

STONE/RIP-RAP OUTLET SEDIMENT TRAP - ST IV
CONSTRUCTION SPECIFICATIONS

- The area under embankment shall be cleared, grubbed and stripped of any vegetation and root mat. The post area shall be cleared.
- The fill material for the embankment shall be free of roots or other woody vegetation or well as untreated stone, rocks, organic material or other objectionable material. The embankment shall be compacted by tamping with equipment while it is being constructed. Maximum height of embankment shall be measured at construction.
- All cut and fill slopes shall be 2:1 or flatter.
- Elevation of the top of any dike directing water into trap must equal or exceed the height of trap embankment.
- Storage area provided shall be figured by computing the volume measured from top of excavation. (For storage requirements see Table 3).
- Geotextile Class C shall be placed over the bottom and sides of the outlet channel prior to placement of stone. Section of fabric must overlap of least 12" with section nearest the entrance to outlet channel.
- "A" - 7" stone shall be used to construct the weir and "A" - 12" or Class 1 rip-rap shall be used to construct the outlet channel.
- Outlet - An outlet shall include a means of conveying the discharge in an erosion free manner to an existing stable channel. Protection against scour at the discharge point shall be provided as necessary.
- Outlet channel must have positive drainage from the trap.
- Sediment shall be removed and trap returned to its original dimensions when the sediment has accumulated to 1/2 of the net storage depth of the trap (900 cu ft). Removed sediment shall be deposited in a suitable area and in such a manner that it will not erode.
- The structure shall be inspected periodically after each rain and repaired as needed.
- Construction of traps shall be carried out in such a manner that sediment pollution is avoided. Once constructed, the top and outside face of the embankment shall be stabilized with seed and mulch. Points of concentrated inflow shall be protected in accordance with Grade Stabilization Structure criteria. The remainder of the interior slopes should be stabilized (see Table 3) with seed and mulch upon trap completion and mulched and maintained until the trap is fully established.
- The structure shall be developed by approved methods, removed and the area stabilized when the drainage area has been properly stabilized.

BENCH MARKS (NAD 83)
HO.CO.#223
 CONC. MONUMENT 13' OFF OF LEFT SHOULDER ON WEST BOUND ROUTE 32, 54.2' NORTH/WEST OF EXISTING CUT IN BRIDGE WALL
 N 546528.8416(F) E 1357894.375(F)
 N 166582.3241(M) E 413887.0332

HO.CO.#224
 CONC. MONUMENT IN GRASS MEDIAN WEST BOUND MD ROUTE 32, 20.1' OFF OF LEFT SHOULDER 107.5' EAST OF STORMDRAIN INLET
 N 544851.973(F) E 1358466.401(F)
 N 168070.977(M) E 413866.1677(M)

BENCH MARKS (NAD 27)
HO.CO.#2241013
 CONC. MONUMENT 13' OFF OF LEFT SHOULDER ON WEST BOUND ROUTE 32, 54.2' NORTH/WEST OF EXISTING CUT IN BRIDGE WALL
 N 485780.000 E 845476.000

SEQUENCE OF CONSTRUCTION

- DAY 1 1) OBTAIN GRADING PERMIT.
 DAY 2-6 2) INSTALL SEDIMENT CONTROL.
 DAY 7-24 3) CLEAR AND GRUB SITE, PERFORM FILL OPERATION AS NECESSARY.
 DAY 25-30 4) WITH APPROVAL OF HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE CONTROLS AND PERMANENT SEED AREA.

TEMPORARY SEEDING PREPARATION
 APPLY TO GRADED OR CLEARED AREAS LIKELY TO BE RE-DISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING. IF NOT PREVIOUSLY DISCING.

SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ FT).

SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND FROM AUGUST 15 THROUGH NOVEMBER 15, SEED WITH 2-1/2 BUSHELS PER ACRE OF ANNUAL RYE (3.2 LBS/1000 SQ FT). FOR PERIOD MAY 1 THROUGH AUGUST 14, SEED WITH 3 LBS PER ACRE OF LBS/1000 SQ FT OF ENHANCED PHOSPHORUS (E) SEED FOR THE PERIOD NOVEMBER 16 THROUGH 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 SOIL.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROOTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF ENHANCED PHOSPHORUS ON FLAT AREAS ON SLOPES 3 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

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

PERMANENT SEEDING PREPARATION
 SEEDING PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING, IF NOT PREVIOUSLY DISCING.

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

- PREFERRED - APPLY 2 TONS PER ACRE SOLICITUM LIMESTONE (92 LBS/1000 SQ 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.
- ACCEPTABLE - APPLY 2 TONS PER ACRE SOLICITUM 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.

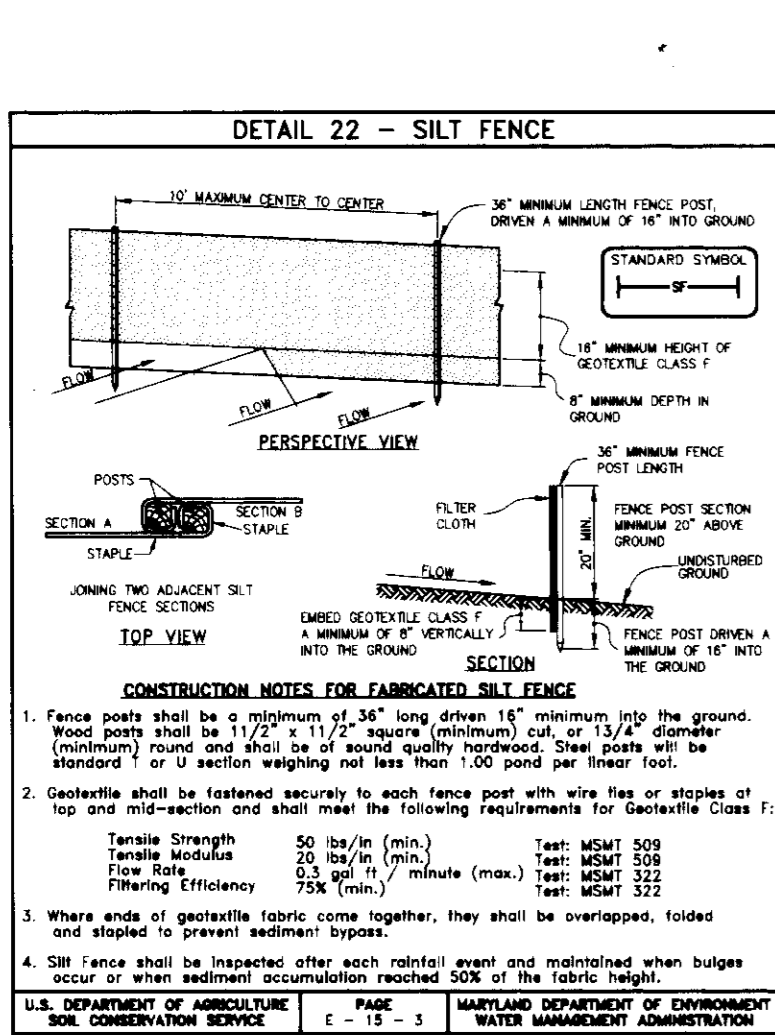
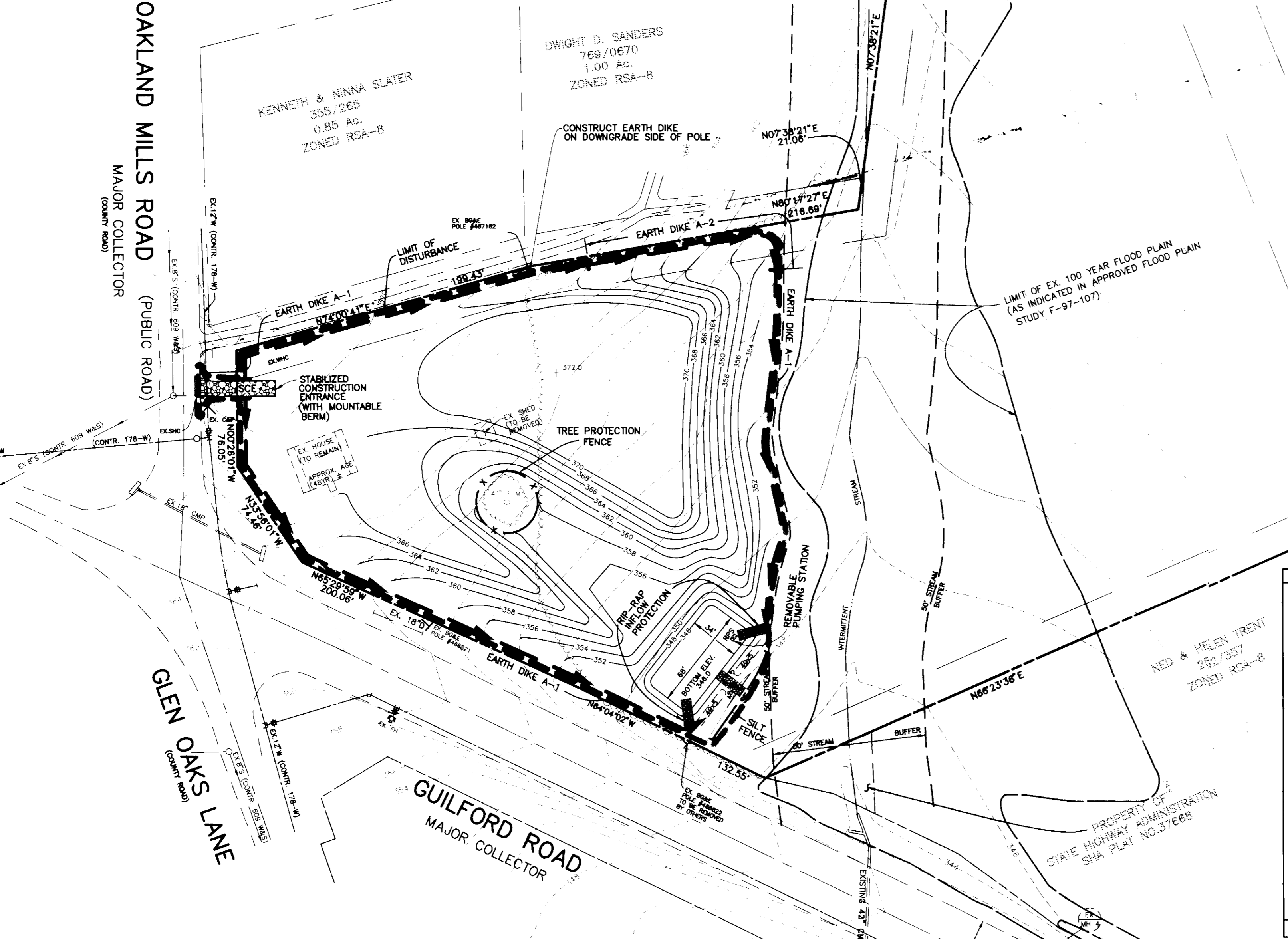
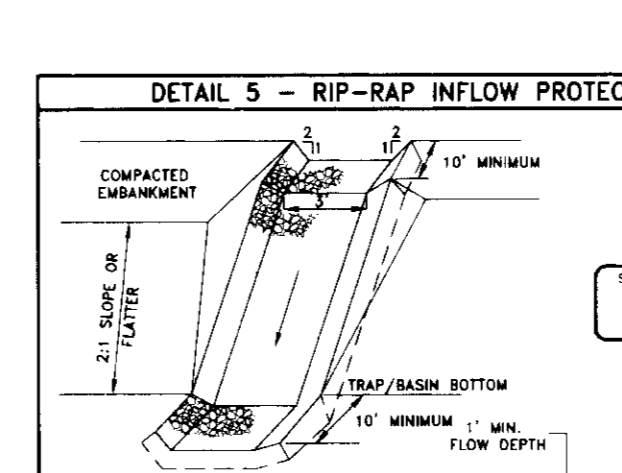
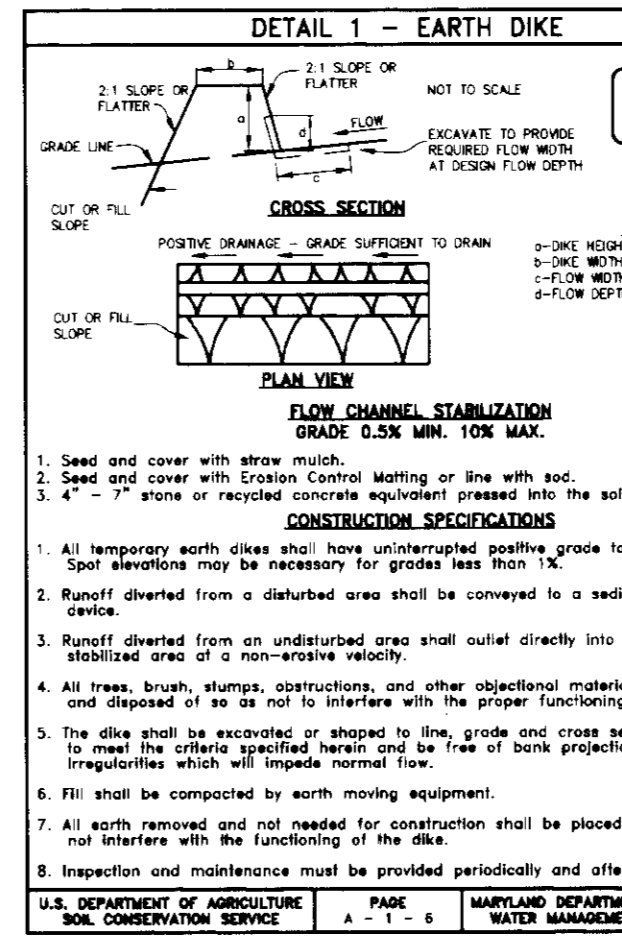
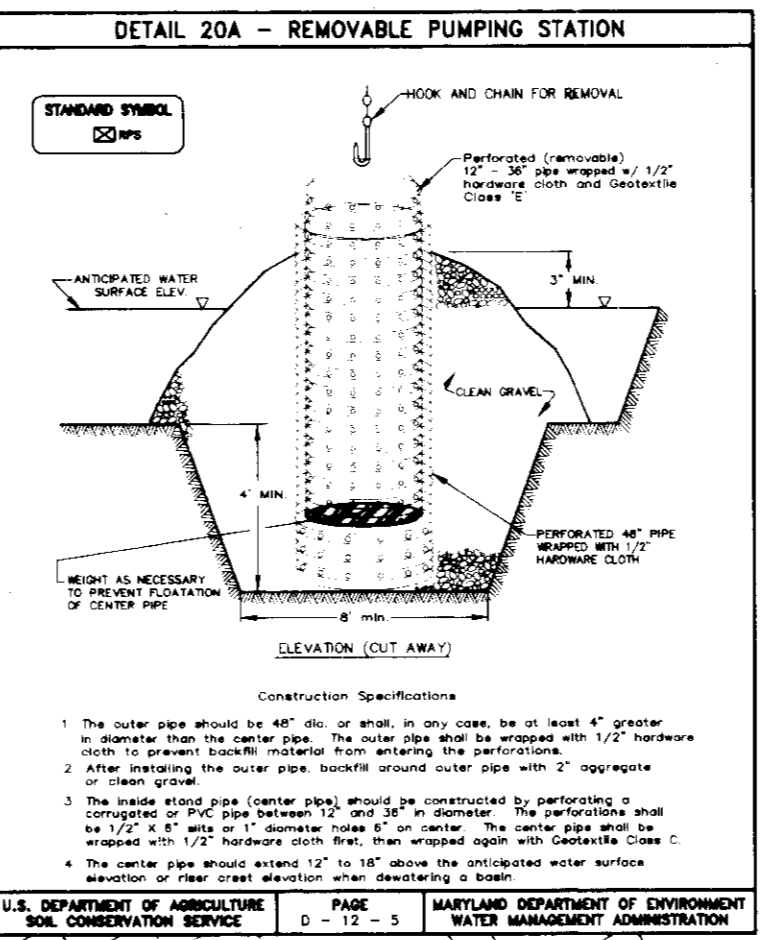
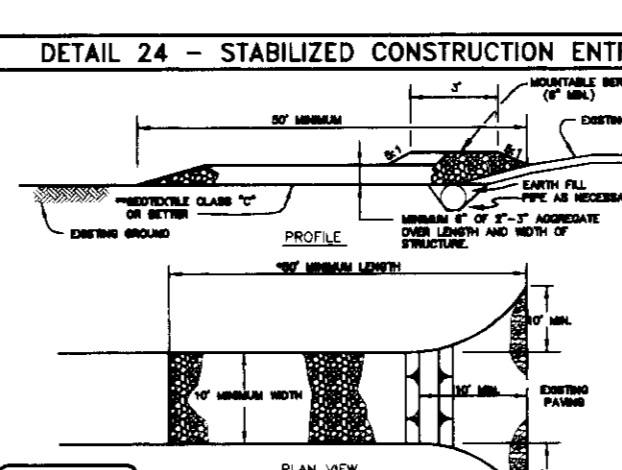
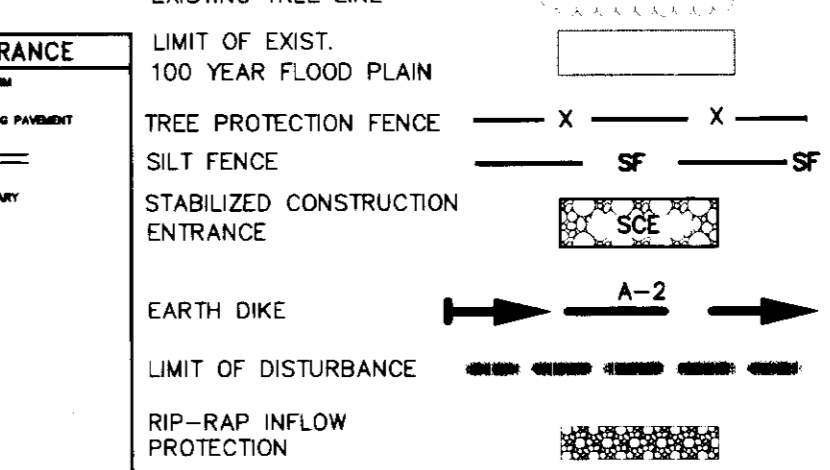
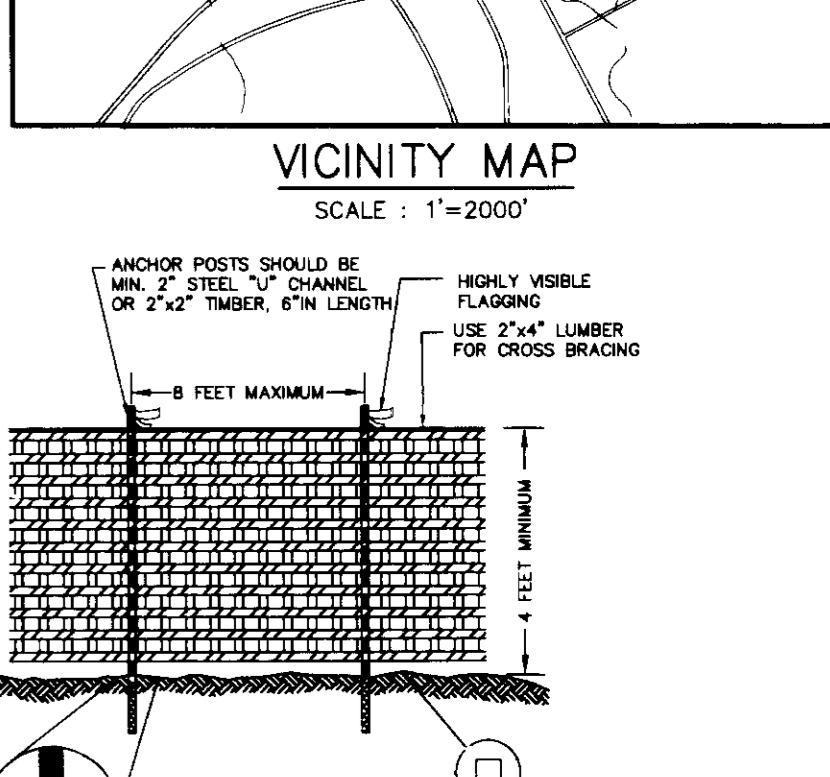
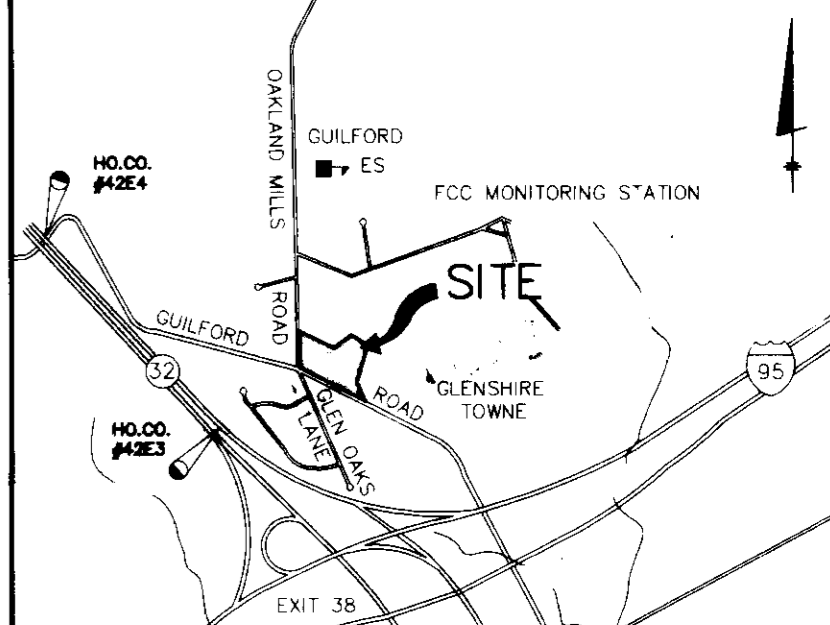
SEEDING: FOR PERIODS MARCH 1 THROUGH APRIL 30 AND AUGUST 15 THROUGH OCTOBER 15, SEED WITH 60 LBS PER ACRE (4 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE PER ACRE AND 2 LBS PER ACRE (0.5 LBS/1000 SQ FT) OF WEEDING LOVEGRASS; DURING THE PERIOD OF OCTOBER 16 THROUGH FEBRUARY 28 PROTECT SITE BY OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING; OPTION (2) USE SOIL WITH 3 LBS PER ACRE OF KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS PER ACRE OF WELL ANCHORED STRAW.

MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROOTED SMALL GRASS STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF ENHANCED PHOSPHORUS ON FLAT AREAS ON SLOPES 3 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS.

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS AND PERMITS SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION.
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1984 MARSHLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR PRE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 7 CALENDAR DAYS FOR ALL PERMANENT SEDIMENT CONTROL STRUCTURES, DYES, DIMES, DIMES 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 ACCORDING TO THEIR FENCEMENTS IN ACCORDANCE WITH 11, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED FOR ALL PERMANENT SEDIMENT CONTROL STRUCTURES, DIMES, DIMES AND ALL SLOPES GREATER THAN 3:1; B) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMITS FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL DIVISION.
- SITE ANALYSIS:**
 TOTAL AREA OF SITE: 6.48 ACRES
 AREA TO BE VEGETATED: 6.48 ACRES
 TOTAL CUT: 100 CU YDS
 TOTAL FILL: 12,000 CU YDS
 OFFSITE WASTE/BORROW AREA LOCATION: N/A
- 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 DEMAND NECESSARY BY THE HOWARD COUNTY 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.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES ARE LIMITED TO THREE PIPE LENGTHS OR THAT WHICH CAN BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.



SILT FENCE DESIGN CRITERIA

Slope Steepness	(Maximum) Slope Length	(Maximum) Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2% slope and/or roads (USDA general classification system, soil Class A) maximum slope length and silt fence length will be limited. In these areas of all fence may be the only perimeter control required.

GENERAL NOTES

- The contractor shall notify the Department of Public Works 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.
- The topography shown hereon was taken from a field survey by T.S.A. Group, Inc. on 9/93.
- Any damage to the county's right-of-way shall be corrected at the builder's expense.
- Existing utilities shown were located by field run survey by T.S.A. Group, Inc. and County records.
- All roadways are public and existing.
- No wetlands exist within the property boundary.
- Previous Howard County file numbers: F-97-107, P-95-28, WP-96-49.
- Floodplain study performed by T.S.A. Group, Inc., approved August 14, 1996.

THE PURPOSE OF THIS PLAN IS TO STOCKPILE MATERIAL NECESSARY FOR THE COMPLETION OF F-97-107 TO BE DONE AT A FUTURE TIME

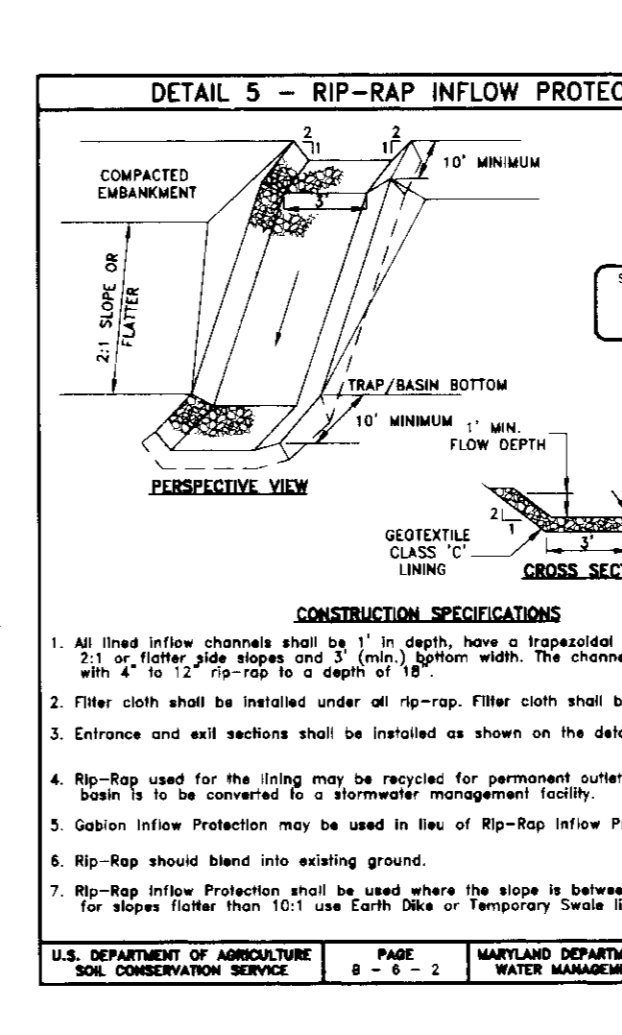
SUBDIVISION NAME: OAKHURST
SECTION: ONE, AREA ONE
PARCEL #: 89
PREVIOUS FILE:

TAX MAP: 42
ELEC. DIST.: 6TH
CENSUS: 6062

WATER CODE: N/A
SEWER CODE: N/A

SITE ANALYSIS DATA CHART

TOTAL PROJECT AREA	6.48 AC.
AREA OF PLAN SUBMISSION	6.48 AC.
LIMIT OF DISTURBED AREA	1.91 AC.
PRESENT ZONING	RSA-B
TOTAL NO. OF LOTS	N/A
TYPE OF UNITS	N/A
NO. OF UNITS PROPOSED	N/A
DRAINAGE AREA	1.91 AC.
STORAGE REQUIRED	7200 CU YD
STORAGE PROVIDED	7200 CU YD
BOTTOM DIMENSIONS	89'x34'
DEPTH	2.5'
SIDE SLOPES	2:1
BOTTOM ELEVATION	346.0
EMBANKMENT ELEVATION	349.5
CREST ELEVATION	348.5
CLEAN OUT ELEVATION	347.5
WEIR LENGTH	7.6'



NO DATE **REVISION**

TSA GROUP, INC.
 planning • architecture • engineering • surveying
 8480 Baltimore National Pike • Ellicott City, Maryland 21043 • (410)465-8105

OWNER: HARRY AND HELEN KNISLEY
 9513 GUILFORD ROAD
 COLUMBIA, MARYLAND 21046

PROJECT: OAKHURST
 (FORMERLY KNISLEY PROPERTY)
 SECTION 1 - AREA 1

LOCATION: TAX MAP 42 - PARCEL 69
 6TH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DEVELOPER: SDG GROUP INC.
 P.O. BOX 417
 ELLICOTT CITY, MARYLAND 21041
 (410) 465-4244

TITLE: GRADING EROSION / SEDIMENT CONTROL PLAN
 NOTES AND DETAILS

DATE: MARCH, 1997
 APRIL 18, 1997

PROJECT NO.: 1015

SCALE: AS SHOWN

DRAWING: 1 OF 1

DES: GWF **DRN:** JR