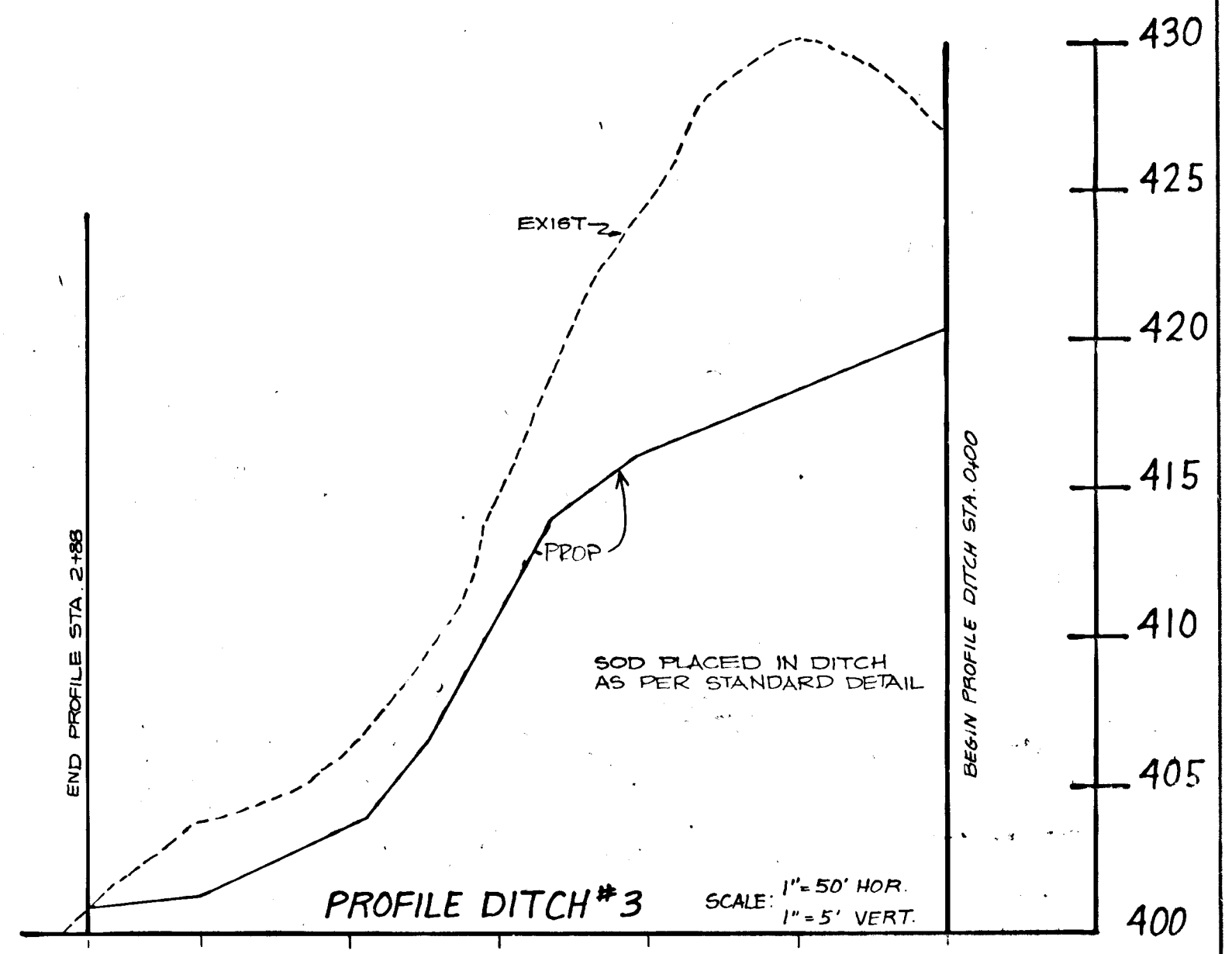
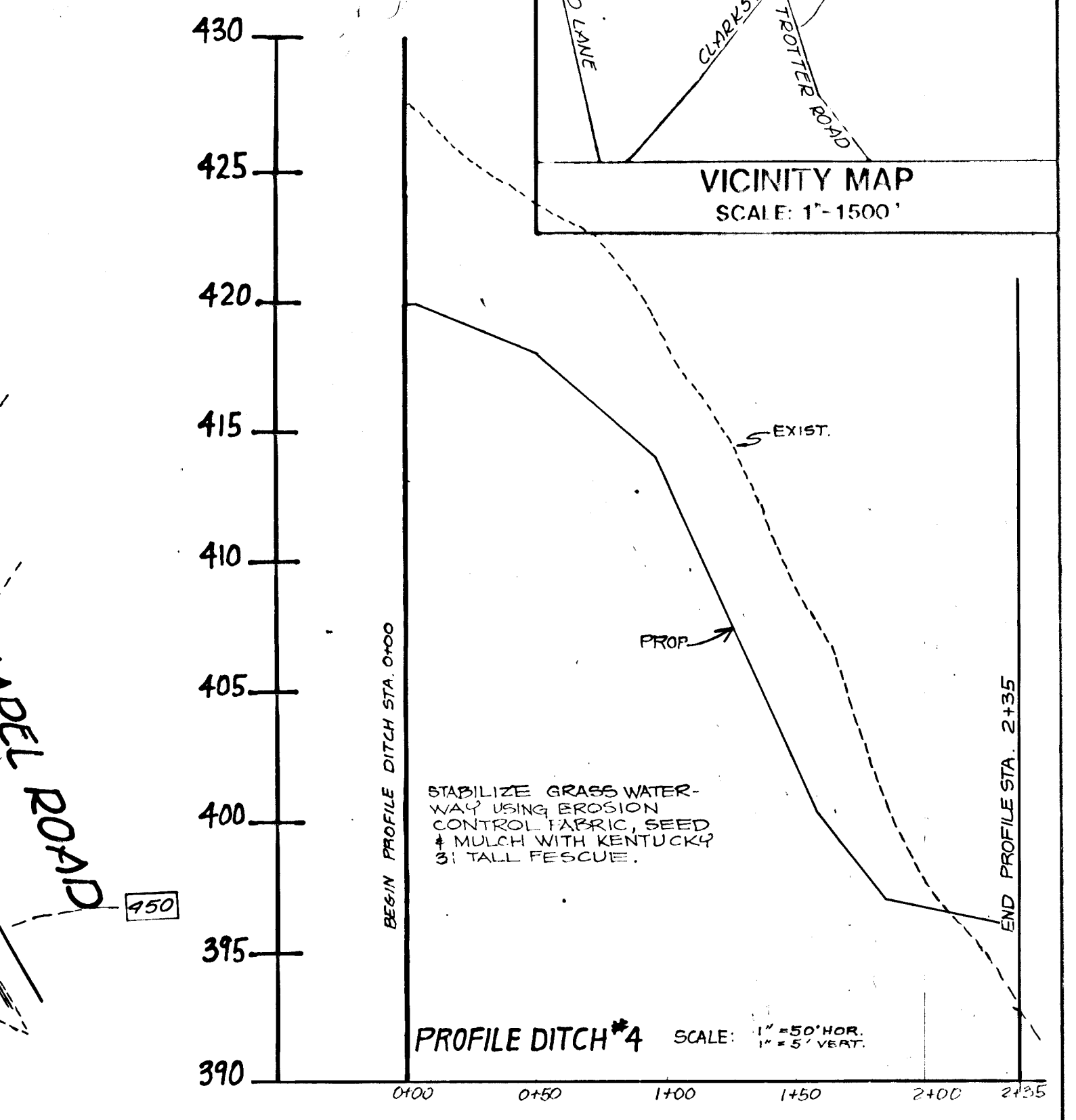
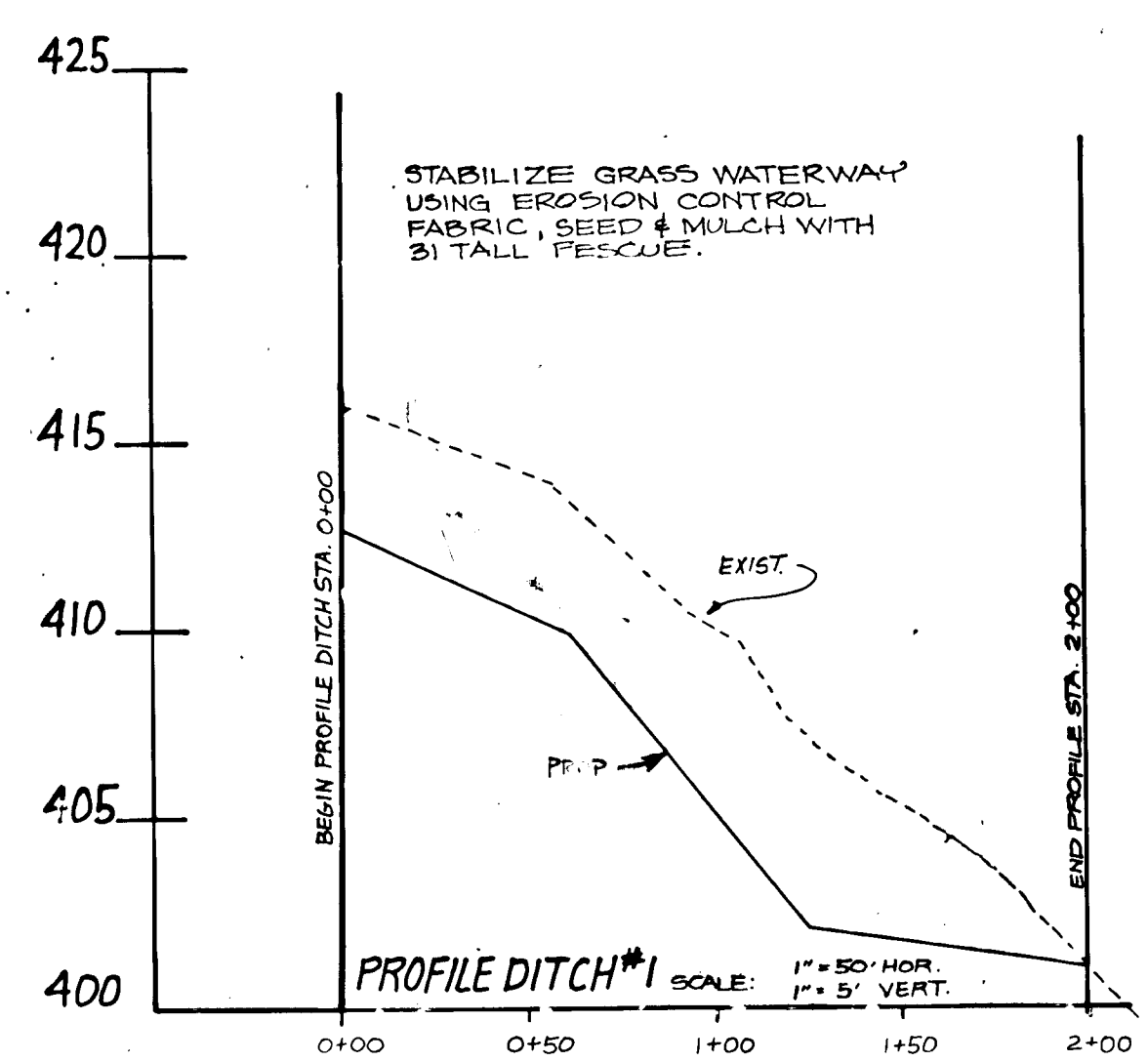
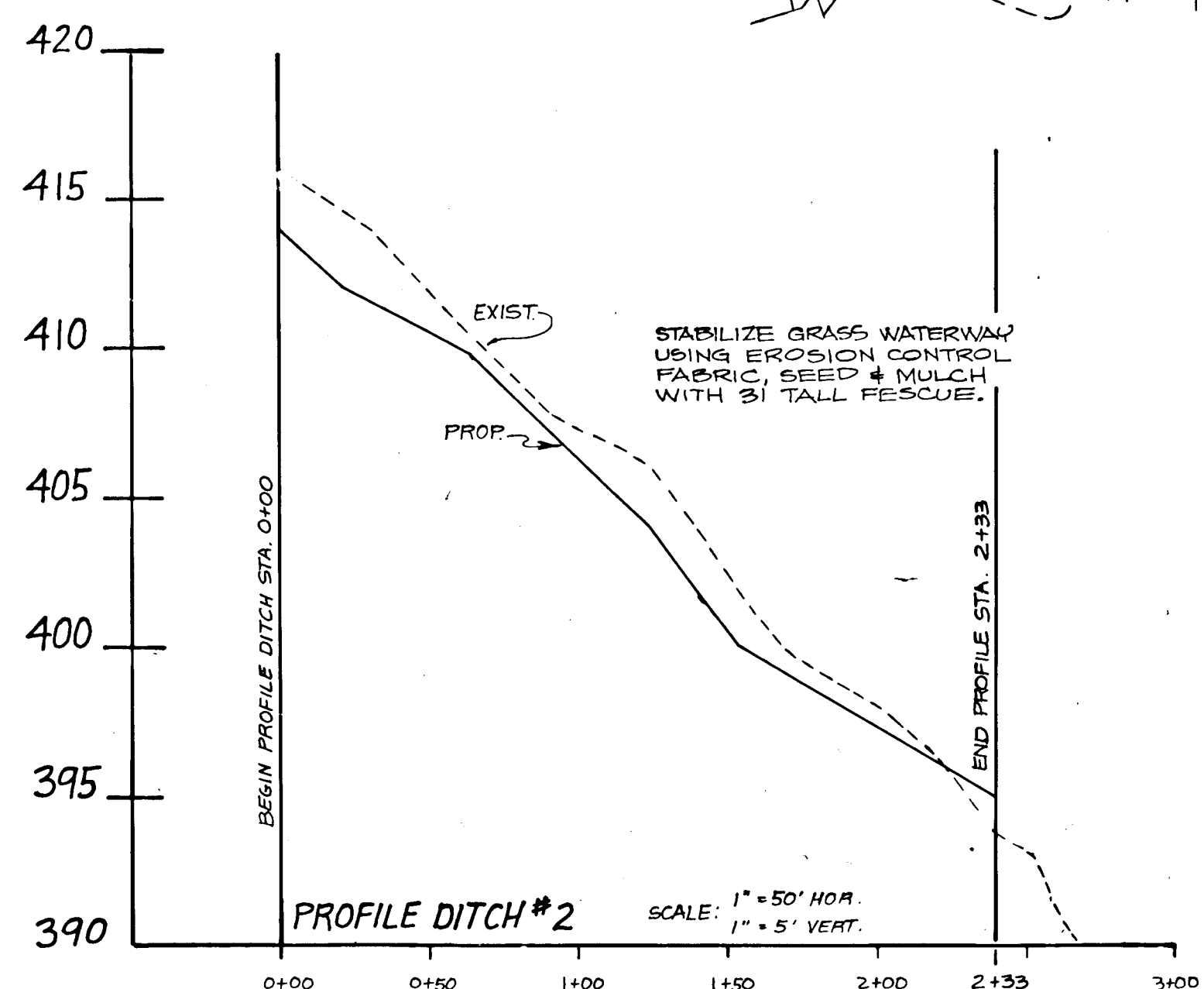


NOTE: REFERENCE PLAN #F-88-38 FOR EXISTING SEDIMENT EROSION CONTROL.

- SEQUENCE OF CONSTRUCTION**
- 1) OBTAIN GRADING PERMIT. 1 DAY
 - 2) INSTALL ALL SILT FENCE & SEDIMENT TRAPS, LEAVE EXISTING SEDIMENT TRAP #1 FROM PREVIOUS SECTION 2, AREA 2 IN PLACE. 3 DAYS
 - 3) CLEAR AND GRUB FOR ROAD. 3 DAYS
 - 4) INSTALL ROAD CULVERT. 2 DAYS
 - 5) GRADE IN ROAD AS PER GRADING PLAN. 1 WEEK
 - 6) INSTALL DRAINAGE DITCHES 1-4, WITH THE EXCEPTION OF THE DOWNSTREAM PORTIONS OF THE DITCHES AFFECTED BY THE TRAPS. 1 WEEK
 - 7) INSTALL ALL PAVING. 4 DAYS
 - 8) IMMEDIATELY STABILIZE ALL UNPAVED AREAS. 1 DAY
 - 9) WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE ALL SILT FENCE AND FILL IN SEDIMENT TRAPS. 2 DAYS
 - 10) FINISH INSTALLATION OF THE DITCHES (PLACE SILT FENCE AROUND THE WORK AREA). 1 DAY
 - 11) REMOVE SILT FENCE AROUND THE BOTTOM OF THE DITCHES AND IMMEDIATELY STABILIZE ALL AFFECTED AREAS. 3 DAYS

SEDIMENT CONTROL TRAP SCHEDULE

TRAP NO.	1	2	3	4
TRAP TYPE	RIP-RAP	RIP-RAP	RIP-RAP	RIP-RAP
DRAINAGE AREA	4.4 ACRES	3.15 ACRES	0.51 ACRES	0.35 ACRES
STORAGE, CU.FT.				
REQUIRED	7920	5670	918	630
PROVIDED	8149	5748	1304	682
BOTTOM DIM.	28x48	54x24	2x12	10x20
BOTTOM ELEV.	400	399	400	392
EMBANKMENT ELEV.	406	405	406	396
OUTLET WIDTH	5	5	4	4
OUTLET ELEV.	405	403	405	395
CLEANOUT ELEV.	402	401	402	393
STORAGE DEPTH	4	4	4	2



GRADING AND SEDIMENT CONTROL PLAN FOR CHAPEL WOODS SECTION 2 AREA 3 TAX MAP 29 PARCEL 41 5th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SHEET 2 OF 6

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
 APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING.
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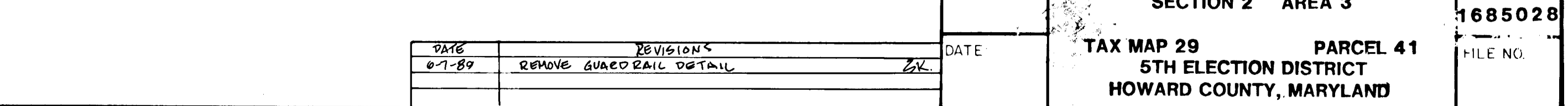
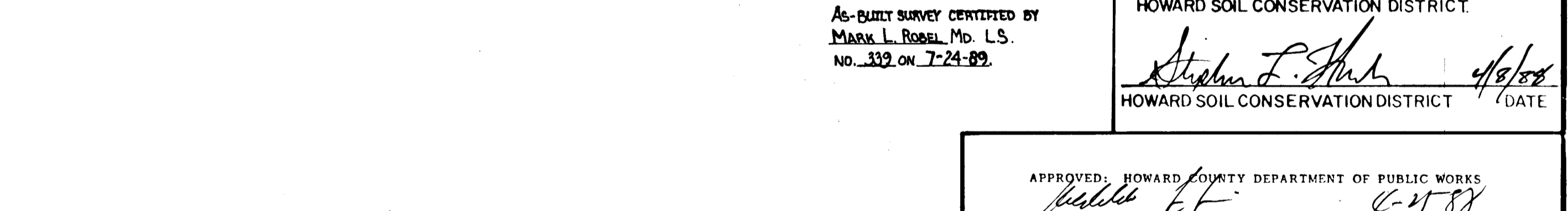
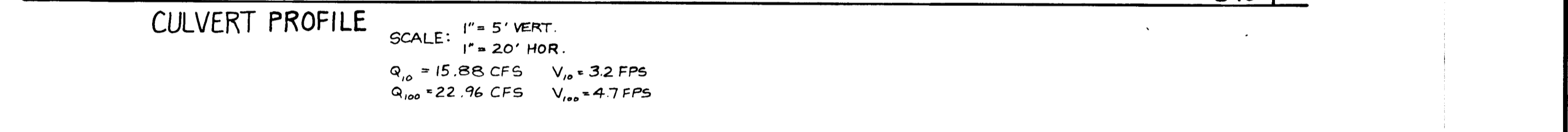
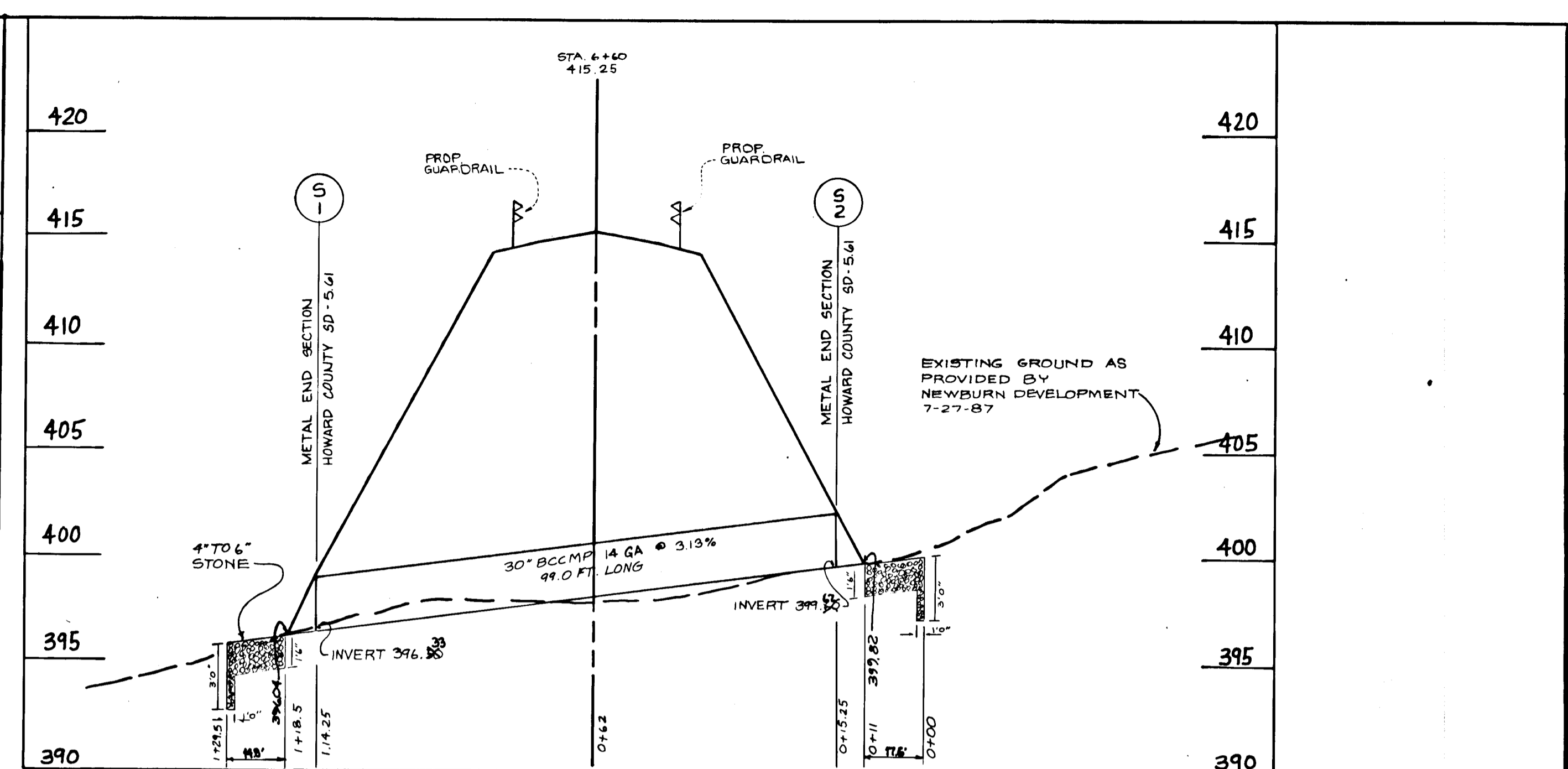
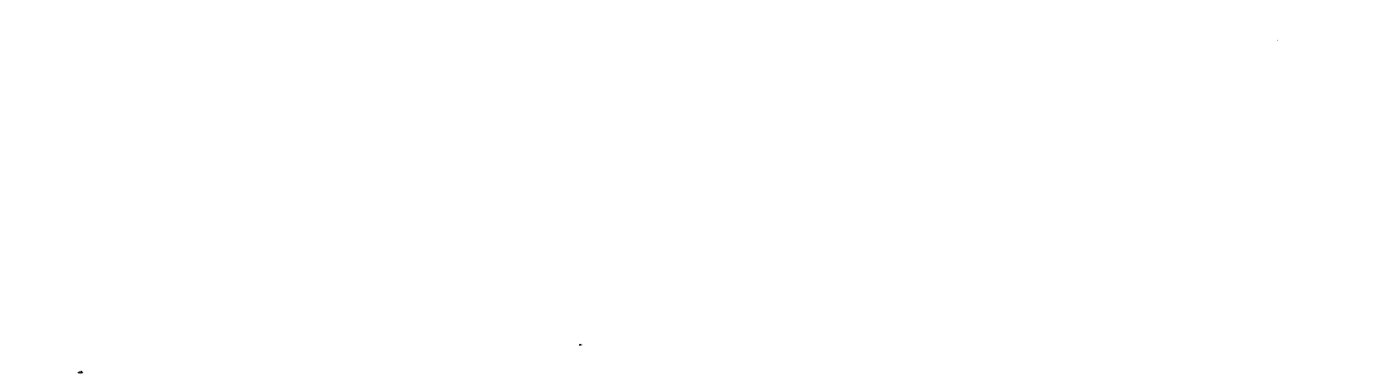
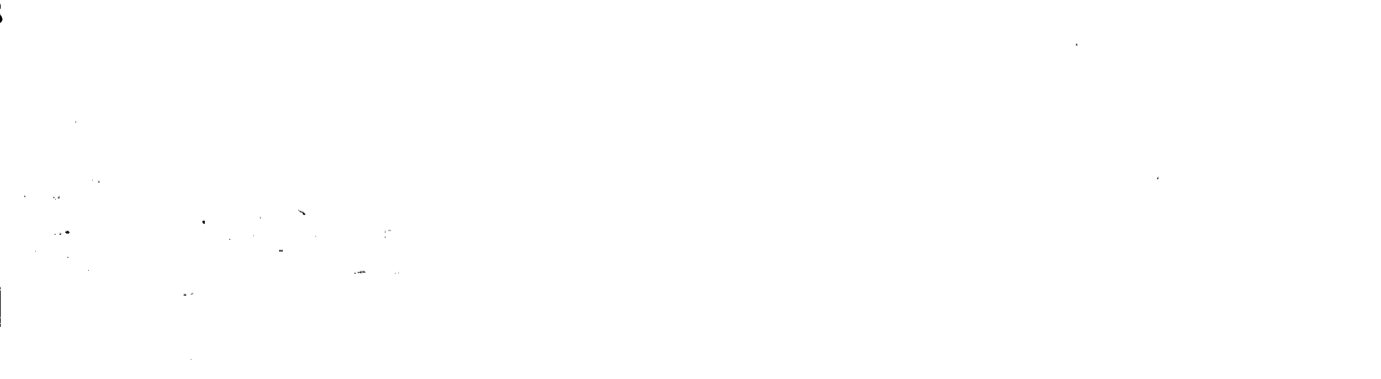
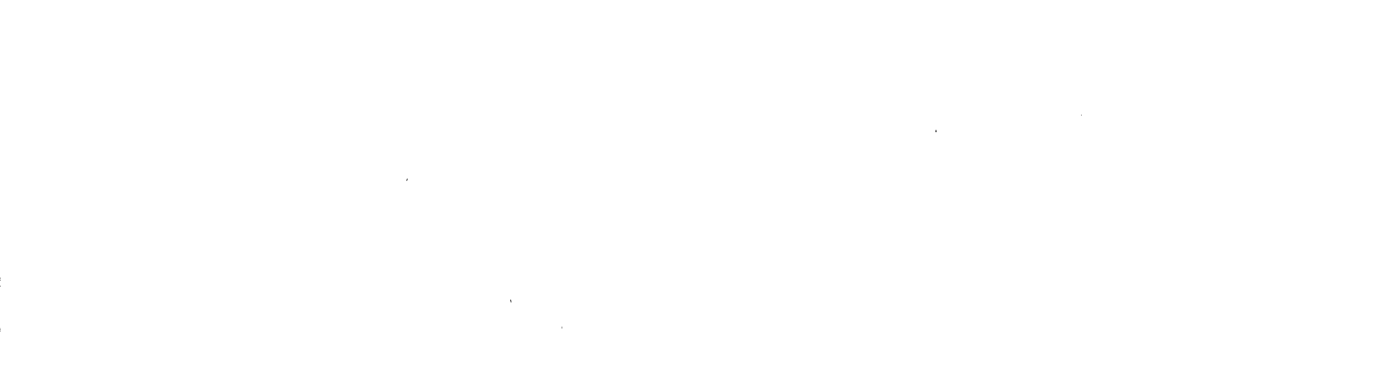
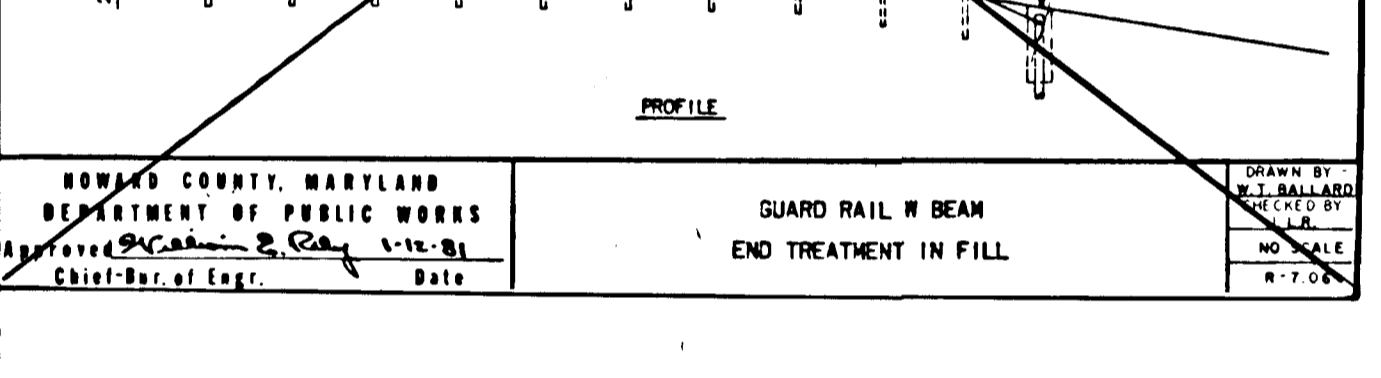
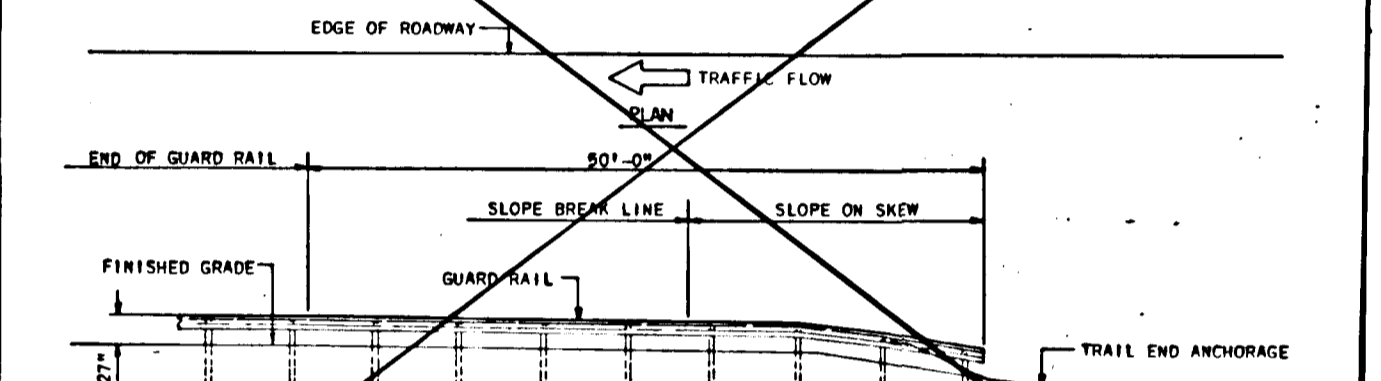
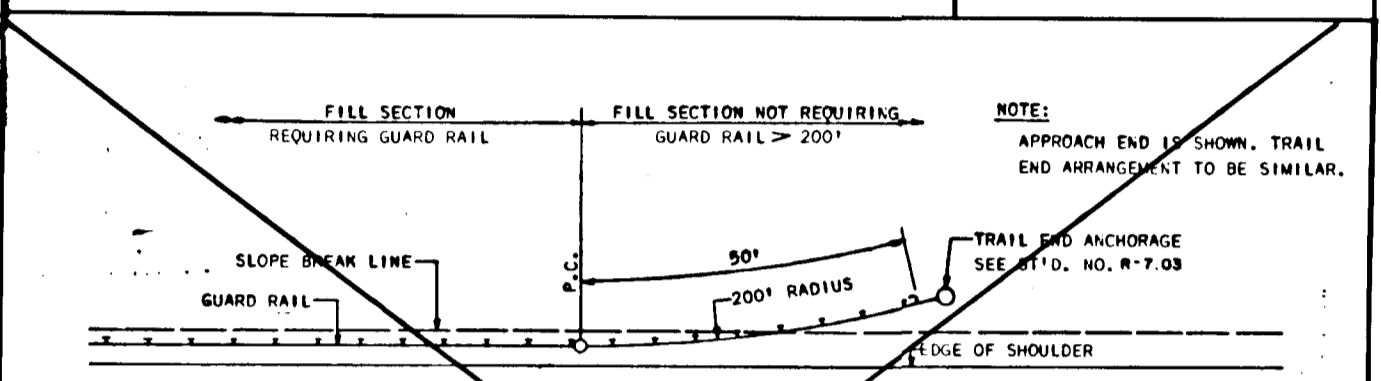
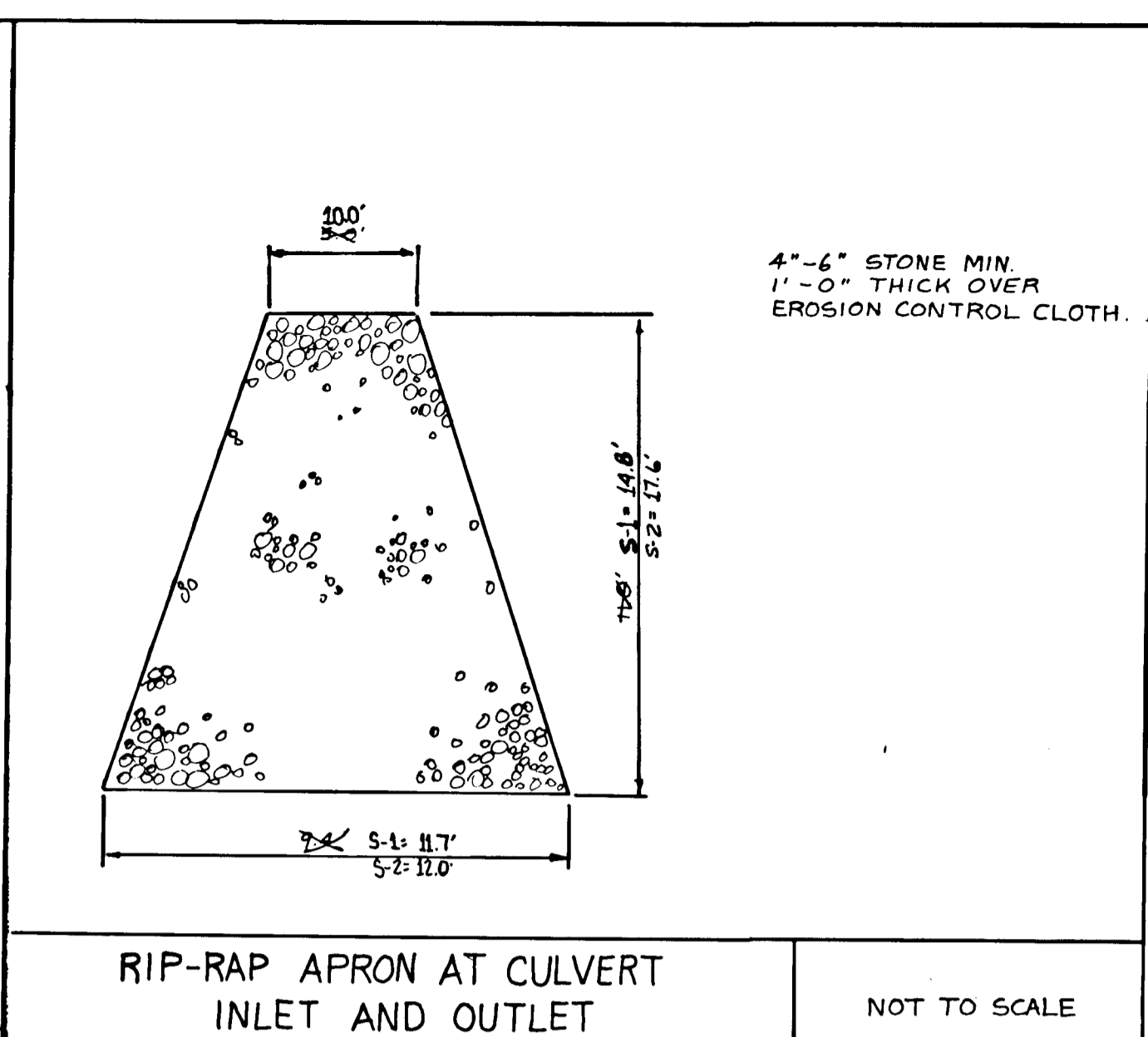
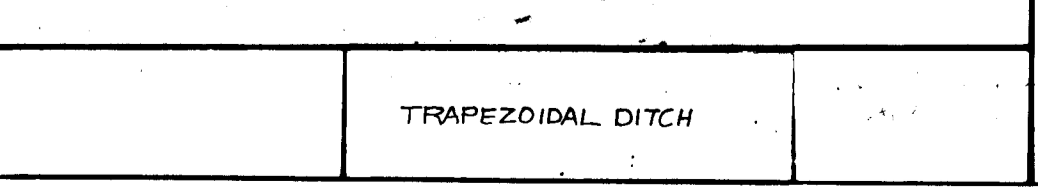
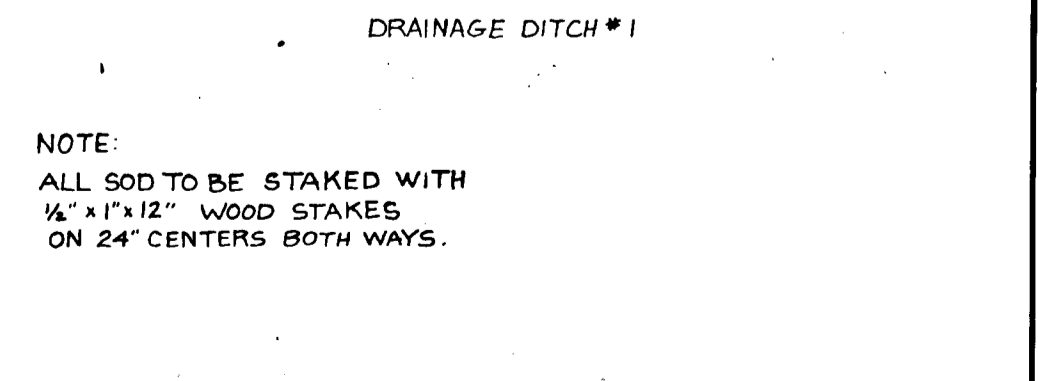
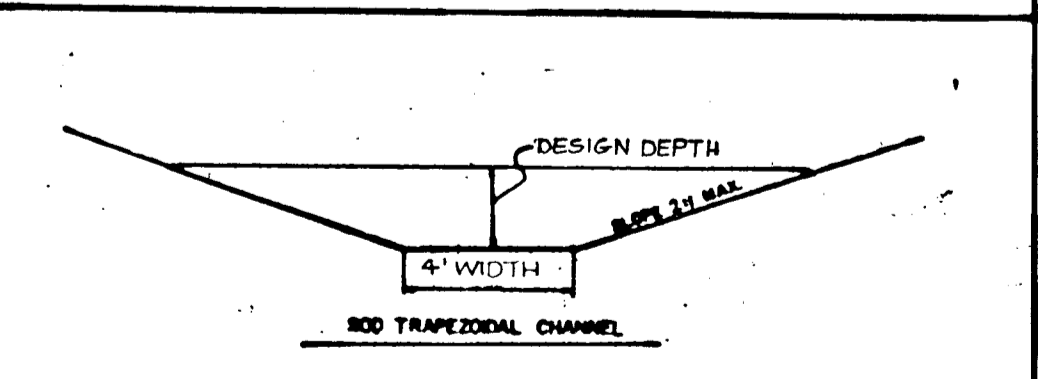
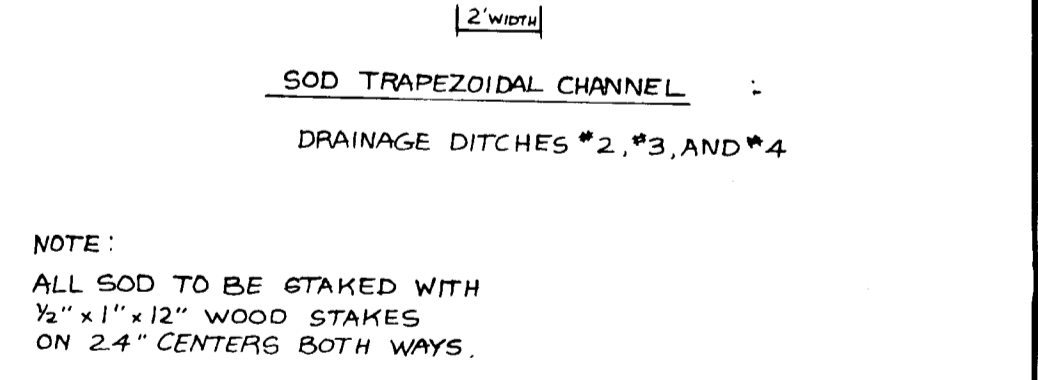
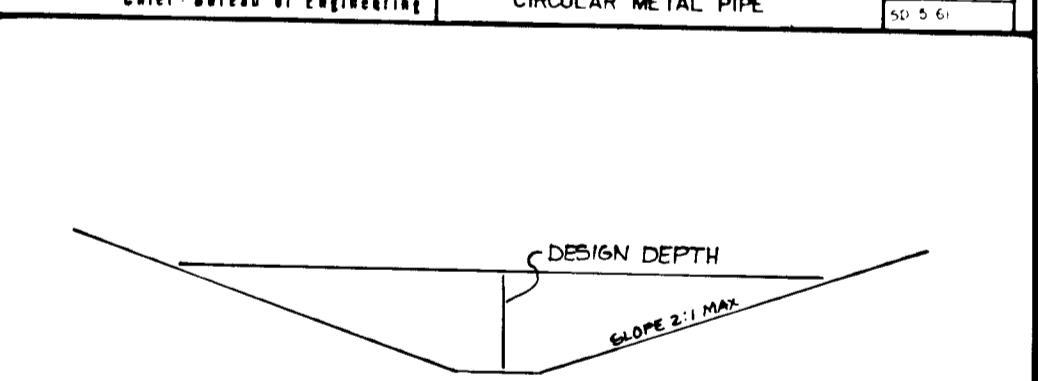
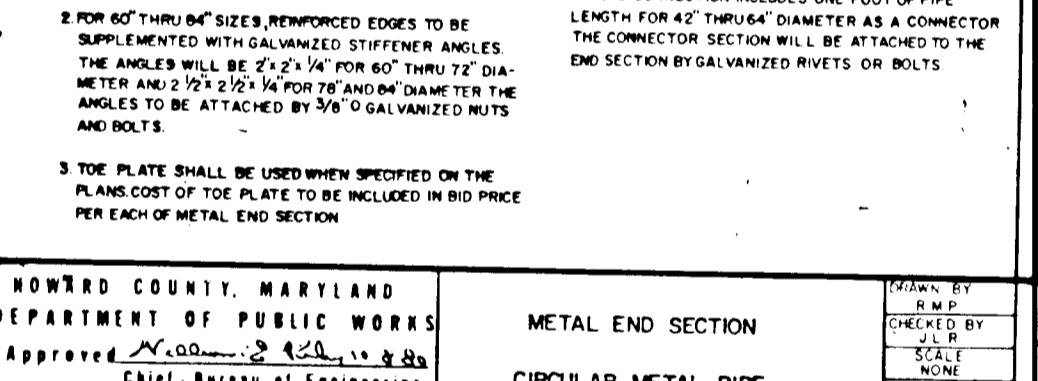
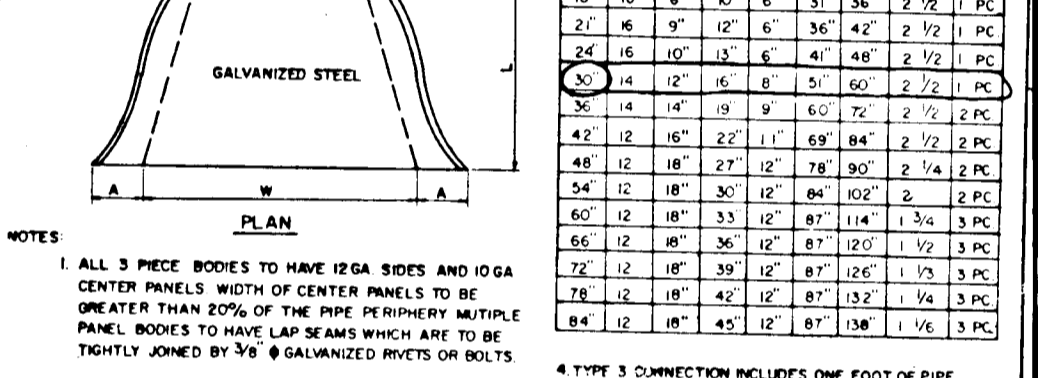
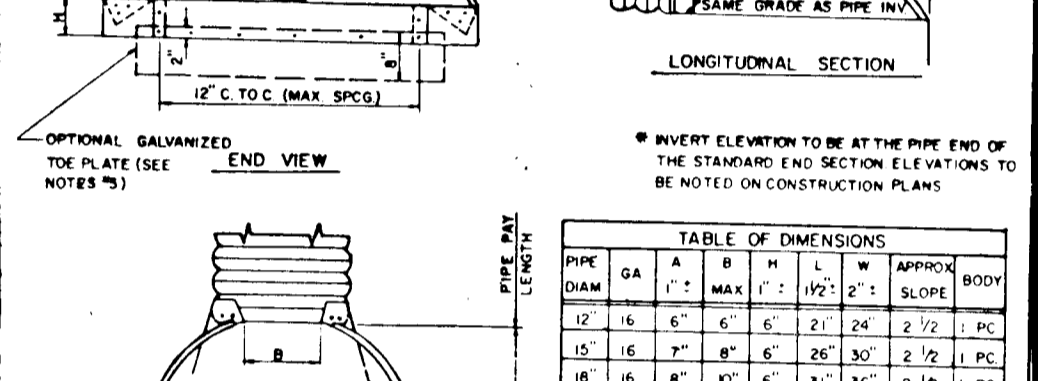
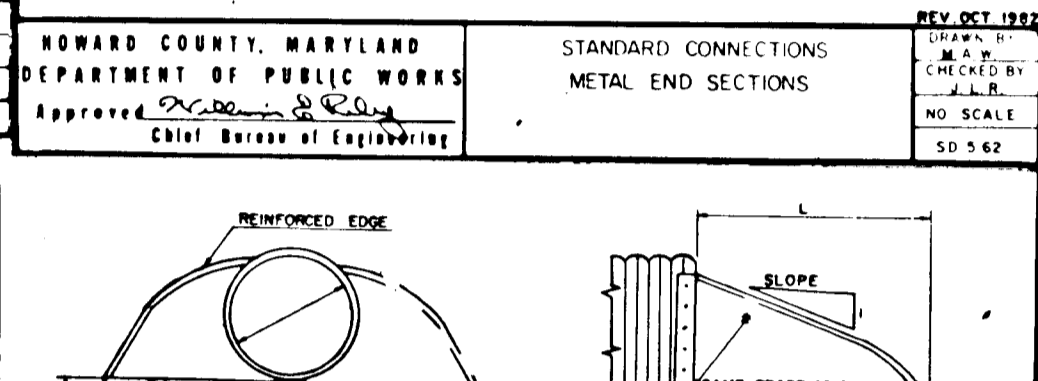
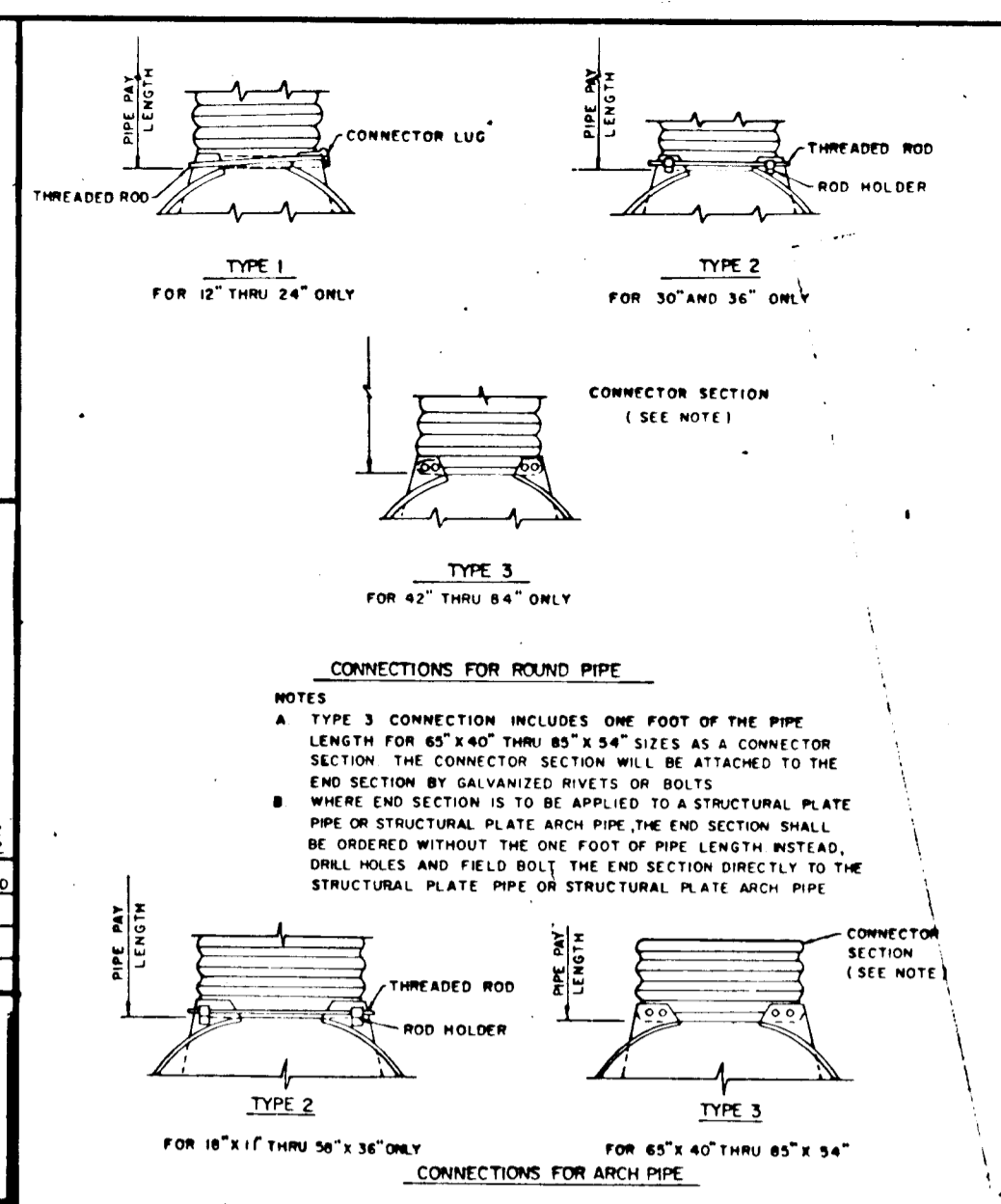
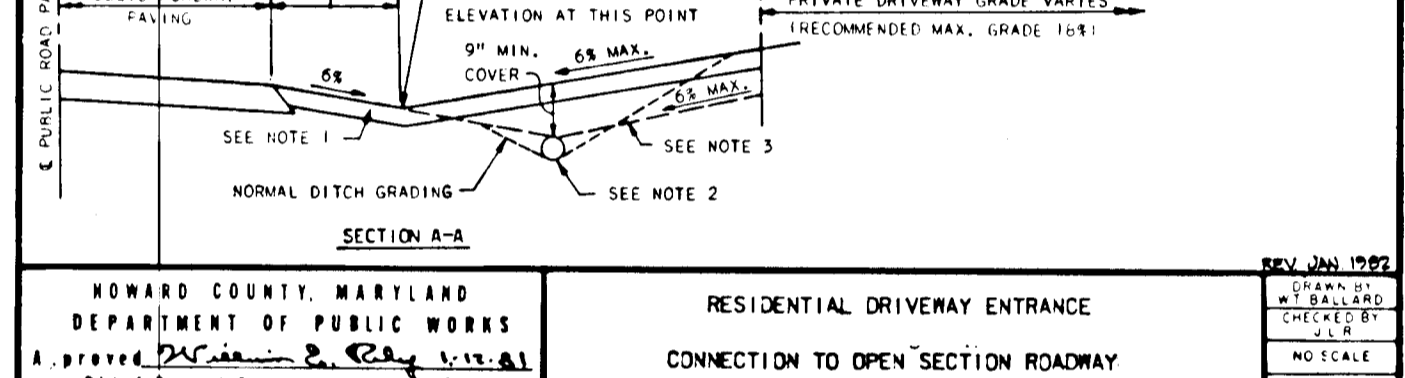
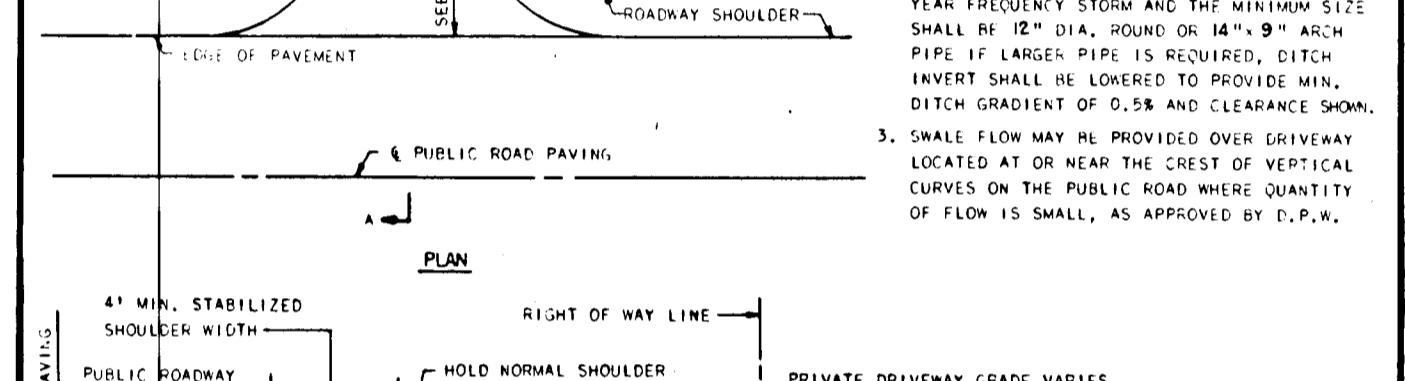
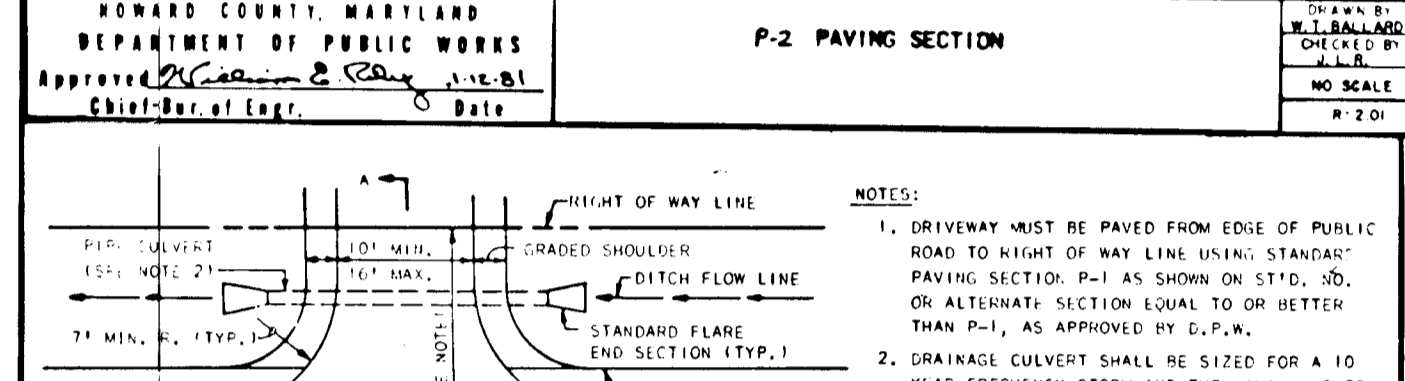
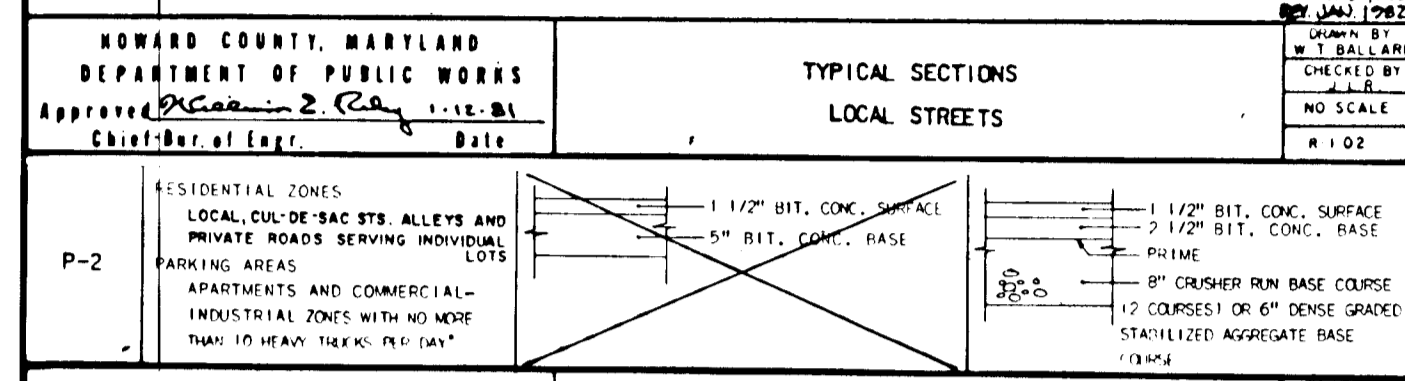
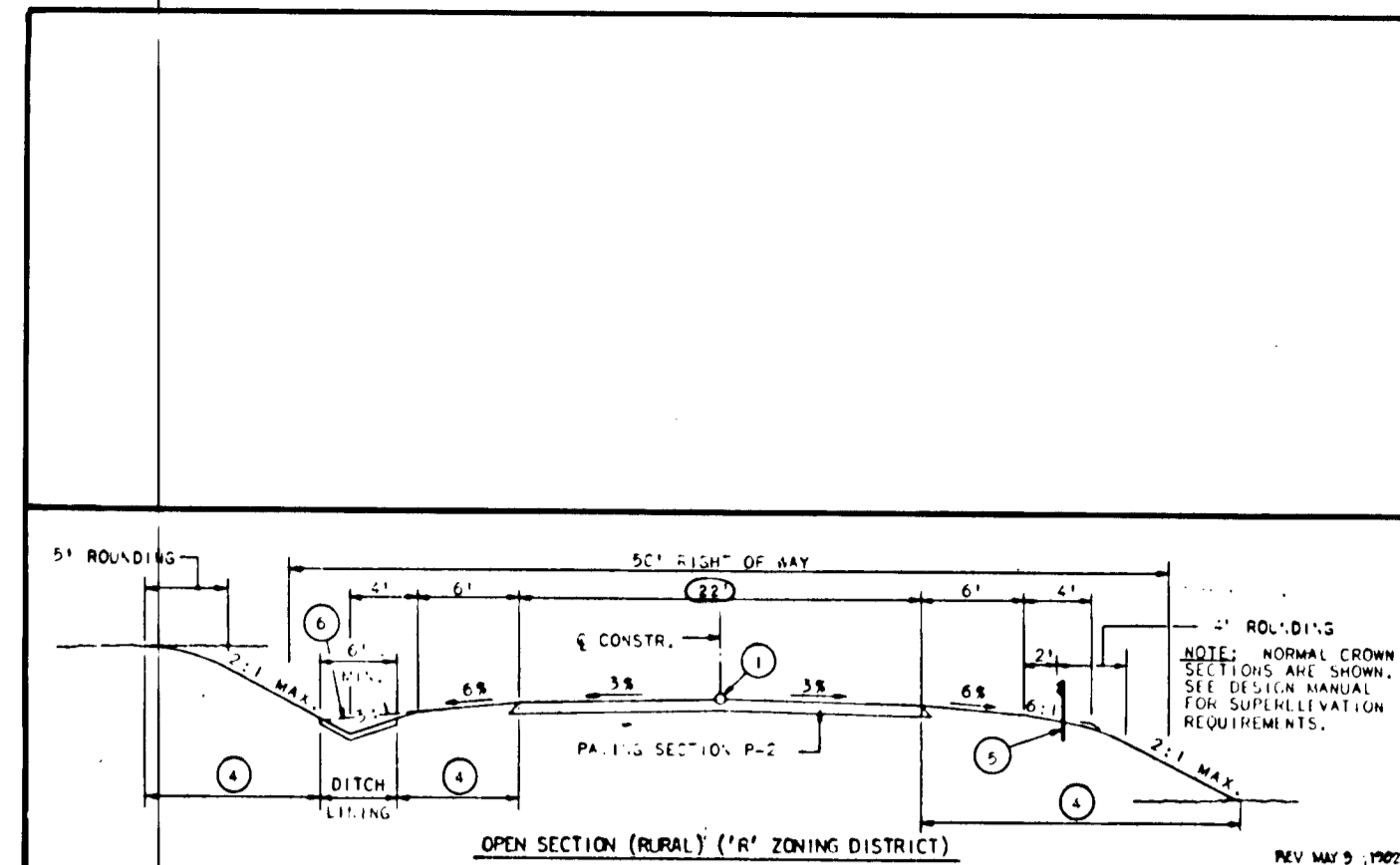
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
 U.S. SOIL CONSERVATION SERVICE
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

ENGINEERS 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."
 JOHN E.C. PATMORE
 Registered Professional Engineer #8978

OWNER'S/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. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
 James L. Newburn
 President
 Newburn Development Corp.

OWNFR/DEVELOPER
 NEWBURN DEVELOPMENT CORP.
 5570 STERRET PLACE, SUITE 201
 COLUMBIA, MARYLAND 21044

KIDDE CONSULTANTS, INC.
 ENGINEERS • PLANNERS • SURVEYORS
 JOHN E.C. PATMORE #8978
 DATE: SEPT., 1987
 SCALE: 1"=50'



REVIEWED FOR HOWARD SOIL CONSERVATION AND MEETS TECHNICAL REQUIREMENTS.

John M. ... 4-8-88
US SOIL CONSERVATION SERVICE DATE

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

Stephen P. ... 4/8/88
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Phillip E. ... 6-27-88
Chief, Land Development Division DATE

Lawrence W. ... 4/27/88
Chief, Bureau of Highways DATE

... 4-27-88
Chief, Bureau of Engineering DATE

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING

... 6/22/88
DATE

COMMUNITY PLANNING AND LAND DEVELOPMENT

STATE OF MARYLAND PROFESSIONAL ENGINEER

KIDDE CONSULTANTS, INC.
ENGINEERS • PLANNERS • SURVEYORS
1100 WEST STREET / SUITE 100 / LAUREL, MD 20707
(Wash.) (301) 953-1821 / 792-8086 (Balt.)

JOHN E.C. PATMORE #9878
DATE **SEPT., 1987** SCALE **AS SHOWN**

DESIGNED: _____ SCALE AS SHOWN

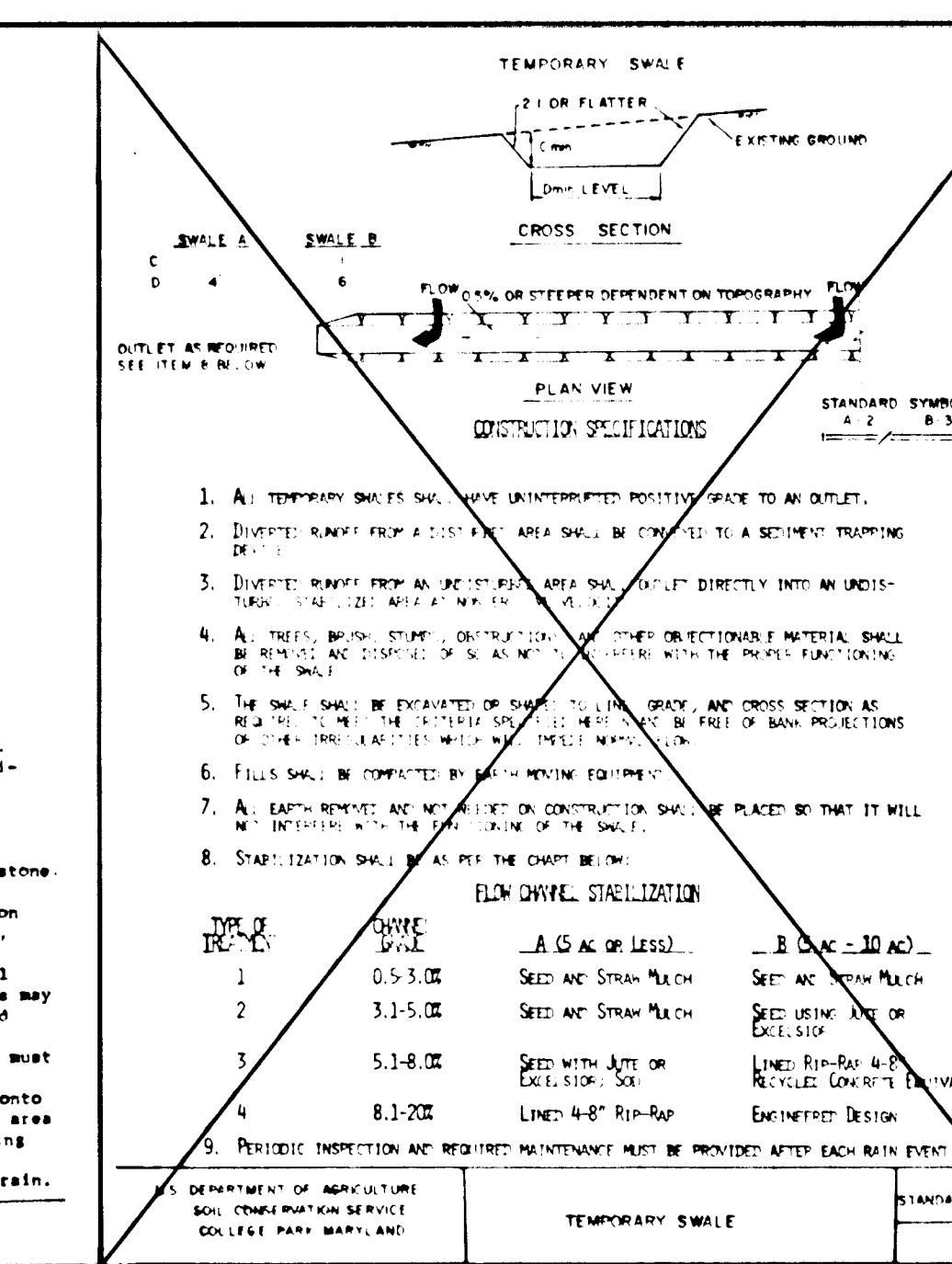
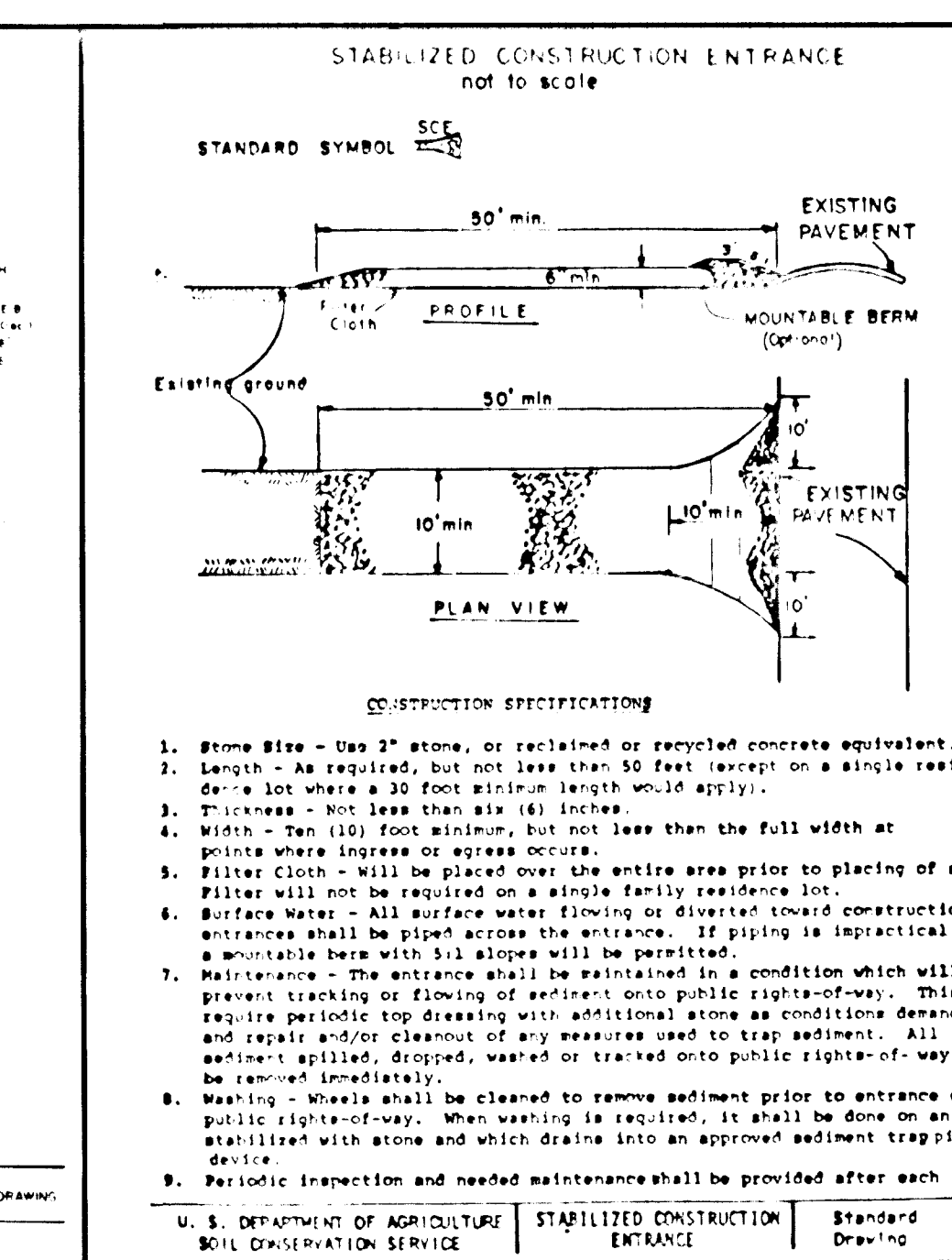
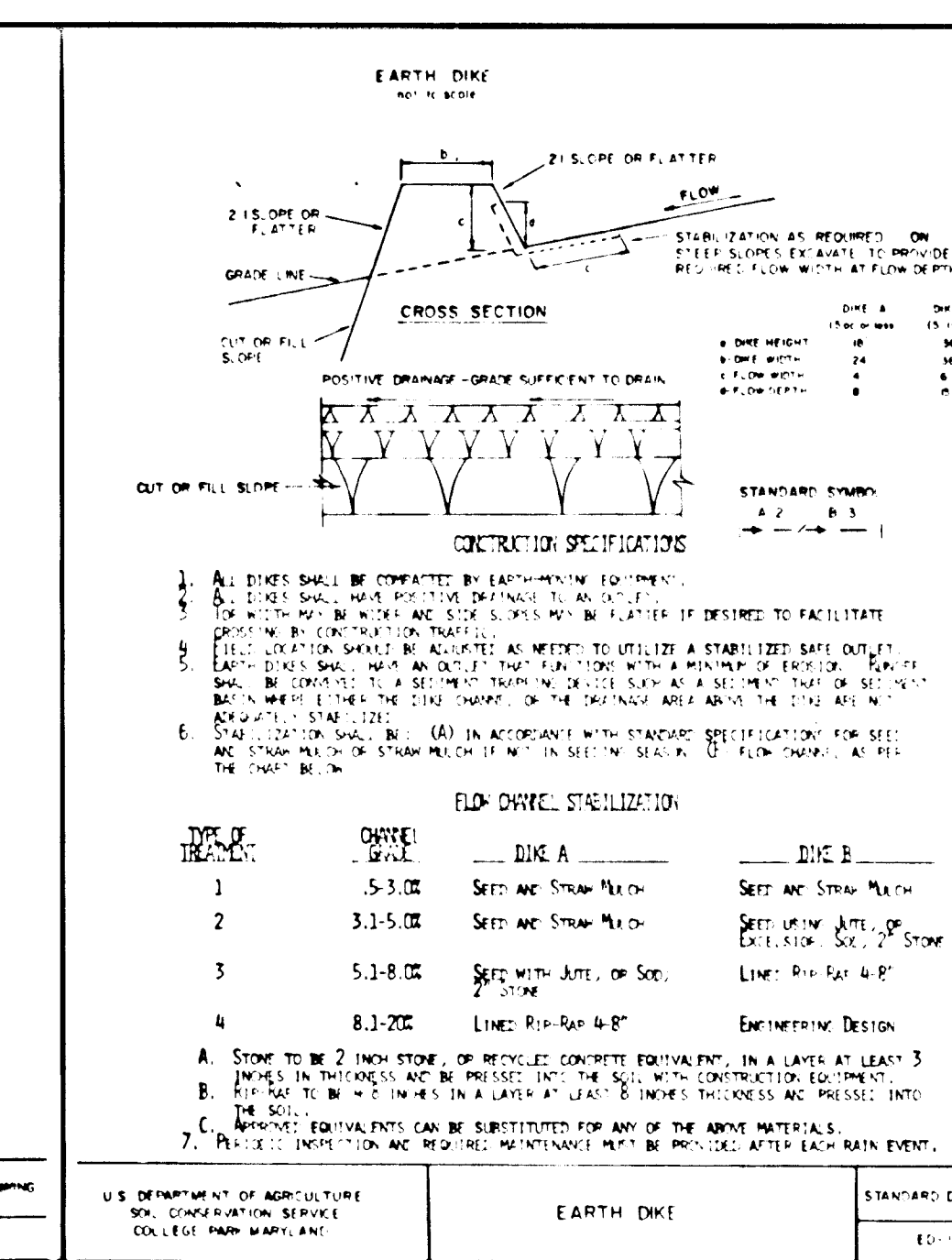
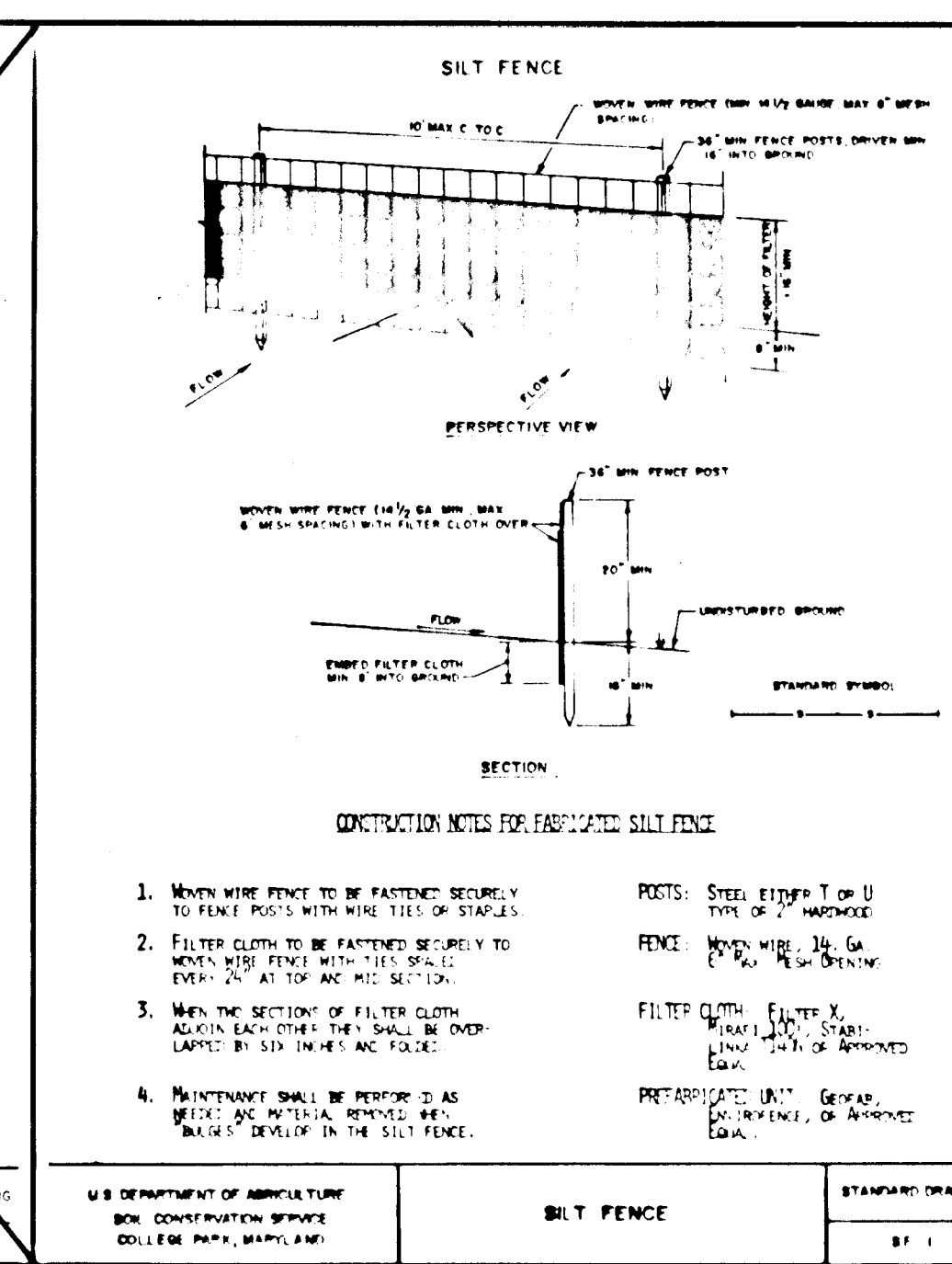
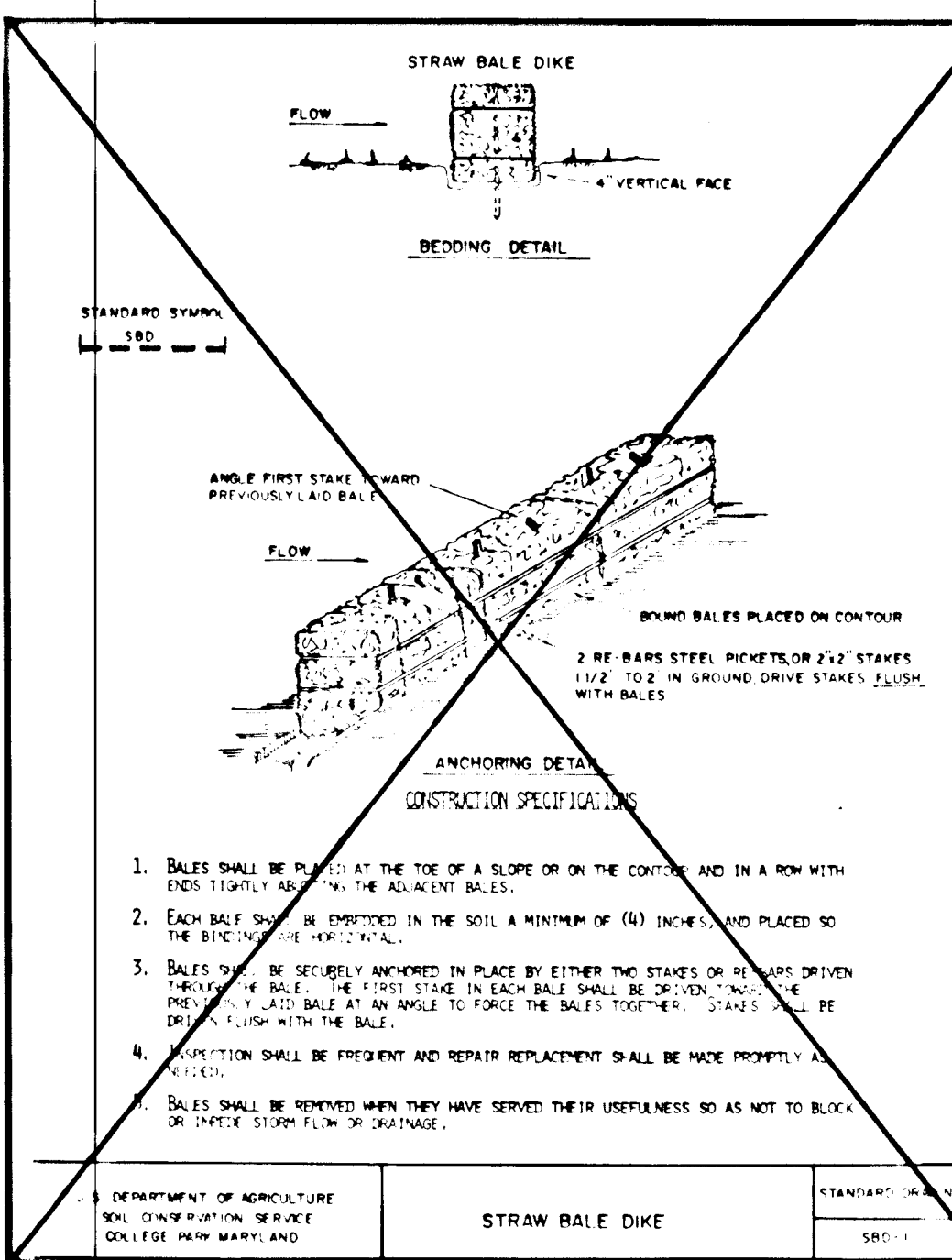
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CHECKED: _____ JOB NO. **1685028**

DATE: _____ FILE NO. _____

DETAIL SHEET FOR CHAPEL WOODS SECTION 2 AREA 3

TAX MAP 29 PARCEL 41
5TH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND



PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.

Seeding 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 lb/1000 sq ft) and 600 lb per acre 10-10-10 fertilizer (14 lb/1000 sq ft) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lb per acre 30-0-0 ureaform fertilizer (9 lb/1000 sq ft).
- 2) Acceptable - Apply 2 tons per acre dolomitic limestone (92 lb/1000 sq ft) and 1000 lb per acre 10-10-10 fertilizer (23 lb/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 25 bushel per acre (1.4 lb/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lb Kentucky 31 Tall Fescue per acre and 2 lbs per acre (.05 lb/1000 sq ft) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use seed. Option (3) Seed with 60 lb/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 lb/1000 sq ft) of untreated 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 redisturbed where a short-term vegetative cover is needed.

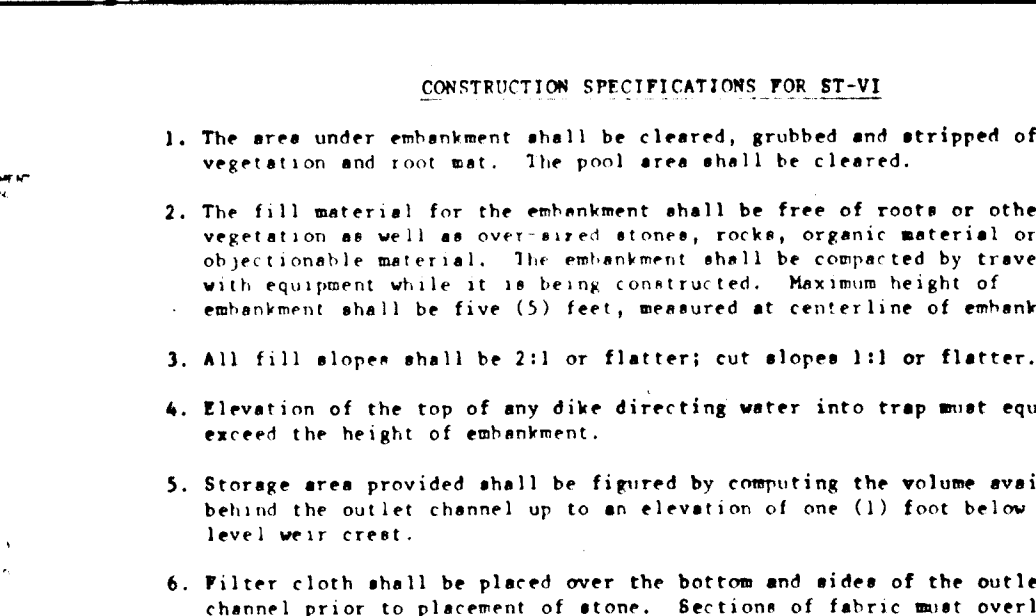
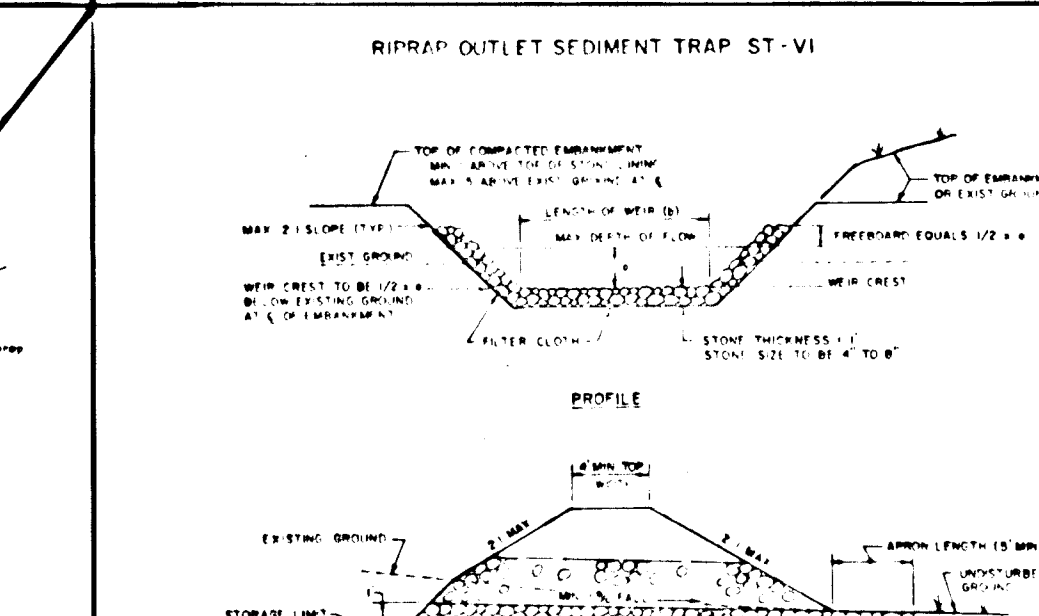
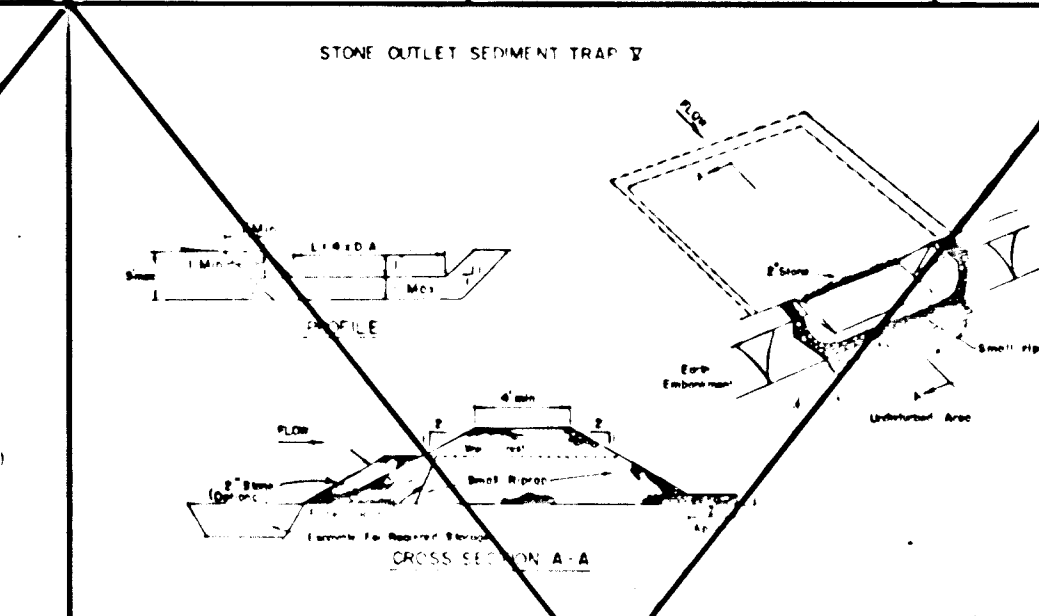
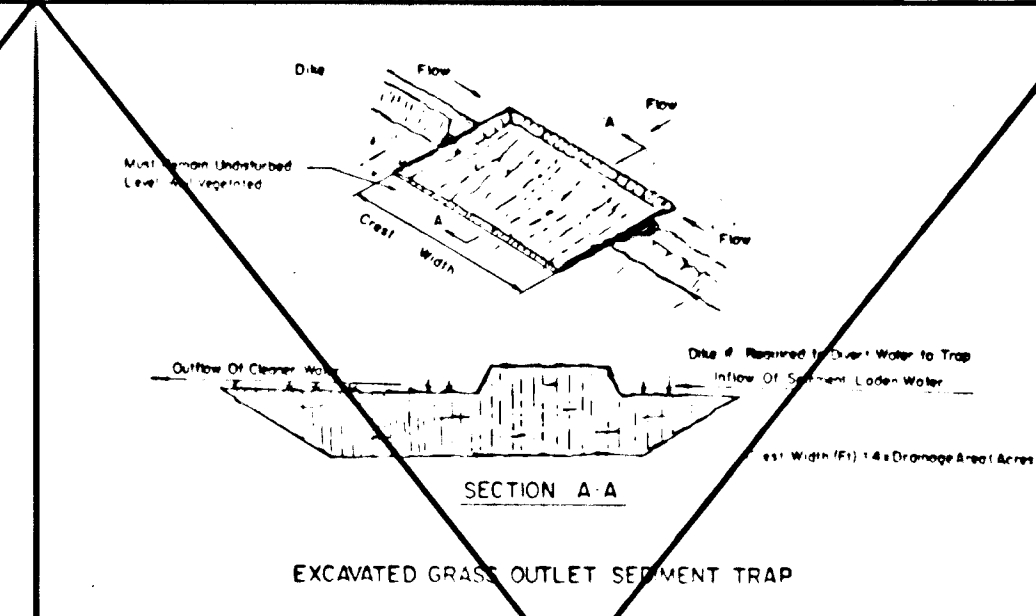
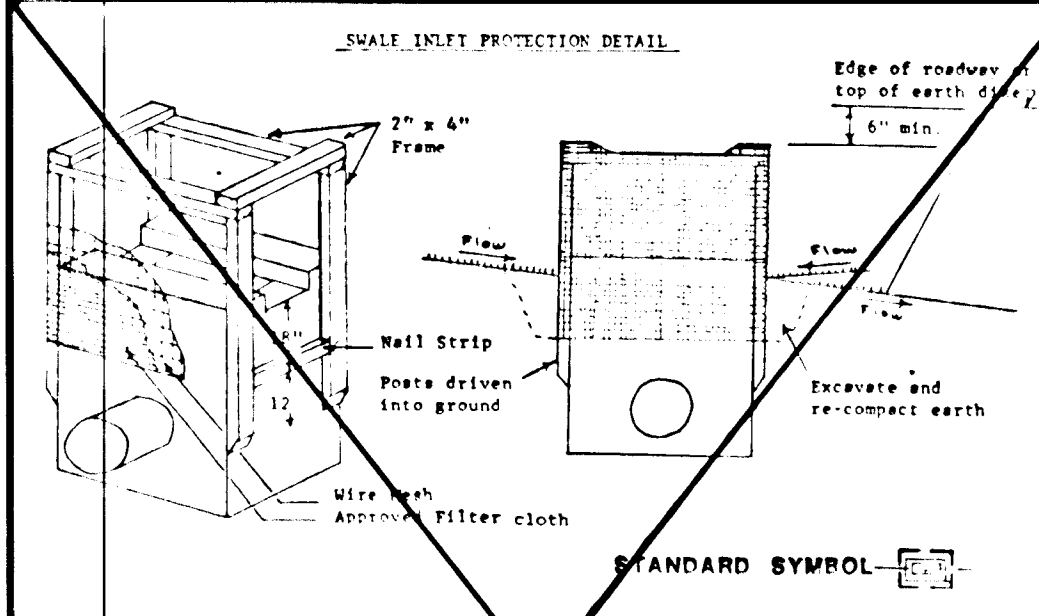
Seeding Preparation: Loosen upper three inches of soil by raking, disking or other acceptable means before seeding.

Soil Amendments: Apply 600 lb per acre 10-10-10 fertilizer (14 lb/1000 sq ft)

Seeding: For periods March 1 thru April 30, and from August 15 thru November 15, seed with 25 bushel per acre (1.4 lb/1000 sq ft) of Kentucky 31 Tall Fescue. For the period May 1 thru August 14, seed with 3 lbs per acre of weeping lovegrass (.07 lb/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.

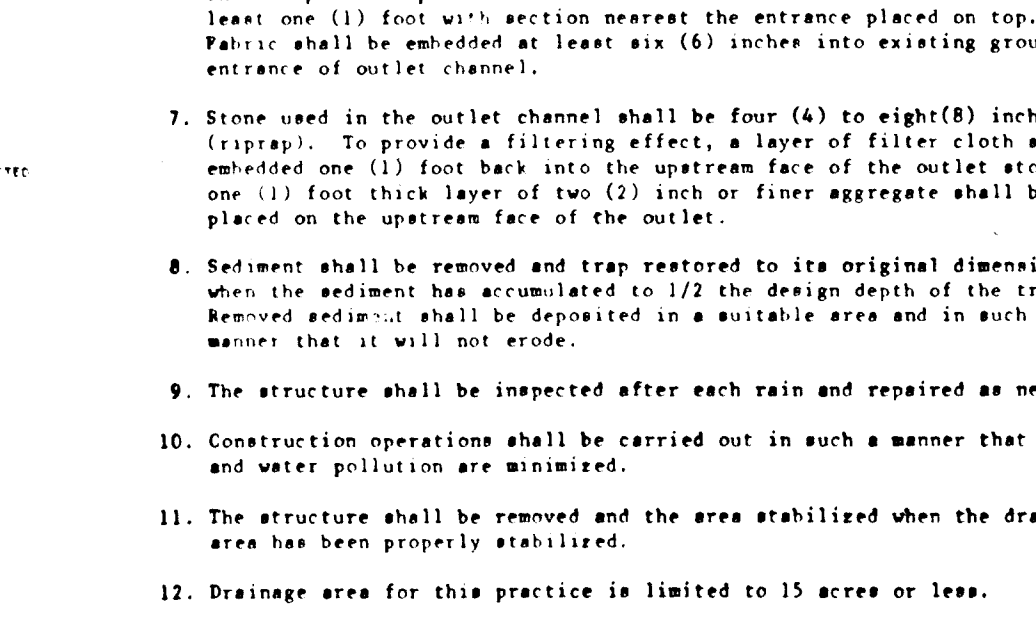
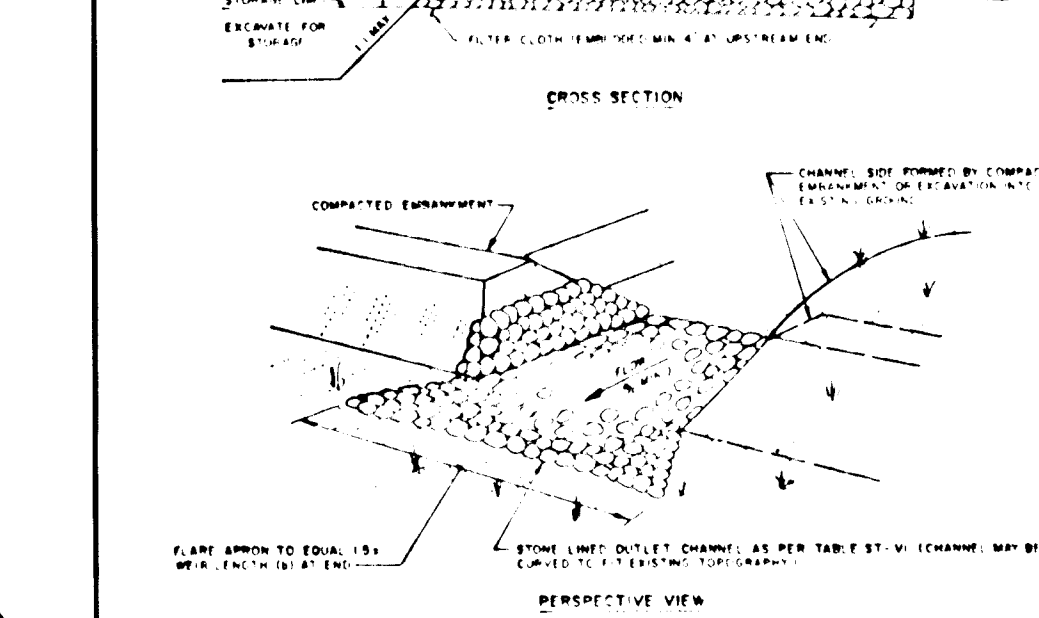
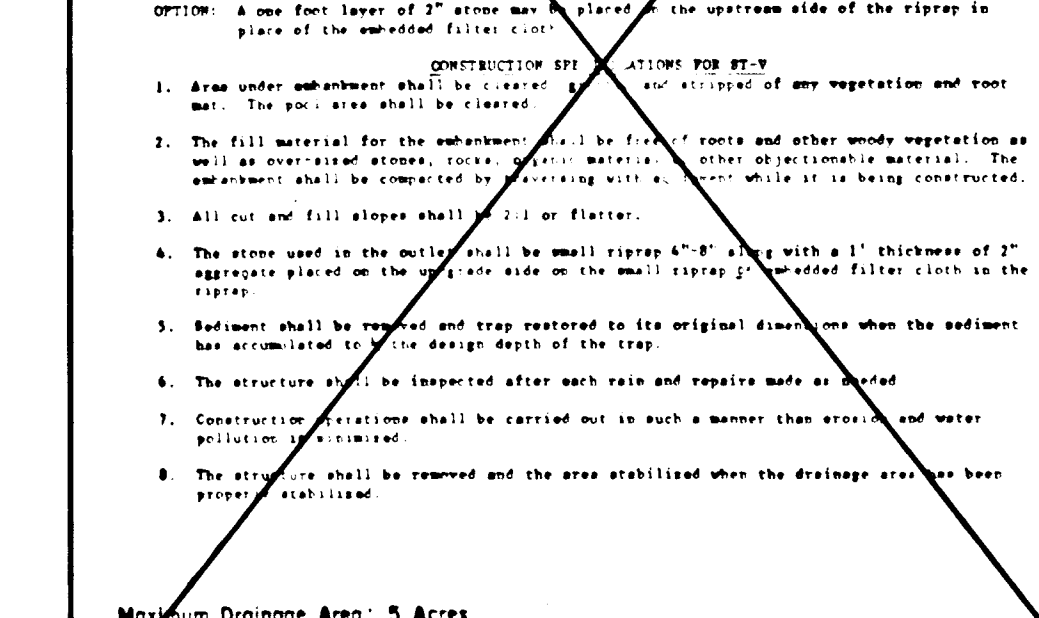
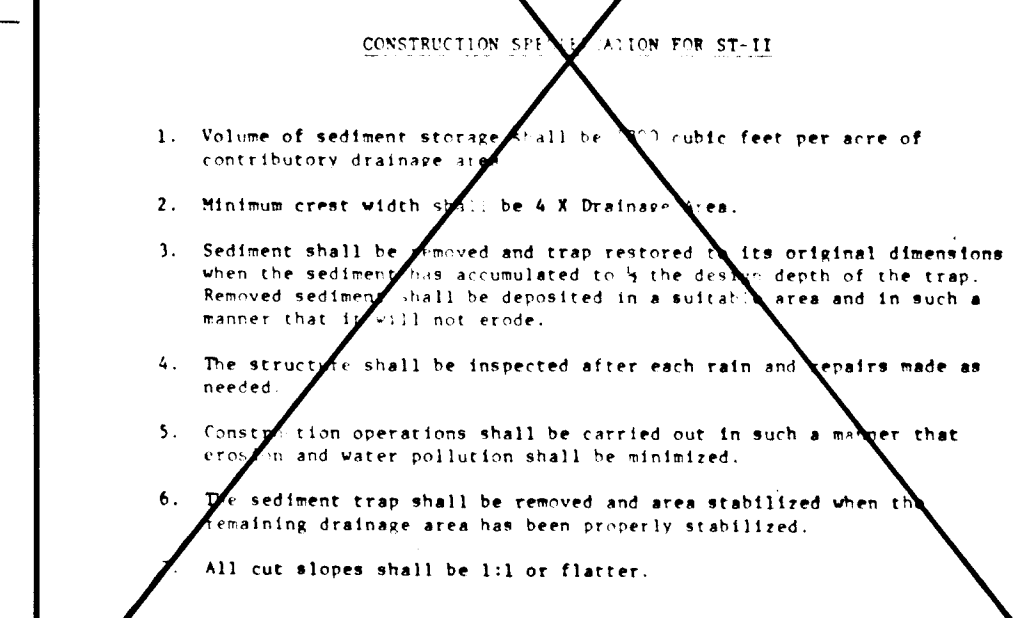
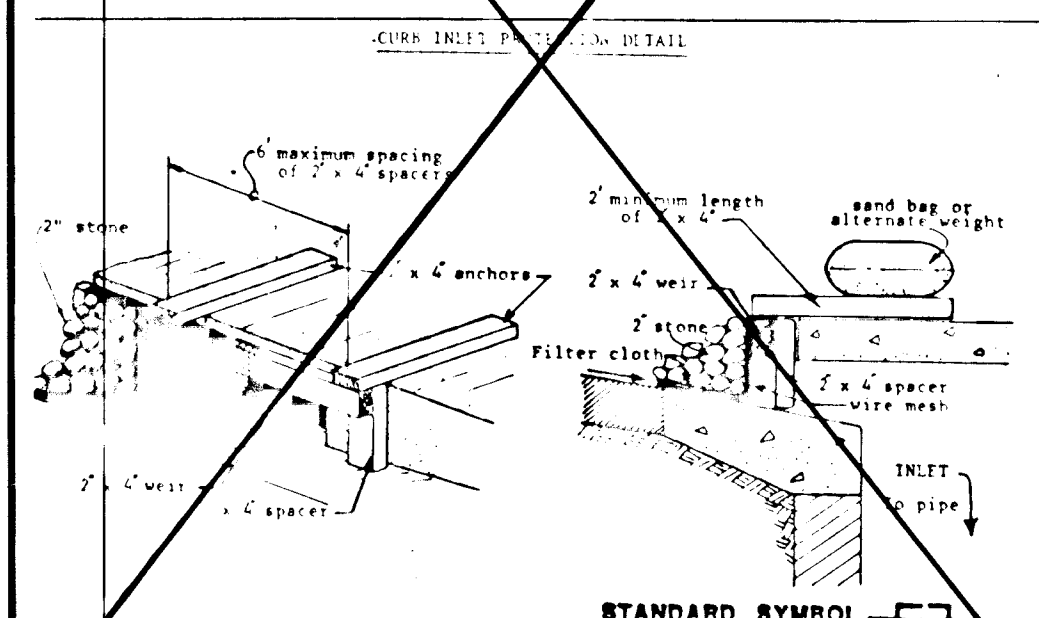
Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lb/1000 sq ft) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use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



CONSTRUCTION SPECIFICATIONS FOR ST-VI

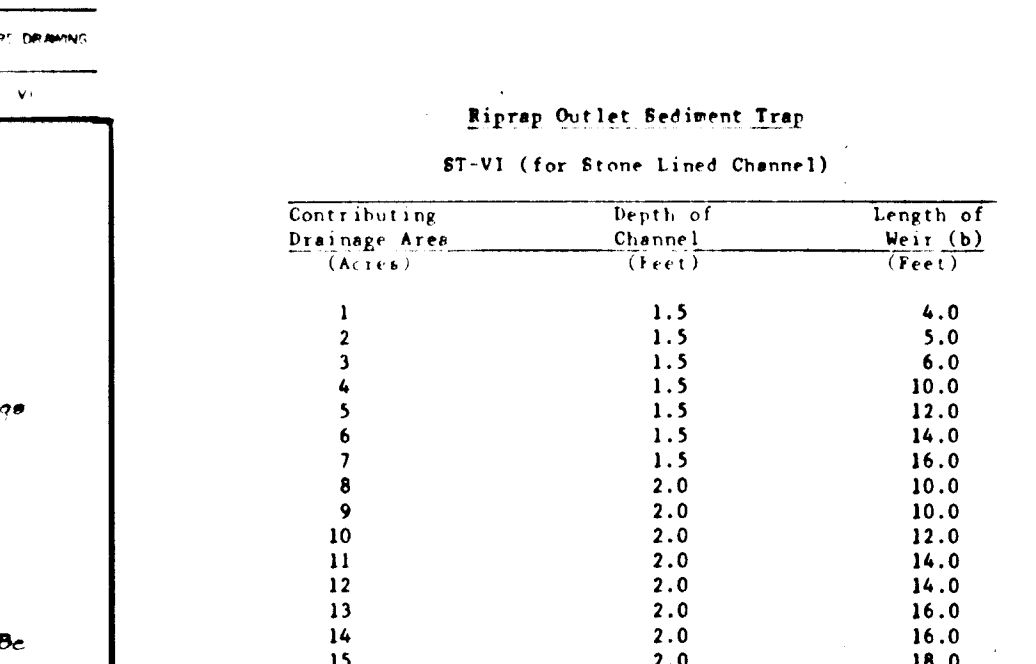
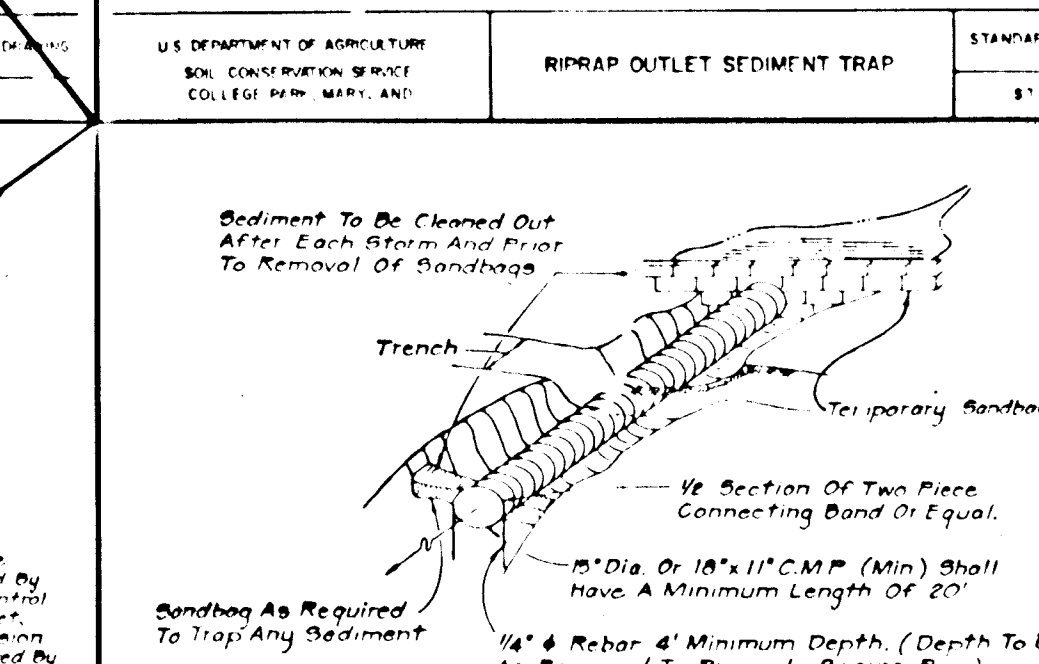
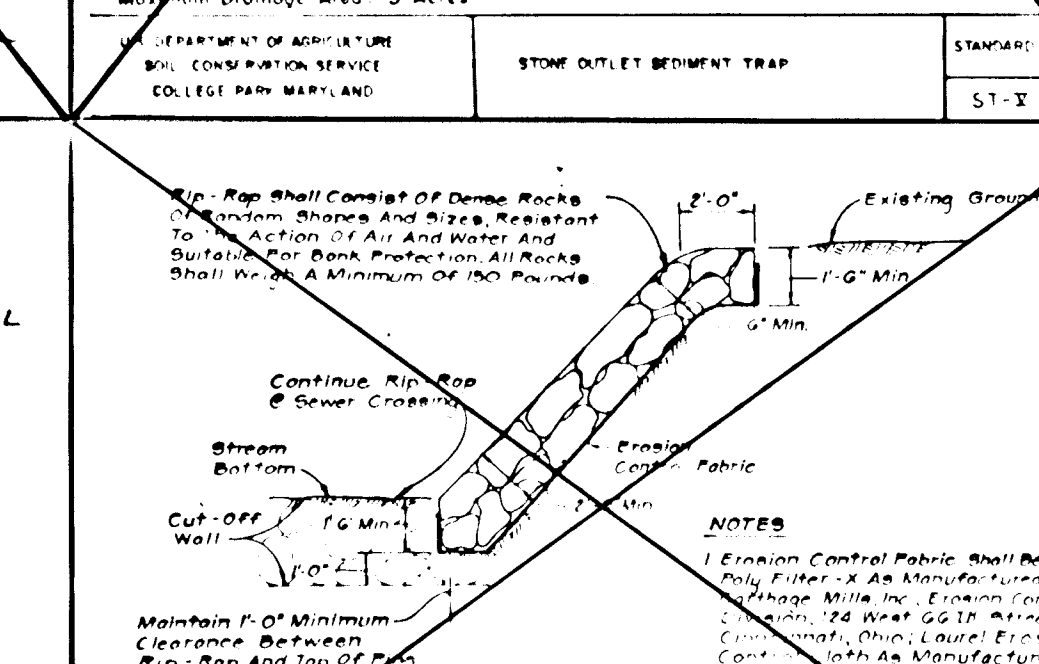
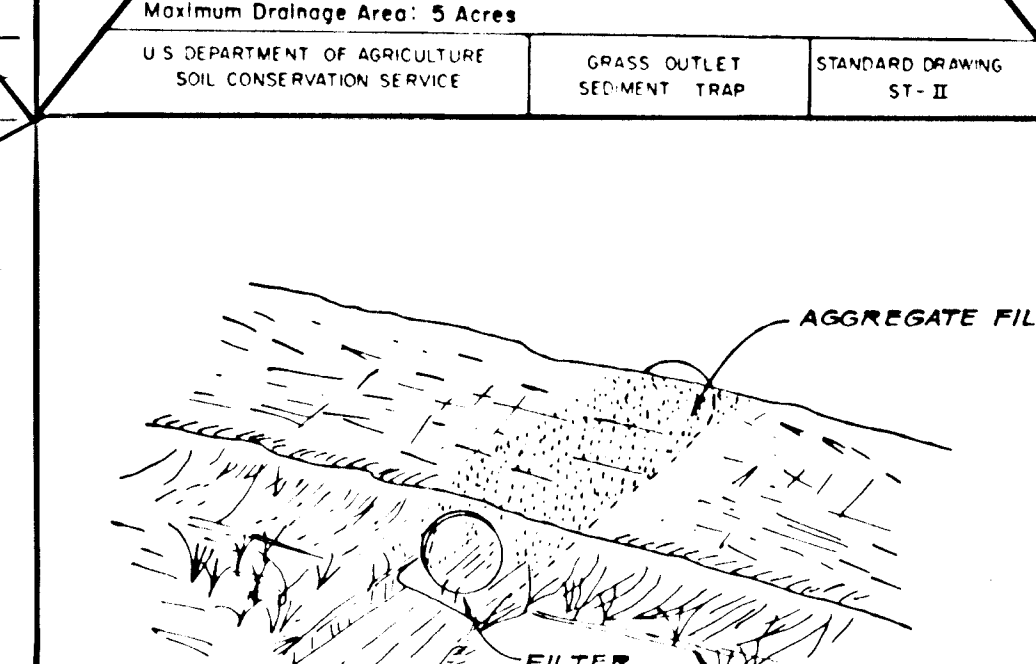
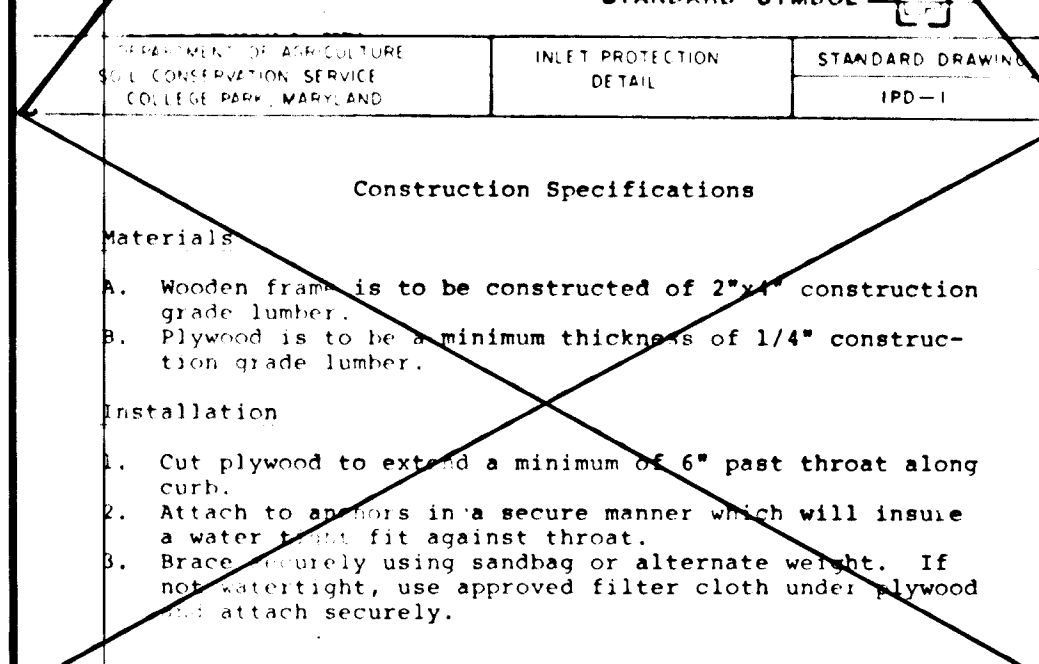
1. The area under enhancement shall be cleared, grubbed and stripped of any vegetation and root mat. The pool area shall be cleared.
2. The fill material for the enhancement shall be free of roots or other woody vegetation as well as over-sized stones, rocks, organic material or other objectionable material. The enhancement shall be compacted by traversing with equipment while it is being constructed. Maximum height of enhancement shall be five (5) feet, measured at centerline of embankment.
3. All fill slopes shall be 2:1 or flatter; cut slopes 1:1 or flatter.
4. Elevation of the top of any dike directing water into trap must equal or exceed the height of embankment.
5. Storage area provided shall be figured by computing the volume available behind the outlet channel up to an elevation of one (1) foot below the level weir crest.
6. Filter cloth shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Sections of fabric must overlap at least one (1) foot with section nearest the entrance placed on top. Fabric shall be embedded at least six (6) inches into existing ground at entrance of outlet channel.
7. Stone used in the outlet channel shall be four (4) to eight (8) inches (1 1/2" to 2") in size. To provide a filtering effect, a layer of filter cloth shall be embedded one (1) foot back into the upstream face of the outlet stone or a one (1) foot thick layer of two (2) inch or finer aggregate shall be placed on the upstream face of the outlet.
8. Sediment shall be removed and trap restored to its original dimensions when the sediment has accumulated to 1/2 the design depth of the trap. Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
9. The structure shall be inspected after each rain and repaired as needed.
10. Construction operations shall be carried out in such a manner that erosion and water pollution are minimized.
11. The structure shall be removed and the area stabilized when the drainage area has been properly stabilized.
12. Drainage area for this practice is limited to 15 acres or less.



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 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.
- 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 seeding (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	27,856.4 Acres	4.0
Area Disturbed	170 Acres	5.0
Area to be roofed or paved	0.65 Acres	6.0
Area to be vegetatively stabilized	1.05 Acres	10.0
Total Cut	3,400 Cu. yds	12.0
Total Fill	3,400 Cu. yds	14.0
Offsite waste/borrow area location	N/A	16.0
- 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 DPW sediment control inspector.



SOIL CONSERVATION MEASURES AT SMALL STREAM CROSSING

Contributing Drainage Area (Acres)	Depth of Channel (Feet)	Length of Weir (ft)
1	1.5	4.0
2	1.5	5.0
3	1.5	6.0
4	1.5	10.0
5	1.5	12.0
6	1.5	14.0
7	1.5	16.0
8	2.0	10.0
9	2.0	10.0
10	2.0	12.0
11	2.0	14.0
12	2.0	16.0
13	2.0	16.0
14	2.0	16.0
15	2.0	18.0

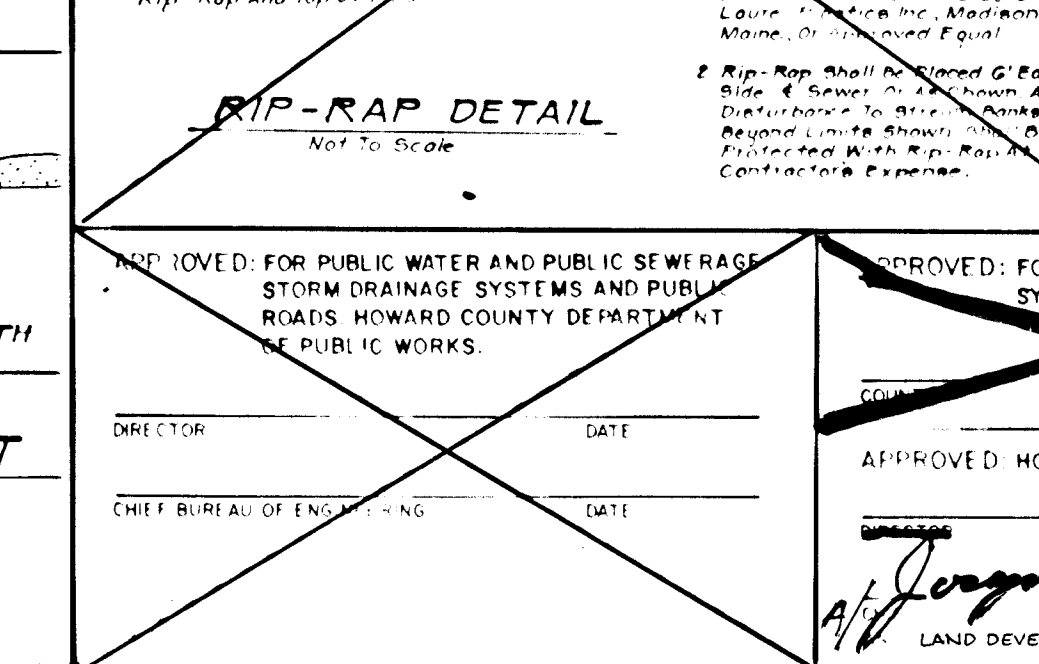
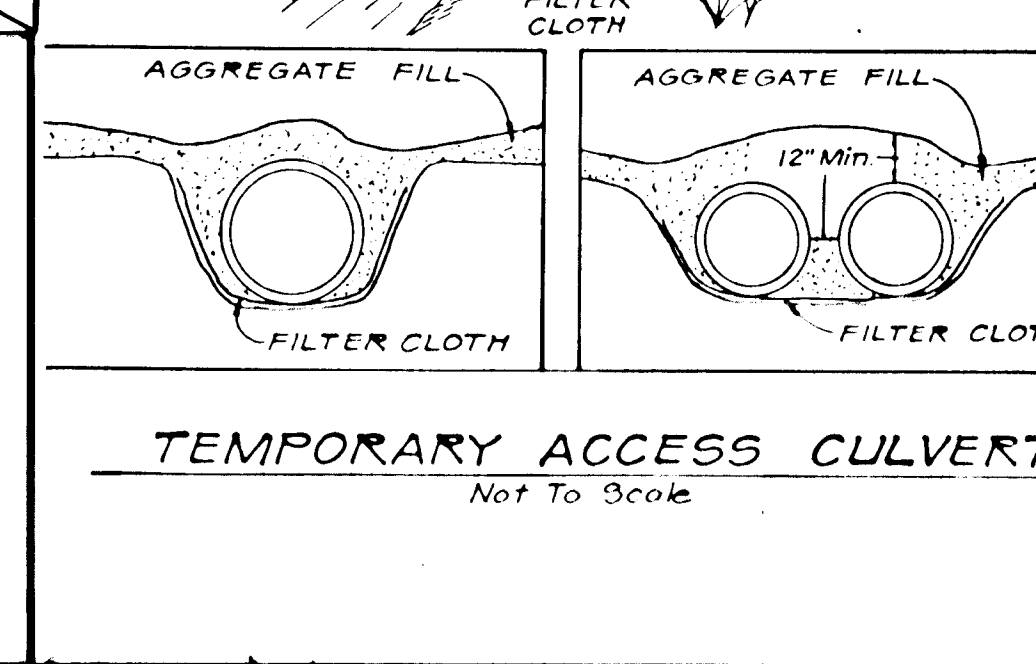
REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

James M. ... 4-8-88 DATE

U.S. SOIL CONSERVATION SERVICE

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

Stephen L. ... 4/6/88 DATE



APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Joseph ... 4/22/88 DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

John E. Patmore 4/14/88 DATE

NOTE: FOR SEQUENCE OF CONSTRUCTIONS, SEE SHEET 2 OF 6

SEDIMENT CONTROL DETAIL SHEET

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Wesley H. ... 4/27/88 DATE

CHIEF, LAND DEVELOPMENT DIVISION

William W. Weiland 4/27/88 DATE

CHIEF, BUREAU OF HIGHWAYS

William R. ... 4-27-88 DATE

CHIEF, BUREAU OF ENGINEERING

OWNER'S/DEVELOPER'S CERTIFICATION

"I 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 *James L. Newburn* Date 4/5/88

Name James L. Newburn President Phone 497-3815

Firm Newburn Development Corp. 5570-201 Starrett Pl. Columbia, MD 21045

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."

John E. Patmore 4/14/88 DATE

JOHN E. PATMORE

Registered Professional Engineer #8978

KIDDE CONSULTANTS, INC.

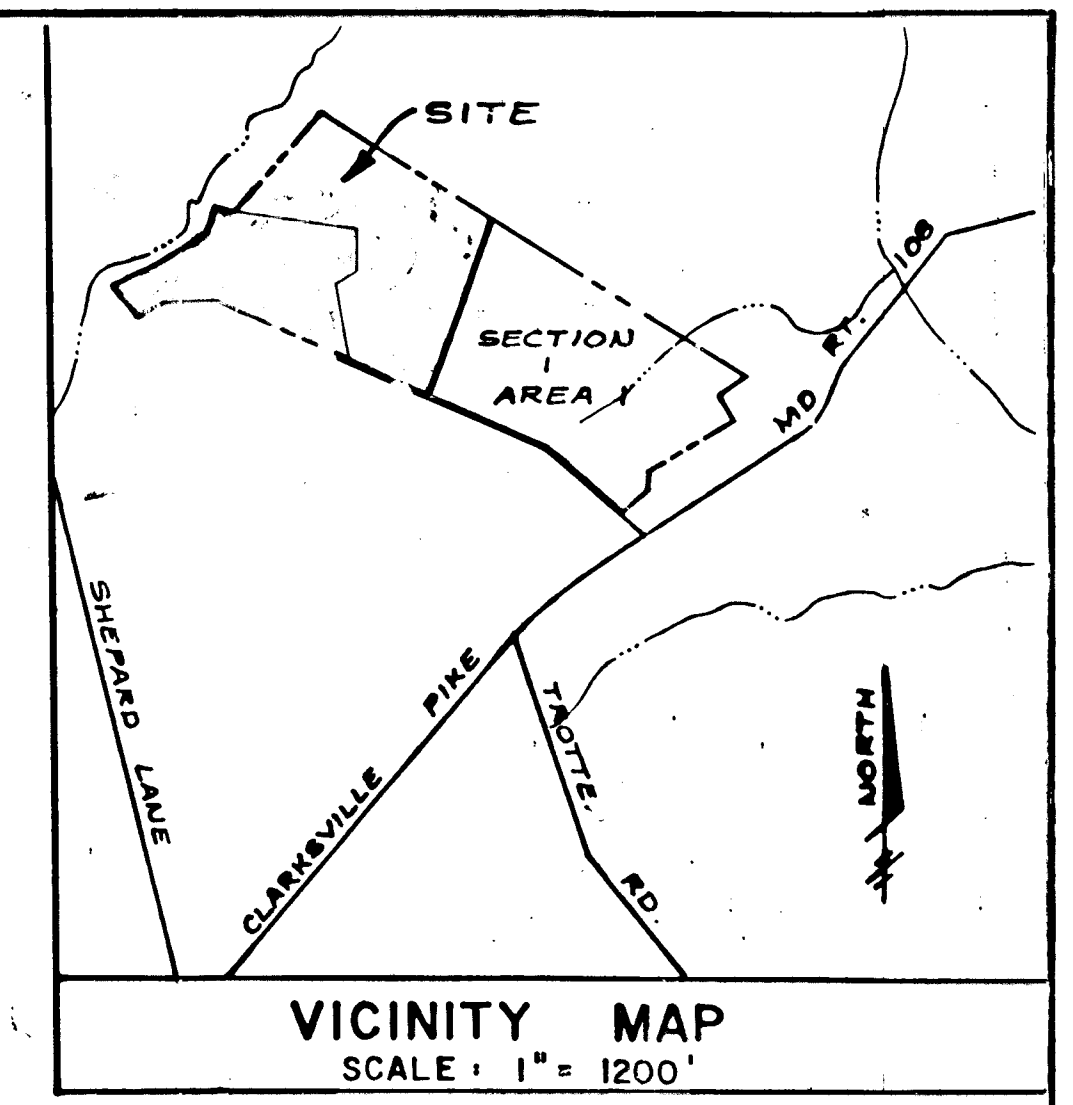
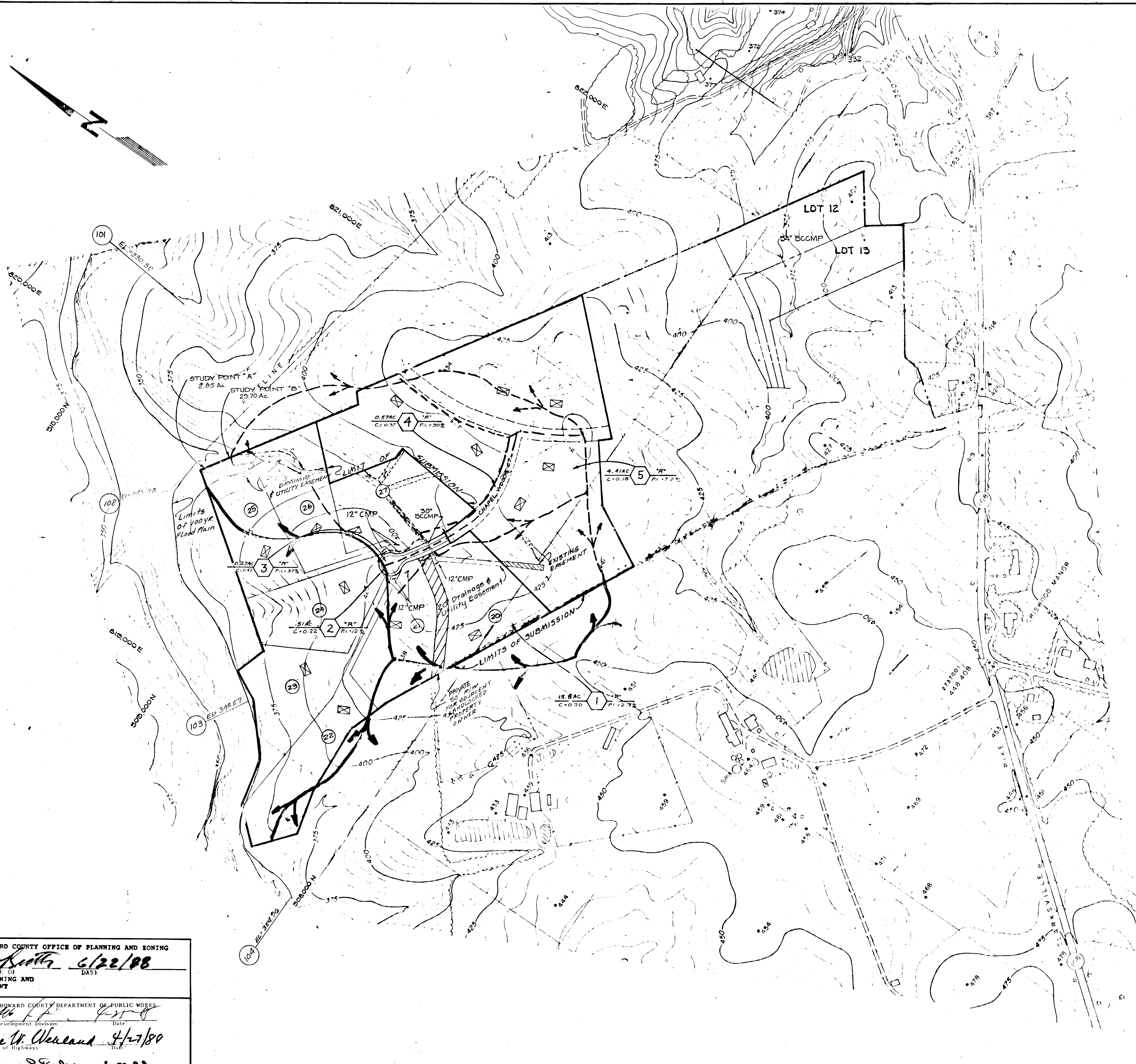
ENGINEERS • PLANNERS • SURVEYORS

1100 WEST STREET / SUITE 100 / LAUREL, MD 20707

(Wash.) (301) 953-1821 / 792-8086 (Balt.)

CHAPEL WOODS SEC 2 AREA 3

DATE	4/27/88	SHEET	4	DATE	SEPT., 1987	NUMBER	1685028
SCALE	AS SHOWN		6				



NOTE:
 1. HOUSE LOCATIONS INDICATE NO DRAINAGE WILL IMPACT HOUSES. HOUSE LOCATIONS PER PRELIMINARY PLAN, P-86-23.
 2. PROPOSED 12" DIAMETER DRIVEWAY CULVERTS ARE PRIVATE.

LEGEND:
 ——— EXISTING DRAINAGE DIVIDE
 - - - - - PROPOSED DRAINAGE DIVIDE
 ⊠ PROPOSED HOUSE LOCATION

OWNER/DEVELOPER
 NEWBURN DEVELOPMENT CORP
 5570 STERRETT PLACE SUITE 201
 COLUMBIA MARYLAND 21044

DRAINAGE AREA MAP FOR CHAPEL WOODS

SECTION 2 AREA 3
 TAX MAP 29 PARCEL 41
 5TH ELECTION DISTRICT HOWARD COUNTY MARYLAND

SHEET 5 OF 6

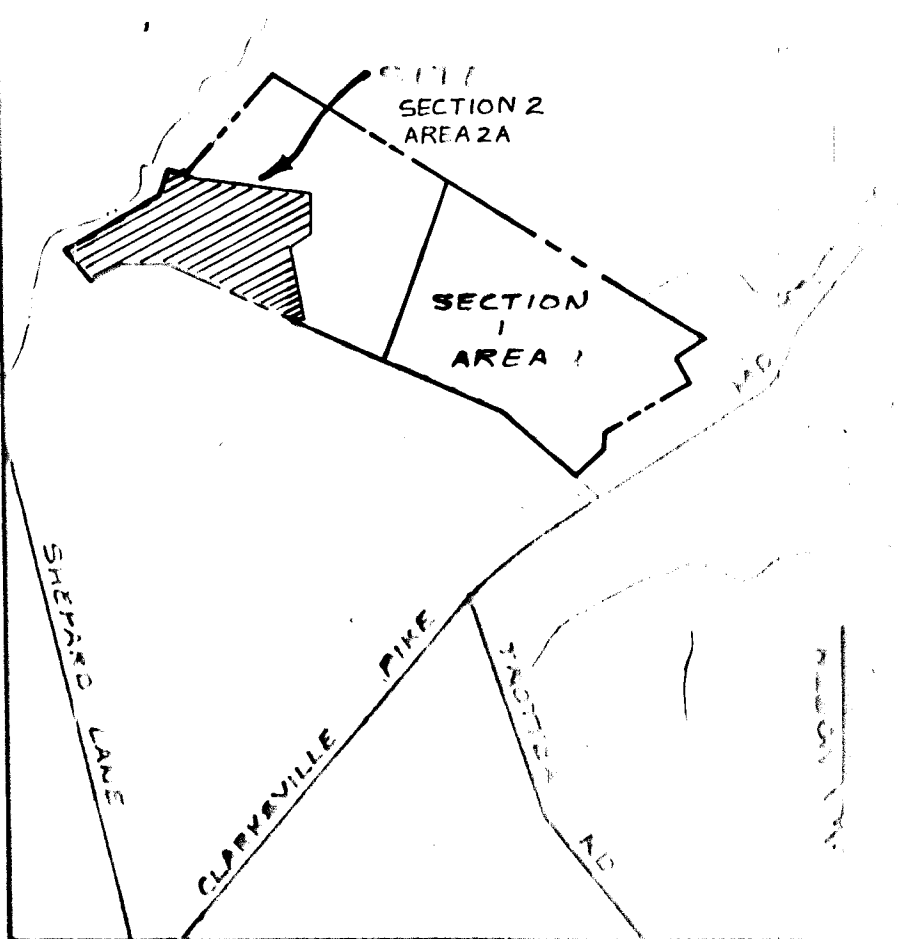
APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Joseph Keeter 6/22/88
 DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
Michelle F. H.
 Chief, Land Development Division
 DATE

Ernestine W. Weiland 4/27/80
 Chief, Bureau of Highways
 DATE

William S. Seay 2-27-88
 Chief, Bureau of Engineering
 DATE

KIDDE CONSULTANTS, INC.		
DATE	REVISION	BY
ENGINEERS • PLANNERS • SURVEYORS 1100 WEST STREET / SUITE 100 / LAUREL, MD 20707 (Wash.) (301) 953-1821 / 792-8086 (Balt.)		
SURVEYED BY		
COMPUTED BY		
DRAWN BY		
CHECKED BY		
John E.C. Patmore		JOHN E.C. PATMORE #8978
Drwg. No. 1685028		DATE SEPT., 1987 SCALE 1" = 200'



VICINITY MAP
SCALE 1" = 1200'

SOIL SYMBOL	GROUP	DESCRIPTION
B	B	BROWN SAND
B1	B	BROWN SAND, CLAYEY
B2	B	BROWN SAND, SILTY
B3	B	BROWN SAND, CLAYEY SILTY
B4	B	BROWN SAND, CLAYEY SILTY
B5	B	BROWN SAND, CLAYEY SILTY
B6	B	BROWN SAND, CLAYEY SILTY
B7	B	BROWN SAND, CLAYEY SILTY
B8	B	BROWN SAND, CLAYEY SILTY
B9	B	BROWN SAND, CLAYEY SILTY
B10	B	BROWN SAND, CLAYEY SILTY
B11	B	BROWN SAND, CLAYEY SILTY
B12	B	BROWN SAND, CLAYEY SILTY
B13	B	BROWN SAND, CLAYEY SILTY
B14	B	BROWN SAND, CLAYEY SILTY
B15	B	BROWN SAND, CLAYEY SILTY
B16	B	BROWN SAND, CLAYEY SILTY
B17	B	BROWN SAND, CLAYEY SILTY
B18	B	BROWN SAND, CLAYEY SILTY
B19	B	BROWN SAND, CLAYEY SILTY
B20	B	BROWN SAND, CLAYEY SILTY
B21	B	BROWN SAND, CLAYEY SILTY
B22	B	BROWN SAND, CLAYEY SILTY
B23	B	BROWN SAND, CLAYEY SILTY
B24	B	BROWN SAND, CLAYEY SILTY
B25	B	BROWN SAND, CLAYEY SILTY
B26	B	BROWN SAND, CLAYEY SILTY
B27	B	BROWN SAND, CLAYEY SILTY
B28	B	BROWN SAND, CLAYEY SILTY
B29	B	BROWN SAND, CLAYEY SILTY
B30	B	BROWN SAND, CLAYEY SILTY
B31	B	BROWN SAND, CLAYEY SILTY
B32	B	BROWN SAND, CLAYEY SILTY
B33	B	BROWN SAND, CLAYEY SILTY
B34	B	BROWN SAND, CLAYEY SILTY
B35	B	BROWN SAND, CLAYEY SILTY
B36	B	BROWN SAND, CLAYEY SILTY
B37	B	BROWN SAND, CLAYEY SILTY
B38	B	BROWN SAND, CLAYEY SILTY
B39	B	BROWN SAND, CLAYEY SILTY
B40	B	BROWN SAND, CLAYEY SILTY
B41	B	BROWN SAND, CLAYEY SILTY
B42	B	BROWN SAND, CLAYEY SILTY
B43	B	BROWN SAND, CLAYEY SILTY
B44	B	BROWN SAND, CLAYEY SILTY
B45	B	BROWN SAND, CLAYEY SILTY
B46	B	BROWN SAND, CLAYEY SILTY
B47	B	BROWN SAND, CLAYEY SILTY
B48	B	BROWN SAND, CLAYEY SILTY
B49	B	BROWN SAND, CLAYEY SILTY
B50	B	BROWN SAND, CLAYEY SILTY

OWNER/DEVELOPER
NEWBURN DEVELOPMENT CORP.
5570 STERRETT PLACE SUITE 201
COLUMBIA MARYLAND 21044

SOILS MAP
FOR
CHAPEL WOODS
SECTION 2 AREA 3
TAX MAP 29 PARCEL 41
5TH ELECTION DISTRICT HOWARD COUNTY MARYLAND

SHEET 6 OF 6

APPROVED: HOWARD COUNTY OFFICE OF PLANNING AND ZONING
Joseph Booth 6/22/88
 DIVISION OF COMMUNITY PLANNING AND LAND DEVELOPMENT
 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
William H. Percy 4/2/88
 CHIEF, LAND DEVELOPMENT DIVISION
 DATE

Shawville W. Wallace 4/2/88
 CHIEF, BUREAU OF HIGHWAYS
 DATE

William E. Reid 4-27-88
 CHIEF, BUREAU OF ENGINEERING
 DATE

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 JOHN E.C. PATMORE #8978
 1685028
 SEPT. 1987
 1" = 200'