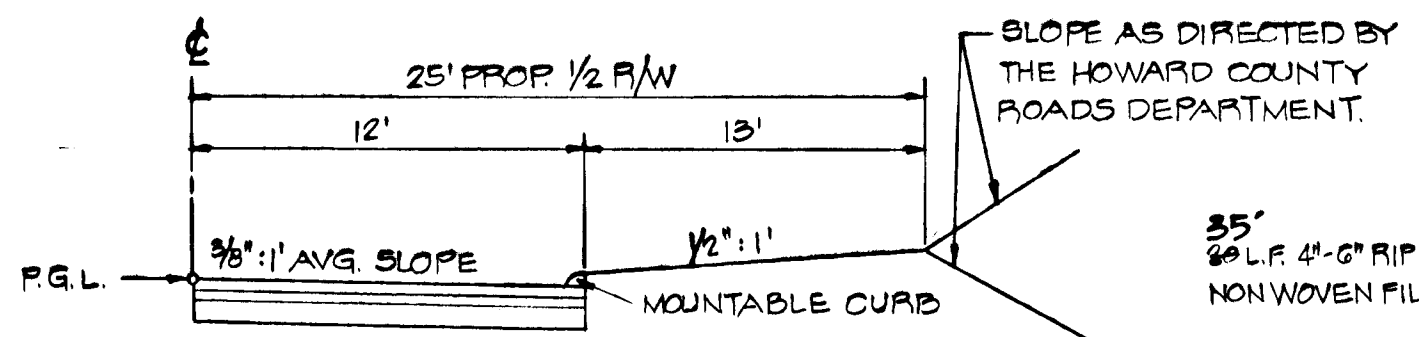
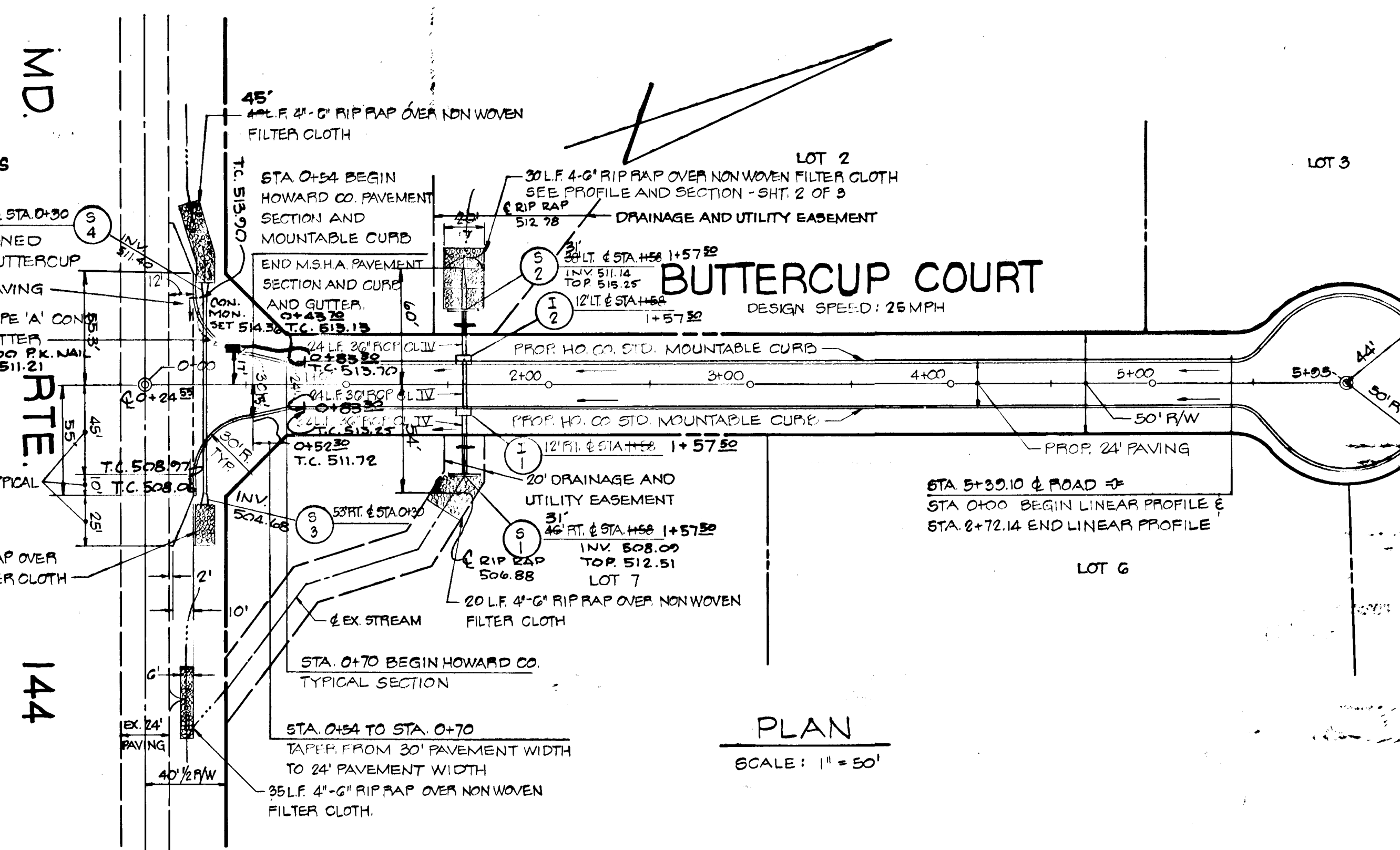


**MARYLAND ROUTE 144**  
 MINOR ARTERIAL (SECONDARY)  
 DESIGN SPEED: 40 M.P.H.  
 ZONED: R  
 NOT TO SCALE  
 (HO. CO. DRAWG. D-15, PG. 7)  
**PROPOSED WIDENING**

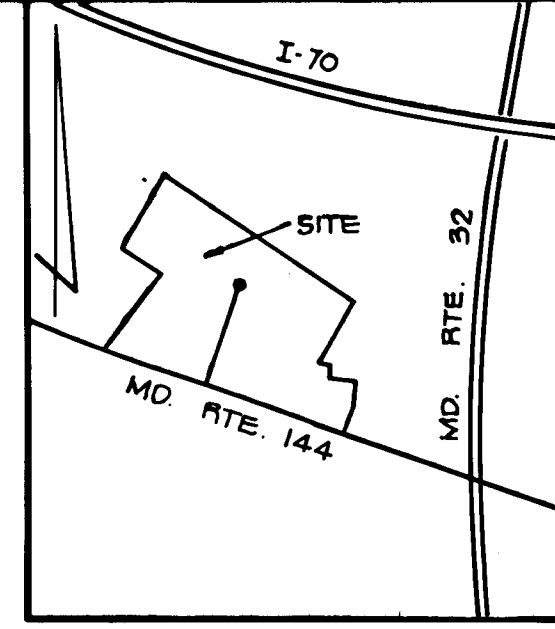


**BUTTERCUP COURT**  
 TYPICAL HALF SECTION  
 DESIGN SPEED: 25 M.P.H.  
 ZONED: R  
 NOT TO SCALE  
 (HO. CO. DRAWG. D-16, PG. 7)

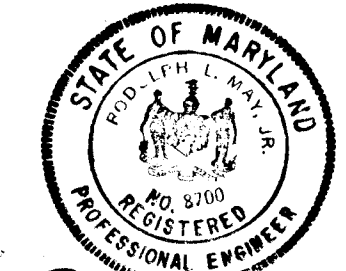


**PLAN**  
 SCALE: 1" = 50'

**NOTE:**  
 ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND STANDARD SPECIFICATIONS.



**VICINITY MAP**  
 SCALE: 1" = 1200'



Robert May Jr.  
 9-26-78

TAX MAP 15 PARCEL G7

**OWNER & DEVELOPER**  
 CHESTER E. AND COLORES E. GRIMES  
 12700 FREDERICK ROAD  
 WEST FRIENDSHIP, MD. 21704

APPROVED: DEPARTMENT OF PUBLIC WORKS.  
*W. J. ...* 11-22-78  
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING AND ZONING.  
*Ann W. ...* 11-19-78  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

**TITLE** ROAD CONSTRUCTION PLAN-BUTTERCUP COURT

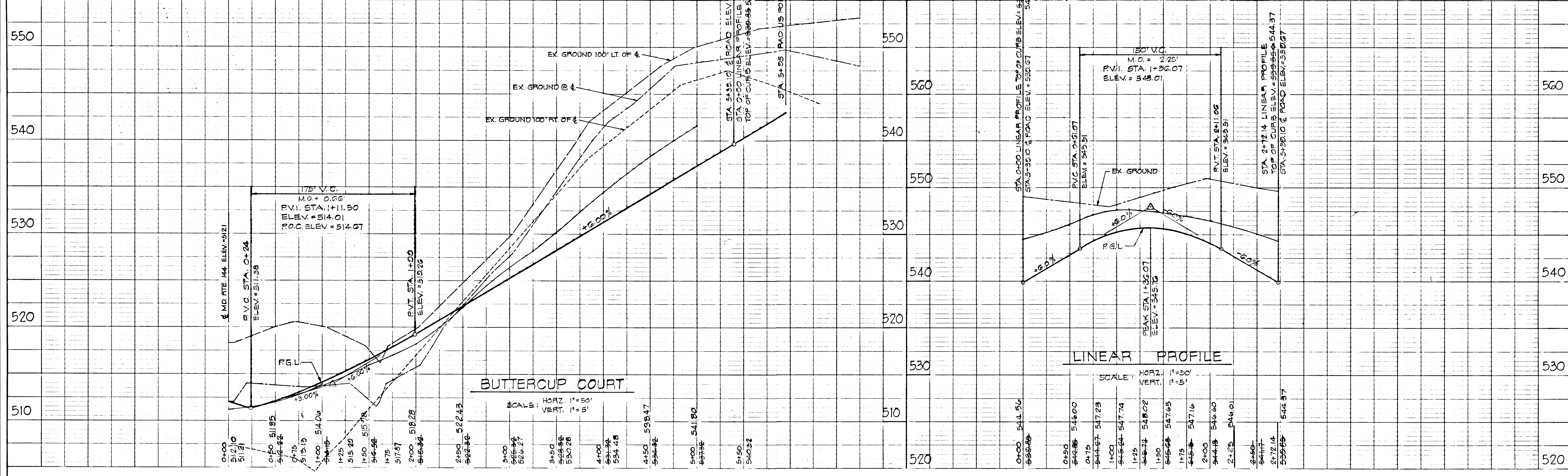
**PROJECT** BUTTERCUP ESTATES

**LOCATION** 3RD ELECTION DISTRICT HOWARD COUNTY, MD

**DATE** SEPTEMBER, 1978 **DESIGN BY:** **DRAWN BY:** J.J.B. **CHECKED BY:** P.L.M.

**SCALE:** 1" = 50' **JOB NO.:** 77229 **DRAWING NO.:** 1 OF 3

**boender associates** engineers, surveyors, planners  
 BALTIMORE 301-465-7777 • SALISBURY 301-749-1285



**LINEAR PROFILE**

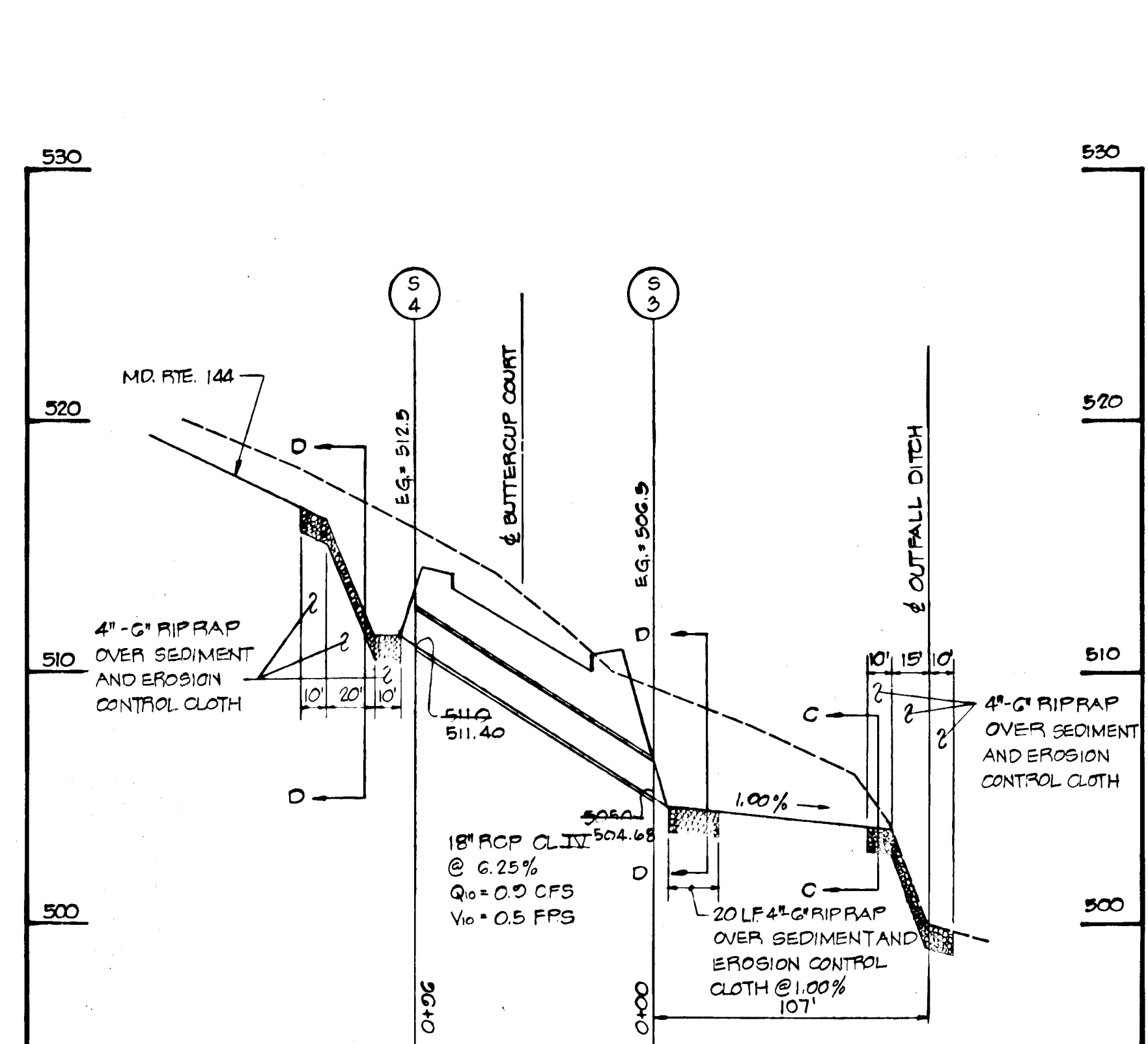
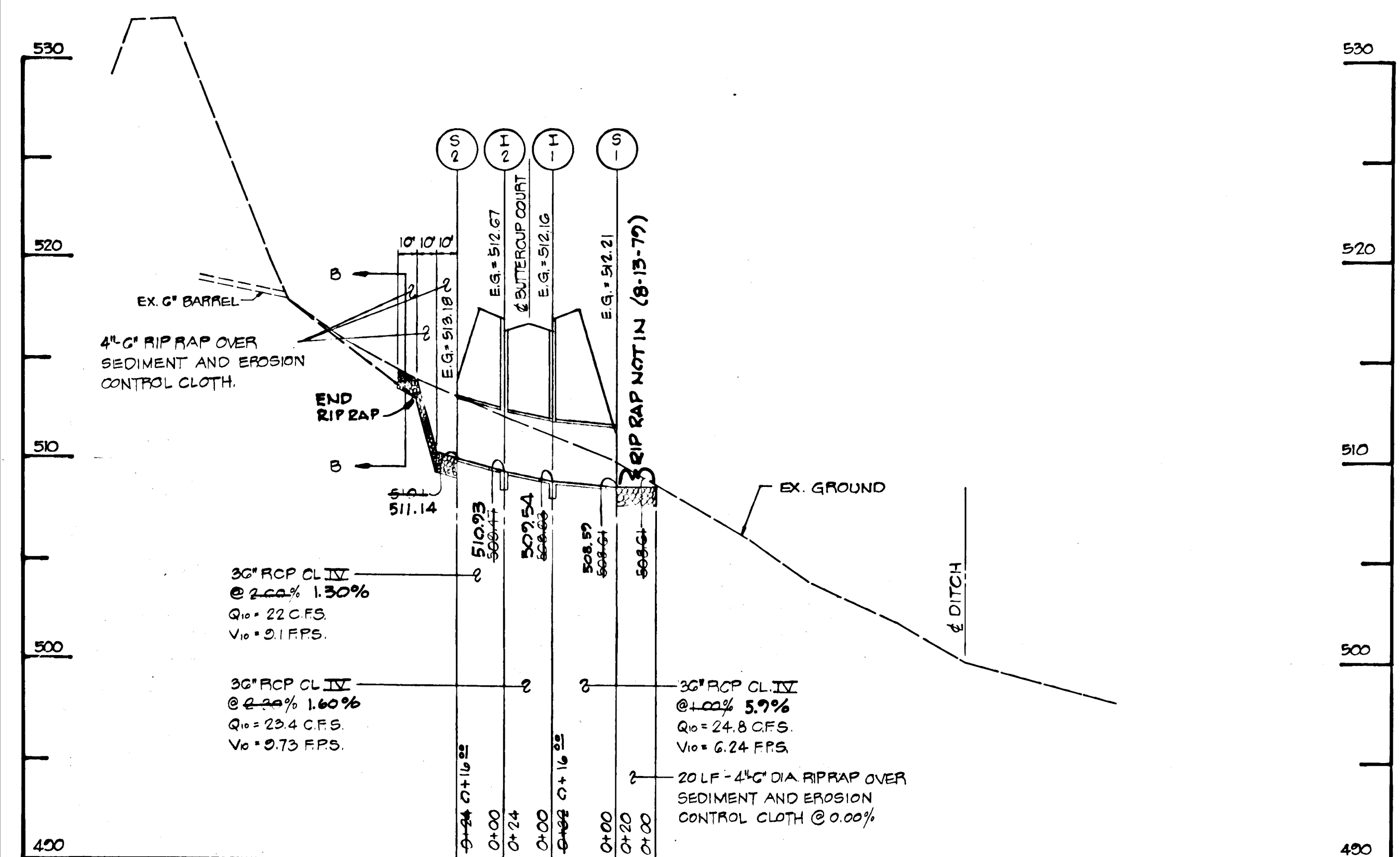
SCALE: HORIZ. 1" = 50' VERT. 1" = 5'

STATION	ELEVATION
0+00	512.10
0+10	511.85
0+20	511.25
0+30	510.75
0+40	510.25
0+50	509.75
1+00	514.06
1+25	517.16
1+50	520.26
1+75	523.36
2+00	526.46
2+25	529.56
2+50	532.66
2+75	535.76
3+00	538.86
3+25	541.96
3+50	545.06
3+75	548.16
4+00	551.26
4+25	554.36
4+50	557.46
4+75	560.56
5+00	563.66

PLAN  
 SURVEYED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

PROFILE  
 SURVEYED: \_\_\_\_\_  
 CHECKED: \_\_\_\_\_  
 DATE: \_\_\_\_\_

STRUCTURE SCHEDULE				
NO.	DESCRIPTION	INVERT ELEV.	TOP ELEV.	REMARKS
S-1	STD. 'C' WALL	508.61	512.51	HO. CO. STD. D-52, PG. 107
I-1	STD. A-B W/ DEFLECTORS	509.54	510.50	CO. STD. D-64A, PG. 110A
I-2	STD. A-B W/ DEFLECTORS	510.93	510.50	CO. STD. D-64A, PG. 110A
S-2	STD. 'C' WALL	511.14	514.05	CO. STD. D-52, PG. 107
S-3	STD. FLARED END SECTION	511.00	514.00	M.S.H.A. STD. 368.01 OR 368.02
S-4	STD. FLARED END SECTION	511.17	514.00	M.S.H.A. STD. 368.01 OR 368.02

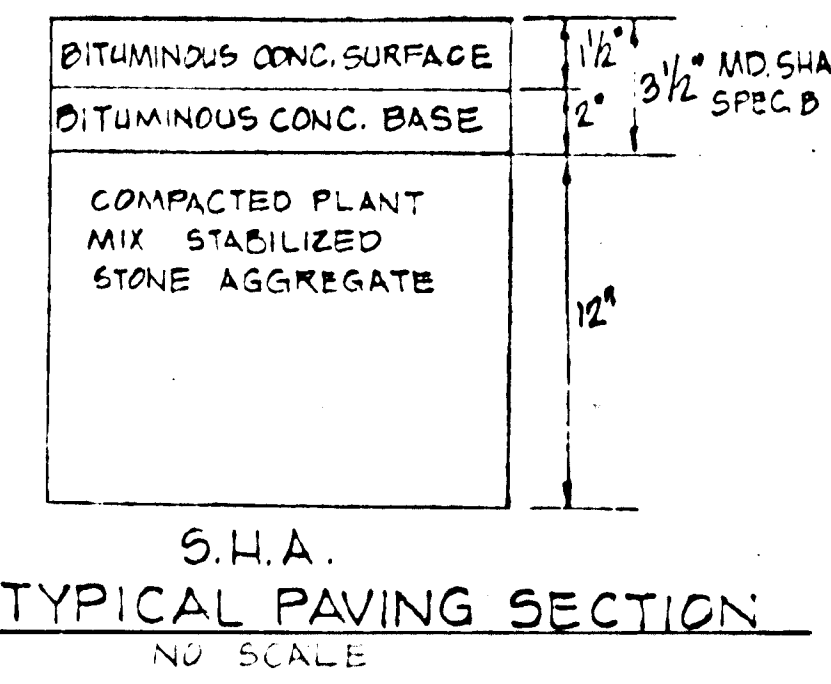
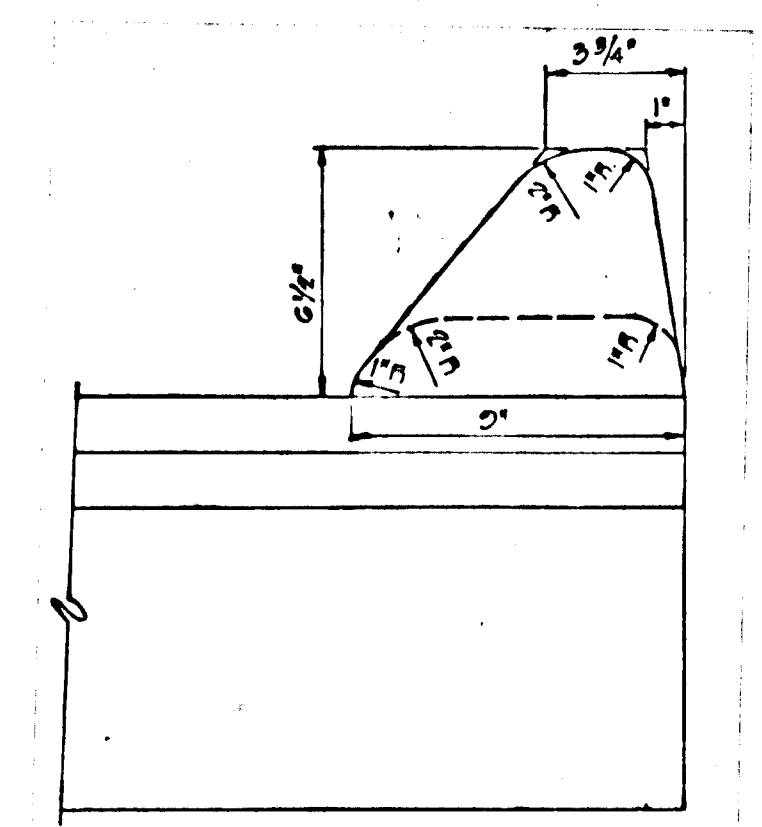
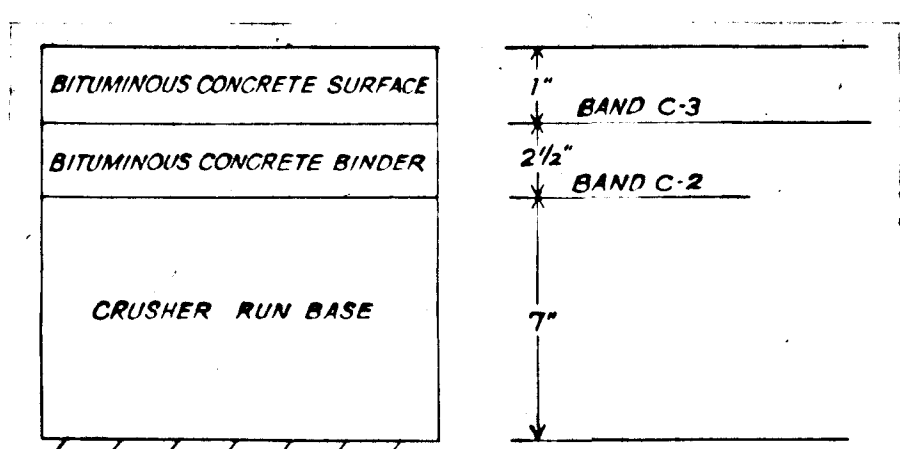
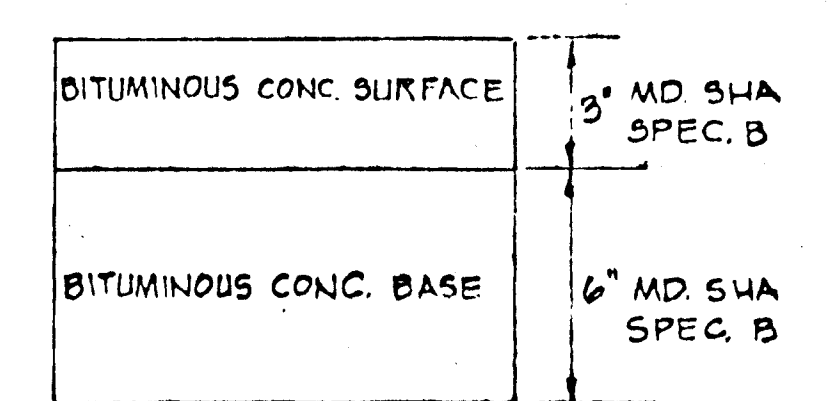
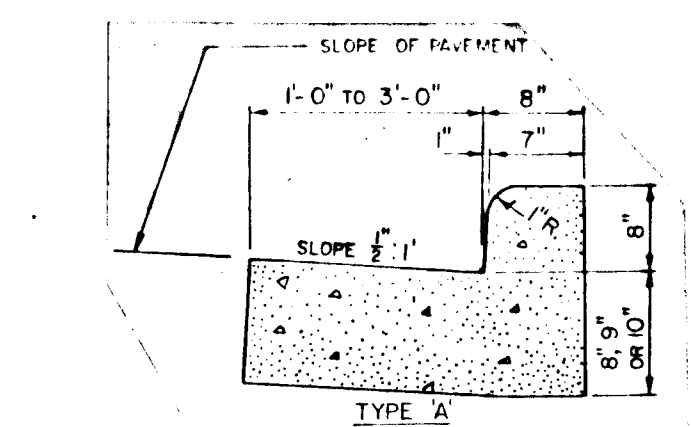
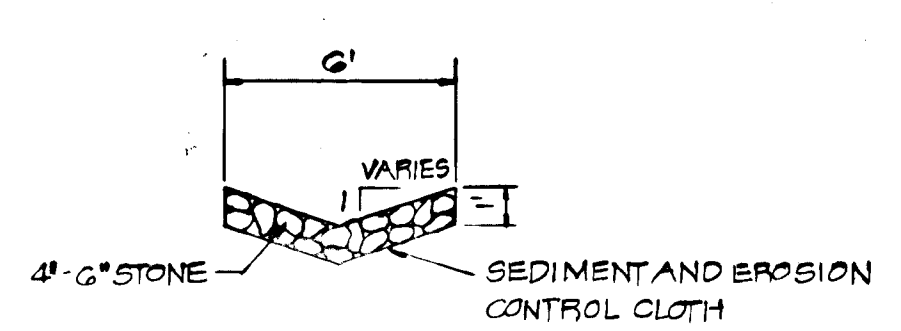
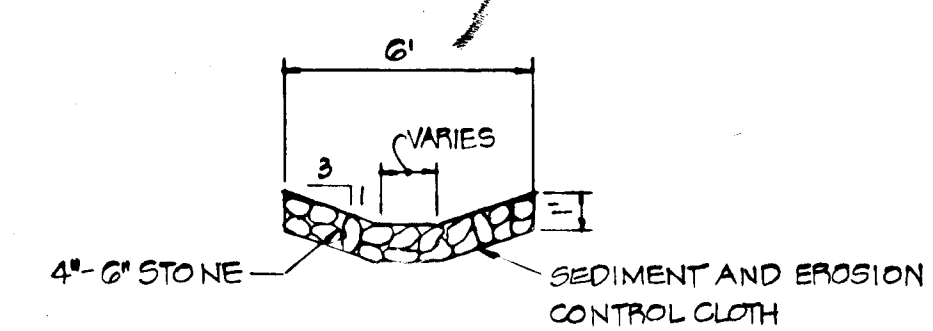
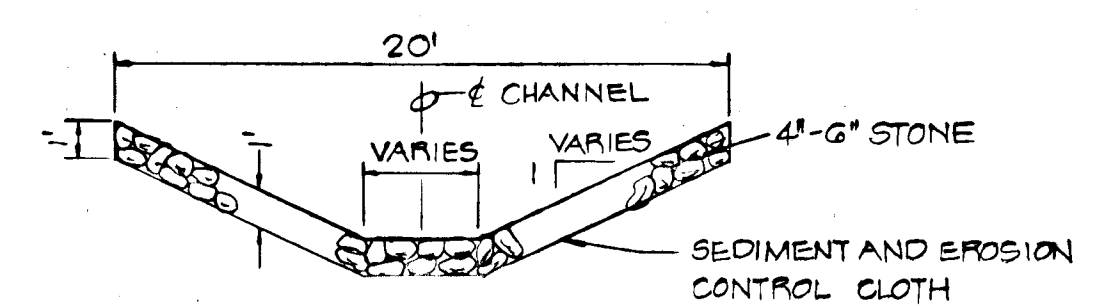


REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS.

*C. Wayne Ray* 11-20-78  
U.S. SOIL CONSERVATION SERVICE DATE

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

*Robert W. Ziehm* 11-20-78  
HOWARD SOIL CONSERVATION DISTRICT DATE



CLEARING AND GRADING: ARTICLE C-1  
SURGRADE: ARTICLE C-2  
BASE COURSE: ARTICLE C-25  
BINDER COURSE: ARTICLE C-31 or C-33  
SURFACE COURSE: ARTICLE C-31

TO BE CONSTRUCTED IN ACCORDANCE WITH THE HOWARD COUNTY ROAD CONSTRUCTION CODE AND SPECIFICATIONS

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

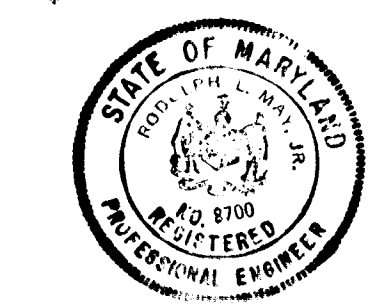
HO. CO. STD. DRAWG. D-4, PG. 30

APPROVED DEPARTMENT OF PUBLIC WORKS

*W. J. Ebert* 11-22-78  
CHIEF, BUREAU OF ENGINEERING DATE

APPROVED OFFICE OF PLANNING AND ZONING

*John W. Mumford* 11-19-78  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



*Robert May Jr.* 11-26-78  
OWNER & DEVELOPER  
CHESTER E. AND DOLORES E. GRIMES  
12700 FREDERICK ROAD  
WEST FRIENDSHIP, MD. 21704

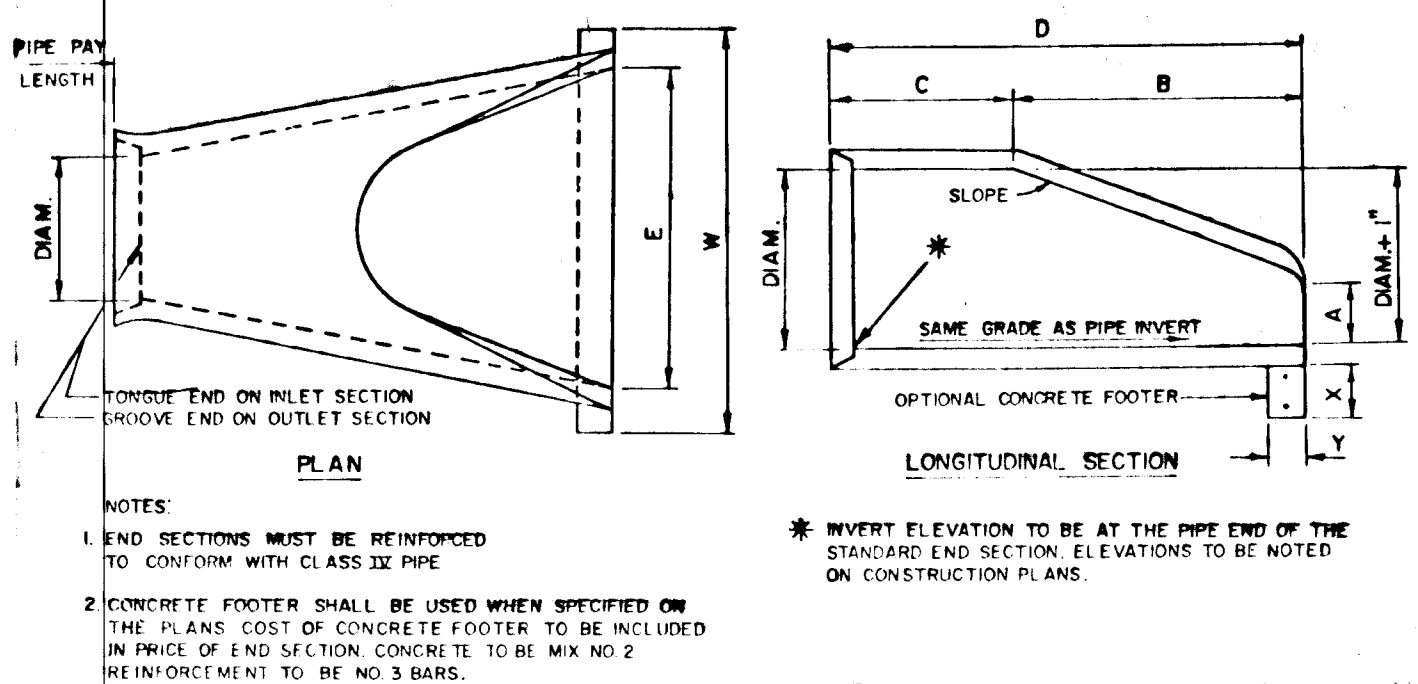


TABLE OF DIMENSIONS									
CONCRETE END SECTION					CONCRETE FOOTER				
DIAM.	SLOPE	A	B	C	D	E	W	X	Y
8"	3:1	10 1/4"	2'-2"	4'-0"	6'-2"	3'-0"	4'-0"	12"	3"

CONCRETE END SECTION  
M.S.H.A. STANDARD NO. 368.01

STORM DRAIN PROFILES, SECTIONS & DETAILS			
PROJECT BUTTERCUP ESTATES			
LOCATION	3RD ELECTION DISTRICT	HOWARD CO., MD.	
DATE	SEPT., 1978	DESIGN BY:	R.L.M.
SCALE:	AS SHOWN	DRAWN BY:	J.J.B.
		CHECKED BY:	R.L.M.
		JOB NO.:	77229
		DRAWING NO.:	2 OF 3

boender associates  
SUITE 102-107 TOWN & COUNTRY PROFESSIONAL BUILDING  
ELLCOTT CITY, MARYLAND 21043  
BALTIMORE 301-468-7177 SALISBURY 301-748-1288

engineers  
surveyors  
planners

#720

F-79-56



**DEVELOPER'S CERTIFICATE**  
 I CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL, AND ALSO AUTHORITY FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT OF THEIR AUTHORIZED OFFICE AS REQUIRED. NECESSARY DEVIATION FROM THIS PLAN WILL NOT BE MADE UNLESS AUTHORIZED BY THE HOWARD SOIL CONSERVATION DISTRICT.

*John A. Boender* 9-26-78  
 JOHN A. BOENDER (AGENT) DATE

**ENGINEER'S CERTIFICATE**  
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON THE AERIAL PHOTOGRAPHY AND SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

*Robert M. Mauck* 9-26-78  
 ROBERT M. MAUCK (ENGINEER) DATE

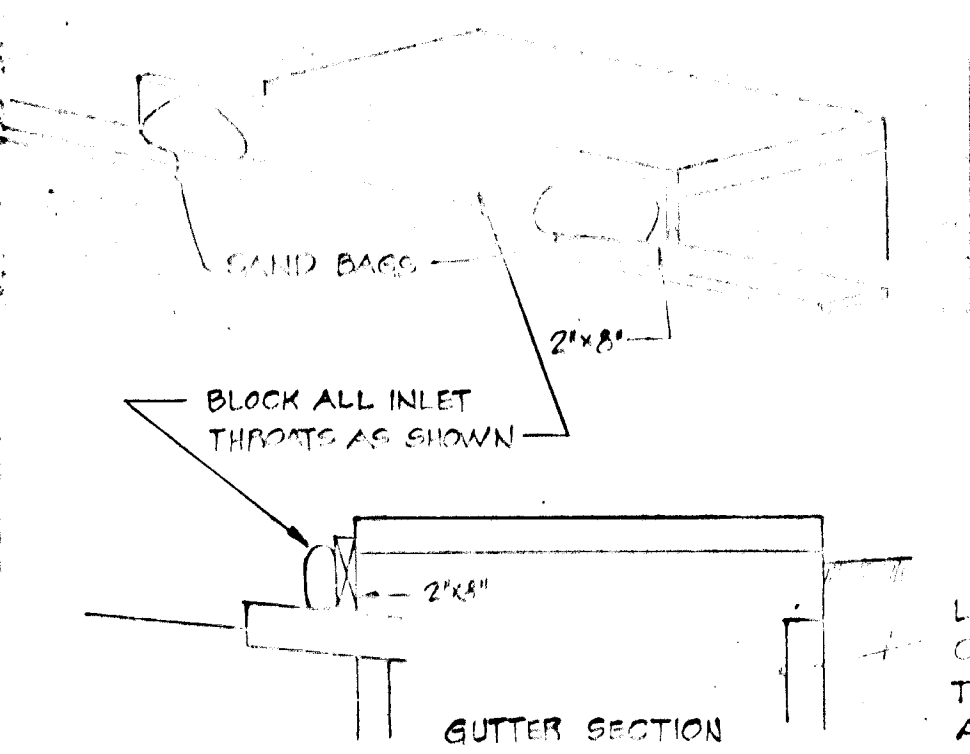
REVIEWED FOR HOWARD S.C.D. AND METS TECHNICAL REQUIREMENTS.

*C. Wayne Ray* 11-20-78  
 C. WAYNE RAY (SOIL CONSERVATION SERVICE) DATE

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

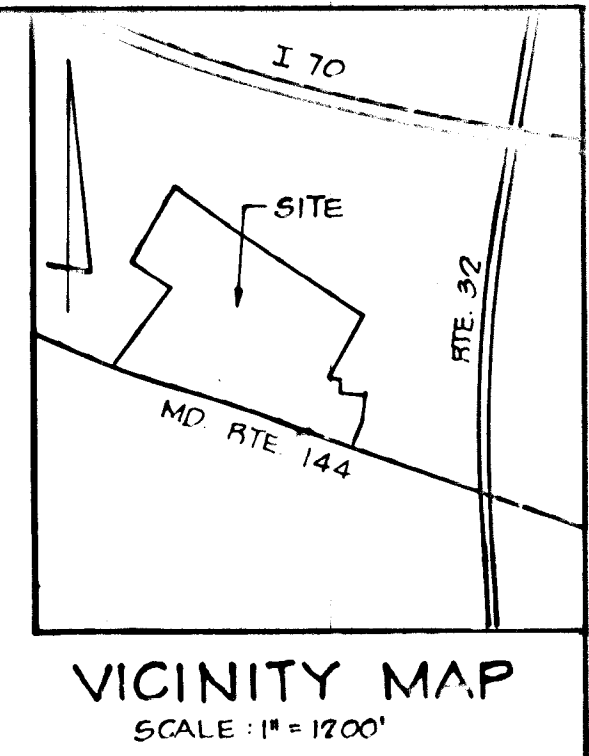
*Robert Zilmer* 11-20-78  
 ROBERT ZILMER (HOWARD SOIL CONSERVATION DISTRICT) DATE

- CONSTRUCTION SEQUENCE**
1. OBTAIN GRADING PERMIT.
  2. NOTIFY THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS AT 202-2432 24 HOURS PRIOR TO BEGINNING.
  3. INSTALL TEMPORARY SEDIMENT CONTROL MEASURES. S.C.E., D.D., SED. TRAP #1, I.D. AND S.O.S.(S).
  4. ROUGH GRADE SITE, MAINTAIN I.D. INTEGRITY.
  5. INSTALL CURVERTS AND INLETS. BLOCK UPSTREAM END OF CURVERT DURING CONSTRUCTION. OPEN CURVERT WHEN COMPLETE. BLOCK INLETS WHEN COMPLETE.
  6. STABILIZE ROAD WITH BASE COURSE AND SLOPES WITH TEMPORARY STABILIZATION MEASURES.
  7. FINE GRADE AND APPLY PERMANENT STABILIZATION MEASURES.
  8. REMOVE TEMPORARY SEDIMENT CONTROL MEASURES WITH APPROVAL OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.



**SEDIMENT TRAP DATA**

AREA = 17 AC.  
 SIZE = 60' x 22' x 2' DEEP  
 VOLUME REQUIRED = 114 CY.  
 VOLUME PROVIDED =  
 SPILLWAY LENGTH = 10'  
 SPILLWAY ELEV. = 517.0  
 CLEANOUT ELEV. = 516.0  
 BOTTOM ELEV. = 515.0



**APPROVED FOR RECORD OF PUBLIC WORKS**

*W. O. Silbert* 11-22-78  
 W. O. SILBERT (PUBLIC WORKS) DATE

**APPROVED FOR PLANNING AND ZONING**

*Robert M. Mauck* 11-19-78  
 ROBERT M. MAUCK (PLANNING AND ZONING) DATE

**SEDIMENT TRAP AT CURB INLETS**  
 NOT TO SCALE

**SITE ANALYSIS**

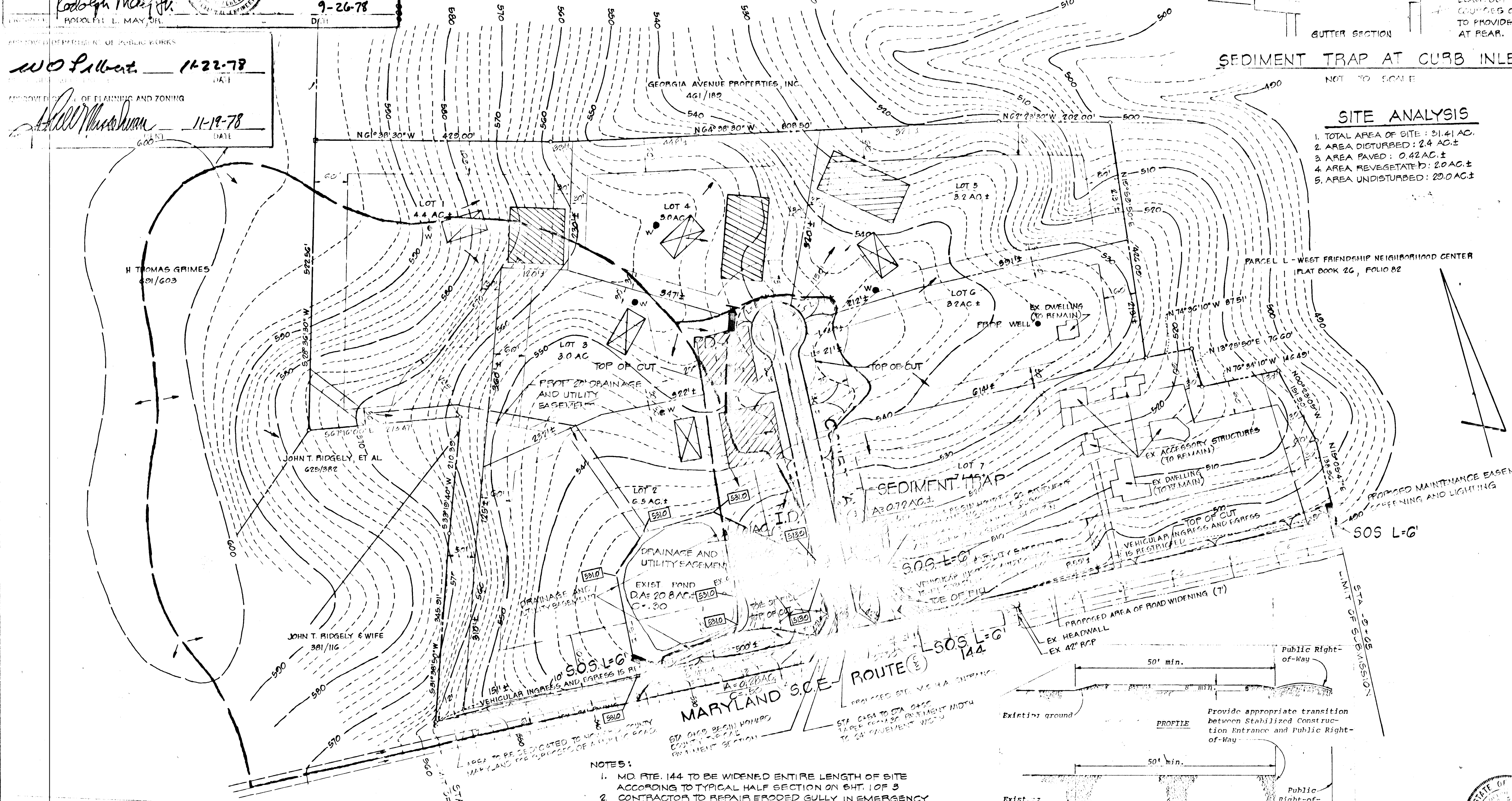
1. TOTAL AREA OF SITE: 31.41 AC.
2. AREA DISTURBED: 2.4 AC. ±
3. AREA PAVED: 0.42 AC. ±
4. AREA REVEGETATED: 20 AC. ±
5. AREA UNDISTURBED: 29.0 AC. ±

**SEDIMENT CONTROL NOTES**

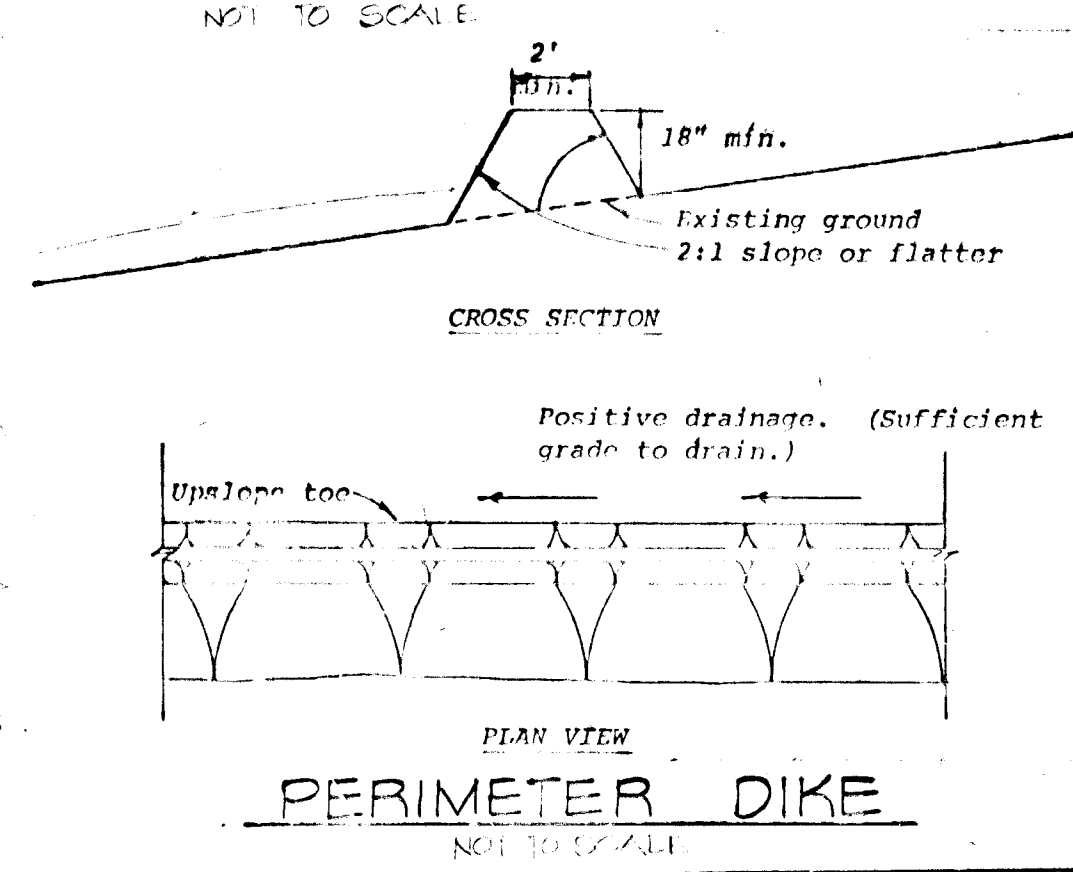
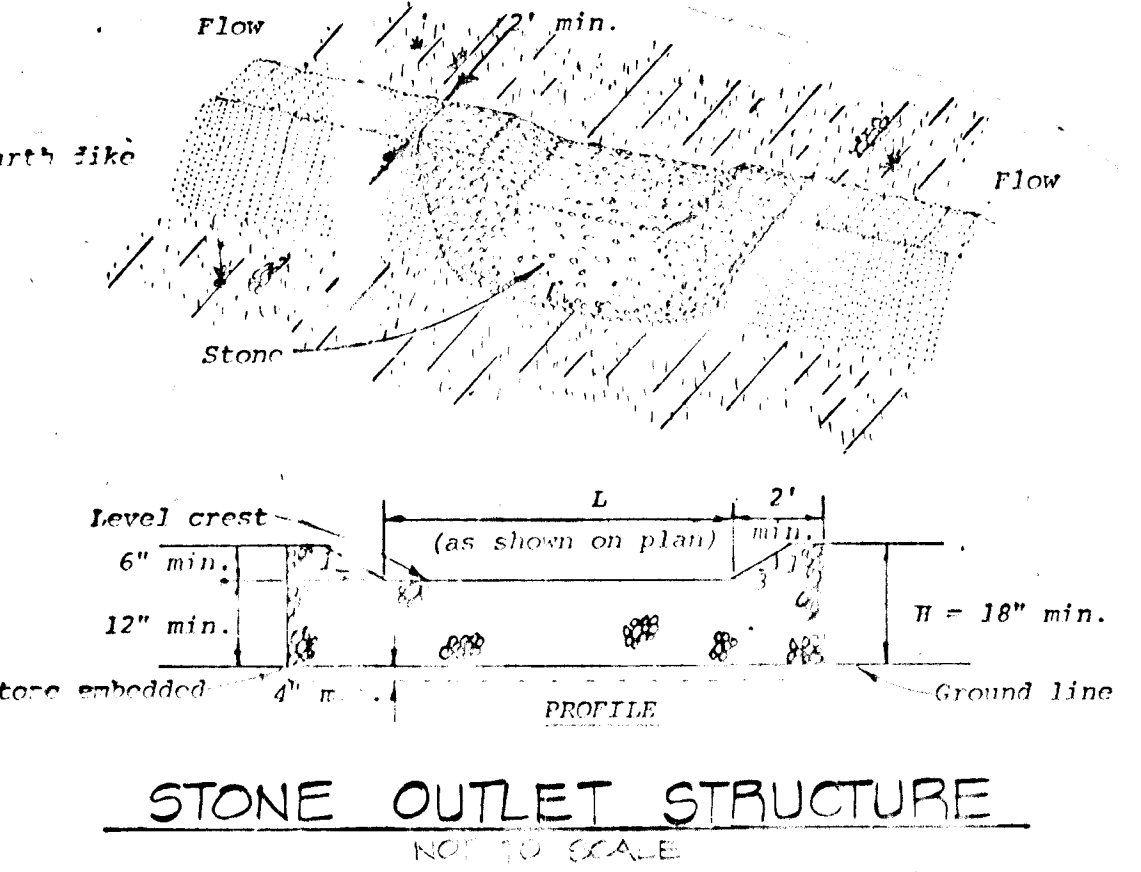
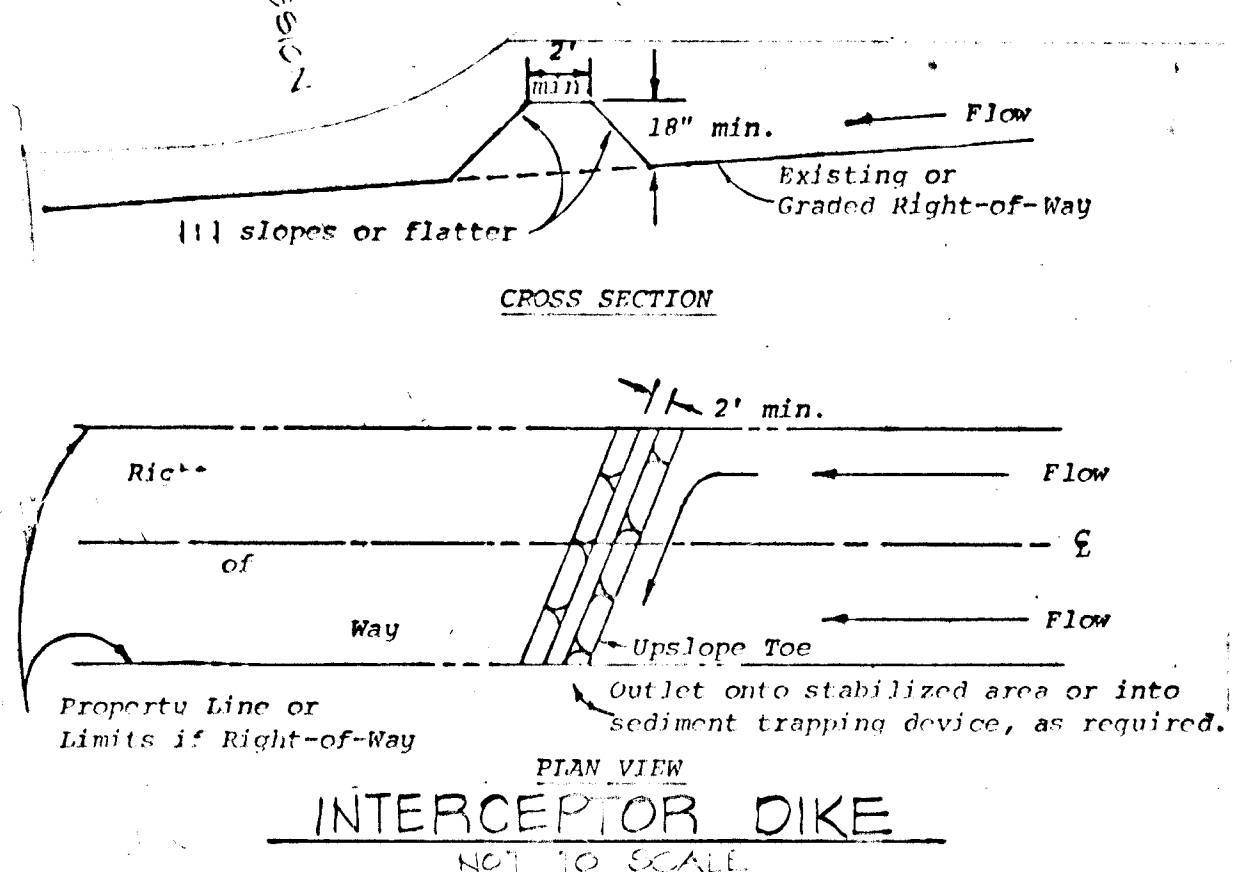
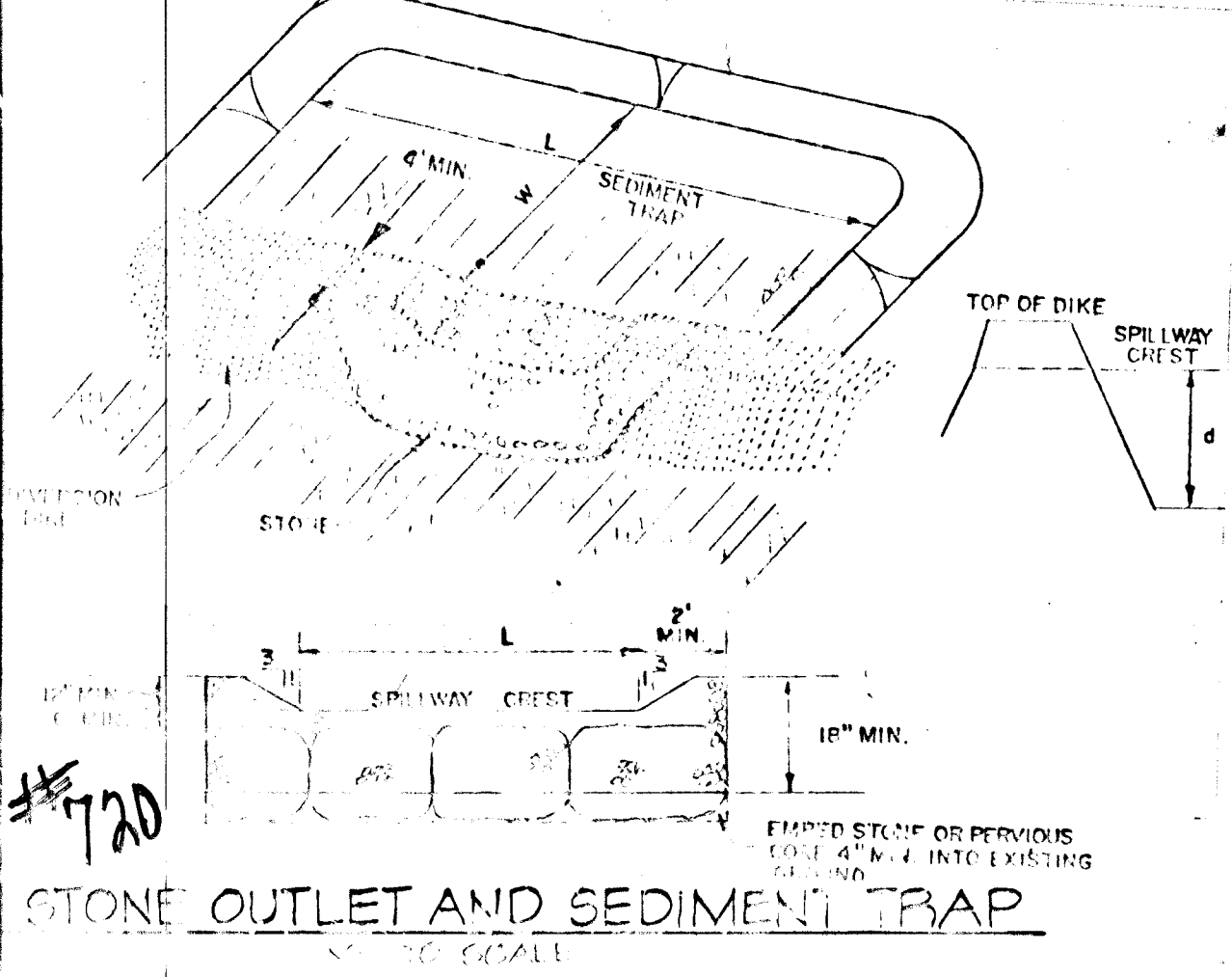
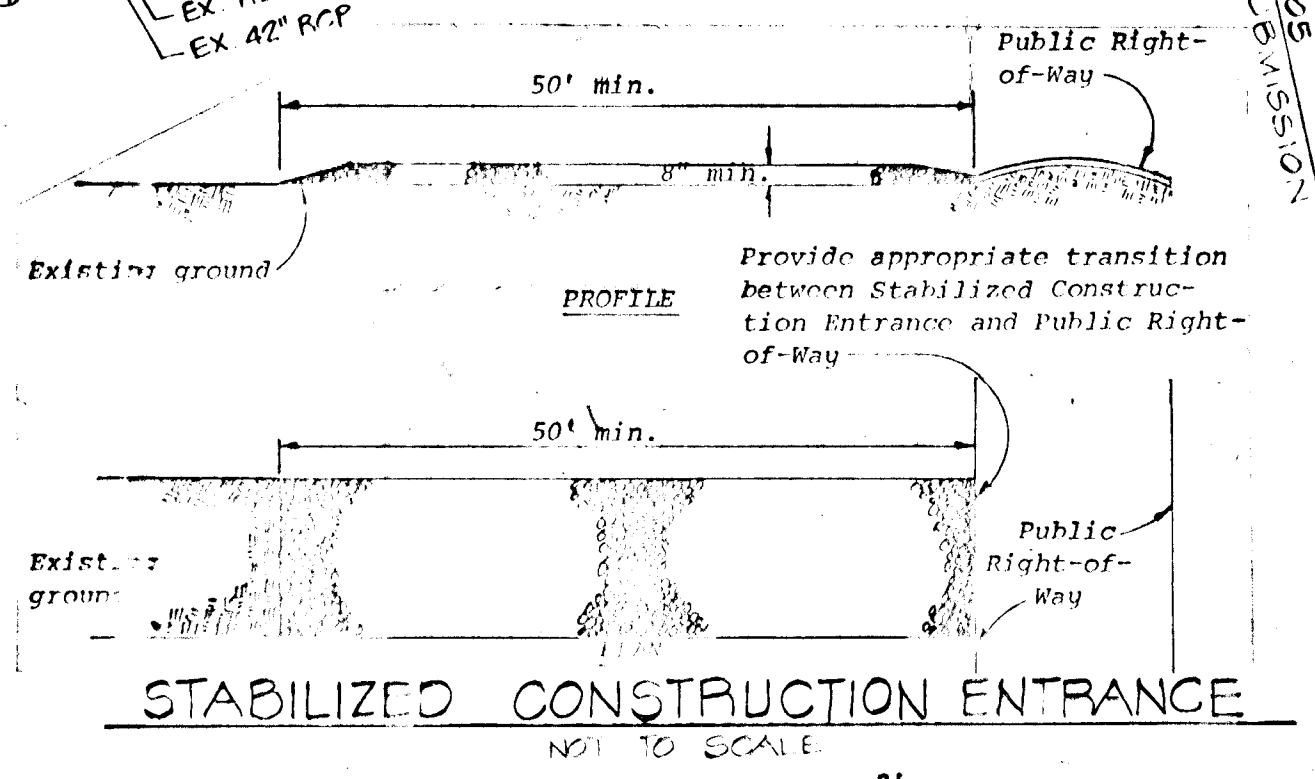
1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL IN DEVELOPING AREAS," PREPARED BY THE U.S.D.A. SOIL CONSERVATION SERVICE.
2. APPLY FOR GRADING PERMIT.
3. NOTIFY THE BUREAU OF LICENSE INSPECTIONS AND PERMITS 24 HRS. PRIOR TO GRADING OPERATIONS.
4. CONSTRUCTION SHALL ADHERE TO THE CONSTRUCTION SEQUENCE.
5. CUT AND FILL SLOPES SHALL BE 3:1 MAXIMUM.
6. ELEVATIONS MARKED THIS (X) SHALL BE FINISHED GRADE.
7. ANY EXCESS MATERIAL SHALL BE STOCKPILED IN A CLEARED LOCATION ON SITE WHICH IS PROTECTED BY SEDIMENT CONTROL STRUCTURE(S). MAXIMUM FILL SLOPE SHALL BE 3:1. STOCKPILED MATERIAL SHALL BE STABILIZED ACCORDING TO SEEDING SPECIFICATIONS BELOW.
8. SEDIMENT CONTROL STRUCTURES SHALL BE REMOVED ONLY WITH PERMISSION OF THE BUREAU OF LICENSE, INSPECTIONS AND PERMITS.
9. STABILIZATION MEASURES:  
 TEMPORARY STABILIZATION:  
 APPLY: 2000 LBS./AC. OR 46 LBS. OF PULVERIZED DOLOMIC LIMESTONE, 500 LBS./AC. OR 11.5 LBS./1000 SQ. FT. OF 10-10-10 FERTILIZER. PLANT WITH RYEGRASS AT 40 LBS./AC. MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.  
 PERMANENT STABILIZATION:  
 APPLY: 2000 LBS./AC. OF PULVERIZED DOLOMIC LIMESTONE, 500 LBS./AC. OF 10-10-10 FERTILIZER.  
 SEED: 85 LBS./AC. OF KENTUCKY 31 TALL FESCUE, 40 LBS./AC. OF KENTUCKY BLUE GRASS, 25 LBS./AC. OF ANNUAL RYEGRASS.  
 NOTE: SEEDING MAY BE DONE BETWEEN MARCH 1 - MAY 1, OR AUG. 1 - OCT. 1. ONLY MULCH ALL DISTURBED AREAS IMMEDIATELY AFTER GRADING.  
 MULCH: 2 TONS/AC. OF UNWEATHERED WHEATSTRAW. TIE MULCH DOWN WITH 400 GAL./AC. OF LIQUID ASPHALT.

**GENERAL NOTES**

1. TOTAL NO. OF PROPOSED LOTS: 7
  2. TOTAL AREA OF LOTS: 9.036 AC. ±
  3. TOTAL AREA OF ROADWAY: 1.05 AC. ±
  4. TOTAL AREA OF SITE: 31.41 AC. ±
  5. TAX MAP IS PARCEL G7
  6. DEED REFERENCE: 392/14
  7. MINIMUM LOT SIZE: 3 AC
  8. EXISTING ZONING: R
  9. BOUNDARY SHOWN HEREON IS BASED ON PLAT PREPARED BY SPELLMAN LARSEN & ASSOCIATES.
  10. TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY AERIAL TOPOGRAPHY, ROAD PROFILE AND OUTFALL FROM POND IS FIELD RUN.
  11. DESIGN SPEED COURT 'A': 30 M.P.H.
  12. THIS AREA INDICATES A PRIVATE SEWAGE EASEMENT OF APPROXIMATELY 10000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF HEALTH AND MENTAL HYGIENE FOR INDIVIDUAL DISPOSAL IMPROVEMENTS OF ANY NATURE. IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWAGE IS AVAILABLE AND SERVICING ANY RESIDENTIAL STRUCTURES CONSTRUCTED ON THESE BUILDING SITES THIS EASEMENT SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWAGE SYSTEM.
  13. POSITIVE DRAINAGE SHALL BE MAINTAINED IN ALL DITCHES AND SWALES.
  14. EXISTING STRUCTURES ON LOTS 7 AND 8 ARE TO REMAIN.
  15. ALL SEDIMENT CONTROL MEASURES WILL BE PROVIDED ON THE FINAL CONSTRUCTION PLANS.
  16. ● = DENOTES PROPOSED WELL LOCATION.
  17. THIS PLAN SUBJECT TO V.P. 78-10.
  18. POND HYDROLOGY WILL BE PROVIDED WITH ROAD CONSTRUCTION PLANS.
- OWNER & DEVELOPER  
 CHESTER E. AND DOLORES E. GRIMES  
 12750 FREDERICK ROAD  
 WEST FRIENDSHIP, MD 21784



- NOTES:**
1. MD RTE. 144 TO BE WIDENED ENTIRE LENGTH OF SITE ACCORDING TO TYPICAL HALF SECTION ON SHT. 10F 3
  2. CONTRACTOR TO REPAIR ERODED GULLY IN EMERGENCY SPILLWAY AT EXISTING POND.



**DRAINAGE AREA MAP & SEDIMENT CONTROL PLAN**

PROJECT: BUTTERCUP ESTATES  
 LOCATION: 540 ELECTION DISTRICT, HOWARD CO., MD  
 DATE: SEPT. 1978  
 SCALE: 1" = 100'

DESIGN BY: R.L.M.  
 DRAWN BY: J.J.B./W.H.N.  
 CHECKED BY: R.L.M.

boender associates engineers/surveyors/planners