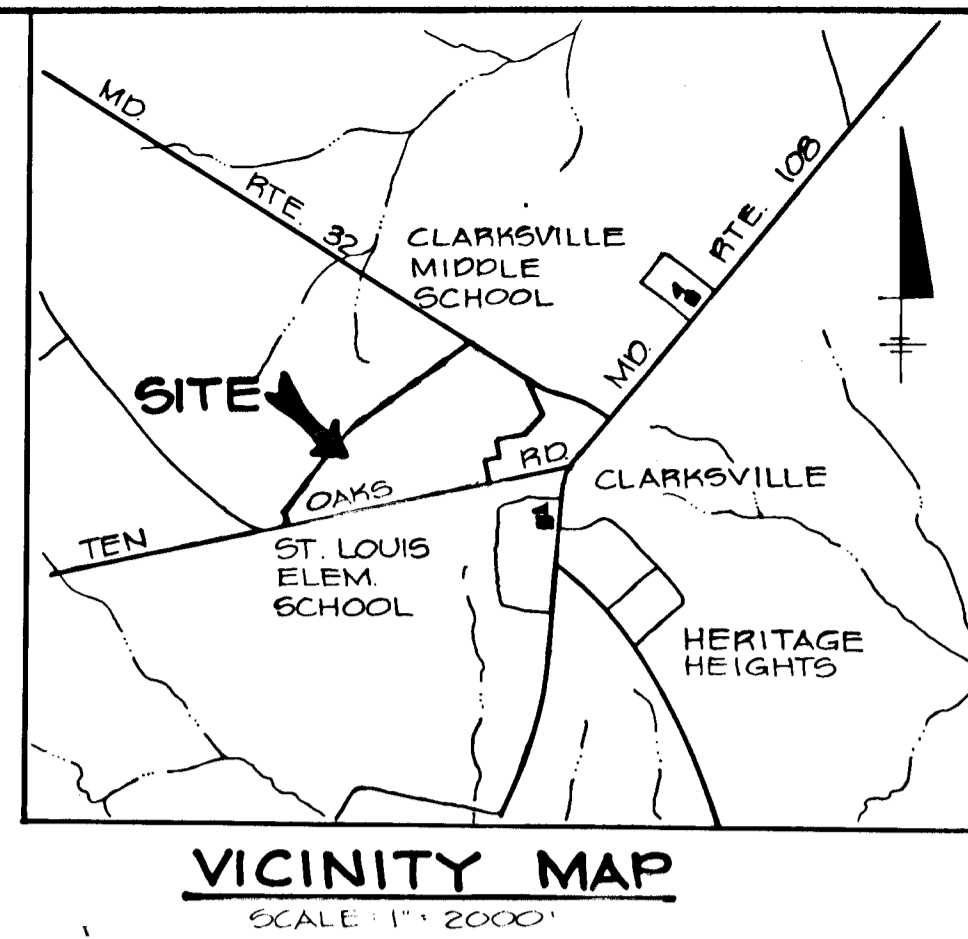


SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN # PROFILE - TEN OAKS RD. (0+00 TO 12+00)
3	PLAN # PROFILE - TEN OAKS RD. (12+00 TO 19+61)
4	PLAN # PROFILE - GOLDEN HARVEST COURT
5	PLAN # PROFILE - MORNING DEW COURT
6	DRAINAGE AREA MAP
7	GRADING AND SEDIMENT CONTROL
8	GRADING, SEDIMENT CONTROL AND DETAILS
9	STORM DRAIN PROFILES AND DETAILS

ROADWAYS AND STORM DRAINS CLARKSVILLE MANOR



5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

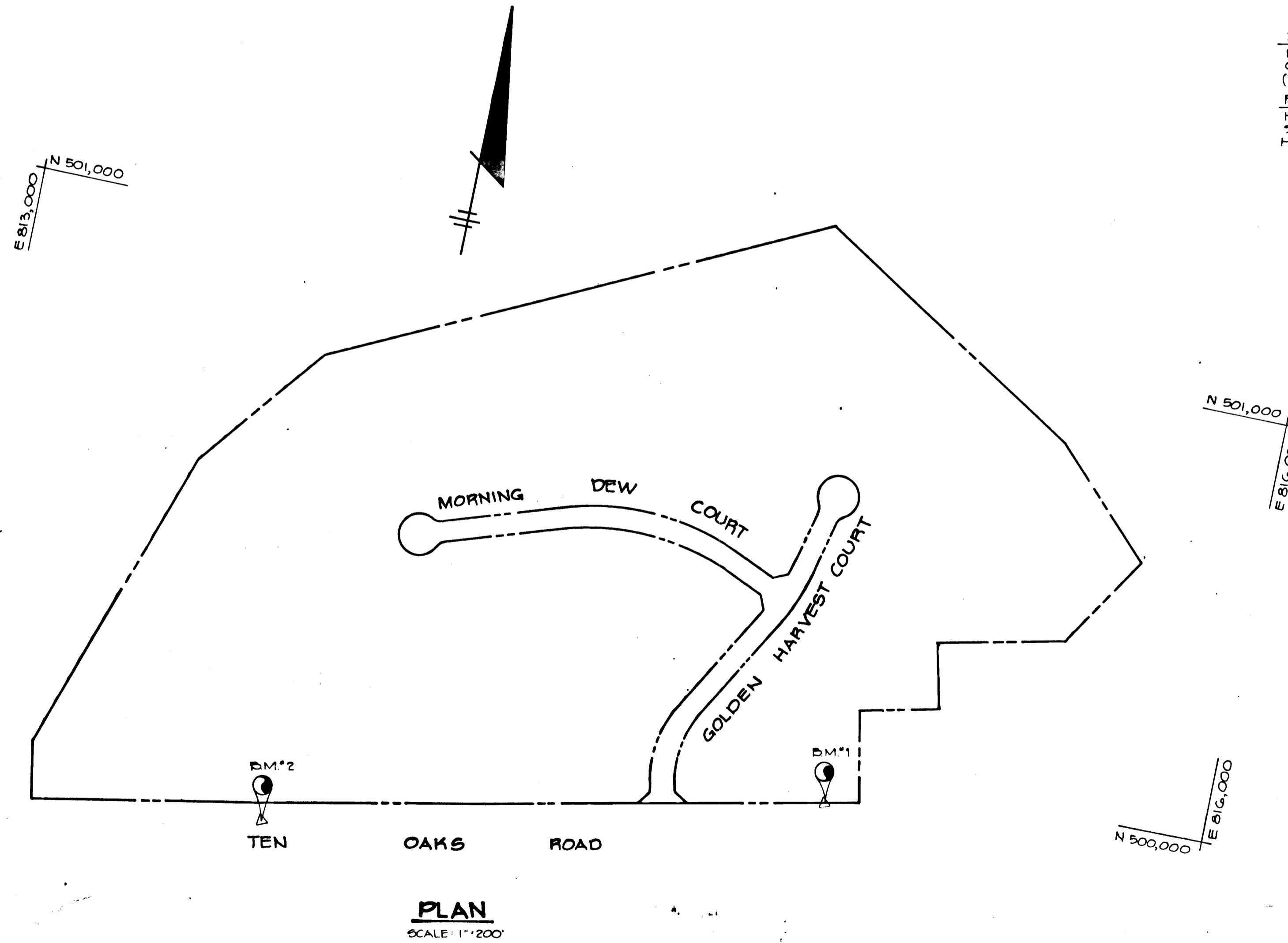
GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV, 1988, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION.
- 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 INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS TO VERIFY THEIR LOCATION AND ELEVATION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY IF LOCATION OF UTILITIES IS OTHER THAN SHOWN.
- CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK ON THESE DRAWINGS:

MISS UTILITY	1-800-257-7777
C&P TELEPHONE COMPANY	725-9976
AT&T CABLE LOCATION DIVISION	393-3553
BALTIMORE GAS AND ELECTRIC COMPANY	685-0123
STATE HIGHWAY ADMINISTRATION	531-5533
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION (24 HOURS NOTICE PRIOR TO COMMENCEMENT OF WORK)	792-7272

- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY DESIGN MANUAL, VOL. IV, 1988, STANDARD SPECIFICATIONS AND DETAILS.
- STORM DRAIN BACKFILL WITHIN ROADWAYS, UNDER STRUCTURES AND FOR STORM DRAIN TRENCHES SHALL BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM 1557.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE AS SHOWN IN DETAIL G2.01 (TRENCH IN ROCK OR TRENCH IN EARTH AS DETERMINED BY FIELD CONDITIONS) IN VOL. IV OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR AS SHOWN ON THE DRAWINGS.
- ALL STREET CURB RETURNS SHALL HAVE 35.0' RADII UNLESS OTHERWISE NOTED.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C.S. MEAN SEA LEVEL DATUM, 1929.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- TOPO TAKEN FROM FIELD RUN SURVEY DATED MAY 1988 BY THE RIEMER GROUP, INC.
- SUBJECT PROPERTY ZONED "R" PER 8.2.85 COMPREHENSIVE ZONING PLAN.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1984 EDITION.
- DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:

ALL 50' RIGHT-OF-WAYS 50 M.P.H.



BENCH MARKS

- B.M. #1 ELEV. 468.57
HUB # TACK SET 350' NORTHEAST OF GOLDEN HARVEST COURT (TRAVERSE STA. #201)
- B.M. #2 ELEV. 469.54
HO. CO. MONUMENT # 2536001 350' SOUTHWEST OF GOLDEN HARVEST COURT (SEE VICINITY MAP)

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Charles E. Jager Jr. 12-28-88
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Donald J. Seaman 11/17/88
CHIEF, Land Development Division

Lawrence W. Chiswick 12/1/88
CHIEF, Bureau of Highways

Charles E. Jager Jr. 12-2-88
CHIEF, Bureau of Engineering

DATE NO REVISION

OWNER / DEVELOPER
CHARLES E. JAGER JR & EUGENE W. JAGER
TRUSTEES UNDER WILL OF C. ELLSWORTH JAGER
11920 ROUTE 216
FULTON, MARYLAND 20759

PROJECT 6-88-40 P88-G5
CLARKSVILLE MANOR

AREA TAX MAP 34 PARCEL NO. 160 ZONED R-RURAL
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
TITLE SHEET

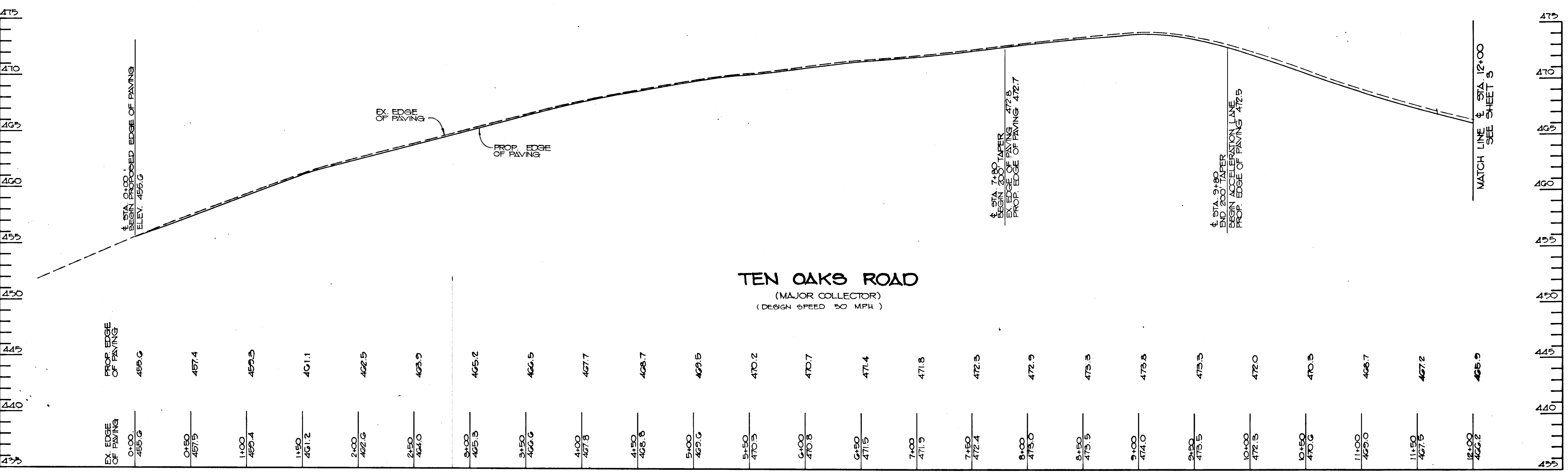
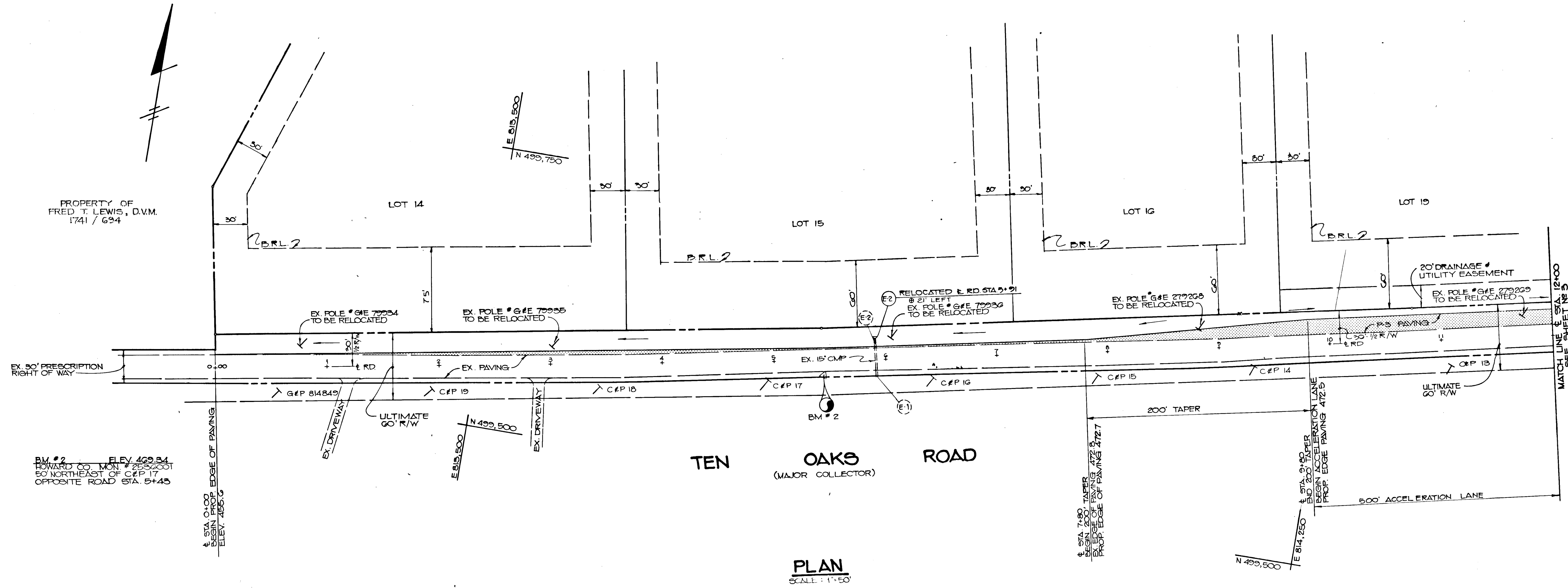
THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

12-88
DATE
SBB-40 P88-G5
DESIGNED BY: D.B.S.
DRAWN BY: D.V.P.
PROJECT NO: 34300
DATE JULY 29, 1988
SCALE: AS SHOWN
DRAWING NO. 1 OF 2

NOTE:
ARMY CORPS OF ENGINEERS PERMIT 401 & 404 ARE NOT REQUIRED FOR THE CONSTRUCTION WITHIN THE LIMIT OF DISTURBANCE AS SHOWN ON THIS SET OF DRAWINGS.

1191

PROPERTY OF
FRED T. LEWIS, D.V.M.
1741 / 694



PROFILE
SCALE: HOR. 1"=50'
VERT. 1"=10'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Harold J. McLaughlin 12-21-88
DATE
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul W. Seaman 11/10/88
DATE
Chief, Land Development Division
Dr. William W. Weisand 12/1/88
DATE
Chief, Bureau of Highways
W. C. ... 12/1/88
DATE
Chief, Bureau of Engineering

DATE	NO.	REVISION

OWNER / DEVELOPER
CHARLES E. IAGER JR. AND EUGENE W. IAGER
TRUSTEES UNDER WILL OF C. ELLSWORTH IAGER
11920 ROUTE 216
FULTON, MARYLAND 20759

PROJECT: 588-40 P88-05
CLARKSVILLE MANOR
AREA TAX MAP 54 PARCEL 160 ZONED - R RURAL
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

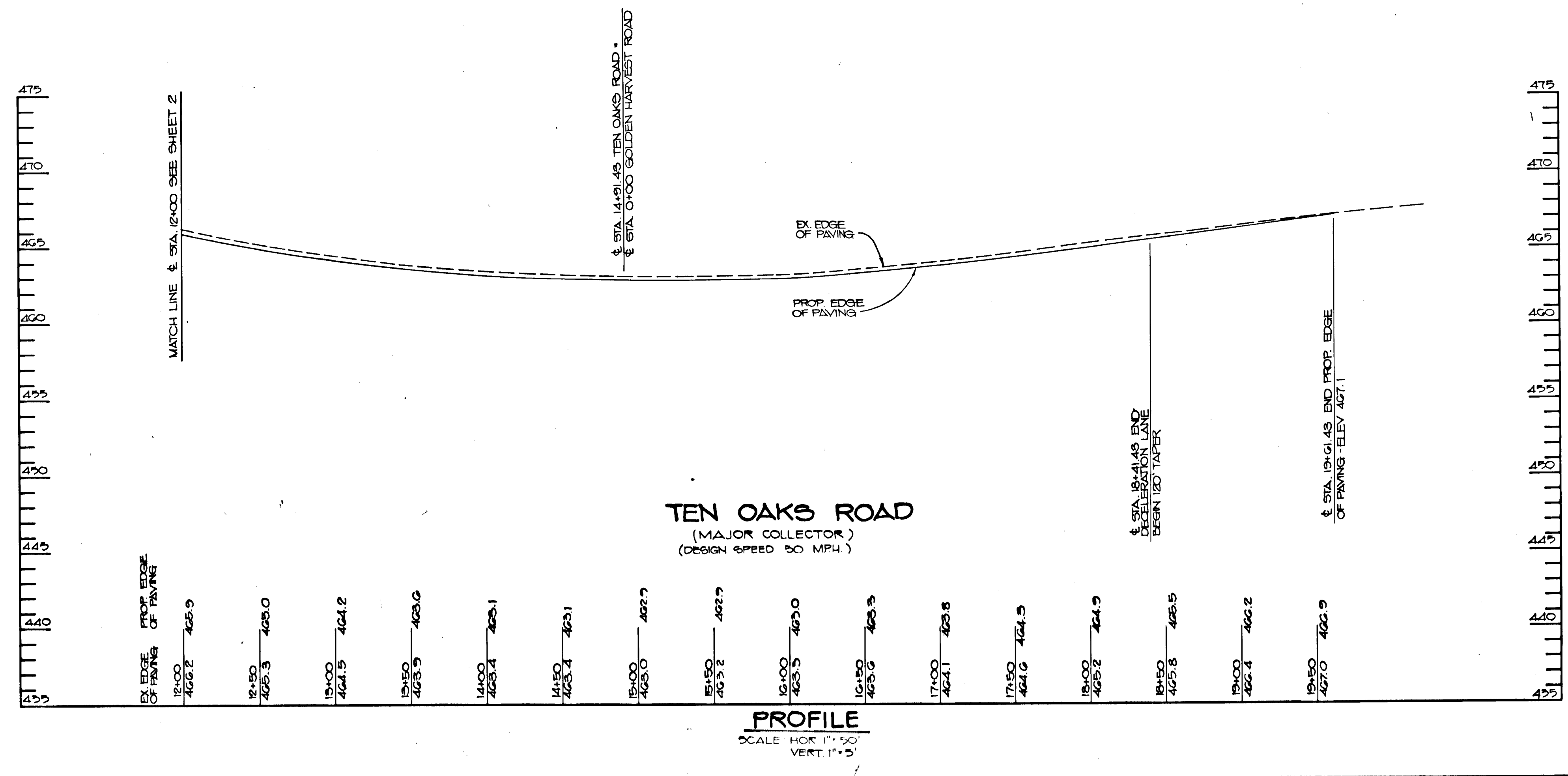
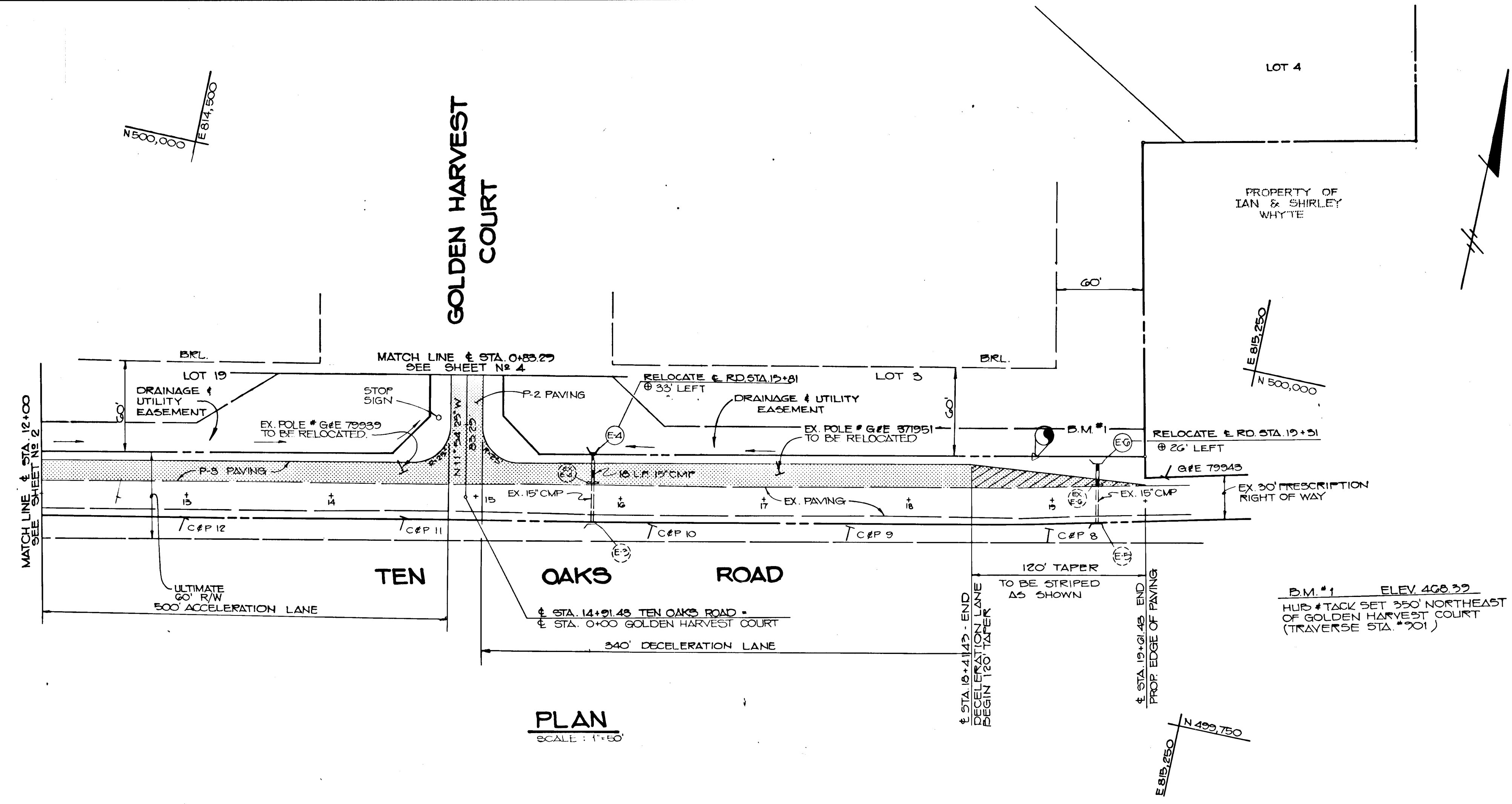
TITLE:
**PLAN AND PROFILE
TEN OAKS ROAD
(STA. 0+00 TO STA. 12+00)**

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

DATE: 11-3-88
DESIGNED BY: D.D.S.
DRAWN BY: R.A.W.
PROJECT NO: 24300
DATE: JULY 29, 1988
SCALE: AS SHOWN
DRAWING NO. 2 OF 2

1191

MARYLAND ELECTRIC CO. INC. 1988



APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

Frank J. McLaughlin 12-22-88 DATE
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Paul W. Sepp 11/17/88 DATE
 Chief, Land Development Division

Lawrence W. Weiland 12/18/88 DATE
 Chief, Bureau of Highways

William E. Ray 12-2-88 DATE
 Chief, Bureau of Engineering

DATE	NO.	REVISION

OWNER/DEVELOPER
 CHARLES E. IAGER, JR. & EUGENE W. IAGER
 TRUSTEES UNDER WILL OF C. ELLESMORTH IAGER
 11920 ROUTE 216
 FULTON, MARYLAND 20769

PROJECT: 888-40 P88-05
CLARKSVILLE MANOR

AREA TAX MAP 54 PARCEL 120 ZONED R-RURAL
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE:
PLAN AND PROFILE
TEN OAKS ROAD
 (STA. 12+00 TO STA. 19+G1.45)

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

DATE: 11-3-88
 DESIGNED BY: D.B.S.
 DRAWN BY: R.A.W.
 PROJECT NO: 24300
 DATE: JULY 29, 1988
 SCALE: AS SHOWN
 DRAWING NO. 3 OF 2

ARTHUR E. MUEGGELIOT

174500

1191

CURVE DATA TABLE

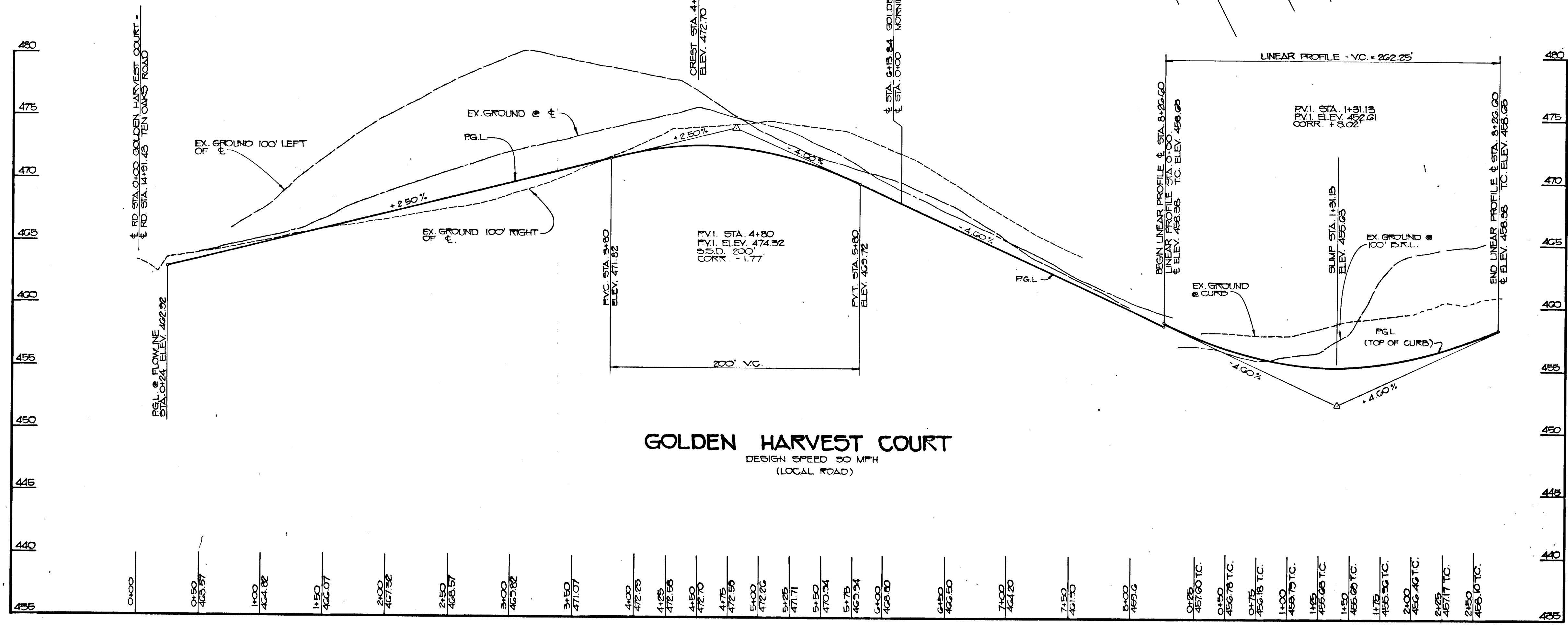
± STA. 5+51.84 TO ± STA. 7+08.92
 Δ = 16°21'48"
 R = 550.00'
 L = 157.08'
 T = 79.08'
 Chd = N22°12'34"E, 156.54'

CURVE DATA TABLE

± STA. 0+88.29 TO ± STA. 2+07.84
 Δ = 42°17'48"
 R = 250.00'
 L = 184.59'
 T = 96.71'
 Chd = N09°14'32"E, 180.20'

PLAN

SCALE: 1"=50'



APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Frank J. Dwyer 12-20-88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Donald J. Szymon 11/17/88
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE
Stanley W. Weiland 12/1/88
 CHIEF, BUREAU OF HIGHWAYS
 DATE
William E. Edin 12-2-88
 CHIEF, BUREAU OF ENGINEERING
 DATE

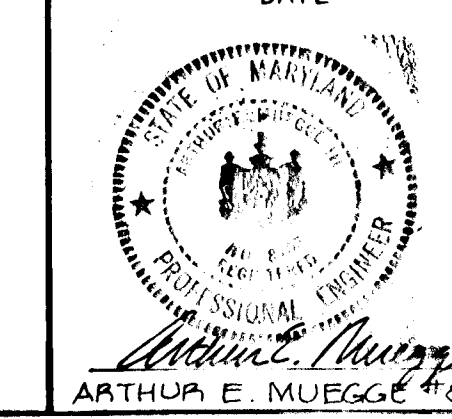
OWNER/DEVELOPER
 CHARLES E. IAGER JR & EUGENE W. IAGER
 TRUSTEES UNDER WILL OF C. ELLSWORTH IAGER
 11920 ROUTE 216
 FULTON, MARYLAND 20759

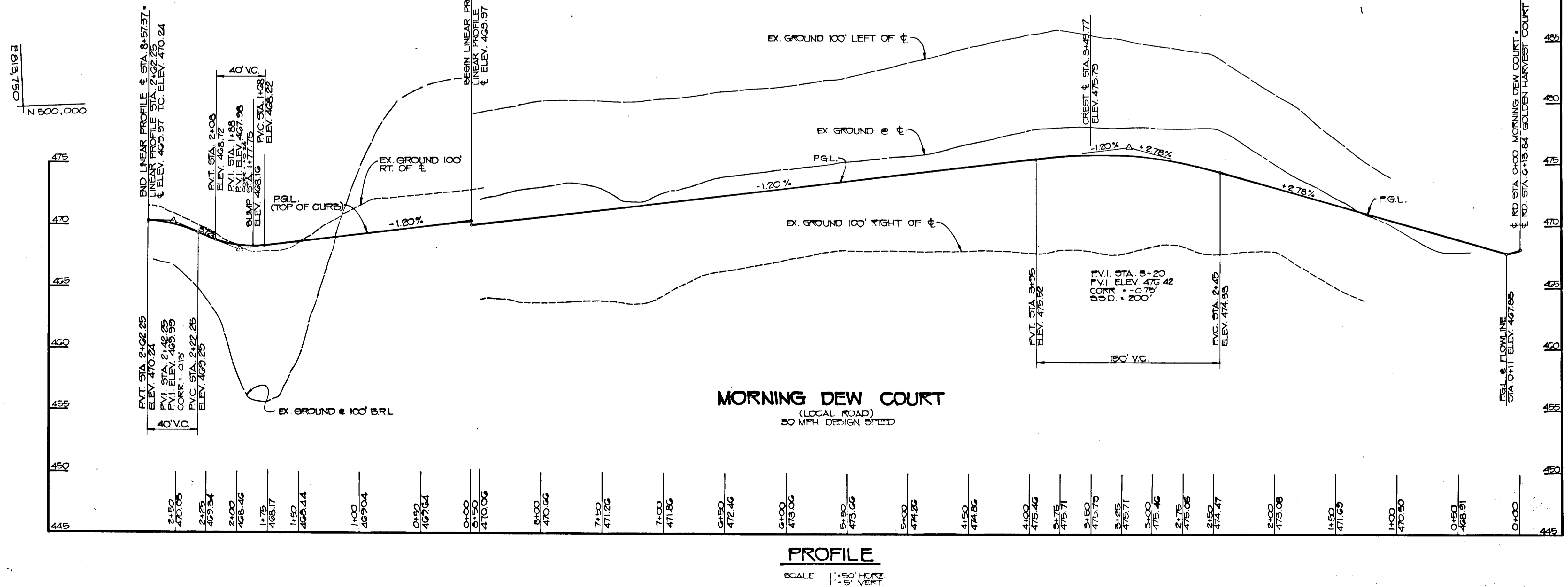
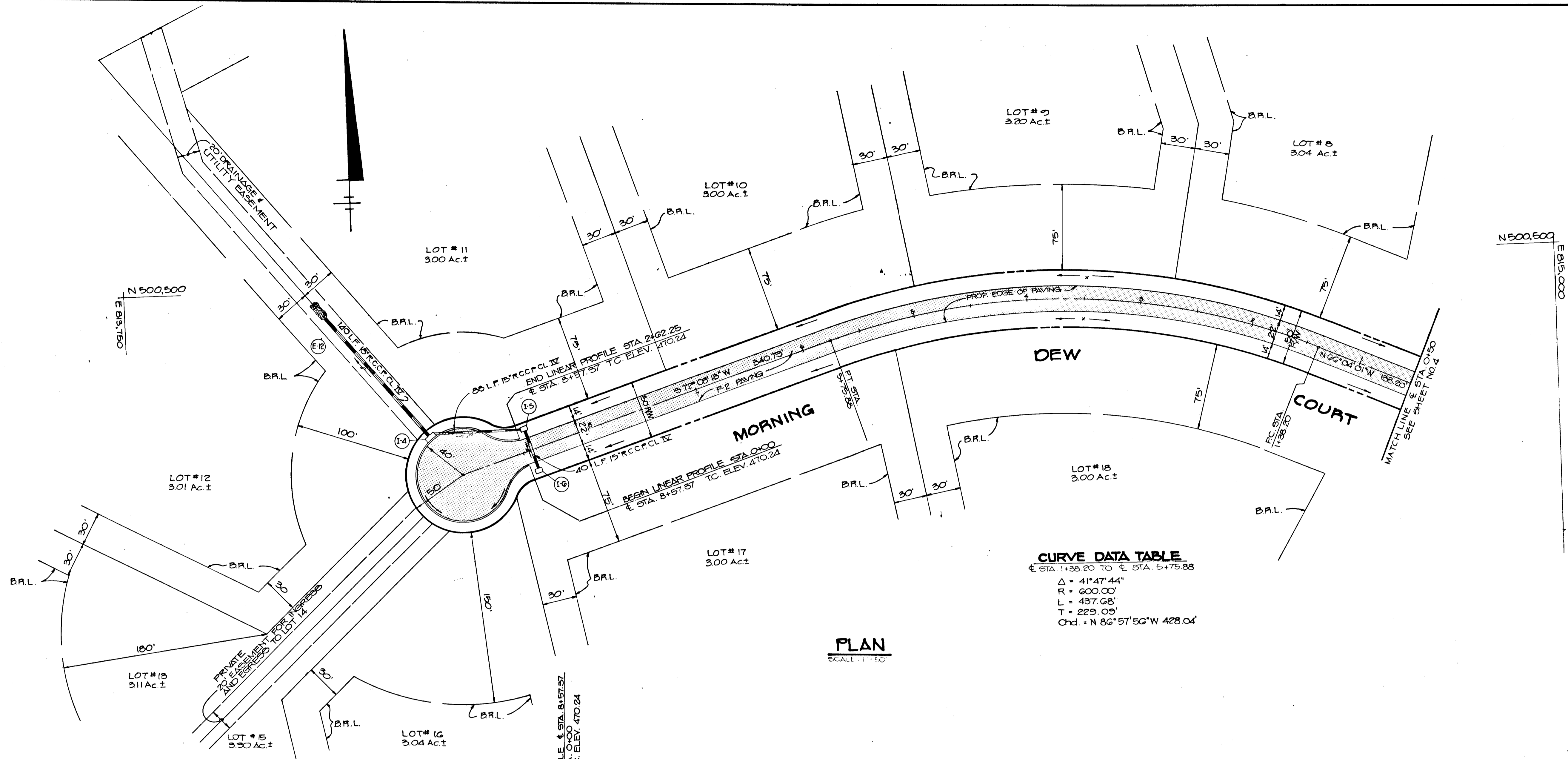
PROJECT: 5-88-40 P88-05
CLARKVILLE MANOR
 AREA TAX MAP 34 PARCEL NO. 160 ZONED R-RURAL
 5th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **PLAN AND PROFILE
 GOLDEN HARVEST COURT**

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

DATE: 11-2-88
 5-88-40 P88-05
 DESIGNED BY: D.B.S.
 DRAWN BY: R.A.W.
 PROJECT NO: 54300
 DATE: JULY 27, 1988
 SCALE: AS SHOWN
 DRAWING NO. 4 OF 2





APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Donald S. J. Taylor 12/21/88
 CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Donald J. Johnson 11/17/88
 CHIEF, Land Development Division

Frederick W. Weiland 12/1/88
 CHIEF, Bureau of Highways

John E. ... 12/2/88
 CHIEF, Bureau of Engineering

DATE	NO.	REVISION

OWNER/DEVELOPER
 CHARLES E. IAGER JR. & EUGENE W. IAGER
 TRUSTEES UNDER WILL OF C. ELLEWORTH IAGER
 11020 ROUTE 216
 FULTON, MARYLAND 20759

PROJECT 5 88-40 P88-65
CLARKSVILLE MANOR

AREA TAX MAP 34 PARCEL NO. 100 ZONED R-RURAL
 8th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

TITLE: **PLAN AND PROFILE MORNING DEW COURT**

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

11/3/88 DATE
 5-88-40 P88-65
 DESIGNED BY: D.B.S.
 DRAWN BY: R.A.W.
 PROJECT NO: 34300
 DATE: JULY 29, 1988
 SCALE: AS SHOWN
 DRAWING NO: 5 OF 2

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 ARTHUR E. MUEGGEL #101

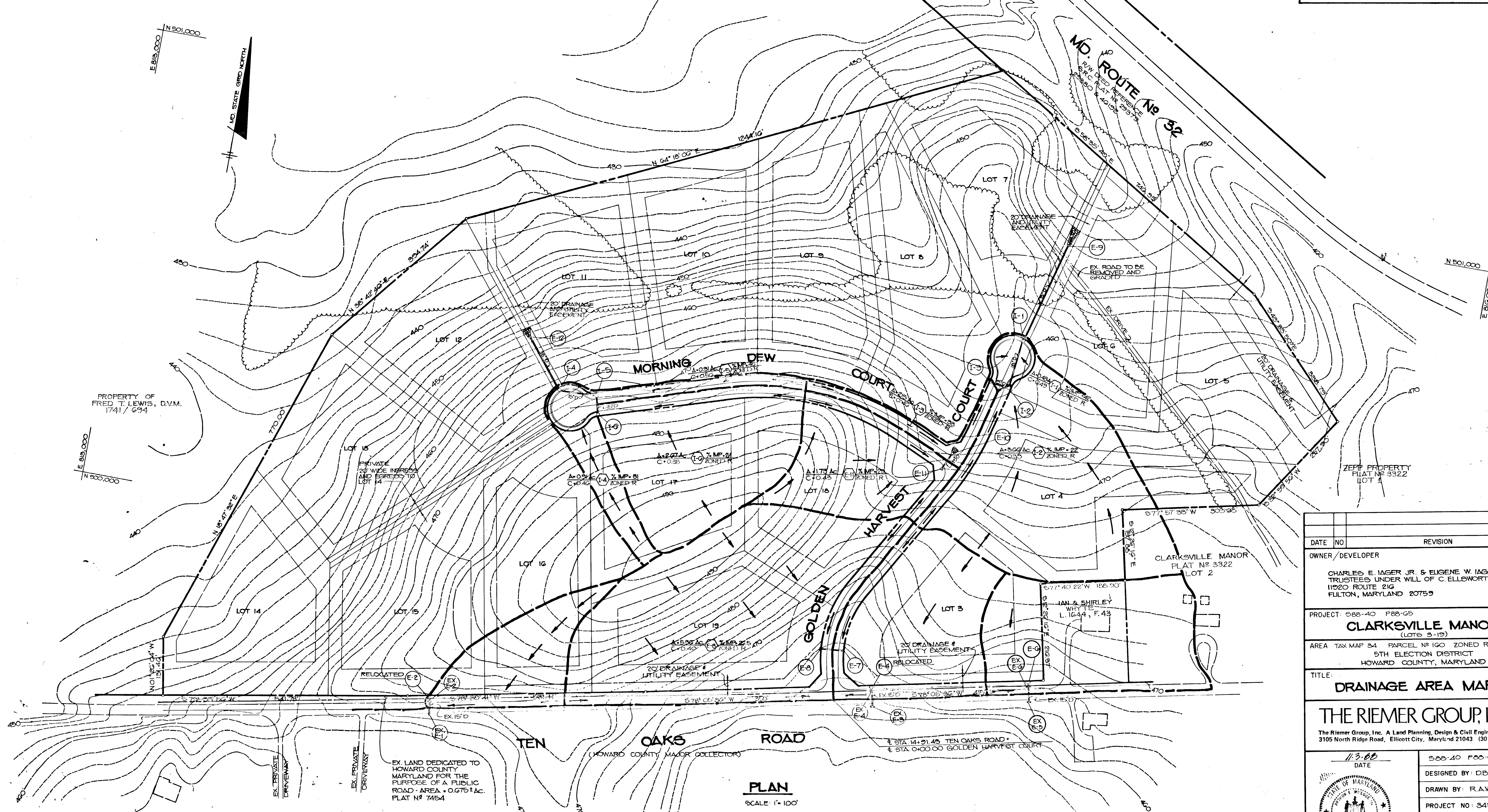
1191

David S. McLaughlin 12-20-88
CHIEF, DIVISION OF
COMMUNITY PLANNING AND
LAND DEVELOPMENT

Paul W. Johnson 11/7/88
Chief, Land Development Division

Thomas W. Wescott 12/1/88
Chief, Bureau of Highways

Robert B. Reed 12-2-88
Chief, Bureau of Engineering



DATE	NO.	REVISION

OWNER/DEVELOPER
 CHARLES E. IAGER JR. & EUGENE W. IAGER
 TRUSTEES UNDER WILL OF C. ELLENWORTH IAGER
 11920 ROUTE 21G
 FULTON, MARYLAND 20759

PROJECT: 588-40 P88-05
CLARKSVILLE MANOR
 (LOTS 3-19)

AREA TAX MAP 34 PARCEL NO 160 ZONED R-RURAL
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

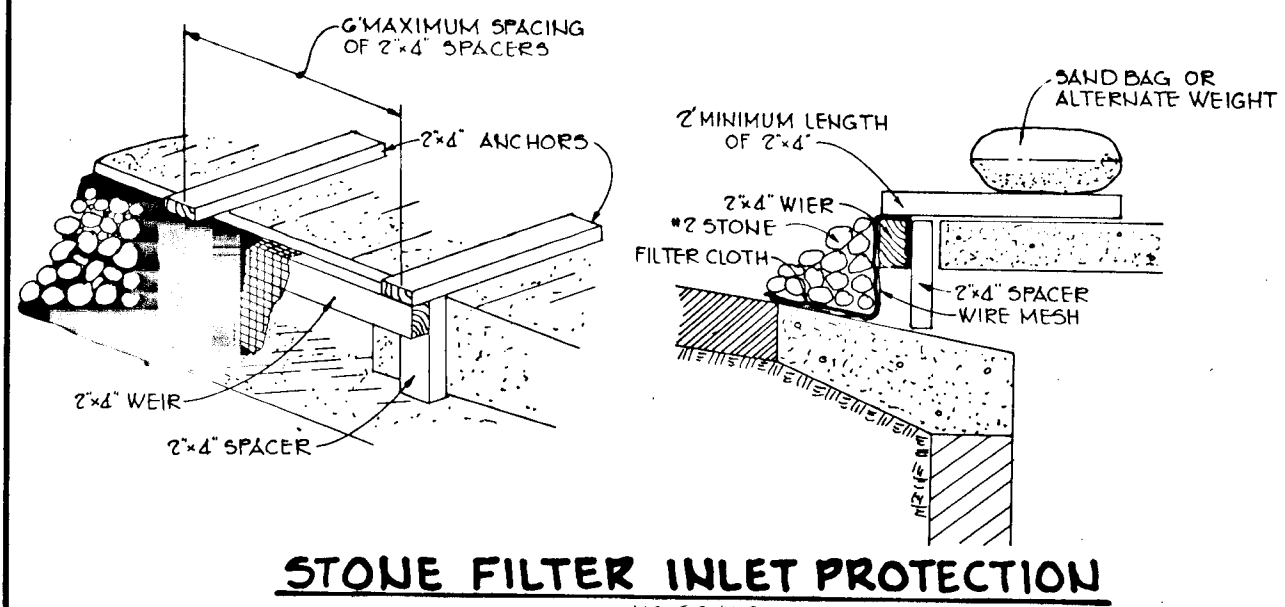
TITLE:
DRAINAGE AREA MAP

THE RIEMER GROUP, INC.
 The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
 3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

11-3-88 DATE
 588-40 P88-05
 DESIGNED BY: D.B.S., C.J.R.
 DRAWN BY: R.A.W.
 PROJECT NO: 34300
 DATE: MARCH 7, 1988
 SCALE: AS SHOWN
 DRAWING NO. 6 OF 9

EX. LAND DEDICATED TO
 HOWARD COUNTY
 MARYLAND FOR THE
 PURPOSE OF A PUBLIC
 ROAD AREA - 0.675± AC.
 PLAT # 7454

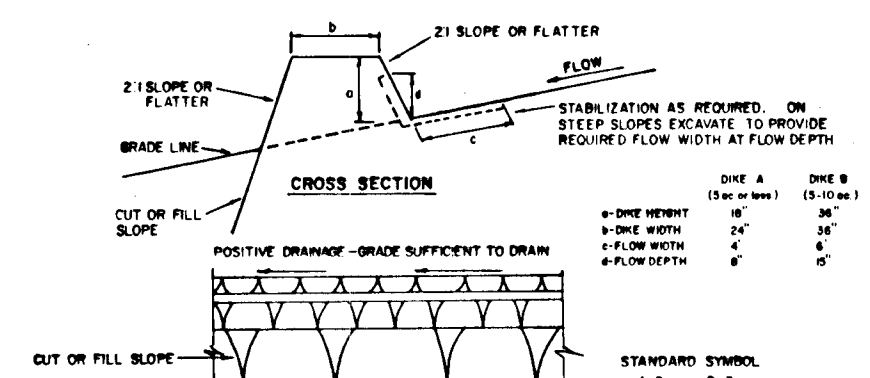
PLAN
 SCALE: 1" = 100'



STONE FILTER INLET PROTECTION
NO SCALE

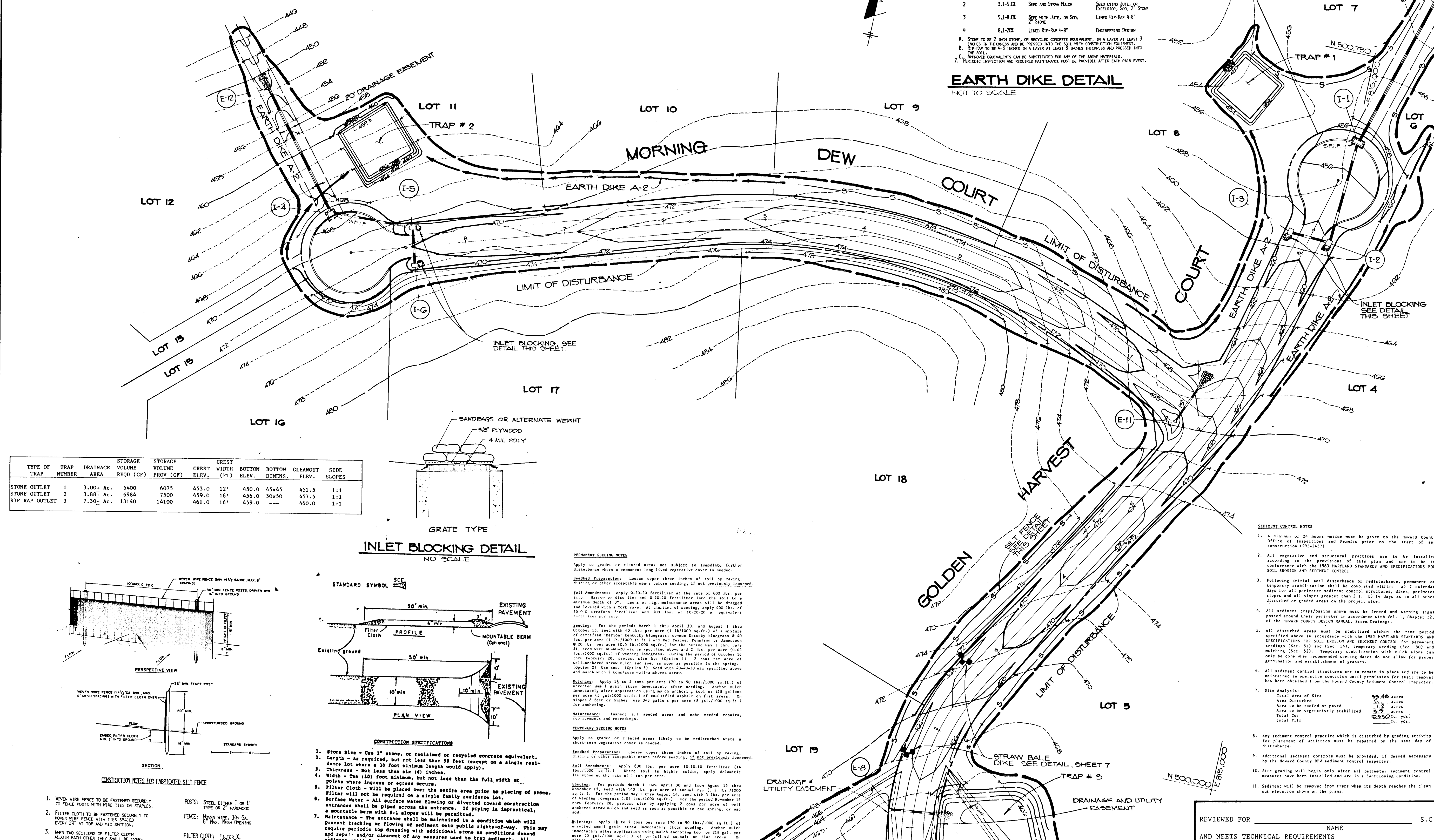
STANDARD SYMBOL

- SEQUENCE OF CONSTRUCTION
1. OBTAIN GRADING PERMIT.
 2. INSTALL STORM DRAIN FROM E-7 TO E-8 AND THEN INSTALL STABILIZED CONSTRUCTION ENTRANCE.
 3. INSTALL SILT FENCE AND SEDIMENT CONTROL DEVICES.
 4. GRADE ROADS WITHOUT DISTURBING SEDIMENT CONTROL DEVICES.
 5. STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
 6. INSTALL REMAINING STORM DRAINS AND STONE FILTER INLET PROTECTIONS.
 7. INSTALL THE STANDARD CURB AND GUTTER IN CUL-DE-SACS AND COMPLETE ROAD CONSTRUCTION.
 8. STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
 9. UPON APPROVAL OF THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS SEDIMENT CONTROL INSPECTION, REMOVE ALL SEDIMENT CONTROL DEVICES AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.

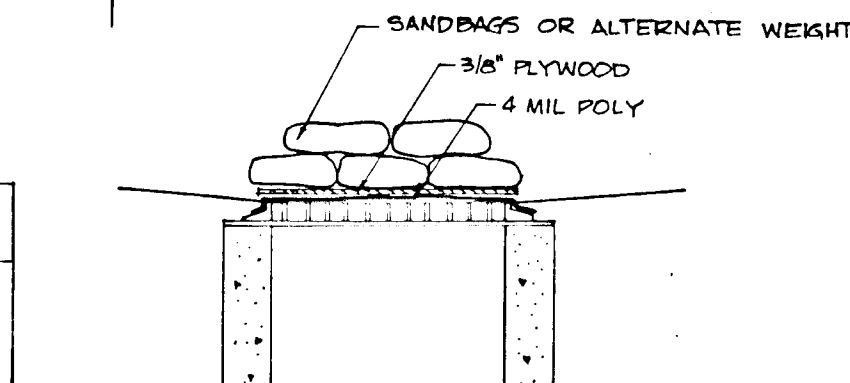


- CONSTRUCTION SPECIFICATIONS
1. ALL DIKES SHALL BE CONSTRUCTED BY EARTH-MOVING EQUIPMENT.
 2. DIKES SHALL HAVE POSITIVE DRAINAGE TO AN OUTLET.
 3. TOP WIDTH MAY BE WIDER AND/OR SLOPES MAY BE FLATTER.
 4. CROSS-SECTION OF CONSTRUCTION SHALL BE AS SHOWN TO UTILIZE A STABILIZED BANK OUTLET.
 5. EARTH DIKES SHALL HAVE AN OUTLET THAT FUNCTIONS WITH A MINIMUM OF FRICTION. BANKS SHALL BE CONFORMED TO A SEDIMENT TRAPPING DEVICE SUCH AS A SEDIMENT TRAP OR SEDIMENT BASIN WHERE EITHER THE DIKE CHANNEL OR THE DRAINAGE AREA ABOVE THE DIKE ARE NOT POSITIVELY STABILIZED.
 6. STABILIZATION SHALL BE: (A) IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR SEED AND STRAW MULCH OR STRAW MULCH IF NOT IN SEEDING SEASON; (B) FLOW CHANNEL, AS PER THE CHART BELOW.
- | TYPE OF TREATMENT | COVER | DIKE A | DIKE B |
|-------------------|----------|-------------------------------|---|
| 1 | 5-3.00 | SEED AND STRAW MULCH | SEED AND STRAW MULCH |
| 2 | 3.3-3.00 | SEED AND STRAW MULCH | SEED USING JUTE OR COCOONHULL SOIL COVERS |
| 3 | 5.3-8.00 | SEED WITH JUTE OR SOIL COVERS | LINED RIP-RAP 4-8" |
| 4 | 8.1-200 | LINED RIP-RAP 4-8" | ENGINEERING DESIGN |
- A. STONE TO BE 2" DIA. STONE OR RECYCLED CONCRETE EQUIVALENT, IN A LAYER AT LEAST 3" THICK, TO BE PLACED ON TOP OF MULCH AND COMPACTED TO 4-8" INCHES IN A LAYER AT LEAST 8" THICK AND COMPACTED TO 12" INCHES IN A LAYER AT LEAST 8" THICK AND COMPACTED TO 12" INCHES IN A LAYER AT LEAST 8" THICK AND COMPACTED TO 12" INCHES IN A LAYER AT LEAST 8" THICK.
- C. APPROVED EQUIVALENTS CAN BE SUBSTITUTED FOR ANY OF THE ABOVE MATERIALS.
7. PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.

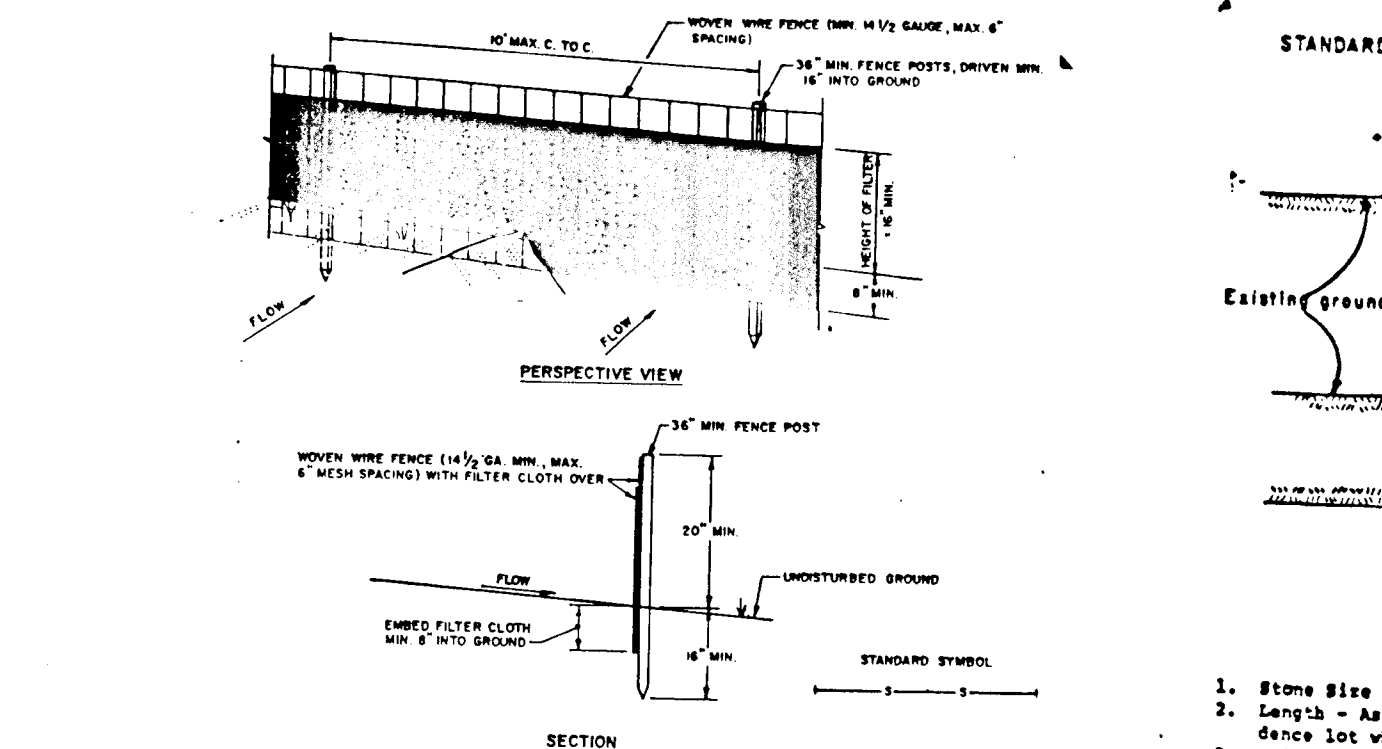
EARTH DIKE DETAIL
NOT TO SCALE



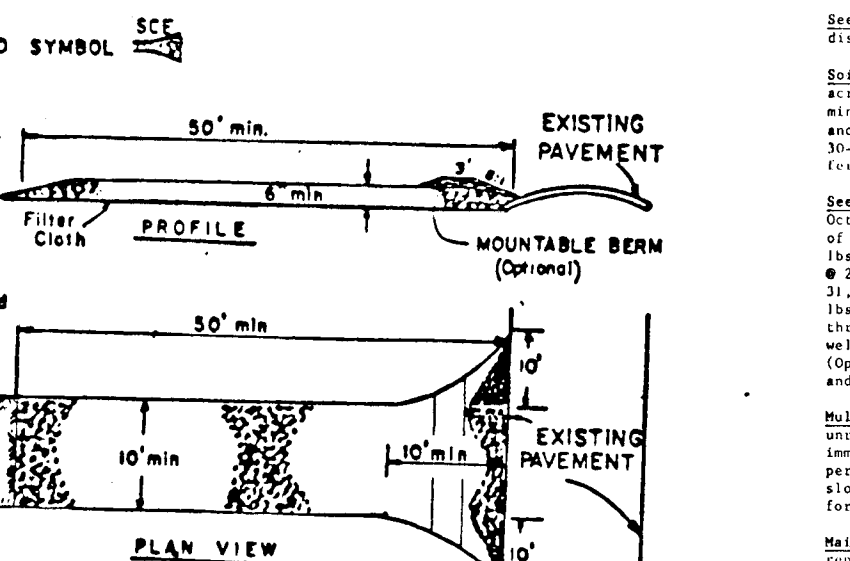
TYPE OF TRAP	TRAP NUMBER	DRAINAGE AREA	STORAGE VOLUME REQ'D (CF)	STORAGE VOLUME PROV. (CF)	CREST WIDTH (FT)	BOTTOM ELEV.	BOTTOM DIMENS.	CLEANOUT ELEV.	SIDE SLOPES
STONE OUTLET	1	3.00± AC.	3400	6075	453.0	12'	450.0	45x45	1:1
STONE OUTLET	2	3.88± AC.	6984	7500	459.0	16'	456.0	50x50	1:1
RIP RAP OUTLET	3	7.30± AC.	13140	14100	461.0	16'	459.0	—	1:1



INLET BLOCKING DETAIL
NO SCALE



- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIE SPACED EVERY 2' AT TOP AND MID SECTION.
 3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
 4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "MUDS" DEVELOP IN THE SILT FENCE.
- POSTS: STEEL EITHER T OR U TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE 18 GA. OR 1/4" PLYWOOD
FILTER CLOTH: FILTER X TENSILE STRENGTH 100 LB. PER YD. OR APPROVED EQUAL
PRE-FABRICATED UNIT: GEOPUR, ENVIRONMENTAL, OR APPROVED EQUAL



- CONSTRUCTION SPECIFICATIONS
1. Stone Size - Use 2" stone, or reclaimed or recycled concrete equivalent.
 2. Length - As required, but not less than 50 feet (except on a single residence lot where a 10 foot minimum length would apply).
 3. Thickness - Not less than six (6) inches.
 4. Mesh - One (10) foot minimum, but not less than the full width at points where ingress or egress occurs.
 5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 6. Surface Water - All surface water flowing or directed toward construction entrances shall be piped across the entrance. If piping is impractical, a mountable berm with 5:1 slope will be permitted.
 7. Maintenance - The entrance shall be maintained in a condition which will require periodic treading with additional stone as conditions demand sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
 8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto stabilized with stone and which drains into an approved sediment trapping device.
 9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE
NO SCALE

SILT FENCE ENTRANCE
NO SCALE

SCALE: 1" = 50'

BY THE DEVELOPER:
"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 COUNTY SOIL CONSERVATION DISTRICT."
Eugene W. Jager 8/15/88
DEVELOPER DATE

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT."
Arthur E. Mueggel 11-3-88
ENGINEER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
CHIEF, DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
DATE
LMS

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Chief, Land Development Division
Date
11/7/88
Chief, Bureau of Highways
Date
12/1/88
Chief, Bureau of Engineering
Date
12-20-88

DATE	NO	REVISION

OWNER/DEVELOPER
CHARLES E. JAGER, JR. & EUGENE W. JAGER TRUSTEES UNDER WILL OF C. ELLSWORTH JAGER
11020 ROUTE 210
FULTON, MARYLAND 20753

PROJECT 88-40
CLARKSVILLE MANOR

AREA TAX MAP 34 PARCEL NO. 160 ZONED R-1 RURAL
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE
GRADING SEDIMENT CONTROL PLAN & DETAILS

THE RIEMER GROUP, INC.

The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

11-3-88
DATE
S.C.D.
AND MEETS TECHNICAL REQUIREMENTS

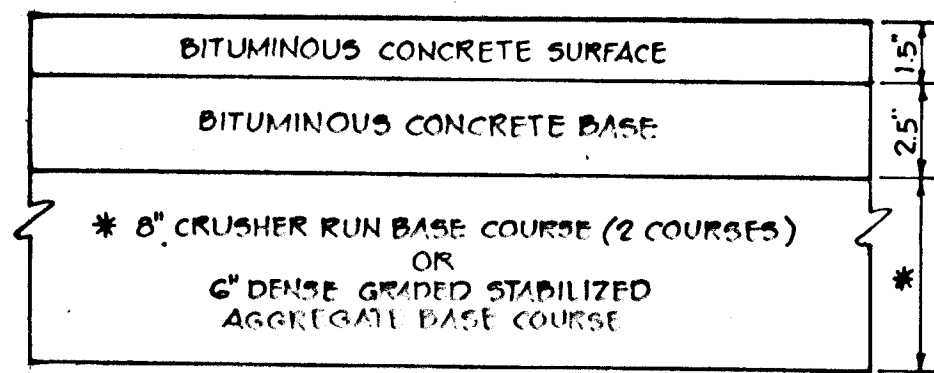
U.S. SOIL CONSERVATION SERVICE DATE

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

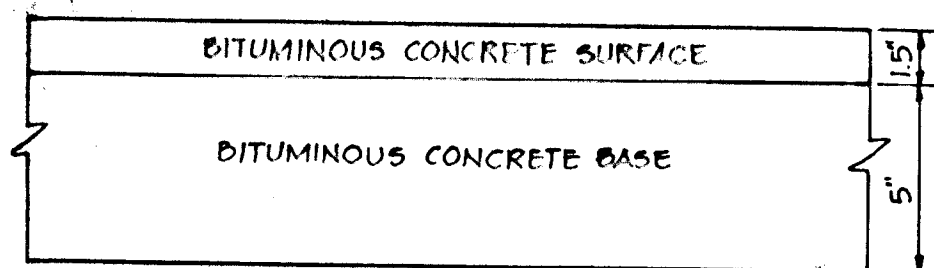
Arthur E. Mueggel 11/8/88
HOWARD S.C.D. DATE

88-40
DESIGNED BY: D.B.S.
DRAWN BY: R.A.W.
PROJECT NO 34200
DATE
SCALE: AS SHOWN
DRAWING NO. 8 OF 9

F87-33

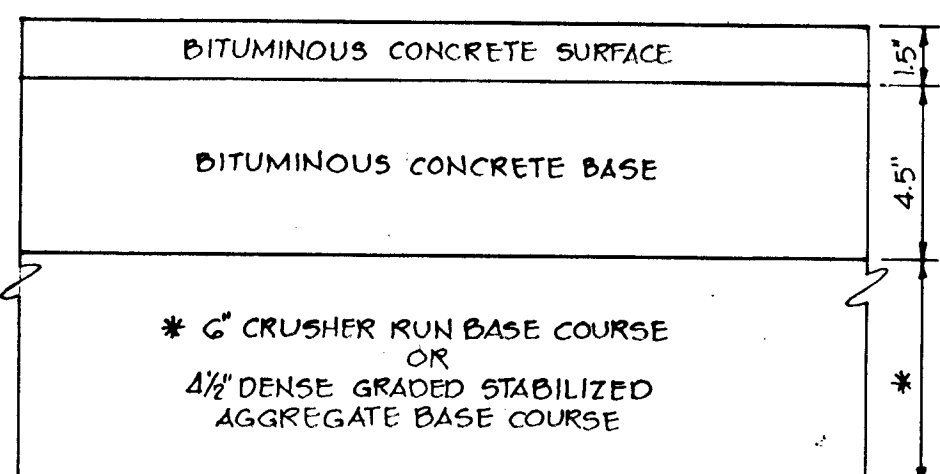


(ALTERNATE)

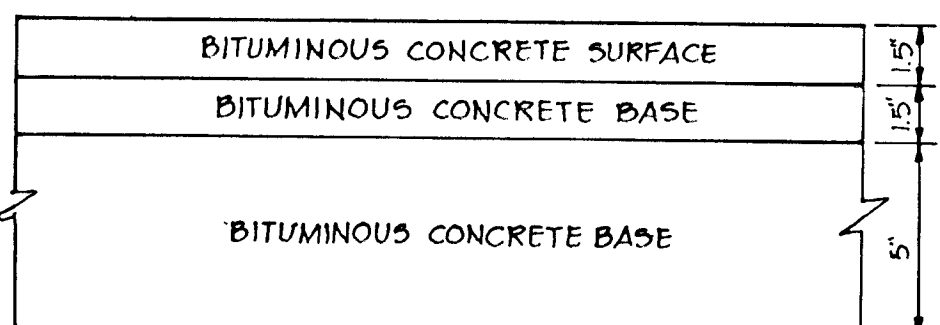


HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

(6" PAVING, P. 2)

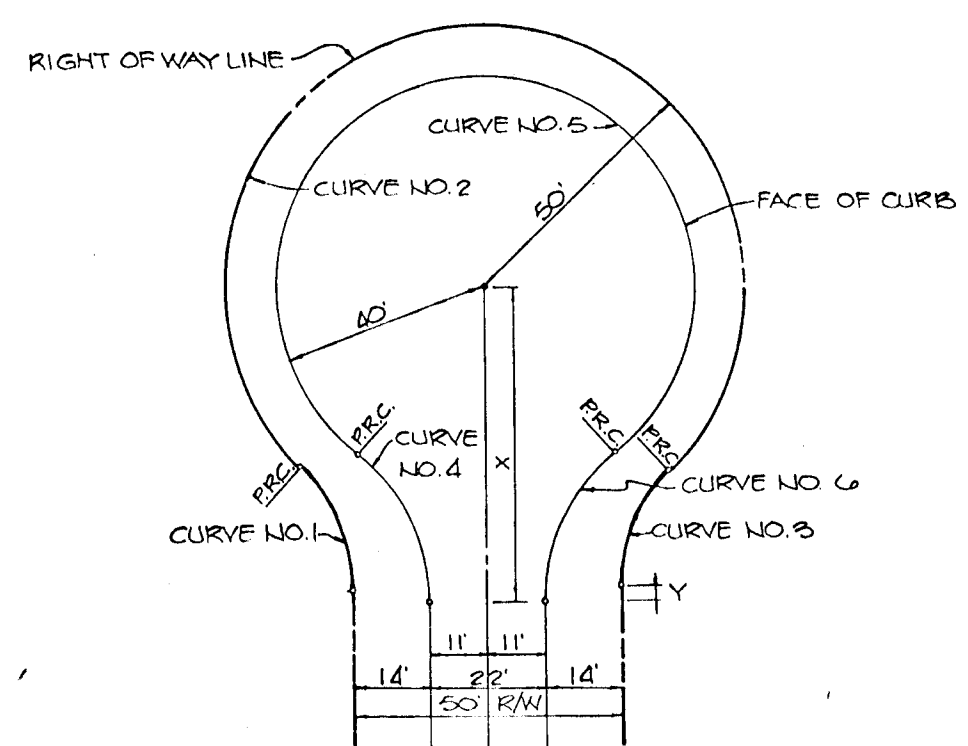


(ALTERNATE)



HOWARD COUNTY DESIGN MANUAL VOLUME IV - STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (DRAWING R-2.01)

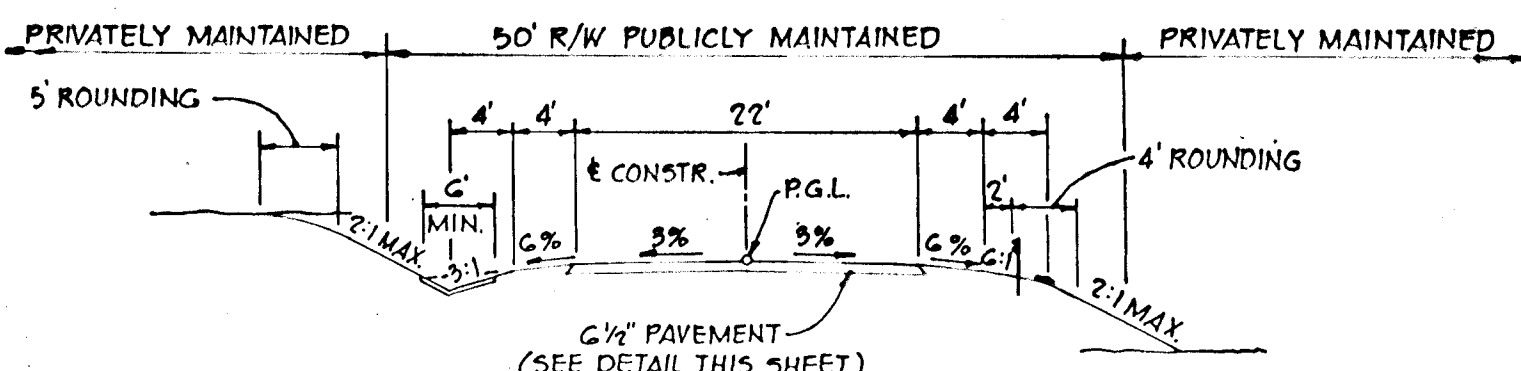
(8" PAVING, P. 3)



CURVE DATA

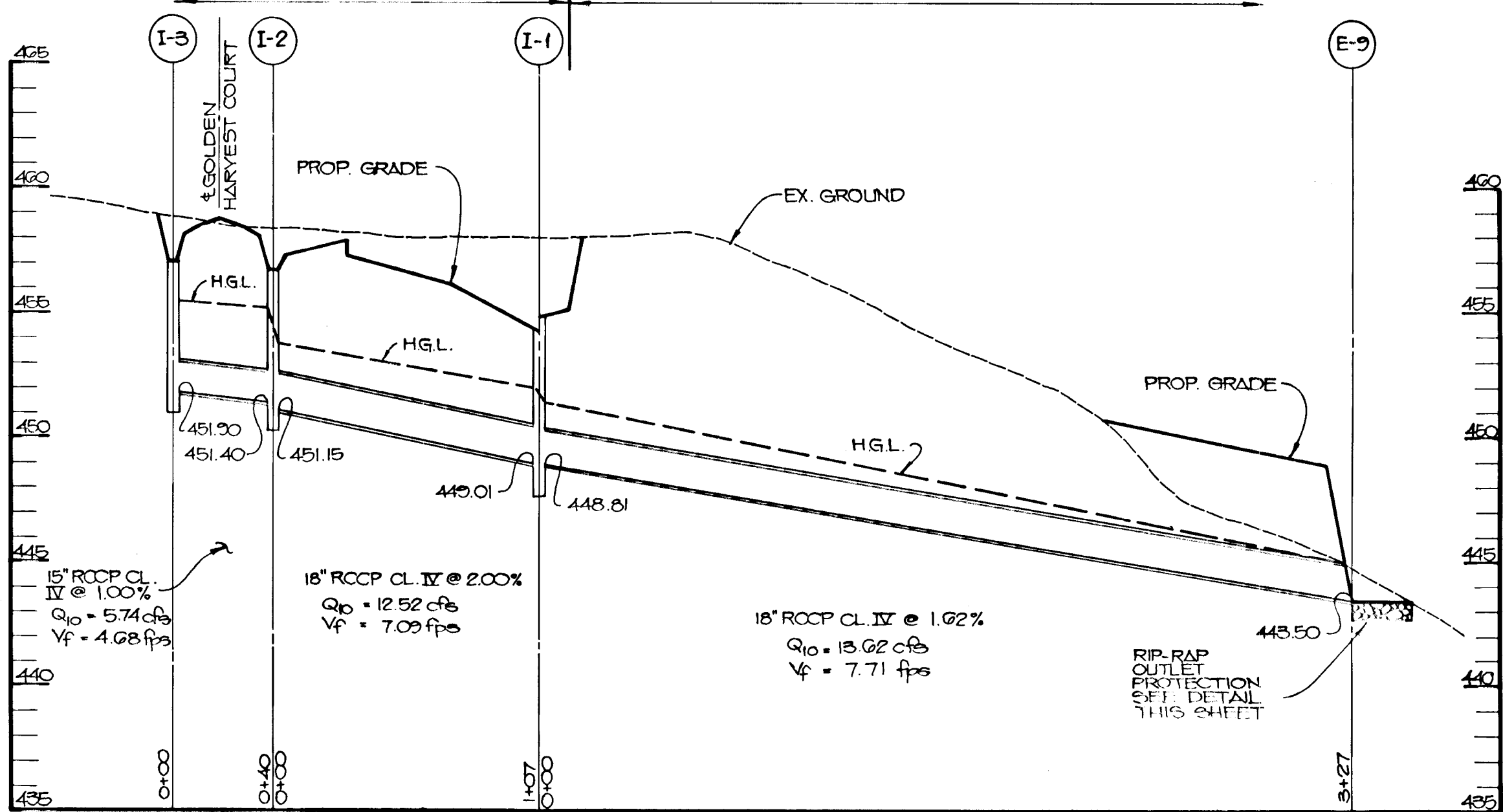
X	Y	L.P.	CURVE 1	CURVE 2	CURVE 3	CURVE 4	CURVE 5
11.25	27.25	45	50'	50'	50'	50'	50'
25.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
21.08	241.15	31.87	158.51	158.51	158.51	158.51	158.51
11.15	17.15	17.15	17.15	17.15	17.15	17.15	17.15
20.41	31.05	31.05	31.05	31.05	31.05	31.05	31.05

CUL-DE-SAC DETAIL
NO SCALE

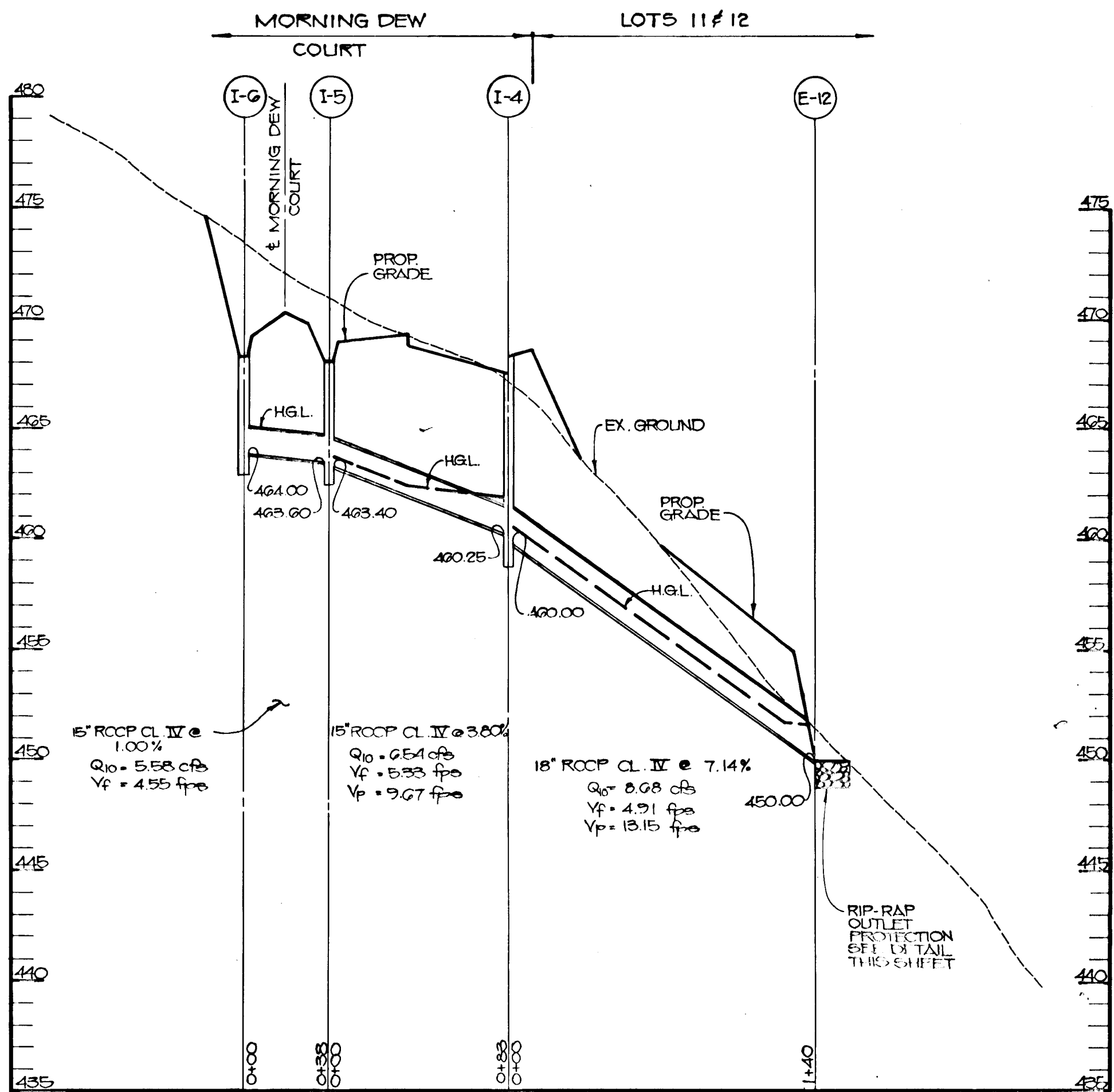


TYPICAL ROAD SECTION

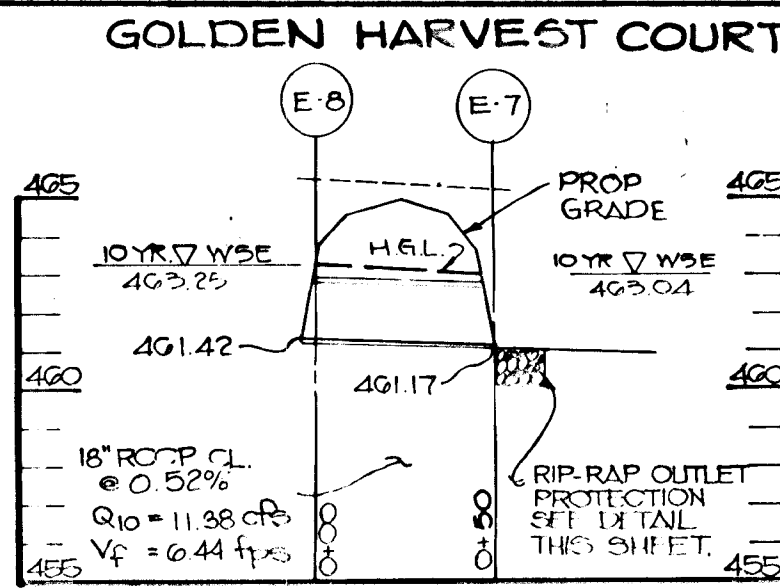
DESIGN SPEED 50 MPH
MORNING DEW COURT # GOLDEN HARVEST COURT
STA. 0+11 TO STA. 8+57.37
GOLDEN HARVEST COURT
STA. 0+24 TO STA. 8+26.60
LOTS 6-7



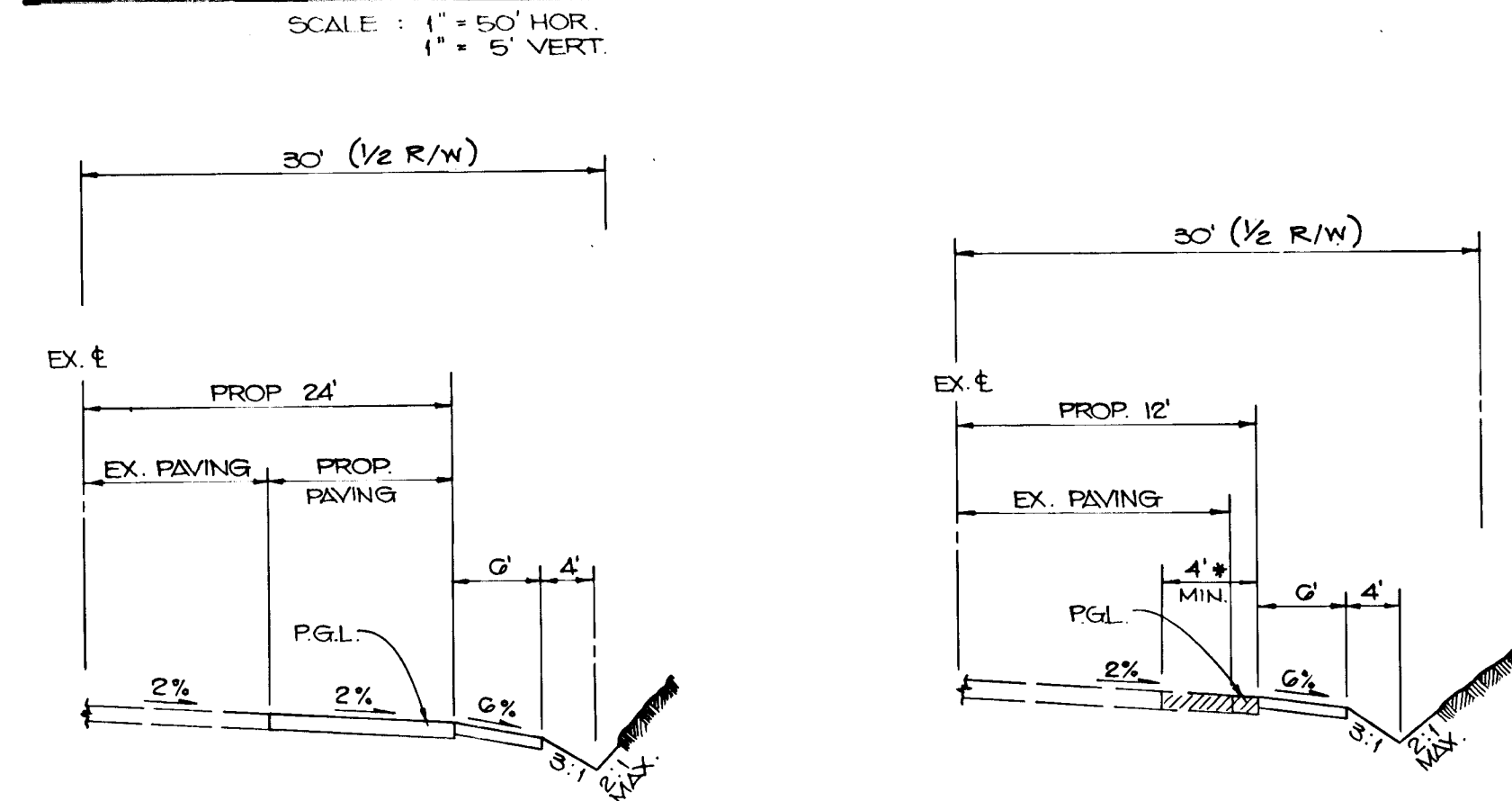
STORM DRAIN PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VERT.



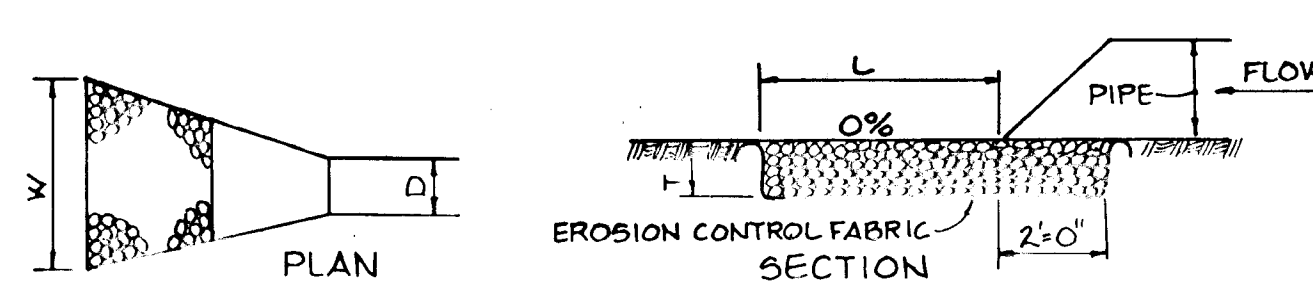
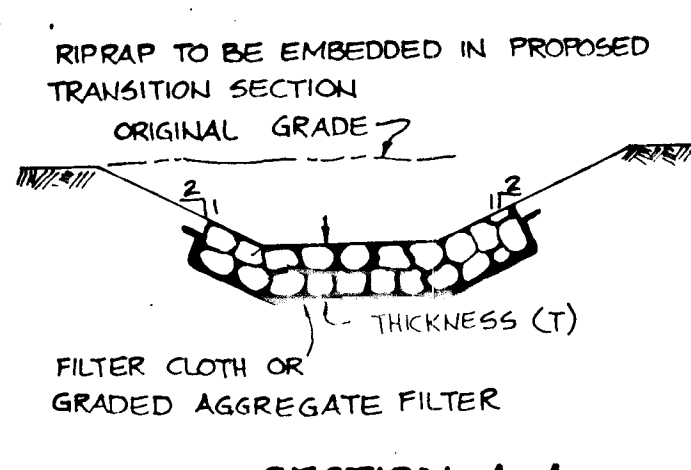
STORM DRAIN PROFILE
SCALE: 1" = 50' HOR.
1" = 5' VERT.



STORM DRAIN PROFILES
SCALE: 1" = 50' HOR.
1" = 5' VERT.



TEN OAKS ROAD - WIDENING DETAILS
NOT TO SCALE

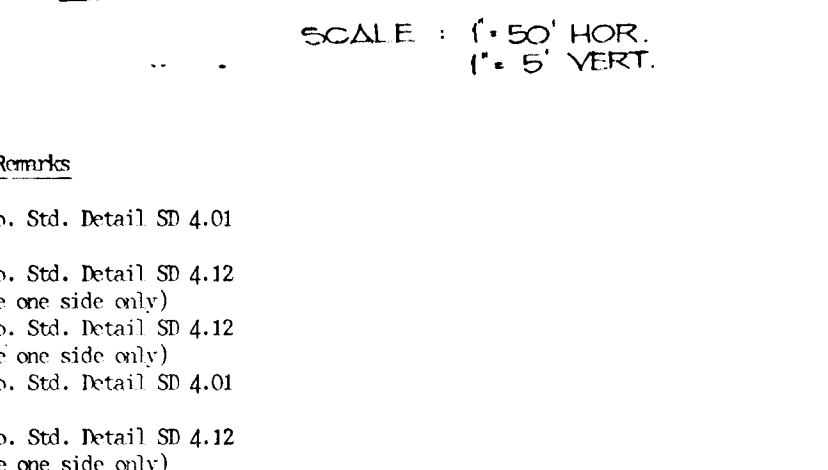


STRUCTURE	MEDIUM STONE DIA.	LENGTH (L)	WIDTH (W)	THICKNESS (T)
E-7	0.50'	10'	12'	1.2'
E-9	0.50'	10'	20'	1.2'
E-10	0.50'	10'	11'	1.2'
E-12	0.50'	15'	17'	1.2'

OUTLET PROTECTION DETAIL
NO SCALE

No.	Type	Location	Top Elev.	Inv. In.	Inv. Out.	Remarks
I-1	A-5	L.P. Sta. 1+31.25	455.63	448.01	447.81	Hs. Co. Std. Detail SD 4.01
I-2	18" Type Modified	Golden Harvest Court C/L Sta. 8+22.50	457.60	450.40	450.15	Hs. Co. Std. Detail SD 4.12 (Scale one side only)
I-3	18" Type Modified	Golden Harvest Court C/L Sta. 8+17.50	457.83	—	450.80	Hs. Co. Std. Detail SD 4.12 (Scale one side only)
I-4	A-5	Golden Harvest Court L.P. Sta. 1+77.75	468.16	460.25	460.00	Hs. Co. Std. Detail SD 4.01
I-5	18" Type Modified	Morning Dew Court C/L Sta. 8+53.50	468.65	463.60	463.40	Hs. Co. Std. Detail SD 4.12 (Scale one side only)
I-6	18" Type Modified	Morning Dew Court C/L Sta. 8+53.50	468.65	—	464.00	Hs. Co. Std. Detail SD 4.12 (Scale one side only)
E-2	15" Metal end section	See Plan	—	469.20	—	Hs. Co. Std. Detail SD 5.61
E-4	Type 2 Headwall	See Plan	—	450.82	—	Hs. Co. Std. Detail SD 5.11
E-6	15" Metal end section	See Plan	—	463.29	—	Hs. Co. Std. Detail SD 5.61
E-8	18" Conc. end section	See Plan	—	—	461.42	Hs. Co. Std. Detail SD 5.52
E-9	18" Conc. end section	See Plan	—	—	461.07	Hs. Co. Std. Detail SD 5.52
E-10	18" Conc. end section	See Plan	—	—	444.00	Hs. Co. Std. Detail SD 5.52
E-11	18" Conc. end section	See Plan	—	—	465.00	Hs. Co. Std. Detail SD 5.52
E-12	18" Conc. end section	See Plan	—	—	465.50	Hs. Co. Std. Detail SD 5.52

STORM DRAIN PROFILES
SCALE: 1" = 50' HOR.
1" = 5' VERT.



BY THE DEVELOPER:
"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."
Eugene W. Iager DEVELOPER 8/15/88 DATE

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
Arthur E. Miller ENGINEER 11-3-88 DATE

REVIEWED FOR HOWARD S.C.D. NAME: S.C.D.
AND MEETS TECHNICAL REQUIREMENTS
James M. Hahn SOIL CONSERVATION SERVICE 11-8-88 DATE

APPROVED FOR HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Stephen L. Fisher HOWARD S.C.D. 11/8/88 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Frankie J. P. Anglen CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION 12-2-88 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Paul D. Johnson CHIEF, Land Development Division 11/17/88 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William W. Westlund CHIEF, Bureau of Highways 12/1/88 Date

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
R. S. Brown CHIEF, Bureau of Engineering 12/1/88 Date

OWNER/DEVELOPER
CHARLES E. IAGER, JR. # EUGENE W. IAGER TRUSTEES UNDER WILL OF C. ELLSWORTH IAGER 11920 ROUTE 216 FULTON, MARYLAND 20759

PROJECT: 5-88-40 P-88-05
CLARKSVILLE MANOR
AREA TAX MAP 34 PARCEL NO. 160 ZONED R
5th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: STORM DRAIN PROFILES & DETAILS

THE RIEMER GROUP, INC.
The Riemer Group, Inc. A Land Planning, Design & Civil Engineering Firm
3105 North Ridge Road, Ellicott City, Maryland 21043 (301) 461-2690

DATE: 11-2-88
DESIGNED BY: D.E.S.
DRAWN BY: R.A.W.
PROJECT NO: 24300
DATE: JULY 29, 1988
SCALE: AS SHOWN
DRAWING NO: 3 OF 3

