

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 - MISS UTILITY: 1-800-257-7777
 - C & P TELEPHONE COMPANY: 725-9976
 - HOWARD COUNTY BUREAU OF UTILITIES: 313-2266
 - AT&T CABLE LOCATION DIVISION: 393-3553
 - B.G.&E. CO. CONTRACTOR SERVICES: 850-4620
 - B.G.&E. CO. UNDERGROUND DAMAGE CONTROL: 787-4620
 - STATE HIGHWAY ADMINISTRATION: 531-5533
- SITE ANALYSIS:
 - AREA OF PARCEL = 11.58 AC
 - PRESENT ZONING = M-1 -WAYS PAVING
 - USE OF STRUCTURE: TRUCKING TERMINAL
 - BUILDING AREA:
 - WAREHOUSE AND DISTRIBUTION: EXISTING=14,150 SQ.FT. + PROPOSED=15,800 SQ.FT. TOTAL=29,950 SQ.FT.
 - HYBRID INDUSTRIAL/OFFICE SPACE: EXISTING= 6,150 SQ.FT. + PROPOSED= 0 SQ.FT. TOTAL=6,150 SQ.FT.
 - MAXIMUM NUMBER OF EMPLOYEES: 15
 - BUILDING COVERAGE ON SITE: 0.60 AC OR 5% OF GROSS AREA
 - PAVED PARKING LOT/AREA ON SITE: 6.95 AC OR 60% OF GROSS AREA
- PROJECT BACKGROUND:
 - LOCATION: HOWARD COUNTY, MARYLAND TAX MAP: 43 PARCEL: 410 & 518
 - ZONING: M-1
 - SECTION/AREA: N/A
 - SITE AREA: 11.58 AC
 - DPZ REFERENCES: NONE
- 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 START OF WORK.
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAYS PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTOR'S INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- ALL REINFORCED CONCRETE FOR STORM DRAIN STRUCTURES SHALL HAVE A MINIMUM OF 28 DAYS STRENGTH OF 3,500 P.S.I.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.
- ESTIMATES OF EARTHWORK QUANTITIES ARE PROVIDED SOLELY FOR THE PURPOSE OF CALCULATING FEES.
- SOIL COMPACTION SPECIFICATIONS, REQUIREMENTS, METHODS AND MATERIALS ARE TO BE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE PROJECT GEOTECHNICAL ENGINEER. GEOTECHNICAL ENGINEER TO CONFIRM ACCEPTABILITY OF PROPOSED PAVING SECTION, BASED ON SOILS TEST.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS 'C' AS SHOWN IN FIG. 11-4 VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL.
- COORDINATES AND ELEVATIONS ARE BASED ON HOWARD COUNTY MONUMENTS 0030 AND 4366 (NAD 83).
- A NOISE STUDY IS NOT REQUIRED FOR THIS PROJECT.
- EXISTING TOPOGRAPHY IS BASED ON A FIELD RUN TOPOGRAPHIC SURVEY PERFORMED BY MARKS & VOGEL ASSOCIATES, INC. DATED JUNE, 1995.
- THIS PROJECT IS CURRENTLY SERVED BY PUBLIC WATER (CONT #76W) AND PUBLIC SEWER (CONTRACT #20-1230). AN EXISTING 6" DIP WHICH WILL BE UTILIZED FOR WATER SERVICE. A PRIVATE SH-2 IS TO BE PROVIDED.
- ALL PAVING TO BE MINIMUM HOWARD COUNTY STANDARD P-3 UNLESS OTHERWISE NOTED (SEE P-3 DETAIL SHEET 7).
- ALL CURB AND GUTTER TO BE HOWARD COUNTY STANDARD CONCRETE (SEE DETAIL SHEET 7).
- PARCEL 518 & 410 ARE OWNED BY GREAT COASTAL EXPRESS, INC.
- EXISTING TERMINAL BUILDING CURRENTLY UTILIZING PRIVATE SEWAGE DISPOSAL. ABANDON SEPTIC SYSTEM AND CONSTRUCT SEWER HOUSE CONNECT TO EXISTING SEWER MAIN.
- STORMWATER MANAGEMENT POND IS PRIVATE. WATER QUALITY PROVIDED BY STORMCEPTOR. POND HAZARD CLASSIFICATION 'A'.
- ARCHITECTURAL/BUILDING PLANS TO INCLUDE OIL INTERCEPTOR WHICH WILL BE LOCATED WITHIN THE EXISTING BUILDING.
- REQUEST TO WAIVE SECTION 16.196(h) OF THE HOWARD COUNTY ZONING REGULATIONS TO REACTIVATE TO COMPLY/ADDRESS S.E.C. COMMENTS/REQUIREMENTS WAS APPROVED ON DECEMBER 31, 1996 PER WP-97-63.

	2 YEAR	10 YEAR	100 YEAR
FLOW INTO POND	17.3 c.f.s.	28.4 c.f.s.	40.6 c.f.s.
FLOW OUT OF POND	6.7 c.f.s.	16.5 c.f.s.	26.7 c.f.s.
W.S. ELEVATION	226.63	227.61	228.20
STORAGE VOLUME	0.32 AC FT	0.52 AC FT	0.58 AC FT

POND SUMMARY

OPERATION AND MAINTENANCE SCHEDULE FOR STORMWATER MANAGEMENT DETENTION FACILITY AND STORMCEPTOR WATER QUALITY STRUCTURE
 STORMCEPTOR (SEE SHEET NO. 2)

STORMWATER MANAGEMENT FACILITY

- ROUTINE MAINTENANCE**
- FACILITY WILL BE INSPECTED ANNUALLY AND AFTER MAJOR STORMS. INSPECTIONS SHOULD BE PERFORMED DURING WET WEATHER TO DETERMINE IS FUNCTIONING PROPERLY.
 - TOP AND SIDE SLOPES OF THE EMBANKMENT SHALL BE MOWED A MINIMUM OF TWO (2) TIMES A YEAR, ONCE IN JUNE AND ONCE IN SEPTEMBER. OTHER SIDE SLOPES AND MAINTENANCE ACCESS SHOULD BE MOWED AS NEEDED.
 - DEBRIS AND LITTER NEXT TO THE OUTLET STRUCTURE SHALL BE REMOVED DURING REGULAR MOWING OPERATIONS AND AS NEEDED.
 - VISIBLE SIGNS OF EROSION IN THE POND AS WELL AS RIPRAP OUTLET AREAS SHALL BE REPAIRED AS SOON AS IT IS NOTICED.

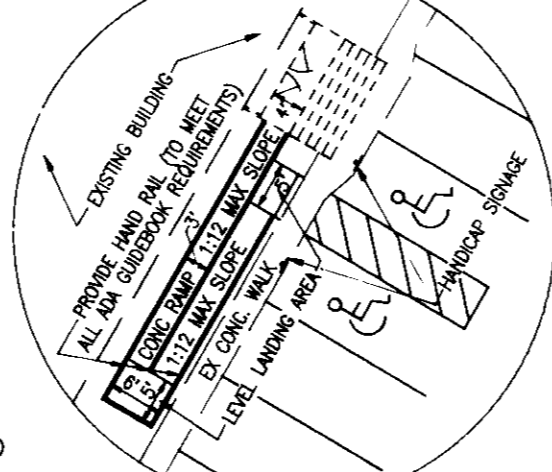
NON-ROUTINE MAINTENANCE

- STRUCTURAL COMPONENTS OF THE POND SUCH AS THE DAM, THE RISER, AND THE PIPES SHALL BE REPAIRED UPON DETECTION OF ANY DAMAGE. THE COMPONENTS SHOULD BE INSPECTED DURING ROUTINE MAINTENANCE OPERATIONS.
- SEDIMENT SHOULD BE REMOVED WHEN ITS ACCUMULATION SIGNIFICANTLY REDUCES THE DESIGN STORAGE, INTERFERE WITH THE FUNCTION OF THE RISER, WHEN DEEMED NECESSARY FOR AESTHETIC REASONS, OR WHEN DEEMED NECESSARY BY THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

OPERATION, MAINTENANCE AND INSPECTION

INSPECTION OF THE POND(S) SHOWN HEREON SHALL BE PERFORMED AT LEAST ANNUALLY, IN ACCORDANCE WITH THE CHECKLIST AND REQUIREMENTS CONTAINED WITHIN USDA, SCS "STANDARDS AND SPECIFICATIONS FOR PONDS" (MD-378). THE POND OWNER(S) AND ANY HEIRS, SUCCESSORS, OR ASSIGNS SHALL BE RESPONSIBLE FOR THE SAFETY OF THE POND AND THE CONTINUED OPERATION, SURVEILLANCE, INSPECTION, AND MAINTENANCE THEREOF. THE POND OWNER(S) SHALL PROMPTLY NOTIFY THE SOIL CONSERVATION DISTRICT OF ANY UNUSUAL OBSERVATIONS THAT MAY BE INDICATORS OF DISTRESS SUCH AS EXCESSIVE SEEPAGE, TURBID SEEPAGE, SLIDING OR SLUMPING.

INSERT HANDICAP RAMP
 SCALE: 1"=20'



ADDRESS CHART

PARCEL NUMBER	STREET ADDRESS
410 & 518	8151 MISSION ROAD

PARKING TABULATION

	REQUIRED	PROPOSED	EXISTING	TOTAL
WAREHOUSE/DISTRIBUTION TERMINAL	15 SPACES	28 SPACES	0 SPACES	28 SPACES
0.5 SPACES/1,000 SQ.FT. - HYBRID INDUSTRIAL/OFFICE SPACE	16 SPACES	0 SPACES	58 SPACES	58 SPACES
2.5 SPACES/1,000 SQ.FT. - HANDICAP SPACES	*2 SPACES	2 SPACES	0 SPACES	2 SPACES
TOTAL: 31 SPACES				TOTAL: 88 SPACES

* NUMBER OF HANDICAP SPACES BASED ON REQUIRED STANDARD SPACES. ADDITIONAL STANDARD SPACES HAVE BEEN PROPOSED ON THIS SITE TO PROVIDE LONG TERM PARKING FOR LONG-DISTANCE DRIVERS.

ENGINEERS CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Robert H. Vogel
 SIGNATURE OF ENGINEER
 DATE: 3/17/97

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

3/21/97
 SIGNATURE OF DEVELOPER
 DATE

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Cheryl J. ...
 USDA-NATURAL RESOURCES CONSERVATION SERVICE
 DATE: 4/15/97

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert W. Zielhuis
 HOWARD SOIL CONSERVATION DISTRICT
 DATE: 4/13/97

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

James R. ...
 DIRECTOR
 DATE: 4/15/97

Cheryl Hamilton
 LAND DEVELOPMENT
 DATE: 4/15/97

Cheryl Hamilton
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 DATE: 4/16/97

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

DATE: 4/15/97

COUNTY HEALTH OFFICER		DATE			
SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER			
N/A	N/A	410 & 518			
L. F.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
N/A	14	M-1	43	6th	6069.01
WATER CODE		SEWER CODE			
B02		317000			

GREAT COASTAL EXPRESS, INC
TRUCKING TERMINAL
SITE DEVELOPMENT PLAN
SITE LAYOUT

TAX MAP #43
 6TH ELECTION DISTRICT

PARCEL '410 & 518'
 HOWARD COUNTY, MARYLAND

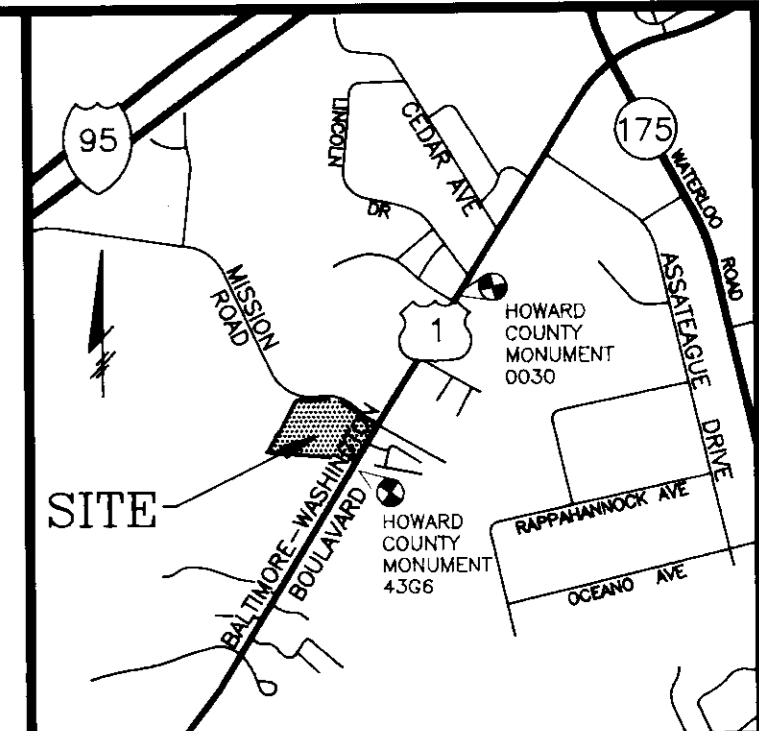
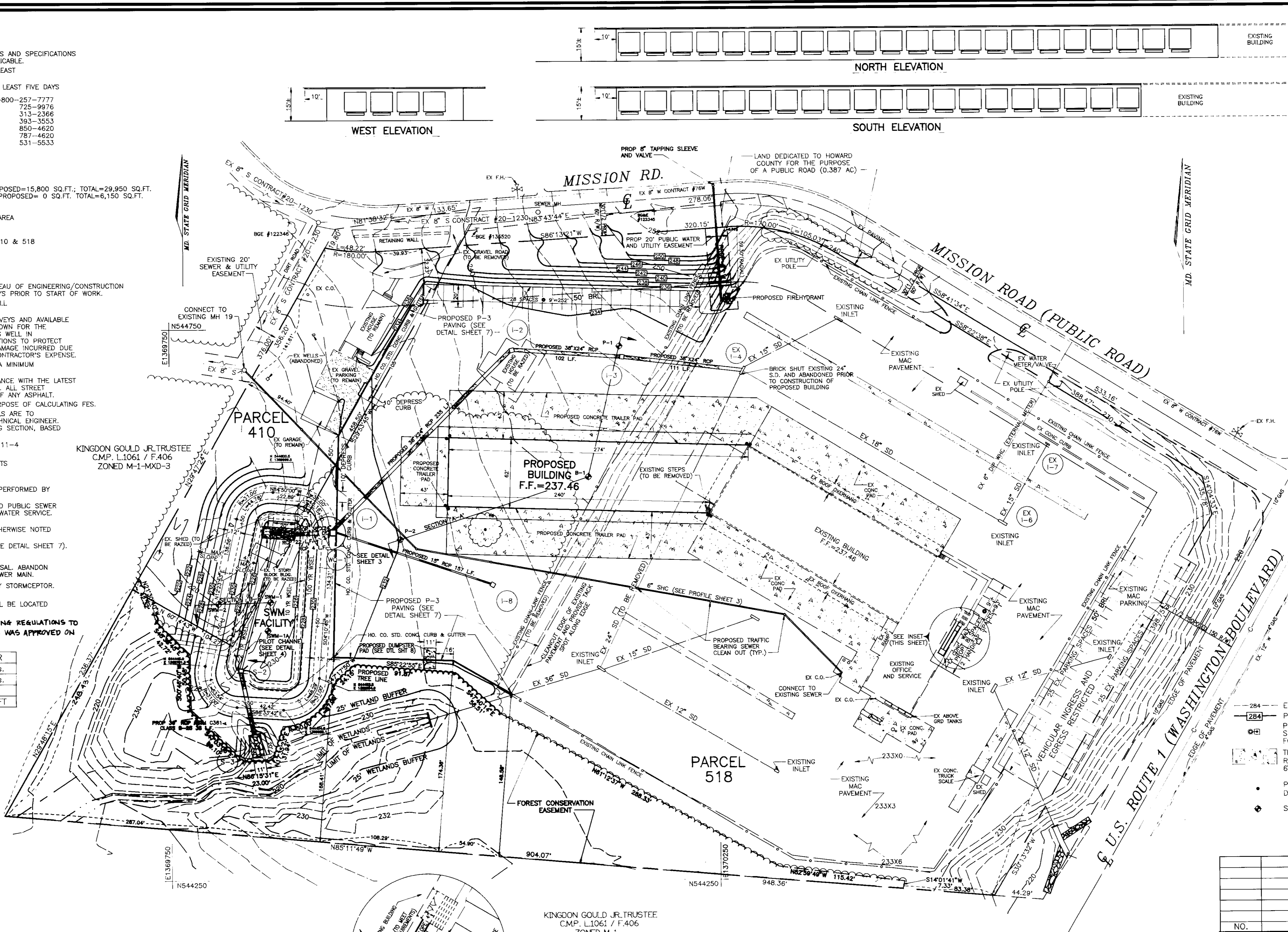
MARKS & VOGEL ASSOCIATES, INC.
 ENGINEERS - SURVEYORS - PLANNERS

3691 PARK AVENUE, SUITE 101
 BELLCOTT CITY, MARYLAND 21048

TELEPHONE: (410) 461-5828
 FAX: (410) 465-3986

DESIGN BY: R.H.V.
 DRAWN BY: D.S.G.H.
 CHECKED BY: R.H.V.
 DATE: MARCH, 1996
 SCALE: 1"=50'
 W.O. NO.: 95-26

1 SHEET OF 8



VICINITY MAP
 SCALE: 1"=2000'

SHEET INDEX

SHT. NO.	DESCRIPTION
1	SITE LAYOUT
2	GRADING, SEDIMENT & EROSION CONTROL
3	STORM DRAIN PROFILES & STRUCTURE SCHEDULE
4	SWM PROFILES AND DETAILS
5	DRAINAGE AREA & SOILS MAP
6	LANDSCAPE PLAN
7	DETAILS AND NOTES
8	SWM POND NOTES AND DETAILS

LEGEND

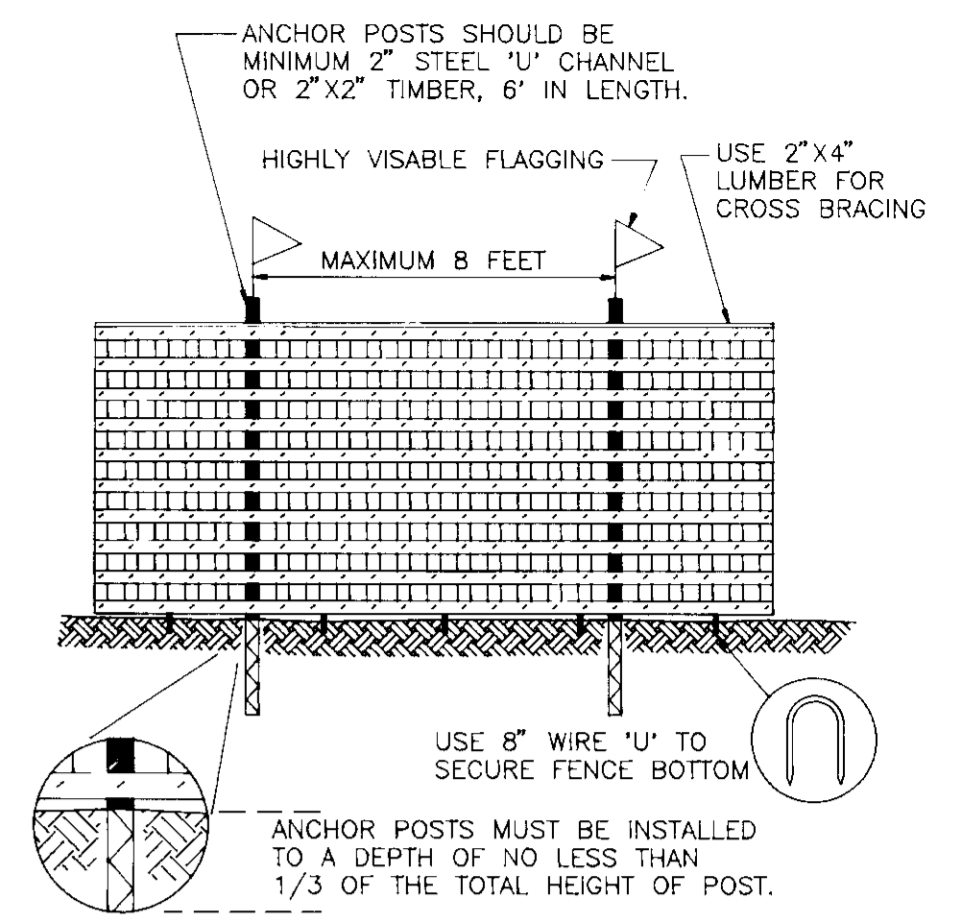
- 284 - EXISTING CONTOUR
- 284 - PROPOSED CONTOUR
- PROPOSED LIGHTING FIXTURE (SEE ARCHITECTURAL PLANS FOR DETAILS)
- TRAILER DOLLY PAD: 7' REINFORCED CONCRETE OVER 6" CRUSHER RUN BASE
- PROPOSED BOLLARD (SEE DETAIL SHEET 8)
- SOILS BORING LOCATION
- PROPOSED WATER LINE
- PROPOSED STORM DRAIN
- PROPOSED SEWER LINE
- OWNER/DEVELOPER: GREAT COASTAL EXPRESS, INC. P.O.C.: JOHN GROVER, 1401 W. HUNDRED ROAD, CHESTER, VIRGINIA 23631, TELEPHONE: (804) 768-0016

NO.	REVISION	DATE

OPERATION & MAINTENANCE SCHEDULE FOR THE STORMCEPTOR DEVICE: (CONT.)

1. THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE PERIODICALLY INSPECTED AND CLEANED TO MAINTAIN OPERATION AND FUNCTION. THE OWNER SHALL INSPECT THE STORMCEPTOR UNIT YEARLY AT A MINIMUM UTILIZING THE STORMCEPTOR INSPECTION/MONITORING FORM. INSPECTIONS SHALL BE DONE BY USING A CLEAR PLEXIGLASS TUBE (SLOTTED JUDGE) TO EXTRACT A WATER COLUMN SAMPLE. WHEN THE SEDIMENT DEPTHS EXCEED THE LEVEL SPECIFIED IN TABLE G OF THE STORMCEPTOR TECHNICAL MANUAL, THE UNIT MUST BE CLEANED.
2. THE STORMCEPTOR WATER QUALITY STRUCTURE SHALL BE CHECKED AND CLEANED IMMEDIATELY AFTER PETROLEUM SPILLS. THE OWNER SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES.
3. THE MAINTENANCE OF THE STORMCEPTOR UNIT SHALL BE DONE USING A VACUUM TRUCK WHICH WILL REMOVE THE WATER, SEDIMENT, DEBRIS, FLOATING HYDROCARBONS AND OTHER MATERIALS IN THE UNIT. PROPER CLEANING AND DISPOSAL OF THE REMOVED MATERIALS AND LIQUID MUST BE FOLLOWED BY THE OWNER.
4. THE INLET AND OUTLET PIPES SHALL BE CHECKED FOR ANY OBSTRUCTIONS AT LEAST ONCE EVERY SIX MONTHS. IF OBSTRUCTIONS ARE FOUND THE OWNER SHALL HAVE THEM REMOVED. STRUCTURAL PARTS OF THE STORMCEPTOR UNIT SHALL BE REPAIRED AS NEEDED.
5. THE OWNER SHALL RETAIN AND MAKE THE STORMCEPTOR INSPECTION/MONITORING FORMS AVAILABLE TO HOWARD COUNTY OFFICIALS UPON THEIR REQUEST.

FOREST RETENTION AREA
MACHINERY, DUMPING OR STORAGE OF ANY MATERIAL IS PROHIBITED
VIOLATORS ARE SUBJECT TO FINES AS IMPOSED BY THE HOWARD COUNTY FOREST CONSERVATION ACT OF 1992



- NOTES
1. FOREST PROTECTION DEVICE ONLY.
 2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
 3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
 4. ROOT DAMAGE SHOULD BE AVOIDED.
 5. PROTECTIVE SIGNAGE MAY ALSO BE USED.
 6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.

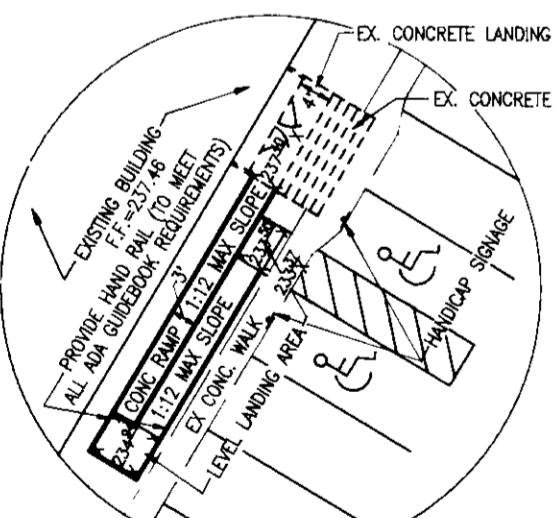
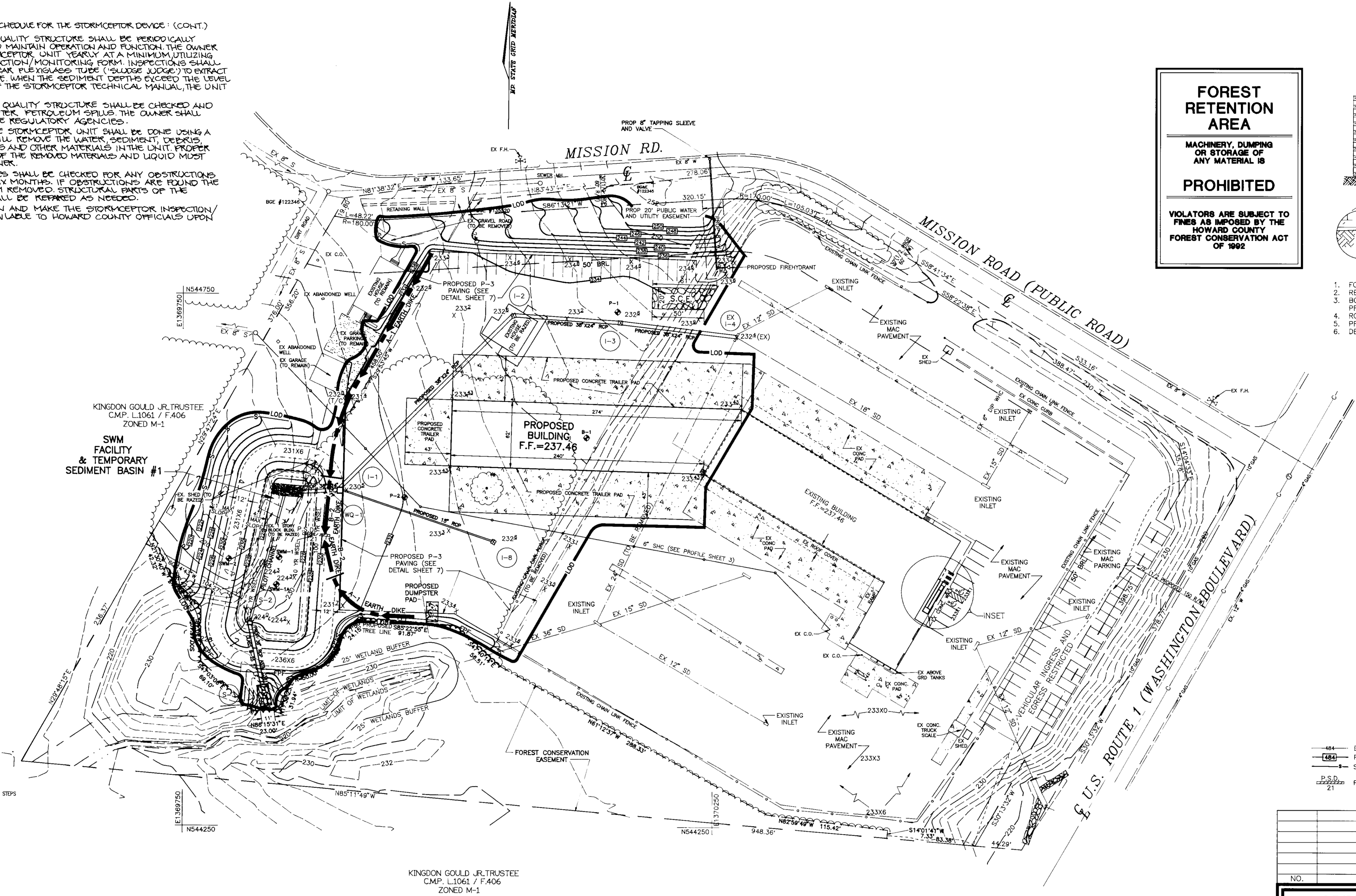
FOREST PROTECTION FENCE
 NOT TO SCALE

SEDIMENT BASIN #1

TYPE OF TRAP:	SEDIMENT BASIN
DRAINAGE AREA:	5.0 AC
STORAGE WET/DRY REQUIRED:	18,000 FT ³
TOTAL STORAGE PROVIDED:	18,000 FT ³
STORAGE ELEVATION:	228.2 (TOTAL) 225.7 (WET)
STORAGE DEPTH:	4.2' (TOTAL) 1.7' (WET)
BOTTOM ELEVATION:	224.0
CLEANOUT ELEVATION:	224.9
INVERT OF HOLES IN VERTICAL DEWATERING PIPE:	225.70
TOP OF EMBANKMENT:	230.20

LEGEND

- 484 — EXISTING CONTOUR
- - - 484 - - - PROPOSED CONTOUR
- - - SILT FENCE
- - - P.S.D. PIPE SLOPE DRAIN
- L.O.D. — LIMIT OF DISTURBANCE
- EARTH DIKE
- FOREST PROTECTION FENCE SEE DETAIL THIS SHEET



NOTE: SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS ON RAMP AND RAILING

OWNER/DEVELOPER
 GREAT COASTAL EXPRESS, INC.
 P.O.C.: JOHN GROVER
 1401 W. HUNDRED ROAD
 CHESTER, VIRGINIA 23831
 TELEPHONE: (804) 768-0016

GREAT COASTAL EXPRESS, INC
 TRUCKING TERMINAL
 SITE DEVELOPMENT PLAN
 GRADING, SEDIMENT & EROSION CONTROL
 TAX MAP #43 PARCEL '410 & 518'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

MARKS & VOGEL ASSOCIATES, INC.
 ENGINEERS - SURVEYORS - PLANNERS
 3891 PARK AVENUE, SUITE 101 ELLICOTT CITY, MARYLAND 21043
 TELEPHONE: (410) 481-5828 FAX: (410) 485-9868

ENGINEERS CERTIFICATE
 *I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 Robert H. Vogel 6/1/97
 SIGNATURE OF ENGINEER DATE
 ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE
 *I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.
 [Signature] 3/21/97
 SIGNATURE OF DEVELOPER DATE

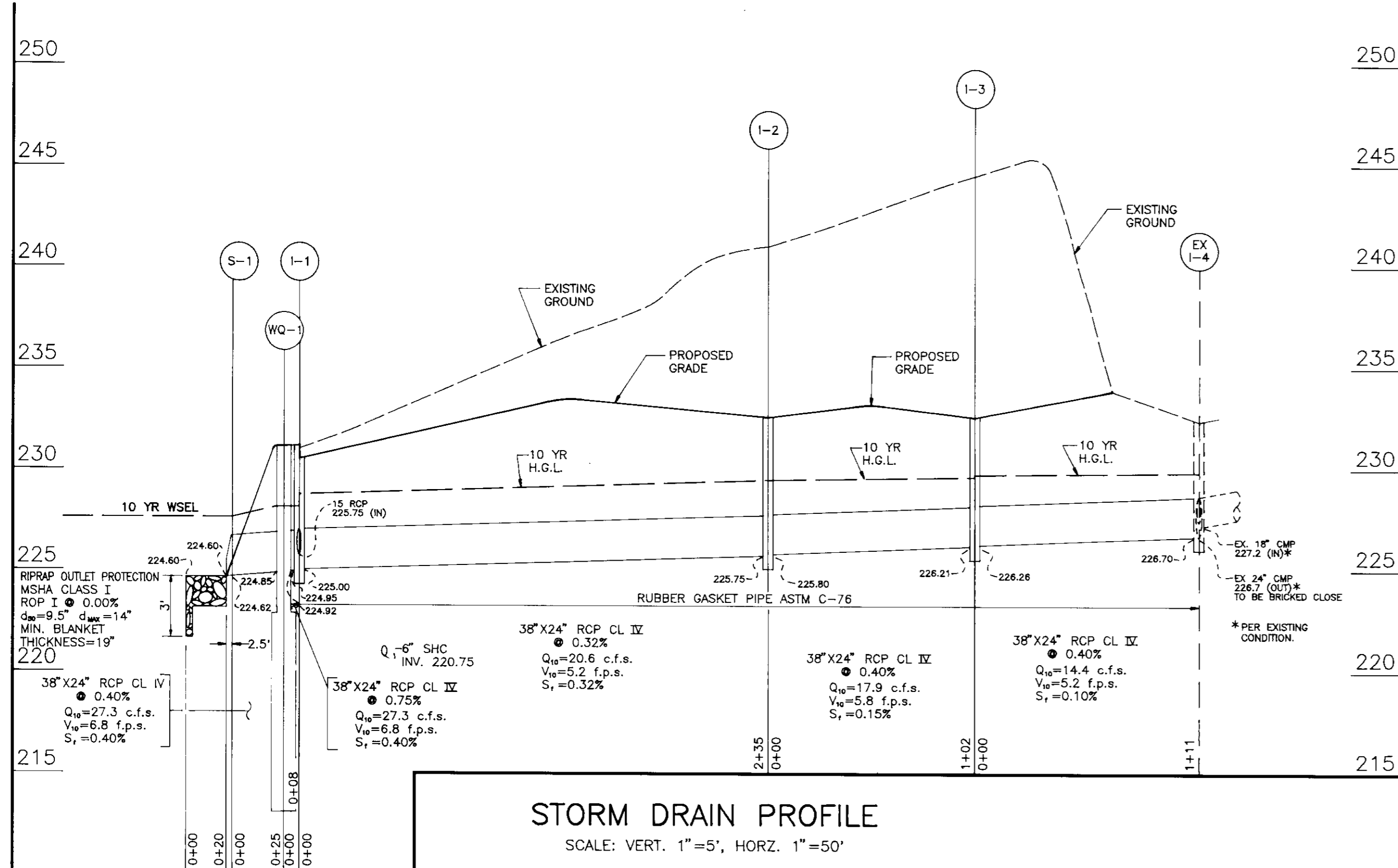
THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
 [Signature] 4/03/97
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE
 THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
 [Signature] 4/13/97
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 [Signature] 4/13/97
 DIRECTOR DATE
 [Signature] 4/1/97
 LAND DEVELOPMENT DATE
 [Signature] 4/1/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

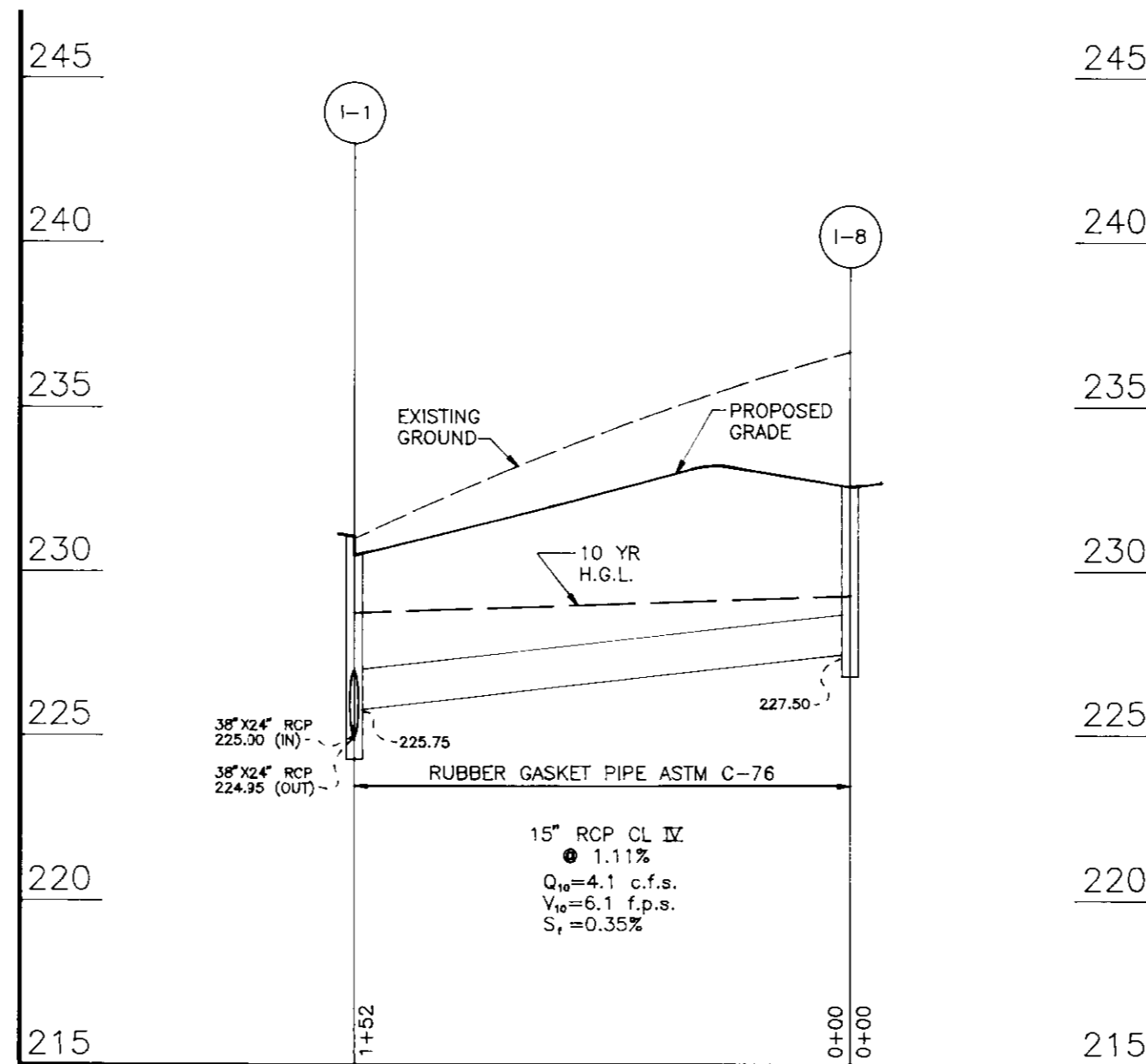
APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER		DATE
SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
N/A	N/A	410 & 518
PLAT NO.	BLOCK NO.	ZONE
N/A	14	M-1
TAX/ZONE	ELECT. DIST.	CENSUS TR.
43	6th	6069.01
WATER CODE	SEWER CODE	
802	317000	

DESIGN BY: R.H.V.
 DRAWN BY: D.G.H.
 CHECKED BY: R.H.V.
 DATE: MARCH, 1998
 SCALE: 1"=50'
 W.O. NO.: 95-26
 2 SHEET OF 8



STORM DRAIN PROFILE
SCALE: VERT. 1"=5', HORIZ. 1"=50'



STORM DRAIN PROFILE
SCALE: VERT. 1"=5', HORIZ. 1"=50'

STORMCEPTOR ORDER INFORMATION

STORMCEPTOR MODEL: 4800
 INSET SIZE: 32"
 STRUCTURE: WQ1
 TOP ELEVATION: 230.5
 INLET PIPE INVERT: 224.92
 OUTLET PIPE INVERT: 224.85
 PIPE SIZE: 38" X 24" RCP CL IV,
 3 3/4" WALL THICKNESS

OWNER/DEVELOPER
 GREAT COASTAL EXPRESS, INC.
 P.O.C.: JOHN GROVER
 1401 W. HUNDRED ROAD
 CHESTER, VIRGINIA 23831
 TELEPHONE: (804) 768-0016

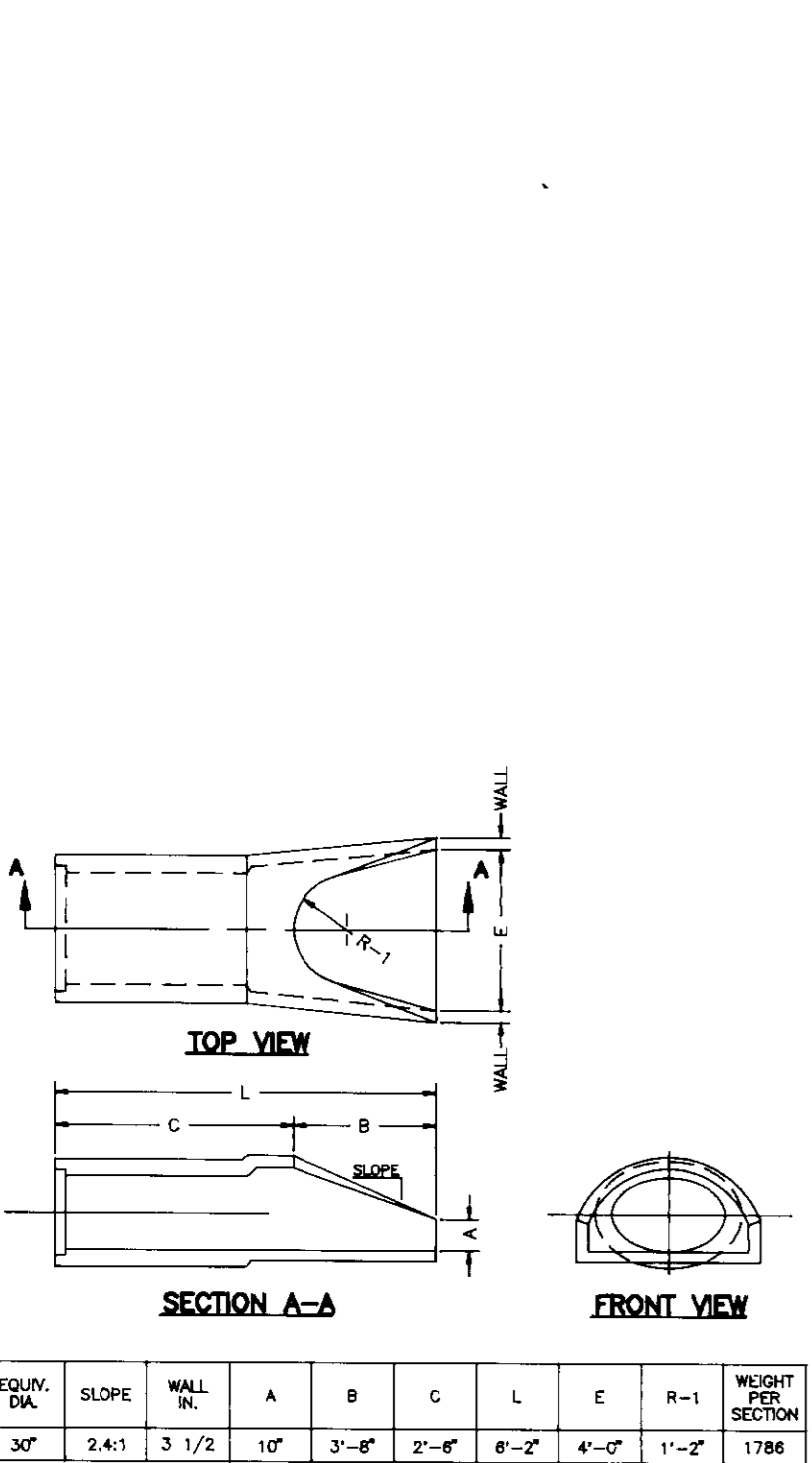
SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT.
- NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (313-1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE. 1 DAY
- INSTALL PERIMETER SILT FENCE, 1 DAY
- INSTALL AND INSPECT TREE PROTECTION DEVICES 2 DAY
- CONSTRUCT SEDIMENT BASIN. TEMPORARILY BLOCK RISER WEIR AS SHOWN ON DETAIL AND PROVIDE HORIZONTAL DEWATERING DEVICE. 2 WEEKS
- INSTALL EARTH DIKE AND PIPE SLOPE DRAIN ALONG TOP OF SLOPE AT POND. 1 WEEK
- MASS GRADE SITE 3 WEEKS
- CONSTRUCT NEW STORM DRAINAGE SYSTEM AND INSTALL INLET PROTECTION 2 WEEK
- ABANDON PART OF EXISTING STORM DRAIN SYSTEM AS SHOWN. 2 WEEK
- CONSTRUCT BUILDING, INSTALL PAVING AND REMOVE PIPE SLOPE DRAIN 2 WEEK
- STABILIZE ANY DISTURBED AREAS AND INSTALL LANDSCAPING 2 WEEK
- RESTORE STORMWATER MANAGEMENT POND BOTTOM TO FINAL ELEVATION, REMOVE TEMPORARY HORIZONTAL DEWATERING PIPE AND REMOVE TEMPORARY BLOCKING IN RISER STRUCTURE 1 WEEK
- DURING GRADING AND AFTER EACH RAINFALL, THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROL MEASURES SHOWN HEREON.
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 - A. 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, SWALES, DITCH PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1.
 - B. 14 CALENDAR DAYS FOR ALL OTHER DISTURBED AREAS.
- UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL SEDIMENT CONTROL STRUCTURES.

STRUCTURE SCHEDULE

NO.	TYPE	TOP ELEVATION	ROADWAY SLOPE	CROSS SLOPE	LOCATION	INV IN	INV OUT	REMARKS
I-1	PRECAST STD TYPE A-S INLET	231.10*	SUMP	-	N 544,565.8 E 1,369,901.5	225.75	224.95	HOWARD COUNTY STD. DTL. SD 4.40
I-2	DOUBLE S INLET	232.60†	SUMP	-	N 544,730.5 E 1,370,061.9	225.80	225.75	HOWARD COUNTY STD. DTL. SD 4.23
I-3	DOUBLE S INLET	232.60†	SUMP	-	N 544,724.3 E 1,370,162.6	226.26	226.21	HOWARD COUNTY STD. DTL. SD 4.23
I-8	DOUBLE S INLET	232.60†	SUMP	-	N 544,517.8 E 1,370,043.2	-	227.50	HOWARD COUNTY STD. DTL. SD 4.23
S-1	ELLIPTICAL FLARED END SECTION	227.5	-	-	N 544,564.3 E 1,369,862.9	-	224.60	SEE DETAIL THIS SHEET
S-2	SMALL OUTLET STRUCTURE	229.93	-	-	N 544,441.2 E 1,369,814.2	**	224.00	SEE DETAIL SHEET 4. REFERENCE HOWARD COUNTY STD. DTL. SD 4.39
S-3	TYPE 'C' ENDWALL	227.8	-	-	N 544,382.3 E 1,369,825.6	-	223.00	HOWARD COUNTY STD. DTL. SD 5.21
WQ-1	STC 4800	230.5	-	-	N 544,565.6 E 1,369,888.4	224.94	224.85	STC 4800 PRECAST STRUCTURE

† TOP OF GRADE
 * TOP OF INLET AT FACE OF CURB
 ** SEE DETAIL SHEET 4



ELLIPTICAL FLARED END SECTION
NOT TO SCALE

OAKS PRECAST CONCRETE PIPE CO.
 351 ELIZABETH STREET
 QUELPH, ONT. N1E 2X9
 TEL: (519)822-3820
 FAX: (519)822-8480

CONCRETE PIPE CO.
 1555 MATHESON BLVD. EAST
 MISSISSAUGA, ONT. L4W 1H9
 TEL: (905)625-5900
 FAX: (905)625-0136

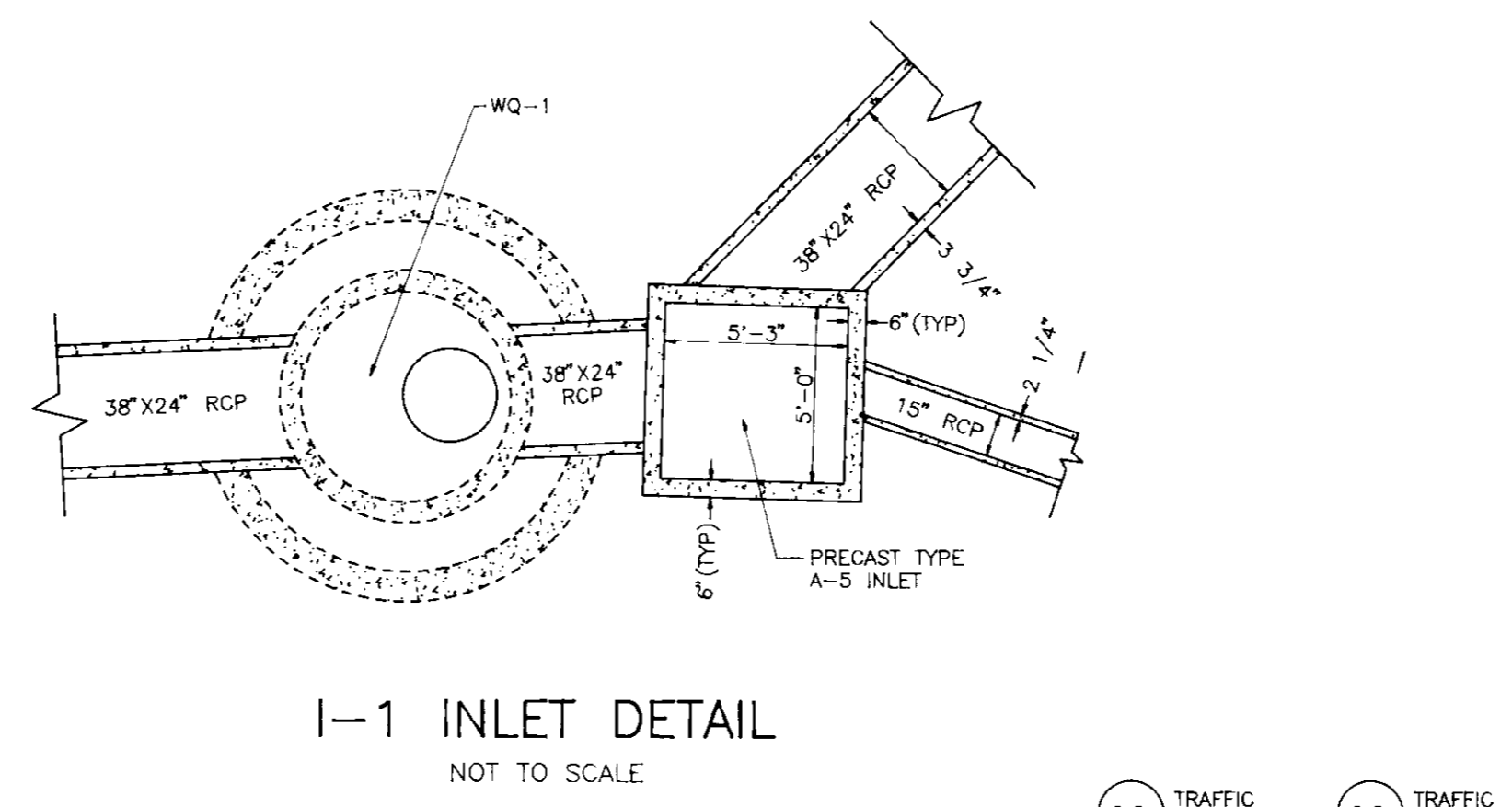
Design Specifications:

- ASTM C 478
- BASE WEIGHT - 18.53 TONS

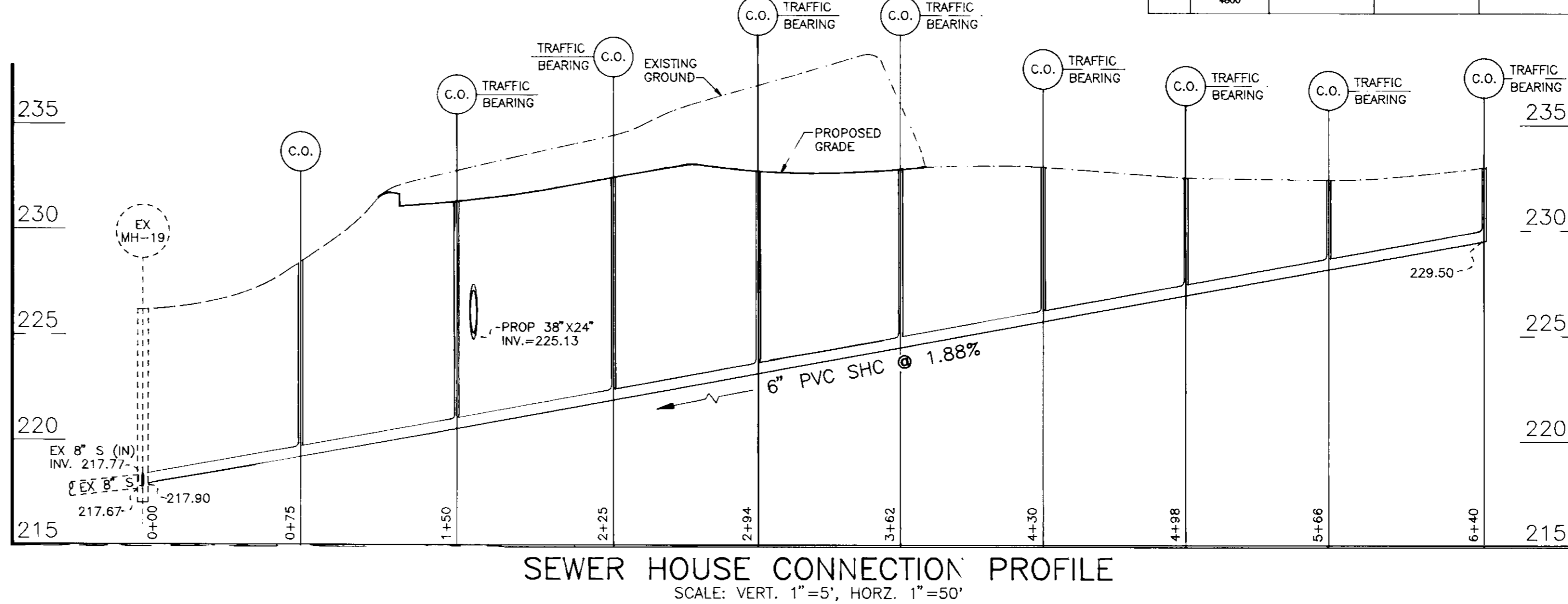
NOTE: 1. NON-SMOOTH OUTSIDE WALL PIPE TO BE GRADED IN PLACE (NO NON-H-SEAL BOOTHS)
 2. INNER SECTION ABOVE THE INSERT TO BE 72" x 4" FOR A MINIMUM OF 8\"/>

REV. 08/16/95 **D.B. G.B.** **S.B.** **SCALE** NTS **UNITS** U.S.

STC 4800 PRECAST CONCRETE STORMCEPTOR
4800 US GALLON CAPACITY



I-1 INLET DETAIL
NOT TO SCALE



SEWER HOUSE CONNECTION PROFILE
SCALE: VERT. 1"=5', HORIZ. 1"=50'

ENGINEERS CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Robert H. Vogel
 SIGNATURE OF ENGINEER
 ROBERT H. VOGEL

DATE: 6/19/96

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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/WE SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

John Grover
 SIGNATURE OF DEVELOPER

DATE: 3/21/97

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Charles T. Sorenson
 USDA-NATURAL RESOURCES CONSERVATION SERVICE

DATE: 04/03/97

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert Zielman
 HOWARD SOIL CONSERVATION DISTRICT

DATE: 4/3/97

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

James R. Rutter
 DIRECTOR

DATE: 4/15/97

Carla Hamilton
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE: 4/19/97

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

[Signature]
 COUNTY HEALTH OFFICER

DATE: N/A

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER			
N/A	N/A	410 & 518			
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
N/A	14	M-1	43	6th	6069.01

WATER CODE: B02
 SEWER CODE: 317000

GREAT COASTAL EXPRESS, INC
TRUCKING TERMINAL
SITE DEVELOPMENT PLAN
STORMDRAIN PROFILES & SCHEDULE

TAX MAP #43
 6TH ELECTION DISTRICT

PARCEL '410 & 518'
 HOWARD COUNTY, MARYLAND

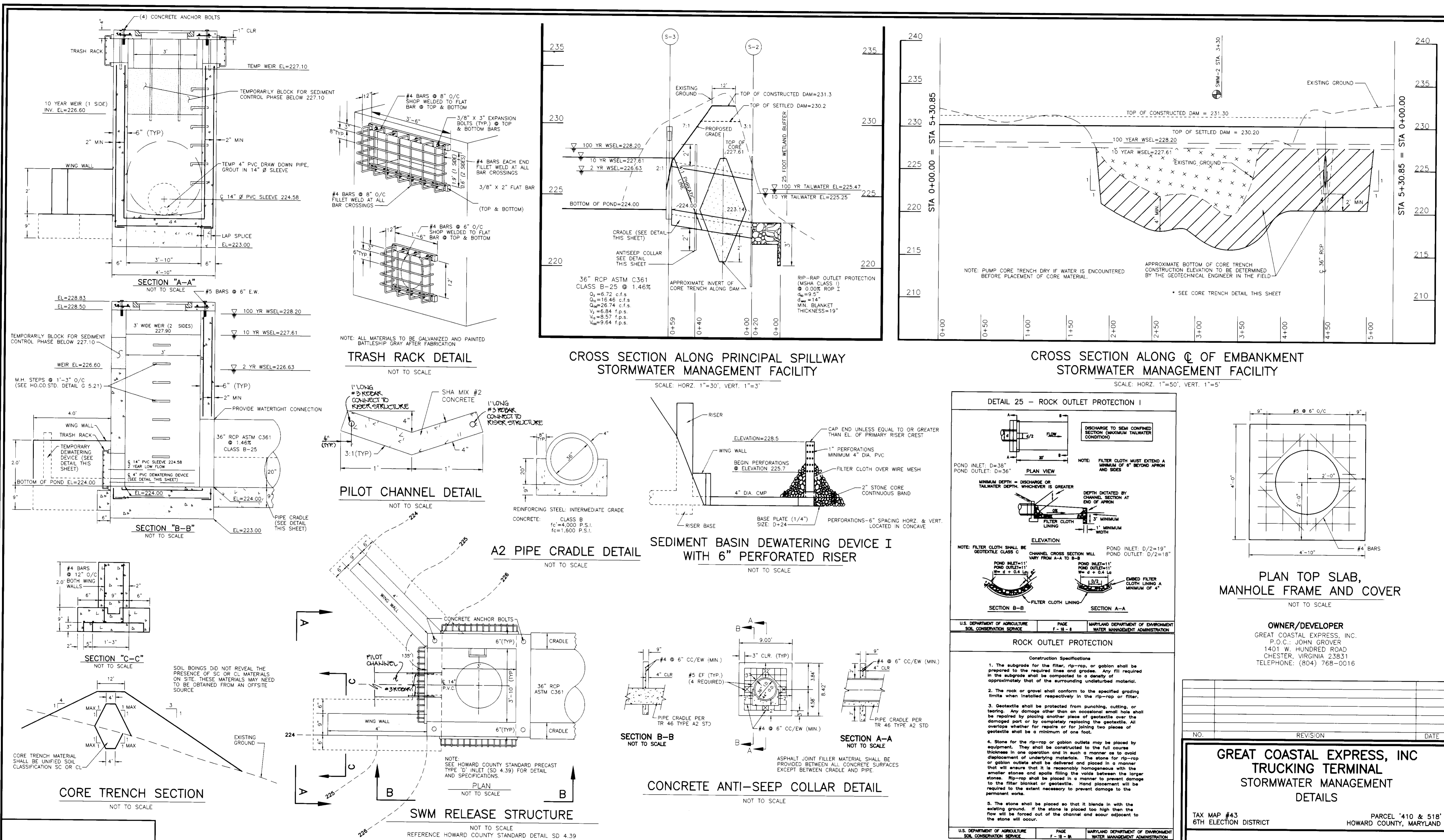
MARKS-VOGEL ASSOCIATES, INC.
 ENGINEERS - SURVEYORS - PLANNERS

3801 PARK AVENUE, SUITE 101
 ELLICOTT CITY, MARYLAND 21043

TELEPHONE: (410) 481-6888
 FAX: (410) 485-3998

DESIGN BY: R.H.V.
 DRAWN BY: D.G.H.
 CHECKED BY: R.H.V.
 DATE: MARCH, 1996
 SCALE: AS SHOWN
 W.D. NO.: 95-26

3 SHEET OF 8



ENGINEERS CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

ROBERT H. VOGEL 3/24/97
SIGNATURE OF ENGINEER DATE

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION.

3/21/97
SIGNATURE OF DEVELOPER DATE

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

4/13/97
USDA - NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

4/13/97
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

4/13/97
DIRECTOR DATE

4/13/97
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT

COUNTY HEALTH OFFICER DATE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
N/A	N/A	410 & 518
PLAT NO.	BLOCK NO.	ZONE
N/A	14	M-1
TAX/ZONE	ELECT. DIST.	CENSUS TR.
43	6th	6069.01
WATER CODE	SEWER CODE	
B02	317000	

GREAT COASTAL EXPRESS, INC TRUCKING TERMINAL STORMWATER MANAGEMENT DETAILS

TAX MAP #43 6TH ELECTION DISTRICT PARCEL '410 & 518' HOWARD COUNTY, MARYLAND

MARKS & VOGEL ASSOCIATES, INC.
ENGINEERS - SURVEYORS - PLANNERS

3691 PARK AVENUE, SUITE 101 BELLCOTT CITY, MARYLAND 21048 TELEPHONE: (410) 461-6828 FAX: (410) 465-3968

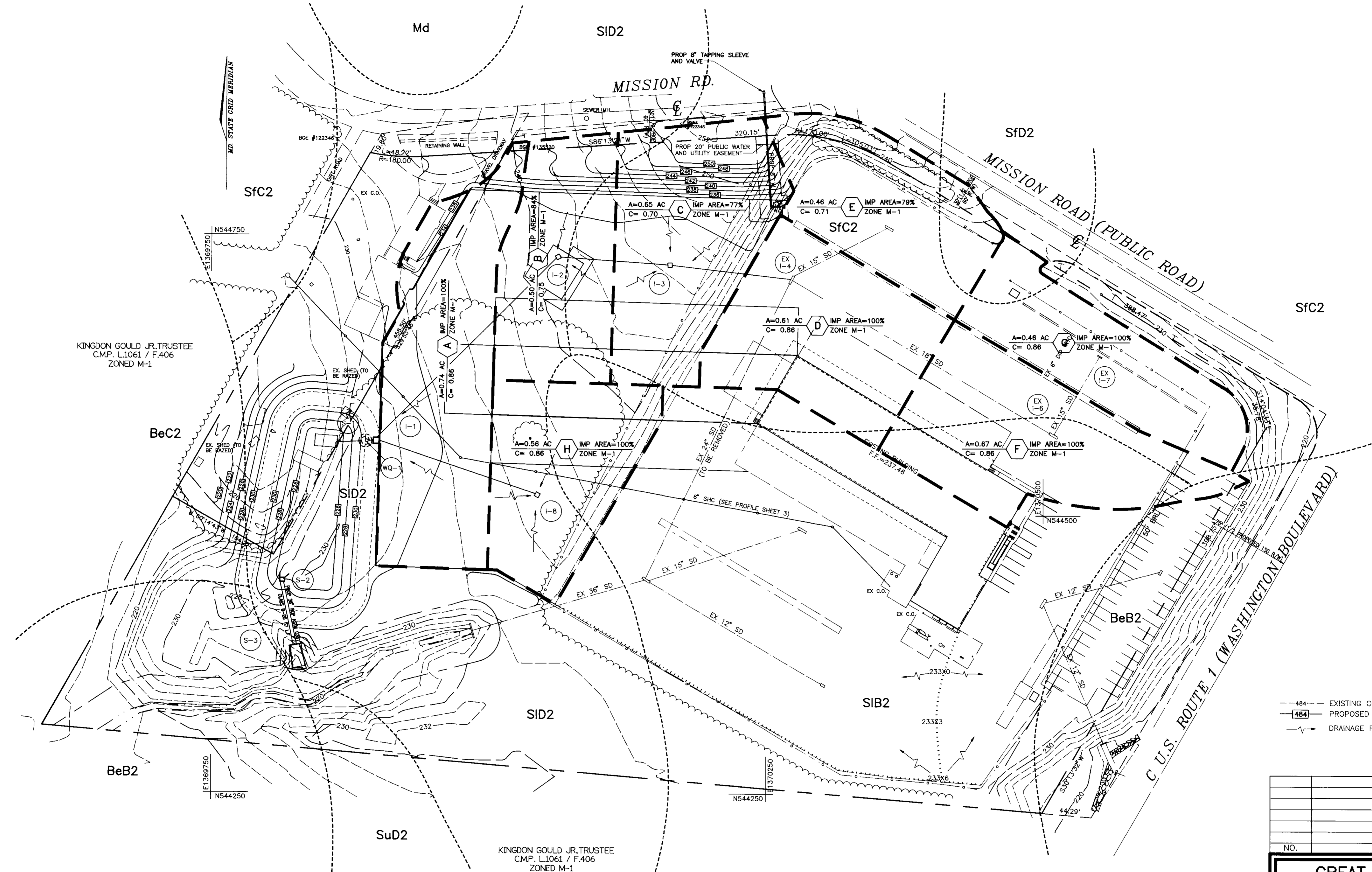
DESIGN BY: R.H.V.
DRAWN BY: D.G.H.
CHECKED BY: R.H.V.
DATE: MARCH, 1996
SCALE: AS SHOWN
W.O. NO.: 95-26

SDP-96-75

4 SHEET OF 8

SOILS LEGEND		
SYMBOL	NAME / DESCRIPTION	TYPE
SfC2	SASSAPARAS GRAVELLY SANDY LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	B
ImC2	BELTSVILLE SILT LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	C
ImB2	BELTSVILLE SILT LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED	C
SuD2	SUNNYSIDE FINE SANDY LOAM, 5 TO 15 PERCENT SLOPES, MODERATELY ERODED	B
SfD2	SASSAPARAS LOAM, 5 TO 10 PERCENT SLOPES, MODERATELY ERODED	B
SfB2	SASSAPARAS LOAM, 1 TO 5 PERCENT SLOPES, MODERATELY ERODED	B
SfD2	SASSAPARAS GRAVELLY SANDY LOAM, 10 TO 15 PERCENT SLOPES, MODERATELY ERODED	B

NOTE:
 -THIS SITE DOES NOT INCLUDE SOILS DESIGNATED AS HYDRIC OR SOILS WITH HYDRIC INCLUSIONS. SOILS ARE NOT CLASSIFIED AS HIGHLY ERODIBLE.
 -HOWARD SOIL SURVEY, MAP NUMBER 30



LEGEND	
---484---	EXISTING CONTOUR
---484---	PROPOSED CONTOUR
---	DRAINAGE FLOW ARROW
---	EXISTING DRAINAGE DIVIDE
---	STORM DRAINAGE DIVIDE
---	SOIL TYPE DIVISION LINE

NO.	REVISION	DATE

GREAT COASTAL EXPRESS, INC
TRUCKING TERMINAL
DRAINAGE AREA MAP
AND SOILS MAP

TAX MAP #43 PARCEL '410 & 518'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

MARKS & VOGEL ASSOCIATES, INC.
 ENGINEERS - SURVEYORS - PLANNERS

3891 PARK AVENUE, SUITE 101 TELEPHONE: (410) 461-8828
 ELLICOTT CITY, MARYLAND 21045 FAX: (410) 465-3866

	DESIGN BY: R.H.V.
	DRAWN BY: D.G.H.
	CHECKED BY: R.H.V.
	DATE: MARCH, 1996
SCALE: 1"=50'	
W.O. NO.: 95-26	
5 SHEET 8	

ENGINEERS CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Robert H. Vogel 6/17/96
 SIGNATURE OF ENGINEER DATE
 ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

John L. Young 3/21/97
 SIGNATURE OF DEVELOPER DATE

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Cheeryl J. Simmons 04-03-97
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert J. Zielinski 4/18/97
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Janet R. Rute 4/15/97
 DIRECTOR DATE

Cindy Hamilton 4/15/97
 COUNTY LAND DEVELOPMENT AND RESEARCH DATE

Cheryl Simmons 4/9/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

N/A #6

COUNTY HEALTH OFFICER		DATE
SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
N/A	N/A	410 & 518
PLAT NO.	BLOCK NO.	ZONE
N/A	14	M-1
TAX/ZONE	ELECT. DIST.	CENSUS TR.
43	6th	6069.01
WATER CODE	SEWER CODE	
802	317000	

FOREST CONSERVATION WORKSHEET

I. BASIC SITE DATA

A. GROSS SITE AREA	11.58 AC
B. AREA WITHIN 100 YEAR FLOODPLAIN	0.00 AC
C. AREA WITHIN AGR. USE OR PRESERVATION PARCEL	0.00 AC
D. AREA OF EXTERNAL ROAD DEDICATION	0.00 AC
E. AREA OF EXTERNAL ROAD DEDICATION	0.39 AC
F. NET TRACT AREA	11.19 AC
G. LAND USE CATEGORY	M-1

II. INFORMATION FOR CALCULATIONS

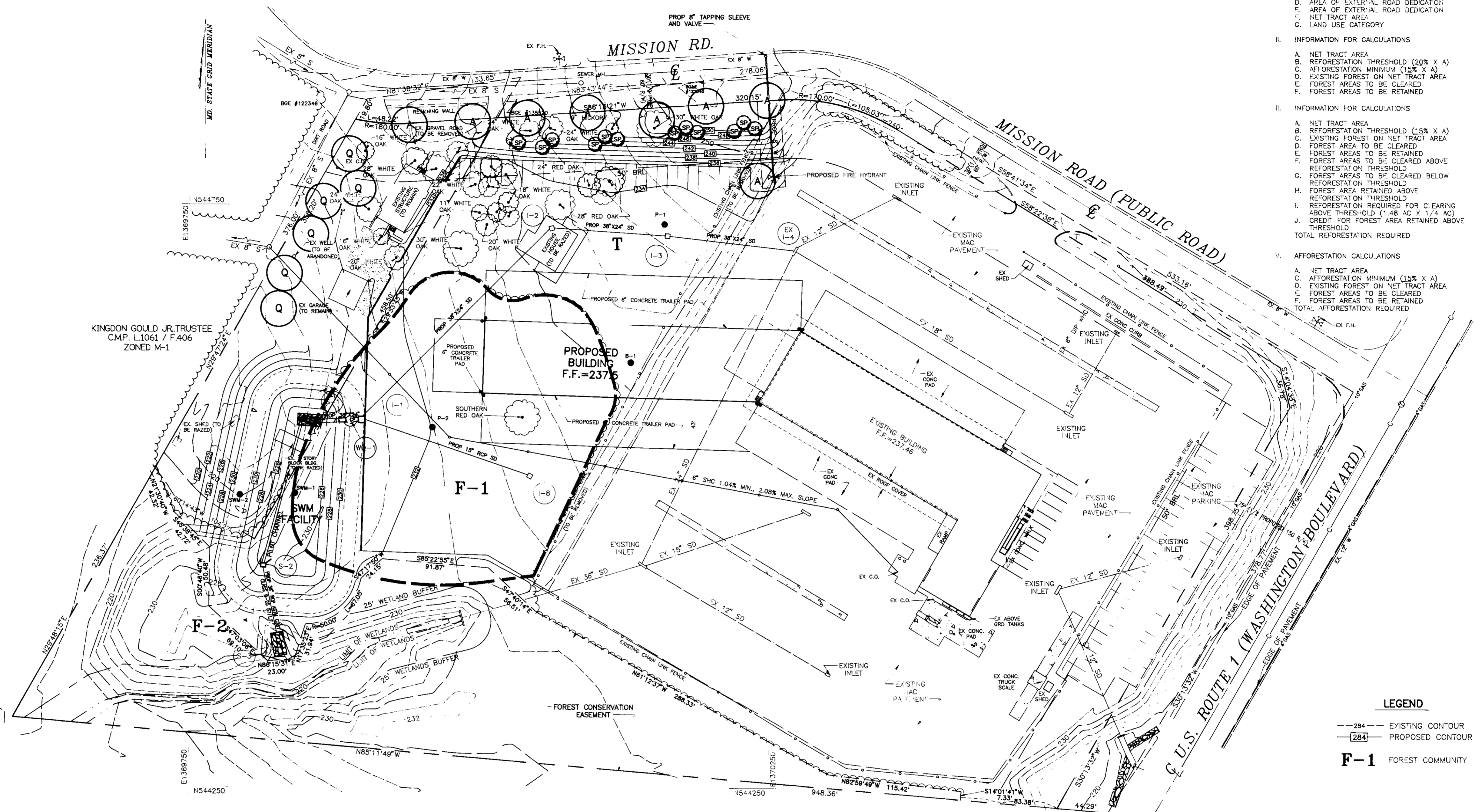
A. NET TRACT AREA	11.19 AC
B. REFORESTATION THRESHOLD (20% X A)	1.68 AC
C. EXISTING FOREST ON NET TRACT AREA	3.34 AC
D. FOREST AREA TO BE CLEARED	1.76 AC
E. FOREST AREAS TO BE CLEARED ABOVE REFORESTATION THRESHOLD	1.48 AC
F. FOREST AREAS TO BE CLEARED BELOW REFORESTATION THRESHOLD	0.00 AC
G. FOREST AREA RETAINED ABOVE REFORESTATION THRESHOLD	0.08 AC
H. FOREST AREA RETAINED BELOW REFORESTATION THRESHOLD	0.37 AC
I. CREDIT FOR FOREST AREA RETAINED ABOVE THRESHOLD	0.08 AC
J. CREDIT FOR FOREST AREA RETAINED BELOW THRESHOLD	0.29 AC
TOTAL REFORESTATION REQUIRED	0.00 AC

V. AFFORESTATION CALCULATIONS

A. NET TRACT AREA	11.19 AC
B. REFORESTATION THRESHOLD (15% X A)	1.68 AC
C. AFFORESTATION MINIMUM (15% X A)	3.24 AC
D. EXISTING FOREST ON NET TRACT AREA	1.48 AC
E. FOREST AREAS TO BE CLEARED	1.76 AC
F. FOREST AREAS TO BE RETAINED	0.00 AC
TOTAL AFFORESTATION REQUIRED	0.00 AC

PLANTING NOTES

- PLANTS, RELATED MATERIALS, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.
 - ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED AND HAVE A VIGOROUS ROOT SYSTEM. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS PLANTS FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUNSCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BOXERS AND ALL FORMS OF INFESTATION OR OBSTRUCTIONABLE DISTURBANCES. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG; NO HELD-IN PLANTS OR PLANTS FROM COLD STORAGE WILL BE ACCEPTED.
 - UNLESS OTHERWISE SPECIFIED, ALL PLANT MATERIAL SHALL CONFORM TO "AMERICAN STANDARD FOR NURSERY STOCK" ANSI Z60.1-1986, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSYMEN, INCLUDING ALL ADDENDA.
 - UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATIONS SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" (HEREIN-AFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, SEPTEMBER, 1981, INCLUDING ALL ADDENDA.
 - CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE LANDSCAPE GUIDELINES.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING UTILITY COMPANIES, UTILITY CONTRACTORS AND "MISS UTILITY" A MINIMUM OF 48 HOURS PRIOR TO BEGINNING ANY WORK. CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO UTILITIES AND MAY MAKE MINOR ADJUSTMENTS IN SPACING AND LOCATION OF PLANT MATERIALS TO AVOID CONFLICTS WITH UTILITIES.
 - PLANTING BED SHALL BE MULCHED WITH 3" OF SHREDDED HARDWOOD BARK MULCH, GROUND COVER BEDS SHALL BE MULCHED TO A DEPTH OF 2".
 - ALL AREAS WITHIN THE CONTRACT LIMIT NOT COVERED BY BUILDING, PAVING, PLANTING BEDS OR OTHERWISE DESIGNATED ON THE PLANS SHALL BE SEEDED AND MULCHED OR SODDED IN ACCORDANCE WITH "1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL - PERMANENT SEEDING SPECIFICATIONS (SEE SHEET 6), INCLUDING ALL ADDENDA, AS DIRECTED BY THE OWNER.
 - CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL MATERIALS IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE.
 - PLANTING MIX SHALL BE DONE AS FOLLOWS:
 DECIDUOUS PLANTS - TWO PARTS TOP SOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE, ADD 3 LBS. OF STANDARD 10-10-10 FERTILIZER PER CUBIC YARD OF PLANTING MIX.
 EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL, ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX.
 TOPSOIL SHALL CONFORM TO LANDSCAPE GUIDELINES.
 - THIS PLAN IS INTENDED FOR LANDSCAPE PLAN ONLY. SEE OTHER PLAN SHEETS FOR INFORMATION ON GRADING, SEDIMENT CONTROL, LAYOUT, ETC.
 - CONTRACTOR TO ADJUST PLANTINGS AS REQUIRED WITH PRIOR APPROVAL OF THE ENGINEER OR LANDSCAPE ARCHITECT.
- NOTE:
 A PORTION OF THE FOREST CONSERVATION OBLIGATIONS INCURRED BY THE PROPOSAL (2,632 S.F.) HAVE BEEN MET BY PAYMENT OF \$3,789.90 TO THE HOWARD COUNTY FOREST CONSERVATION FUND. SUCH PAYMENT IS ONLY FOR DEVELOPMENT OCCURRING UNDER THIS PLAN ONLY. ANY FUTURE RESUBDIVISION OR CHANGE IN LAND USE MAY COME UNDER THE PROVISIONS OF THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.



SCHEDULE A

PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO ROADWAYS	ADJACENT TO PERIMETER PROPERTIES
LANDSCAPE TYPE *	B	A
LINEAR FEET OF ROADWAY FRONTAGE/PERIMETER	410'±	1,060'±±
CREDIT FOR EXISTING VEGETATION (YES/NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	YES *
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO
NUMBER OF PLANTS REQUIRED		
SHADE TREES	1:50=8	1:60=6
EVERGREEN TREES	1:40=10	0
SHRUBS	0	0
NUMBER OF PLANTS PROVIDED		
SHADE TREES	7	6
EVERGREEN TREES	10	0
OTHER TREES (2:1 SUBSTITUTION)	2	0
SHRUBS (10:1 SUBSTITUTION)	0	0
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)		

COMMENTS:
 * 100% CREDIT FOR 660' OF PERIMETER EXISTING WOODLAND.
 ±± PERIMETER ADJACENT TO PROPOSED IMPROVEMENTS
 + FRONTAGE ADJACENT TO PROPOSED IMPROVEMENTS

SCHEDULE B

PARKING LOT INTERNAL LANDSCAPING

NUMBER OF PARKING SPACES	25
NUMBER OF TREES + ISLANDS REQUIRED	1/20 SPACES=1 (200 SQ.FT.)
NUMBER OF TREES PROVIDED	1/570 sq.ft.
SHADE TREES/ISLAND AREA	
OTHER TREES (2:1 SUBSTITUTION)	

NOTE: 1 ADDITIONAL TREE PROVIDED ALONG RIGHT OF WAY

LANDSCAPE SCHEDULE

KEY	QTY	BOTANICAL NAME/COMMON NAME	SIZE	ROOT
A	8	ACER RUBRUM "OCTOBER GLORY"/ OCTOBER GLORY RED MAPLE	2 1/2"-3" CAL.	B+B
Q	6	OVERCROW RUBRA/ RED OAK	2 1/2"-3" CAL.	B+B
P.S.	12	PINUS STROBUS/ WHITE PINE	5'-0" HT.	B+B

OWNER/DEVELOPER

GREAT COASTAL EXPRESS, INC.
 P.O.C.: JOHN GROVER
 1401 W. HUNDRED ROAD
 CHESTER, VIRGINIA 23831
 TELEPHONE: (834) 768-0016

- NOTE:
 1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
 2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS A PART OF THE DEPARTMENT OF PUBLIC WORKS DEVELOPER'S AGREEMENT IN THE AMOUNT OF \$2,500.00 (\$100 PER TREE)
 3. THE CONTRACTOR IS TO EXERCISE CAUTION WHEN INSTALLING LANDSCAPING IN CLOSE PROXIMITY TO SITE UTILITIES.
 4. SEE SHEET 2 FOR LOCATION AND DETAILS OF FOREST PROTECTION FENCE.

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.

Carol J. Williams 04/03/97
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert Z. Zilman 4/13/97
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

James R. Butler 4/15/97
 DIRECTOR DATE

Andy Hamilton 4/14/97
 COUNTY LAND DEVELOPMENT AND PLANNING DIVISION DATE

William D. Williams 4/13/97
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 HOWARD COUNTY HEALTH DEPARTMENT

N/A
 COUNTY HEALTH OFFICER DATE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER			
N/A	N/A	410 & 518			
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
N/A	14	M-1	43	6th	6069.01
WATER CODE		SEWER CODE			
B02		317000			

GREAT COASTAL EXPRESS, INC TRUCKING TERMINAL

LANDSCAPE PLAN & FOREST CONSERVATION EASEMENT

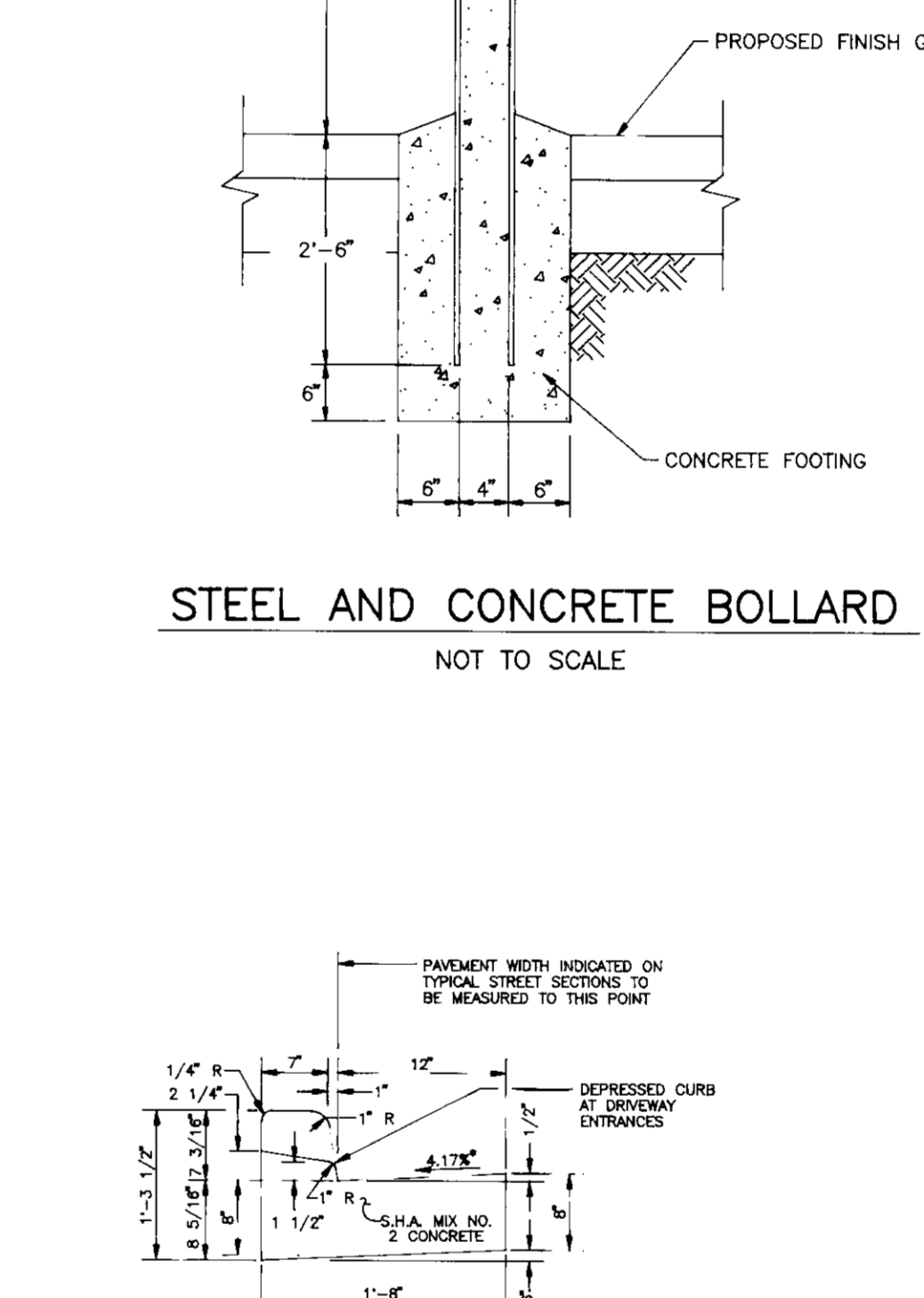
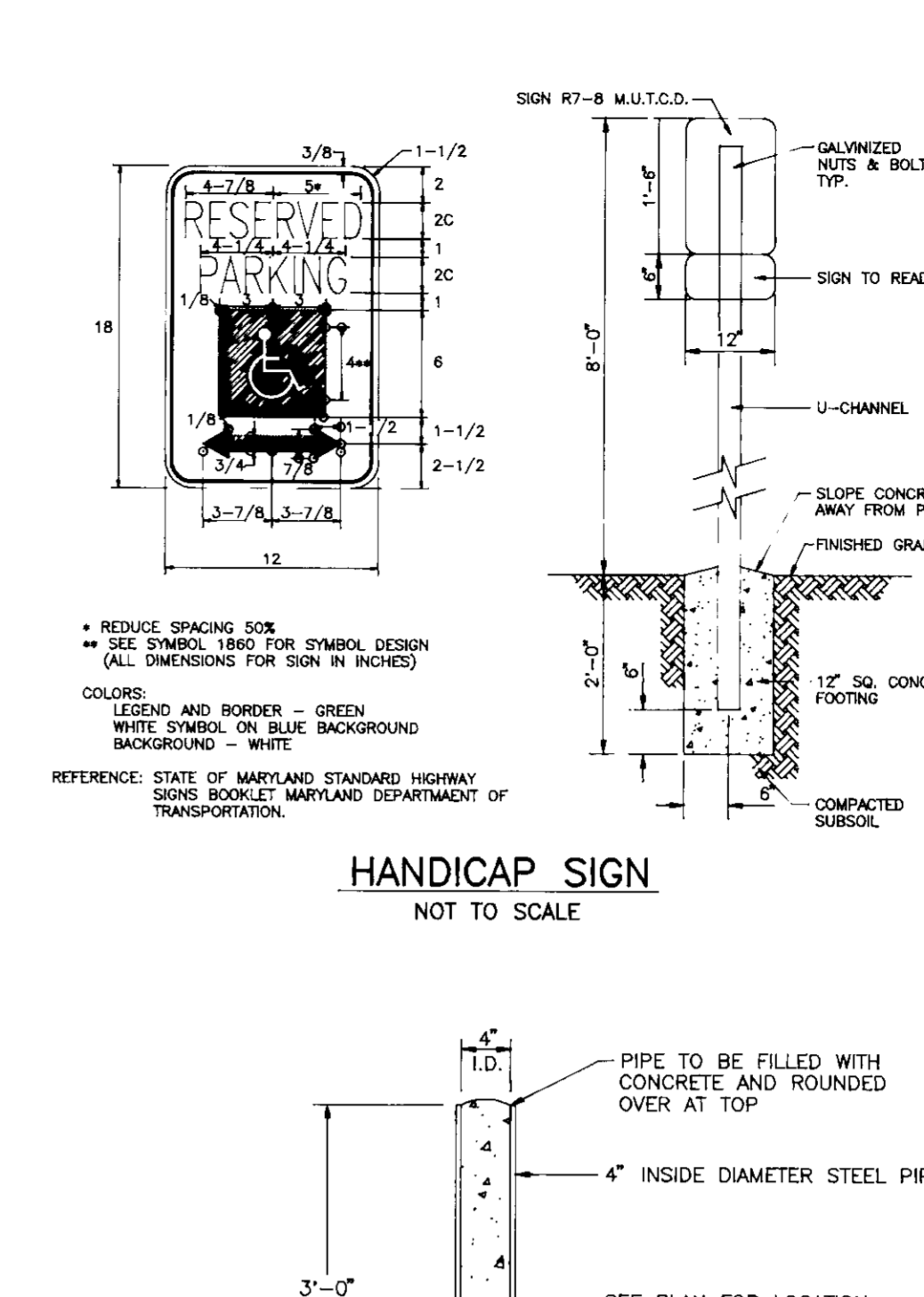
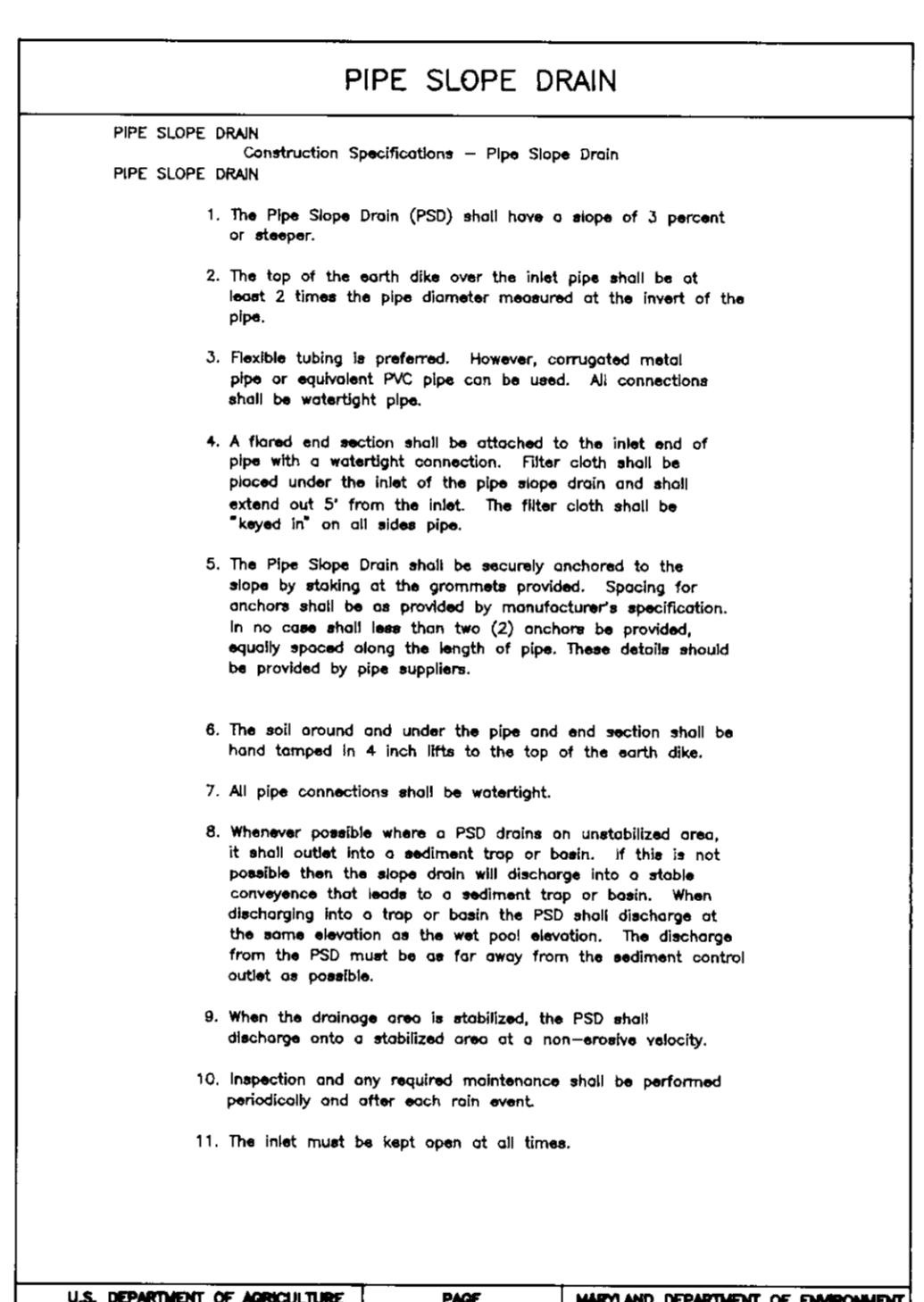
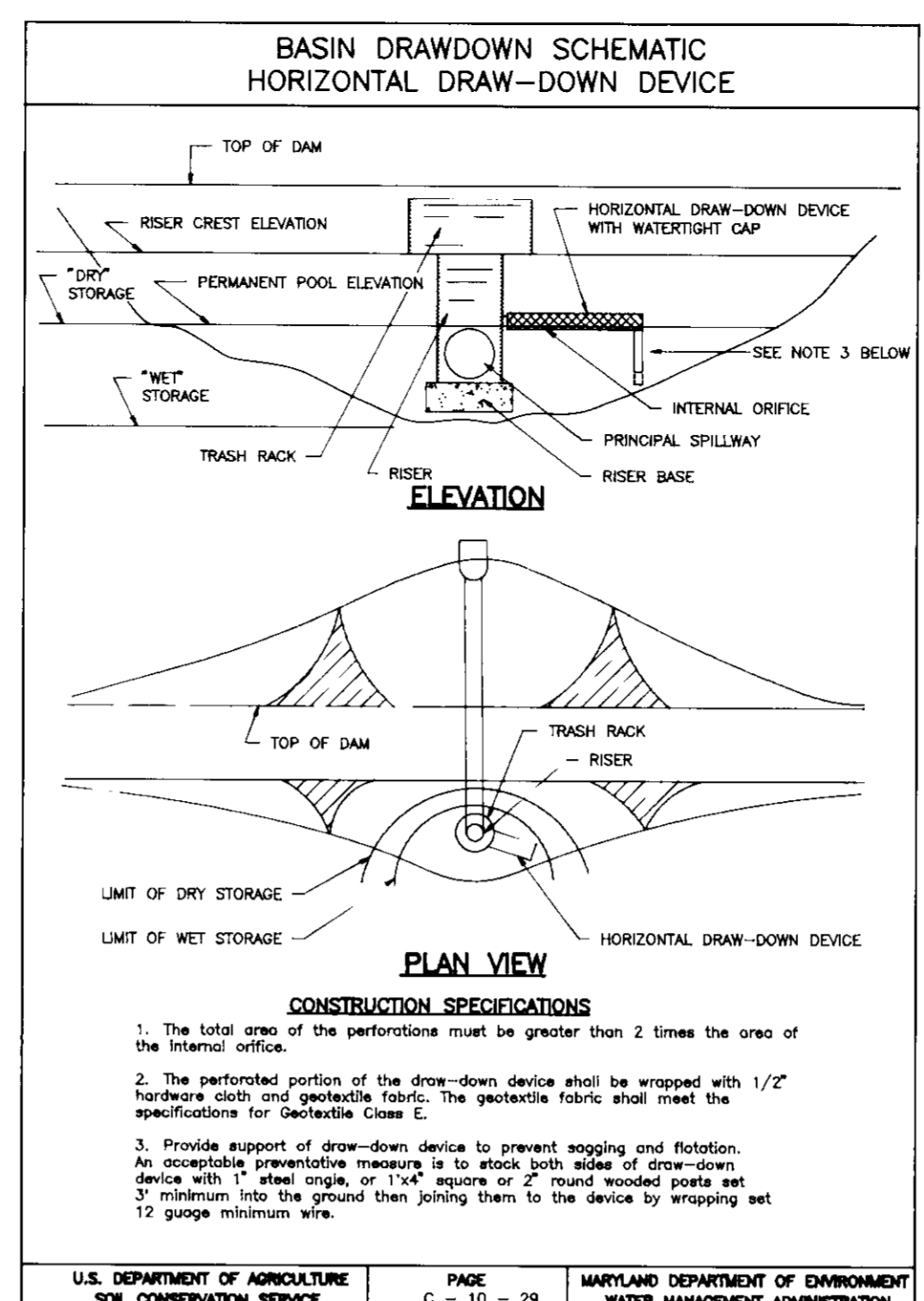
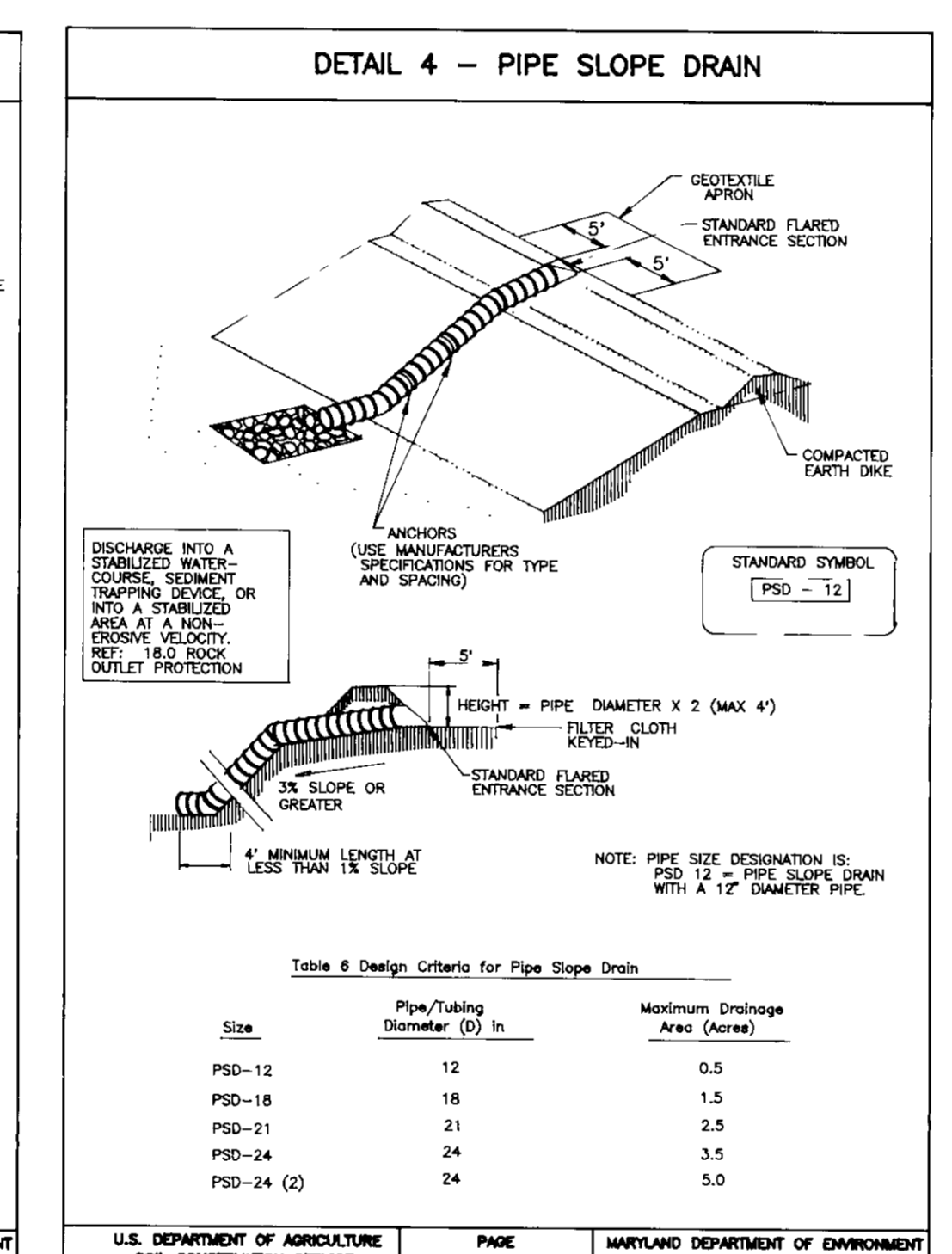
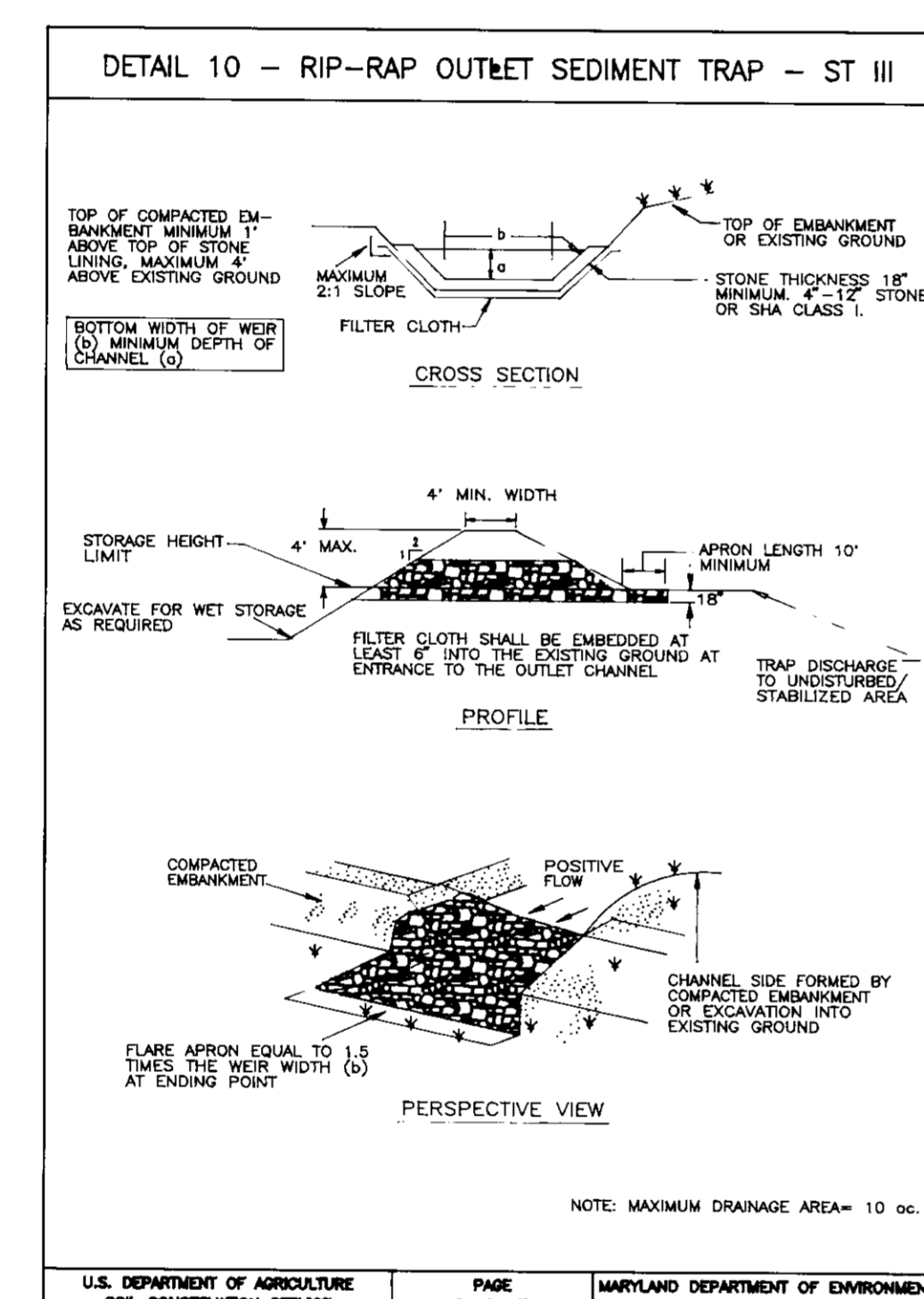
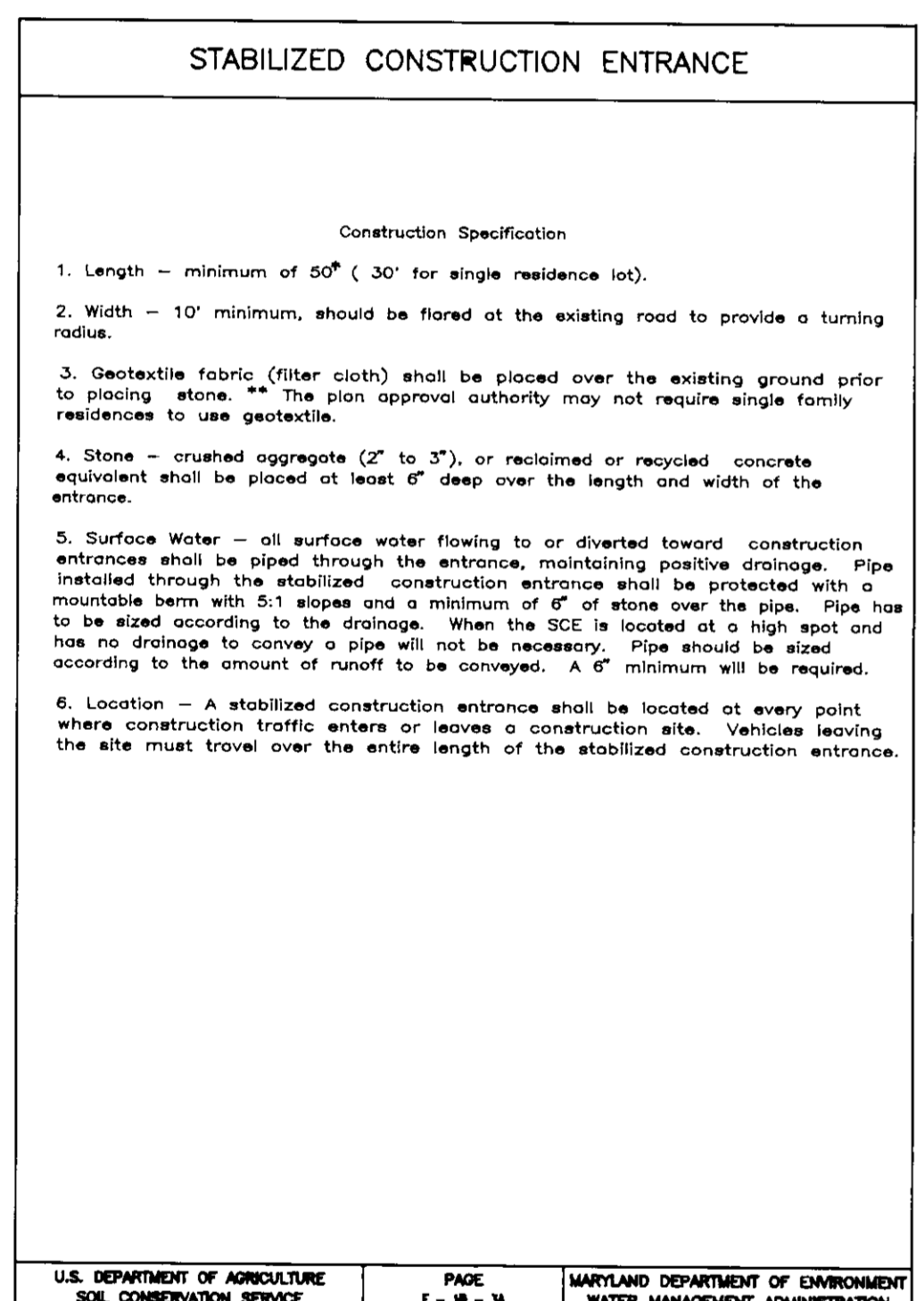
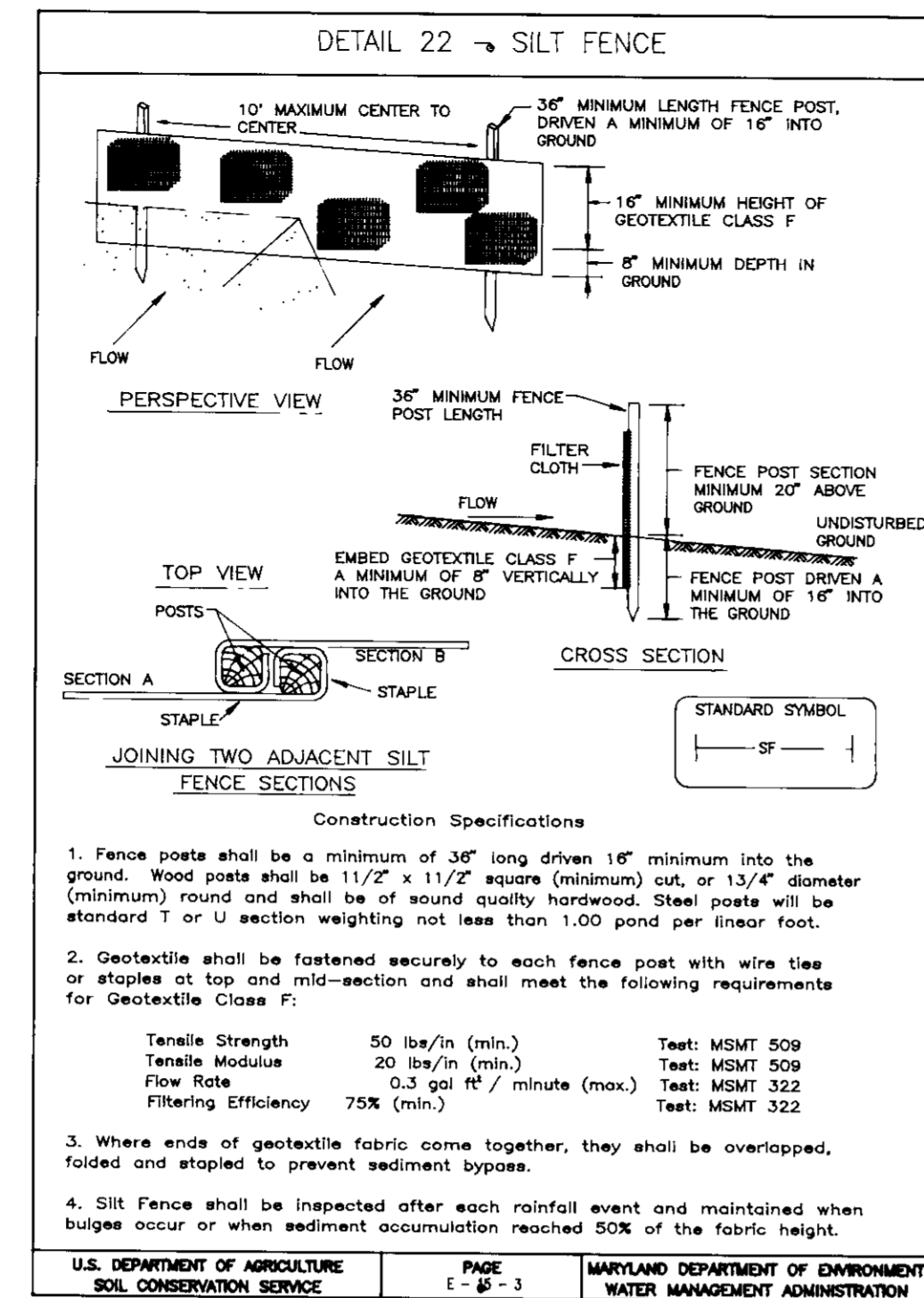
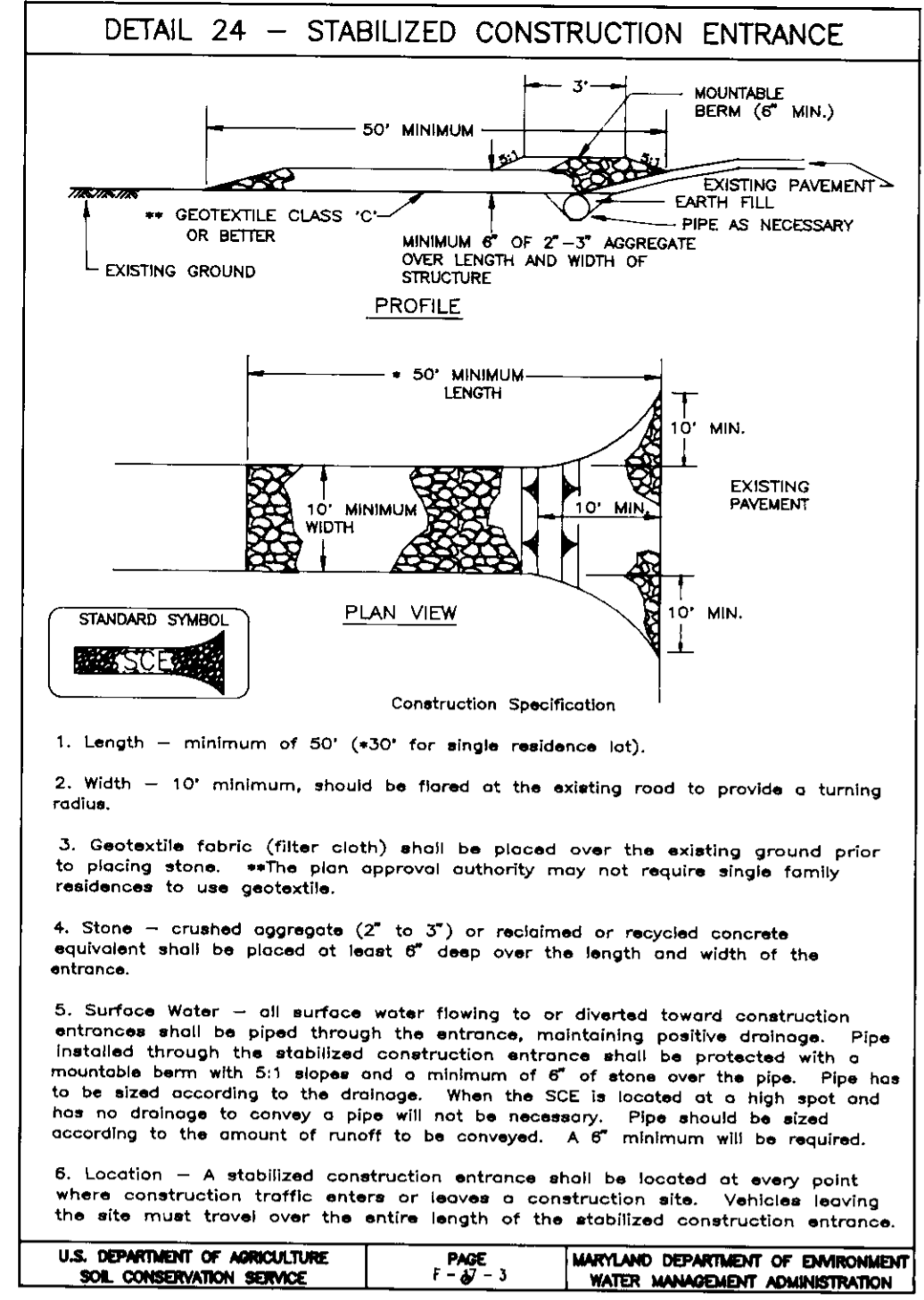
TAX MAP #43 PARCEL '410 & 518'
 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

MARKS & VOGEL ASSOCIATES, INC.

ENGINEERS - SURVEYORS - PLANNERS

3691 PARK AVENUE, SUITE 101 ELLICOTT CITY, MARYLAND 21043 TELEPHONE: (410) 461-5828 FAX: (410) 465-3968

STATE OF MARYLAND PROFESSIONAL ENGINEER AND SURVEYOR
 DRAWN BY: R.H.V.
 CHECKED BY: R.H.V.
 DATE: OCTOBER, 1995
 SCALE: 1"=50'
 W.O. NO.: 95-26



TEMPORARY SEEDING

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed.

Seedbed Preparation: Loosen upper three inches of soil by raking, disking, or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.).

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual ryegrass (3.2 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.7 lbs./1000 sq. ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well-anchored straw mulch, and seed as soon as possible in the spring, or use sod.

Mulching: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gal. per acre (8 gal./1000 sq. ft.) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent, long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper 3 inches of soil by raking, disking, or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Use one of the following schedules:

- Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper 3 inches of soil. At time of seeding apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq. ft.).
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the period March 1 thru April 30 and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs./1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. of Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.5 lbs./1000 sq. ft.) of weeping lovegrass. During the period of October 16 thru February 28, protect site by: Option 1 - 2 tons per acre of well-anchored straw mulch, and seed as soon as possible in the spring. Option 2 - Use sod. Option 3 - Seed with 60 lbs. per acre Kentucky 31 Tall Fescue, and mulch with 2 tons per acre well anchored straw.

Mulching: Apply 1 1/2 to 2 tons per acre (70-90 lbs./1000 sq. ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal./1000 sq. ft.) emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1000 sq. ft.) for anchoring.

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

GREAT COASTAL EXPRESS, INC TRUCKING TERMINAL

DETAILS AND NOTES

TAX MAP #43 6TH ELECTION DISTRICT PARCEL #410 & 518 HOWARD COUNTY, MARYLAND

MARKS-VOGEL ASSOCIATES, INC.

ENGINEERS - SURVEYORS - PLANNERS

8691 PARK AVENUE, SUITE 101 ELLICOTT CITY, MARYLAND 21043 TELEPHONE: (410) 461-5825 FAX: (410) 465-3960

DESIGN BY: R.H.V.
 DRAWN BY: D.G.H.
 CHECKED BY: R.H.V.
 DATE: MARCH, 1996
 SCALE: AS SHOWN
 W.O. NO.: 95-26

7 SHEET OF 8

SDP-96-75

ENGINEERS CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

Robert H. Vogel DATE 4/17/96 SIGNATURE OF ENGINEER ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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 SHALL ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."

John L. Thomas DATE 3/21/97 SIGNATURE OF DEVELOPER

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Howard County Department of Planning and Zoning

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS HOWARD COUNTY HEALTH DEPARTMENT

Howard County Health Department

NO.	REVISION	DATE

APPROVED: COUNTY HEALTH OFFICER DATE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
N/A	N/A	410 & 518

PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
N/A	14	M-1	43	6th	6069.01

WATER CODE B02 SEWER CODE 317000

OWNER/DEVELOPER
 GREAT COASTAL EXPRESS, INC.
 P.O. BOX 100
 1401 W. HUNDRED ROAD
 CHESTER, VIRGINIA 23831
 TELEPHONE: (804) 768-0016

APPROVED: DIRECTOR DATE 4/15/97
 APPROVED: CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE 4/9/97

APPROVED: CHIEF, SOIL CONSERVATION DISTRICT DATE 4/13/97

STORMWATER MANAGEMENT POND CONSTRUCTION SPECIFICATIONS

I. SITE PREPARATION

AREAS DESIGNATED FOR BORROW AREAS, EMBANKMENT, AND STRUCTURAL WORKS SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL. ALL TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED. CHANNEL BANKS AND SHARP BREAKS SHALL BE SLOPED TO NO STEEPER THAN 1:1.

AREAS TO BE COVERED BY THE RESERVOIR WILL BE CLEARED OF ALL TREES, BRUSH, LOGS, FENCES, RUBBISH AND OTHER OBJECTIONABLE MATERIAL UNLESS OTHERWISE DESIGNATED ON THE PLANS. TREES, BRUSH AND STUMPS SHALL BE CUT APPROXIMATELY LEVEL WITH THE GROUND SURFACE. FOR DRY STORMWATER MANAGEMENT PONDS, A MINIMUM OF A 50 FOOT RADIUS AROUND THE INLET STRUCTURE SHALL BE CLEARED.

ALL CLEARED AND GRUBBED MATERIAL SHALL BE DISPOSED OF OUTSIDE AND BELOW THE LIMITS OF THE DAM AND RESERVOIR AS DIRECTED BY THE OWNER OR HIS REPRESENTATIVE. WHEN SPECIFIED, A SUFFICIENT QUANTITY OF TOPSOIL WILL BE STOCKPILED IN A SUITABLE LOCATION FOR USE ON THE EMBANKMENT AND OTHER DESIGNATED AREAS.

II. EARTH FILL

MATERIAL
THE FILL MATERIAL SHALL BE TAKEN FROM APPROVED DESIGNATED BORROW AREAS. IT SHALL BE FREE OF ROOTS, STUMPS, WOOD, RUBBISH, STONES GREATER THAN 6", FROZEN OR OTHER OBJECTIONABLE MATERIALS. FILL MATERIAL FOR THE CENTER OF THE EMBANKMENT AND CUT OFF TRENCH SHALL CONFORM TO UNIFIED SOIL CLASSIFICATION GC, SC, CH, OR CL. CONSIDERATION MAY BE GIVEN TO THE USE OF OTHER MATERIALS IN THE EMBANKMENT IF DESIGN AND CONSTRUCTION ARE SUPERVISED BY A GEOTECHNICAL ENGINEER.

PLACEMENT
AREAS ON WHICH FILL IS TO BE PLACED SHALL BE SCARIFIED PRIOR TO PLACEMENT OF FILL. FILL MATERIALS SHALL BE PLACED IN 8-INCH MAXIMUM THICKNESS (BEFORE COMPACTION) LAYERS WHICH ARE TO BE CONTINUOUS OVER THE ENTIRE LENGTH OF THE FILL. THE MOST PERMEABLE BORROW MATERIAL SHALL BE PLACED IN THE DOWNSTREAM PORTIONS OF THE EMBANKMENT. THE PRINCIPAL SPILLWAY MUST BE INSTALLED CONCURRENTLY WITH FILL PLACEMENT AND NOT EXCAVATED INTO THE EMBANKMENT.

COMPACTION
THE MOVEMENT OF THE HAULING AND SPREADING EQUIPMENT OVER THE FILL SHALL BE CONTROLLED SO THAT THE ENTIRE SURFACE OF EACH LIFT SHALL BE TRAVERSED BY NOT LESS THAN ONE TREAD TRACK OF THE EQUIPMENT OR COMPACTION SHALL BE ACHIEVED BY A MINIMUM OF FOUR COMPLETE PASSES OF A SHEEPSFOOT, RUBBER Tired OR VIBRATORY ROLLER. FILL MATERIAL SHALL CONTAIN SUFFICIENT MOISTURE SO THAT IF FORWARDED INTO A BAIL IT WILL NOT CRUMBLE, YET NOT SO WET THAT WATER CAN BE SQUEEZED OUT.

WHERE A MINIMUM REQUIRED DENSITY IS SPECIFIED, IT SHALL NOT BE LESS THAN 95% OF MAXIMUM DRY DENSITY WITH A MOISTURE CONTENT WITHIN ±2% OF THE OPTIMUM. EACH LAYER OF FILL SHALL BE COMPACTED AS NECESSARY TO OBTAIN THAT DENSITY, AND IS TO BE CERTIFIED BY THE ENGINEER AT THE TIME OF CONSTRUCTION. ALL COMPACTION IS TO BE DETERMINED BY ASTM METHOD 1-99.

CUTOFF TRENCH
THE CUTOFF TRENCH SHALL BE EXCAVATED INTO IMPERVIOUS MATERIAL ALONG OR PARALLEL TO THE CENTERLINE OF THE EMBANKMENT AS SHOWN ON THE PLANS. THE BOTTOM WIDTH OF THE TRENCH SHALL BE COVERED BY THE EQUIPMENT USED FOR EXCAVATION, WITH THE MINIMUM WIDTH BEING FOUR FEET. THE DEPTH SHALL BE AT LEAST FOUR FEET BELOW EXISTING GRADE OR AS SHOWN ON THE PLANS. THE SIDE SLOPES OF THE TRENCH SHALL BE 1 TO 1 OR FLATTER. THE BACKFILL SHALL BE COMPACTED WITH CONSTRUCTION EQUIPMENT, ROLLERS, OR HAND TAMPERS TO ASSURE MAXIMUM DENSITY AND MINIMUM PERMEABILITY.

III. STRUCTURAL BACKFILL
BACKFILL ADJACENT TO PIPES OR STRUCTURES SHALL BE OF THE TYPE AND QUALITY CONFORMING TO THAT SPECIFIED FOR THE ADJOINING FILL MATERIAL. THE FILL SHALL BE PLACED IN HORIZONTAL LAYERS NOT TO EXCEED FOUR INCHES IN THICKNESS AND COMPACTED BY HAND TAMPERS OR MANUALLY DIRECTED COMPACTION EQUIPMENT. THE MATERIAL NEEDS TO FILL COMPLETELY ALL SPACES UNDER AND ADJACENT TO THE PIPE AT NO TIME DURING THE BACKFILLING OPERATION SHALL DRIVEN EQUIPMENT BE ALLOWED TO OPERATE CLOSER THAN FOUR FEET, MEASURED HORIZONTALLY, TO ANY PART OF A STRUCTURE. UNDER NO CIRCUMSTANCES SHALL EQUIPMENT BE ALLOWED TO OPERATE ON OR AGAINST THE STRUCTURE OR PIPE, UNLESS THERE IS A COMPACTED FILL OF 24" OR GREATER OVER THE STRUCTURE OR PIPE.

IV. PIPE CONDUITS
ALL PIPES SHALL BE CIRCULAR IN CROSS SECTION.
A. CORRUGATED METAL PIPE—ALL OF THE FOLLOWING CRITERIA SHALL APPLY FOR CORRUGATED METAL PIPE:
1. MATERIALS — (STEEL PIPE) — THIS PIPE AND ITS APPURTENANCES SHALL BE GALVANIZED AND FULLY BITUMINOUS COATED AND SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION M-190 TYPE A WITH WATER TIGHT COUPLING BANDS. ANY BITUMINOUS COATING DAMAGED OR OTHERWISE REMOVED SHALL BE REPLACED WITH COLD APPLIED BITUMINOUS COATING COMPOUND.
STEEL PIPES WITH POLYMERIC COATING SHALL HAVE A MINIMUM COATING THICKNESS OF 0.01 INCH (10 MIL) ON BOTH SIDES OF THE PIPE. THE FOLLOWING COATINGS OR AN APPROVED EQUAL MAY BE USED: HEXON, PLASTI-COTE, BLAC-KLAD, AND BETH-CU-LOY. COATED CORRUGATED STEEL PIPE SHALL MEET THE REQUIREMENTS OF ASTM M-245 AND M-246.
2. MATERIALS — (ALUMINUM COATED STEEL PIPE) — THIS PIPE AND ITS APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION M-274 WITH WATER TIGHT COUPLING BANDS OR FLANGES. ANY ALUMINUM COATING DAMAGED OR OTHERWISE REMOVED SHALL BE REPLACED WITH COLD APPLIED BITUMINOUS COATING COMPOUND.
MATERIALS — (ALUMINUM PIPE) — THIS PIPE AND ITS APPURTENANCES SHALL CONFORM TO THE REQUIREMENTS OF ASTM SPECIFICATION M-196 OR M-211 WITH WATER TIGHT COUPLING BANDS OR FLANGES. ALUMINUM SURFACES THAT ARE TO BE IN CONTACT WITH CONCRETE SHALL BE PAINTED WITH ONE COAT OF ZINC CHROMATE PRIMER. HOT DIP GALVANIZED BOLTS MAY BE USED FOR CONNECTIONS. THE PH OF THE SURROUNDING SOILS SHALL BE BETWEEN 4 AND 9.

3. COUPLING BANDS, ANTI-SEEP COLLARS, END SECTIONS, ETC., MUST BE COMPOSED OF THE SAME MATERIAL AS THE PIPE. METALS MUST BE INSULATED FROM DISSIMILAR MATERIALS WITH USE OF RUBBER OR PLASTIC INSULATING MATERIALS AT LEAST 24 MILS IN THICKNESS.
4. CONNECTIONS — ALL CONNECTIONS WITH PIPES MUST BE COMPLETELY WATER TIGHT. THE DRAIN PIPE OR BARREL CONNECTION TO THE RISER SHALL BE WELDED ALL AROUND WHEN THE PIPE AND RISER ARE METAL. ANTI-SEEP COLLARS SHALL BE CONNECTED TO THE PIPE IN SUCH A MANNER AS TO BE COMPLETELY WATER TIGHT. DIMPLE BANDS ARE NOT CONSIDERED TO BE WATER TIGHT.
ALL CONNECTIONS SHALL USE A RUBBER OR NEOPRENE GASKET WHEN JOINING PIPE SECTIONS. THE END OF EACH PIPE SHALL BE RE-ROLLED AN ADEQUATE NUMBER OF CORRUGATIONS TO ACCOMMODATE THE BAND WIDTH. THE FOLLOWING TYPE CONNECTIONS ARE ACCEPTABLE FOR PIPES LESS THAN 48" IN DIAMETER: FLANGES ON BOTH ENDS OF THE PIPE, A 12" WIDE STANDARD LAP THE BAND WITH 12" WIDE BY 3/8" THICK CLOSED CELL CIRCULAR NEOPRENE GASKET, AND A 12" WIDE HUGGER TYPE BAND WITH O-RING GASKETS HAVING A MINIMUM DIAMETER OF 1/2" GREATER THAN THE CORRUGATION DEPTH. PIPES 48" IN DIAMETER AND LARGER SHALL BE CONNECTED BY A 24" LONG ANNUAL CORRUGATED BAND USING RODS AND LUGS. A 12" WIDE BY 3/8" THICK CLOSED CELL CIRCULAR NEOPRENE GASKET WILL BE INSTALLED ON THE END OF EACH PIPE FOR A TOTAL OF 24". HELICALLY CORRUGATED PIPE SHALL HAVE EITHER CONTINUOUSLY WELDED SEAMS OR HAVE LOCK SEAMS WITH INTERNAL CAULKING OR A NEOPRENE BEAD.

V. CONCRETE
CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 608, MIX NO. 3.

VI. CARE OF WATER DURING CONSTRUCTION
ALL WORK ON THE PERMANENT STRUCTURES SHALL BE CARRIED OUT IN AREAS FREE FROM WATER. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL TEMPORARY DAMS, LEVES, COTTERDAMS, DRAINAGE CHANNELS, AND STREAM DIVERSIONS NECESSARY TO PROTECT THE AREAS TO BE OCCUPIED BY THE PERMANENT WORKS. THE CONTRACTOR SHALL ALSO FURNISH, INSTALL, OPERATE AND MAINTAIN ALL NECESSARY PUMPING AND OTHER EQUIPMENT REQUIRED FOR REMOVAL OF WATER FROM THE VARIOUS PARTS OF THE WORK AND FOR MAINTAINING THE EXCAVATIONS, FOUNDATION, AND OTHER PARTS OF THE WORK FREE FROM WATER AS REQUIRED OR DIRECTED BY THE ENGINEER FOR CONSTRUCTING EACH PART OF THE WORK. AFTER HAVING SERVED THEIR PURPOSE, ALL TEMPORARY PROTECTIVE WORKS SHALL BE REMOVED OR LEVELED AND GRADED TO THE EXTENT REQUIRED TO PREVENT OBSTRUCTION IN ANY DEGREE WHATSOEVER OF THE FLOW OF WATER TO THE SPILLWAY OR OUTLET WORKS AND SO AS NOT TO INTERFERE IN ANY WAY WITH THE OPERATION OR MAINTENANCE OF THE STRUCTURE. STREAM DIVERSIONS SHALL BE MAINTAINED UNTIL THE FULL FLOW CAN BE PASSED THROUGH THE PERMANENT WORKS. THE REMOVAL OF WATER FROM THE REQUIRED EXCAVATION AND THE FOUNDATION SHALL BE ACCOMPLISHED IN A MANNER AND TO THE EXTENT THAT WILL MAINTAIN STABILITY OF THE EXCAVATED SLOPES AND BOTTOM OF REQUIRED EXCAVATIONS AND WILL ALLOW SATISFACTORY PERFORMANCE OF ALL CONSTRUCTION OPERATIONS. DURING THE PLACING AND COMPACTING OF MATERIAL IN REQUIRED EXCAVATIONS, THE WATER LEVEL AT THE LOCATIONS BEING REFILLED SHALL BE MAINTAINED BELOW THE BOTTOM OF THE EXCAVATION AT SUCH LOCATIONS WHICH MAY REQUIRE DRAINING THE WATER TO SLIPS FROM WHICH THE WATER SHALL BE PUMPED.

VII. STABILIZATION
ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND LEFT IN A SIGHTLY CONDITION. ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, SPOIL AND BORROW AREAS, AND BERMS SHALL BE STABILIZED BY SEEDING, LIMING, FERTILIZING AND MULCHING IN ACCORDANCE WITH THE MARYLAND SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS FOR CRITICAL AREA PLANTING (MD-342) OR AS SHOWN ON THE ACCOMPANYING DRAWINGS.

VIII. EROSION AND SEDIMENT CONTROL
CONSTRUCTION OPERATIONS WILL BE CARRIED OUT IN SUCH A MANNER THAT EROSION WILL BE CONTROLLED AND WATER AND AIR POLLUTION MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT WILL BE FOLLOWED. CONSTRUCTION PLANS SHALL DETAIL EROSION AND SEDIMENT CONTROL MEASURES TO BE EMPLOYED DURING THE CONSTRUCTION PROCESS.
IX. ROCK RIPRAP
ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, AND MATERIALS, SECTION 608, MIX NO. 3.
BULK SPECIFIC GRAVITY AND ABSORPTION SHALL BE DETERMINED ACCORDING TO ASTM C 127. THE TEST FOR SOUNDNESS SHALL BE PERFORMED ACCORDING TO ASTM C 88.
THE RIPRAP SHALL BE PLACED TO THE REQUIRED THICKNESS IN ONE OPERATION. THE ROCK SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THE RIPRAP IN PLACE SHALL BE HOMOGENEOUS WITH THE LARGER ROCKS UNIFORMLY DISTRIBUTED AND FIRMLY IN CONTACT ONE TO ANOTHER WITH THE SMALLER ROCKS FILLING THE VOIDS BETWEEN THE LARGER ROCKS. FILTER CLOTH SHALL BE PLACED UNDER ALL RIPRAP AND SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 918.12.

* ALSO, SEE HERBST + ASSOC. 7/24/95 REPORT, APPENDIX III FOR FURTHER SPECIFICATIONS

- NOTES**
- SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE, WASHINGTON METROPOLITAN AREA" FOR ALL MATERIAL, PRODUCT, AND PROCEDURE SPECIFICATIONS.
 - SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
 - PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
 - KEEP MULCH 1" FROM TRUNK

- REINFORCED CONCRETE PIPE** — ALL OF THE FOLLOWING CRITERIA SHALL APPLY FOR REINFORCED CONCRETE PIPE:
- MATERIALS — REINFORCED CONCRETE PIPE SHALL HAVE BELL AND SPIGOT JOINTS WITH RUBBER GASKETS AND SHALL EQUAL OR EXCEED ASTM DESIGNATION C-361.
 - BEDDING — ALL REINFORCED CONCRETE PIPE CONDUITS SHALL BE LAID IN CONCRETE BEDDING FOR THEIR ENTIRE LENGTH. THIS BEDDING SHALL CONSIST OF HIGH SLUMP CONCRETE PLACED UNDER THE PIPE AND UP THE SIDES OF THE PIPE AT LEAST 10X OF ITS OUTSIDE DIAMETER WITH A MINIMUM THICKNESS OF 3 INCHES, OR AS SHOWN ON THE DRAWINGS.
 - LAYING PIPE — BELL AND SPIGOT PIPE SHALL BE PLACED WITH THE BELL END UPSTREAM. JOINTS SHALL BE MADE IN ACCORDANCE WITH RECOMMENDATIONS OF THE MANUFACTURER OF THE MATERIAL. AFTER THE JOINTS ARE SEALED FOR THE ENTIRE LINE, THE BEDDING SHALL BE PLACED SO THAT ALL SPACES UNDER THE PIPE ARE FILLED. CARE SHALL BE EXERCISED TO PREVENT ANY DEVIATION FROM THE ORIGINAL LINE AND GRADE OF THE PIPE. THE FIRST JOINT MUST BE LOCATED WITHIN 2 FEET FROM THE RISER.
 - BACKFILLING SHALL CONFORM TO STRUCTURAL BACKFILL AS SHOWN ABOVE.
 - OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.

- POLYVINYL CHLORIDE (PVC) PIPE** — ALL OF THE FOLLOWING CRITERIA SHALL APPLY FOR POLYVINYL CHLORIDE (PVC) PIPE:
- MATERIALS — PVC PIPE SHALL BE PVC-1120 OR PVC-1220 CONFORMING TO ASTM D-1785 OR ASTM D-2241.
 - JOINTS AND CONNECTIONS TO ANTI-SEEP COLLARS SHALL BE COMPLETELY WATER TIGHT.
 - BEDDING — THE PIPE SHALL BE FIRMLY AND UNIFORMLY BEDDED THROUGHOUT ITS ENTIRE LENGTH. WHERE ROCK OR SOFT, SPONGY OR OTHER UNSTABLE SOIL IS ENCOUNTERED, ALL SUCH MATERIAL SHALL BE REMOVED AND REPLACED WITH SUITABLE EARTH COMPACTION TO PROVIDE ADEQUATE SUPPORT.
 - BACKFILLING SHALL CONFORM TO STRUCTURAL BACKFILL AS SHOWN ABOVE.
 - OTHER DETAILS (ANTI-SEEP COLLARS, VALVES, ETC.) SHALL BE AS SHOWN ON THE DRAWINGS.

- CONCRETE**
CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 608, MIX NO. 3.

- CARE OF WATER DURING CONSTRUCTION**
ALL WORK ON THE PERMANENT STRUCTURES SHALL BE CARRIED OUT IN AREAS FREE FROM WATER. THE CONTRACTOR SHALL CONSTRUCT AND MAINTAIN ALL TEMPORARY DAMS, LEVES, COTTERDAMS, DRAINAGE CHANNELS, AND STREAM DIVERSIONS NECESSARY TO PROTECT THE AREAS TO BE OCCUPIED BY THE PERMANENT WORKS. THE CONTRACTOR SHALL ALSO FURNISH, INSTALL, OPERATE AND MAINTAIN ALL NECESSARY PUMPING AND OTHER EQUIPMENT REQUIRED FOR REMOVAL OF WATER FROM THE VARIOUS PARTS OF THE WORK AND FOR MAINTAINING THE EXCAVATIONS, FOUNDATION, AND OTHER PARTS OF THE WORK FREE FROM WATER AS REQUIRED OR DIRECTED BY THE ENGINEER FOR CONSTRUCTING EACH PART OF THE WORK. AFTER HAVING SERVED THEIR PURPOSE, ALL TEMPORARY PROTECTIVE WORKS SHALL BE REMOVED OR LEVELED AND GRADED TO THE EXTENT REQUIRED TO PREVENT OBSTRUCTION IN ANY DEGREE WHATSOEVER OF THE FLOW OF WATER TO THE SPILLWAY OR OUTLET WORKS AND SO AS NOT TO INTERFERE IN ANY WAY WITH THE OPERATION OR MAINTENANCE OF THE STRUCTURE. STREAM DIVERSIONS SHALL BE MAINTAINED UNTIL THE FULL FLOW CAN BE PASSED THROUGH THE PERMANENT WORKS. THE REMOVAL OF WATER FROM THE REQUIRED EXCAVATION AND THE FOUNDATION SHALL BE ACCOMPLISHED IN A MANNER AND TO THE EXTENT THAT WILL MAINTAIN STABILITY OF THE EXCAVATED SLOPES AND BOTTOM OF REQUIRED EXCAVATIONS AND WILL ALLOW SATISFACTORY PERFORMANCE OF ALL CONSTRUCTION OPERATIONS. DURING THE PLACING AND COMPACTING OF MATERIAL IN REQUIRED EXCAVATIONS, THE WATER LEVEL AT THE LOCATIONS BEING REFILLED SHALL BE MAINTAINED BELOW THE BOTTOM OF THE EXCAVATION AT SUCH LOCATIONS WHICH MAY REQUIRE DRAINING THE WATER TO SLIPS FROM WHICH THE WATER SHALL BE PUMPED.

- STABILIZATION**
ALL BORROW AREAS SHALL BE GRADED TO PROVIDE PROPER DRAINAGE AND LEFT IN A SIGHTLY CONDITION. ALL EXPOSED SURFACES OF THE EMBANKMENT, SPILLWAY, SPOIL AND BORROW AREAS, AND BERMS SHALL BE STABILIZED BY SEEDING, LIMING, FERTILIZING AND MULCHING IN ACCORDANCE WITH THE MARYLAND SOIL CONSERVATION SERVICE STANDARDS AND SPECIFICATIONS FOR CRITICAL AREA PLANTING (MD-342) OR AS SHOWN ON THE ACCOMPANYING DRAWINGS.

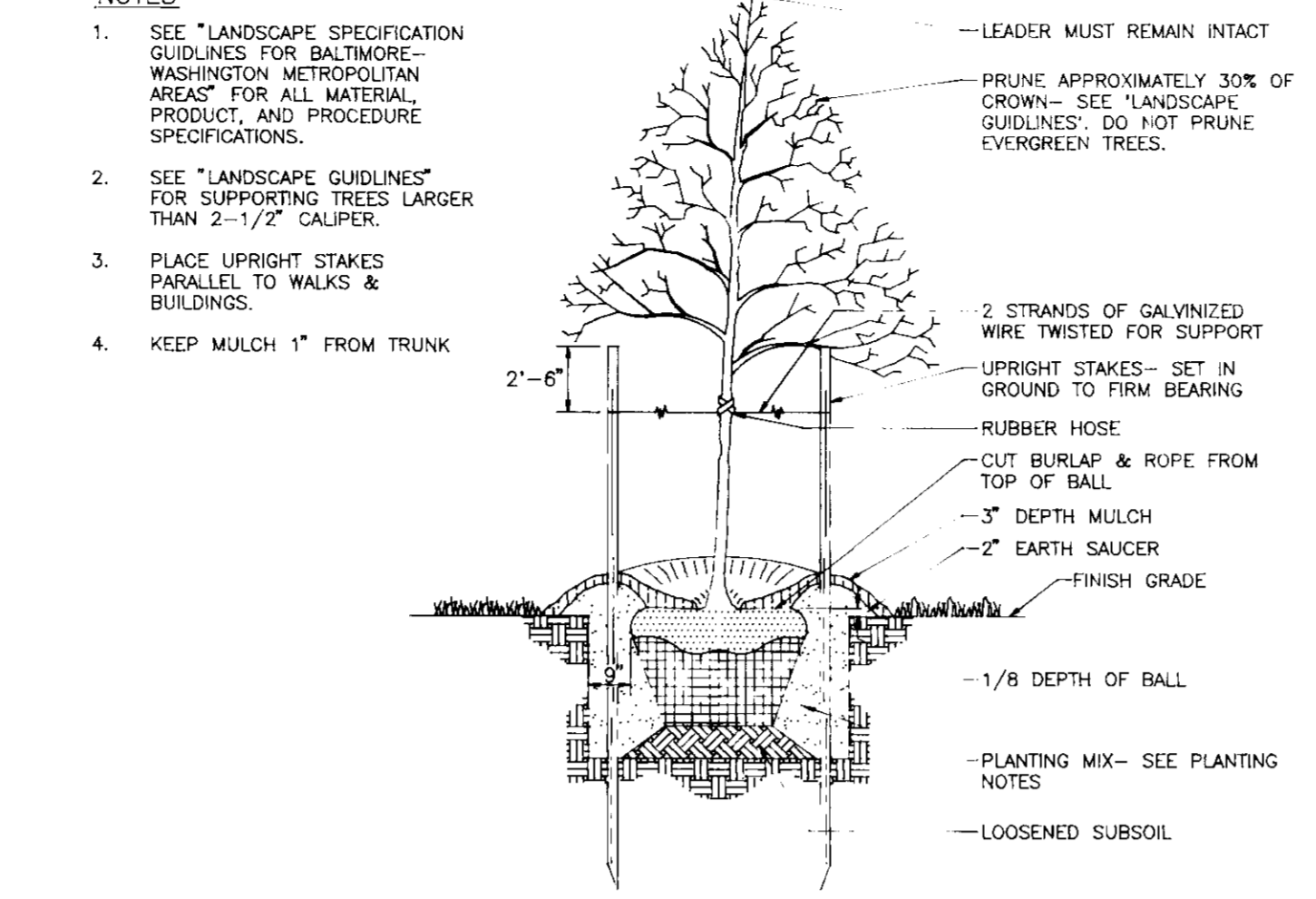
- EROSION AND SEDIMENT CONTROL**
CONSTRUCTION OPERATIONS WILL BE CARRIED OUT IN SUCH A MANNER THAT EROSION WILL BE CONTROLLED AND WATER AND AIR POLLUTION MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT WILL BE FOLLOWED. CONSTRUCTION PLANS SHALL DETAIL EROSION AND SEDIMENT CONTROL MEASURES TO BE EMPLOYED DURING THE CONSTRUCTION PROCESS.
ROCK RIPRAP
ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, AND MATERIALS, SECTION 608, MIX NO. 3.
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THE RIPRAP SHALL BE PLACED TO THE REQUIRED THICKNESS IN ONE OPERATION. THE ROCK SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THE RIPRAP IN PLACE SHALL BE HOMOGENEOUS WITH THE LARGER ROCKS UNIFORMLY DISTRIBUTED AND FIRMLY IN CONTACT ONE TO ANOTHER WITH THE SMALLER ROCKS FILLING THE VOIDS BETWEEN THE LARGER ROCKS. FILTER CLOTH SHALL BE PLACED UNDER ALL RIPRAP AND SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 918.12.

- CONCRETE**
CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 608, MIX NO. 3.

- EROSION AND SEDIMENT CONTROL**
CONSTRUCTION OPERATIONS WILL BE CARRIED OUT IN SUCH A MANNER THAT EROSION WILL BE CONTROLLED AND WATER AND AIR POLLUTION MINIMIZED. STATE AND LOCAL LAWS CONCERNING POLLUTION ABATEMENT WILL BE FOLLOWED. CONSTRUCTION PLANS SHALL DETAIL EROSION AND SEDIMENT CONTROL MEASURES TO BE EMPLOYED DURING THE CONSTRUCTION PROCESS.

- ROCK RIPRAP**
ROCK RIPRAP SHALL MEET THE REQUIREMENTS OF THE MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, AND MATERIALS, SECTION 608, MIX NO. 3.
BULK SPECIFIC GRAVITY AND ABSORPTION SHALL BE DETERMINED ACCORDING TO ASTM C 127. THE TEST FOR SOUNDNESS SHALL BE PERFORMED ACCORDING TO ASTM C 88.
THE RIPRAP SHALL BE PLACED TO THE REQUIRED THICKNESS IN ONE OPERATION. THE ROCK SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL INSURE THE RIPRAP IN PLACE SHALL BE HOMOGENEOUS WITH THE LARGER ROCKS UNIFORMLY DISTRIBUTED AND FIRMLY IN CONTACT ONE TO ANOTHER WITH THE SMALLER ROCKS FILLING THE VOIDS BETWEEN THE LARGER ROCKS. FILTER CLOTH SHALL BE PLACED UNDER ALL RIPRAP AND SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 918.12.

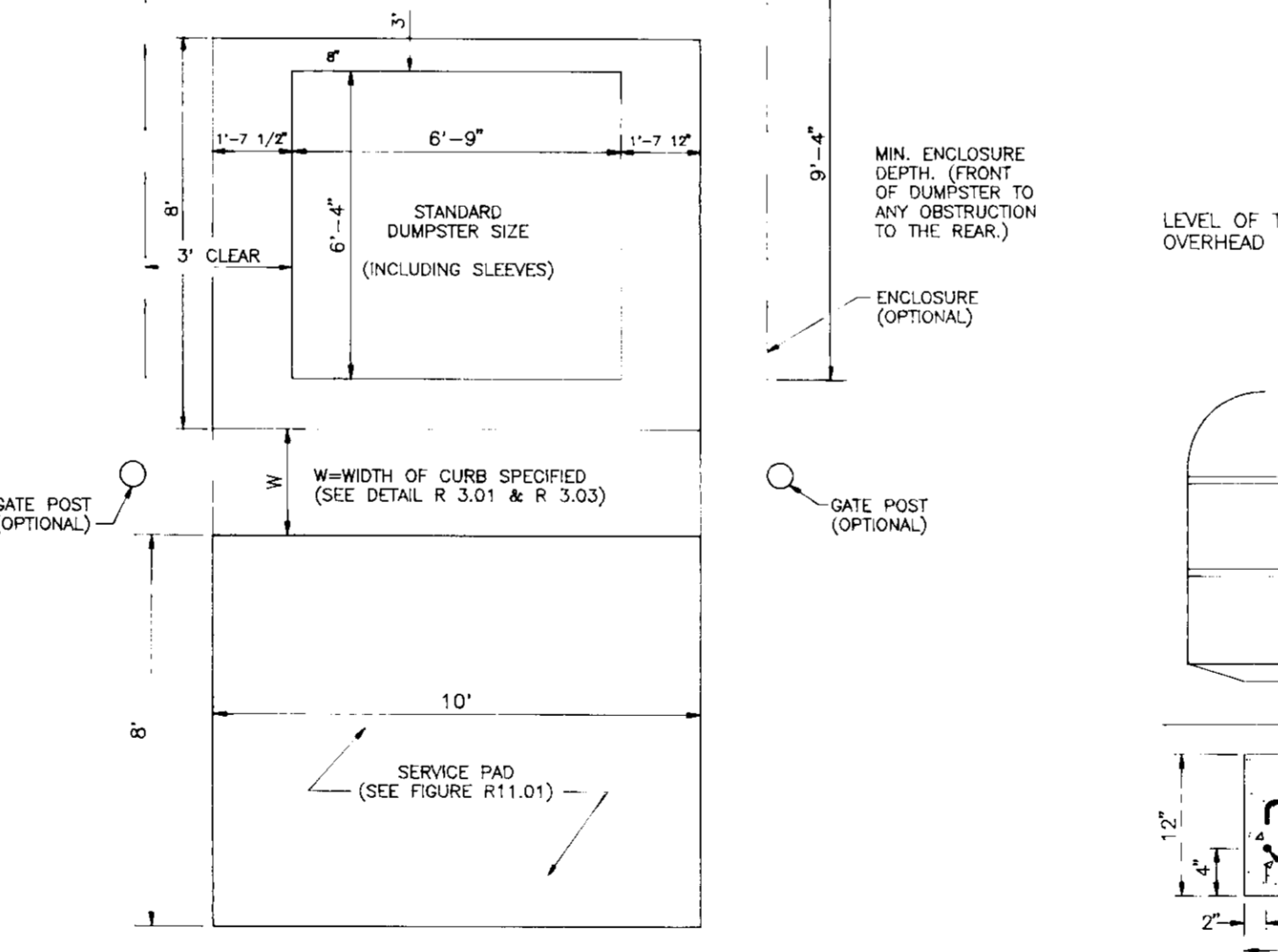
- CONCRETE**
CONCRETE SHALL MEET THE REQUIREMENTS OF MARYLAND DEPARTMENT OF TRANSPORTATION, STATE HIGHWAY ADMINISTRATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, SECTION 608, MIX NO. 3.



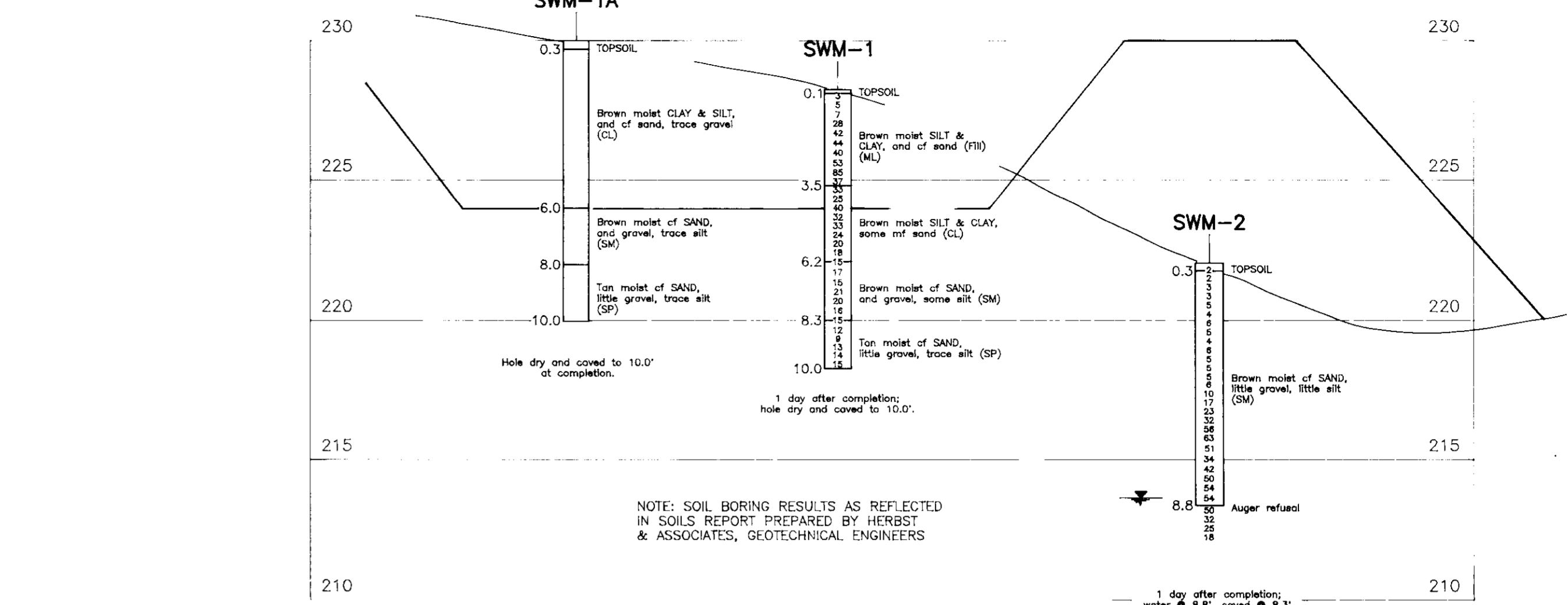
TREE PLANTING AND STAKING
DECIDUOUS AND EVERGREEN TREES UP TO 2-1/2" CALIPER NOT TO SCALE



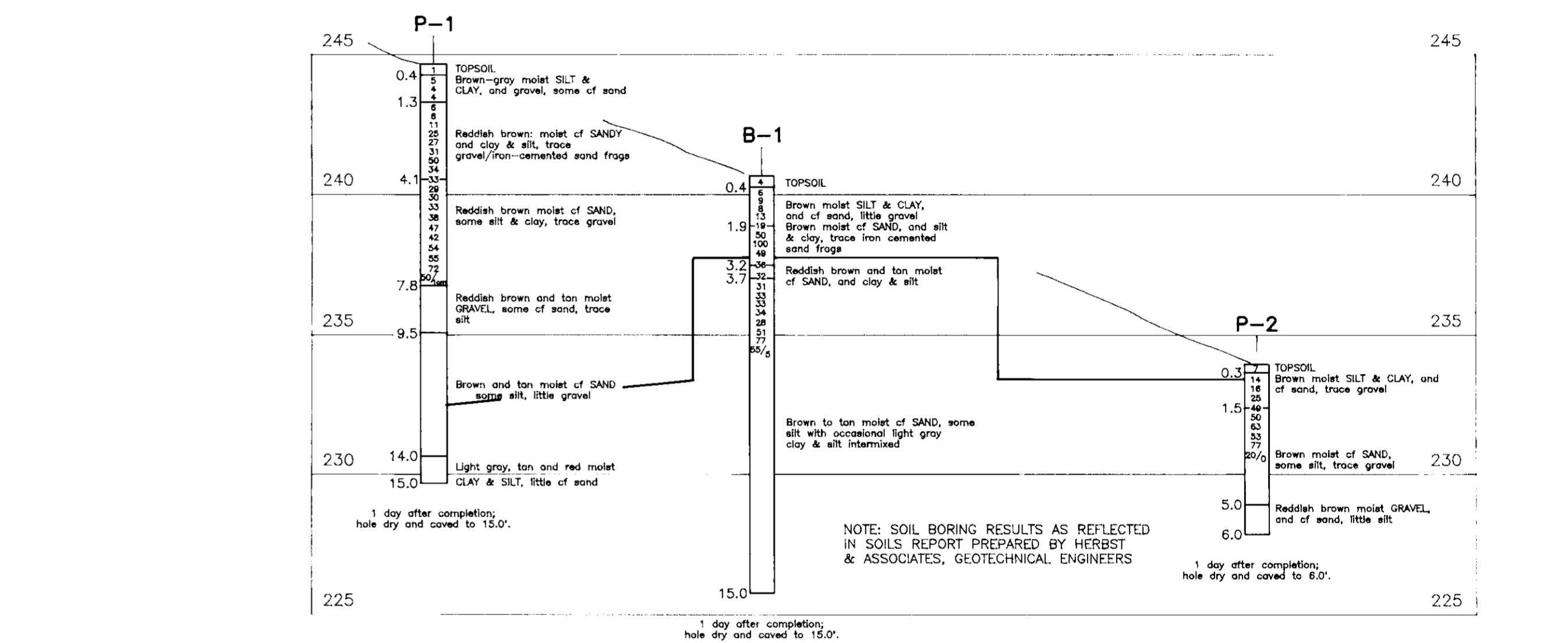
SOLID WASTE OPTIONAL CONTAINER ENCLOSURE
HOWARD COUNTY STD. R 11.02 NOT TO SCALE



SOLID WASTE SERVICE PAD
HOWARD COUNTY STD. R 11.01 NOT TO SCALE



SECTION B-B BORING PROFILE
NOT TO SCALE



SECTION A-A BORING PROFILE
NOT TO SCALE

ENGINEERS CERTIFICATE
"I HEREBY CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
SIGNATURE OF ENGINEER: Robert H. Vogel
DATE: 8/17/96

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, AND THAT ANY RESPONSIBLE PERSONNEL SHALL BE KEPT ADVISED OF THE PROGRESS OF THE PROJECT. I HAVE NOTIFIED THE DEVELOPER THAT HE/SHE MUST ENGAGE A REGISTERED PROFESSIONAL ENGINEER TO SUPERVISE POND CONSTRUCTION AND PROVIDE THE HOWARD SOIL CONSERVATION DISTRICT WITH AN "AS-BUILT" PLAN OF THE POND WITHIN 30 DAYS OF COMPLETION."
SIGNATURE OF DEVELOPER: Robert H. Vogel
DATE: 3/21/97

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL.
APPROVED: Howard County Department of Planning and Zoning
DIRECTOR: [Signature]
DATE: 4/15/97

THESE PLANS FOR SMALL POND CONSTRUCTION, SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
APPROVED: [Signature]
DATE: 4/13/97
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
HOWARD COUNTY HEALTH DEPARTMENT
COUNTY HEALTH OFFICER: [Signature]
DATE: N/A

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER			
N/A	N/A	410 & 518			
PLAT NO.	BLOCK NO.	ZONE	TAX/ZONE	ELECT. DIST.	CENSUS TR.
N/A	14	M-1	43	6th	6069.01
WATER CODE	SEWER CODE				
802	317000				

GREAT COASTAL EXPRESS, INC TRUCKING TERMINAL
POND NOTES AND DETAILS
TAX MAP #43 PARCEL '410 & 518'
6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

MARKS-VOGEL ASSOCIATES, INC.
ENGINEERS - SURVEYORS - PLANNERS
3891 PARK AVENUE, SUITE 101 ELLICOTT CITY, MARYLAND 21043
TELEPHONE: (410) 461-6828 FAX: (410) 465-9966

DESIGN BY: R.H.V.
DRAWN BY: D.G.H.
CHECKED BY: R.H.V.
DATE: OCTOBER, 1995
SCALE: AS SHOWN
W.O. NO.: 95-26

8 SHEET OF 8