

HOWARD COUNTY MARYLAND

DEPARTMENT OF PUBLIC WORKS

REVIEW FOR HOWARD COUNTY, S.C.D.
AND MEETS TECHNICAL REQUIREMENTS

DATE: _____

U.S. SOIL CONSERVATION SERVICE

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

APPROVED: _____ DATE: _____
HOWARD COUNTY S.C.S.

ENGINEER'S CERTIFICATION

I CERTIFY THAT THIS PLAN FOR SOIL 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.

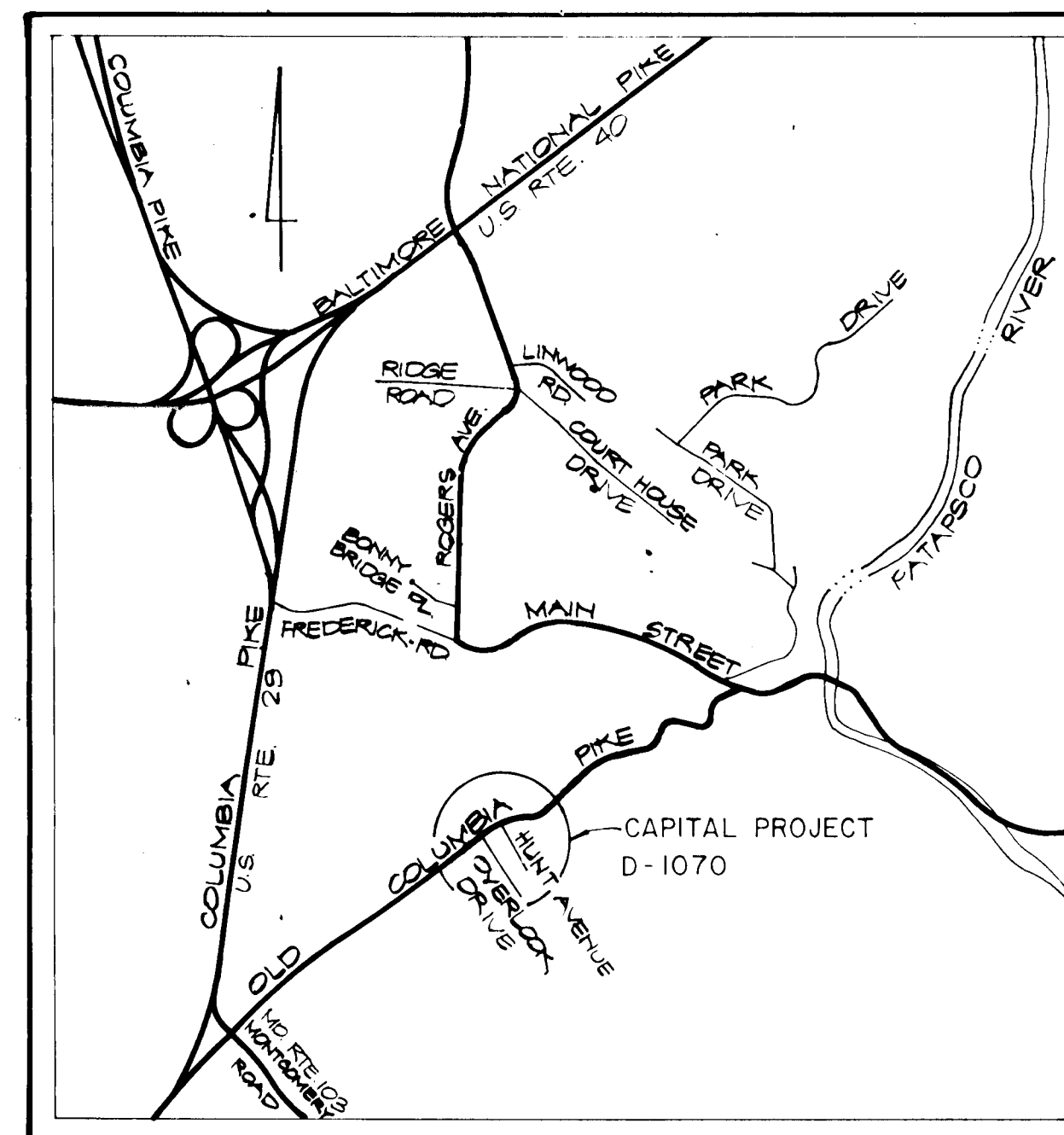
DATE: 3/18/87

HICKS ENGINEERING COMPANY, INC.
200 EAST JOPPA ROAD - SUITE 402
TOWSON, MD 21204

DEVELOPER'S CERTIFICATION

"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN OF DEVELOPMENT AND PLAN FOR SOIL 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."

DATE: 3-18-87



VICINITY MAP
SCALE: 1" = 2000'

INDEX OF SHEETS		
SHEET NO.	DESCRIPTION	LOCATION
1	TITLE SHEET	
2	STANDARD DETAILS	
3	DRAINAGE AREA MAP, DESIGN DATA PLAN & PROFILE	OLD COLUMBIA PIKE

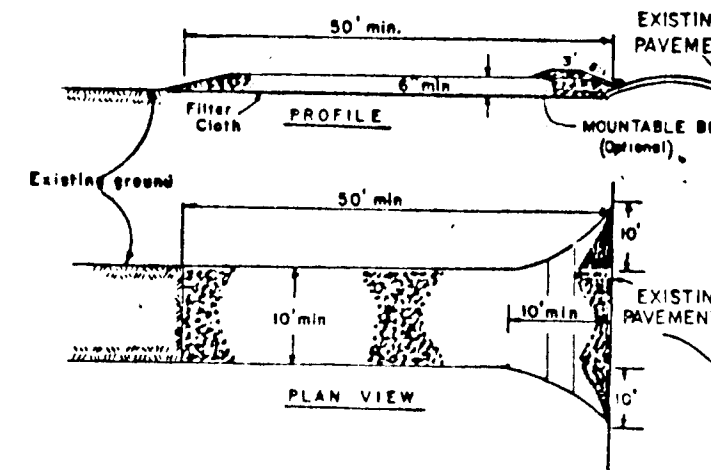
STORM DRAINAGE IMPROVEMENTS ELLICOTT CITY AREA ELECTION DISTRICT: ELLICOTT CITY NO. 2

C/1821D/1

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND DIRECTOR OF PUBLIC WORKS: _____ DATE: _____ CHIEF, BUREAU OF ENGINEERING: <i>William P. Ray</i> 3/18/87 CHIEF, DIVISION OF ROADS, BRIDGES AND STORM DRAINAGE: <i>Elizabeth Anderson Calia</i> 3/18/87	HICKS ENGINEERING COMPANY, INC. CIVIL ENGINEERS 200 EAST JOPPA ROAD SUITE 402 TOWSON, MD 21204		DES: J.E.G.		CAPITAL PROJECT D-1070 HUNT AVENUE - OVERLOOK DRIVE - OLD COLUMBIA PIKE	STORM DRAINAGE IMPROVEMENTS FOR ELLICOTT CITY AREA	SCALE AS SHOWN
			DRN: J.E.G.				DATE: MAR, 1987

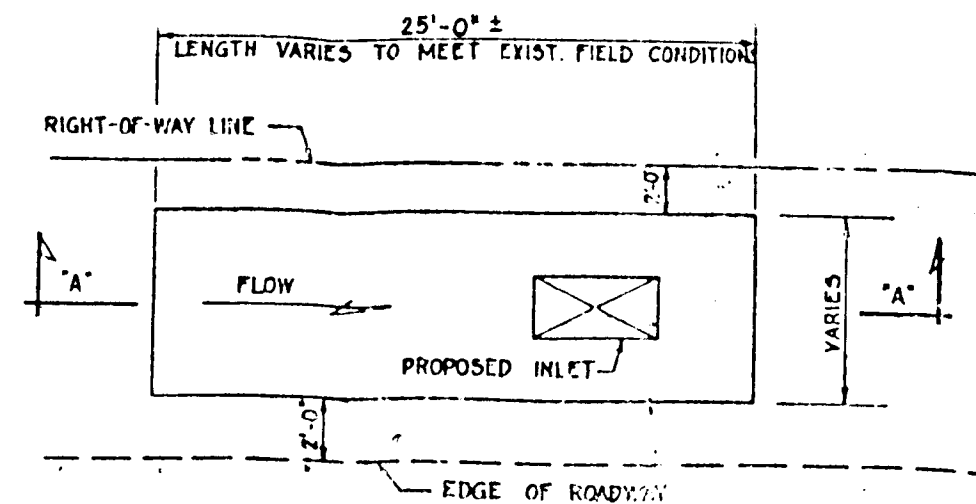
SOIL EROSION & SEDIMENT CONTROL NOTES

1. SEDIMENT CONTROL TO BE PROVIDED IN ACCORDANCE WITH CHAPTER 12 OF THE HOWARD COUNTY DESIGN MANUAL, 1983 STANDARDS AND SPECIFICATIONS FOR SEDIMENT AND EROSION CONTROL, AND THIS PLAN.
2. THE CONTRACTOR SHALL INSTALL AND MAINTAIN ALL TEMPORARY SEDIMENT CONTROL MEASURES AS SHOWN ON THE DRAWINGS. HOWEVER, ANY SEDIMENT CONTROL MEASURES NOT SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS, BUT REQUIRED AS A RESULT OF THE CONTRACTOR'S EXCAVATIONS OR ACTIVITIES SHALL NOT BE CAUSE FOR EXTRA PAYMENT.
3. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: 1) 7 CALENDAR DAYS FOR THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3:1 AND 2) 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

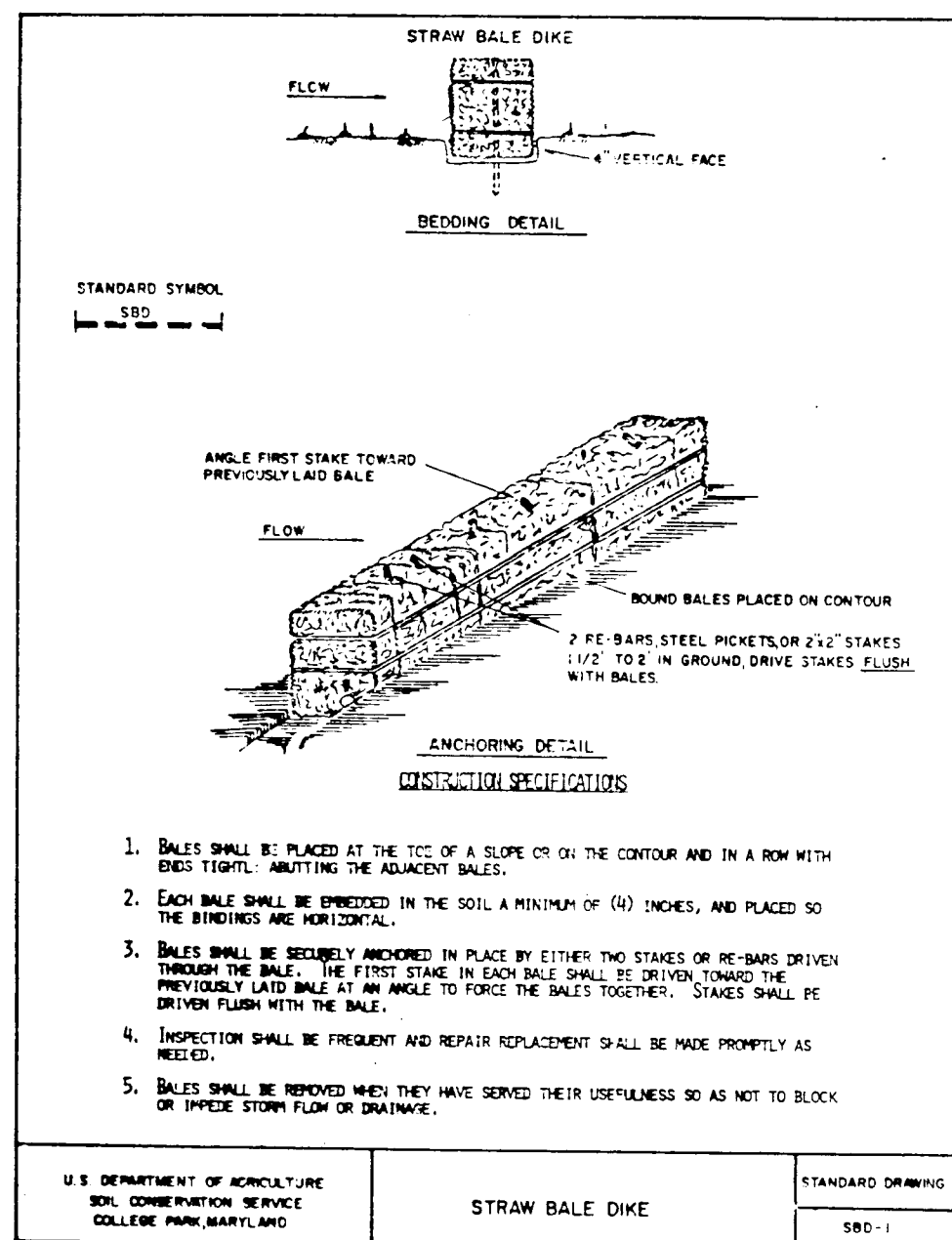


- CONSTRUCTION SPECIFICATIONS**
1. Stone Size - Use 3" stone, or equivalent of riprap concrete equivalent.
 2. Length - As required, but not less than 10 feet except on a slope resistance less than a 30 foot minimum length would apply.
 3. Thickness - Not less than 18 inches.
 4. Width - Ten (10) feet minimum, but not less than the full width at points where topsoil or gravel occurs.
 5. 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.
 6. Surface Water - All surface water flowing or directed toward construction entrance shall be piped across the entrance. If piping is impractical, a portable pump with 3/4" lines will be permitted.
 7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleaning of any measure used to trap sediment. All sediment spilled, dropped, washed or tracked onto public right-of-way must be removed immediately.
 8. Washing - Wheels shall be cleaned to remove sediment prior to entrance onto public right-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.
 9. Periodic inspection and needed maintenance shall be provided after each rain.

STABILIZED CONSTRUCTION ENTRANCE FOR STAGING AREA

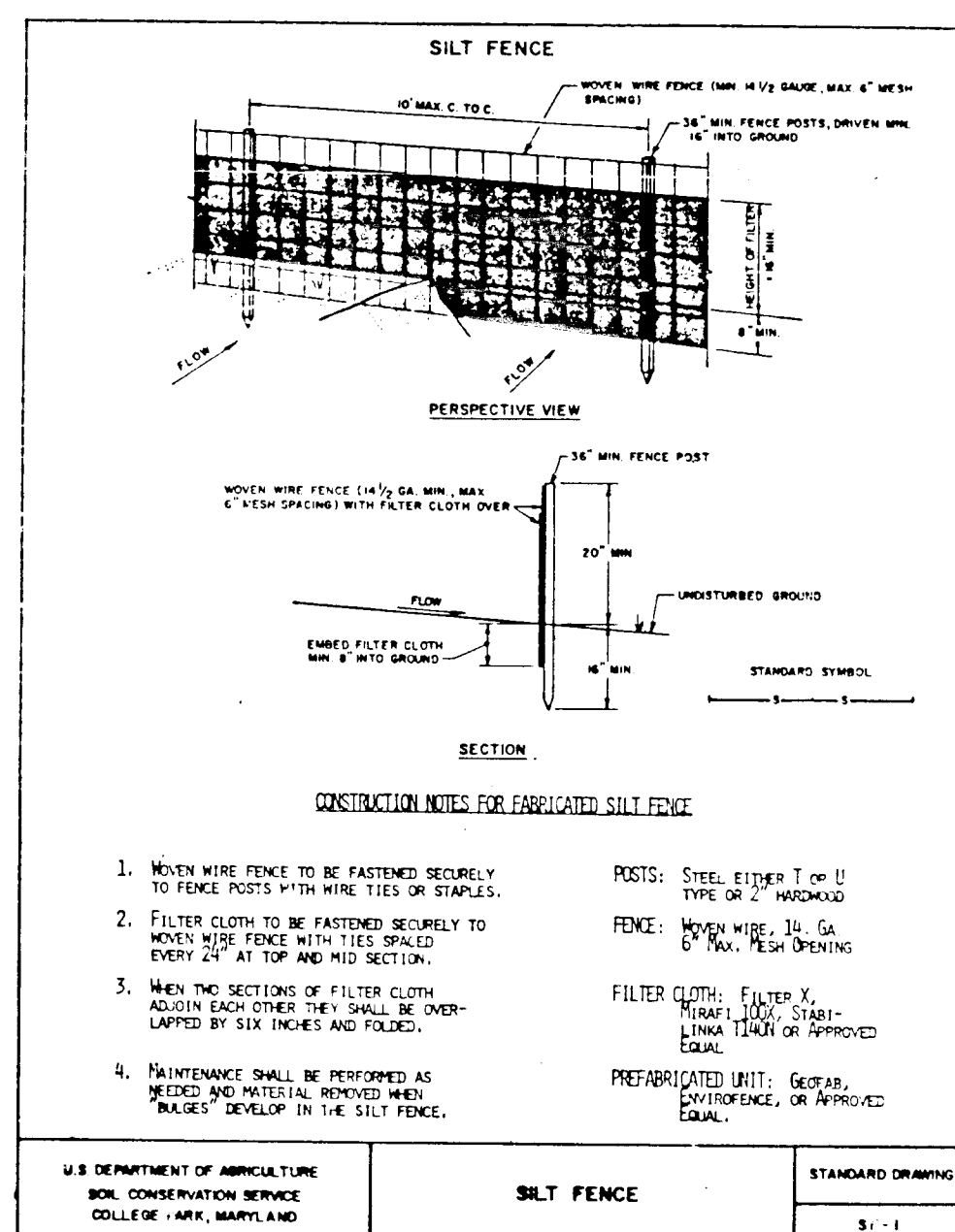


TEMPORARY INLET SEDIMENT TRAP
Not to Scale



- CONSTRUCTION SPECIFICATIONS**
1. BALES SHALL BE PLACED AT THE TOP OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH BEST-TIGHT, SPACING THE ADJACENT BALES.
 2. EACH BALE SHALL BE SPACED IN THE SOIL A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN THROUGH THE PREVIOUSLY LAYED BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
 4. INSPECTION SHALL BE FREQUENT AND REPAIR/REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
 5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPED FLOW OF DRAINAGE.

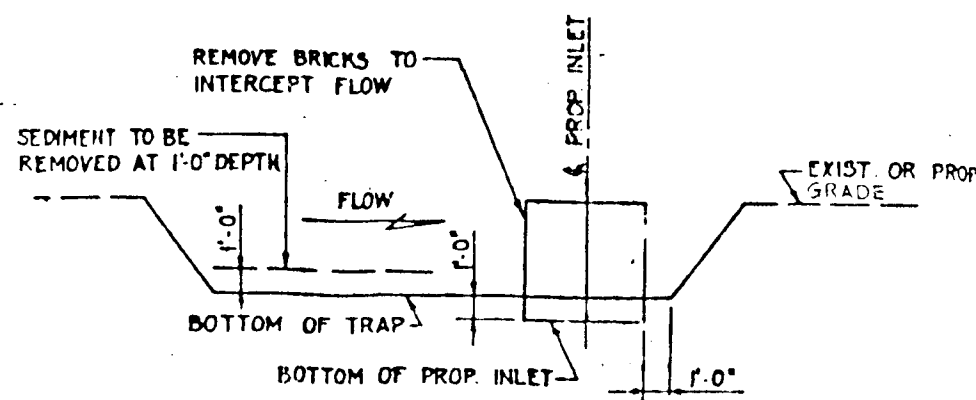
U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND
STRAW BALE DIKE
STANDARD DRAWING
SD-1



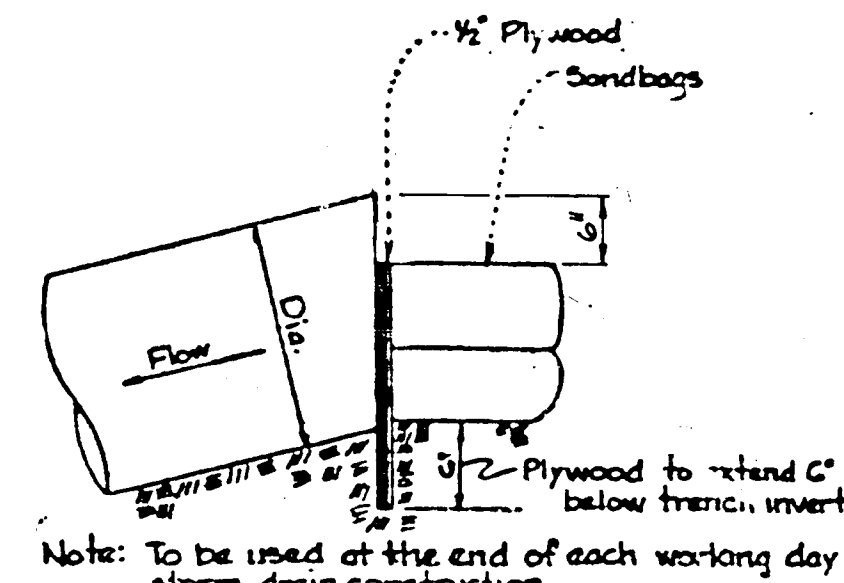
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 4 FT TOP AND MID SECTION.
3. WHEN THE SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND POLYGLUE.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "RALES" DEVELOP IN THE SILT FENCE.

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE
COLLEGE PARK, MARYLAND
SILT FENCE
STANDARD DRAWING
SI-1



SECTION A-A
Not to Scale



PIPE BLOCKING DETAIL
No Scale

GENERAL NOTES (CONT.)

22. THE CONTRACTOR SHALL LOCATE EXISTING UTILITIES A MINIMUM OF TWO WEEKS IN ADVANCE OF CONSTRUCTION OPERATIONS IN VICINITY OF UTILITIES. COST SHALL BE INCLUDED IN THE UNIT PRICES BID FOR STORM DRAIN ITEMS.
23. STANDARD DETAILS FOR THIS CONTRACT SHALL BE THE HOWARD COUNTY STANDARD DETAILS AS SUPPLEMENTED BY THE MARYLAND STATE HIGHWAY ADMINISTRATION STANDARD DETAILS.
24. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE (5) DAYS BEFORE STARTING WORK SHOWN HEREON: MISS UTILITY 1-800-257-7777
BALTIMORE GAS & ELECTRIC CO., UNDERGROUND ELECTRIC DISTRIBUTION ENGINEERING DAMAGE CONTROL 234-5691
BALTIMORE GAS & ELECTRIC CO., UNDERGROUND GAS DISTRIBUTION ENGINEERING 234-5533
CHESAPEAKE AND POTOMAC TELEPHONE CO. 725-9976
STATE HIGHWAY ADMINISTRATION 531-5533
COLONIAL PIPELINE COMPANY 781-4641
HOWARD COUNTY BUREAU OF UTILITIES 992-2366
CONSTRUCTION INSPECTION/SURVEYS DIVISION 992-2417

PERMANENT SEEDING NOTES

- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded 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 lbs/1000 square 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. 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 (23 lbs/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 60 lbs per acre (1.6 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 (40 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 8:1 or higher, use 3/8 gal per acre (8 gal/1000 sq ft) for anchoring.

Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseeding.

TEMPORARY SEEDING NOTES

- Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.
- Seeded Preparation:** Loosen upper three inches of soil by raking, disking 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 August 1 thru November 15, seed with 2 1/2 bushel per acre of annual ryegrass (3.2 lbs/1000 sq ft). For the period May 1 thru August 31, 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 (40 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, 8:1 or higher, use 3/8 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.

GENERAL NOTES

1. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 FOR UNDERGROUND UTILITY LOCATIONS, AT LEAST FIVE DAYS PRIOR TO COMMENCING WORK SHOWN ON THE PLANS.
2. ALL TOP ELEVATIONS FOR THE PROPOSED INLETS AND MANHOLES ARE APPROXIMATE, AND ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR AND THE ENGINEER.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ALL EXISTING DRIVEWAYS DAMAGED DURING CONSTRUCTION. SEE MEASUREMENT AND PAYMENT IN SPECIAL PROVISIONS. EXISTING BITUMINOUS CONCRETE DRIVEWAYS SHALL BE RESTORED AS FOLLOWS:
 - 1) 4-INCH DEPTH OF BITUMINOUS CONCRETE BASE COURSE
 - 2) 1-INCH DEPTH OF BITUMINOUS CONCRETE SURFACE COURSE
4. TREES ARE TO BE PROTECTED FROM DAMAGE TO MAXIMUM EXTENT. TREES LOCATED WITHIN THE CONSTRUCTION STRIP ARE NOT TO BE REMOVED OR DAMAGED BY THE CONTRACTOR.
5. CONTRACTOR TO GRADE AROUND THE TOP OF THE PROPOSED INLETS IN ORDER TO PROVIDE POSITIVE DRAINAGE TO THE INLETS. LINING SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. COORDINATES ARE BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM, 1957 DATUM, PROJECTED BY THE PLANNING AND ZONING COMMISSION OF HOWARD COUNTY, MARYLAND.
7. THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR TO HIS OWN SATISFACTION BEFORE STARTING CONSTRUCTION. NEITHER THE ENGINEER NOR THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS WARRANT OR GUARANTEE THE COMPLETENESS OR CORRECTNESS OF THE INFORMATION SHOWN.
8. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES. ANY DAMAGE DUE TO THE CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. CLEAR ALL UTILITIES BY A MINIMUM OF 6-INCHES.
9. TEST PITS SHALL BE DUG AT ALL UTILITY CROSSINGS TO DETERMINE EXISTING HORIZONTAL AND VERTICAL ALIGNMENT OF UTILITIES. TEST PITS SHALL BE DUG A SUFFICIENT AMOUNT OF TIME IN ADVANCE OF THE CONSTRUCTION OR TRENCHING OPERATION, IN ORDER TO ALLOW FOR NECESSARY ADJUSTMENTS.
10. WHERE TEST PITS HAVE BEEN MADE ON EXISTING UTILITIES, THEY ARE NOTED BY THE SYMBOL . THE RESULTS OF TEST PITS ARE INCLUDED ON THE STORM DRAIN PROFILES.
11. ALL UTILITY POLES MUST BE CLEARED BY 2- FEET, OR THE PROPOSED STORM DRAIN SHALL BE PLACED BY TUNNELING. ALL COSTS FOR TUNNELING ARE TO BE INCLUDED IN THE UNIT PRICE BID FOR FURNISHING AND LAYING THE STORM DRAIN PIPE.
12. ALL VERTICAL CONTROLS ARE BASED ON U.S.G.S. DATUM OF 1929.
13. ALL PIPE ELEVATIONS SHOWN ARE INVERT \odot ELEVATIONS.
14. CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR FURNISHING AND LAYING STORM DRAIN PIPE.
15. PLACE REGULATION "MEN WORKING" AND WARNING SIGNS AS REQUIRED TO COMPLY WITH MARYLAND STATE HIGHWAY ADMINISTRATION MANUAL OF TRAFFIC CONTROL FOR HIGHWAY CONSTRUCTION AND MAINTENANCE OPERATIONS.
16. EXISTING WATER HOUSE SERVICES, THAT ARE IN CONFLICT WITH THE PROPOSED STORM DRAINAGE FACILITIES, SHALL BE ADJUSTED BY THE CONTRACTOR.
17. FOR DETAILS NOT SHOWN ON THE DRAWINGS, AND FOR MATERIALS AND CONSTRUCTION METHODS, THE CONTRACTOR SHALL ABIDE BY THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, "STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION", AND THE SPECIAL PROVISIONS. IN THE EVENT OF ANY DISCREPANCY BETWEEN THESE TWO SOURCES, THE LATTER SHALL GOVERN.
18. THE CONTRACTOR SHALL REMOVE TREES, STUMPS AND ROOTS ALONG THE LINE OF EXCAVATION AS DIRECTED BY THE ENGINEER. PAYMENT FOR SUCH REMOVAL SHALL BE INCLUDED IN THE UNIT PRICE BID FOR STORM DRAIN ITEMS.
19. EXISTING FENCES, MAILBOXES, SIGNS AND SHRUBS DISTURBED BY THE WORK SHALL BE RECONSTRUCTED OR REPLACED IN KIND.
20. ALL SLOPES AND/OR DISTURBED AREAS SHALL RECEIVE 4-INCH DEPTH OF TOPSOIL, AND SODDING EXCEPT, WHERE OTHERWISE INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
21. LOCATION POINTS FOR INLETS, MANHOLES AND STRUCTURES:

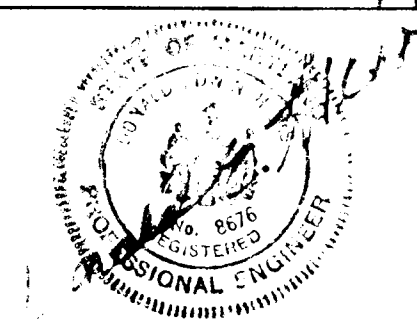
ITEM	HORIZONTAL LOC.	VERTICAL LOC.
CURB TYPE INLETS	CENTER FACE OF CURB	TOP OF CURB
GRATE TYPE INLETS	CENTER OF GRATE	TOP OF GRATE
MANHOLES	CENTER OF COVER	TOP OF COVER
ENDWALLS	CENTER OF WALL	TOP OF WALL

DEPARTMENT OF PUBLIC WORKS
HOWARD COUNTY, MARYLAND

Director of Public Work: *Elizabeth Anderson Calia* 3/10/87
Chief, Bureau of Engineering: *Robert E. Kelly* 3/10/87

HICKS ENGINEERING
COMPANY, INC.

200 EAST JOPPA ROAD
SUITE 402
TOWSON, MD 21204



DES: J.E.G.			
DRN: J.E.G./L.W.			
CHK: D.E.H.			
DATE: MAR, 1987			
BY NO.		REVISION	

CAPITAL PROJECT D-1070
HUNT AVENUE · OVERLOOK DRIVE ·
OLD COLUMBIA PIKE

STORM DRAINAGE IMPROVEMENTS

FOR
ELLCOTT CITY AREA

SCALE AS SHOWN
SHEET 2 OF 3

SEQUENCE OF CONSTRUCTION

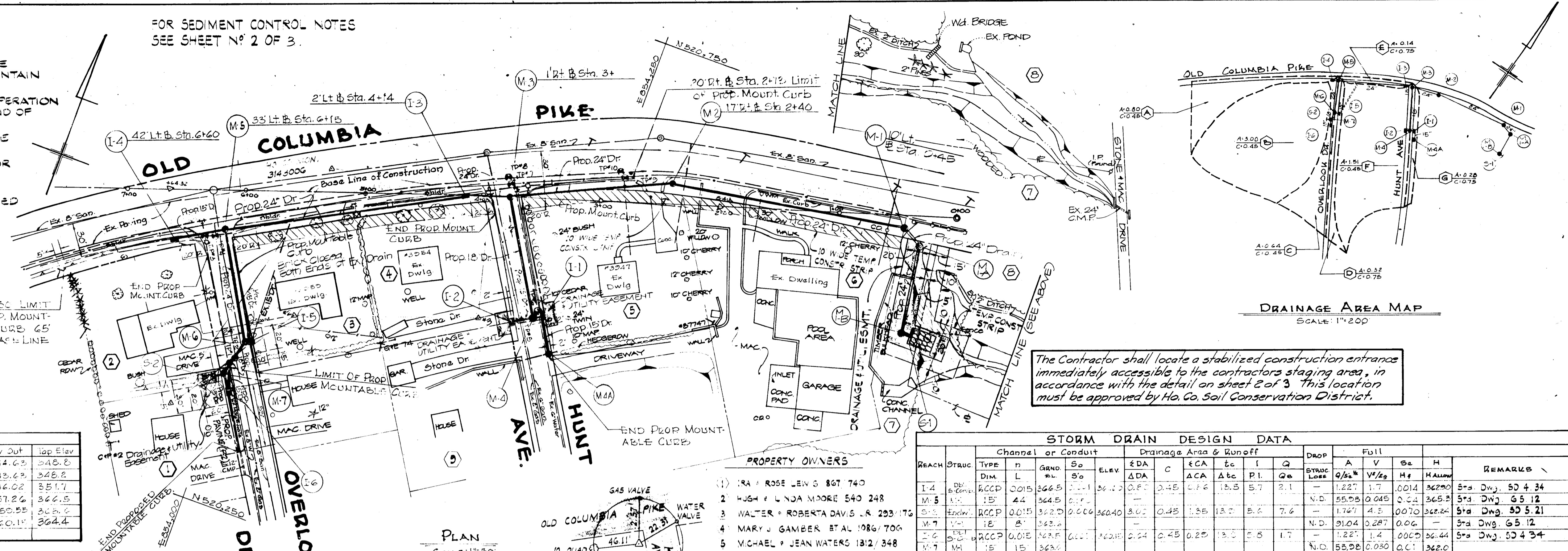
- OBTAIN CONSTRUCTION PERMITS
- PLACE SEDIMENT CONTROL DEVICES
- MAINTAIN ONE-LANE OF TRAFFIC ALONG OLD COLUMBIA PIKE, AT THE INTERSECTION WITH HUNT AVENUE AND OVERLOOK DRIVE, MAINTAIN ONE HALF WIDTH OF ROADWAY FOR VEHICULAR TRAFFIC.
- PLACE ADDITIONAL SEDIMENT CONTROL MEASURES AS THE PIPE LAYING OPERATION PROGRESSES UP-GRADE, BLOCKING DETAIL MUST BE UTILIZED AT THE END OF EACH WORK DAY.
- MAINTAIN POSITIVE GRADE TO EACH SEDIMENT TRAP WHICH SHALL BE CONSTRUCTED AT EACH STORM DRAIN INLET
- INGRESS AND EGRESS SHALL BE MAINTAINED TO ALL RESIDENCES FOR OVERNIGHT, WEEK-ENDS AND HOLIDAYS.
- COMPLETE GRADING; RESTORE DRIVEWAYS, EXTEND PAVING AND CONSTRUCT MOUNTABLE CURBS; AND STABILIZE AREAS DISTURBED BY THE CONTRACTOR'S OPERATIONS.
- REMOVE SEDIMENT CONTROL DEVICES, AFTER RECEIVING PROPER AUTHORIZATION FROM THE SEDIMENT CONTROL INSPECTOR AND RESTORE ALL AREAS THAT MAY REQUIRE STABILIZATION.

FOR SEDIMENT CONTROL NOTES
SEE SHEET NO 2 OF 3.

MANHOLE SCHEDULE					
No	TYPE	LOCATION	Inv In	Inv Out	Top Elev
M-1A	Standard	10' LT 0+45	335.00	345.50	340.0
M-2	Standard	17' RT 2+40	339.10	338.20	342.2
M-3	Standard	1' RT 3+77	341.32	340.82	350.0
M-4	Shallow	See Plan	343.45	343.00	348.7
M-5	Standard	32' LT 6+15	357.07	356.57	364.0
M-6	Shallow	See Plan	359.50	359.00	363.0
M-7	Shallow	See Plan	360.00	359.75	363.9
M-1A	Shallow	See Plan	362.00	362.75	360.5
M-1B	Shallow	See Plan	365.00	364.50	369.0

INLET SCHEDULE											
No	TYPE	LOCATION	Area	Coeff	Tc	Items	G	Cap	Inv In	Inv Out	Top Elev
I-1	Dbl'S Comb	See Plan	0.28	0.75	5.0	7.4	1.6	10	344.65	348.8	348.8
I-2	Dbl'S Comb	See Plan	1.51	0.45	13.0	5.8	3.0	2	343.65	348.2	348.2
I-3	Dbl'S Comb	2' LT 4+14	0.14	0.75	9.0	7.4	0.8	3.0	346.50	346.08	351.7
I-4	Dbl'S Comb	2' LT 6+15	0.50	0.45	13.5	5.1	2.1	3.0	357.26	357.26	362.5
I-5	Dbl'S Comb	See Plan	0.32	0.75	10.2	6.2	1.6	10	350.55	350.55	362.8
I-6	Dbl'S Comb	See Plan	0.44	0.45	13.0	5.8	1.7	3.0	360.11	360.11	364.4

STA 1+50 LIMIT OF PROP. MOUNTABLE CURB 65' LT OF BASE LINE



The Contractor shall locate a stabilized construction staging area, in accordance with the detail on sheet 2 of 3. This location must be approved by Ho. Co. Soil Conservation District.

STORM DRAIN DESIGN DATA																		
REACH	STRUCT	TYPE	DIM	Channel or Conduit		Drainage Area & Runoff					DRAIN LOSS	Full			REMARKS			
				L	S	ELEV	ADA	C	ACA	Ac		P1	Q	V		H	ALLOW	
I-1	Dbl'S Comb	RCCP	15"	0.015	366.5	366.5	366.5	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-5	Manhole	End	15"	0.015	364.5	364.5	364.5	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 5 12
M-7	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 5 21
M-3	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 5 12
M-1	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-2	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-4	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-6	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-8	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-9	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-10	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-11	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-12	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-13	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-14	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-15	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-16	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-17	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-18	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-19	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-20	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-21	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-22	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-23	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-24	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-25	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-26	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-27	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-28	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-29	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-30	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-31	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-32	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-33	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-34	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-35	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-36	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-37	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-38	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-39	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-40	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-41	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-42	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-43	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-44	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-45	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015	0.015	0.015	0.015	1.227	1.7	0.014	362.90	5th Dwg. 5D 4 34
M-46	Manhole	End	15"	0.015	362.0	362.0	362.0	0.015	0.015	0.015</								