

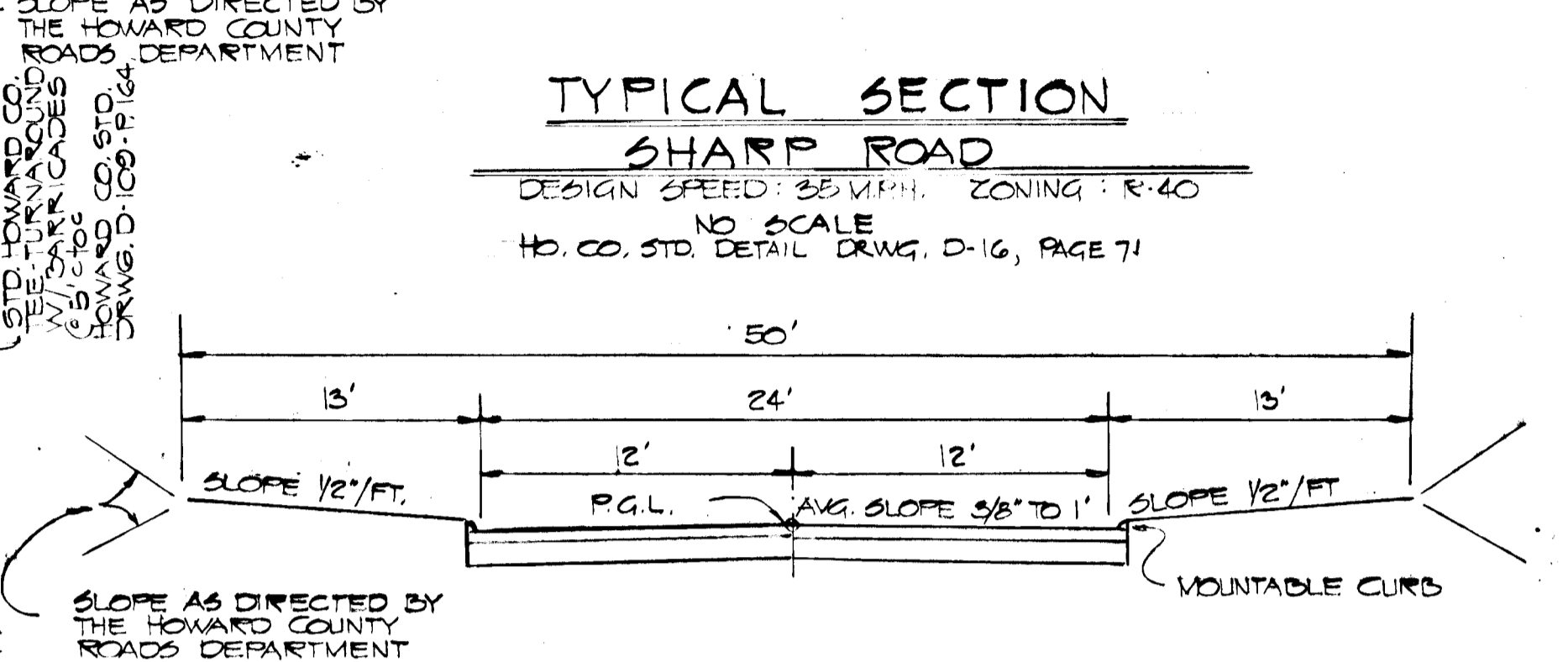
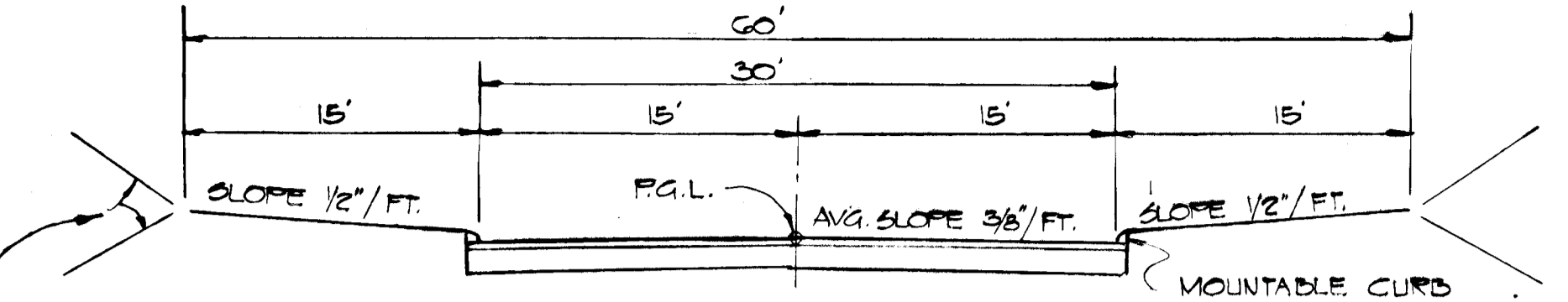
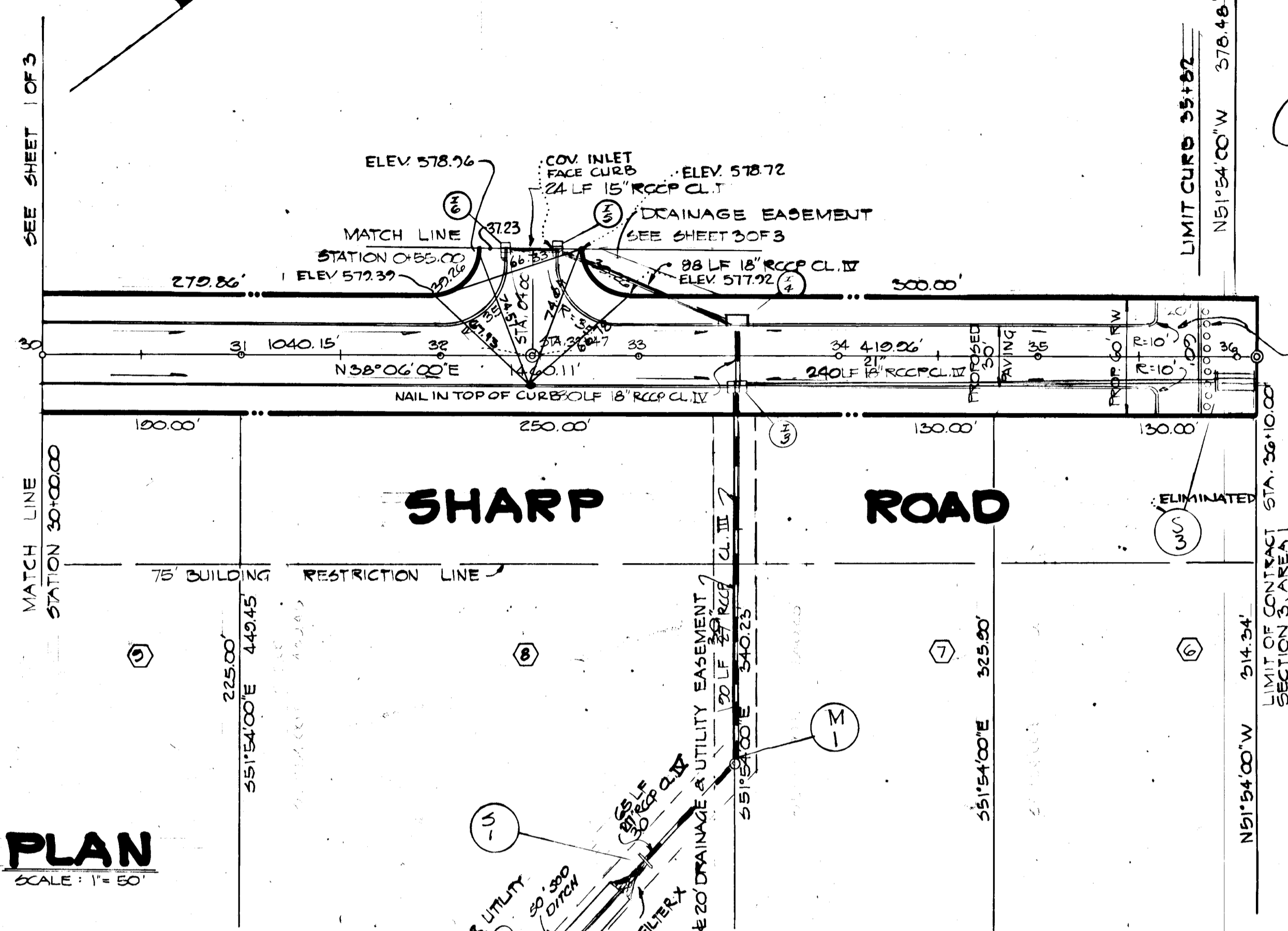




DEPARTMENT OF PUBLIC WORKS  
*Erwin W. Keeland* 7/8/76  
 CHIEF, BUREAU OF HIGHWAYS DATE  
 OFFICE OF PLANNING AND ZONING  
 ACTING CHIEF, DIVISION OF LAND DEVELOPMENT  
*John A. Clouston* 7/6/76  
 DATE

PLAN  
 SURVEYED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PLANNING CHECKED BY: \_\_\_\_\_  
 GRADES CHECKED BY: \_\_\_\_\_  
 RT. OF WAY CHECKED BY: \_\_\_\_\_  
 NO. \_\_\_\_\_

PROFILE  
 SURVEYED BY: \_\_\_\_\_ DATE: \_\_\_\_\_  
 PLANNING CHECKED BY: \_\_\_\_\_  
 GRADES CHECKED BY: \_\_\_\_\_  
 STRUCTURE NOTATIONS CHECKED BY: \_\_\_\_\_  
 NO. \_\_\_\_\_



3" BITUMINOUS CONCRETE SURFACE	1/2" SAND C-3
5" BITUMINOUS CONCRETE SURFACE	5" GRAVEL MIX

CLEARING AND GRADING ART. C-1  
 SUPGRADE ART. C-2  
 BASE COURSE ART. C-3  
 SURFACE COURSE ART. C-31

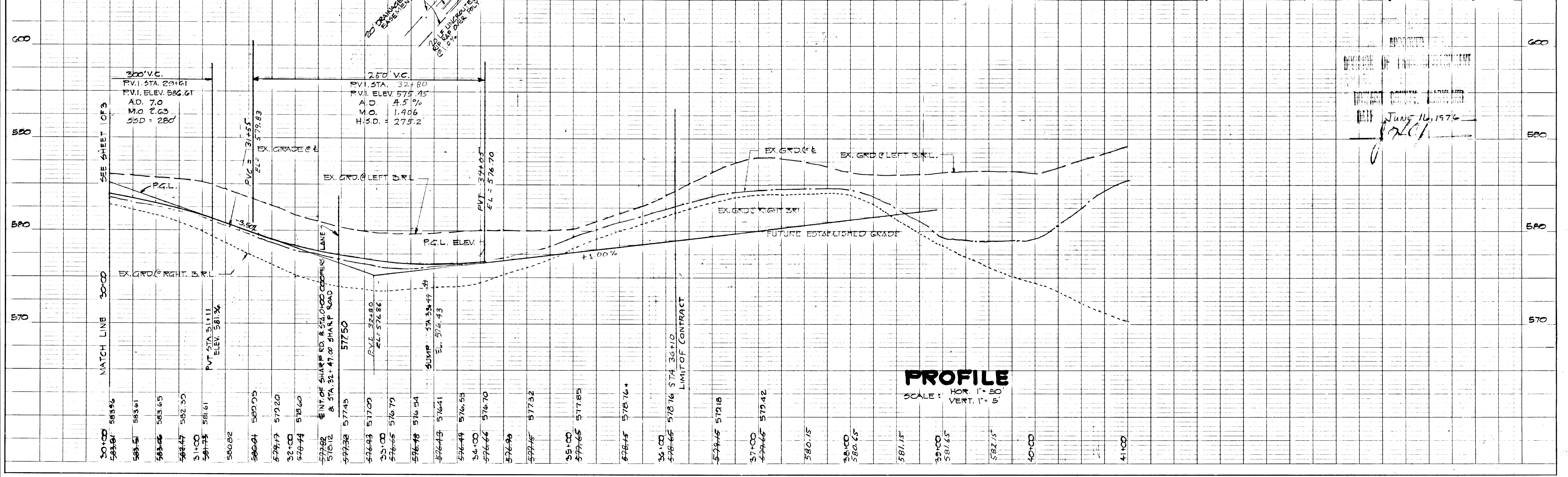
1. BASE WILL BE PRIMED IN ACCORDANCE WITH SECTION C-30-3 AS PROVIDED IN THE HOWARD CO. ROAD CONSTRUCTION CODE & STANDARD SPECIFICATIONS.  
 2. TACK COAT IS REQUIRED IN ACCORDANCE WITH SECTION C-31-4 OF THE HOWARD CO. ROAD CONSTRUCTION CODE & STANDARD SPECIFICATIONS.

**TYPICAL PAVING SECTION**  
 NOT TO SCALE  
 HOWARD CO. STD. DETAIL DRWG. D-5, PAGE 60



**OWNER & DEVELOPER**  
*John A. Clouston*  
 12/19/75  
 W. L. BORING  
 BURNWOODS ROAD  
 GLENWOOD, MD.

Revised 4-8-8 As Per D.P.W. Comments 7-3-79			
TITLE SHARP ROAD STA. 30+00 TO STA. 36+00			
PROJECT SECTION 3 AREA 1 GWENLEE ESTATES			
LOCATION 3RD & 4TH ELECTION DISTRICT HOWARD CO., MD.			
DATE 7/6/76	DES. BY EK	DRAWN BY JD	CHKD. BY JG
SCALE AS SHOWN	JOB NO. 7184	DRWG. NO. 2016	
WESTMINSTER 848-5588 BALTIMORE 465-7777 SALISBURY 749-1286		<b>BOENDER ASSOCIATES INC.</b>	





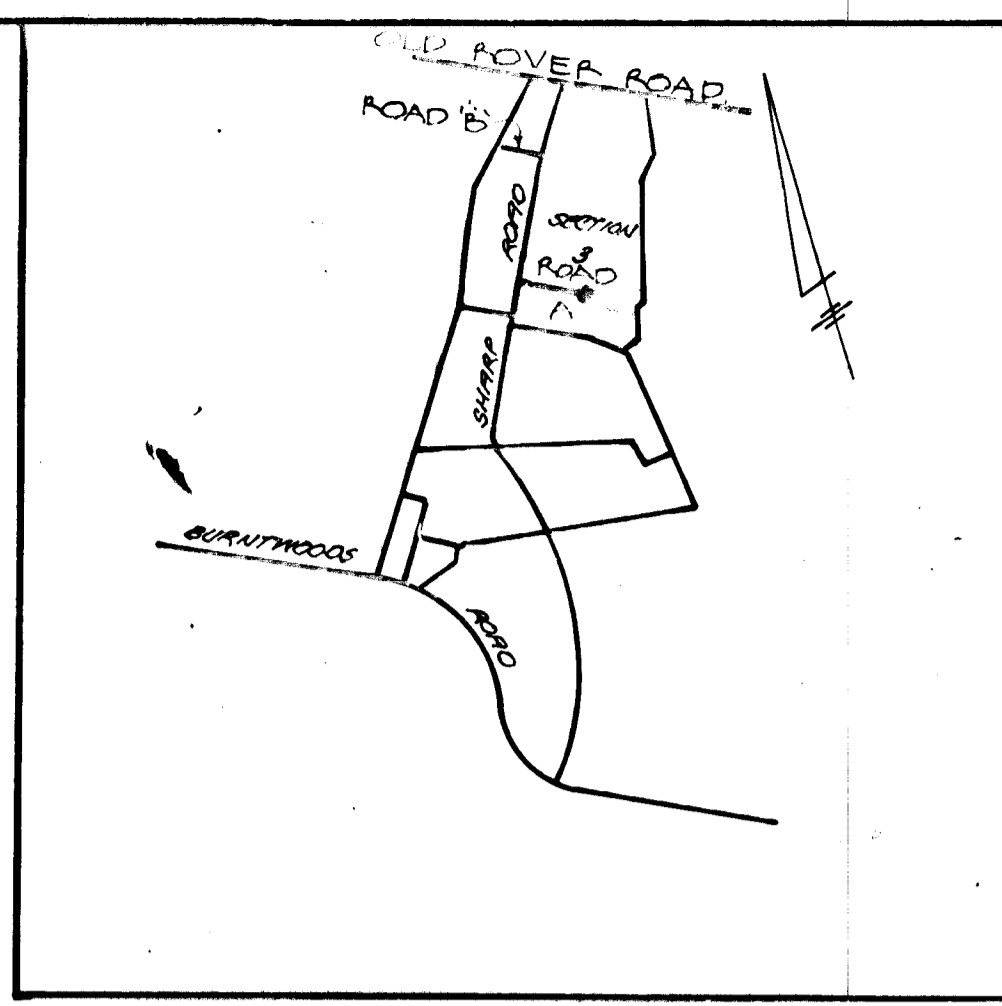




PERCOLATION TEST DATE	TEST DATE
LOT NO.	AVERAGE PERC. TIME IN MIN. FOR 2" INCH
EXISTING DWELLING	EXISTING DWELLING

THE LOTS SHOWN HEREON COMPLY WITH THE MIN. OWNERSHIP WIDTH & LOT AREA AS REQ. BY THE MARYLAND STATE DEPT. OF HEALTH REGULATIONS.

NOTE: ALL PERCOLATION TEST HOLES HAVE BEEN FIELD LOCATED.



APPROVED FOR PRIVATE WATER & PRIVATE SEWAGE SYSTEMS

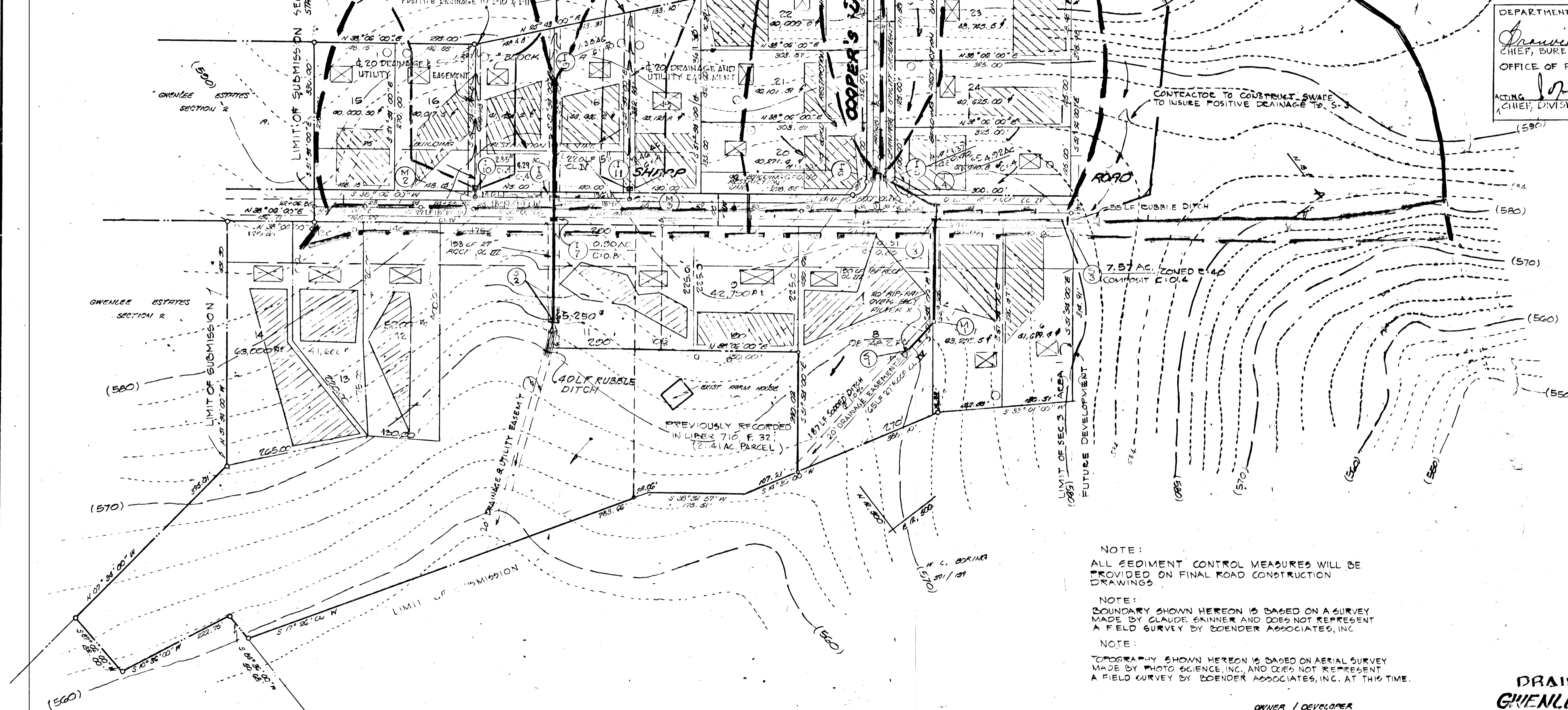
COUNTY HEALTH OFFICER \_\_\_\_\_ DATE \_\_\_\_\_

DEPARTMENT OF PUBLIC WORKS

*Frederick H. McLeod* 7/8/76  
CHIEF, BUREAU OF HIGHWAYS DATE

OFFICE OF PLANNING AND ZONING

*John C. Clow* 7/8/76  
ACTING CHIEF, DIVISION OF LAND DEVELOPMENT DATE



- GENERAL NOTES:
1. PRESENT BUILDING: R-10
  2. MINIMUM LOT SIZE: 40,000 SQ. FT.
  3. PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS TO BE UTILIZED.
  4. ALL LOTS COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF HEALTH REGULATIONS.
  5. TOTAL NO. OF LOTS: 24
  6. TOTAL AREA OF SITE: 7.57 AC.
  7. TOTAL AREA OF LOTS: 2.02 AC.
  8. TOTAL AREA OF A/R: 2.02 AC.

APPROVED

DIVISION OF LAND DEVELOPMENT

HOWARD COUNTY REGISTER

DATE: JULY 11, 1976



*John C. Clow*  
7/11/76

NOTE: ALL SEDIMENT CONTROL MEASURES WILL BE PROVIDED ON FINAL ROAD CONSTRUCTION DRAWINGS.

NOTE: BOUNDARY SHOWN HEREON IS BASED ON A SURVEY MADE BY CLAUDE SKINNER AND DOES NOT REPRESENT A FIELD SURVEY BY BOENDER ASSOCIATES, INC.

NOTE: TOPOGRAPHY SHOWN HEREON IS BASED ON AERIAL SURVEY MADE BY PHOTO SCIENCE, INC. AND DOES NOT REPRESENT A FIELD SURVEY BY BOENDER ASSOCIATES, INC. AT THIS TIME.

- LEGEND
- [Hatched Box] THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF APPROXIMATELY 40,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF HEALTH REGULATIONS. THIS AREA IS RESERVED FOR PUBLIC SEWAGE IS AVAILABLE AND SERVICES ARE PROVIDED. UTILITIES CONSTRUCTED ON THESE BUILDING SITES THIS EASEMENT SHALL BE MAINTAINED AND NOT BE CONNECTED TO A PUBLIC SEWAGE SYSTEM.
  - [Circle with X] PROPOSED WELL LOCATION.
  - [Square with X] PROPOSED HOUSE LOCATION.

OWNER / DEVELOPER

W.L. BORING

BURNWOODS ROAD

GLENWOOD, MARYLAND

**DRAINAGE AREA MAP**

**GWENLEE ESTATES**

SECTION 3, AREA 1

310 & 4TH ELECTION DISTRICT HOWARD COUNTY, MD.

DATE: OCTOBER, 1975 SCALE: 1" = 100'

ENGINEERING - PLANNING - SURVEYING

BOENDER ASSOCIATES, INC.

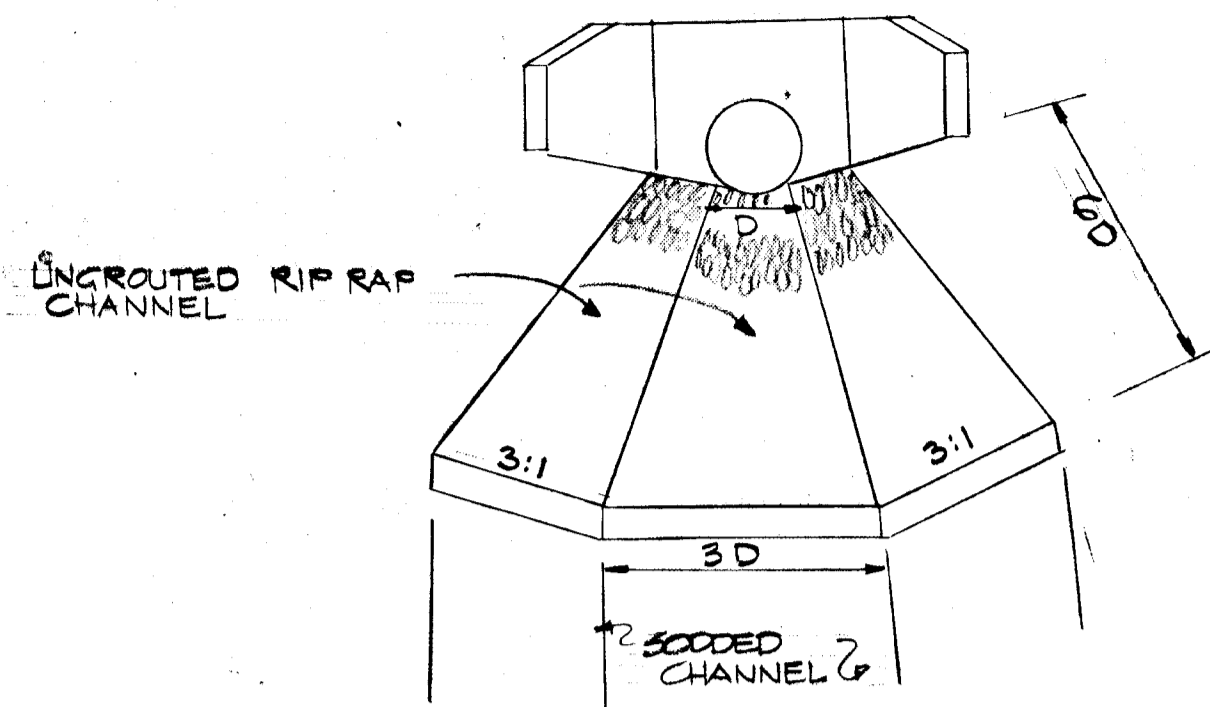
8722 TOWN & COUNTY RD.

BELLEVILLE CITY, MARYLAND

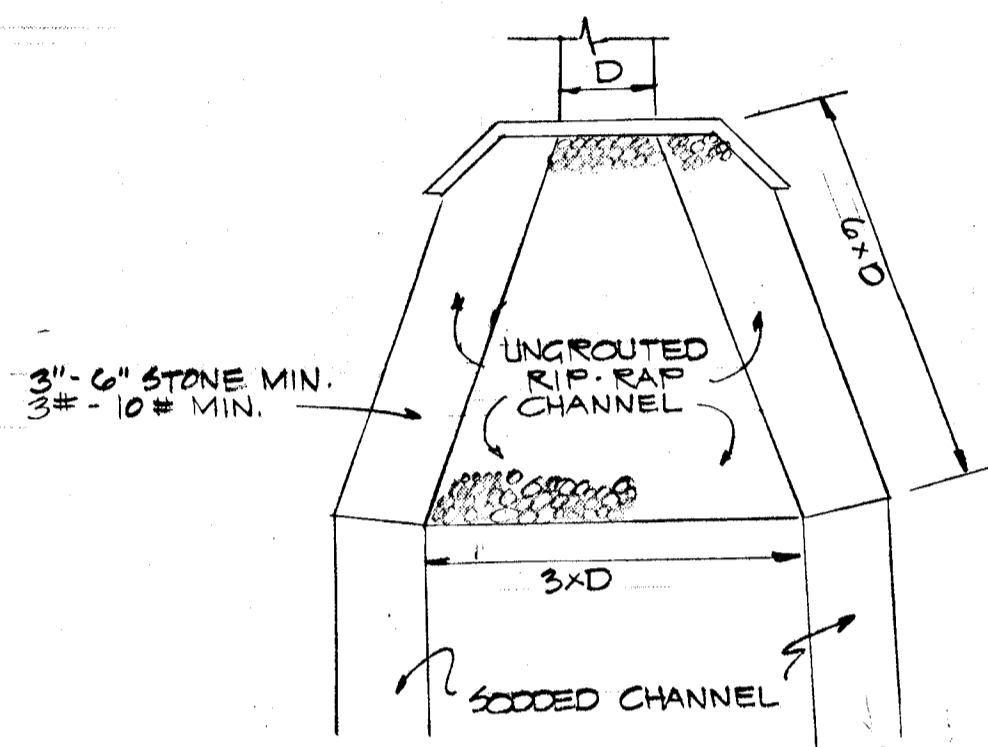


STRUCTURE SCHEDULE

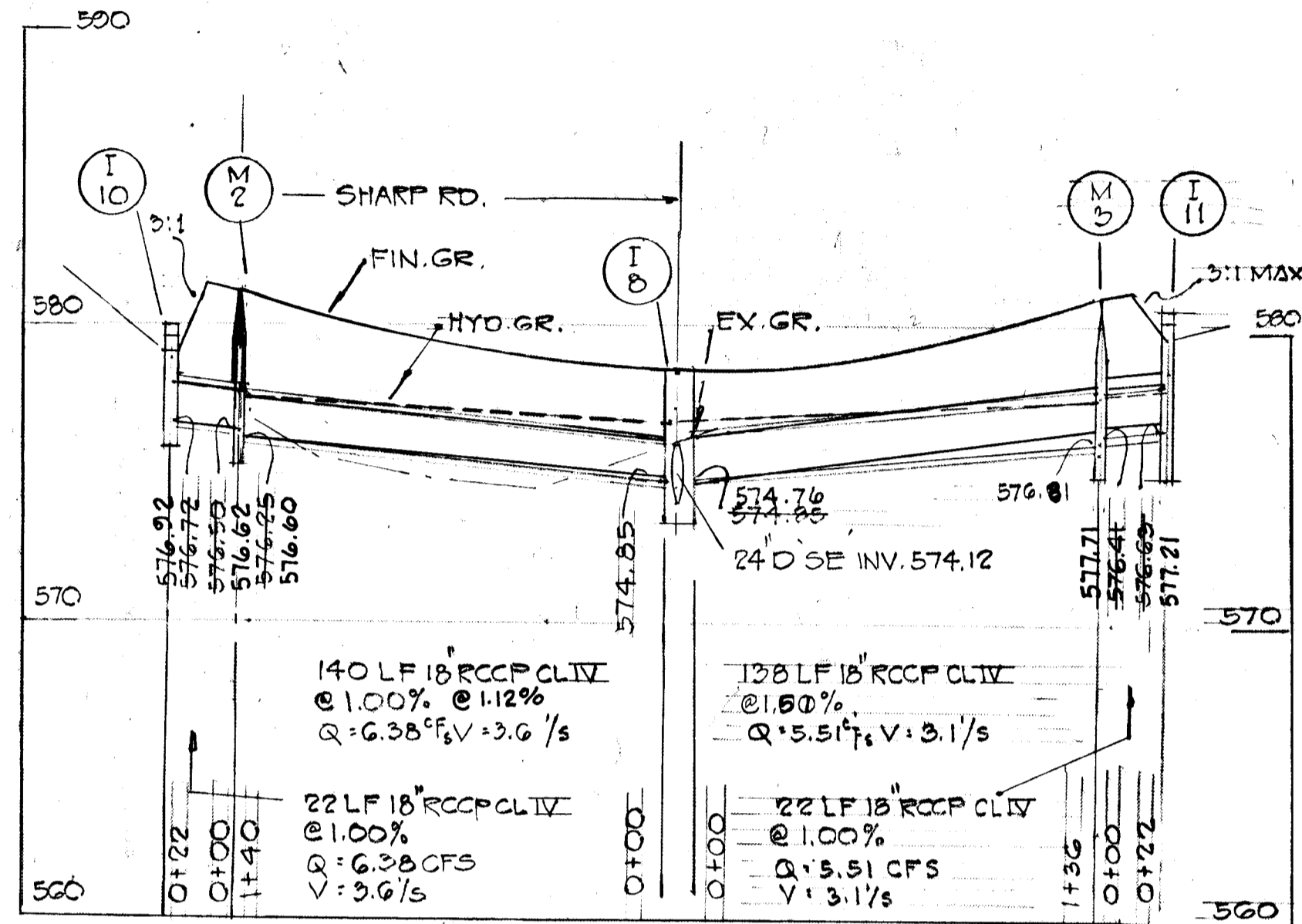
No.	TYPE	INV. IN	INV. OUT	TOP EL.	REMARKS
1-3	HO. CO. STD. A-5 INLET	571.82	569.74	576.64	HO. CO. STD. DETAILS DRWG. G4-A P. 119-A
1-4	HO. CO. STD. A-10 INLET	572.65	570.80	576.47	HO. CO. STD. DETAILS DRWG. G4-B P. 119-B
1-5	" " " " " " " " " " " "	573.83	571.80	576.29	HO. CO. STD. DETAILS DRWG. G4-A P. 119-A
1-6	" " " " " " " " " " " "	573.84	570.50	576.50	HO. CO. STD. DETAILS DRWG. G4-B P. 119-B
1-7	" " " " " " " " " " " "	573.82	570.82	576.58	HO. CO. STD. DETAILS DRWG. G4-B P. 119-B
1-8	HO. CO. STD. C TYPE	-	-	579.83	DRWG. G4-B P. 119-B
1-9	HO. CO. STD. C TYPE	-	-	579.83	DRWG. G4-B P. 119-B
1-10	HO. CO. STD. C TYPE	-	-	579.83	DRWG. G4-B P. 119-B
1-11	HO. CO. STD. TYPE C ENDWELL	567.54	568.48	573.73	HO. CO. STD. DETAILS DRWG. D. 103 P. 158
1-12	HO. CO. STD. TYPE C ENDWELL	568.30	568.30	571.95	HO. CO. STD. DETAILS DRWG. D. 103 P. 158
1-13	HO. CO. STD. TYPE C ENDWELL	567.51	567.51	571.05	HO. CO. STD. DETAILS DRWG. D. 103 P. 158
1-14	HO. CO. STD. TYPE C ENDWELL	572.36	-	-	HO. CO. STD. DETAILS DRWG. D. 103 P. 158
1-15	HO. CO. STD. C TYPE INLET	576.92	580.00	580.00	HO. CO. STD. DETAILS DRWG. G4-C P. 119-C
1-16	HO. CO. STD. MANHOLE	576.62	576.62	580.98	HO. CO. STD. DETAILS DRWG. 103 P. 158
1-17	HO. CO. STD. MANHOLE	576.81	576.81	580.00	HO. CO. STD. DETAILS DRWG. 103 P. 158
1-18	HO. CO. STD. C TYPE INLET	572.41	572.83	580.00	HO. CO. STD. DETAILS DRWG. G4-C P. 119-C



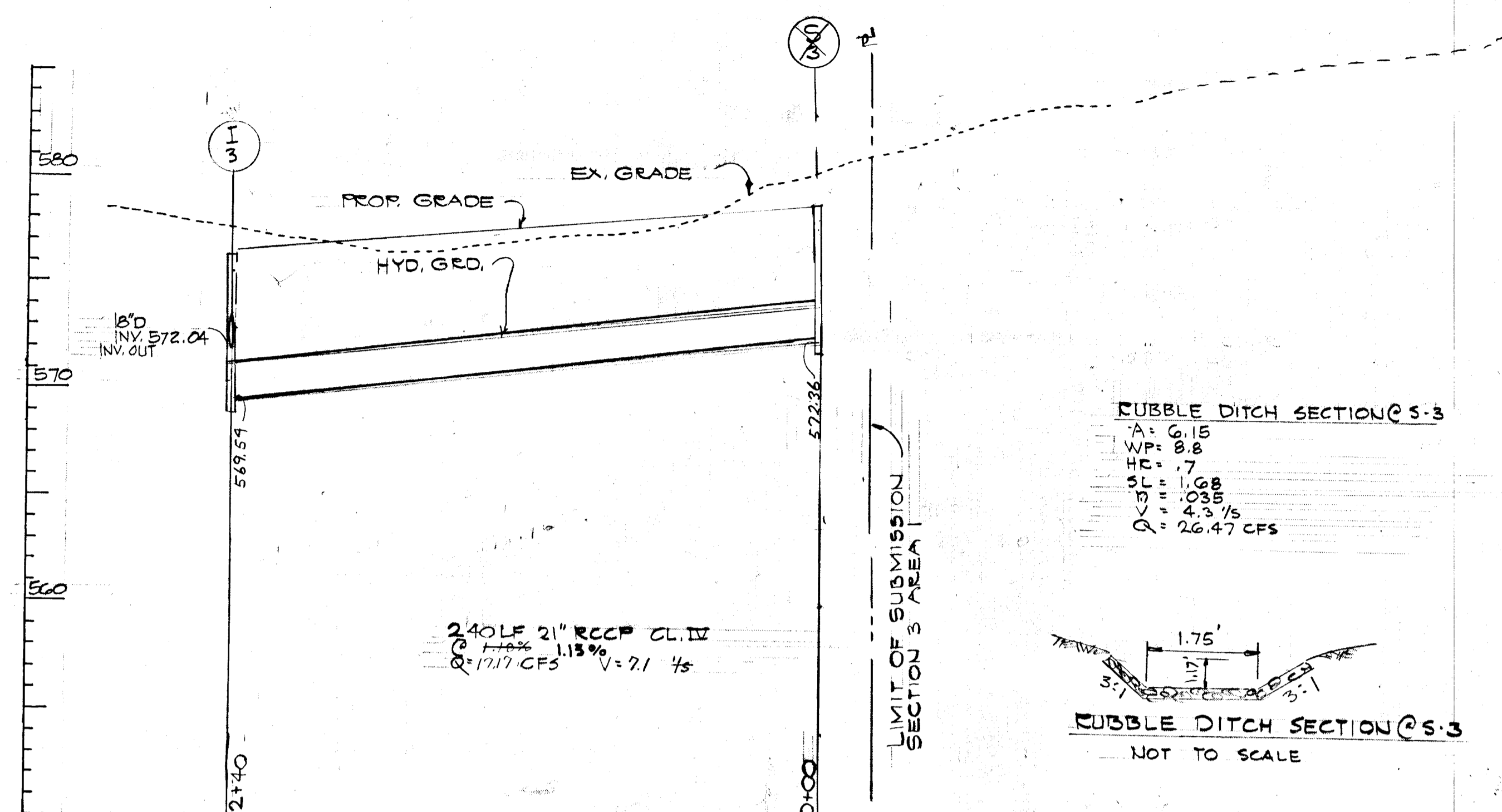
TYPICAL FRONT VIEW - RUBBLE OUTFALL  
NOT TO SCALE



TYPICAL PLAN VIEW - RUBBLE OUTFALL  
NOT TO SCALE



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



RUBBLE DITCH SECTION @ S-3

A = 6.15  
WP = 8.8  
HE = .7  
SL = 1.088  
V = 4.3 1/5  
Q = 26.47 CFS

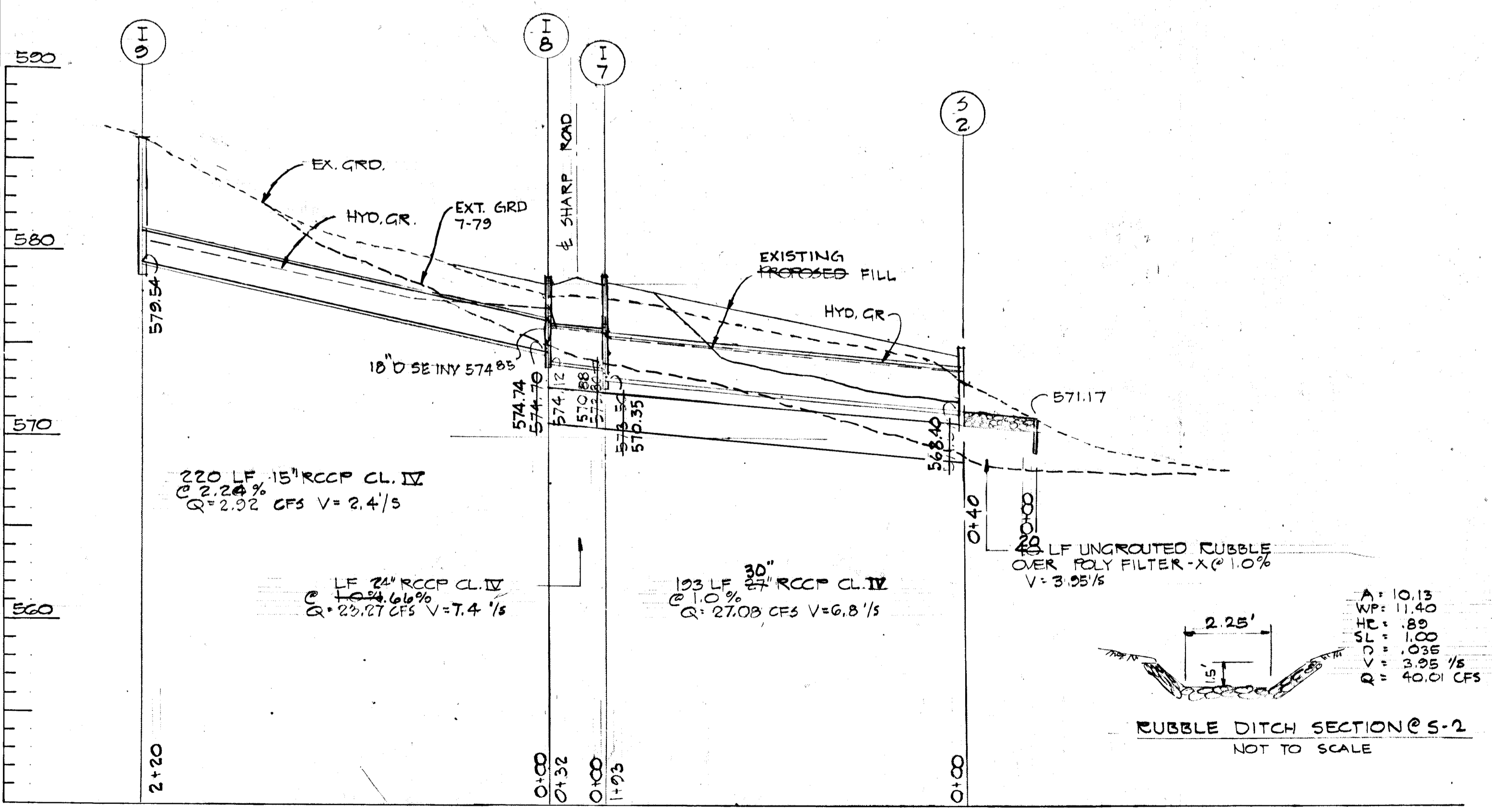
RUBBLE DITCH SECTION @ S-3  
NOT TO SCALE

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

OUTFALL	A	WP	HR	SL	n	V	Q	REQ.
3-1	1.0'	11.3%	0.72	1.0%	0.027	4.7	44.65	36.09

OUTFALL	A	WP	HR	SL	n	V	Q	REQ.
3-1	2.5'	11.3%	0.72	1.0%	0.027	4.7	44.65	36.09

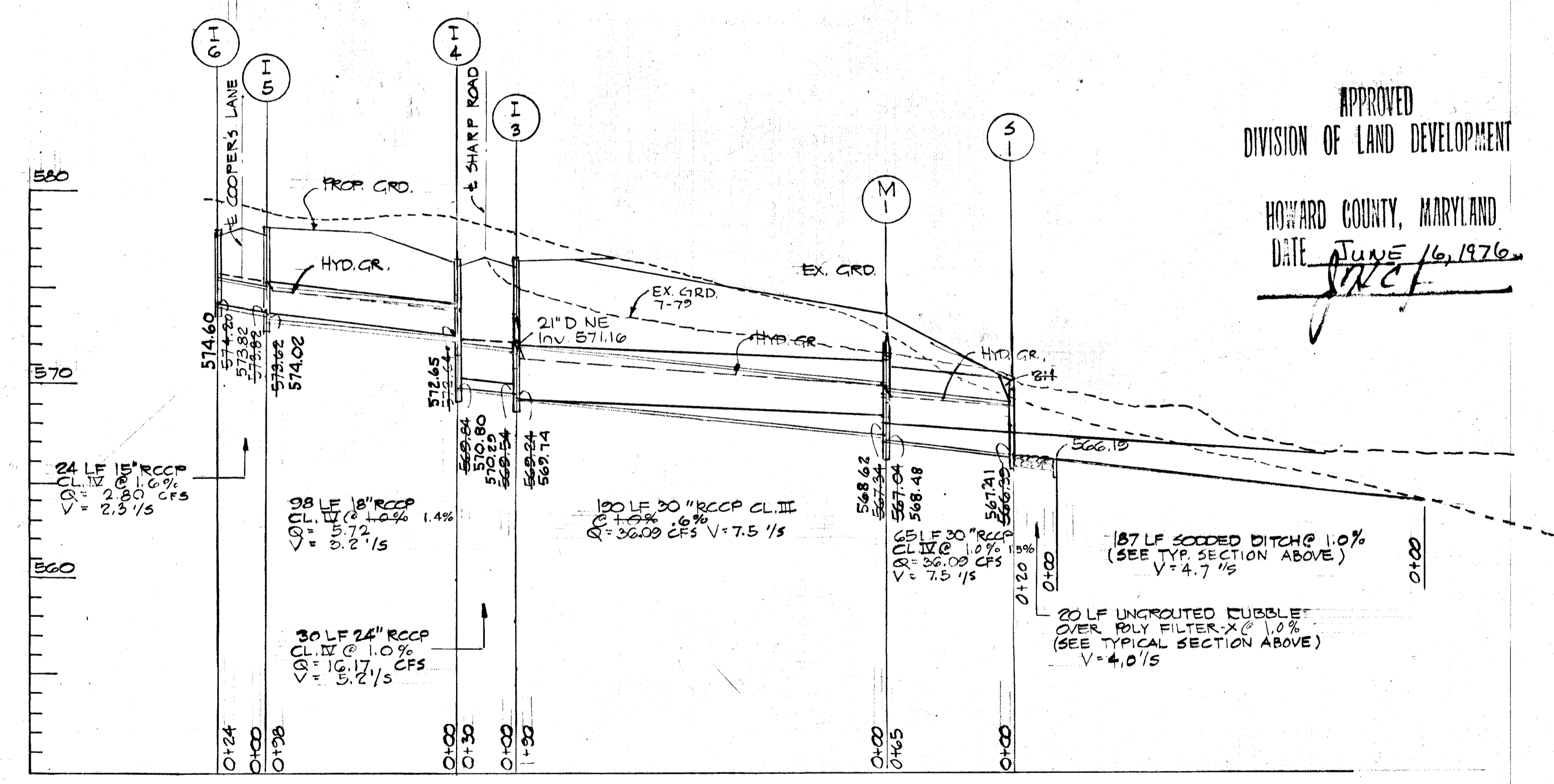
TYPICAL SECTION OF  
SCOOED DITCH  
NOT TO SCALE



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

RUBBLE DITCH SECTION @ S-2  
NOT TO SCALE

A = 10.13  
WP = 11.40  
HP = .89  
SL = 1.00  
V = 3.25 1/5  
Q = 40.01 CFS



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

APPROVED  
DIVISION OF LAND DEVELOPMENT  
HOWARD COUNTY, MARYLAND  
DATE JUNE 16, 1976  
STREET

DEPARTMENT OF PUBLIC WORKS  
Lawrence M. McLeod  
CHIEF BUREAU OF HIGHWAYS  
OFFICE OF PLANNING AND ZONING  
ACTING CHIEF, DIVISION OF LAND DEVELOPMENT

1/8/76  
DATE

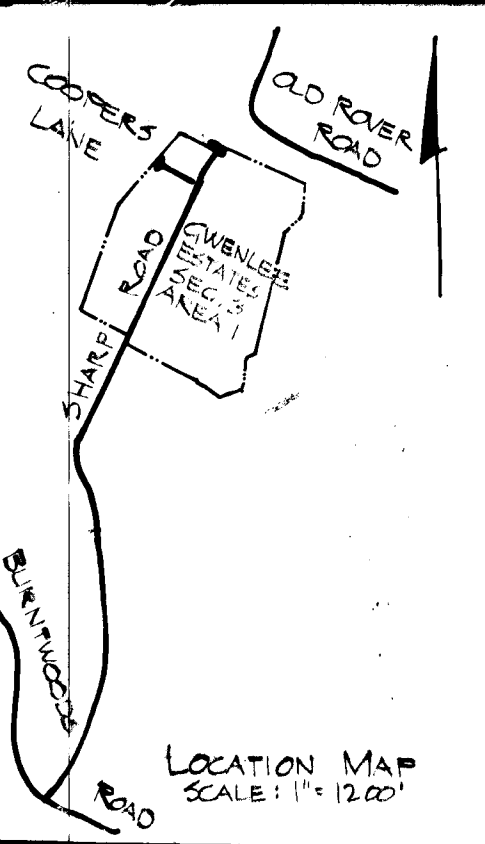
7/10/76  
DATE

Revised 4-8-80 as Per DRW. Comments 7-3-80

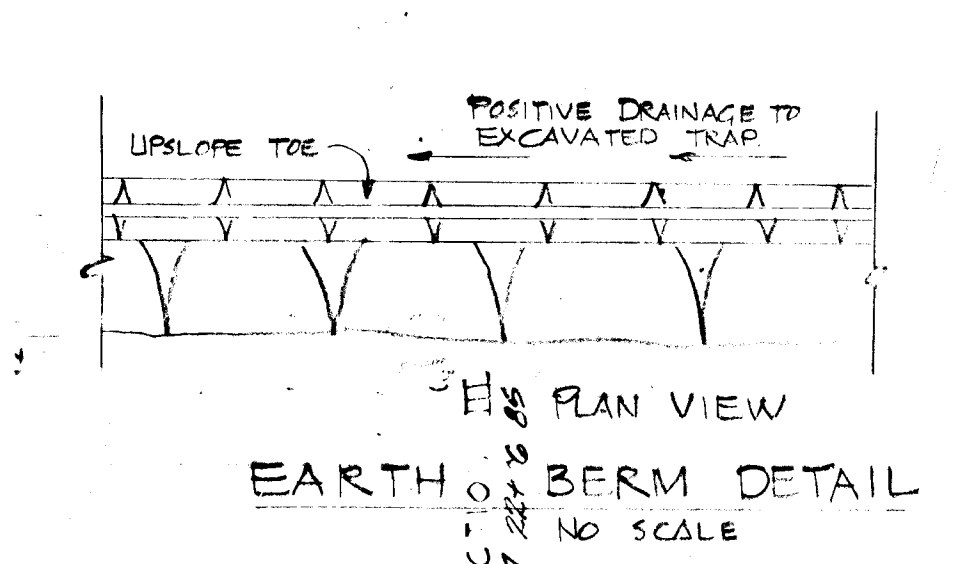
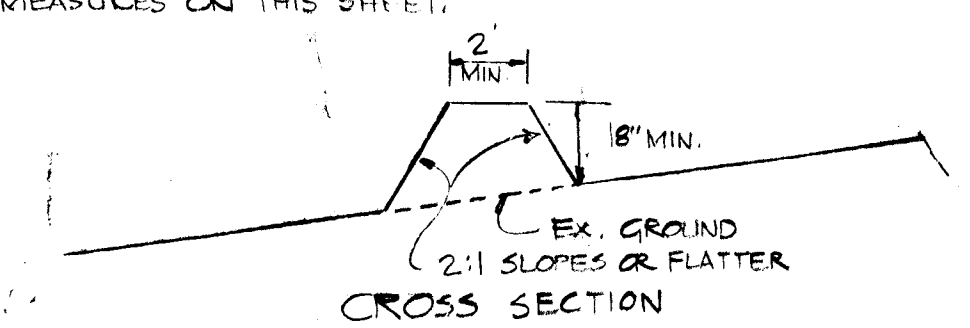
TITLE	
STORM DRAIN PROFILES	
PROJECT	SECTION 3 AREA 1 GWIENLEE ESTATES
LOCATION	3 & 4th ELECTION DISTRICT HOWARD CO., MD.
DATE	1/30/76
SCALE	AS SHOWN
NO.	7484
SHEET	5 OF 6







- CONSTRUCTION SEQUENCE:**
1. CONSTRUCT ALL APPROVED TEMPORARY SEDIMENT CONTROL DEVICES, SEDIMENT BASIN, BARREL, RISER, BERM, STONE ENTRANCES, TRAPS, ETC. AND STABILIZE USING APPROVED SEDIMENT CONTROL MEASURES AS SHOWN ON THIS SHEET.
  2. BEGIN R/W CLEARING AND GRADING.
  3. BEGIN STEEL MAIN CONSTRUCTION INCLUDING PROTECTIVE DEVICE AROUND INLETS.
  4. COMPLETE ROAD GRADING TO SUBGRADE.
  5. COMPLETE STORM DRAIN CONSTRUCTION.
  6. REMOVE STONE ENTRANCE & 1.5' TO FINISHED GRADE & INSTALL CURB.
  7. MOVE EXCAVATED TOP BACKFILL AND RISES AND STONE OUTLETS, AND ALL OTHER TEMPORARY SEDIMENT CONTROL DEVICES.
  8. STABILIZE ALL DISTURBED AREAS WITH APPROVED SEDIMENT CONTROL MEASURES ON THIS SHEET.



**SITE ANALYSIS**  
 PAVED AREA: 1.2 AC.  
 GREEN AREA: 36.1 AC.  
 TOTAL AREA: 37.3 AC.  
 AREA TO BE DISTURBED: 2.1 AC ±  
 AREA TO BE VEGETATED: 1.2 AC ±



**INTERCEPTOR DIKE DETAIL**  
 (610) NO SCALE

**EARTH BERM DETAIL**  
 NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

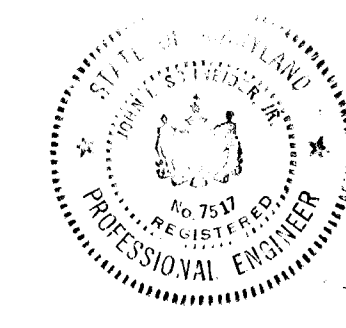
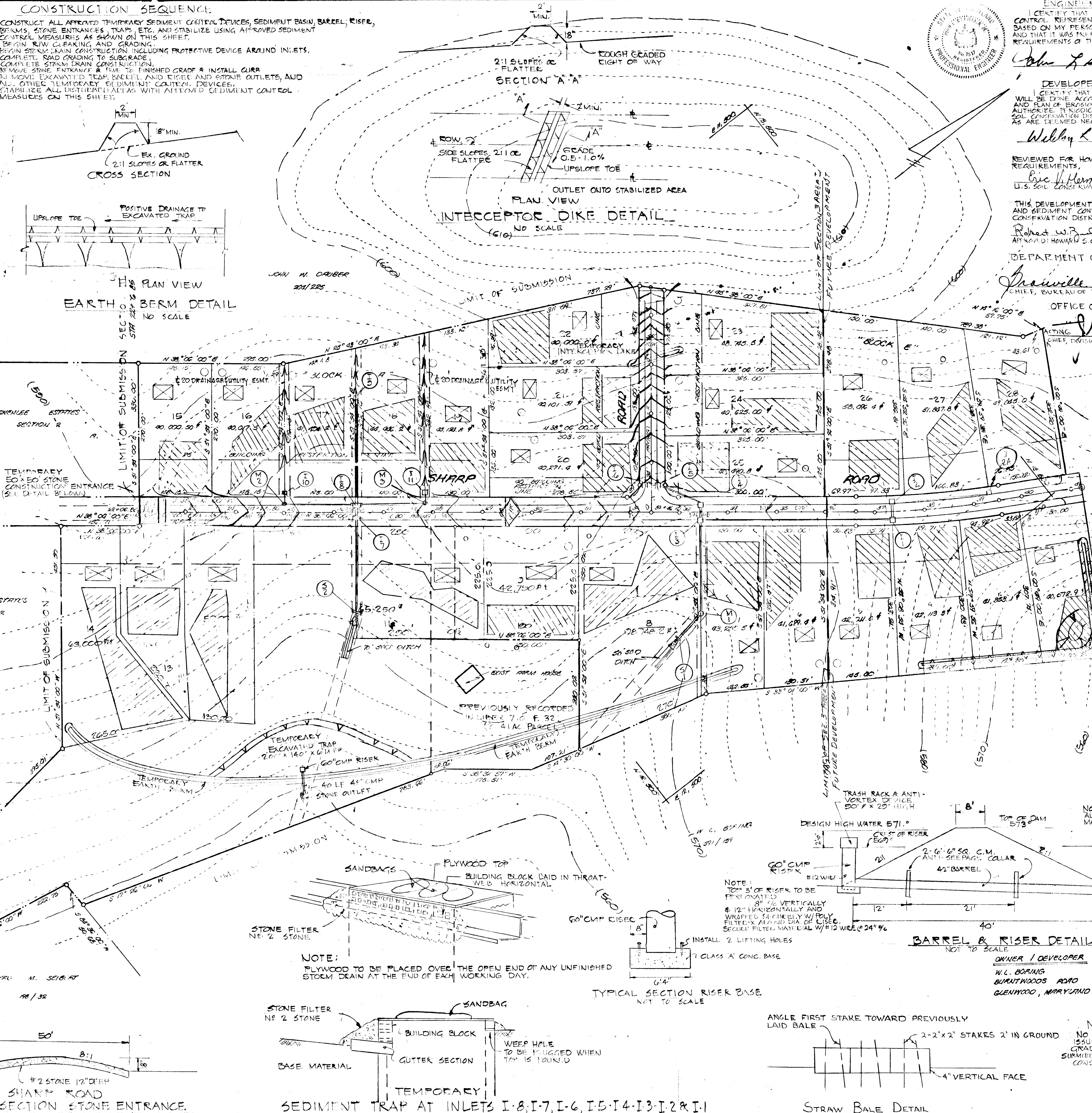
**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE

**TEMPORARY EXCAVATED TRAP**  
 (570) NO SCALE



**ENGINEER'S CERTIFICATION**  
 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 CONTROLLED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.  
 John Schneider 2-4-76 DATE

**DEVELOPER'S CERTIFICATION**  
 I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN OF EROSION AND SEDIMENT CONTROL AND I ALSO AUTHORIZE FIELD ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS AS ARE DEEMED NECESSARY.  
 Welby L. Boring 2-4-76 DATE

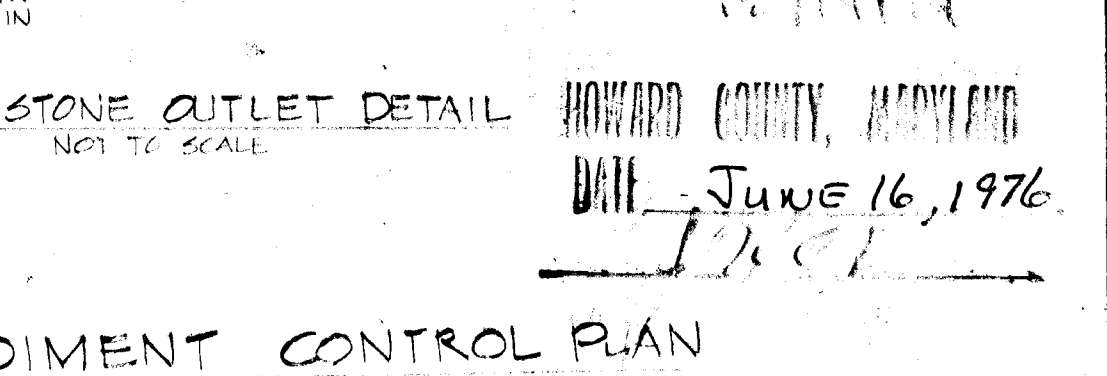
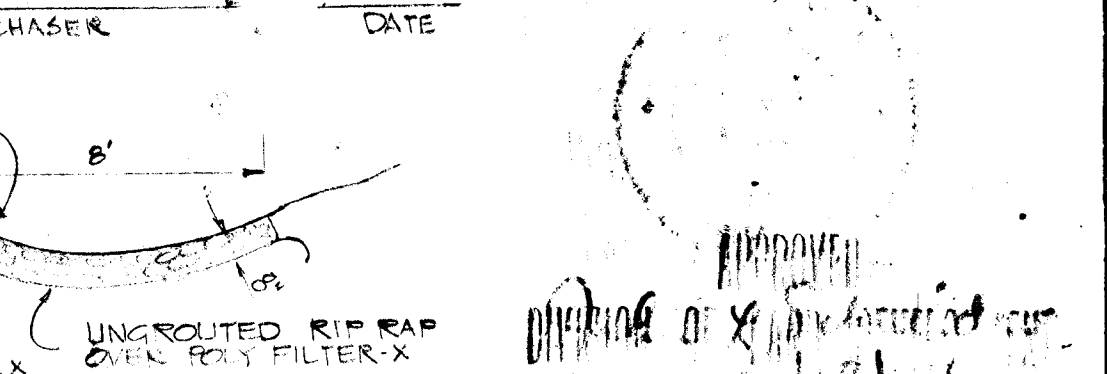
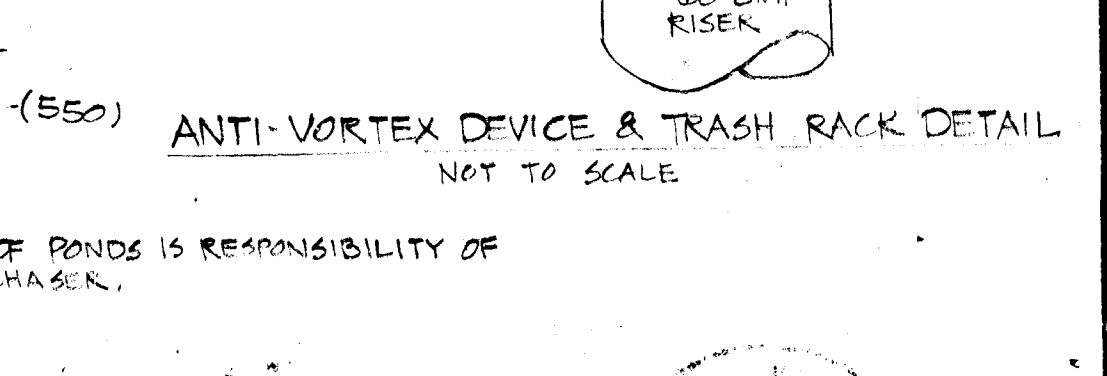
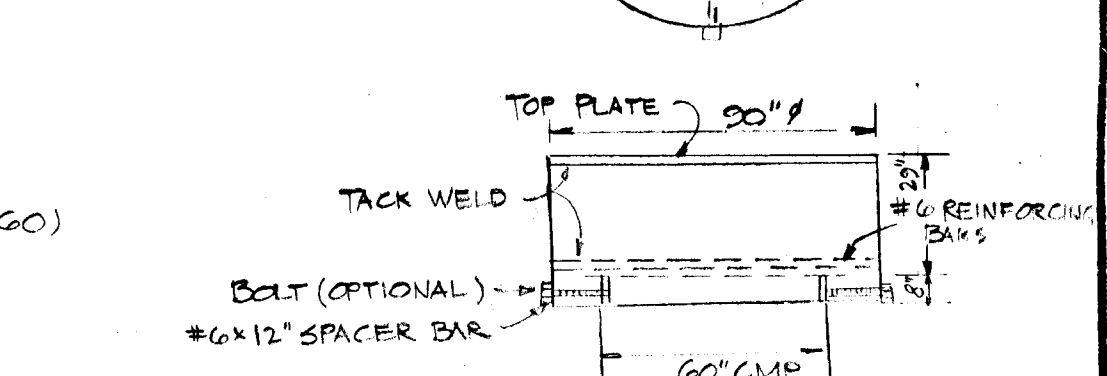
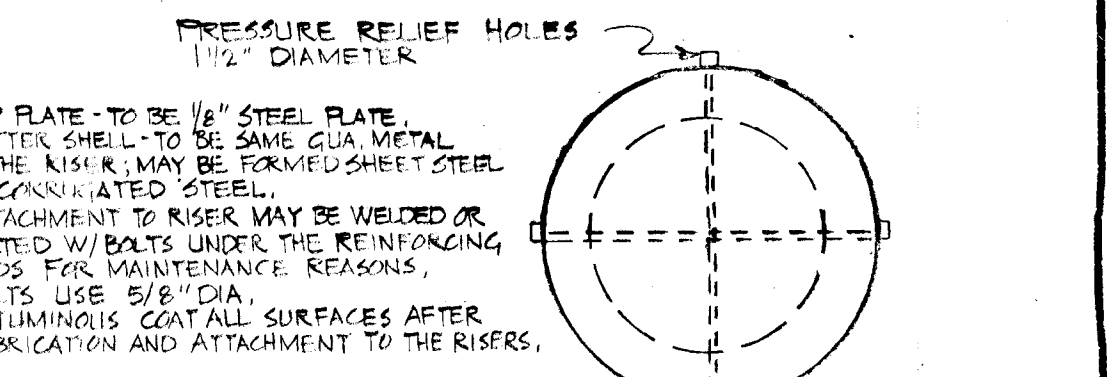
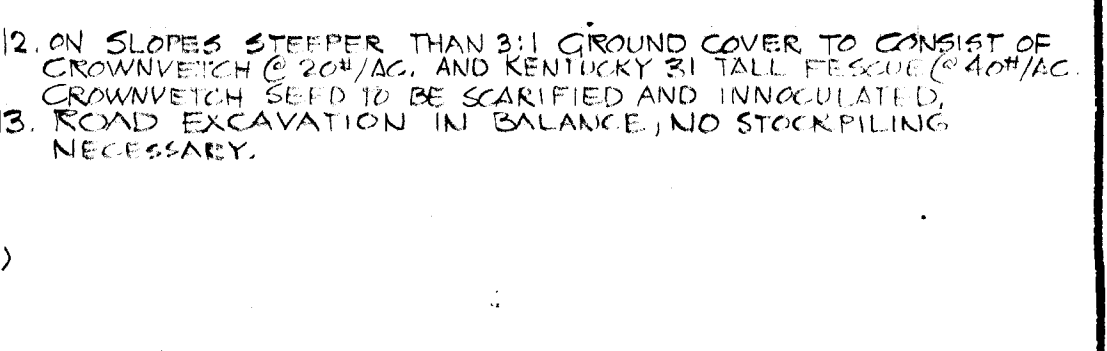
**REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.**  
 Eric V. Herman 7/76 DATE  
 U.S. SOIL CONSERVATION SERVICE

**APPROVED FOR HOWARD S.C.D.**  
 Robert W. B. 7/76 DATE

**DEPARTMENT OF PUBLIC WORKS**  
 Greenville McNeeland 7/8/76 DATE  
 CHIEF, BUREAU OF HIGHWAYS

**OFFICE OF PLANNING AND ZONING**  
 W.L. Boring 7/8/76 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT

- SEDIMENT CONTROL NOTES**
1. THE H.S.C.D. AND BUREAU OF LICENCE INSPECTION AND PERMITS WILL BE GIVEN 24 HRS. NOTICE TO ANY GRADING.
  2. ALL SEDIMENT CONTROL STRUCTURES SHOWN ON THIS PLAN UNLESS OTHERWISE SPECIFIED WILL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH NOTE #2 THROUGH #7 ANY GRADING OR EARTH DISTURBANCE ON THIS SITE.
  3. AS SOON AS ROUGH GRADING IS COMPLETED AREA TO BE PAVED WILL BE STABILIZED WITH SAGE MATERIAL.
  4. ALL CUT AND FILL SLOPES SHALL BE GRADUED TO A MINIMUM OF 2:1.
  5. FOLLOWING THE STABILIZATION OF ALL AREAS, UPRGRADE THE AREA OF THE SEDIMENT CONTROL. MEASURES MAY BE REMOVED AND GRADED TO THE FINAL GRADES PLANNED AND STABILIZED IMMEDIATELY.
  6. ELEVATIONS MARKED THIS (X) ARE FINISHED GRADES.
  7. IN THE EVENT OF EXCESSIVE MATERIAL THE WASTE WILL BE STOCKPILED WITH A MAXIMUM (2) 1/2' EASE OFF AREA WHICH HAS BEEN CLEARED ON THE SITE. STOCKPILED MATERIAL WILL BE STABILIZED IN ACCORDANCE WITH NOTE #2.
  8. SEDIMENT CONTROL MEASURES WILL NOT BE REMOVED UNTIL APPROVAL IS OBTAINED FROM THE H.S.C.D.
  9. TEMPORARY STABILIZATION:  
 APPLY: 2000 LBS./AC. OR 40 LBS./1000 SQ.FT. OF PULVERIZED OLIGOMITIC LIMESTONE.  
 500 LBS./AC. OR 10 LBS./1000 SQ.FT. OF 5-5 FERTILIZER PLANT TO RYE GRASS (40 LBS./AC. FERTILIZER WITH 10-10-10 AND MULCH WITH STRAW @ 1/2 TONS/ACRE.
  10. PERMANENT STABILIZATION:  
 APPLY: 2000 LBS./AC. OF PULVERIZED OLIGOMITIC LIMESTONE.  
 1000 LBS./AC. OF 0-20-0 SUPER PHOSPHATE.  
 1000 LBS./AC. OF 5-10-10 FERTILIZER.  
 SEED: 80 LBS./AC. OF KENTUCKY 31 TALL FESCUE.  
 25 LBS./AC. OF KENTUCKY BLUE GRASS.  
 25 LBS./AC. OF ANNUAL RYE GRASS.  
 NOTE: SEEDING MAY BE DONE BETWEEN MARCH 1 - MAY 1 OR AUGUST 1 - OCTOBER 1 ONLY.  
 MULCH: 2 TONS/AC. OF UNWEATHERED WHEATSTRAW, THE MULCH DOWN W/ 480 GAL/AC. OF LIQUID ASPHALT.
  11. SOYBEANS SHALL BE WELL ROOTED KENTUCKY BLUE GRASS SO CONTAINING NOT MORE THAN 30% OF GRASSES NATIVE TO HOWARD CO. MD. AREA, AND NOT MORE THAN 5% OF OTHER. IT MUST BE OF AN APPROPRIATE HEIGHT (3-4 INCHES) UNDER VISIBLE GROWTH. THE SOYBEANS SHALL BE CUT IN STRIPS NOT MORE THAN 1 INCHES WIDE, BY NOT MORE THAN 6 INCHES LONG, AND SHALL BE UNIFORMLY 2 INCHES THICK. AFTER CUTTING THE SOYBEANS SHALL BE IMMEDIATELY ROLLED WITH THE GRASS INSIDE AND SHALL BE KEPT MOISTENED TO PREVENT DRYING.  
 SOYBEANS SHALL BE LAID WITH CLOSE TIGHT JOINTS ON A SMOOTH BED OF TOPSOIL. THE SOYBEANS SHALL BE ROLLED WITH A ROLLER WEIGHING 20-100 LBS. PER FT. OF ROLLER WIDTH, AND LEVELLED UP WITH SCAFFOLDING TO PREVENT VOIDS. AFTER THE SOYBEANS HAVE BEEN LAID AND ROLLED, IT SHALL BE ROLLED AND THOROUGHLY WATERED.
  12. ON SLOPES STEEPER THAN 2:1 GROUND COVER TO CONSIST OF OF KENTUCKY BLUE GRASS AND KENTUCKY 31 TALL FESCUE. SOYBEANS CRAWLED AND SEED TO BE SCAFFOLDING AND IMMEDIATELY ROLLED.
  13. ROAD EXCAVATION IN BALANCE, NO STOCKPILING NECESSARY.



**SEDIMENT CONTROL PLAN**  
**GHENLEE ESTATES**  
 SECTION 3 AREA 1  
 310 & 4TH ELECTION DISTRICT  
 DATE: OCTOBER 1974  
 HOWARD COUNTY, MD.  
 SCALE: 1" = 100'

**NOTE:**  
 NO BUILDING PERMITS FOR LOTS TO BE ISSUED UNTIL SUCH TIME AS A MASTER GRADING AND SEDIMENT CONTROL PLAN IS SUBMITTED AND APPROVED BY HOWARD SOIL CONSERVATION SERVICE.

**ENGINEERING - PLANNING - SURVEYING**  
 BOENDER ASSOCIATES, INC.  
 8724 JOHN F. COUNTRY, RD.  
 BILLYDOTT CITY, MARYLAND