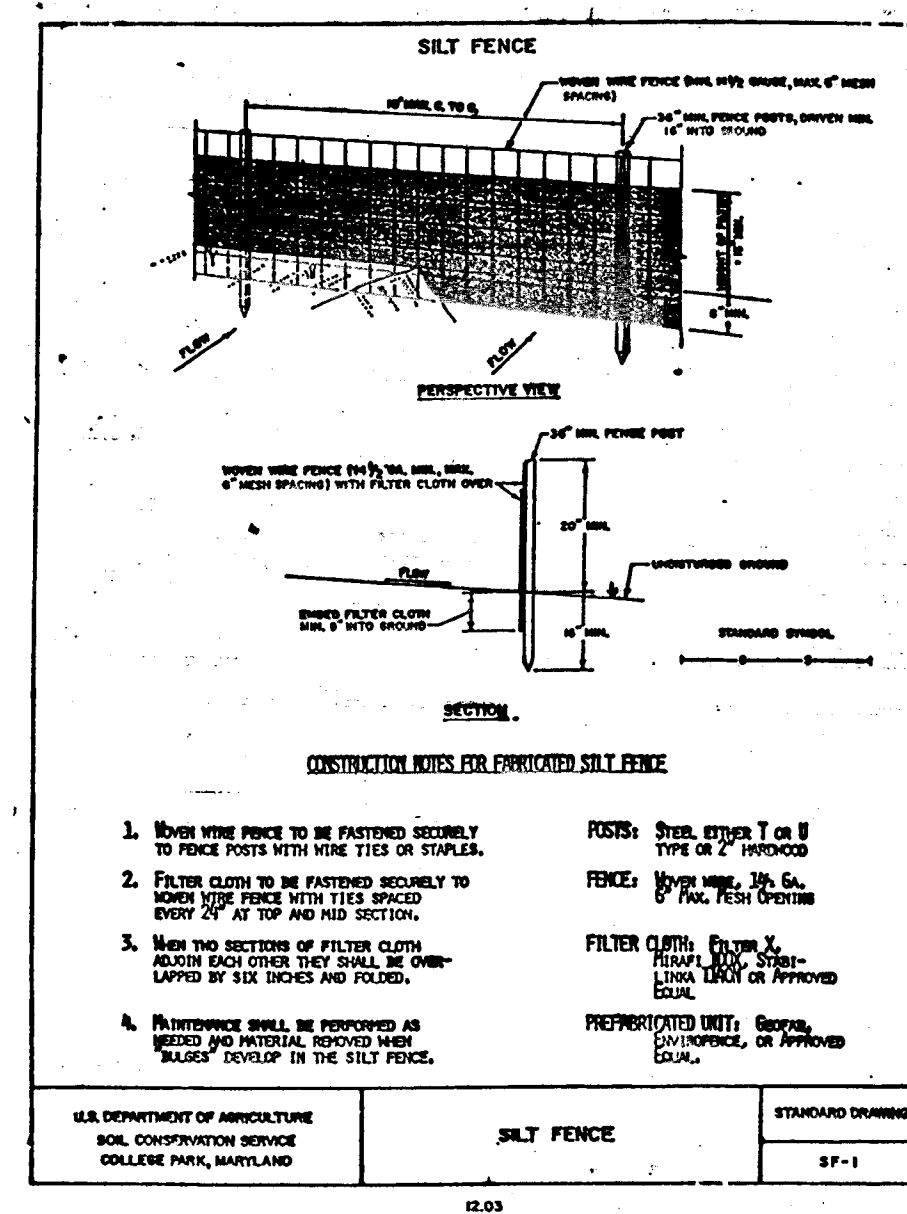
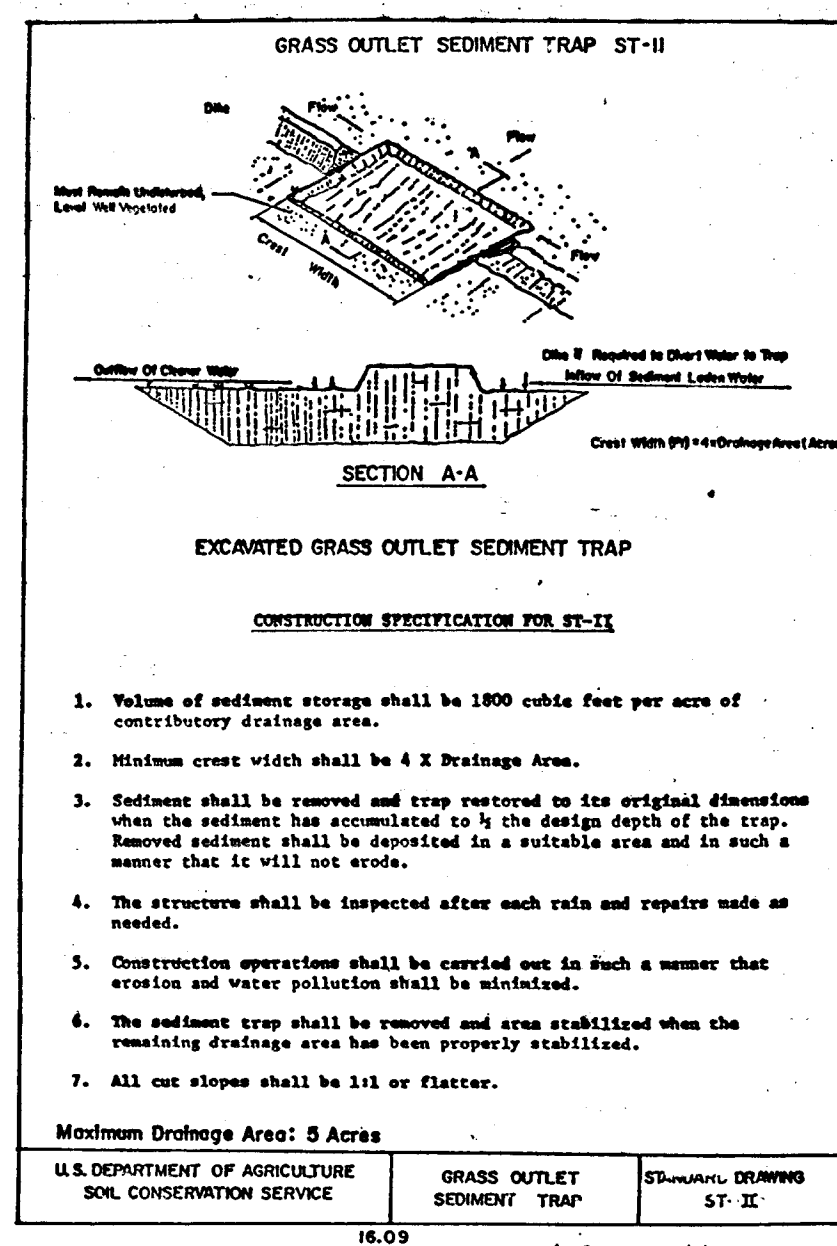
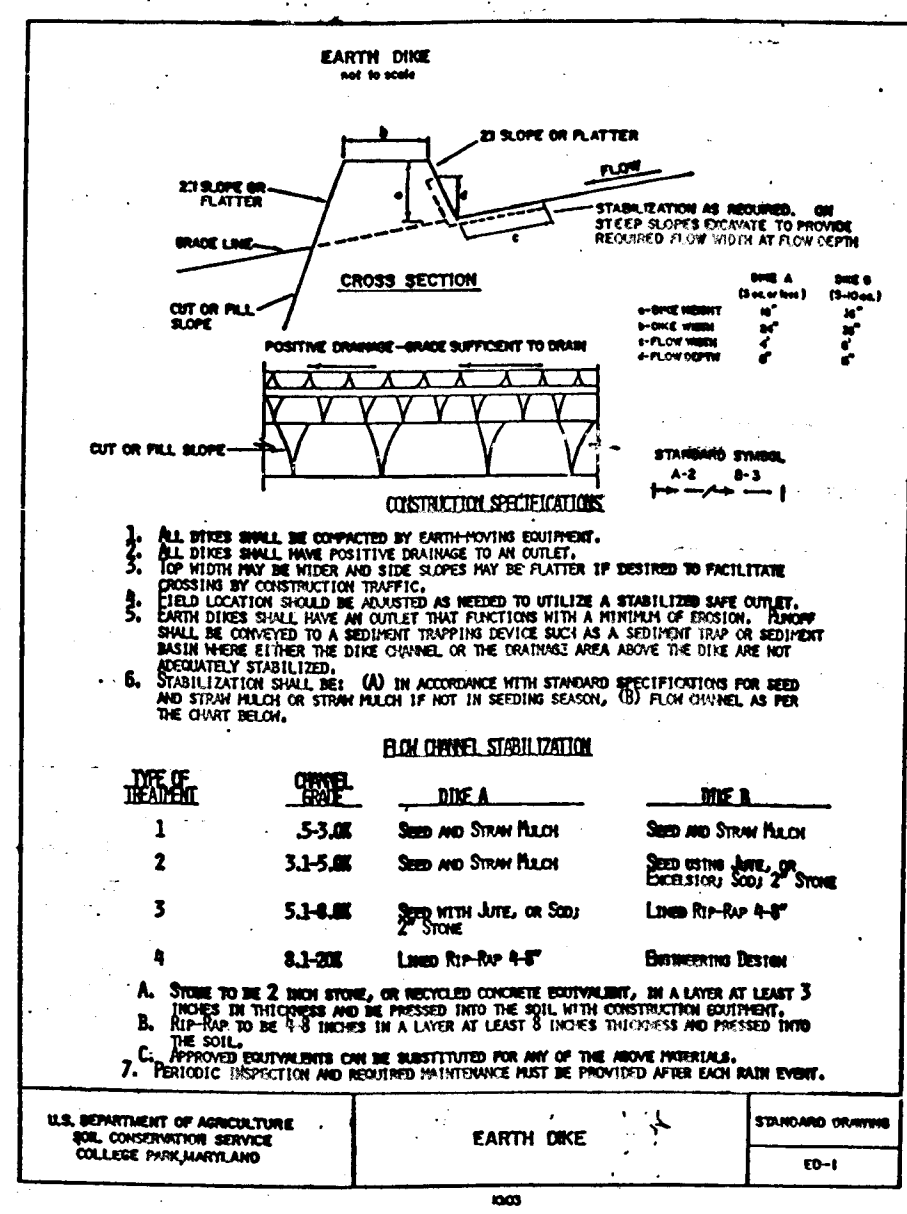
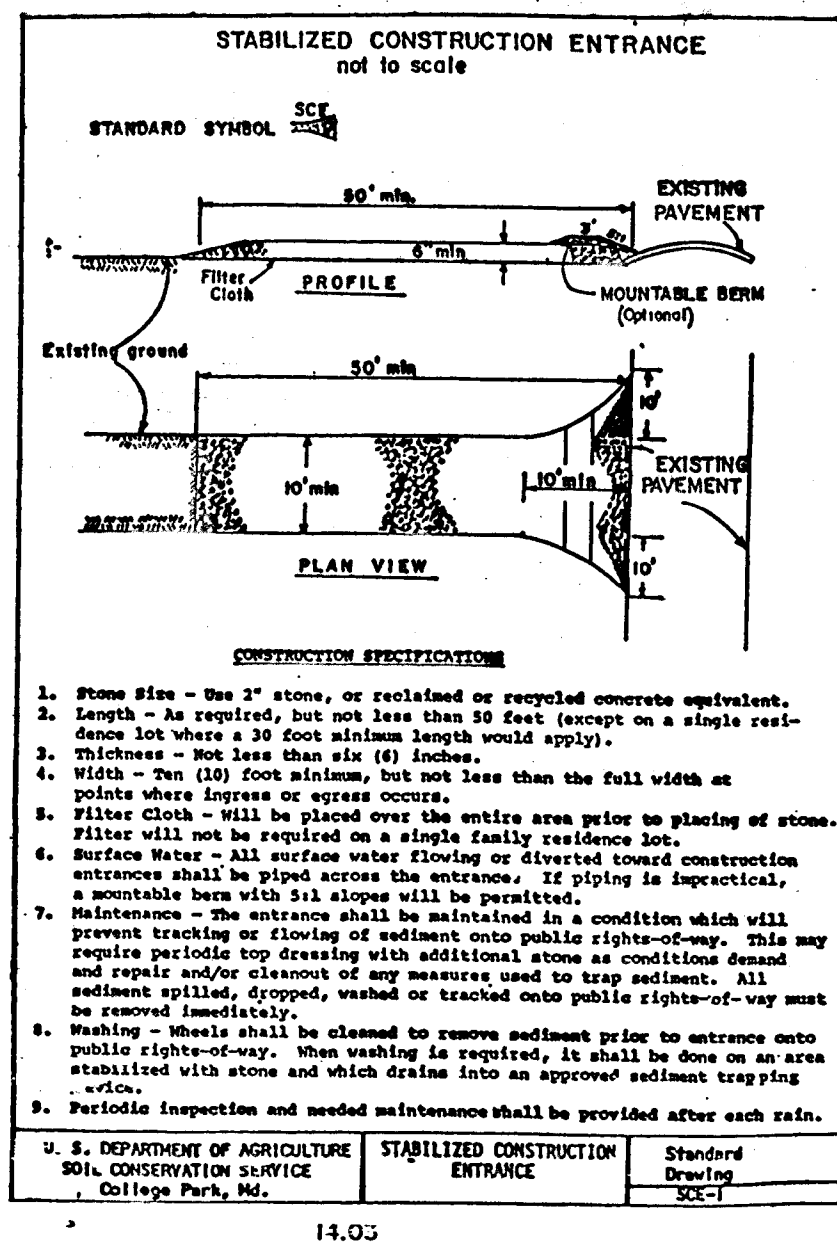
- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.
- Soil Amendments:** In lieu of soil test recommendations, use one of the following schedules:
- 1) Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Barrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
 - 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Barrow or disc into upper three inches of soil.
- Seeding:** For the periods March 1 thru April 30, and August 1 thru October 15, seed with 50 lbs per acre (Kentucky 31 Tall Fescue) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, plant site by: Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.
- Mulching:** Apply 1/4 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchor.
- Maintenance:** Inspect all seeded areas and make needed repairs, replacements and replantings.

TEMPORARY SEEDING NOTES

- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, discing or other acceptable means before seeding.
- Soil Amendments:** Apply 60 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).
- Seeding:** For periods March 1 thru April 30 and from August 15 thru November 15, seed with 24 bushel per acre of annual ryegrass (2.2 lbs/1000 sq ft). For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.
- Mulching:** Apply 1/4 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gal per acre (8 gal/1000 sq ft) for anchoring.
- Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for methods not covered.

SEQUENCE OF CONSTRUCTION

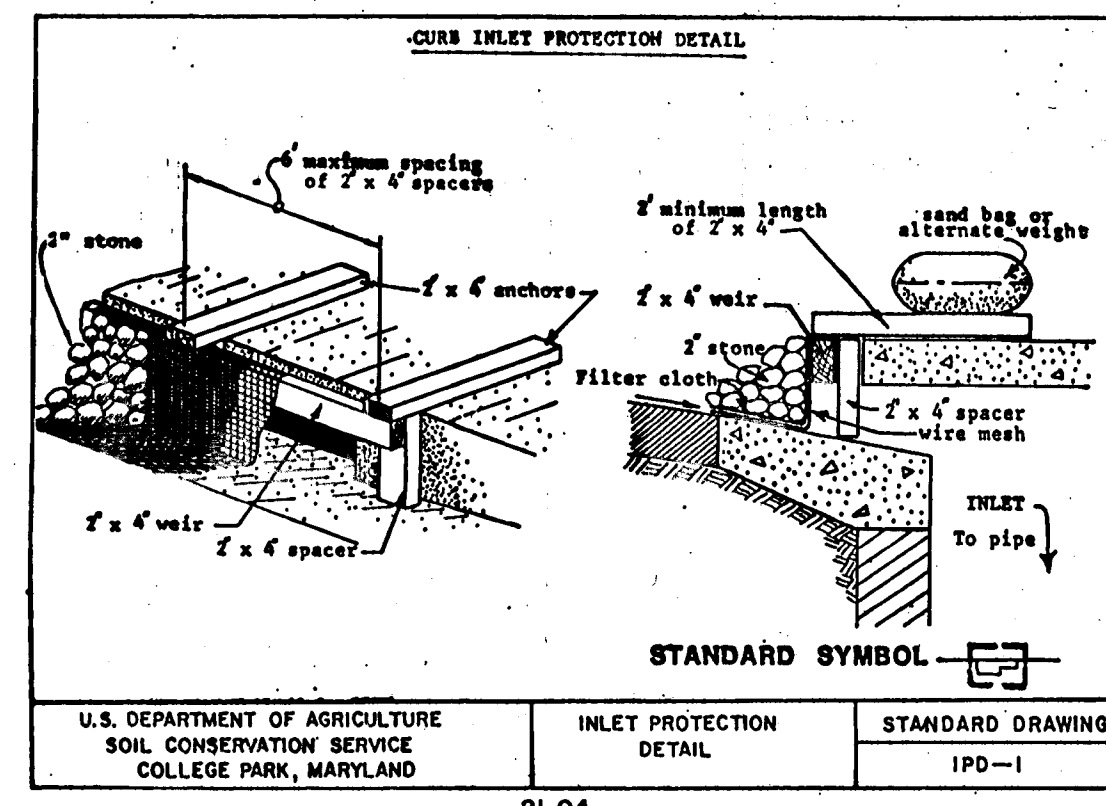
- 1) OBTAIN GRADING PERMIT.
- 2) NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (992-2437) AT LEAST 24 HOURS BEFORE STARTING ANY WORK.
- 3) CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE.
- 4) RECONSTRUCT TRAPS (NO. 1 AND 2 AS OF MASS GRADING PLAN GP-87-20) NECESSARY TO OBTAIN BOTTOM ELEVATION.
- 5) INSTALL TRAP NO. 7 AND ALL OTHER SEDIMENT CONTROL DEVICES AS NEEDED.
- 6) INSTALL WATER AND SEWER (SECTION 2).
- 7) SUPPLY RIP-RAP AS NEEDED IN DISTURBED AREAS OF NATURAL SWALE WATER WAY BETWEEN SEWER MANHOLES 3, 15, 16, AND 17.
- 8) DURING CONSTRUCTION AND AFTER EACH RAIN FALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL STRUCTURES SHOWN ON THIS PLAN.
- 9) CONSTRUCT ALL STORM DRAIN SYSTEMS (SECTION 2).
- 10) INSTALL INLET PROTECTION DEVICES ON SPECIFIED INLETS.
- 11) DIVERT MAIN STORM DRAIN SYSTEM TO SEDIMENT TRAP NO. 7.
- 12) CONSTRUCT CONCRETE CURB AND LAY BASE COURSE.
- 13) PROVIDE DRIVEWAY ACCESS ONTO RIDGE TREE COURT AND OLD MAPLE COURT FOR EXISTING RESIDENCES.
- 14) UPON STABILIZATION OF GRADED AREAS, INLETS SHALL BE OPEN AND ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE STORM DRAIN SYSTEMS.
- 15) INSTALL REMAINDER OF STORM DRAIN SYSTEM AND OUTFALLS.
- 16) REMOVE SEDIMENT TRAPS AND ALL OTHER SEDIMENT CONTROL DEVICES ONCE ALL DISTURBED AREAS HAVE BEEN STABILIZED.



SEDIMENT TRAPS

SEDIMENT TRAP NO.	SECTION 2			SECTION 1			SECTION 2
	1	2	3	4	5	6	
TYPE OF TRAP	S.O.*	S.O.	R.R.O**	S.O.	S.O.	S.O.	S.O.
DRAINAGE AREA	2.24AC	5.04AC	4.10AC	5.24AC	1.35AC	1.61AC	2.24AC
STORAGE REQUIRED (CY)	150.0	204.0	275.0	398.0	91.0	108.0	147.0
STORAGE REQUIRED (CY)	167.0	209.0	278.0	404.0	97.0	118.0	148.0
STORAGE ELEVATION (FH)	457	442	423	423	441	426	426.0
BOTTOM ELEVATION (FH)	454	438	418	424	438	423	422.0
DIMENSIONS: (ft x ft)							
@ STORAGE ELEV.	30'x50'	34'x60'	30'x80'	36'x90'	50'x75'	25'x60'	60'x20'
@ BOTTOM ELEV.	10'x30'	15'x44'	10'x60'	15'x70'	13'x38'	13'x48'	44'x10'
STORAGE DEPTH (FH)	5.0	4.0	5.0	5.0	3.0	3.0	4.0
CLEANOUT ELEV. (FH)	456.5	440.0	421.5	426.5	439.5	424.5	424.0
CREST ELEV. (FH)	460.0	449.0	427.0	430.0	442.0	427.0	427.0
WEIR LENGTH (FH)	10.0	12.0	14.0	14.0	6.0	7.0	9.0

S.O.* = STONE-OUTLET TRAP
R.R.O** = RIP-RAP OUTLET TRAP



DEVELOPERS CERTIFICATE

"I, WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY 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."

Signature of Developer: *[Signature]* DATE: 5-21-87

ENGINEER'S CERTIFICATE

"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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."

Signature of Engineer: *[Signature]* DATE: 5/18/87

Reviewed for HOWARD S.C.D. Name: *[Name]*

and Meets Technical Requirements.

Signature: *[Signature]* DATE: 5-21-87

U.S. Soil Conservation Service

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

Signature: *[Signature]* DATE: 5/18/87

Howard S.C.D.

APPROVED: DEPARTMENT OF PUBLIC WORKS.

Signature: *[Signature]* DATE: 5/27/87

CHIEF, BUREAU OF ENGINEERING

APPROVED: OFFICE OF PLANNING AND ZONING

Signature: *[Signature]* DATE: 5/22/87

CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

OWNER:
DULIN ENTERPRISES, LTD
1133 GREENWOOD ROAD
PIKESVILLE, MARYLAND
21208
PHONE: (301) 466-3350

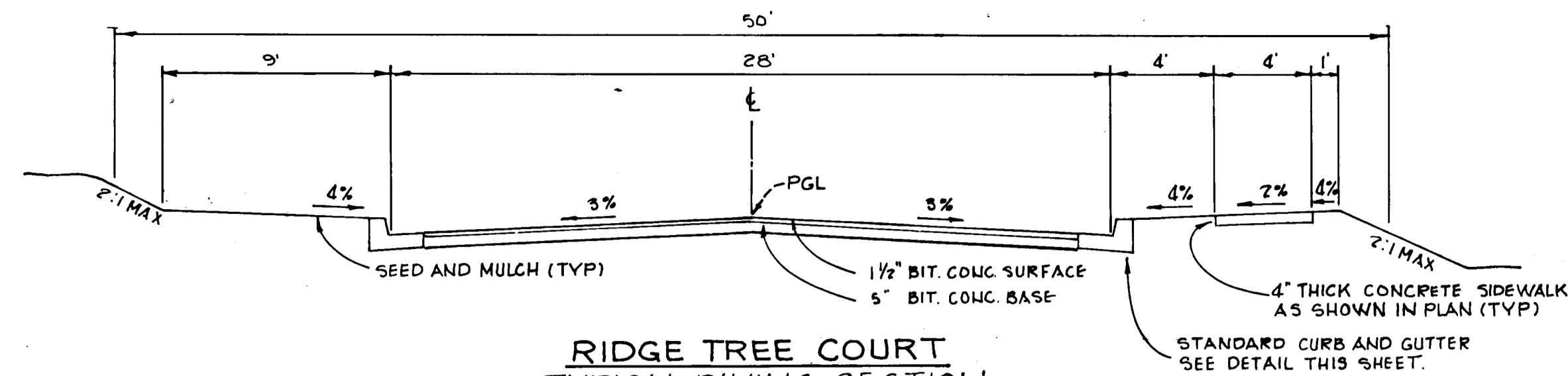
DEVELOPER:
TALLEY CONSTRUCTION
1133 GREENWOOD ROAD
PIKESVILLE, MARYLAND
21208
PHONE: (301) 466-3350

SEDIMENT EROSION CONTROL DETAIL
McKENZIE'S DISCOVERY
SECTION TWO
TAX MAP 17, PARCELS: 4, 172, 360
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

JOHN E. HARMS JR. AND ASSOCIATES INC.
CONSULTING ENGINEERS - ARCHITECTS - SURVEYORS
9030 RED BRANCH ROAD SUITE 100
COLUMBIA, MARYLAND 21045 TELEPHONE (301) 740-5200

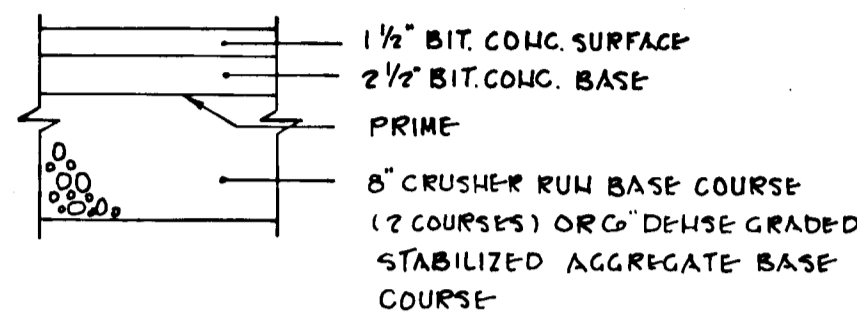
NO.	REVISION	BY	DATE

DESIGNED BY: J.A.B.
DRAWN BY: P.O.A.
CHECKED BY: W.H.N.
DATE: JAN 1987
SCALE: AS SHOWN
W.O. NO. 04-86-002D

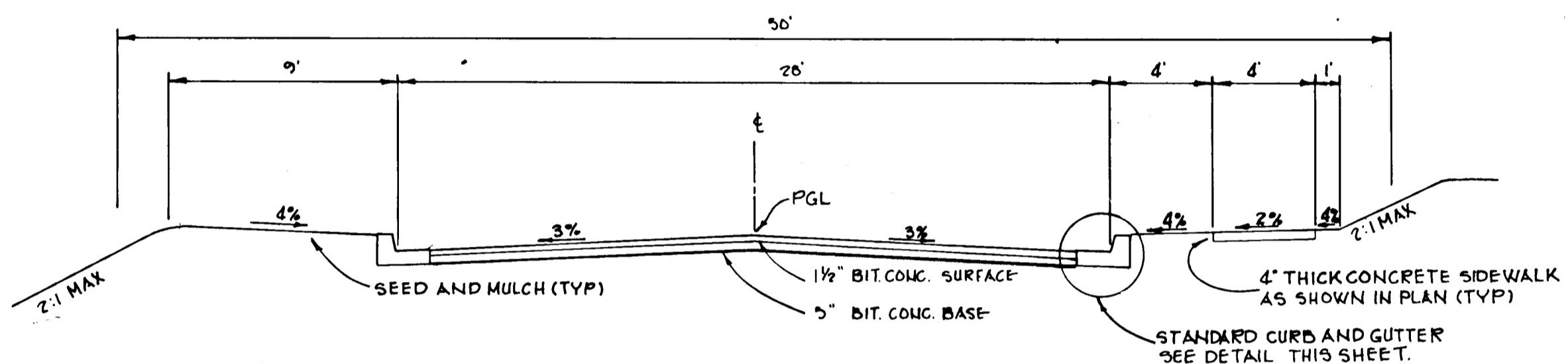


**RIDGE TREE COURT
TYPICAL PAVING SECTION**

NOT TO SCALE
DESIGN SPEED 25 MPH

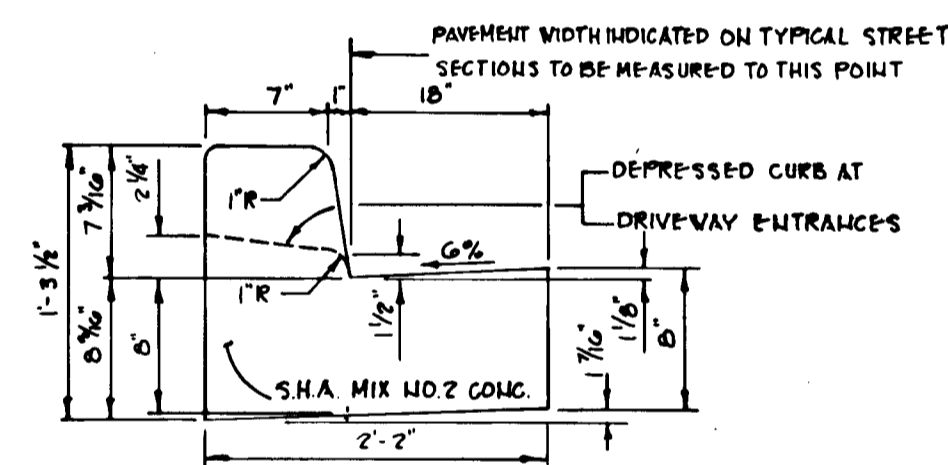


ALTERVATE PAVING SECTION
NOT TO SCALE

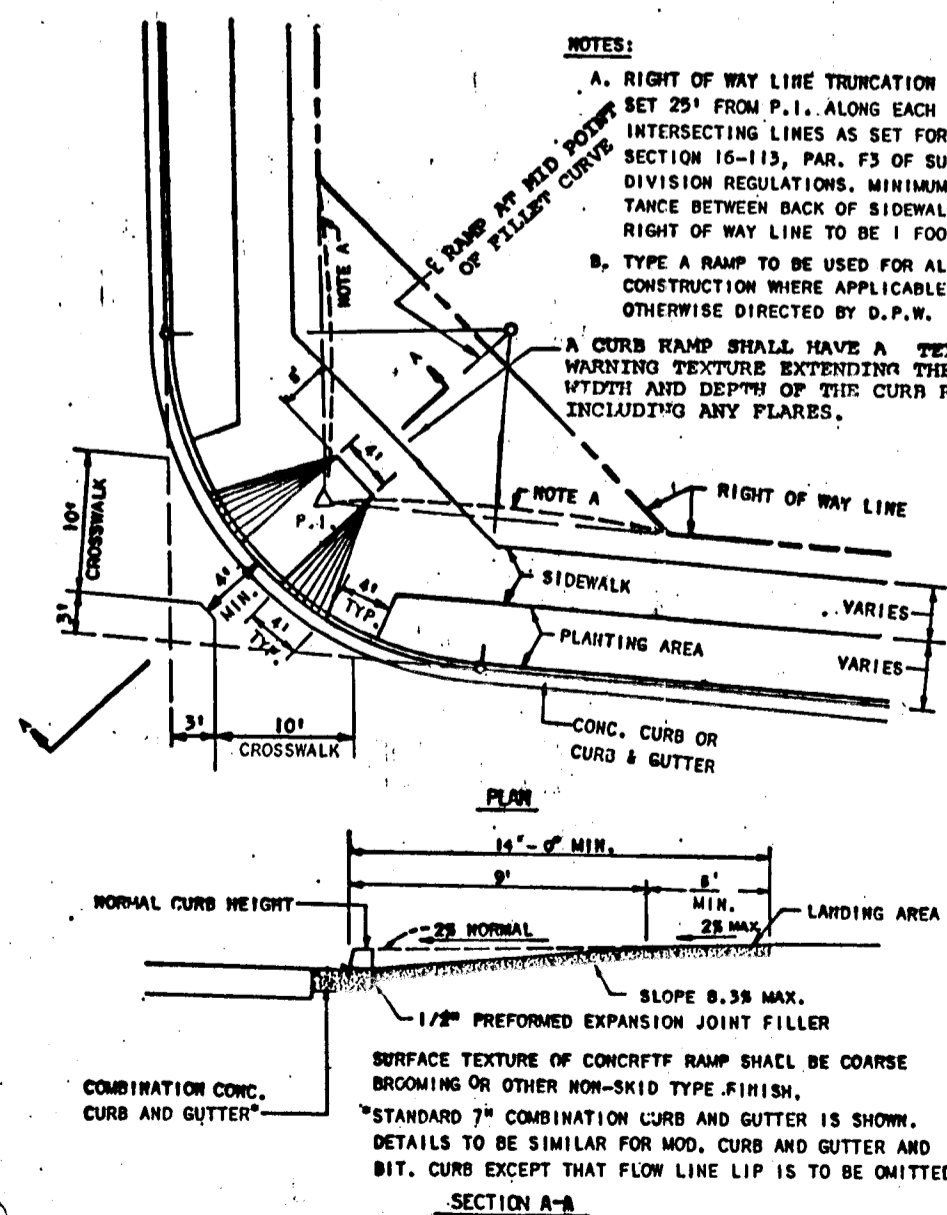


**OLD MAPLE COURT
TYPICAL PAVING SECTION**

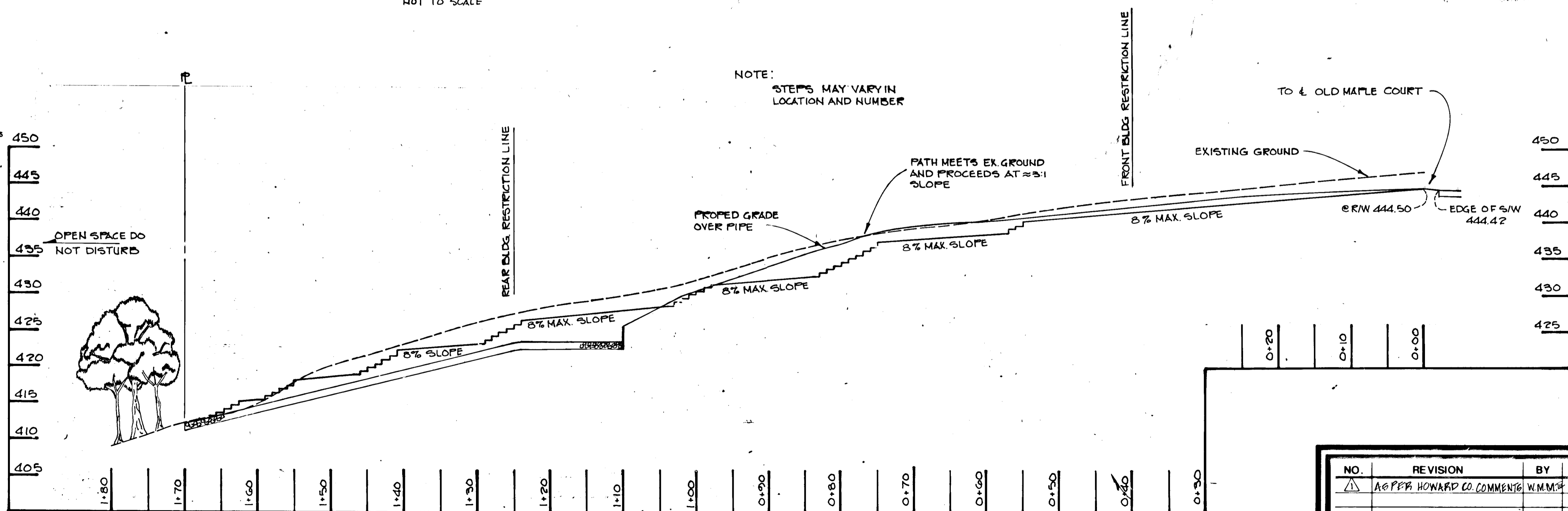
NOTE:
ZONING: R-20
ROAD CLASSIFICATION: LOCAL ROADS
DESIGN SPEED: 25 MPH.



STANDARD CURB AND GUTTER DETAIL
NOT TO SCALE



HANDICAPPED RAMP DETAIL
NOT TO SCALE

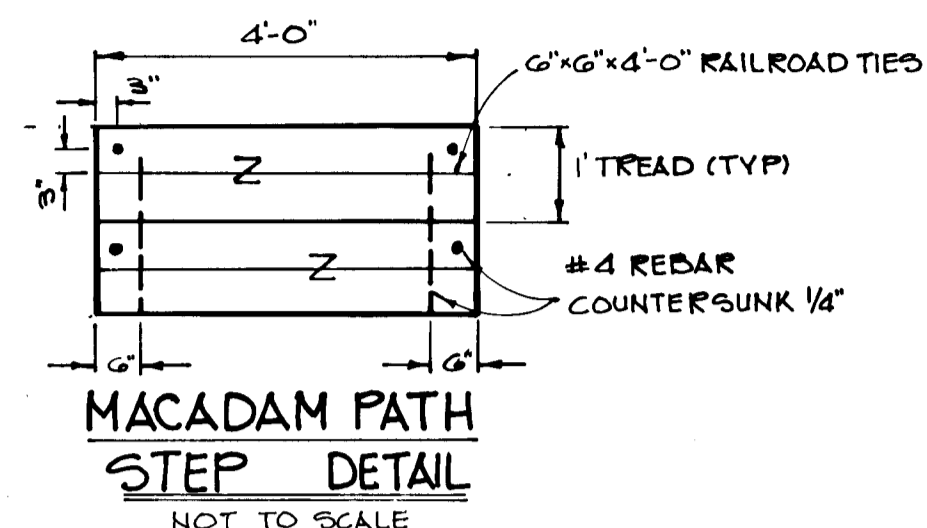


PROFILE WALKWAY TO OPENSACE LOTS 35, 36

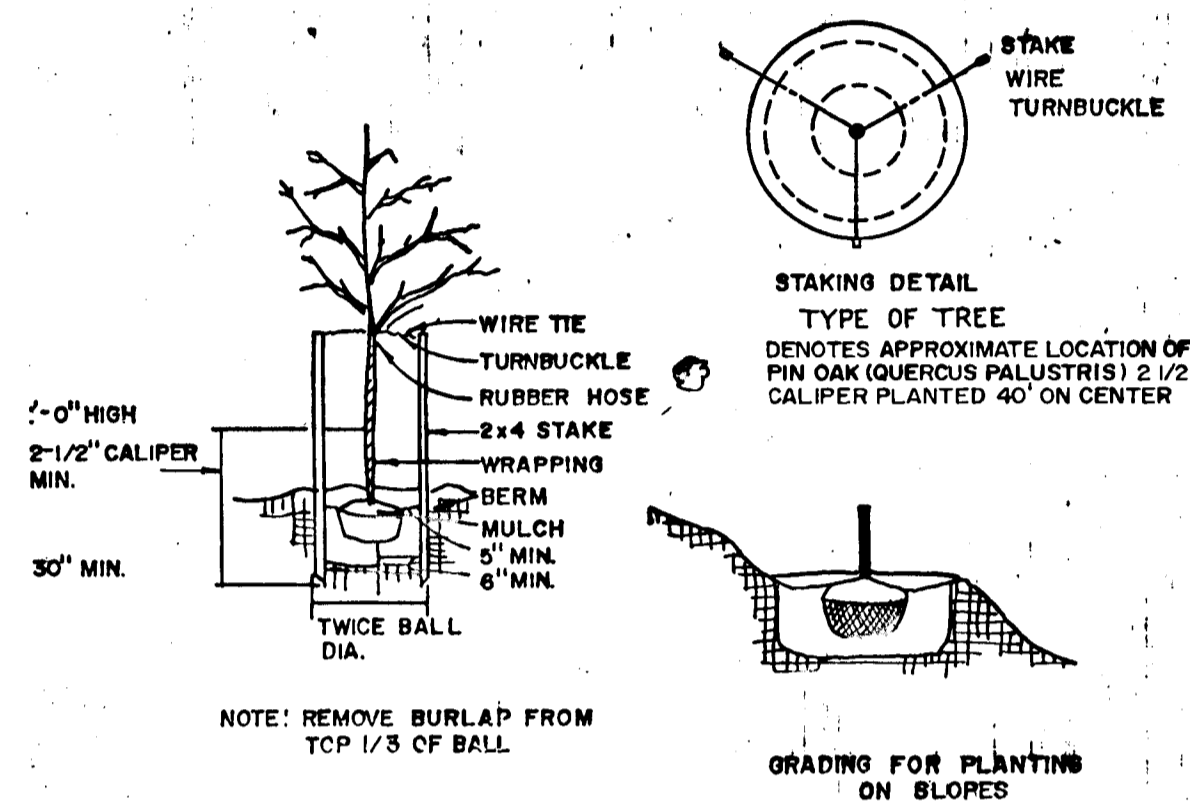
SCALE: 1"=10' VERT
1"=100' HORIZ

STREET LIGHT SCHEDULE

- TYPE A: 175 WATT MERCURY VAPOR LAMP MOUNTED ON A 14' FIBERGLASS SKONZE POLE LOCATED AT 1) RIGHT CORNER OF THE INTERSECTION OF RIDGE TREE COURT AND OLD MAPLE COURT. 2) 1/4 STA. 4+30 RIGHT SIDE ALONG RIDGE TREE COURT.

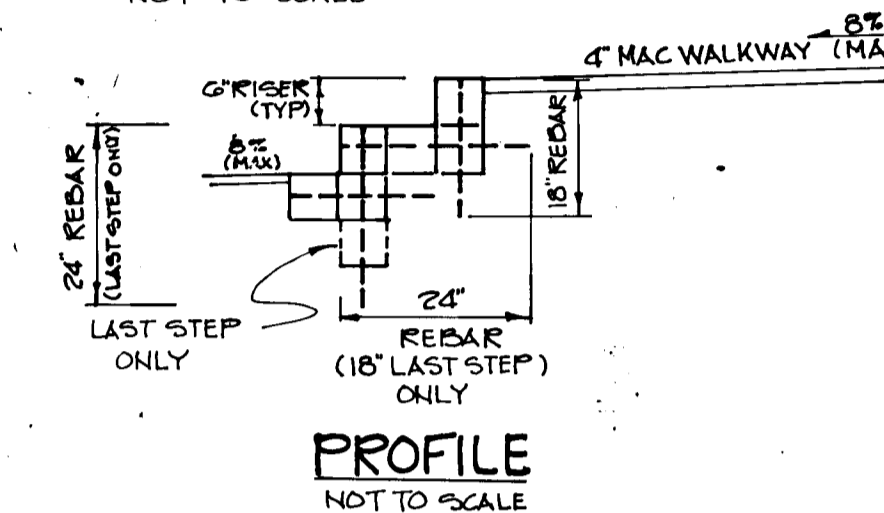


**MACADAM PATH
STEP DETAIL**
NOT TO SCALE



TREE PLANTING

NOTE: CONTRACTOR SHALL VERIFY LOCATION OF UNDERGROUND UTILITIES PRIOR TO DIGGING. FINAL LOCATIONS OF TREES MAY BE ADJUSTED SLIGHTLY TO ACCOMMODATE FIELD CONDITIONS. PLANTING PROCEDURES SHALL COMPLY WITH "LANDSCAPE SPECIFICATIONS FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS". SUBSTITUTIONS TO THE ABOVE SPECIES MAY BE PERMITTED, PROVIDED THAT THE PLANTING IS IN ACCORDANCE WITH THE STREET TREE AND LANDSCAPE REQUIREMENTS AS SPECIFIED IN SECTION 16.131 OF THE HOWARD COUNTY SUBDIVISION REGULATIONS.



PROFILE
NOT TO SCALE

DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan, and that any 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.

Signature of Developer: *[Signature]* Date: 5-19-87

ENGINEERS CERTIFICATE

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 and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Engineer: *[Signature]* Date: 5/18/87

APPROVED: DEPARTMENT OF PUBLIC WORKS.

Signature: *[Signature]* Date: 5-27-87
CHIEF, BUREAU OF ENGINEERING

APPROVED: OFFICE OF PLANNING AND ZONING.

Signature: *[Signature]* Date: 5-27-87
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

DETAIL SHEET

McKENZIE'S DISCOVERY

SECTION TWO
TAX MAP 1017 PARCELS 2, 172, 360
2nd ELECTION DISTRICT HOWARD COUNTY, MARYLAND

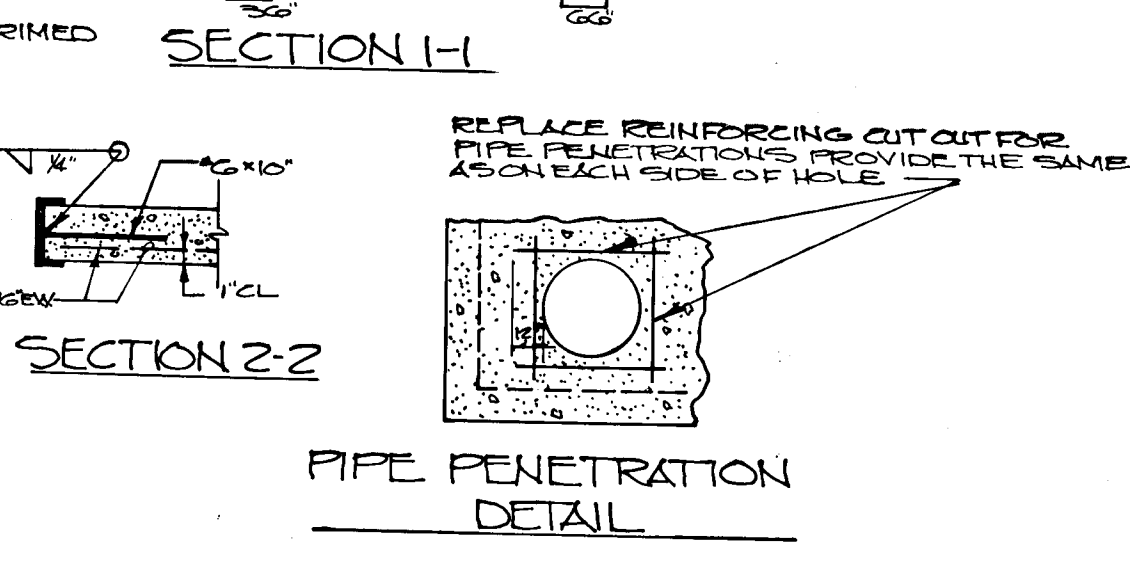
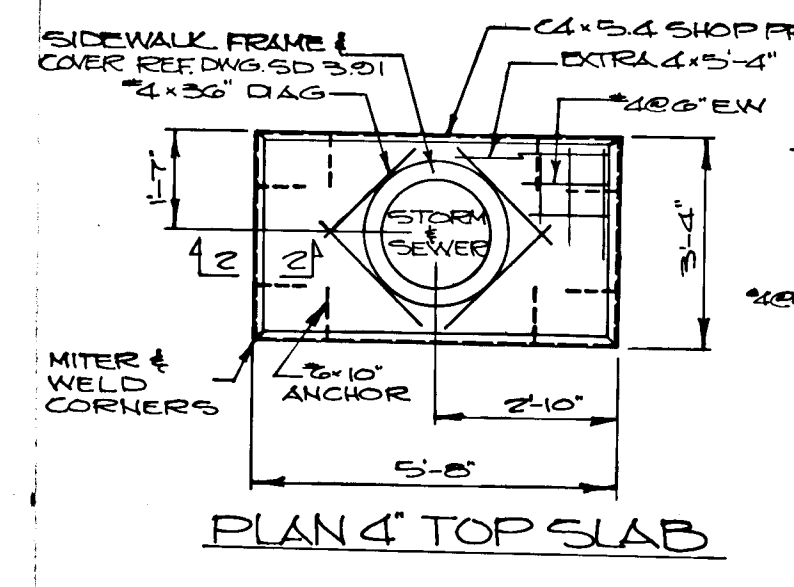
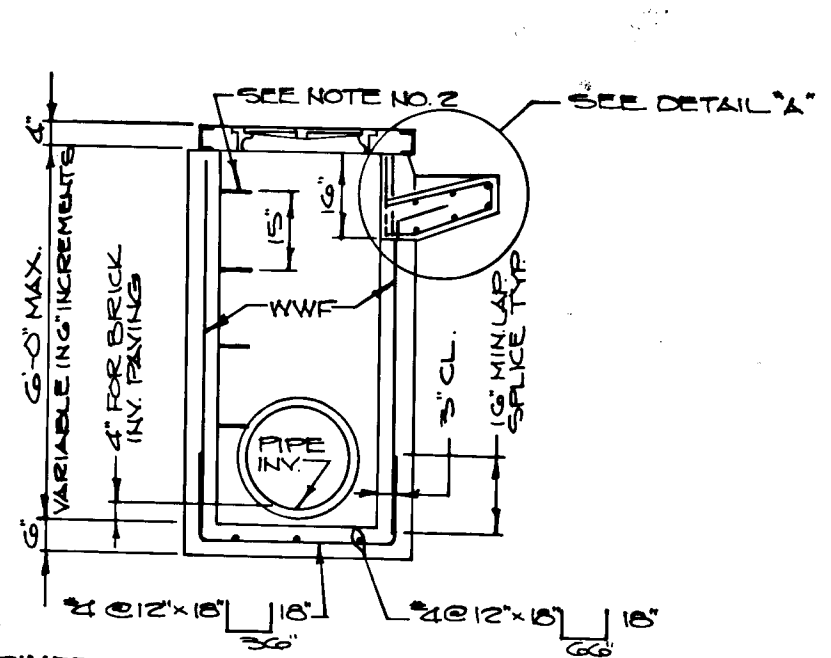
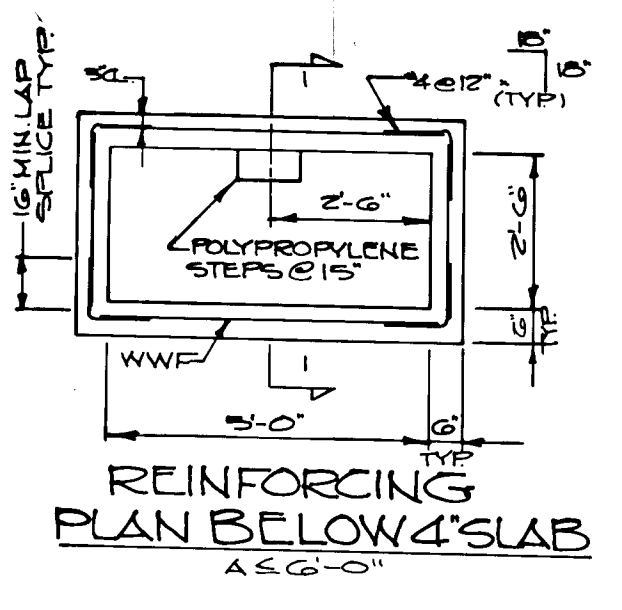
JOHN E. HARMS JR. AND ASSOCIATES INC.

CONSULTING ENGINEERS - ARCHITECTS - SURVEYORS

9030 RED BRANCH ROAD SUITE 100
COLUMBIA, MARYLAND 21045 TELEPHONE (301) 740-5200

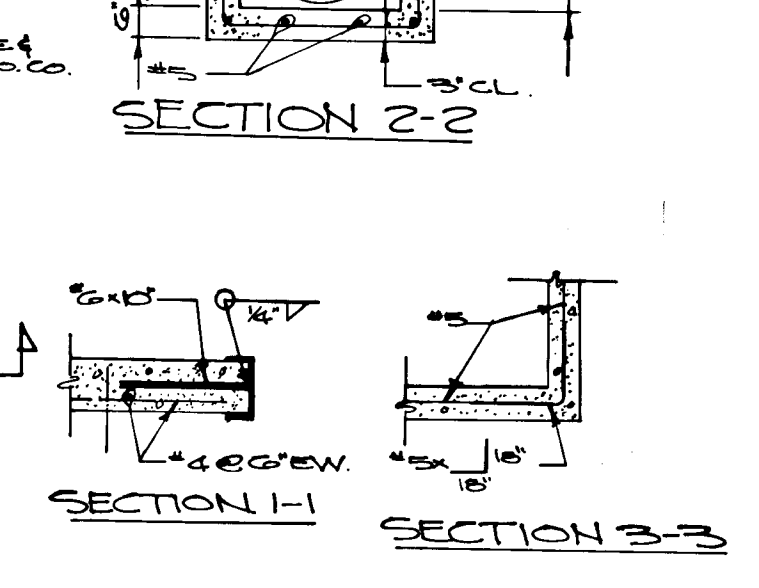
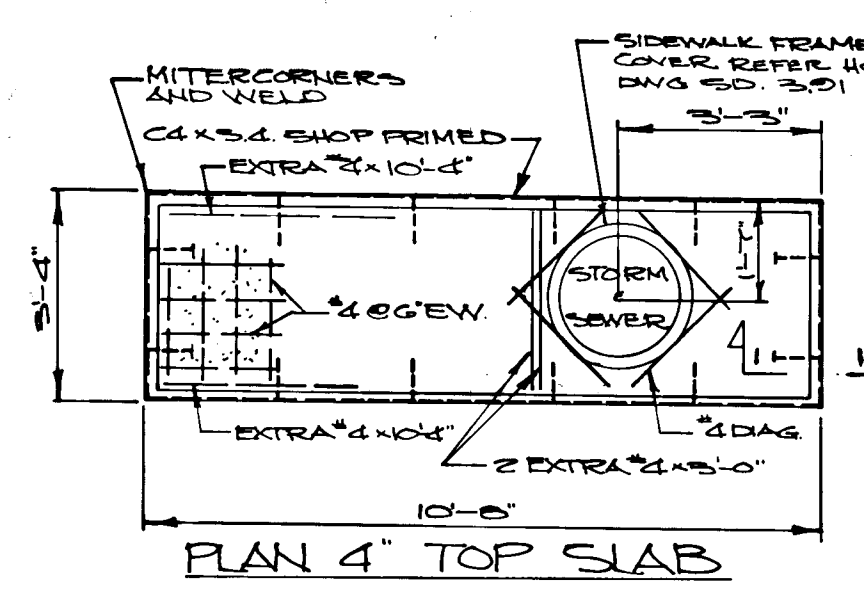
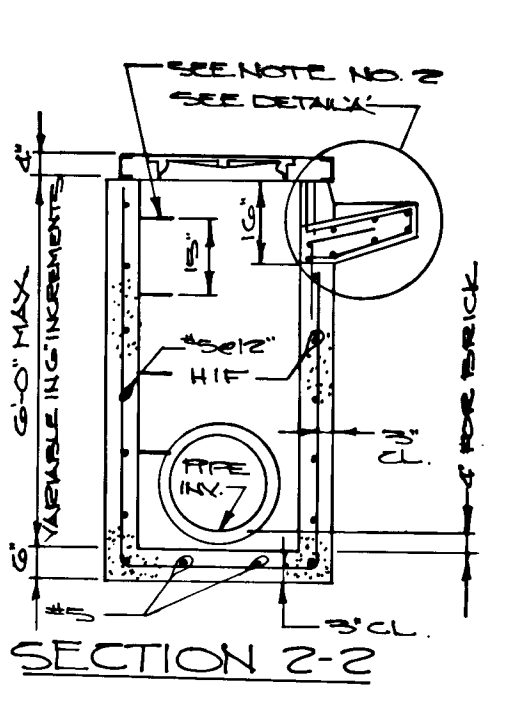
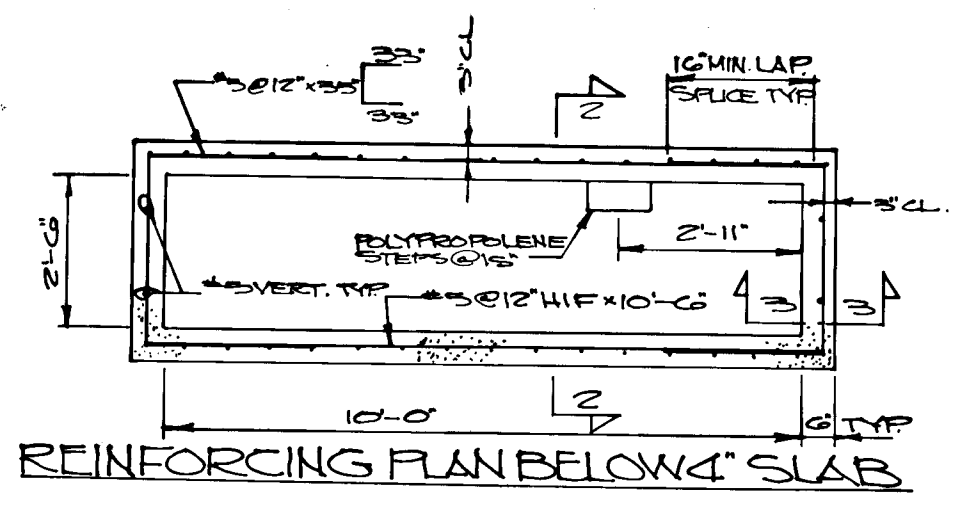
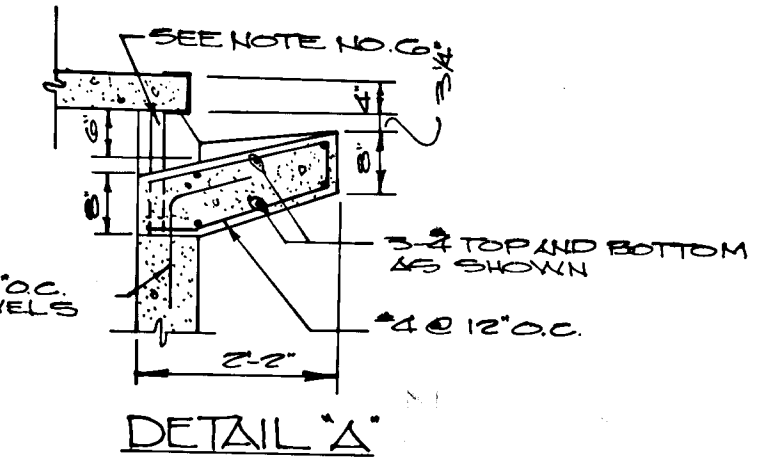
NO.	REVISION	BY	DATE
1	ADD PER HOWARD CO COMMENTS	W.M.M.	3-17-87

DESIGNED BY: J.A.D.
DRAWN BY: P.O.A.
CHECKED BY: R.H.V.
DATE: JAN. 1987
SCALE: AS SHOWN
W.O. NO. 04-86-0020



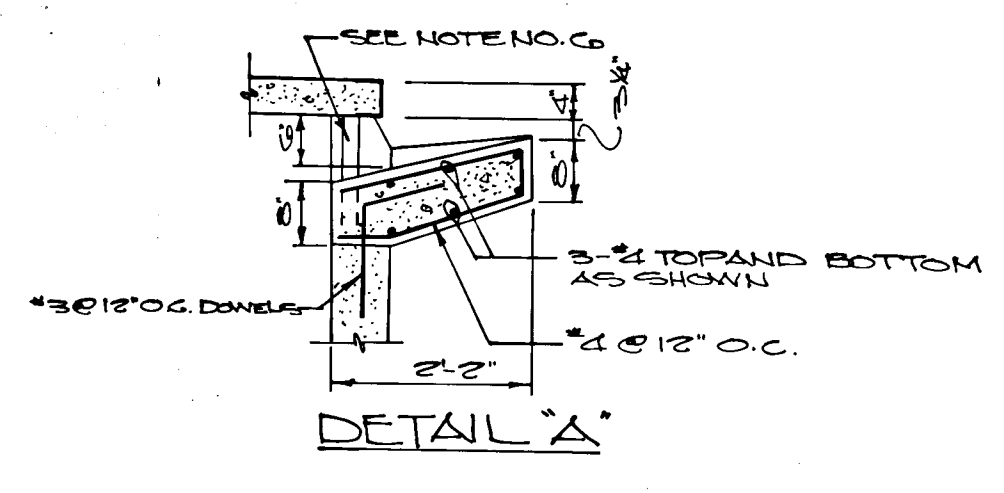
NOTES:

1. CONCRETE SHALL CONFORM TO MARYLAND DOT STANDARD SPECIFICATION FOR CONSTRUCTION & MATERIALS 1992, MIX NO. IN ADDITION, FC = 4500 PSI @ 28 DAYS CEMENT SHALL BE TYPE III AND 3/8 COARSE AGGREGATE SHALL BE USED.
2. POLYPROPYLENE STEPS SHALL BE TYPE P24 OR P25 AS MANUFACTURED BY M.A. INDUSTRIES, INC. STEP SHALL BE INSTALLED IN LINE WHERE A > 3'-0\"/>



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DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

DIRECTOR OF PUBLIC WORKS DATE CHIEF, BUREAU OF ENGINEERING DATE

DES: JAB	POA	ADD PRECAST DETAILS TO THIS SHEET FROM SHEET 2/ST	2/ST
DRN: POA			
CHK: HO. CTY			
DATE: 8/87	BY NO.	REVISION	DATE

JOHN E. HARMS JR. & ASSOC. INC.
CONSULTING ENGINEERS - SURVEYORS
6030 REDBRANCH RD. SUITE 100
COLUMBIA, MARYLAND 21045 TELE (301) 704-4300
600 SCALE MAP NO. BLOCK NO.

DETAIL SHEET
McKENZIE'S DISCOVERY
SECTION TWO
TAX MAP NO. 17 PARCELS 4, 7, 8, 9
2d. ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE AS SHOWN
SHEET 2A OF 2