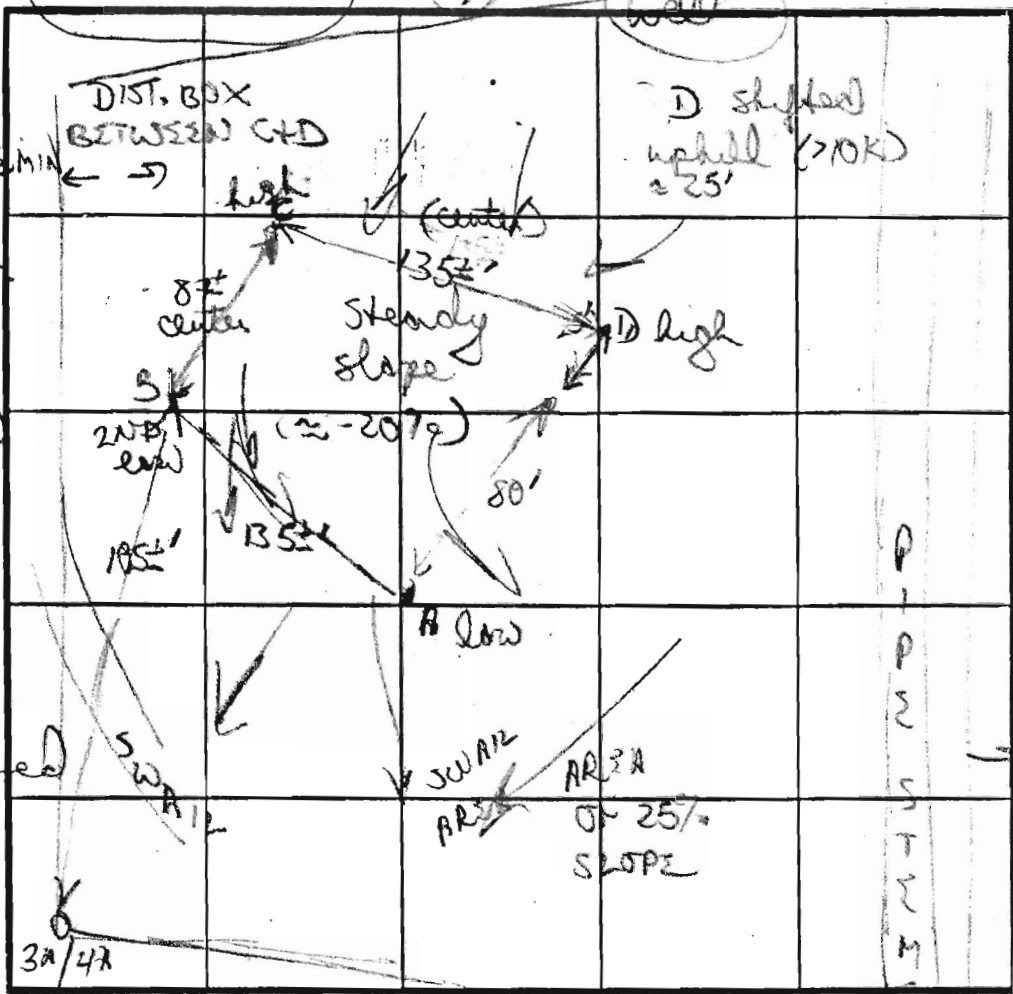


INLET 3 1/2-4'  
 MAX D 8  
 187 1/2 BD

A41571 LOT 4A

4

well



Brown/orange clay 3 1/2'  
 clay silt loam 5'  
 to mostly powdery orange/purple silty loam w/ 5-10% frags 7' ↓  
 11 1/2' D  
 LOT 3A B  
 orange clay silt loam 3'

SOIL PROFILE  
 orange/brown clay patchy 4 1/2'  
 (heavy to 3 1/2') changing to orange red silty (some clay) loam 9 1/2'  
 w/ 10% silt-med frags ↓ 12 1/2'

D  
 purple clay 3 1/2-4'

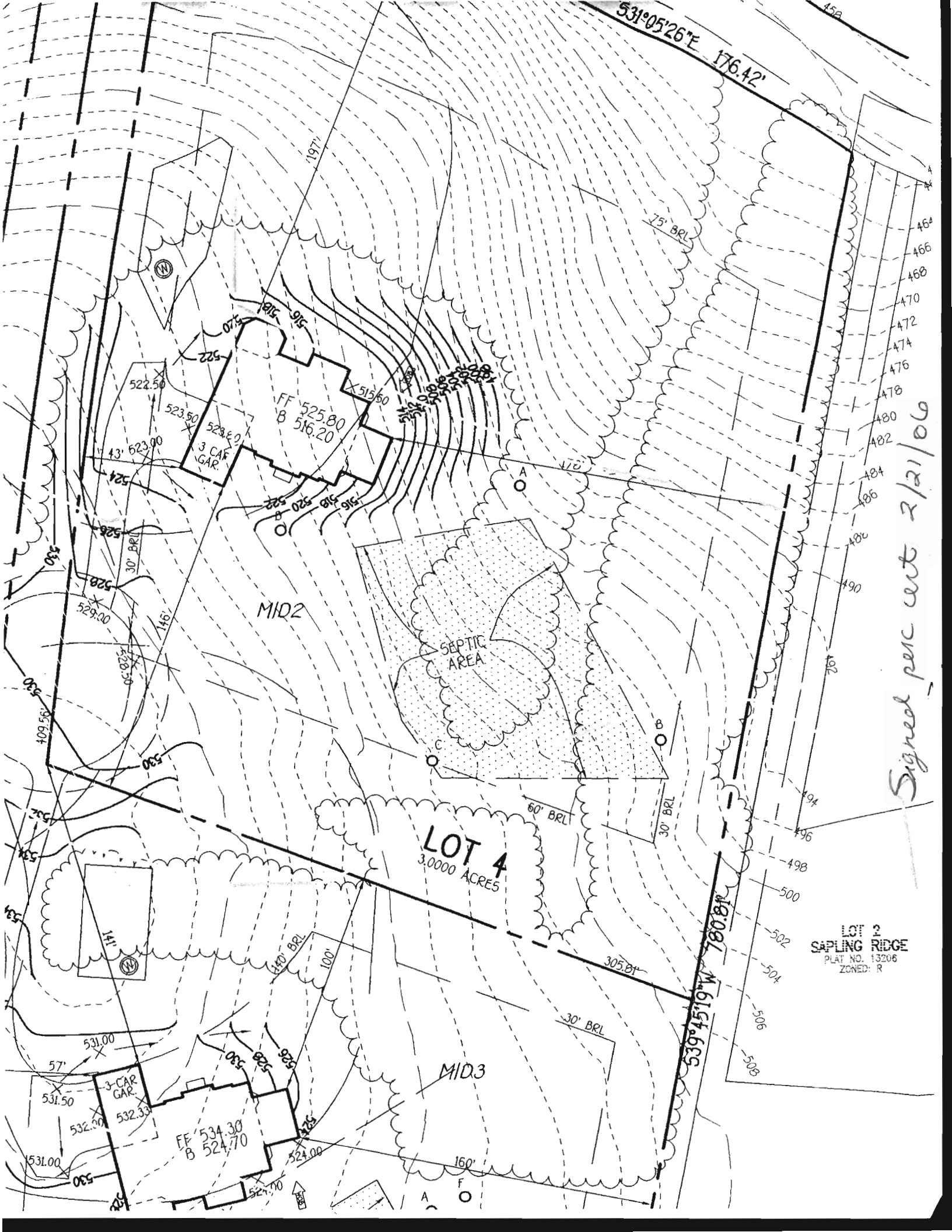
INDICATE NORTH - NAME ADJOINING ROADWAY AS BASE LINE.

HOWARD ROAD

DATE	TEST NO.	DEPTH	PRE-WET		TEST - 1" DROP		TIME	
			START	STOP	START	STOP		
6/3/88	A	3 1/2-4'S	1145	1152	1152	1209	17MIN	
		12 1/2' D	bottom (see profile)					
	D	3 1/2' S	1151	1153	1153	1157	4MIN	
		12' D	bottom (see profile)					
	C	3-3 1/2' S	1158	1201	1201	1205	4MIN	
		7' M	1158	1202	1202	1206	4MIN	
		11 1/2' D	bottom (see profile)					
	B	3' S	1206	1208	1208	1211	3MIN	
		11' D	bottom (see profile)					

orange brown silty loam 8'  
 patchy 10-15% silt-med black frag rock ↓  
 11' D

REMARKS high holes shifted above stakes, low hole (A) on fringe of 25% slope  
 TYPE OF SOIL mostly orange/purple clays 3-4'; silty loams w/ scattered frags  
 TESTED BY B Nylan ALSO PRESENT Alan, Mark, Dave



*Signed per cert 2/21/06*

LOT 2  
SAPLING RIDGE  
PLAT NO. 13206  
ZONED: R

**SEDIMENT CONTROL NOTES**

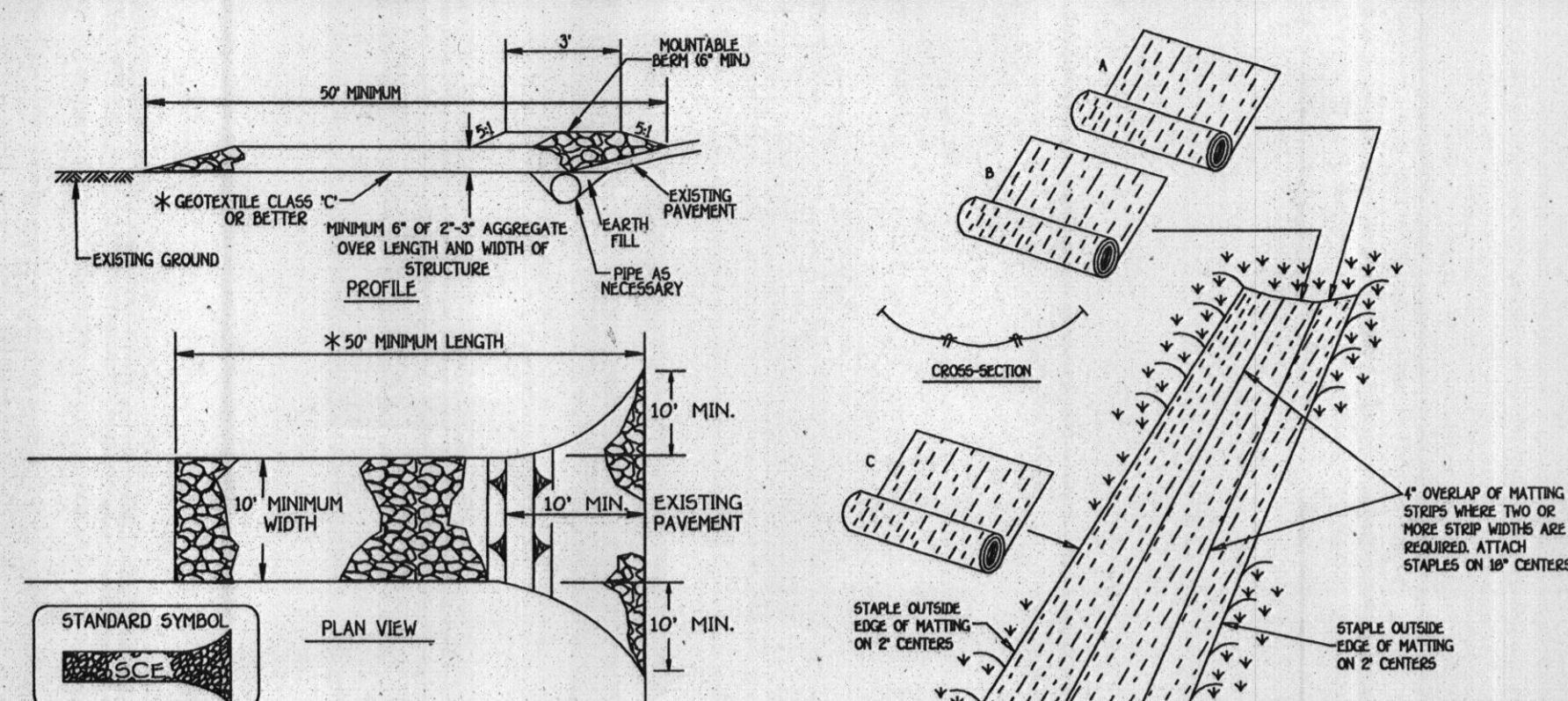
- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTION, LICENSING AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (S-C-2005).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND DESIGN THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 10 BUSINESS DAYS FOR ALL PERMITTED SEDIMENT CONTROL STRUCTURES, DITCHES, PERFORATED SLABS AND ALL SLOPES STEEPER THAN 3:1 IN 24 HOURS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. ALL SEDIMENT TRANSPORTS MUST BE FINISHED AND MARKING SIGNS POSTED AROUND THESE PERMITTED IN ACCORDANCE WITH VOL. 1, CHAPTER 22 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. FOR PERMANENT SEEDING SEE SEC. 501, 500 GCS, 501. TEMPORARY SEEDING SEE SEC. 501 AND 500 GCS. SOIL 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 PERSSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
7. SITE ANALYSIS:
  - TOTAL AREA OF SITE: 3,000 ACRES
  - AREA TO BE GRADED: 0.87 ACRES
  - AREA TO BE ROOFED OR PAVED: 0.00 ACRES
  - AREA TO BE VEGETATIVELY STABILIZED: 0.57 ACRES
  - TOTAL CUT: 450 CUBIC YARDS
  - TOTAL FILL: 450 CUBIC YARDS
  - OFFSITE MASTER/ROOFING AREA LOCATION: N/A
8. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING, CONSTRUCTION OR UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
9. PERMITS AND APPROVALS MUST BE PROVIDED, IF REQUIRED, NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERMITTED EROSION AND SEDIMENT CONTROL STRUCTURES. APPROVALS MUST BE OBTAINED UNTIL THE INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LINES OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITH ONE WORKING DAY, MINIMUM IS NEEDED.

**TEMPORARY SEEDING NOTES**

- APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RE-DISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
- SEEDING PREPARATION:**  
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY LOOSENED.
- SOIL AMENDMENTS:**  
APPLY 600 LBS. PER ACRE 10-20-20 FERTILIZER ON LBS./1000 SQ.FT.
- SEEDING:**  
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH NOVEMBER 15, SEED WITH 1 LB. BUREL PER ACRE OF ANNUAL, ONE LB. LBS. ACRES OF MEADOW LOWGRASS (L71 LBS./1000 SQ.FT.) FOR THE PERIOD NOVEMBER 15 THRU FEBRUARY 28. PROTECT SITE BY APPLYING 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OR USE SOIL.
- MULCHING:**  
APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE OF GALVANOUM SOFT OF DENSIFIED ASPHALT ON FLAT AREAS ON SLOPES 5 FEET OR HIGHER. USE 300 GALLONS PER ACRE OF GALVANOUM SOFT FOR ANCHORING.
- REFER TO THE 1994 MARYLAND STANDARDS AND SPECIFICATION FOR SOIL EROSION AND SEDIMENT CONTROL FOR RATE AND METHODS NOT COVERED.

**PERMANENT SEEDING NOTES**

- ALL DISTURBED AREAS SHALL BE STABILIZED AS FOLLOWS:
- SEEDING PREPARATION:**  
LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
- SOIL AMENDMENTS:**  
APPLY TWO TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS./1000 SQ.FT.) AND 600 LBS. PER ACRE 0-20-20 FERTILIZER ON LBS./1000 SQ.FT. BEFORE SEEDING. HUSK OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 600 LBS. PER ACRE 10-20-20 LIQUIDUM FERTILIZER (9 LBS./1000 SQ.FT.) AND 500 LBS. PER ACRE 0-15-15/1000 SQ.FT. OF 10-20-20 FERTILIZER.
- SEEDING:**  
FOR THE PERIODS MARCH 1 THROUGH APRIL 30, AND AUGUST 1 THROUGH OCTOBER 15, SEED WITH 100 LBS. PER ACRE (23 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THROUGH JULY 31, SEED WITH 60 LBS./ACRE (14 LBS./1000 SQ.FT.) OF KENTUCKY 31 TALL FESCUE AND 2 LBS. PER ACRE (0.05 LBS./1000 SQ.FT.) OF MEADOW LOWGRASS. DURING THE PERIOD OF OCTOBER 15 THROUGH FEBRUARY 28, PROTECT SITE BY OPTION (1) - TWO TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING, OPTION (2) - USE SOIL, OPTION (3) - SEED WITH 100 LBS./ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH TWO TONS/ACRE WELL ANCHORED STRAW. ALL SLOPES SHOULD BE HYDROSEEDING.
- MULCHING:**  
APPLY 1 TO 2 TONS PER ACRE (70 TO 90 LBS./1000 SQ.FT.) OF UNROTTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING 200 GALLONS PER ACRE OF GALVANOUM SOFT OF DENSIFIED ASPHALT ON FLAT AREAS ON SLOPES 5 FEET OR HIGHER. USE 300 GALLONS PER ACRE OF GALVANOUM SOFT FOR ANCHORING.
- MATERIALS:**  
INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.
- FOR PUBLIC POND SUBSTITUTE CHEMICAL CROWWEED AT 15 LBS./ACRE AND KENTUCKY 31 TALL FESCUE AT 40 LBS./ACRE AS THE SEEDING REQUIREMENT. OPTIMUM SEEDING DATE FOR THIS MIXTURE IS MARCH 1 TO APRIL 30.



**Construction Specification**

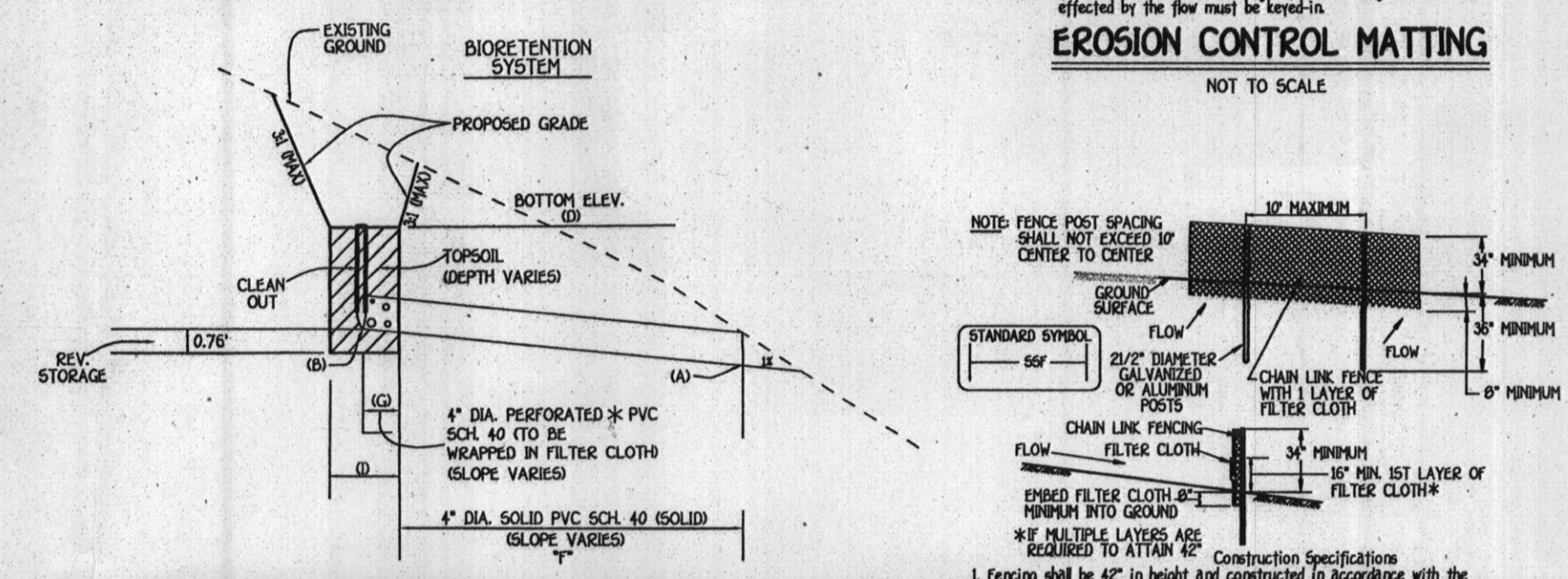
- Length - minimum of 50' (40' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to create a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The stone approval authority must not require single family residences to use geotextile.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - All surface water flowing to or diverted toward construction entrance shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mounded berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be placed according to the amount of runoff to be conveyed. A 6" minimum will be required.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

**Construction Specifications**

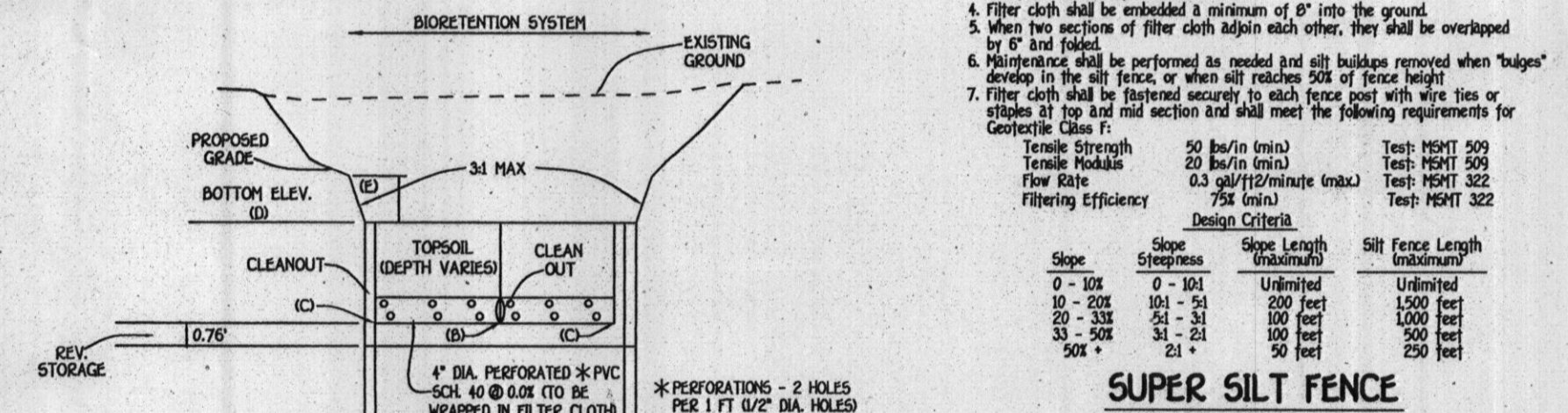
1. Lay-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to the channel cross-section. Secure with a row of staples spaced 4' down slope from the trench. Stapling between staples is 0'.
2. Staple the 4" overlap in the channel center using an 18" spacing between staples.
3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
4. Staples shall be placed 2' apart with 4 rows for each side, 2 outer rows and 2 filtering rows down the center.
5. The discharge end of matting shall be higher than the end of the top slope shall overlap the upper end of the lower slope by 4", always between staples. The overlap with a double row of staples shall be 4" apart in a staggered pattern on either side.
6. The discharge end of the matting tier shall be secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area affected by the flow must be secured with 2 double rows of staples.

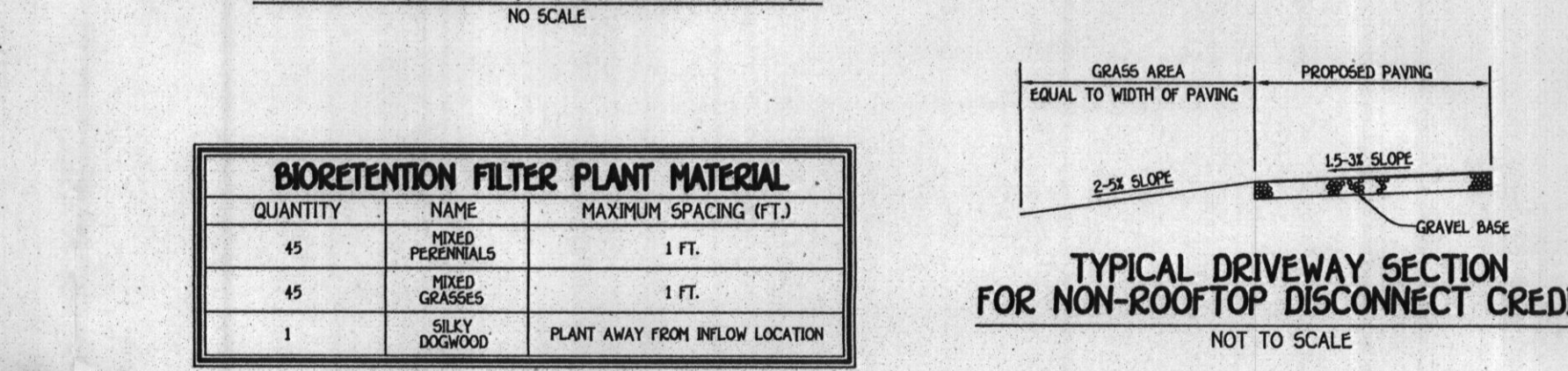
**STABILIZED CONSTRUCTION ENTRANCE**



**EROSION CONTROL MATTING**



**SUPER SILT FENCE**



**BIORETENTION FILTER PLANT MATERIAL**

QUANTITY	NAME	MAXIMUM SPACING (FT.)
45	MIXED PERENNIALS	1 FT.
45	MIXED GRASSES	1 FT.
1	SILKY DOGWOOD	PLANT AWAY FROM INFLOW LOCATION

**BIORETENTION FILTER DATA**

BIORETENTION FILTER	A	B	C	D	E	F	G	H	I	J
1	492.00	494.00	494.00	496.50	497.00	15'	4'	40'	8'	50'

**SEQUENCE OF CONSTRUCTION**

1. OBTAIN GRADING PERMIT. 1 DAY
2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN. 1 DAY
3. CLEAR AND GRAB TO LIMITS OF DISTURBANCE AND MASS GRADE TO SUN-BASE. 1 DAY
4. INSTALL TEMPORARY SEEDING. 1 DAY
5. CONSTRUCT BUILDINGS. 2 MONTHS
6. FINE GRADE SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE. 1 DAY
7. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERSSION IS GRANTED BY I/S CONTROL INSPECTOR. 2 DAYS

**NOTE:** THE EXISTING WELL SHOWN ON THIS PLAN, TAG NO. HD 95-053 HAS BEEN FIELD LOCATED BY FISHER, COLLINS & CARTER, INC., PROFESSIONAL LAND SURVEYORS AND IS ACCURATELY SHOWN.

**DEVELOPER'S CERTIFICATE**

"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 THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERSON ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Signature: *Kevin Bowser* DATE: 5-10-06

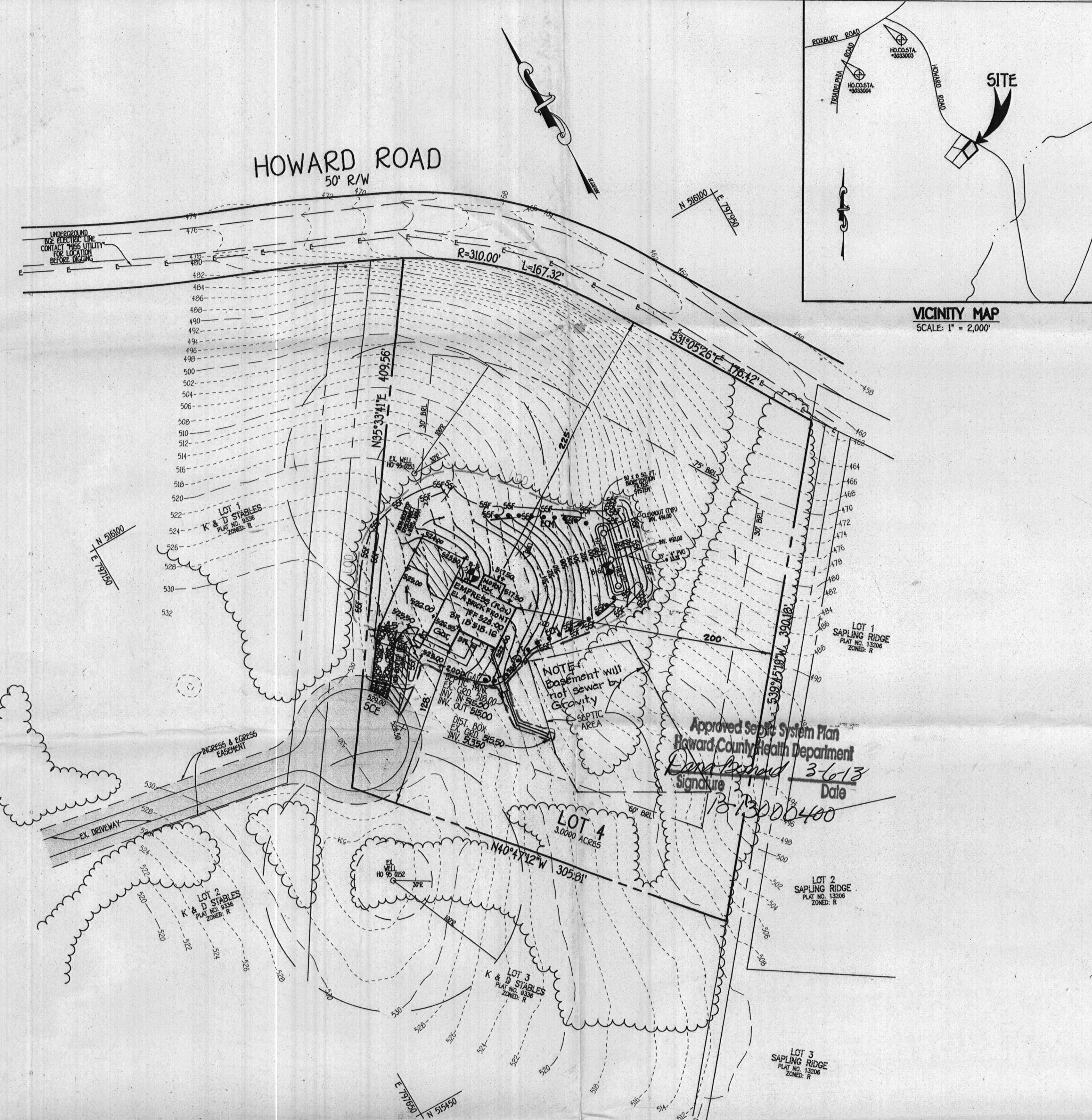
**ENGINEER'S CERTIFICATE**

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

Signature: *Earl D. Collins* DATE: 5-9-06

**OWNER/DEVELOPER:** KENNARD WARFIELD, JR., C/O LAND DESIGN & DEVELOPMENT, INC., 6307 MAIN STREET, ELLICOTT CITY, MARYLAND 21043

**BUILDER:** RYAN HOMES, 6085 MARSHALLEE DRIVE, SUITE 140, ELK RIDGE, MARYLAND 21075, 410-796-0980



**GENERAL NOTES**

1. SUBJECT PROPERTY ZONED: R
2. TOTAL AREA OF PROPERTY: 3,000 ACRES
3. SEPTIC EASEMENT SUBJECT TO HOWARD COUNTY HEALTH DEPARTMENT REVIEW.
4. LENGTH OF TRENCH TO BE DETERMINED AT TIME OF SEPTIC PERMIT ISSUANCE.
5. CONTRACTOR/BUILDER TO VERIFY ELEVATION IN THE FIELD BEFORE BEGINNING ANY CONSTRUCTION.
6. FIELD RUN TOPOGRAPHIC SURVEY DONE BY FLOWN AERIAL.
7. NO WETLANDS CURRENTLY EXIST ON THE PROPERTY.
8. STORMWATER MANAGEMENT IS PROVIDED BY NON-ROOFTOP DISCONNECTED AND THE USE OF A LEVEL SPREADER.
9. BASEMENT WILL, NOT SEWER BY GRAVITY

**APPROVED SEPTIC SYSTEM PLAN**  
Howard County Health Department  
Date: 3-6-13  
Signature: [Signature]

**LEGEND**

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
+362.5	SPOT ELEVATION
---	EROSION CONTROL MATTING
---	SUPER SILT FENCE
---	LIMITS OF DISTURBANCE

**FISHER, COLLINS & CARTER, INC.**  
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
10000 SQUAD OFFICE PARK - SUITE 200 NATIONAL FIRE ELLICOTT CITY, MARYLAND 21042 410-661-2925

**HOWARD SOIL CONSERVATION DISTRICT**

Signature: *John R. Blanton* DATE: 5/10/06

Signature: *Jim Maguire* DATE: 5/10/06

**SITE DEVELOPMENT, SEDIMENT/EROSION CONTROL PLAN, NOTES & DETAILS**

**K & D STABLES**

LOT 4  
TAX MAP NO. 27 ZONED: R PARCEL NO. 206  
5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1" = 50' DATE: APRIL, 2005

**G.P. 06-93**