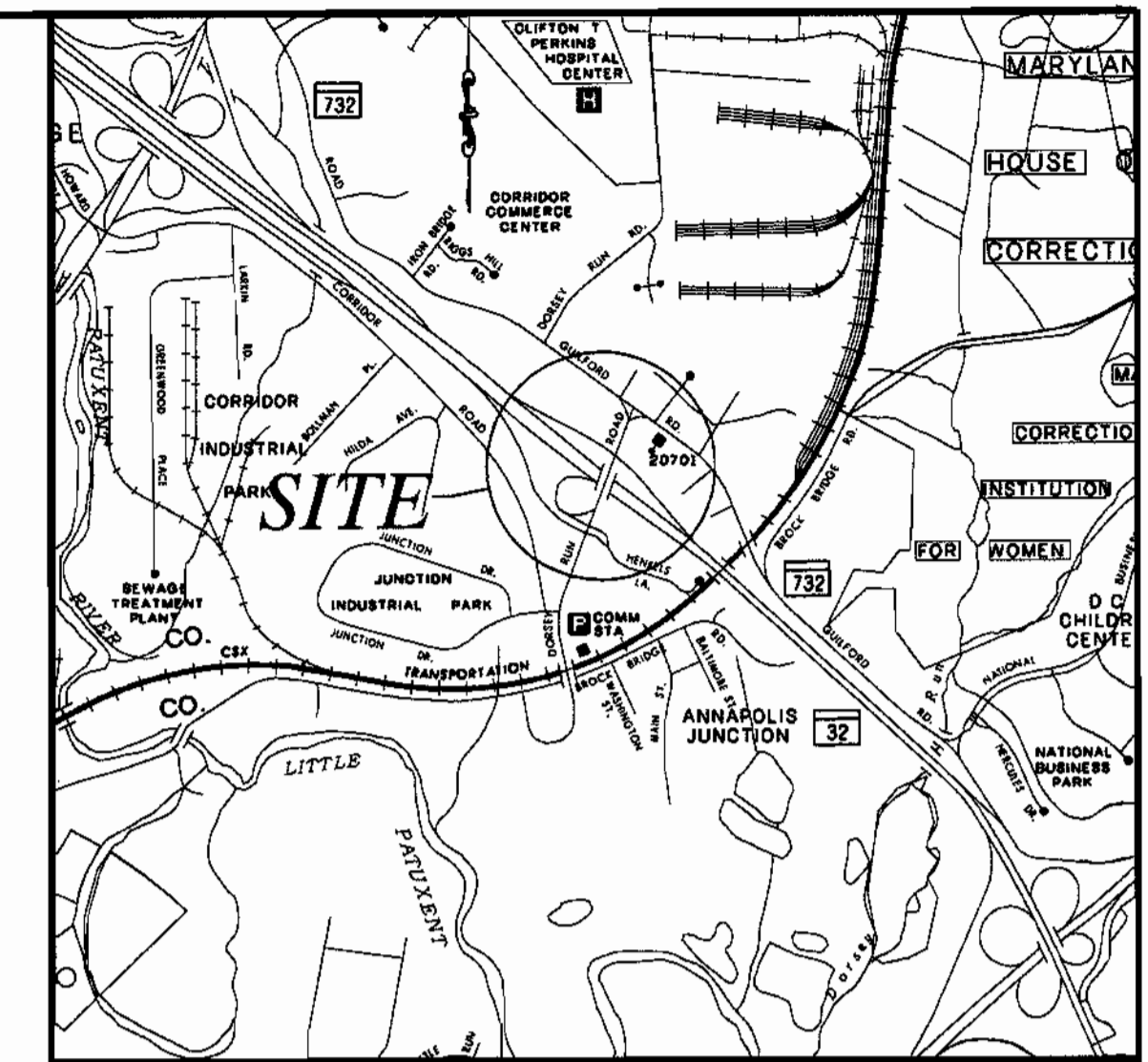


SITE DATA ANALYSIS:

A. TOTAL PROJECT AREA:	112 AC.
B. AREA OF PLAN SUBMISSION:	112 AC.
C. LIMIT OF DISTURBED AREA:	8.39 AC. (365,581 SF)
D. PRESENT ZONING:	
E. PROPOSED USE OF SITE:	STATE HIGHWAY
F. FLOOR SPACE ON EACH LEVEL OF BUILDINGS PER USE: NA	

SITE DEVELOPMENT PLAN FOR DORSEY RUN ROAD AT MD 32 HOWARD CO., MARYLAND

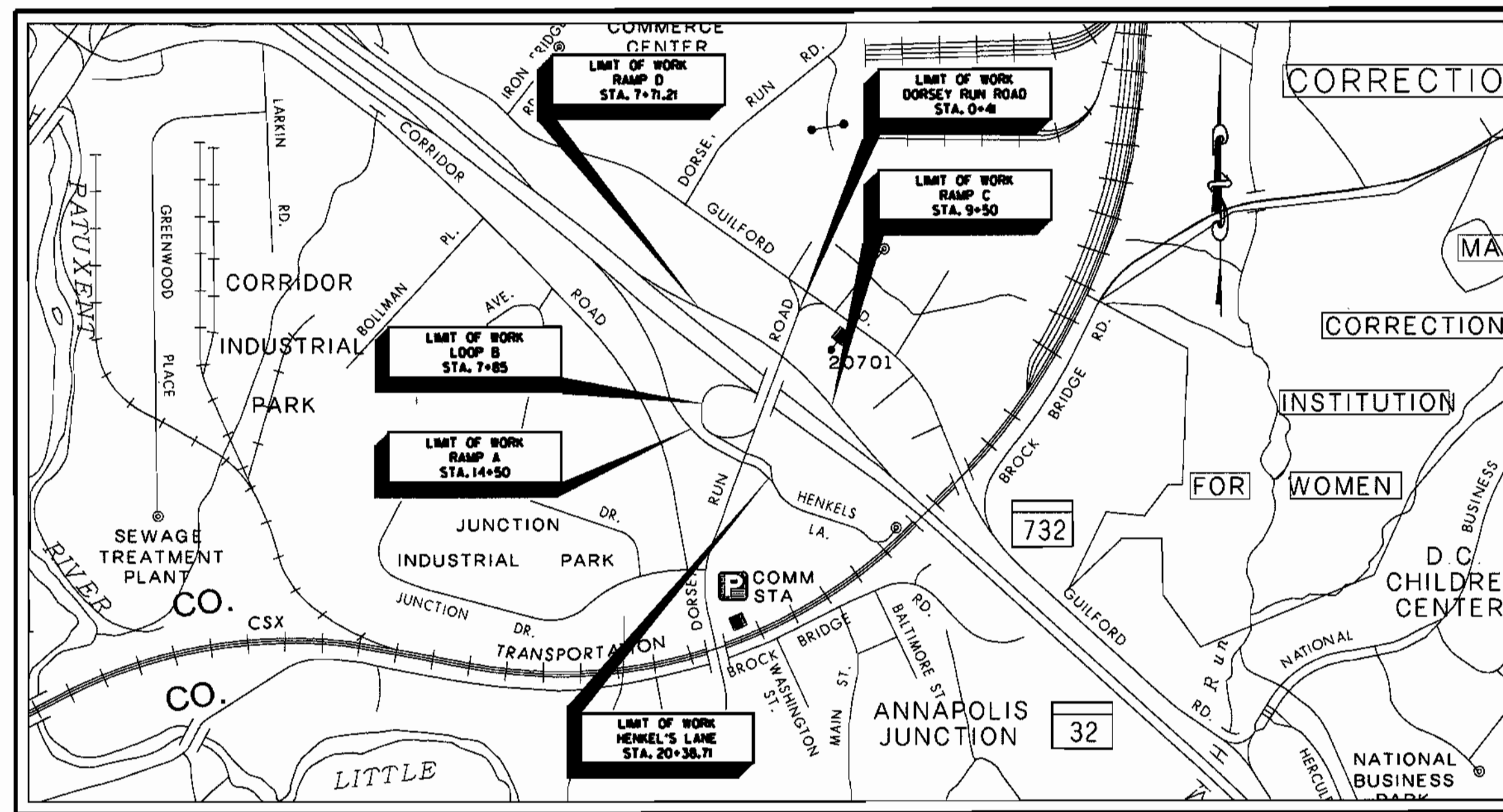


VICINITY MAP
SCALE: 1" = 2000'

DORSEY RUN ROAD @ MD 32 FROM HENKEL'S LANE TO GUILFORD ROAD

GENERAL NOTES:

- THE TOPOGRAPHY SHOWN IS BASED UPON A SURVEY BY PK&K
- HORIZONTAL CONTROL BASED ON MARYLAND STATE GRID SYSTEM
- HOWARD CO. BENCHMARK CONTROL:
#4392 - STAMPED DISK IN U.S. 1 MEDIAN AT NS OF BROOKDALE DR.
N 490906.0, E 865758.6, ELEV. 208.90
#4396 - STAMPED DISK IN SHOULDER WS U.S. 1 AT PARKING LOT ENTRANCE, 0.5 MI. SW OF MEADOWBRIDGE RD.
N 489526.6, E 864447.7, ELEV. 209.84
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO FIELD LOCATE AND VERIFY ACTUAL SITE CONDITIONS PRIOR TO THE START OF ANY WORK. THERE IS NO WARRANTY OR GUARANTEE ON THE COMPLETENESS OR CORRECTNESS OF THE EXISTING CONDITION INFORMATION. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER PRIOR TO THE START OF ANY WORK.
- THE LOCATION OF EXISTING UNDERGROUND UTILITIES IS SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE TO PUBLIC UTILITIES BEFORE COMMENCING ANY WORK. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR THE COST OF REPAIR OF ANY AND ALL DAMAGES WHICH OCCUR AS A RESULT OF A FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL EXISTING UTILITIES TO REMAIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" AT 1-800-287-7777 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION WORK.
- THE CONTRACTOR SHALL STAKE OUT ALL BASELINES OF CONSTRUCTION, THE LOCATION OF ALL NEW CONSTRUCTION AND VERIFY ALL SETBACKS, OFFSETS AND CLEARANCES PRIOR TO START OF ANY WORK.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING UTILITY INVERTS AND CLEARANCES FROM NEW WORK PRIOR TO START OF ANY WORK.
- ALL DISTURBED AREAS NOT STABILIZED WITH STRUCTURES, PAVING, AND PLANTINGS SHALL BE STABILIZED WITH FOUR INCHES OF TOPSOIL, SEED, MULCH, AND WATER TO ESTABLISH AN ADEQUATE GROWTH OF GRASS.
- ALL WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATION OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE TOPS OF ALL FRAMES, GRATES AND COVERS OF ALL EXISTING UTILITIES WITHIN THE LIMITS OF CONTRACT AND/OR DISTURBANCE SHALL BE ADJUSTED TO THE NEW GRADES.
- CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES.
- NUMERICAL DIMENSIONS AND ELEVATIONS SHOWN SHALL SUPERSEDE ANY DISCREPANCY IN THE SCALING ON THE DRAWINGS.
- THERE ARE NO KNOWN CEMETERIES OR BURIAL GROUNDS ON THIS SITE. HOWEVER UPON DISCOVERY OF ANY EVIDENCE OF BURIAL OR GRAVES, THE DEVELOPMENT WILL BE SUBJECT TO SECTION 16.1505 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- WATER IS PUBLIC (EXCEPT WHERE NOTED).
- SEWER SERVICE IS CONNECTED TO THE COUNTY PUBLIC SEWER SYSTEM.
- THE WETLAND DELINEATION FOR THIS PROJECT WAS PREPARED BY WECMA DATED AUGUST 16, 2001. THERE ARE NO WETLANDS OR WATERS WITHIN THE LOD.
- 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.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF PAVEMENT.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE 100 YEAR FLOODPLAIN, WETLANDS, STREAM, OR THEIR REQUIRED BUFFERS AND THE FOREST CONSERVATION EASEMENT AREA, EXCEPT AS APPROVED BY WF-00-36.
- ALL EXTERIOR ON-SITE LIGHTING SHALL BE MOUNTED ON THE PROPOSED BUILDINGS (SEE ARCH PLANS) AND SHALL BE ORIENTED TO DIRECT OR REFLECT LIGHT INWARDS AND DOWNWARDS AWAY FROM ALL ADJOINING PUBLIC STREETS AND RESIDENTIAL LAND USE PROPERTIES IN ACCORDANCE WITH SECTION 134.B.2 OF THE HOWARD COUNTY ZONING REGULATIONS.
- THIS PROJECT IS EXEMPT FROM THE REQUIREMENTS OF SUBTITLE 12, FOREST CONSERVATION, SECTION 16.1202.b.(ii).



SITE LAYOUT
SCALE: 1" = 1000'

ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

INDEX OF SHEETS		
SHEET NO.	DWG NO.	DESCRIPTION
1	CS-1	COVER SHEET
2	SW-1	STORMWATER MANAGEMENT DETAILS & SPECIFICATIONS
3	SW-2	STORMWATER MANAGEMENT PLAN & DETAILS SAND FILTER NO. 1
4	SW-3	STORMWATER MANAGEMENT PLAN & DETAILS SAND FILTER NO. 2
5	SW-4	STORMWATER MANAGEMENT PLAN & DETAILS SAND FILTER NO. 3
6	EP-1	EROSION CONTROL PLAN - INITIAL PHASE
7	EP-2	EROSION CONTROL PLAN - INITIAL PHASE
8	EP-3	EROSION CONTROL PLAN - INITIAL PHASE
9	EP-4	EROSION CONTROL PLAN - INITIAL PHASE
10	EP-5	EROSION CONTROL PLAN - INITIAL PHASE
11	EP-6	EROSION CONTROL PLAN - INITIAL PHASE
12	EP-7	EROSION CONTROL PLAN - INITIAL PHASE
13	EP-8	EROSION CONTROL PLAN - FINAL PHASE
14	EP-9	EROSION CONTROL PLAN - FINAL PHASE
15	EP-10	EROSION CONTROL PLAN - FINAL PHASE
16	EP-11	EROSION CONTROL PLAN - FINAL PHASE
17	EP-12	EROSION CONTROL PLAN - FINAL PHASE
18	EP-13	EROSION & SEDIMENT CONTROL DETAILS
19	EP-14	EROSION & SEDIMENT CONTROL NOTES AND DETAILS
20	SB-1	STORMWATER MANAGEMENT SOIL BORING LOGS
21	SB-2	STORMWATER MANAGEMENT SOIL BORING LOGS
22	SB-3	STORMWATER MANAGEMENT SOIL BORING PLAN

OWNER	DEVELOPER
MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045

STORMWATER MANAGEMENT / EROSION & SEDIMENT CONTROL COVER SHEET

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND**

ENGINEERS: **WR Consulting Engineers**
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: AS NOTED	DRAWING NO:
MAP NO.:	CS-1
GRID NO.:	
PARCEL NO.:	SHEET NO. 1 OF 22

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

[Signature] 4/18/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/23/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/26/02
DIRECTOR DATE

LEGEND	EXISTING		NEW	
	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
BUILDING	EX. BLDG.	NEW BLDG.	MANHOLE	⊙
BITUMINOUS PAVING	BIT. PAVING	LIGHT HEAVY	INLET	□
CONCRETE SIDEWALK	CONC. SIDEWALK		CONTOUR	159 160
CURB	—		FENCE	x
STORM DRAIN	—		TREE	⊗
SANITARY	—		TREELINE	~
WATER	—		PROPERTY LINE	—
GAS	—		WETLANDS LIMIT	—
STEAM	—		WETLAND BUFFER	—
ELECTRIC	—		FLOOD PLAIN	—
TELEPHONE	—		STREAM	—
ELEC/TELE DUCT	—		STREAM BUFFER	—
VALVE	⊕		LIMIT OF DISTURBANCE	—
HYDRANT	⊗		STREET LIGHT	—

Developer Certification:
"I/we certify that all development and construction will be done according to this plan, and that any 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."

[Signature] 4/18/02
Signature of Developer Date

Printed Name: **J. J. Swanson, Jr.**

Engineer's Certification:
"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."

[Signature] 4/18/02
Signature of Engineer Date

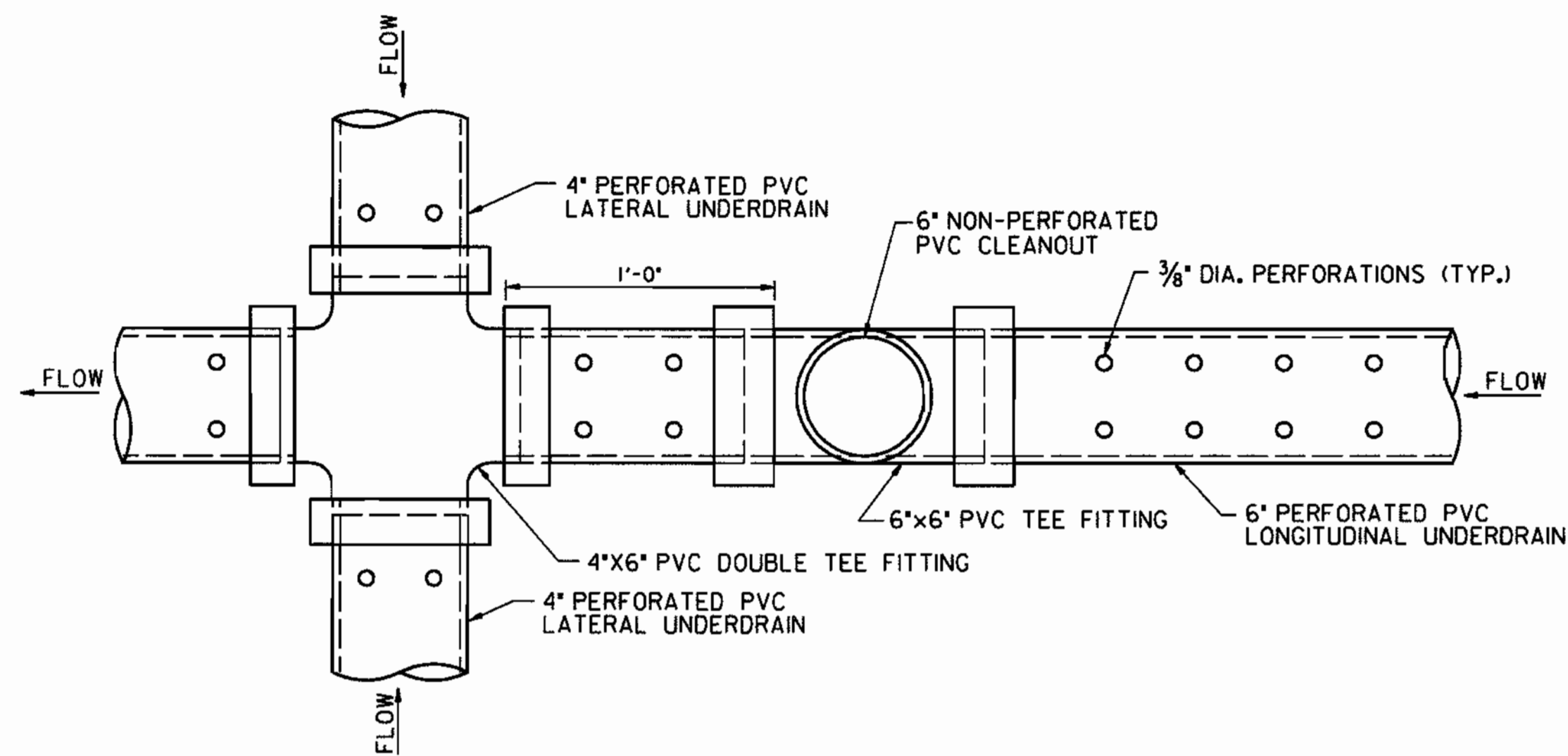
Printed Name: **Leann J. Kriesel**

Reviewed for HOWARD SCD and meets Technical Requirements.

[Signature] 4/18/02
Signature of Reviewer Date

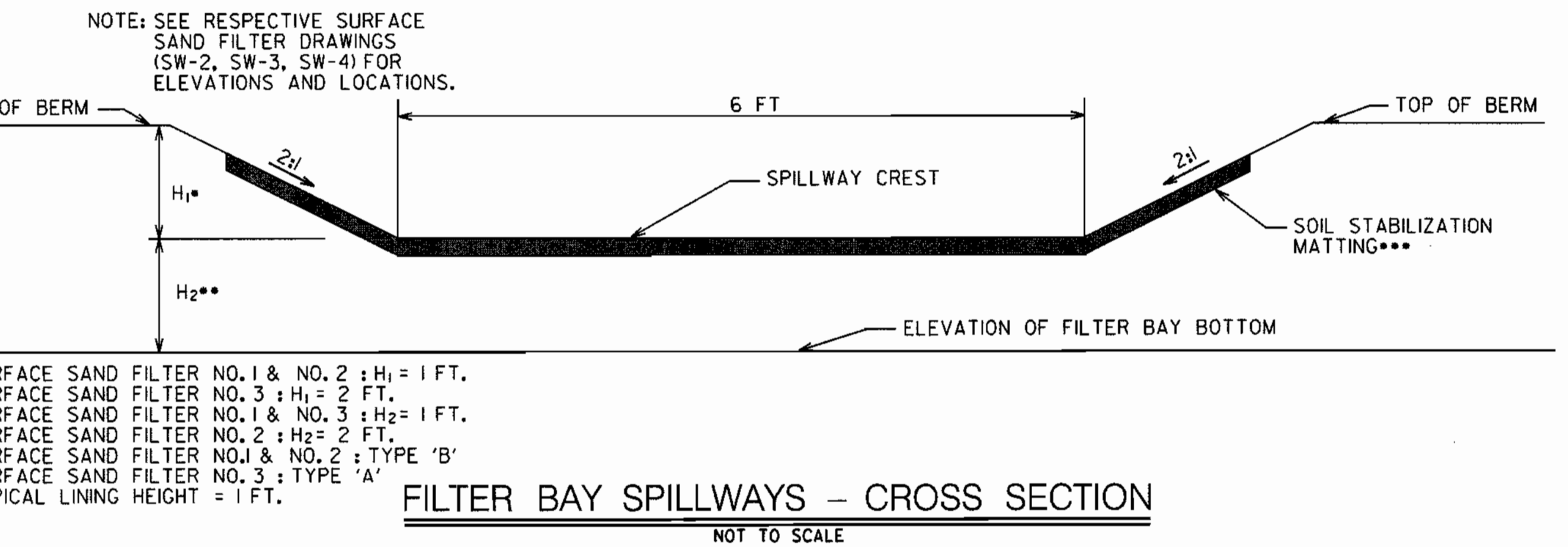
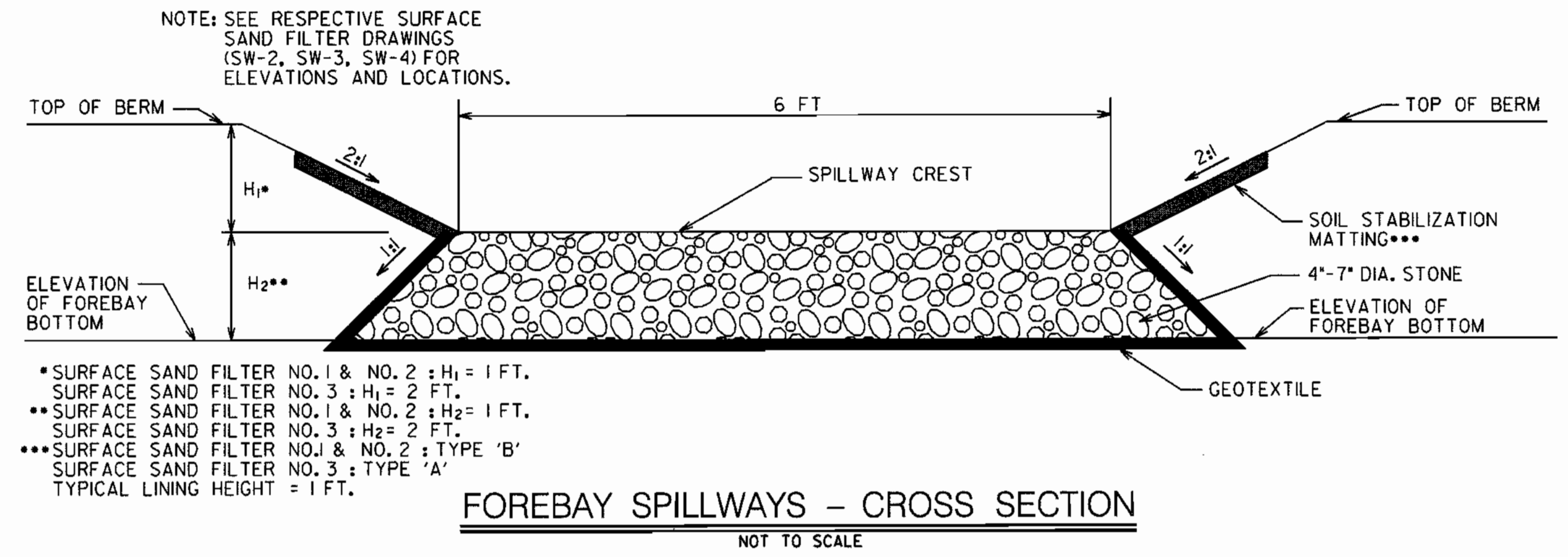
This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 4/18/02
Signature of District Director Date



UNDERDRAIN CONNECTION DETAIL
NOT TO SCALE

- NOTES:**
- PVC FITTINGS AND CONNECTIONS SHALL BE INSTALLED AS PER MANUFACTURER'S INSTRUCTIONS.
 - UNDERDRAIN GRAVEL OMITTED ON UNDERDRAIN CONNECTION DETAIL FOR CLARIFICATION.
 - EACH CLEANOUT PIPE SHALL HAVE A THREADED PVC FITTING AND SEWER CAP WITH A 2 INCH SQUARE LUG.
 - CAPS SHALL BE PLACED ON UPSTREAM ENDS OF ALL UNDERDRAIN PIPES.



OPERATION AND MAINTENANCE REQUIREMENTS FOR SURFACE SAND FILTERS (MDE FACILITY CODE F-1)

- The sediment chamber (forebay) outlet devices (stone check dams) shall be cleaned/repared when drawdown times within the chamber exceed thirty-six (36) hours. Trash and debris shall be removed as necessary.
- Sediment should be cleaned out of the sedimentation chamber (forebay) when it accumulates to a depth of more than six inches. Vegetation within the sedimentation chamber should be limited to a height of 18 inches.
- When the filtering capacity of the filter diminishes substantially (e.g., when water ponds on the surface of the filter bed for more than seventy-two (72) hours), the top few inches of discolored material shall be removed and shall be replaced with fresh material. The removed sediments should be disposed in an acceptable manner (e.g., landfill). Silt/sediment should be removed from the filter bed when the accumulation exceeds one inch.
- Surface sand filters that have a grass cover should be mowed a minimum of three (3) times per growing season to maintain maximum grass heights less than 12 inches.
- Dead or diseased plant material shall be replaced.
- Direct maintenance access shall be provided to the pretreatment area and the filter bed.
- Construction of surface sand filters shall conform to the specifications outlined in the plans.

MATERIAL SPECIFICATIONS FOR SURFACE SAND FILTERS (MDE FACILITY CODE F-1)			
Material	Specification/Test Method	Size	Notes
sand	clean AASHTO-M-6 or ASTM-C-33 concrete sand	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.
topsoil	MSHA 2001 Standard Specifications: section 920.01.	n/a	Topsoil may be salvaged from construction site.
underdrain gravel	AASHTO-M-43	0.375" to 0.75"	
4"-7" diam. gabion stone	MSHA 2001 Standard Specifications: section 901.05.	4" to 7"	
geotextile fabric	ASTM-D-4833 (puncture strength-125 lb.) ASTM-D-4632 (tensile strength - 300 lb.)	0.08" thick equivalent opening size of #80 sieve	Must maintain 125 gpm per sq. ft. flow rate.
soil stabilization matting	MSHA 2001 Standards Specifications: section 920.06.	n/a	Filters #1 and #2 to have type 'B' soil stabilization matting on all vegetated channels. Filter #3 to have Type 'A' soil stabilization matting on all vegetated channels.
underdrain piping, connections, and fittings	F 758, Type PS 28 or AASHTO-M-278	4" or 6" rigid schedule 40 PVC or SDR35	Perforated pipe to have 3/8" perf. @ 6" on center, 4 holes per row. Minimum of 3" of gravel over pipes; not necessary underneath pipes. Caps, connections, and elbows to be provided as shown on details and plans.
underdrain outlet	MSHA Standard No. 387.01	6" PVC	Filters #1 and #3 to have standard outlet. Filter #2 to be outletted into proposed type 's' double-grate inlet.

NOTE:
THE LUMP SUM PRICE FOR EACH OF THE THREE SURFACE SAND FILTERS SHALL CONSIST OF THE ITEMS LISTED ABOVE.

SURFACE SAND FILTER CONSTRUCTION SPECIFICATIONS

- SAND IN THE SAND FILTERS SHALL BE CONSTRUCTED IN 6-INCH LIFTS AND FLOODED TO AID IN CONSOLIDATION OF THE SAND.
- TWO (2) FEET OF OVERLAP SHALL BE THE MINIMUM BETWEEN SHEETS OF GEOTEXTILE, WITH THE UPSTREAM SHEET OVERLAPPING THE DOWNSTREAM SHEET.
- LARGE TREE ROOTS SHALL BE TRIMMED FLUSH WITH THE SIDES OF THE SAND FILTER TO PREVENT PUNCTURING OR TEARING OF GEOTEXTILE.
- WITH THE EXCEPTION OF THE SAND LAYER, FILL TO BE COMPACTED TO MINIMUM 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN +/- 2% OF THE OPTIMUM. (AASHTO METHOD T-99, STANDARD PROCTOR.)
- SAND FILTERS SHALL NOT BE CONSTRUCTED UNTIL ALL RESPECTIVE CONTRIBUTORY DRAINAGE AREAS HAVE BEEN STABILIZED.

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

[Signature] 4/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/23/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/26/02
DIRECTOR DATE

Developer Certification:
"I/We certify that all development and construction will be done according to this plan, and that any 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."

[Signature] 4/2/02
Signature of Developer Date
Printed Name: J. J. SUREGIBER, JR.

Engineer's Certification:
"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."

[Signature] 4/6/02
Signature of Engineer Date
Printed Name: LEON J. KRIESEL

Reviewed for HOWARD SCD and meets Technical Requirements.
[Signature] 4/9/02
USDA - Natural Resources Conservation Service Date
This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 4/9/02
Howard SCD Date

OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
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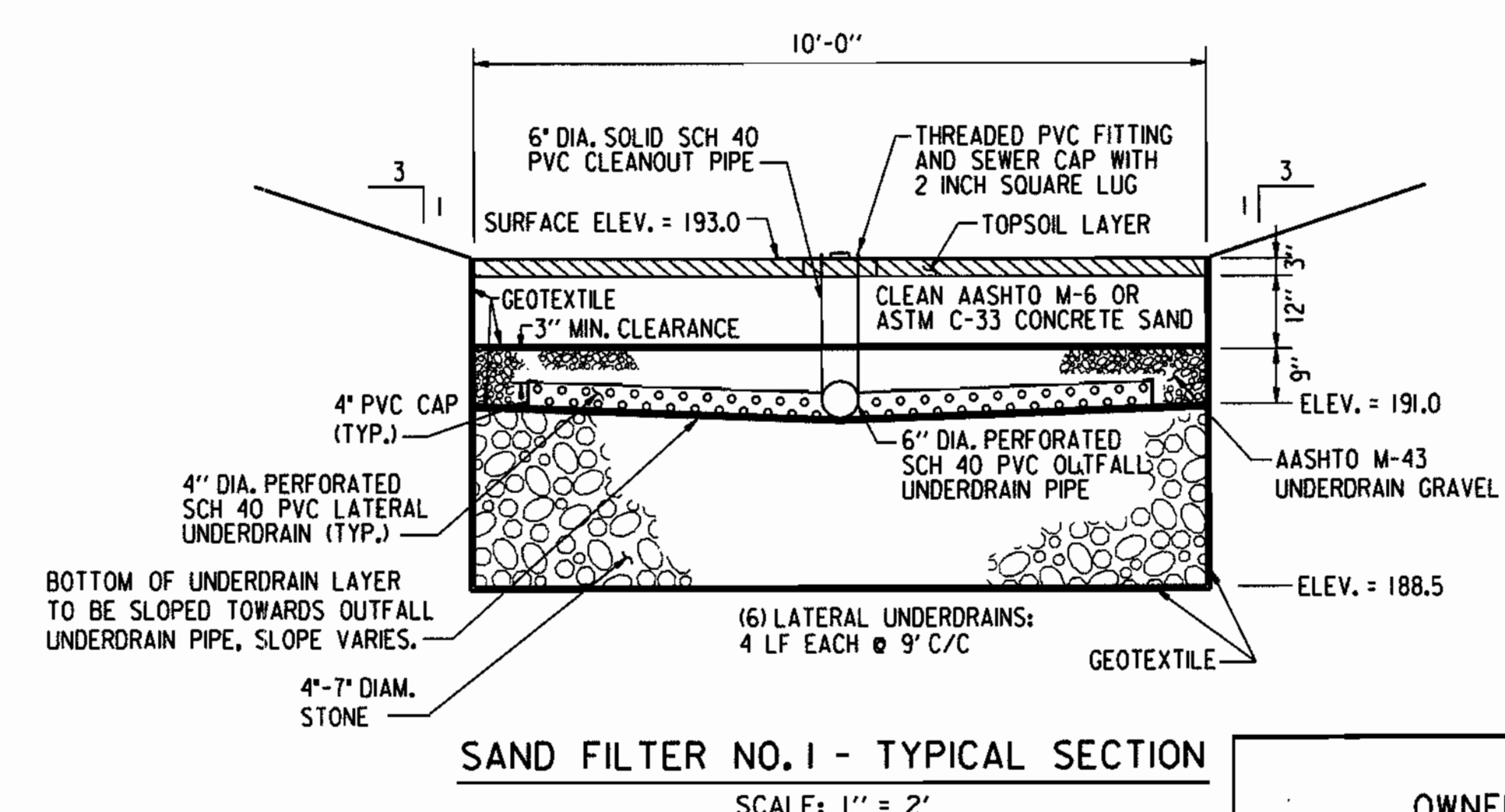
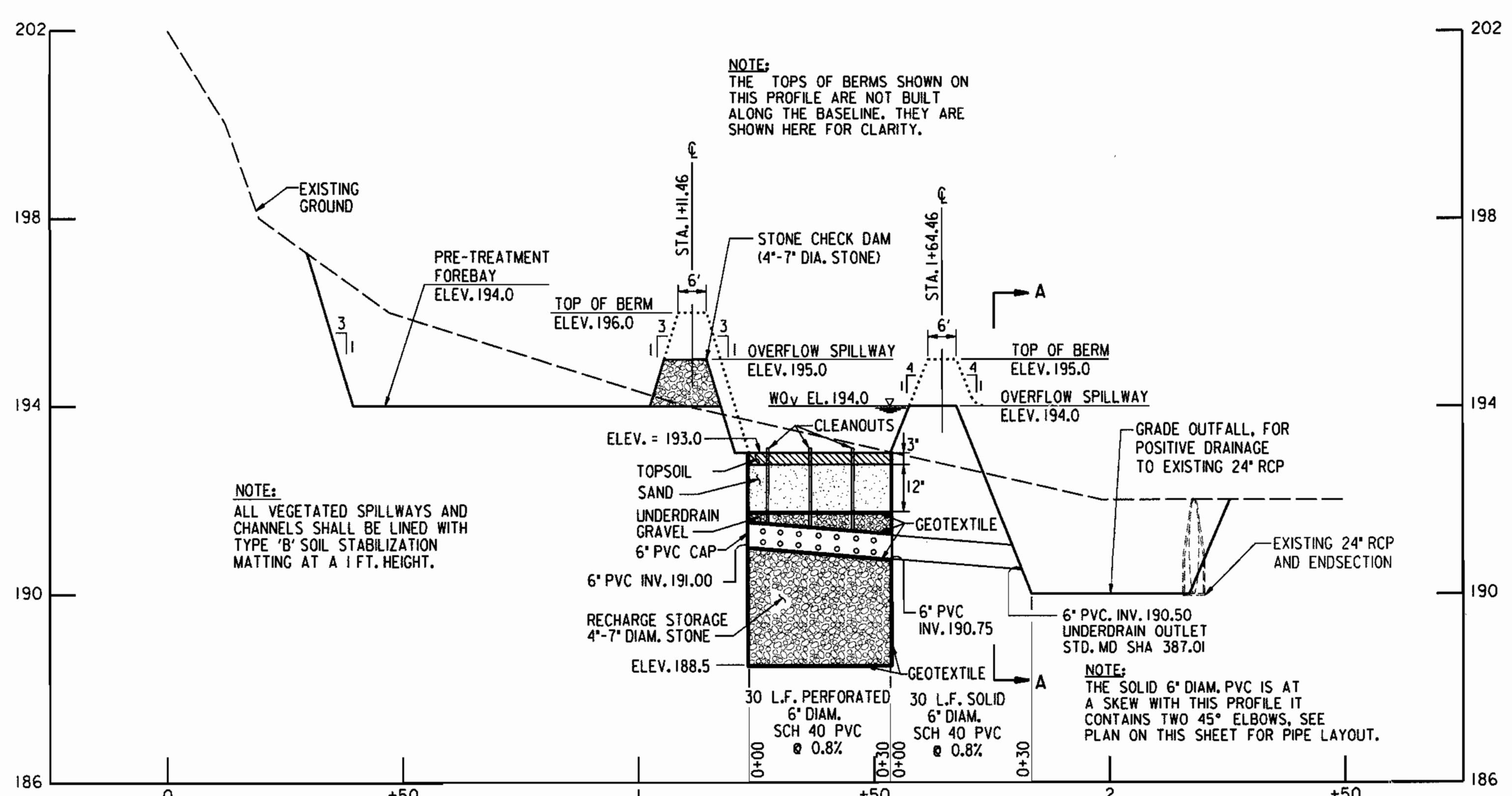
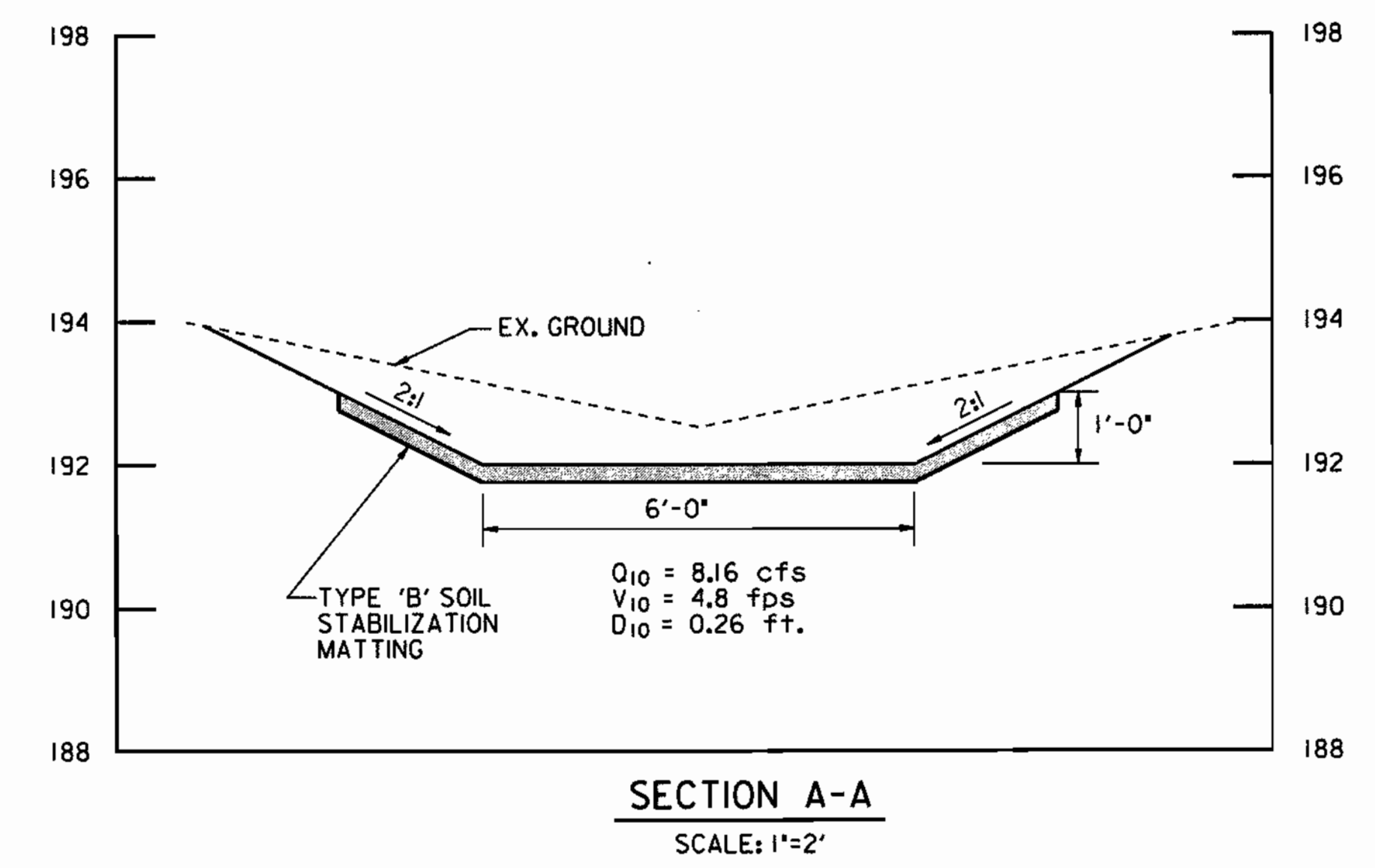
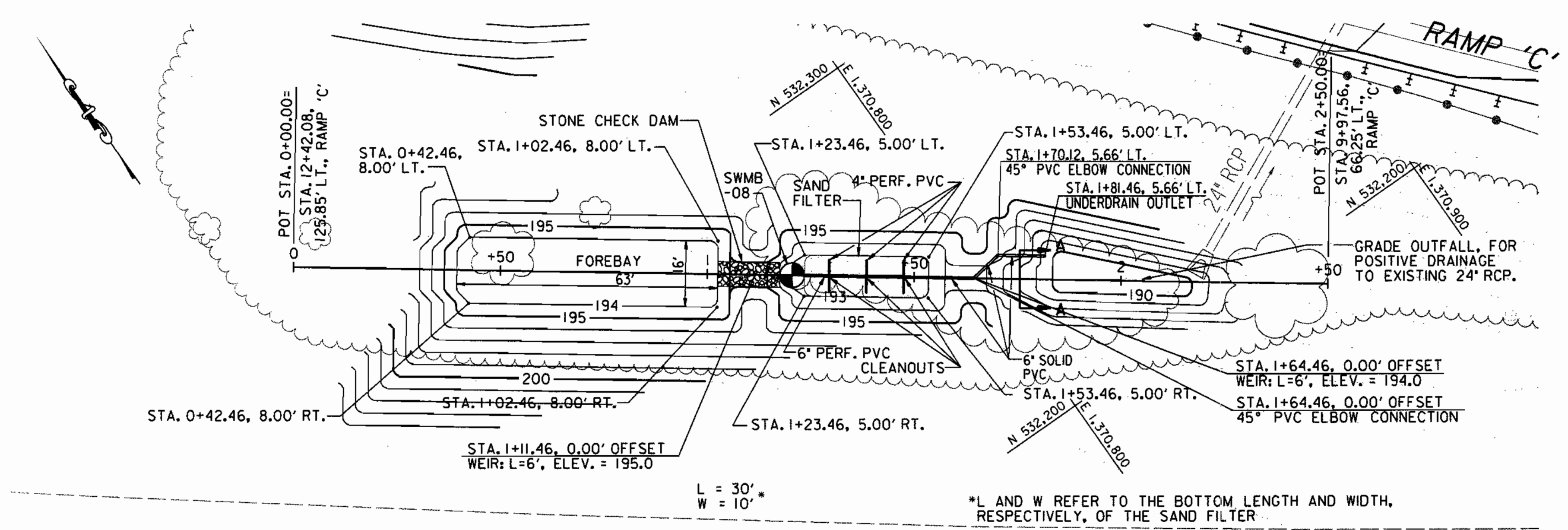
DATE	NO.	REVISIONS

**STORMWATER MANAGEMENT
GENERAL DETAILS
AND SPECIFICATIONS**

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND**

ENGINEERS:
WR Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	SW-1
GRID NO.:	
PARCEL NO.:	



OWNER
MARYLAND STATE HIGHWAY ADMINISTRATION
707 N. CALVERT STREET
BALTIMORE, MARYLAND 21202

DEVELOPER
CONSTELLATION REAL ESTATE, INC.
8815 CENTRE PARK DRIVE, SUITE NO. 104
COLUMBIA, MARYLAND 21045

DATE	NO.	REVISIONS

**SWM PLAN AND DETAILS
SURFACE SAND FILTER NO. 1**

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND**

ENGINEERS:
WR Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 20'	DRAWING NO:
MAP NO.:	SW-2
GRID NO.:	
PARCEL NO.:	SHEET NO. 3 OF 22

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

[Signature] 4/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/25/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/24/02
DIRECTOR DATE

MAINTENANCE NOTE:
THIS STORMWATER MANAGEMENT FACILITY SHALL BE MAINTAINED BY MARYLAND STATE HIGHWAY ADMINISTRATION, AS PER OPERATION AND MAINTENANCE REQUIREMENTS, DWG. NO. SW-1.

Developer Certification:
I/We certify that all development and construction will be done according to this plan, and that any 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.

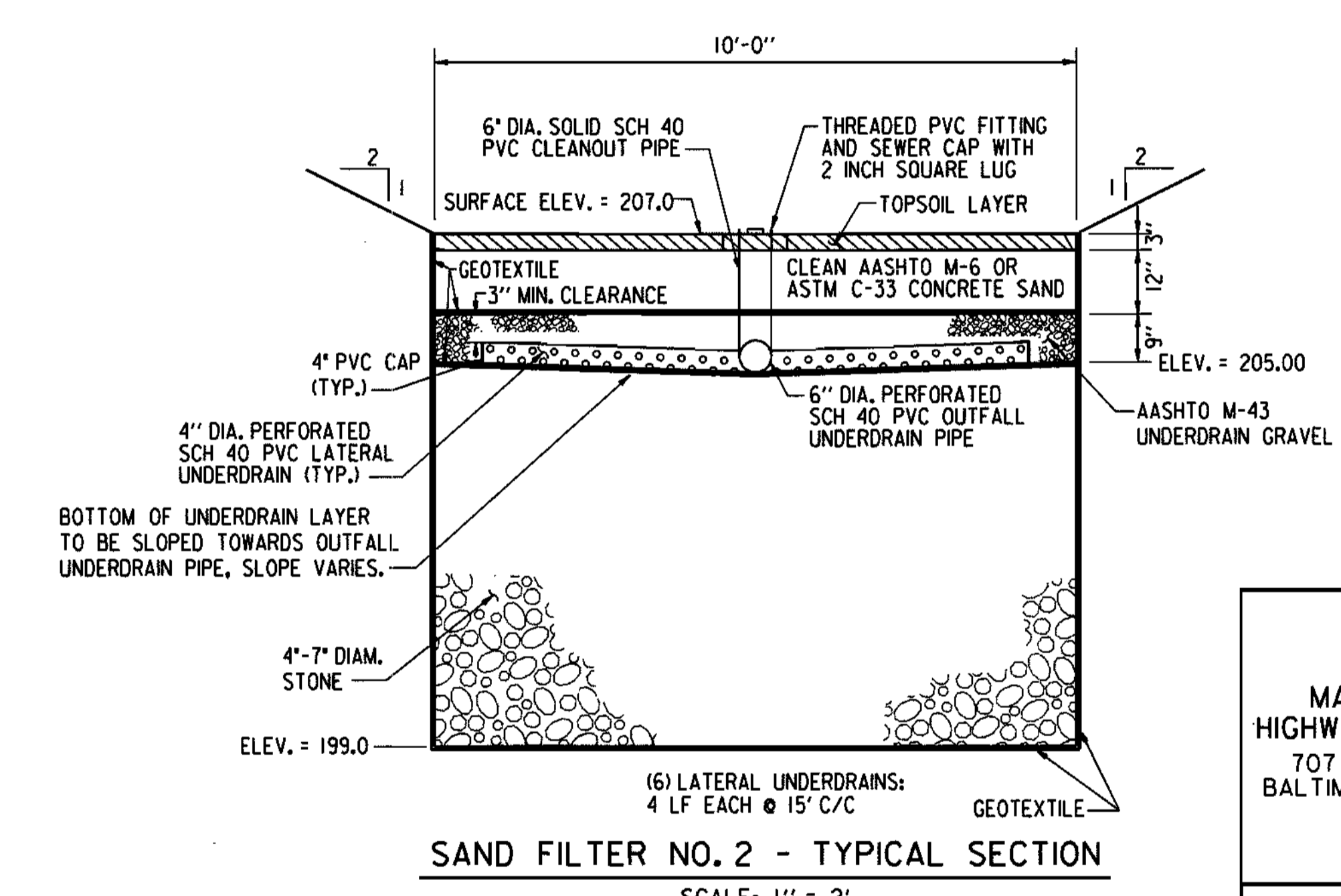
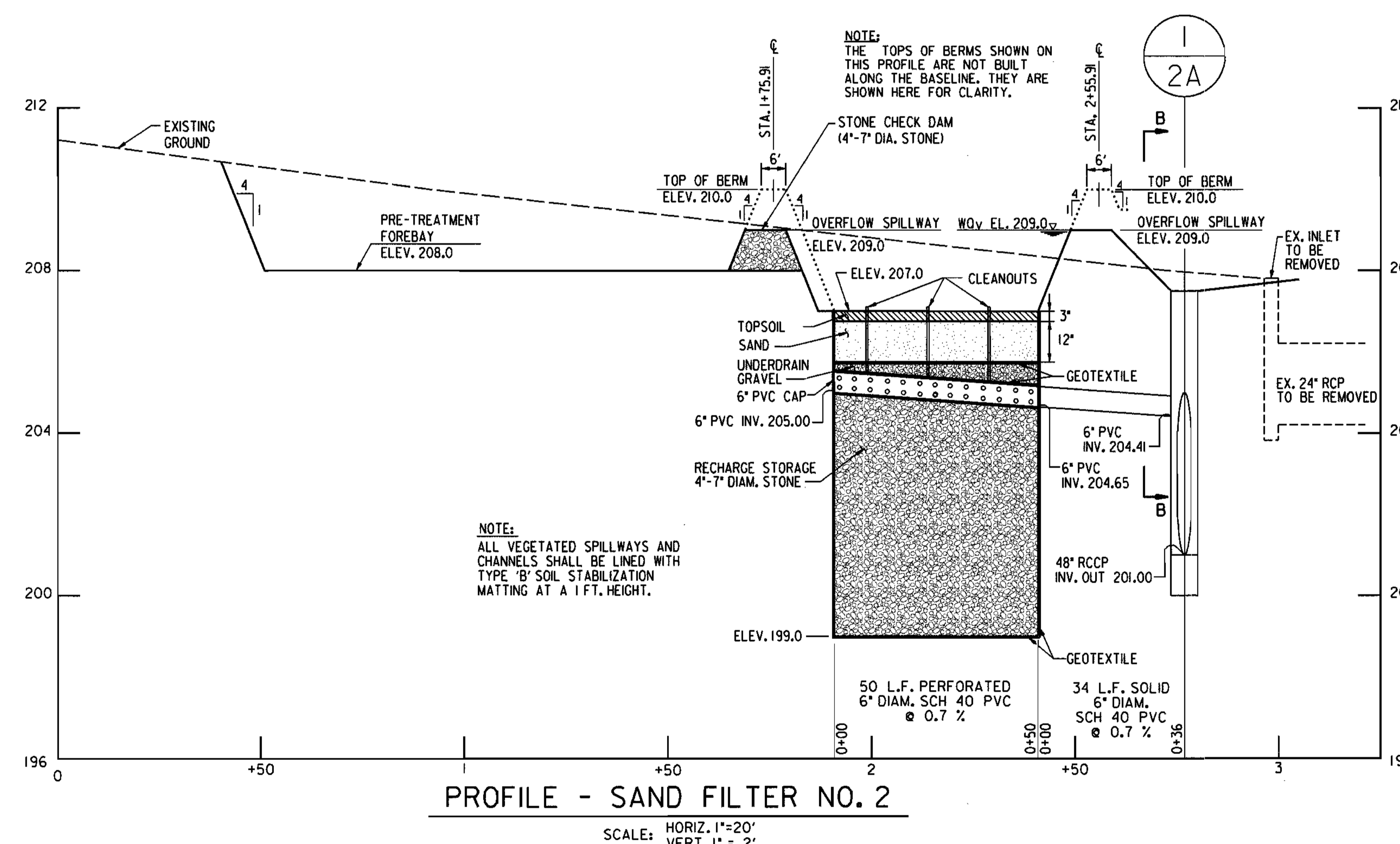
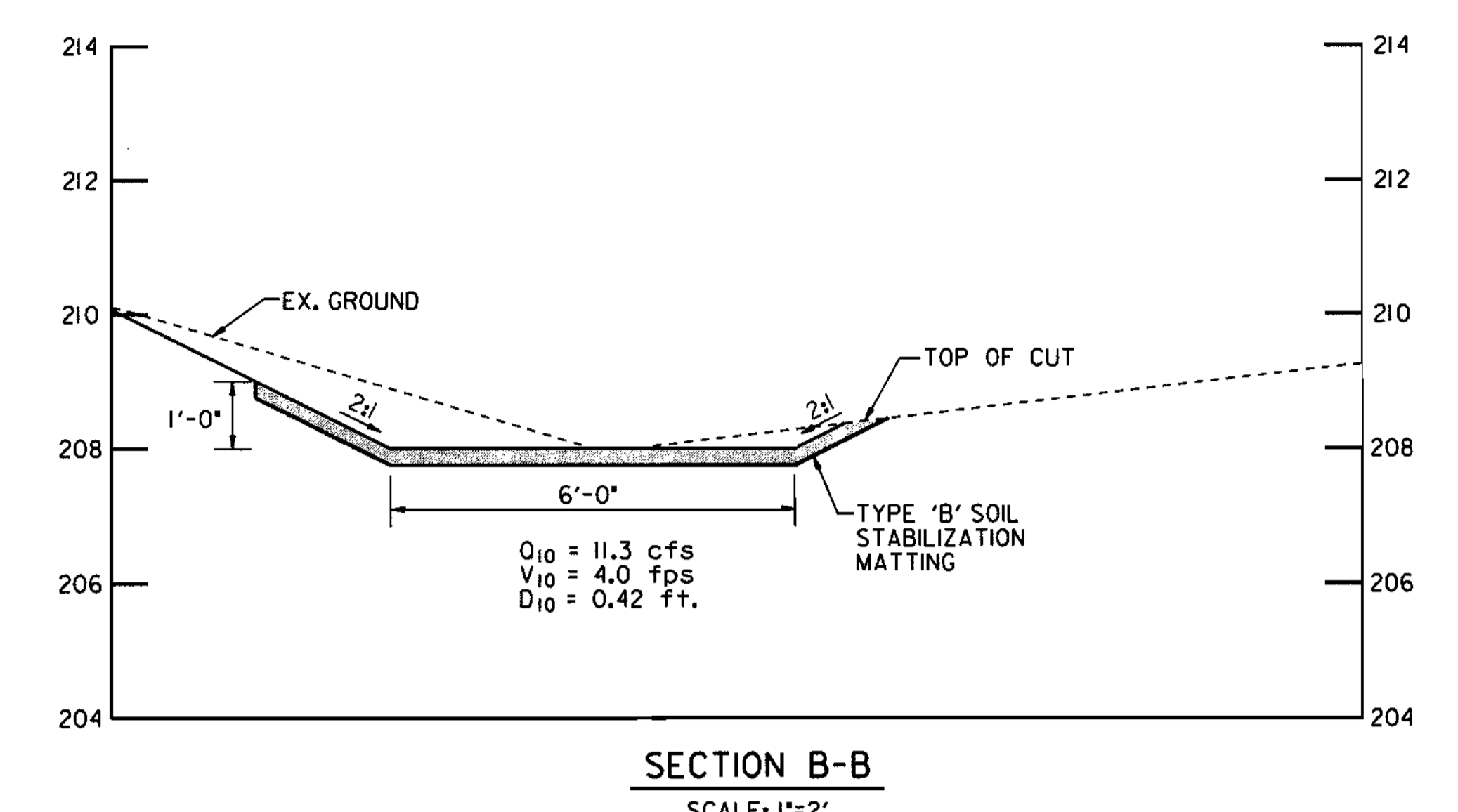
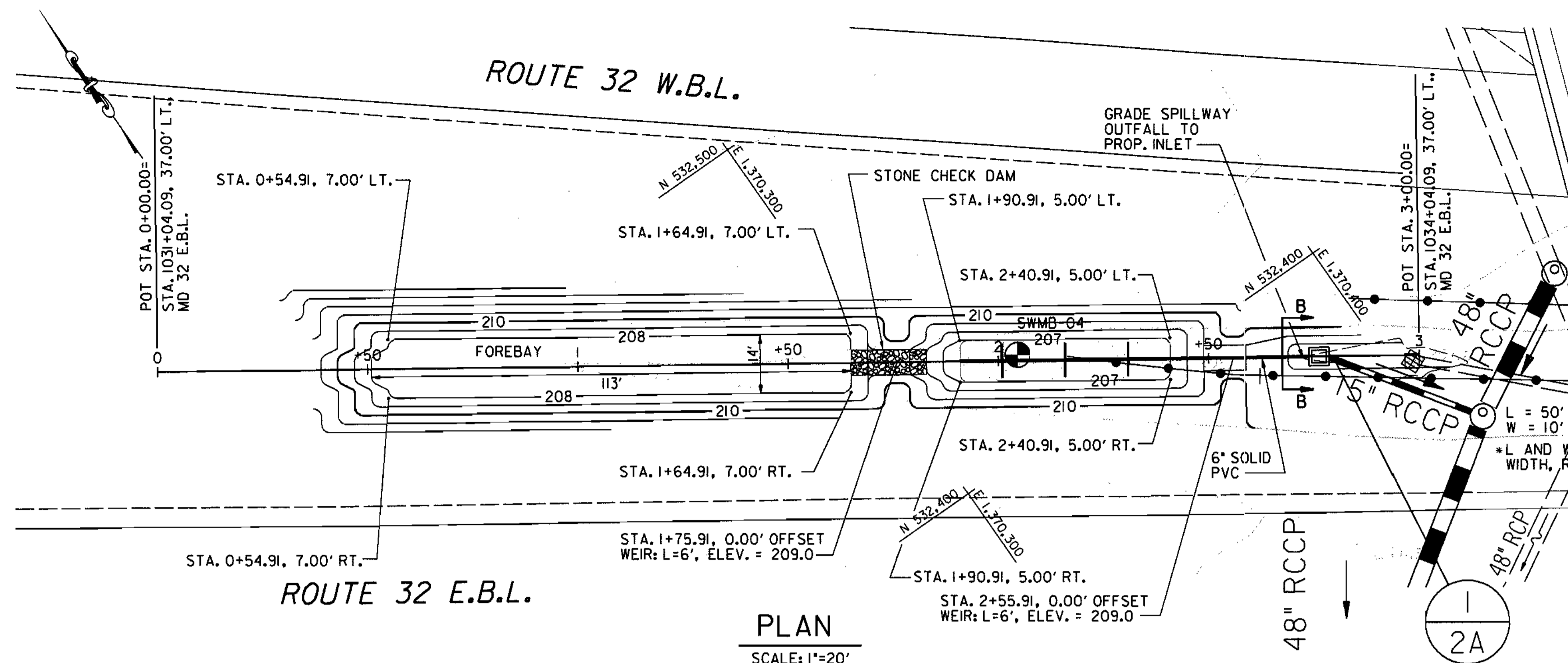
[Signature] 4/2/02
Signature of Developer Date
Printed Name: J. J. Schaeffer, Jr.

Engineer's Certification:
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.

[Signature] 4/2/02
Signature of Engineer Date
Printed Name: LEON J. KRISCAL

Reviewed for HOWARD SCD and meets Technical Requirements.
[Signature] 4/8/02
Jim Myers Date
USA - Natural Resources Conservation Service

This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 4/8/02
Printed Name: J. J. Schaeffer, Jr. Date



OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
--	--

DATE	NO.	REVISIONS

PROJECT TITLE:
DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND

ENGINEERS:
WR Consulting Engineers
849 Fairmount Avenue
Baltimore, Maryland 21286
WHITNEY, BAILEY, COX & MAGNANI, LLC
(410) 512-4500
(410) 324-4100 (FAX)

Developer Certification:
I/We certify that all development and construction will be done according to this plan and that any 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.

Signature of Developer: *J. J. Scheer, Jr.* Date: 4/2/02
Printed Name: J. J. Scheer, Jr.

Engineer's Certification:
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.

Signature of Engineer: *Leon S. Kraebel* Date: 4/2/02
Printed Name: LEON S. KRAEBEL

Reviewed for HOWARD SCD and meets Technical Requirements.
Signature: *Jim Magnus* Date: 4/8/02
Signature: *John Robertson* Date: 4/8/02

MAINTENANCE NOTE:
THIS STORMWATER MANAGEMENT FACILITY SHALL BE MAINTAINED BY MARYLAND STATE HIGHWAY ADMINISTRATION, AS PER OPERATION AND MAINTENANCE REQUIREMENTS, DWG. NO. SW-1.

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

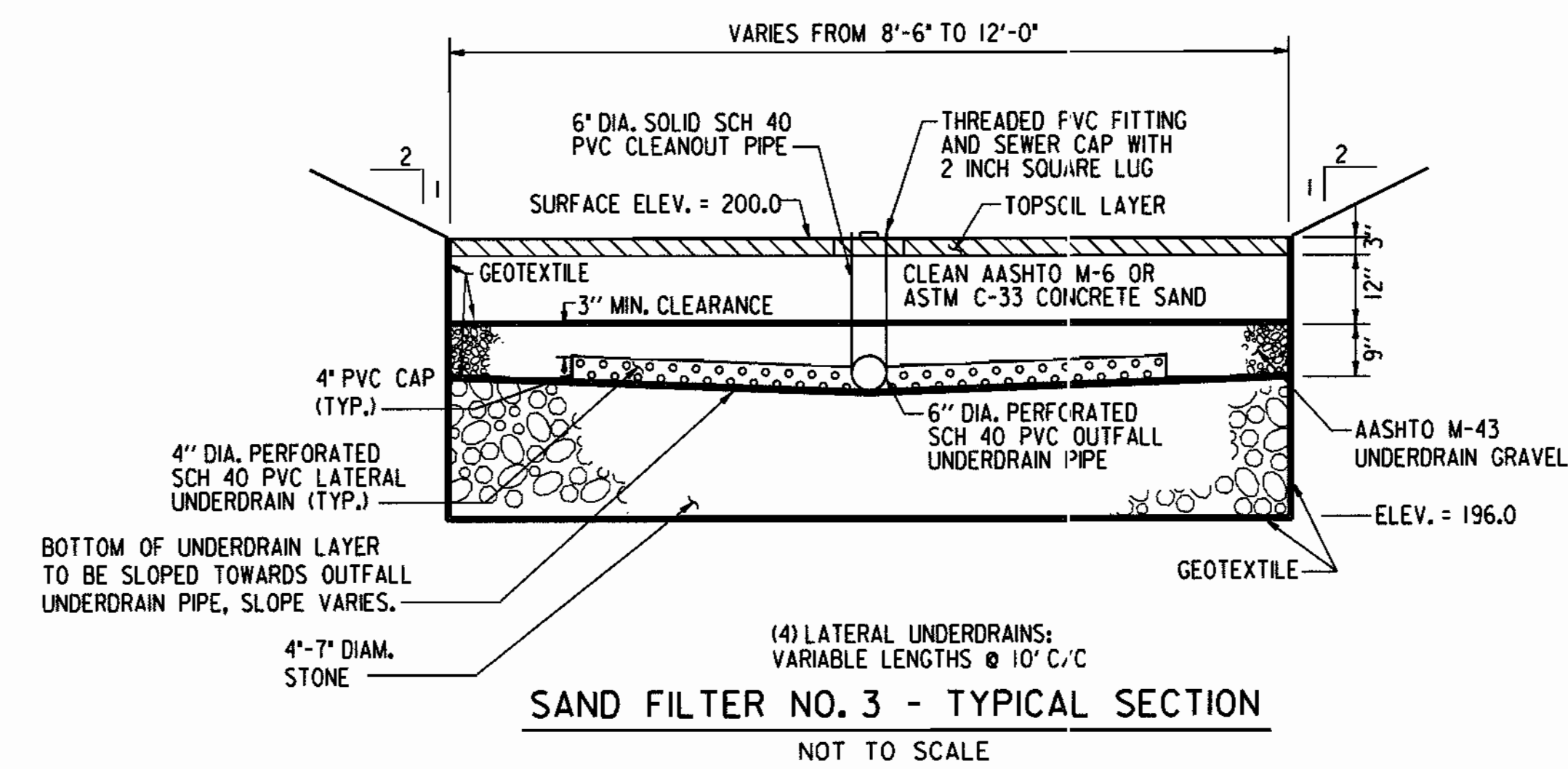
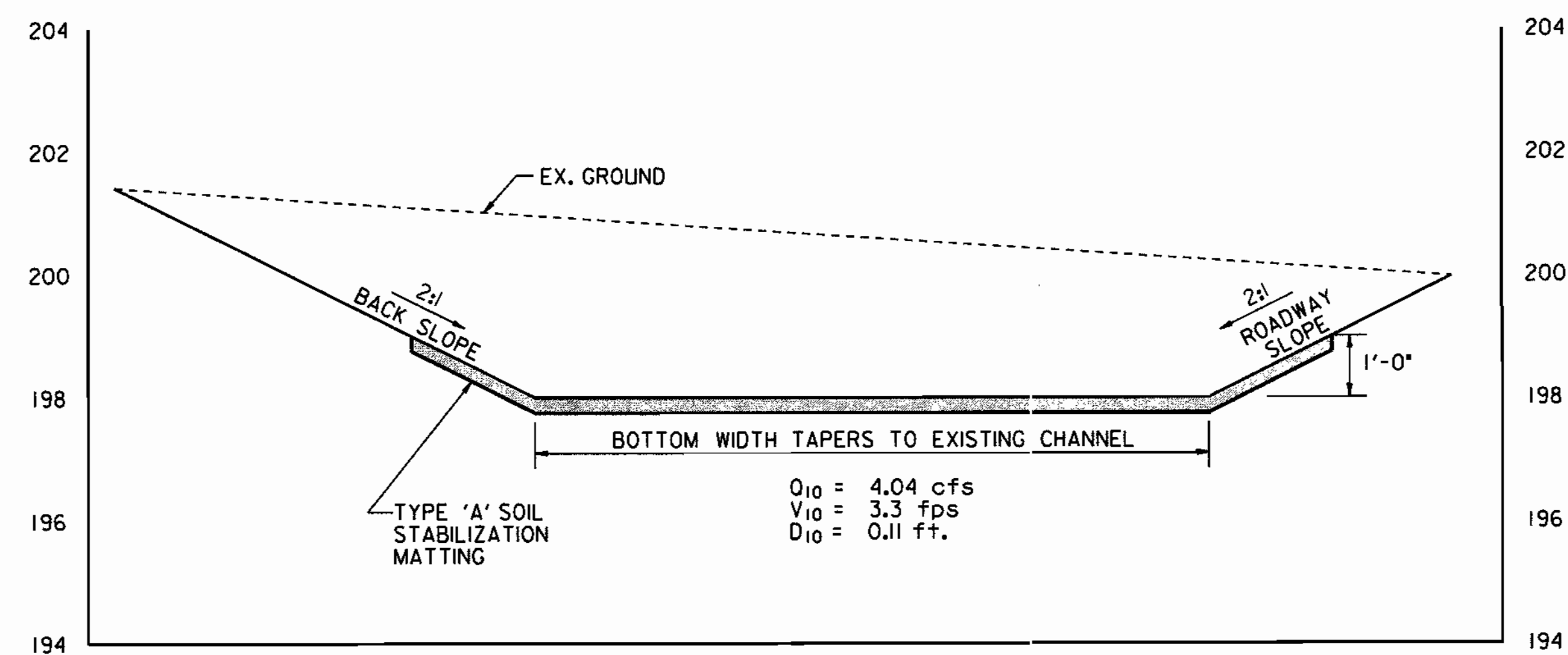
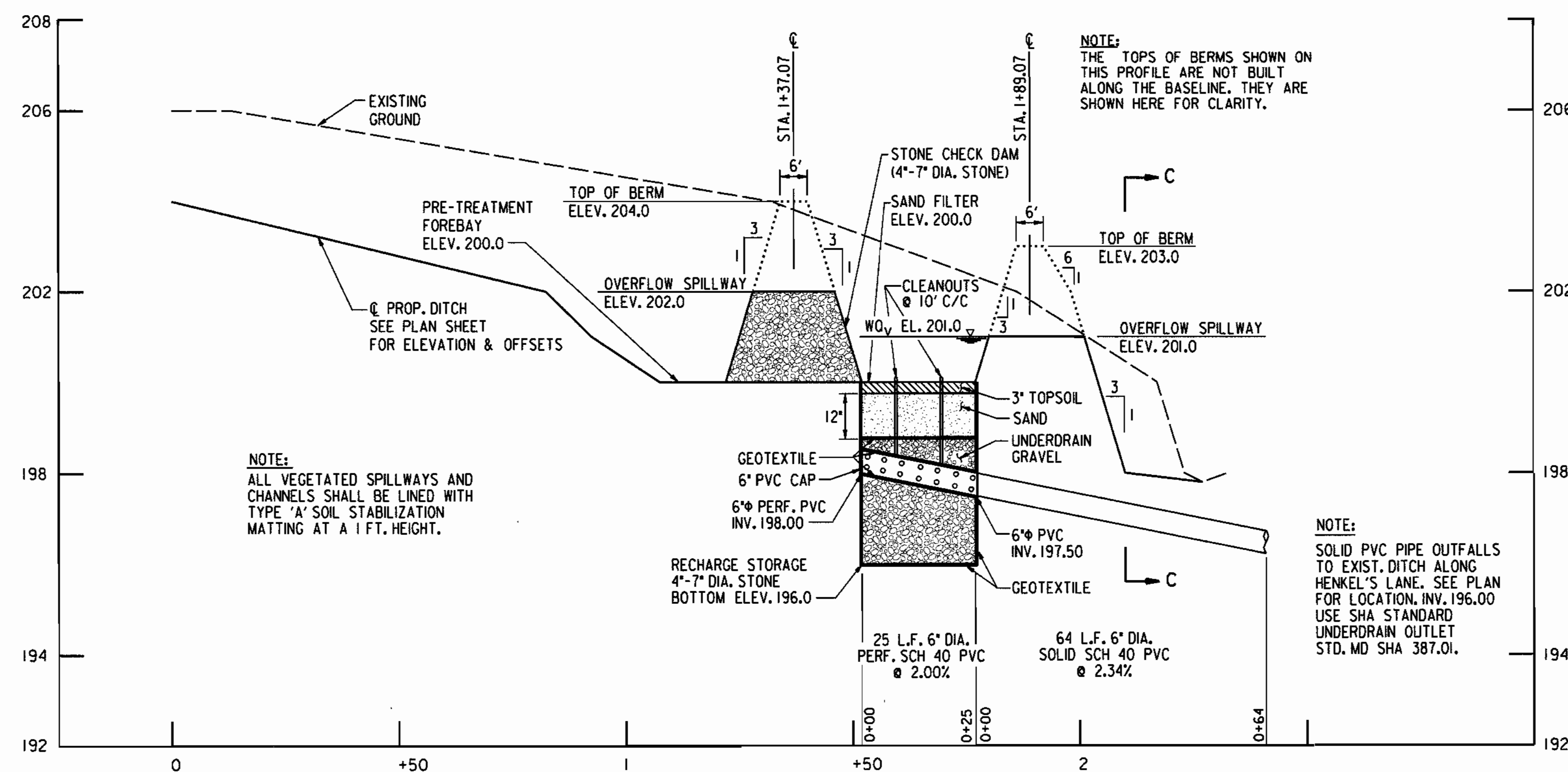
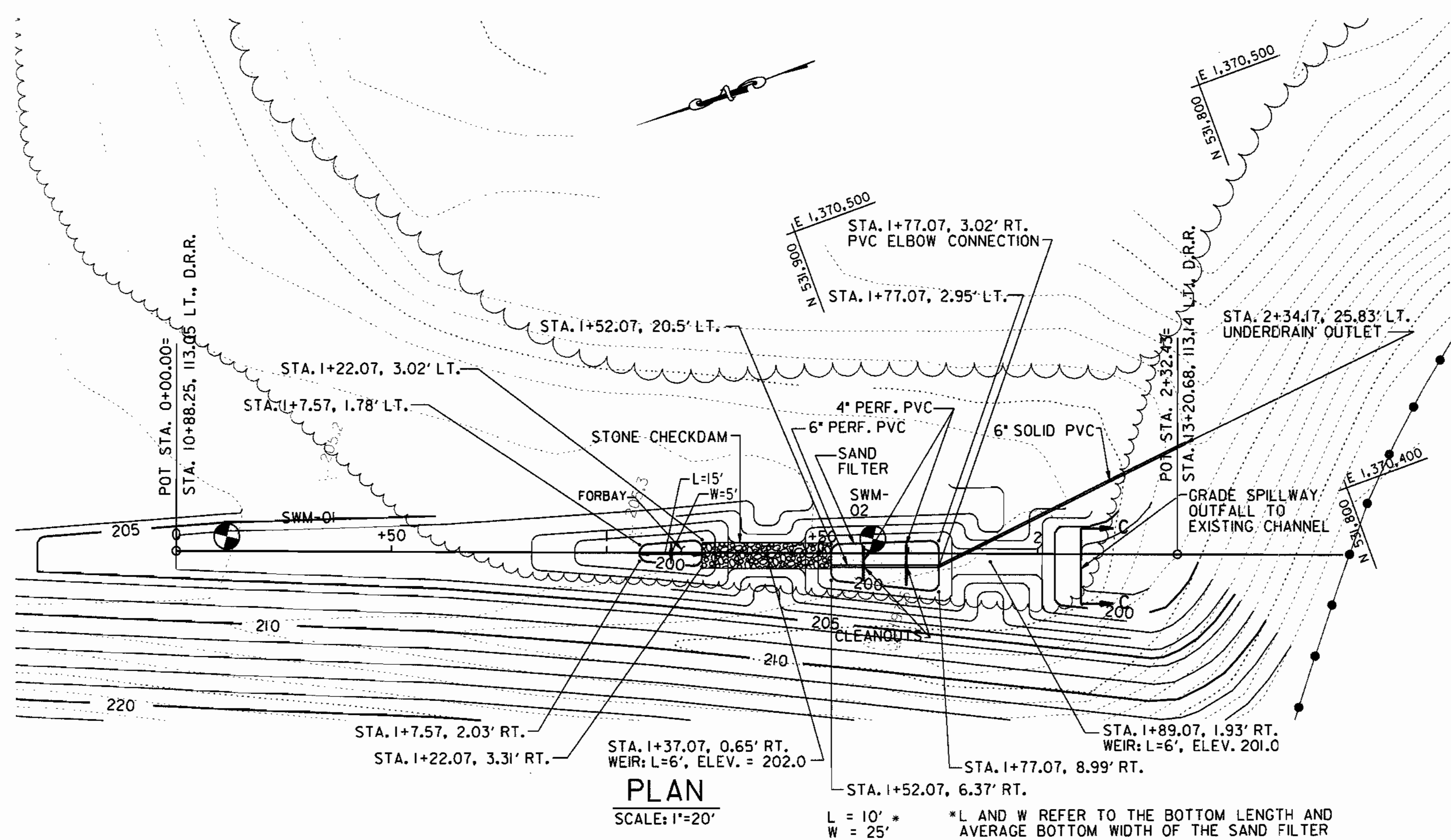
Signature: *Michael DeMunn* Date: 4/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature: *Cindy Hamble* Date: 4/23/02
CHIEF, DIVISION OF LAND DEVELOPMENT

Signature: *James R. Smith* Date: 4/26/02
DIRECTOR



DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO.:
MAP NO.:	SW-3
GRID NO.:	
PARCEL NO.:	SHEET NO. 4 OF 22



OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
--	--

DATE	NO.	REVISIONS

SWM PLAN AND DETAILS
SURFACE SAND FILTER NO. 3

PROJECT TITLE:
DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND

ENGINEERS: **WR Consulting Engineers**
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	SW-4
GRID NO.:	
PARCEL NO.:	SHEET NO. 5 OF 22

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

4/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

4/23/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

4/26/02
DIRECTOR DATE

MAINTENANCE NOTE:
THIS STORMWATER MANAGEMENT FACILITY SHALL BE MAINTAINED BY MARYLAND STATE HIGHWAY ADMINISTRATION, AS PER OPERATION AND MAINTENANCE REQUIREMENTS, DWG. NO. SW-1.

Developer Certification:
"I/We certify that all development and construction will be done according to this plan, and that any 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."

4/2/02
Signature of Developer Date
Printed Name: J. J. Schreiber, Jr.

Engineer's Certification:
"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."

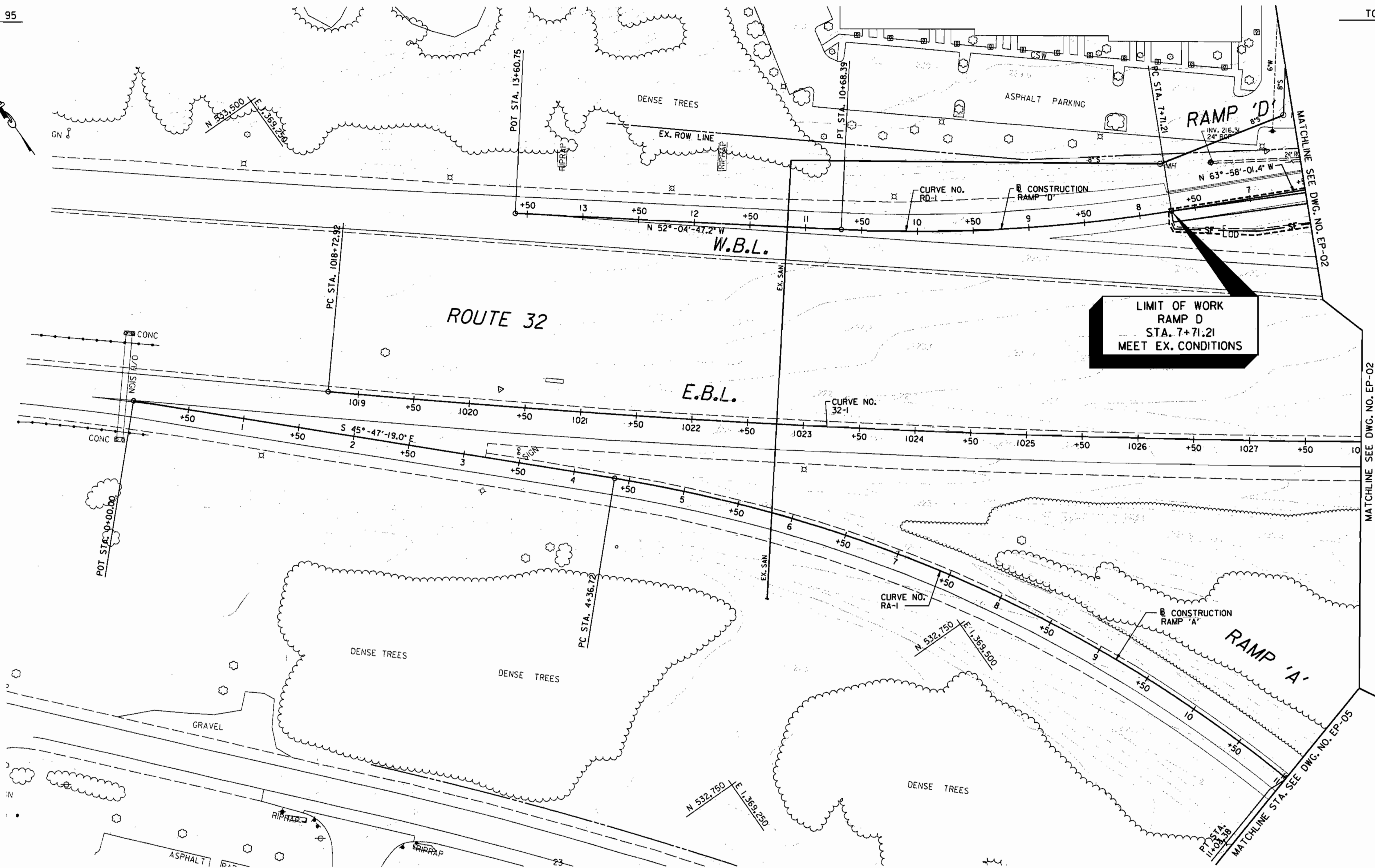
4/2/02
Signature of Engineer Date
Printed Name: LEON J. KRIBBEL

Reviewed for HOWARD SCD and meets Technical Requirements.
 4/15/02
USD - Natural Resources Conservation Service Date

This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 4/18/02
Howard SCD Date

TO INTERSTATE 95

TO MD 295



LIMIT OF WORK
RAMP D
STA. 7+71.21
MEET EX. CONDITIONS

INSTALL SILT FENCE
STA. 7+71, LT. TO STA. 6+50, LT. RAMP 'D' 128 L.F.

NOTE:
WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD) IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

[Signature] 4/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/24/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/24/02
DIRECTOR DATE

Developer Certification:

"I/We certify that all development and construction will be done according to this plan, and that any 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."

[Signature] 4/2/02
Signature of Developer Date
Printed Name: J. J. ZURBOSK, JR.

Engineer's Certification:

"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."

[Signature] 4/2/02
Signature of Engineer Date
Printed Name: LEON J. KRIEBEL

Reviewed for HOWARD SCD and meets Technical Requirements.

[Signature] 4/18/02
USDA Natural Resources Conservation Service Date

[Signature] 4/18/02
This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
HOWARD SCD Date

OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
--	--

DATE	NO.	REVISIONS

EROSION CONTROL
INITIAL PHASE

PROJECT TITLE:
DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND

ENGINEERS: **WB** Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-1
GRID NO.:	
PARCEL NO.:	SHEET NO. 6 OF 22

TO INTERSTATE 95

TO MD 295

CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (SCE)

STA. 3+74, 10' LT. RAMP 'D' 1 EA.
 STA. 4+65, 25' RT. D.R.R. 1 EA.
 STA. 6+38, 28' RT. D.R.R. 1 EA.
 STA. 13+60, 24' RT. LOOP 'B' 1 EA.
 STA. 1036+80, 48' LT. MD 32 EB 1 EA.

INSTALL SILT FENCE (SF)

STA. 0+35, LT. TO STA. 3+69, LT. RAMP 'D' 350 LF.
 STA. 3+81, LT. TO STA. 6+50, LT. RAMP 'D' 270 LF.
 STA. 1+18, RT. RAMP 'D' TO STA. 4+65, RT. D.R.R. 85 LF.
 STA. 8+50, LT. D.R.R. TO STA. 10+12.16, RT. RAMP 'C' 600 LF.
 STA. 6+62, LT. D.R.R. TO STA. 10+12.16, LT. RAMP 'C' 492 LF.
 STA. 7+18, RT. TO STA. 7+31, RT. D.R.R. 50 LF.
 STA. 9+49, LT. TO STA. 9+87, LT. D.R.R. 69 LF.
 STA. 6+95, LT. TO STA. 7+45, LT. D.R.R. 66 LF.

INSTALL SUPER SILT FENCE (SSF)

STA. 9+38, RT. TO STA. 11+44.66, RT. D.R.R. 179 L.F.
 STA. 9+23, RT. TO STA. 9+87, LT. D.R.R. 220 L.F.

CONSTRUCT TEMPORARY STONE OUTLET STRUCTURE (TSOS)

STA. 4+13, 58' RT. D.R.R. 1 EA.
 STA. 6+77, 98' RT. D.R.R. 1 EA.
 STA. 6+95, 99' RT. D.R.R. 1 EA.

CONSTRUCT MODIFIED MEDIAN INLET PROTECTION (MMIP)

STA. 4+29, 67' RT. D.R.R. 1 EA.

CONSTRUCT AT GRADE INLET PROTECTION (AGIP)

STA. 6+68, 21' RT., D.R.R. 1 EA.
 STA. 6+83, 33' LT., D.R.R. 1 EA.
 STA. 9+88, 22' RT., D.R.R. 1 EA.
 STA. 10+01, 31' LT., D.R.R. 1 EA.

CONSTRUCT CURB INLET PROTECTION (CIP)

STA. 4+91, 26' LT. D.R.R. 1 EA.
 STA. 14+25, 20' RT. RAMP 'C' 1 EA.

CONSTRUCT A-3 EARTH DIKE

STA. 6+95, 126' LT. TO STA. 7+18, 118' LT., D.R.R. 20 LF.
 STA. 7+35, 114' LT. TO STA. 7+62, 95' LT., D.R.R. 30 LF.
 STA. 6+00, 50' RT. TO STA. 6+74, 106' RT., D.R.R. 98 LF.
 STA. 6+95, 108' RT. TO STA. 7+32, 50' RT., D.R.R. 66 LF.

CONSTRUCT STONE CHECK DAM (CD)

STA. 10+39, 98' LT. D.R.R. 1 EA.
 STA. 10+58, 96' LT. D.R.R. 1 EA.
 STA. 11+39, 93' LT. D.R.R. 1 EA.

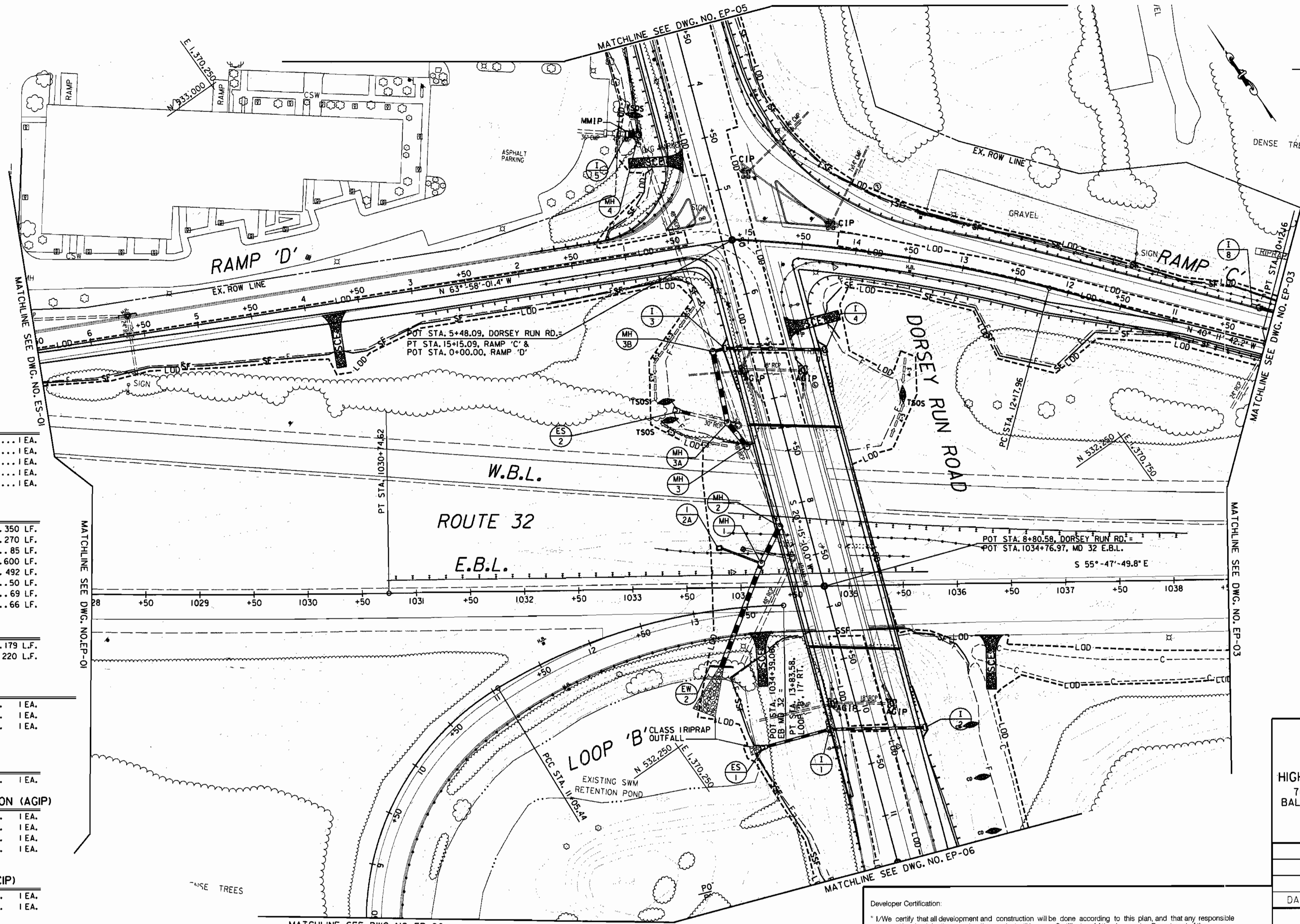
APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

[Signature] 4/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/23/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/26/02
 DIRECTOR DATE

FILE: P:\2000\03017801\06-Highway\Dgn\ep pl 02drr.dwg, dgm
DATE: 28-Feb-02 11:02



NOTE:
 WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD) IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

Developer Certification:
 "I/We certify that all development and construction will be done according to this plan, and that any 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."

[Signature] 4/2/02
 Signature of Developer Date
 Printed Name: **J.J. SCHUBERT, JR.**

Engineer's Certification:
 "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."

[Signature] 4/2/02
 Signature of Engineer Date
 Printed Name: **LEON J. KRIESEL**

Reviewed for HOWARD SCD and meets Technical Requirements.

[Signature] 4/18/02
 Signature of Consultant Date
 Printed Name: **John R. Robertson**

OWNER
 MARYLAND STATE HIGHWAY ADMINISTRATION
 707 N. CALVERT STREET
 BALTIMORE, MARYLAND 21202

DEVELOPER
 CONSTELLATION REAL ESTATE, INC.
 8815 CENTRE PARK DRIVE,
 SUITE NO. 104
 COLUMBIA, MARYLAND 21045

DATE	NO.	REVISIONS

EROSION CONTROL INITIAL PHASE

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
 HOWARD CO., MARYLAND**

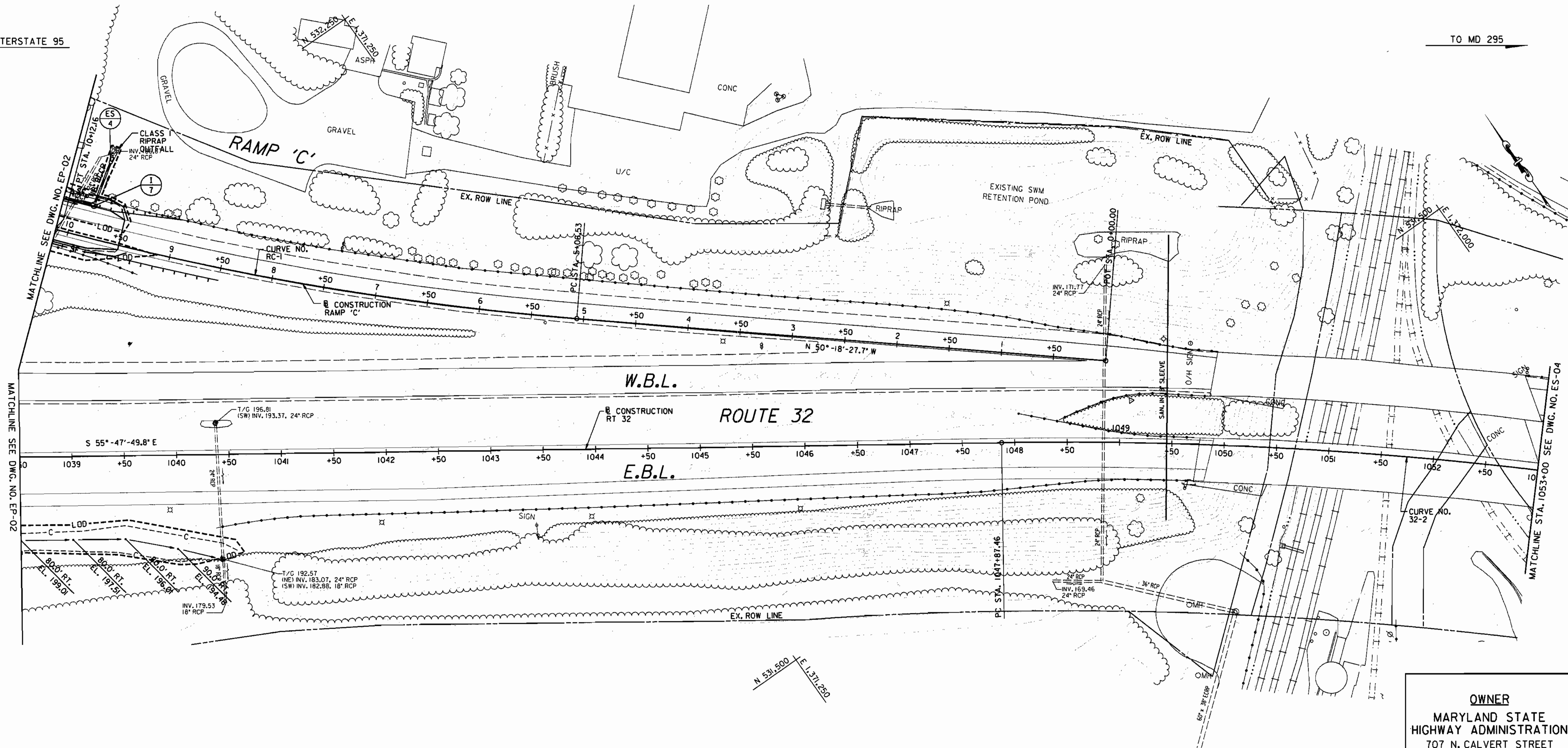
ENGINEERS: *[Logo]* Consulting Engineers
 849 Fairmount Avenue (410) 512-4500
 Baltimore, Maryland 21286 (410) 324-4100 (FAX)
 WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO.:
MAP NO.:	EP-2
GRID NO.:	SHEET NO. 7 OF 22
PARCEL NO.:	

SDP-02-54

TO INTERSTATE 95

TO MD 295



INSTALL SILT FENCE (SF)
 STA. 9+47, RT. TO STA. 10+12.16, RT., RAMP 'C' 72 L.F.
 STA. 9+31, LT. TO STA. 10+12.16, LT., RAMP 'C' 82 L.F.


NOTE:
 WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD) IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
--	--

DATE	NO.	REVISIONS

**EROSION CONTROL
INITIAL PHASE**

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
 HOWARD CO., MARYLAND**

ENGINEERS:
 Consulting Engineers
 849 Fairmount Avenue (410) 512-4500
 Baltimore, Maryland 21286 (410) 324-4100 (FAX)
 WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-3
GRID NO.:	
PARCEL NO.:	SHEET NO. 8 OF 22

Developer Certification:
 "I/We certify that all development and construction will be done according to this plan, and that any 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."



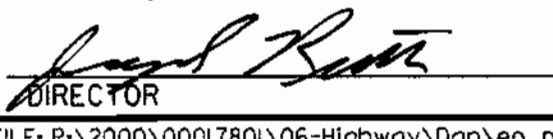
Signature of Developer: *J. I. Schreiber, Jr.* Date: 4/2/02
 Printed Name: J. I. Schreiber, Jr.

Engineer's Certification:
 "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."

Signature of Engineer: *L. J. Kriebel* Date: 4/2/02
 Printed Name: LEON J. KRIEBEL

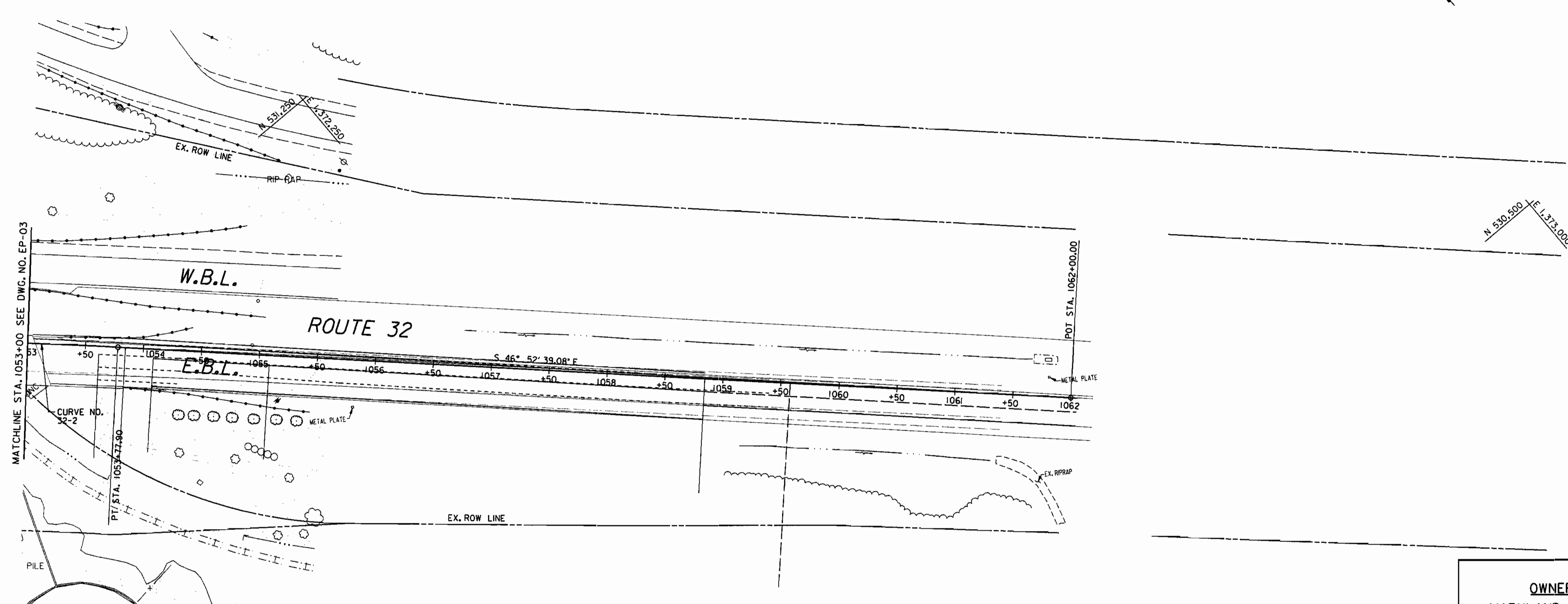
Reviewed for HOWARD SCD and meets Technical Requirements.

Signature: *Jim Meyer* Date: 4/18/02
 Title: HOWARD SOIL CONSERVATION DISTRICT
 Signature: *John R. Robertson* Date: 4/18/02
 Title: HOWARD SCD

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.
 4/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 4/23/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 4/26/02
 DIRECTOR DATE

TO INTERSTATE 95

TO MD 295



NOTE:
 THIS SHEET CONTAINS NO PROPOSED CONSTRUCTION
 AND IS SHOWN AS REFERENCE ONLY TO COINCIDE WITH
 THE ROADWAY PLAN SET.

NOTE:
 WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE
 OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD)
 IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER
 SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

N 530.500 E 1.372,250

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

[Signature] 4/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 7/23/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/26/02
 DIRECTOR DATE

Developer Certification:
 "I/We certify that all development and construction will be done according to this plan, and that any 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."

[Signature] 4/10/02
 Signature of Developer Date

Printed Name: J.J. SURETZKE, JR.

Engineer's Certification:
 "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."

[Signature] 4/10/02
 Signature of Engineer Date

Printed Name: LEON J. KRIESEL

Reviewed for HOWARD SCD and meets Technical Requirements.

[Signature] 4/10/02
 USDA - Natural Resources Conservation Service Date

[Signature] 4/10/02
 This development plan is approved for plan construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 HOWARD SCD Date

OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
--	--

DATE	NO.	REVISIONS

**EROSION CONTROL
INITIAL PHASE**

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
 HOWARD CO., MARYLAND**

ENGINEERS: **WRP Consulting Engineers**
 849 Fairmount Avenue (410) 512-4500
 Baltimore, Maryland 21286 (410) 324-4100 (FAX)
 WHITNEY, BAILEY, COX & MAGNANI, LLC

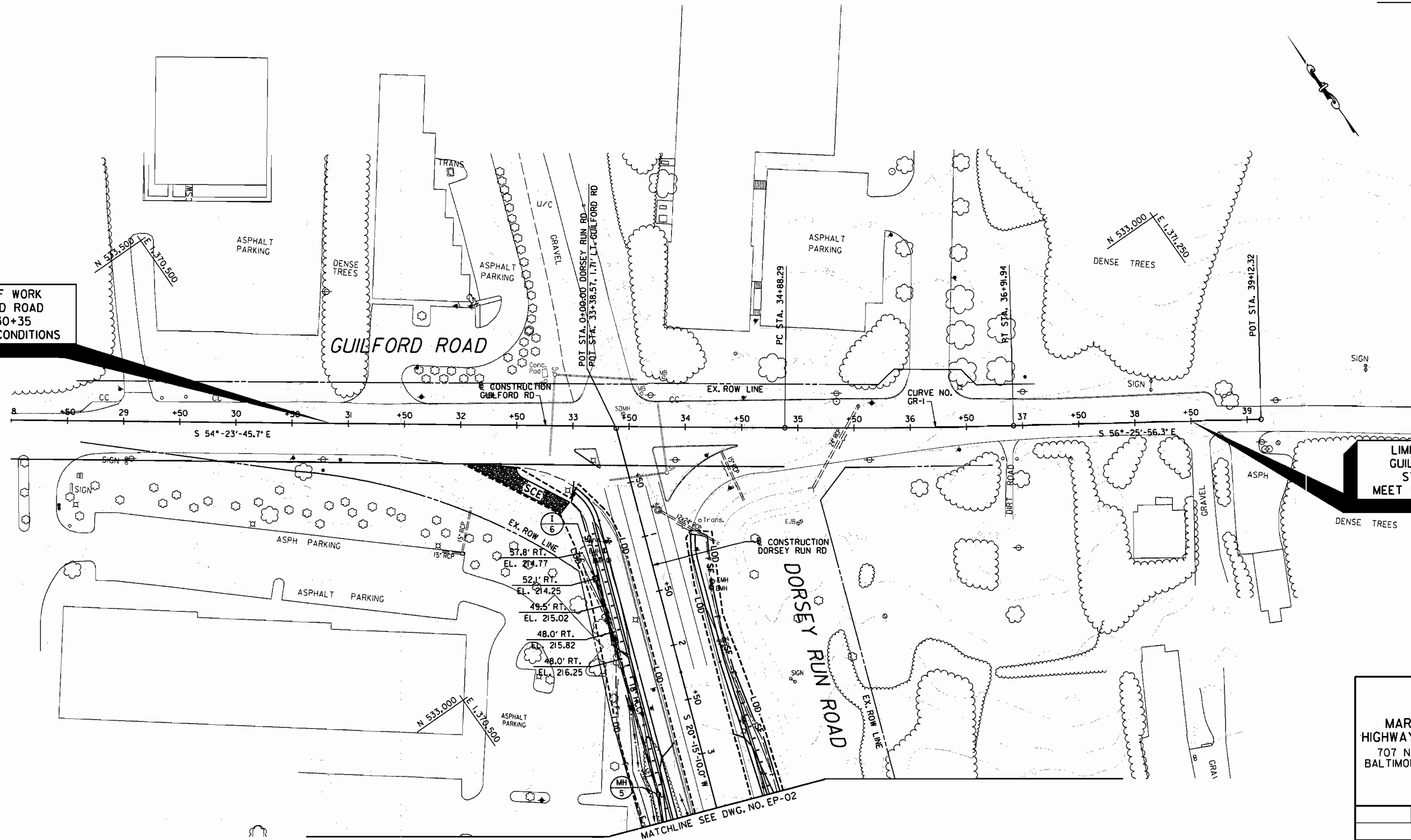
DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-4
GRID NO.:	
PARCEL NO.:	
SHEET NO. 9 OF 22	

TO INTERSTATE 95

TO MD 295

LIMIT OF WORK
GUILFORD ROAD
STA. 30+35
MEET EX. CONDITIONS

LIMIT OF WORK
GUILFORD ROAD
STA. 38+50
MEET EX. CONDITIONS



INSTALL SILT FENCE (SF)

STA. 1+09, LT. TO STA. 3+50, LT. D.R.R. 246 L.F.
STA. 0+50, RT. TO STA. 2+01, RT. D.R.R. 154 L.F.

**CONSTRUCT STABILIZED
CONSTRUCTION ENTRANCE (SCE)**

STA. 32+30, 35', RT. GUILFORD RD. 1 EA.

NOTE:
WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE
OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD)
IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER
SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
--	--

DATE	NO.	REVISIONS

**EROSION CONTROL
INITIAL PHASE**

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND**

ENGINEERS:
W.B. Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI, LLC

Developer Certification:
"I/We certify that all development and construction will be done according to this plan, and that any 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."

Signature of Developer: *J.J. Schreiber, Jr.* Date: 4/2/02
Printed Name: J.J. Schreiber, Jr.

Engineer's Certification:
"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."

Signature of Engineer: *Leon J. Kriebel* Date: 4/2/02
Printed Name: LEON J. KRIEBEL

Reviewed for HOWARD SCD and meets Technical Requirements.

USDA - Natural Resources Conservation Service
John Meyer Date: 4/8/02
John Kriebel Date: 4/1/02

This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
How: SCD

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

Andrew Williams 4/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

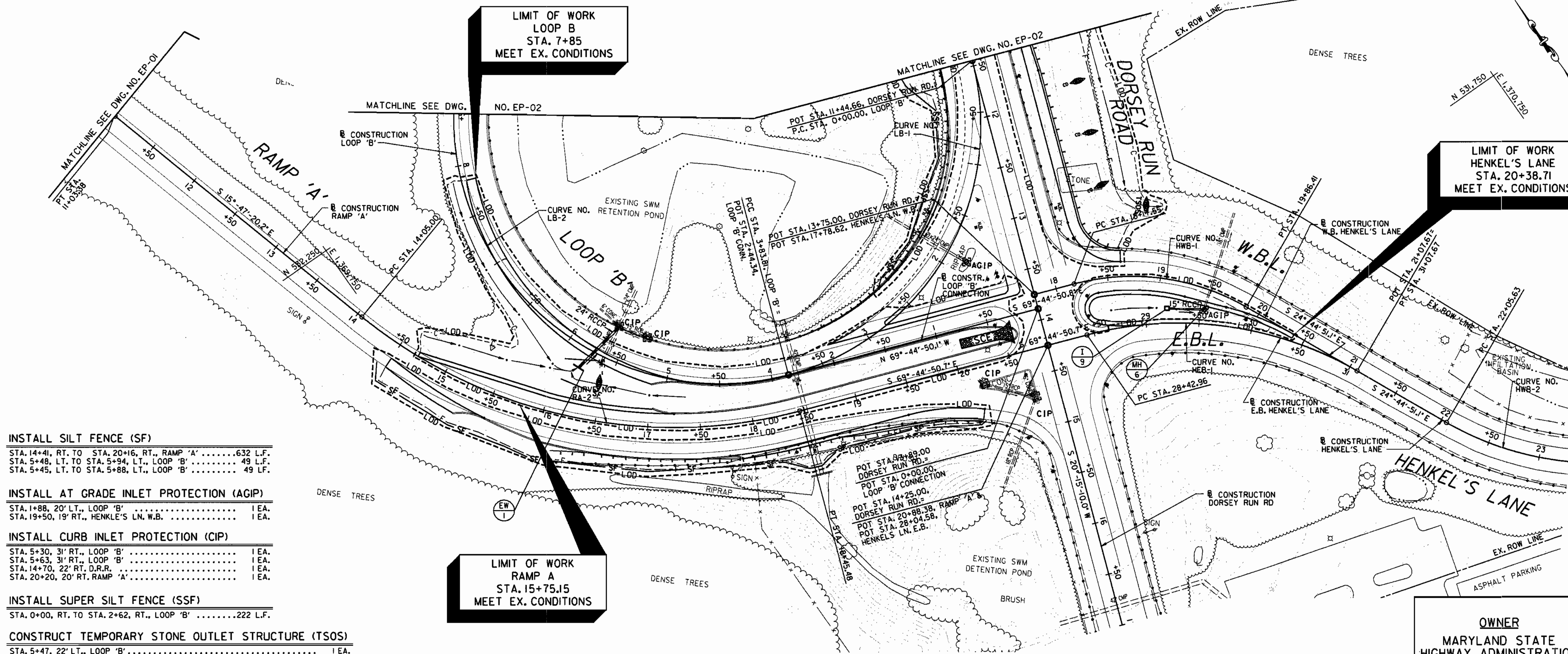
Cindy Knutson 4/23/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Joseph Rutter 4/26/02
DIRECTOR DATE

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-5
GRID NO.:	
PARCEL NO.:	
SHEET NO. 10 OF 22	

TO INTERSTATE 95

TO MD 295



INSTALL SILT FENCE (SF)

STA. 14+41, RT. TO STA. 20+16, RT., RAMP 'A' 632 L.F.
 STA. 5+48, LT. TO STA. 5+94, LT., LOOP 'B' 49 L.F.
 STA. 5+45, LT. TO STA. 5+88, LT., LOOP 'B' 49 L.F.

INSTALL AT GRADE INLET PROTECTION (AGIP)

STA. 1+88, 20' LT., LOOP 'B' 1 EA.
 STA. 19+50, 19' RT., HENKLE'S LN. W.B. 1 EA.

INSTALL CURB INLET PROTECTION (CIP)

STA. 5+30, 31' RT., LOOP 'B' 1 EA.
 STA. 5+63, 31' RT., LOOP 'B' 1 EA.
 STA. 14+70, 22' RT. D.R.R. 1 EA.
 STA. 20+20, 20' RT. RAMP 'A' 1 EA.

INSTALL SUPER SILT FENCE (SSF)

STA. 0+00, RT. TO STA. 2+62, RT., LOOP 'B' 222 L.F.

CONSTRUCT TEMPORARY STONE OUTLET STRUCTURE (TSOS)

STA. 5+47, 22' LT., LOOP 'B' 1 EA.
 STA. 13+20, 124' LT., D.R.R. 1 EA.

CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (SCE)

STA. 14+04, 30' RT., D.R.R. 1 EA.

CONSTRUCT STONE CHECK DAM (CD)

STA. 11+89, 91' LT., D.R.R. 1 EA.
 STA. 12+39, 90' LT., D.R.R. 1 EA.
 STA. 12+90, 88' LT., D.R.R. 1 EA.

**LIMIT OF WORK
RAMP A
STA. 15+75.15
MEET EX. CONDITIONS**

**LIMIT OF WORK
LOOP B
STA. 7+85
MEET EX. CONDITIONS**

**LIMIT OF WORK
HENKLE'S LANE
STA. 20+38.71
MEET EX. CONDITIONS**

NOTE:
WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD) IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.
 [Signature] 4/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 4/23/02
 CHIEF, DIVISION OF LAND DEVELOPMENT
 [Signature] 4/26/02
 DIRECTOR

Developer Certification:
 "I/We certify that all development and construction will be done according to this plan, and that any 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."
 Signature of Developer: [Signature] 4/2/02
 Printed Name: J.J. Schaeffer, Jr.
 Date: 4/2/02
 Engineer's Certification:
 "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."
 Signature of Engineer: [Signature] 4/2/02
 Printed Name: LEON J. KRIEDEL
 Date: 4/2/02
 Reviewed for HOWARD SCD and meets Technical Requirements.
 [Signature] 4/8/02
 USDA - Natural Resources Conservation Service
 [Signature] 4/14/02
 This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 4/14/02
 Date: 4/14/02

OWNER
 MARYLAND STATE HIGHWAY ADMINISTRATION
 707 N. CALVERT STREET
 BALTIMORE, MARYLAND 21202

DEVELOPER
 CONSTELLATION REAL ESTATE, INC.
 8815 CENTRE PARK DRIVE, SUITE NO. 104
 COLUMBIA, MARYLAND 21045

DATE	NO.	REVISIONS

EROSION CONTROL INITIAL PHASE

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
 HOWARD CO., MARYLAND**

ENGINEERS:
 Consulting Engineers
 849 Fairmount Avenue
 Baltimore, Maryland 21286
 (410) 512-4500
 (410) 324-4100 (FAX)
 WHITNEY, BAILEY, COX & MAGNANI, LLC

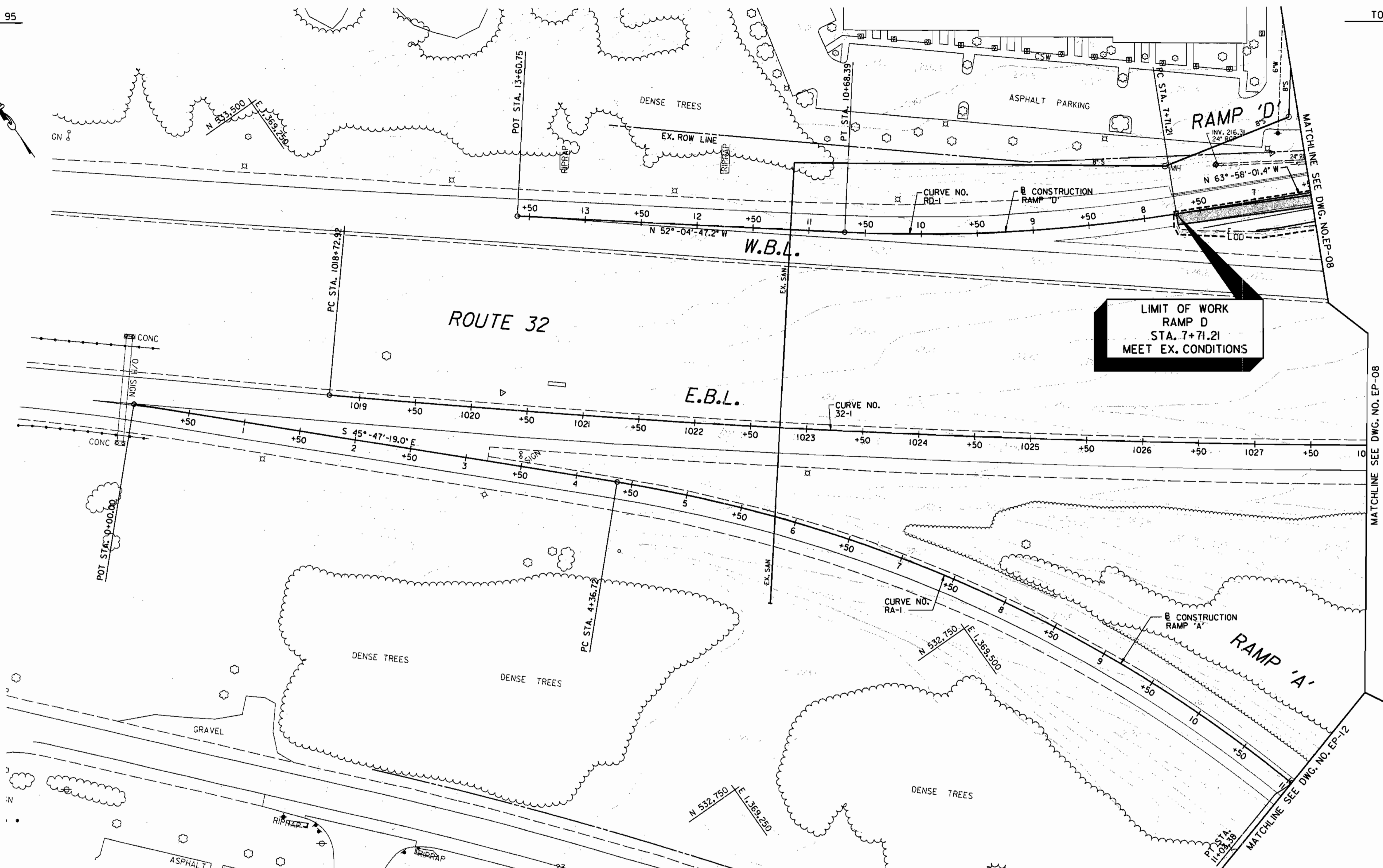
DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO.:
MAP NO.:	EP-6
GRID NO.:	
PARCEL NO.:	SHEET NO. 11 OF 22



TO INTERSTATE 95

TO MD 295

MAINTAIN AND REHABILITATE SILT FENCE
STA. 6+50 LT. TO STA. 7+73, LT. RAMP 'D'



LIMIT OF WORK
RAMP D
STA. 7+71.21
MEET EX. CONDITIONS

NOTE:
WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE
OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD)
IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER
SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
--	--

DATE	NO.	REVISIONS

EROSION CONTROL PLAN
FINAL PHASE

PROJECT TITLE:
DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND

ENGINEERS: **WR** Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-7
GRID NO.:	SHEET NO. 12 OF 22
PARCEL NO.:	

Developer Certification:
"I/We certify that all development and construction will be done according to this plan, and that any 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."

Signature of Developer: *J. Schreiber, Jr.* Date: 4/2/02
Printed Name: J. Schreiber, Jr.

Engineer's Certification:
"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."

Signature of Engineer: *L. J. Kriebel* Date: 4/2/02
Printed Name: LEON J. KRIEBEL

Reviewed for HOWARD SCD and meets Technical Requirements.
Signature: *Jim Myers* Date: 7/8/02
USDA Natural Resources Conservation Service

This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Signature: *John R. Robertson* Date: 7/14/02
How SCD

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

Signature: *[Signature]* Date: 4/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature: *Cindy Hamel* Date: 7/23/02
CHIEF, DIVISION OF LAND DEVELOPMENT

Signature: *[Signature]* Date: 4/26/02
DIRECTOR

TO INTERSTATE 95

TO MD 295

CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (SCE)

STA. 1034+24, 4' LT., MD 32 E.B.L. I EA.
STA. 1036+24, 100' LT., MD 32 E.B.L. I EA.

CONSTRUCT STONE CHECK DAM (CD)

STA. 10+40, 111' LT., D.R.R. I EA.
STA. 10+90, 112' LT., D.R.R. I EA.
STA. 11+40, 112' LT., D.R.R. I EA.

MAINTAIN AND REHABILITATE SILT FENCE (SF)

STA. 0+35, LT. TO STA. 3+69, LT. RAMP 'D'
STA. 3+81, LT. TO STA. 6+50, LT. RAMP 'D'
STA. 1+18, RT. RAMP 'D' TO STA. 4+50, RT. D.R.R.
STA. 8+50, LT. D.R.R. TO STA. 10+12.16, RT. RAMP 'C'
STA. 6+62, LT. D.R.R. TO STA. 10+12.16, LT. RAMP 'C'
STA. 7+11, RT. TO STA. 7+22, RT. D.R.R.
STA. 9+49, LT. TO STA. 9+87, LT. D.R.R.
STA. 6+95, LT. TO STA. 7+45, LT. D.R.R.

MAINTAIN AND REHABILITATE SUPER SILT FENCE (SSF)

STA. 9+38, RT. TO STA. 11+44.66, RT., D.R.R.

MAINTAIN AND REHABILITATE STABILIZED CONSTRUCTION ENTRANCE (SCE)

STA. 3+74, 10' LT. RAMP 'D'

MAINTAIN AND REHABILITATE TEMPORARY STONE OUTLET STRUCTURE (TSOS)

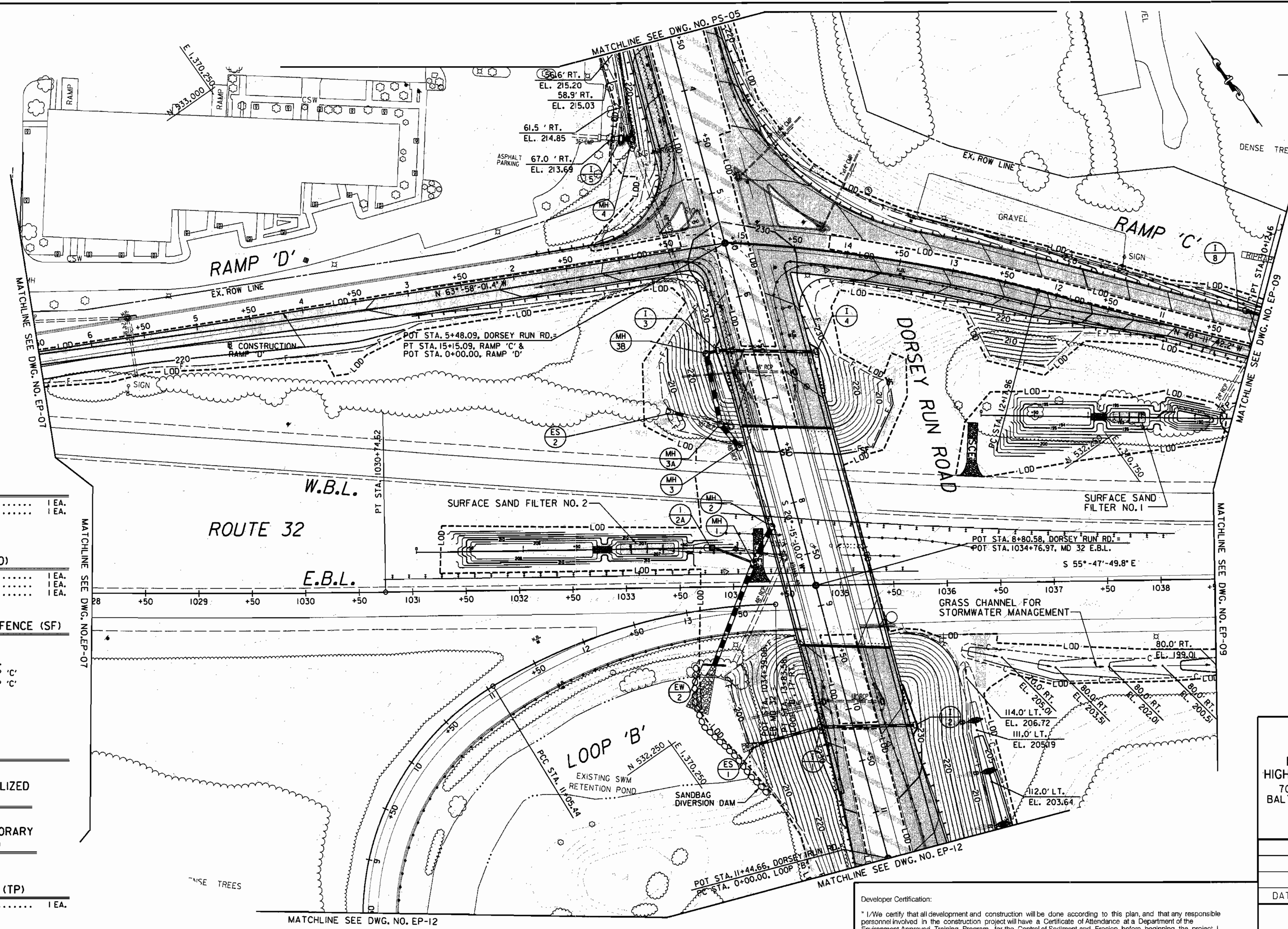
STA. 4+13, 58' RT. D.R.R.

INSTALL TREE PROTECTION FENCE (TP)

STA. 10+10, 70' LT., RAMP 'C' I EA.

CONSTRUCT SANDBAG DIVERSION

STA. 9+26, 128' RT., TO STA. 10+56, 95' RT., D.R.R.



NOTE:
WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD) IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

NOTE:
SAND FILTER AND GRASS CHANNEL FOR STORMWATER MANAGEMENT SHALL NOT BE CONSTRUCTED UNTIL UPSTREAM DRAINAGE AREAS ARE STABILIZED AND UPON APPROVAL OF INSPECTOR.

Developer Certification:

* I/We certify that all development and construction will be done according to this plan, and that any 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.

Signature of Developer: *J.J. Schaeffer, Jr.* Date: 4/2/02
Printed Name: J.J. Schaeffer, Jr.

Engineer's Certification:

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.

Signature of Engineer: *Leon J. Kriebel* Date: 4/2/02
Printed Name: LEON J. KRIEBEL

Reviewed for HOWARD SCD and meets Technical Requirements.

Signature: *Jim Myers* Date: 4/18/02
USDA Natural Resources Conservation Service

Signature: *John R. Johnston* Date: 4/18/02
HOWARD SOIL CONSERVATION DISTRICT

OWNER

MARYLAND STATE HIGHWAY ADMINISTRATION
707 N. CALVERT STREET
BALTIMORE, MARYLAND 21202

DEVELOPER

CONSTELLATION REAL ESTATE, INC.
8815 CENTRE PARK DRIVE, SUITE NO. 104
COLUMBIA, MARYLAND 21045

DATE	NO.	REVISIONS

EROSION CONTROL PLAN FINAL PHASE

PROJECT TITLE:

DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND

ENGINEERS:

WR Consulting Engineers
849 Fairmount Avenue
Baltimore, Maryland 21286
WHITNEY, BAILEY, COX & MAGNANI, LLC
(410) 512-4500
(410) 324-4100 (FAX)

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

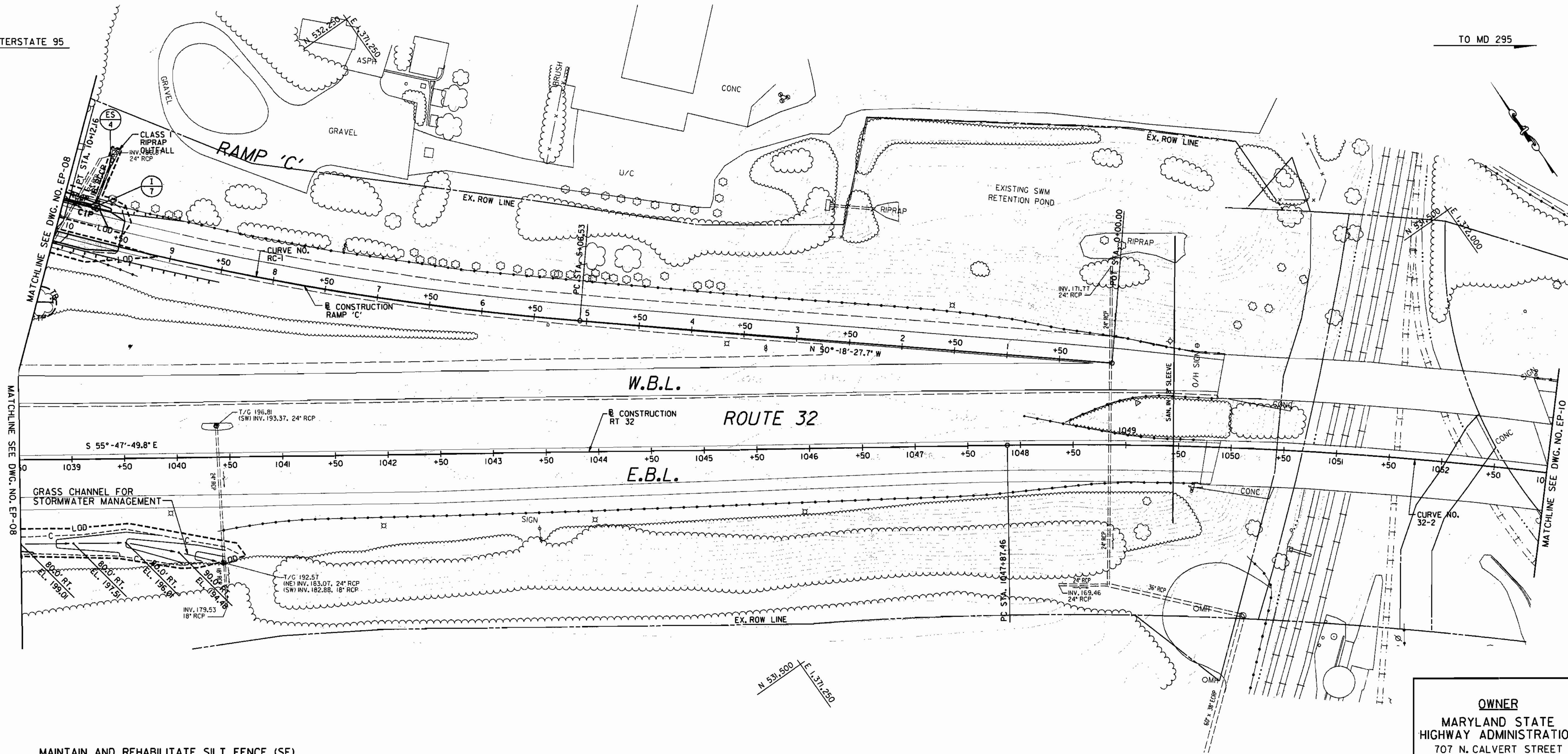
Signature: *[Signature]* Date: 4/10/02
Signature: *Cinda Hamble* Date: 1/23/02
Signature: *[Signature]* Date: 4/24/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION
CHIEF, DIVISION OF LAND DEVELOPMENT
DIRECTOR



DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV, 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-8
GRID NO.:	
PARCEL NO.:	SHEET NO. 13 OF 22

TO INTERSTATE 95

TO MD 295



MAINTAIN AND REHABILITATE SILT FENCE (SF)
 STA. 9+50, RT. TO STA. 10+12.16, RT. RAMP 'C'

NOTE:
 WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD) IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

NOTE:
 GRASS CHANNEL FOR STORMWATER MANAGEMENT SHALL NOT BE CONSTRUCTED UNTIL UPSTREAM DRAINAGE AREAS ARE STABILIZED AND UPON APPROVAL OF INSPECTOR.

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

[Signature] 4/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/23/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/26/02
 DIRECTOR DATE

Developer Certification:
 "I/We certify that all development and construction will be done according to this plan, and that any 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."

[Signature] 4/2/02
 Signature of Developer Date
 Printed Name: J. J. SUGGER, JR.

Engineer's Certification:
 "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."

[Signature] 4/2/02
 Signature of Engineer Date
 Printed Name: LEON J. KRIEBEL

Reviewed for HOWARD SCD and meets Technical Requirements.
[Signature] 4/8/02
 USDA Natural Resources Conservation Service Date

This development plan is approved for permit construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
[Signature] 4/8/02
 Howard SCD Date

OWNER
 MARYLAND STATE HIGHWAY ADMINISTRATION
 707 N. CALVERT STREET
 BALTIMORE, MARYLAND 21202

DEVELOPER
 CONSTELLATION REAL ESTATE, INC.
 8815 CENTRE PARK DRIVE, SUITE NO. 104
 COLUMBIA, MARYLAND 21045

DATE	NO.	REVISIONS

EROSION CONTROL PLAN FINAL PHASE

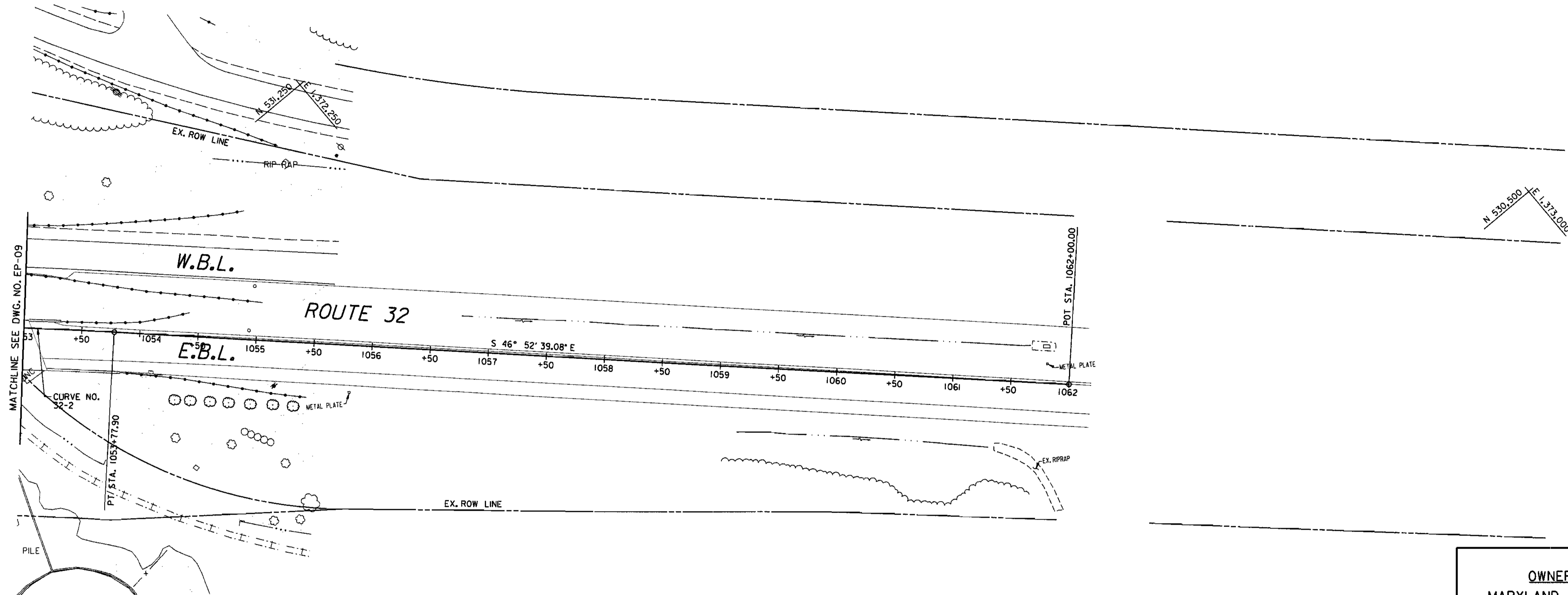
PROJECT TITLE:
 DORSEY RUN ROAD AT MD 32
 HOWARD CO., MARYLAND

ENGINEERS: **WR Consulting Engineers**
 849 Fairmount Avenue (410) 512-4500
 Baltimore, Maryland 21286 (410) 324-4100 (FAX)
 WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-9
GRID NO.:	SHEET NO. 14 OF 22
PARCEL NO.:	

TO INTERSTATE 95

TO MD 295



NOTE:
 THIS SHEET CONTAINS NO PROPOSED CONSTRUCTION
 AND IS SHOWN AS REFERENCE ONLY TO COINCIDE
 WITH THE ROADWAY PLAN SET.

NOTE:
 WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE
 OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD)
 IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER
 SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

$N 530.500 E 1.372.250$

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

Michael Danilov 4/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cinda Hamrick 4/23/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul R. Hester 4/26/02
 DIRECTOR DATE

Developer Certification:

"I/We certify that all development and construction will be done according to this plan, and that any 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."

J.J. Schreiber, Jr. 4/2/02
 Signature of Developer Date

Printed Name: J.J. SCHREIBER, JR.

Engineer's Certification:

"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."

Leon J. Kriebel 4/2/02
 Signature of Engineer Date

Printed Name: LEON J. KRIEBEL

Reviewed for HOWARD SCD and meets Technical Requirements.

Jim Meyer 4/1/02
 USD Natural Resources Conservation Service Date

John R. Blanton 4/1/02
 Howd SCD Date

This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
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DATE	NO.	REVISIONS
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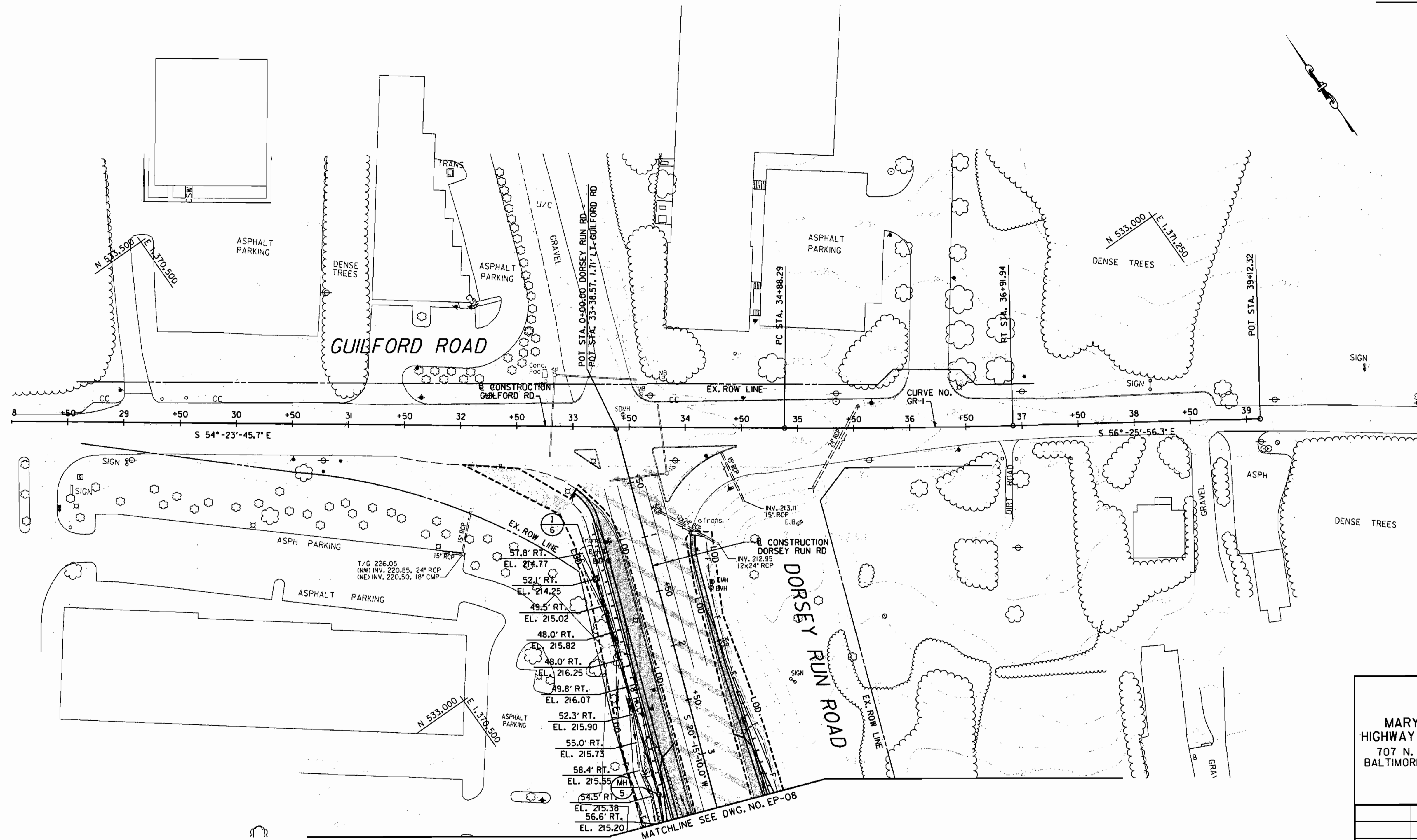
**EROSION CONTROL PLAN
FINAL PHASE**

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
 HOWARD CO., MARYLAND**

ENGINEERS: **WB Consulting Engineers**
 849 Fairmount Avenue (410) 512-4500
 Baltimore, Maryland 21286 (410) 324-4100 (FAX)
 WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-10
GRID NO.:	
PARCEL NO.:	SHEET NO. 15 OF 22





MAINTAIN AND REHABILITATE SILT FENCE (SF)

STA. 1+09, LT. TO STA. 3+50, LT. D.R.R.
STA. 0+50, RT. TO STA. 2+01, RT. D.R.R.

NOTE:
WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD) IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

Developer Certification:
 "I/We certify that all development and construction will be done according to this plan, and that any 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."

Signature of Developer: *J.J. Schaefer, Jr.* Date: 4/2/02
 Printed Name: J.J. Schaefer, Jr.

Engineer's Certification:
 "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."

Signature of Engineer: *Leon J. Krieger* Date: 4/2/02
 Printed Name: LEON J. KRIEGER

Reviewed for HOWARD SCD and meets Technical Requirements:
 USDA - Natural Resources Conservation Service Date: _____
 This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
 Howard SCD Date: _____

OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
--	--

DATE	NO.	REVISIONS

**EROSION CONTROL PLAN
FINAL PHASE**

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND**

ENGINEERS: **WR Consulting Engineers**
 849 Fairmount Avenue
 Baltimore, Maryland 21286
 (410) 512-4500
 (410) 324-4100 (FAX)
 WHITNEY, BAILEY, COX & MAGNANI, LLC



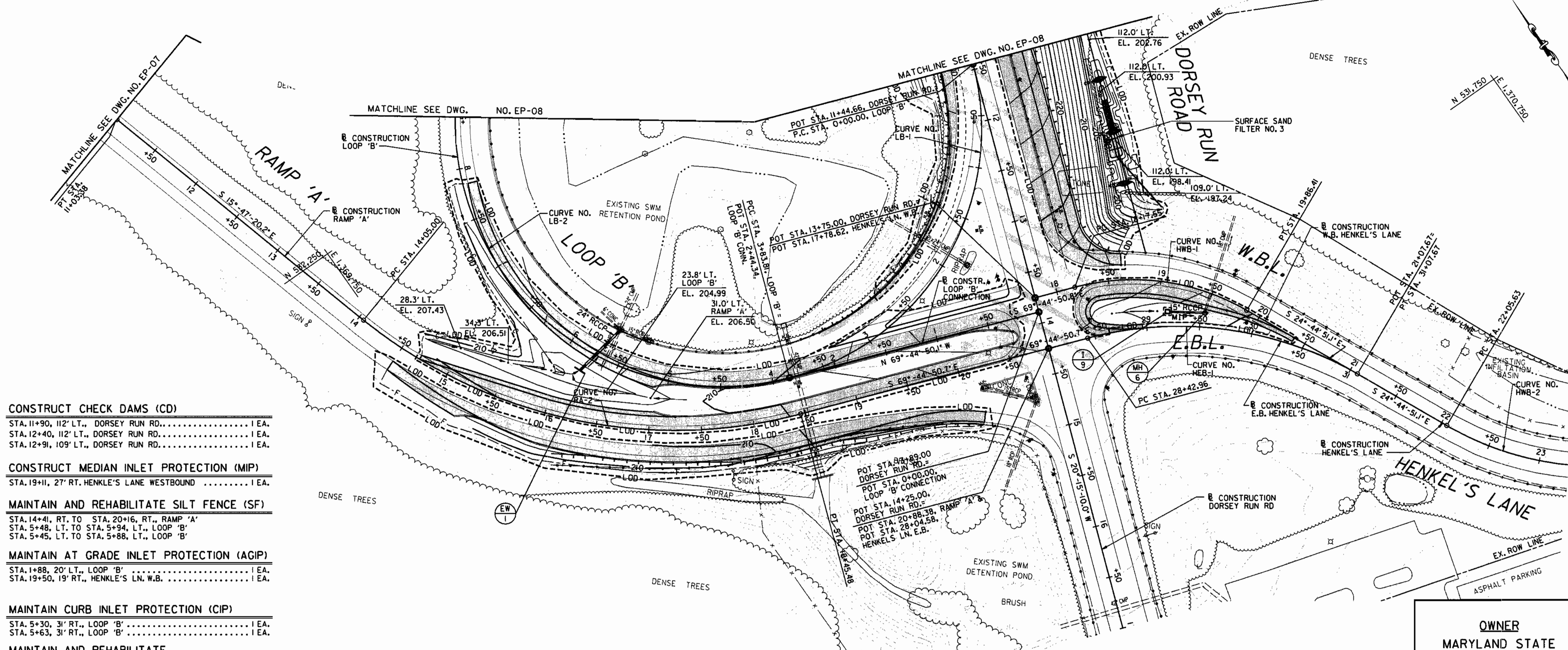
DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-II
GRID NO.:	
PARCEL NO.:	

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

Charles D. Williams 4/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Anda Hamada 4/23/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul Davis 4/26/02
 DIRECTOR DATE



CONSTRUCT CHECK DAMS (CD)

STA. 11+90, 112' LT., DORSEY RUN RD. I EA.
 STA. 12+40, 112' LT., DORSEY RUN RD. I EA.
 STA. 12+91, 109' LT., DORSEY RUN RD. I EA.

CONSTRUCT MEDIAN INLET PROTECTION (MIP)

STA. 19+11, 27' RT. HENKLE'S LANE WESTBOUND I EA.

MAINTAIN AND REHABILITATE SILT FENCE (SF)

STA. 14+41, RT. TO STA. 20+16, RT., RAMP 'A'
 STA. 5+48, LT. TO STA. 5+94, LT., LOOP 'B'
 STA. 5+45, LT. TO STA. 5+88, LT., LOOP 'B'

MAINTAIN AT GRADE INLET PROTECTION (AGIP)

STA. 1+88, 20' LT., LOOP 'B' I EA.
 STA. 19+50, 19' RT., HENKLE'S LN. W.B. I EA.

MAINTAIN CURB INLET PROTECTION (CIP)

STA. 5+30, 31' RT., LOOP 'B' I EA.
 STA. 5+63, 31' RT., LOOP 'B' I EA.

MAINTAIN AND REHABILITATE TEMPORARY STONE OUTLET STRUCTURE (TSOS)

STA. 5+47, 22' LT., LOOP 'B' I EA.
 STA. 5+90, 30' LT., LOOP 'B' I EA.

CONSTRUCT TEMPORARY STONE OUTLET STRUCTURE (TSOS)

STA. 5+47, 22' LT., LOOP 'B' I EA.
 STA. 5+90, 30' LT., LOOP 'B' I EA.

NOTE:
 WHERE SHOWN ON THE PLANS ADJACENT TO SILT FENCE OR SUPER SILT FENCE, THE LIMIT OF DISTURBANCE (LOD) IS DEMONSTRATIVE ONLY. THE SILT FENCE OR SUPER SILT FENCE SHALL BE THE ACTUAL LIMIT OF DISTURBANCE.

NOTE:
 SURFACE SAND FILTER NO. 3 SHALL NOT BE CONSTRUCTED UNTIL UPSTREAM DRAINAGE AREAS ARE STABILIZED AND UPON APPROVAL OF INSPECTOR.

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

[Signature] 4/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/23/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/26/02
 DIRECTOR DATE

Developer Certification:
 "I/We certify that all development and construction will be done according to this plan, and that any 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."

[Signature] 4/2/02
 Signature of Developer Date

Printed Name: **J. J. Suresper, Jr.**

Engineer's Certification:
 "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."

[Signature] 4/2/02
 Signature of Engineer Date

Printed Name: **LEON J. KRIESEL**

Reviewed for HOWARD SOCD and meet Technical Requirements.

[Signature] 4/14/02
 USDA Natural Resources Conservation Service Date

This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

[Signature] 4/14/02
 Flow SCD Date

OWNER MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	DEVELOPER CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
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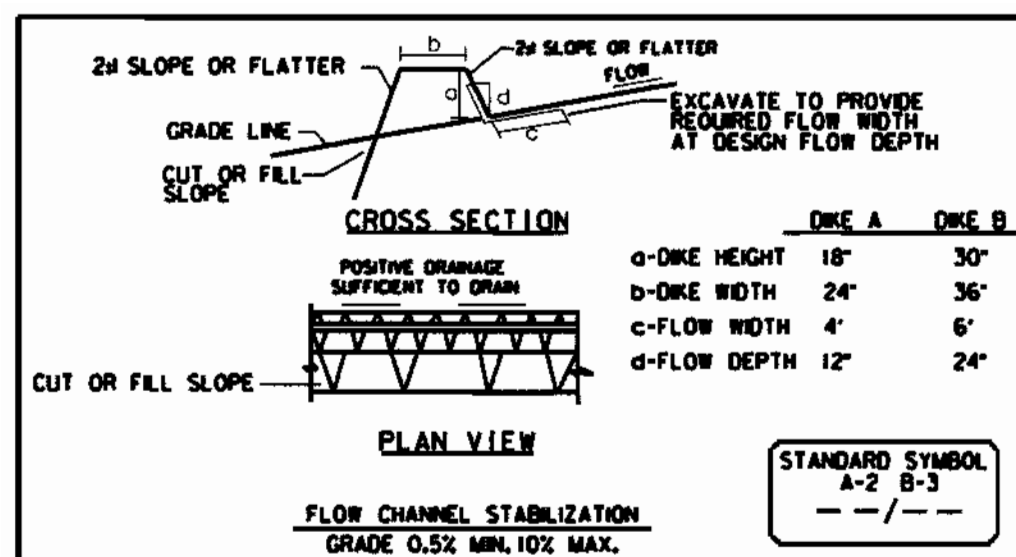
DATE	NO.	REVISIONS

EROSION CONTROL PLAN FINAL PHASE

PROJECT TITLE:
DORSEY RUN ROAD AT MD 32 HOWARD CO., MARYLAND

ENGINEERS: *[Logo]* Consulting Engineers
 849 Fairmount Avenue (410) 512-4500
 Baltimore, Maryland 21286 (410) 324-4100 (FAX)
 WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: 1" = 50'	DRAWING NO:
MAP NO.:	EP-12
GRID NO.:	
PARCEL NO.:	SHEET NO. 17 OF 22

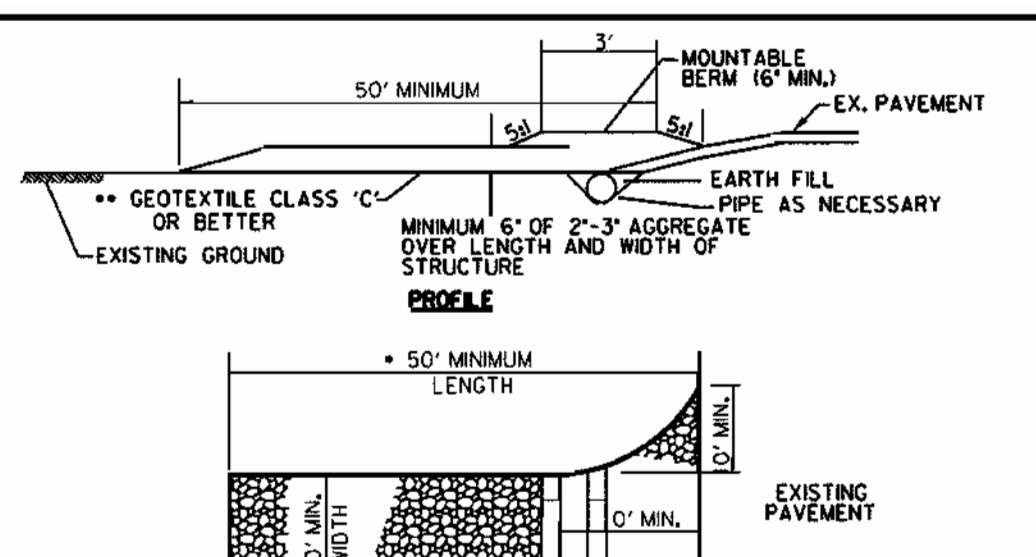


1 EARTH DIKE NOT TO SCALE

Excavate to provide required flow width at design flow depth. Cut or fill slope. Cross section and plan view. Standard symbol: A-2 B-3.

Construction Specifications

- Seed and cover with straw mulch.
- Seed and cover with Erosion Control Matting or line with sod.
- 3" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum.
- All temporary earth dikes shall have uninterupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%.
- Runoff diverted from a disturbed area shall be conveyed to a sediment trapping device.
- Runoff diverted from an undisturbed area shall outlet directly into an undisturbed, stabilized area at a non-erode velocity.
- 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.
- 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.
- Fill shall be compacted by earth moving equipment.
- All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike.
- Inspection and maintenance must be provided periodically and after each rain event.

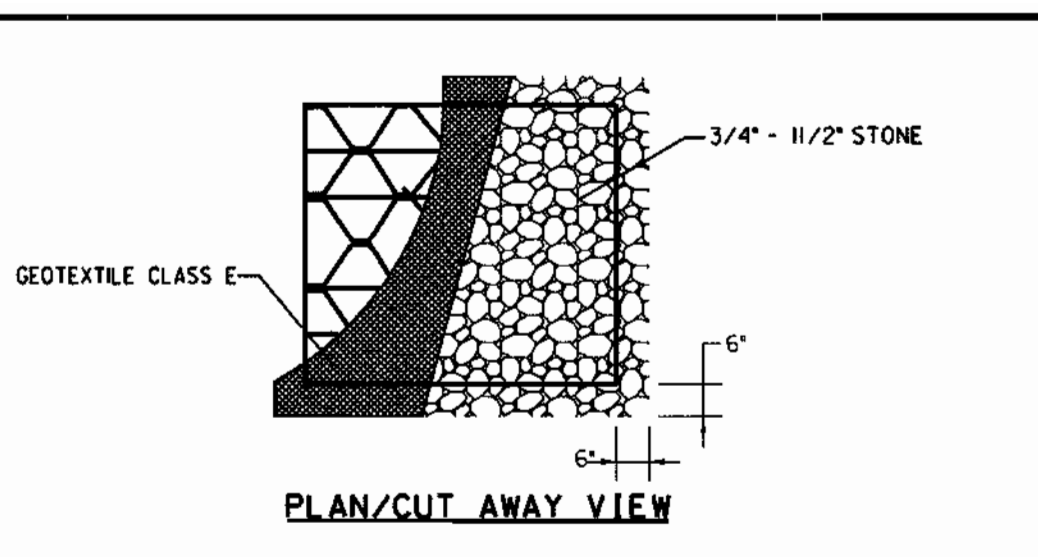


2 STABILIZED CONSTRUCTION ENTRANCE NOT TO SCALE

Plan view showing geotextile fabric and stone. Standard symbol: B-3 C-3.

Construction Specification

- Length - minimum of 50' (30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- 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.
- 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.
- 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 SCD 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.
- 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.

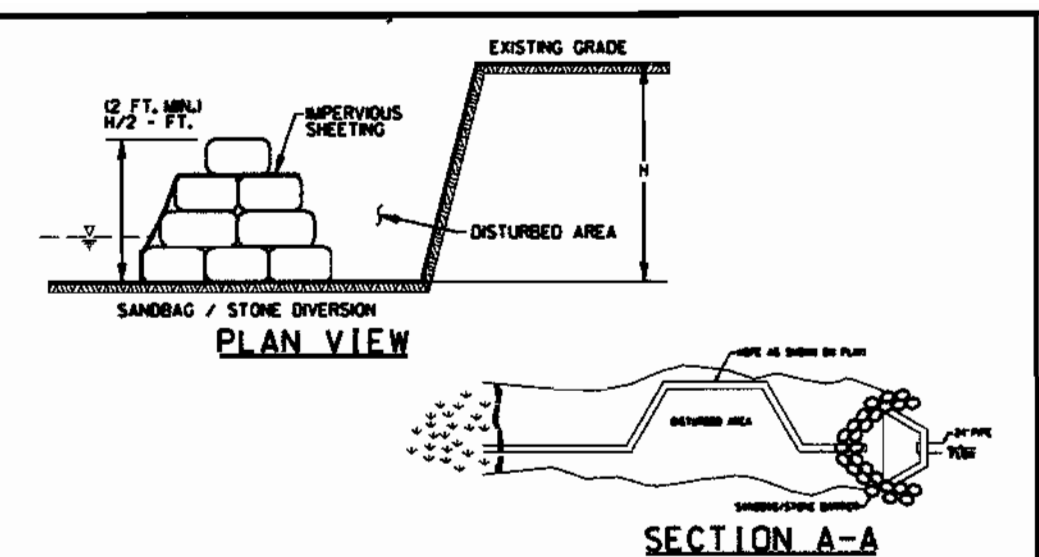


3 AT GRADE INLET PROTECTION NOT TO SCALE

Plan/Cut Away View and Cross Section. Standard symbol: AGP.

Construction Specifications

- Lift grate and wrap with Geotextile Class E to completely cover all openings, then set grate back in place.
- Place 3/4" to 1 1/2" stone, 4" - 6" thick on the grate to secure the fabric and provide additional filtration.
- This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.

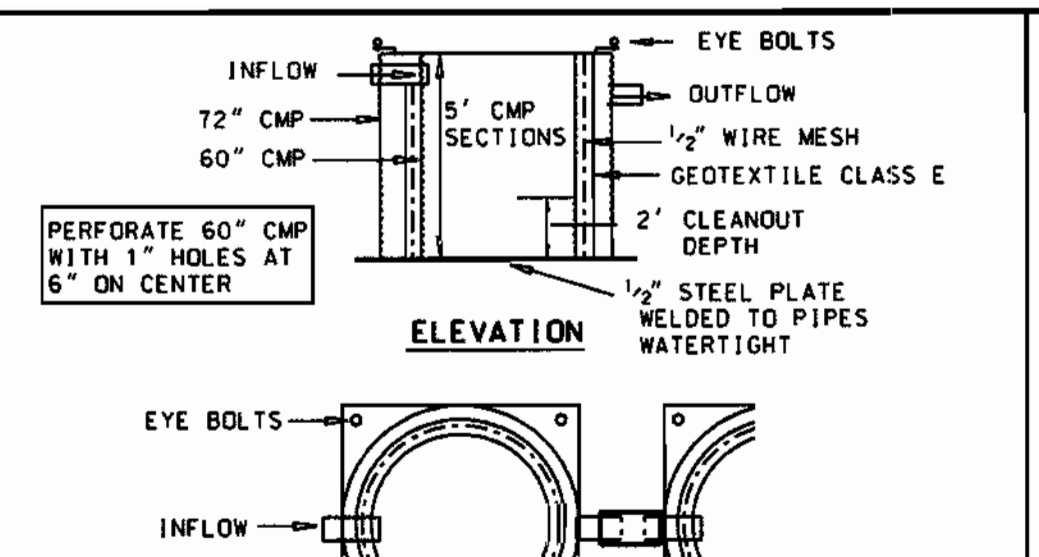


4 DIVERSION PIPE NOT TO SCALE

Plan View and Section A-A. Standard symbol: PST.

Construction Specifications

- The work shall consist of installing a flow diversion structure when construction activities take place within the stream channel such as culvert construction or culvert replacement.
- Material Specifications:
 - Sandbags: Sandbags shall consist of materials which are resistant to ultra-violet radiation, tearing, and puncture and woven tightly enough to prevent leakage of fill material (e.g., sand, fine gravel, etc.).
 - Stone: Stone shall be washed and have a minimum diameter of 6 inches.
 - Sheeting: Sheeting shall consist of polyethylene or other material which is impervious and resistant to puncture and tearing.
- Construction Requirements:
 - At erosion and sediment control devices shall be installed as the first order of work.
 - The height of the sandbagstone diversion structures shall be one-half the distance from the stream bed to the bank plus one foot, as indicated in Section A.A. The sandbags shall be placed on a smooth, prepared surface.
 - All excavated materials shall be disposed of in a SCD-approved disposal area outside the 100-year floodplain unless otherwise approved on the plans by the WRA.
 - Sheeting shall be covered a minimum of 18 inches.
 - The diversion pipe shall have a minimum diameter of sufficient size to convey the normal stream flow.
 - If necessary, all fence or strappings shall be installed around the perimeter of the work area.
 - Sediment control devices are to remain in place until all disturbed areas are stabilized and the inspecting authority approves their removal.

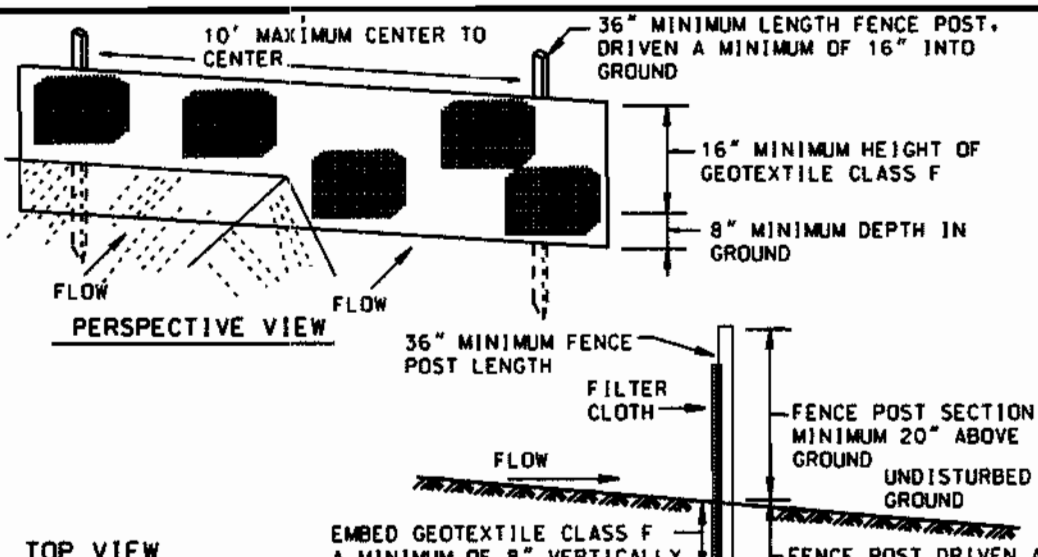


5 PORTABLE SEDIMENT TANK NOT TO SCALE

Elevation and Plan View. Standard symbol: PST.

Construction Specifications

- The following formula should be used in determining the storage volume of the sediment tank: 1 cubic foot of storage for each gallon per minute of pump discharge capacity.
- An example of a typical sediment tank is shown above. Other container designs can be used if the storage volume is adequate and approvals are obtained from the local approving agency.
- Tanks may be connected in series.



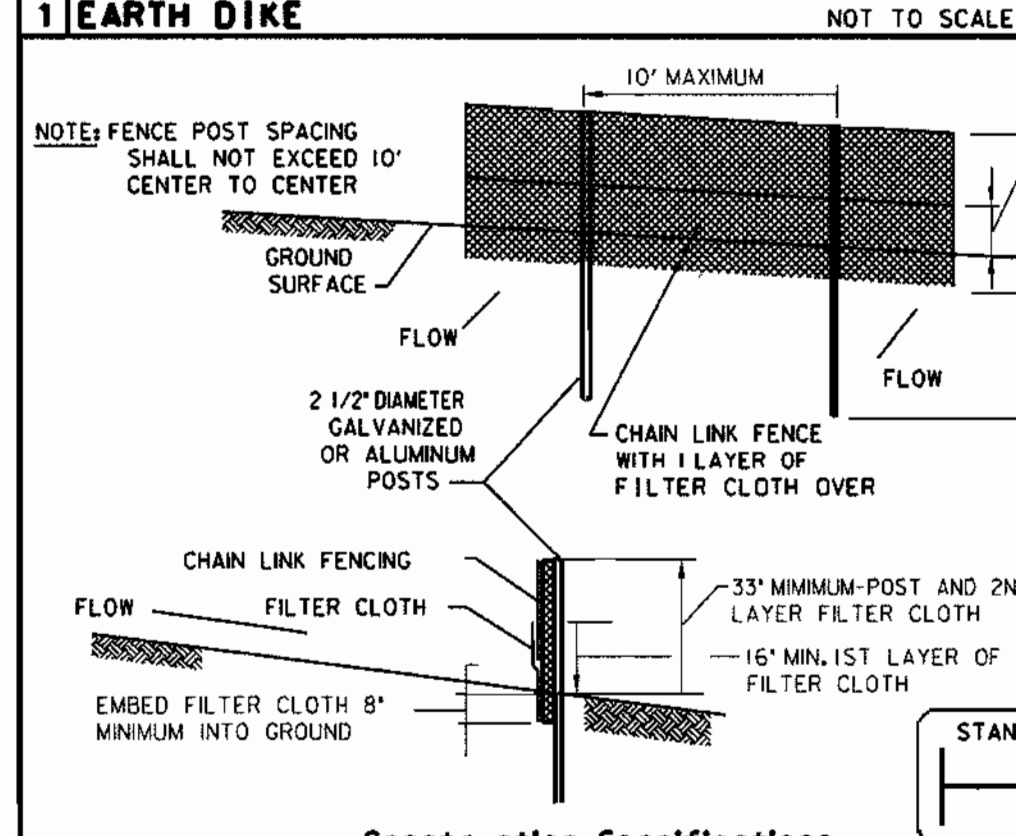
6 SILT FENCE NOT TO SCALE

Perspective View, Top View, and Cross Section. Standard symbol: SF.

Construction Specifications

- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum cut) or 1 3/4" diameter (minimum round) and shall be of sound quality hardwood. Steel posts shall be standard T or U section weighing not less than 1.00 pound per linear foot.
- 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/ft ² /minute (max.)	Test: MSMT 322
- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.



7 SUPER SILT FENCE NOT TO SCALE

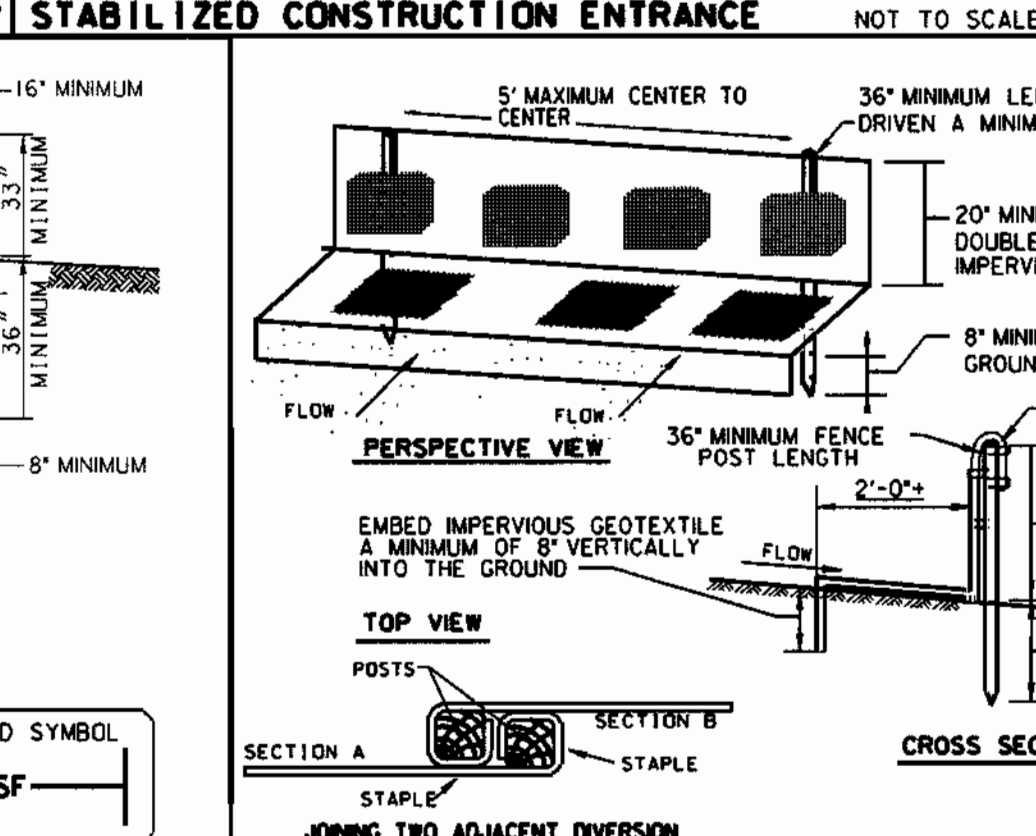
Perspective View and Cross Section. Standard symbol: SSF.

Construction Specifications

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 5' fence shall be used, substituted 42" fabric and 6' length posts.

- The poles do not need to be set in concrete.
- Chain link fence shall be fastened securely to the fence posts with wire ties or staples.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 8" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt bulldozes removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth 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/minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322

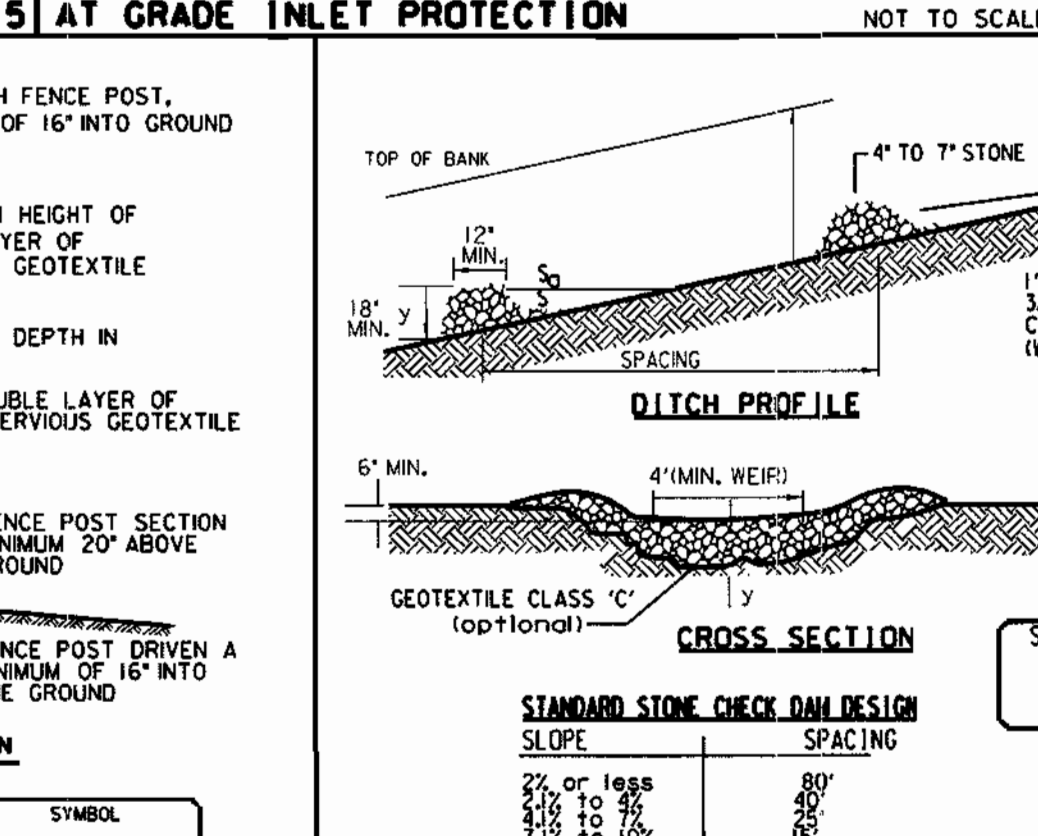


8 DIVERSION FENCE NOT TO SCALE

Perspective View and Cross Section. Standard symbol: DF.

Construction Specifications

- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighing not less than 1.00 pound per linear foot.
- Impervious Geotextile shall be fastened securely to each fence post with staples at top and mid-section.
- Impervious Geotextile shall be Miraf MCF-1212 or approved equivalent. Miraf MCF-1212 is a composite of woven polyethylene fabric and 1.5 mils of polyethylene film laminated on both sides to form a monolithic barrier.
- Where ends of impervious geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Diversion Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

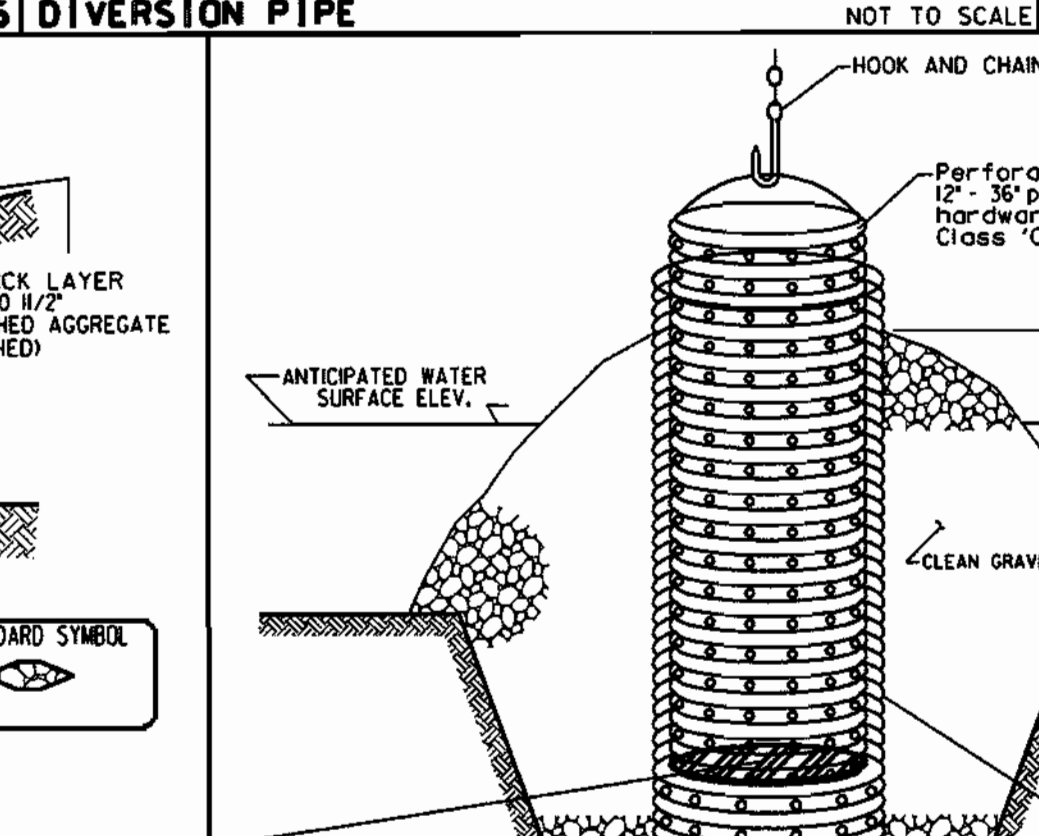


9 STONE CHECK DAM NOT TO SCALE

Ditch Profile and Cross Section. Standard symbol: SC.

Construction Specifications

- Swales and ditches shall be prepared in accordance with the construction specifications described in Section A-2, Standards and Specifications for Temporary Swale.
- The check dam shall be constructed of 4" - 7" stone. The stone shall be placed so that it completely covers the width of the channel and keyed into the channel banks.
- The top of the check dam shall be constructed so the center is approximately 6" lower than the outer edges, forming a weir that water can flow across.
- The maximum height of the check dam at the center shall not exceed 2'.
- The upstream side of the check dam shall be lined with approximately 1" of 3/4" to 1 1/2" crushed aggregate.

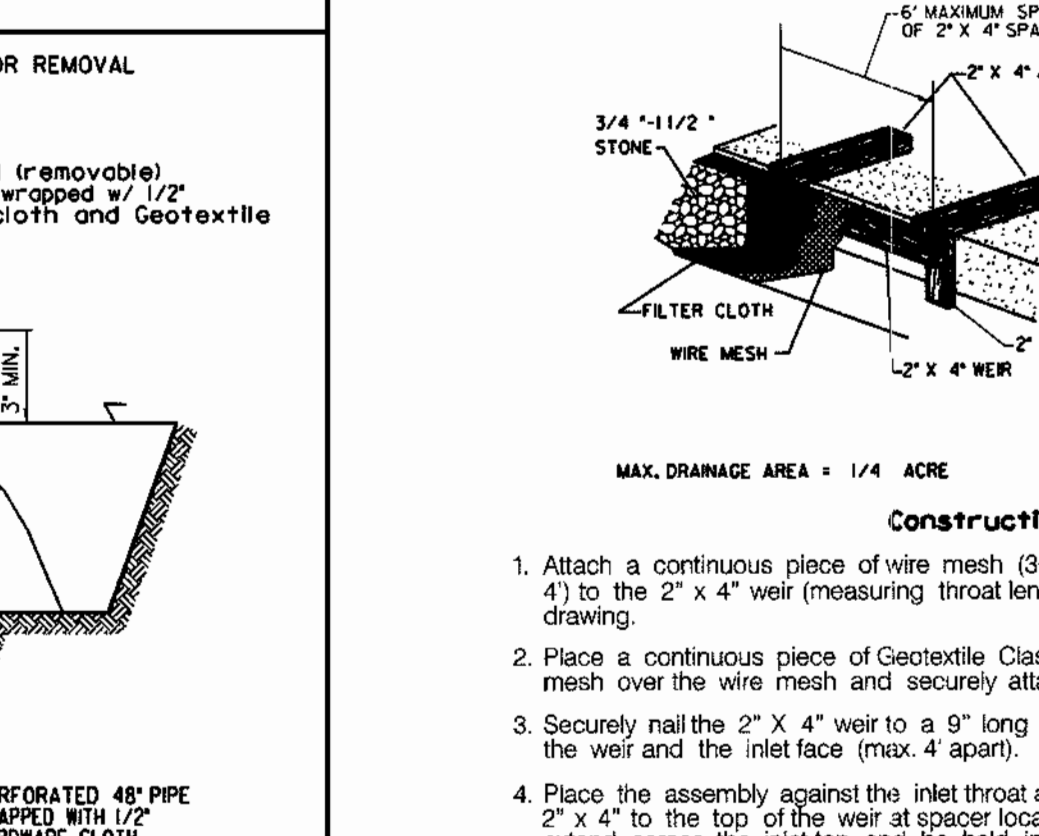


10 REMOVABLE PUMPING STATION NOT TO SCALE

Elevation View. Standard symbol: CP.

Construction Specifications

- The outer pipe should be 48" dia or shall in any case be at least 4" greater in diameter than the center pipe. The outer pipe shall be wrapped with 12" hardware cloth to prevent backfill material from entering the perforations.
- After installing the outer pipe, backfill around outer pipe with 2" aggregate or clean gravel.
- The inside stand pipe (center pipe) should be constructed by perforating a corrugated or PVC pipe between 12" and 36" in diameter. The perforations shall be 1/2" x 6" slots or 1" diameter holes 6" on center. The center pipe shall be wrapped with 12" hardware cloth first, then wrapped again with Geotextile Class C.
- The center pipe should extend 12" to 18" above the anticipated water surface elevation or riser crest elevation when dewatering a basin.
- When discharging a removable pumping station to a filter bag, place the filter bag outside the dewatering area on non-disturbed ground (do not drain back into the work area).

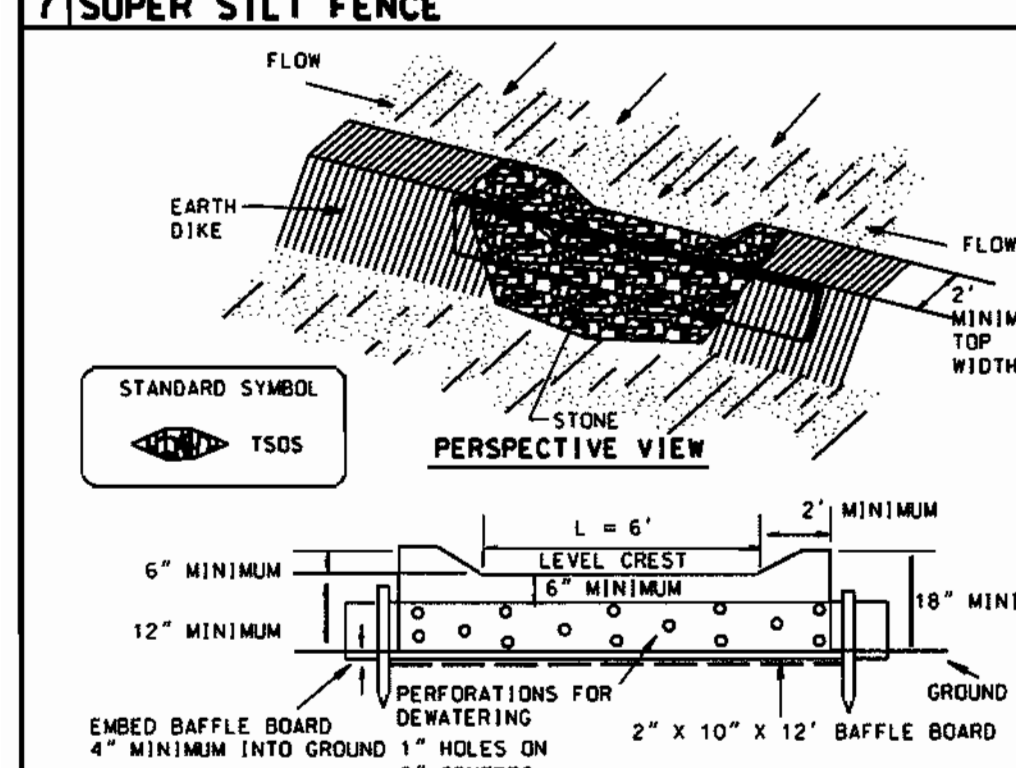


11 CURB INLET PROTECTION NOT TO SCALE

Perspective View and Cross Section. Standard symbol: CP.

Construction Specifications

- Attach a continuous piece of wire mesh (30" minimum width by throat length plus 4") to the 2" x 4" weir (measuring throat length plus 2") as shown on the standard drawing.
- Place a continuous piece of Geotextile Class E the same dimensions as the wire mesh over the wire mesh and securely attach it to the 2" x 4" weir.
- Securely nail the 2" x 4" weir to a 9" long vertical spacer to be located between the weir and the inlet face (max. 4" apart).
- Place the assembly against the inlet throat and nail (minimum 2" lengths of 2" x 4" to the top of the weir at spacer locations). These 2" x 4" anchors shall extend across the inlet top and be held in place by sandbags or alternate weight.
- The assembly shall be placed so that the end spacers are a minimum 1" beyond both ends of the throat opening.
- Form the 12" x 12" wire mesh and the geotextile fabric to the concrete gutter and against the face of the curb on both sides of the inlet. Place clean 3/4" x 1/2" stone over the wire mesh and geotextile in such a manner to prevent water from entering the inlet under or around the geotextile.
- This type of protection must be inspected frequently and the filter cloth and stone replaced when clogged with sediment.
- Assure that storm flow does not bypass the inlet by installing a temporary earth or asphalt dike to direct the flow to the inlet.

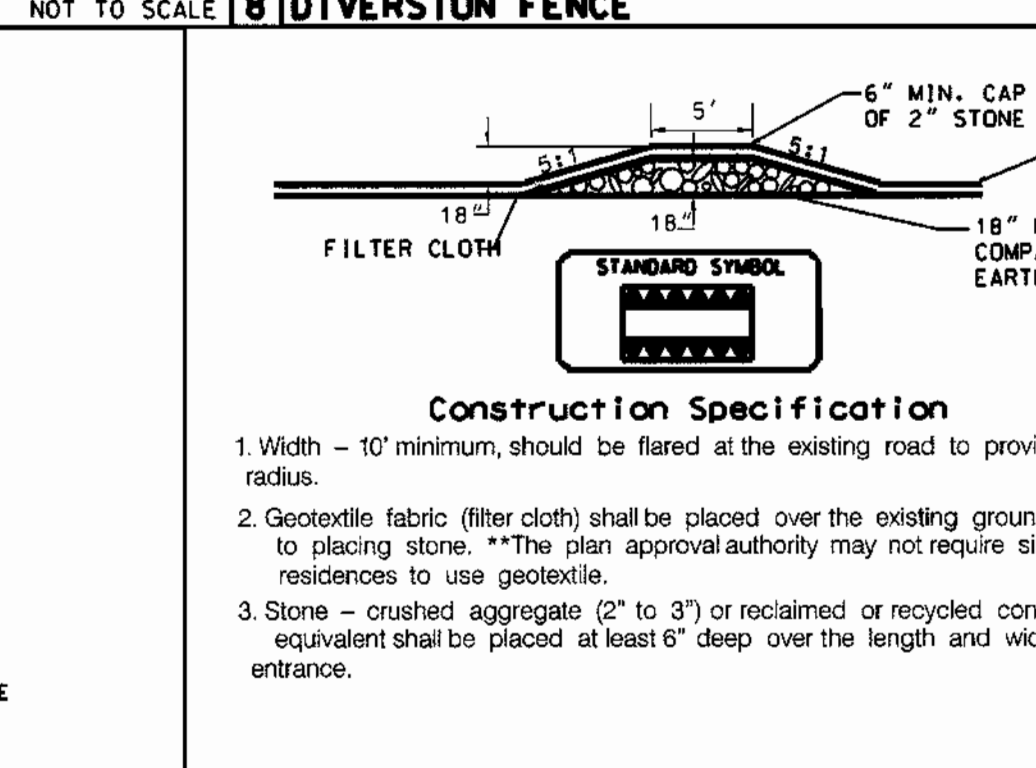


12 STONE OUTLET STRUCTURE NOT TO SCALE

Perspective View and Cross Section. Standard symbol: TSOS.

Construction Specifications

- Crushed stone shall be used. Gravel may be used if crushed stone is not available. The stone shall be 2" - 3" in size.
- The crest of the stone dike shall be at least 6" lower than the lowest elevation of the top of the earth dike and shall be level.
- The stone outlet structure shall be embedded into the soil a minimum of 4".
- The minimum length of the crest of the stone outlet structure shall be 6".
- The stone outlet structure shall be inspected after each rain. Stone shall be replaced when the structure ceases to function and ponding results.
- The baffle board shall be extended one foot into the dike, staked and embedded 4" into the existing ground.
- The drainage area to this structure shall be less than 1/2 acre.

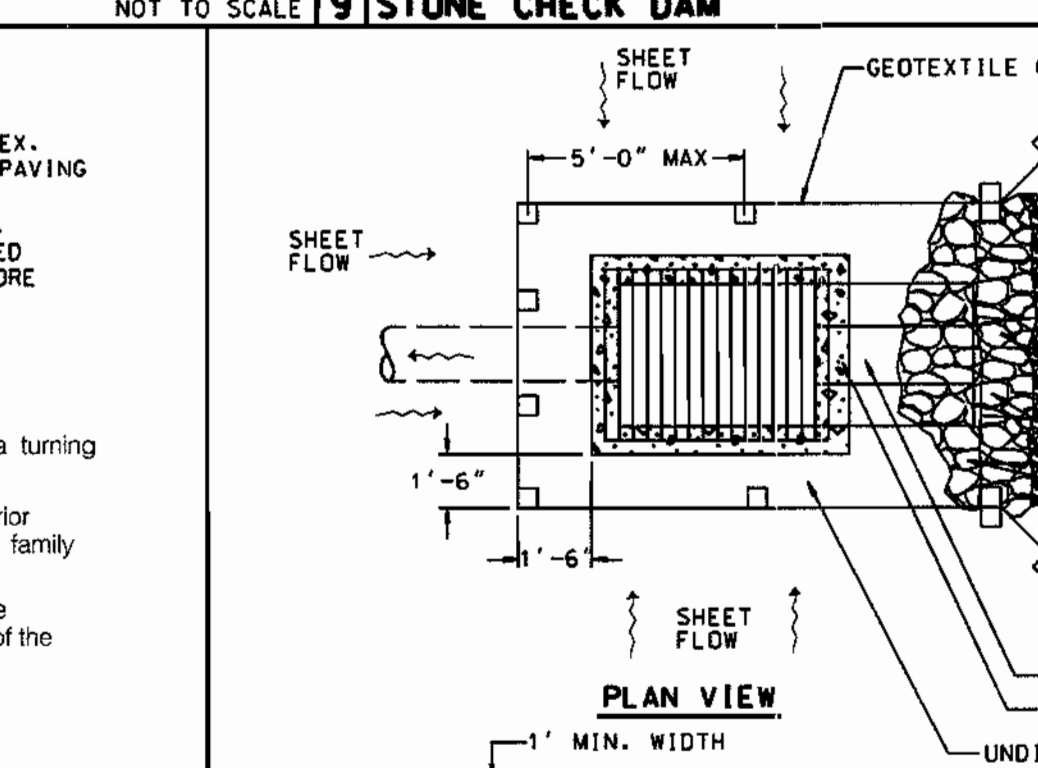


13 MOUNTABLE BERM NOT TO SCALE

Cross Section. Standard symbol: MB.

Construction Specification

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



14 DETAIL 23D - MEDIAN INLET PROTECTION NOT TO SCALE

Plan View and Section A-A. Standard symbol: MIP.

Construction Specifications

- Fence posts shall be 36" (min.) long, driven 16" into the ground and spaced 5' (max.) apart. Wood posts shall be 1 1/2" x 1 1/2" (min.) square cut or 1 3/4" (min.) diameter round and shall be of sound quality hardwood. Steel posts shall be standard T or U section weighing not less than 1.0 #/linear foot.
- Geotextile Class F shall be fastened securely to each post with wire ties or staples at top and mid-section.
- Where ends of geotextile fabric come together they shall be overlapped, folded and stapled.
- Median Inlet Protection shall be inspected after each rain and maintained when bulges occur in the fabric or when the stone gets clogged.
- Stone used to construct the weir shall be 4" - 7" with a 1" thick layer of 3/4" - 1 1/2" stone on the upstream face.

13 STONE OUTLET STRUCTURE NOT TO SCALE

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

Signature: [Signature] DATE: 4/10/02

Signature: [Signature] DATE: 4/23/02

Signature: [Signature] DATE: 4/26/02

14 DETAIL 23D - MEDIAN INLET PROTECTION NOT TO SCALE

Developer Certification: I/We certify that all development and construction will be done according to this plan, and that any 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.

Signature of Developer: [Signature] DATE: 4/26/02

Signature of Engineer: [Signature] DATE: 4/26/02

Reviewed for HOWARD SCD and meets Technical Requirements.

Signature: [Signature] DATE: 4/18/02

Signature: [Signature] DATE: 4/18/02

3 CURB INLET PROTECTION NOT TO SCALE

Developer Certification: I/We certify that all development and construction will be done according to this plan, and that any 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.

Signature of Developer: [Signature] DATE: 4/26/02

Signature of Engineer: [Signature] DATE: 4/26/02

Reviewed for HOWARD SCD and meets Technical Requirements.

Signature: [Signature] DATE: 4/18/02

Signature: [Signature] DATE: 4/18/02

OWNER	DEVELOPER
MARYLAND STATE HIGHWAY ADMINISTRATION 707 N. CALVERT STREET BALTIMORE, MARYLAND 21202	CONSTELLATION REAL ESTATE, INC. 8815 CENTRE PARK DRIVE, SUITE NO. 104 COLUMBIA, MARYLAND 21045
DATE	NO. REVISIONS
EROSION AND SEDIMENT CONTROL DETAILS	
PROJECT TITLE: DORSEY RUN ROAD AT MD 32 HOWARD CO., MARYLAND	
ENGINEERS:	Consulting Engineers
	849 Fairmount Avenue (410) 512-4500 Baltimore, Maryland 21286 (410) 324-4100 (FAX) WHITNEY, BAILEY, COX & MAGNANI, LLC
DESIGNED BY: BSN	ELECTION DIST.:
DRAWN BY: CEO	CENSUS TRACT #:
CHECKED BY: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: N.T.S.	DRAWING NO.:
MAP NO.:	
GRID NO.:	EP-13
PARCEL NO.:	SHEET NO. 18 OF 22

STANDARD SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspections, Licenses and Permits, Sediment Control Division prior to the start of any construction (313-1855).
- All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or re-disturbance, permanent or temporary stabilization shall be completed within a 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes steeper than 3:1, b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol 1, Chapter 7 of the HOWARD COUNTY DESIGN MANUAL Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall only be done when recommended seeding dates do not allow for proper germination and establishment of grasses.
- All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
- Site Analysis:
Total Area of Site = 13.97 Acres
Area Disturbed = 9.65 Acres
Area to be roofed or paved = 6.14 Acres
Area to be vegetatively stabilized = 3.51 Acres
Total Cut = 105,000 Cu. Yds.
Total Fill = 105,000 Cu. Yds.
Offsite water/borrow area location = NA
- Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
- Additional sediment control must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
- On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be requested upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other building or grading inspection approvals may not be authorized until this initial approval by the inspection agency is made.

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

PERMANENT SEEDING NOTES

- Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed.
- Seeded Preparation:** Loosen upper three inches of soil by raking, disking, or other acceptable means before seeding, 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 times 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 lbs/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, 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 - 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 slope 8 ft. or higher, use 348 gal per acre (8 gal/1000 sq. ft.) for anchoring.
- Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for additional rates and methods for covered.

TEMPORARY SEEDING SUMMARY

NO.	SEED MIXTURE (HARDINESS ZONE 7A) (FROM TABLE 26)				FERTILIZER RATE (10-10-10)	LIME RATE
	SPECIES	APPLICATION RATE (lb/oc)	DATES	SEEDING DEPTHS		
	RYE	140	2/1-4/30 8/15-11/30	1"-2"	600 lb/oc (15 lb/1000 sq ft)	2 tons/oc (100 lb/1000 sq ft)
	RYE PLUS FOXTAIL MILLET	150	2/1-4/30 5/1-8/14 8/15-11/30	1"		

PERMANENT SEEDING SUMMARY

NO.	SEED MIXTURE (HARDINESS ZONE 7A) (FROM TABLE 25)				FERTILIZER RATE (10-20-20)			LIME RATE
	SPECIES	APPLICATION RATE (lb/oc)	DATES	SEEDING DEPTHS	N	P205	K20	
3	TALL FESCUE (85%) PERENNIAL BLUEGRASS (10%) KENTUCKY BLUEGRASS (5%)	125 15 10	3/1-5/15 8/15-11/15	1/4"	90 lb/oc (2.0 lb/1000 sq ft)	175 lb/oc (4 lb/1000 sq ft)	175 lb/oc (4 lb/1000 sq ft)	2 tons/oc (100 lb/1000 sq ft)
8	REED CANARYGRASS (75%) REDTOP (6%) PLUS BIRDSFOOT TREFLOL (19%)	40 3 10	3/1-5/15 8/15-11/15	1/4"	1000 sq ft	1000 sq ft	1000 sq ft	

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

[Signature] 4/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

[Signature] 4/23/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 4/26/02
DIRECTOR DATE

VEGETATIVE STABILIZATION

PERMANENT AND TEMPORARY SEEDING, SODDING AND MULCHING

- SITE PREPARATION**
PERMANENT OR TEMPORARY VEGETATION SHALL BE ESTABLISHED WITHIN SEVEN (7) DAYS ON THE SURFACE OF ALL SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, WATERWAYS, SEDIMENT CONTROL BASINS, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) AND WITHIN 14 DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. MULCHING MAY ONLY BE USED ON DISTURBED AREAS AS TEMPORARY COVER WHERE VEGETATION IS NOT FEASIBLE OR WHERE SEEDING CANNOT BE COMPLETED BECAUSE OF WEATHER.
- SEEDBED PREPARATION AND SEEDING APPLICATION**
LOOSEN THE TOP LAYER OF THE SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURE OR CONSTRUCTION EQUIPMENT SUCH AS DISC HARROWS, CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. INCORPORATE THE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF THE SOIL BY DISCING OR BY OTHER SUITABLE MEANS. ROUGH AREAS SHOULD NOT BE ROLLED OR DRAGGED SMOOTH, BUT LEFT IN A ROUGHENED CONDITION. STEEP SLOPES GREATER THAN 3:1 SHOULD BE TRACKED BY A DOZER, LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. THE TOP 1 TO 3 INCHES OF SOIL SHOULD BE LOOSE AND FRABLE. PERMANENT COVER MAY REQUIRE AN APPLICATION OF TOPSOIL IF SO, IT MUST MEET THE REQUIREMENTS SET FORTH IN SECTION 21.0 STANDARDS AND SPECIFICATIONS FOR TOPSOIL FROM THE 1994 STANDARDS AND SPECIFICATIONS.
- SOIL AMENDMENTS**
SOIL TESTS SHALL BE MADE ON SITES OVER FIVE ACRES TO DETERMINE THE EXACT REQUIREMENTS FOR BOTH LIME AND FERTILIZER FOR SITES UNDER 5 ACRES, IN LIEU OF A SOIL TEST, APPLY THE FOLLOWING:

FERTILIZER	NITROGEN	2 LBS./1000 SQ. FT.	(90 LBS./AC.)
	P ₂ O ₅	4 LBS./1000 SQ. FT.	(175 LBS./AC.)
	K ₂ O	4 LBS./1000 SQ. FT.	(175 LBS./AC.)

FOR LOW MAINTENANCE AREAS APPLY 150 LBS./AC. UREAFORM FERTILIZER (30-0-0) AT 3.5 LBS./1000 SQ. FT. IN ADDITION TO THE ABOVE FERTILIZER AT THE TIME OF SEEDING.
- SEDIMENT CONTROL PRACTICE SEEDING**
SELECT A SEEDING MIXTURE FROM TABLES 25 OR 26. NOTE: IF SEDIMENT CONTROL PRACTICES ARE IN FOR LONGER THAN 12 MONTHS, PERMANENT SEEDING IS REQUIRED.
- TEMPORARY/PERMANENT SEEDING MIXTURES AND RATES**
SELECT A SEEDING MIXTURE FROM APPROPRIATE TABLE 25 OR 26.
- TURFGRASS ESTABLISHMENT**
THIS INCLUDES LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE. AREAS TO RECEIVE SEED SHALL BE FILLED BY DISCING OR BY OTHER APPROVED METHOD TO A DEPTH OF 3 TO 5 INCHES, LEVELED AND RAKED TO PREPARE A PROPER SEEDBED. STONES AND DEBRIS OVER 1 1/2" INCHES IN DIAMETER SHALL BE REMOVED. THE RESULTING SEEDBED SHALL BE IN SUCH CONDITION THAT FUTURE MOWING OF GRASSES WILL POSE NO DIFFICULTY. USE CERTIFIED MATERIAL AND CHOOSE A TURFGRASS MIXTURE FROM PAGE G-20 OF THE 1994 STANDARDS AND SPECIFICATIONS OR SELECT FROM THE LIST IN THE MOST CURRENT UNIVERSITY OF MARYLAND PUBLICATION, AGRONOMY MIMEO #77, "TURFGRASS CULTIVAR RECOMMENDATIONS FOR MARYLAND". SEE MIMEO AT END OF THIS SECTION.
- MULCHING**
ALL SEEDINGS REQUIRE MULCHING. ALSO MULCH DURING NON-SEEDING DATES UNTIL SEEDING CAN BE DONE.
MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS/ACRE OR 90 LBS./1000 SQ. FT. (2 BALES). A MULCH ANCHORING TOOL IS USED, APPLY 2.5 TONS/ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY OR BY HAND, TO A DEPTH OF 1-2 INCHES. MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY MULCH NETTINGS, MULCH ANCHORING TOOL, WOOD CELLULOSE FIBER OR LIQUID MULCH BINDERS.
APPLY WOOD CELLULOSE FIBER AT A DRY WEIGHT OF 1,500 LBS./ACRE. IF MIXED WITH WATER USE 50 LBS. OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.
LIQUID BINDER SHOULD BE APPLIED HEAVIER AT THE EDGE WHERE WIND CATCHES MULCH IN ALLEYS AND ON CREST OF BANKS. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION. APPLY RATES RECOMMENDED BY THE MANUFACTURER TO ANCHOR AND MULCH. STABLE LIGHT WEIGHT PLASTIC NETTING OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

- SEEDING**
CLASS OF TURFGRASS SOD SHALL BE MARYLAND OR VIRGINIA STATE CERTIFIED, OR MARYLAND OR VIRGINIA STATE APPROVED SOD. SOD SHALL BE HARVESTED, DELIVERED AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD IS TO BE LAID WITH THE LONG EDGES PARALLEL TO THE CONTOUR USING STAGGERED JOINTS WITH ALL ENDS TIGHTLY ADJUTED AND NOT OVER LAPPING. SOD SHALL BE ROLLED AND THOROUGHLY WATERED AFTER INSTALLATION. DAILY WATERING TO MAINTAIN 4 INCH DEPTH OF MOISTURE FOR THE FIRST WEEK IS REQUIRED IN THE ABSENCE OF RAINFALL. SOD IS NOT TO BE APPLIED ON FROZEN GROUND.
- MAINTENANCE**
A. IRRIGATE - APPLY MINIMUM 1" OF WATER EVERY 3 TO 4 DAYS DEPENDING ON SOIL TEXTURE, WHEN SOIL MOISTURE BECOMES DEFICIENT TO PREVENT LOSS OF STAND OF PROTECTIVE VEGETATION.
B. REPAIRS - IF STAND PROVIDES BETWEEN 40% AND 94% GROUND COVERAGE, OVERSEED AND FERTILIZE USING HALF OF THE RATES ORIGINALLY APPLIED. IF STAND PROVIDES LESS THAN 40% COVERAGE, REESTABLISH STAND FOLLOWING ORIGINAL RATES AND PROCEDURES.
NOTE: USE OF THIS INFORMATION DOES NOT PRECLUDE MEETING ALL OF THE REQUIREMENTS OF THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL VEGETATIVE PRACTICES.

SECTION III: PERMANENT SEEDING
SEEDING GRASS AND LEGUMES TO ESTABLISH GROUND COVER FOR A MINIMUM PERIOD OF ONE YEAR ON DISTURBED AREAS GENERALLY RECEIVING LOW MAINTENANCE.

TOPSOILING SPECIFICATIONS

SECTION I - SITE PREPARATION (WHERE TOPSOIL IS TO BE ADDED)

- WHEN TOPSOILING MAINTAIN NEARBY EROSION AND SEDIMENT CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, DIKES, WATERWAYS AND SEDIMENT BASINS.
- GRADING: GRADES ON THE AREAS TO BE TOPSOILED WHICH HAVE BEEN PREVIOUSLY ESTABLISHED SHALL BE MAINTAINED.
- LIMING: WHERE THE SUBSOIL IS EITHER HIGHLY ACID OR COMPOSED OF HEAVY CLAYS, GROUND LIMESTONE SHALL BE SPREAD AT THE RATE OF 4-8 TONS/ACRE (200-400 POUNDS PER 1,000 SQUARE FEET). LIME SHALL BE DISTRIBUTED UNIFORMLY OVER DESIGNATED AREAS AND WORKED INTO THE SOIL IN CONJUNCTION WITH TILLAGE OPERATIONS AS DESCRIBED IN THE FOLLOWING PROCEDURES.
- TILLING: AFTER THE AREAS TO BE TOPSOILED HAVE BEEN BROUGHT TO GRADE AND IMMEDIATELY PRIOR TO CURING AND SPREADING THE TOPSOIL, THE SUBGRADE SHALL BE LOCKED BY DISCING OR BY SCARPING TO A DEPTH OF AT LEAST 3 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SUBSOIL. PASSING A BULLDOZER UP AND DOWN OVER THE ENTIRE SURFACE AREA OF THE SLOPE TO CREATE HORIZONTAL EROSION CHECK SLOTS TO PREVENT TOPSOIL FROM SLIDING DOWN THE SLOPE.

SECTION II - TOPSOIL MATERIAL AND APPLICATION

- NOTE: TOPSOIL SALVAGED FROM THE EXISTING SITE MAY OFTEN BE USED BUT IT SHOULD MEET THE SAME STANDARDS AS SET FORTH IN THESE SPECIFICATIONS. THE DEPTH OF TOPSOIL TO BE SALVAGED SHALL BE NO MORE THAN THE DEPTH DESCRIBED AS A REPRESENTATIVE PROFILE FOR THAT PARTICULAR SOIL TYPE AS DESCRIBED IN THE SOIL SURVEY PUBLISHED BY USDA-SCS IN COOPERATION WITH MARYLAND AGRICULTURAL EXPERIMENT STATION.
- MATERIALS: TOPSOIL SHALL BE A LOAM, SANDY LOAM, CLAY LOAM, SILT LOAM, SANDY CLAY LOAM, LOAMY SAND OR OTHER SOIL AS APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST. IT SHALL NOT HAVE A MIXTURE OF CONTRASTING TEXTURED SUBSOIL AND CONTAIN NO MORE THAN 5 PERCENT BY VOLUME OF CINDERS, STONES, SLAG, COARSE FRAGMENT, GRAVEL, STICKS, ROOTS, TRASH OR OTHER EXTRANEOUS MATERIALS LARGER THAN 1/2 INCHES IN DIAMETER. TOPSOIL MUST BE FREE OF PLANTS OR PLANT PARTS OF BERMUDA GRASS, QUACKGRASS, JOHNSON GRASS, NUTSEDGE, POISON IVY, THISTLES, OR OTHERS AS SPECIFIED. ALL TOPSOIL SHALL BE TESTED BY A RECOGNIZED LABORATORY FOR ORGANIC MATTER CONTENT, PH AND SOLUBLE SALTS. A PH OF 6.0 TO 7.5 AND AN ORGANIC CONTENT OF NOT LESS THAN 15 PERCENT BY WEIGHT IS REQUIRED. IF PH VALUE IS LESS THAN 6.0, LIME SHALL BE APPLIED AND INCORPORATED WITH THE TOPSOIL TO ADJUST THE PH TO 6.5 OR HIGHER. TOPSOIL CONTAINING SOLUBLE SALTS GREATER THAN 500 PARTS PER MILLION SHALL NOT BE USED.
NO SOD OR SEED SHALL BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED TO PERMIT DISSIPATION OF TOXIC MATERIALS.
 - TOPSOIL SUBSTITUTES OR AMENDMENTS AS APPROVED BY A QUALIFIED AGRONOMIST OR SOIL SCIENTIST MAY BE USED IN LIEU OF NATURAL TOPSOIL.
 - GRADING: THE TOPSOIL SHALL BE UNIFORMLY DISTRIBUTED AND COMPACTED TO A MINIMUM OF FOUR (4) INCHES. SPREADING SHALL BE PERFORMED IN SUCH A MANNER THAT SODDING OR SEEDING CAN PROCEED WITH A MINIMUM OF ADDITIONAL SOIL PREPARATION AND TILLAGE. ANY IRREGULARITIES IN THE SURFACE RESULTING FROM TOPSOILING OR OTHER OPERATIONS SHALL BE CORRECTED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS. TOPSOIL SHALL NOT BE PLACED WHILE IN A FROZEN OR MUDDY SUBGRADE IS EXCESSIVELY WET, OR IN A CONDITION THAT MAY OTHERWISE BE DETRIMENTAL TO PROPER GRADING AND SEEDBED PREPARATION.

ALTERNATIVE FOR PERMANENT SEEDING
AS AN OPTION TO APPLYING THE FULL AMOUNTS OF LIME AND COMMERCIAL FERTILIZER, APPLY COMPOSTED SLUDGE AS SPECIFIED BELOW. A POTASSIUM FERTILIZER AT THE RATE OF 4 POUNDS PER 1,000 SQUARE FOOT AND 1/8 THE NORMAL LIME APPLICATION RATE.

COMPOSTED SLUDGE MATERIAL
COMPOSTED SLUDGE FOR USE AS A SOIL AMENDMENT OR CONDITIONER SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:

- BE SUPPLIED BY OR ORIGINATE FROM A PERSON OR PERSONS THAT ARE PERMITTED (AT THE TIME OF ACQUISITION OF THE COMPOST) BY THE MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE UNDER REGULATION 10.17.10.
- SHALL CONTAIN AT LEAST 1 PERCENT NITROGEN, 1.5 PERCENT PHOSPHORUS AND .2% POTASSIUM AND HAVE A PH OF 7.0 AND 8.0.
- IF COMPOST DOES NOT MEET THESE REQUIREMENTS, THE APPROPRIATE CONSTITUENTS MUST BE ADDED SO THAT THE REQUIREMENTS ARE MET PRIOR TO USE OF THE COMPOST.
- BE APPLIED AT A RATE OF 2,000 POUNDS PER 1,000 SQUARE FEET.

REFERENCES
1. GUIDELINE SPECIFICATIONS, SOIL PREPARATION AND SODDING, MD-VA PUB. #1, COOPERATIVE EXTENSION SERVICE, UNIVERSITY OF MARYLAND AND VIRGINIA POLYTECHNIC INSTITUTES, REVISED 1973.

GENERAL NOTES
A. THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL REQUIRED EASEMENT, RIGHT AND/OR RIGHTS-OF-WAY PURSUANT TO THE DISCHARGE FROM THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES AND THE DISCHARGE OF STORMWATER ONTO OR ACROSS AND GRADING OR OTHER WORK TO BE PERFORMED ON ADJACENT OR DOWNSTREAM PROPERTIES AFFECTED BY THIS PLAN.

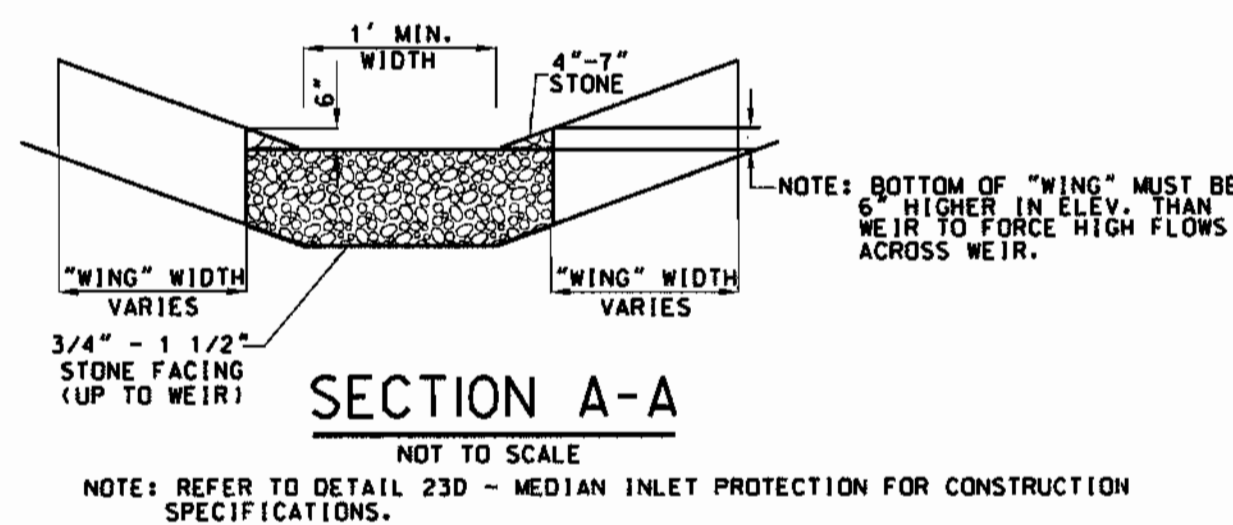
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN A SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1) AND B) FOURTEEN DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THE IN-PLACE SEDIMENT CONTROL MEASURES WILL BE MAINTAINED ON A CONTINUING BASIS UNTIL THE SITE IS PERMANENTLY STABILIZED AND ALL PERMIT REQUIREMENTS ARE MET.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF TWO ACRES, APPROVAL OF THE INSPECTION AGENCY IS REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS WILL NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- APPROVAL SHALL BE REQUESTED UPON FINAL STABILIZATION OF ALL SITES WITH DISTURBED AREAS IN EXCESS OF TWO ACRES BEFORE REMOVAL OF CONTROLS.
- DISTURBED SURFACE AREA:
VOLUME OF SPOIL MATERIAL:
VOLUME OF BORROW MATERIAL:
LIST PREDOMINANT SOIL TYPES AND GENERAL DESCRIPTION PER P.G.S.C.D. SOIL SURVEY.

GENERAL SEQUENCE OF CONSTRUCTION

ESTIMATED TIME	SEQUENCE OF CONSTRUCTION (STA. 1+00, RT. TO STA. 4+50, RT. DORSEY RUN RD.)
1/2 DAY	1. OBTAIN A GRADING PERMIT.
2 WEEKS	2. INSTALL STABILIZED CONSTRUCTION ENTRANCES.
5 DAYS	3. INSTALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLANS. PERIMETER CONTROLS INCLUDE SILT FENCE, SUPER SILT FENCE, EARTH DIKES. SEE DETAILED SEQUENCING FOR AREAS THAT REQUIRE SPECIAL CONSTRUCTION.
5 DAYS	4. INSTALL INLET PROTECTION, TSOS, AND REMAINDER OF INITIAL PHASE EROSION CONTROLS.
2 WEEKS	5. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB THE WORK AREA.
3 MONTHS	6. INSTALL FINAL PHASE SEDIMENT CONTROLS AS REQUIRED AND WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, CONSTRUCT STORM DRAIN, DITCHES, BRIDGE AND ROADWAY WIDENING ACCORDING TO ROADWAY PLANS AND FOLLOWING MAINTENANCE OF TRAFFIC CONTROL PLANS.
3 DAYS	7. UPON STABILIZATION OF ALL AREAS AND WITH APPROVAL OF SEDIMENT CONTROL INSPECTOR, REMOVE ALL EROSION CONTROLS.
3 WEEKS	8. CONSTRUCT SURFACE SAND FILTERS AND GRASS CHANNEL FOR STORMWATER MANAGEMENT.
1/2 DAY*	a) CLEAR AND GRUB AREAS REQUIRED TO CONSTRUCT SAND FILTERS.
1 DAY*	b) ROUGH GRADE FOREBAY AREAS AND EXCAVATE SAND FILTER AREA.
1 DAY*	c) PLACE STONE, GEOTEXTILE, SAND AND APPURTENANT STRUCTURES SUCH AS UNDERDRAIN AND CLEANOUTS.
1 DAY*	d) BRING SAND FILTER, EMBANKMENTS, AND SPILLWAYS TO FINAL GRADE AND VEGETATIVELY STABILIZE ALL DISTURBED AREAS.
1/2 DAY*	e) UPON STABILIZATION, REMOVE CONSTRUCTION ENTRANCES AND STABILIZE.
2 DAYS	9. STABILIZE REMAINING AREAS OF DISTURBANCE. * THESE TIME FRAMES ARE FOR 1 SURFACE SAND FILTER EACH. SAND FILTERS MAY BE CONSTRUCTED CONCURRENTLY, WITH APPROVAL OF THE SEDIMENT CONTROL INSPECTOR.

SEQUENCE OF CONSTRUCTION (STA. 5+00, LT. TO STA. 7+75, LT. LOOP 'B')

ESTIMATED TIME	SEQUENCE OF CONSTRUCTION (STA. 5+00, LT. TO STA. 7+75, LT. LOOP 'B')
1 DAY	1. CONSTRUCT 24" PIPE FROM EW-1 TO EX. INLET AT STA. 5+63, RT.
8 DAYS	2. CONSTRUCT DITCHES FROM STA. 5+90, LT. TO STA. 7+90, LT., LOOP 'B' AND FROM STA. 14+60 TO STA. 16+10, LT., RAMP 'A'. CONSTRUCT DITCHES FROM DOWNSTREAM TO UPSTREAM AND STABILIZE IMMEDIATELY WITH SOIL STABILIZATION MATTING.
1/2 DAY	3. CONSTRUCT DITCH FROM STA. 5+75, LT. TO STA. 5+50, LT., LOOP 'B' AND STABILIZE IMMEDIATELY WITH SOIL STABILIZATION MATTING.
1 DAY	4. CLEAR AND GRUB REMAINDER OF WORK AREA AND ALL OTHER AREAS DRAINING TO THIS AREA.
1 MONTH	5. CONSTRUCT ROADWAY ACCORDING TO PLANS.



MODIFIED MEDIAN INLET PROTECTION (CONT.)

NOT TO SCALE

Developer Certification:
I/We certify that all development and construction will be done according to this plan, and that any 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.

Signature of Developer: *[Signature]* 4/2/02
Printed Name: J. J. Schreiber, Jr.
Date

Engineer's Certification:
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.

Signature of Engineer: *[Signature]* 4/2/02
Printed Name: Leon J. Krieger
Date

Reviewed for HOWARD SCD and meets Technical Requirements.

Signature: *[Signature]* 4/18/02
USDA - Natural Resources Conservation Service
Signature: *[Signature]* 4/14/02
Howard SCD

SEQUENCE OF CONSTRUCTION (STA. 1+00, RT. TO STA. 4+50, RT. DORSEY RUN RD.)

ESTIMATED TIME	SEQUENCE OF CONSTRUCTION (STA. 1+00, RT. TO STA. 4+50, RT. DORSEY RUN RD.)
1/2 DAY	1. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
2 WEEKS	2. CONSTRUCT 1-5, MH-4, MH-5, 1-6, AND ASSOCIATED STORM DRAIN SYSTEM AND INSTALL MODIFIED MEDIAN INLET PROTECTION AT 1-5 (THIS STORM DRAIN, AFTER CONSTRUCTED, WILL SERVE AS A CLEAR-WATER DIVERSION).
1 WEEK	3. CONSTRUCT PROPOSED DITCH FROM STA. 1+00 TO STA. 1+25 AND FROM STA. 1+25 TO STA. 2+00 FROM DOWNSTREAM TO UPSTREAM AND STABILIZE AT THE END OF EACH DAY WITH SOIL STABILIZATION MATTING.
1/2 DAY	4. UPON COMPLETION OF CHANNEL WORK, INSTALL SILT FENCE FROM STA. 0+50 TO STA. 2+01, RT.
1/2 DAY	5. CONSTRUCT TEMPORARY STONE OUTLET STRUCTURE AT STA. 4+13, RT. DORSEY RUN RD.
1/2 DAY	6. CLEAR AND GRUB REMAINDER OF WORK AREA FROM STA. 1+00 TO STA. 4+50.
1 MONTH	7. CONSTRUCT ROADWAY WIDENING AND DITCH FROM STA. 2+00 TO STA. 4+50.

SEQUENCE OF CONSTRUCTION FOR RELOCATED STORM DRAIN FROM STA. 6+75, RT. TO STA. 9+50, RT. DORSEY RUN RD.

ESTIMATED TIME	SEQUENCE OF CONSTRUCTION FOR RELOCATED STORM DRAIN FROM STA. 6+75, RT. TO STA. 9+50, RT. DORSEY RUN RD.
1 MONTH	1. CONSTRUCT NEW STORM DRAIN FROM EW-2 AND FROM MH-3 TO MH-3B. REMOVE EXISTING CMP AS REQUIRED. BRICK BULKHEAD ANY STORM DRAIN TO REMAIN IN PLACE.
1/2 DAY	2. PLACE HDPE DIVERSION AT EW-2 AND OUTFALL TO POND OUTSIDE OF PROPOSED WORK AREA. PLACE SANDBAGS AS SHOWN ON PLAN TO A TOP ELEVATION OF 203.0. WRAP SANDBAGS WITH PLASTIC SHEETING ACCORDING TO DETAIL.
1 DAY	3. DRAIN WORK AREA THROUGH A PORTABLE SEDIMENT TANK AND OUTFALL DOWNSTREAM OF SANDBAGS INTO POND.
1/2 DAY	4. PLACE SUPER SILT FENCE AS SHOWN ON PLANS.
1/2 DAY	5. CLEAR AND GRUB REMAINDER OF WORK AREA.
1 MONTH	6. CONSTRUCT FILL AND ROADWAY ACCORDING TO PLANS.

OWNER: MARYLAND STATE HIGHWAY ADMINISTRATION, 707 N. CALVERT STREET, BALTIMORE, MARYLAND 21202

DEVELOPER: CONSTELLATION REAL ESTATE, INC., 8815 CENTRE PARK DRIVE, SUITE NO. 104, COLUMBIA, MARYLAND 21045

DATE NO. REVISIONS

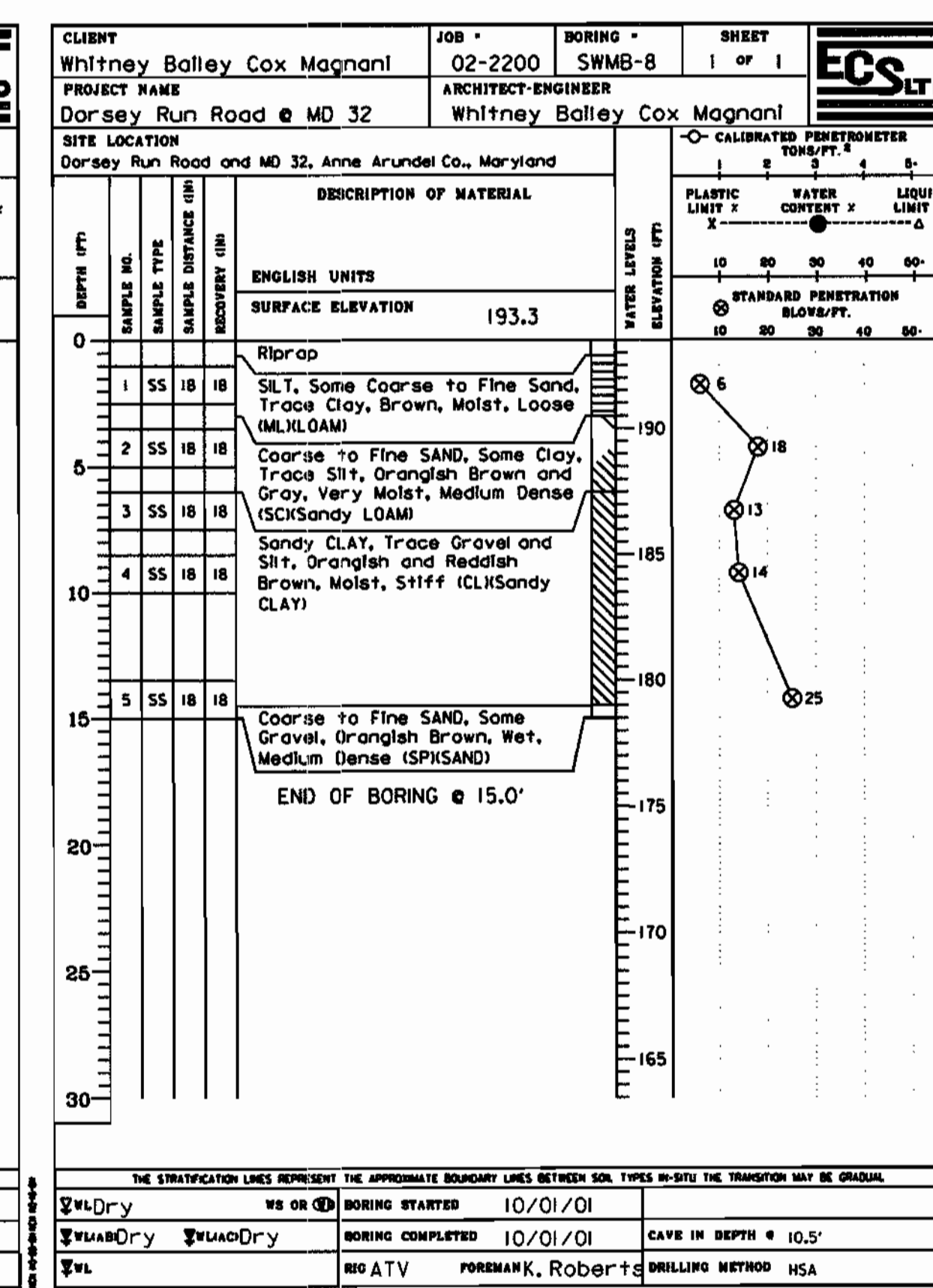
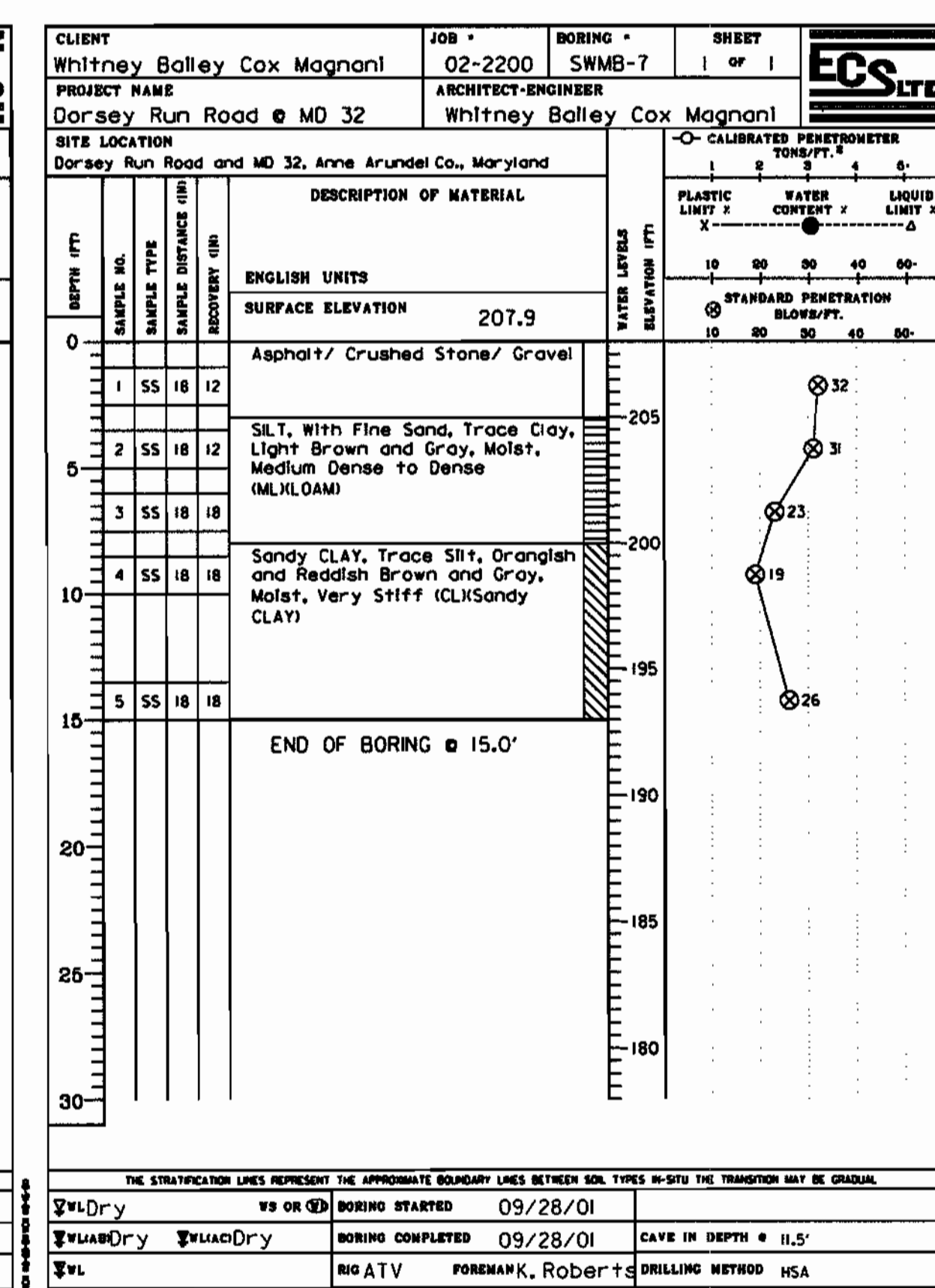
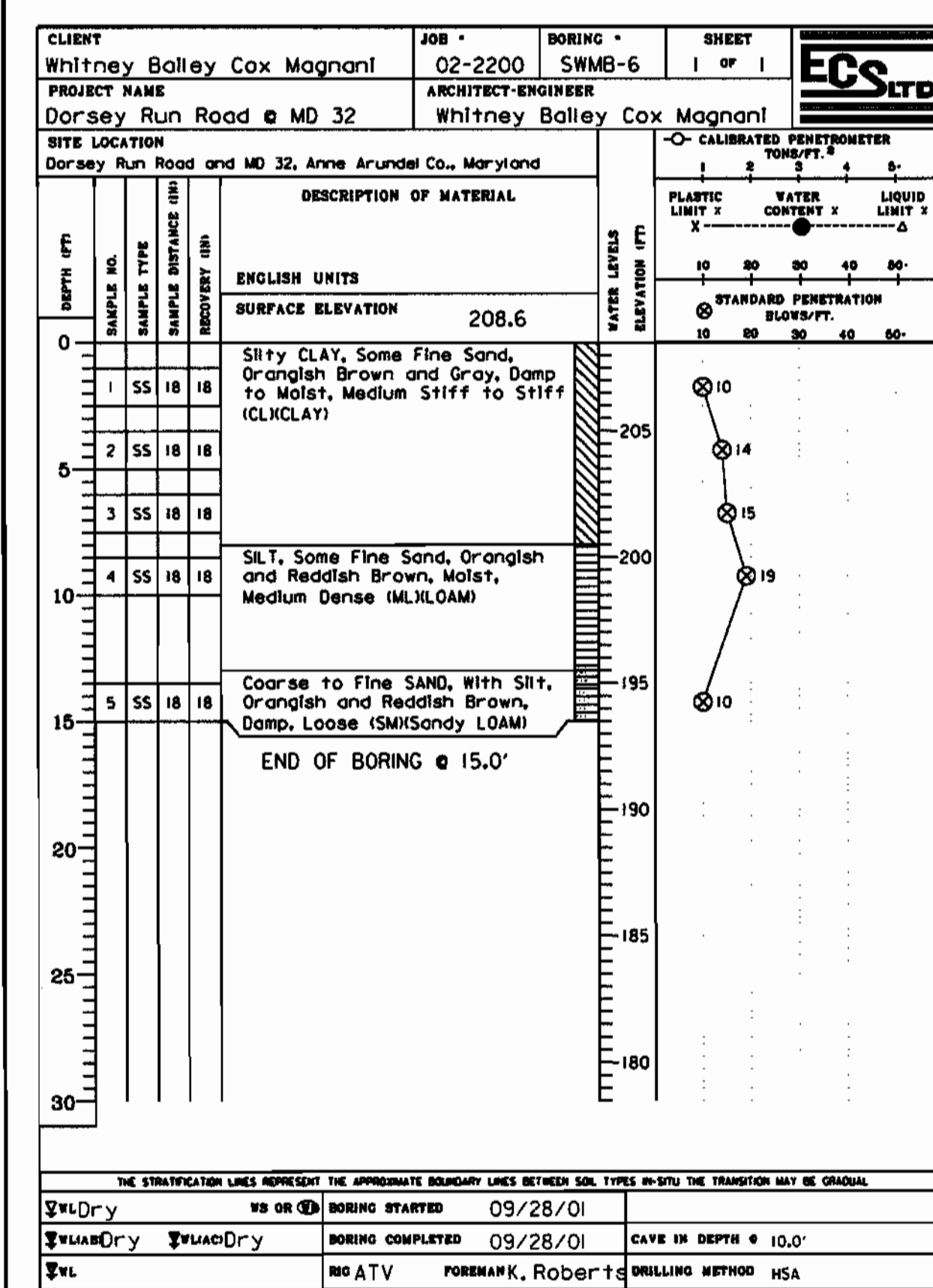
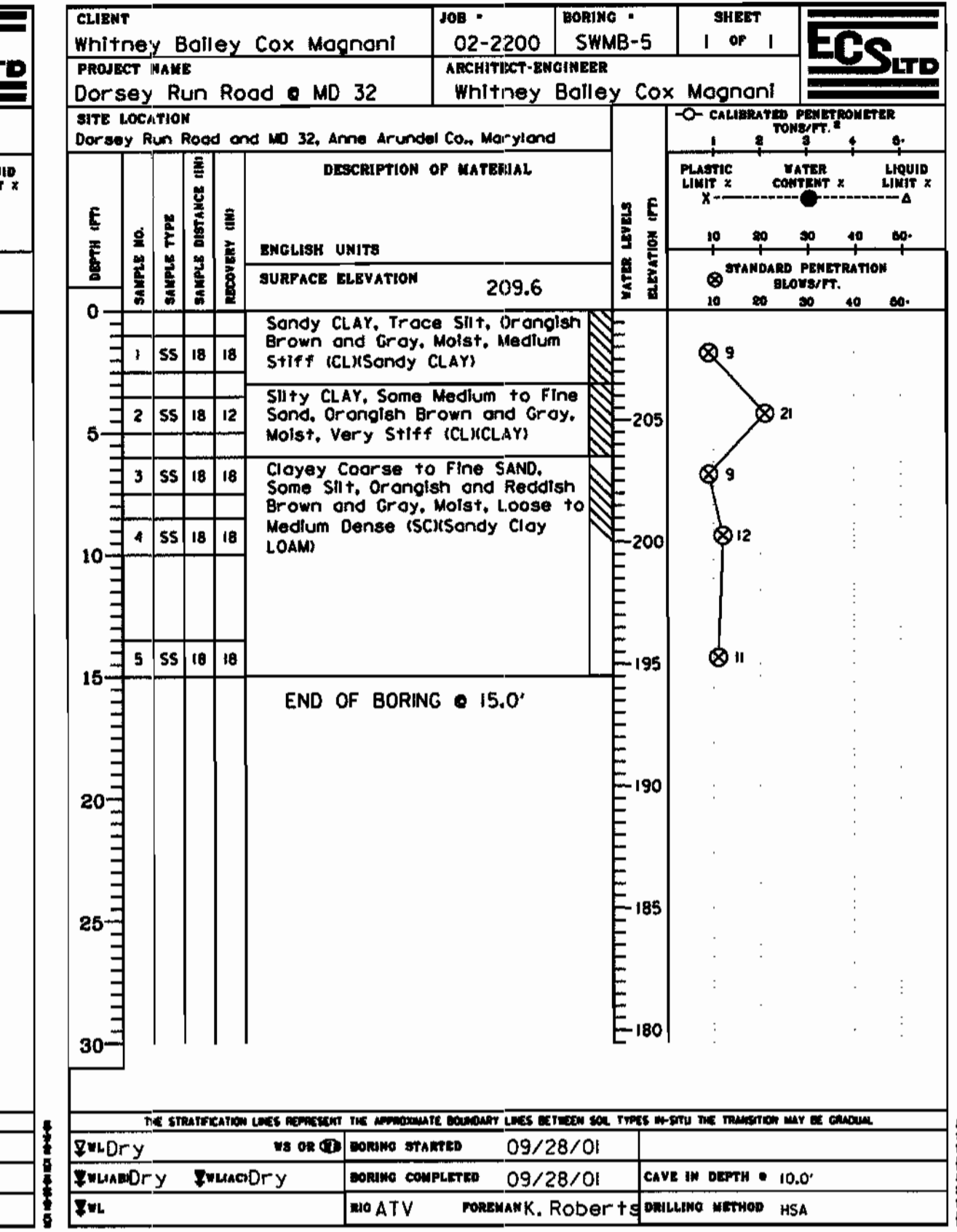
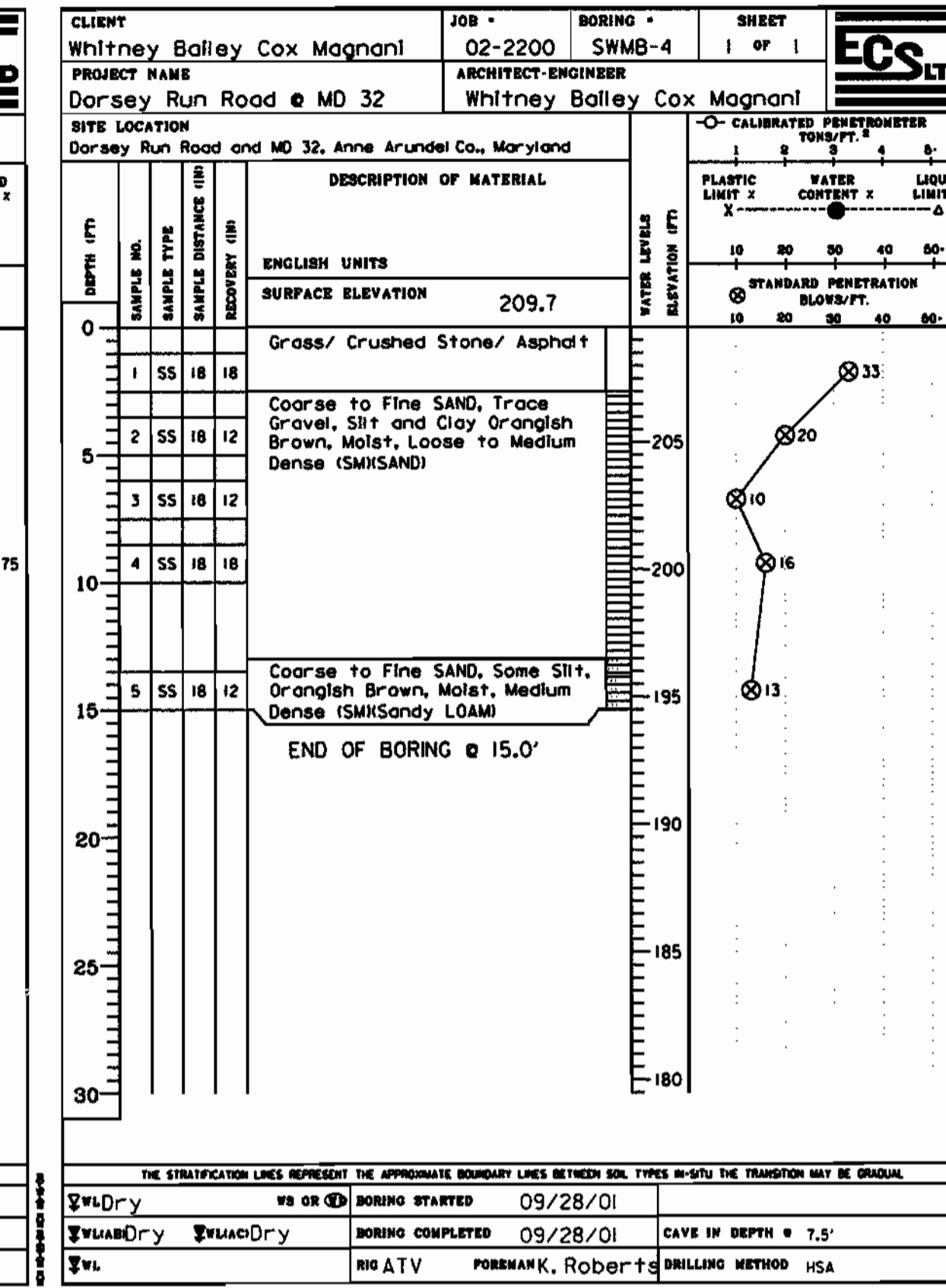
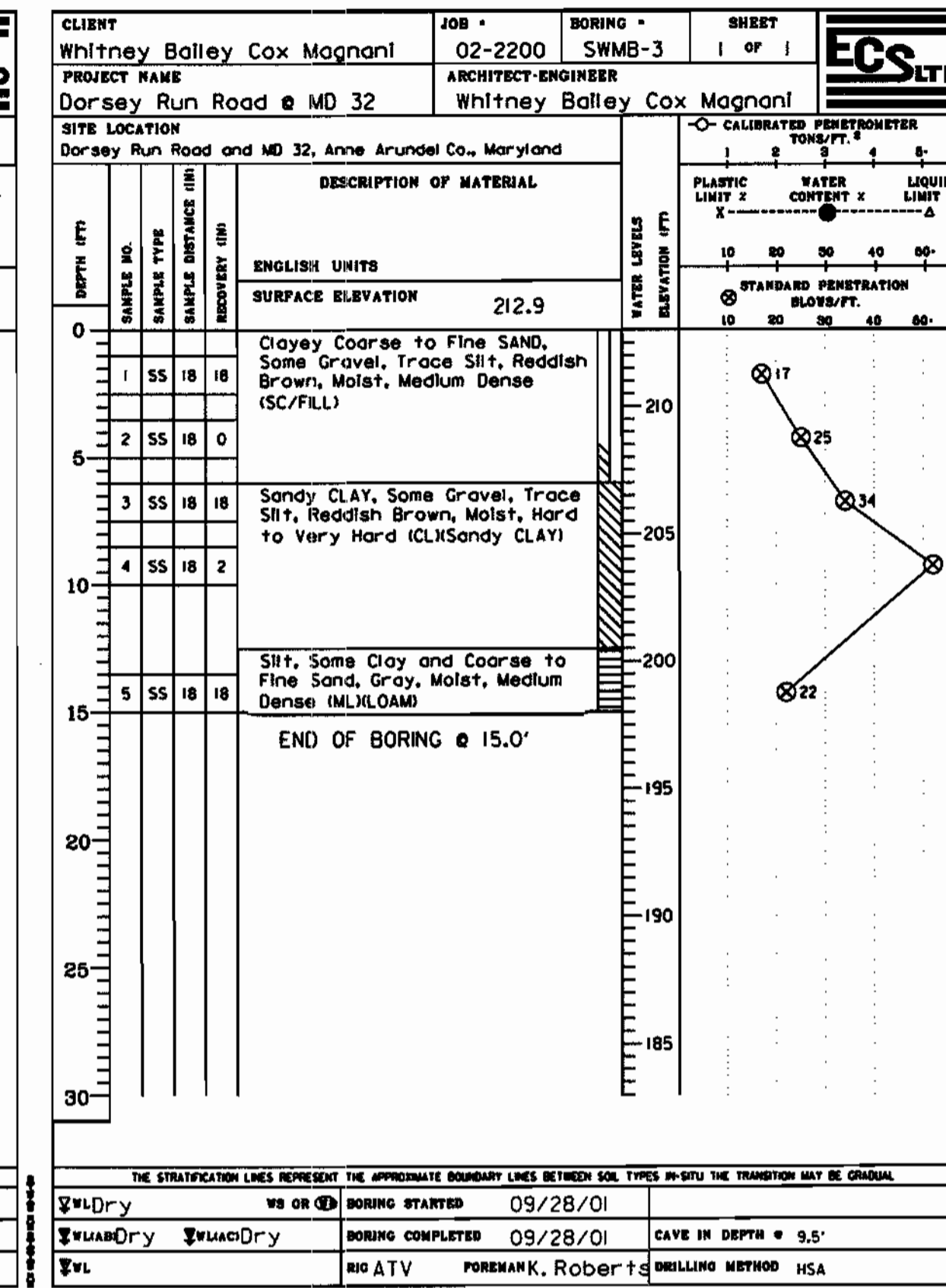
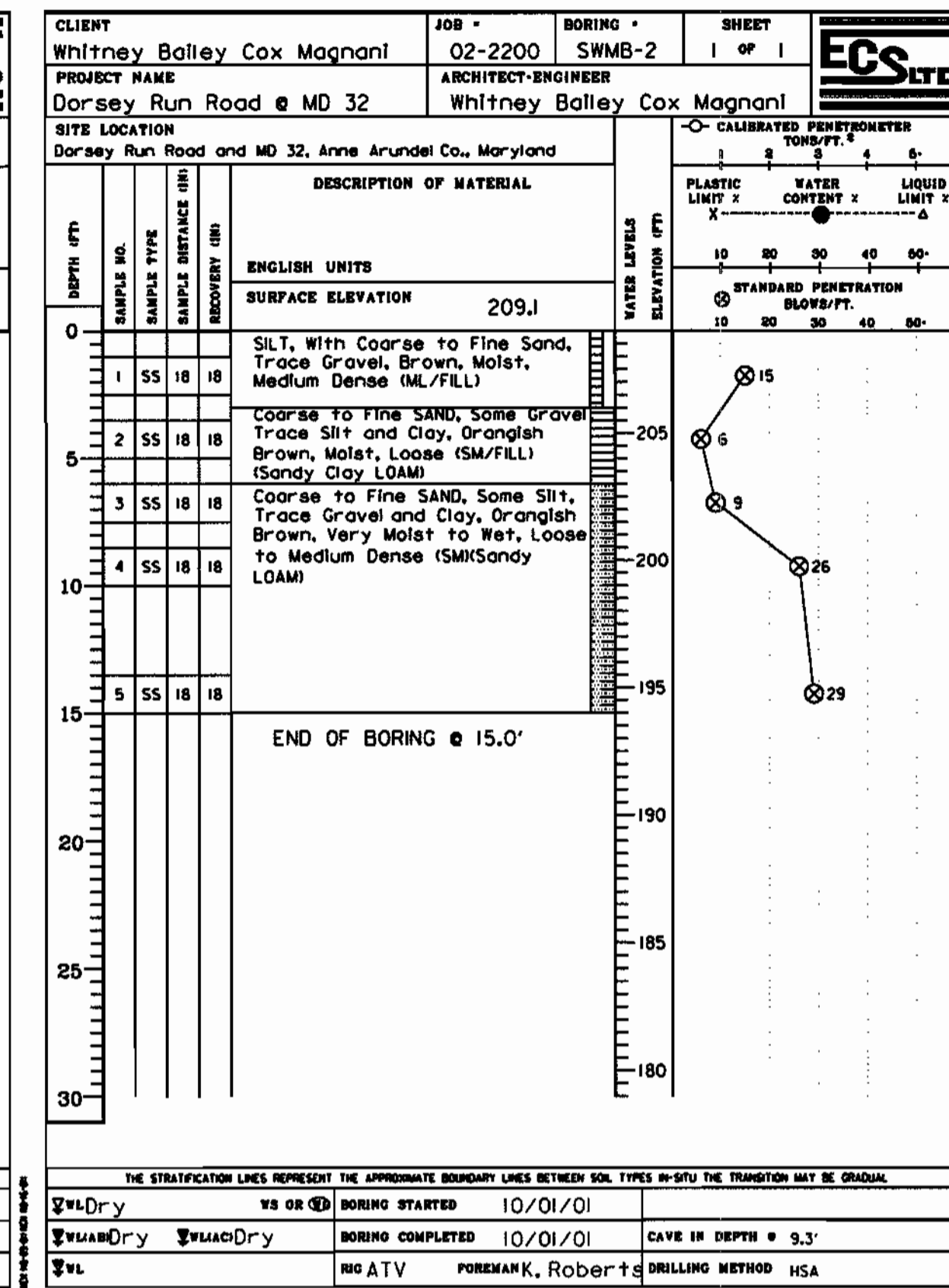
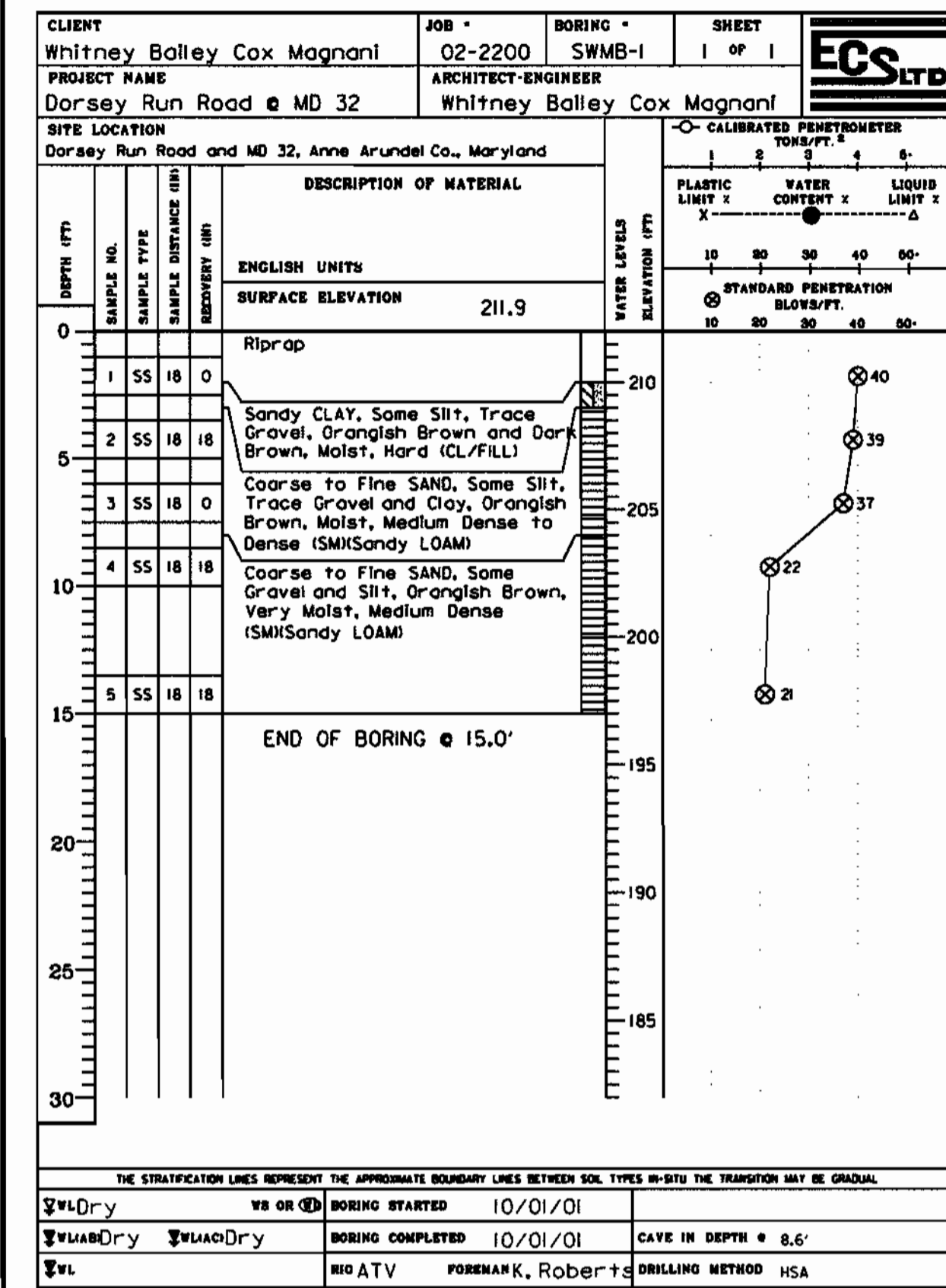
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS

PROJECT TITLE: DORSEY RUN ROAD AT MD 32 HOWARD CO., MARYLAND

ENGINEERS: *[Logo]* Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN	ELECTION DIST.:
DRAWN: CEO	CENSUS TRACT #:
CHECKED: BSN	WATER CODE:
DATE: NOV. 2001	SEWER CODE:
SCALE: N.T.S.	DRAWING NO.:
MAP NO.:	EP-14
GRID NO.:	
PARCEL NO.:	SHEET NO. 19 OF 22





SWM SOIL BORINGS - DORSEY RUN ROAD

BORING DESIGN.	STATION	BASELINE	OFFSET	EX. GROUND ELEVATION
SWMB-01	3+60.32	RAMP D	90.71 LT	211.9
SWMB-02	1+61.01	RAMP D	126.42 LT	209.1
SWMB-03	1030+24.71	ROUTE 32	37.67 LT	212.9
SWMB-04	1033+08.71	ROUTE 32	38.37 RT	209.7
SWMB-05	12+71.71	RAMP A	52.70 RT	209.6
SWMB-06	14+39.58	RAMP A	50.38 RT	208.6
SWMB-07	16+19.46	RAMP A	50.69 RT	207.9
SWMB-08	11+23.00	RAMP C	97.21 LT	193.3
SWMB-09	20+29.64	HENKELS	86.29 LT	185.3
SWMB-10	5+47.55	RAMP C	70.73 RT	184.9
SWMB-11	3+96.54	RAMP C	76.14 RT	182.3
SWMB-12	1046+93.27	ROUTE 32	134.05 RT	170.7
SWM-01	11+00.00	DORSEY RUN	112.00 LT	206.3
SWM-02	12+50.00	DORSEY RUN	112.00 LT	203.4
SWM-03	1042+50.00	ROUTE 32	149.74 RT	173.7
SWM-04	1045+00.00	ROUTE 32	142.39 RT	172.0

OWNER
 MARYLAND STATE HIGHWAY ADMINISTRATION
 707 N. CALVERT STREET
 BALTIMORE, MARYLAND 21202

DEVELOPER
 CONSTELLATION REAL ESTATE, INC.
 8815 CENTRE PARK DRIVE,
 SUITE NO. 104
 COLUMBIA, MARYLAND 21045

Developer Certification:
 "I/We certify that all development and construction will be done according to this plan, and that any 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."

Signature of Developer: *J. J. Suberba, Jr.* Date: 4/2/02
 Printed Name: J. J. Suberba, Jr.

Engineer's Certification:
 "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."

Signature of Engineer: *L. J. Kriebel* Date: 4/2/02
 Printed Name: LEON J. KRIEBEL

Reviewed for HOWARD SCD and meets Technical Requirements:
 Signature: *Jim Myers* Date: 4/18/02
 Signature: *John K. Robertson* Date: 4/18/02

DATE NO. REVISIONS

PROJECT TITLE:
 DORSEY RUN ROAD AT MD 32
 HOWARD CO., MARYLAND

ENGINEERS:
 Consulting Engineers
 849 Fairmount Avenue (410) 512-4500
 Baltimore, Maryland 21286 (410) 324-4100 (FAX)
 WHITNEY, BAILEY, COX & MAGNANI, LLC

DESIGNED: BSN
 DRAWN: CEO
 CHECKED: BSN
 DATE: NOV. 2001
 SCALE: NONE
 MAP NO.:
 GRID NO.:
 PARCEL NO.:

ELECTION DIST.:
 CENSUS TRACT #:
 WATER CODE:
 SEWER CODE:
 DRAWING NO.:
 SB-1

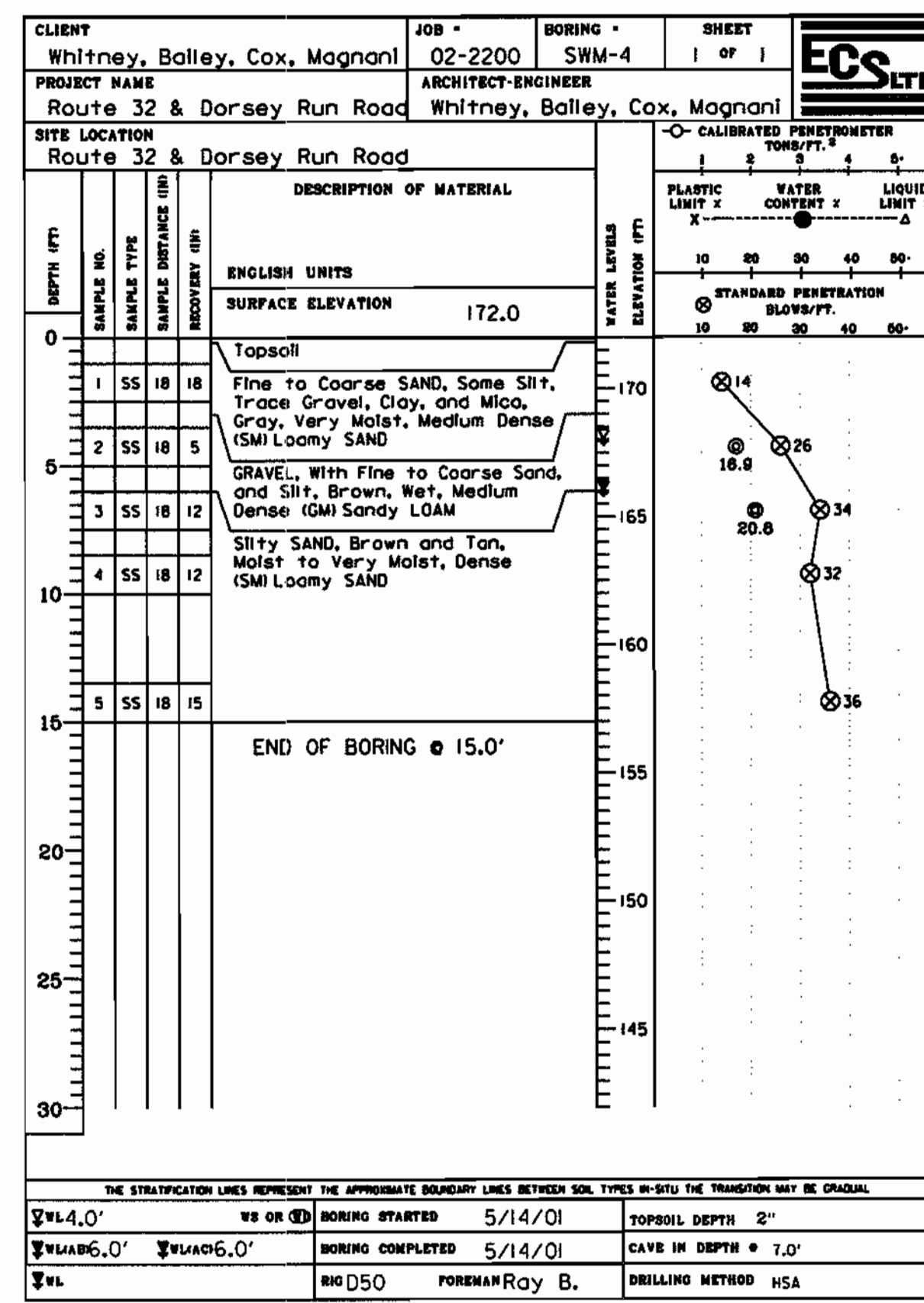
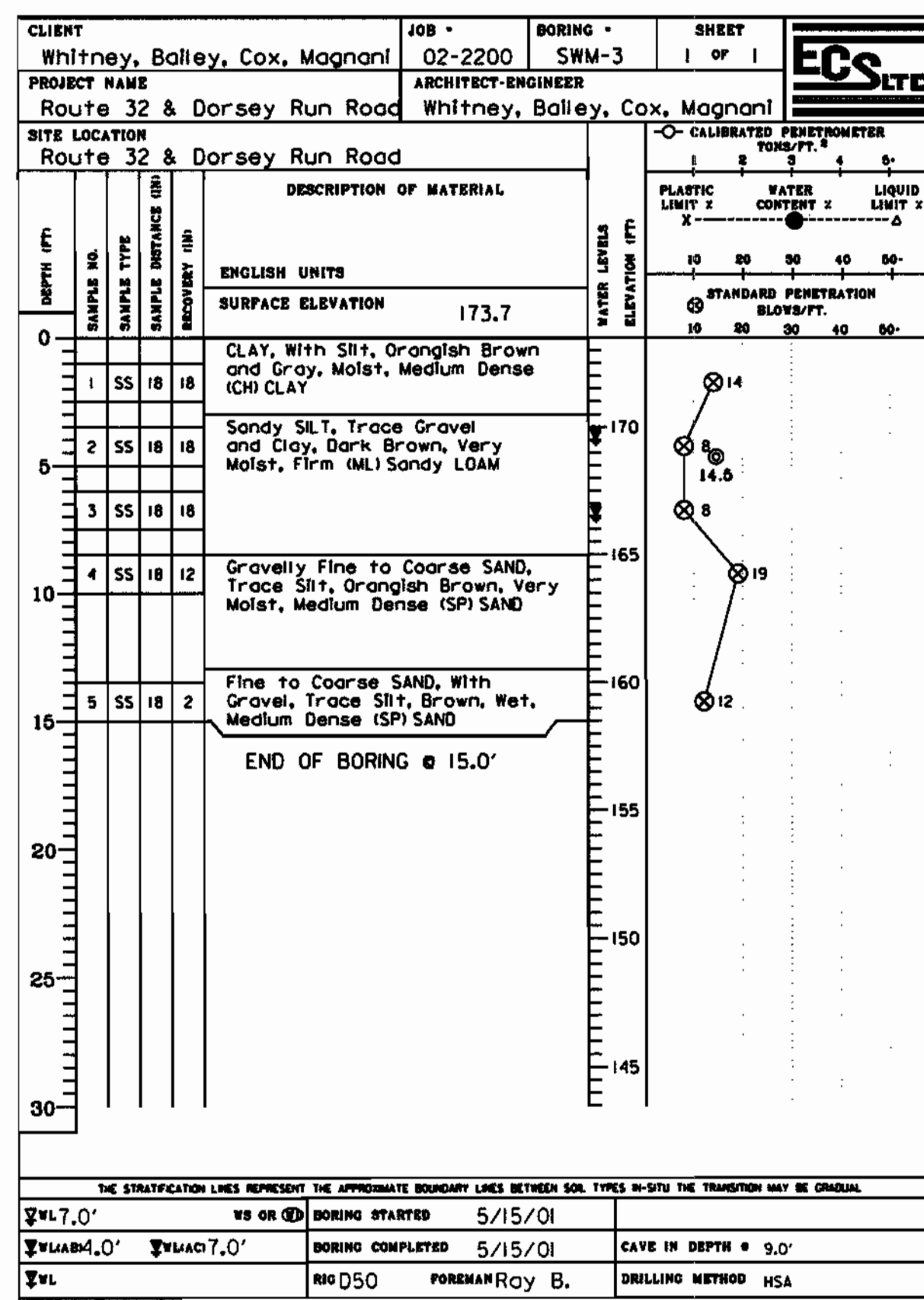
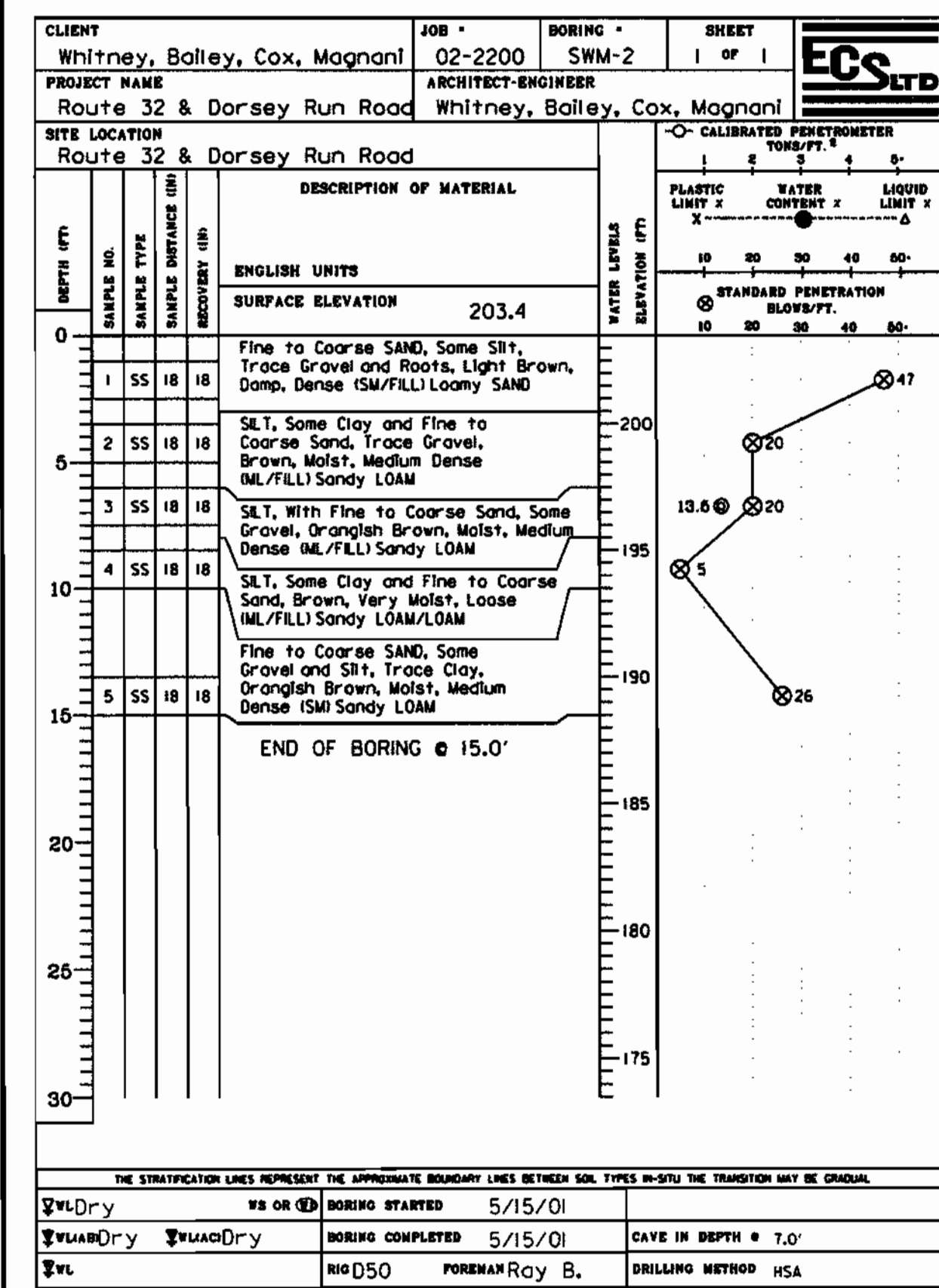
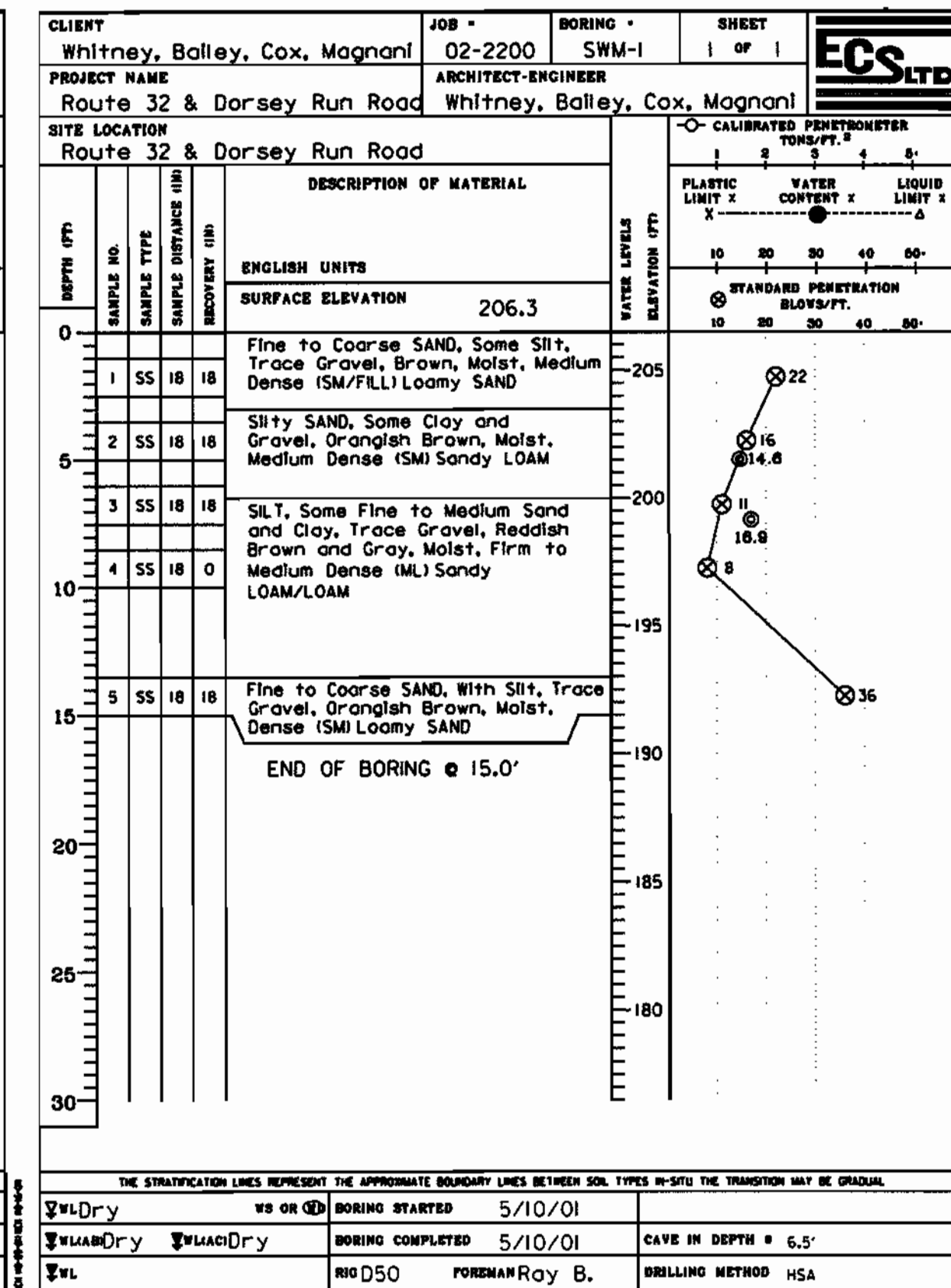
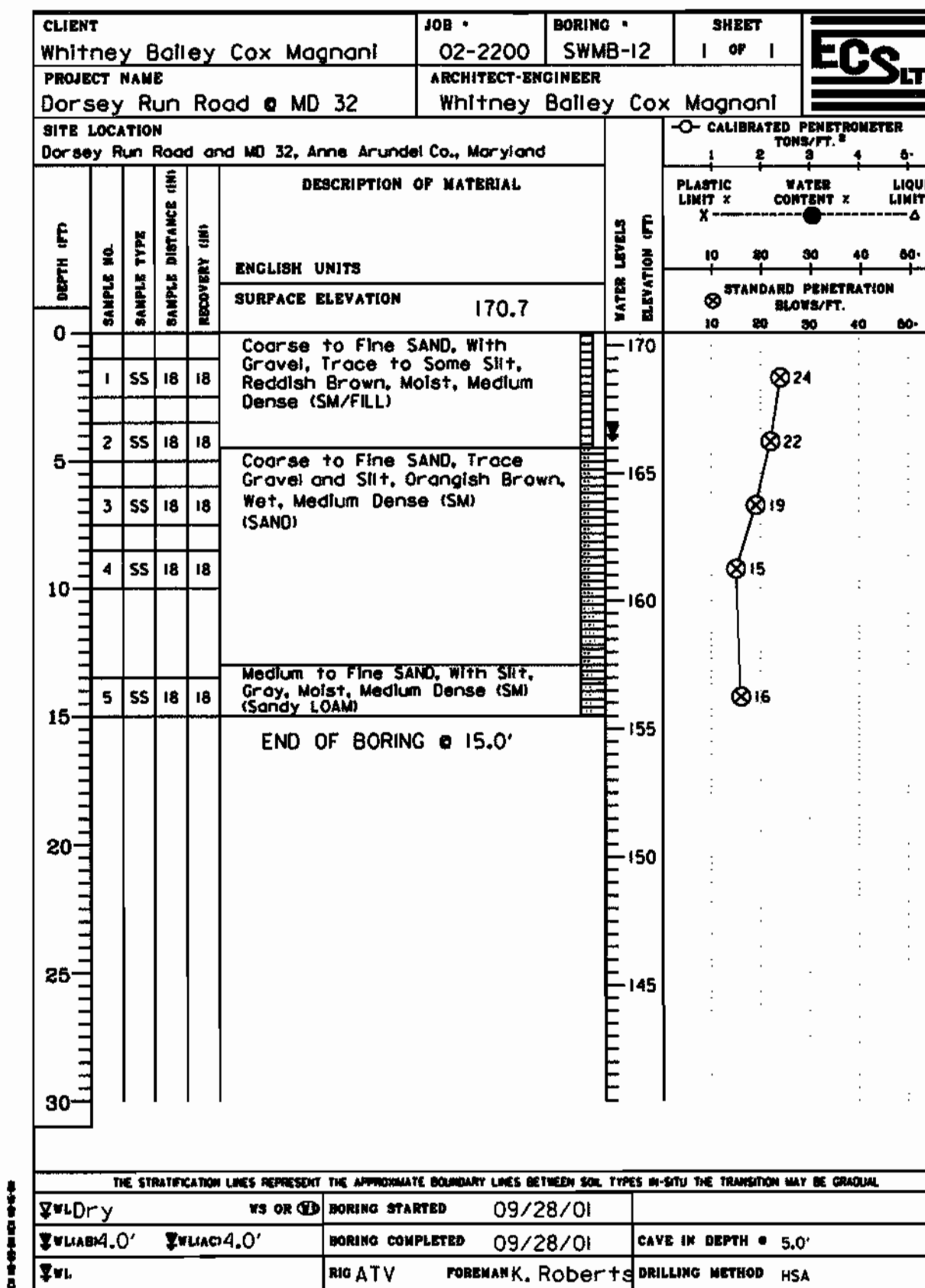
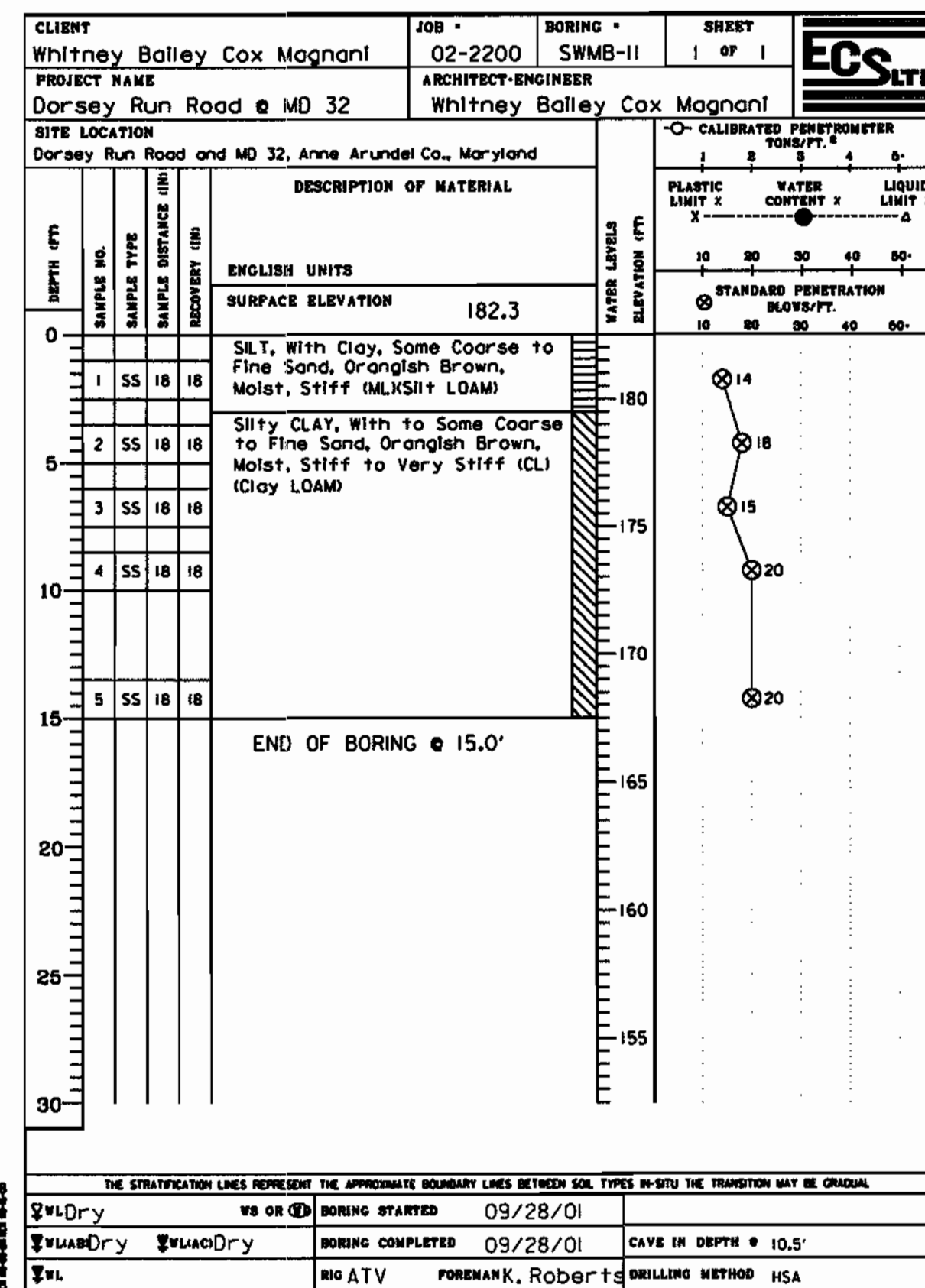
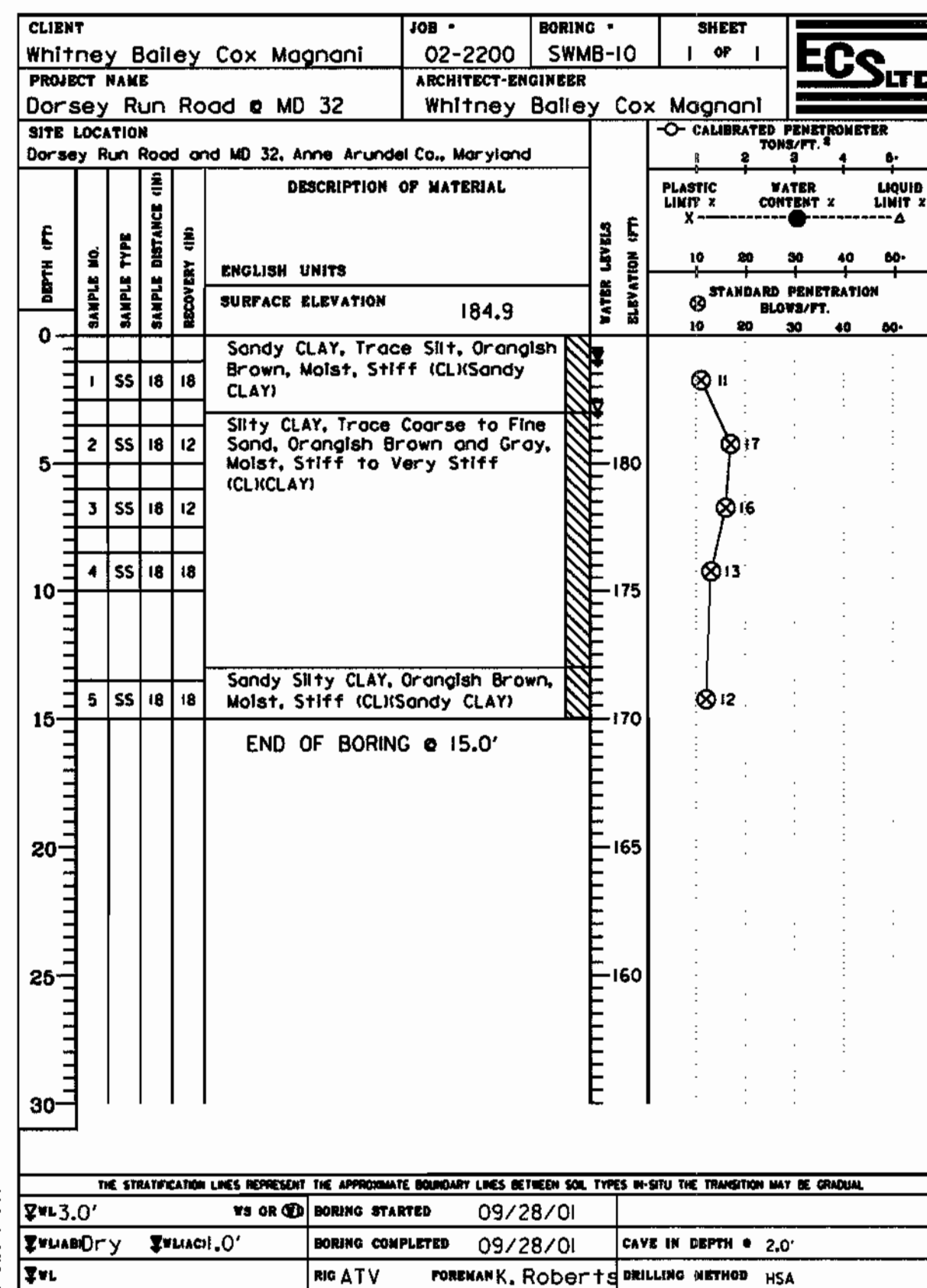
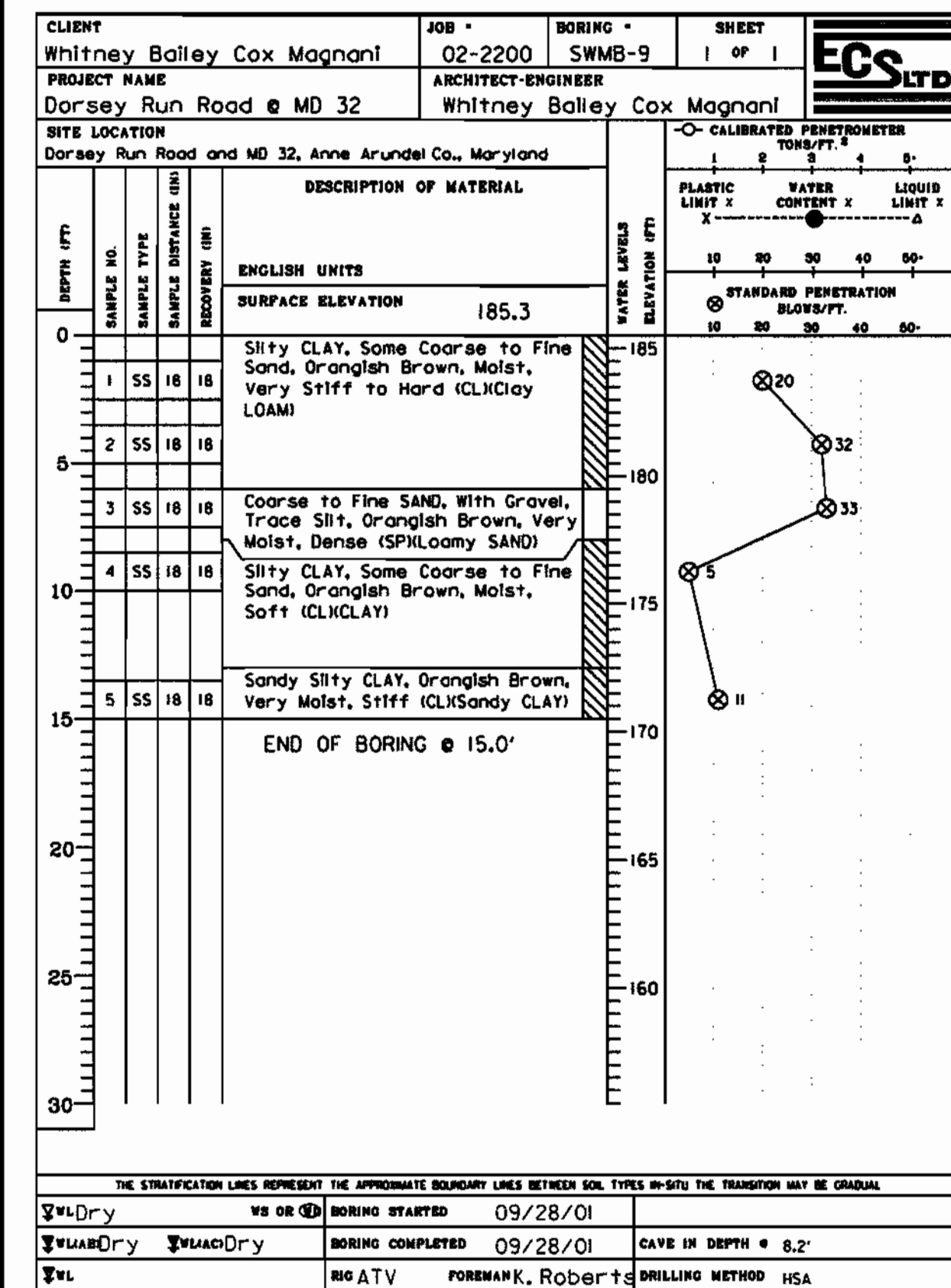
SHEET NO. 20 OF 22

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

Signature: *Chris Williams* Date: 4/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

Signature: *Chris Williams* Date: 4/2/02
 CHIEF, DIVISION OF LAND DEVELOPMENT

Signature: *Paul Smith* Date: 4/26/02
 DIRECTOR



SWM SOIL BORINGS - DORSEY RUN ROAD

BORING DESIGN.	STATION	BASELINE	OFFSET	EX. GROUND ELEVATION
SWMB-01	3+60.32	RAMP D	90.71 LT	211.9
SWMB-02	1+61.01	RAMP D	126.42 LT	209.1
SWMB-03	1030+24.71	ROUTE 32	37.67 LT	212.9
SWMB-04	1033+08.71	ROUTE 32	38.37 LT	209.7
SWMB-05	12+71.71	RAMP A	52.70 RT	209.6
SWMB-06	14+39.58	RAMP A	50.38 RT	208.6
SWMB-07	16+19.46	RAMP A	50.69 RT	207.9
SWMB-08	11+23.00	RAMP C	97.21 LT	193.3
SWMB-09	20+29.64	HENKELS	86.29 LT	185.3
SWMB-10	5+47.55	RAMP C	70.73 RT	184.9
SWMB-11	3+96.54	RAMP C	76.14 RT	182.3
SWMB-12	1046+93.27	ROUTE 32	134.05 RT	170.7
SWM-01	11+00.00	DORSEY RUN	112.00 LT	206.3
SWM-02	12+50.00	DORSEY RUN	112.00 LT	203.4
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SWM-04	1045+00.00	ROUTE 32	142.39 RT	172.0

OWNER: MARYLAND STATE HIGHWAY ADMINISTRATION
 707 N. CALVERT STREET
 BALTIMORE, MARYLAND 21202

DEVELOPER: CONSTELLATION REAL ESTATE, INC.
 8815 CENTRE PARK DRIVE,
 SUITE NO. 104
 COLUMBIA, MARYLAND 21045

Developer Certification:
 I/We certify that all development and construction will be done according to this plan, and that any 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.

Signature of Developer: J.J. Schaeffer, Jr. Date: 4/2/02
 Printed Name: J.J. Schaeffer, Jr.

Engineer's Certification:
 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.

Signature of Engineer: Leon J. Keiszel Date: 4/2/02
 Printed Name: Leon J. Keiszel

Reviewed for HOWARD SCD and meets Technical Requirements.
 Signature: Jim Myers Date: 4/5/02
 Signature: John W. Dolan Date: 4/5/02

DATE NO. REVISIONS

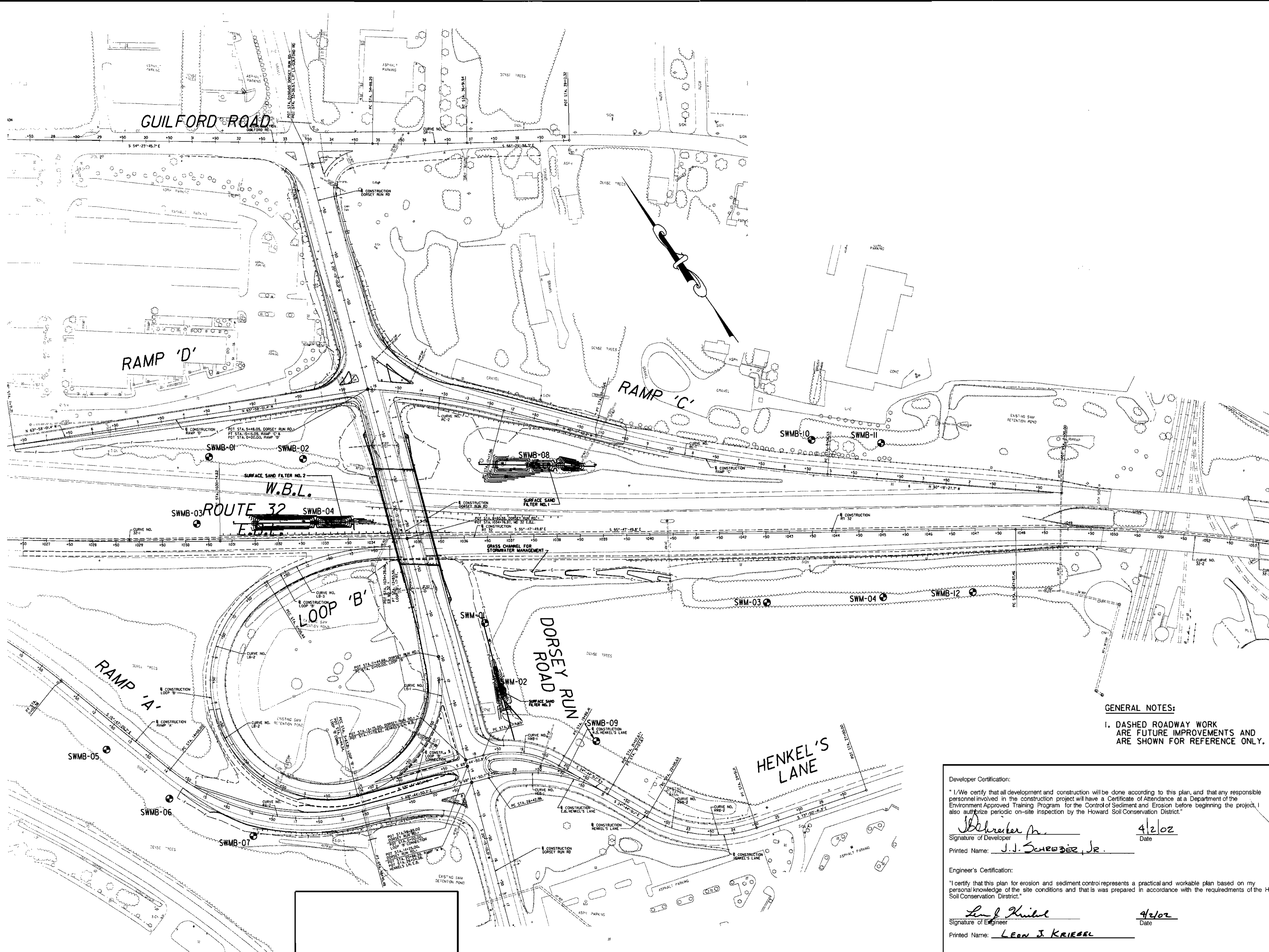
PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
 HOWARD CO., MARYLAND**

ENGINEERS: **WHITNEY, BAILEY, COX & MAGNANI, LLC**
 Consulting Engineers
 849 Fairmount Avenue (410) 512-4500
 Baltimore, Maryland 21286 (410) 324-4100 (FAX)

DESIGNED: BSN ELECTION DIST. #:
 DRAWN: CEO CENSUS TRACT #:
 CHECKED: BSN WATER CODE:
 DATE: NOV. 2001 SEWER CODE:
 SCALE: NONE DRAWING NO.:
 MAP NO.:
 GRID NO.: SB-2
 PARCEL NO.: SHEET NO. 21 OF 22

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

Signature: Cindy Hamada Date: 4/26/02
 Signature: [Signature] Date: 4/10/02
 Signature: [Signature] Date: 4/26/02



Dorsey Run Road
Soil Boring Coordinates

	North	East	Rem.
ROUTE 32			
SWMB-03	532,579.3640	1,370,093.4670	10173
SWMB-04	532,420.3080	1,370,328.5450	10174
SWMB-12	531,499.4110	1,371,376.7310	10182
RAMP A			
SWMB-05	532,292.7730	1,369,654.6380	10175
SWMB-06	532,128.7040	1,369,704.9130	10176
SWMB-07	531,958.8270	1,369,806.8000	10177
RAMP C			
SWMB-08	532,265.1340	1,370,762.1150	10178
SWMB-10	531,967.8970	1,371,281.1080	10180
SWMB-11	531,876.0430	1,371,399.8020	10181
RAMP D			
SWMB-01	532,682.5580	1,370,197.6560	10171
SWMB-02	532,563.0010	1,370,361.0720	10172
HENKEL'S			
SWMB-09	531,701.8180	1,370,528.7950	10179
DORSEY RUN			
SWM-01	532,049.3630	1,370,475.2550	10151
SWM-02	531,908.6360	1,370,423.3310	10152
ROUTE 32			
SWM-03	531,735.6080	1,371,001.3020	10153
SWM-04	531,601.1590	1,371,212.1980	10154

GENERAL NOTES:
1. DASHED ROADWAY WORK ARE FUTURE IMPROVEMENTS AND ARE SHOWN FOR REFERENCE ONLY.

OWNER
MARYLAND STATE HIGHWAY ADMINISTRATION
707 N. CALVERT STREET
BALTIMORE, MARYLAND 21202

DEVELOPER
CONSTELLATION REAL ESTATE, INC.
8815 CENTRE PARK DRIVE, SUITE NO. 104
COLUMBIA, MARYLAND 21045

DATE	NO.	REVISIONS

SWM SOIL BORING PLAN

PROJECT TITLE:
**DORSEY RUN ROAD AT MD 32
HOWARD CO., MARYLAND**

ENGINEERS:
WR Consulting Engineers
849 Fairmount Avenue (410) 512-4500
Baltimore, Maryland 21286 (410) 324-4100 (FAX)
WHITNEY, BAILEY, COX & MAGNANI, LLC

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Signature of Developer: *J.J. Schwab, Jr.* Date: 4/2/02
Printed Name: J.J. Schwab, Jr.

Engineer's Certification:
"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."

Signature of Engineer: *Leon J. Kriebel* Date: 4/2/02
Printed Name: LEON J. KRIEBEL

Reviewed for HOWARD SOIL and meets Technical Requirements.
John Meyer 4/4/02
USDA - Natural Resources Conservation Service Date

This development plan is approved for pond construction, soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John K. Roberts 4/4/02
Howard CO Date

APPROVED: HOWARD CO. DEPT. OF PLANNING & ZONING.

John P. Dammann 4/10/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Cindy Hambs 4/26/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Paul S. Raitt 4/26/02
DIRECTOR DATE

	DESIGNED: BSN	ELECTION DIST.:
	DRAWN: CEO	CENSUS TRACT #:
	CHECKED: BSN	WATER CODE:
	DATE: NOV. 2001	SEWER CODE:
	SCALE: 1" = 50'	DRAWING NO:
	MAP NO.:	SB-3
GRID NO.:		
PARCEL NO.:	SHEET NO. 22 OF 22	