

APPROVED HOWARD COUNTY DEPT. OF PUBLIC WORKS	
<i>[Signature]</i>	DATE 9-2-86
CHIEF BUREAU OF ENGINEERING	
DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i>	DATE 9-2-86
CHIEF DIV. OF LAND DEVEL. AND ZONING ADM	
11/5/86	Relocated M-1, I-3, I-4
Date	Revision Description
COLUMBIA GATEWAY	
8th ELECTION DISTRICT HOWARD COUNTY, MARYLAND	
OWNER / DEVELOPER	
THE HOWARD RESEARCH AND DEVELOPMENT CORPORATION COLUMBIA, MARYLAND	
	DAFT · McCUNE · WALKER INC. LAND PLANNING CONSULTANTS LANDSCAPE ARCHITECTS ENGINEERS & SURVEYORS 200 E. PENNSYLVANIA AVE. TOWSON, MD. 21204 TELEPHONE: (301) 296-3333
AREA	PARCELS H-1 THRU H-5 A RESUBDIVISION OF PARCEL H
TITLE	DRAINAGE AREA MAP, DETAILS & STORM DRAIN PROFILES
Des By J.D.C.	Scale AS SHOWN
Drn By M.S.S.	Date 7-1-86
CKM By J.W.R.	Approved
Prof. No. 84-011	2 OF 3

8511

F-87-04

DIRECTOR OF PUBLIC WORKS _____ DATE _____
 CHIEF, BUREAU OF ENGINEERING _____ DATE _____
 CHIEF, LAND DEVELOPMENT DIVISION _____ DATE _____

APPROVED HOWARD COUNTY DEPT. OF PUBLIC WORKS
 _____ DATE 9-28-86
 CHIEF, BUREAU OF ENGINEERING

DEPARTMENT OF PLANNING AND ZONING
 _____ DATE 9-28-86
 CHIEF, DIV. OF LAND DEVEL. AND ZONING ADM

Date No Revision Description

COLUMBIA GATEWAY
 6th ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

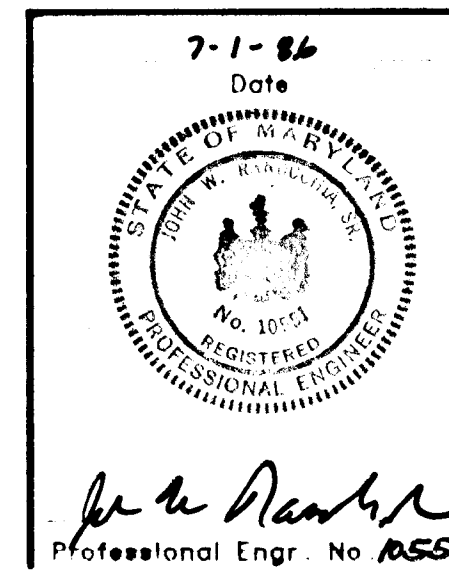
OWNER/DEVELOPER
 THE HOWARD RESEARCH
 AND DEVELOPMENT CORPORATION

DAFT McCUNE WALKER Inc.
 LAND PLANNING / LANDSCAPE ARCHITECTS
 ENGINEERS & SURVEYORS
 200 E. PENNSYLVANIA AVE.
 TOWSON MARYLAND 21284
 (301) 298-3333

AREA PARCELS H-1 THRU H-4
 A RESUBDIVISION OF PARCEL H

TITLE **SEDIMENT CONTROL FOR ROAD GRADING**

Des By A.J.D. Scale 1" = 30'
 Dwn By A.J.D. Date 7-1-86
 Chk By J.W.R. Approved



Professional Engr. No. 10551

LEGEND
 DRAINAGE AREA LIMIT
 LIMIT OF DISTURBANCE
 STABILIZED CONSTRUCTION ENTRANCE
 SILT FENCE
 MOUNTABLE BERM
 EARTH DIKE
 INLET PROTECTION

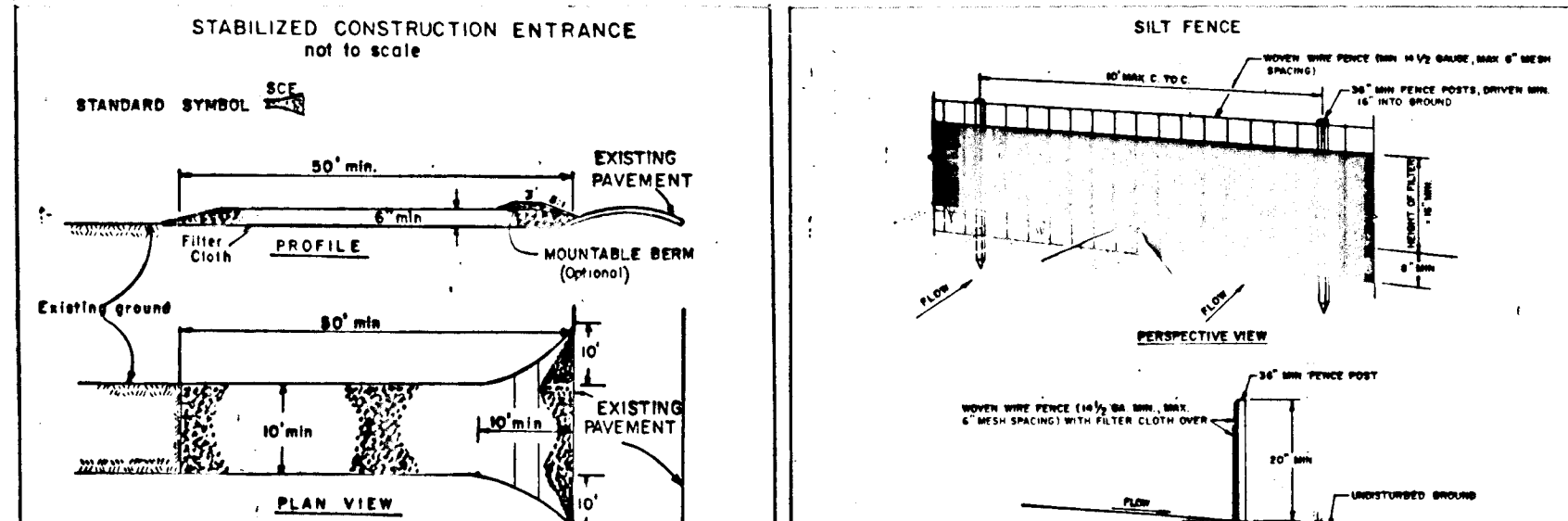
SEQUENCE OF OPERATIONS

1. OBTAIN GRUBS PERMIT.
2. CLEAR AND GRUB FOR THE INSTALLATION OF ALL SEDIMENT CONTROL MEASURES (3 DAYS)
3. INSTALL ALL SEDIMENT CONTROL MEASURES AS SHOWN. (3 DAYS)
4. STABILIZE EARTH DIKE WITH TEMPORARY SEEDING. SEE SEEDING NOTE.
5. CLEAN AND GRUB SITE WITHIN LIMITS OF DISTURBANCE. (3 DAYS)
6. MASS GRADE SITE AND INSTALL UTILITIES. PROVIDE INLETS WITH INLET PROTECTION. (9 WEEKS)
7. FINE GRADE ROAD. INSTALL CURB & GUTTER AND APPLY ROAD SUBBASE. (1 WEEK)
8. FINE GRADE AND STABILIZE ALL REMAINING AREAS WITH PERMANENT SEEDING. (1 WEEK)
9. WITH PRIOR PERMISSION OF INSPECTOR, REMOVE ALL SEDIMENT CONTROLS, FINE GRADE AND STABILIZE THOSE AREAS PAVED ROAD SURFACE. (1 WEEK)

REVIEWED FOR HOWARD SOIL AND MEETS TECHNICAL REQUIREMENTS

DATE 8/29/86
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
 APPROVED _____ DATE 7-1-86
 HOWARD S.C.D. DATE



CONSTRUCTION SPECIFICATIONS

1. Stone Size - One 2" stone, or ratiolined or recycled concrete equivalent.
2. Length - As required, but not less than 30 feet (except on a single residence lot where a 30 foot minimum length would apply).
3. Thickness - Not less than 18 inches.
4. Width - Ten (10) foot minimum, but not less than the full width at points where ingress of gravel occurs.
5. Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter cloth will not be required on a single family residence lot.
6. Surface Water - All surface water flowing or directed toward construction entrance shall be piped across the entrance. If piping is impractical, a mountable berm with 3/4" slope will be permitted.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleaning of any measure used to trap sediment.
8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
9. Periodic inspection and needed maintenance shall be provided after each rain.

SEEDING SPECIFICATIONS

Soil Preparation: Loosen upper 3 inches of soil by raking, disking or other acceptable means. Remove all sticks, debris and stones larger than 1/2 inch in size.

Soil Amendments: Apply 2 tons per acre of ground dolomitic limestone (92 lbs./1,000 square feet) and 600 lbs. per acre 10-20-10 fertilizer (14 lbs./1,000 square feet) or equivalent rate. Narrow or disc line into upper 3 inches of soil. (Soil line application if area was previously amended with lime for temporary seeding is acceptable.) At time of seeding, apply 400 lbs. per acre (9.2 lbs./1,000 square feet) of 30-0-0 ureaform fertilizer.

Seeding: For the periods March 1st through April 30th, and August 1st through October 15th, seed with 348 lbs. per acre (18 lbs./1,000 square feet) of 802 Kentucky 33 Certified Tall Fescue and 102 Annual Ryegrass (1-1/2 months per acre). During the period of October 15th through February 28th and May 1st through July 31st refer to temporary seeding notes. These areas will be reseeded with permanent vegetation during March or August as appropriate.

Hydroseeding: Wood cellulose fiber mulch (45 lbs./1,000 square feet - dry weight) shall be incorporated as an integral part of a slurry mix after seed, fertilizer and water have been thoroughly mixed. Mix shall be uniformly applied, by an approved hydroseeding machine on all lawn areas designated on the drawings after the proposed seed has been sown. The applied slurry shall form a blotter like cover uniformly impregnated with green seed, fertilizer and fiber mulch. An approved tackifier shall be immediately applied to the hydroseeded areas if a reseeded tackifier was not incorporated into the mulch.

Maintenance: Seeded areas shall be watered and maintained until a thick stand of grass is established. Bare spots which persist after three weeks of favorable growing weather shall be reseeded and graded as specified except that lime and fertilizer may be omitted. Lawn areas shall be mowed to a height of 2 inches and 1/2 inches at all times, until a thick stand of turf is established.

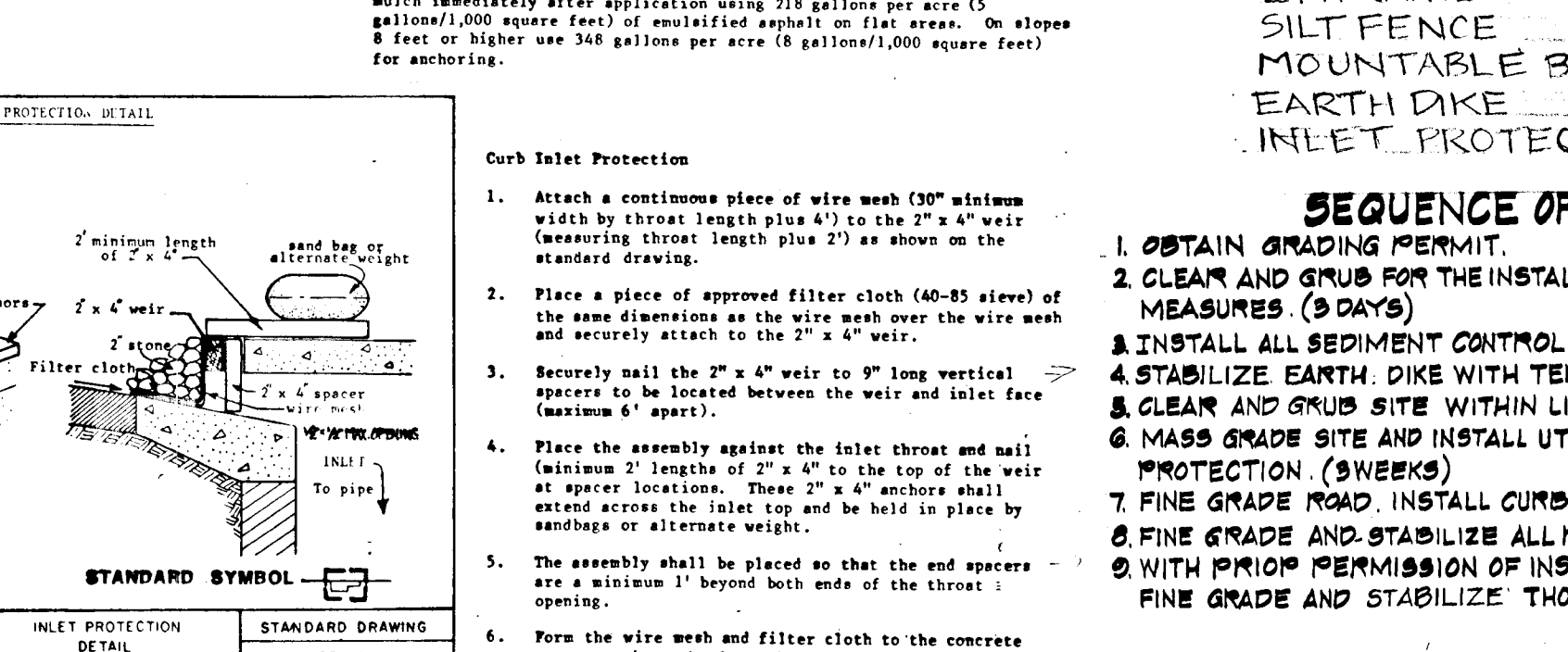
TEMPORARY SEEDING NOTES

Soil Preparation: Loosen upper 3 inches by raking, disking or other acceptable means.

Soil Amendments: Apply 2 tons (92 lbs./1,000 square feet) per acre of ground dolomitic limestone and 600 lbs. per acre (10 lbs./1,000 square feet) of 10-20-10 fertilizer (or equivalent rate). Narrow or disc line into upper 3 inches of soil.

Seeding: For periods March 1st through April 30th, and from August 1st through October 31st, seed with 40 lbs. per acre (10 lbs./1,000 square feet) of Italian Ryegrass. For the period May 1st through August 1st seed with 3 lbs./acre (60 lbs./1,000 square feet) of Warming Longgrass. For the period November 1st through February 28th protect the site by possible in the spring or use seed.

Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs./1,000 square feet) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using 218 gallons per acre (2 gallons/1,000 square feet) of emulsified asphalt on flat areas. On slopes 2 feet or higher use 348 gallons per acre (8 gallons/1,000 square feet) for anchoring.



CONSTRUCTION SPECIFICATIONS

1. Materials
 - A. Wooden frame is to be constructed of 2" x 4" construction grade lumber.
 - B. Wire mesh must be of sufficient strength to support filter fabric, and stone for curb inlet, with water fully impounded against it.
 - C. Filter cloth must be of a type approved for this purpose; resistant to sunlight with close size, 105, 40-60, to allow sufficient passage of water and removal of sediment.
 - D. Stone is to be 2" in size and clean, since fines would clog the cloth.
2. Erection
 - A. This type of protection must be inspected frequently, and the filter cloth and stone replaced when clogged with sediment.
 - B. Assume that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.
 - C. Form the wire mesh and filter cloth to the concrete gutter against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such manner as to prevent water from entering the inlet under or around the filter cloth.

CERTIFICATION BY THE ENGINEER

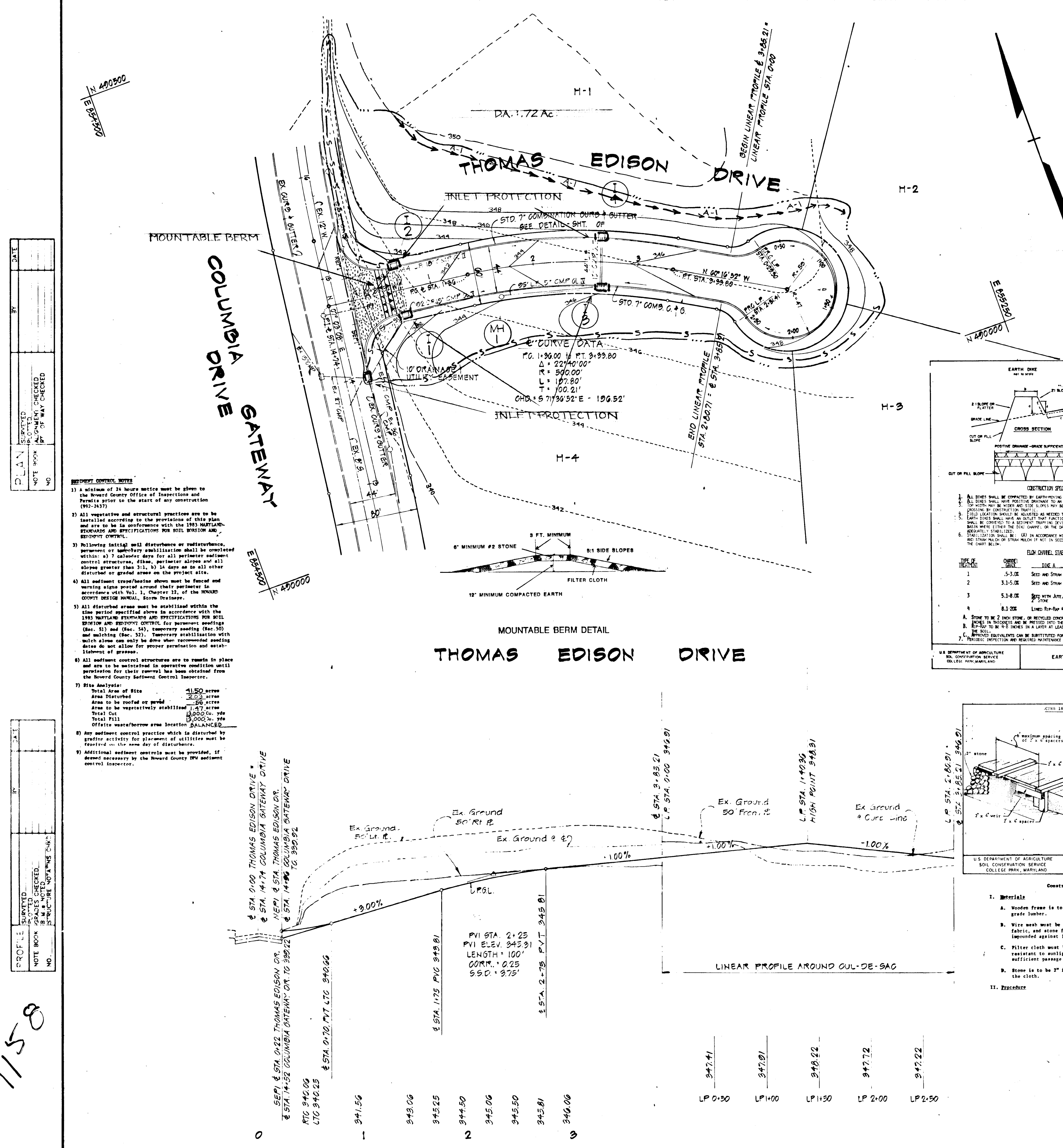
"I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Walter L. Woodford, PE #10551
 JOHN W. RANOLICIA, Sr. DATE 7-1-86

CERTIFICATION BY THE DEVELOPER

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPT. OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY."

Walter L. Woodford DATE 7-1-86
 Walter L. Woodford DATE



DATE	BY	REVISION

DATE	BY	REVISION

1158