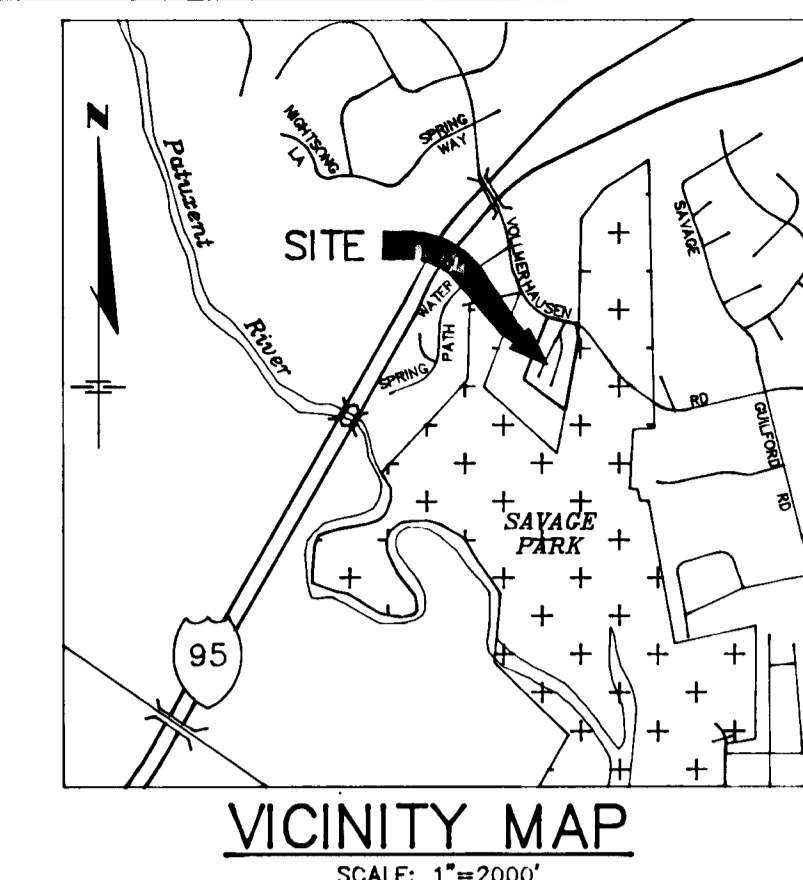


WINCOPIN TRAIL ENTRANCE ROAD
SAVAGE PARK
HOWARD COUNTY, MARYLAND
CAPITAL PROJECT NO. N-3944

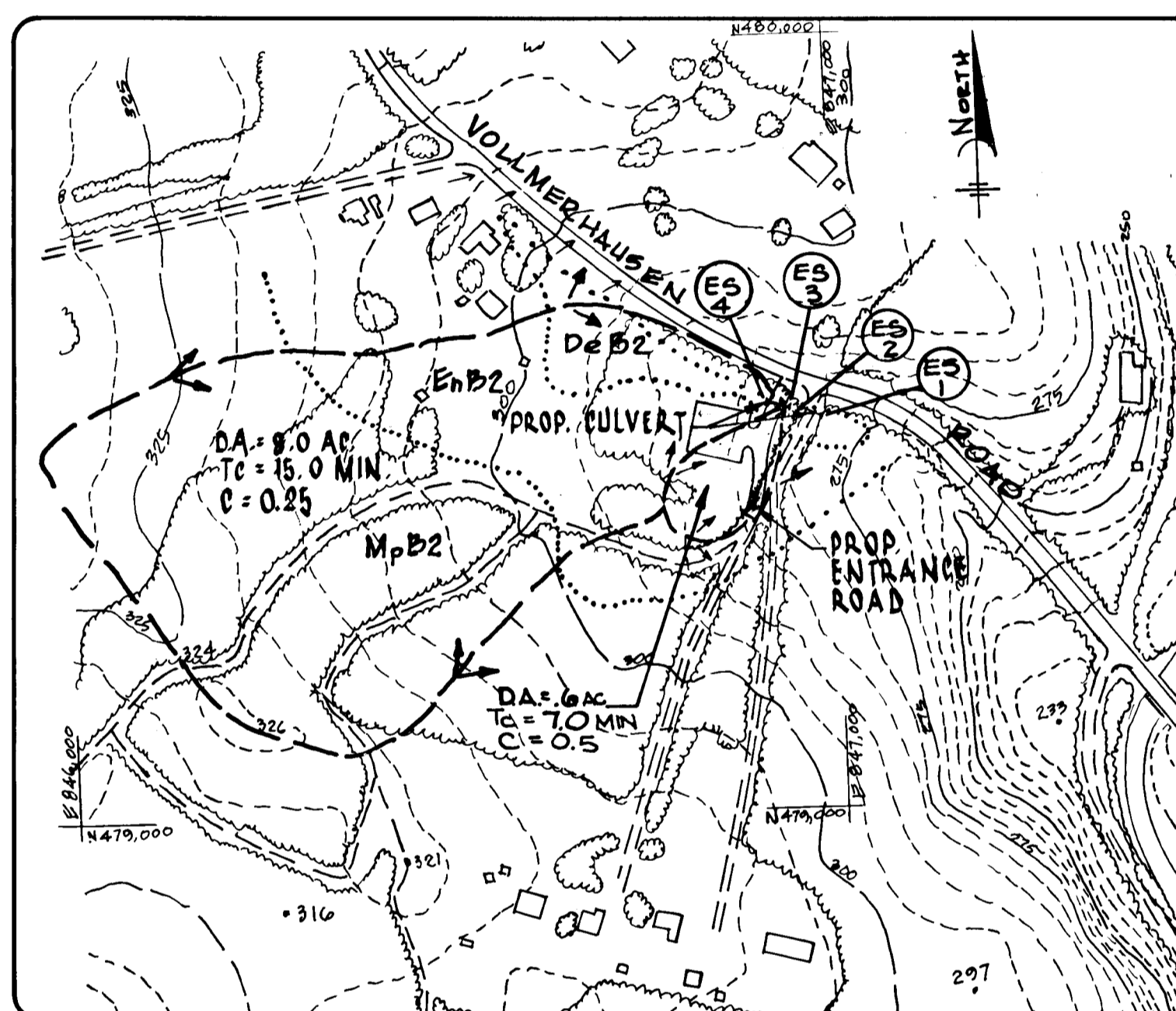


LIST OF DRAWINGS

SHEET	DESCRIPTION
1	COVER SHEET
2	ROAD PLAN AND PROFILE, GRADING SEDIMENT CONTROL, SEDIMENT CONTROL DETAILS
3	

GENERAL NOTES:

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY DFI INC. DATED 11-94.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS.471 AND 47C4 WERE USED FOR THIS PROJECT.
- THERE IS NO WATER ON THIS SITE.
- THERE IS NO SEWER ON THIS SITE.
- THERE ARE NO FLOODPLAINS ON THIS SITE.
- STORMWATER MANAGEMENT IS NOT APPLICABLE ON THIS SITE.
- THERE ARE NO WETLANDS ON THIS SITE.



DRAINAGE AREA MAP

SCALE: 1"=200'

SOIL TYPES

D&B2 - DELANDO SILT LOAM
E&B2 - ELSINGORO LOAM
M&B2 - MONTALTO SILT LOAM

TRAFFIC NOTE:
FOR TRAFFIC CONTROL DURING CONSTRUCTION OF DRIVEWAY, USE HOWARD COUNTY STANDARD DETAIL TE-11 FOR SHOULDER WORK.

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 THE ENVIRONMENT 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."

Paul G. Johnson
SIGNATURE OF DEVELOPER

DATE 9/16/97

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 COUNTY SOIL CONSERVATION DISTRICT."

SJA DATE 9-9-97

DFI, INC.
504 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146
TEL (410)647-2727

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

Cheryl S. ...
U.S.D.A. NATURAL RESOURCES DATE

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

C194C ZΦ1

DK MURRAY / MURPHY / DWG / COVER / 54-22-97

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND	
<i>...</i> DIRECTOR OF PUBLIC WORKS DATE	<i>Paul G. Johnson</i> 9/16/97 CHIEF, BUREAU OF ENGINEERING DATE
<i>...</i> CHIEF, BUREAU OF HIGHWAYS DATE	<i>Elizabeth Anderson-Cole</i> 9/12/97 CHIEF, DIVISION OF TRANSPORTATION, DATE PROJECTS AND WATERSHED MANAGEMENT

dfi CONSULTING ENGINEERS, SURVEYORS,
AND LAND PLANNERS
504 BALTIMORE/ANNAPOLIS BOULEVARD
SEVERNA PARK, MD 21146 (410)647-2727
FAX (410)647-7127

DES: LRC					
DRN: LRC					
CHK: MAM					
DATE: 9/8/97	BY	NO.	REVISION		

COVER SHEET

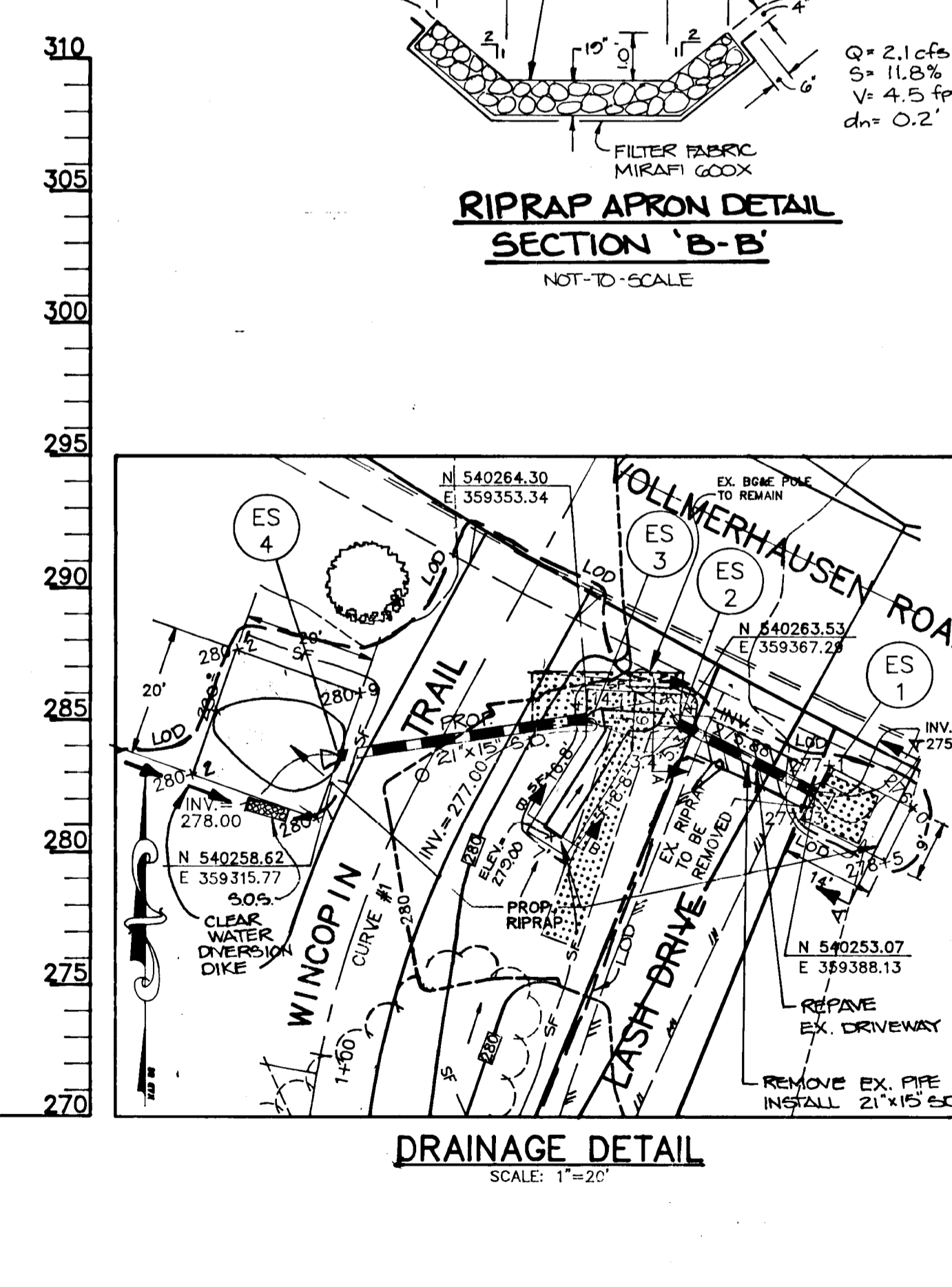
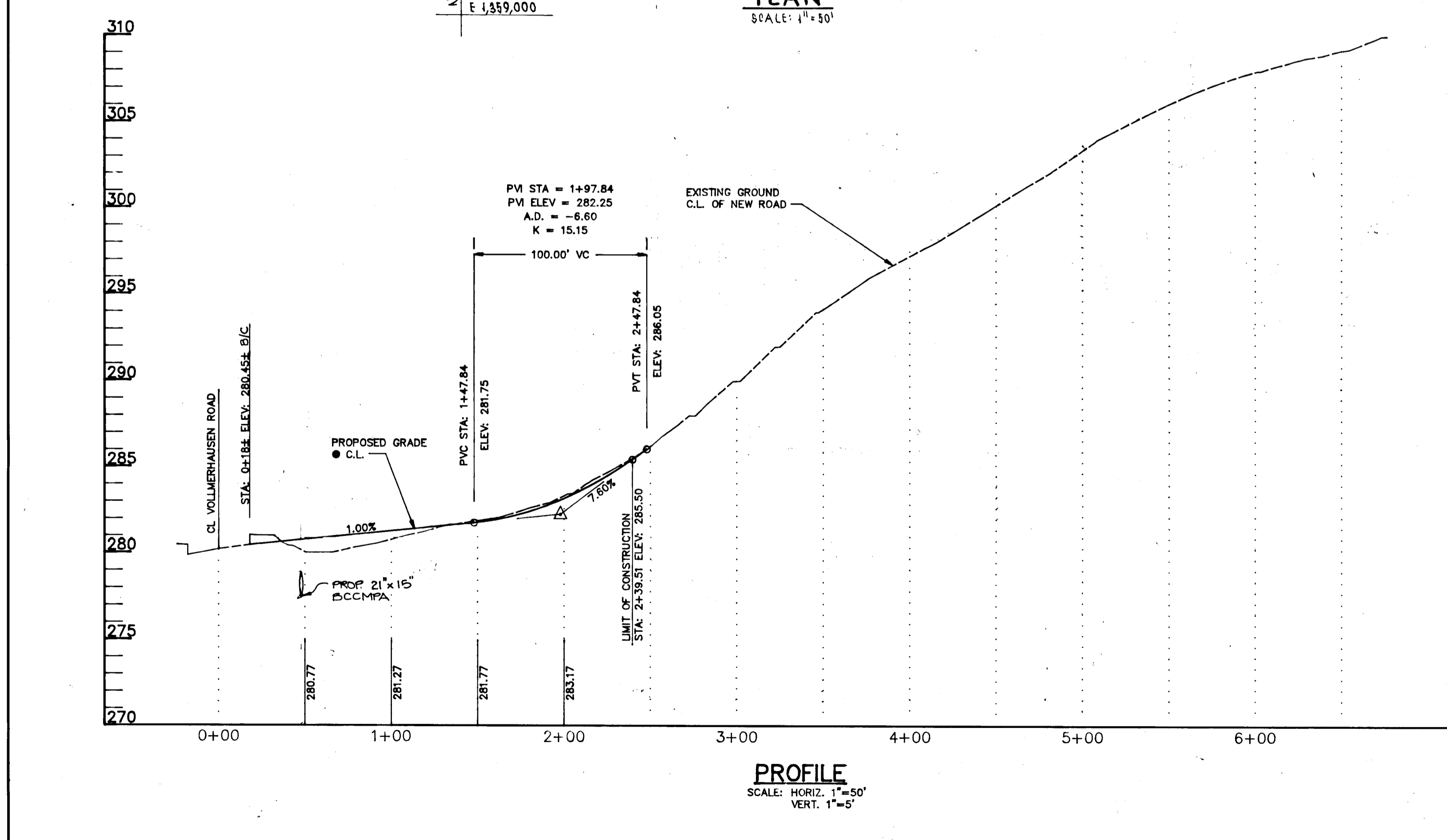
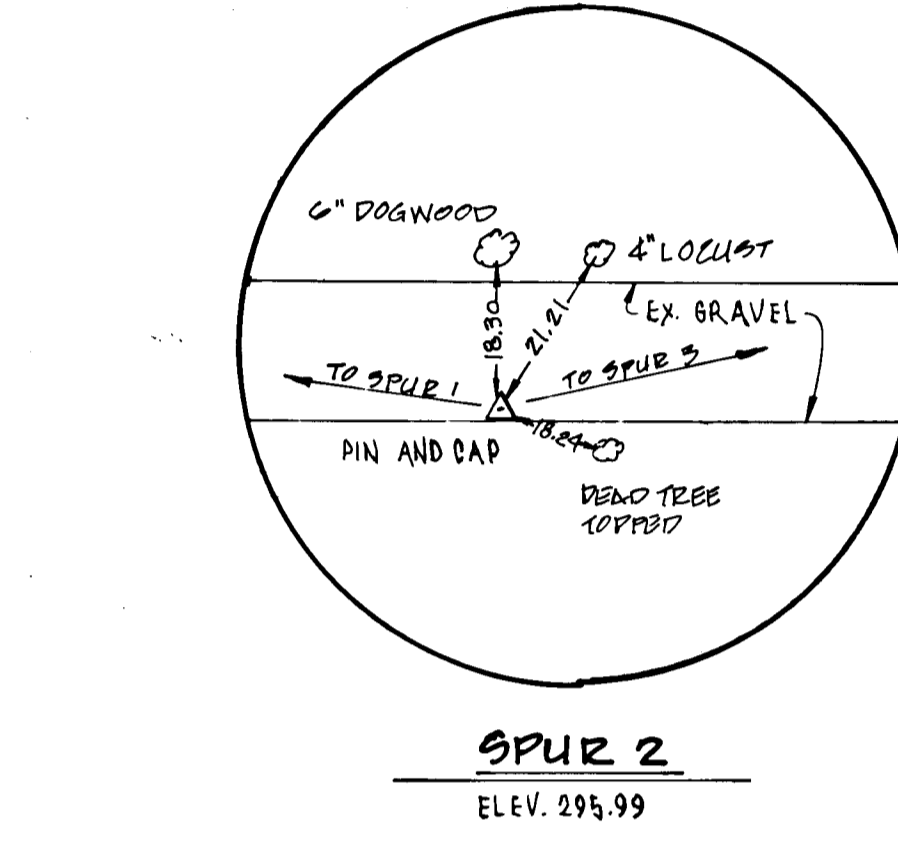
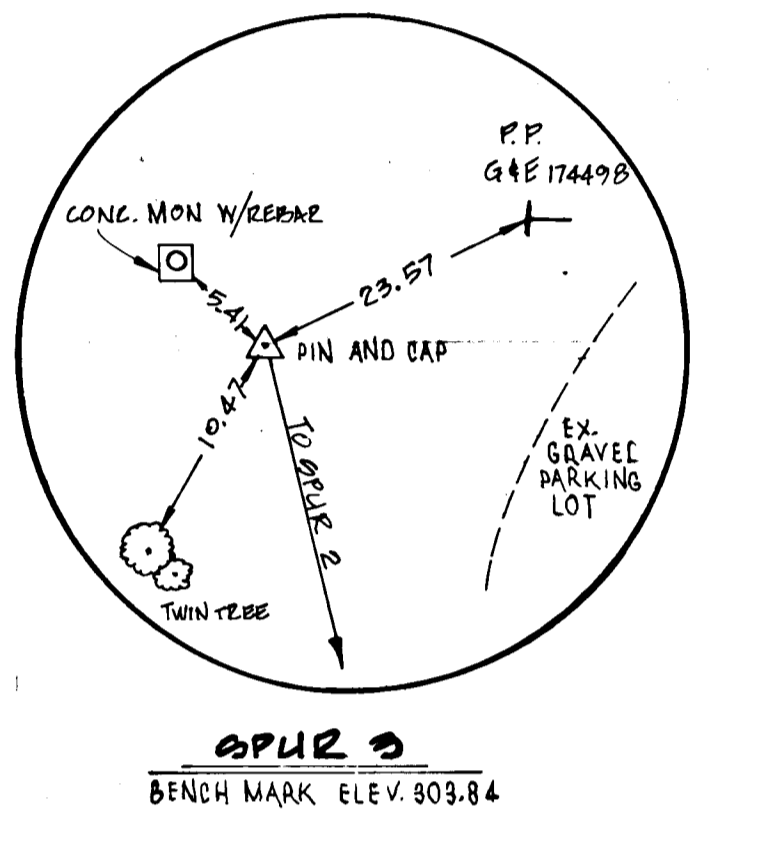
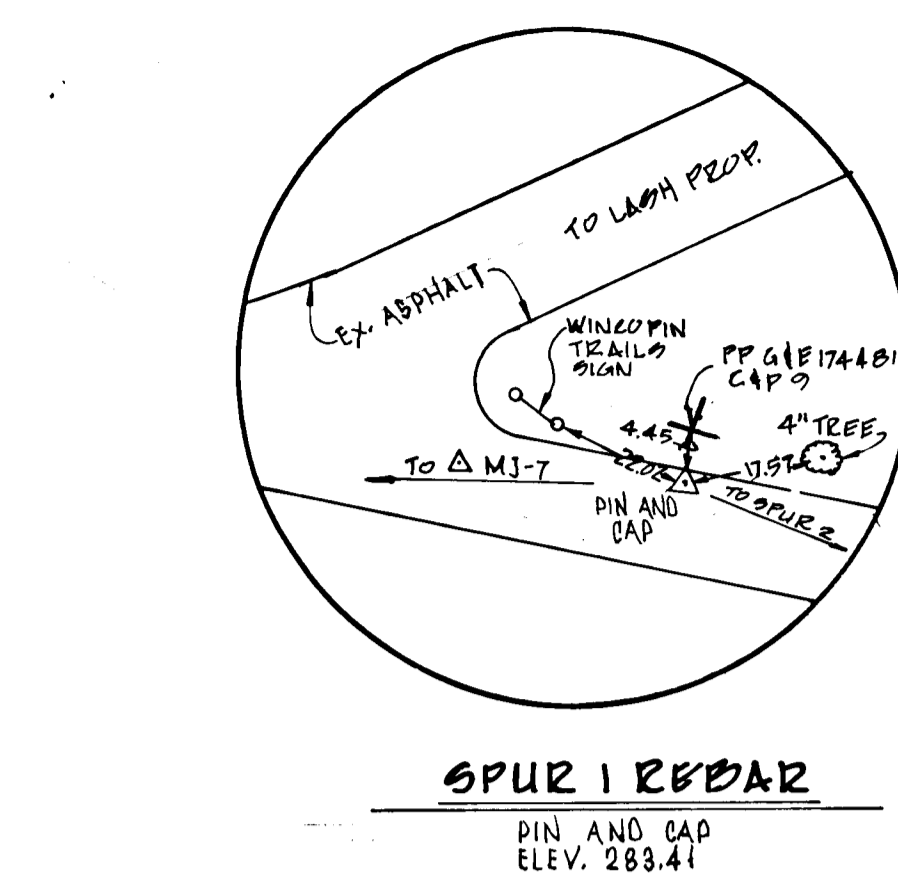
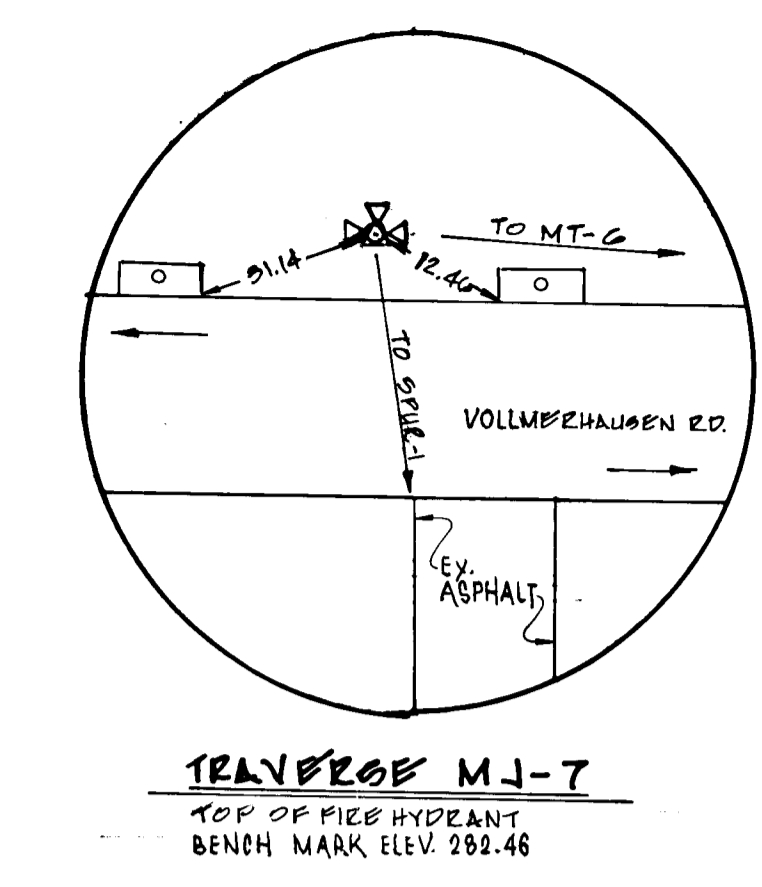
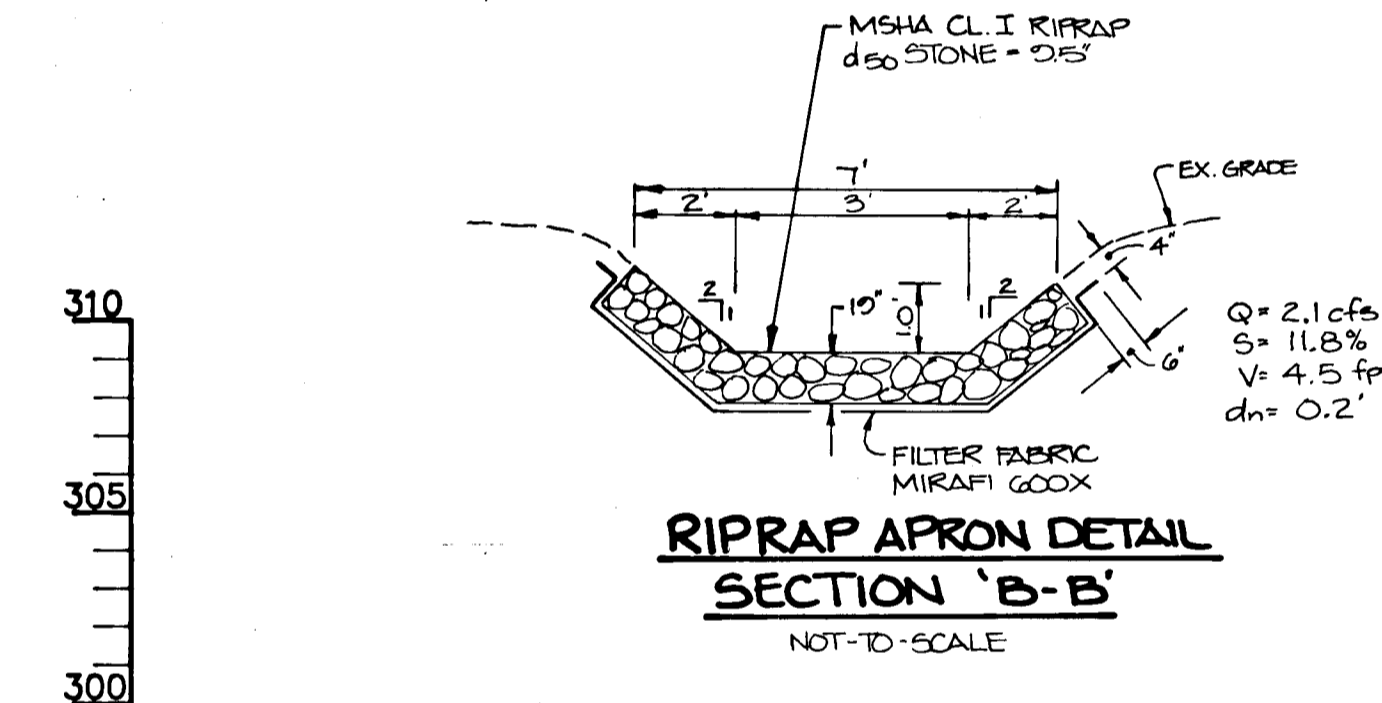
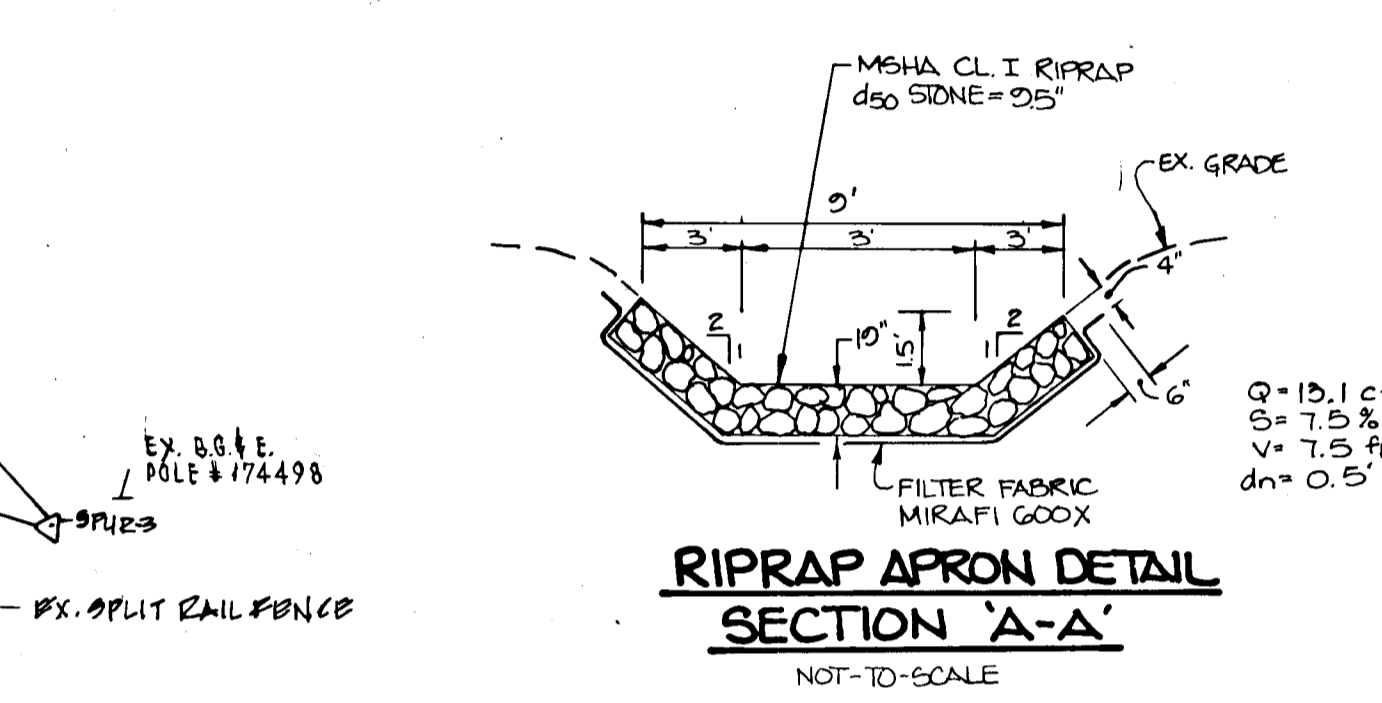
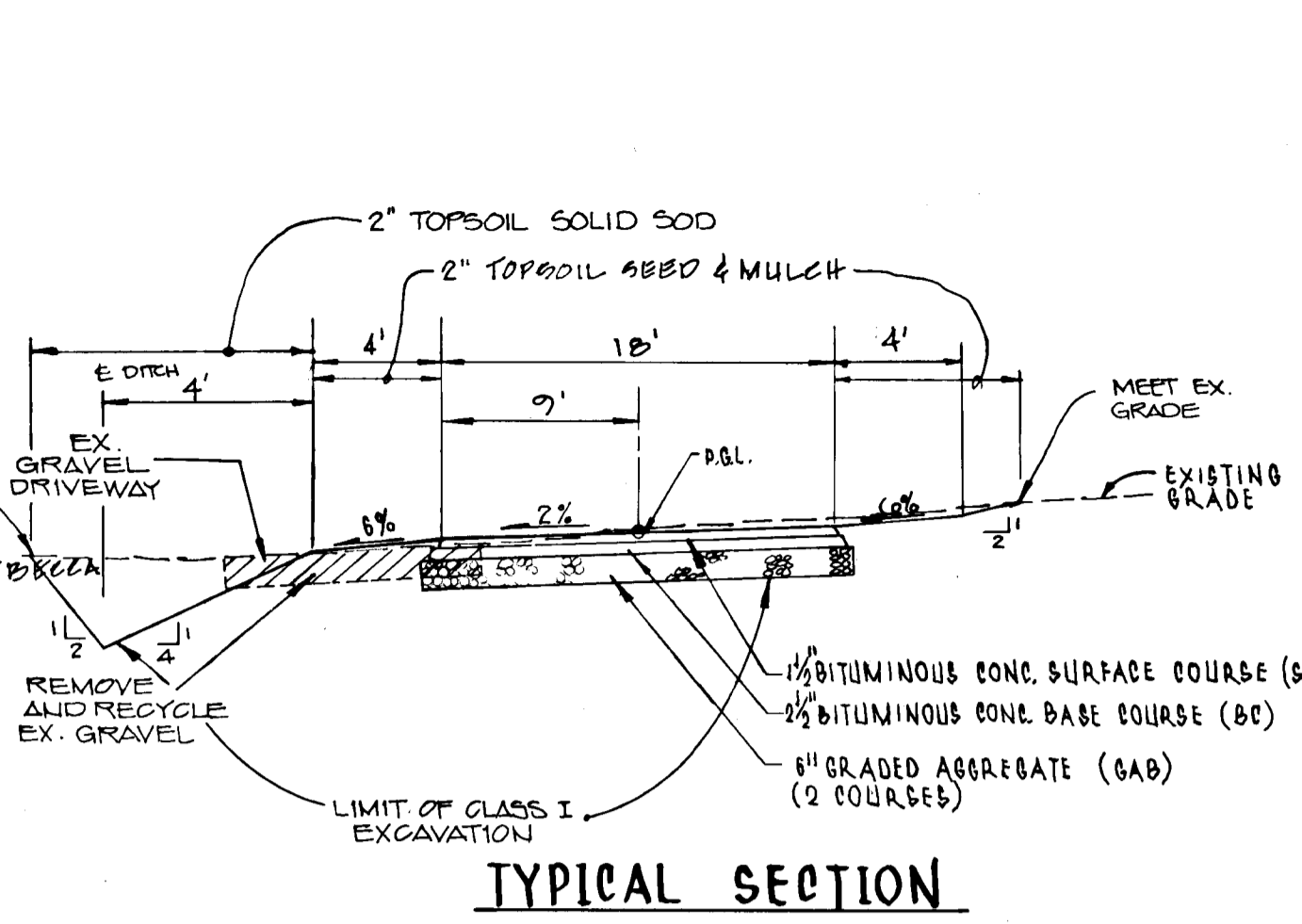
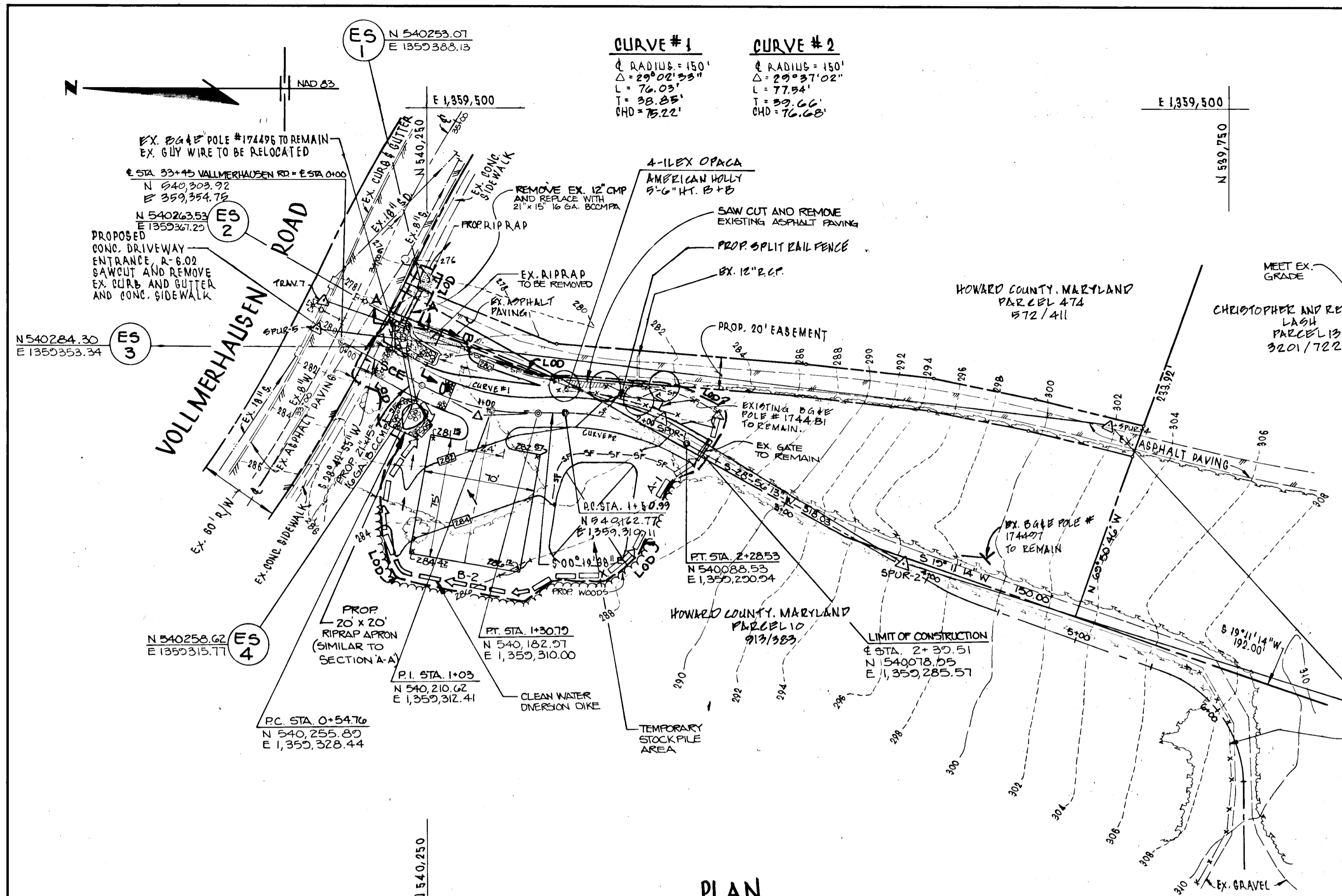
600 SCALE MAP NO. BLOCK NO.

WINCOPIN TRAIL ENTRANCE ROAD

CAPITAL PROJECT NO. N-3944
ELECTION DISTRICT NO. 6
HOWARD COUNTY, MARYLAND

SCALE AS SHOWN

SHEET 1 OF 3



TRAVERSE DESCRIPTION

POINT No.	NORTH	EAST	BEARING	DISTANCE
M-7	540,315.65	1,359,379.54	S 18°25'00\"/>	
SPUR 1	540,109.10	1,359,309.52	S 30°21'50\"/>	
SPUR 2	539,954.13	1,359,217.93	S 17°12'45\"/>	
SPUR 3	539,664.37	1,359,127.26	N 47°31'49\"/>	

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 THE ENVIRONMENT 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: *Paul J. Egan* DATE: 9/16/97

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 COUNTY SOIL CONSERVATION DISTRICT."

DATE: 9-9-97

DFI, INC.
504 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146
TEL (410)647-2727

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

SIGNATURE: *Cheryl Seaman* DATE: 9/16/97

U.S.D.A. NATURAL RESOURCES SERVICE

APPROVED: *Keith...* DATE: 9/16/97

HOWARD S.C.D.

SEDIMENT CONTROL NOTES

- 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. (313-1855)
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH SEC. 219 OF THE HOWARD COUNTY STANDARDS AND SPECIFICATIONS.
- 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.
- 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.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE "1993 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR PERMANENT SEEDINGS (SEC. 51) SOD (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.
- 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.
- SITE ANALYSIS:
 TOTAL AREA OF SITE 0.61 ACRES
 AREA DISTURBED 0.61 ACRES
 AREA TO BE PAVED 0.10 ACRES
 AREA TO BE VEGETATIVELY STABILIZED 0.51 ACRES
 TOTAL CUT 431 CU.YDS.
 TOTAL FILL 123 CU.YDS.
 OFFSITE WASTE AREA LOCATION TO BE DETERMINED BY THE CONTRACTOR AT A LATER DATE. OFFSITE WASTE AREA HAS TO BE AS APPROVED WITH CORRECTIVE ACTION PERMITS. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR.
- 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.
- ALL TRENCH MATERIAL SHOULD BE PLACED ON THE HIGHER SIDE OF THE TRENCH.

TOPSOIL

- TOPSOIL SHALL BE A LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAM SAND. OTHER SOILS MAY BE USED IF RECOMMENDED BY AN AGRONOMIST OR SOIL SCIENTIST AND APPROVED BY THE APPROPRIATE APPROVAL AUTHORITY. REGARDLESS, TOPSOIL SHALL NOT BE A MIXTURE OF CONTRASTING TEXTURED SUBSOILS AND SHALL CONTAIN LESS THAN 5% BY VOLUME OF ONDERS, STONES, SLAG, COARSE FRAGMENTS, GRAVEL, STICKS, ROOTS, TRASH, OR OTHER MATERIAL LARGER THAN 1 1/2" IN DIAMETER.
- TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS SUCH AS BERMUDA GRASS, QUACKGRASS, JOHNSONGRASS, NUTSEDGE, POISON IVY, THISTLE, OR OTHERS AS SPECIFIED.
- WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, GROUND LIME SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL. LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.

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, IF NOT PREVIOUSLY LOOSENED.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

- PREFERRED - APPLY 2 TONS PER ACRES DOLOMITIC LIMESTONE (92 LBS/1000 SQ.FT.) AND 600 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.)
- 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 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 (0.05 LBS/1000 SQ.FT.) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, 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 REDISTURBED 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 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 (0.07 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.

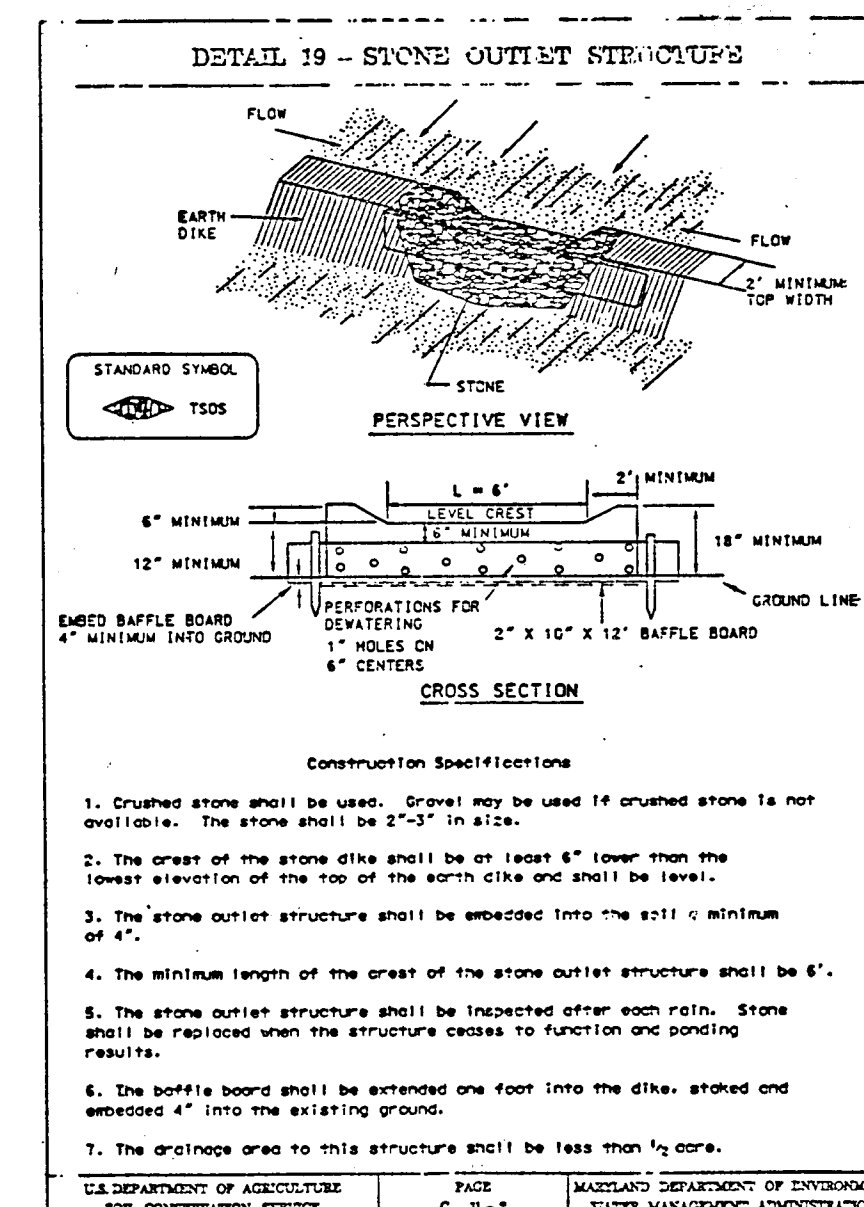
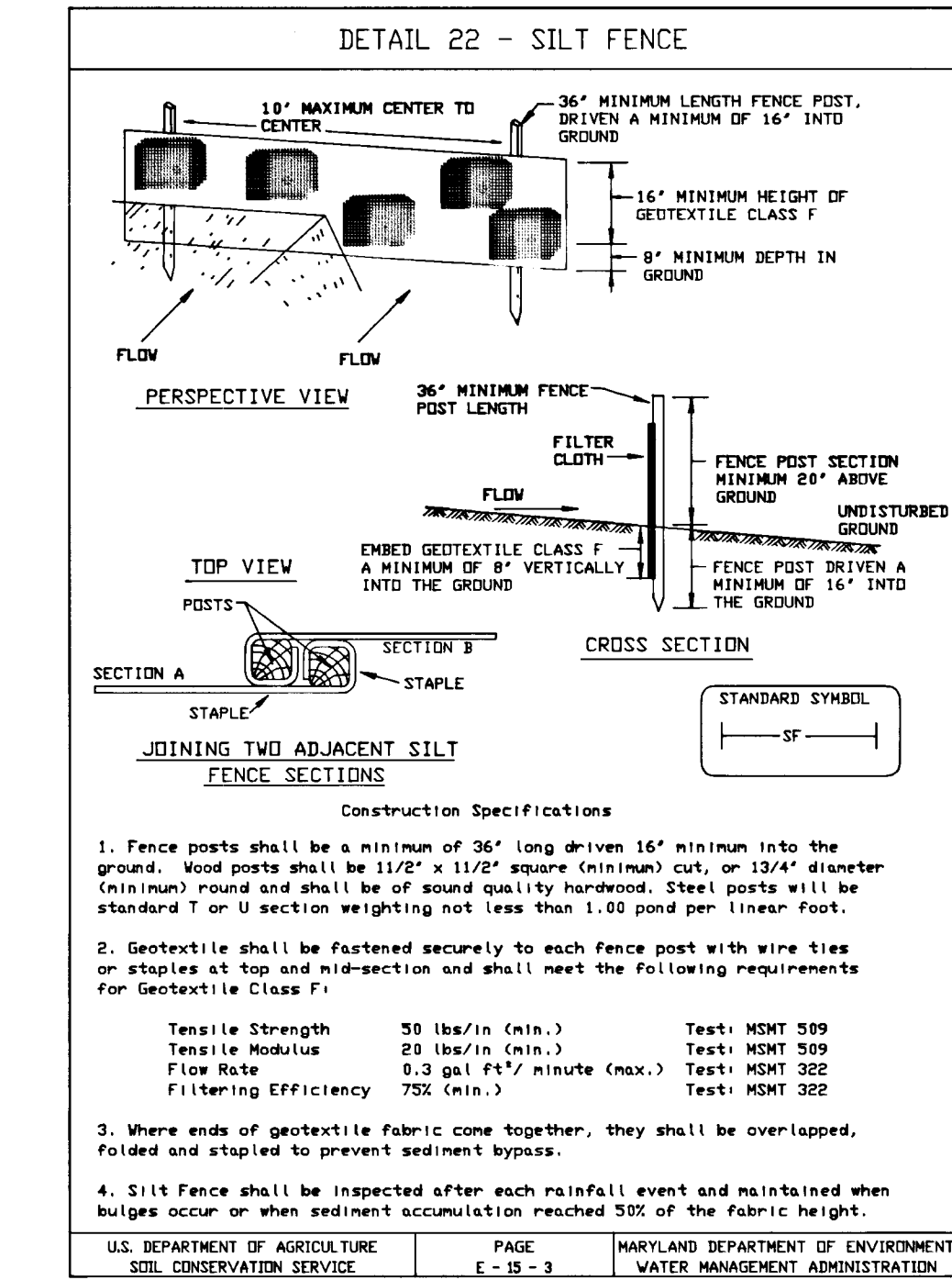
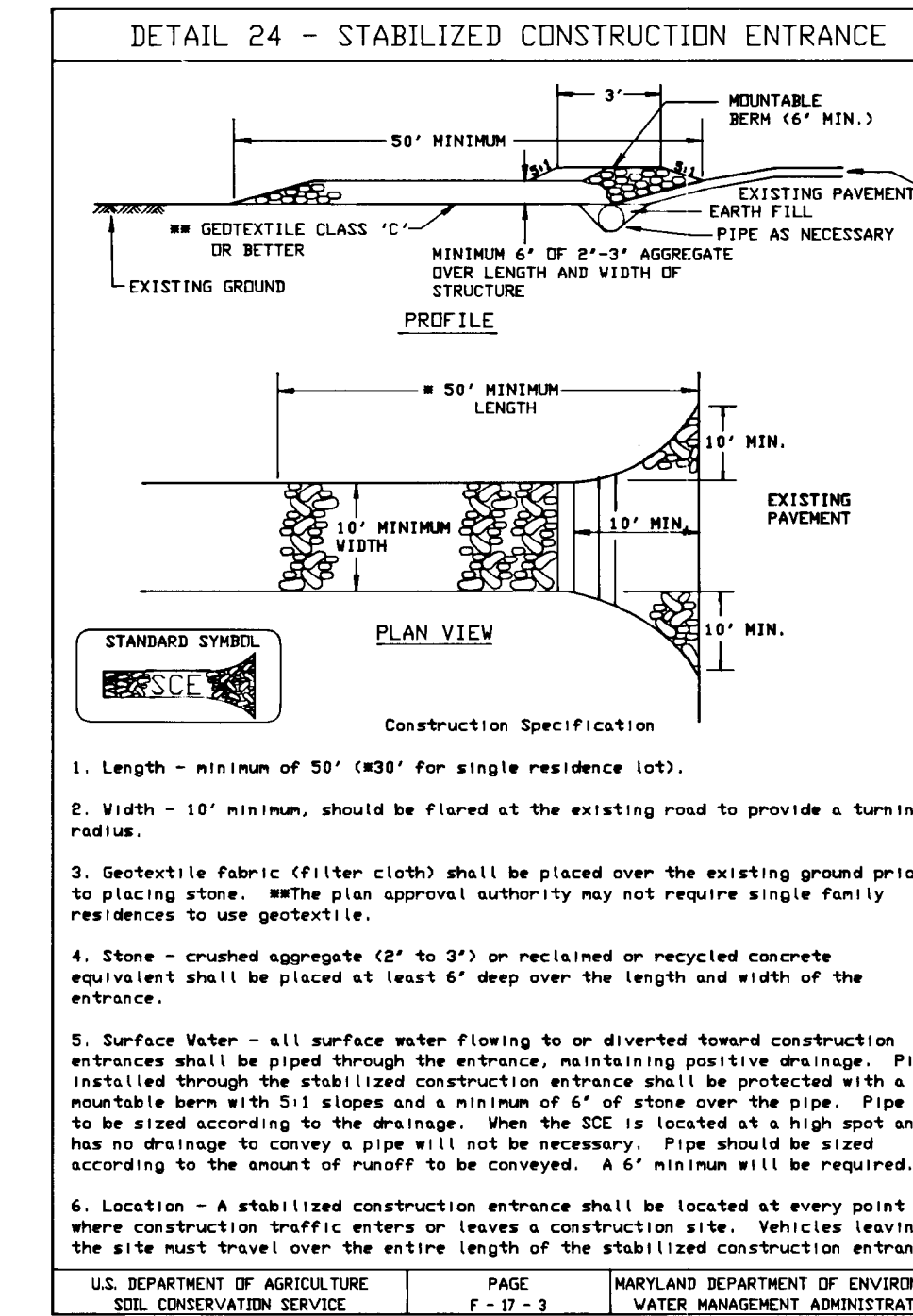
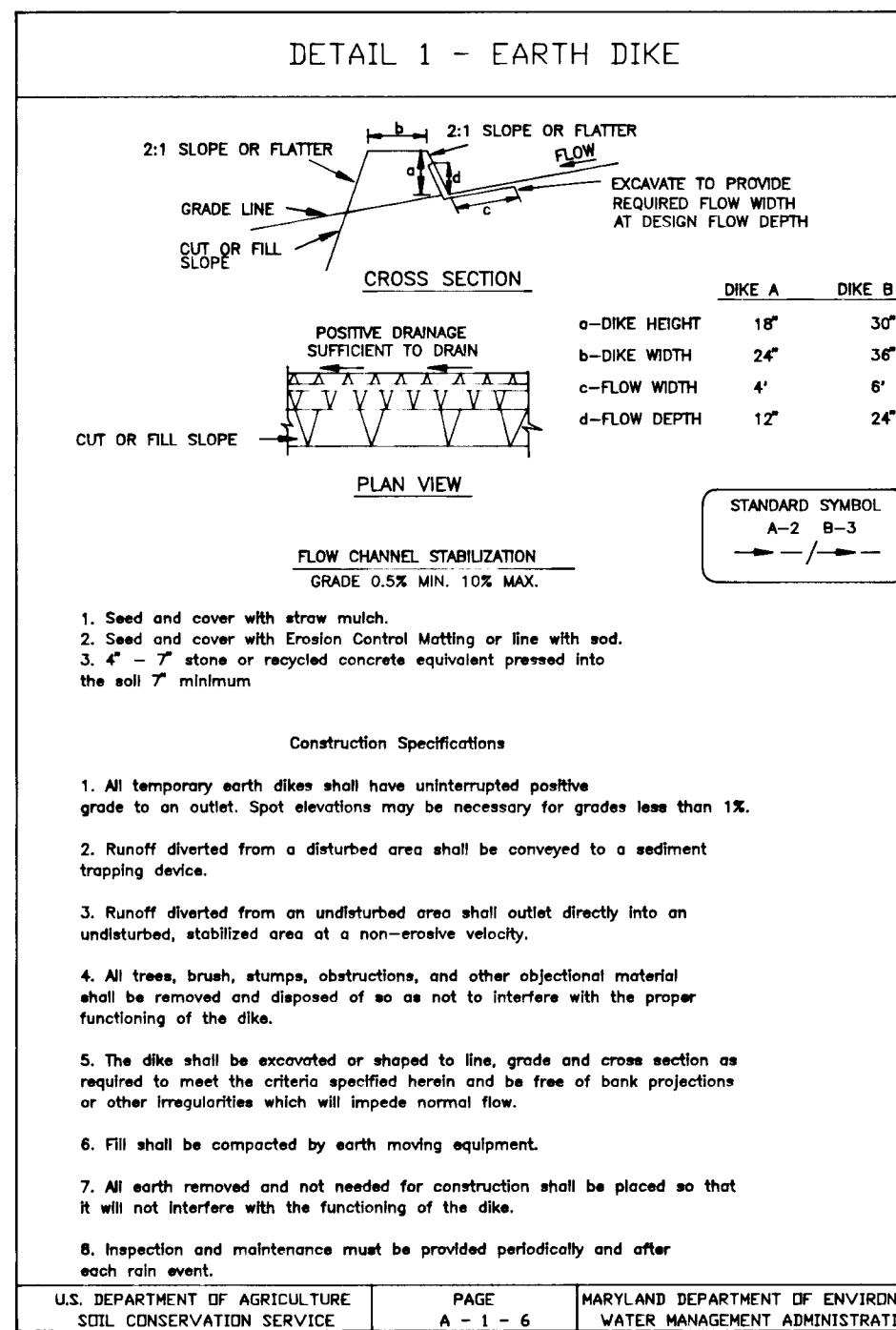
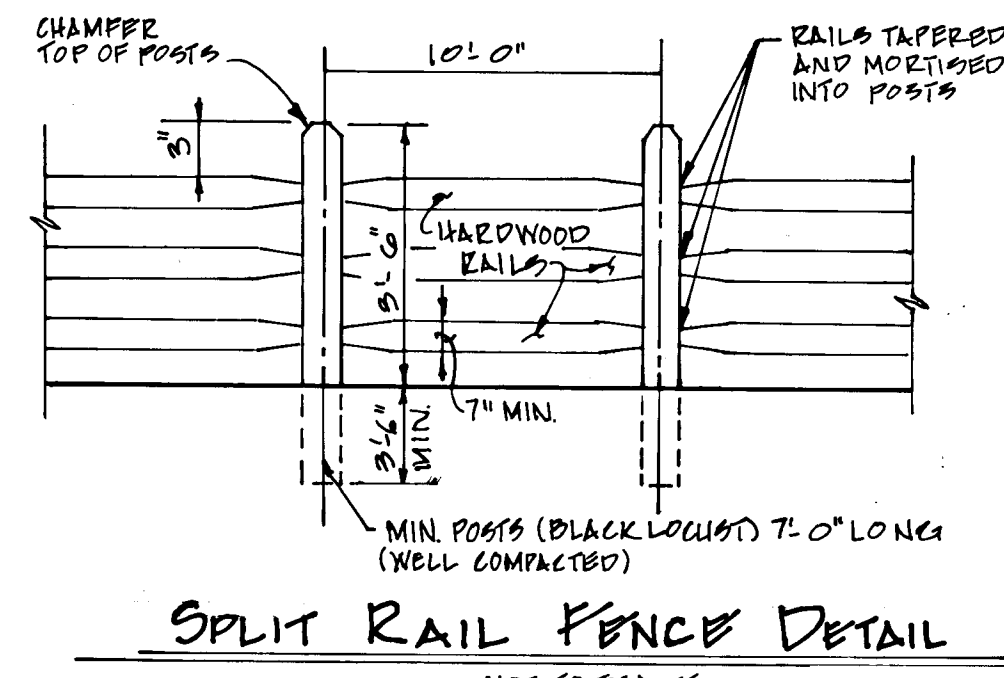
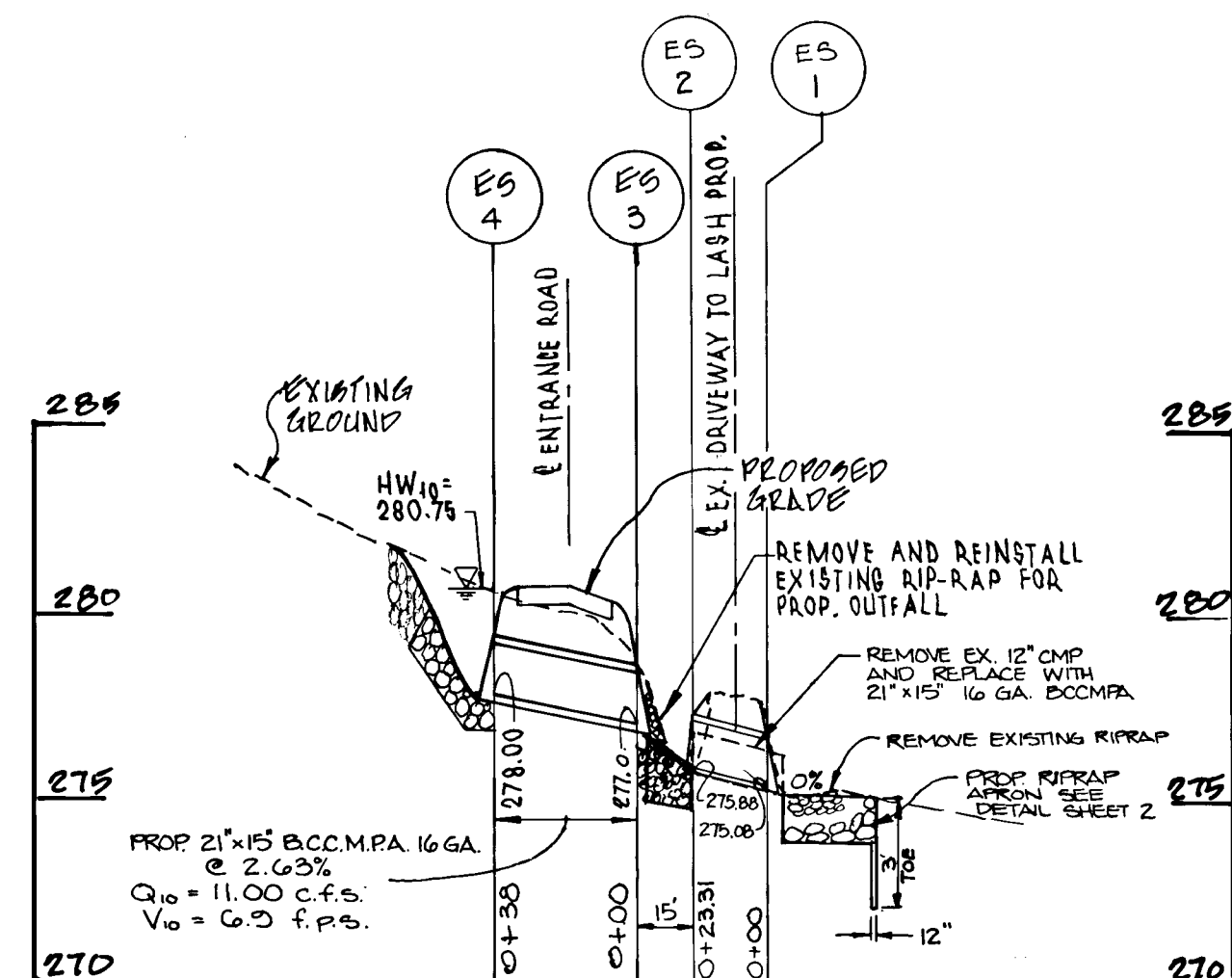
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REFER TO THE "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR RATE AND METHODS NOT COVERED.

"SEDIMENT CONTROL TO BE IMPLEMENTED IN ACCORDANCE WITH VOLUME 4, ARTICLE 15 OF THE HOWARD COUNTY DESIGN MANUAL AND THESE PLANS."

SEQUENCE OF CONSTRUCTION

1. OBTAIN GRADING PERMIT.
 - 1 DAY 2. INSTALL SOD.
 - 1 WEEK 3. CLEAR FOR AND INSTALL NEW CULVERTS AND RIPRAP CHANNELS.
 - 3 DAYS 4. CLEAR FOR AND INSTALL CLEAR WATER DIVERSION DIKE, S.O.S. AND SILT FENCES.
 - 1 WEEK 5. CLEAR, GRUB AND ROUGH GRADE SITE, STRIP TOPSOIL.
 - 1 WEEK 6. FINE GRADE ROADWAY AND PARKING LOT.
 - 1 WEEK 7. INSTALL CONCRETE DRIVEWAY APRON AND PAVEMENT.
 - 3 DAYS 8. STABILIZE ROAD-SIDE DISTURBED AREAS WITH TOPSOIL, SOD AND/OR SEED AND MULCH.
 - 1 DAY 9. WITH INSPECTORS APPROVAL, REMOVE SILT FENCES AND EARTH DIKES AND STABILIZE REMAINING DISTURBED AREAS.
- * ITEMS THAT CAN BE DONE CONCURRENTLY



DEVELOPER'S CERTIFICATION

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DATE 2/16/97

SIGNATURE OF DEVELOPER

ENGINEER'S CERTIFICATE

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DATE 9-9-97

DPI, INC.
604 BALTIMORE/ANNAPOLIS BLVD.
SEVERNA PARK, MD 21146
TEL (410)647-2727

REVIEWED FOR HOWARD S.C.D. AND MEETS TECHNICAL REQUIREMENTS

DATE 9/12/92

DATE 9/12/92

DATE

<p>DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND</p> <p>9/16/97</p> <p>9/16/97</p> <p>9/12/97</p>	<p>DES: _____</p> <p>DRN: _____</p> <p>CHK: _____</p> <p>DATE: 9/21/97</p>	<p style="text-align: center;">SEDIMENT CONTROL DETAILS</p> <p style="text-align: center;">600' SCALE MAP NO. _____ BLOCK NO. _____</p>	<p style="text-align: center;">DETAIL SHEET</p> <p style="text-align: center;">WINCOPIN TRAIL ENTRANCE ROAD</p> <p style="text-align: center;">CAPITAL PROJECT NO. N-3944 ELECTION DISTRICT NO. 6 HOWARD COUNTY, MARYLAND</p>	<p>SCALE AS SHOWN</p> <p>SHEET 3 OF 3</p>
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