

ENGINEER'S CERTIFICATE
 I HEREBY CERTIFY THAT THE PLAN AND PROFILE FOR EROSION AND SEDIMENT CONTROL REPRESENTED ON THESE DRAWINGS IS A FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

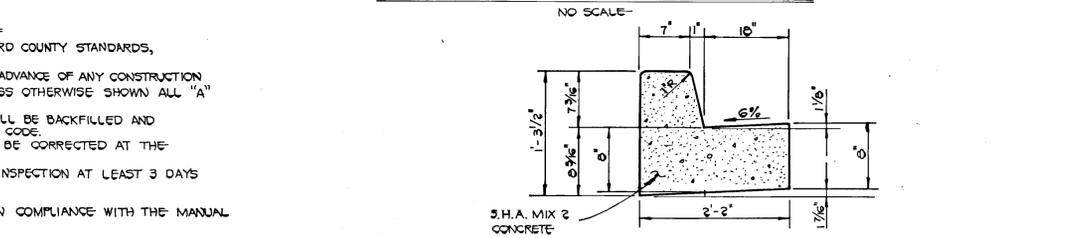
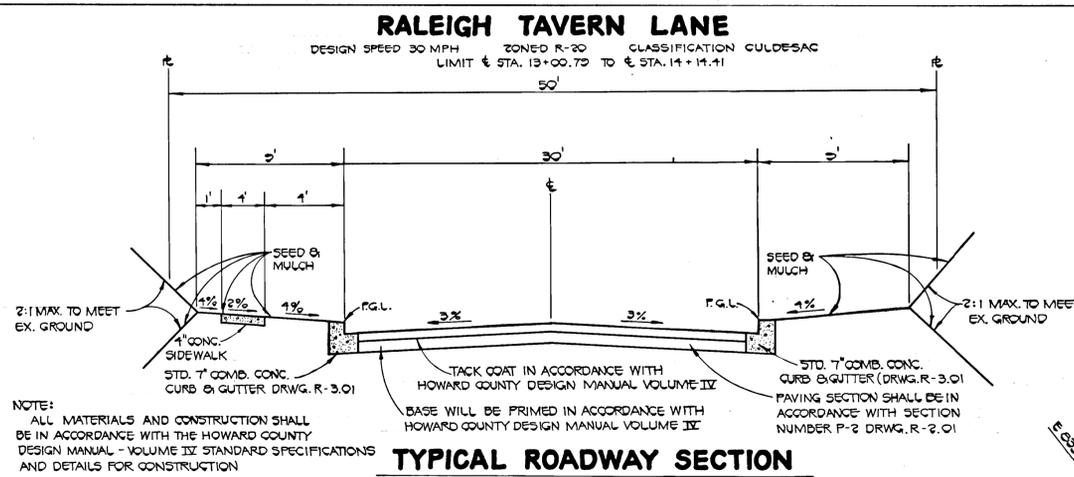
CHARLES J. CROVO, SR. 5/14/87

DEVELOPER'S CERTIFICATE
 I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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 COUNTY SOIL CONSERVATION DISTRICT OR ITS AUTHORIZED AGENTS AS ARE DEEMED NECESSARY.

CLYDE SMITH 5/11/87

APPROVED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND METS TECHNICAL REQUIREMENTS.
 James M. Nelson 7-1-87
 U.S. SOIL CONSERVATION SERVICE

THIS DEVELOPMENT PLAN IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.
 Stephen J. Nelson 7/1/87
 CONSERVATION DISTRICT

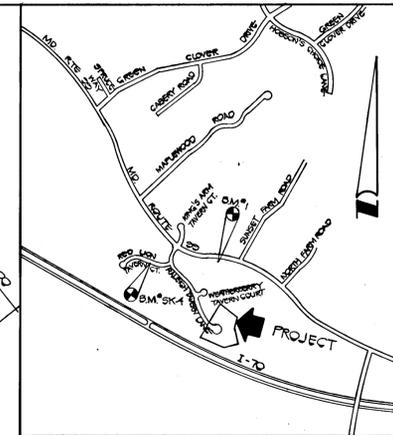
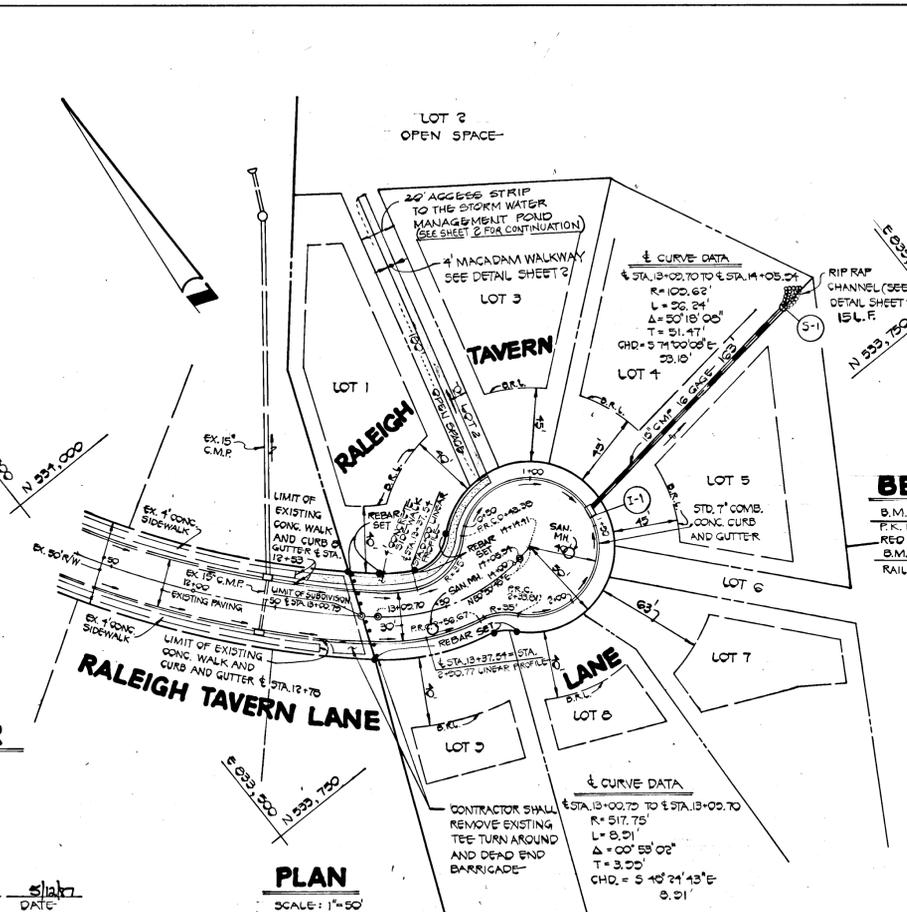


GENERAL NOTES

- ALL WORK SHALL BE DONE IN ACCORDANCE WITH HOWARD COUNTY STANDARDS, SPECIFICATIONS, AND DETAILS FOR CONSTRUCTION.
- ALL UTILITY COMPANIES MUST BE NOTIFIED 24 HOURS IN ADVANCE OF ANY CONSTRUCTION.
- ALL INLETS SHALL BE HOWARD COUNTY STANDARDS UNLESS OTHERWISE SHOWN. ALL "A" INLETS SHALL BE DEPRESSED.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHTS-OF-WAYS SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH HOWARD COUNTY ROAD CODE.
- ANY DAMAGE TO PUBLIC RIGHTS-OF-WAYS OR PAVING WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR TO NOTIFY THE HOWARD COUNTY DEPT. OF INSPECTION AT LEAST 3 DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS. TELEPHONE: 792-7272.
- ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED IN COMPLIANCE WITH THE MANUAL (UNIFORM) TRAFFIC CONTROL DEVICES, 1978 EDITION.

APPROVED DEPARTMENT OF PUBLIC WORKS
 Richard S. Ridenour 7-7-87
 CHIEF, BUREAU OF ENGINEERING

APPROVED OFFICE OF PLANNING AND ZONING
 Louis J. Dene 7-3-87
 CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION



VICINITY MAP
 SCALE: 1" = 1200'

BENCH MARKS
 B.M. 5K-4 ELEV. 480.64
 P.R. NAIL SET IN CURB LEFT SIDE OPPOSITE E STA. 2+56 REO LION TAVERN COURT.
 B.M. #1 ELEV. 485.56
 RAILROAD SPIKE SET IN B.G. & E. POLE # 104310

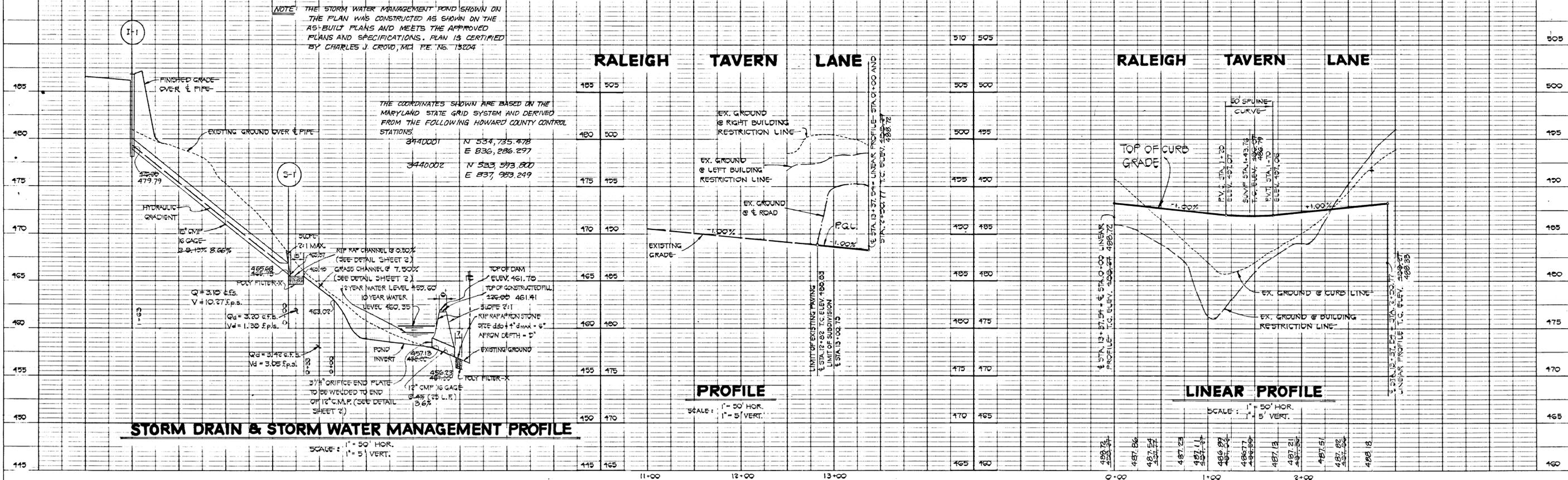
MARKET SQUARE EAST
 LOTS 1 THRU 9
 SECOND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

RALEIGH TAVERN LANE
 PLAN AND PROFILE

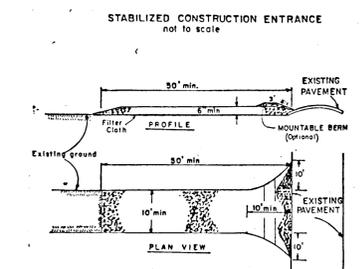
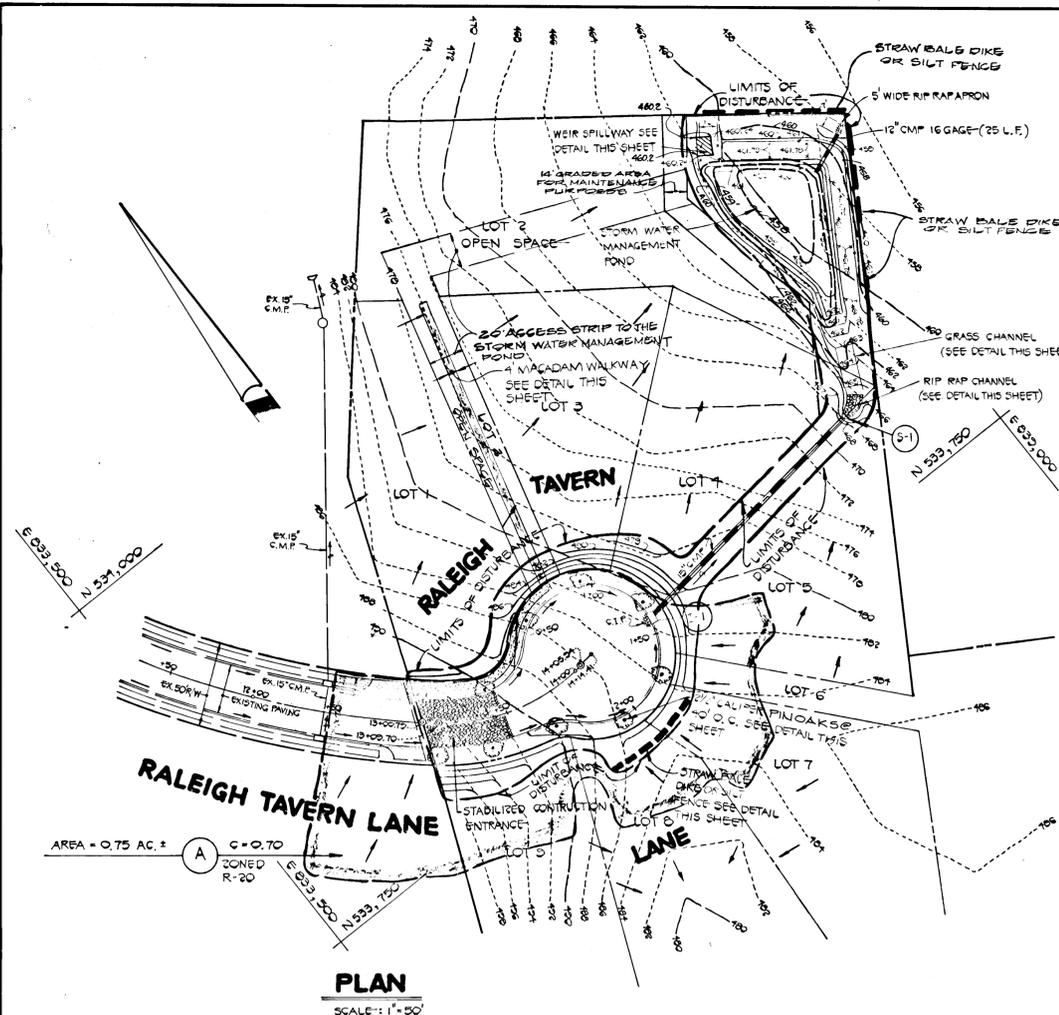
OWNER AND DEVELOPER
SMITH ROBERT & ASSOCIATES
 P.O. BOX 15
 ELLICOTT CITY, MARYLAND 21043

SCALE AS SHOWN DATE APRIL 29, 1987 DWG. NO. 1 OF 2
 DES. J. O'DONNELL DRN. J. O'DONNELL CHK. C. CROVO

FISHER, COLLINS AND CARTER, INC.
 CIVIL ENGINEERS AND LAND SURVEYORS
 8388 COURT AVE. ELLICOTT CITY, MARYLAND 21043

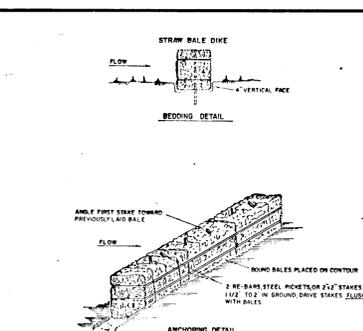


1269

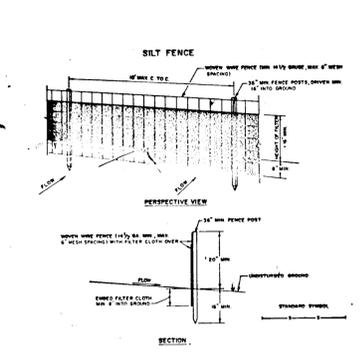


- CONSTRUCTION SPECIFICATIONS**
- Stone Size - See 3" stone, or recycled or crushed concrete equivalent.
 - Length - As required, but not less than 30 feet (except on a single residential lot where a 20 foot minimum length would apply).
 - Thickness - Not less than six (6) inches.
 - Width - Two (2) feet minimum, but not less than the full width at the entrance where longer or wider occurs.
 - Filter Cloth - Will be placed over the entire area prior to placing of stone. Filter will not be required on a single family residence lot.
 - Surface Water - All surface water flowing or diverted toward construction entrances shall be piped across the entrance. If piping is impractical, a minimum berm with 5:1 slopes will be provided.
 - Maintenance - The pipe shall be maintained in a condition which will prevent tracking of flowing sediment onto public rights-of-way. This may require periodic top dressing with 1/2" stone as conditions demand and repair and/or cleanup of any areas used to trap sediment. All additional spillage, washed or tracked onto public rights-of-way must be removed immediately.
 - Removal - Entrances shall be cleaned to remove sediment prior to entrance onto public rights-of-way. When washing is required, it shall be done on an area stabilized with stone and which drains into an approved sediment trapping device.
 - Periodic inspection and needed maintenance shall be provided after each rain.

- CONSTRUCTION SEQUENCE:**
- OBTAIN GRADING PERMIT.
 - CONSTRUCT STONE CONSTRUCTION ENTRANCE.
 - CONSTRUCT PERMANENT STORMWATER MANAGEMENT POND AND STABILIZE USING TEMPORARY SEEDING.
 - THE ORIFICE PIPE SHALL BE BLOCKED IN ACCORDANCE WITH THE DETAIL ON THIS SHEET. THE PIPE SHALL REMAIN BLOCKED UNTIL SUCH TIME WHEN THE SEDIMENT BASIN TRANSITIONS TO FUNCTION AS A STORMWATER MANAGEMENT POND.
 - INSTALL SILT FENCE OR STRAW BALE DIKES AS SHOWN ON THIS SHEET.
 - CONSTRUCT STORM DRAIN SYSTEM FROM S-1 TO I-1.
 - INSTALL INLET PROTECTION DEVICE AT I-1.
 - PLACE RALEIGH TAVERN LANE TO SUBGRADE.
 - CONSTRUCT CONCRETE CURB AND GUTTER AND LAY BASE COURSE.
 - GRADE SLOPE AREAS BETWEEN EXISTING GROUND AND BACK OF CURB.
 - UPON STABILIZATION OF GRADED AREAS, INLET SHALL BE OPENED AND ALL ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE STORM DRAIN SYSTEM.
 - DURING CONSTRUCTION, SEDIMENT SHALL BE REMOVED FROM THE STORMWATER MANAGEMENT POND WHEN THE CLEANOUT ELEVATION 459.10 HAS BEEN REACHED.
 - REMOVE STONE CONSTRUCTION ENTRANCE.
 - INSTALL RIP RAP CHANNEL AT S-1.
 - CLEAN BASE COURSE. APPLY TACK COAT TO BASE COURSE AND LAY SURFACE COURSE. STABILIZE ALL SHOULDERS USING PERMANENT SEEDING.
 - REMOVE EARTH DIKE, SILT FENCE AND STRAW BALE DIKES ONCE DISTURBED AREAS HAVE BEEN STABILIZED.
 - ALL DISTURBED AREAS DUE TO REMOVAL OF SEDIMENT CONTROL MEASURES SHALL BE GRADED AND STABILIZED BY PERMANENT SEEDING.
 - REMOVE STONE BLOCKING DEVICE AND ACCUMULATED SEDIMENT FROM THE STORMWATER MANAGEMENT POND. THE POND SHALL BE GRADED IN ACCORDANCE WITH THIS PLAN AND STABILIZED USING PERMANENT SEEDING.
 - 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, SLOPES, DITCH PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; b) 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
 - NOTIFY HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS FOR FINAL INSPECTION AT DURATION OF PROJECT.

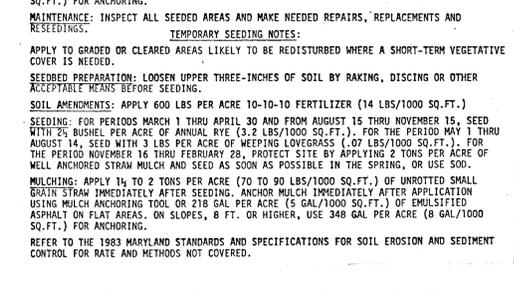


- CONSTRUCTION SPECIFICATIONS**
- Bales shall be placed at the top of a slope or on the contour and in a row with ends tightly abutting the adjacent bales.
 - Each bale shall be embedded in the soil a minimum of (8) inches, and placed so the binding end is vertical.
 - Bales shall be securely anchored in place by either the stakes or by using 1/2" x 1/2" x 12" galvanized steel stakes 1/2" dia. x 12" long, driven through the bales.
 - Inspection shall be frequent and repair/replacement shall be made promptly as needed.
 - Bales shall be removed when they have served their usefulness so as not to block or interfere with flow of drainage.

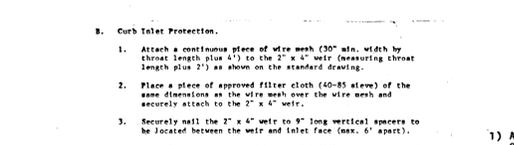


- CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**
- When wire fence to be fastened securely to fence posts with wire ties or staples.
 - Filter cloth to be fastened securely to wooden silt fence with ties spaced every 6" to 10" and tied folded.
 - When no sections of filter cloth, attach each other the same as described by ties and folded.
 - Maintenance shall be removed as needed and replaced when needed to develop in the silt fence.

PERMANENT SEEDING NOTES:
APPLY TO GRADED OR CLEARED AREA 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, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULE:
1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQ. FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARRON 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 (14 LBS/1000 SQ. FT.) BEFORE SEEDING. HARRON 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 PER ACRE (1.4 LBS/1000 SQ. FT.) OF 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 REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEEDED.
SEEDBED PREPARATION: LOOSEN UPPER THREE-INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.
SOIL AMENDMENTS: APPLY 600 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 25 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.



- Attach a continuous piece of wire mesh (30" min. width by acceptable means) before seeding.
- Place a piece of approved filter cloth (40-85 mesh) of the same dimensions as the wire mesh over the wire mesh and securely attach to the 2" x 4" w/pt.
- Securely nail the 2" x 4" w/pt to 9" long vertical spacers to be located between the curb and inlet face (max. 6' apart).
- Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the curb at spacer locations). Three 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.



- SEEDING CONTROL NOTES:**
- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTIONS AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (992-2437).
 - 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.
 - 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 1983 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: 4.25 ACRES
AREA TO BE ROOFED OR PAVED: 0.75 ACRES
AREA TO BE VEGETATIVELY STABILIZED: 0.50 ACRES
TOTAL CUT: - CU. YDS.
TOTAL FILL: - CU. YDS.
OFFSITE WASTE/BORROW AREA LOCATION: N/A
CU. YDS.
 - 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 DPM 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.

ENGINEER'S CERTIFICATE
I HEREBY 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: Charles J. Crovo
DATE: 5/14/87

DEVELOPER'S CERTIFICATE
I DO HEREBY CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR EROSION AND SEDIMENT CONTROL AND THAT ALL 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 OR THEIR AUTHORIZED AGENTS, AS ARE DEEMED NECESSARY.
Signature: Charles J. Crovo
DATE: 5/14/87

REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.
Signature: James M. Helms
DATE: 7-1-87
U.S. SOIL CONSERVATION DISTRICT

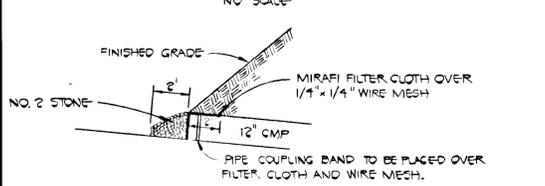
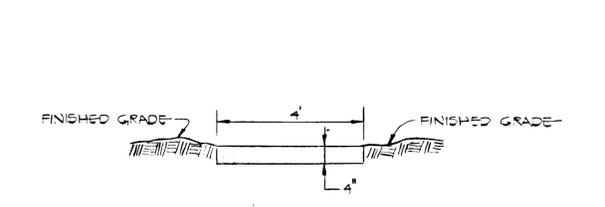
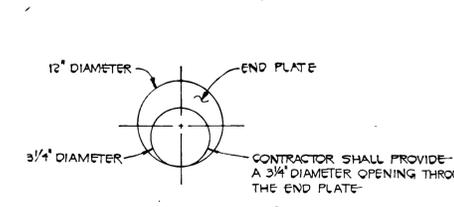
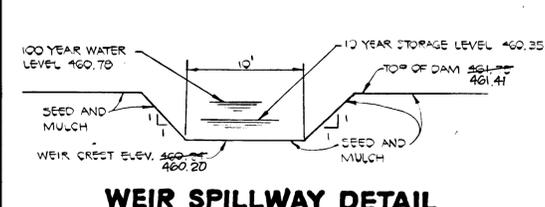
THIS DEVELOPMENT IS APPROVED FOR EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: Stephen L. Fisher
DATE: 7/1/87
DISTRICT HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS
Signature: William E. Chan
DATE: 7-7-87
CHIEF, BUREAU OF ENGINEERING

APPROVED: OFFICE OF PLANNING AND ZONING
Signature: Lori Farnum
DATE: 7-2-87
CHIEF, DIVISION OF LAND DEVELOPMENT AND ZONING ADMINISTRATION

STRUCTURE SCHEDULE

NO.	TYPE	INVERT IN	INVERT OUT	± TOP ELEV.	± ROAD STATIONS	REMARKS
I-1	A-5	-	479.79 473.00	486.79 486.67	L.P. STA. 1+43.76 RALEIGH TAVERN LANE	S.D. 4.01
S-1	STD. METAL END SECTION	-	485.68 486.70	486.93 487.00	-	S.D. 5.61



FISHER, COLLINS, AND CARTER, INC.
CIVIL ENGINEERS AND LAND SURVEYORS
8388 COURT AVENUE
ELLCOTT CITY, MARYLAND 21043
(301) 461-2855

OWNER & DEVELOPER:
SMITH ROBERT & ASSOCIATES
P.O. BOX 15
ELLCOTT CITY, MARYLAND 21043



STREET TREE, GRADING, STORM WATER MANAGEMENT AND SEDIMENT CONTROL PLAN
MARKET SQUARE EAST
SECOND ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN APRIL 20, 1987
SHEET 2 OF 2

F-87-188 AS-BUILT 10-17-88