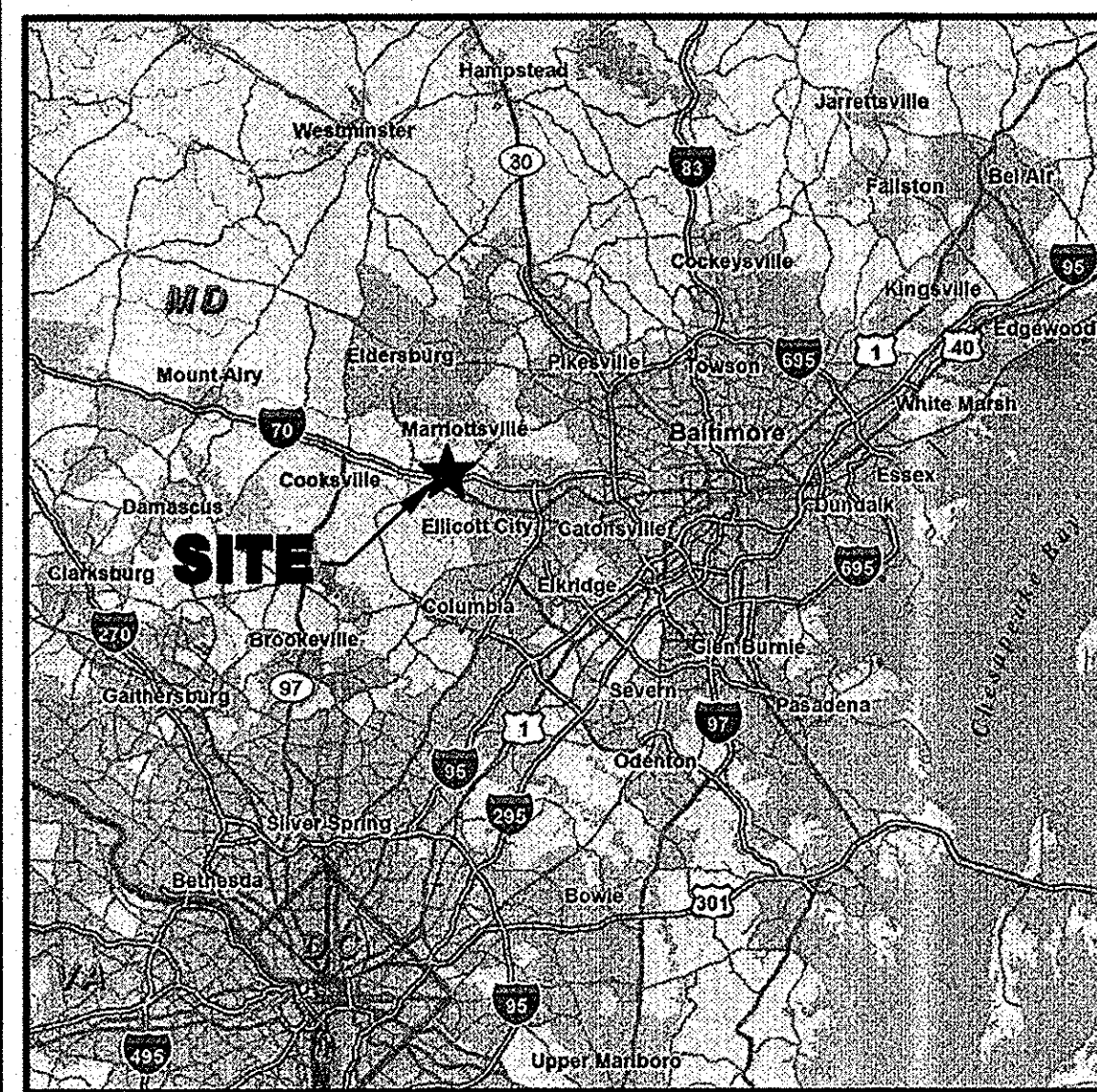
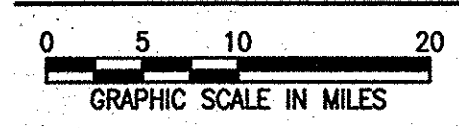


COMPOST FACILITY AT ALPHA RIDGE LANDFILL HOWARD COUNTY, MARYLAND ENVIRONMENTAL CONCEPT PLAN



VICINITY MAP



SITE ANALYSIS

SITE AREA:	600.00 AC
WETLAND AREA:	0 AC
WETLAND BUFFER AREA:	0 AC
FLOODPLAIN AREA:	0 AC
FLOODPLAIN BUFFER AREA:	0 AC
FORESTED AREA:	0 AC
SLOPES > 15% AREA:	3.06 AC
ERODIBLE SOILS AREA:	0 AC
LIMIT OF DISTURBANCE AREA:	13.76 AC
PROPOSED SITE USE:	COMPOSTING FACILITY
GREEN OPEN AREA:	5.52 AC
PROPOSED IMPERVIOUS AREA:	6.47 AC*

*FULL BUILD-OUT AREA

BENCHMARK INFORMATION

- HOWARD COUNTY SURVEY CONTROL: BASE A
ELEVATION 564.733 US FT
N 598,156.281 E 1,336,841.785
- HOWARD COUNTY SURVEY CONTROL: BASE F
ELEVATION 512.817 US FT
N 597,030.549 E 1,338,031.404

THE SYSTEM OF COORDINATES USED BY HOWARD COUNTY IS BASED ON THE FOLLOWING DATUMS AND PROJECTIONS:
 • HORIZONTAL: MARYLAND NAD83
 • VERTICAL: NAVD88

BENCHMARK LOCATIONS PROVIDED ON PROJECT ACCESS INSET.

ADDRESS CHART	
LOT/PARCEL #	STREET ADDRESS

PERMIT INFORMATION CHART				
Subdivision Name	Section/Area	Lot/Parcel No.	Water Code	Sewer Code

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND
SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

HOWARD SCD _____ DATE _____

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief Engineer 11-3-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Chief, Division of Land Development 10-29-15
CHIEF, DIVISION OF LAND DEVELOPMENT

GRID: 8 BLOCK: N/A
ZONING: RC-DEO PARCEL/LOT: 220, 253, 11, 23, 54
TAX MAP: 0016 FLECTION DISTRICT: 3-02

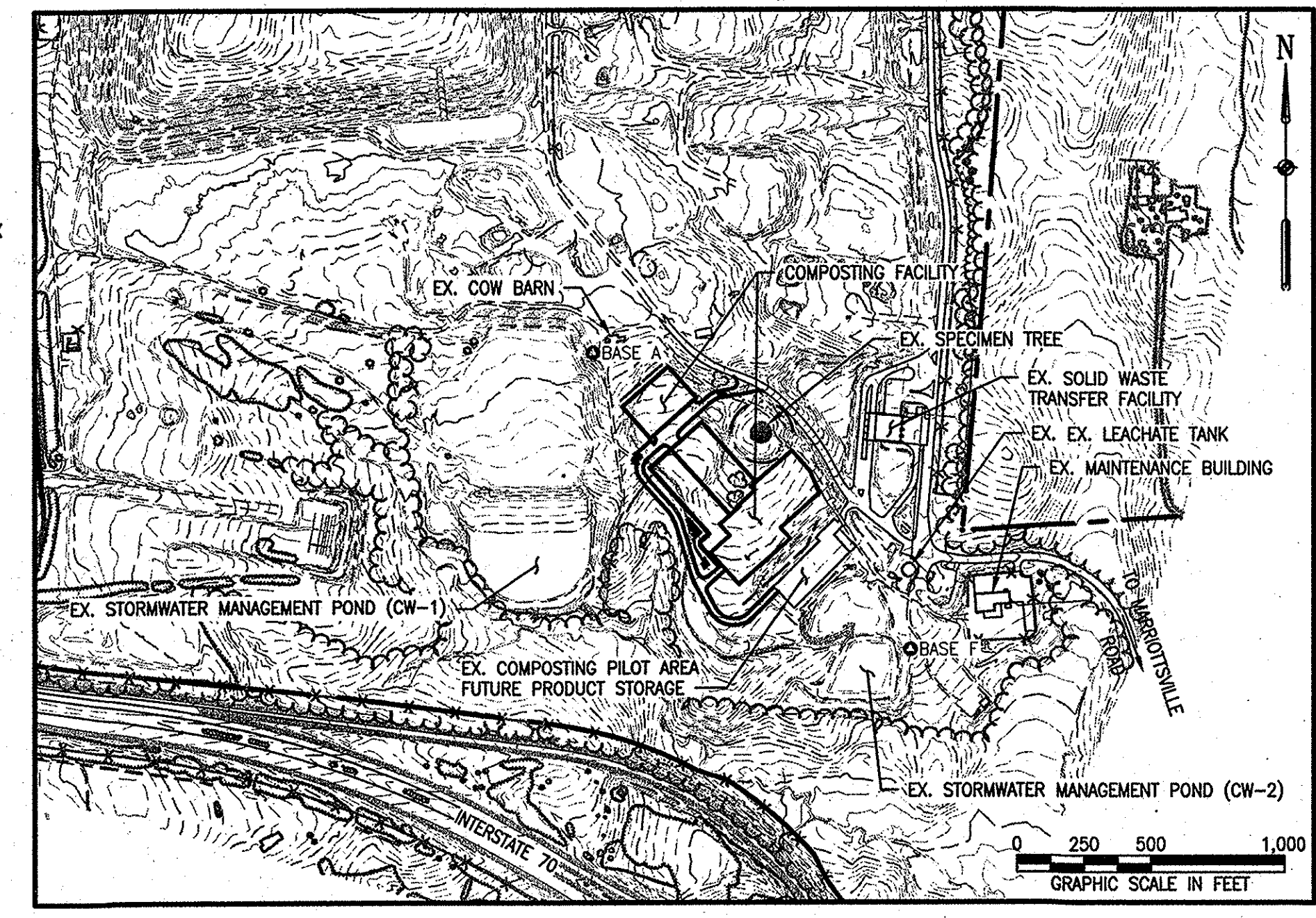
OWNER/ENGINEER INFORMATION

DEVELOPER/OWNER: HOWARD COUNTY GOVERNMENT
CONTACT: JEFF DANNIS, P.E., CSP
6751 COLUMBIA GATEWAY DRIVE, SUITE 514
COLUMBIA, MD 21046
TELEPHONE: (410) 313-2330

ENGINEER: EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.
CONTACT: MARK GUTBERLET, P.E.
225 SCHILLING CIRCLE
HUNT VALLEY, MD 21031
TELEPHONE: (410) 584-7000

LEGEND

SYMBOL	DESCRIPTION
---10---	EXISTING INDEX CONTOUR
---9---	EXISTING INTERMEDIATE CONTOUR
=====	STEEP SLOPES (>15%)
=====	EXISTING BUILDING
=====	EXISTING ROAD
=====	EXISTING GRAVEL ROAD
=====	EXISTING FENCE
=====	EXISTING STORM DRAIN INLET/JUNCTION BOX
=====	EXISTING BENCHMARK
=====	EXISTING UTILITY POLE
=====	EXISTING SANITARY CLEANOUT
=====	EXISTING ELECTRIC STRUCTURE
=====	EXISTING SHORELINE
=====	EXISTING WETLAND
=====	EXISTING RIPRAP
=====	EXISTING TREE OR BRUSH LINE
-----S-----S-----	EXISTING SANITARY FORCE MAIN
-----W-----W-----	EXISTING SANITARY SEWER PIPE (GRAVITY)
-----SD-----SD-----	EXISTING WATER PIPE
-----UE-----UE-----	EXISTING STORM DRAIN
-----UT-----UT-----	EXISTING UNDERGROUND ELECTRIC LINE
-----LR-----LR-----	EXISTING UNDERGROUND TELEPHONE LINE
-----LFM-----LFM-----	EXISTING LEACHATE LINE
-----DFM-----DFM-----	EXISTING LEACHATE FORCE MAIN
-----OFD-----OFD-----	EXISTING DRAIN FORCE MAIN
=====	EXISTING OVERFLOW DRAIN
=====	EXISTING PROPERTY LINE
-----B-----B-----	LIMIT OF FIELD RUN TOPO
-----	PROPERTY BUFFER LINE
-----10-----	PROPOSED INDEX CONTOUR
-----9-----	PROPOSED INTERMEDIATE CONTOUR
=====	LIMIT OF DISTURBANCE
-----Gsb-----	HYDRAULIC SOIL GROUP BOUNDARY
-----Gbc-----	HYDRAULIC SOIL GROUP LABEL
=====	DRAINAGE AREA BOUNDARY
-----B-1-----	SOIL BORING LABEL
-----SD-----SD-----	PROPOSED STORM DRAIN
-----W-----W-----	PROPOSED WATER PIPE
-----C-----C-----	PROPOSED CONTACT WATER LINE
-----UE-----UE-----	PROPOSED UNDERGROUND ELECTRIC LINE
-----SF-----SF-----	SILT FENCE
-----SSF-----SSF-----	SUPER SILT FENCE
-----DF-----DF-----	DIVERSION FENCE
-----A-2-----	EARTH DIKE
=====	STABILIZED CONSTRUCTION ENTRANCE
=====	TEMPORARY GABION OUTLET STRUCTURE
=====	TEMPORARY STONE OUTLET STRUCTURE
=====	AT-GRADE INLET PROTECTION
-----UT-----UT-----	PROP. UNDERGROUND TELEPHONE LINE
=====	PROPOSED LIGHT POLE
=====	PROPOSED ASPHALT
=====	PROPOSED CONCRETE
=====	PROPOSED ESD FACILITY



PROJECT ACCESS INSET

SHEET LIST

ECP SHEET NO.	DRAWING NO.	SHEET TITLE
1	T-1	TITLE SHEET
2	ES-1	EROSION AND SEDIMENT CONTROL PLAN - INITIAL I
3	ES-2	EROSION AND SEDIMENT CONTROL PLAN - INITIAL II
4	ES-3	EROSION AND SEDIMENT CONTROL PLAN - FINAL I
5	ES-4	EROSION AND SEDIMENT CONTROL PLAN - FINAL II
6	DA-1	ESD DRAINAGE AREA MAP

NOTE:
APPROVAL OF THIS ENVIRONMENTAL CONCEPT PLAN DOES NOT CONSTITUTE APPROVAL OF SUBSEQUENT SUBMISSION PLANS, SITE DEVELOPMENT PLANS OR REVISIONS TO APPROVED SITE DEVELOPMENT PLANS, FOREST CONSERVATION PLANS OR GRADING OR BUILDING PERMITS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS THAT MAY ALTER THE SITE DESIGN, HOUSE OR STRUCTURE LOCATION, DRIVEWAY LOCATION, GRADING, TREE CLEARING AND/OR OTHER REQUIREMENTS AS THE DEVELOPMENT PLAN PROGRESSES THROUGH THE PLAN REVIEW AND/OR PERMIT APPLICATION PROCESS IN ACCORDANCE WITH THE SUBDIVISION, LAND DEVELOPMENT AND ZONING REGULATIONS AND FOREST CONSERVATION REQUIREMENTS.

ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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.

Mark J. Gutberlet, P.E. 9/15/15
MARK J. GUTBERLET, P.E. DATE

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Jeff Dan尼斯 9/15/15
JEFF DANNIS DATE

DESIGN NARRATIVE:

NATURAL RESOURCE PROTECTION AND ENHANCEMENT
THE PROJECT DOES NOT IMPACT ADJACENT NATURAL RESOURCES. NO NEARBY TREES WILL BE REMOVED AND A NEARBY STREAM AND ITS BUFFER WILL NOT BE IMPACTED. A PORTION OF EXISTING MAN-MADE STEEP SLOPES WILL BE REQUIRED TO BE IMPACTED TO INSTALL THE COMPOST FACILITY, A PUBLIC ESSENTIAL SERVICE, AND OPERATED BY HOWARD COUNTY GOVERNMENT. THE LIMIT OF STEEP SLOPE IMPACTS WILL BE MINIMIZED TO THE MAXIMUM EXTENT POSSIBLE. A WAIVER PETITION TO 16.116(b)(1), STEEP SLOPE DISTURBANCE, WILL BE SUBMITTED AT TIME OF SDP REVIEW.

MAINTENANCE OF NATURAL FLOW PATTERNS
THE PROJECT DOES NOT ALTER NATURAL DRAINAGE PATTERNS.

REDUCTION OF IMPERVIOUS AREAS
THE NEW IMPERVIOUS AREA ASSOCIATED WITH THE PROJECT HAS BEEN MINIMIZED AS MUCH AS IS PRACTICABLE TO STILL ALLOW THE FUNCTIONALITY OF THE COMPOSTING OPERATION.

IMPLEMENTATION OF ESD PLANNING TECHNIQUES AND PRACTICES
THE PROPOSED PROJECT WILL UTILIZE A COMBINATION OF MICRO-BIORETENTION, AND SUBMERGED GRAVEL WETLAND FACILITIES, A GRASS SWALE AND BIORETENTIONS TO PROVIDED ESD TO THE MAXIMUM EXTENT PRACTICABLE. FOR ALL REMAINING REQUIRED ESD VOLUME, AN EXISTING WET POND WILL BE UTILIZED FOR TREATMENT PURPOSES.

PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 23402, EXPIRATION DATE 25 AUGUST 2016.

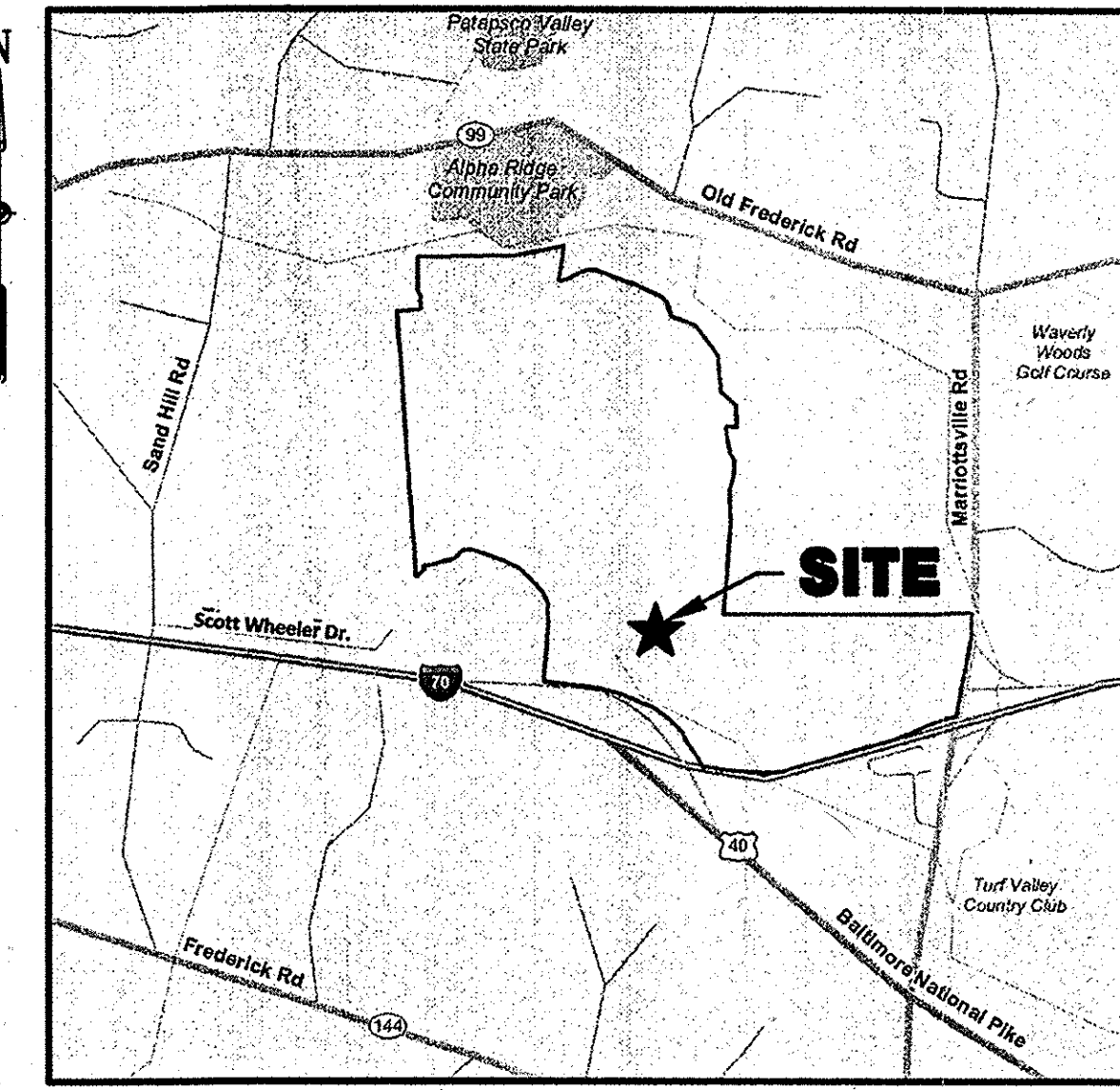
EA ENGINEERING, SCIENCE, AND TECHNOLOGY

DSN. BY: MBS/MP			
DRN. BY: JAP/KEJ			
CHK. BY: SMD			
DATE: OCTOBER 2014			

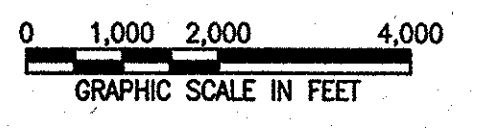
BY NO. REVISION DATE

WGS84 (DECIMAL DEGREES)
LAT: 39.310328
LONG: -79.912165

NAD83 MARYLAND STATE PLAN (FEET)
NORTHING: 598,623.21034
EASTING: 1,337,186.70975



LOCATION MAP



- NOTES:**
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN
 - THIS CAPITAL PROJECT SITE PLAN IS EXEMPT FROM FOREST CONSERVATION REQUIREMENTS OUTLINED IN APPENDIX "O" OF THE HOWARD COUNTY FOREST CONSERVATION MANUAL. FOREST CONSERVATION OBLIGATIONS HAVE BEEN PREVIOUSLY ADDRESSED BY SDP-97-128.
 - THE SYSTEM OF COORDINATES USED BY HOWARD COUNTY IS BASED IN THE FOLLOWING DATUMS AND PROJECTIONS:
 • HORIZONTAL: MARYLAND NAD83
 • VERTICAL: NAVD88

- GENERAL NOTES:**
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATION IF APPLICABLE.
 - THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
 - ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
 - ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
 - THE EXISTING TOPOGRAPHY OUTSIDE OF THE "LIMIT OF FIELD RUN TOPO" BOUNDARY HAS BEEN PROVIDED FROM THE HOWARD COUNTY GIS DATABASE IN DECEMBER 2013.
 - THE EXISTING TOPOGRAPHY AND UTILITIES INSIDE OF THE "LIMIT OF FIELD RUN TOPO", UNLESS OTHERWISE MENTIONED, HAVE BEEN PROVIDED FROM A FIELD RUN SURVEY BY THE HOWARD COUNTY SURVEY DIVISION IN AUGUST 2011.
 - THE TOPOGRAPHIC SURVEY IS BASED ON GEODETIC CONTROL STATIONS ALPHA 1, AERIAL TARGET 1, AERIAL TARGET 2, AND BENCHMARK 16B2M, BEING PART OF THE MARYLAND STATE REFERENCE SYSTEM NAD '83/91.
 - THE EXISTING FIBER OPTIC LINE HAS BEEN TAKEN FROM AN AS-BUILT PLAN PREPARED BY KCI CONVERGENT TECHNOLOGIES AND DATED 04/04/12.
 - THE EXISTING WATER LINES HAVE BEEN PROVIDED FROM TWO SEPARATE AS-BUILT PLANS PREPARED BY KCI TECHNOLOGIES DATED DECEMBER 2004 AND JUNE 2009.
 - THE SOILS HAVE BEEN PROVIDED FROM THE WEB SOIL SURVEY IN MARCH 2014.
 - WATER IS PUBLIC.
 - SEWER IS PUBLIC.
 - STORMWATER MANAGEMENT IS PROVIDED VIA A COMBINATION OF MICRO-BIORETENTION AND SUBMERGED GRAVEL WETLAND FACILITIES ALONG WITH A GRASS SWALE TO PROVIDED ESD TO THE MAXIMUM EXTENT PRACTICABLE. FOR ALL REMAINING REQUIRED ESD VOLUME, AN EXISTING WET POND WILL BE UTILIZED FOR TREATMENT PURPOSES. ALL FACILITIES WILL BE OWNED AND MAINTAINED BY HOWARD COUNTY.
 - EXISTING UTILITIES ARE BASED ON THE SURVEY PREPARED BY HOWARD COUNTY SURVEY DIVISION DATED AUGUST 2011.
 - THE FLOODPLAIN SHOWN HEREIN HAS BEEN PROVIDED FROM PLANS PREPARED BY URS DATED NOVEMBER 2006. THIS PLAN REFERENCES 1978 FLOODPLAIN DELINEATION BY CENTURY ENGINEERING AND A 1986 UPDATE BY BERNARD JOHNSON, INC.
 - THE WETLANDS DELINEATION WAS OBTAINED FROM PLANS PREPARED BY SCS ENGINEERS DATED JULY 2013.
 - NO TRAFFIC STUDY IS REQUIRED FOR THIS PROJECT.

Table 5.1 Natural Resources and the Corresponding Regulatory Authorities

FEDERAL	STATE	LOCAL
Wetlands	Tidal and Non-Tidal Wetlands	Steep Slopes
Major Waterways	Wetlands of Special State Concern	Highly Erodible Soils
Floodplains	Wetland Buffers	Enhanced Stream Buffers
	Stream Buffers	Topography/Slopes
	Perennial Streams	Springs
	Floodplains	Seeps
	Forests	Intermittent Streams
	Forest Buffers	Vegetative Cover
	Critical Areas	Soils
		Bedrock/Geology
		Existing Drainage Areas

HYDROLOGIC SOIL GROUP - HOWARD COUNTY, MARYLAND*

MAP UNIT SYMBOL	MAP UNIT NAME	HSG RATING	K RATING
Ba	Baile silt loam, 0-3% Slopes	D	0.32
GbB	Gladstone loam, 3-8% Slopes	B	0.20
Gbc	Gladstone loam, 8-15% Slopes	B	0.20
GnB	Glenville-Baile silt loams, 0-8% Slopes	C	0.37
Ubf	Udorthents, Refuse, 0-65% Slopes	N/A	N/A

*Soils information provided from USDA NRCS Web Soil Survey

TITLE SHEET

COMPOST FACILITY
AT ALPHA RIDGE LANDFILL
HOWARD COUNTY, MARYLAND

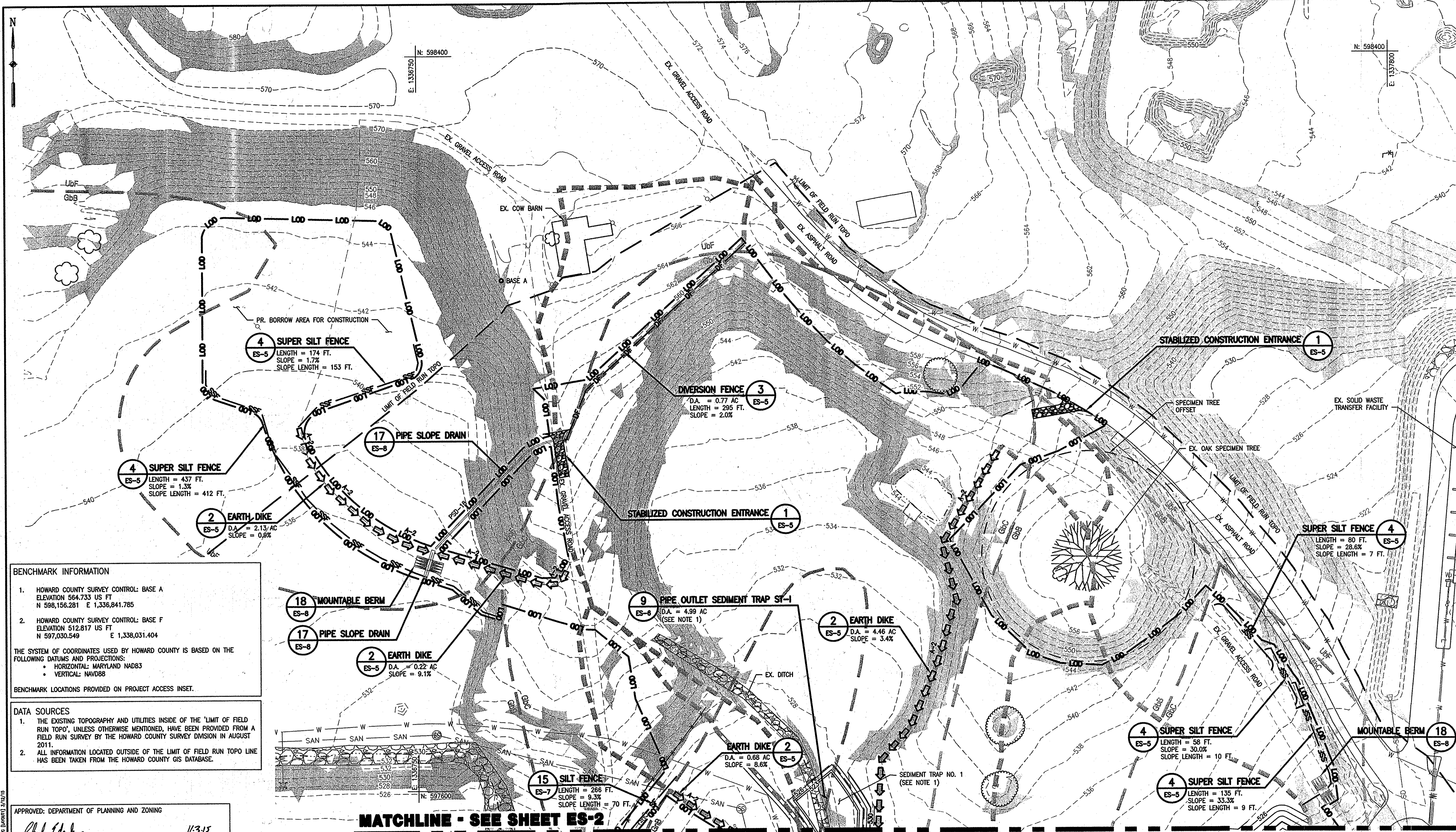
ECP SHEET: DRAWING:
1 OF 6 T-1

PROJECT: 14982.05
SHEET: 1 OF 33

ECA-15-033

FILE PATH: G:\PROJECTS\14982.05\14982.05.DWG DATE: 10/15/14

NOT FOR CONSTRUCTION - ENVIRONMENTAL CONCEPT PLAN



BENCHMARK INFORMATION

- HOWARD COUNTY SURVEY CONTROL: BASE A
ELEVATION 564.733 US FT
N 596,156.281 E 1,336,841.785
- HOWARD COUNTY SURVEY CONTROL: BASE F
ELEVATION 512.817 US FT
N 597,030.549 E 1,338,031.404

THE SYSTEM OF COORDINATES USED BY HOWARD COUNTY IS BASED ON THE FOLLOWING DATUMS AND PROJECTIONS:

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BENCHMARK LOCATIONS PROVIDED ON PROJECT ACCESS INSET.

DATA SOURCES

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- ALL INFORMATION LOCATED OUTSIDE OF THE LIMIT OF FIELD RUN TOPO LINE HAS BEEN TAKEN FROM THE HOWARD COUNTY GIS DATABASE.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

John E. Clark 11/3/15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

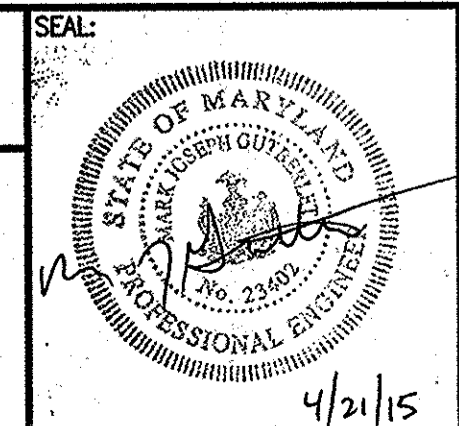
Kevin J. Lander 10/29/15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

GRID: 8 BLOCK: N/A
ZONING: RC-DEO PARCEL/LOT: 220, 253, 11, 23, 54
TAX MAP: 0016 ELECTION DISTRICT: 3-02

OWNER/ENGINEER INFORMATION

DEVELOPER/OWNER:
HOWARD COUNTY GOVERNMENT
CONTACT: JEFF DANNIS, P.E., CSP
6751 COLUMBIA GATEWAY DRIVE, SUITE 514
COLUMBIA, MD 21046
TELEPHONE: (410) 313-2330

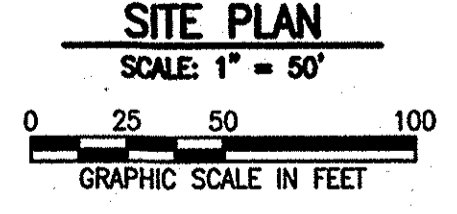
ENGINEER:
EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.
CONTACT: MARK GUTBERLET, P.E.
225 SCHILLING CIRCLE
HUNT VALLEY, MD 21031
TELEPHONE: (410) 584-7000



MATCHLINE - SEE SHEET ES-2

NOTES:

- SEE DRAWING ES-6 FOR SEDIMENT TRAP TABLE.



PROFESSIONAL CERTIFICATION:	DSN. BY: MBS/MP			
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 23402, EXPIRATION DATE 25 AUGUST 2016.	DRN. BY: JAP/KEJ			
	CHK. BY: SMD			
	DATE: OCTOBER 2014.	BY: NO.	REVISION	DATE

EROSION AND SEDIMENT CONTROL PLAN - INITIAL I

COMPOST FACILITY AT ALPHA RIDGE LANDFILL
HOWARD COUNTY, MARYLAND

ECP SHEET:	DRAWING:
2 OF 6	ES-1
PROJECT:	14982.05
SHEET:	10 OF 33

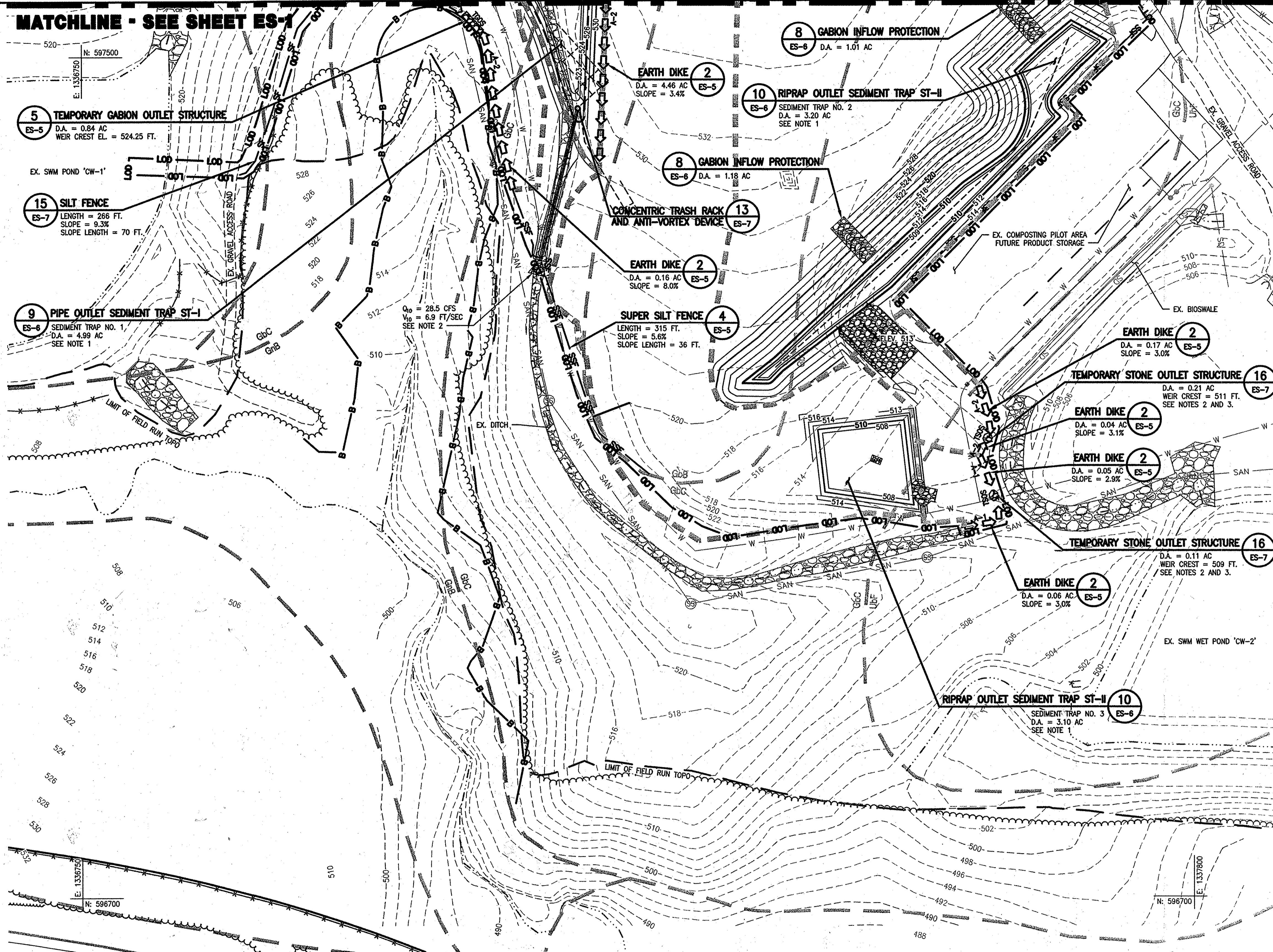
ECP-15-033

NOT FOR CONSTRUCTION - ENVIRONMENTAL CONCEPT PLAN

NOTES:

- SEE DRAWING ES-6 FOR SEDIMENT TRAP TABLE.
- RIPRAP APRONS AT SEDIMENT TRAP NO. 1 SHALL BE 14 FT. LONG BY 16.5 FT. WIDE.

MATCHLINE - SEE SHEET ES-1



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APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chris Clark 11-3-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

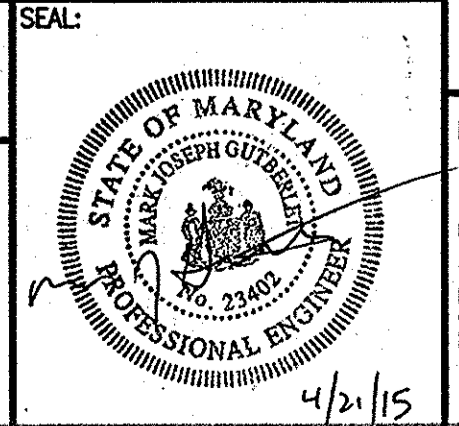
Kevin L. Lavelle 10-29-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

GRID: 8 BLOCK: N/A
ZONING: RC-DEO PARCEL/LOT: 220, 253, 11, 23, 54
TAX MAP: 0016 ELECTION DISTRICT: 3-02

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225 SCHILLING CIRCLE
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DSN. BY:	MBS/MP			
DRN. BY:	JAP/KEJ			
CHK. BY:	SMD			
DATE:	OCTOBER 2014			
BY	NO.	REVISION	DATE	

SITE PLAN
SCALE: 1" = 50'
0 25 50 100
GRAPHIC SCALE IN FEET

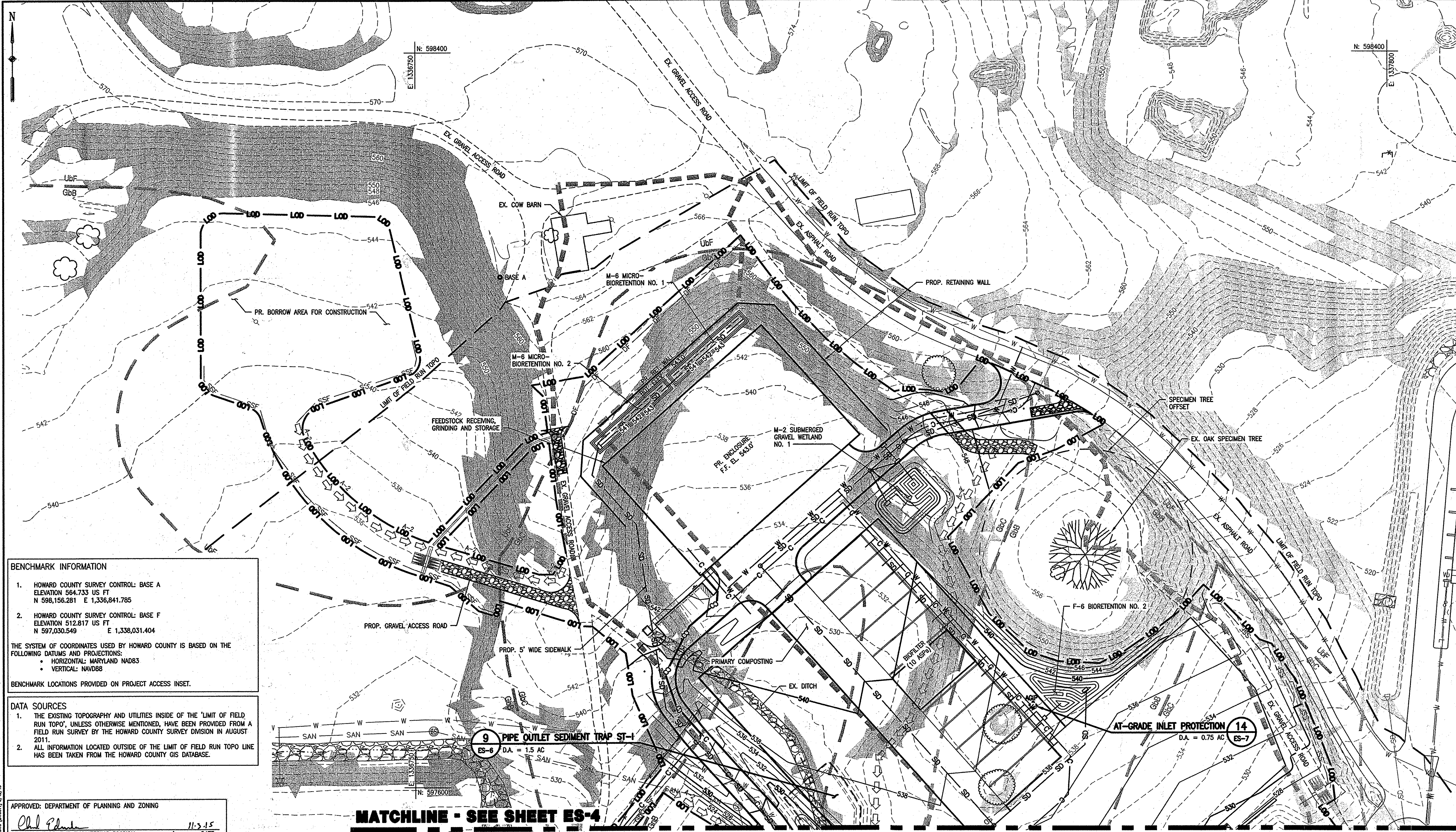
EROSION AND SEDIMENT CONTROL PLAN - INITIAL II

COMPOST FACILITY AT ALPHA RIDGE LANDFILL
HOWARD COUNTY, MARYLAND

ECP SHEET:	DRAWING:
3 OF 6	ES-2
PROJECT:	14982.05
SHEET:	11 OF 33

EA-15-033

NOT FOR CONSTRUCTION - ENVIRONMENTAL CONCEPT PLAN



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APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Edman 11-3-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

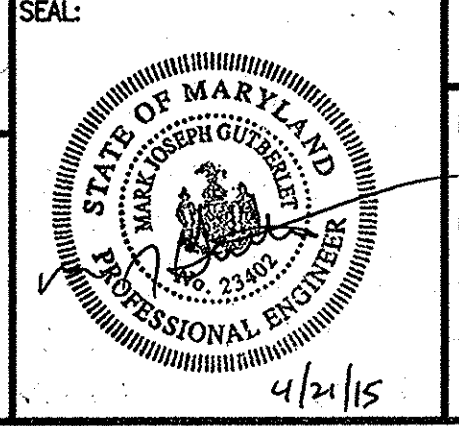
Kevin D. ... 10-19-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

GRID: 8 BLOCK: N/A
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EA ENGINEERING, SCIENCE, AND TECHNOLOGY

DSN. BY:	MBS/MP			
DRN. BY:	JAP/KEJ			
CHK. BY:	SMD			
DATE:	OCTOBER 2014			
BY	NO.	REVISION	DATE	

SITE PLAN
SCALE: 1" = 50'
GRAPHIC SCALE IN FEET

- NOTES:**
- SEE DRAWING ES-6 FOR SEDIMENT TRAP TABLE.
 - EROSION AND SEDIMENT CONTROLS INSTALLED DURING INITIAL PHASE ARE SHOWN AS EXISTING IN FINAL PHASE.

MATCHLINE - SEE SHEET ES-4

EROSION AND SEDIMENT CONTROL PLAN - FINAL I

COMPOST FACILITY AT ALPHA RIDGE LANDFILL
HOWARD COUNTY, MARYLAND

ECP SHEET:	DRAWING:
4 OF 6	ES-3
PROJECT:	14982.05
SHEET:	12 OF 33

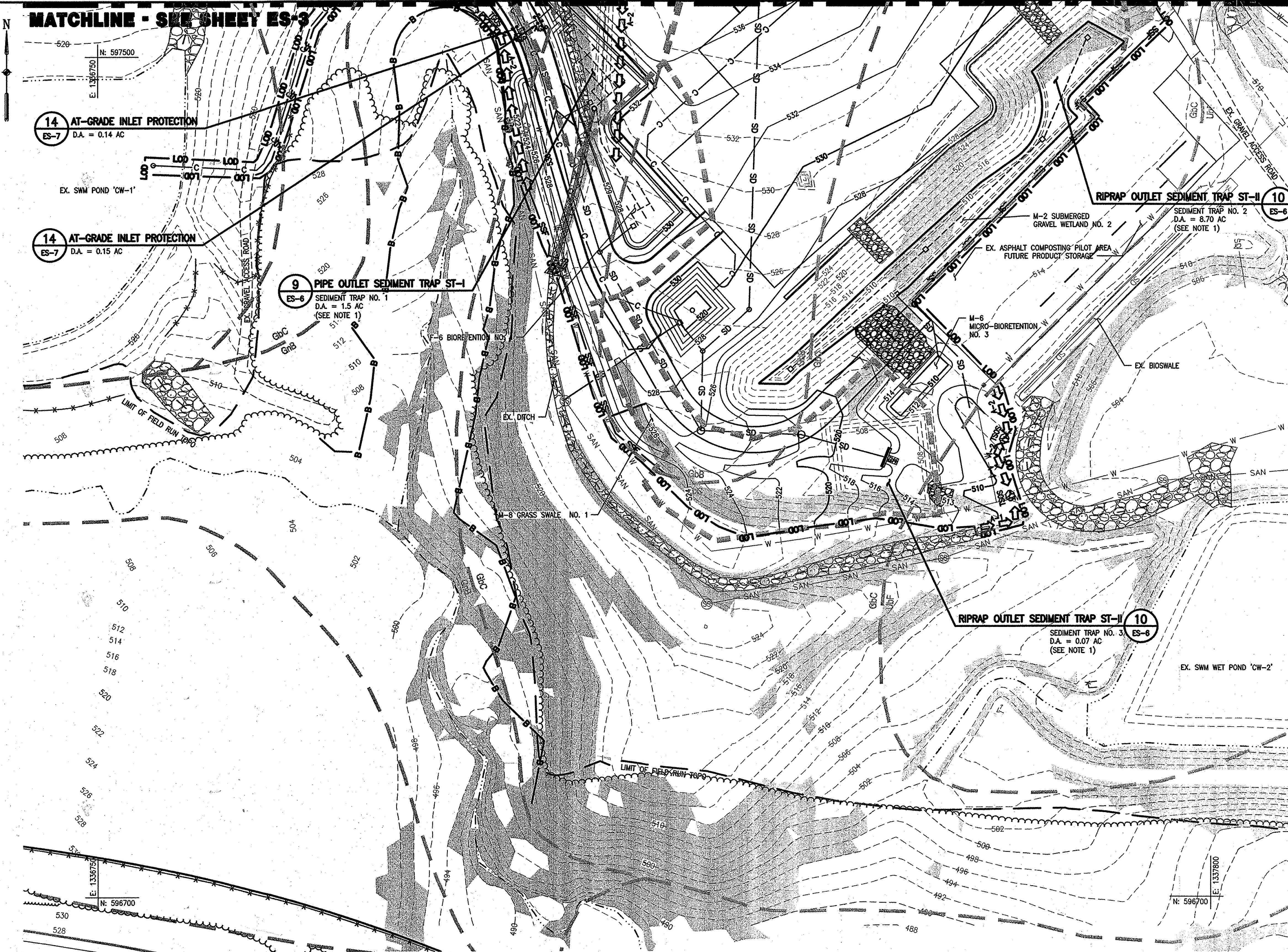
EA-15-033

NOT FOR CONSTRUCTION - ENVIRONMENTAL CONCEPT PLAN

NOTES:

- SEE DRAWING ES-6 FOR SEDIMENT TRAP TABLE.
- EROSION AND SEDIMENT CONTROLS INSTALLED DURING INITIAL PHASE ARE SHOWN AS EXISTING IN FINAL PHASE.

MATCHLINE - SEE SHEET ES-3



BENCHMARK INFORMATION

- HOWARD COUNTY SURVEY CONTROL: BASE A
ELEVATION 564.733 US FT
N 598,156.281 E 1,336,841.785
- HOWARD COUNTY SURVEY CONTROL: BASE F
ELEVATION 512.817 US FT
N 597,030.549 E 1,338,031.404

THE SYSTEM OF COORDINATES USED BY HOWARD COUNTY IS BASED ON THE FOLLOWING DATUMS AND PROJECTIONS:

- HORIZONTAL: MARYLAND NAD83
- VERTICAL: NAVD88

BENCHMARK LOCATIONS PROVIDED ON PROJECT ACCESS INSET.

DATA SOURCES

- THE EXISTING TOPOGRAPHY AND UTILITIES INSIDE OF THE 'LIMIT OF FIELD RUN TOPO', UNLESS OTHERWISE MENTIONED, HAVE BEEN PROVIDED FROM A FIELD RUN SURVEY BY THE HOWARD COUNTY SURVEY DIVISION IN AUGUST 2011.
- ALL INFORMATION LOCATED OUTSIDE OF THE LIMIT OF FIELD RUN TOPO LINE HAS BEEN TAKEN FROM THE HOWARD COUNTY GIS DATABASE.

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Phil P. ... 11-3-15
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

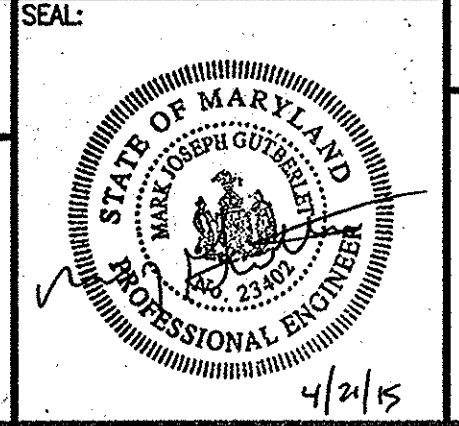
Kathleen ... 10-26-15
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

GRID: 8 BLOCK: N/A
ZONING: RC-DEO PARCEL/LOT: 220, 253, 11, 23, 54
TAX MAP: 0016 ELECTION DISTRICT: 3-02

OWNER/ENGINEER INFORMATION

DEVELOPER/OWNER:
HOWARD COUNTY GOVERNMENT
CONTACT: JEFF DANNIS, P.E., CSP
6751 COLUMBIA GATEWAY DRIVE, SUITE 514
COLUMBIA, MD 21046
TELEPHONE: (410) 313-2330

ENGINEER:
EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.
CONTACT: MARK GUTBERLET, P.E.
225 SCHILLING CIRCLE
HUNT VALLEY, MD 21031
TELEPHONE: (410) 584-7000



PROFESSIONAL CERTIFICATION:

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 23402, EXPIRATION DATE 25 AUGUST 2016.



DSN. BY:	MBS/MP			
DRN. BY:	JAP/KEJ			
CHK. BY:	SMD			
DATE:	OCTOBER 2014			
BY	NO.	REVISION		DATE

SITE PLAN
SCALE: 1" = 50'
GRAPHIC SCALE IN FEET

EROSION AND SEDIMENT CONTROL PLAN - FINAL II

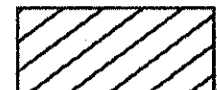



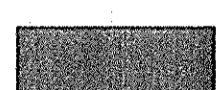
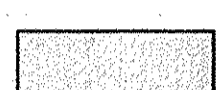


COMPOST FACILITY AT ALPHA RIDGE LANDFILL
HOWARD COUNTY, MARYLAND

ECP SHEET:	DRAWING:
5 OF 6	ES-4
PROJECT:	14982.05
SHEET:	13 OF 33

ECA-15-033

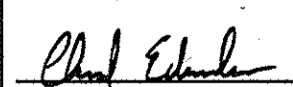
NOT FOR CONSTRUCTION - ENVIRONMENTAL CONCEPT PLAN


LEGEND

-  DRAINAGE AREA 1
M-6 MICRO-BIORETENTION NO. 1
-  DRAINAGE AREA 2
M-6 MICRO-BIORETENTION NO. 2
-  DRAINAGE AREA 3
M-2 SUBMERGED GRAVEL WETLAND NO. 1
-  DRAINAGE AREA 4
F-6 BIORETENTION NO. 1
-  DRAINAGE AREA 5
F-6 BIORETENTION NO. 2
-  DRAINAGE AREA 6
M-2 SUBMERGED GRAVEL WETLAND NO. 2
-  DRAINAGE AREA 7
M-8 GRASS SWALE NO. 1
-  DRAINAGE AREA 8
M-6 MICRO-BIORETENTION NO. 3

DRAINAGE AREA NO.	DRAINAGE AREA (AC)	% IMPERVIOUS	ESD FEATURE ID	ESD FEATURE DESCRIPTION	PROVIDED ESDV (CU.FT.)
1	0.50	84.6	M-6	MICRO-BIORETENTION NO. 1	1,750
2	0.50	84.6	M-6	MICRO-BIORETENTION NO. 2	1,750
3	1.63	26.5	M-2	SUBMERGED GRAVEL WETLAND 1	1,143
4	1.43	35.6	F-6	BIORETENTION NO. 1	4,674
5	1.43	35.6	F-6	BIORETENTION NO. 2	635
6	5.43	61.9	M-2	SUBMERGED GRAVEL WETLAND 2	18,930
7	0.21	31.0	M-8	GRASS SWALE NO. 1	451
8	0.12	45.9	M-6	MICRO-BIORETENTION NO. 3	522
TOTAL PROVIDED ESDV					29,855
TARGET ESDV					52,844

NOTE:
1. THE REMAINDER OF THE REQUIRED VOLUME OF 22,989 CF WILL BE TREATED BY THE EXISTING CW-2 WET POND.

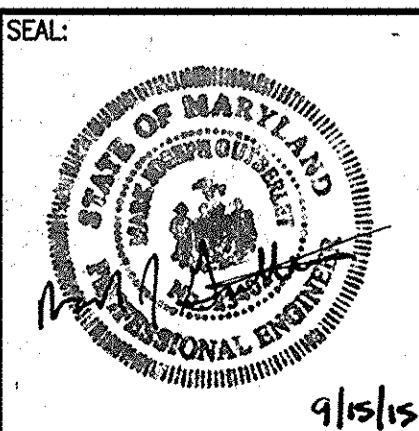
APPROVED: DEPARTMENT OF PLANNING AND ZONING
 11-3-15
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

 10-29-15
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

GRID: B BLOCK: N/A
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DSN. BY:	MBS/MP			
DRN. BY:	JAP/KEJ			
CHK. BY:	SMD			
DATE:	MAY 2015			
BY	NO.	REVISION	DATE	

DRAINAGE AREA MAP
 SCALE: 1" = 80'
 0 40 80 160
 GRAPHIC SCALE IN FEET

ESD DRAINAGE AREA MAP

**COMPOST FACILITY - PHASE II
 AT ALPHA RIDGE LANDFILL
 HOWARD COUNTY, MARYLAND**

ECP SHEET: DRAWING:
 6 OF 6 DA-1

PROJECT:
 14982.05
 SHEET:
 42 OF 59

ECR-15-033

NOT FOR CONSTRUCTION - ENVIRONMENTAL CONCEPT PLAN