

Definition
Filter cloth installed around inlets in the form of a fence or across an opening, thereby reducing sediment content of sediment laden water.

Purpose
To prevent sediment laden water from entering a storm drain system through inlets.

Conditions Where Practice Applies
This practice shall be used where the drainage area to an inlet is disturbed, it is not possible to temporarily divert the storm drain outfall into a sediment trapping device and watertight blocking of inlets is not advisable. It is not to be used in place of sediment trapping devices. This practice may be used in conjunction with storm drain diversion to help prevent siltation of pipes installed with a low slope angle.

Construction Specifications

- Materials**
 - Wooden frame is to be constructed of 2" x 4" construction grade lumber.
 - Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlets, with water fully impounded against it.
 - Filter cloth must be of a type approved for this purpose; resistant to sunlight with sieve size, 80S, 40-85, to allow sufficient passage of water and removal of sediment.
 - Stone is to be 2" in size and clean, since fines would clog the cloth.

APPROVED: FOR PRIVATE WATER, PRIVATE SEWER & PUBLIC DRAINAGE SYSTEMS & ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: *As per 8/2/86*
3-25-86

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DATE: *3-25-86*
John M. ...

NOTE: THE CONTRACTOR OR DEVELOPER SHALL CONTACT THE CONSTRUCTION INSPECTION/SURVEY DIVISION 24 HOURS IN ADVANCE OF COMMENCEMENT OF WORK AT 792-7272

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: 1) SEVEN CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, 2) FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS OF THE PROJECT SITE.

SEDIMENT CONTROL 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. (992-2437)
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes and all slopes greater than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with 11, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR permanent seedings (Sec. 51) sod (Sec. 54), temporary seeding (Sec. 50) and mulching (Sec. 52). Temporary stabilization with mulch alone can only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- 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.
- Site Analysis:
Total Area of Site: *0.69* Acres
Area Disturbed: *0.59* Acres
Area to be paved: *0.30* Acres
Area to be vegetatively stabilized: *2.30* Acres
Total Cut: *2620* Cu. Yds.
Total Fill: *2620* Cu. Yds.
Offsite waste/borrow area location: *0*
- Any sediment control practice which is disturbed by grading activity for utilities must be repaired on the same day of disturbance.
- Additional sediment controls must be provided, if deemed necessary by the Howard County DPW sediment control inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

NOTE:
SOIL MAP # 28
PREDOMINANT SOILS
MgBz, CgBz, GmBz.

SEQUENCE OF CONSTRUCTION

- Obtain necessary permits. - June, 1986
- Notify County 24 hours prior to commencement of construction. - June, 1986
- Clear & grub for SEE DIVERSION - June, 1986
- Install SEE DIVERSION - June, 1986
- Clear & grub for grading of roads & storm drains only. - July, 1986
- Grade site and install storm drain systems. - July, 1986
- Install inlet protection on each basin. - August, 1986
- Install bituminous paving. - August, 1986
- Install bituminous curb. - August, 1986
- Stabilize disturbed areas. - Sept., 1986
- Remove sediment control devices when approved by Sediment Control Inspector.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING:

- 1) UNFERTILIZED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FEET) AND 100 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.
- 2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 100 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING: FOR PERIODS FROM 1 THRU APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 50 LBS. PER ACRE (14 LBS/1000 SQ. FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 40 LBS. KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS. PER ACRE (6 LBS/1000 SQ. FT.) OF WINTERING LOGGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 29, PROTECT SITE BY OPTION (1) 2 TONS PER ACRE OF WELLS ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE 500# WELLS ANCHORED STRAW.

MULCHING: APPLY 18 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ. FT.) OF UNWEIGHTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH SPECIFICALLY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT OR HIGHER, USE 348 GALLONS PER ACRE (6 GAL/1000 SQ. FT.) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDING.

TEMPORARY SEEDING NOTES

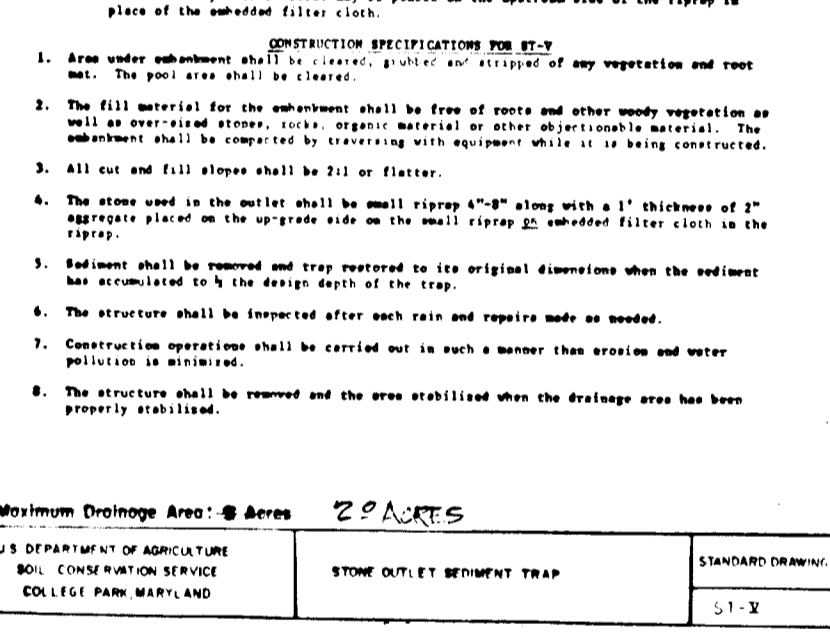
APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED UNDER A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: APPLY 100 LBS. PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.)

SEEDING: FOR PERIODS FROM 1 THRU APRIL 30 AND FROM AUGUST 15 THRU NOVEMBER 15, SEED WITH 15 LBS. PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ. FT.). FOR THE PERIOD MAY 1 THRU AUGUST 14, SEED WITH 3 LBS. PER ACRE OF WINTERING LOGGRASS (6.0 LBS/1000 SQ. FT.). FOR THE PERIOD NOVEMBER 16 THRU FEBRUARY 29, PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELLS ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE 500# WELLS ANCHORED STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH SPECIFICALLY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 2 1/2 GALLONS PER ACRE (5 GAL/1000 SQ. FT.) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES, 8 FT OR HIGHER, USE 348 GALLONS PER ACRE (6 GAL/1000 SQ. FT.) FOR ANCHORING.

REFER TO THE 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.



STANDARD AND SPECIFICATIONS FOR SILT FENCE

Definition
A temporary barrier of geotextile fabric (filter cloth) used to intercept sediment laden runoff from small drainage areas of disturbed soil.

Purpose
The purpose of a silt fence is to reduce runoff velocity and effect deposition of transported sediment load. Limits imposed by ultraviolet stability of the fabric will dictate the maximum period the silt fence may be used.

Conditions Where Practice Applies
A silt fence may be used subject to the following conditions:

- Maximum allowable slope length contributing runoff to a silt fence are listed in the table below:

Slope Steepness	Maximum Slope Length (Ft.)
2:1	50
3:1	75
4:1	125
5:1	175
Flatter than 3:1	200

2. Maximum drainage area for overland flow to a silt fence shall not exceed 1/2 acre per 100 feet of fence; and

3. Erosion will occur in the form of sheet erosion; and

4. There is no concentration of water flowing to the barrier.

Design Criteria
Design computations are not required. All silt fences shall be placed as close to the contour as possible, and the area below the fence must be undisturbed or stabilized.

A detail of the silt fence shall be shown on the plan, and contain the following minimum requirements:

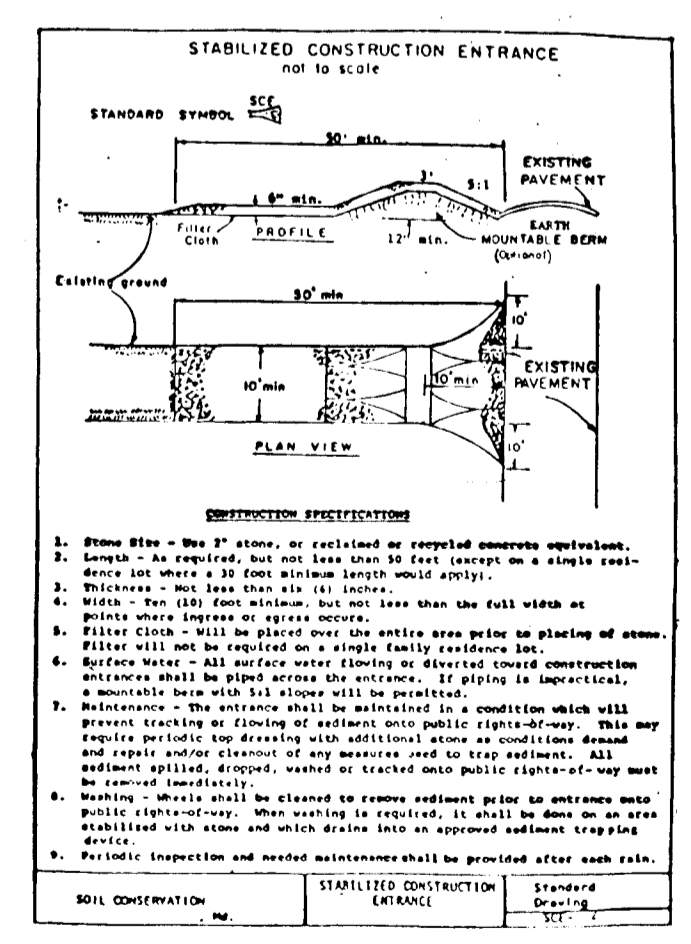
- The type, size, and spacing of fence posts.

Criteria for Silt Fence Materials

- Silt Fence Fabric: The fabric shall meet the following specifications unless otherwise approved by the appropriate erosion and sediment control plan approval authority. Such approval shall not constitute statewide acceptance. Statewide acceptability shall depend on in-field and/or laboratory observations and evaluations.

Fabric Properties	Minimum Acceptable Value	Test Method
Grab Tensile Strength (lbs)	90	ASTM D1682
Elongation at Failure (%)	50	ASTM D1682
Mullen Burst Strength (PSI)	190	ASTM D3786
Puncture Strength (lbs)	40	ASTM D751 (modified)
Slurry Flow Rate (gal/min/ft)	0.3	Virginia DOT VM-51
Equivalent Opening Size	40-80	US Sed Sieve CW-02215
Ultraviolet Radiation Stability I	90	ASTM-G-26

- Fence Posts (for fabricated units): The length shall be a minimum of 36 inches long. Wood posts will be of sound quality hardwood with a minimum cross sectional area of 3.0 square inches. Steel posts will be standard T and U section weighing not less than 1.00 pound per linear foot.
- Wire Fence (for fabricated units): Wire fencing shall be a minimum 14# gage with a maximum 6" mesh opening, or as approved.
- Fabricated Units: Equivalent or approved equal may be used in lieu of the above method providing the unit is installed per manufacturer's instructions.



DEVELOPER'S CERTIFICATE
I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A PROGRAM OF NATURAL RESOURCES APPROVED TRAINING BEFORE BEGINNING THE PROJECT.
Richard Demmitt 1-15-86

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. IT WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OF THE HOWARD SOIL CONSERVATION DISTRICT.
Neil Schwartz 1/10/86

REVIEWER'S CERTIFICATE
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
S.C.D.
Howard

AND MEET TECHNICAL REQUIREMENTS
U.S. SOIL CONSERVATION SERVICE UNIT
James M. ... 3-25-86

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
Stephen J. ... 3/25/86

Owner, Developer: *J.R.D. DEVELOPMENT CORPORATION*
P.O. BOX 208
CLARKSVILLE, MD 21029
301-531-5534

NO.	REVISIONS	DATE

DEVELOPMENT CONSULTANTS GROUP, INC.
17904 GEORGIA AVENUE # 102
OLNEY, MARYLAND 20832
301-924-4570

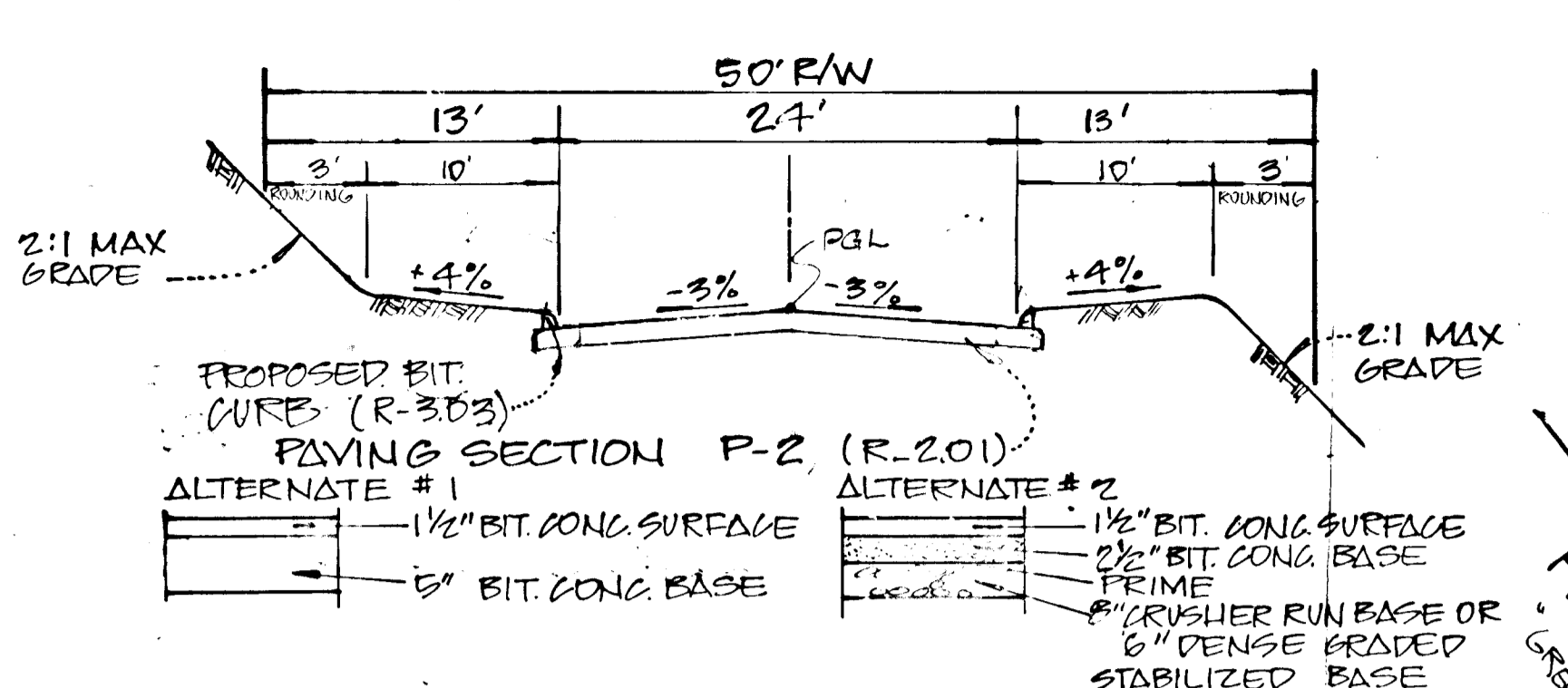
SOIL EROSION & SEDIMENT CONTROL PLAN, DETAILS & SPECS.
SECTION ONE, AREA TWO
GREENE FIELDS
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

DATE: *Dec, 85*
DRAWN BY: *M.L.S.*
CHECKED BY: *M.L.S.*
SCALE: *AS SHOWN*

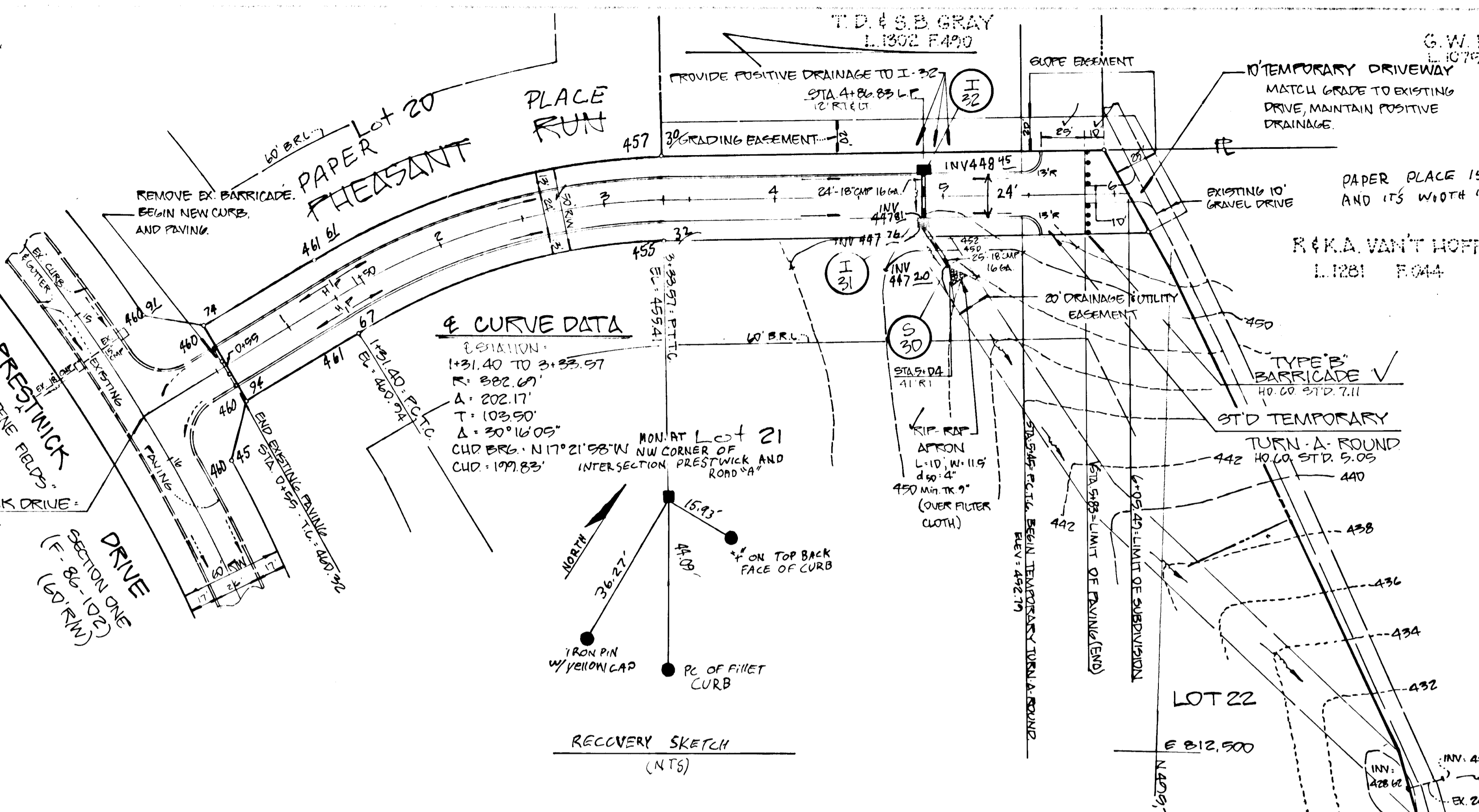
Sheet *1* of *3*
PROJECT NO. *136-01*

F-86-112 VCG#136-01

STATION 0+99 TO 5+45



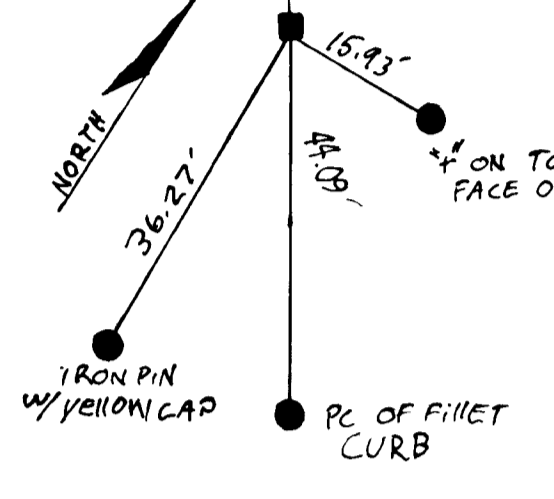
TYPICAL SECTION (NO SCALE)



CURVE DATA

STATION: 1+31.40 TO 3+55.97
 R: 802.6'
 Δ: 202.17'
 T: 103.50'
 Δ: 30°16'05"
 CURV. BEG. N 17°21'58" W
 CURV. END: 199.83'

MONUMENT AT LOT 21
 NW CORNER OF
 INTERSECTION PRESTONICK AND
 ROAD "A"



RECOVERY SKETCH (NTS)

STRUCTURE SCHEDULE						
NO	TYPE	TOP	INV. IN	INV. OUT	COMMENTS	STD
S-20	18" METAL END SECTION	448.80	-	447.2520	18" P	SD 5.61
I-21	18" INVERT	452.55	447.7681	447.5576	W: 2'-6"	SD 4.01
I-22	18" INVERT	452.55	-	448.0045	W: 2'-6"	SD 4.01

PIPE SCHEDULE			
SIZE	TYPE	LENGTH	
18"	CMF 16 GA	19 LF	

SCALES
 PLAN
 1" = 50'

PROFILE
 HORIZONTAL: 1" = 50'
 VERTICAL: 1" = 5'

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DATE: 3/25/86
 J. W. MILES
 L. 1079 F736
 ENGINEER

APPROVED: FOR PRIVATE WATER, PRIVATE SEWER & PUBLIC DRAINAGE SYSTEMS & ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DATE: 3/27/86
 R. J. REED
 L. 1281 F044
 ENGINEER

AS BUILT OCT 10, 1986

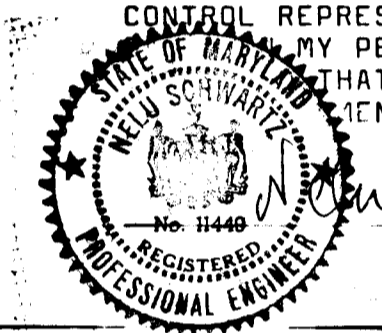
HOWARD COUNTY
 CONTROL POINTS 2336001
 AND 2436001 WHERE USED FOR
 4:1 V CONTROL
 AS BUILT

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

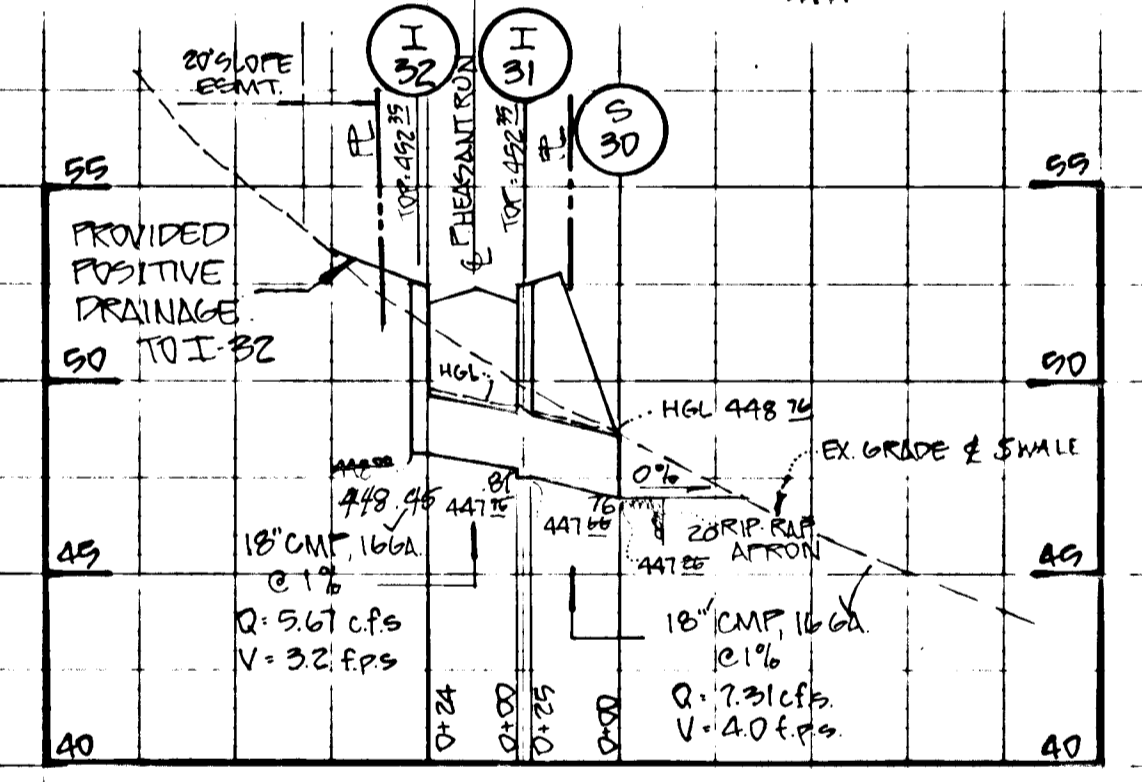
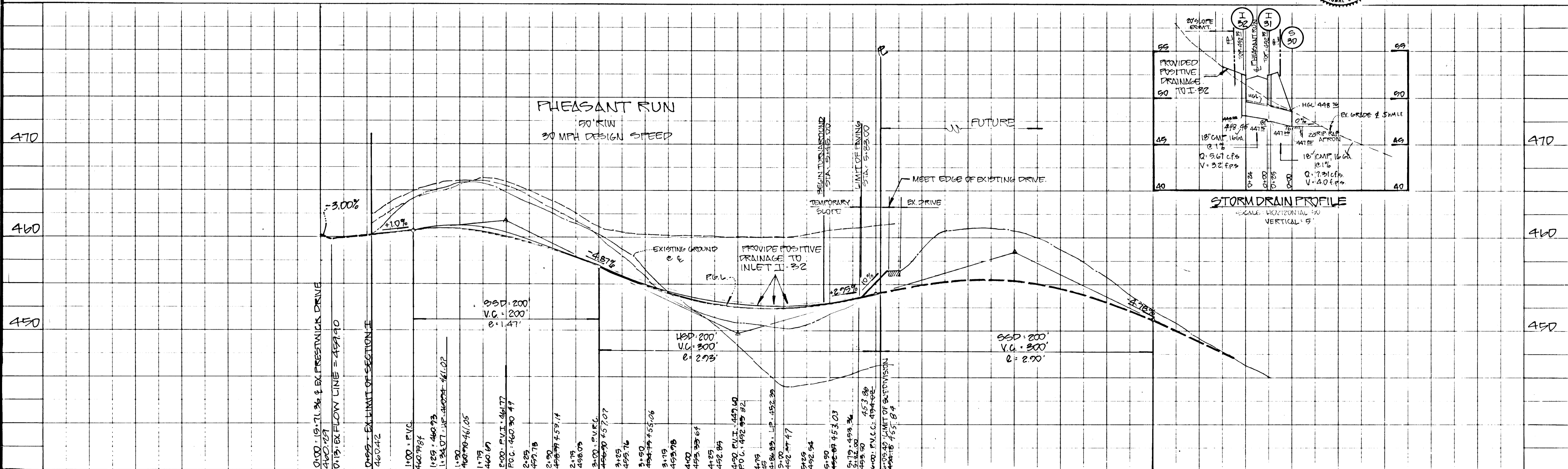
Richard Demmitt 1-10-86
 DATE

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITION THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION ACT.

Richard Schwartz 4/19/86
 DATE



PRECAST INLETS BY APOLLO PAVING CO.
 PHESANT RUN
 LIMIT OF APPROVAL THIS DRAWING 0+99 TO 5+45



STORM DRAIN PROFILE

Client: Developer (CONTRACT)
 J.R.D. DEVELOPMENT CORPORATION
 P.O. BOX 208
 CLARKSVILLE, MD 21029
 301-531-5527



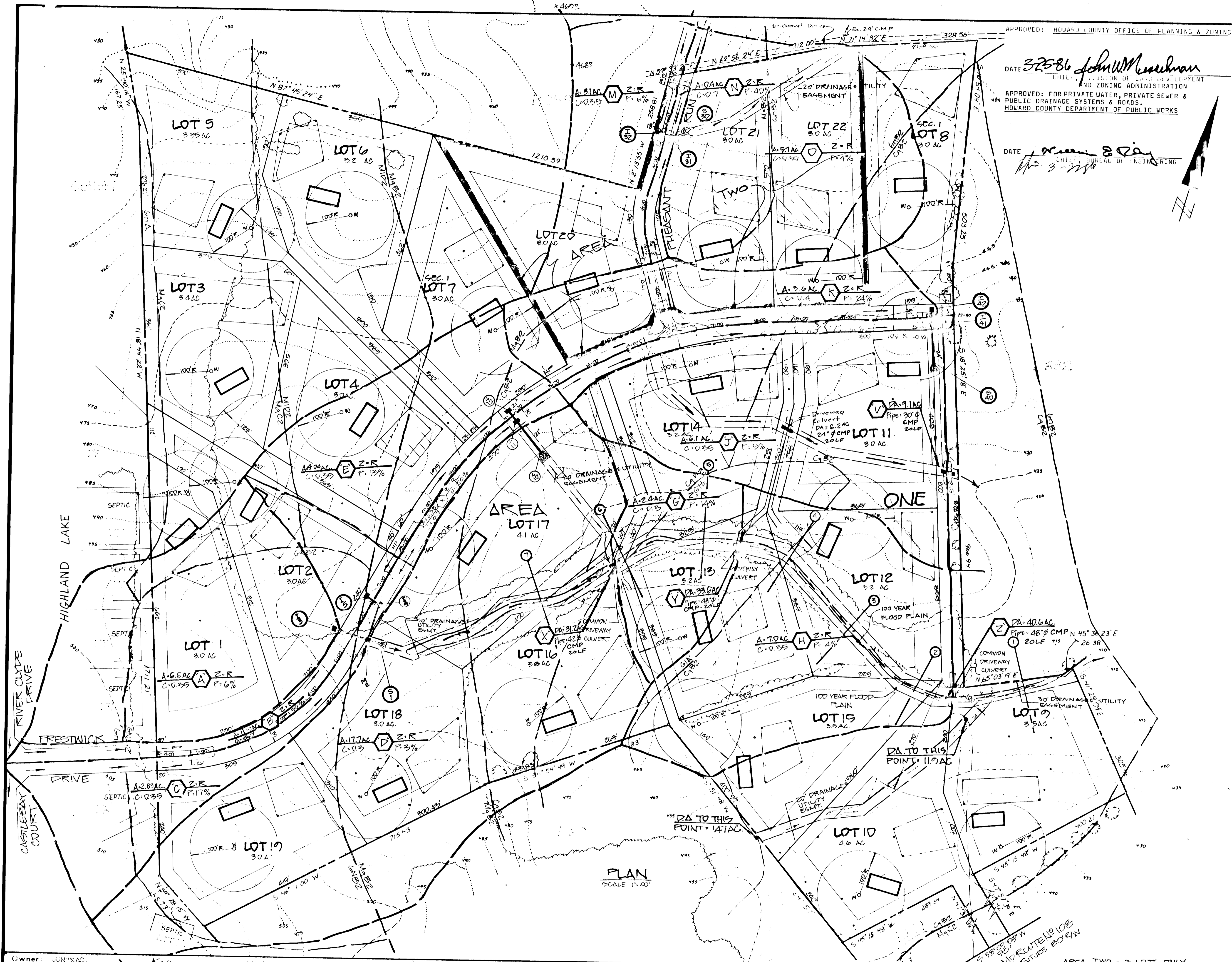
DEVELOPMENT CONSULTANTS GROUP, INC.
 17904 GEORGIA AVENUE # 102
 OLNEY, MARYLAND 20832
 301-924-4570

GRADE ESTABLISHMENT AND STORM DRAIN PLAN
 SECTION ONE, AREA TWO
GREENE FIELDS
 5TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEC 85
 DRAWN BILL
 CHECKED M.L.S.
 SCALE AS SHOWN
 Sheet 2 of 3
 PROJECT NO. 136-01

1194

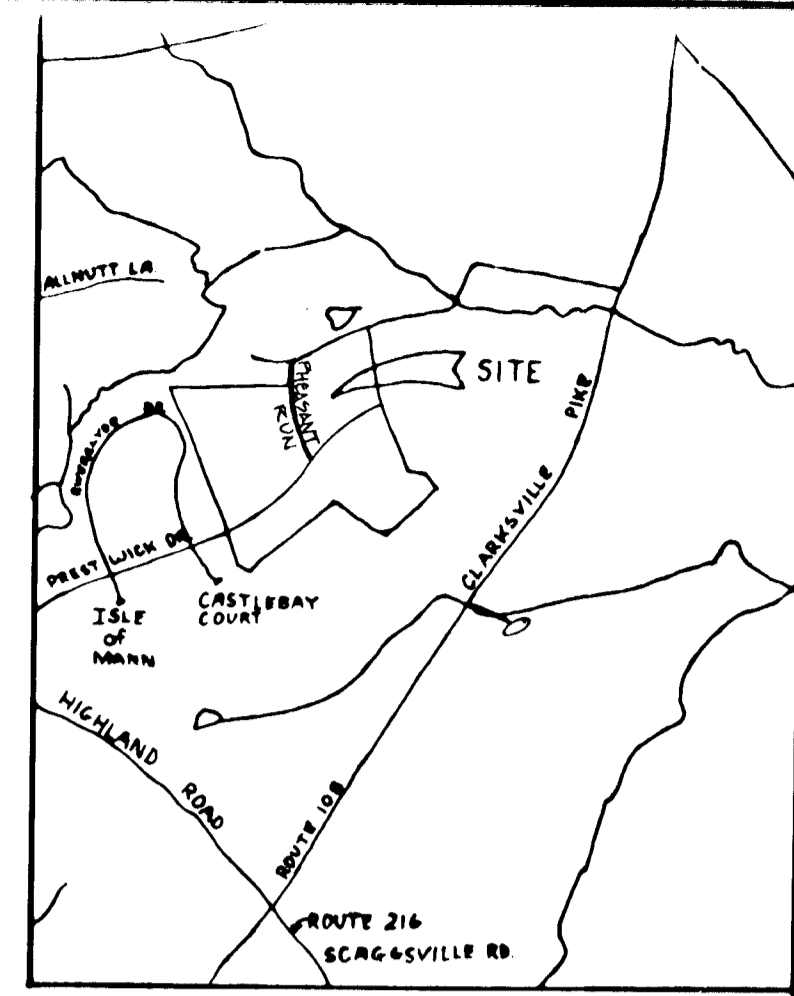
F-86-112 POG# 136-01



APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

DATE 3-25-86
 APPROVED: FOR PRIVATE WATER, PRIVATE SEWER & PUBLIC DRAINAGE SYSTEMS & ROADS.
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

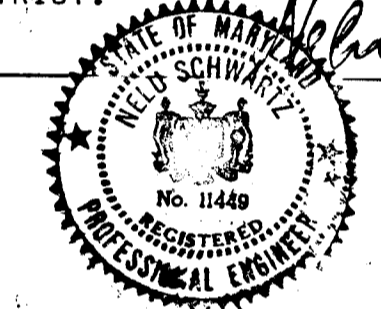
DATE 3-2-86
 APPROVED: HOWARD COUNTY DEPARTMENT OF ENGINEERING



VICINITY MAP
 SCALE 1" = 2000'

DEVELOPER'S CERTIFICATE
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT."
 Richard J. Demmitt 1-10-86
 DATE

ENGINEER'S CERTIFICATE
 I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."
 Richard J. Demmitt 1-10-86
 DATE



Owner: CONTRACT:
 JRD DEVELOPMENT, INC.
 P.O. BOX 208
 CLARKSVILLE, MD 21029
 301-531-5537

DEVELOPMENT CONSULTANTS GROUP, INC.
 17904 GEORGIA AVENUE SUITE 102
 OLNEY, MARYLAND 20832
 301-924-4570

AREA TWO - 3 LOTS ONLY
 F-86-112
 DRAINAGE MAP AREA
GREENE FIELDS
 ELECTION DISTRICT 4B5
 TAX MAP 34 PARCEL 25-318
 HOWARD COUNTY, MARYLAND
 DATE: DEC 1985
 DRAWN: MIKE L.
 CHECKED: M.L.S.
 SCALE: 1" = 100'
 SHEET 3 of 3
 PROJECT NO. 136-01

1194