

SHEET INDEX	
NO.	DESCRIPTION
1	TITLE SHEET
2	PLAN OF ROADWAYS AND STORM DRAINS
3	ROADWAY PROFILES
4	DRAINAGE AREA MAP
5	STORM DRAIN PROFILES
6	ROADWAY AND STORM DRAIN DETAILS
7	GRADING, SEDIMENT CONTROL & S.W.M. PLAN
8	SEDIMENT CONTROL AND STORM WATER MGMT. DETAILS
9	STORM WATER MANAGEMENT FACILITY SPECIFICATIONS

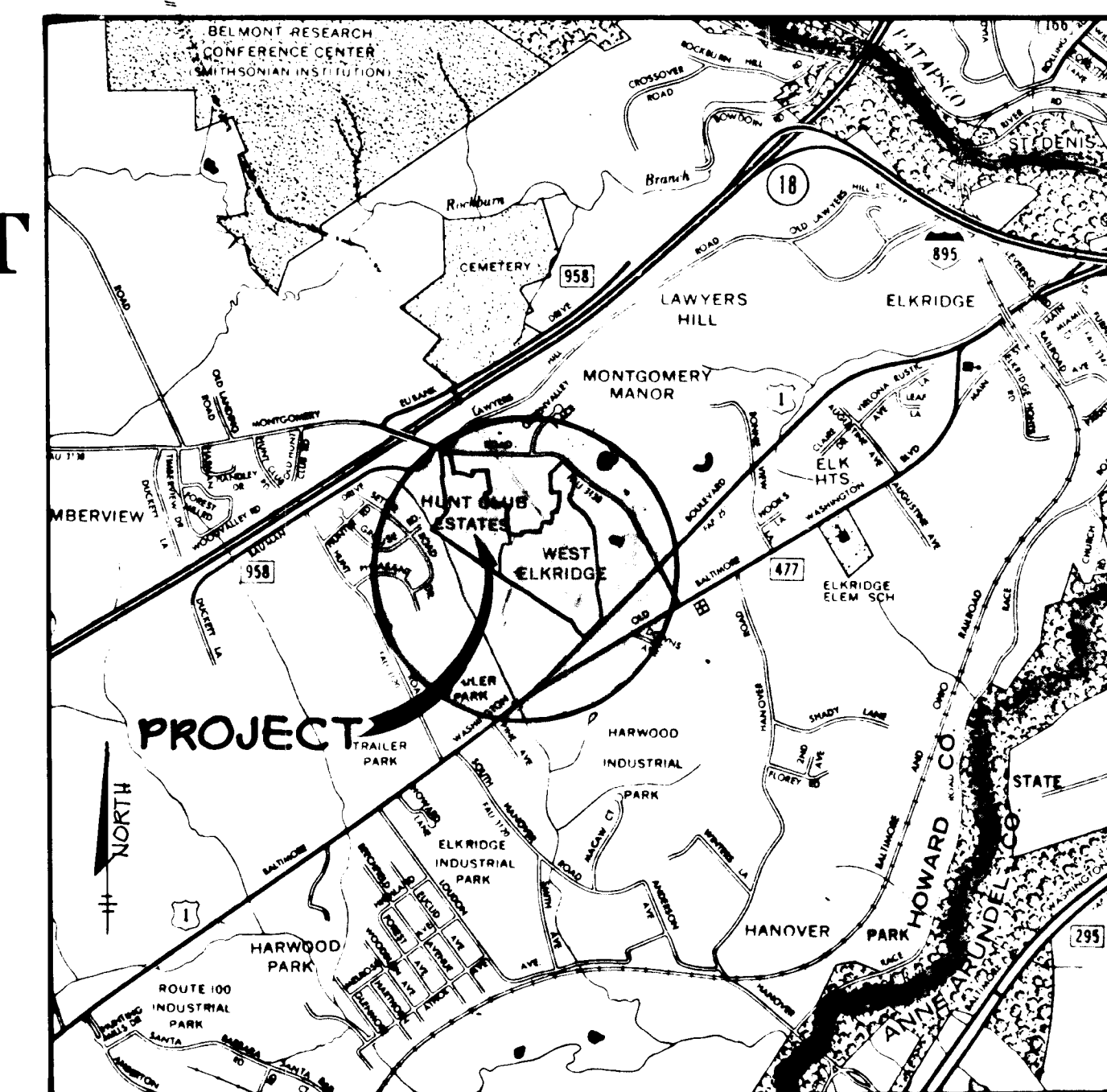
ROADWAY, STORM DRAIN & STORM WATER MANAGEMENT

QUAIL RIDGE

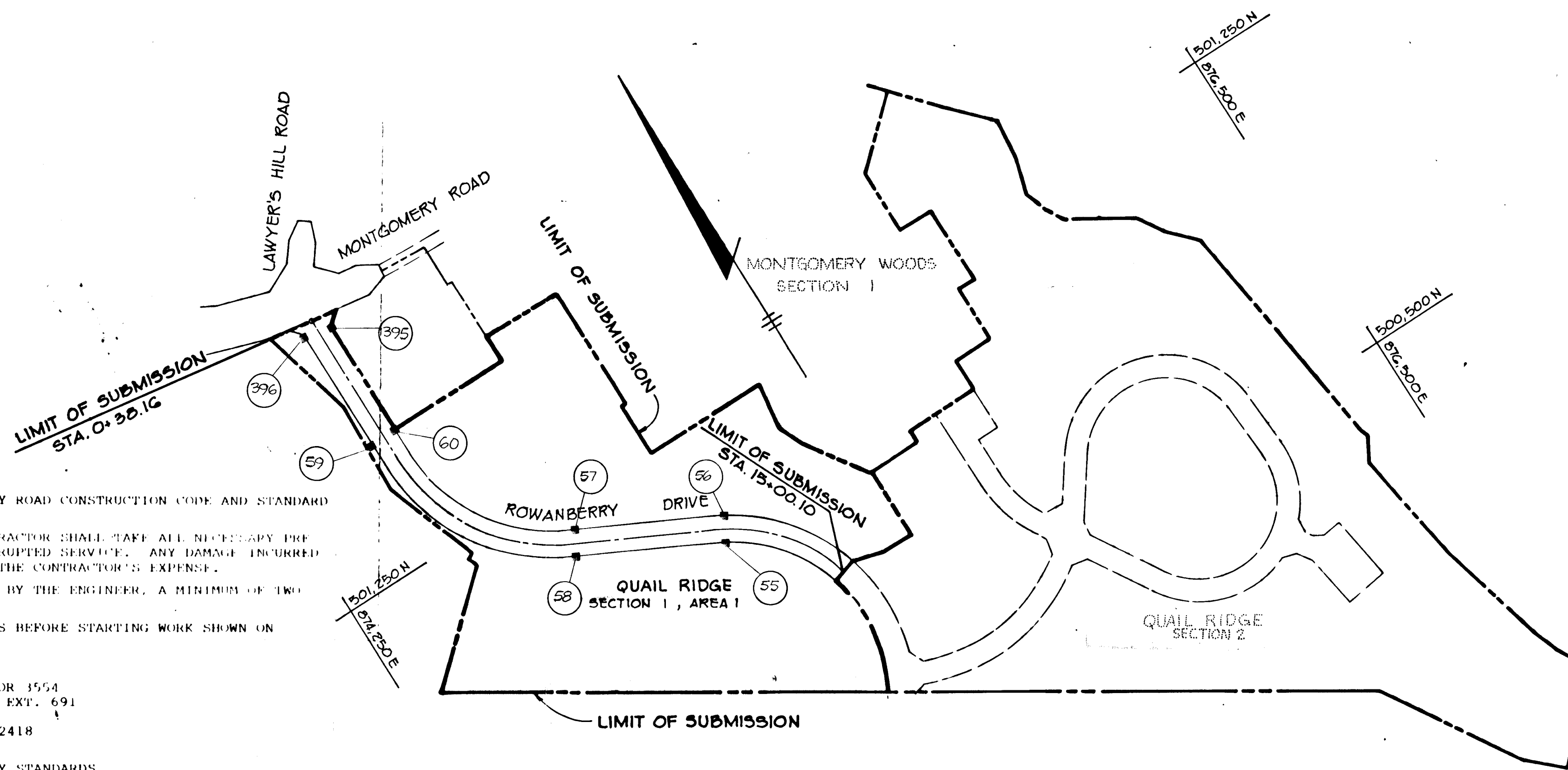
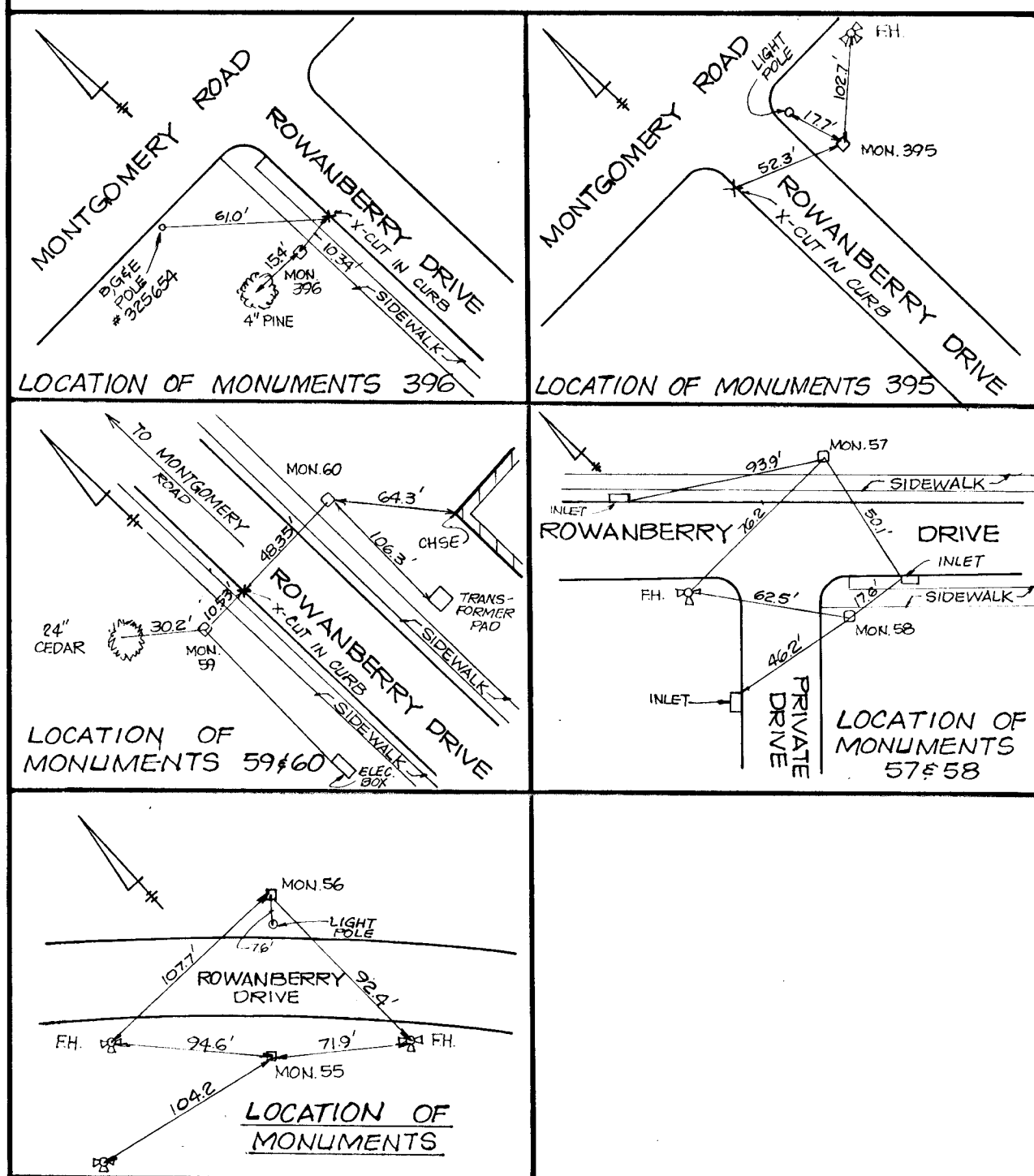
SECTION I, AREA I

1ST ELECTION DISTRICT

HOWARD COUNTY, MARYLAND



VICINITY MAP
Scale 1"=2,000'



PLAN
Scale 1"=200'

GENERAL NOTES

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.
- 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 WHERE DIRECTED BY THE ENGINEER. A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS.
- CONTRACTOR TO NOTIFY THE FOLLOWING UTILITIES AT LEAST FIVE DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.

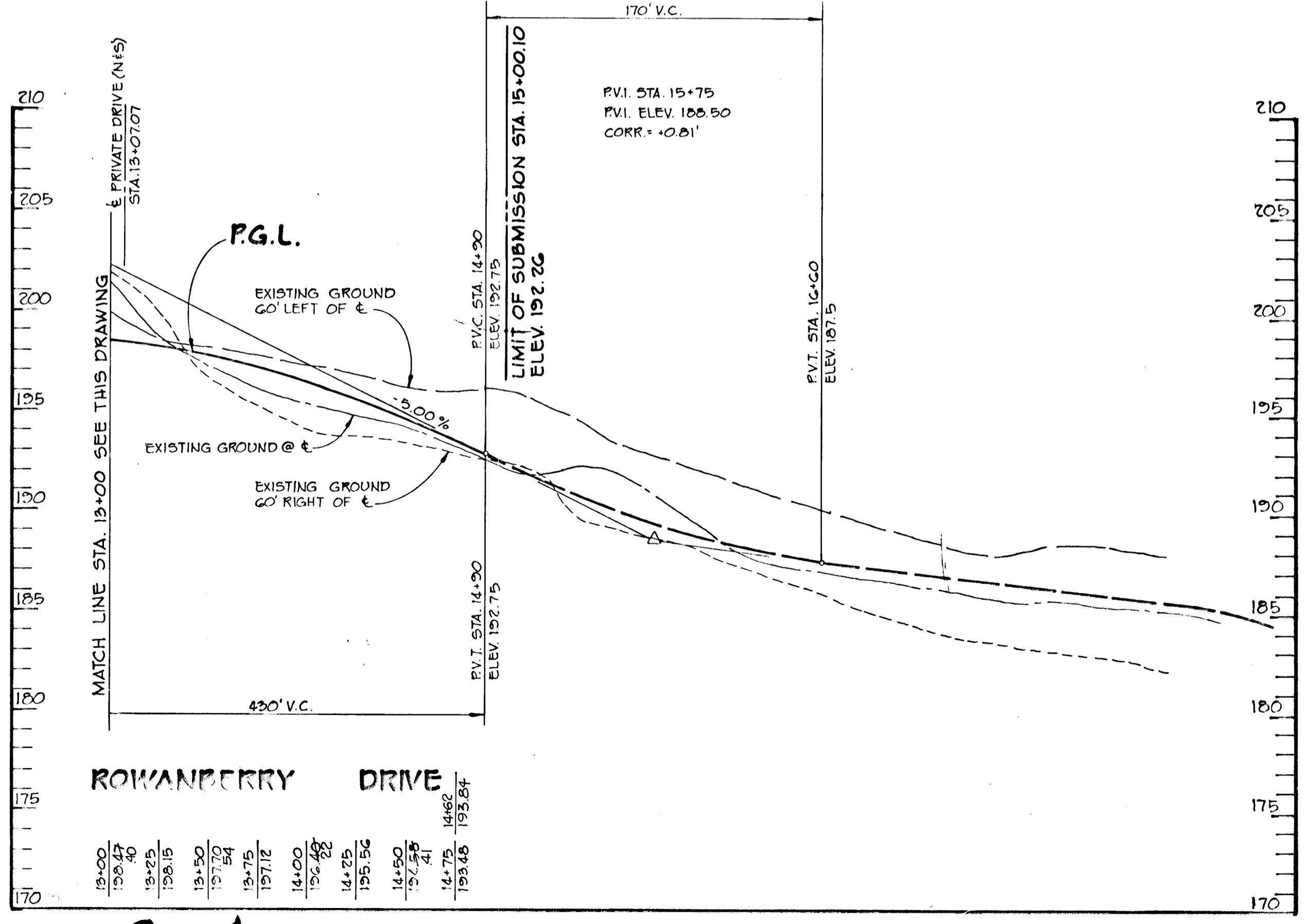
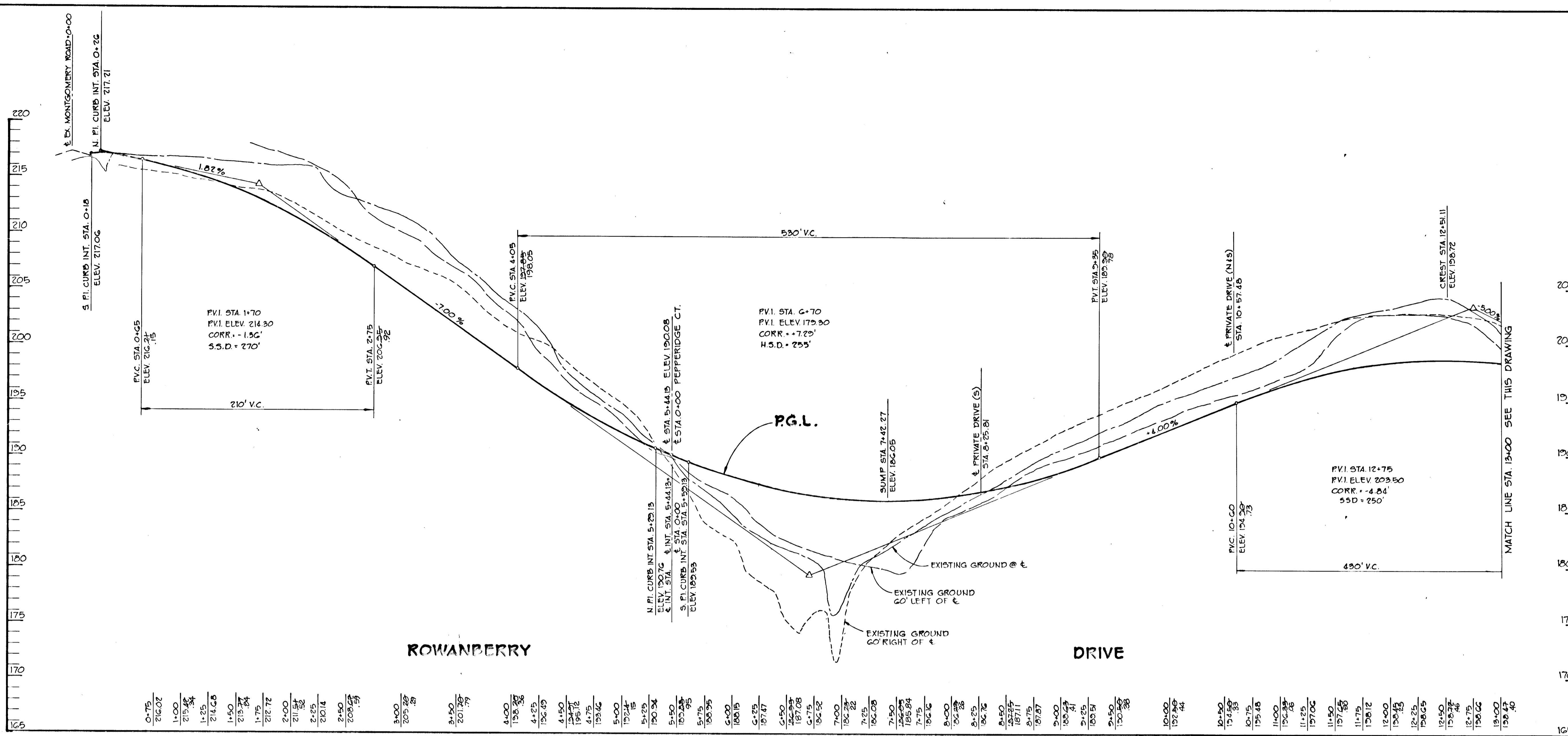
BELL TELEPHONE SYSTEM	393-3649
LONG DISTANCE CABLE DIVISION	393-3553 OR 3554
BALTIMORE GAS AND ELECTRIC COMPANY	539-8000, EXT. 691
HOWARD COUNTY BUREAU OF UTILITIES	992-2366
HOWARD COUNTY CONSTRUCTION/INSPECTION SURVEY DIVISION	992-2417/2418
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL STREET CURB RETURNS SHALL HAVE 45.0' RADII UNLESS OTHERWISE NOTED.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
- INSTALLATION OF TRAFFIC CONTROL DEVICES, MARKING, AND SIGNING SHALL BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES 1971 EDITION.
- 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.
- DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE AMERICAN ASSOCIATION OF STATE HIGHWAY OFFICIAL STANDARDS:

ALL 60' RIGHT-OF-WAYS	35 M.P.H.
ALL 50' RIGHT-OF-WAYS	30 M.P.H.
- ALL ELEVATIONS SHOWN ARE BASED ON U.S.C. AND G.S. MEAN SEA LEVEL DATUM 1929.
- ALL FILL AREAS WITHIN ROADWAYS AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM 95% COMPACTION.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT' ELEVATIONS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- SUBJECT PROPERTY ZONED R-A1 PER 10-03-77 COMPREHENSIVE ZONING PLAN.

6-18-81	REVISOR	REVISOR'S NAME	REVISION
		REVISOR'S NAME	REVISION
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING <i>[Signature]</i> 4-3-81 CHIEF, DIVISION OF LAND DEVELOPMENT DATE			
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>[Signature]</i> 4/19/81 CHIEF, BUREAU OF ENGINEERING DATE			
3-27-81	2	REVISOR	REVISION
1-15-81	1	REVISOR	REVISION
OWNER MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029			
DEVEL MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029			
PROJECT: QUAIL RIDGE SECTION I, AREA I			
AREA TAX MAP NO 38 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND			
TITLE: TITLE SHEET			
Riemer-Tracy & Associates, Inc. 8659 Baltimore National Pike Ellicott City, Maryland 21043 (301) 461-2690 Land Planning, Design & Civil Engineering			
DATE: 9-12-80		PARCEL 823	
		DESIGNED BY: L.J.D.	
PROFESSIONAL ENGR. NO. 9566		DRAWN BY: T.E.S.	
		PROJECT NO: C0279	
		DATE: 9-12-80	
		SCALE: AS SHOWN	
		DRAWING NO. 1 OF 9	

AS-BUILT SURVEY CERTIFIED BY
ARTHUR E. MUEGGE, MD. P.E. No.
8707 ON 10-6-88

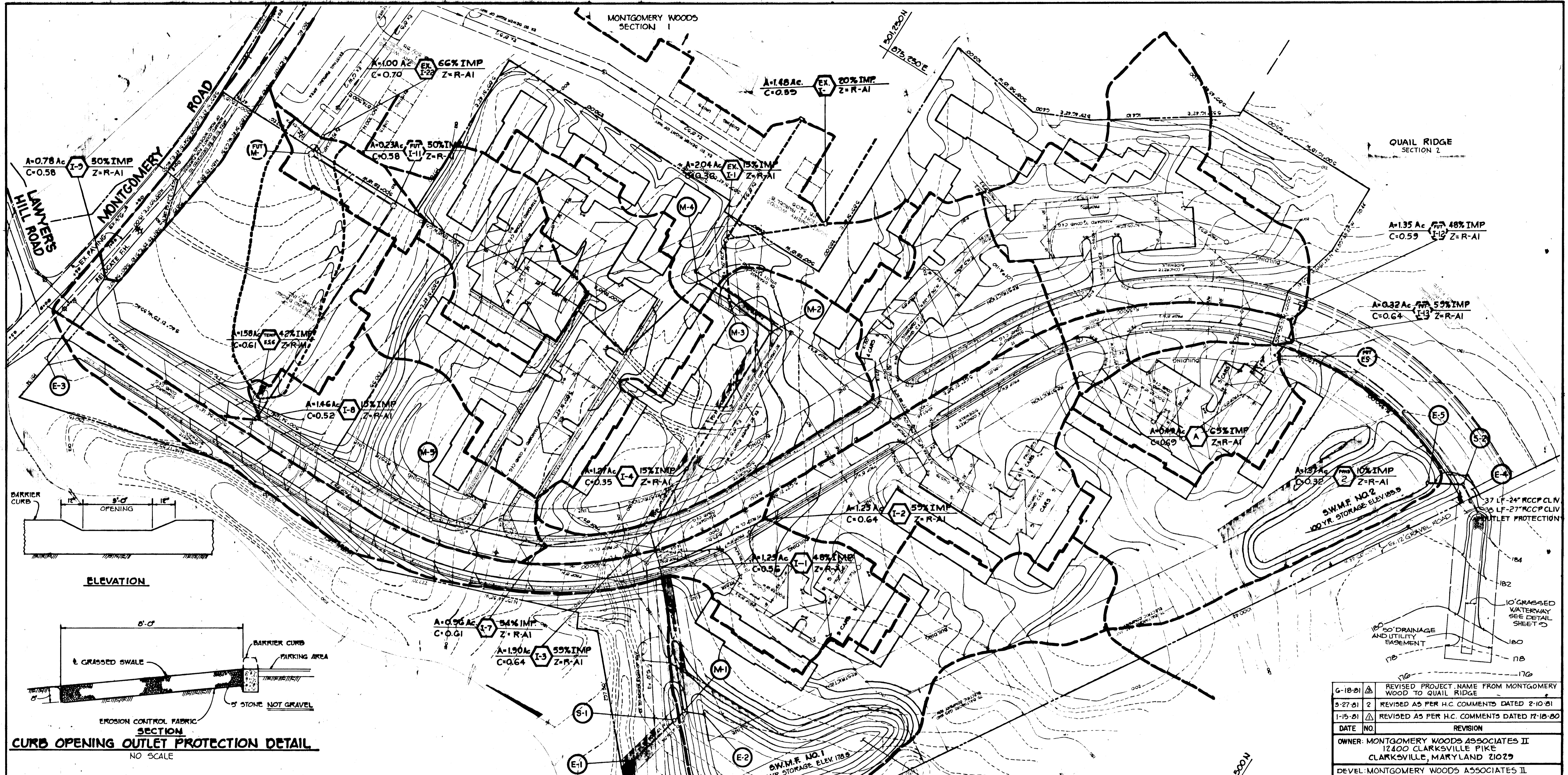
1904



904

6-18-81	REVISED PROJECT NAME FROM MONTGOMERY WOODS TO QUAIL RIDGE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING <i>Shull Muhammad</i> 4-7-81 CHIEF, DIVISION OF LAND DEVELOPMENT	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>William S. P...</i> 4/1/81 CHIEF, BUREAU OF ENGINEERING	
5-27-81	REVISED AS PER H.C. COMMENTS DATED 2-10-81
1-15-81	REVISED AS PER H.C. COMMENTS DATED 12-18-80
DATE	NO. REVISION
OWNER: MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029	
DEVELOPER: MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029	
PROJECT: QUAIL RIDGE SECTION 1, AREA I	
AREA: TAX MAP NO. 38 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
TITLE: ROADWAY PROFILES	
Riemer-Tracy & Associates Inc. 8659 Baltimore National Pike Ellicott City, Maryland 21043 (301) 461-2680 Land Planning, Design & Civil Engineering	
9-12-80 DATE	PARCEL 823
DESIGNED BY: L.J.D.	
DRAWN BY: T.E.S.	
PROJECT NO: CO279	
DATE: 9-12-80	
SCALE: HORIZ. 1"=50' VERT. 1"=5'	
DRAWING NO. 3 OF 9	

AS-BUILT SURVEY CERTIFIED BY
ARTHUR E. MUEGGE MD, P.E. No.
8707 ON 10-6-88



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."

Michael G. Galt
 SIGNATURE OF DEVELOPER 9-12-80
 DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION, AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED 'AS-BUILT' OF THE POND WITHIN 30 DAYS OF COMPLETION."

James K. Jones
 SIGNATURE OF ENGINEER 9-12-80
 DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

James M. Helm 4-1-81
 U.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Ziehm 4-1-81
 APPROVED HOWARD S.C.D. DATE

PLAN NUMBER

2/20/80 3 REVISD OUTLET FROM S.W.M.F. NO. 2
 DATE NO. REVISION

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Shirley M. ... 4-3-81
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

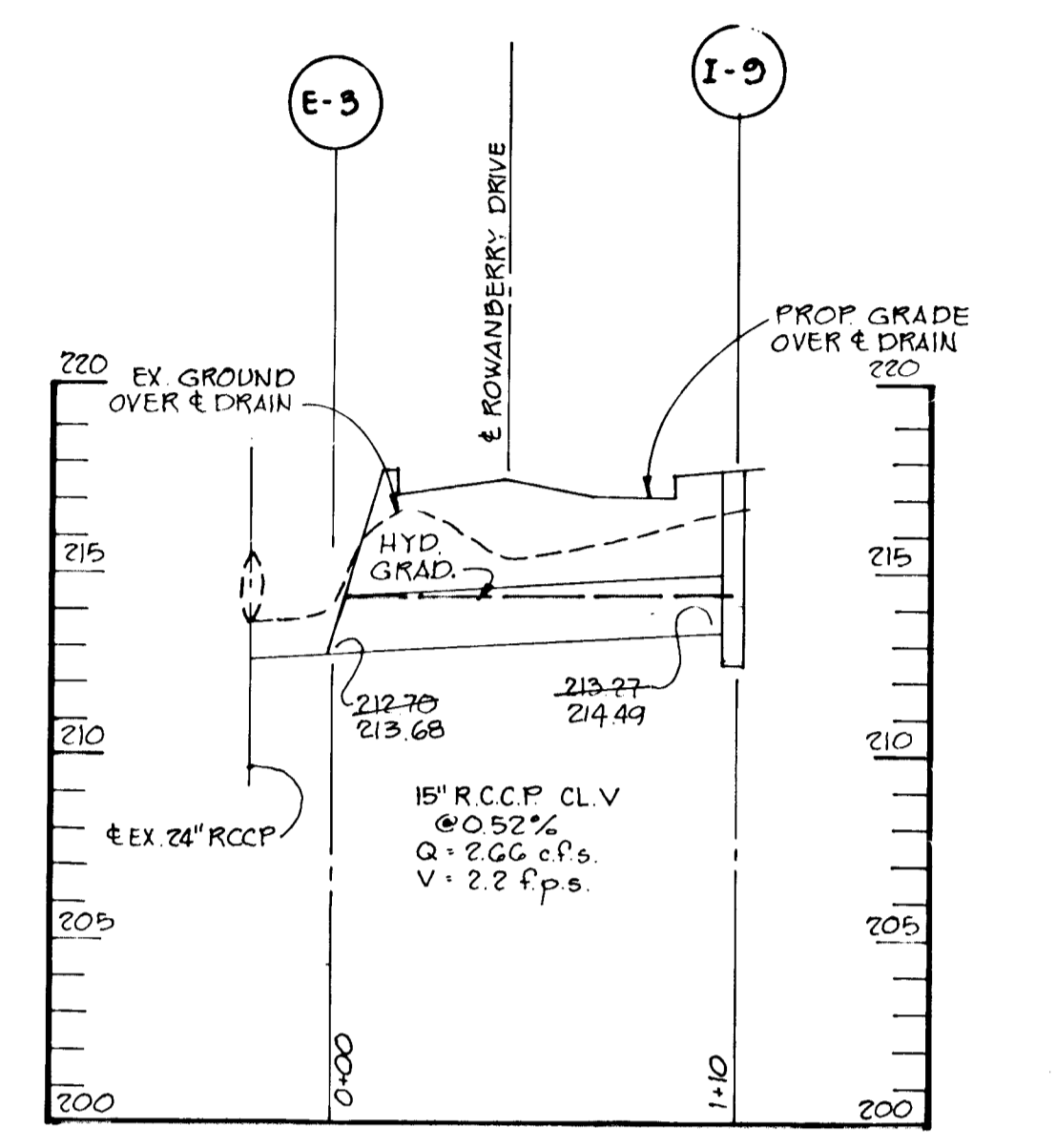
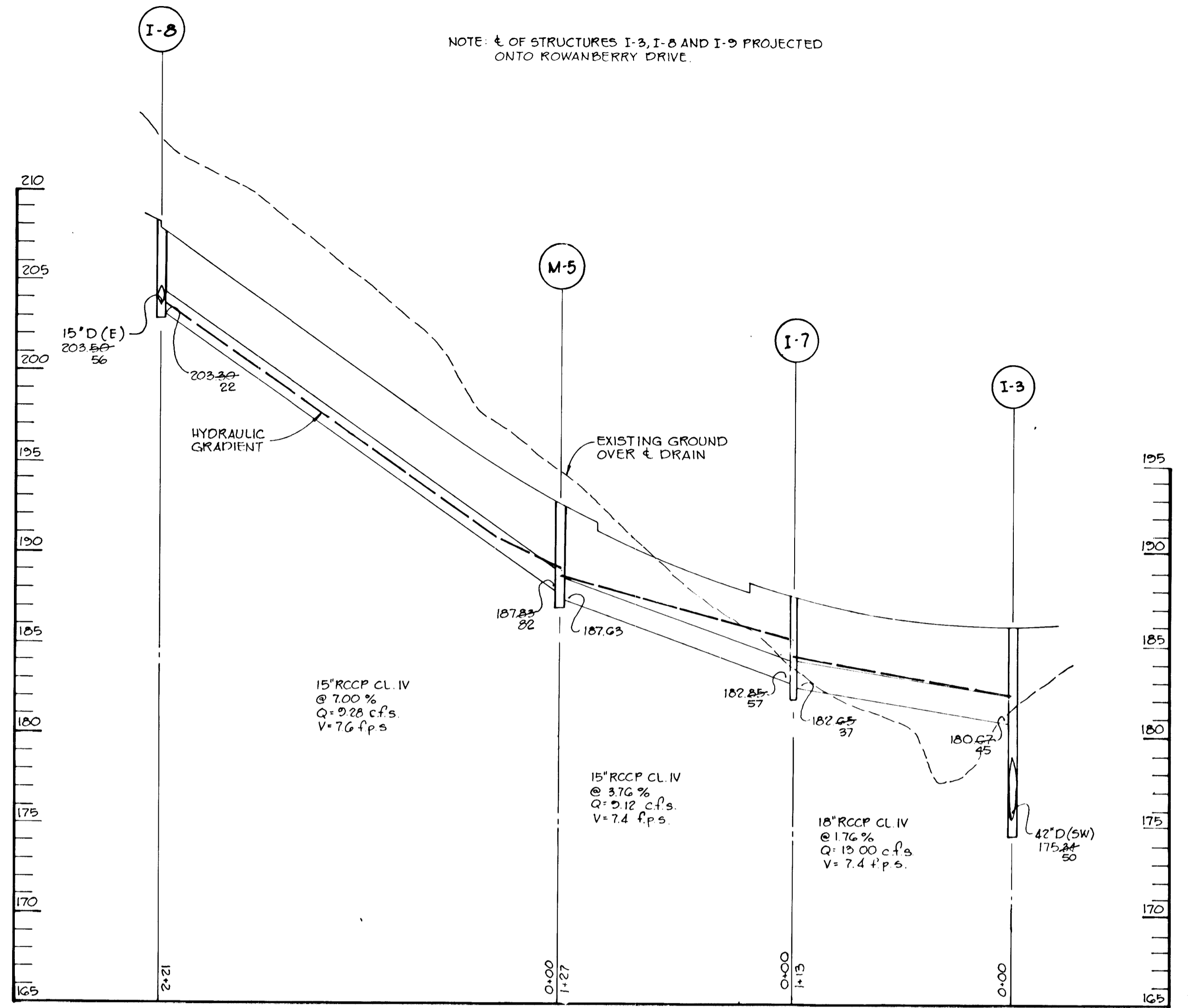
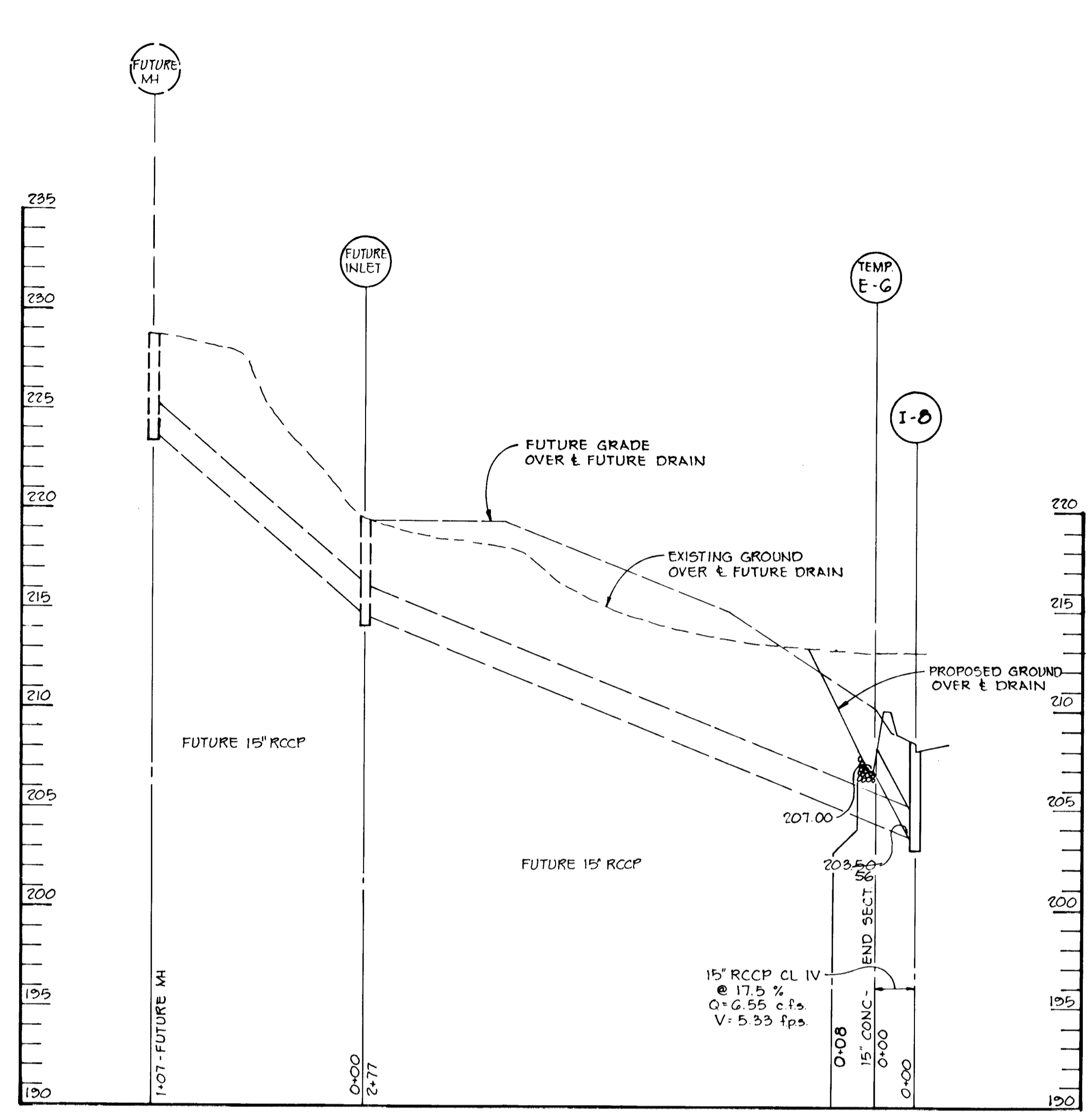
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William E. Ray 4-1-81
 CHIEF, BUREAU OF ENGINEERING DATE

6-18-81	1	REVISED PROJECT NAME FROM MONTGOMERY WOOD TO QUAIL RIDGE
5-27-81	2	REVISED AS PER H.C. COMMENTS DATED 2-10-81
1-15-81	3	REVISED AS PER H.C. COMMENTS DATED 12-18-80
DATE	NO.	REVISION
OWNER: MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029		
DEVEL: MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029		
PROJECT: QUAIL RIDGE SECTION 1, AREA T		
AREA TAX MAP NO. 38 131 ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: DRAINAGE AREA MAP		

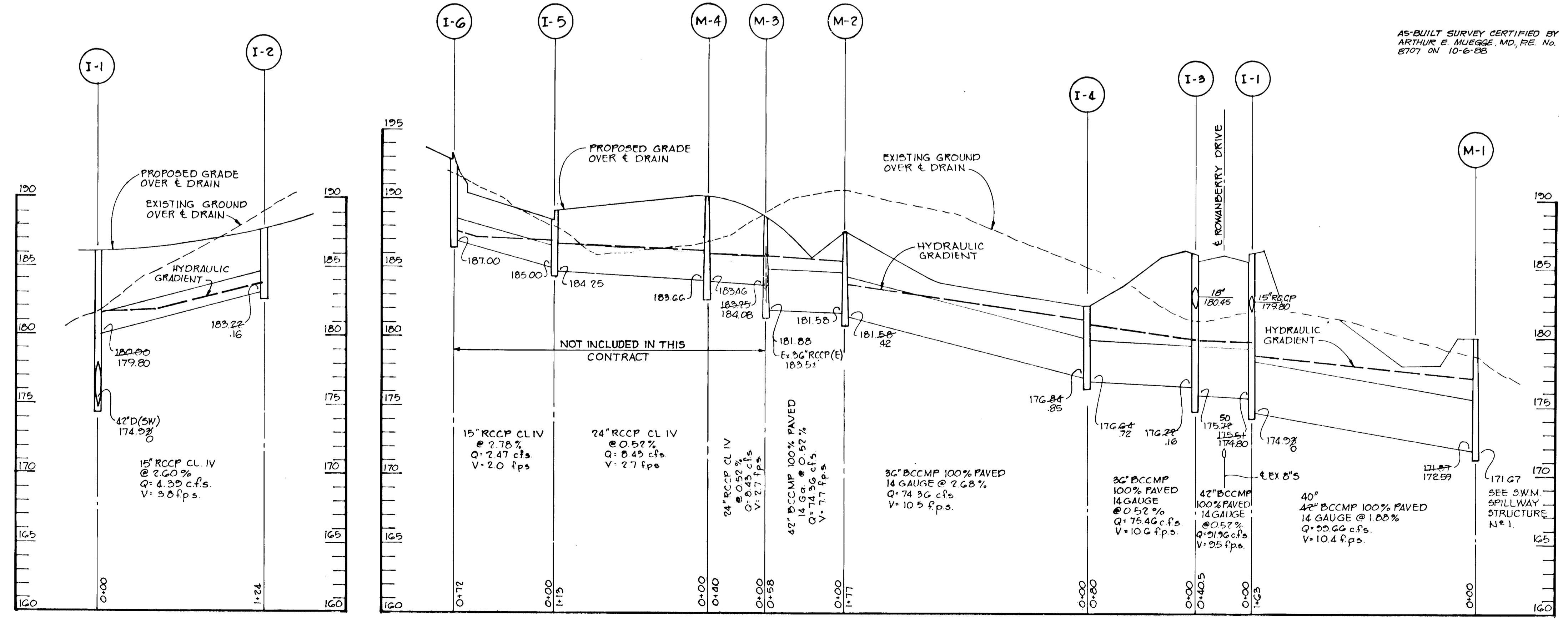
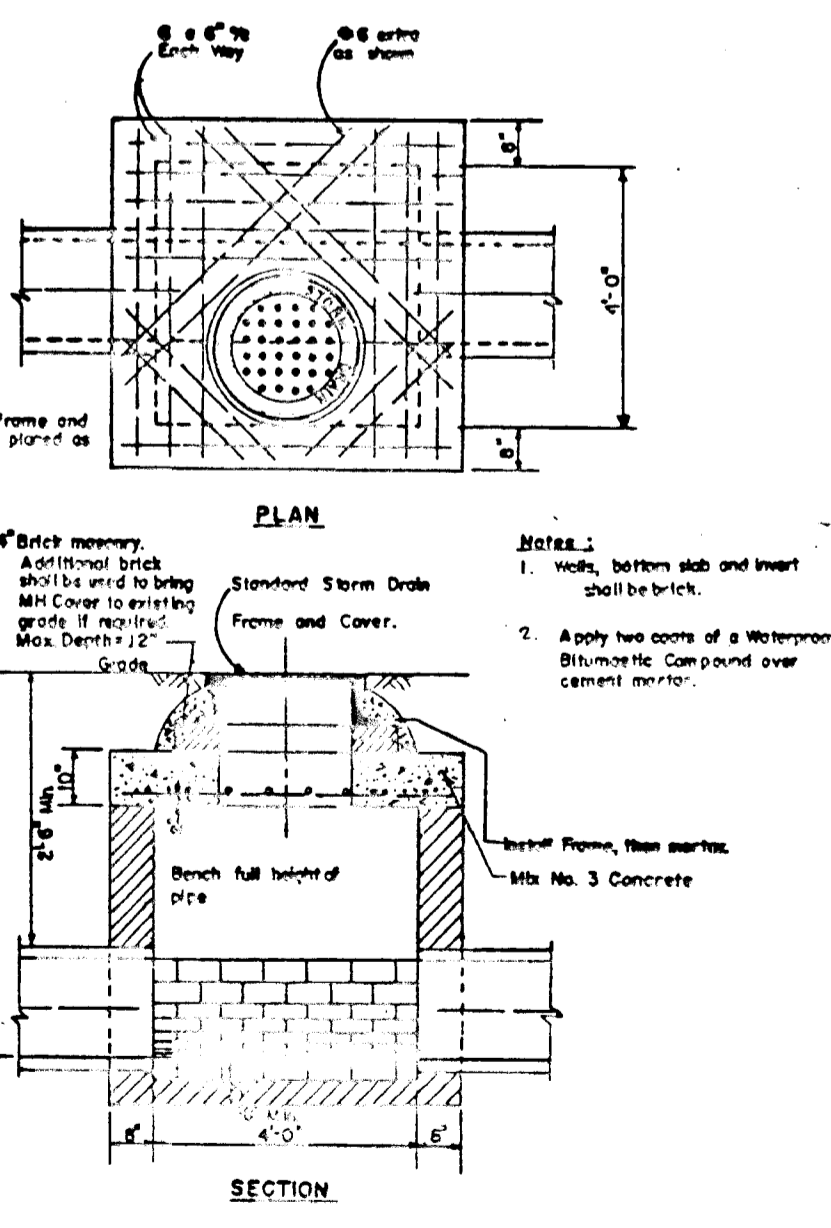
Riemer - Tracy & Associates, Inc.
 8659 Baltimore National Pike
 Ellicott City, Maryland 21043
 (301) 461-2690
 Land Planning, Design & Civil Engineering

PARCEL 823
 DESIGNED BY: L.J.D.
 DRAWN BY: T.E.S.
 PROJECT NO: C0279
 DATE: 9-12-80
 SCALE: 1"=50'
 DRAWING NO. 4 OF 9

James K. Jones
 PROFESSIONAL ENGR. NO. 9968

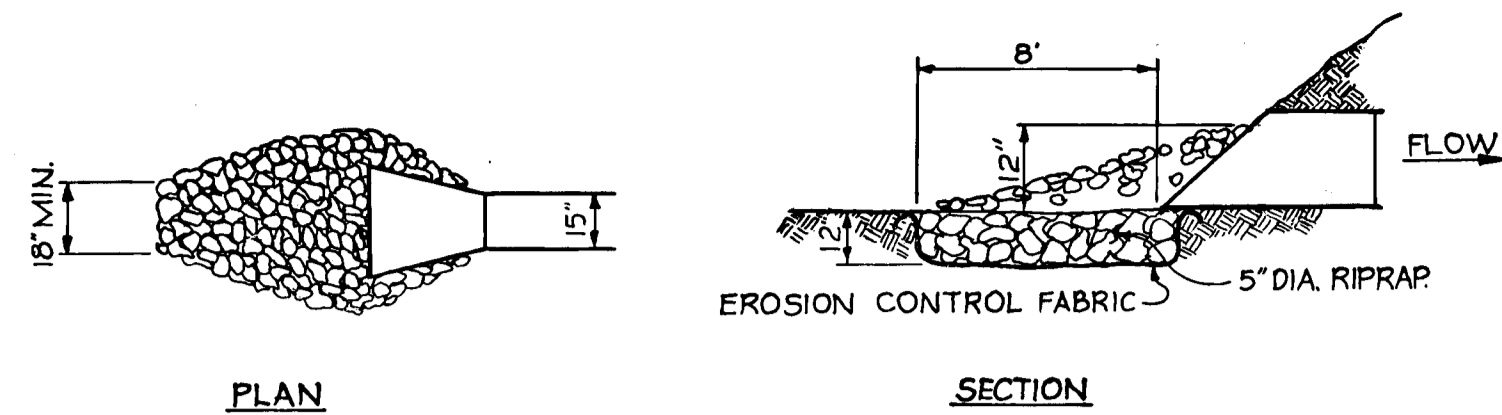


NOTE: ALL STORM DRAIN PIPE HAS CLASS 'C' BEDDING UNLESS OTHERWISE NOTED.

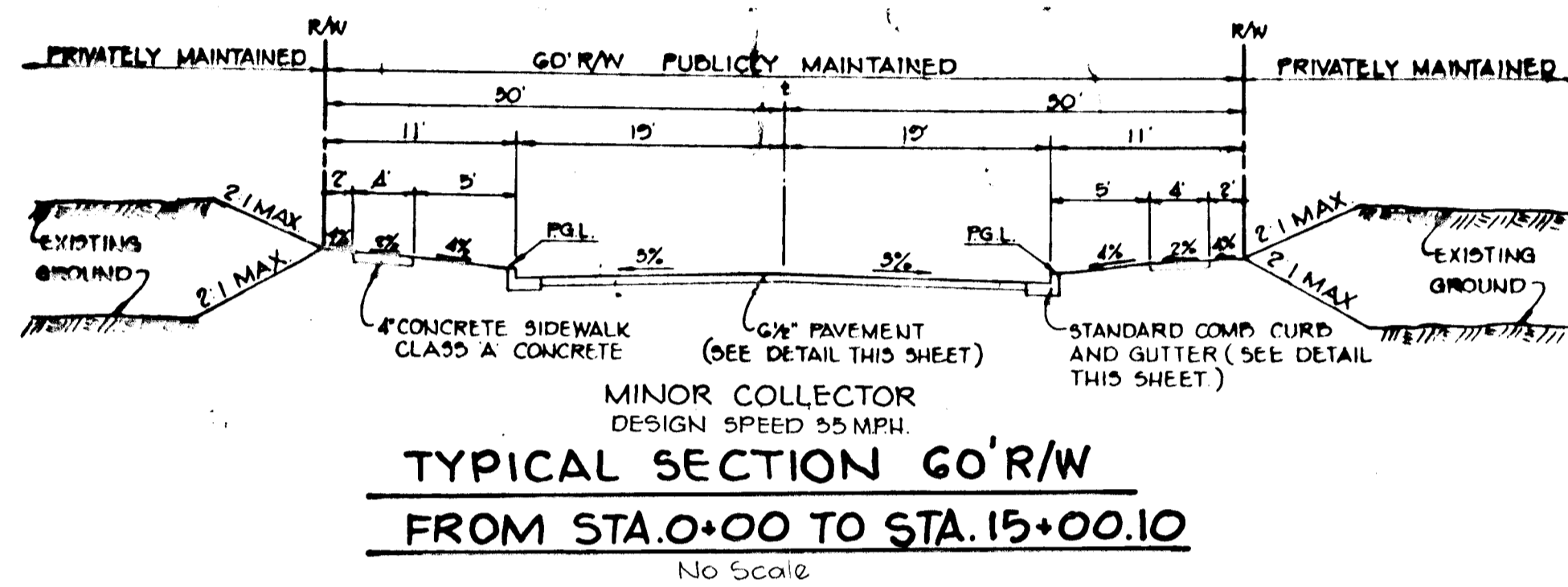


AS-BUILT SURVEY CERTIFIED BY ARTHUR E. MUEGGLE, MD, PE, NO. 8797 ON 10-6-88

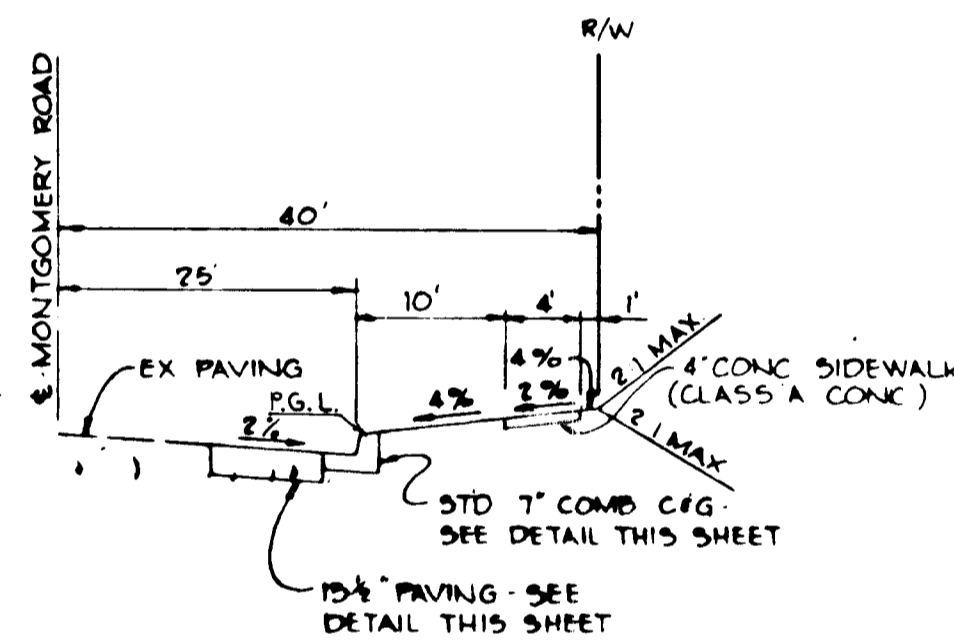
G-18-B1	REVISED PROJECT NAME FROM MONTGOMERY WOODS TO QUAIL RIDGE	
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING <i>Arthur E. Mueggel</i> 4-3-81 CHIEF, DIVISION OF LAND DEVELOPMENT DATE		
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS <i>Rieman & Tracy</i> 4/18/81 CHIEF, BUREAU OF ENGINEERING DATE		
2-27-81	REVISION AS PER H.C. COMMENTS DATED 2-10-81	
1-15-81	REVISION AS PER H.C. COMMENTS DATED 12-18-80	
DATE	NO	REVISION
OWNER: MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029		
DEVELOPER: MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029		
PROJECT: QUAIL RIDGE SECTION I, AREA I		
AREA: TAX MAP NO. 38 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: STORM DRAIN PROFILES		
Rieman & Tracy & Associates, Inc. 8659 Baltimore National Pike Ellicott City, Maryland 21043 (301) 461-2690 Land Planning, Design & Civil Engineering		
3-12-80	DATE	PARCEL B73
DRAWN BY: J.K.T.		
PROJECT NO: CO279		
DATE: 3-12-80		
SCALE: HORIZ. 1"=50'		
VERT. 1"=5'		
DRAWING NO. 5 OF 9		



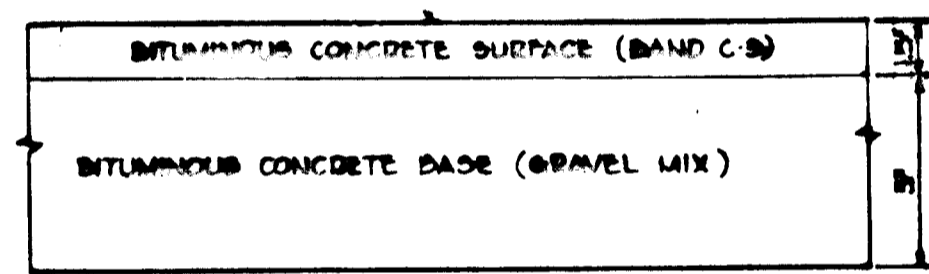
**TEMPORARY END SECTION
RIPRAP DETAIL**
NO SCALE



**TYPICAL SECTION 60'R/W
FROM STA. 0+00 TO STA. 15+00.10**
No Scale

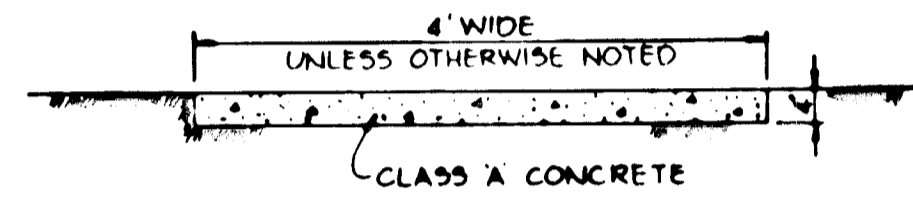


**ROADWAY SECTION FOR
MONTGOMERY ROAD WIDENING
FROM STA. 9+26 TO STA. 14+50**
No Scale

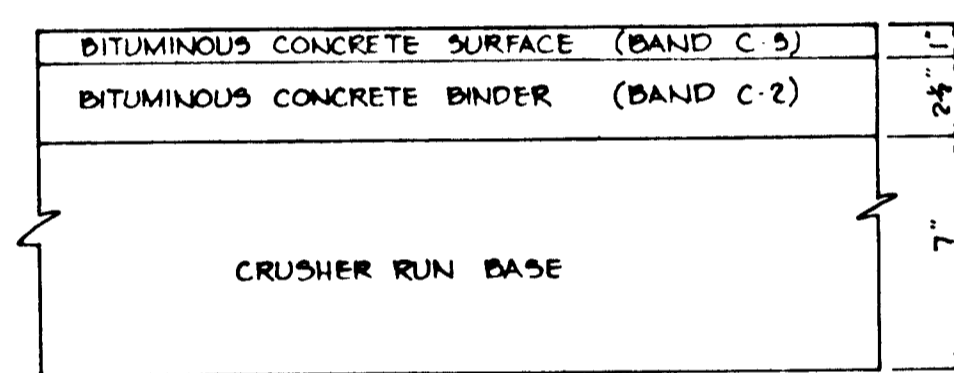


6" PAVEMENT *
HOWARD COUNTY STANDARD (DRAWING D-9, PAGE 60)

- NOTES:
1. A TACK COAT IS REQUIRED IN ACCORDANCE WITH SECTION C-31-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
 2. BASE WILL BE PRIMED IN ACCORDANCE WITH SECTION C-30-5 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
 3. TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
- * FOR ALTERNATE 10 1/2" PAVING SEE DETAIL THIS SHEET



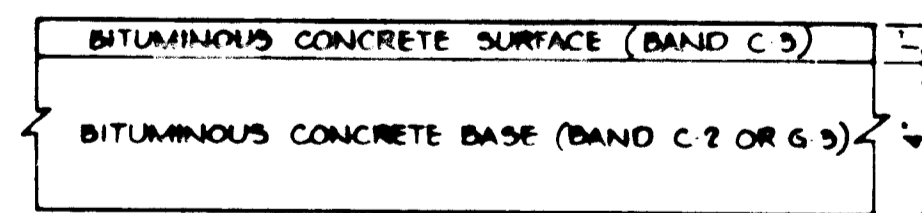
SIDEWALK DETAIL
No Scale



**10 1/2" PAVING
(ALTERNATE)**
HOWARD COUNTY STANDARD (DRAWING D-4, PAGE 59)

- NOTES:
1. A TACK COAT IS REQUIRED IN ACCORDANCE WITH SECTION C-31-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
 2. BASE WILL BE PRIMED IN ACCORDANCE WITH SECTION C-30-5 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
 3. TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.

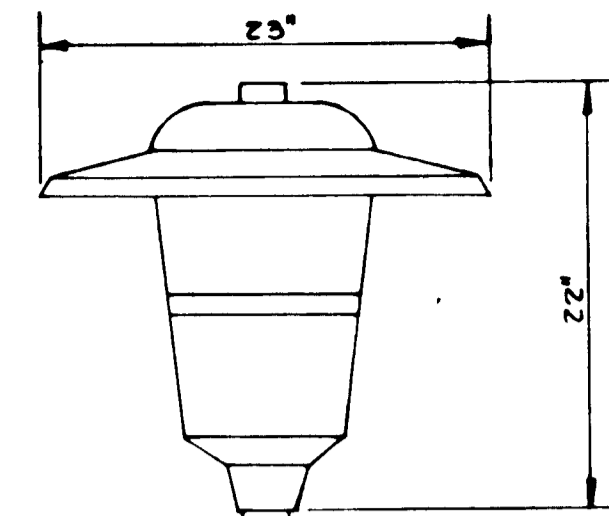
TYPICAL PAVING SECTIONS
SCALE: 1"=5"



5" PAVEMENT
HOWARD COUNTY STANDARD (DRAWING D-15, PAGE 68)

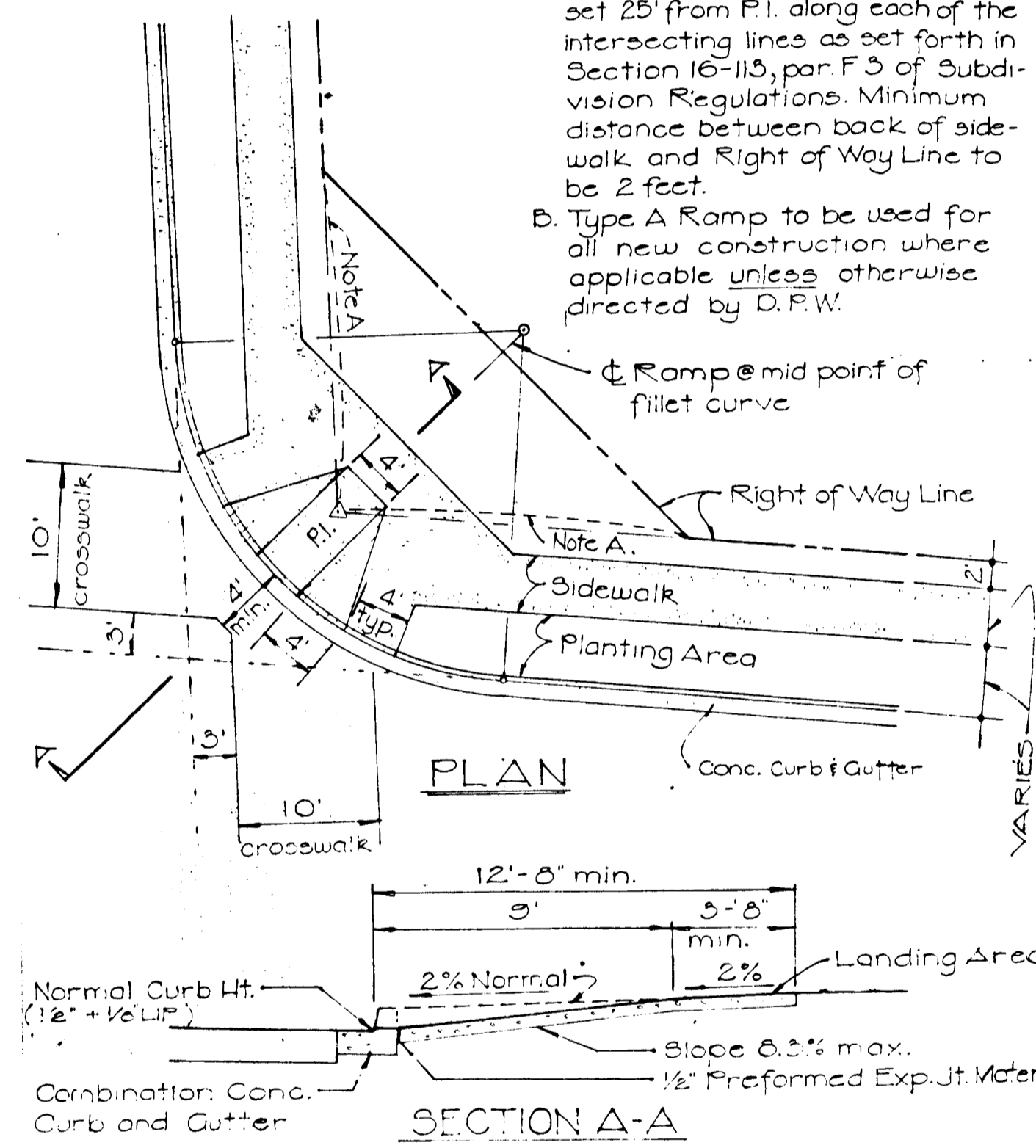
- NOTES:
1. A TACK COAT IS REQUIRED IN ACCORDANCE WITH SECTION C-31-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
 2. BASE WILL BE PRIMED IN ACCORDANCE WITH SECTION C-30-5 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
 3. TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.

**PRIVATELY MAINTAINED DRIVEWAYS
AND PARKING AREAS
TYPICAL PAVING SECTION**
SCALE: 1"=5"



NOTE:
ALL STREET LIGHT FIXTURES TO BE 175 WATT MERCURY TYPE WITH A MINIMUM OF 7,700 LUMEN, 14" HIGH, AND DIRECTED DOWNWARD. LOCATIONS OF STREET LIGHT FIXTURES ARE ON THE PLAN AND ARE SHOWN THUS **

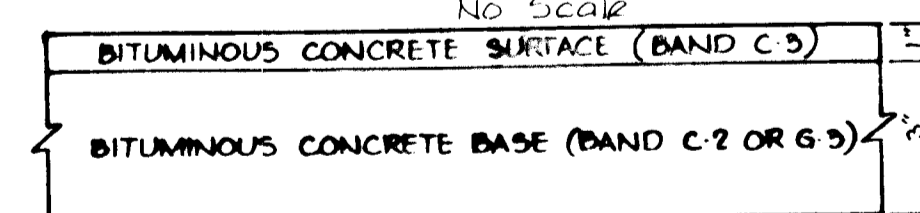
DETAIL-LIGHTING FIXTURE
No Scale



SECTION A-A

Surface texture of concrete ramp shall be coarse brooming or non-skid type surface.

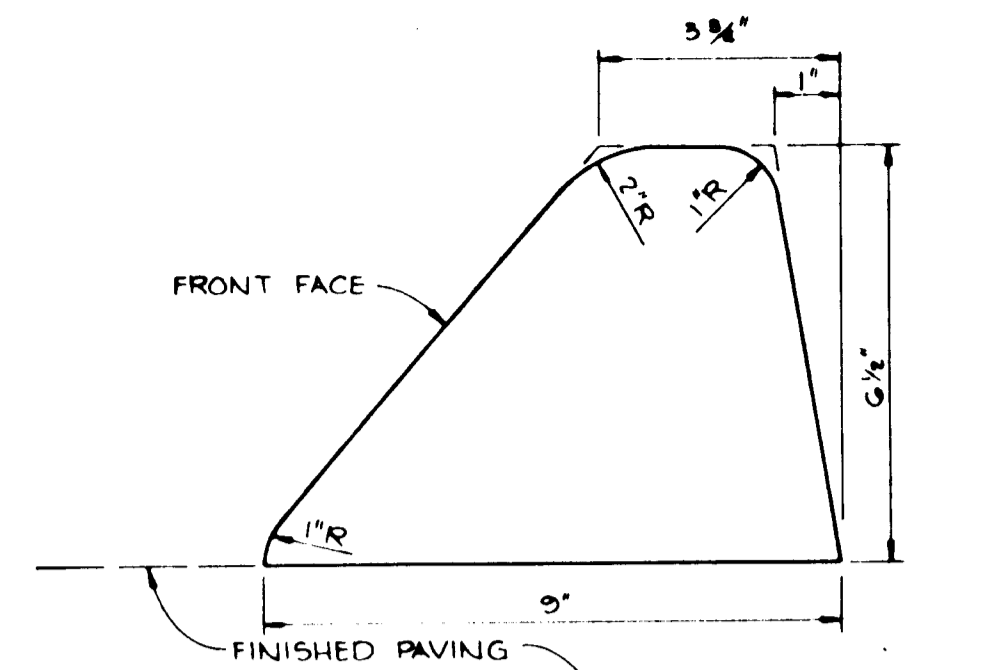
TYPICAL HANDICAPPED RAMP
No Scale



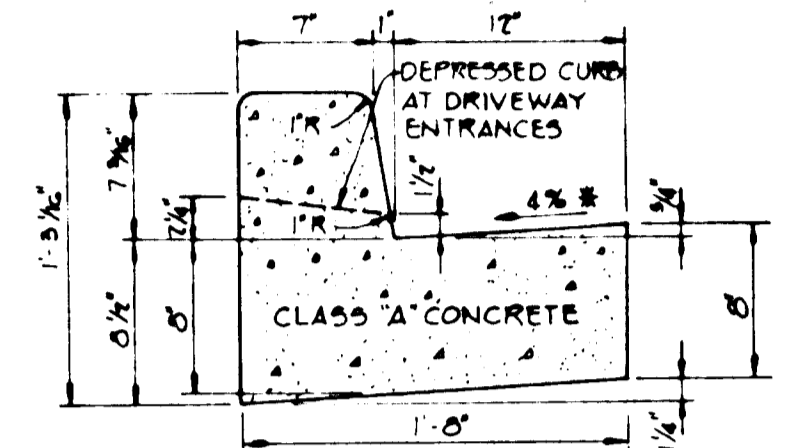
4" PAVEMENT
HOWARD COUNTY STANDARD (DRAWING D-15, PAGE 67)

- NOTES:
1. A TACK COAT IS REQUIRED IN ACCORDANCE WITH SECTION C-31-4 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
 2. BASE WILL BE PRIMED IN ACCORDANCE WITH SECTION C-30-5 OF THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.
 3. TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS.

BITUMINOUS SIDEWALK PAVING
No Scale

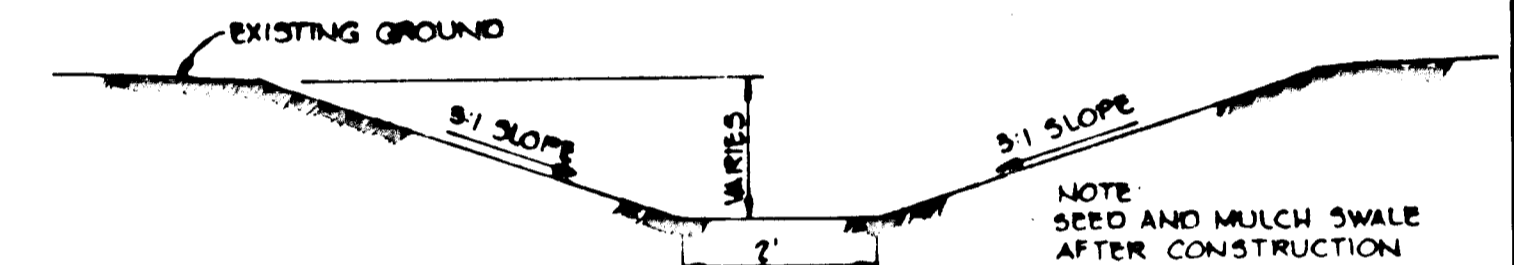


BITUMINOUS CURB
No Scale



**STANDARD 7" COMBINATION
CURB AND GUTTER**
No Scale

* GUTTER PAN AT THE MEDIAN EDGE OF INTERMEDIATE ARTERIALS OR THE HIGH SIDE OF SUPERELEVATED SECTIONS SHALL BE SLOPED AT THE SAME RATE AS THE PAVEMENT.



GRASSED SWALE
NO SCALE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
CHIEF: *Phillip M. ...* 4-3-81
DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

CHIEF: *W. ...* 4/1/81
BUREAU OF ENGINEERING

2-27-81 2 REVISED AS PER H.C. COMMENTS DATED 2-10-81
1-15-81 1 REVISED AS PER H.C. COMMENTS DATED 12-18-81

OWNER: MONTGOMERY WOODS ASSOCIATES II
12400 CLARKSVILLE PIKE
CLARKSVILLE, MARYLAND 21029

DEVELOPER: MONTGOMERY WOODS ASSOCIATES II
12400 CLARKSVILLE PIKE
CLARKSVILLE, MARYLAND 21029

PROJECT: QUAIL RIDGE
SECTION 1, AREA 1

AREA: TAX MAP NO 38
1ST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

TITLE: ROADWAY & STORM DRAIN DETAILS

Riemer Tracy & Associates, Inc.
8559 Baltimore National Pike
Ellicott City, Maryland 21043
(301) 461-2690
Land Planning, Design & Civil Engineering

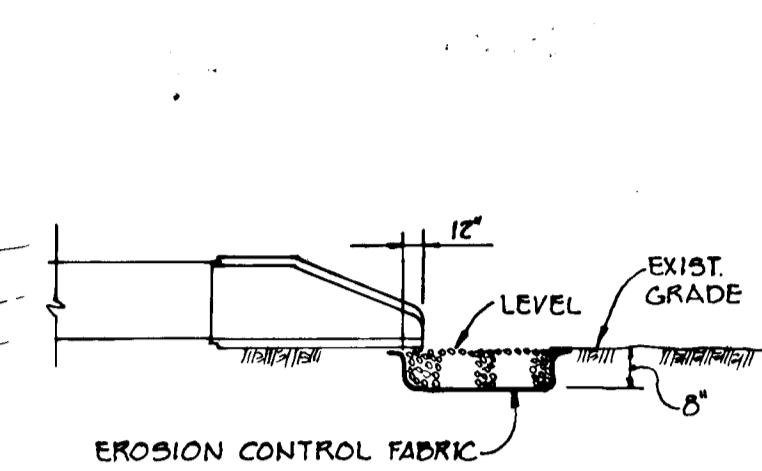
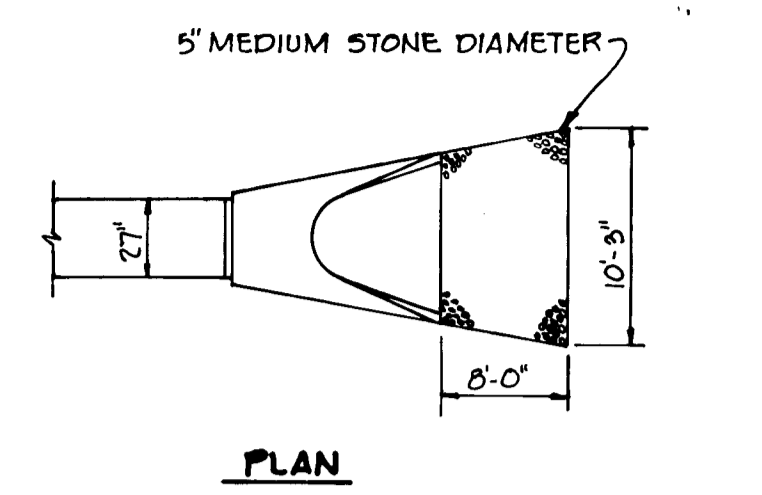
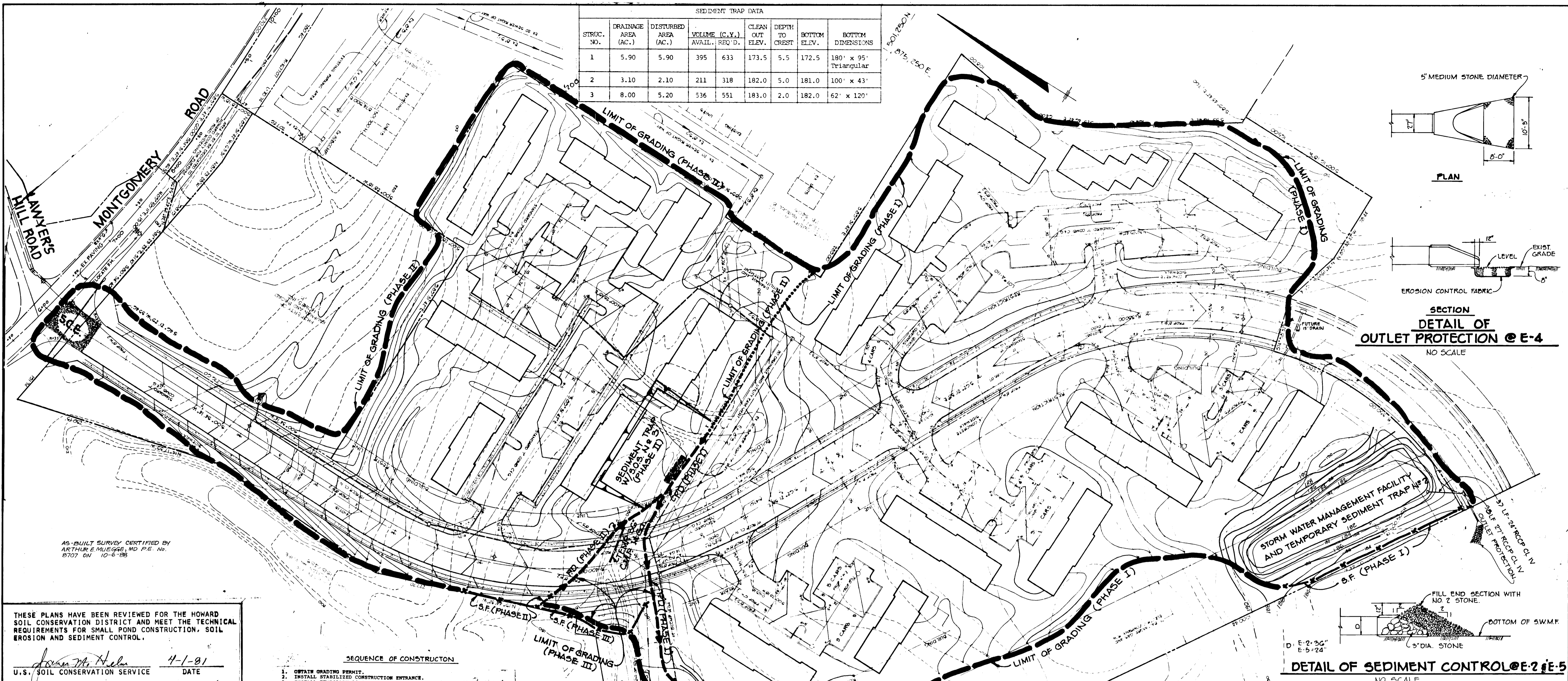
DATE: 9-12-80
PARCEL: 823
DESIGNED BY: L.J.D.
DRAWN BY: D.A.M.
PROJECT NO: C0279
DATE: 9-12-80
SCALE: AS SHOWN
DRAWING NO: G OF 9



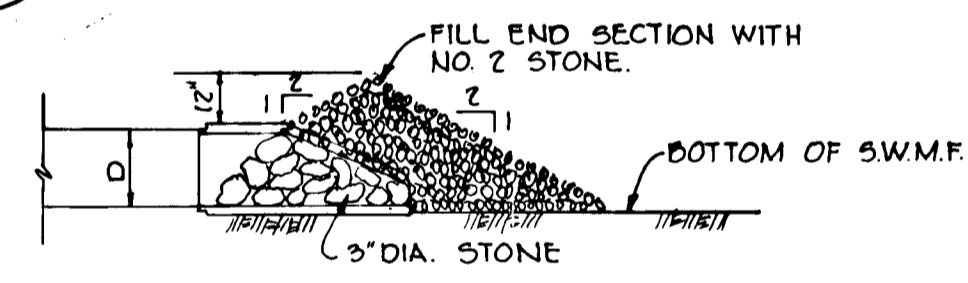
DATE: 6-10-81
REVISION: REVISED PROJECT NAME FROM MONTGOMERY WOODS TO QUAIL RIDGE

MARCH 27, 1981

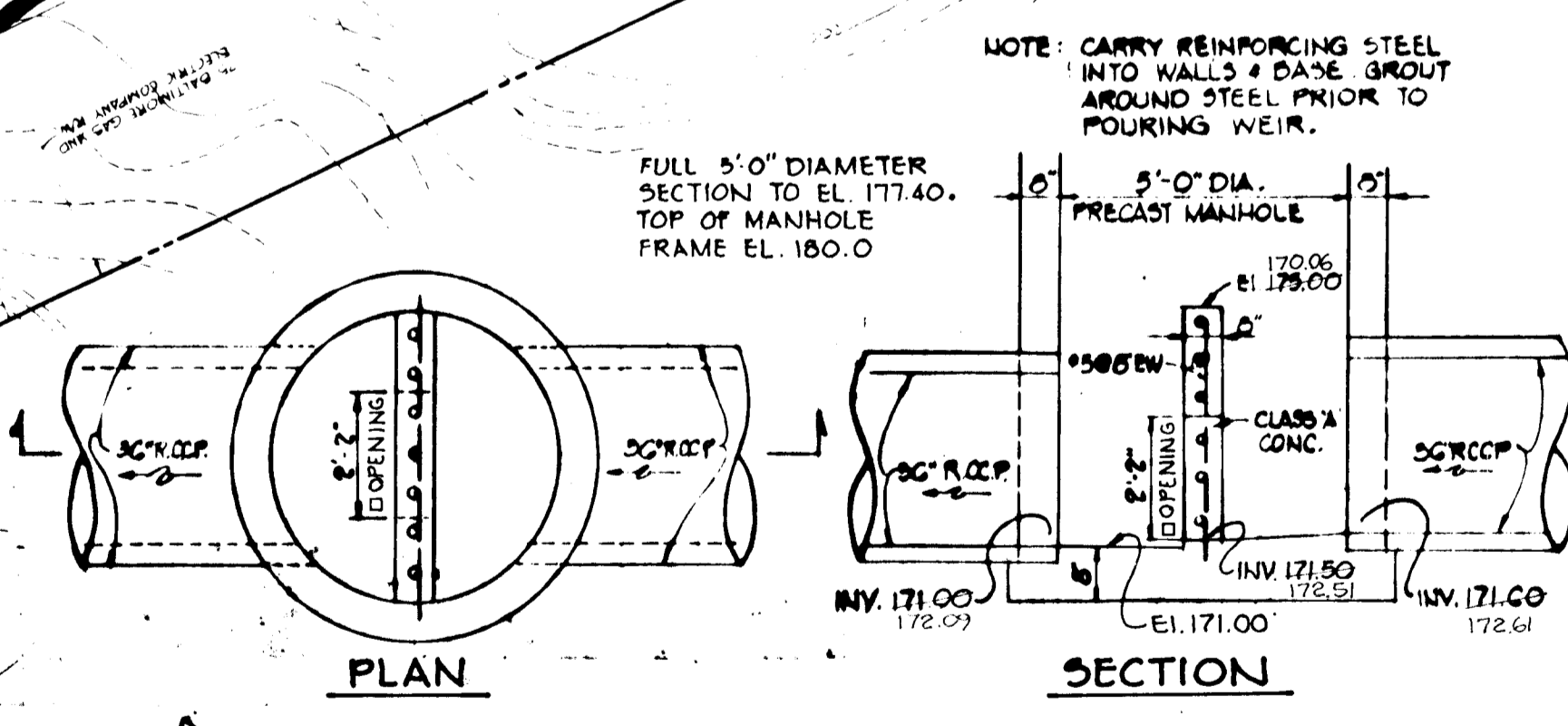
SEDIMENT TRAP DATA						
STROC. NO.	DRAINAGE AREA (AC.)	DISTURBED AREA (AC.)	VOLUME (C.Y.)	CLEAN OUT ELEV.	DEPTH TO CREST	BOTTOM DIMENSIONS
1	5.90	5.90	395 633	173.5	5.5	172.5 180' x 95' Triangular
2	3.10	2.10	211 318	182.0	5.0	181.0 100' x 43'
3	8.00	5.20	536 551	183.0	2.0	182.0 62' x 120'



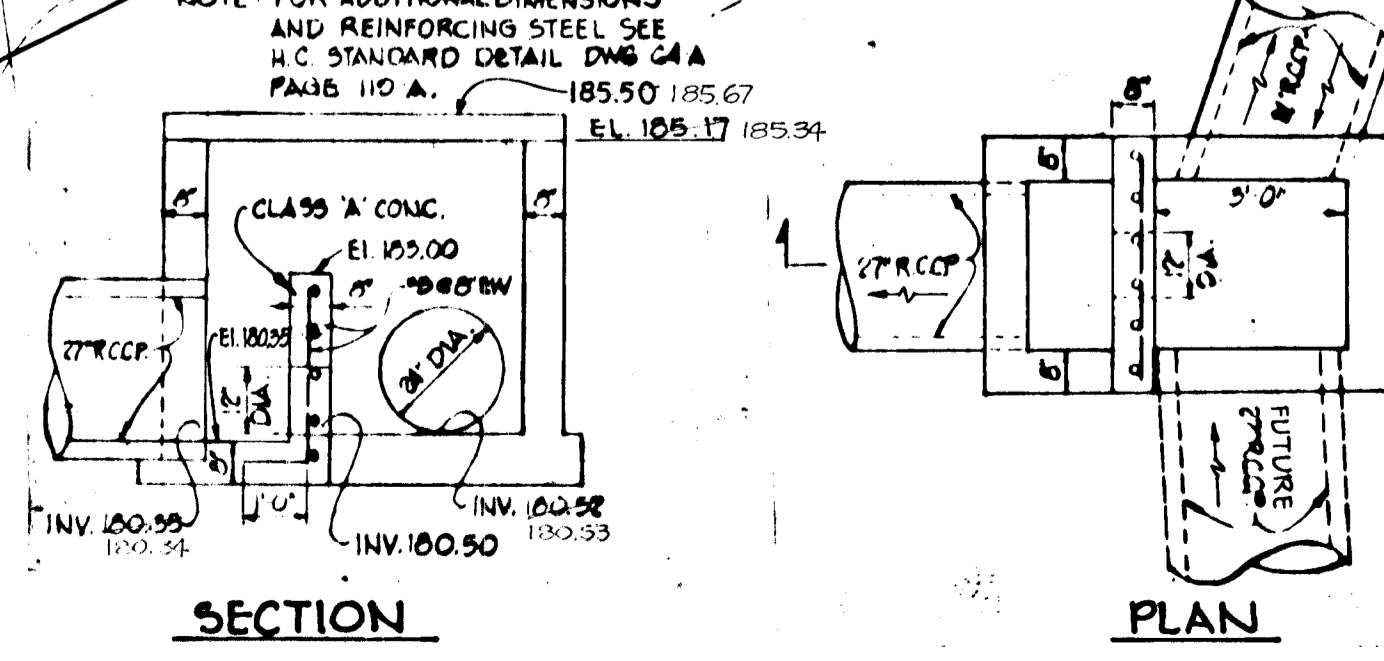
**SECTION
DETAIL OF
OUTLET PROTECTION @ E-4**
NO SCALE



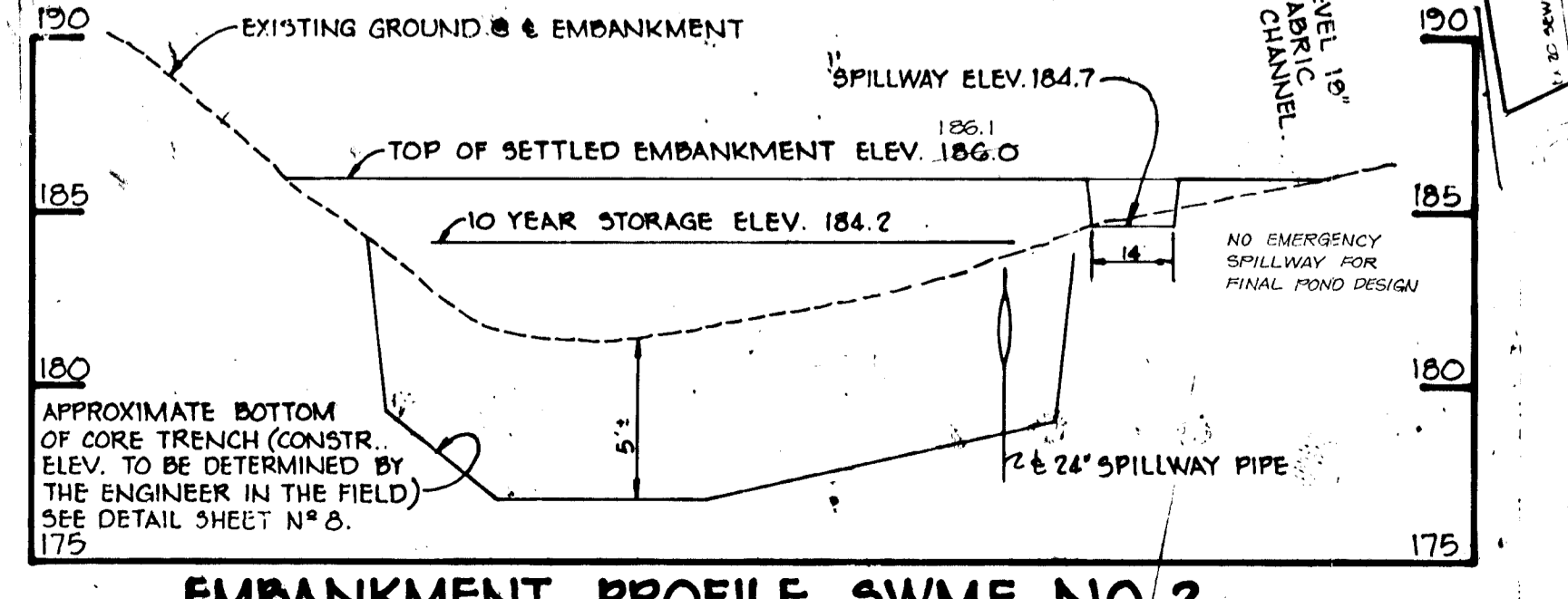
DETAIL OF SEDIMENT CONTROL @ E-5
NO SCALE



SPILLWAY CONTROL STRUCTURE 5-1
NO SCALE



SPILLWAY CONTROL STRUCTURE 5-2
NO SCALE



EMBANKMENT PROFILE SWMF NO. 2
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- INSTALL TEMPORARY 36-INCH DRAIN FOR ACCESS TO 1st PHASE OF GRADING.
- CLEAR AND GRUB AREAS OF PHASE I SEDIMENT CONTROL STRUCTURES ONLY.
- INSTALL STORM WATER MANAGEMENT FACILITIES AND SEDIMENT TRAPS 1 & 2 AND PHASE I SILT FENCES AND PERIMETER DIKES. STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
- GRADE PHASE I. MAINTAINING POSITIVE DRAINAGE ALONG PERIMETER DIKES AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
- INSTALL STORM DRAINS TO CONNECT EXISTING 36-INCH DRAIN TO STORM WATER MANAGEMENT FACILITY. PLACE SEDIMENT CONTROL AT INLETS.
- CONVERT SEDIMENT TRAPS 1 & 2 INTO STORM WATER MANAGEMENT FACILITY AS FOLLOWS:
 - IMPOUNDED WATER SHALL BE PUMPED OUT.
 - SEDIMENT SHALL BE REMOVED AND THE BASIN AREA RESTORED TO ITS ORIGINAL DIMENSIONS.
 - REMOVED SEDIMENT SHALL BE USED TO MOUND THE AREA BETWEEN THE PARKING LOT AND THE ROAD ADJACENT TO THE WEST SIDE OF BOWENBERRY DRIVE OPPOSITE STA. 13+50 THRU 14+50. STABILIZE MOUND IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
- REMOVE TEMPORARY 36-INCH DRAIN IN ACCESS ROAD TO PHASE I.
- INSTALL SEDIMENT TRAP NO. 3 WITH STONE OUTLET STRUCTURE (OPEN PHASE I PERIMETER DIKE TO ACCOMMODATE STONE OUTLET STRUCTURE) AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
- GRADE PHASE II. MAINTAINING ORIGINAL DIMENSIONS OF TRAP NO. 3 AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
- INSTALL PHASE II SILT FENCE.
- REMOVE SEDIMENT TRAP AND STONE OUTLET STRUCTURE NO. 3 AND COMPLETE GRADING IN THAT AREA. STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
- COMPLETE PHASE III GRADING AND STABILIZE IN ACCORDANCE WITH TEMPORARY SEEDING NOTES.
- INSTALL ALL UTILITIES, PAVING AND STRUCTURES AND STABILIZE IN ACCORDANCE WITH PERMANENT SEEDING NOTES.
- UPON APPROVAL OF THE HOWARD SOIL CONSERVATION DISTRICT, REMOVE ALL SEDIMENT CONTROL DEVICES.

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Arthur E. Muegge 4-1-91
U.S. SOIL CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: *Robert W. Ziehm* 4-1-91
HOWARD S.C.D. DATE

BY THE DEVELOPER:

"I HEREBY 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."

Michael White 9-12-80
SIGNATURE OF DEVELOPER DATE

BY THE ENGINEER:

"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION, AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION."

James K. Tracy 9-12-80
ENGINEER - JAMES K. TRACY DATE

6-18-81	1	REVISED PROJECT NAME FROM MONTGOMERY WOODS TO QUAIL RIDGE OUTLET FROM SWMF
8-27-81	2	REVISED AS PER H.C. COMMENTS DATED 2-10-81
1-15-81	3	REVISED AS PER H.C. COMMENTS DATED 12-18-80
DATE	NO.	REVISION
OWNER: MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029		
DEVELOPER: MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029		
PROJECT: QUAIL RIDGE SECTION, AREA 1		
AREA: TAX MAP NO. 38 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND		
TITLE: GRADING, SEDIMENT CONTROL AND STORM WATER MANAGEMENT PLAN		

Riemer - Tracy & Associates, Inc.
4000 Baltimore National Pike
Ft. Belvoir, Maryland 21041
(301) 481-2600
Land Planning, Design & Civil Engineering

DATE: 9-12-80
DESIGNED BY: LJD
DRAWN BY: TES
PROJECT NO: C0279
DATE: 9-12-80
SCALE: 1"=50'
DRAWING NO: 7 OF 9

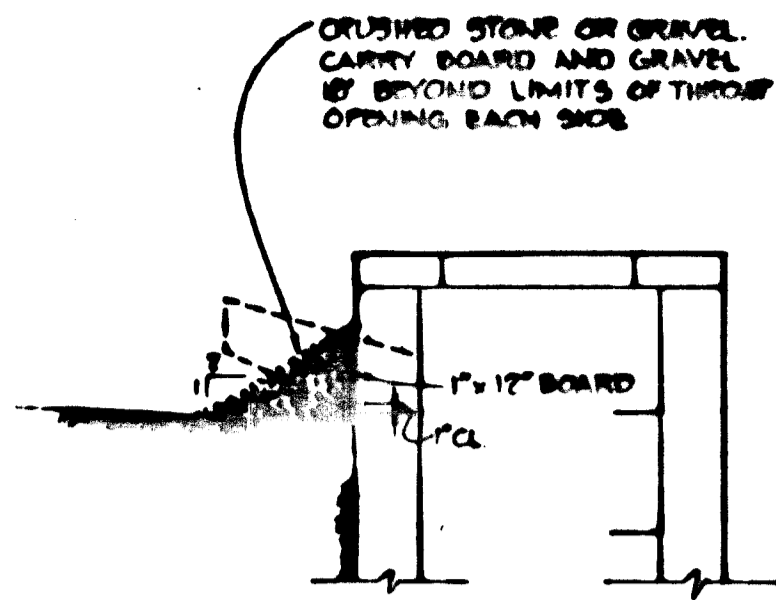
APPROVED: *James K. Tracy* 9-12-80
CHIEF, BUREAU OF ENGINEERING DATE
PROFESSIONAL ENGR. NO. 9566

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

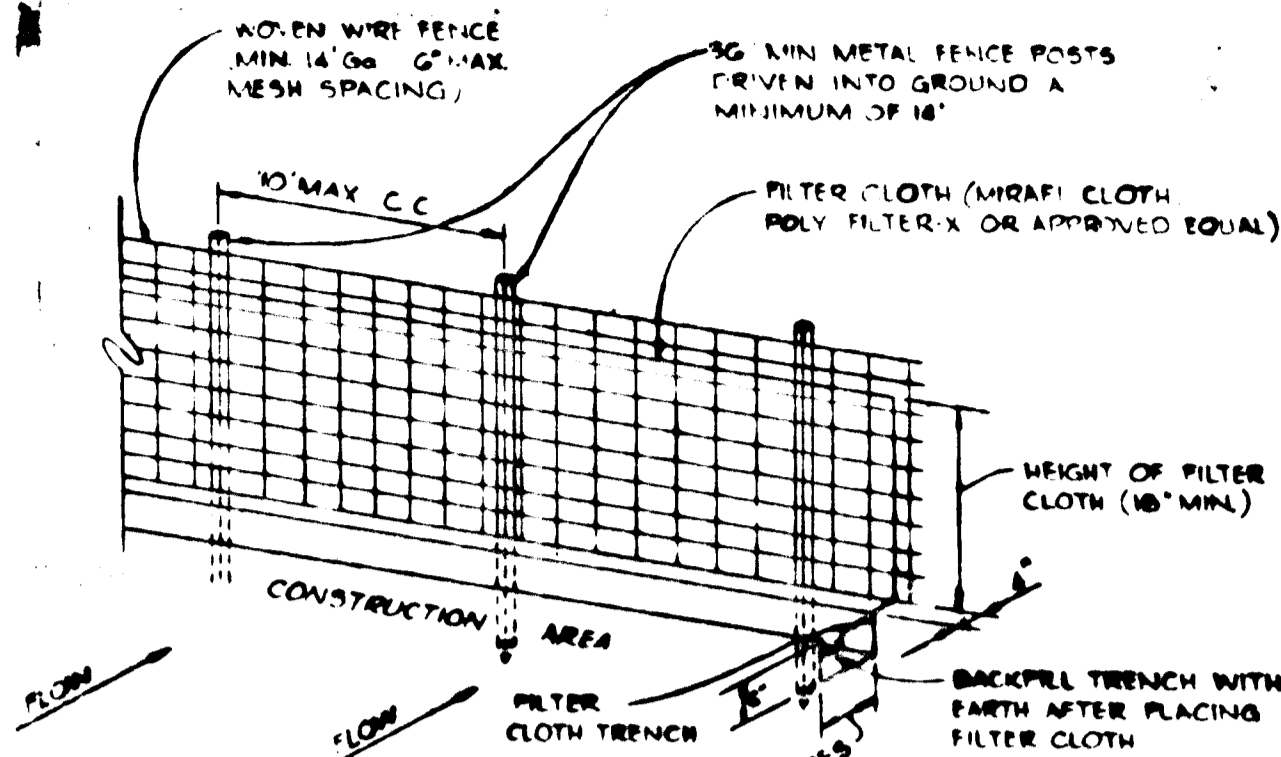
Shelley M. ... 4-3-91
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

William E. ... 4-1-81
CHIEF, BUREAU OF ENGINEERING DATE

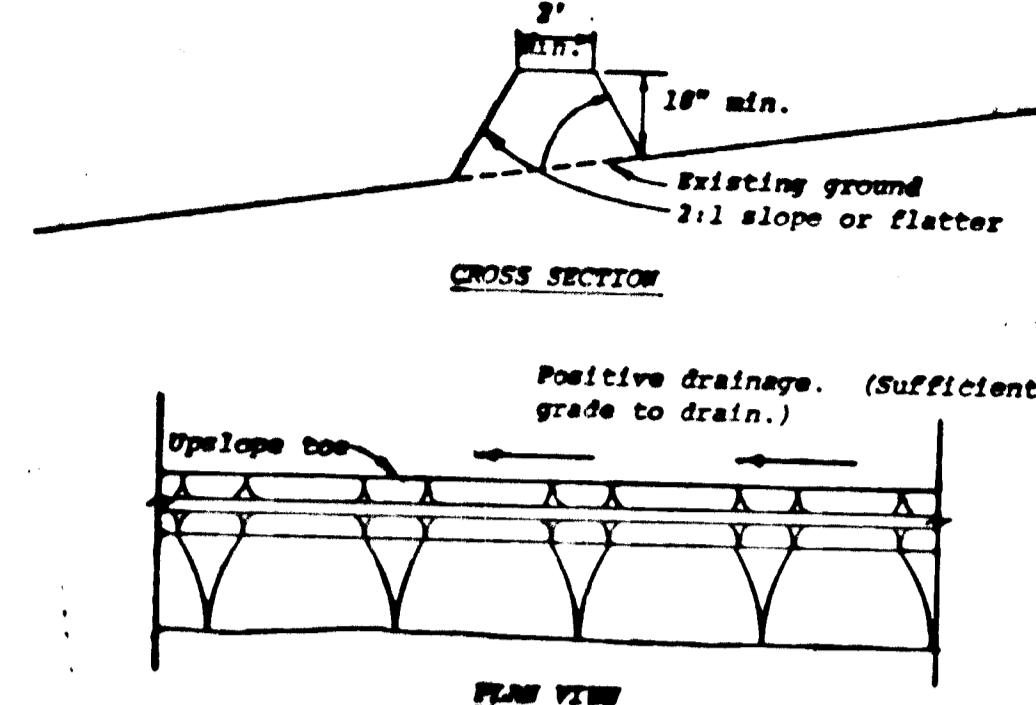


TYPICAL INLET BLOCKING DETAIL
NO SCALE



NOTES:
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" TO 26".
3. SILT FENCE TO BE PLACED IN LINE OF STRAW BALES AND/OR DIVERSION DIKES AT THE OPTION OF THE DEVELOPER.

SILT FENCE
NO SCALE

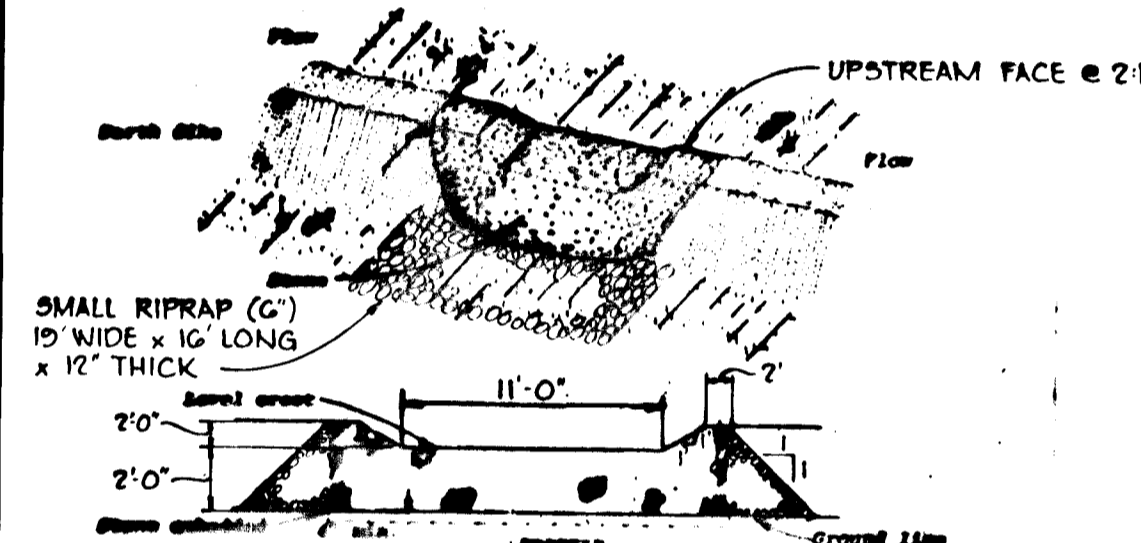


- Construction Specifications**
- All dikes shall be machine compacted.
 - All perimeter dikes shall have positive drainage to an outlet.
 - A. Diverted runoff from a protected or stabilized upland area shall outlet directly onto an undisturbed stabilized area or into a level spreader or grade stabilization structure.
B. Diverted runoff from a disturbed or exposed upland area shall be conveyed to a sediment trapping device such as a sediment trap or a sediment basin or to an area protected by any of these practices.
 - Stabilization, when required, shall be done in accordance with Standard and Specifications for Grassed Waterway. The minimum area to be stabilized shall be the channel flow area.
 - Periodic inspection and required maintenance shall be provided.



* Drainage area less than 5 acres

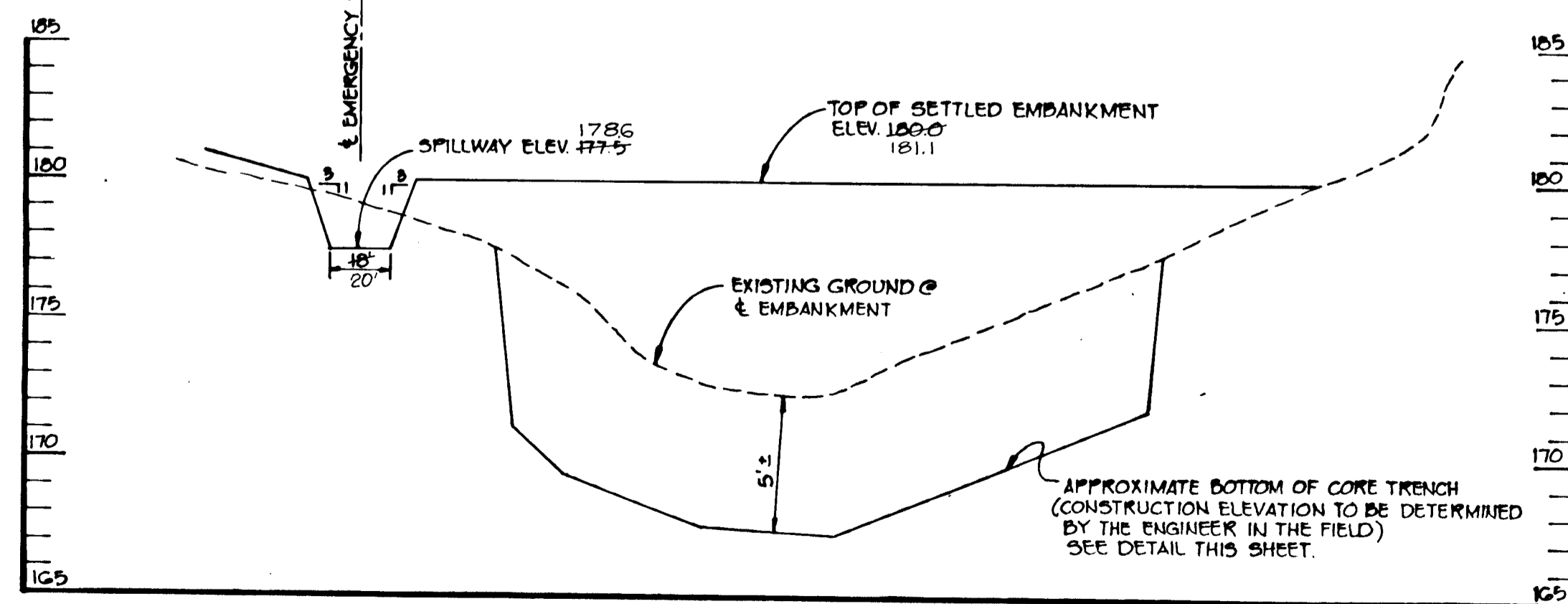
PERIMETER DIKE
NO SCALE



- Construction Specifications**
- The stone shall be crushed stone. Gravel may be used if crushed stone is not available. The stone shall meet MSHA Size No. 2 or ASTM (ASTM No. 1) Size No. 2 or 24.
 - The crest of the stone dike shall be at least six inches lower than the lowest elevation of the top of the earth dike and shall be level.
 - The stone outlet structure shall be embedded into the soil a minimum of four inches.
 - The minimum length, in feet, of the area of the stone outlet structure shall be equal to six times the number of acres of contributing drainage area.
 - The stone outlet structure shall be inspected after each rain, and the stone shall be replaced when the structure ceases to function as intended due to silt accumulation along the stone, washout, construction traffic damage, etc.

STONE OUTLET STRUCTURE
NO SCALE

STABILIZED CONSTRUCTION ENTRANCE
NO SCALE



EMBANKMENT PROFILE S.W.M.F. NO. 1
SCALE: HORIZ. 1"=50'
VERT. 1"=5'

AS-BUILT SURVEY CERTIFIED BY ARTHUR E. MUEGGE - MD, P.E. NO. 8707 ON 10-6-88

SEDIMENT CONTROL CONSTRUCTION NOTES
GENERAL NOTES

- 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 (922-2670).
- ALL SEDIMENT CONTROL STRUCTURES WILL BE INSTALLED IN ACCORDANCE WITH "THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS" AS PREPARED BY THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE.
- SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- ALL DISTURBED AREAS ARE TO BE DRESSED AND STABILIZED ACCORDING TO THE TEMPORARY OR PERMANENT SEEDING SCHEDULES AS SOON AS PROPER WEATHER CONDITIONS EXIST FOR THE ESTABLISHMENT OF A PERMANENT VEGETATIVE COVER.
- SEDIMENT WILL BE REMOVED FROM TRAPS WHEN THE DEPTH REACHES THE CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- FERTILIZER AND LIME RATES MAY BE CHANGED THROUGH AUTHORIZATION BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT IF SOIL TESTS DETERMINE A REDUCTION IN THE SPECIFIED RATES IS JUSTIFIED.
- 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.
- REFERENCES CALLED FOR ON THE SEDIMENT CONTROL CONSTRUCTION PLAN AND DETAILS ARE MADE TO "THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS".
- SEDIMENT CONTROL WILL BE INSTALLED BEFORE CLEARING AND GRUBBING REMAINDER OF SITE.

TEMPORARY SEEDING

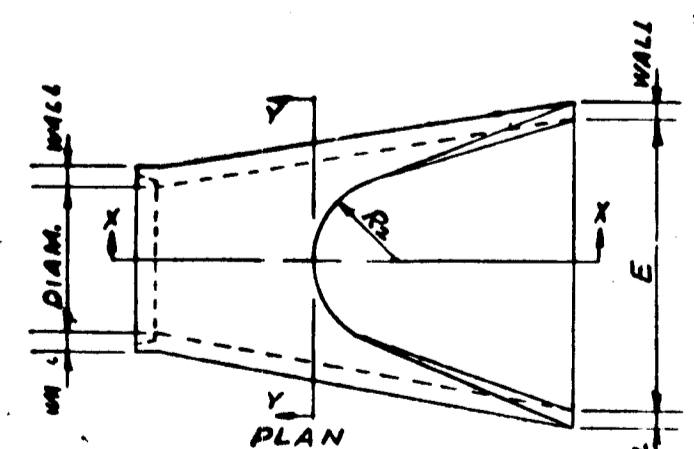
AREA TO BE SEEDING SHALL BE RECENTLY LOOSENEED. IF THE GROUND IS PACKED, CRUSTED OR HARD, THE TOP LAYER OF SOIL SHALL BE LOOSENEED BY DISCING, RACKING OR OTHER ACCEPTABLE MEANS.

- APPLY 10-20-10 FERTILIZER (OR EQUIVALENT) AT THE RATE OF 600 LBS. PER ACRE OR 15 LBS. PER 1000 SQ. FT.
- WHERE SOIL IS KNOWN TO BE HIGHLY ACID, APPLY DOLOMITIC LIMESTONE AT THE RATE OF 1 TON PER ACRE.
- WORK BOTH INTO SOIL AND SEED WITH CYCLOP SEEDER, DRILL, CULTIPAKER SEEDER OR HYDROSEEDER (SLURRY WILL INCLUDE SEED AND FERTILIZER) AT THE RATE OF 40 LBS. PER ACRE OF ITALIAN OR PERENNIAL RYEGRASS.
- MULCH WITH UNWEATHERED SMALL GRAIN STRAW AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE AND ANCHOR WITH A CUTBACK ASPHALT OR EMULSIFIED ASPHALT AT THE RATE OF 5 GAL. PER 1000 SQ. FT.

PERMANENT SEEDING

FINAL STABILIZATION WILL TAKE PLACE AS SOON AS POSSIBLE AS WEATHER CONDITIONS PERMIT, AS FOLLOWS:

- APPLY DOLOMITIC LIMESTONE AT THE RATE OF 2 TONS PER ACRE (ONE TON PER ACRE IF APPLICATION OF TON PER ACRE WAS MADE FOR TEMPORARY SEEDING).
- APPLY 0-20-20 FERTILIZER AT THE RATE OF 600 LBS. PER ACRE HARROW OR DISC LIME AND 0-20-20 FERTILIZER INTO THE SOIL TO A MINIMUM DEPTH OF 3" LANKS OR HIGH MAINTENANCE AREAS WILL BE DRAGGED AND LEVELED WITH A YORK RAKE. AT THE TIME OF SEEDING APPLY 400 POUNDS OF 38-0-0 UREAFORM FERTILIZER AND 500 LBS. OF 15-20-20 OR EQUIVALENT FERTILIZER PER ACRE.
- SEED WITH A MIXTURE OF CERTIFIED "MERION" KENTUCKY BLUEGRASS - 40 LBS. PER ACRE; COMMON KENTUCKY BLUEGRASS @ 40 LBS. PER ACRE; RED FESCUE, PENNLAWN OR JAMESTOWN @ 20 LBS. PER ACRE.
- MULCH WITH UNWEATHERED SMALL GRAIN STRAW AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE AND ANCHOR WITH A CUTBACK ASPHALT OR EMULSIFIED ASPHALT AT THE RATE OF 5 GAL. PER 1000 SQ. FT.
- SEED ALL SLOPES WITH A MIXTURE OF CERTIFIED KENTUCKY 31 TALL FESCUE @ 50 LBS. PER ACRE AND INOCULATED KOREAN LESPEDEZA @ 15 LBS. PER ACRE.



FLARED END SECTION - DIMENSIONS

DIAM	WALL	A	B	C	D	E	F	P	R	R ₂	T
15	2 1/4	7	27	46	73	30	3:1	24.05	12.23	11	2
24	3	11	42	3 1/2	73 1/2	48	3:1	34.39	17.15	14	2 1/2
27	3 1/2	12	48	25 1/4	73 1/4	54	3:1	36.37	18.19	14	2 1/2
36	4	16	65	3 3/4	97 1/2	72	3:1	48.80	24.40	20	3 1/2

TYPICAL CONCRETE END SECTION
NO SCALE

G-18-B1 REVISD PROJECT NAME FROM MONTGOMERY WOODS TO QUAIL RIDGE

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."
Signature of Developer: *Michael Glat* DATE: 9-12-80

BY THE ENGINEER:
"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD COUNTY SOIL CONSERVATION DISTRICT WITH AN "AS BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
Signature of Engineer: *James K. Jagan* DATE: 9-12-80

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
Signature: *James M. Hillen* DATE: 4-1-81
U.S. SOIL CONSERVATION SERVICE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
APPROVED: *Robert Ziehn* DATE: 4-1-81
HOWARD S.C.D.

PLAN NUMBER
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Signature: *James M. Hillen* DATE: 4-3-81
CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Signature: *William E. Riley* DATE: 4-9-81
CHIEF, BUREAU OF ENGINEERING
2-20-84 3 REVISD PRINCIPAL SPILLWAY 12-23-81
3-27-81 2 REVISD AS PER H.C. COMMENTS DATED 2-10-81
1-15-81 1 REVISD AS PER H.C. COMMENTS DATED 12-18-80

OWNER: MONTGOMERY WOODS ASSOCIATES II
1240 CLARKSVILLE PIKE
CLARKSVILLE, MARYLAND 21029
DEVELOPER: MONTGOMERY WOODS ASSOCIATES II
1240 CLARKSVILLE PIKE
CLARKSVILLE, MARYLAND 21029
PROJECT: QUAIL RIDGE SECTION 1, AREA 1
AREA: TAX MAP NO. 35 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
TITLE: SEDIMENT CONTROL & S.W.M. DETAILS

Riemer Tracy & Associates, Inc.
8659 Baltimore National Pike
Ellicott City, Maryland 21043
(301) 461-2690
Land Planning, Design & Civil Engineering
9-12-80
PARCEL 829
DRAWN BY: L.J.D.
PROJECT NO: CO279
DATE: 9-12-80
SCALE: AS SHOWN
DRAWING NO. 8 OF 9
Signature: *James K. Jagan* PROFESSIONAL ENGR. NO. 9566

I. SITE PREPARATION

Areas under the borrow areas, embankment, and structural works shall be cleared, grubbed and the topsoil stripped to remove all trees, vegetation, roots or other objectionable material. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface.

All cleared and grubbed material shall be disposed of outside the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

II. EARTH FILL

Material

The fill material shall be taken from approved designated borrow area or areas. It shall be free of roots, stumps, wood, rubbish, over-size stones, frozen or other objectionable materials. The embankment shall be constructed to an elevation which provides for anticipated settlement to the design elevation. The fill height all along the length of the embankment shall be increased above the design elevation (including freeboard) as shown on the plans.

Placement

Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in 8-inch maximum thickness (before compaction) layers which are to be continuous over the entire length of the fill. The most porous borrow material shall be placed in the downstream portions of the embankment.

Compaction

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction can be obtained with the equipment used.

Cutoff Trench

Where specified, a cutoff trench shall be excavated along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the cutoff trench shall be the most impervious material available and shall be compacted with equipment or rollers to assure maximum density and minimum permeability.

III. STRUCTURAL BACKFILL

Backfill material shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall the contractor drive equipment over any part of a concrete structure or pipe unless there is a compacted fill of twenty-four inches or greater over the structure or pipe.

IV. PIPE CONDUITS

A. Reinforced Concrete Pipe

- Materials - Reinforced concrete pipe shall have a rubber gasket joint and shall equal or exceed ASTM Specification C-361. Approved equivalents are AWWA Specification C-300, 301, and 302.
- Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its diameter with a minimum thickness of 3", or as shown on the drawings.
- Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe.
- Backfilling shall conform to structural backfill as shown above.
- Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

B. For pipes of other materials, specific specifications shall be shown on the drawings.

V. CONCRETE

1. Materials

- Cement - Normal Portland cement shall conform to the latest ASTM Specification C-150.
- Water - The water used in concrete shall be clean, free from oil, acid, alkali, scales, organic matter or other objectionable substances.
- Sand - The sand used in concrete shall be clean, hard, strong and durable, and shall be well graded with 100 percent passing a one-quarter inch sieve. Limestone sand shall not be used.
- Coarse Aggregate - The coarse aggregate shall be clean, hard, strong and durable, and free from clay or dirt. It shall be well graded with a maximum size of one and one-half (1-1/2) inches.
- Reinforcing Steel - The reinforcing steel shall be deformed bars of intermediate grade billet steel or rail steel conforming to ASTM Specification A-615.

2. Design Mix - The concrete shall be mixed in the following proportions, measured by weight. The water-cement ratio shall be 5-1/2 to 6 U. S. gallons of water per 94 pound bag of cement. The proportion of materials for the trial mix shall be 1:2:3-1/2. The combination of aggregates may be adjusted to produce a plastic and workable mix that will not produce harshness in placing or honeycombing in the structure.

3. Mixing - The concrete ingredients shall be mixed in batch mixers until the mixture is homogeneous and of uniform consistency. The mixing of each batch shall continue for not less than one and one-half minutes after all the ingredients, except the full amount of water, are in the mixer. The minimum mixing time is predicted on proper control of the speed of rotation of the mixer and of the introduction of the materials, including water, into the mixer. Water shall be added prior to, during, and following the mixer-charging operations. Excessive overmixing requiring the addition of water to preserve the required concrete consistency shall not be permitted. Truck mixing will be allowed provided that the use of this method shall cause no violation of any applicable provisions of the specifications given here.

4. Forms - The forms shall have sufficient strength and rigidity to hold the concrete and to withstand the necessary pressure, tamping, and vibration without deflection from the prescribed lines. They shall be mortar-tight and constructed so that they can be removed without hammering or prying against the concrete.

The inside of forms shall be oiled with a non-staining mineral oil or thoroughly wetted before concrete is placed.

Forms may be removed 24 hours after the placement of concrete. All wire ties and other devices used shall be recessed from the surface of the concrete.

5. Reinforcing Steel - All reinforcing material shall be free of dirt, rust, scale, oil, paint or any other coatings. The steel shall be accurately placed and securely tied and blocked into position so that no movement of the steel will occur during placement of concrete.

6. Consolidating - Concrete shall be consolidated with internal type mechanical vibrators. Vibration shall be supplemented by spading and hand tamping as necessary to insure smooth and dense concrete along form surfaces, in corners, and around embedded items.

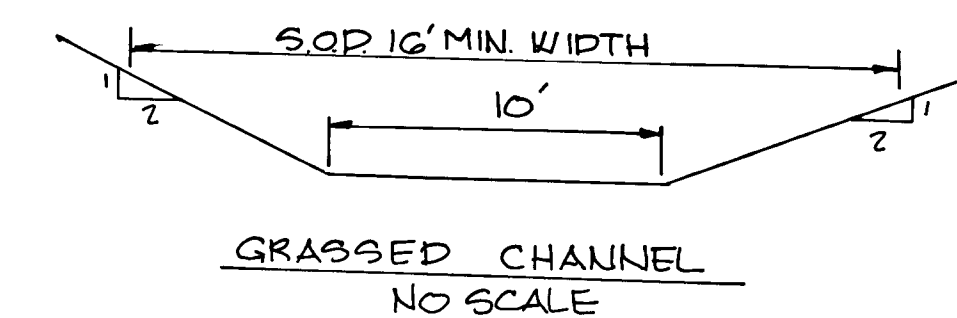
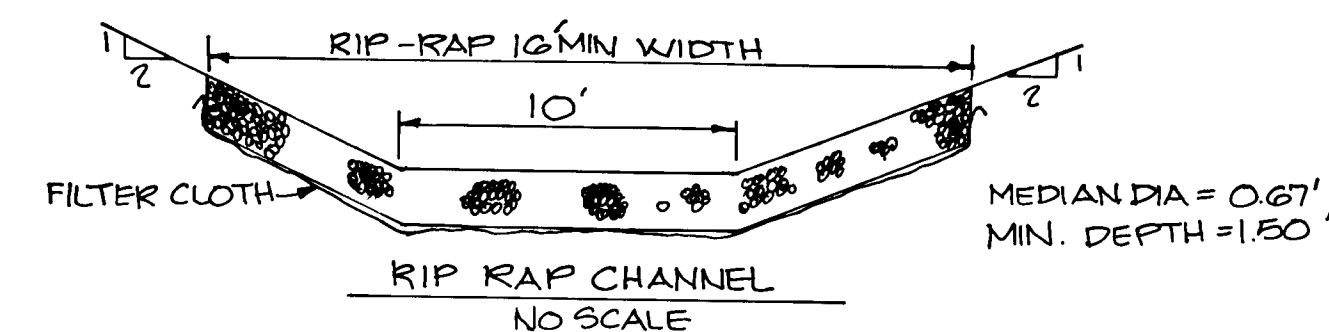
7. Finishing - Defective concrete, honeycombed areas, voids left by the removal of tie rods, ridges on all concrete surfaces permanently exposed to view or exposed to water on the finished structure, shall be repaired immediately after the removal of forms. All voids shall be reamed and completely filled with dry-patching mortar.

8. Protection and Curing - Exposed surfaces of concrete shall be protected from the direct rays of the sun for at least the first three (3) days. All concrete shall be kept continuously moist for at least ten (10) days after being placed. Moisture may be applied by spraying or sprinkling as necessary to prevent the concrete from drying. Concrete shall not be exposed to freezing during the curing period. Curing compounds may also be used.

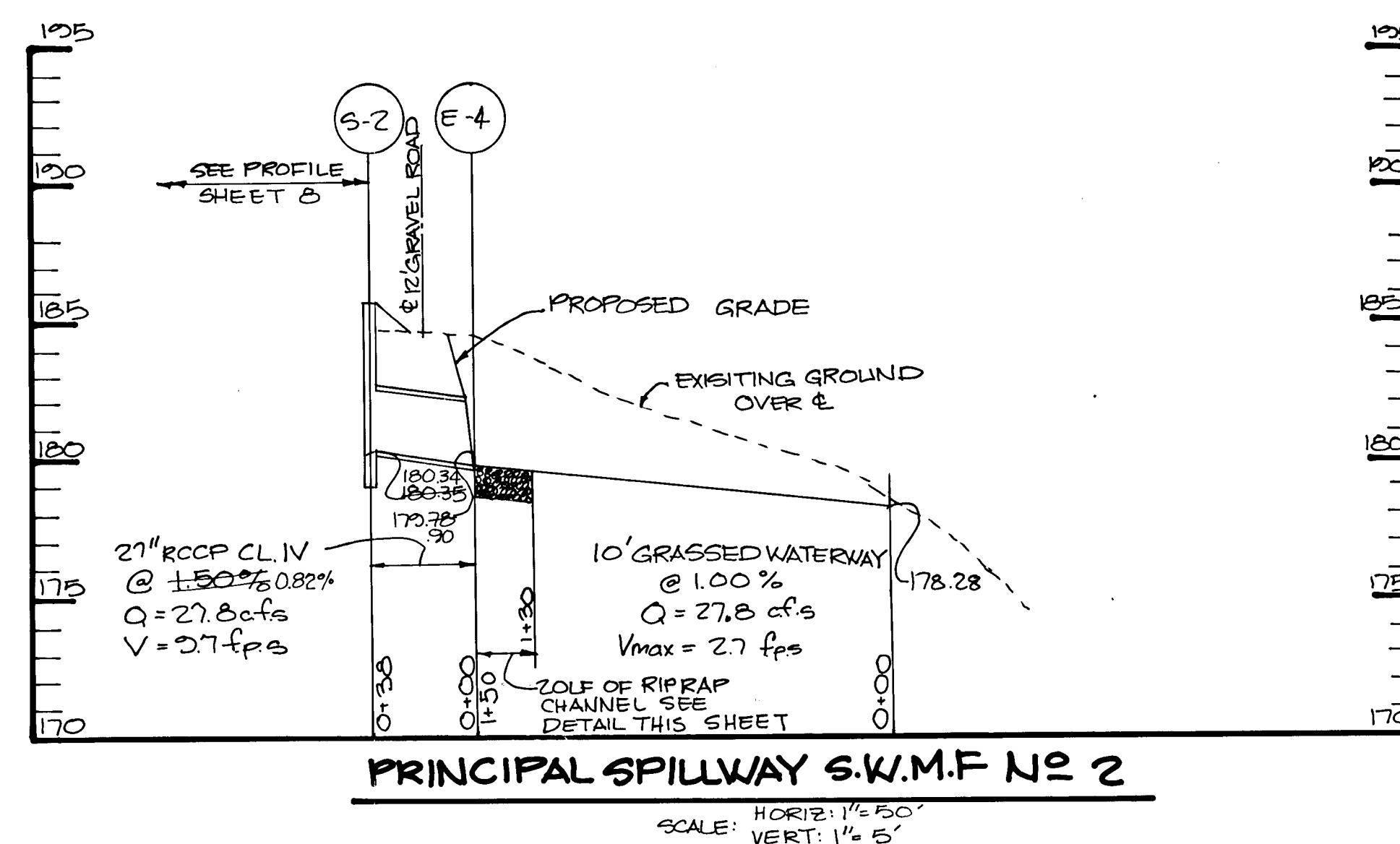
9. Placing Temperature - Concrete may not be placed at temperatures below 32° F with the temperature falling, or 34° with the temperature rising.

VI. STABILIZATION

All borrow areas shall be graded to provide proper drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, fertilizing and mulching (if required) in accordance with the vegetative treatment specifications shown on or accompanying the drawings.



AS-BUILT SURVEY CERTIFIED BY ARTHUR E. MUEGGLE - MD, P.E. No. 8707 ON 10-6-88



6-18-81	REVISOR PROJECT NAME FROM MONTGOMERY WOODS TO QUAIL RIDGE
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING	
<i>Shawn MacMahon</i>	4-3-81
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.	
APPROVED: <i>Robert W. Ziehl</i>	4/4/81
HOWARD COUNTY, MD.	DATE
PLAN NUMBER	
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS	
<i>William E. Rainey</i>	4/14/81
CHIEF, BUREAU OF ENGINEERING	DATE
BY THE DEVELOPER:	
"I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO THESE PLANS OF DEVELOPMENT, POND CONSTRUCTION AND EROSION AND SEDIMENT CONTROL. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THE IR AUTHORIZED AGENTS, AS ARI DEEMED NECESSARY. DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT. I WILL PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION."	
<i>Michael Whit</i>	1-15-81
SIGNATURE OF DEVELOPER	DATE
BY THE ENGINEER:	
"I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION, AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE MUST PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH A RED-LINED "AS-BUILT" OF THE POND WITHIN 30 DAYS OF COMPLETION."	
<i>James K. Tracy</i>	1-15-81
SIGNATURE OF ENGINEER	DATE
THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.	
<i>James M. Adams</i>	4-1-81
U.S. SOIL CONSERVATION SERVICE	DATE
2-29-86	REVISOR PRINCIPAL SPILLWAY RIP-RAP CHANNELS
3-27-81	REVISOR AS PER H.C. COMMENTS DATED 2-10-81
1-15-81	REVISOR AS PER H.C. COMMENTS DATED 12-18-80
DATE	NO. REVISION
OWNER: MONTGOMERY WOODS ASSOCIATES II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029	
DEVELOPER: MONTGOMERY WOODS ASSOC. II 12400 CLARKSVILLE PIKE CLARKSVILLE, MARYLAND 21029	
PROJECT: QUAIL RIDGE SECTION 1, AREA I	
AREA: ELECTION DISTRICT N#1 HOWARD COUNTY, MARYLAND TAX MAP N# 38 PARCEL N# 823	
TITLE: STORM WATER MANAGEMENT FACILITY SPECIFICATIONS	
Riemer-Tracy & Associates, Inc. 8656 Baltimore National Pike Ellicott City, Maryland 21043 (301) 461-2690 Land Planning, Design & Civil Engineering	
1-15-81	DATE
<i>James K. Tracy</i>	DESIGNED BY: J. K. T.
PROFESSIONAL ENGR. NO. 966	DRAWN BY: J. K. T.
	PROJECT NO: CO279
	DATE: 1-15-81
	SCALE: NONE
	DRAWING NO. 9 OF 9