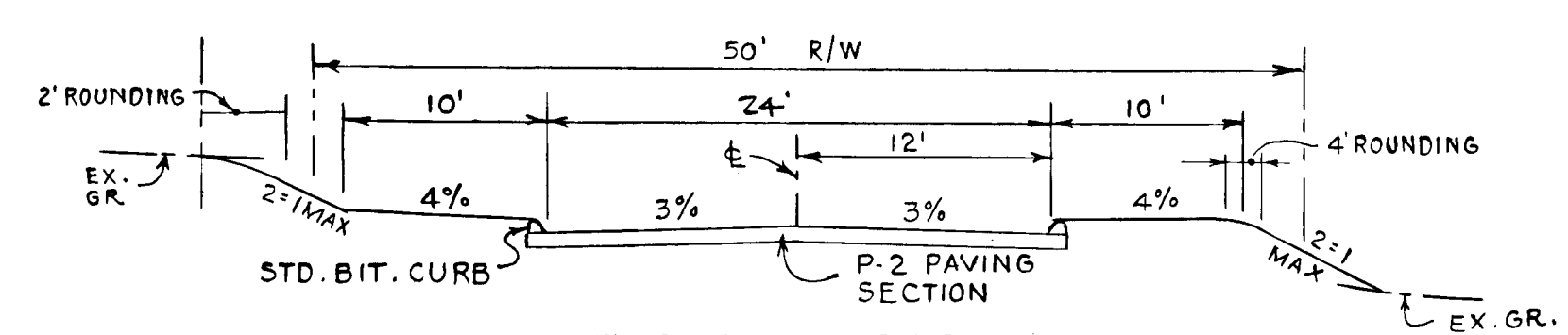
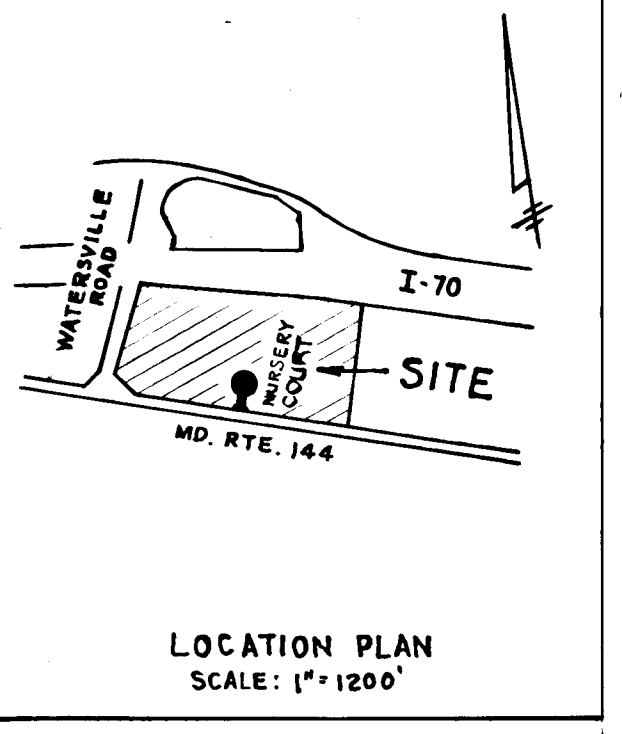
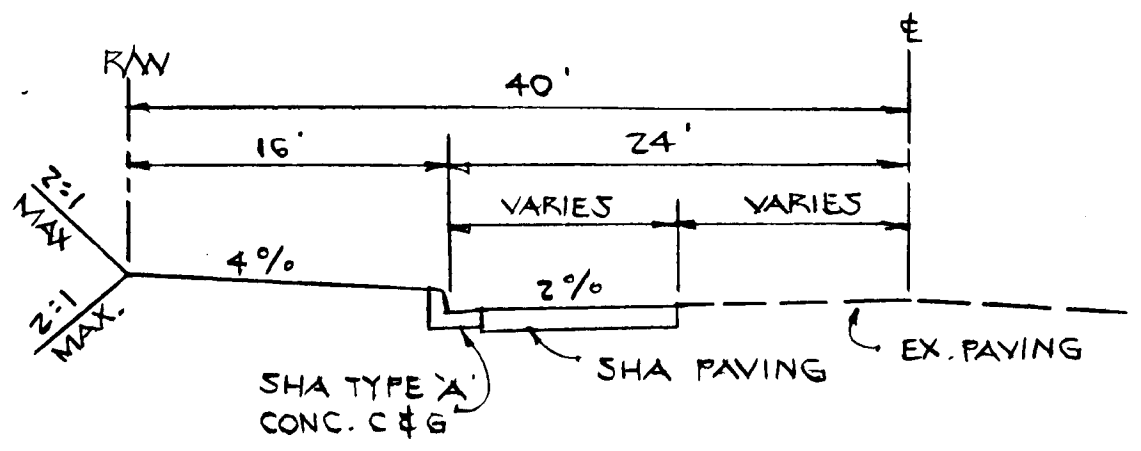


**GENERAL NOTES**

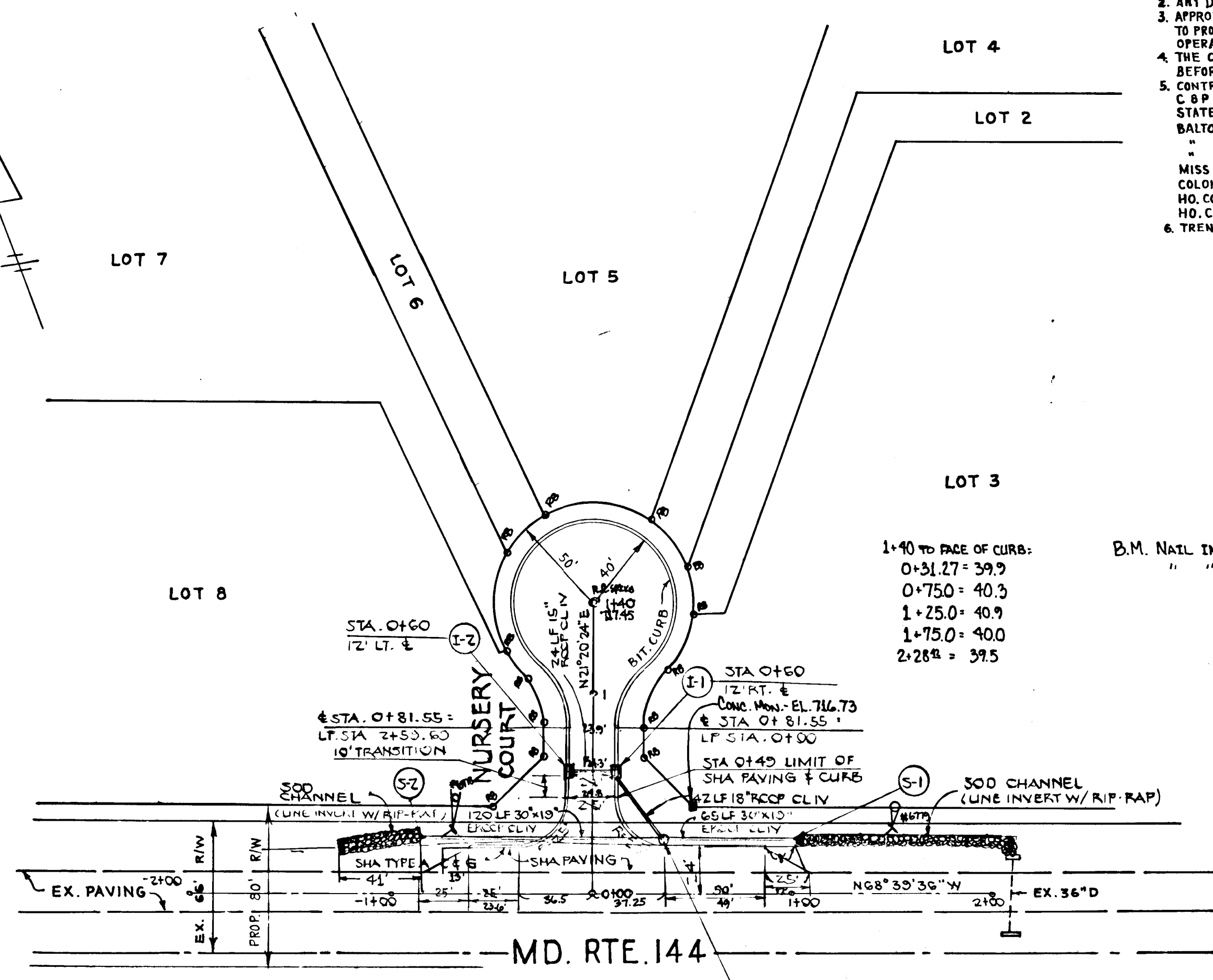
1. ALL CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH HO. CO. STDS. SPECS & DETAILS FOR CONSTRUCTION.
2. ANY DAMAGE TO PUBLIC RIGHTS-OF-WAYS OR PAVING WILL BE DONE AT THE DEVELOPERS EXPENSE.
3. APPROXIMATE LOCATIONS OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXIST. UTILITIES & MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES WHERE DIRECTED BY THE ENGR. AT LEAST 2 WEEKS BEFORE CONSTRUCTION.
5. CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES AT LEAST 5 DAYS BEFORE STARTING WORK SHOWN HEREON:  
 C.B.P. TELEPHONE CO. 1-800-257-7777  
 STATE HIGHWAY ADMIN. 531-5533  
 BALTO. G & E. CO. - CONTRACTOR SERVICES 850-4620  
 HO. CO. BUREAU OF UTILITIES 992-2366  
 HO. CO. DEPT. OF INSPECTION & PERMITS 992-2366  
 MISS. UTILITY 1-559-0100  
 COLONIAL PIPELINE CO. 795-1390  
 TROUBLE SHOOTING - 298-9001
6. TRENCH BEDDING TO BE PER G 2-01



TYPICAL SECTION  
NURSERY COURT  
CUL DE SAC 30 MPH DESIGN SPEED



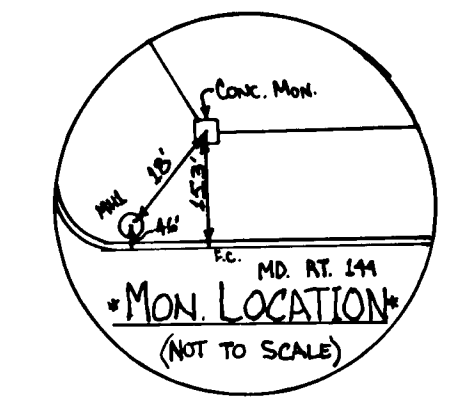
TYPICAL HALF SECTION  
MD. RTE. #144  
STATE ROAD



PLAN  
SCALE: 1"=50'

1+40 TO FACE OF CURB:  
 0+31.27 = 39.9  
 0+75.0 = 40.3  
 1+25.0 = 40.9  
 1+75.0 = 40.0  
 2+28.4 = 39.5

B.M. NAIL IN POLE 6779 = 716.94  
 " " " 6778 = 716.99



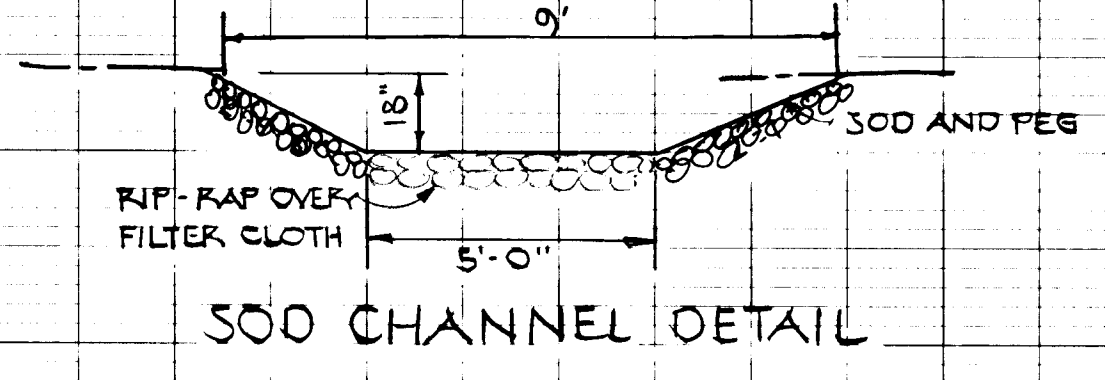
THIS PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SCD  
 Stephen L. Adams 10/24/87  
 HOWARD SCD DATE  
 REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS  
 James M. Nelson 10/22/87  
 US SOIL CONSERVATION SERVICE DATE

STRUCTURE SCHEDULE					
NO.	TYPE	INV. IN	INV. OUT	TOP ELEV.	REMARKS
I-1	S-COMB (DEP)	713.30	713.15	716.80	S.D. 4.34
I-2	S-COMB (DEP)	-	713.44	716.36	S.D. 4.34
S-1	CONCRETE END SECTION	-	711.90	-	SHA STO
S-2	CONCRETE END SECTION	714.11	-	-	SHA STO
M-1	SHALLOW MH	712.55	712.19	716.36	G 5.05

AS-BUILT SURVEY CERTIFIED BY  
 WALTER PARK MD. L.S. NO 5529  
 ON 10-11-88.

BELOW S-1  
 A = 12.0  
 D = 11.7  
 T = 1.03  
 T/2 = 1.02  
 S = 0.0076  
 S/2 = 0.00718  
 D = 0.035  
 K = 42.5  
 Y = 3.8 fps  
 Q<sub>10</sub> = 45.4 cfs  
 Q<sub>10</sub> DES = 28.4 cfs  
 CHANNEL IS ADEQUATE

ABOVE S-2 @ DEPTH OF O.G.  
 A = 31.72  
 D = 7.68  
 T = 0.48  
 T/2 = 0.613  
 S = 0.070  
 S/2 = 0.2646  
 D = 0.035  
 K = 42.5  
 Y = 6.9 fps  
 Q<sub>10</sub> = 25.7 cfs  
 Q<sub>10</sub> DES = 24.1 cfs  
 CHANNEL IS ADEQUATE



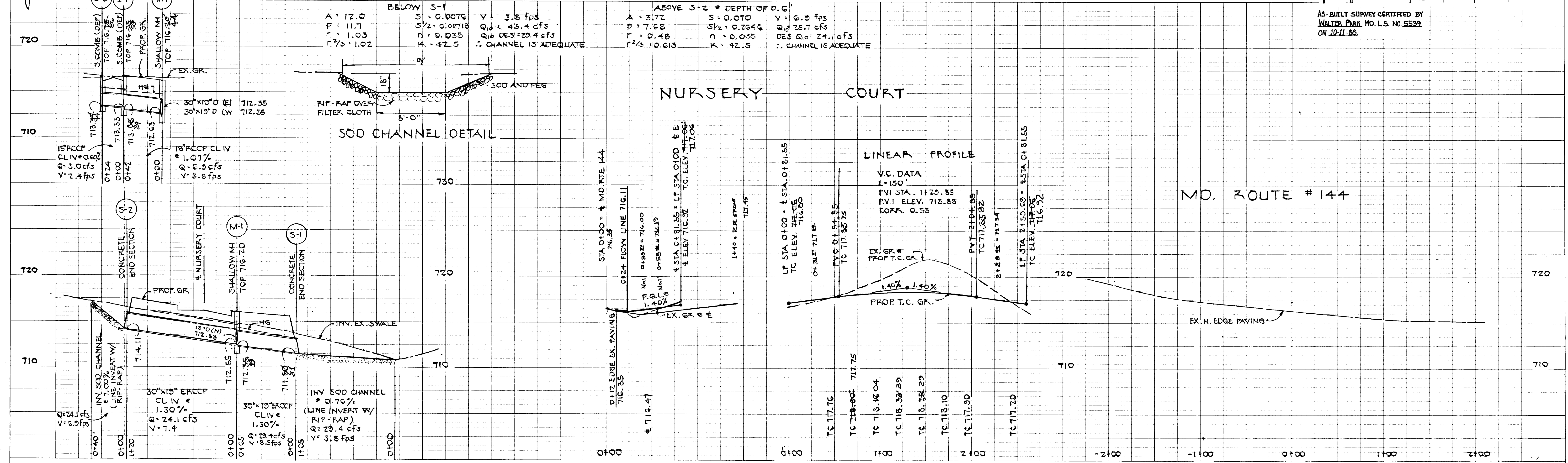
SOD CHANNEL DETAIL

NURSERY COURT

LINEAR PROFILE

V.C. DATA  
 L = 150'  
 PVI STA. 1+25.85  
 P.V.I. ELEV. 718.88  
 POKR. 0.55

MD. ROUTE #144



APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 CHIEF, LAND DEVELOPMENT DIVISION, DATE  
 Approved: W. W. W. 10/20/87  
 CHIEF, BUREAU OF HIGHWAYS DATE  
 Approved: 10-23-87  
 CHIEF, BUREAU OF ENGINEERING DATE

APPROVED: OFFICE OF PLANNING & ZONING  
 Approved: [Signature] 10/23/87  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

HUDKINS ASSOCIATES  
 200 EAST JOPPA ROAD  
 ROOM 101, SHELL BUILDING  
 TOWSON, MARYLAND 21204

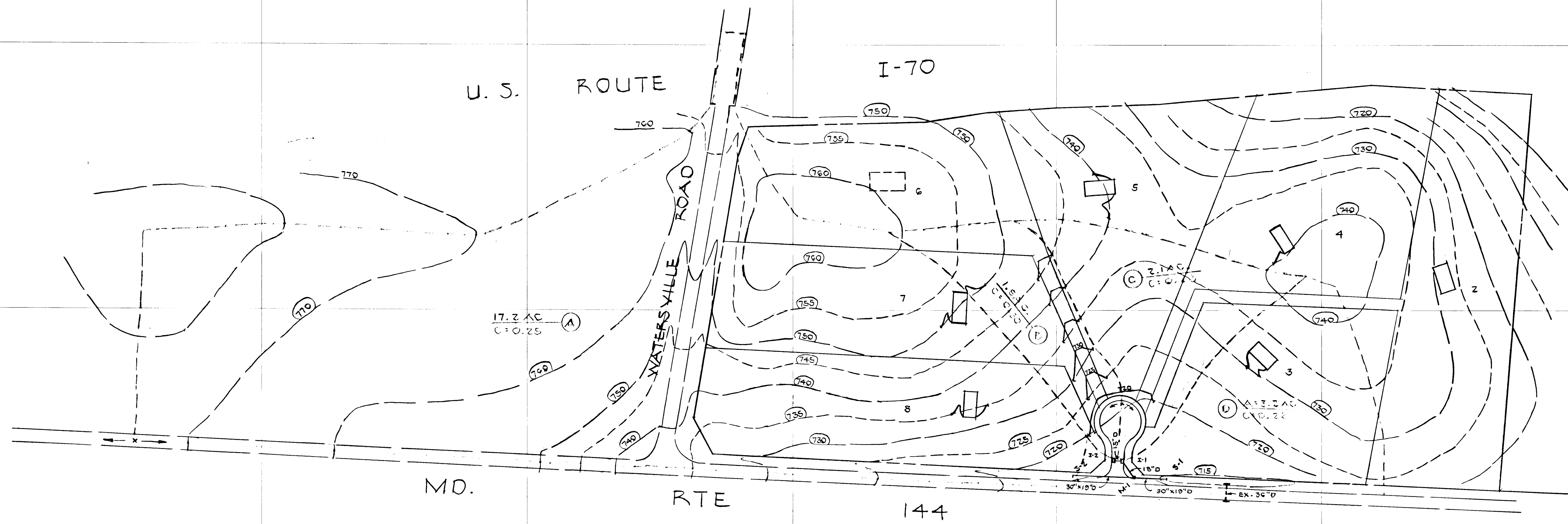
DES: DB  
 DRN: DB  
 CHK: AL  
 DATE: 6-29-87

REVISION  
 BY NO DATE

ROAD AND STORM DRAIN PLANS

NURSERY COURT SECTION TWO LOTS 2 THRU 8 NURSERY ACRES FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE AS SHOWN  
 SHEET 1 OF 4  
 AS-BUILT 10-11-88. F-87-225

8011



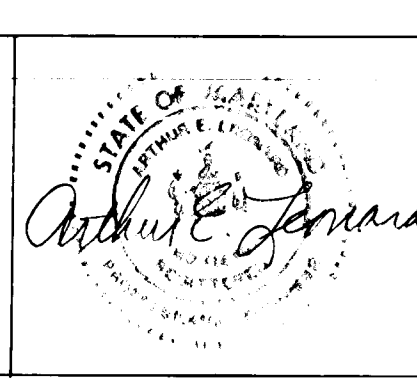
SCALE  
1" = 100'

8011

APPROVED: HOWARD COUNTY  
DEPARTMENT OF PUBLIC WORKS  
CHIEF, LAND DEVELOPMENT DIVISION, DATE 10-20-87  
*Benjamin W. Manum*  
CHIEF, BUREAU OF HIGHWAYS, DATE 10-20-87  
*Benjamin W. Manum*  
CHIEF, BUREAU OF ENGINEERING, DATE

APPROVED:  
OFFICE OF PLANNING & ZONING  
CHIEF, DIVISION OF LAND DEVELOPMENT  
AND ZONING ADMINISTRATION, DATE 10-20-87  
*Arthur E. Leonard*

HUDKINS ASSOCIATES  
200 EAST JOFFA ROAD  
ROOM 101, SHELL BUILDING  
TOWSON, MARYLAND 21204



DES. DB					
DRN DB					
CHK. A.L.					
DATE 6-25-87	BY	NO	REVISION	DATE	600' SCALE MAP NO.

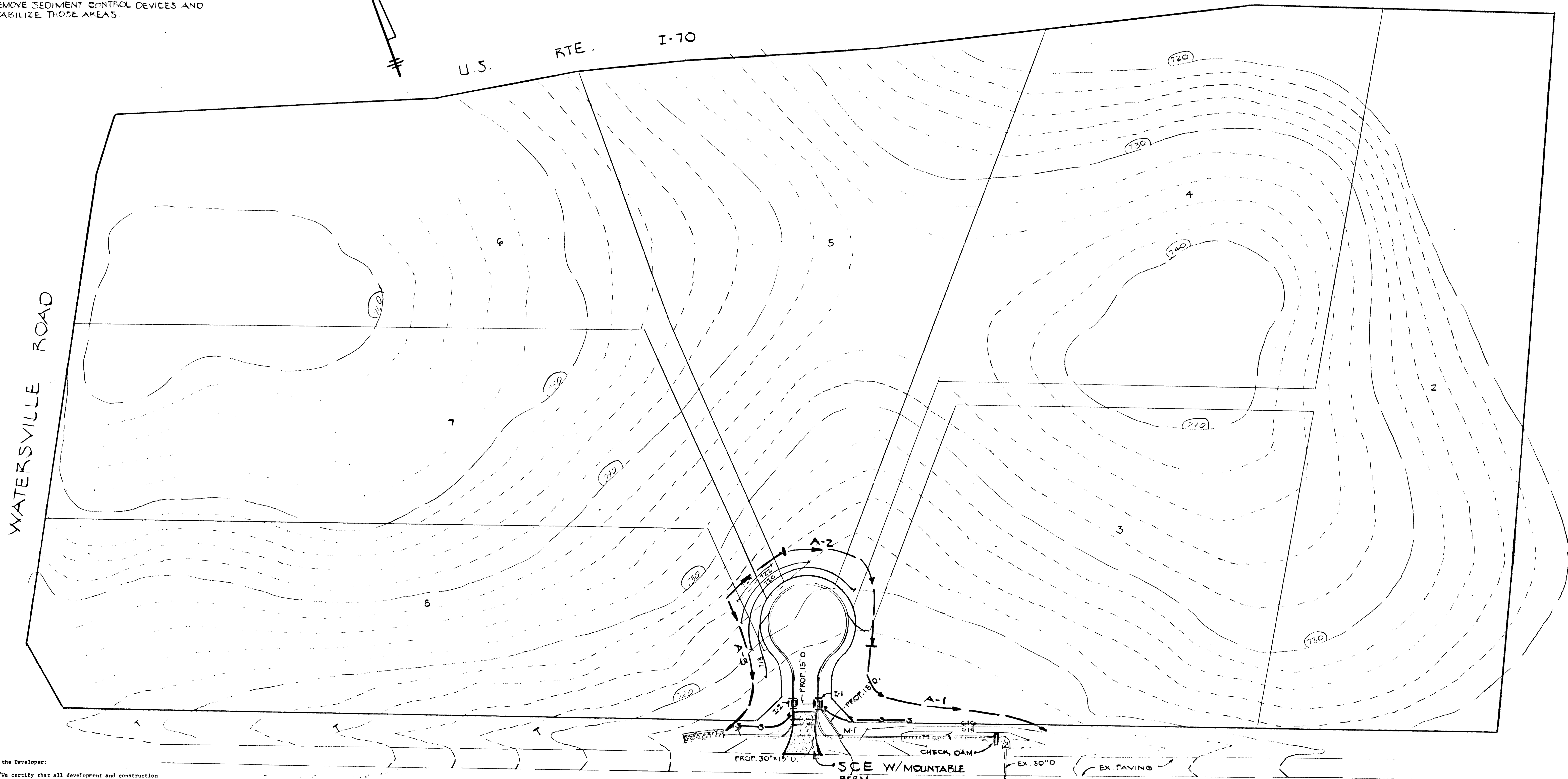
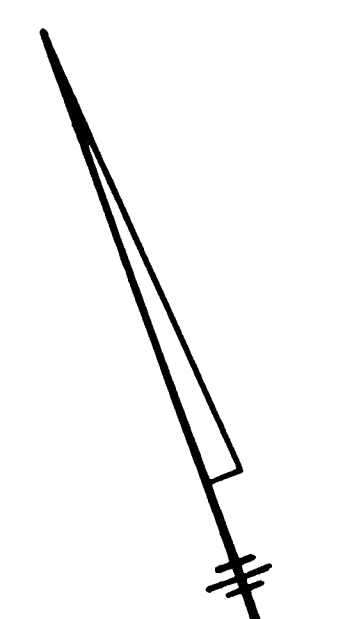
ORAINAGE  
AREA MAP

NURSERY COURT  
SECTION TWO  
LOTS 2 THRU 8  
NURSERY ACRES  
FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND  
P 87-40  
F 87-225

SCALE  
AS  
SHOWN  
SHEET  
2 OF 4

**SEQUENCE OF CONSTRUCTION**

1. OBTAIN GRADING PERMIT
2. NOTIFY HO. CO. OFFICE OF INSPECTION AND PERMITS & NOTIFY 24 HRS. BEFORE STARTING CONSTRUCTION (002-2437)
3. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES.
4. INSTALL SEDIMENT CONTROL DEVICES
5. NOTIFY OFFICE OF INSPECTION & PERMITS TO OBTAIN APPROVAL OF INSTALLATION
6. ROUGH GRADE SITE
7. INSTALL STORM DRAINS.
8. FINE GRADE SITE.
9. INSTALL SUB-BASE MATERIALS ON ROADS
10. STABILIZE REMAINING AREAS
11. PAVE ROADS
12. REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE THOSE AREAS.



MD ROUTE # 144

PLAN  
1" = 50'

( ) By the Developer:  
"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. I also authorize periodic on-site inspection by the Howard Soil Conservation District."  
*Carl D. ...* 9/18/87  
Signature of Developer Date  
Print name below signature

( ) 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 E. ...* 8-31-87  
Signature of Engineer Date  
Print name below signature

( ) Reviewed for HOWARD S.C.D. and meets Technical Requirements  
*James M. ...* 10/2/87  
U.S. Soil Conservation Service Date  
Signature of District Engineer Date  
Print name below signature

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
CHIEF, LAND DEVELOPMENT DIVISION, DATE  
*W. M. ...* 10/30/87  
CHIEF, BUREAU OF HIGHWAYS DATE  
*...* 10-30-87  
CHIEF, BUREAU OF ENGINEERING, DATE

APPROVED: OFFICE OF PLANNING & ZONING  
*...*  
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

HUDKINS ASSOCIATES  
200 EAST JOFFA ROAD  
ROOM 101 SHELL BUILDING  
TOWSON, MARYLAND 21204



DES: DB  
DRN: DB  
CHK: AL

DATE: 8-31-87

BY NO. REVISION DATE

**SEDIMENT CONTROL PLAN**

NURSERY COURT  
SECTION TWO  
LOTS 2 THRU 8  
NURSERY ACRES  
FOURTH ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN  
SHEET 3 OF 4

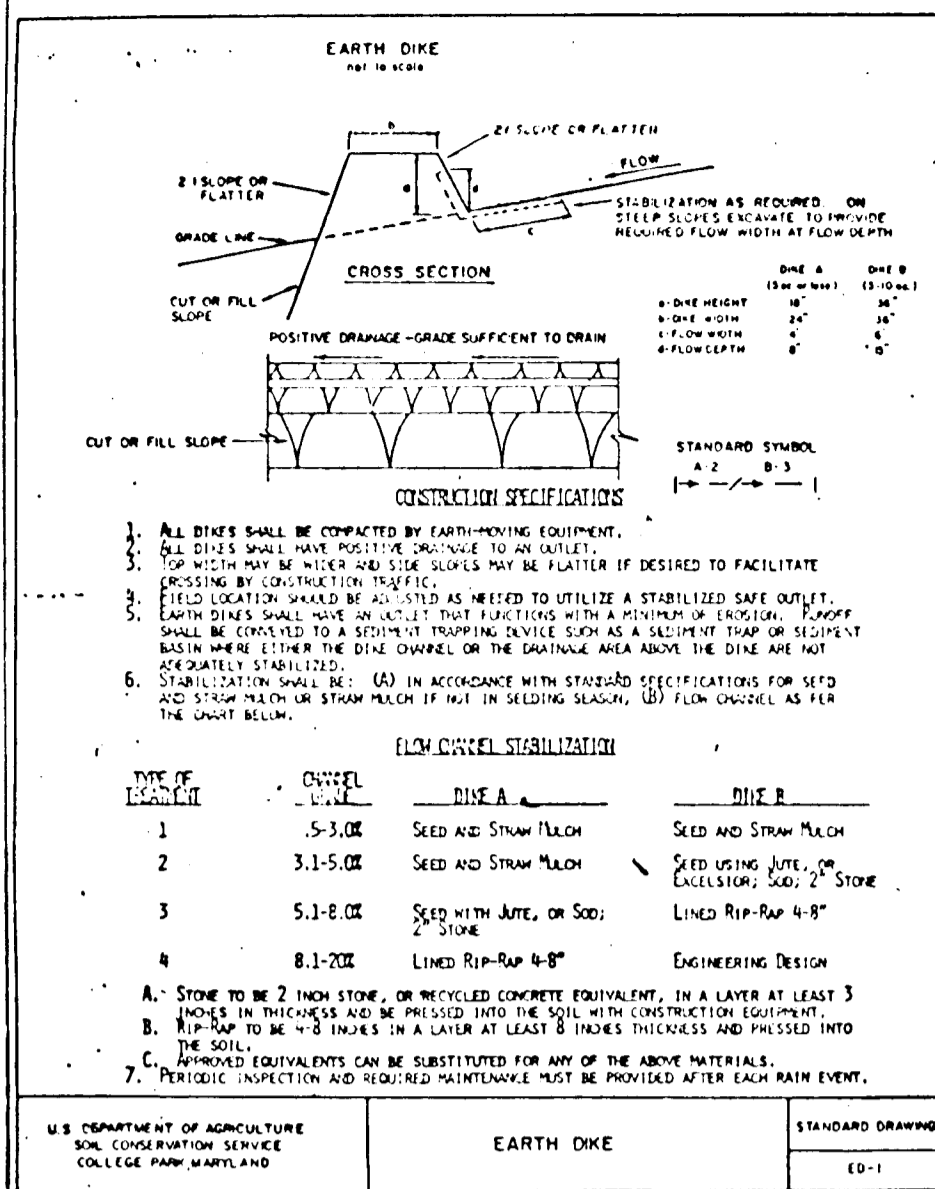
S-85-36

P.87-40

AS-BUILT 10-11-88

F-87-225

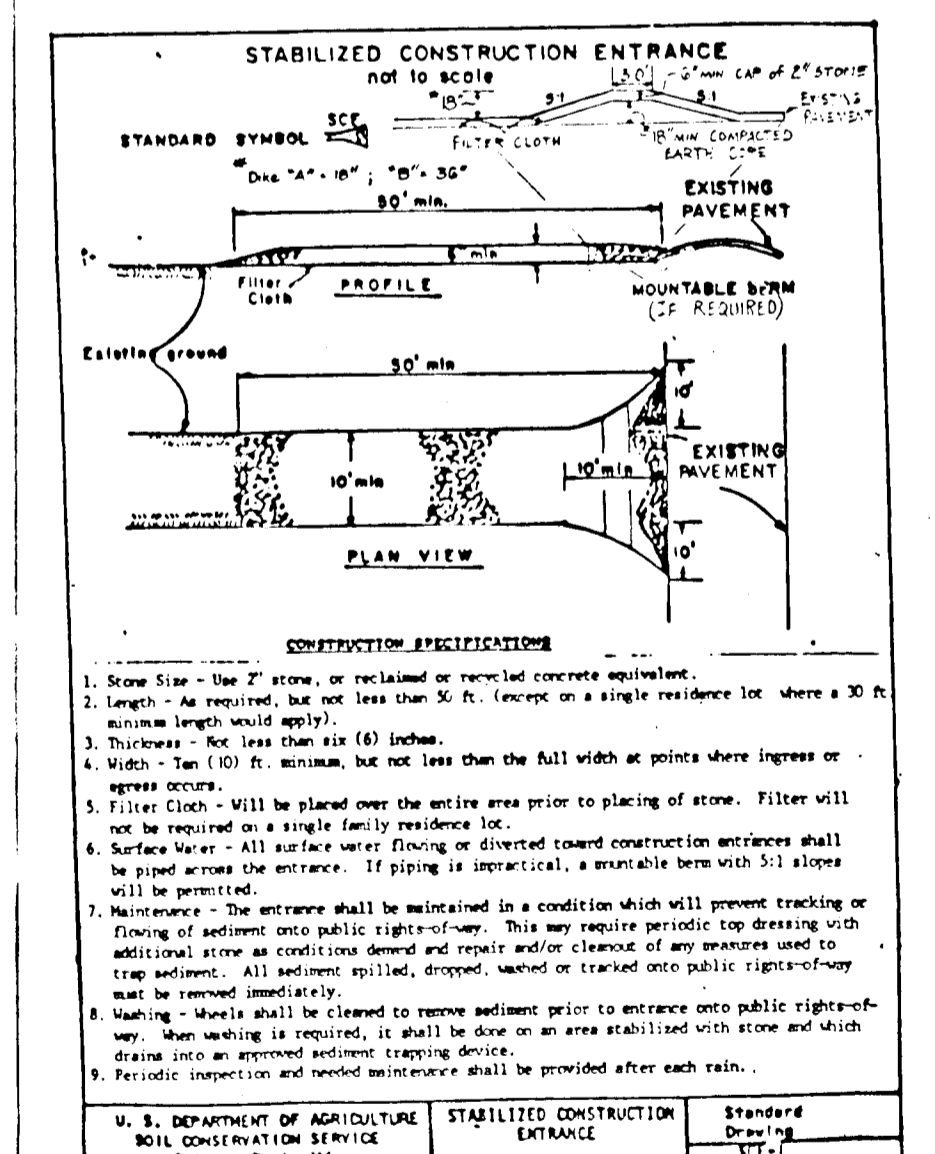
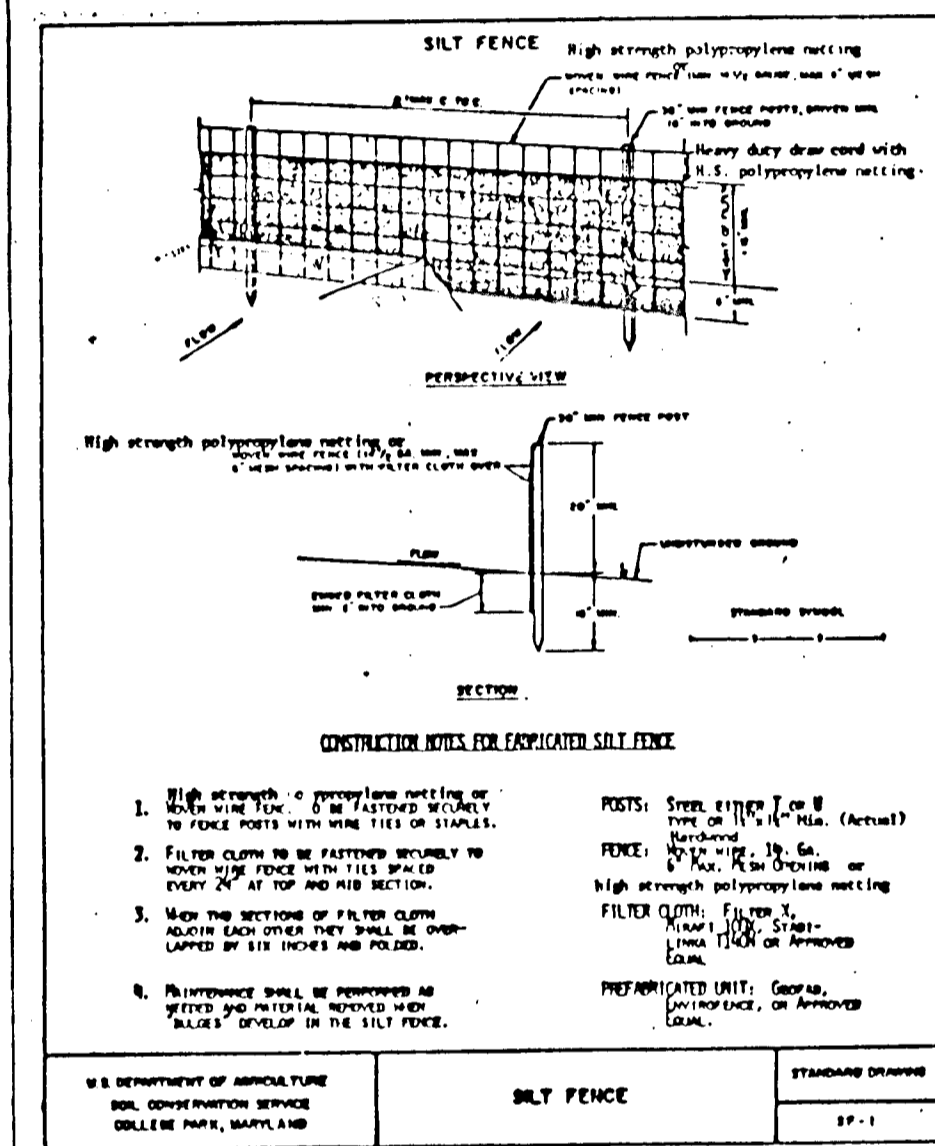
1108



**SEDIMENT CONTROL NOTES**

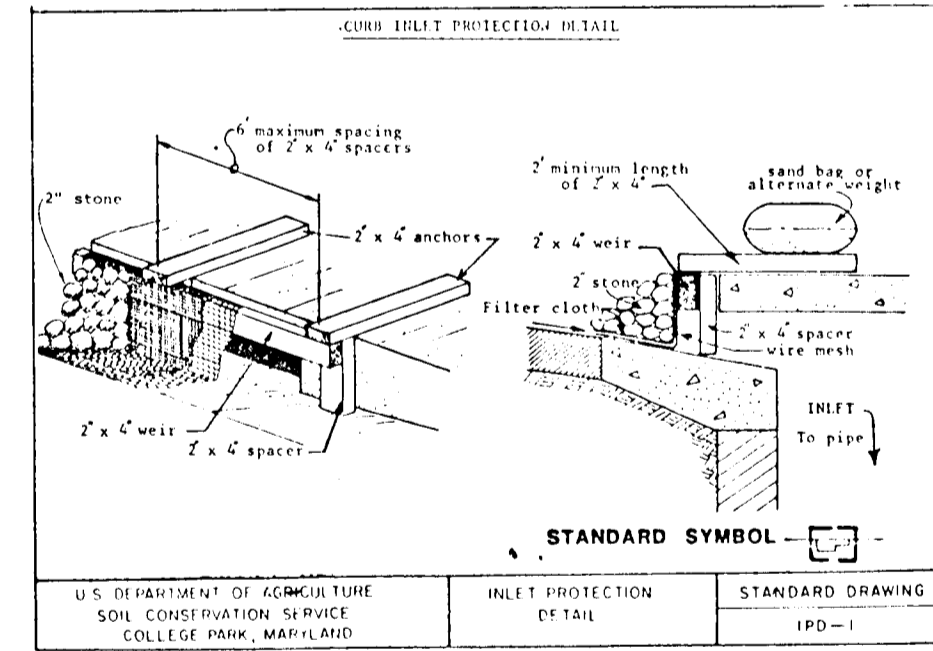
- 1) A minimum of 24 hours notice must be given to the Howard County Office of Inspection and Permits prior to the start of any construction. (992-2437)
- 2) All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 3) Following initial soil disturbance or redistribution, 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.
- 4) All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 12, of the HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- 5) 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) and (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.
- 6) 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.
- 7) Site Analysis:
 

Total Area of Site	1.6 Acres
Area Disturbed	1.6 Acres
Area to be roofed or paved	0.0 Acres
Area to be vegetatively stabilized	0.0 Acres
Total Cut	0.0 Cu. yds
Total Fill	0.0 Cu. yds
Offsite waste/borrow area location	1/4
- 8) Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- 9) Additional sediment controls must be provided, if deemed necessary by the Howard County DFW 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 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.

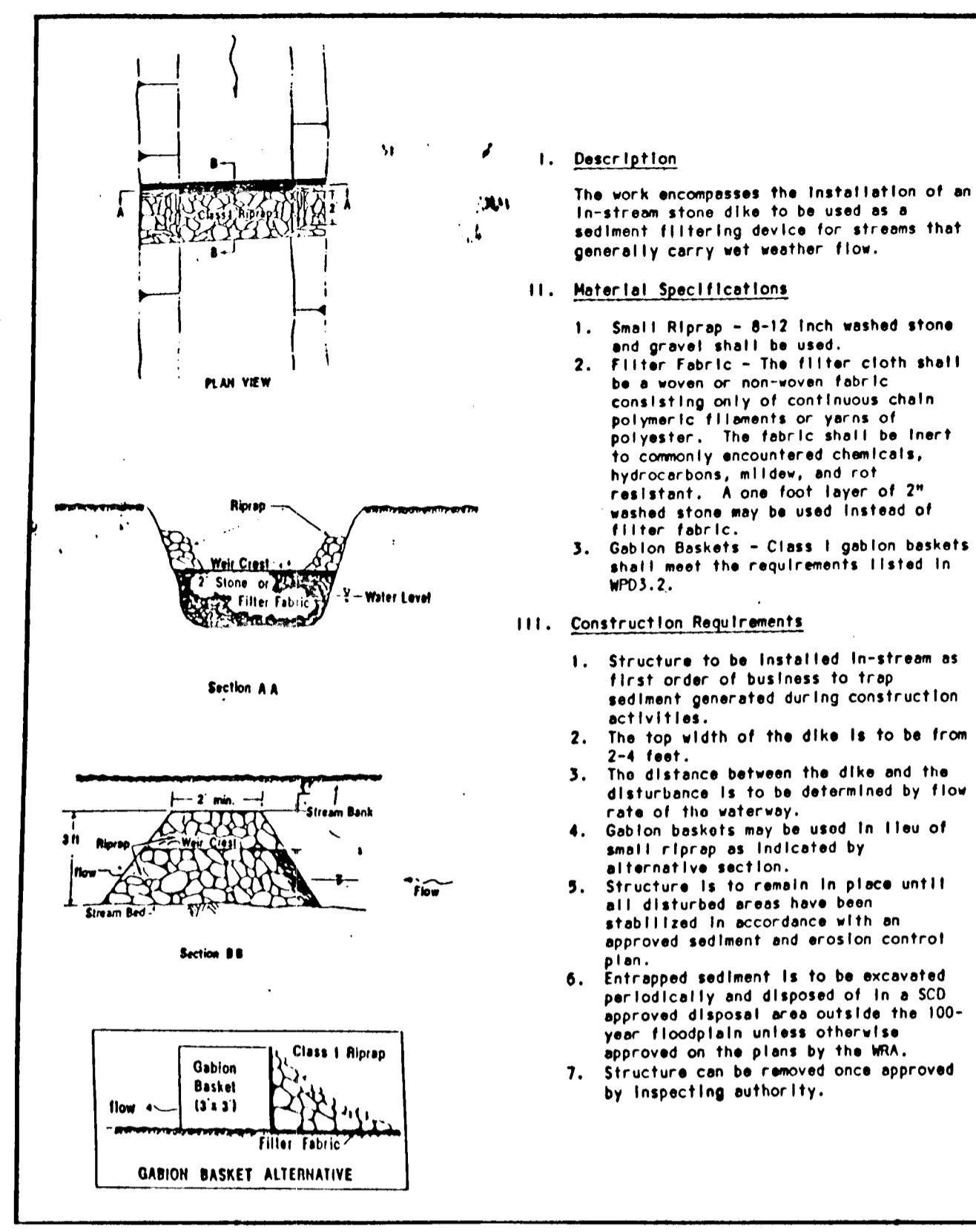


By the Developer:  
 "I/We certify that all development and construction will be done according to this plan, and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of Natural Resources Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."  
 Signature of Developer: *Carl U. ...* Date: 9/1/87  
 Print name below signature: Carl U. ...

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."  
 Signature of Engineer: *James M. ...* Date: 10/22/87  
 Print name below signature: James M. ...  
 Reviewed for HOWARD S.C.D. and State Technical Requirements: *James M. ...* Date: 10/22/87  
 Service: *James M. ...*  
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.  
 Signature of District: *James M. ...* Date: 10/22/87  
 Howard S.C.D.



- Curb Inlet Protection.**
1. Attach a continuous piece of wire mesh (30" min. width by throat length plus 4") to the 2' x 4" curb (measuring throat length plus 4") as shown on the standard drawing.
  2. Place a piece of approved filter cloth (24" x 48" size) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2' x 4" curb.
  3. Securely nail the 2' x 4" curb to 8" long vertical anchors to be located between the curb and inlet face (see 6" anchor).
  4. Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the curb at anchor locations. These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
  5. The assembly shall be placed so that the end anchors are a minimum 1' beyond both ends of the throat opening.
  6. Form the wire mesh and filter cloth to the concrete gutter and against the face of curb on both sides of the inlet. Place clean 2" stone over the wire mesh and filter fabric in such a manner as to prevent water from entering the inlet under or around the filter cloth.
  7. This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
  8. Assure that storm flow does not bypass inlet by installing temporary earth or asphalt dikes directing flow into inlet.



**PERMANENT SEEDING NOTES**

- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
- Soil Amendments:** In lieu of soil test recommendations, use one of the following schedules:
- 1) Preferred -- Apply 2 tons per acre dolomitic limestone (92 lbs/1000 square ft) and 600 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs per acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq ft).
  - 2) Acceptable -- Apply 2 tons per acre dolomitic limestone (92 lbs/1000 sq ft) and 1000 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil.

**Seeding -** For the periods March 1 thru April 30, and August 1 thru October 15, seed with 60 lbs per acre (1.4 lbs/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lbs/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use sod. Option (3) Seed with 60 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

**Mulching -** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal/1000 sq ft) for anchoring.

**Maintenance -** Inspect all seeded areas and make needed repairs, replacements and reseedings.

**TEMPORARY SEEDING NOTES**

- Apply to graded or cleared areas likely to be redistributed where a short-term vegetative cover is needed.
- Seedbed Preparation:** Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.
- Soil Amendments:** Apply 60 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft).
- Seeding:** For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel 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 weeping lovegrass (.07 lbs/1000 sq ft). For the period November 16 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 sod.
- Mulching:** Apply 1 1/2 to 2 tons per acre (70 to 90 lbs/1000 sq ft) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 ft or higher, use 348 gal per acre (8 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.

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS  
 DEPARTMENT OF PUBLIC WORKS  
 SHEET LAND DEVELOPMENT DIVISION  
 Signature: *James M. ...* Date: 10/22/87  
 CHIEF, DIVISION OF HIGHWAY  
 Signature: *James M. ...* Date: 10/22/87  
 CHIEF, DIVISION OF ENGINEERING

OFFICE OF PLANNING & ZONING  
 Signature: *James M. ...* Date: 10/22/87  
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

HUDKINS ASSOCIATES  
 400 EAST JOLIYA ROAD  
 ROOM 101, SHELLBURN  
 TOWSON, MARYLAND 21204  
 Signature: *James M. ...* Date: 10/22/87

DES. DB  
 DRY DB  
 CH. AL  
 DATE 8-31-87

SEDIMENT CONTROL PLAN

NURSERY COURT  
 SECTION TWO  
 LOTS 2 THRU 8  
 NURSERY ACKS  
 FOURTH ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
 SCALE AS SHOWN  
 SHEET 4 OF 4  
 P-87-40

1108