

- SEQUENCE OF CONSTRUCTION**
1. MEET AT THE SITE WITH SEDIMENT CONTROL INSPECTOR.
 2. OBTAIN PERMIT.
 3. INSTALL EROSION AND SEDIMENT CONTROL MEASURES.
 4. CLEAR SITE AND PERFORM ROUGH GRADING.
 5. COMMENCE BUILDING EXCAVATION AND GENERAL CONSTRUCTION.
 6. COMPLETE PAVEMENT.
 7. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
 8. REMOVE SEDIMENT CONTROL MEASURES WHEN NO LONGER REQUIRED, AS DETERMINED BY THE SEDIMENT CONTROL INSPECTOR.

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."

William E. Jandura, P.E. 5/21/89
 William E. Jandura, Chairman 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."

James W. Helman, P.E. 4/15/88
 James W. Helman, P.E. MD Reg. No. 4970 Date

SEDIMENT TRAP DATA

TRAP NO	N# 1	N# 2
DRAIN AREA	0.07 AC.	0.18 AC.
VOL. REQ'D	133 FT ³	324 FT ³
VOL. PROVIDED	162 FT ³	330 FT ³
SIZE (LxWxD)	9x9x2'	10x11x3'
TOP ELEV.	565.0	555.0
BOTTOM ELEV.	563.0	552.0
CLEANOUT ELEV.	564.0	553.5

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET TECHNICAL REQUIREMENTS.

James W. Helman 6/24/89
 U.S. Soil Conservation Service Date

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

Robert W. Ziehm DATE 6/29/89

PLAN NUMBER _____

APPROVED: FOR PRIVATE WATER AND PRIVATE SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

James M. Bond 7/10/89
 COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING

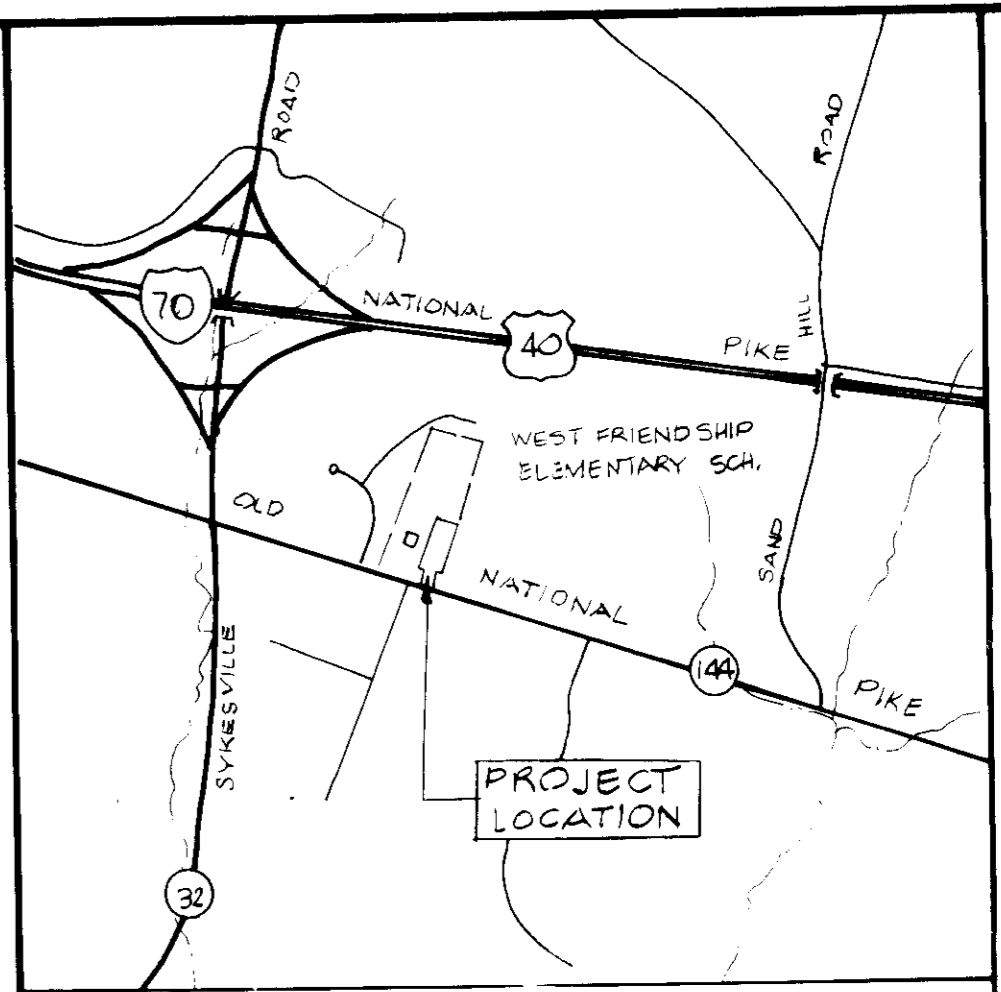
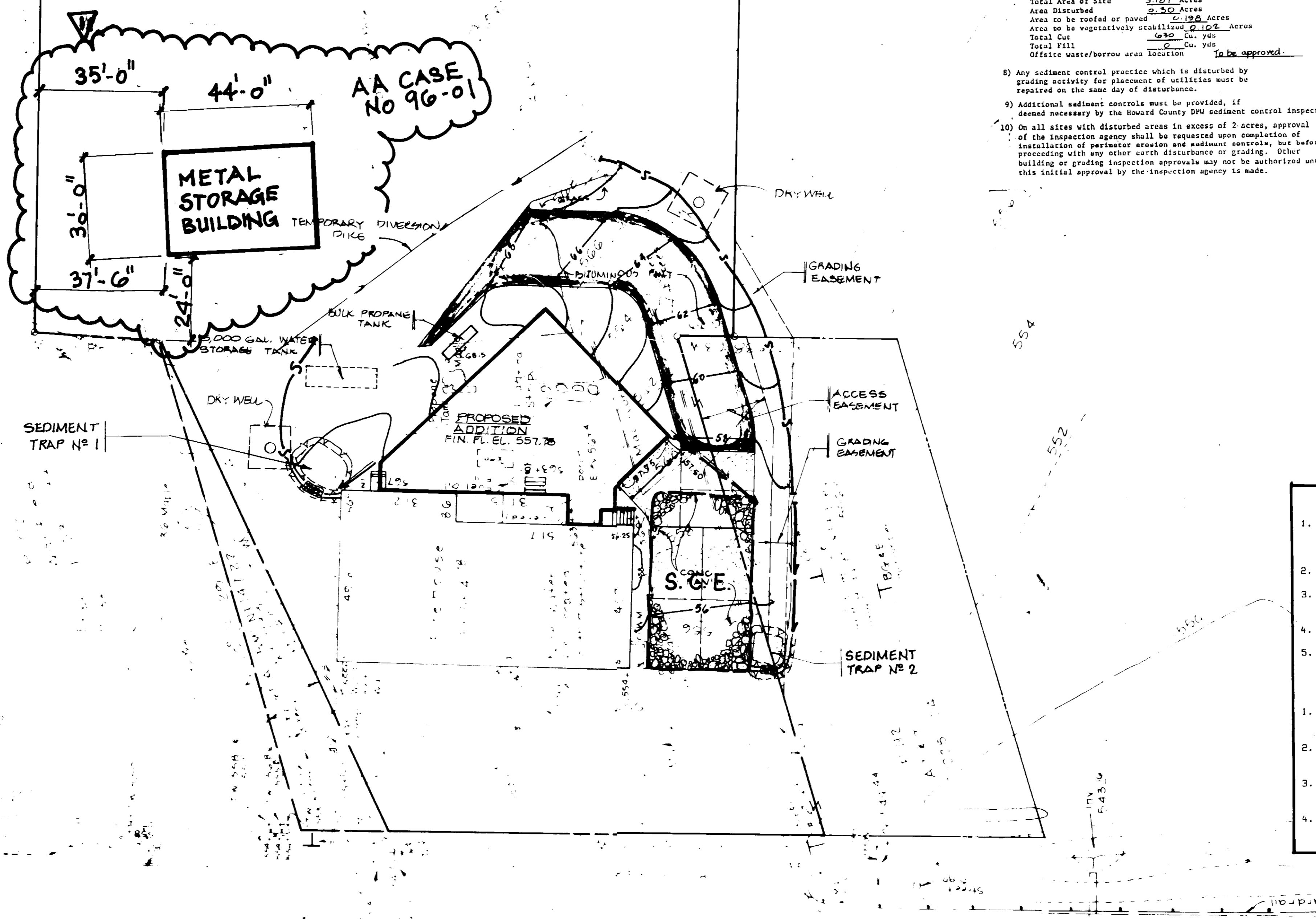
Michael J. Langley 7/24/89
 PLANNING DIRECTOR DATE

APPROVED: FOR STORM DRAINAGE SYSTEMS AND PUBLIC ROADS, HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James W. Helman 7/17/89
 DIRECTOR DATE

APPROVED
 DIVISION OF
 COMMUNITY PLANNING
 & LAND DEVELOPMENT
 HOWARD COUNTY

3-9-89



- SEDIMENT CONTROL NOTES**
1. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH APPLICABLE PUBLISHED "STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL", PUBLISHED 1983.
 2. ALL SEDIMENT CONTROL MEASURES TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL OR BALANCE OF SITE.
 3. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. DEVELOPER SHALL BE RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
 4. ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED TO PREVENT TRACKING OF MUD INTO PUBLIC WAYS.
 5. ALL SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAINAGE SYSTEM (I.E., THROUGH USE OF SAND BAGS, GRAVEL BORDERS OR OTHER APPLICABLE METHOD).
 6. CONTRACTOR INSTALLING THE ABOVE SHALL OBTAIN AND FOLLOW THE "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED 1983, AS DISTRIBUTED BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 7. ALL DRAINAGE SWALES AND ALL SLOPES GREATER THAN 3:1 WILL BE SOODED.
 8. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.

- SEEDING, SODDING, AND/OR MULCHING NOTES**
1. ALL DISTURBED AREAS SHALL BE SEED, SOODED, AND/OR MULCHED IN ACCORDANCE WITH "STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PUBLISHED 1983, AS DISTRIBUTED BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 2. SEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE ABOVE MENTIONED STANDARDS. REFER TO PAGES 51.01, 52.02, AND 54.01 FOR SEEDING, MULCHING, AND SOODING SPECIFICATIONS RESPECTIVELY.
 3. DIKE SEEDING AND PERMANENT SITE SEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE ABOVE MENTIONED STANDARDS. REFER TO PAGES 51.01 THROUGH 51.08 INCLUSIVE.
 4. IF SITE IS READY TO RECEIVE FINAL CURB DURING THE NON-PLANTING SEASON THEN IT SHALL BE PROTECTED BY MULCHING. REFER TO PAGES 52.01 THROUGH 52.03 INCLUSIVE OF THE ABOVE "STANDARDS AND SPECIFICATIONS". THE MULCH WILL REMAIN UNTIL THE NEXT PLANTING SEASON AS DEFINED BY THE STANDARDS.
 5. ANY DISTURBED AREA THAT IS TO BE EXPOSED FOR 30 DAYS (NOT LESS THAN 40 DAYS) SHALL BE TEMPORARILY STABILIZED BY MULCHING AS PER "STANDARDS AND SPECIFICATIONS", PAGES 52.01 THROUGH 52.03.

- SEQUENCE OF DRYWELL CONSTRUCTION**
1. DELAY START OF DRYWELL CONSTRUCTION UNTIL BUILDING IS CLOSED IN, ROUGH GRADING COMPLETED, AND TEMPORARY SEEDING AND MULCHING COMPLETED.
 2. EXCAVATE DRYWELL AND INSTALL FILTER FABRIC.
 3. INSTALL OBSERVATION WELL AND INLET CONNECTION. BACKFILL WITH STONE.
 4. INSTALL TOP FILTER FABRIC AND BACKFILL TO GRADE.
 5. PROVIDE SCREENS AT TOP OF ROOF LEADERS TO PREVENT DEBRIS FROM ENTERING DRYWELL.
- MAINTENANCE OF DRYWELL**
1. INSPECT AND CLEAN GUTTERS AND DOWNSPOUTS TWICE YEARLY, AT A MINIMUM.
 2. INSPECT DRYWELL TWO DAYS AFTER EACH STORM TO INSURE PROPER OPERATION.
 3. REMOVE ANY DEBRIS OR SILT THAT ACCUMULATES AT THE BOTTOM OF THE OBSERVATION WELL AT LEAST EVERY SIX MONTHS.
 4. WHEN WATER STANDS IN THE DRYWELL LONGER THAN 72 HOURS AFTER A STORM IT MAY BE NECESSARY TO REPLACE THE STONE AND/OR FILTER FABRIC TO RETURN THE DRYWELL TO PROPER FUNCTION.

Revisions

1	AS BUILT LOCATION OF METAL STOR. BLDG.	5/6/86 AW
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DRAWINGS AND SPECIFICATIONS AS INSTRUMENTS OF SERVICE SHALL BE KEPT ON THE PROJECT FOR WHICH THEY ARE MADE. THEY SHALL BE MAINTAINED AND NOT TO BE USED OR COPIED FOR ANY OTHER WORK EXCEPT BY WRITTEN AGREEMENT WITH THE ARCHITECT. CONTRACTOR TO VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD BEFORE PROCEEDING WITH THE WORK.

Christoph Design, P.A.
 ARCHITECTURE AND INTERIORS - CONSULTANTS
 (301) 589-8339
 8607 2nd Ave., Silver Spring, MD 20910

West Friendship Volunteer Fire Association - Station 3
 12460 FREDERICK RD.
 WEST FRIENDSHIP, MD. 21974

EROSION CONTROL PLAN

PROJECT TITLE: **West Friendship Volunteer Fire Association - Station 3**

OWNER: **WEST FRIENDSHIP VOLUNTEER FIRE ASSOCIATION**
 12460 FREDERICK ROAD
 WEST FRIENDSHIP, MD 21974

PROJECT ENGINEER: **JAMES W. HELTMAN, P.E.**
 CONSULTING ENGINEER
 2717 Rittenhouse Street, NW
 Washington, D.C. 20015
 (202) 363-2339

DATE: _____
 SCALE: _____
 Drawn: Checked
 Job No: _____
 Sheet: 12

ELECTION DISTRICT No. 3

LIBERTY FOLIO 505 TAX MAP No. 15 PARCEL 171

SUBDIVISION NAME: **WEST FRIENDSHIP VOLUNTEER FIRE ASSOC.**

PLATA OR L/F: **12** ZONE: **R** BLOCK: **12** TAX/ZONE MAP/ELEC. DIST: **15** CENSUS TR.: **3** 6030

WATER CODE: _____ SEWER CODE: _____

SCALE: 1" = 20' DATE: 1-12-89 SHEET No. 2 OF 3

SDP-89-160

OWNER: **WEST FRIENDSHIP VOLUNTEER FIRE ASSOCIATION**
 12460 FREDERICK ROAD
 WEST FRIENDSHIP, MD 21974

PROJECT ENGINEER: **JAMES W. HELTMAN, P.E.**
 CONSULTING ENGINEER
 2717 Rittenhouse Street, NW
 Washington, D.C. 20015
 (202) 363-2339

SDP 89/160

PERMANENT SEEDING NOTES

Apply to areas of erosion 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, if not previously loosened.

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 sq ft) and 500 lbs per acre 10-10-10 fertilizer (14 lbs/1000 sq ft) before seeding. Harrow or disk 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 100 lbs per acre 10-10-10 fertilizer (23 lbs/1000 sq ft) before seeding. Harrow or disk 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 seedings.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be disturbed where a short-term vegetative cover is needed.

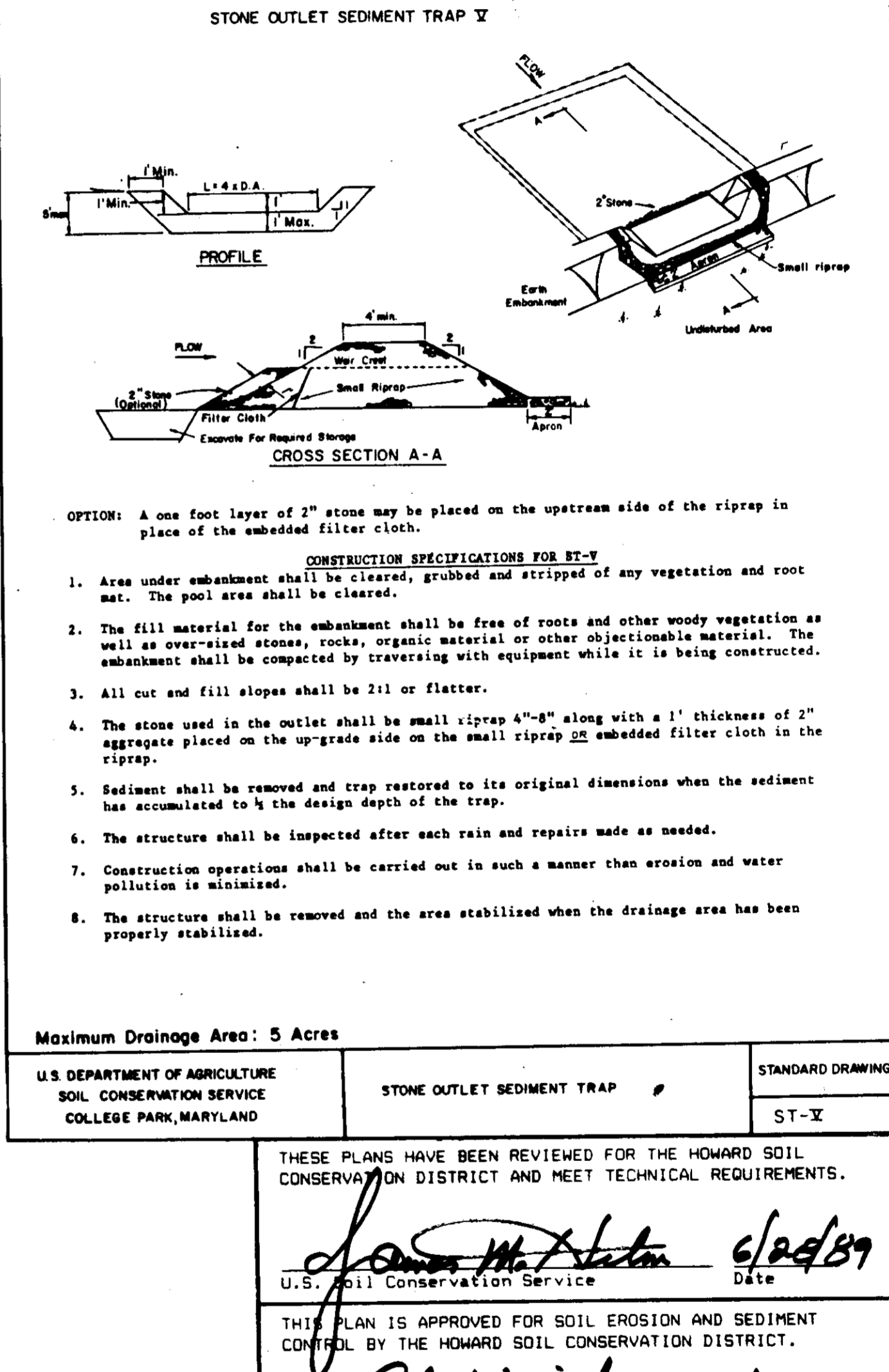
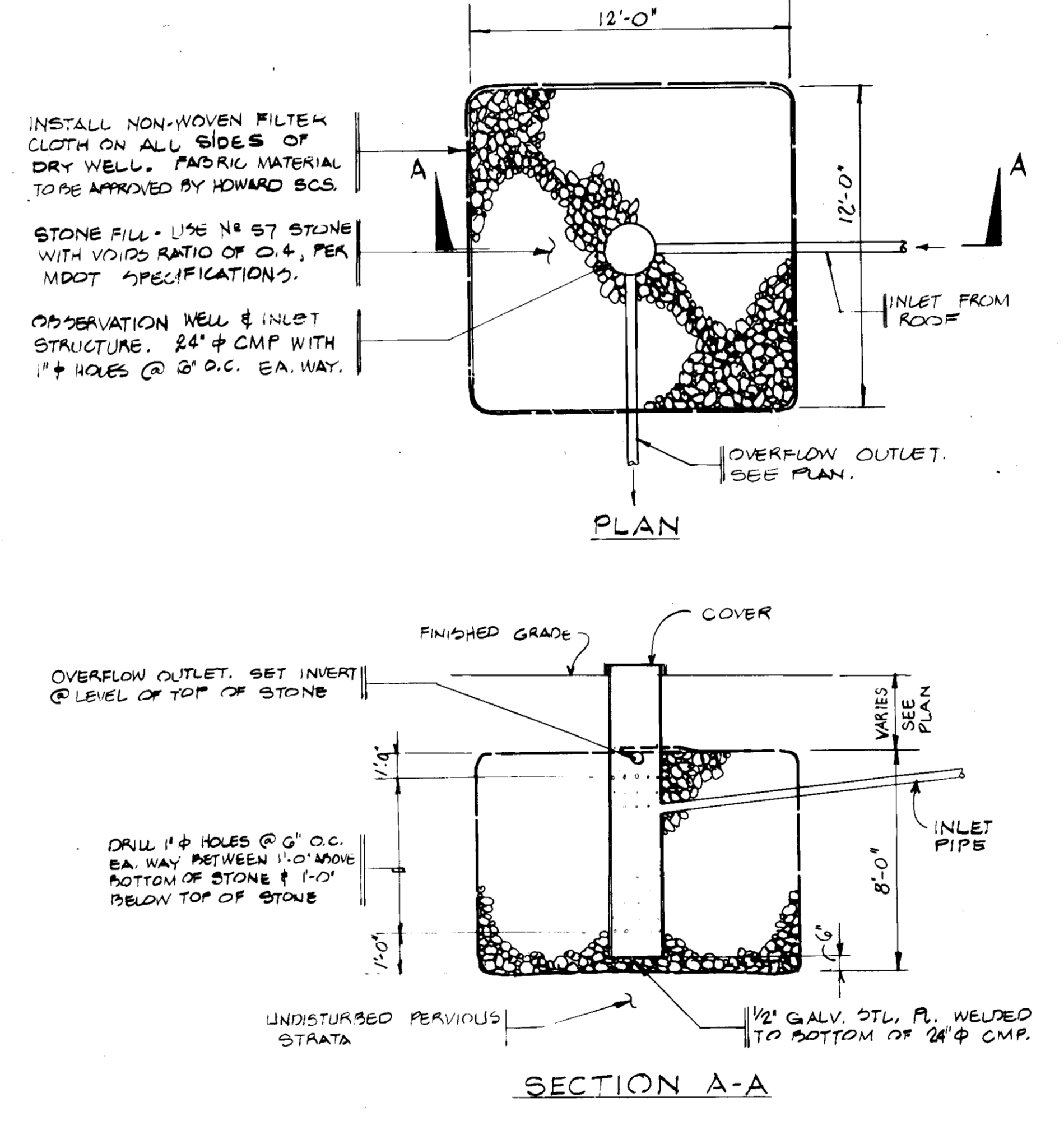
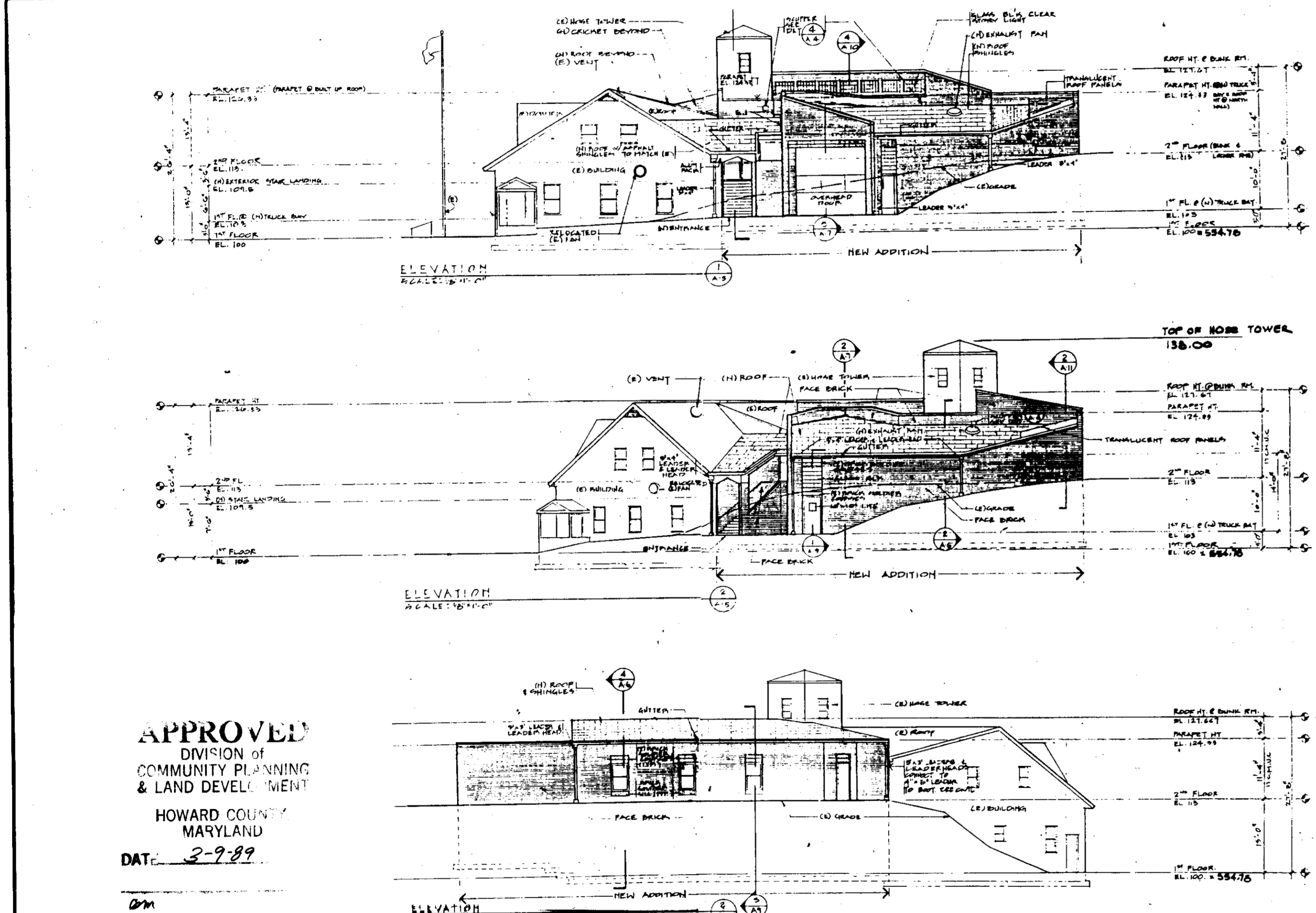
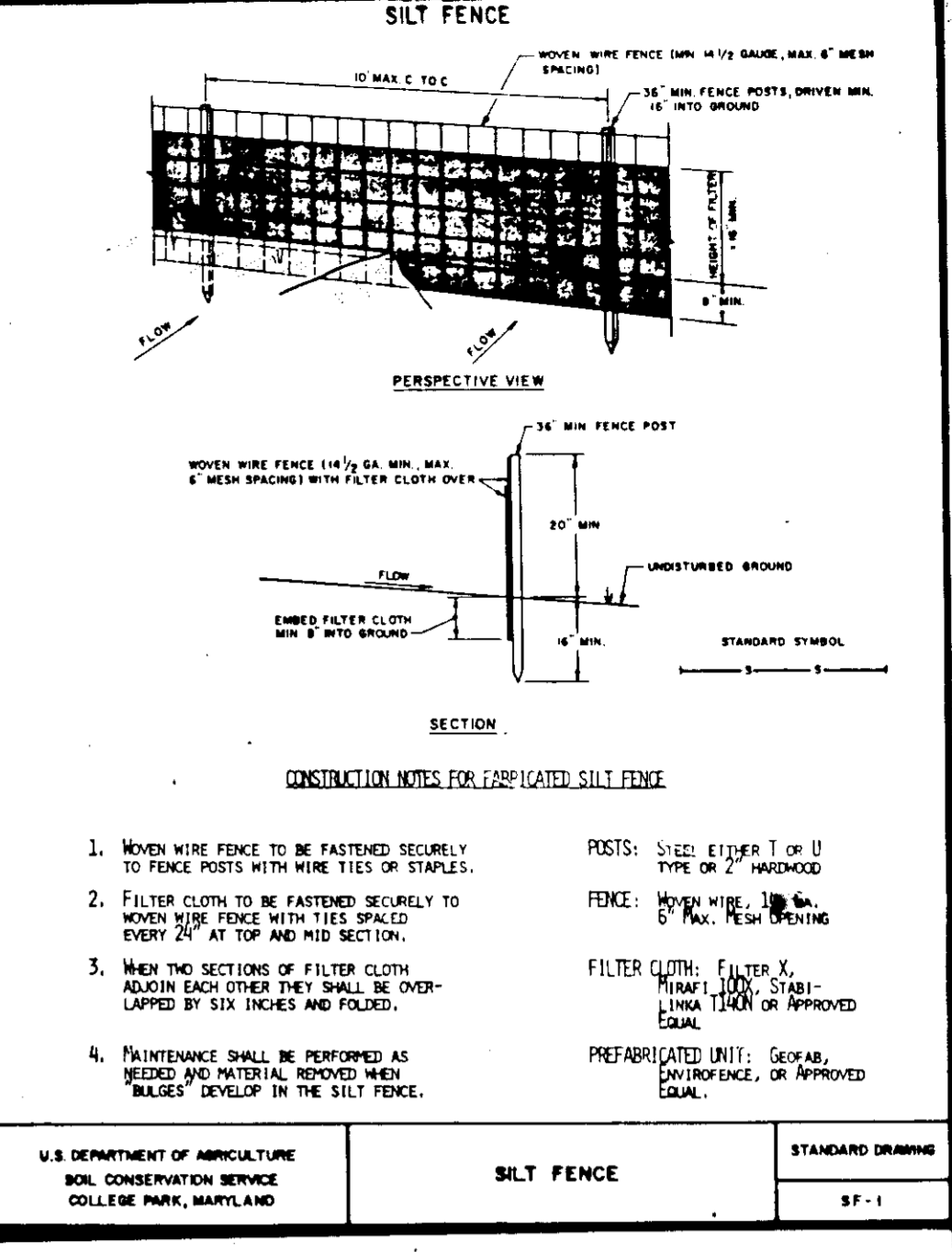
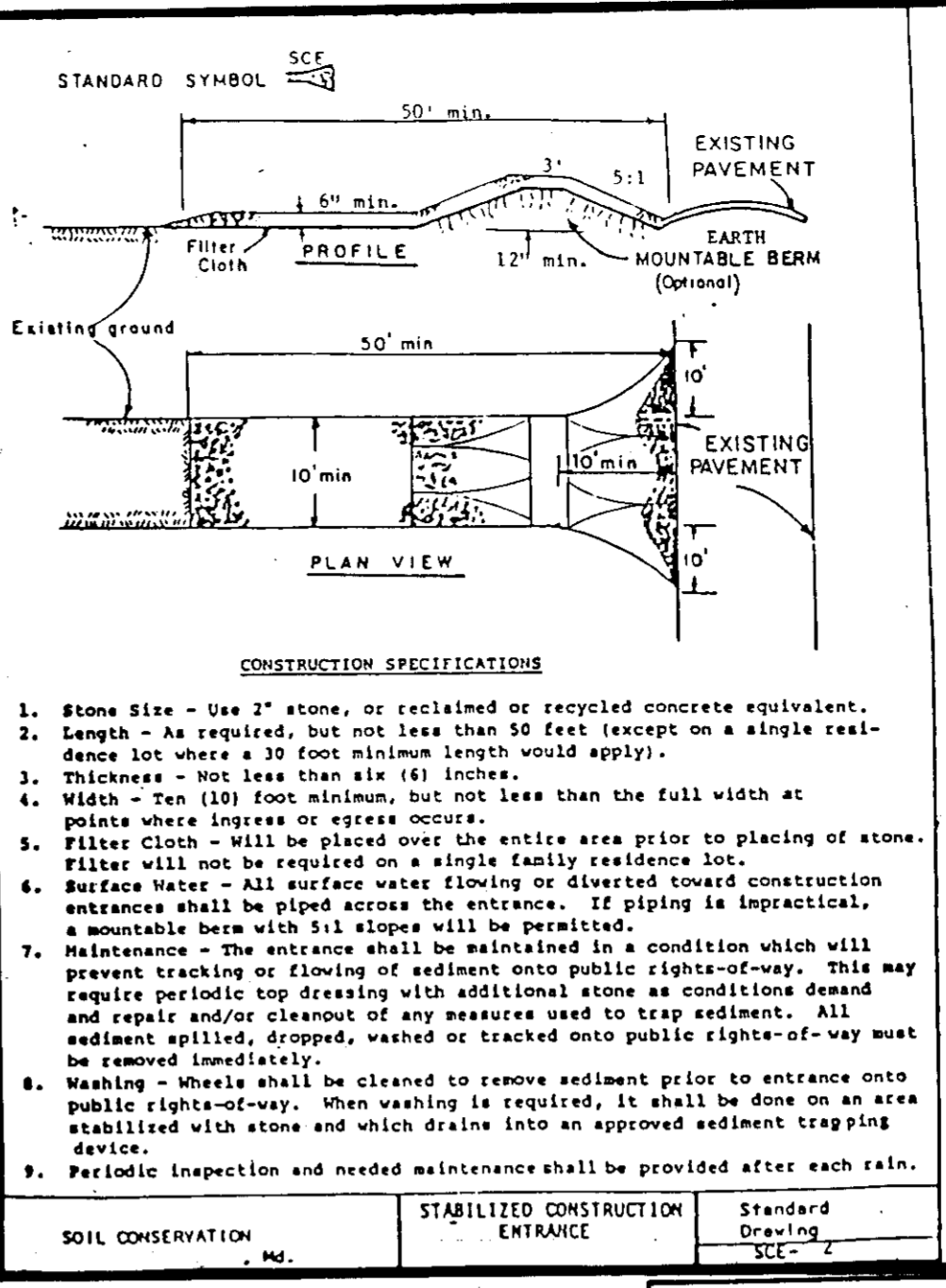
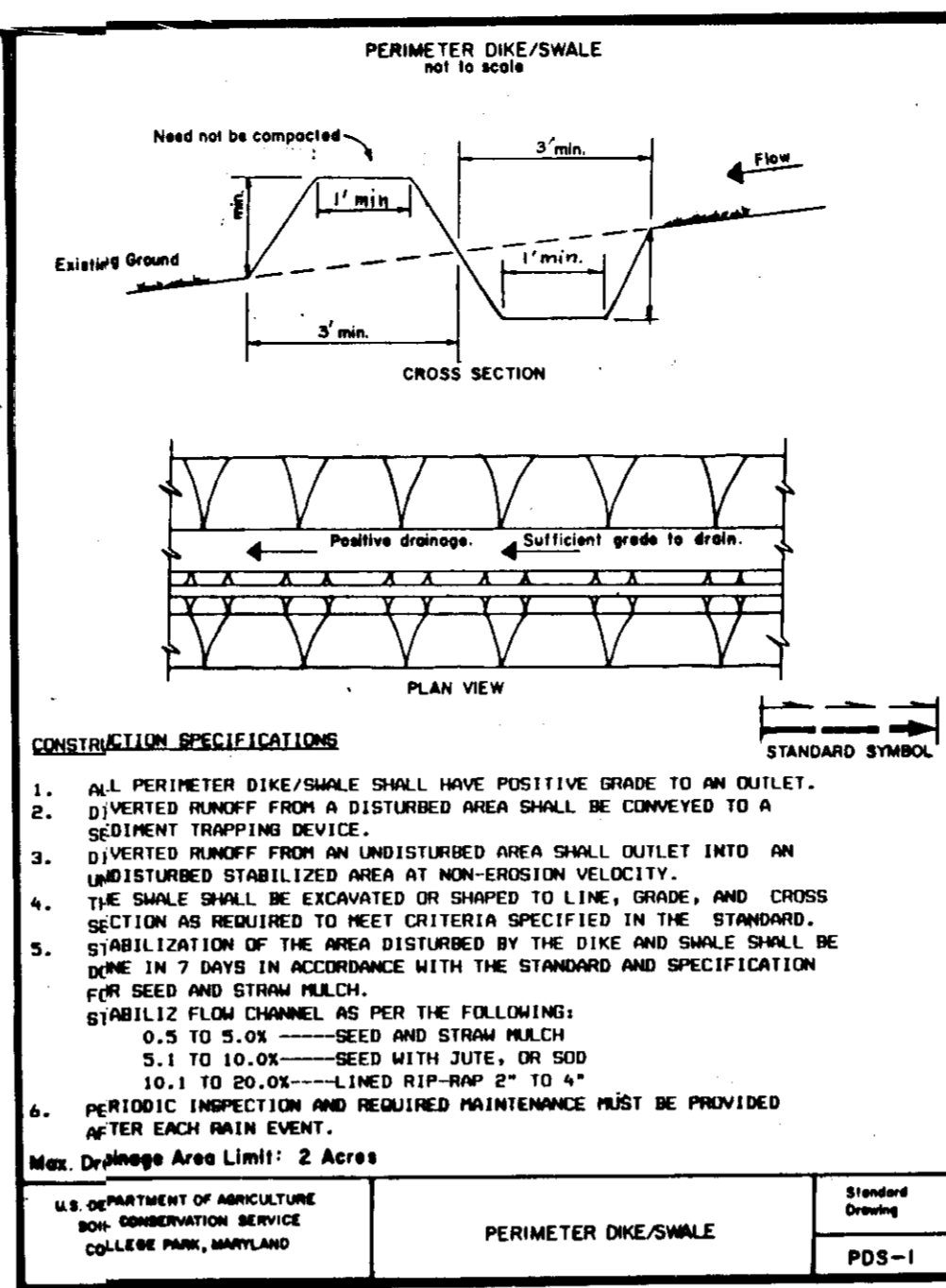
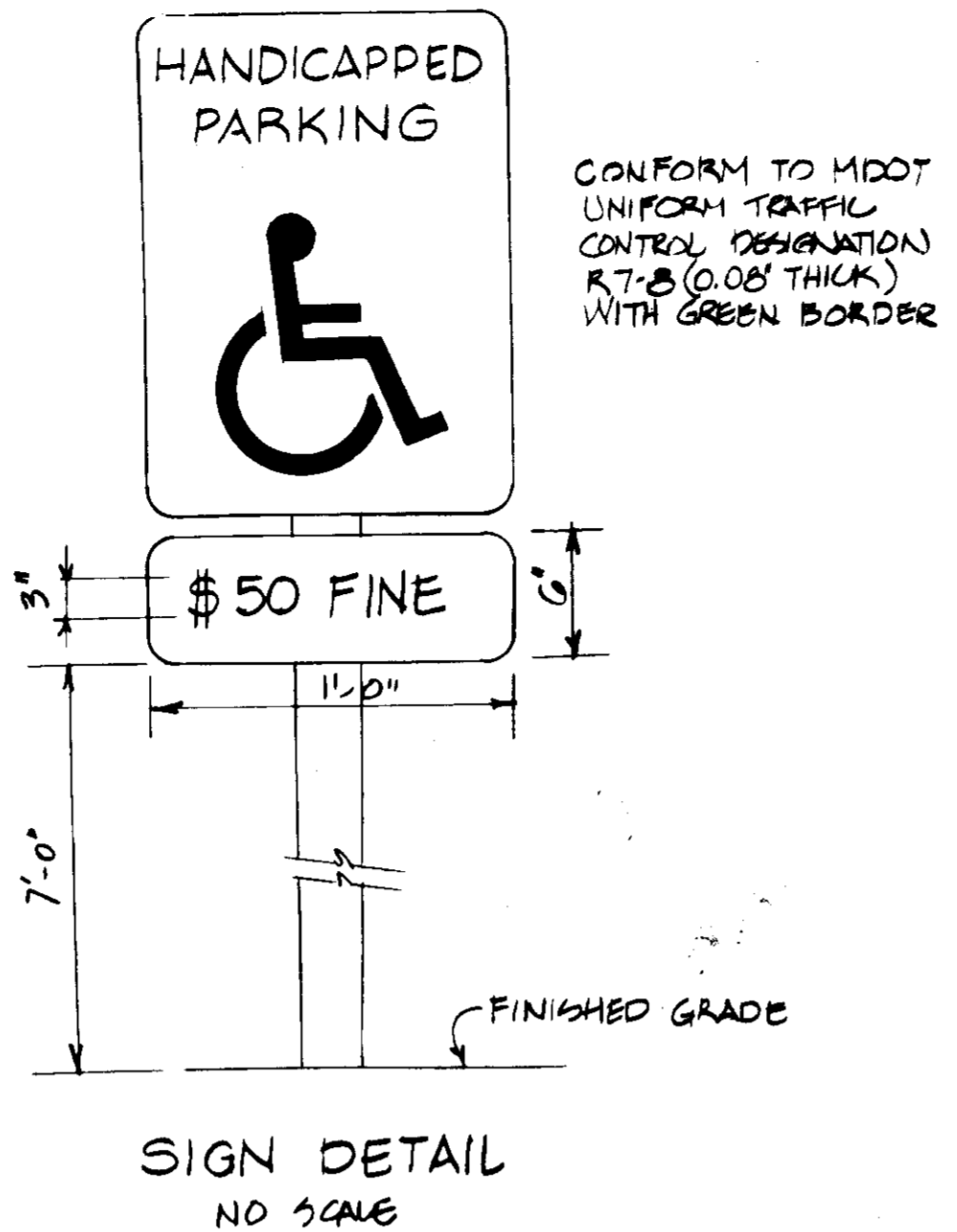
Seedbed Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding, if not previously loosened.

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 October 15, seed with 2-1/2 bushels 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 HANDBOOK STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.



APPROVED: FOR PRIVATE WATER AND PRIVATE SEWER SYSTEMS. HOWARD COUNTY HEALTH DEPARTMENT. *James M. B... 7/6/89*

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING. *W... 7.24.89*

APPROVED: CHIEF DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT. *W... 7/13/89*

APPROVED: FOR STORM DRAINAGE SYSTEMS AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS. *W... 7.17.89*

BUILDING ELEVATIONS
SCALE: 1/8"=1'-0"

DEVELOPER'S CERTIFICATION

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.

William E. Saunders, Pres. 5/2/89

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.

James W. Helman 5/2/89

DRY WELL DETAILS
SCALE: 1/4"=1'-0"

ELECTION DISTRICT No.			
LIBER 1945 FOLIO 535	TAX MAP No. 15	PARCEL 171	
BUILDING ADDITION TO WEST FRIENDSHIP VOL. FIRE ASSN., STATION #3 12460 FREDERICK ROAD WEST FRIENDSHIP, MD 21974			
SCALE: NOTED	DATE: 1-12-89	SHEET No. 3 OF 3	
SUBDIVISION NAME: WEST FRIENDSHIP VOL. FIRE ASSN.	SECT./AREA: N.A.	LOT/PARCEL: P 171	
PLAT OR L.F. ZONE: L 1945	BLOCK: R 12	TAX/ZONE MAP ELEC. DIST: 3	CENSUS TR. 6030
WATER CODE:		SEWER CODE:	

OWNER/DEVELOPER
WEST FRIENDSHIP VOLUNTEER FIRE ASSOCIATION
12460 Frederick Road
West Friendship, MD 21974

PROJECT ENGINEER
JAMES W. HELTMAN, P.E.
CONSULTING ENGINEER
2717 Rittenhouse Street, NW
Washington, D.C. 20015
(202) 363-2339

EROSION CONTROL DETAILS

PROJECT TITLE: **West Friendship Volunteer Fire Association, Station 3**

DATE: _____

SCALE: _____

DRAWN: _____

CHECKED: _____

JOB NO: _____

SHEET: **C-3**

DRAWING TITLE: **EROSION CONTROL DETAILS**

PROJECT TITLE: **West Friendship Volunteer Fire Association, Station 3**

DATE: _____

SCALE: _____

DRAWN: _____

CHECKED: _____

JOB NO: _____

SHEET: **C-3**

Christoph Design, P.A.
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