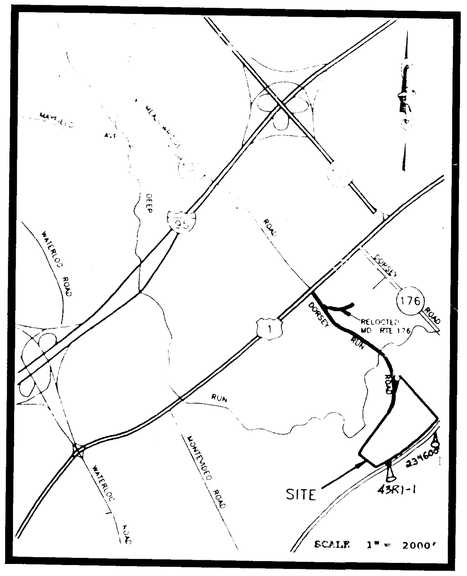
BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY
SERVING
ANNE ARUNDEL, BALTIMORE, AND HOWARD COUNTIES

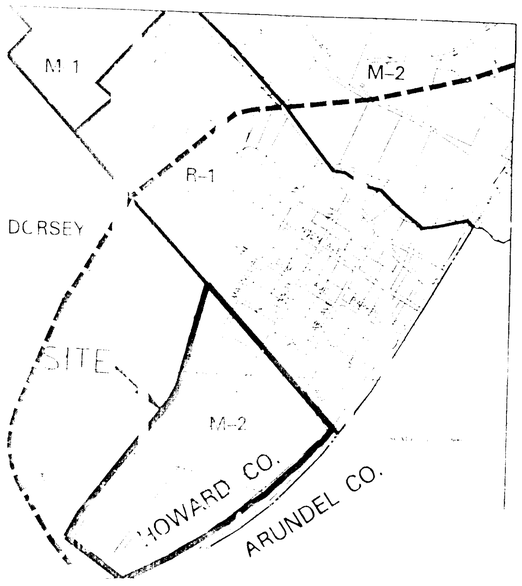
General Notes:

1. All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications if applicable.
2. 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.
3. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work at.
5. Traffic control devices, markings, and signing shall be in accordance with the latest edition of the Manual on Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
6. All plan dimensions are to the face of curb unless otherwise noted.
7. The 8" water main, water meter and hydrants are public. Water will be constructed under Howard County Contract 44-3421-D. Sewer is private.
8. Stormwater management control is provided by two extended detention ponds.
9. Wetlands delineation study was prepared by Post, Buckley, Schuh, and Jernigan, Inc. July 1994 and approved by the Department of Natural Resources 11/7/94.

   There are no wetlands located within the limits of disturbance for this project.
10. Survey prepared by Harford Aerial based on photogrammetry on April 18, 1994 and based on control points provided by Howard County. Contour interval is 2 foot at 1" = 50'. County control stations are: 43N1-1 and 2346007.
11. Any damage to public right-of-ways, paving, or existing utilities will be corrected at the contractor's expense.
12. Existing utilities are located from road construction plans, field surveys and available record drawings. Approximate location of existing utilities are shown for the Contractor's information. The contractor shall verify all existing utilities to his own satisfaction before starting construction. Contractor shall locate existing utilities well in advance of construction activities and take all necessary precautions to protect the existing utilities and to maintain uninterrupted service. Any damage incurred due to Contractors operation shall be repaired immediately at the Contractors expense.
13. Estimates of earthwork quantities are provided solely for the purpose of calculating permit fees.
14. All areas not being paved or receiving building coverage shall be stabilized in accordance with the plans approved by the Howard County Soil Conservation District.
15. All slopes shall be 2:1 or flatter.
16. The contractor shall maintain 3.5' of cover over all proposed water lines unless otherwise noted on the plans.
17. Signs indicating Forest Retention Area shall be placed along the Forest Conservation Easement lines where construction impacts the trees to remain. See sheet 8 for details of sign.



VICINITY MAP



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SITE ANALYSIS

a) Area of submittal: 54 Ac.
b) Present Zoning: M-2
c) Proposed Use of Site: Composting Facility for Yard Debris
d) Proposed Use of Structures: Maintenance Building -- 3200 SF
   Scale House -- 480 SF
e) Paved Area -- 1.1 Ac.
f) Total Number of Units Allowed -- NA
g) Total Number of Units Provided -- Zero
h) Maximum number of employees on site -- 7
i) Required Parking Spaces -- 7
j) Parking Spaces Provided
   Regular -- 10
   Handicapped -- 2 (1 van accessible)
k) Woods to Remain -- 24 Acres (16.9 ac. in FCE)

?Estimate of number of employees

scale operator

manager
scarab operator
loader
screener
2 laborers

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zielke
APPROVED: HOWARD SOIL CONSERVATION DISTRICT

PLAN NUMBER — DATE 6/16/95

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Patricia Leagle 6/15/95
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Joyce M. Boyd MD per E.S. 6-16-95
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

6/19/95
DIRECTOR — DATE

Lynn Summers 6/19/95
CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

6/13/95
DIRECTOR — DATE

6/13/95
CHIEF, BUREAU OF ENGINEERING — DATE

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	6012
WATER CODE		SEWER CODE			
Public		Private			

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

TITLE PAGE

5/4/95
FE ZENI PROGRAM MANAGER — DATE

5/4/95
JAMES PECK, DIRECTOR — DATE

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

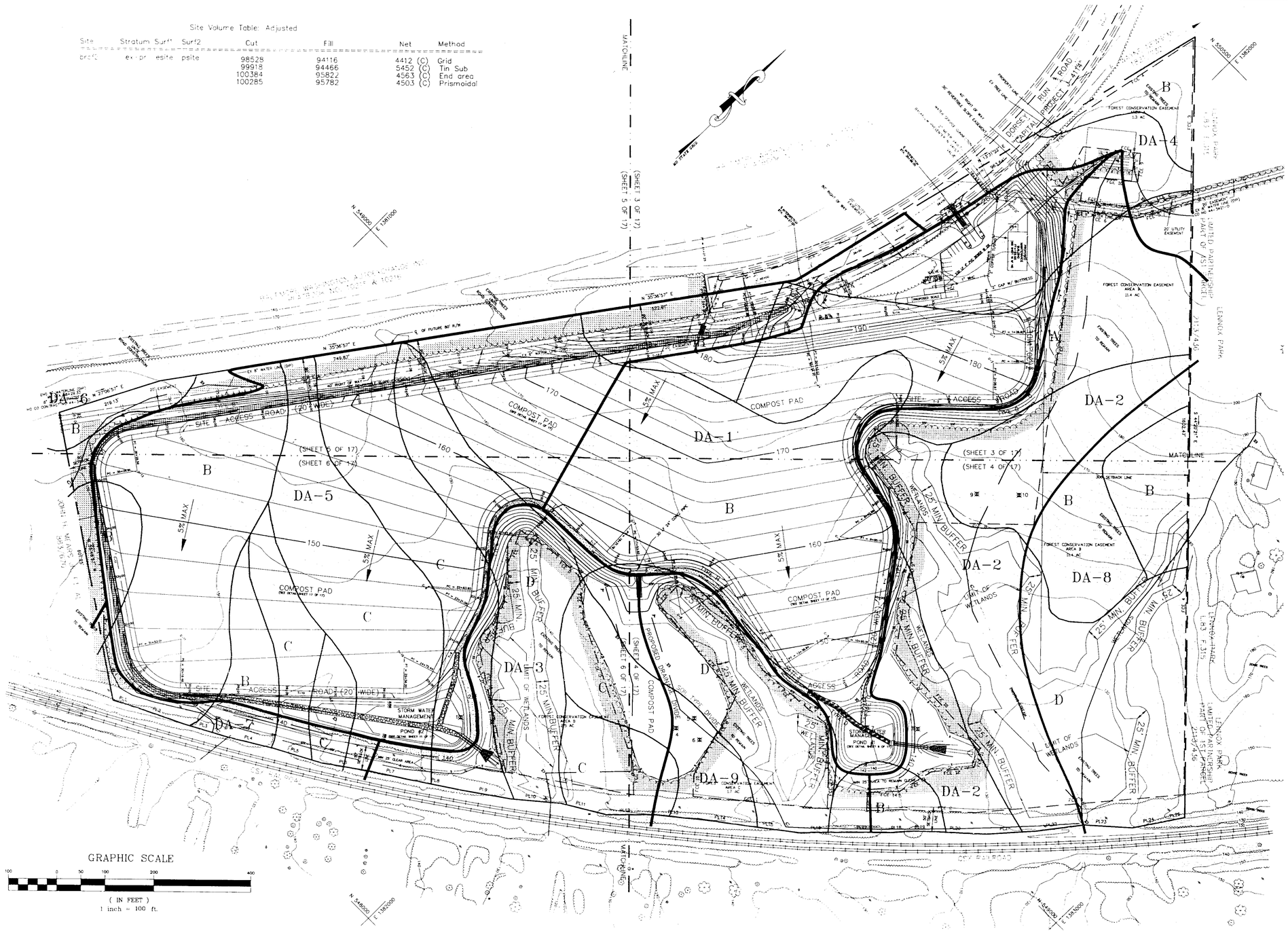
MARCH 29, 1995

SHEET 1 OF 17

SDP-95-60

Site Volume Table: Adjusted

Site	Stratum	Surf1	Surf2	Cut	Fill	Net	Method
prof1	exspr	esite	psite	98528	94116	4412 (C)	Grid
				99918	94466	5452 (C)	Tin Sub
				100384	95822	4563 (C)	End area
				100285	95782	4503 (C)	Prismoidal



LEGEND

- DITCH TYPE A
- DITCH TYPE B
- DITCH TYPE C
- DITCH TYPE D
- DITCH TYPE E
- DITCH TYPE F
- DITCH TYPE G
- DITCH TYPE H
- PAVED AREA
- 1 BORING
- STABILIZED CONSTRUCTION ENTRANCE
- D SOIL TYPE
- SOIL TYPE DIVIDE LINE
- DA-2 PROPOSED DRAINAGE AREA
- PROPOSED DRAINAGE DIVIDE LINE
- FLOW PATH
- S SILT FENCE
- SSF SUPER SILT FENCE
- SS DIVERSION SUPER SILT FENCE
- A-4 BERM
- MATCHLINE
- BARRIER FENCE
- LIMITS OF DISTURBANCE
- LIMITS OF DISTURBANCE & CLEARING
- EXISTING TREE LINE
- FOREST PRESERVATION LINE
- HANDICAP PARKING
- FIRE HYDRANT
- TELEPHONE POLE
- SIGN

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

PROPERTY LINE DATA

LINE	DIRECTION	DISTANCE	LINE	DIRECTION	DISTANCE
PL1	S 61°19'33" W	50.02'	PL13	S 50°34'35" W	98.00'
PL2	S 63°34'34" W	101.60'	PL14	S 52°19'34" W	94.40'
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PL9	S 54°34'34" W	101.00'	PL21	S 41°12'34" W	100.60
PL10	S 49°34'34" W	103.60'	PL22	S 37°22'34" W	100.30'
PL11	S 58°19'34" W	96.40'	PL23	S 47°47'34" W	100.30'
PL12	S 44°34'36" W	99.70'	PL24	S 33°42'35" W	101.60'
			PL25	S 32°57'31" W	7.61'

CURVE DATA FOR CENTERLINE OF PROPOSED SITE ROAD

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA	PI COORDINATES N	PI COORDINATES E
C-1	75.00'	128.82'	86.90'	113.56'	98°24'31"	549877.89	1382046.88
C-2	75.00'	117.57'	74.76'	105.89'	89°48'50"	549719.65	1382201.51
C-3	100.00'	218.05'	191.84'	177.35'	124°56'08"	549392.28	1381868.67
C-4	100.00'	74.29'	38.95'	72.60'	42°34'00"	549334.23	1382180.69
C-5	100.00'	243.43'	270.88'	187.62'	139°28'28"	548918.22	1382492.97
C-6	125.00'	147.59'	83.76'	139.17'	67°39'08"	549038.49	1381954.03
C-7	75.00'	67.97'	36.52'	65.67'	51°55'38"	548882.70	1381845.24
C-8	90.00'	198.17'	177.24'	160.49'	126°09'30"	548863.15	1381489.38
C-9	100.00'	37.14'	18.79'	36.93'	2°16'46"	548617.59	1381690.39
C-10	75.00'	83.76'	46.86'	79.48'	63°59'23"	548411.21	1381757.54
C-11	100.00'	136.52'	81.29'	126.16'	78°13'06"	548002.20	1381334.50
C-12	75.00'	119.68'	76.90'	107.38'	91°25'54"	548291.04	1380909.22
C-13	125.00'	15.26'	7.64'	15.25'	06°59'37"	549410.90	1381711.43
C-14	125.00'	18.83'	9.43'	18.81'	08°37'48"	549502.56	1381761.45

TANGENT DATA FOR CENTERLINE OF PROPOSED SITE ROAD

LINE	DIRECTION	DISTANCE
T-1	S 44°20'21" E	59.58'
T-2	S 41°28'29" W	200.26'
T-3	S 79°27'39" E	86.58'
T-4	S 36°53'39" E	210.35'
T-5	N 77°25'11" W	197.56'
T-6	S 34°55'40" W	69.73'
T-7	S 86°51'18" W	142.64'
T-8	S 39°18'12" E	121.32'
T-9	S 18°01'26" E	151.38'
T-10	S 45°57'57" W	460.29'
T-11	N 55°48'57" W	355.90'
T-12	N 35°36'57" E	1293.01'
T-13	N 28°37'20" E	87.35'
T-14	N 37°15'08" E	375.19'

NOTE:

INFORMATION ON SOILS IS FROM SHEET 31 OF SOIL SURVEY FOR HOWARD COUNTY

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zielman
APPROVED: HOWARD SOIL CONSERVATION DISTRICT
PLAN NUMBER — DATE 6/16/95

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Patricia Chafin 6/15/95
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

Joyce M. Beck MD for F.H. 6-16-95
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

6/19/95
DIRECTOR — DATE

6/19/95
CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

6/13/95
DIRECTOR — DATE

6/13/95
CHIEF, BUREAU OF ENGINEERING — DATE

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE		SEWER CODE			
Public		Private			

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

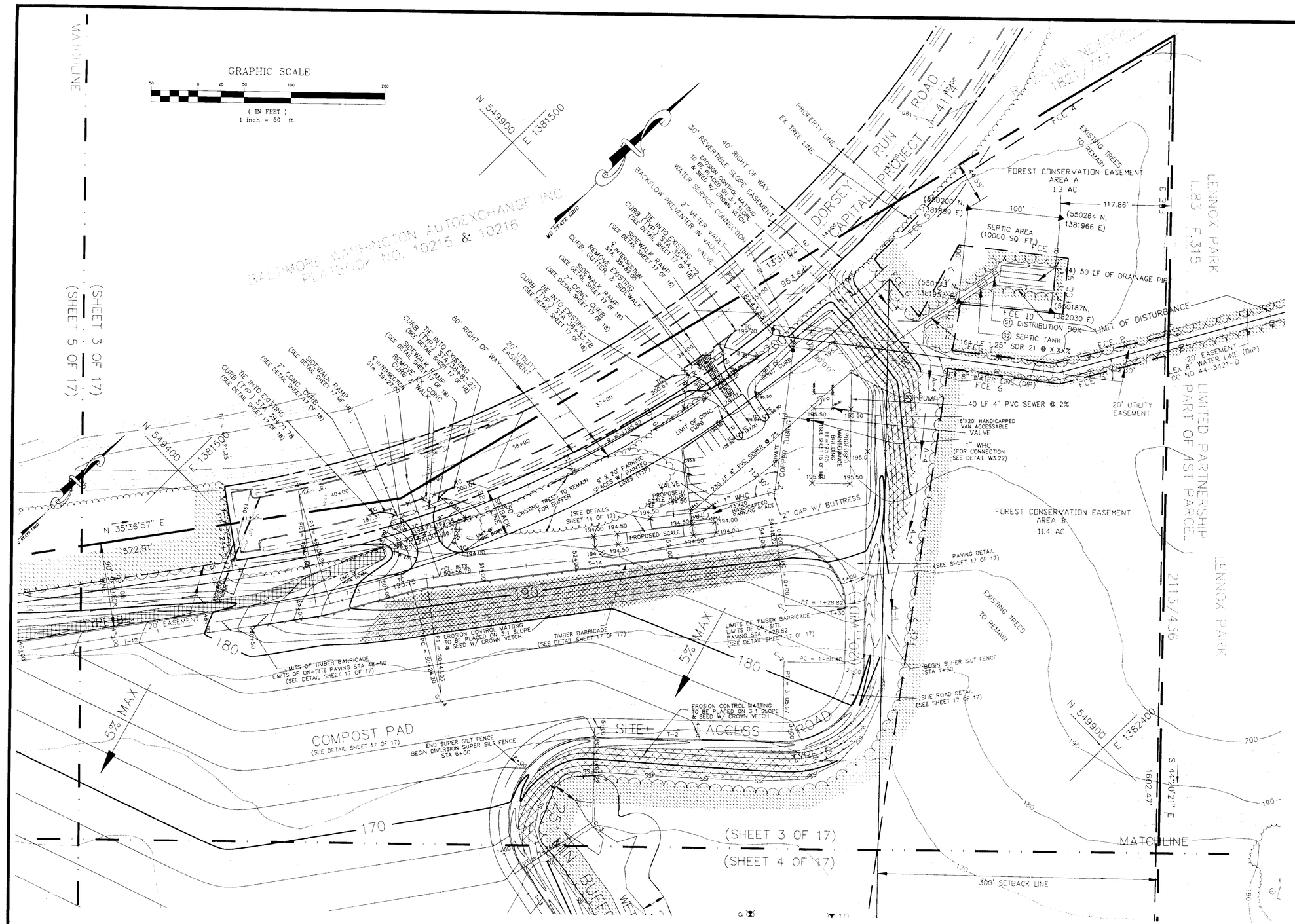
PROPOSED DRAINAGE AREA MAP

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, 1995

SHEET 2 OF 17

SDP-95-60



LEGEND

- DITCH TYPE B
- DITCH TYPE G
- PAVED AREA
- HANDICAP PARKING
- FIRE HYDRANT
- BORING
- STABILIZED CONSTRUCTION ENTRANCE
- 137.00 X PROPOSED SPOT ELEVATIONS
- SSF SUPER SILT FENCE
- SS DIVERSION SUPER SILT FENCE
- A-4 BERM
- MATCHLINE
- LIMITS OF DISTURBANCE & CLEARING
- EXISTING TREE LINE
- FOREST PRESERVATION LINE
- TIMBER BARRICADE
- PERC TEST LOCATION
- BARRIER FENCE

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/14/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS

U.S. SOIL CONSERVATION SERVICE — DATE 6/15/95

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-16-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/19/95

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/19/95

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6.13.95

CHIEF BUREAU OF ENGINEERING — DATE 6/13/95

SUBDIVISION NAME	SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility	N/A	690

LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR
2113/436 2678/448	12	M-2	43	1	

WATER CODE	SEWER CODE
Public	Private

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

SITE PLAN AND SEDIMENT & EROSION CONTROL PLAN

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE — MARCH 29, 1995

SDP. 95. 60 — SHEET 3 OF 17

PROPERTY LINE DATA

LINE	DIRECTION	DISTANCE
PL1	S 61°19'33" W	50.02'
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CURVE DATA FOR CENTERLINE OF PROPOSED SITE ROAD

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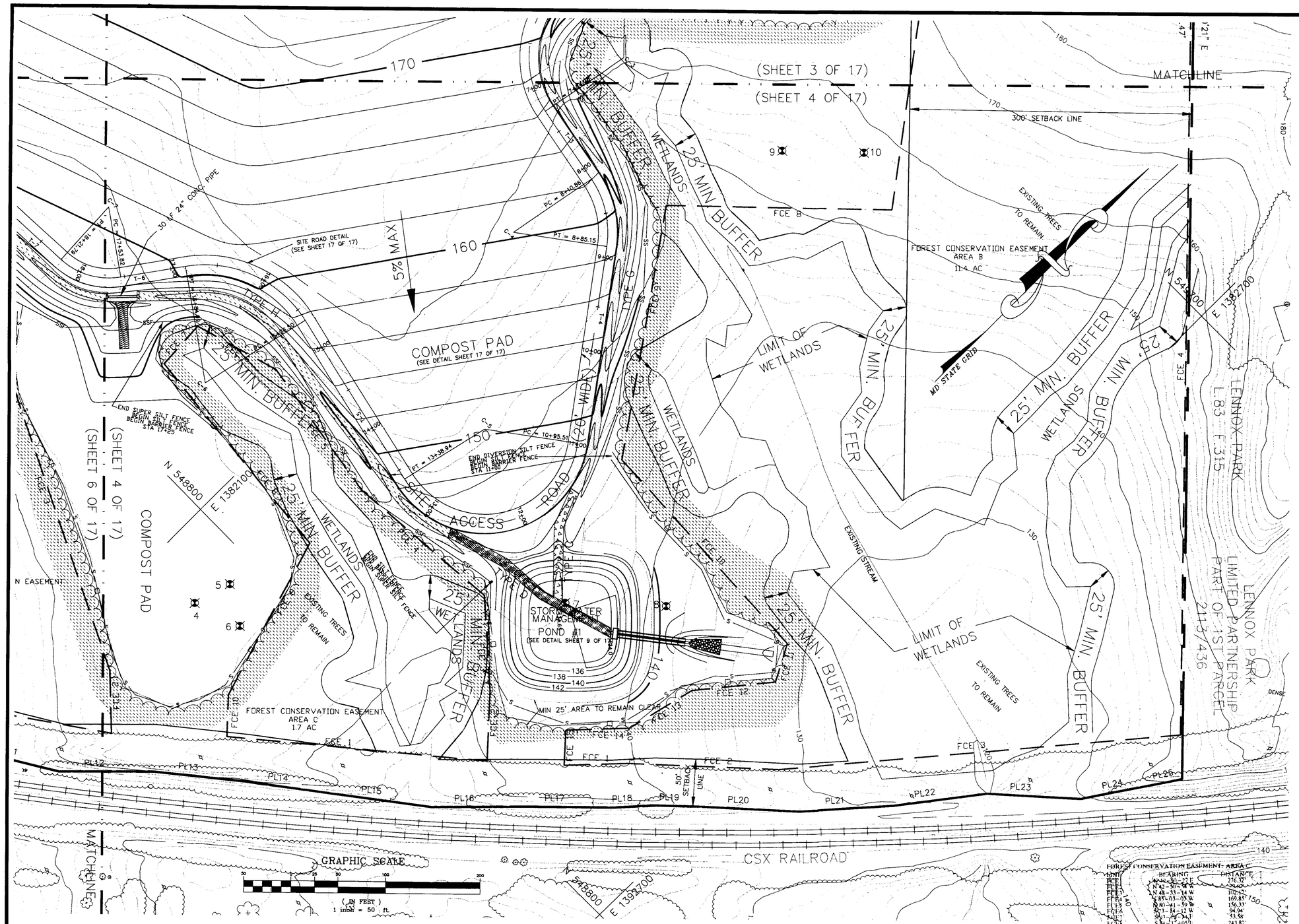
T-13	N 28°37'20" E	87.35'
T-14	N 37°15'08" E	375.19'

FOREST CONSERVATION EASEMENT AREA A

LINE	BEARING	DISTANCE
[illegible]	[illegible]	[illegible]

NOTE: Signs indicating Forest Retention Area shall be placed along the Forest Conservation Easement lines where construction impacts the forest retention. See sheet 4 for details of sign.



LEGEND

- DITCH TYPE C
- DITCH TYPE D
- DITCH TYPE G
- DITCH TYPE H
- BORING
- STABILIZED CONSTRUCTION ENTRANCE
- 137.00 X PROPOSED SPOT ELEVATIONS
- —S— SILT FENCE
- —□— BARRIER FENCE
- —SSF— SUPER SILT FENCE
- —SS— DIVERSION SUPER SILT FENCE
- MATCHLINE
- LIMITS OF DISTURBANCE & CLEARING
- EXISTING TREE LINE
- FOREST PRESERVATION LINE
- TELEPHONE POLE
- SIGN

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C-12	75.00'	119.68'	76.90'	107.38'	91°25'54"	548291.04	1380909.22
C-13	125.00'	15.26'	7.64'	15.25'	06°59'37"	549410.90	1381711.43
C-14	125.00'	18.83'	9.43'	18.81'	08°37'48"	549502.56	1381761.45

TANGENT DATA FOR CENTERLINE OF PROPOSED SITE ROAD

LINE	DIRECTION	DISTANCE
T-1	S 44°20'21" E	59.58'
T-2	S 41°28'29" W	200.26'
T-3	S 79°27'39" E	86.58'
T-4	S 36°53'39" E	210.35'
T-5	N 77°25'11" W	197.56'
T-6	S 34°55'40" W	69.73'
T-7	S 86°51'18" W	142.64'
T-8	S 39°18'12" E	121.32'
T-9	S 18°01'26" E	151.38'
T-10	S 45°57'57" W	460.29'
T-11	N 55°48'57" W	355.90'
T-12	N 35°36'57" E	1293.01'
T-13	N 28°37'20" E	87.35'
T-14	N 37°15'08" E	375.19'

FOREST CONSERVATION EASEMENT AREA B

LINE	BEARING	DISTANCE
FCE1	N 42-51-41 E	66.23'
FCE2	N 46-52-27 E	159.98'
FCE3	N 39-45-21 E	428.99'
FCE4	N 44-23-07 W	1214.01'
FCE5	S 20-22-03 W	116.10'
FCE6	S 52-09-27 W	121.95'
FCE7	S 37-09-26 E	651.34'
FCE8	S 45-45-34 W	246.08'
FCE9	S 35-27-52 E	273.18'
FCE10	S 87-20-15 E	299.45'
FCE11	S 28-00-05 E	42.15'
FCE12	S 38-45-16 W	89.38'
FCE13	S 13-15-55 W	76.07'
FCE14	S 42-52-48 W	66.52'
FCE15	S 42-14-20 E	37.38'

NOTE: Signs indicating Forest Retention Area shall be placed along the Forest Conservation Easement lines where construction impacts the trees to remain. See sheet 8 for details of sign.

FOREST CONSERVATION EASEMENT AREA C

LINE	BEARING	DISTANCE
FCE1	N 36-30-22 E	276.32'
FCE2	N 42-51-34 W	[illegible]
FCE3	N 48-33-34 W	102.94'
FCE4	S 85-03-03 W	169.85'
FCE5	N 80-41-59 W	156.33'
FCE6	N 71-14-12 W	94.04'
FCE7	N 71-14-12 W	53.56'
FCE8	S 84-31-40 E	243.87'
FCE9	S 17-16-11 E	181.04'
FCE10	S 43-04-20 E	44.28'

NOTE: Signs indicating Forest Retention Area shall be placed along the Forest Conservation Easement lines where construction impacts the trees to remain. See sheet 8 for details of sign.

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/16/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 6/5/95

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-16-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/19/95

Gina Sirwimangi — 6/19/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/13/95

CHIEF, BUREAU OF ENGINEERING — DATE 6/13/95

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE	SEWER CODE				
Public	Private				

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

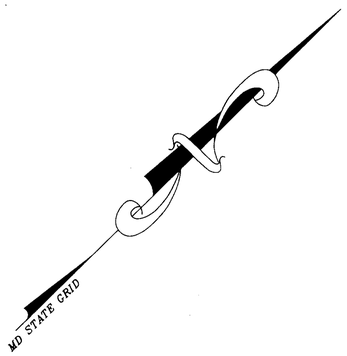
SITE PLAN AND SEDIMENT & EROSION CONTROL PLAN

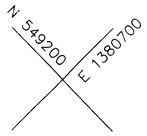
PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

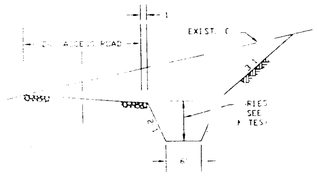
MARCH 29, 1995

SHEET 4 OF 17

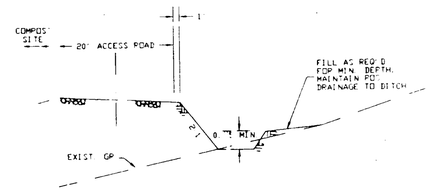
SDP 95-60







FULL DEPTH DITCH
IN CUT
NOT TO SCALE



PARTIAL DEPTH DITCH
IN FILL
NOT TO SCALE

TYPE B DITCH
TREATMENT FROM
ROAD STATION 36+75
TO STATION 5+75

MATCHLINE (SHEET 3 OF 17)
(SHEET 5 OF 17)

LEGEND

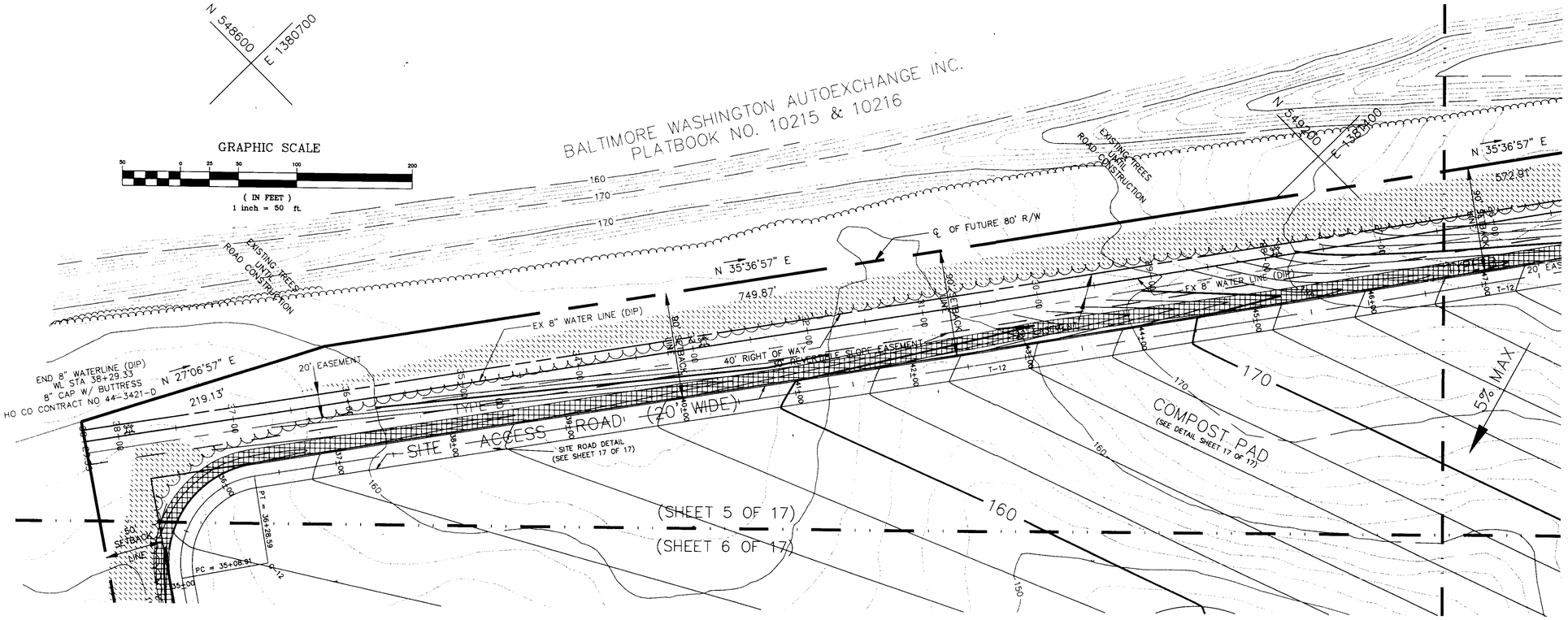
- DITCH TYPE B
- COM-1 CONTROL POINT
- MATCHLINE
- LIMITS OF DISTURBANCE & CLEARING
- EXISTING TREE LINE

NOTE: DITCH DEPTH FROM EDGE OF ROAD IS GREATER THAN 1.5' FROM ROAD STATION 36+75 TO STATION 45+25. DITCH DEPTH ON THE NORTH SIDE MAY BE LESS THAN 1.5' IN EXISTING LOW AREAS (SEE CROSS SECTIONS ABOVE). DITCH DEPTH TO RETURN TO TYPICAL 1.5' DEPTH AT STATION 36+25 AND STATION 45+75. DITCH INVERT ELEVATION AT STATION 43+10 TO BE 160.00; MAINTAIN CONSTANT DITCH SLOPE OF 4.65% BETWEEN STATIONS 43+10 AND 45+25. DITCH SLOPE FROM STATION 36+75 (INVERT ELEVATION @ 152.00) TO STATION 42+75 (INVERT ELEVATION @ 158.00) TO BE 1%. IF GIVEN ELEVATIONS DO NOT ALLOW INFLOW FROM ANY AREAS NORTH OF THE DITCH, ADJUST ELEVATIONS AS DIRECTED BY THE ENGINEER.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.



PROPERTY LINE DATA

LINE	DIRECTION	DISTANCE
PL1	S 61°19'33" W	50.02'
PL2	S 63°34'34" W	101.60'
PL3	S 61°04'34" W	100.00'
PL4	S 58°34'34" W	94.70'
PL5	S 61°34'34" W	100.70'
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PL20	S 47°27'34" W	100.60'
PL21	S 41°12'34" W	100.60'
PL22	S 37°22'34" W	100.30'
PL23	S 47°47'34" W	100.30'
PL24	S 33°42'35" W	101.60'
PL25	S 32°57'51" W	7.61'

CURVE DATA FOR CENTERLINE OF PROPOSED SITE ROAD

CURVE	RADIUS	LENGTH	TANGENT	CHORD	DELTA	PI COORDINATES N	PI COORDINATES E
C-1	75.00'	128.82'	86.90'	113.56'	98°24'31"	549877.89	1382046.88
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C-4	100.00'	74.29'	38.95'	72.60'	42°34'00"	549334.23	1382180.69
C-5	100.00'	243.43'	270.88'	187.62'	139°28'28"	548918.22	1382492.97
C-6	125.00'	147.59'	83.76'	139.17'	67°39'08"	548038.49	1381954.03
C-7	75.00'	67.97'	36.52'	65.67'	51°55'38"	548882.70	1381845.24
C-8	90.00'	198.17'	177.24'	160.49'	126°09'30"	548863.15	1381489.38
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THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zielke
APPROVED: HOWARD SOIL CONSERVATION DISTRICT — 6/16/95 DATE

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — 6/15/95 DATE

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — 6-16-95 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — 6/19/95 DATE

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — 6/19/95 DATE

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS:
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — 6/13/95 DATE

CHIEF BUREAU OF ENGINEERING — 6/13/95 DATE

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE		SEWER CODE			
Public		Private			

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

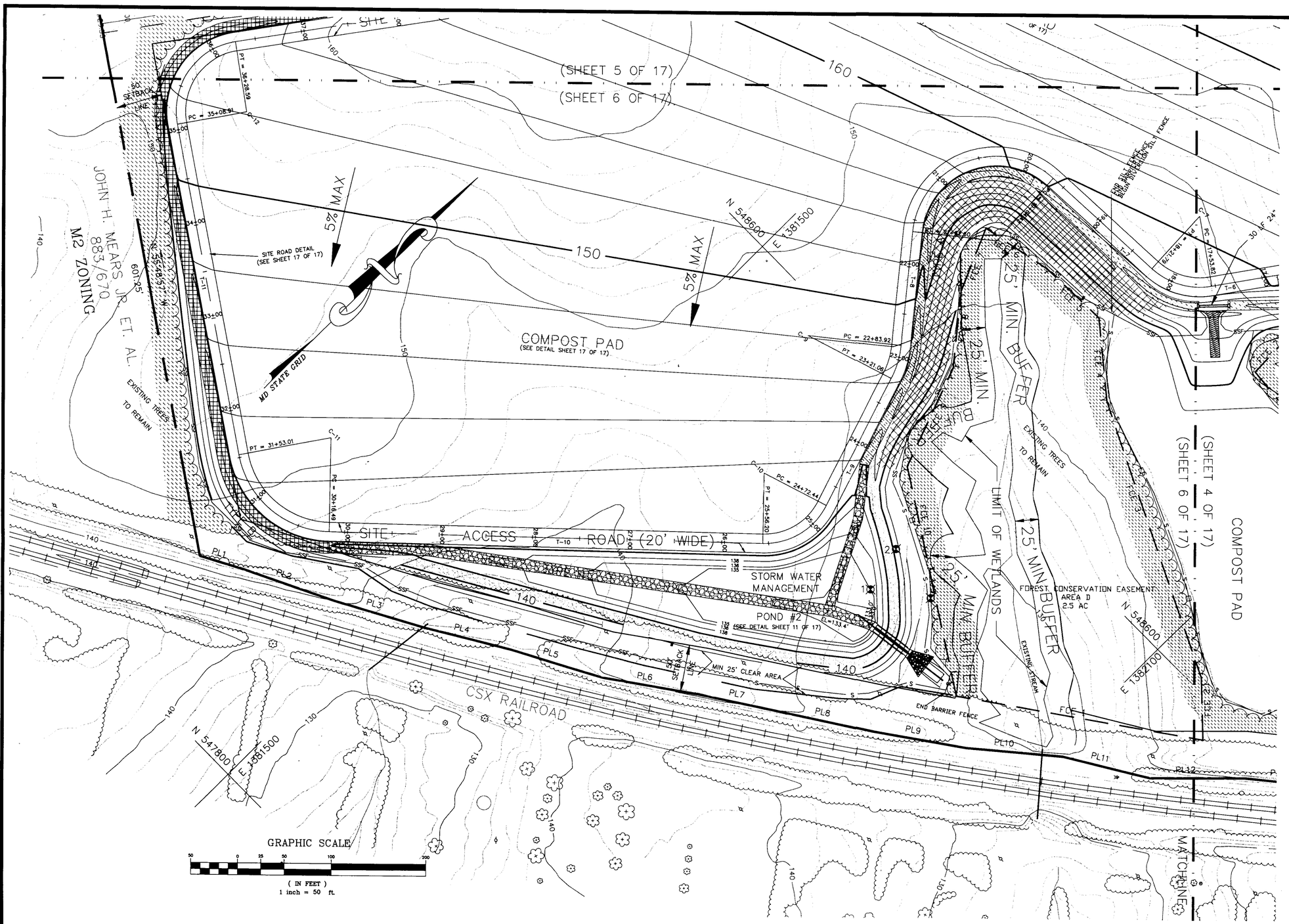
SITE PLAN AND
SEDIMENT & EROSION CONTROL PLAN

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, 1995

SHEET 5 OF 17

SDP-95-60



LEGEND

- DITCH TYPE A
- DITCH TYPE B
- DITCH TYPE E
- DITCH TYPE F
- DITCH TYPE H
- 1 BORING
- STABILIZED CONSTRUCTION ENTRANCE
- 137.00 X PROPOSED SPOT ELEVATIONS
- —s— SILT FENCE
- —ssf— SUPER SILT FENCE
- —ss— DIVERSION SUPER SILT FENCE
- —□— BARRIER FENCE
- MATCHLINE
- LIMITS OF DISTURBANCE & CLEARING
- EXISTING TREE LINE
- FOREST PRESERVATION LINE
- TELEPHONE POLE
- SIGN

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/16/95

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U.S. SOIL CONSERVATION SERVICE — DATE 6/15/95

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COUNTY HEALTH OFFICER — DATE 6-16-95

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BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

SITE PLAN AND SEDIMENT & EROSION CONTROL PLAN

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, 1995

SHEET 6 OF 17

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PL19	S 46°12'36" W	50.80'
PL20	S 47°27'34" W	100.60'
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T-10	S 45°57'57" W	460.29'
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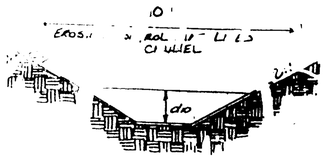
T-13	N 28°37'20" E	87.35'
T-14	N 37°15'08" E	375.19'

FOREST CONSERVATION EASEMENT AREA D

LINE	BEARING	DISTANCE
FCE1	[illegible]	[illegible]
FCE2	[illegible]	[illegible]
FCE3	[illegible]	[illegible]
FCE4	[illegible]	[illegible]
FCE5	[illegible]	[illegible]
FCE6	[illegible]	[illegible]
FCE7	[illegible]	[illegible]
FCE8	[illegible]	[illegible]
FCE9	[illegible]	114.74'
FCE10	[illegible]	249.43'

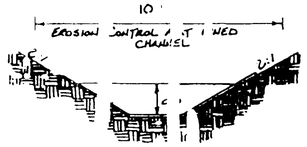
Note: Signs indicating Forest Conservation Area shall be placed along the forest conservation easement where construction adjacent to forest conservation easement is anticipated. Signs shall be placed at intervals not to exceed 100 feet.

SDP 95-60



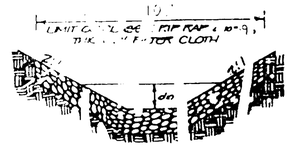
Qo = 6.5 cfs
do = .5 FT
A = 2.35 FT²
WP = 6.1 FT
N = .06
S = 4.5 %
Vo = 2.77 F/S

TYPICAL SECTION
CHANNEL A
N.T.S.



Qo = 9.9
do = .73 FT
A = 3.97 FT²
WP = 7.26 FT
N = .06
S = 1.87 %
Vo = 2.27 F/S

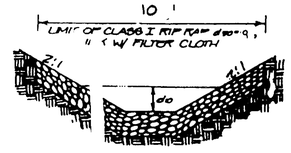
TYPICAL SECTION
CHANNEL H
N.T.S.



Qo = 11 cfs
do = .56 FT
A = 2.88 FT²
WP = 6.5 FT
N = .065
S = 8.3%
Vo = 3.8 F/S

TYPICAL SECTION
SEDIMENT POND 1 INFLOW CHANNEL D

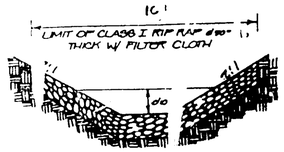
N.T.S.



Qo = 6.5 cfs
do = .4 FT
A = 1.9 FT²
WP = 5.77 FT
N = .065
S = 10%
Vo = 3.4 F/S

TYPICAL SECTION
SEDIMENT POND #2 INFLOW CHANNEL E

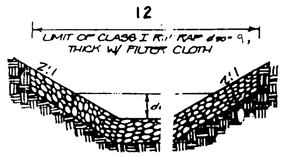
N.T.S.



Qo = 9.6 cfs
do = .45 FT
A = 2.2 FT²
WP = 6 FT
N = .065
S = .12 %
Vo = 4 F/S

TYPICAL SECTION
SEDIMENT POND 1 INFLOW CHANNEL C

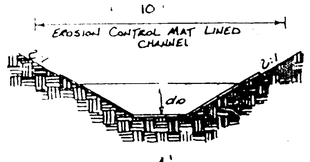
N.T.S.



Qo = 22.1 cfs
do = .9 FT
A = 7.34 FT²
WP = 10.7 FT
N = .065
S = 2.66
Vo = 3 F/S

TYPICAL SECTION
SEDIMENT POND 2 INFLOW CHANNEL F

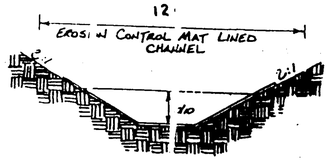
N.T.S.



Qo = 11 cfs
do = .59 FT
A = 3.1 FT²
WP = 6.66 FT
N = .06
S = 5.7 %
Vo = 3.5 F/S

TYPICAL SECTION
CHANNEL G

N.T.S.

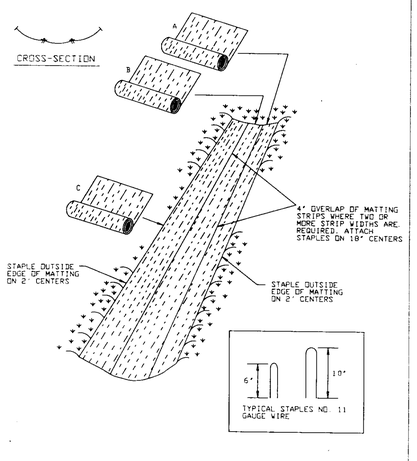


Qo = 22 cfs
do = 1 FT
A = 7.84 FT²
WP = 10.4 FT
N = .06
S = 1.8 %
Vo = 2.8 F/S

TYPICAL SECTION
CHANNEL B

N.T.S.

DETAIL 30 - EROSION CONTROL MATTING



U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

EROSION CONTROL MATTING

Construction Specifications

1. Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".

2. Staple the 4' overlap in the channel center using an 18" spacing between staples.

3. Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.

4. Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.

5. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.

6. The discharge end of the matting liner should be similarly secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area effected by the flow must be keyed-in.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G - 22 - 2A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit
2. Notify Howard County Bureau of Inspection and Permits (313-1880) at least 48 hours prior to starting any work.
3. Construct Stabilized Construction Entrance (week 1).
4. Stakeout site as needed for grading (week 1).
5. Stakeout wetlands and buffer zone (week 1).
6. Clear and grub for super silt fence, super diversion fence and berms (week 2).
7. Install silt fencing (both regular and super) and berms. Install super diversion fence (week 2).
8. Construct stormwater management ponds, excavating to elevation shown to provide for sediment control. At stormwater pond #1, block the 1.5' orifice and the weir to elevation 139.65. Install a 3" orifice at elevation 135.1. In stormwater pond #2, block off 2" orifice. Install an 8" orifice at elevation 133. Mark the risers with the cleanout elevations:
   Pond #1 -- 133.8'
   Pond #2 -- **131.5'**
   (weeks 3 and 4)
9. Construct drainage channels (weeks 5&6).
10. Stabilize disturbed areas with vegetation (concurrent with other activities).
11. Clear and grub areas to be graded (weeks 5,6&7).
12. Install utilities (weeks 6,7&8).
13. Grade and construct entrance roads, scale and scalehouse, perimeter road, parking lot and maintenance shed area (weeks 9,10,11&12).
14. Compact compost pad areas with layer of woodchips (weeks 12,13 &14).
15. Stabilize disturbed areas with vegetation (concurrent with other activities).
16. Convert sediment basins to permanent stormwater management ponds. In stormwater management pond #1, remove plate from weirs and open low flow orifice and block off the 3 inch orifice. In stormwater management pond #2, open low flow orifice. Install caps with the orifices per detail (week 15).
17. During grading and after each rainfall, the Contractor shall inspect and provide necessary maintenance on the sediment and erosion control measures shown hereon.
18. 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, swales, ditch perimeter slopes and all slopes greater than 3:1
    B. 14 calendar days for all other disturbed area.

19. With the approval of the sediment control inspector remove all sediment control structures, leaving super silt fencing.

By the Owner:

"I am [illegible] and will be [illegible] responsible [illegible] project site [illegible] Department [illegible] Erosion and Sediment Control [illegible] before beginning [illegible] periodic inspection [illegible] Howard County."

James W. Peck
JAMES W. PECK 6/8/95
Signature of Owner Date
Print name below signature

By the Engineer:

"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. Shaw 6/8/95
Signature of Engineer Date
Print name below signature
LOUIS E. SHAW III
Reviewed for HOWARD S.C.D. and meets Technical Requirements

U.S. Soil Conservation Service — Date

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

Howard S.C.D. — Date

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zieber
APPROVED: HOWARD SOIL CONSERVATION DISTRICT
PLAN NUMBER — DATE 6/16/95

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Patricia Eagle 6/16/95
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

George W. Boyd 6-16-95
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

6/19/95
DIRECTOR — DATE

Glenn Summers 6/19/95
CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

6/13/95
DIRECTOR — DATE

6/13/95
CHIEF BUREAU OF ENGINEERING — DATE

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE		SEWER CODE			
Public		Private			

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

SEDIMENT AND EROSION CONTROL DETAILS

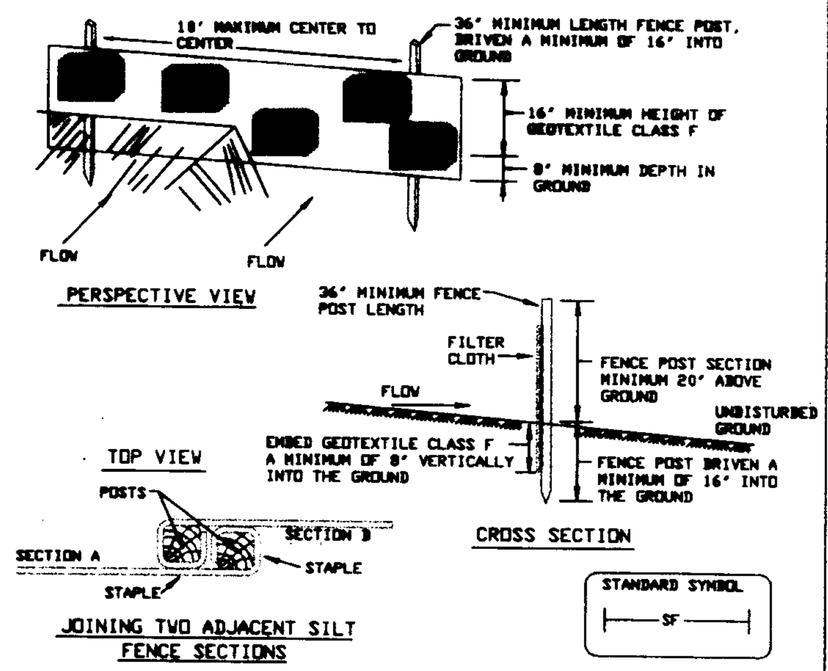
PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, 1995

SHEET 7 OF 17

SDP 95-60

DETAIL 22 - SILT FENCE



Construction Specifications

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

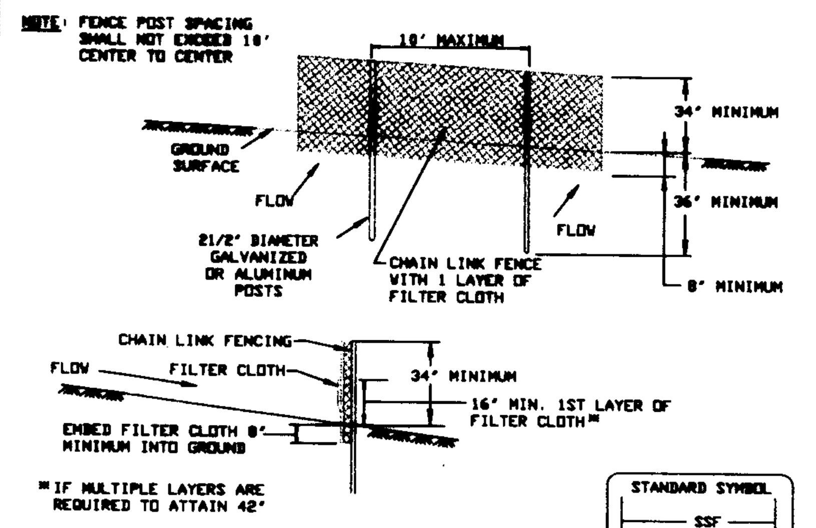
Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft²/ minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

3. Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.

4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE E - 15 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL 33 - SUPER SILT FENCE



Construction Specifications

1. Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.

2. Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 8" into the ground.

5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

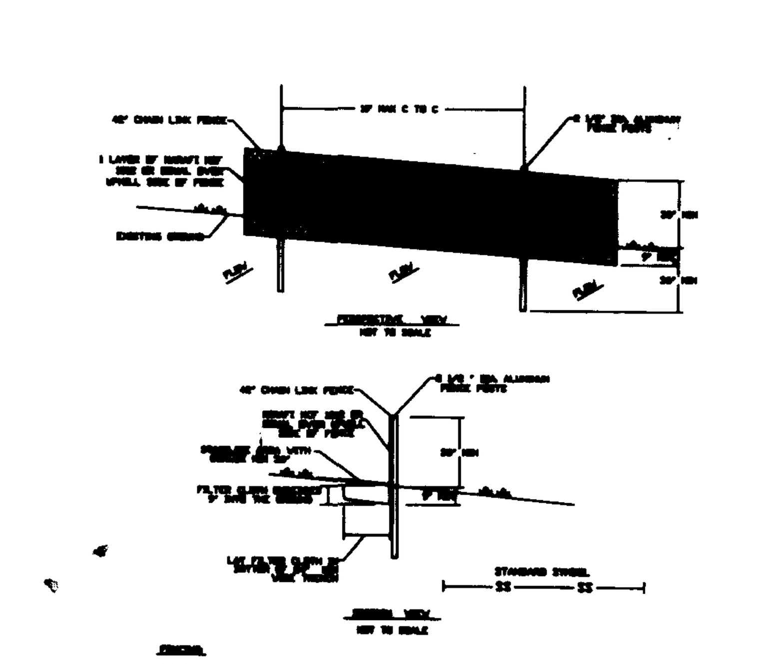
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height

7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal/ft²/minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE H - 26 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

SUPER DIVERSION FENCE



HOWARD SOIL CONSERVATION DISTRICT

1) A minimum of 48 hours ... must be given to the ... Licenses and Permits, Sediment Control Division ... the start of any ... (313-1???).

2) All vegetative and structural practices are to be installed according to the ... this plan and are to be ... conformance with the most current ... SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.

3) Following initial soil disturbance ... redisturbance, permanent or temporary stabilization shall be completed within ... calendar days for ... 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 ... 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 1991 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding (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.

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 5± Acres
   - Area Disturbed 2± Acres
   - Area to be roofed or paved 1.1 Acres
   - Area to be vegetatively stabilized 24.9 Acres
   - Total Cut 100,000 Cu. Yds. OR STABILIZED WITH WOODCHIPS
   - Total Fill 25,000 Cu. Yds.
   - Offsite waste/borrow area location N/A

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 control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.

10) 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.

11) Trenches for the construction of utilities is limited to three pipe lengths or that which can be backfilled and stabilized within one working day, whichever is shorter.

Min 11"

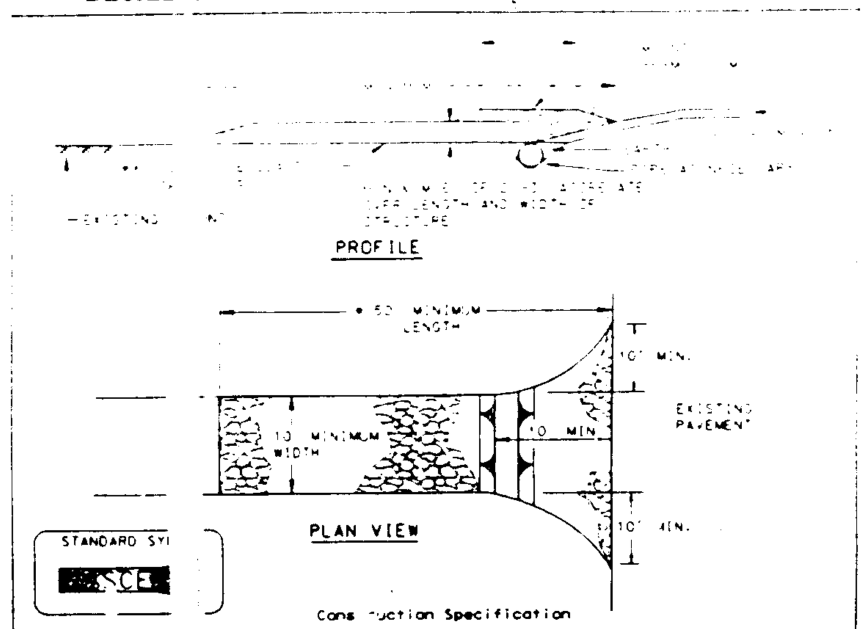
Min 15"

FOREST RETENTION AREA

MACHINERY, DUMPING OR STORAGE OF ANY MATERIALS IS
PROHIBITED

VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE HOWARD COUNTY FOREST CONSERVATION ACT OF 1992

DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



Construction Specification

1. Length - minimum of 50' (*30' for single residence lot).

2. Width - 10' minimum, should be flared at the existing road to provide a turning radius.

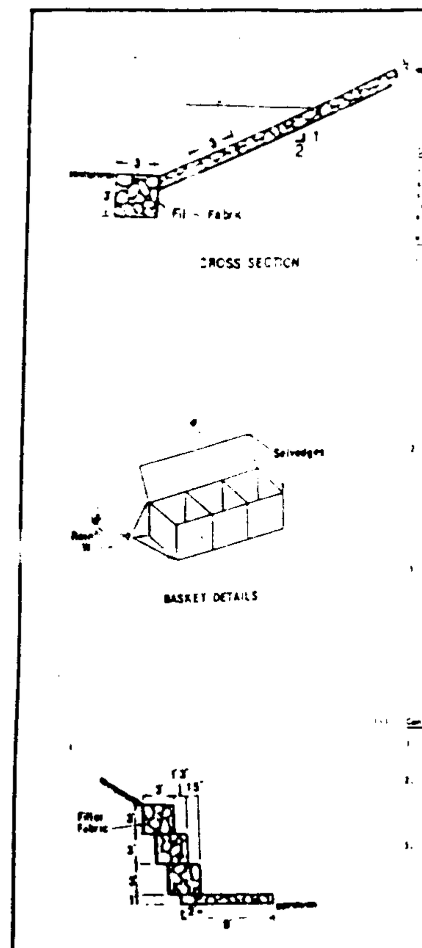
3. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. The plan approval authority may not require single family residences to use geotextile.

4. Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.

5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and has no drainage to convey a pipe will not be necessary. Pipe should be sized according to the amount of runoff to be conveyed. A 6" minimum will be required.

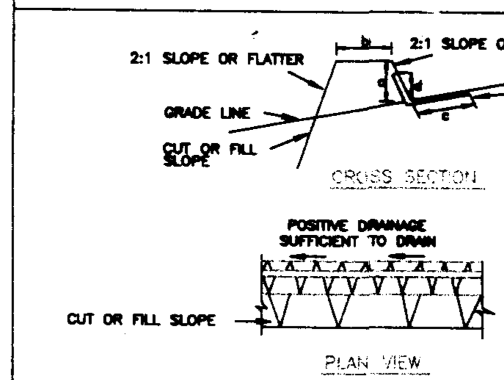
6. Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE F - 17 - 3	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



WATER RESOURCES ADMINISTRATION	Gabion	Approved On 1/24/86 Chief, Waterway Permits	WPD 3.2

DETAIL 1 - EARTH DIKE



	DIKE A	DIKE B
a—DIKE HEIGHT	18"	30"
b—DIKE WIDTH	24"	36"
c—FLOW WIDTH	4'	6'
d—FLOW DEPTH	12"	24"

STANDARD SYMBOL
A-2 B-3

FLOW CHANNEL STABILIZATION
GRADE 0.5% MIN. 10% MAX.

1. Seed and cover with straw mulch.
2. Seed and cover with Erosion Control Matting or line with sod.
3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum

Construction Specifications

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.

2. Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.

3. Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erosive velocity.

4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike.

5. The dike shall be excavated or shaped to line, grade and cross section as required to meet the criteria specified herein and be free of bank projections or other irregularities which will impede normal flow.

6. Fill shall be compacted by earth moving equipment.

7. All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.

8. Inspection and maintenance must be provided periodically and after each rain event.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE A - 1 - 6	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

HOWARD SOIL CONSERVATION DISTRICT
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:
1. Preferred -- Apply 2 tons/acre dolomitic limestone (92 lbs/1000 sq. ft.) and 600 lbs/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/acre 30-0-0 ureaform fertilizer (9 lbs/1000 sq. ft.)
2. Acceptable -- Apply 2 tons/acre dolomitic limestone (92 lb/1000 sq. ft.) and 1000 lbs/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 -- April 30, and August 1 -- October 15, seed with 60 lbs/acre (1.4 lbs/1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 -- July 31, seed with 60 lbs Kentucky 31 Tall Fescue per acre and 2 lbs/acre (.05 lbs/1000 sq. ft.) of weeping lovegrass. During the period of October 16 -- February 28, protect site by: Option 1 -- Two 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 30 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 slope 8 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.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be re-disturbed 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 600 lbs/acre 10-10-10 fertilizer (14 lbs/1000 sq. ft.).

Seeding: -- For periods March 1 -- April 30 and from August 15 -- October 15, seed with 2-1/2 bushel per acre of annual rye (3.2 lbs/1000 sq. ft.). For the period May 1 -- August 14, seed with 3 lbs/acre of weeping lovegrass (.07 lbs/1000 sq. ft.). For the period November 16 -- February 28, protect site by applying 2 tons/ 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/acre (70 to 90 lbs/1000 sq. ft.) of unrotted weed-free, 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 addition rates and methods not covered.

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — 6/16/95 DATE

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — 6/15/95 DATE

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — 6-16-95 DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — 6/19/95 DATE

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — 6/13/95 DATE

CHIEF, BUREAU OF ENGINEERING — 6/13/95 DATE

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	698
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE	SEWER CODE				
Public	Private				

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

SEDIMENT AND EROSION CONTROL DETAILS

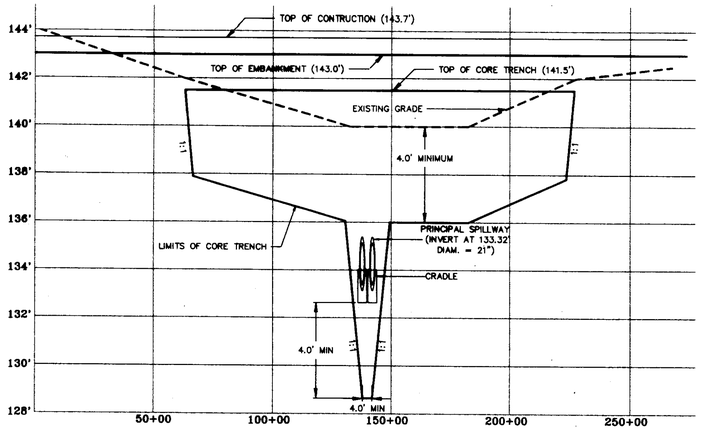
STATE OF MARYLAND — LOUIS E. SHAW — PROFESSIONAL ENGINEER

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

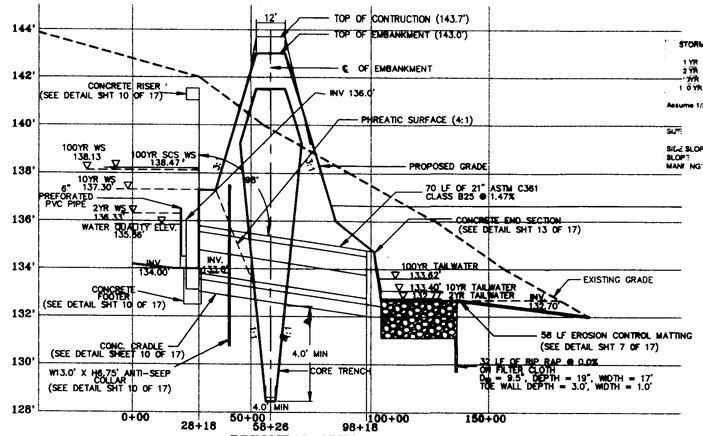
MARCH 29, 1995

SHEET 8 OF 17

SDP-95-60



EMBANKMENT PROFILE A–A



PRINCIPAL SPILLWAY PROFILE B–B

STORMWATER MANAGEMENT POND 1

STORM	DR. AREA ACRES	INVERT FT	INFLOW CFS	DISCHARGE CFS	STORAGE AC.-FT.	VEL. FPS	VOLUME AC.-FT.	ELEVATION FT	CHANNEL VEL FPS	TW ELEV FT
1 YR	12.94	134	1	.68		1.39	13	136.36	.48	.03
2 YR		136	2.96	36		2.38	33	136.93	.62	.03
2YR		136.3	12.91	4.96		3.80	.45	137.3	2.27	.32
10 YR		137.3	27.76	21.97		5.39	.86	138.13	3.71	.72

Assume 1/2 flow through each of two 1.75' diameter pipes

SIZE	Barrel 1.75' dia (2)	Channel 8' BW
SIDE SLOPES	na.	3:1
SLOPE	0.0147	0.0125
MANNING'S n	0.013	0.06

FOR SEDIMENT CONTROL

D. AREA	17.94 ac
BOTTOM ELEVATION	131 ft
VOLUME REQUIRED	8.1 ac -ft
VOLUME PROVIDED	9.54 ac -ft
CLEANOUT ELEVATION	133.8 ft
2 YR. ST. INV. DURING CONSTR	136.1 ft

SEDIMENT CONTROL & POND CONSTRUCTION

( ) By the Developer:

"I/We certify that if development and or construction will be done according to these plans and that we are responsible personnel having charge of the construction project will have a copy of the approved plan on the site at all times. I/We also certify that we will notify the Howard Soil Conservation District in writing of the name of the person responsible for installing the sediment control practices and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

James W. Peake
JAMES W. PEAKE
Signature of Developer
Print name below signature
6/8/95
Date

( ) By the Engineer:

"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. This plan was prepared in conformance with the requirements of the Howard Soil Conservation District. I have notified the developer that he/she must engage a registered professional engineer to operate pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

Louis E. Shaw II
LOUIS E. SHAW II
Signature of Engineer
Print name below signature
6/8/95
Date

( ) These plans have been reviewed for the Howard Soil Conservation District and meet the included requirements for small pond construction, soil erosion and sediment control.

U.S. Natural Resources Conservation Service — Date

( ) These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

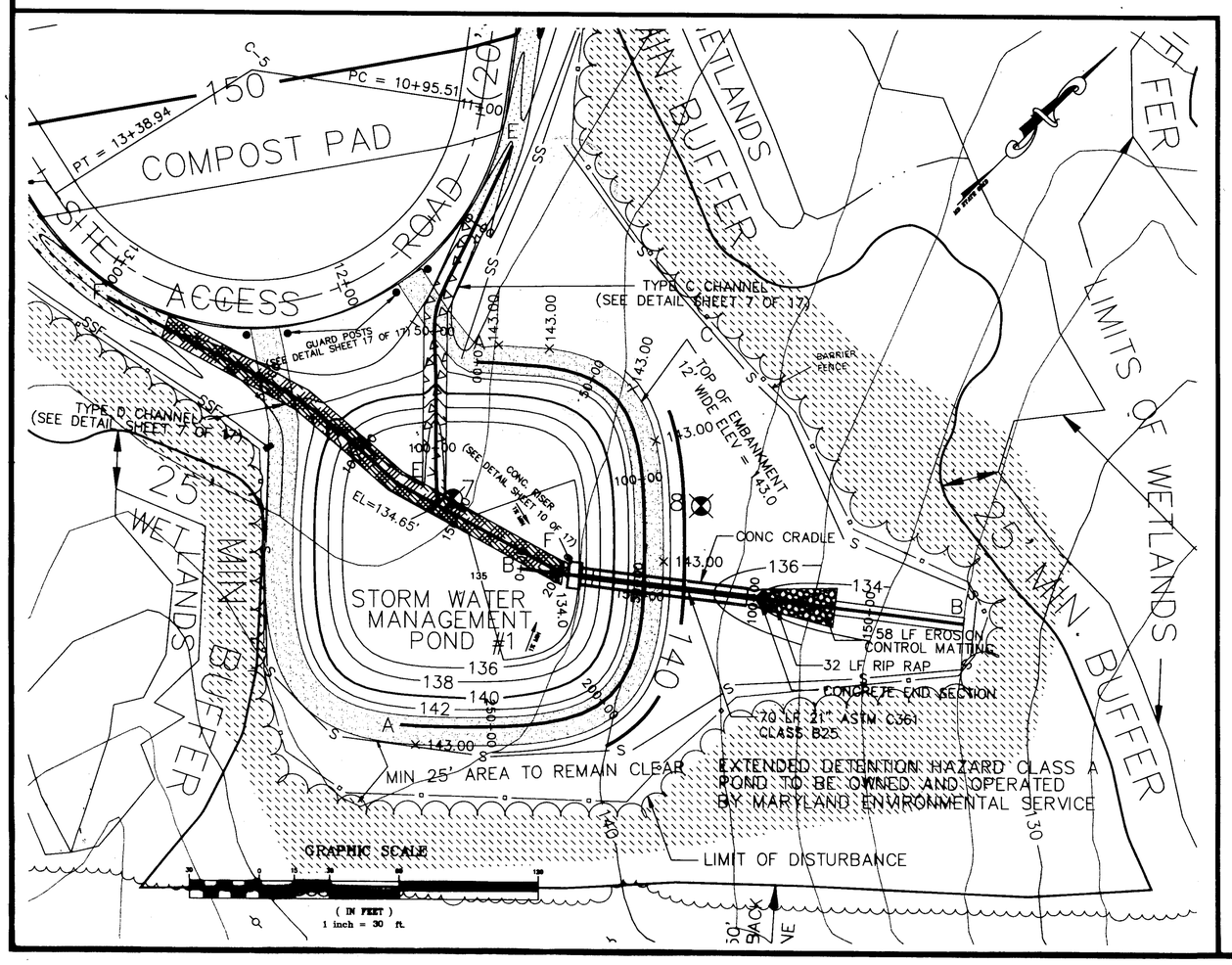
Howard Soil Conservation District — Date

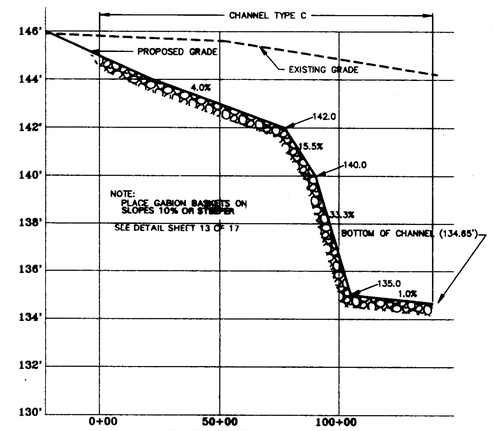
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

NOTES:

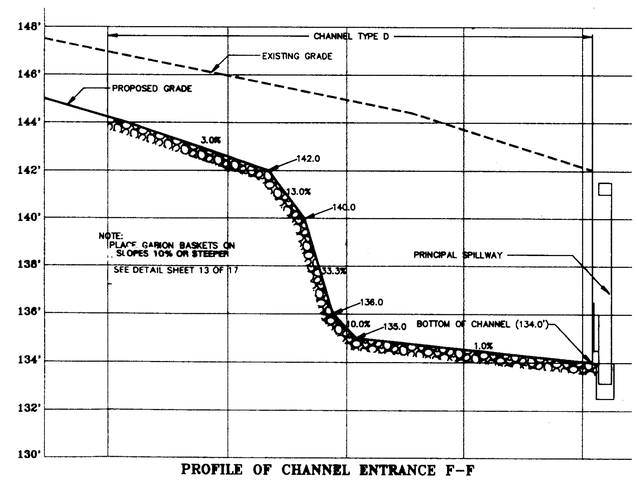
FOR OUTLET STRUCTURE, PIPE CRADLE, AND ANTI-SEEP COLLAR DETAILS, SEE SHEET 10 OF 17.

FOR STANDARD POND CONSTRUCTION NOTES, SEE SHEET 13 OF 17.





PROFILE OF CHANNEL ENTRANCE E–E



PROFILE OF CHANNEL ENTRANCE F–F

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/14/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 6/15/95

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-16-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/19/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/19/95

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/13/95

CHIEF, BUREAU OF ENGINEERING — DATE 6/13/95

SUBDIVISION NAME			SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility			N/A	698
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE	SEWER CODE				
Public	Private				

OWNER/DEVELOPER — Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

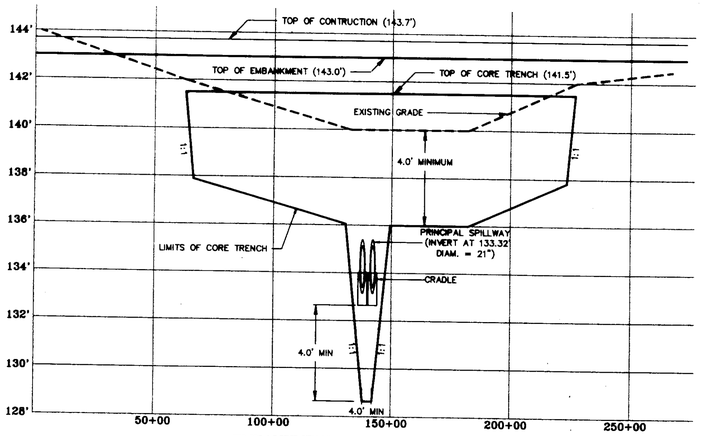
STORM WATER MANAGEMENT POND #1
PLAN AND PROFILE

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

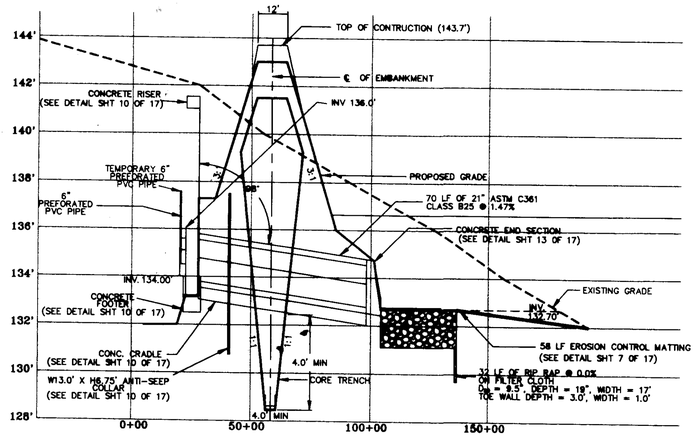
MARCH 29, 1995

SHEET 9 OF 17

SDP-95-60



EMBANKMENT PROFILE A-A



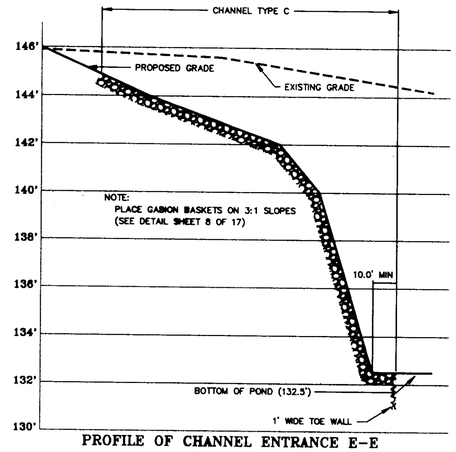
PRINCIPAL SPILLWAY PROFILE B-B

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

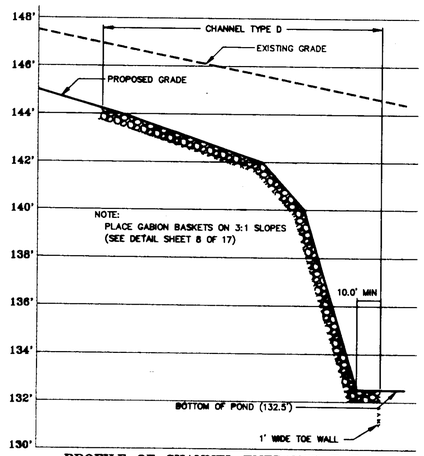
NOTES:

FOR OUTLET STRUCTURE, PIPE CRADLE, AND ANTI-SEEP COLLAR DETAILS, SEE SHEET 10 OF 17.

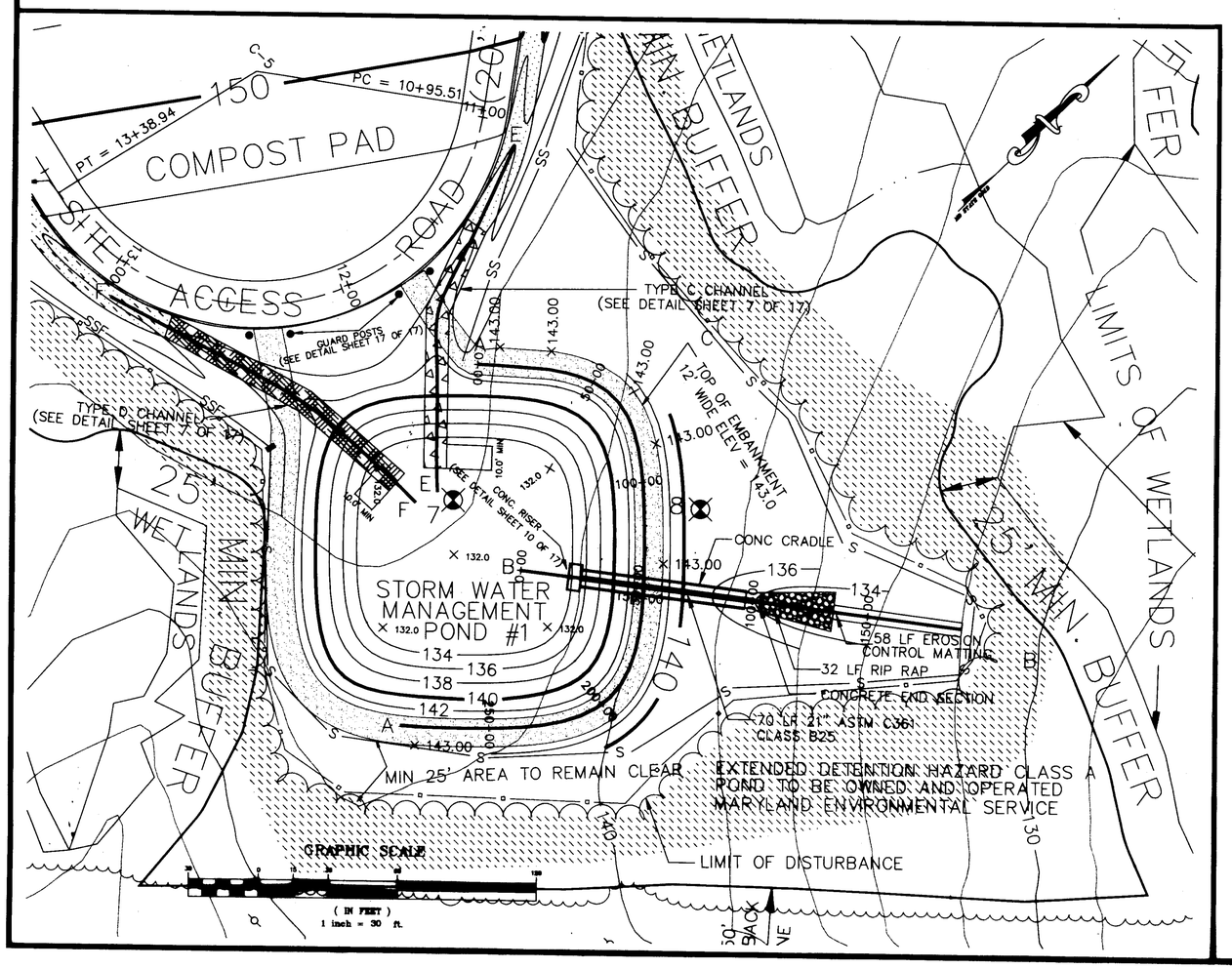
FOR STANDARD POND CONSTRUCTION NOTES, SEE SHEET 13 OF 17.



PROFILE OF CHANNEL ENTRANCE E-E



PROFILE OF CHANNEL ENTRANCE F-F



THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/16/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 6/15/95

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-16-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/19/95

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/19/95

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/13/95

CHIEF BUREAU OF ENGINEERING — DATE 6/13/95

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE	SEWER CODE				
Public	Private				

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

STORM WATER MANAGEMENT POND #1
PLAN AND PROFILE
DURING CONSTRUCTION

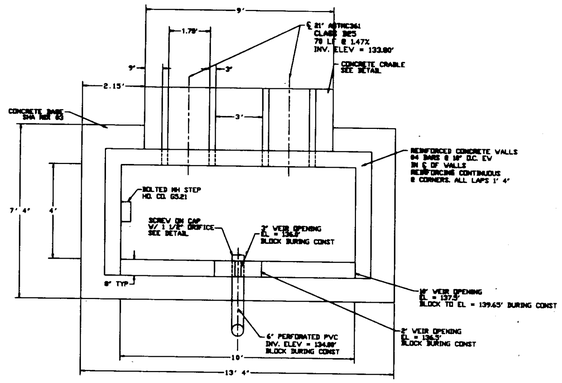
PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, 1995

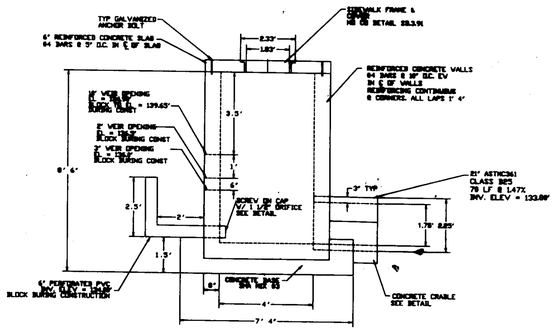
SHEET 9A OF 17

SDP-95-60

PLAN VIEW

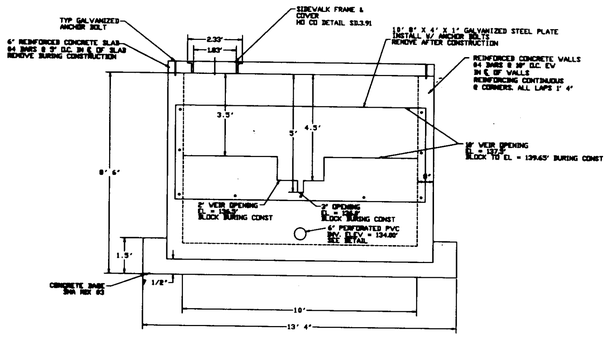


RIGHT SIDE VIEW

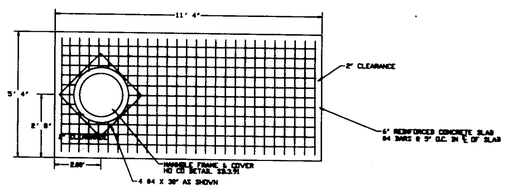


NOT TO SCALE

FRONT VIEW

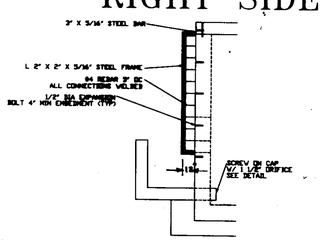


COVER DETAIL

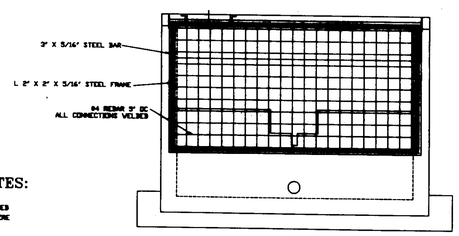


TRASH RACK DETAILS

RIGHT SIDE VIEW



FRONT VIEW

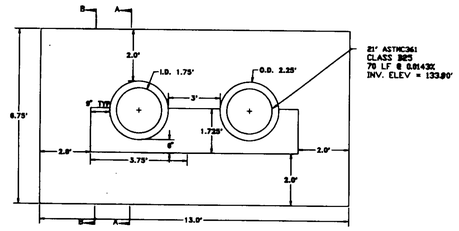


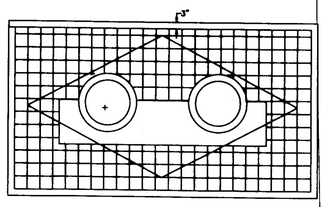
TRASH RACK NOTES:

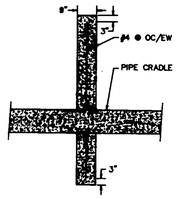
1. USE #4 REBAR ALL CONNECTIONS WELDED
2. ALL ELEMENTS TO HAVE 2 COATS OF ZINC COLD GALVANIZING COMPOUND
3. ALL BARS TO BE ASTM 615 GRADE 60.

ANTI-SEEP COLLAR & CONCRETE CRADLE DETAIL SWP #1

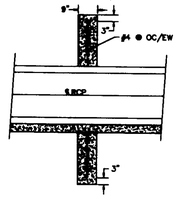
NOT TO SCALE



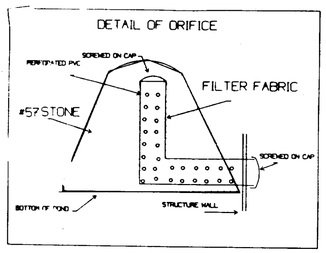


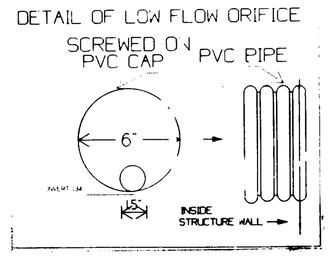


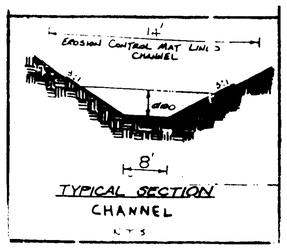
SECTION B-B

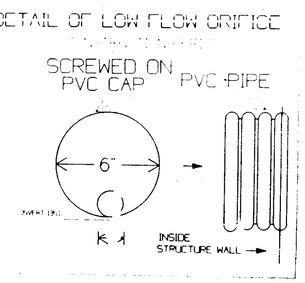


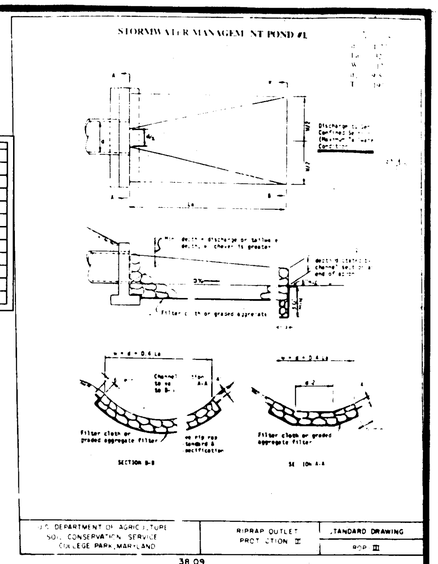
SECTION A-A











THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 4/16/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 4/18/95

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-8-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/19/95

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/19/95

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/19/95

CHIEF BUREAU OF ENGINEERING — DATE 6/19/95

SUBDIVISION NAME	SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility	N/A	698

LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	

WATER CODE	SEWER CODE
Public	Private

OWNER/DEVELOPER: Maryland Environmental Service, 8011 Connerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

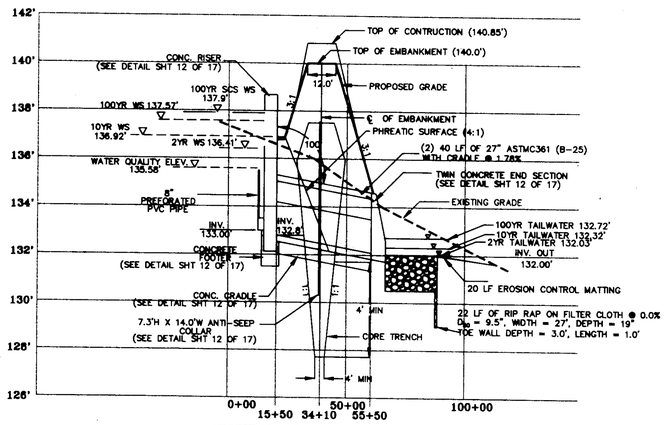
HOWARD COUNTY, MARYLAND

STORM WATER MANAGEMENT POND #1 DETAILS

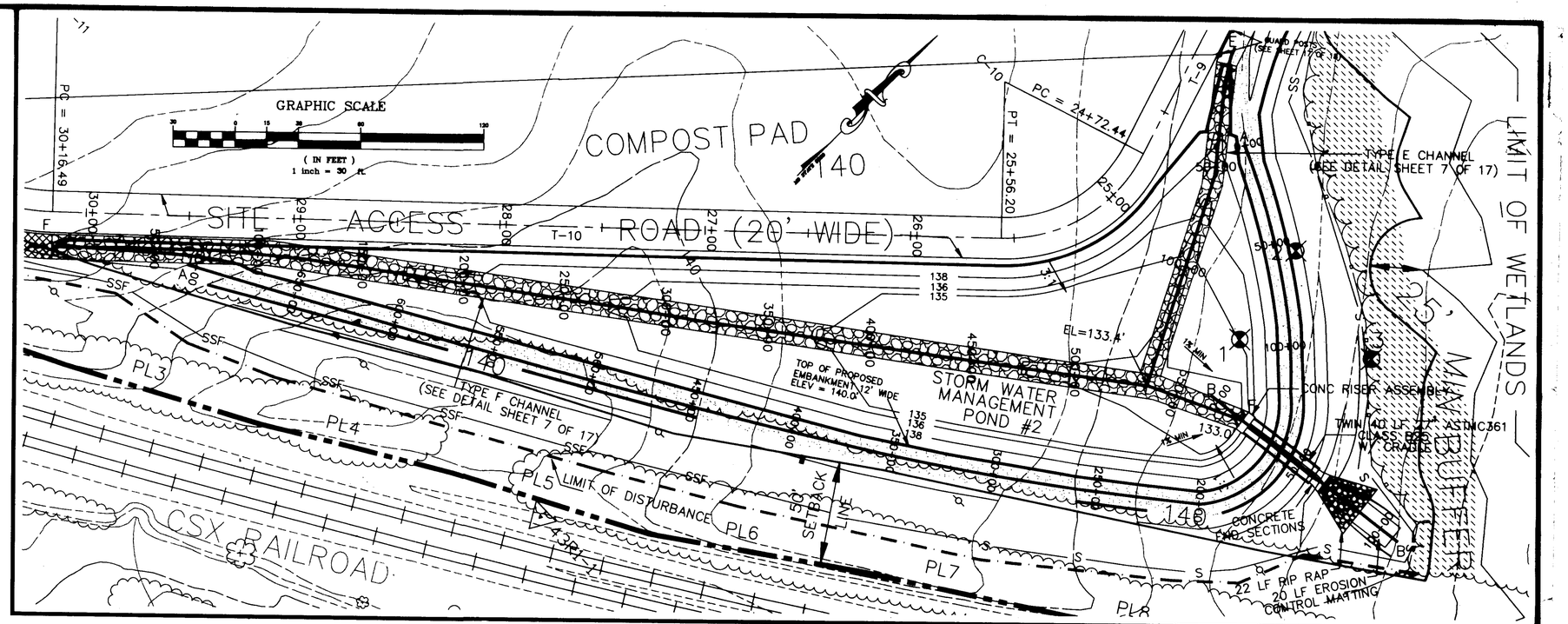
PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE — MARCH 29, 1995

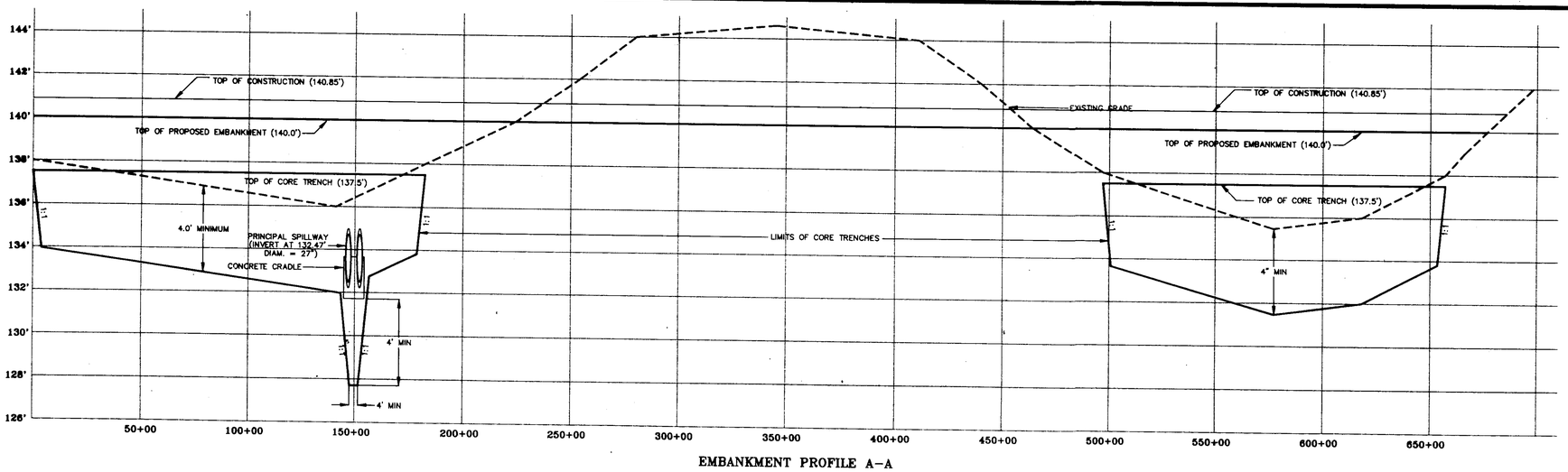
SHEET 10 OF 17

SDP. 95-60



PRINCIPAL SPILLWAY PROFILE B-B





EMBANKMENT PROFILE A-A

SEDIMENT CONTROL & POND CONSTRUCTION

( ) By the Developer:

"I/We certify that all development and or construction will be done according to these plans, and that any responsibility assumed thereof in this 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 program. I shall assign a responsible professional engineer to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion. I also authorize periodic on-site inspections by the Howard Soil Conservation District."

Jonathan W. Park
James W. Beam
Print name below signature

6/8/95
Date

( ) By the Engineer:

"I certify that this plan for pond construction, erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions. The plan was prepared in accordance with the requirements of the Howard Soil Conservation District Manual. I have written the certificate that follows under oath as a registered professional engineer. I also agree to supervise pond construction and provide the Howard Soil Conservation District with an "as-built" plan of the pond within 30 days of completion."

Louis E. Shaw II
Louis E. Shaw II
Print name below signature

6/8/95
Date

( ) These plans have been reviewed for the Howard Soil Conservation District and meet the technical requirements for small pond construction, soil erosion and sediment control.

U.S. Natural Resources Conservation Service — Date

( ) These plans for small pond construction, soil erosion and sediment control meet the requirements of the Howard Soil Conservation District.

Howard Soil Conservation District — Date

STORMWATER MANAGEMENT POND 2

STORM	DR. AREA ACRES	INVERT FT	INFLOW CFS	DISCHARGE CFS	BARREL FPS	EL. * VOLUME Ac.-ft	ELEVATION FT	CHANNEL FPS	VEL. FT.	TW ELEV FT.
1	16.04	133	5.15	16	2.02	37	135.58	29	.03	
10		136.5	10.31	2	2.17	73	136.41	46	.0	
100		136.5	30.8	14.8	4.41	99	136.92	4.52	.36	
100 YR		136.5	55.57	37.56	10.14	1.34	137.57	3.95	8	

Assume 1.2 flow through each of two 1.75' diameter pipes

	Barrel	Channel	
SIZE	2.25' dia (2)	12'	BW
SIDE SLOPES	na	3:1	
SLOPE	0.0178	0.043	
MANNING'S n	0.013	0.06	

FOR SEDIMENT CONTROL

D. AREA	19.04 ac
BOTTOM ELEVATION	130 ft
VOLUME REQ'D	0.79 ac.-ft.
VOLUME PROV'D	0.83 ac.-ft.
CLEANOUT ELEVATION	131.5 ft
2 YR. ST. INV. W/ RING CONSTR.	133 ft

NOTES:

FOR OUTLET STRUCTURE, PIPE CRADLE, AND ANTI-SEEP COLLAR DETAILS, SEE SHEET 12 OF 17.
FOR STANDARD POND CONSTRUCTION NOTES, SEE SHEET 13 OF 17.

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zielke
APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/16/95
PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

Patricia Engler 6/15/95
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT

6-16-95
HOWARD HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

6/19/95
DIRECTOR — DATE

6/19/95
CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

6/13/95
DIRECTOR — DATE

6/13/95
CHIEF BUREAU OF ENGINEERING — DATE

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE	SEWER CODE				
Public	Private				

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

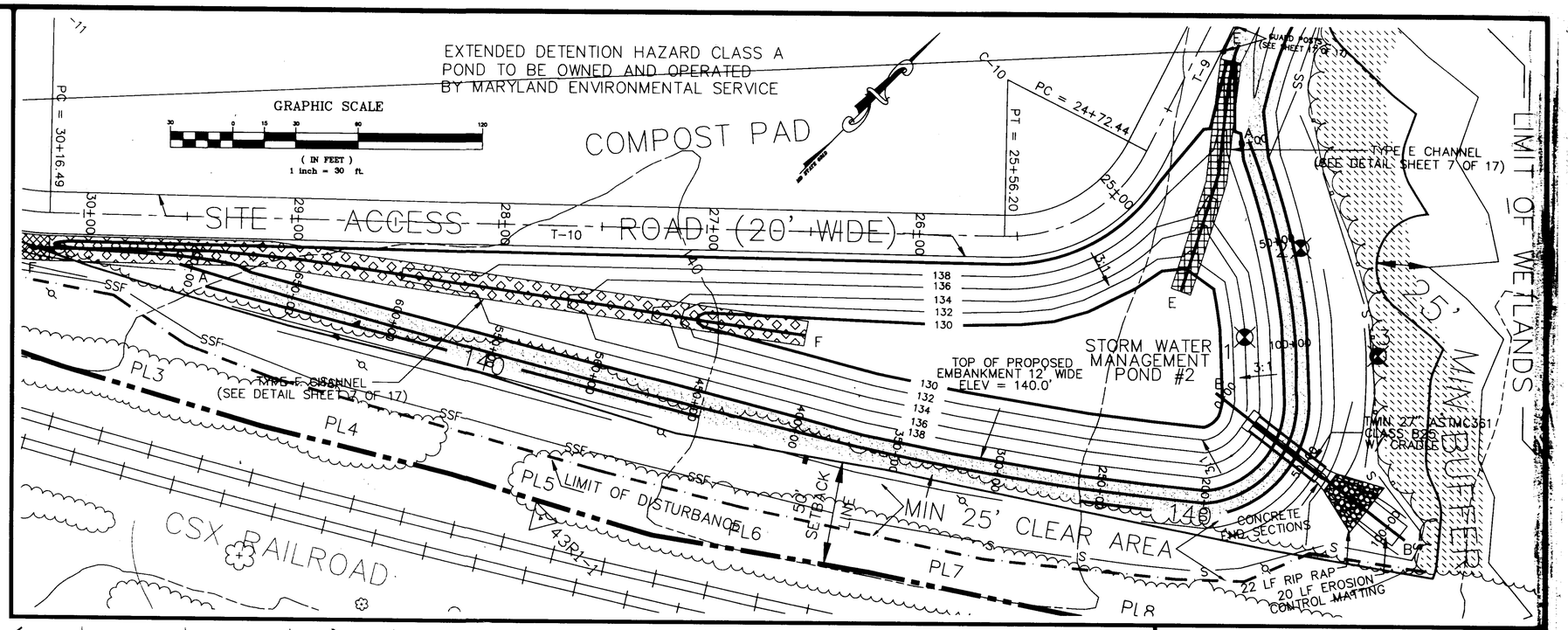
STORM WATER MANAGEMENT POND #2
PLAN AND PROFILE

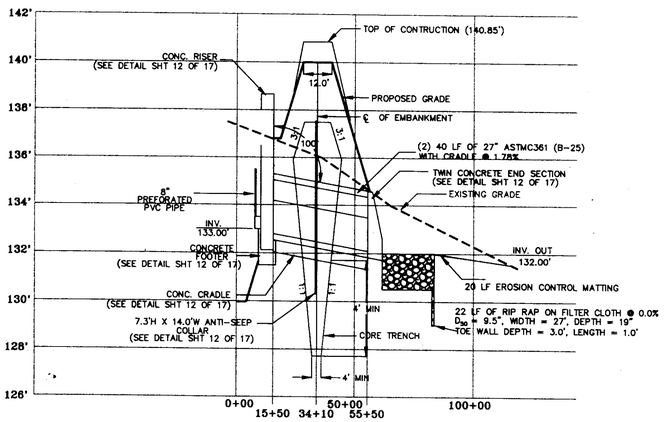
PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, 1995

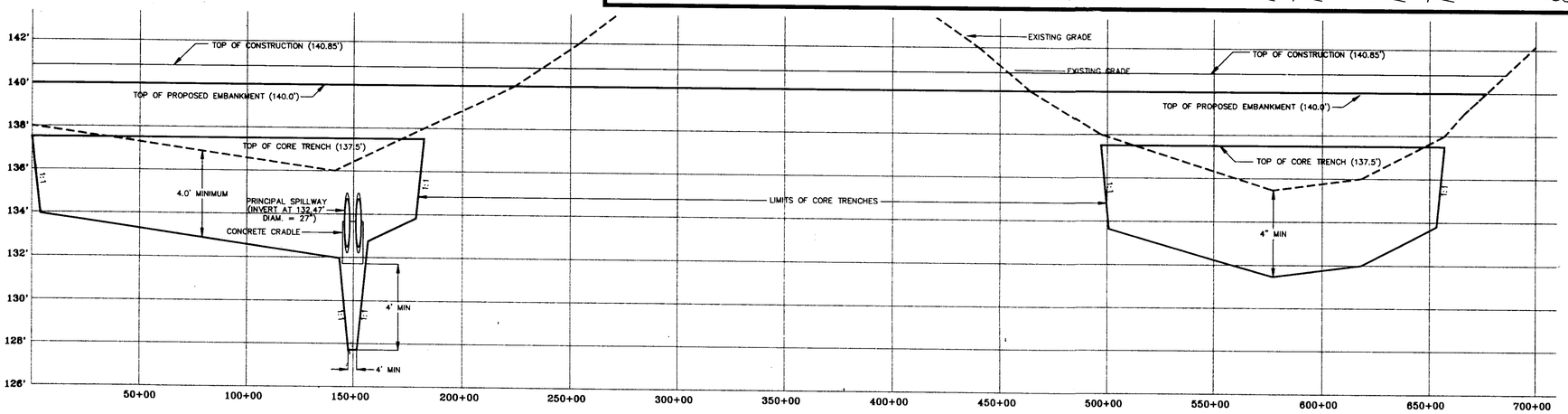
SHEET 11 OF 17

SDP-95-60

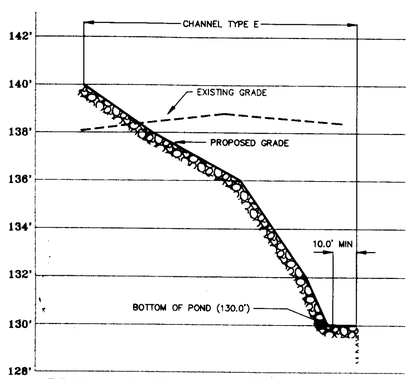




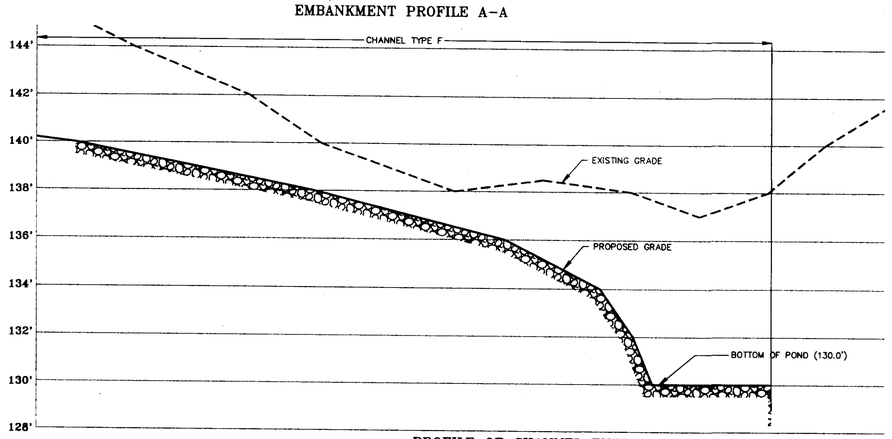
PRINCIPAL SPILLWAY PROFILE B-B



EMBANKMENT PROFILE A-A



PROFILE OF CHANNEL ENTRANCE E-E



PROFILE OF CHANNEL ENTRANCE F-F

NOTES:

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FOR STANDARD POND CONSTRUCTION NOTES, SEE SHEET 13 OF 17.

HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/16/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 6/15/95

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-16-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/19/95

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/19/95

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/13/95

CHIEF BUREAU OF ENGINEERING — DATE 6/13/95

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE	SEWER CODE				
Public	Private				

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

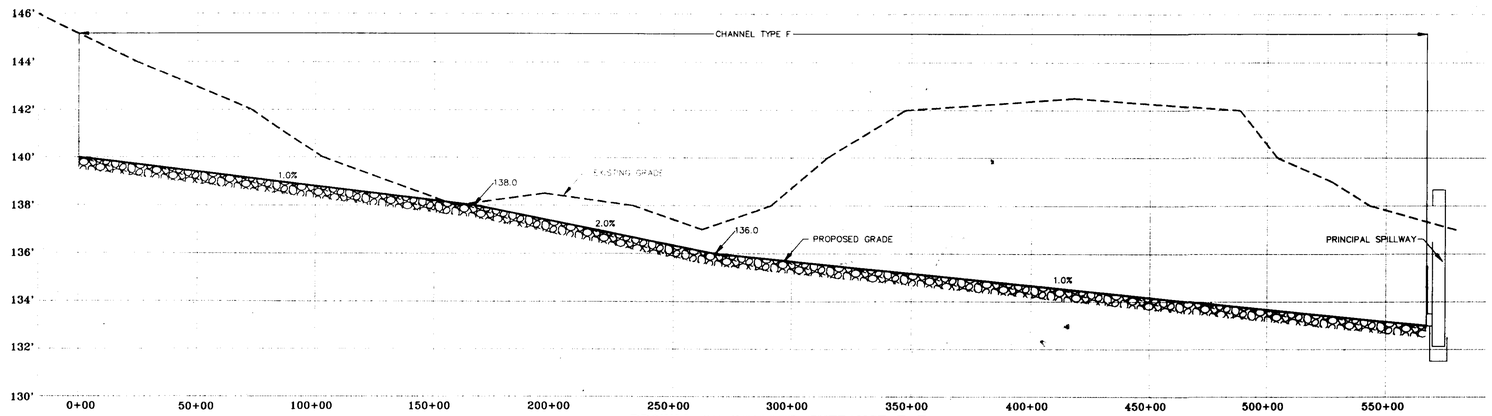
STORM WATER MANAGEMENT POND #2
PLAN AND PROFILE
DURING CONSTRUCTION

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, 1995

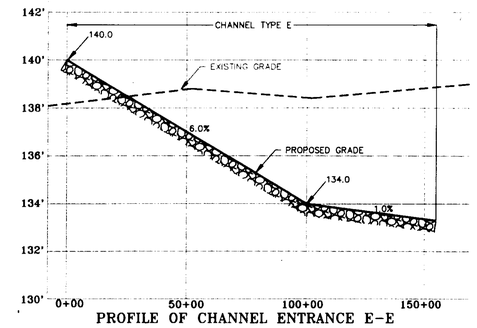
SHEET 11A OF 17

SDP-95-60



PROFILE OF CHANNEL ENTRANCE F-F

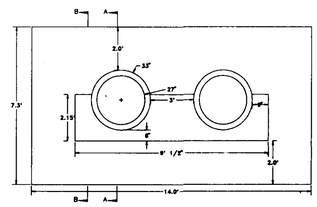
HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

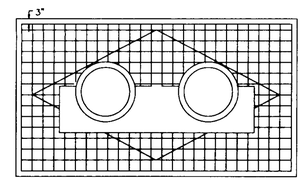


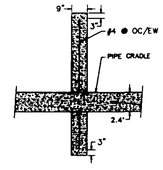
PROFILE OF CHANNEL ENTRANCE E-E

ANTI-SEEP COLLAR & CONCRETE CRADLE DETAIL SWP #2

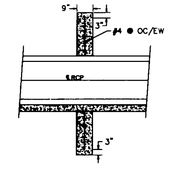
NOT TO SCALE





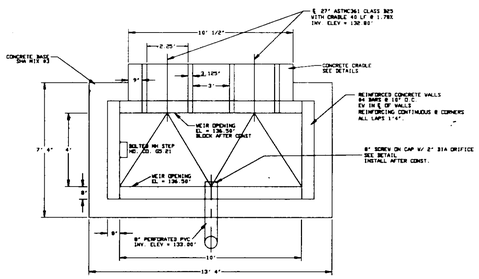


SECTION B-B

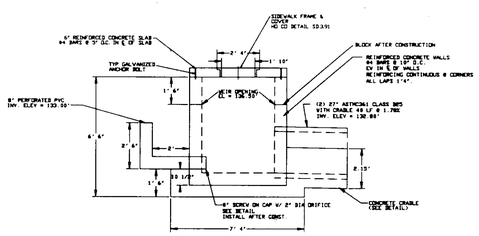


SECTION A-A

PLAN VIEW

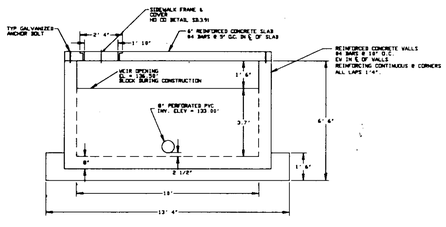


SIDE VIEW

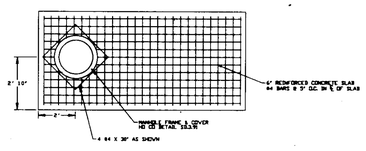


NOT TO SCALE

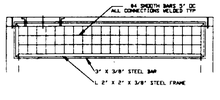
FRONT VIEW



COVER DETAIL

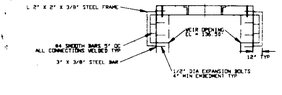


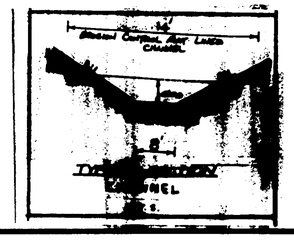
TRASH RACK DETAILS

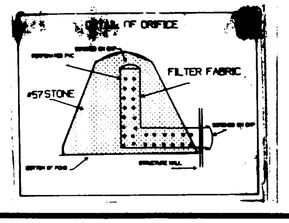


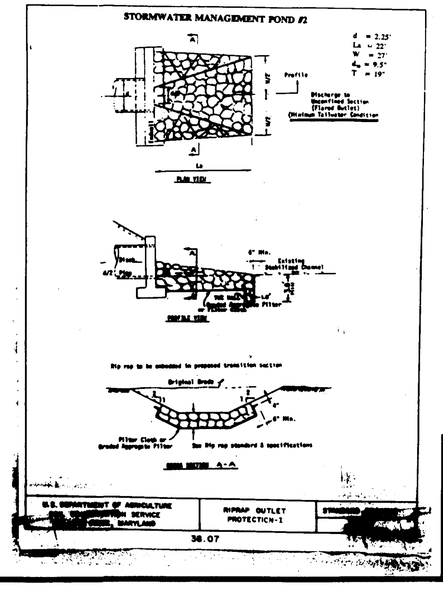
TRASH RACK NOTES:

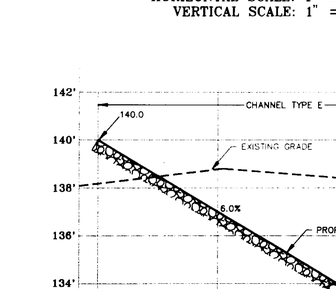
1. USE #4 SMOOTH BARS ALL CONNECTIONS WELDED
2. ALL BARS TO BE ASTM 615 GRADE 60
3. ALL ELEMENTS TO HAVE 2 COATS OF ZINC COLD GALVANIZING COMPOUND

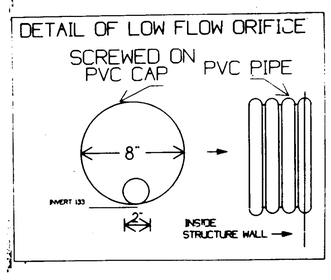












THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/16/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 6/16/95

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-16-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/13/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/13/95

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/13/95

CHIEF, BUREAU OF ENGINEERING — DATE 6/13/95

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE		SEWER CODE			
Public		Private			

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

STORM WATER MANAGEMENT POND #2
PROFILE AND DETAILS

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, 1995

SHEET 12 OF 17

SDP-95-60

Howard County
MARYLAND

TEST BORING LOG

PROJECT: Waste Yard Composting Facility — PROJECT NO.: C-0226
ELEVATION: N/A — OFFSET: N/A — SURFACE ELEVATION: 136.7
DATES: START: 8/31/94 — FINISH: 8/31/94 — INSPECTOR: GM
GROUNDWATER LEVELS (DEPTH/DATE): Not encountered.

Depth (ft)	Sample No. Length Type	Blow Counts Recovery (%)	Strata Depth	Strata Identification	RQD
1.0	S-1	Test Pit	0-1.0'	Organic Topsoil	
3.0	S-2	Test Pit	1.0'-3.0'	Mustard brown clayey silt, sandy silt, moist, stiff.	
4.0	S-3	Test Pit	3.0'-4.0'	Light gray silty clay, clayey silt, moist, stiff, CH	
12.0	S-4	Test Pit	4.0'-12.0'	Light grayish brown high plastic clay, some silt very sticky, moist, stiff, CH	
				End of testpit @ 12.0 feet.	

GENERAL REMARKS:

BORING NO.: 1
SHEET ___ OF ___

Howard County
MARYLAND

TEST BORING LOG

PROJECT: Waste Yard Composting Facility — PROJECT NO.: C-0226
ELEVATION: N/A — OFFSET: N/A — SURFACE ELEVATION: 136.1
DATES: START: 8/31/94 — FINISH: 8/31/94 — INSPECTOR: G.M.
GROUNDWATER LEVELS (DEPTH/DATE): Not Encountered

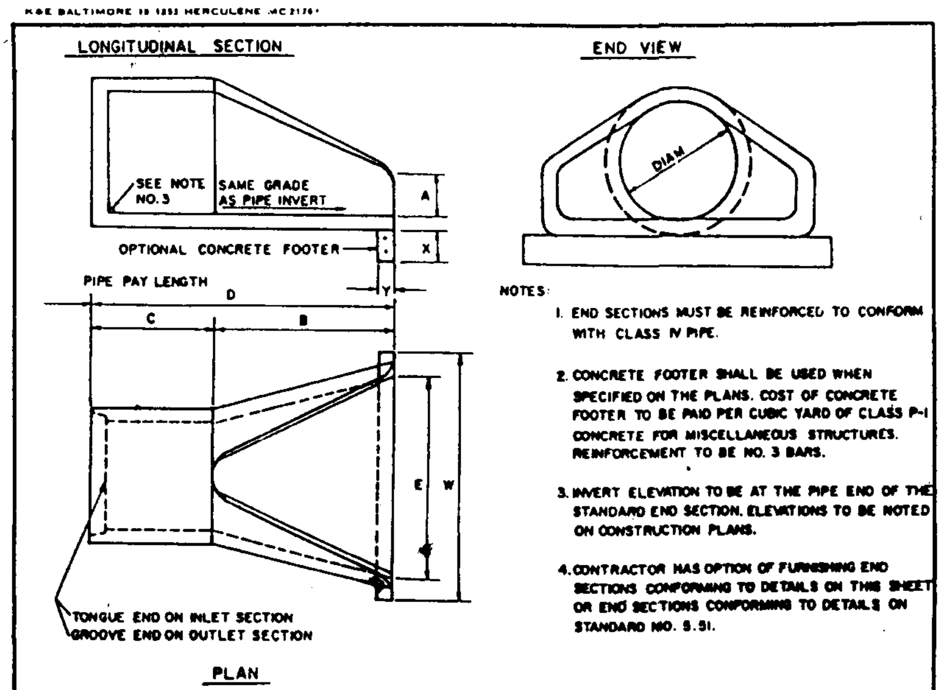
Depth (ft)	Sample No. Length Type	Blow Counts Recovery (%)	Strata Depth	Strata Identification	RQD
1.0	S-1	Test Pit	0-1.0'	Organic Topsoil.	
3.0	S-2	Test Pit	1.0'-3.0'	Mustard brown clayey silt, sandy silt, moist, stiff,	
4.0	S-3	Test Pit	3.0'-4.0'	Light gray silty clay, clayey silt, mosit, stiff, CH	
12.0	S-4	Test Pit	4.0'-12.0'	Light grayish brown high plastic clay, some silt, very sticky, mosit, stiff, CH	
				End of test pit @ 12.0 feet.	

GENERAL REMARKS:

BORING NO.: 2
SHEET ___ OF ___

POND #2 BORING LOGS

K&E BALTIMORE 10 1251 HERCULENE MC 2176



NOTES:

1. END SECTIONS MUST BE REINFORCED TO CONFORM WITH CLASS IV PIPE.
2. CONCRETE FOOTER SHALL BE USED WHEN SPECIFIED ON THE PLANS. COST OF CONCRETE FOOTER TO BE PAID PER CUBIC YARD OF CLASS P-I CONCRETE FOR MISCELLANEOUS STRUCTURES. REINFORCEMENT TO BE NO. 3 BARS.
3. INVERT ELEVATION TO BE AT THE PIPE END OF THE STANDARD END SECTION. ELEVATIONS TO BE NOTED ON CONSTRUCTION PLANS.
4. CONTRACTOR HAS OPTION OF FURNISHING END SECTIONS CONFORMING TO DETAILS ON THIS SHEET OR END SECTIONS CONFORMING TO DETAILS ON STANDARD NO. S.51.

TABLE OF DIMENSIONS

CONCRETE END SECTION							CONCRETE FOOTER		
DIAM.	SLOPE	A	B	C	D	E	W	X	Y
12"	3:1	4"	2'-0"	4'-0 7/8"	6'-0 7/8"	2'-0"	3'-0"	12"	9"
15"	3:1	6"	2'-3"	3'-10"	6'-1"	2'-6"	3'-6"	12"	9"
18"	3:1	9"	2'-3"	3'-10"	6'-1"	3'-0"	4'-0"	12"	9"
21"	3:1	9"	3'-0"	3'-1 1/2"	6'-1 1/2"	3'-6"	4'-6"	12"	9"
24"	3:1	9 1/2"	3'-7 1/2"	2'-6"	6'-1 1/2"	4'-0"	5'-0"	15"	9"
27"	3:1	10 1/2"	4'-1 1/2"	2'-0"	6'-1 1/2"	4'-6"	5'-6"	15"	9"
30"	3:1	1'-0"	4'-6"	1'-7 3/4"	6'-1 3/4"	5'-0"	6'-0"	15"	9"
36"	3:1	1'-3"	5'-3"	2'-10 3/4"	8'-1 3/4"	6'-0"	7'-3"	15"	9"
42"	3:1	1'-6" OR [illegible]	5'-3"	2'-11"	8'-2"	6'-6"	7'-9"	15"	9"
48"	3:1	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"	8'-6"	18"	12"
54"	2.4:1	2'-3"	5'-5"	2'-9 1/4"	8'-2 1/4"	7'-6"	9'-0"	18"	12"

HOWARD COUNTY, MARYLAND
DEPARTMENT OF PUBLIC WORKS
Approved [signature] 10.8.86
Chief - Bureau of Engineering

CONCRETE END SECTION
CIRCULAR CONCRETE PIPE

DRAWN B R.M.P. — CHECKED BY J.L.R. — SCALE NONE — SD-5.52

SEQUENCE OF CONSTRUCTION

1. Obtain grading permit
2. Notify Howard County Bureau of Inspection and Permits (313-1880) at least 48 hours prior to starting any work.
3. Construct Stabilized Construction Entrance (week 1).
4. Stakeout site as needed for grading (week 1).
5. Stakeout wetlands and buffer zone (week 1).
6. Clear and grub for super silt fence, super diversion fence and berms (week 2).
7. Install silt fencing (both regular and super) and berms. Install super diversion fence (week 2).
8. Construct stormwater management ponds, excavating to elevation shown to provide for sediment control. At stormwater pond #1, block the 1.5" orifice and the weir to elevation 139.65. Install a 3" orifice at elevation 135.1. In stormwater pond #2, block off 2" orifice. Install an 8" orifice at elevation 133. Mark the risers with the cleanout elevations:
   Pond #1 -- 133.8'
   Pond #2 -- 131.5'
   (weeks 3 and 4)
9. Construct drainage channels (weeks 5&6).
10. Stabilize disturbed areas with vegetation (concurrent with other activities).
11. Clear and grub areas to be graded (weeks 5,6&7).
12. Install utilities (weeks 6,7&8).
13. Grade and construct entrance roads, scale and scalehouse, perimeter road, parking lot and maintenance shed area (weeks 9,10,11&12).
14. Compact compost pad areas with layer of woodchips (weeks 12,13 &14).
15. Stabilize disturbed areas with vegetation (concurrent with other activities).
16. Convert sediment basins to permanent stormwater management ponds. In stormwater management pond #1, remove plate from weirs and open low flow orifice and block off the 3 inch orifice. In stormwater management pond #2, open low flow orifice. Install caps with the orifices per detail (week 15).
17. During grading and after each rainfall, the Contractor shall inspect and provide necessary maintenance on the sediment and erosion control measures shown hereon.'
18. 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, swales, ditch perimeter slopes and all slopes greater than 3:1.
   B. 14 calendar days for all other disturbed area.
19. With the approval of the sediment control inspector remove all sediment control structures, leaving super silt fencing.

OPERATIONS AND MAINTENANCE PROCEDURES
STORMWATER MANAGEMENT PONDS

1. After major storms, the stormwater management ponds will be inspected; the inspection will cover the following:
   a. Inspection of all the openings to ensure that they are not clogged or blocked by trash.
   b. Siltation of pond, low flow orifice and outfall channel
   c. Erosion of the channels (both inflow and outflow)

2. After the inspection, appropriate action will be take to correct any identified problems, such as:
   a. Cleaning out orifices and removing trash around trash racks.
   b. Cleaning out silt in the pond and channels when an accumulation exceeds 4". Stabilize any disturbed areas after silt removal.
   c. Repairing channels where erosion has occurred.

3. The upper stage, side-slopes and embankment will be mowed twice a year -- in June and October. Any debris, especially floatable material, will be removed during the mowing operation.

4. Woody vegetation, such as trees, shall be removed immediately when found.

5. Once a year the stormwater management pond will be inspected. The embankment will be inspected using the checklist prepared by the Soil Conservation Service. The annual inspection will also check for: subsidence, erosion, cracking or tree growth on the embankment, condition of the outlet structure, accumulation of sediment around the riser, and the adequacy of upstream and downstream channel erosion control measures. Inspection will be carried out with the as-built pond plans in band. Corrective actions will be taken based on the results of the inspection.

Inspection reports will be provided to the Howard County Department of Public Works upon request.

ADDITIONAL CONSTRUCTION NOTES

1. At locations where removal of vegetation and objectional material results in an opening greater than 12.0 inches in depth, backfill with soil compacted to a minimum of 95% of the maximum dry density as determined by the Standard Moisture-Density Relationship test (AASHTO T-99).

2. Soil material meeting the classification requirements to GC, SC, CH, CL as classified in accordance with the Unified Soil Classification System and recommended Soil Conservation Service Maryland Standards and Specifications November, 1992 should be used for the construction of the center of the embankment and the cut-off trench. The fill material should be approved by the geotechnical engineer prior to being used, It should be free from roots, stumps, wood, rubbish, stone greater than six inches, frozen soil or other deleterious material.

3. A minimum 4.0 feet thick compacted layer of relatively impermeable soil material, as specified in #2 above, should be used below the foundation of the principal structure and below the principal spillway pipeline.

4. The depth of the core trench should extend a minimum of four feet below the invert of the ponds.

5. The impervious core should extend from the cut-off trench up to the 10 year water surface elevation throughout the embankment.

6. Core and embankment fill and backfill soils should be compacted to a minimum of 95% of the maximum dry density (AASHTO T-99).

7. The principal spillway structure should be founded on subgrade soil with an allowable soil pressure of no less that 2,000 pounds per square foot.

378 - 12 Pond

SPECIFICATIONS

These specifications are appropriate to all ponds within the scope of the Standard for practice MD-378. All references to ASTM and AASHTO specifications apply to the most recent version.

Site Preparation

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1.

Areas to be covered by the reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 50 foot radius around the inlet structure shall be cleared.

All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

Earth Fill

Material - The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment and cut off trench shall conform to Unified Soil Classification GC, SC, CH, or CL. Consideration may be given to the use of other materials in the embankment if design and construction are supervised by a geotechnical engineer.

Placement - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The principal spillway must be installed concurrently with fill placement and not excavated into the embankment.

Compaction - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble yet not be so wet that water can be squeezed out.

Where a minimum required density is specified, it shall not be less than 95% of maximum dry density with a moisture content within ±2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.

Cut Off Trench - The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability.

Structure Backfill

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.

Pipe Conduits

All pipes shall be circular in cross section.

Reinforced Concrete Pipe - All of the following criteria shall apply for reinforced concrete pipe:

1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM Designation C-361. An approved equivalent is AWWA Specification C-302.
2. Bedding - All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 10% of its outside diameter with a minimum thickness of 3 inches, or as shown on the drawings.
3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the riser.
4. Backfilling shall conform to "Structure Backfill."
5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

Concrete

Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 608, Mix No. 3

Rock Riprap

All rock shall be dense, sound, and free from cracks, seams, and other defects conducive to accelerated weathering. The rock fragments shall be angular to subrounded in shape. The least dimension of an individual rock fragment shall be not less than one-third the greatest dimension of the fragment.

The rock shall have the following properties:

1. Bulk specific gravity (saturated surface-dry basis) not less than 2.5.
2. Absorption not more than three percent.
3. Soundness: Weight loss in five cycles not more than 20 percent when sodium sulfate is used.

Bulk specific gravity and absorption shall be determined according to ASTM C 127. The test for soundness shall be performed according to ASTM C 88.

The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 919.12.

Care of Water during Construction

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until the full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water to sumps from which the water shall be pumped.

Stabilization

All borrow areas shall be graded to provide proper drainage and left in a sightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing and mulching in accordance with the Maryland Soil Conservation Service Standards and Specifications for Critical Area Planting (MD-342) or as shown on the accompanying drawings.

Erosion and Sediment Control

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized. State and local laws concerning pollution abatement will be followed. Construction plans shall detail erosion and sediment control measures to be employed during the construction process.

SCS - MARYLAND

Howard County
MARYLAND

TEST BORING LOG

PROJECT: Waste Yard Composting Facility — PROJECT NO.: C-0226
ELEVATION: N/A — OFFSET: N/A — SURFACE ELEVATION: 142.4
DATES: START: 8/31/94 — FINISH: 8/31/94 — INSPECTOR: G.M.
GROUNDWATER LEVELS (DEPTH/DATE): Not Encountered

Depth (ft)	Sample No. Length Type	Blow Counts Recovery (%)	Strata Depth	Strata Identification	RQD
1.5	S-1	Test Pit	0-1.5'	Organic top soil	
2.5	S-2	Test Pit	1.5'-4.5'	Light tan silty sand, dry, CL	
10.0	S-3	Test Pit	4.5'-10.0'	Yellowish-brown silty sandy clay, some reddish/white clayey silt, moist to dry, stiff, CH	
12.0	S-4	Test Pit	10.0'-12.0'	Reddish white silty clay, clayey silt with trace of tan silty clay, stiff, moist, CH	
15.0	S-5	Test Pit	12.0'-15.0'	Reddish white silty clay, clayey silt, moist, stiff, CH	
				End of test pit @ 15.0'.	

GENERAL REMARKS:

BORING NO.: 7
SHEET 1 OF 1

Howard County
MARYLAND

TEST BORING LOG

PROJECT: Waste Yard Composting Facility — PROJECT NO.: C-0226
ELEVATION: N/A — OFFSET: N/A — SURFACE ELEVATION: 138.2
DATES: START: 8/31/94 — FINISH: 8/31/94 — INSPECTOR: G.M.
GROUNDWATER LEVELS (DEPTH/DATE): Not Encountered

Depth (ft)	Sample No. Length Type	Blow Counts Recovery (%)	Strata Depth	Strata Identification	RQD
1.5	S-1	Test pit	0-1.5'	Organic top soil	
4.0	S-2	Test pit	1.5'-4.0'	Reddish white silty clay, clayey silt, stiff, moist, CH	
10.0	S-3	Test pit	4.0'-10.0'	Same as S-2, but have higher moisture, CH	
15.0	S-4	Test pit	10.0'-15.0'	Same as S-3, but more of reddish than white, CH	
				End of test pit @ 15.0 .	

GENERAL REMARKS:

BORING NO.: 8
SHEET 1 OF 1

POND #1 BORING LOGS

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

[signature]
APPROVED: HOWARD SOIL CONSERVATION DISTRICT
PLAN NUMBER — DATE 6/16/95

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

[signature] 6/15/95
U.S. SOIL CONSERVATION SERVICE — DATE

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

[signature] 6-16-95
COUNTY HEALTH OFFICER — DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[signature] 6/19/95
DIRECTOR — DATE

[signature] 6/19/95
CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

[signature] 6/13/95
DIRECTOR — DATE

[signature] 6/13/95
CHIEF BUREAU OF ENGINEERING — DATE

SUBDIVISION NAME	SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility	N/A	690

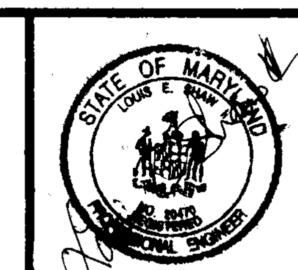
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	

WATER CODE	SEWER CODE
Public	Private

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND



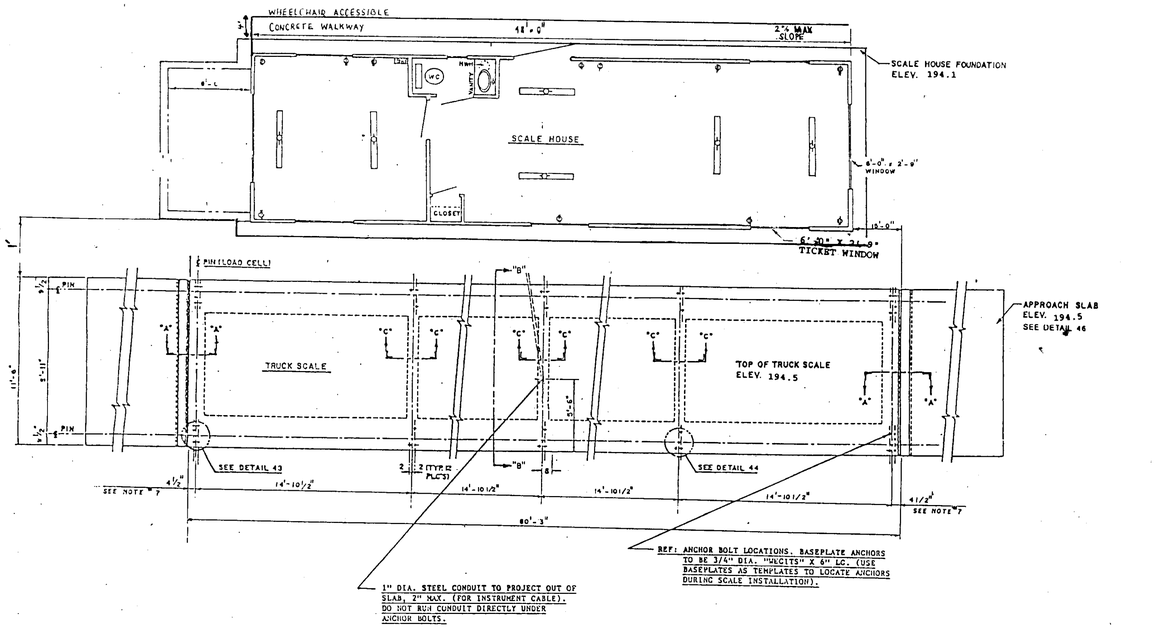
STORMWATER MANAGEMENT POND 1 & 2 DETAILS

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

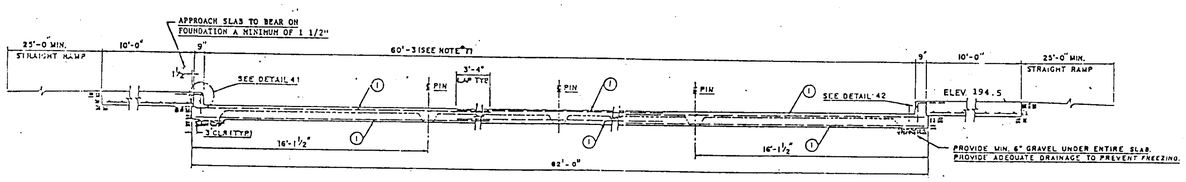
MARCH 29, 1995

SHEET 13 OF 17

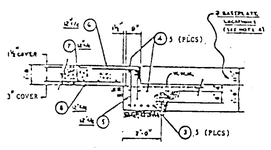
SDP-95-60



SCALE FACILITIES-PLAN
No Scale



TRUCK SCALE FOUNDATION - ELEVATION
No Scale



SCALE SECTION "A-A"
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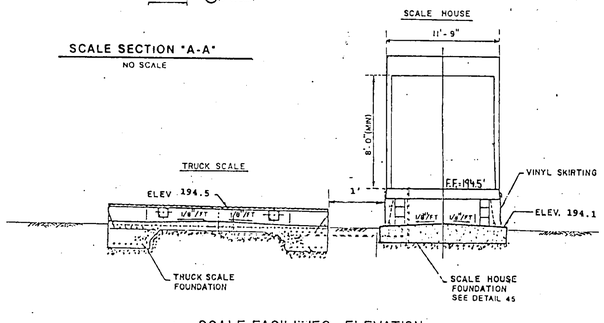

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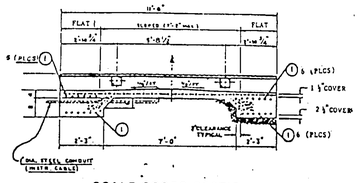
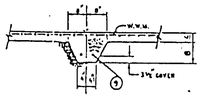


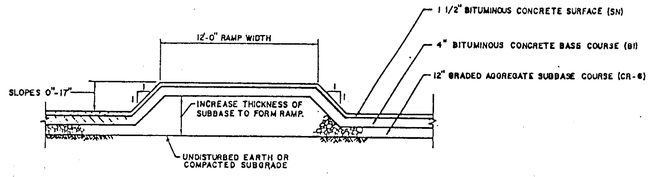
SCALE CROSS SECTION "B-B"
NO SCALE



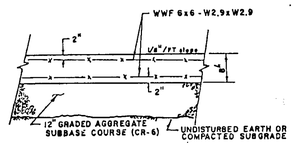
SCALE SECTION "C-C"
NO SCALE

NOTES:

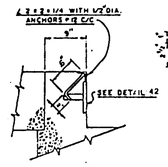
1.) USE MIN. 3000PSI STRENGTH CONCRETE @ 28 DAYS W/5-7% AIR ENTRAINMENT.
2.) USE MIN 40KSI YIELD DEFORMED REINFORCING STEEL.
3.) FOUNDATION DEVELOPS 1500 PSF SOIL PRESSURE.
4.) TOP OF CONCRETE & BASEPLATE LOCATIONS TO BE LEVEL & IN ONE PLANE ± 1/8".
5.) CAST ENTIRE FOUNDATION MONOLITHIC. APPROACHES MAY BE POURED SEPARATELY (SECTION "A-A").
6.) MATERIAL SUMMARY:
CONCRETE - 28CU YDS.
W.W.M. - 720 SQ. FT. (8'x8'x100#)
REINF. STEEL - 3128 LBS.
7.) IF MINIMUM CLEARANCE BETWEEN THE SCALE AND ENDWALL IS DESIRED IN ORDER TO ELIMINATE DEBRIS FALLING INTO THE FOUNDATION, REDUCE THE OVERALL LENGTH TO 60'-3" AND LOAD CELL 1 TO ENDWALL DIMENSIONS TO 4'. THE CONTRACTOR MUST HOLD THE DIAGONAL MEASUREMENTS FROM ENDWALL TO ENDWALL 61'-3" TO 61'-3 1/4".
8.) PROVIDE 100 GAL. HYDROPNEUMATIC WATER TANK AND HVAC SYSTEM FOR SCALE HOUSE.
9.) SUBMIT DETAILED SHOP DRAWINGS, AS REQUIRED.



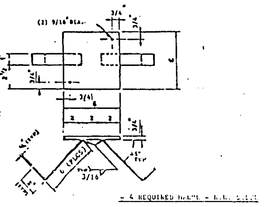
BITUMINOUS APPROACH RAMP DETAIL 46
No Scale



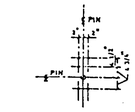
SCALE HOUSE FOUNDATION DETAIL 45
No Scale



SCALE DETAIL 41
NO SCALE

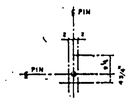


SCALE DETAIL 42
NO SCALE



- OTHER SIDE IS "MIRROR" IMAGE
- DO NOT RUN REBAR DIRECTLY BELOW ANCHOR BOLTS.
- TYPICAL BOTH ENDWALLS.

SCALE DETAIL 43
NO SCALE



- OTHER SIDE 180° OPPOSED
- DO NOT RUN REBAR DIRECTLY BELOW ANCHOR BOLTS
- TYPICAL 4 PLACES

SCALE DETAIL 44
NO SCALE

REINFORCING STEEL SCHEDULE

USE A.S.T.M. A615 GRADE 40 MIN. DEFORMED REINFORCING ST'L. ALL BENDING MUST BE COLD FORMING.

ITEM	QTY	DESCRIPTION	LENGTH A	LENGTH B	LENGTH C	WEIGHT
1	72	#8 STRAIGHT		22'-9		4373
2						
3	10	#6 STRAIGHT		11'-0		165
4	10	#3 STRAIGHT		11'-0		115
5	24	#4 STRAIGHT		1'-7		25
6	24	#4 BENT	1'-6	2'-6		84
7	20	#4 STRAIGHT		11'-0		147
8	24	#4 STRAIGHT		8'-6		132
9	6	#5 BENT	1'-6	11'-0	1'-6	86

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/16/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 6/15/95

APPROVED: FOR PUBLIC WATER AND ~~PUBLIC~~ SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-16-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/19/95

CHIEF DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/19/95

APPROVED: FOR PUBLIC WATER, SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/13/95

CHIEF BUREAU OF ENGINEERING — DATE 6/13/95

SUBDIVISION NAME	SECT./AREA	LOT/PARCEL
Baltimore Regional Yard Debris Composting Facility		10921

LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2979-288 2979-293		M-2	43	1	

WATER CODE	SEWER CODE
Public	Private

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

MARYLAND ENVIRONMENTAL SERVICE

STATE OF MARYLAND — JOHN E. SHEPHERD — REGISTERED PROFESSIONAL ENGINEER

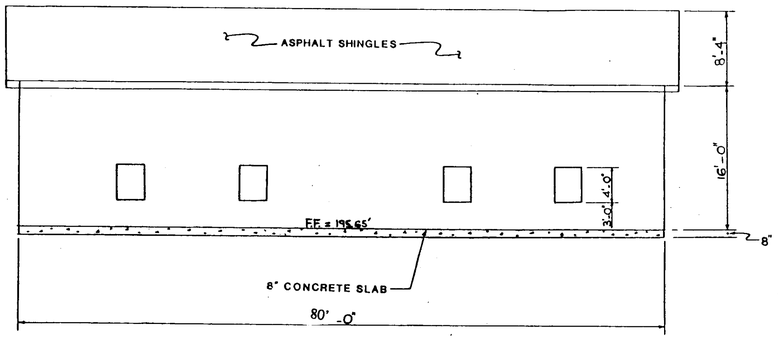
SCALE FACILITY PLAN AND DETAILS

PREPARED BY:
MARYLAND ENVIRONMENTAL SERVICE

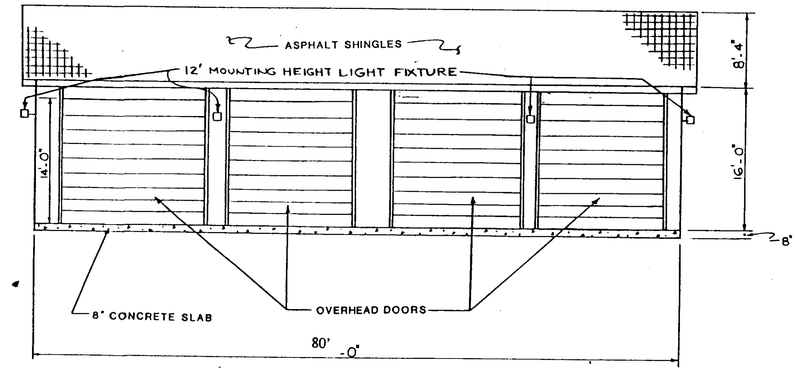
DECEMBER 14, 1994

SHEET 14 OF 17

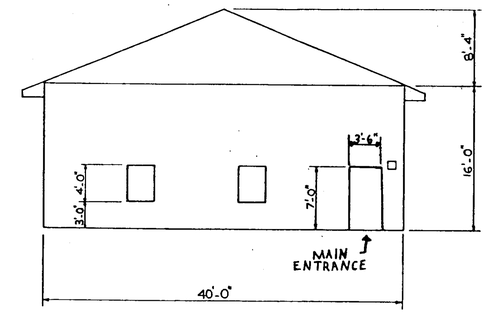
SDP-95-160



REAR ELEVATION



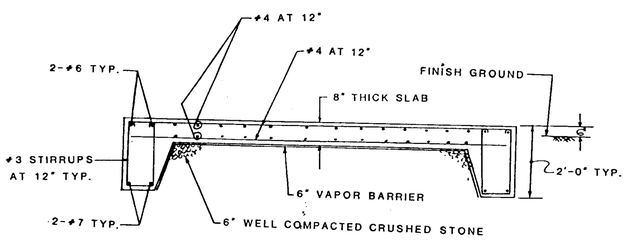
FRONT ELEVATION



LEFT ELEVATION

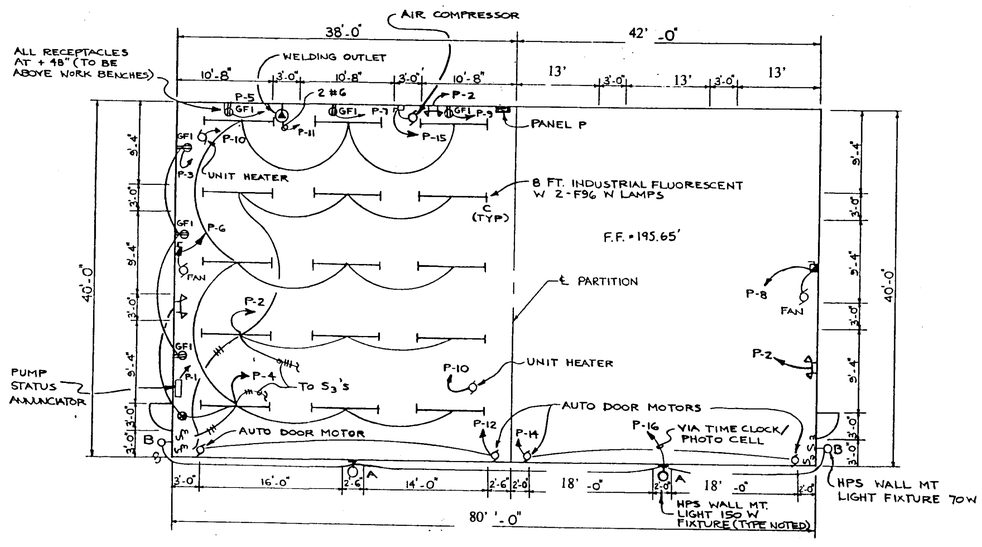
SCALE: 1/8" = 1'

NOTE: LEFT ELEVATION IS IDENTICAL TO RIGHT ELEVATION



FOUNDATION SECTION

N.T.S.



MAINTENANCE BUILDING FOUNDATION PLAN

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/16/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 6/15/95

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-16-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/19/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/19/95

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS. HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/13/95

CHIEF, BUREAU OF ENGINEERING — DATE 6/13/95

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE		SEWER CODE			
Public		Private			

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

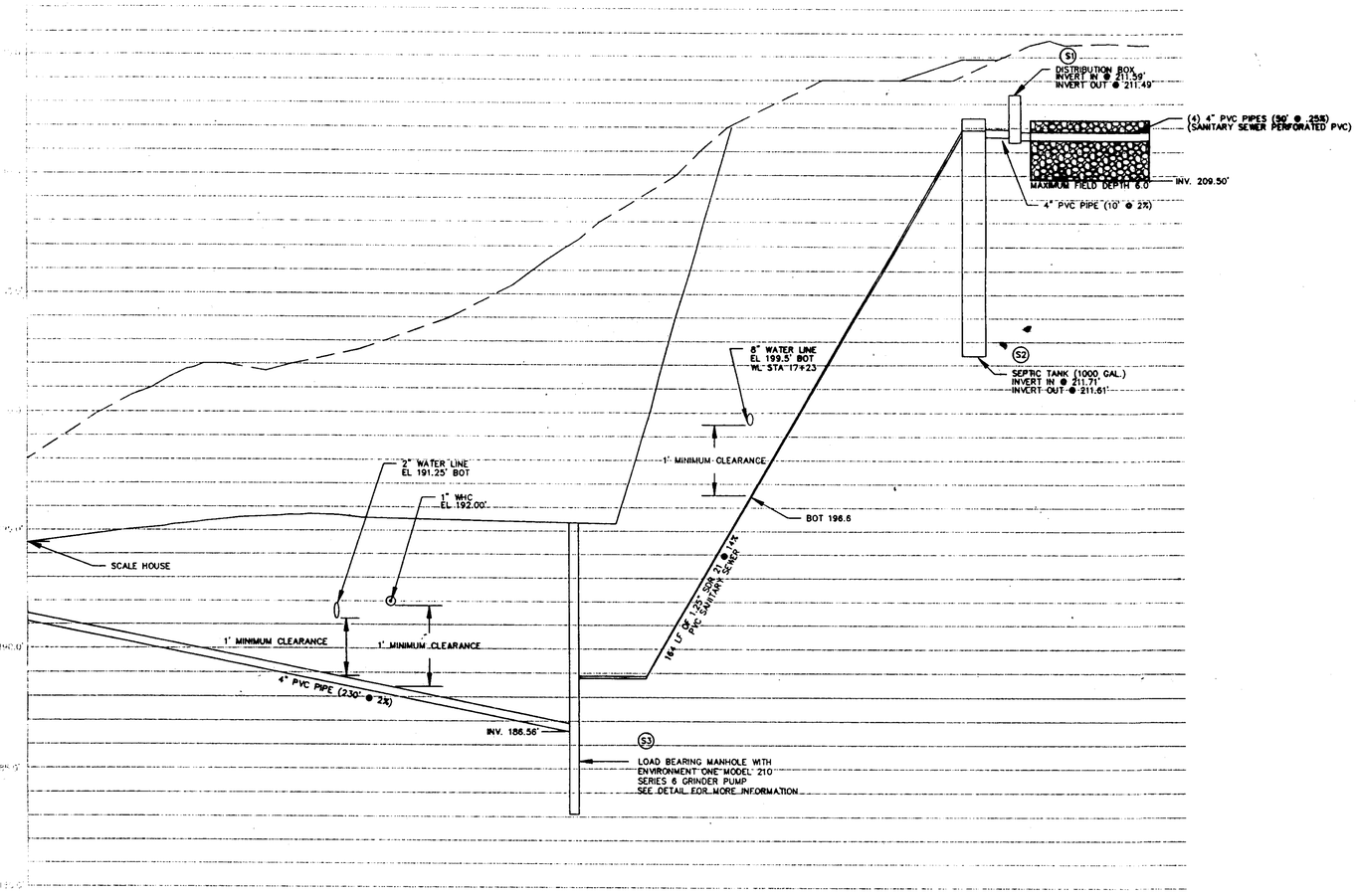
MAINTENANCE BUILDING PLAN AND DETAILS

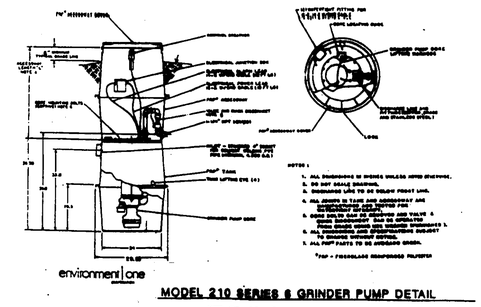
PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, 1995

SHEET 15 OF 17

SDP-95-60

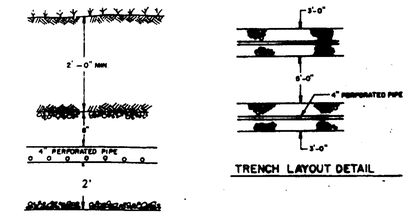




MODEL 210 SERIES 6 GRINDER PUMP DETAIL

NOT TO SCALE

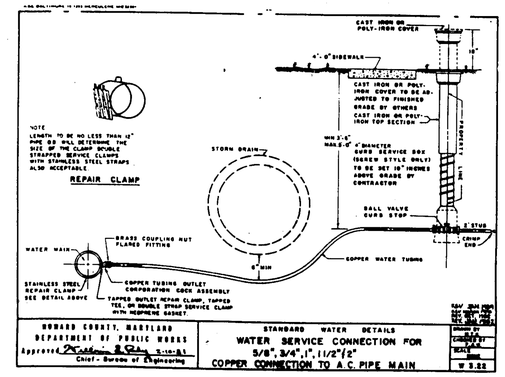
SEPTIC SYSTEM TRENCH DETAIL

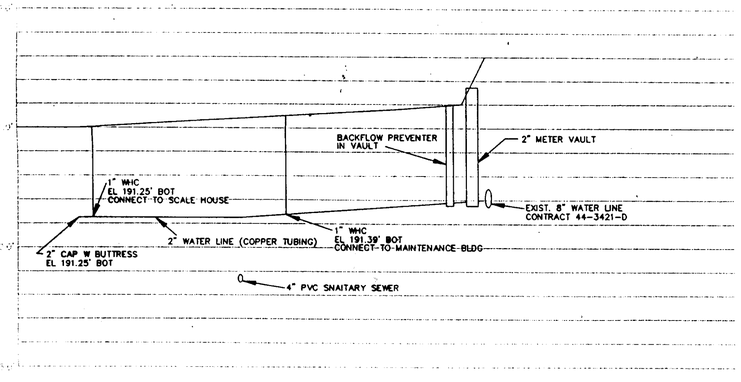


TRENCH LAYOUT DETAIL

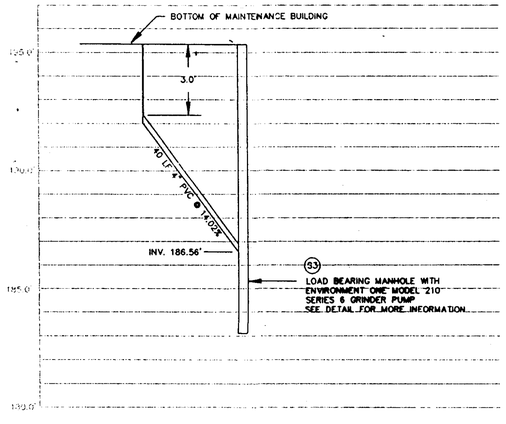
TRENCH DETAIL

NOT TO SCALE





WATER LINE PROFILE



HORIZONTAL SCALE: 1" = 30'
VERTICAL SCALE: 1" = 3'

THESE PLANS FOR S.W.M. CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED: HOWARD SOIL CONSERVATION DISTRICT — DATE 6/20/95

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

U.S. SOIL CONSERVATION SERVICE — DATE 6/20/95

APPROVED: FOR PUBLIC WATER AND PRIVATE SEWAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER — DATE 6-16-95

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE 6/19/95

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE 6/19/95

APPROVED: FOR PUBLIC WATER, PRIVATE SEWER, STORM DRAIN SYSTEM AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE 6/13/95

CHIEF, BUREAU OF ENGINEERING — DATE 6/12/95

SUBDIVISION NAME				SECT./AREA	PARCEL
Baltimore Regional Yard Debris Composting Facility				N/A	690
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2113/436 2678/448	12	M-2	43	1	
WATER CODE		SEWER CODE			
Public		Private			

OWNER/DEVELOPER: Maryland Environmental Service, 2011 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

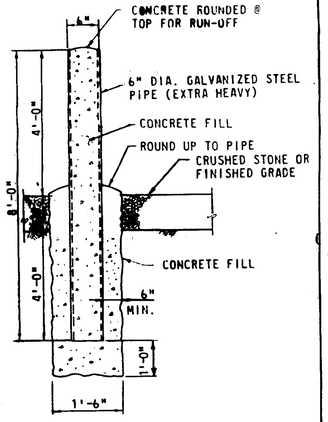
SEWER AND WATER PROFILE AND DETAILS

PREPARED BY: *MARYLAND ENVIRONMENTAL SERVICE*

MARCH 29, 1995

SHEET 16 OF 17

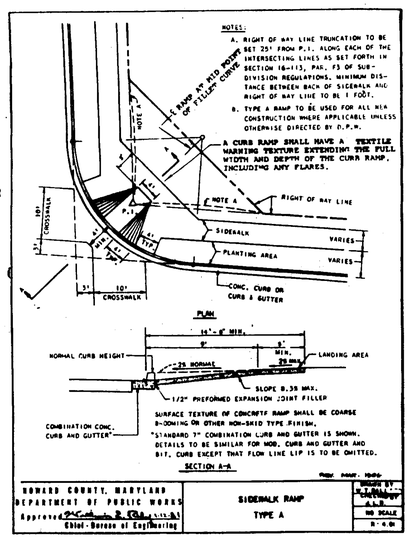
CDP-95-60

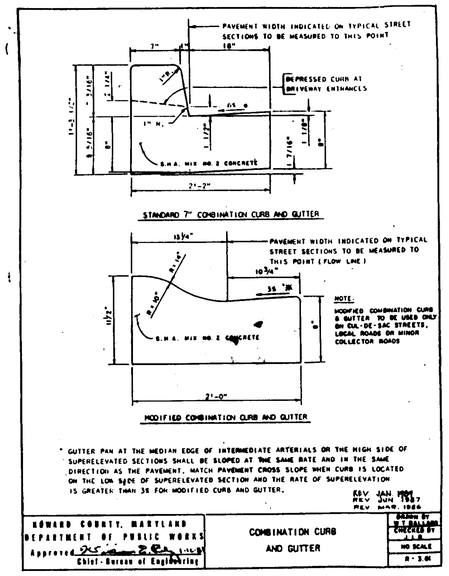


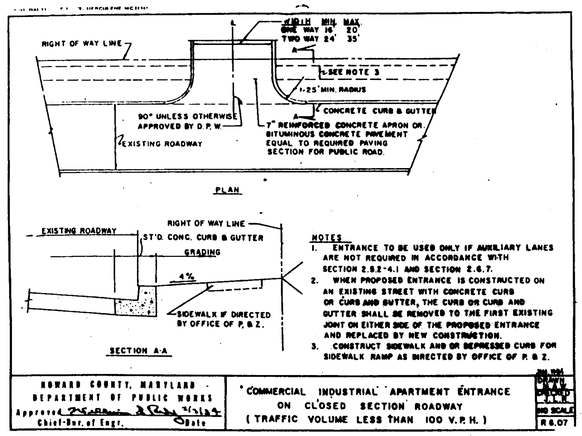
NOTE: SEE PLAN ABOVE FOR LOCATIONS.

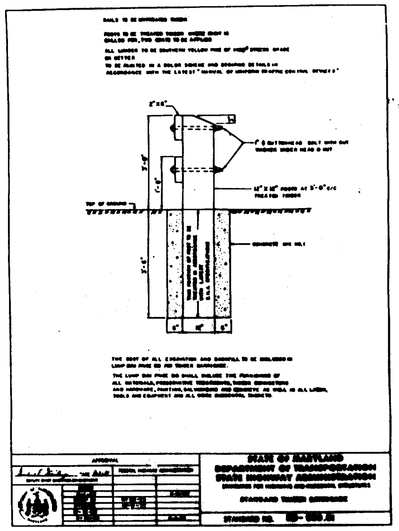
GUARD POST DETAIL

SCALE: 1/2" = 1'-0"

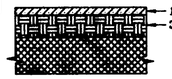






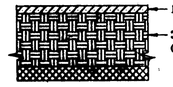


DETAIL "A" COMPOST PAD



1" MIN WOODCHIPS COMPACTED WITH VIBRATORY ROLLER
3" MINIMUM COMPACTED DIRT (NOT TOP SOIL)

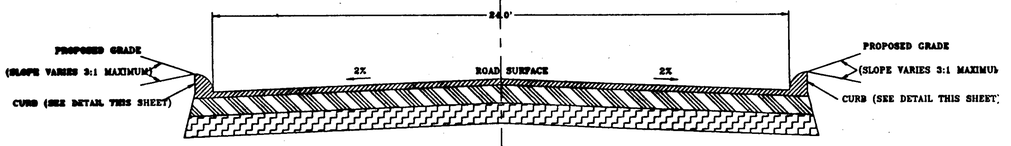
CUT AREAS



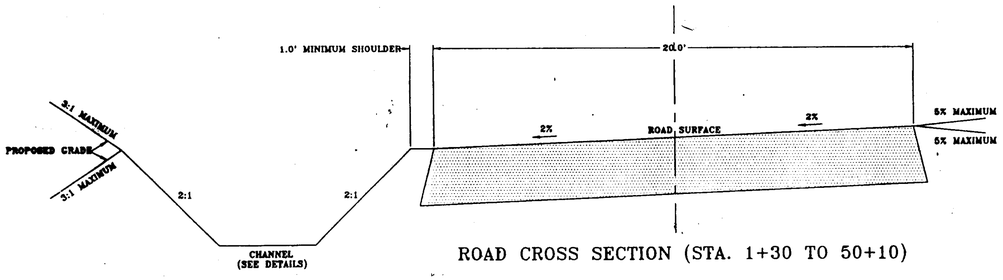
1" MIN WOODCHIPS COMPACTED WITH VIBRATORY ROLLER
3" MINIMUM COMPACTED DIRT (NOT TOP SOIL)
COMPACT EARTH IN 12" MAXIMUM LIFTS

FILL AREAS

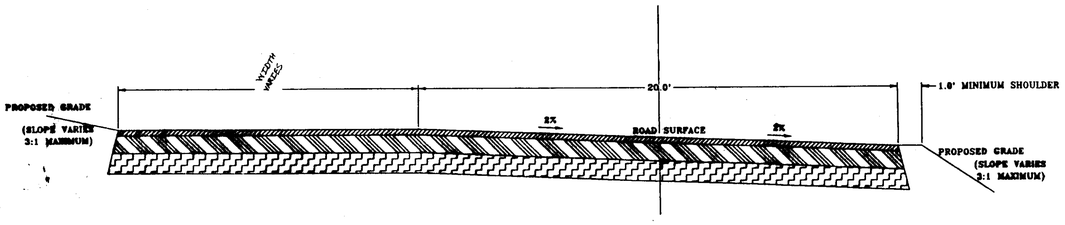
NOT TO SCALE



ENTRANCE ROAD CROSS SECTION



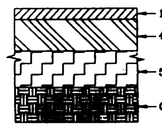
ROAD CROSS SECTION (STA. 1+30 TO 50+10)



ROAD CROSS SECTION (STA. 48+50 TO 53+50)

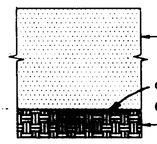
DETAIL "B" PAVING SECTION

HOWARD COUNTY
STANDARD DETAIL PAVING SECTION
ALTERNATE P-3



1 1/2" BITUMINOUS CONCRETE SURFACE
4 1/2" BITUMINOUS CONCRETE BASE
5" GRADED AGGREGATE BASE (GAB)
COMPACTED SUBSURFACE

DETAIL "C" SITE ACCESS ROAD



14" CR6
GEOTEXTILE
(MARAFI 600-X or EQUIV.)
COMPACTED SUBSURFACE

NOT TO SCALE

THESE PLANS FOR S.W.M. CONSTRUCTION, SEDIMENT AND EROSION CONTROL MEET THE REQUIREMENTS OF HOWARD SOIL CONSERVATION DISTRICT.

APPROVED HOWARD SOIL CONSERVATION DISTRICT — DATE

PLAN NUMBER

REVIEWED FOR THE HOWARD CONSERVATION DISTRICT AND MEETS TECHNICAL REQUIREMENTS.

SCD CONSERVATION TECHNICIAN — DATE

APPROVED FOR PUBLIC WATER AND TRANSPORTATION SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

DIRECTOR — DATE

APPROVED HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DIRECTOR — DATE

CHIEF, DIVISION OF LAND DEVELOPMENT AND RESEARCH — DATE

APPROVED FOR PUBLIC WATER, SEWER, STORM DRAIN SYSTEM, AND PUBLIC ROADS.
HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

DIRECTOR — DATE

CHIEF BUREAU OF ENGINEERING — DATE

SUBDIVISION NAME			SECT./AREA	LOT/PARCEL
Baltimore Regional Yard Debris Composting Facility				10021
LIBER/FOLIO	BLOCK	ZONE	TAX/ZONE MAP	ELEC. DIST.	CENSUS TR.
2979-288 2979-292		M-2	43	1	
WATER CODE		SEWER CODE			
Public		Private			

OWNER/DEVELOPER: Maryland Environmental Service, 2661 Commerce Park Drive, Annapolis, Maryland 21401

BALTIMORE REGIONAL YARD DEBRIS COMPOSTING FACILITY

HOWARD COUNTY, MARYLAND

ROAD CROSS-SECTION AND MISC. DETAILS

PREPARED BY: MARYLAND ENVIRONMENTAL SERVICE

MARCH 29, [illegible]

SHEET 17 OF [illegible]

ADP 45.60