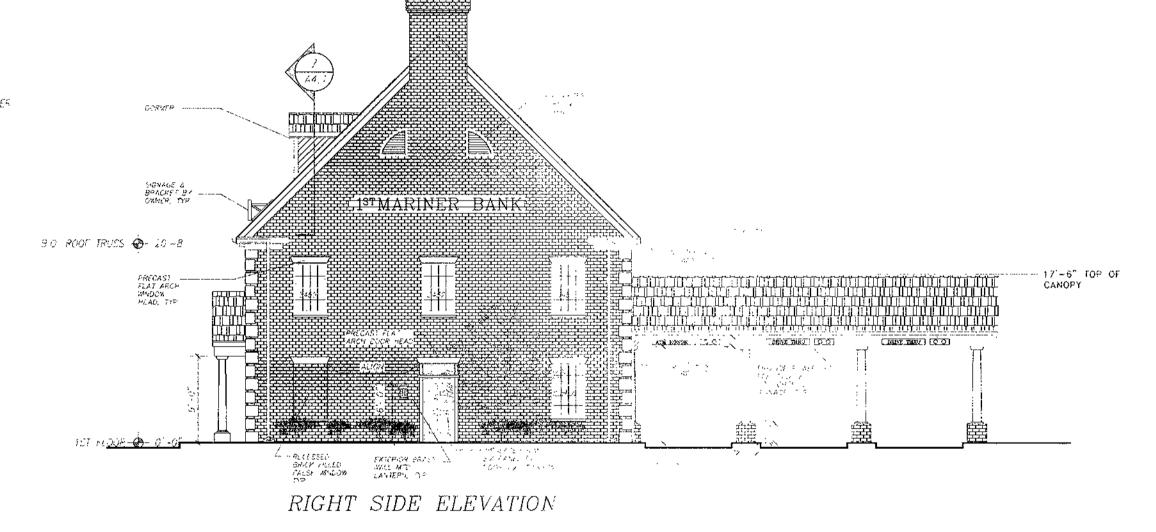
GENERAL CONSTRUCTION NOTES

- 1. All construction shall be in accordance with the latest standards and specifications of Howard County plus MSHA standards and specifications.
- 2. 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
- 3. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- 4. 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 sign shall be in place prior to the placement of any asphalt.
- 5. All plan dimensions are to face of curb unless otherwise noted.
- 6. The existing topography is taken from field run survey with one foot contour intervals prepared by KCW Engineering Technologies, Inc. dated 3-19-99.
- 7. The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County Monument Nos. 24AA and 2485 were used for this project.
- 8. Water is public State contract 131 -W.
- 9. Sewer is public. State contract 411-S
- 10. Starmwater management will be provided using a privately owned and maintained underground extended detention facility and Stormceptors for water quality.
- 11. Existing utilities shown on these plans are base upon observable field information, previous construction drawings for the site, the best available information from the utility companies, the State of Maryland and Howard County. The owner and Engineer do not warrant or quarantee the completeness or the correctness of this existing utility information. The Contractor shall verify as such information to his own satisfaction.
- 12. The traffic study for this project was prepared by The Traffic Group dated 9-1-99 and was approved on 11-10-99.
- 13. Contractor shall take all necessary precautions to support and protect all existing utilities when working adjacent to or crossing existing utilities. Any damage to existing facilities shall be repaired or replaced at Contractor's expense.
- 14. "Full Trench Compaction" shall be used for both work within public right-of-way and for all on site installations.
- 15. Contractor shall adhere to all Federal, State and County health, safety, and environmental
- 16. All excess paving and other unsuitable material shall be removed from this site to an area with an approved Sed-ment Control plan and permit 17. All grading shall be accomplished in accordance with the grades specified on Site
- Development Plan (G 2). 18. Spot elevations benote paving or finish grade unless otherwise noted.





UTILITY SCOPE OF WORK

Contractor shall furnish all materials and labor necessary for abandonment, construction and modification to storm drains, water service and sanitary sewer. Utility contractor shall obtain all necessary permits from Howard County. Note: Existing hydrant to be relocated per Advanced Deposit Order (ADO). 1ST FLOOR - 2432 S.F. COMMERCIAL BANK Utility work within the RTE 40 R/W shall be done in accordance with 2ND FLOOR - 2432 S.F. GENERAL OFFICE S.H.A. Utility permit

FRONT ELEVATION

SANITARY SEWER

1. P.V.C. (Poly-Vinyl Chloride) pipe SCH 35.

2. Clean-out: P.V.C. per Building Code criteria

WATER SERVICE

1. Services 2" or less shall be type "K" copper pipe and fittings.

STORM DRAINS

1st MARINER BANK

ELLICOTT CITY BRANCH

SITE DEVELOPMENT PACKAGE

HOWARD COUNTY, MARYLAND

- 1. 18" R.C.P. (Reinforced Concrete Pipe) shall be ASTM C-361-90, Class IV with "Tylox Super-Seal", or equal, pre-lubricated pipe gaskets.
- 2. 15" R.C.P. (Reinforced Concrete Pipe) shall be Class IV pipe.
- 3. 60" Aluminized Steel 14, Gauge, 5"x1" Corrugations. Pipe Material shall meet AASHTO 274, ASTM A 929 and Pipe shall conform to AASHTO M 36, ASTM A 760.
- 4. 15"&18" Aluminized Steel 16, Gauge, Pipe shall be seamless with box ribs on the exterior and a smooth interior waterway. Pipe Material shall meet AASHTO 274, ASTM A 929 and Pipe shall conform to AASHTO M 36,
- 5. P.V.C. (Poly-Vinyl Chloride) pipe SCH 40.
- 6. Inlets: S.H.A. C.O.G.-20 per S.H.A. detail MD-374.51. On-site - Double 'S' Combination inlet per Howard County detail SD-4.34. 10" In-line Drain shall be Nylopłast or equal conformating with ASTM D3212 with H-10 grate conformating with ASTM A-48-83 Class 30B.
- 7. Manholes: S.H.A. Standard Pre-cast Manhole per S.H.A. detail MD-384.01. On-site - Standard Precast Shallow Manhole per Howard County

8. All storm drains shall be constructed per the profiles on sheet G-3. ADDRESS CHART THIS PLAN HAS BEEN REVIEWED FOR HOWARD KCW J.O.: 99521 SOIL CONSERVATION DISTRICT AND MEET THE TECHNICA APPROVED: HOWARD COUNTY DEPARTMENT OF 10065 BALTIMORE NATIONAL PIKE NO SCALE PLANNING AND ZONING ELLICOTT CITY, MD 21042 DESIGNED: K C.A. PERMIT INFORMATION CHART DRAWN: K.C.A. 1st MARINER BANK Cenus Tract CHECKED: NSH Election District 2nd 6023.01 DATE: JAN. 4, 2000 Sewer Code: н- €8 5440000 DRAWING NO.

BENCHMARKS

- HOWARD CO. HUB NO. 24AA, EL 387.28 N 587380.490 E 1352603.459 0.1± MILE EAST OF BETHANY LANE AT THE ENCHANTED FOREST SHOPPING CENTER BETWEEN 10000-10060 BALTIMORE NATL, PIKE, A BRASS DISC (1" TO 2" BELOY
- TERAIN) SET ATOP A CONCRETE CYLINDRIC BASE HOWARD CO. HUB NO. 24B5, EL. 390.948 N 586956.266 E 1356570.824 EAST OF DOGWOOD ROAD ALONG BALTIMORE

NATL. PIKE. A BRASS DISC (1" TO 2" BELOW TERAIN)

SHEET INDEX:

- 1 COVER SHEET (G-1) 2 SITE DEVELOPMENT PLAN (G-2)
- 3 UTILITY PROFILES (G-3) 4 SITE DETAILS (G-4)

SET ATOP A CONCRETE CYLINDRIC BASE

- 5 SWM D.A. MAPS & SPECIFICATIONS (G-5) 6 STORM WATER MANAGEMENT DETAILS (G-6) 7 STORMCEPTOR DETAILS (G-7)
- 8 SEDIMENT CONTROL PLAN (G-8) 9 SEDIMENT CONTROL DETAILS (G-9)
- 10 LANDSCAPE PLAN (G-10)
- (MON. 24B5) NATIONAL PIKE VICINITY MAF SCALE: 1"=1000

GENERAL NOTES

CARROLL DEVELOPMENT, LLC 10065 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042-3611

DEVELOPER: 1st MARINER BANK ATTN.: KENNETH C. JONES

> 1801 SOUTH CLINTON STREET BALTIMORE, MARYLAND 21224

2. PROPERTY LOCATION: 10065 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042-3611

DEED: TAX ACCOUNT NO .: 245299 1.0 AC. 43,560 S.F. TAX MAP: 24 p. 67

4. ELECTION DISTRICT:

Local Community is Ellicott City ZONING: B-2 Per 10-18-93 Comprehensive Zoning Plan

Note: All adjacent properties zoned B-2 6. EXISTING LAND USE: Vacant, former Southern State Cooperative

Note: Previous DPZ file, SDP 94-88

PROPOSED LAND USE: Proposed financial institution (1st Mariner Bank) with a canopy in the rear of the building as well as associated parking.

Existing (For existing bulk propone facility) Required (Per HCZR Section 133 D 3&4)

General Office Space: 3.3 spaces per 1000 sf (2432 sf building) = 9 ps Commercial Bank Use: 5 spaces per 1000 sf (2432 sf building) = 13 ps Total Parking Spaces Required: Total Parking Spaces Provided: = 24 ps

PARKING SHALL BE PERMANENTLY STRIPED AS SHOWN

10. BUILDING SETBACKS: From Public Right of Way Proposed Required

Building:

HEIGHT: Average height to gable roof shall be less than 40'

11. UTILITIES: Existing public utilities presently are available within the public right-of-way of U.S. Route 40.

Ex. 8" sanitary (Dwg. No. W.O. 6508) Ex. 8" sanitary (Dwg. No. 411-S-7) Ex. 6" gas (Dwg. No. 241726-A)
Ex. 8" water (Dwg. No. 241726-A)

- 12. There are no known historic buildings, archaeological sites, endangered species habitats, or septic systems located on this property. There are no significant views or site features that may affect the development proposal. There are no known streams, bodies of water, or floodplains on or adjacent on this property.
- 13. LIGHTING: Proposed outdoor lighting shall comply with Howard County Zoning Regulations
- 14. This site is exempt from the forest conservation obligations since a previous grading permit was issued for this site in accordance with Section 16.1202(b)(1)(iii) of the Subdivision and Land Development Regulations, prior to 12-31-92.
- 15. There is no 100-yr floodplain nor non-tidal wetlands on this site.
- 16. S.H.A. entrance and road improvements shall be done in accordance with S.H.A. access permit
- 17. This site development plan is for development on Parcel 67 only and future development on Parcel 66 is not part of this site plan.
- 18. Required landscaping will be provided per the Landscape Planfiled with this site plan and required surety will be made part of the Developer's Agreement, in the amount of \$5010.00. Perimeter landscaping between Parcels 66 and 67 is not required since ownership is the same and future development is planned on Parcel 66.
- 19. Vechicular Ingress/Egress is restricted to access points as approved by the State Highway Adminstration.

	REVISIONS				
	NO.	DESCRIPTION	DATE		
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	· · · · · · · · · · · · · · · · · ·	COVER SHEET			

1st MARINER BANK ELLICOTT CITY BRANCH

10065 BALTIMORE NATIONAL PIKE

ELECTION DISTRICT - 2

TECHNOLOGIES

410) 281-0033 www.KCW-ET.com

MAXIMUM NUMBER OF EMPLOYEES, TENANTS ON SITE PER USE. 10 EMPLOYEES

SITE ANALYSIS DATA CHART

PROPOSED USES FOR THE SITE AND STRUCTURES

TOTAL AMOUNT OF UNITS ALLOWED FOR PROJECT

ZONING REGULATIONS AND/OR FDP CRITERIA.

NUMBER OF HANDICAPPED PARKING SPACES)

AREA OF RECREATION OPEN SPACE REQUIRED BY

SUBDIVISION AND LAND REGULATIONS

APPLICABLE DPZ FILE REFERENCES

BUILDING COVERAGE OF SITE:

FLOOR SPACE ON EACH LEVEL OF BUILDING PER USE

TOTAL NUMBER OF UNITS PROPOSED ON SUBMISSION

NUMBER OF PARKING SPACES REQUIRED BY HOWARD COUNTY

NUMBER OF PARKING SPACES PROVIDED ON SITE (INCLUDE

TOTAL PROJECT AREA

PRESENT ZONING

AREA OF PLAN SUBMISSION

LIMIT OF DISTURBED AREA

AS SHOWN ON FINAL PLAT

OPEN SPACE ON SITE:

% OF GROSS AREA

% OF GROSS AREA

KCW Engineering Technologies, Inc. 3104 Timanus Lane, Suite 101 Baltimore, MD 21244 Fax (410) 281-1065

43,560 S.F. / 1.00 AC.

54,350 S.F. / 1.25 AC.

54,350 S.F. / 1.25 AC.

FINANCIAL INSTITUTION

22 PARKING SPACES

11,000 S.F.

25.3%

N/A 2432 S.F.

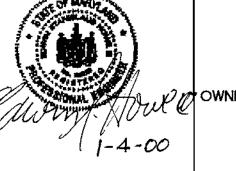
5.6% SDP 94-88

24 PARKING SPACES (2 H/C)

B-2

N/A

N/A



DEVELOPER:

1st MARINER BANK

1801 South Clinton Street Balfimore, Maryland 21224 Attn: Kenneth C. Jones Tele: (410) 342-1500

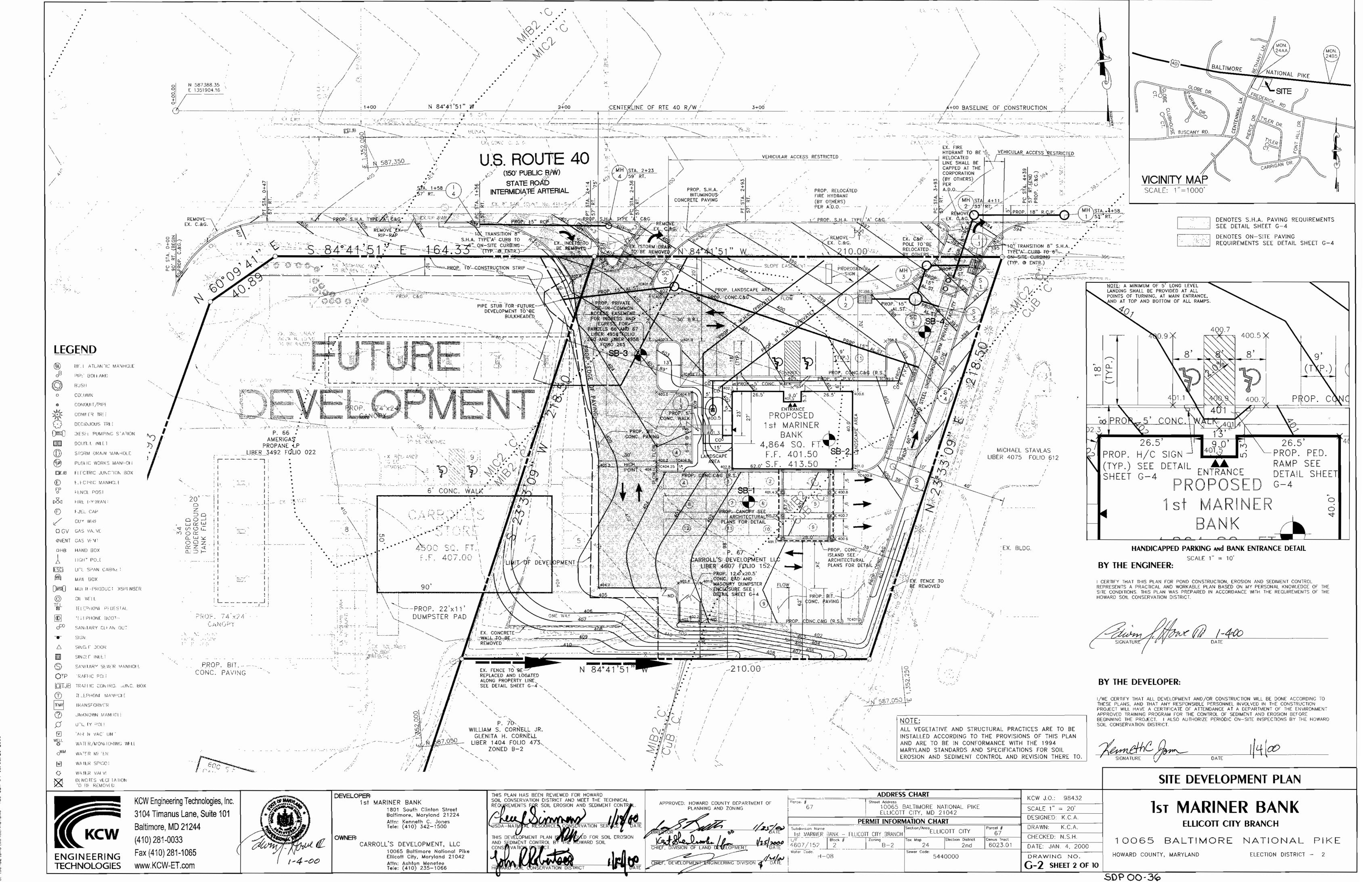
CARROLL'S DEVELOPMENT, LLC 10065 Baltimore National Pike

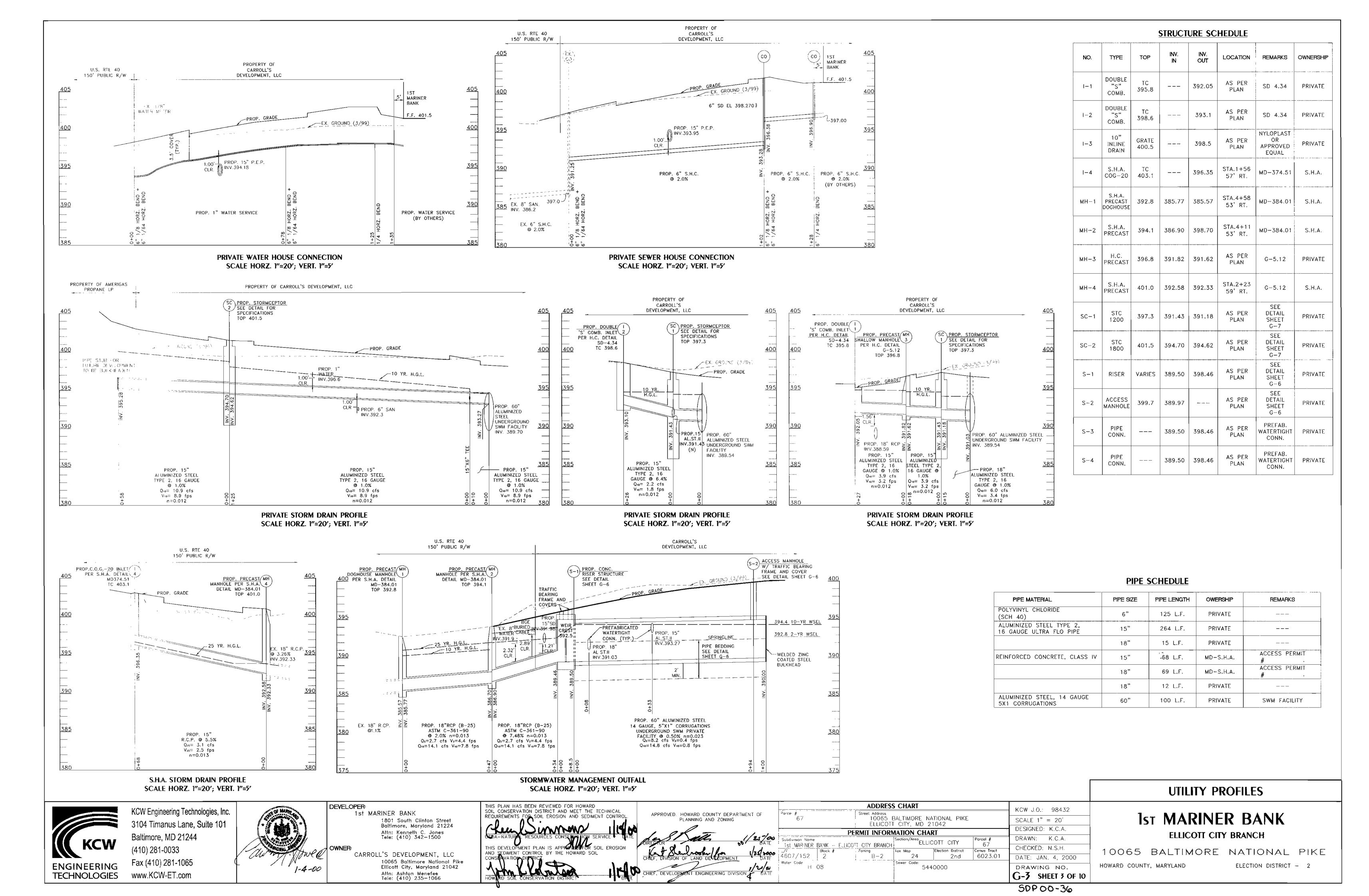
Ellicott City, Maryland 21042 Attn: Ashton Menefee Tele: (410) 235-1066

SDP 00-36

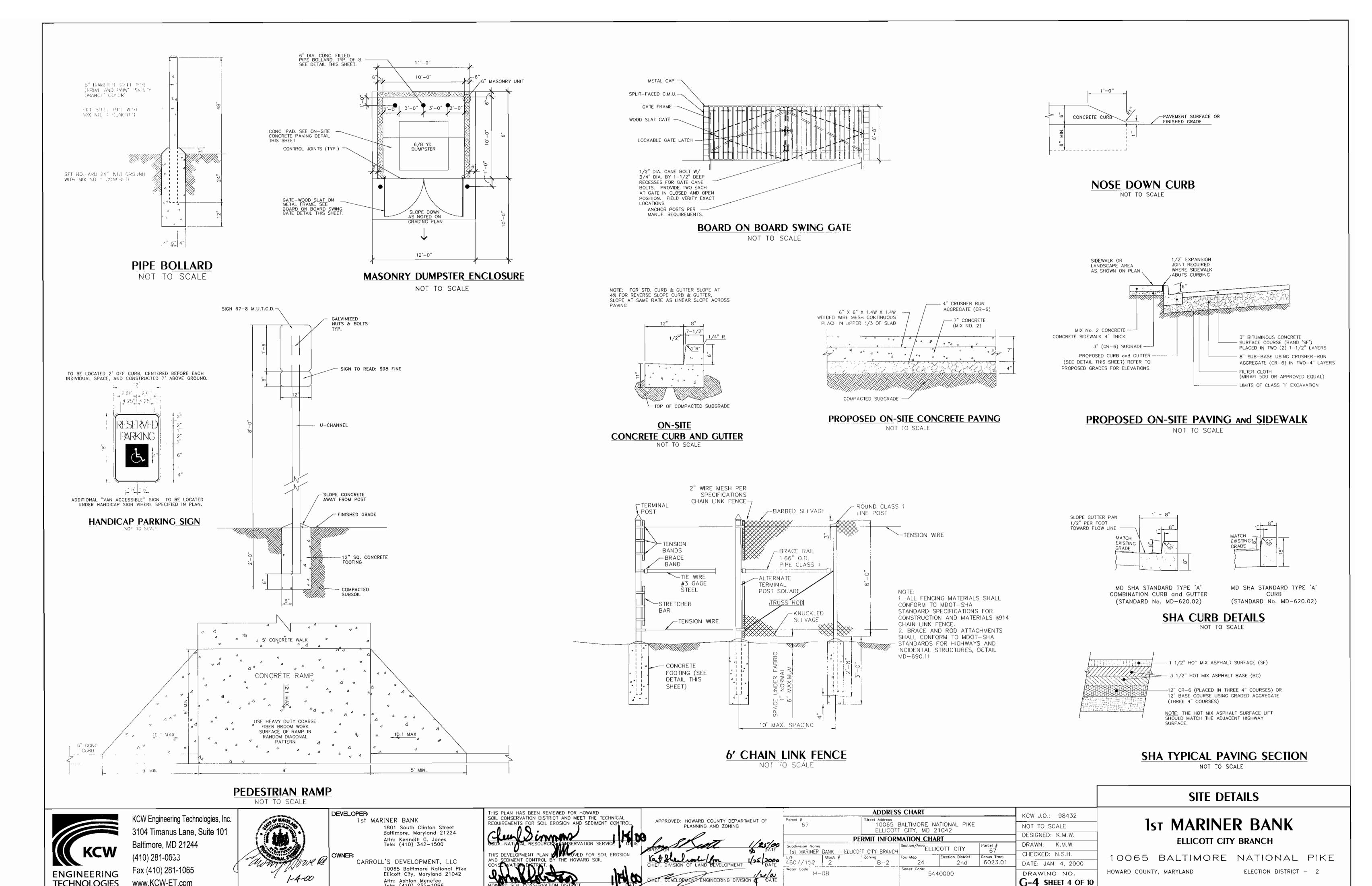
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HOWARD COUNTY, MARYLAND





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G-4 SHEET 4 OF 10

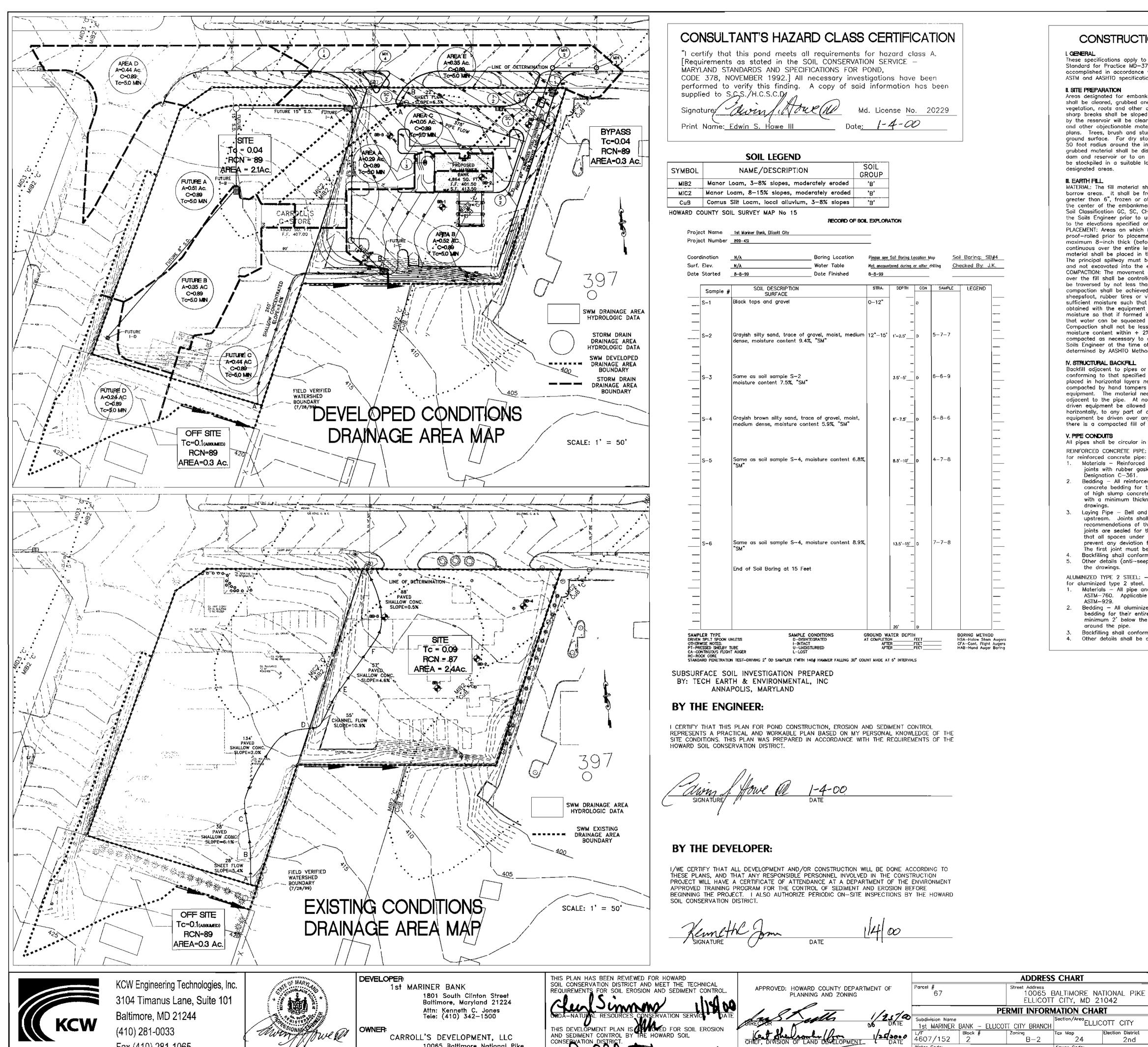
SDP 00-36

1-4-00

www.KCW-ET.com

TECHNOLOGIES

Attn: Ashton Menefee Tele: (410) 235-1066



CARROLL'S DEVELOPMENT, LLC

Attn: Ashton Menefee Tele: (410) 235-1066

10065 Baltimore National Pike

Ellicott City, Maryland 21042

Fax (410) 281-1065

www.KCW-ET.com

ENGINEERING

TECHNOLOGIES

CONSTRUCTION SPECIFICATIONS

These specifications apply to all ponds designed in accordance with SCS Standard for Practice MD-378, dated November 1992. All work shall be accomplished in accordance with the approved plans. All references to ASTM and AASHTO specifications apply to the most recent version.

IL SITE PREPARATION

Areas designated for embankment, structural works and borrow areas shall be cleared, grubbed and stripped of topsoil to remove all trees, vegetation, roots and other objectionable material. 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 pends, a minimum of a 50 foot radius around the inlet structure shall be cleared. All cleared and arubbed material shall be disposed of outside and below the limits of the dam and reservoir or to an off-site area. A sufficient avantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

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 United Soil Classification GC, SC, CH, or CL. All fill material shall be approved by the Soils Engineer prior to use. The fill shall be placed and compacted to the elevations specified on these plans.

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

over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tires or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble yet not be so wet that water can be squeezed out. Compaction 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 Soils Engineer at the time of construction. All compaction is to be determined by AASHTO Method T-99.

IV. 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 other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than 4 feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 2 feet or greater over the structure or pipe.

V. PIPE CONDUITS All pipes shall be circular in cross section.

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 2. Bedding — All reinforced concrete pipe conduits shall be laid in a concrete bedding for their entire length. This bedding shall consist of high slump concrete placed at least 10% of its outside diameter with a minimum thickness of 3 inches, or as shown on the
- 3. Laying Pipe Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After the joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 2 feet from the riser.
- Backfilling shall conform to "Structural Backfill". Other details (anti-seep collars, valves, etc.) shall be as shown on the drawinas.
- ALUMINIZED TYPE 2 STEEL: All of the following criteria shall apply for aluminized type 2 steel.

4. Other details shall be as shown on the drawings.

4607/152

B-2

- Materials All pipe and pipe joints shall meet AASHTO M-36/ ASTM-760. Applicable material specification shall be AASHTO M-214/ ASTM-929. Bedding - All aluminized type 2 steel shall be laid in a pea gravel
- bedding for their entire length. This bedding shall be placed from a minimum 2' below the pipe up to the springline extending 2' minimum around the pipe. Backfilling shall conform to "Structural Backfill".

HIGH DENSITY POLYETHYLENE PIPE: P.E.P. denotes high density polyethylene storm drain pipe. All pipe and pipe joints shall meet AASHTO M294, Type S or SP specifications. Applicable material specification shall be ASTM D 3350. Pipe shall be seamless with annular corrugations on the exterior and a smooth

VI. CONCRETE

Concrete shall meet the requirements of Maryland Department of Transportation , State Highway Administration's Standard Specifications for construction and Materials, Section 608, Mix No. 1 for concrete cradle and Mix No. 3 for structures.

VIL REINFORCEMENT

Reinforcing steel must be ASTM A615, grade 60. Steel angles and anchor bars must be ASTM A36. MSHA, Section 610 - Reinforcement for Concrete Structures. MSHA Section 911 - Reinforcing Steel, Wire Rope and Wire Fabric.

Stone for the Underground Stone Reservoir shall be SRC #2, as specified in the Baltimore County "Standard Specifications and Details for Construction", adopted November 18, 1985.

Gabion mattresses shall be Class IV P.V.C. coated, or an approved Baltimore County equivalent. Filter cloth shall be used under all gabions and shall meet requirements of Section 919.12 of Maryland Department of Transportation, State Highway Administration's "Standard Specifications for Construction and

X. CARE OF WATER DURING CONSTRUCTION

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

XI. EROSION AND SEDIMENT CONTROL

Construction operations will be carried 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.

GENERAL NOTES

- 1. This Underground Storm Water Management facility is private. Maintenance and upkeep of this facility shall be the responsibility of the Owner.
- 2. Maryland State Permit is NOT required. 3. Corps of Engineers permit is NOT required.
- 4. Unless otherwise noted, all construction and workmanship shall be accomplished in accordance with Howard County Department of Public Works Bureau of Engineering "Standard Specifications and Details for Construction." 1980, errata and addenda. State of Maryland Department of Transportation: State Highway Administration (SHA), "Standard Specifications for Construction and Materials; Dated Jan. 1982. In the event of a discrepancy between the details in Volume IV and those of the state, the Howard County Standard Details will govern unless otherwise expressly stated in those construction plans.

OPERATION AND MAINTENANCE SCHEDULE FOR UNDERGROUND STORMWATER MANAGEMENT FACILITY

- . The underground stormwater management facility is privately owned and it shall be responsibility of the owner to periodically inspected and clean the facility to maintain its
- operation and function. The underground stormwater management facility shall be inspected yearly at a minimum and after especially severe storms. When sediment accumulation of more than 2" is observed or any debris that might obstruct the outfall. The facility must be cleaned.
- Clean immediately after petroleum spills. The owner shall contact the appropriate regulatory agencies. The sediment debris shall be removed from the underground stormwater management
- facility by vacuum truck or other manual means. The owner must follow proper cleaning and disposal of the removed materials and liquid. 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.

SWM DESIGN SUMMARY

	U.G. SWM FACILITY	STORMCEPTOR 1	STORMCEPTOR 2
FACILITY IDENTIFICATION:	S-1	SC-1	SC-2
FACILITY TYPE:	UNDERGROUND PIPE	"STORMCEPTOR"	"STORMCEPTOR"
DRAINAGE AREA:	2.1 AC	0.8 AC	1.2 AC
INVERT ELEVATION:	389.50	391.35	394.62
WATER SURFACE ELEVATION 2YR/10YR	392.8/394.4		
STORAGE VOLUME 2YR/10YR/TOP:	0.028/0.043 AC-FT	1,200 GAL	1,800 GAL
INFLOW 2YR/10YR:	8.2/14.8 CFS	TC 395.8	TC 395.8
REQUIRED CONTROL 2YR/10YR:	7.8/14.6 CFS	NONE	NONE
OUTFLOW 2YR/10YR:	7.8/14.3 CFS		
MAINTENANCE RESPONSIBILITY:	PRIVATE	PRIVATE	PRIVATE

SWM D.A. MAPS & SPECIFICATIONS

1st MARINER BANK **ELLICOTT CITY BRANCH**

10065 BALTIMORE NATIONAL PIKE

HOWARD COUNTY, MARYLAND

ELECTION DISTRICT - 2

G-5 SHEET 5 OF 10 50900-36

KCW J.O.: 98432

SCALE AS SHOWN

DESIGNED: K.C.A.

DRAWN: K.C.A.

CHECKED: N.S.H.

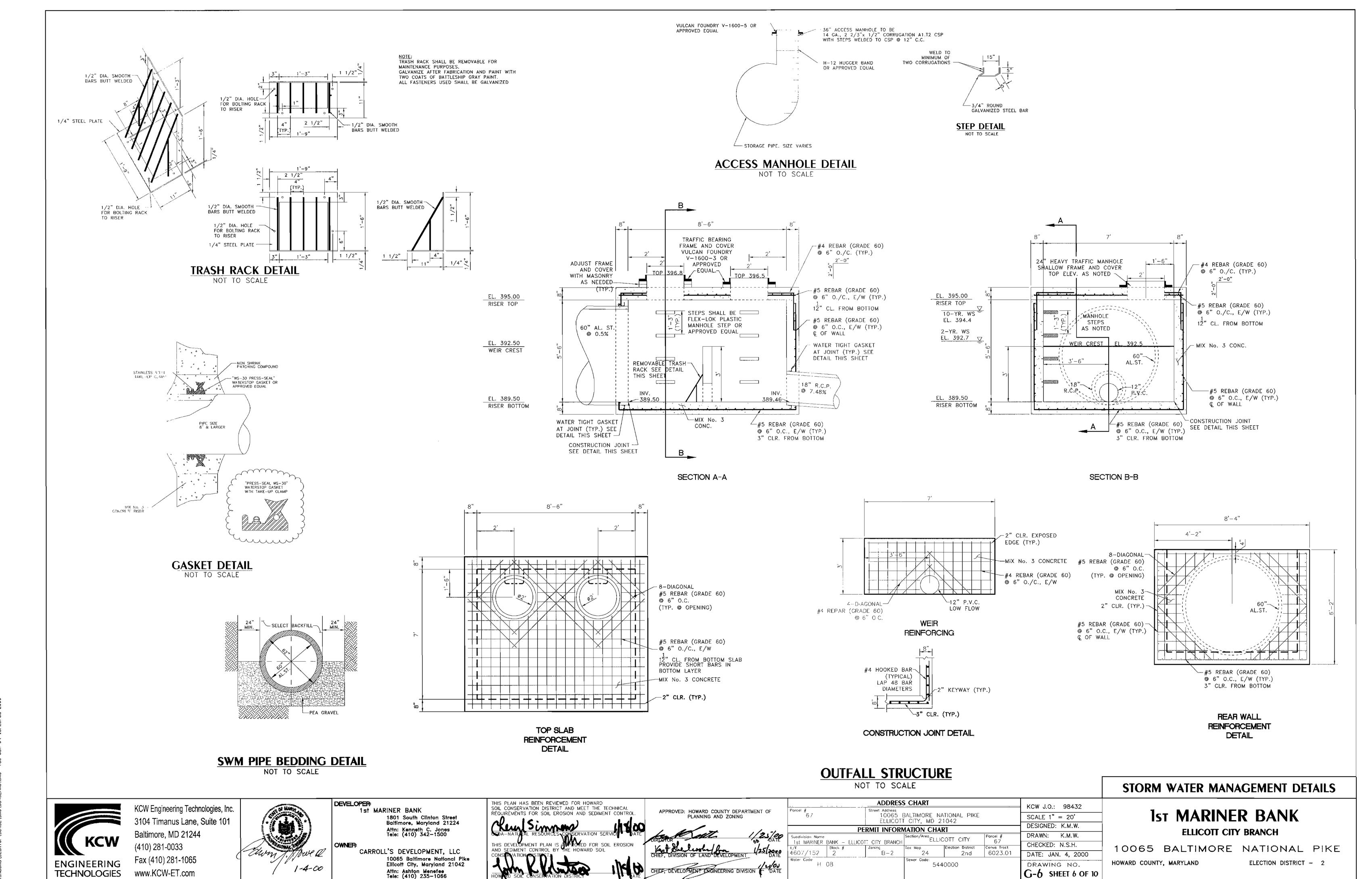
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GENERAL NOTES

1. SILT AND DEBRIS SHALL NOT BE ALLOWED TO ENTER THE STRUCTURES UNTIL CONTRIBUTING DRAINAGE AREAS HAVE BEEN PERMANENTLY STABILIZED.

2. ALL OPENINGS TO STRUCTURES SHALL BE PROTECTED WITH THE APPROPRIATE SEDIMENT MEASURES DURING CONSTRUCTION.

3. VARIOUS TYPES OF EQUIPMENT ARE AVAILABLE COMMERCIALLY FOR THE CLEANOUT OF SYSTEMS. THE MOST COMMONLY USED EQUIPMENT AND TECHNIQUES USED FOR CLEANING SUBSURFACE SYSTEMS ARE VACUUM PUMP & WATERJET SPRAY. BOTH SYSTEMS ARE GENERALLY MOUNTED ON A SELF-CONTAINED VEHICLE AND CAN EFFECTIVELY REMOVE STONES, LEAVES, LITTER AND SEDIMENT DEPOSITS FROM SUMPS AND CHAMBERS.

WATER QUALITY MAINTENANCE NOTES

1. INSPECT THE STORMCEPTOR ON A MONTHLY BASIS AND NOTE SEDIMENT AND OIL ACCUMULATIONS. MORE FREQUENT INSPECTIONS ARE APPROPRIATE WHERE OIL SPILLS OCCUR REGULARLY. STORMCEPTOR CANADA INC. CAN PROVIDE ADVICE ON SAMPLING EQUIPMENT.

2. SEDIMENT SHOULD BE REMOVED ANNAULLY, OR WHENEVER THE ACCUMULATION REACHES 50 % OF THE OPERATING DEPTH. FROM BASE TO DRAIN INVERT. IN AREAS OF NEW CONSTRUCTION, OR WHERE VEGETATION HAS NOT YET BEEN ESTABLISHED MORE FREQUENT

3. VACUUM TRUCKS ARE USED TO REMOVE THE SEDIMENT AND OIL FROM THE STORMCEPTOR TREATMENT CHAMBER. OIL LEVELS GREATER THAN 1 INCH SHOULD BE REMOVED IMMEDIATELY BY A LICENSED WASTER MANAGEMENT FIRM, AND SIGNIFICANT SPILLS MUST BE REPORTED TO THE APPROPRIATE REGULATORY AGENCY.

4. THE PIPES AND STRUCTURAL PARTS SHALL BE CLEANED AND REPAIRED AS NEEDED.

5. ALL MAINTENANCE SHALL BE PERFORMED BY THE OWNER OR BY THE OWNER'S REPRESENTATIVE AT THE OWNER'S EXPENSE.

6. MINIMIZE SURFACE EROSION FROM PERVIOUS SURFACES AT ALL TIMES; MAINTAIN GRASS, SOD, AND/OR MULCH COVERAGE UPON LANDSCAPINGS.

7. REMOVE DEBRIS ON TOP OF INLET GRATES AFTER EVERY RAINFALL.

8. AT INTERVALS NOT EXCEEDING 1 YEAR OR AS NEEDED. REMOVE ALL GREASE AND OILS, SILTS, AND AGGREGATES, AND DEBRIS FROM ALL INLETS

9. THE DISPOSAL OF THE LIQUID AND SOLID MATTER SHOULD BE AS FOLLOWS:

A. ALL LIQUID MATERIAL IN THE SPEARATOR INLET SHALL BE PUMPED INTO A SUITABLE TANK TRUCK AND DISPOSED OF AT AN APPROVED SANITARY DISTRICT DISCHARGE MANHOLE OR BE TAKEN TO AN APPROVED SEWAGE TREATMENT PLANT FOR DISCHARGE.

B. THE SOLID MATERIAL SHALL BE LANDFILLED IN AN APPROVED SANITARY LANDFILL.

REQUIRED PROCEDURES AND INSPECTIONS FOR INGROUND WO FACILITY

THE FOLLOWING INSPECTIONS ARE REQUIRED DURING CONSTRUCTION: ADDITIONAL INSPECTIONS MAY BE REQUIRED AND NOTED BY THE INSPECTOR.

1. PRECONSTRUCTION MEETING: AN OPPORTUNITY TO REVIEW SITE PLANS, DISCUSS THE PURPOSE OF THE FACILITY AND TO ANSWER QUESTIONS REGARDING CONSTRUCTION AND/OR

2. CONSTRUCTION: INSPECTION(S) WILL BE MADE DURING THE CONSTRUCTION OF THE FACILITY TO ENSURE ACCORDANCE WITH THE PLANS. SPECIFIC INSPECTION REQUIREMENTS WILL BE DETERMINED AT THE PRECONSTRUCTION MEETING.

3. FINAL INSPECTION: A FINAL CHECK WILL BE MADE TO CHECK DESIGN DIMENSIONS. IF CONSTRUCTION IS SATISFACTORY.

CONTRACTOR INSTALLATION INSTRUCTIONS PRECAST CONCRETE STORMCEPTOR

1. STAKE-OUT THE LOCATION OF THE STORMCEPTOR AND EXCAVATE HOLE, EXCAVATE ADEQUATE SPACE TO CONNECT INLET AND OUTLET PIPES TO UNIT. INSTALL A 12" DEEP(OR AS REQUIRED) LAYER OF COMPACTED (95% STANDARD PROCTOR DENSITY) AGGREGA SUBBASE AT BOTTOM OF EXCAVATION. INSTALL MULE OR SHORING, AS NÉEDED.

2. CHECK ELEVATION OF UNIT BY MEASURING ITS SECTIONS FROM BASE OF THE STORAGE CHAMBER (BOTTOM OF UNIT'S SLAB) TO THE INVERT OF STORMCEPTOR BYPASS CHAMBER INLET ELEVATION (FIBERGLASS INSERT). SUBTRACT THIS DISTANCE FROM DESIGN INVERT ELEVATION TO DETERMINE TOP OF SUBBASE ELEVATION. CHECK ELEVATION OF INSTALLED SUBBASE AND ADJUST NEEDED.

3. SECURE INSPECTOR APPROVAL OF SUBGRADE SUBBASE.

4. INSTALL STORAGE CHAMBER. INSTALL SCREW INVERTS INTO BASE OF STORAGE CHAMBER. ATTACH CABLES OR CHAINS TO ALL 3 LIFTING LUGS ON THE BASE SLAB. USING LARGE EQUIPMENT OR CRANE LIFT AND PLACE THE BASE SECTION OF THE STORAGE CHAMBER IN THE EXCAVATED HOLE ON THE SUBBASE, MAKE SURE THAT THE BASE IS PRELUBRICATED, INSTALL ADDITIONAL STORAGE CHAMBER SECTIONS, AS REQUIRED (PROCEDURE IS SAME AS STEP 8).

5. INSTALL BYPASS CHAMBER OF STORMCEPTOR WITH FACTORY INSTALLED STORMCEPTOR INSERT, LIFT BYPASS SECTION AND INSTALL, WHILE CHECKING ALIGNMENT AND GRADE OF INLET AND OUTLET DRAINAGE PIPES. CHECK TO MAKE SURE THE BYPASS CHAMBER IS SET FLUSH LEVEL AND IS AT THE PROPER ELEVATION. THE BYPASS CHAMBER MUST BE ORIENTED SUCH THAT INLET PIPE DISCHARGES INTO THE V-SHAPED FIBERGLASS WEIRS (INSIDE INSERT). INSTALL RUBBER GASKET ON TOP OF BYPASS SECTION AND COAT WITH LUBRICANTING GREASE, IF NOT PRELUBRICATED.

6. INSTALL STORMCEPTOR DROP PIPES ACCORDING TO STC PIPE INSTALLATION PROCEDURE ON REVERSE SIDE OF THESE INSTRUCTIONS.

7. INSTALL RISER SECTION. LIFT RISER SECTION AND INSTALL, WHILE CHECKING THAT SECTION IS SET FLUSH AND IS AT PROPER ELEVATION AND THAT UNIT IS LEVEL. SPECIFIC ALIGNMENT OF THIS PART IS REQUIRED IF STEP(S) ARE INCLUDED. ALIGN STEPS ABOVE INLET INSPECTION PORT. NOTE, FOR SHALLOW INSTALLATIONS THIS SECTION MAY NOT BE REQUIRED.

8. INSTALL TOP CAP WITH OPENING FOR STORMCEPTOR COVER. IF OPENING IS OFFSET (NOT CENTERED) THE TOP CAP OPENING SHOULD BE ORIENTED ABOVE THE STORMCEPTOR INLET INSPECTION PORT (PLUG).

9. BACKFILL STORMCEPTOR WITH APPROVED BACKFILL MATERIAL (NO ORGANIC OR TOPSOIL IS TO BE USED FOR BACKFILL). BACKFILL AND COMPACT IN 8 INCH LIFTS, BACKFILL SHOULD BE COMPACTED TO 95% OF STANDARD PROCTOR DENSITY.

10. INSTALL AND SET GRAD ADJUSTING RINGS, AS NEEDED.

11. INSTALL AND SET STORMCEPTOR FRAME AND COVER.

12. INSTALL INLET AND OUTLET STORM DRAIN PIPES. CONNECT INLET AND OUTLET SOTRM DRAIN PIPES WITH FLEXIBLE BOOTS (WHEN PROVIDED) AND WITH NON SHRINK GROUT WHEN NO FLEXIBLE BOOTS ARE PROVIDED. THE INVERT OF THE INLET AND OUTLET PIPE IS TO MATCH WITH THE INVERT OF THE STORMCEPTOR INSERT. FLEXIBLE BOOT INSTALLATION PROCEDURES: CENTER THE PIPE IN THE BOOT OPENING. LUBRICATE THE OUTSIDE OF THE PIPE AND/OR THE INSIDE OF THE BOOT IF THE PIPE OUTSIDE DIAMETER IS THE SAME AS THE INSIDE DIAMETER OF THE BOOT, POSITION THE PIPE CLAMP IN THE GROOVE OF THE BOOT WITH THE SCREW AT THE TOP. TIGHTEN THE PIPE CLAMP SCREW TO 60 INCH POUNDS. IF THE PIPE IS MUCH SMALLER THAN THE BOOT LIFT THE BOOT SUCH THAT IT CONTACTS THE BOTTOM OF THE PIPE WHILE TIGHTENING THE CLAMP TO ENSURE EVEN CONTRACTION OF THE RUBBER. MOVE THE PIPE HORIZONTALLY AND/OR VERTICALLY TO BRING IT TO GRADE.

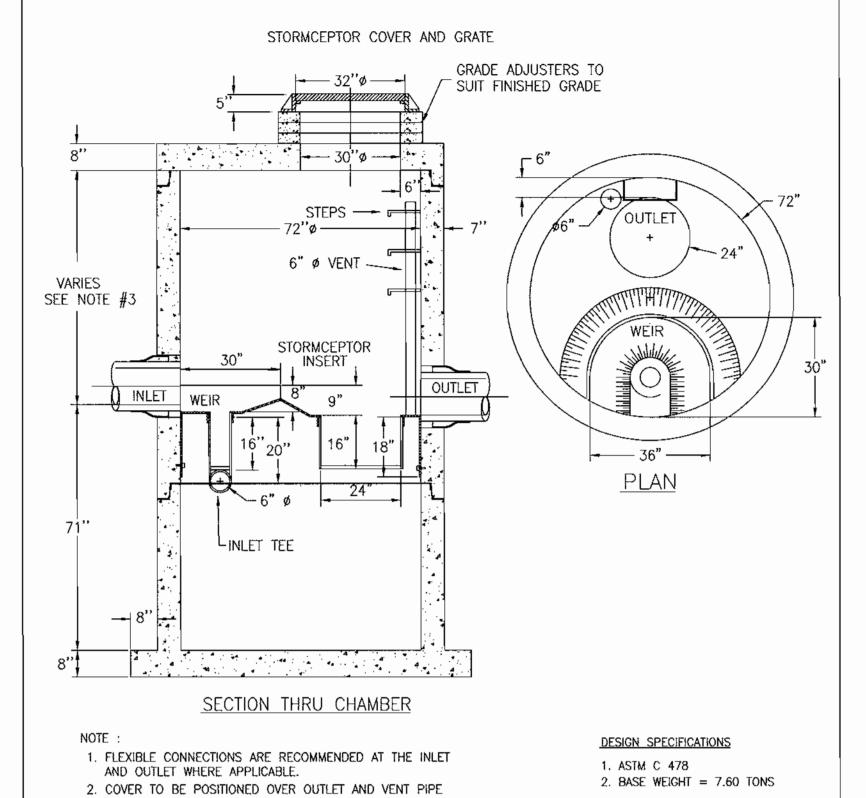
13. THE STORMCEPTOR SHOULD BE PUMPED OUT WHEN THE SEDIMENT CONTROL MEASURES ARE REMOVED (SITE PERMANENTLY STABILIZED).

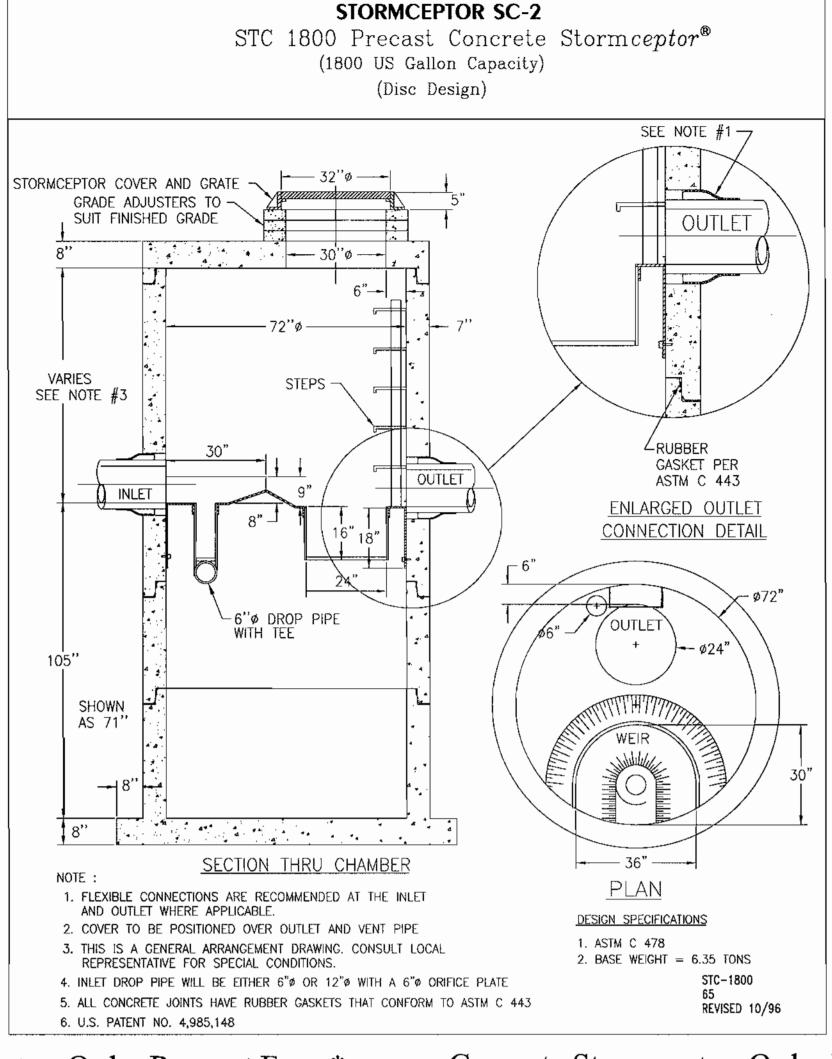
14. FINAL INSPECTION

STORMCEPTOR SC-1

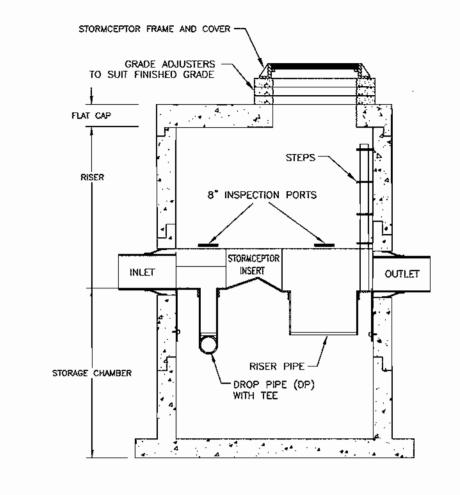
STC 1200 Precast Concrete Storm ceptor® (1200 US Gallon Capacity)

(Disc Design)





Stormceptor Specifications STC PIPE INSTALLATION PROCEDURE



NOTE: VARIABLE BASE SLAB WIDTH DEPENDENT ON BASE SLAB THICKNESS

ENLARGED OUTLET DETAIL

- 1) Drop pipes MUST NOT be attached to Stormceptor™ nipples until the BY—PASS CHAMBER section has been connected to the installed STORAGE CHAMBER.
- 2) Install the drop pipe while inside the STORAGE CHAMBER. Enter the STORAGE CHAMBER via a ladder placed down the via a ladder placed down the Stormceptor access hole
- 3) The drop pipe with the T-section Must be connected to the INLET nipple using the supplied PVC cement. Make certain that the orientation of the TEE is correct.
- 4) The riser pipe MUST be connected to the OUTLET nipple using the supplied PVC cement.

WATER QUALITY COMPUTATIONS

3. THIS IS A GENERAL ARRANGEMENT DRAWING, CONSULT LOCAL

4. INLET DROP PIPE WILL BE EITHER 6"\$ OR 12" WITH A 6"\$ ORIFICE PLATE

5. ALL CONCRETE JOINTS HAVE RUBBER GASKETS THAT CONFORM TO ASTM C 443

REPRESENTATIVE FOR SPECIAL CONDITIONS.

DRAINAGE AREA TO STORMCEPTOR = 0.81 ACRES PROPOSED STORMCEPTOR INLET PIPE = 15" P.E.P.

6. U.S. PATENT NO. 4,985,148

PROPOSED STORMCEPTOR OUTLET PIPE = 15" P.E.P.

THE FIRST 1/2" OF RUNOFF FROM ALL IMPERVIOUS AREA WILL BE TREATED THROUGH THE STORMCEPTOR

IMPERVIOUS AREA TO STORMCEPTOR = 0.72 ACRES

 $Q_{P0.5} = QUNIT \times AREA (MILES) \times Q (INCHES)$ $Q_{P0.5} = 1010 \times (0.72/640) \times 0.5$

 $Q_{P0.5} = 0.6 \text{ cfs}$ $Q_{P0.5} = 269 \text{ gpm}$

STORMCEPTOR MODEL STC-1200

MODEL	MAXIMUM TREATED FLOWRATE (gpm)	TOTAL CAPACITY (GALLONS)	OIL HOLDING CAPACITY (GALLONS)	SEDIMENT HOLDING CAPACITY (CU. FT)	ĐEPTH (FT)	TANK BODY (FT)
STC-1200	285	1230	280	110	6.6	6

DRAINAGE AREA TO STORMCEPTOR = 1.21 ACRES

PROPOSED STORMCEPTOR INLET PIPE = 15" P.E.P.

PROPOSED STORMCEPTOR OUTLET PIPE = 15" P.E.P.

THE FIRST 1/2" OF RUNOFF FROM ALL IMPERVIOUS AREA WILL BE TREATED THROUGH THE STORMCEPTOR

IMPERVIOUS AREA TO STORMCEPTOR = 1.08 ACRES

 $Q_{PO.5} = QUNIT \times AREA (MILES) \times Q (INCHES)$ $Q_{P0.5} = 1010 \times (1.08/640) \times 0.5$

 $Q_{P0.5} = 0.9 \text{ cfs}$ $Q_{P0.5} = 404 \text{ qpm}$

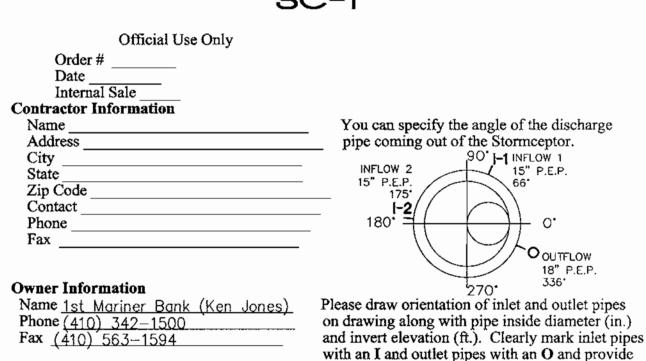
STORMCEPTOR MODEL STC-1800

MODEL	MAXIMUM TREATED FLOWRATE (gpm)	TOTAL CAPACITY (GALLONS)	OIL HOLDING CAPACITY (GALLONS)	SEDIMENT HOLDING CAPACITY (CU. FT)	DEPTH (FT)	TANK BODY (FT)
STC-1800	285	1830	280	195	9.4	6

Concrete Stormceptor Order Request Form*

STC-1200

REVISED 10/96



The inlet/outlet pipe angle in degrees.

Stormceptor Model Insert Size Data Manhole/Structure Number SC-1 3600 22" Top Elevation (ft) 397.3 Inlet Pipe Invert (ft) 391,43 1200 X 4800 Outlet Pipe Invert (ft) 391.18 1800 6000 44" Pipe Type Aluminized Steel Type 2 2400 7200 Disc

Impervious Drainage Area (ac): 0.72 Pipe Outside Diameter (in) [OD]

Project Name 1st Mariner Bank Ellicott City Branch Approximate time frame until required delivery (weeks) Exact Delivery Address: Street 10065 Baltimore National Pike State MD Zip Code <u>21042</u> City Ellicott City

Designer Company KCW Engineering Technologies, Inc Designer Contact Edwin (Ned) Howe Phone (410) 281 – 0033 Fax (410) 281 – 1065

Please fax this sheet to Stormceptor Corporation at (301) 762-4190

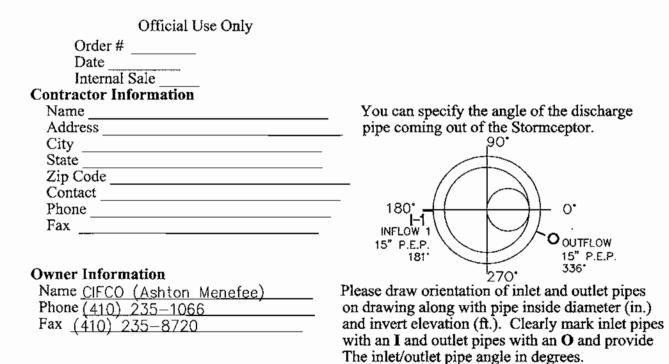
Pipe Inside Diameter (in) [ID]

For Technical Information Please Call Stormceptor Corporation at (301) 762-8361 or Toll Free at 1-800-762-4703

*Form to be included on plan by Designer 4/22/96

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Concrete Storm*ceptor* Order Request Form*



Stormceptor Model Insert Size Data Manhole/Structure Number SC-2 Top Elevation (ft) 401.5 Inlet Pipe Invert (ft) 394.70 4800 1800 X 6000 Outlet Pipe Invert (ft) 394.62 Pipe Type Aluminized Steel Type 2 2400 7200 Disc Pipe Inside Diameter (in) [ID] Custom Impervious Drainage Area (ac): 1.08 Pipe Outside Diameter (in) [OD]

Project Name 1st Mariner Bank Ellicott City Branch Approximate time frame until required delivery (weeks) Exact Delivery Address: Street 10065 Baltimore National Pike Zip Code 21042 City Ellicott City State MD Designer Company KCW Engineering Technologies, Inc.

Designer Contact <u>Edwin (Ned) Howe</u> <u>Phone (410)281-0033 Fax (410)281-1065</u>

Please fax this sheet to Stormceptor Corporation at (301) 762-4190

For Technical Information Please Call Stormceptor Corporation at (301) 762-8361 or Toll Free at 1-800-762-4703

*Form to be included on plan by Designer 4/22/96

ADDRESS CHART

KCW J.O.: 98432 10065 BALTIMORE NATIONAL PIKE SCALE 1" = 20'ELLICOTT CITY, MD 21042 DESIGNED: K.M.W. PERMIT INFORMATION CHART DRAWN: K.M.W. Subdivision Name 1st MARINER BANK CHECKED: N.S.H. 4607/152 B-224 2nd 6023.01 DATE: JAN. 4, 2000 H-085440000 DRAWING NO.

BY THE ENGINEER:

I CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING 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 ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

STORMCEPTOR DETAILS

1st MARINER BANK

10065 BALTIMORE NATIONAL PIKE

ELLICOTT CITY BRANCH

HOWARD COUNTY, MARYLAND ELECTION DISTRICT - 2

ENGINEERING TECHNOLOGIES

KCW Engineering Technologies, Inc. 104 Timanus Lane, Suite 101 Baltimore, MD 21244 (410) 281-0033 Fax (410) 281-1065 www.KCW-ET.com

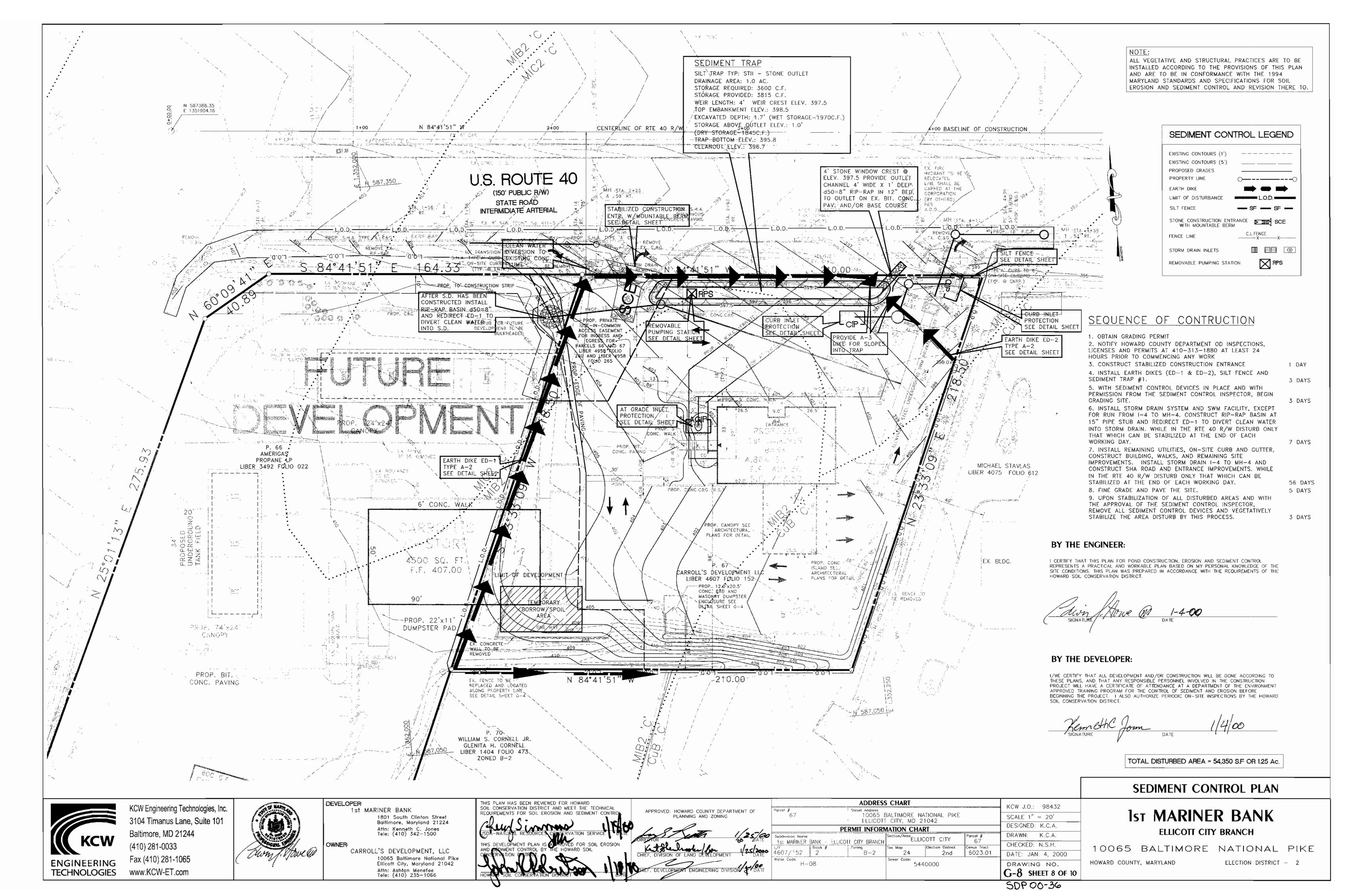


1st MARINER BANK 1801 South Clinton Street Baltimore, Maryland 21224 Attn: Kenneth C. Jones Tele: (410) 342-1500

CARROLL'S DEVELOPMENT, LLC 10065 Baltimore National Pike Ellicott City, Maryland 21042 Attn: Ashton Menefee Tele: (410) 235-1066

THIS PLAN HAS BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL AND SEDIMENT CONTROL BY HOWARD SOIL

G-7 SHEET 7 OF 10 SDP 00-36



S:\98432\DWG\98432MAS.DWG Tue Jan 0

VEGETATIVE STABILIZATION

- A. SITE PREPARATION
- Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment contro pasins
- in Perform all grading operations at right angles to the slope Final grading and shaping is not usually necessary for temporary seeding. iii Schedule requires soil tests to determine soil amendment composition and
- B. SOIL AMENDMENTS (Lertilizer one , me Specifications)
- i So'l test must be performed to determine the exact ratios and application rates for both time and ferfilizer or sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized
- α . Lertilizers shall be uniform to composition, free flowing and suitable for accurate by approved equipment. Morure may be substituted for fertilizer with prior approval from the Soil Conservation District. Fertilizers shall all be delivered to the site fully labeled according to applicable State fertilizer. to the site fully lebeled according to the applicable State fertilizer lows and
- iii. Lime materials shall all be around imestone (hydrated or burnt lime may be substituted) which contains at least 50% total oxides (calcium oxide plus regnesium oxide) ...mestone shall be ground to such fineness that at least 50% will pass thrule #100 and 98-100% will pass thrula #20 mash sieve. iv incorporate time and fertilizer into the top 5-5" of soil by discing or other
- C. SECOBED PREPARATION

contour of the slope

- Seedbod preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable paricultural or construction such as disc harrows or chisely plaws or rippers mounted on construction equipment. After the soil is mounted on loosened, it should not be rolled or dragged smooth but left in the regimened condition. Sloped areas (preater than 3:1) should be tracked leaving the surface in an irregular condition with ridges running parallel to the
- b. Apply fertiazer and lime as prescribed on the plans. ic incorporate time and fertilizer into the top 3-5" of soil by discing or other
- c. Minimum soil conditions required for permanent vegetative establishment:
- Sor pt shall be between 6.0 and 7.0 Soluble salts shall be less than 500 parts per million(ppm). 3 The so shall contain less than 40% day but enough fine grained material (>30% silt plus clay) to provide the capacity to hold a moderate amount
- of mo sture. An exception is if lavegrass or Serecio Lespedeza is to be pointed, then a sandy soil (<30% sit plus clay) would be 4 Soil shall contain 1.5% minimum organic matter by weight.
 5 Soil must contain sufficient pare space to permit adequate root penetration 6. If these conditions cannot be met by soils on site, adding topsoil is
- equired in accordance with Sect. 21 Standards and Specs, for Topsol b. Areas previously graded in conformance with the drawings shall be maintained in a true and ever grade, then secrified a otherwise loosened to a depth of 3"-5" to permit ponding of the topsoil to the surface area and to create norizontal crosion check slots to prevent topsoil from sliding down a slope.
- ic. Apply soil amendments as per socitest or as included on the plans. d. Mix soil amendments into the top 5" of topsoil by discing or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chair or other equipment to rougher surface. Steep slopes (steeper tran 3.1) should be tracked by a dozer leaving the soil in a irregular condition with ridges running parallel to the running contour of the slope. The ten 1" 3" of soil should be loose and friable. Seedbed loosening may not be recessory on newly disturbed areas.
- All seed must meet the recurements of the Maryland State Seed Law. All seed shall be subject to relitesting by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the nonths immediately proceding the date of sowing such material on this job Note. Seed lags shall be made available to the Inspector to verify type and rate of seed used
- ii Inoculant. The inoculant for treating egume seed in the seed mixtures shall be a oure culture of nitrogen fixing bacteria prepared specifically for the species. Inocularts shall not be used after from the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydrosecding. Note: It is very important to keep inoculant as cool as possible initificated. Temperatures above 75—80 deg. F can weaken pacteria and make the inequant less effective.
- a. Trydroseeding. Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeder or a cultipacker seeder a. If fortilizer is being applied at the time of accding, the application rate
- nitragen maximum of 100 lbs/acro total of soluble nitragen P205 (phosphorous) 200 tos/acre, and K20 (potassium): 200 lbs/acre. billime use only ground agricultural immestanc, (up to 3 tons / acre may be
- ic. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and without interruption. a. Dry Seeding. This includes use of conventional drop or broadcast spreaders a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed

The seeded area shall be rolled with a weighted roller to provide good seed to

- b. Where practical seed should be applied in two directions perpendicular to
- iii Drill or Cultipacker Seeding. Mechanized seeders that apply and cover seed
- a Cultipacking secons are required to pury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting. b. Where practical, seed should be opplied in two directions perpendicular to
- each other. Apply half the seeding rate in each direction. F MULCH SPECIFICATIONS (In Order of Preference)
- Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonably bright in color, and shall not be musty, mody, caked, decayed, or excessively dusty and shall be free of naxious weed sends as specified in MD State Law. ii Wood Cellulose Fiber Mulch (WCFM)
- a WCFM shall consist of specially prepares wood cellulose processed into a uniform fibrous physical state b WCFM shall be dived green or contain a green dive in the package that will
- that provide an appropriate color to facilitate visual inspection of the uniformly spread sturry c WCFM, including dive, shall contain no germination or growth inhibiting factors d WCFM materials shall be manufactured and processed in such a manner that
- the wood cellulose fiber much will remain in uniform suspension in water under agitation and will bland with seed, fertilizer and other additives to form a namageneous sturry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings
- e WCFM material shall contain no elements or compounds at concentration levels that will be phylo--toxic
- I WCFM must conform to the following physical requirements. fiber length to approximately 10 mm, diameter approx. 1 mm., pH range of 4.0 to 8.5 ash content of 1.6% max, and water holding copacity of 90% min. Note. Only sterile straw mulch should be used in oreas where one species
- Murch shall be applied to all seeded areas immediately after seeding. 1. If grading is completed outside of the seeding season, mulch alone shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tans/acre. Much shall be applied to a uniform loose depth of between 1" and 2". Much applied shall acreeve a uniform distribution and depth so
- that the soil surface is not exposed. If a mulch anchoring tool is to be used, the rate should be increased to $2.5\,$ tans / acre in Wood celutose fiber used as a mular shall be applied at a net dry weight of 1,500 lbs / acre. The wood cellulose liber shall be mixed with water, and the
- mixture shall contain a meximum of 50 bs of wood cellulose fiber per 100.

operate safely. It used on sloping and, this practice should be used on the

- H SECURING STRAW MULCH (Mulch Anchoring) Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (fisted by preference) depending upon size of area and crosion hazard:
- i A mulan anchoring tool is a tractor grown implement designed to punch and anchor mulch into the sor surface a minimum of 2". This practice is most effective on large areas, but a timited to fietter slopes where equipment can

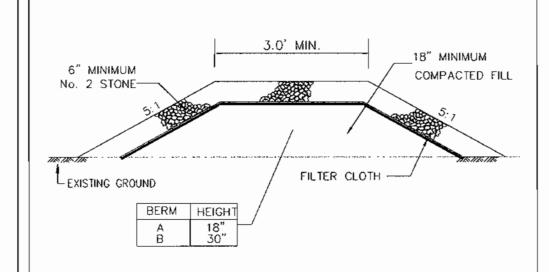
VEGETATIVE STABILIZATION (continued)

ii. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 lbs / acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 lbs.

shall contain a of wood cellulose fiber per 100 gallons of water.

- iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys, and on crests of banks. The remainder of the area should appear uniform ofter binder application. Synthetic binders, such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terro Tax II, Terro Tack AR, or other approved equal, may be used at rates recommended by manufacturer to
- iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4 feet to 15 feet wide and 300 feet to 3,000 feet long.

MOUNTABLE BERM



SOD ESTABLISHMENT

a. Class of turigrass sod shall be Maryland or Virginia State certified or approved.

b. Sod shall be machine cut at a uniform soil thickness of 3/4", plus or minus 1/4" at the time of cutting Measurement for thickness shall exclude top growth and thatch Individual pieces of sod shall be cut to the suppliers

shall be 5%. Broken pads and torn or uneven ends will not be acceptable.

Standard size sections of sod shall be strong enough to support their own

weight and retain their size and shape when suspended vertically with a firm grasp on 10% of the section

e. Sod shall be harvested, delivered and installed within a period of 36 hours

a. During period of excessively high temperature or in areas having dry subsoil,

the subsoil shall be lightly irrigated immediately prior to laying the sod.

sed is not stretched or overlapped and that all joints are butted light in

Wherever possible, sod shall be laid with the long edges parallel to the

or otherwise secured to prevent slippage on slopes and to ensure solid

placed parallel to and tightly wedged against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Ensure that

contour and with staggering joints. Sad shall be rolled and tamped, pegged

underside of the new sod god and soil surface below the sod are thoroughly

wet. The operations of laying, tamping and irrigating for any piece of sod

a In the absence of adequate rainfall, watering shall be performed daily or as

often as necessary during the first week and in sufficient quantities to maintain moist soil to a depth of 4". Watering should be done during the

cutting or subsequent cuttings. Gross height shall be maintained between

No more than 1/3 of the grass leaf shall be removed by the initial

b The first row of sod shall be laid in a straight line with subsequent rows

order to prevent voids which would cause air drying of the roots.

d. Sad shall be watered immediately following rolling or tamping until the

b. After the first week, sod watering is required as necessary to maintain

c. The first mowing of sod should not be attempted until the sod is firmly

COMPACTED FILL

contact between sod roots and the underlying soil surface.

Sod not transplanted within this period shall be approved by an agronomist

d. Sod shall not be harvested or transplanted when moisture content

(excessively wet or dry) may adversely affect its survival.

or soil scientist prior to its installation.

heat of the day to prevent wilting.

2" and 3", unless otherwise specified.

SOD MAINTENANCE

ith and length. Max allowable deviation from standard widths and lengths

Sod labels shall be made available to the job foreman and the Inspector

To provide quick cover on disturbed areas (2:1 grade or flotter).

PERMANENT SEEDING NOTES

REFERENCE: "1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL". PAGE G-20-1 THRU C-20-5. SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

PREFERRED: APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SF) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SF) BEFORE SEEDING. HARROW OR DISC INTO UPPER THARE INCHES OF SOIL AT TIME OF SEEDING APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SF) ACCEPTABLE. APPLY 2 TONS PER ACRE (92 LBS/1000 SF) DOLOMITIC LIMESTONE AND 1000 LBS PER ACRE (23 LBS/1000 SO. FT.) OF 10-10-10 FERTILIZER BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. SEEDING: FOR PERIODS MARCH 1 THRU APRIL 30, AND AUGUST 1 THRU OCROBER 15, SEED WITH 600 LB. PER AC.(1.4 LB. PER 1000 S.F.) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31, SEED WITH 80 LBS KENTUKY 31 TALL FESCUE PER AC AND 2 LB. PER AC. (0.05 LB PER 1000 S.F.) OF WEEPING LOVEGRASS.

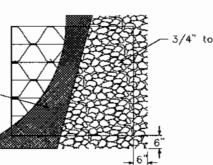
MULCHING: APPLY 1-1/2 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SF) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GAL PER ACRE (5 GAL/1000 SF) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GAL PER ACRE (8 GAL/1000 SF) FOR ANCHORING. MAINTENANCE: INSPECT ALL SEEDING AREAS AND MAKE NEEDED REPAIRS, REPLACEMENTS AND RESEEDINGS

TEMPORARY SEEDING NOTES

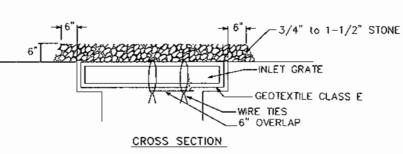
"1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL". PAGE G-20-1 THRU G-20-5. APPLY TO CRADED OR CLEARED AREAS LIKELY TO BE REDISTURBED WHERE A SHORT-TERM VEGETATIVE COVER IS NEFOED. SOIL AMENDMENTS: APPLY 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SF). SEEDING. FOR PERIODS MARCH 1 THRU APRIL 30 AND FROM AUGUST 15 THRU OCTOBER 15. SEED WITH 2-1/2 BUSHEL PER AC OF ANNUAL RYE (3.2 LB. PER 1005.F.). FROM MAY 1 TO AUGUST 14 SEED WITH 3 LB. PER 4.0. (0.07 LB. PER 1000 S.F.). FROM MAY 1 TO AUGUST 14 SEED WITH 3 LB. PER AC. (0.07 LB. PER 1000 S.F.). OF WEEPING LOVERASS. FOR THE PERIOD OF NOVEMBER 16 THRU FEBUARY 28, FOR 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 SF) 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 SF) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FT. OR HIGHER, USE J48 GAL PER ACRE (8 GAL/1000 SD. FT.) FOR ANCHORING.

AT GRADE INLET PROTECTION

3/4" to 1-1/2" STONE



PŁAN/CUT AWAY VIEW



____ AGIP

GEOTEXTILE FABRICS

TABLE 27 GEOTEXTILE FABRICS

OPENING SIZE STRENGTH
MM MAX. LB. MIN.

* U.S. STD. SIEVE CW-02215

Grab Tensile Strength ASTM D 1682: 4" x 8" specimen, 1"x2" clamps, 12"/min.

The fabric shall be inert to commonly encountered chemicals and hydrocarbons, and

polyolephins, polyesters, or polyamides. The geotextile fabric shall resist deterioration

In addition, Classes A through E shall have a 0.01 cm/sec minimum permeability when tested in accordance with MSMT 507, and an apparent elongation of 20 percent (20%) when tested in accordance with the grab tensile strength requirements above.

Class F geotextile fabrics for silt fence shall have a 50 lb/in minimum tensile strength and a 20 lb/in minimum tensile modules when tested in accordance with MSMT 509. The material shall also have a 0.3 gal/sf/min flow rate and seventy—five percent

(75%) minimum filtering efficiency when tested in accordance with MSMT 322. Geotextile fabrics used in the construction of "silt fence" shall resist deterioration from ultraviolet exposure. The fobric shall contain sufficient amounts of ultraviolet ray inhibitors and stabilizers to provide a minimum of 12 months of expected usable

construction life at a temperature range of 0 to 120° F

will be not and mildew resistant. It shall be manufactured from fibers consisting of

long chain synthetic polymers, and composed of a minimum of 85% by weight of

strain rate in both principal directions of geotextile fabric.

The properties shall be determined in accordance with the following procedures:

0.30

0.60

0.30

0.60

0.30

(SILT FENCE) 0.40-0.80 • 90

Apparent Opening Size MSMT 323

APPARENT GRAS TENSILE BURST

250

200

200

90

90

1 Embankment shall be constructed of approved materials from the excavation, or from other sources. The material shall be free of organic materials, trash, muck, roots, frost and other deterious substances

- Before depositing fills, the ground surface shall be cleared of all refuse, brush, gross, roots, ice and frozen material. All organic matter and otherwise unsuitable soils shall be removed from the surface to be filled. The exposed surface shall be plowed, disced, or scarified to a depth of 6 inches. Soils so scarified, or which have been disturbed by grubbing and stripping operations, shall be compacted to undisturbed sail below by discing, leveling, rolling and compacting at the maisture content and to the density specified below for compacted embankments.
- Where fills are to be made on hillsides or slopes, the slope of the original ground on which the fill is to be placed shall be plowed or scarified deeply, or where the slope ratio of the ground is steeper than 5 horizontal to 1 vertical (5:1), the bank shall be stepped or benched, as directed by the Soils Engineer prior to permit placement of the fill in horizontaal layers.
- Placing, spreading and compacting fill materials

 The fill material shall be approved by the Soils Engineer and placed in

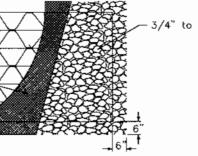
 layers which, before compaction, shall not exceed 8 inches. Each layer shall be spread uniformly and evenly, and shall be thoroughly blade mixed during the spreading to insure uniformity of materials in each layer b After each layer has been placed, mixed and spread evenly, it shall be thoroughly compocted to not less than the percentage of maximum dry density as determined by ASTM D-1577 specified below: 95% in areas under and within 10 feet of foundations. 95% in areas to be paved.
 - iii. 92% in areas to be vegetatively stabilized.

 c. The moisture content of the fill shall be as required to ottain the degree of compoction specified. d Compaction shall be by approved multiple-wheel pneumatic tired rollers vibratory rollers, or other types of acceptable rollers.
- e. The filling operation shall be continued as specified above until the fill has been brought to subgrade shown on the plans.

 f. The fill shall be constructed in such a manner that the surface will be sloped to drain at all times, and fill shall be deposited to prevent excessive moisture accumulation from rainwater
- g. When the work is interrupted by rain, filling shall not be resumed until tests indicate that the moisture content and density of the top 6 inches of fill conform to the above specification requirements.

OWNER:

GEOTEXTILE CLASS E



DETAIL 23B

PAGE E-16-5A

STANDARD SYMBOL

MAX. DRAINAGE AREA = 1/4 ACRE

500

320

320

145

145

190

- CONSTRUCTION SPECIFICATIONS 1. Lift grate and wrap with Geotextile Fabric Class E to completely cover all openings, then set grate back in place.
- 2. Place 3/4" to 1-1/2" stone, 4"-6" thick, on the grate to secure fobric and provide additional filtration.

BY THE ENGINEER:

CERTIFY THAT THIS PLAN FOR POND CONSTRUCTION, EROSION AND SECULABILITY 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 SOL CONSERVATION

SILT FENCE

" MINIMUM FENCE—

THE THE THE THE WEST THE TIE

EMBED GEOTEXTILE CLASS F — A MINIMUM OF 8" VERTICALLY INTO THE GROUND

CONSTRUCTION SPECIFICATIONS

1. Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter

minimum) round and shall be of sound quality hardwood. Steel posts will be

standard T or U section weighting not less than 1.00 pond per linear foot.

2. Geotextile shall be fastened securely to each fence post with wire lies

50 lbs./in. (min.) 20 lbs./in₂ (min.)

or staples at top and mid-section and shall meet the following requirement

Flow Rate 0.3 gol./ft./minute (max.) Test: WSMT 322
Filtering Efficiency 75 % (min.) Test: VSMT 322

4. Silt Fence shall be inspected after each roinfal! event and maintained when

CURB INLET PROTECTION

CONSTRUCTION SPECIFICATIONS

I. 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

2. 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

4. Place the assembly against the inlet throat and nail (min. 2' lengths of 2"x 4"

6 Form the 1/2" x 1/2" wire mesh and the geotextile fabric to the concrete

gutter and against the face of the curb on both sides of the init. Place clean 3/4" to 1-1/2" stone over the wire mesh and geotextile in such a

7. This type of protection must be inspected frequently and the filter cloth and

8. Assure that storm flow does not bypass the inlet by installing a temporary

manner to prevent water from entering the inlet under or around the geotextile.

across the inlet top and be held in place by sandbags or alternate weight

5. The assembly shall be placed so that the end spacers are a minimum 1'

to the top of the weir at spacer locations). These 2"x 4" anchors shall extend

3 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)

beyond both ends of the throat opening.

stone replaced when clogged with sediment

earth or asphalt dike to direct the flow to the injet

bulges occur or when sediment accumulation reached 50% of the fabric height

ANCHORS

3. Where ends of geotextile fabric come together, they shall be overlapped

PERSPECTIVE VIEW

SECTION A

STAPLE

ensile Modulus

2" X 4" WEIR-

the standard drawing.

MAX. DRAINAGE AREA = 1/4 ACRE

folded and stopled to prevent sediment bypass.

S' MAXIMUM SPACING

OF 2" X 4" SPACERS

10' MAXIMUM CENTER TO 36" MINIMUM LENGTH FENCE POS DRIVEN A MINIMUM OF 16" IN 10 GROUND

16" MINIMUM HEICHT OF

MINIMUM 20" ABOVE GROUND

STANDARD SYMBOL

|-----SF------

DETAIL 23B

-{WEICHT

2"x4" SPACER

WIRE MESH

MACTS C

STANDARD SYMBOL

PAGE E-16-5B

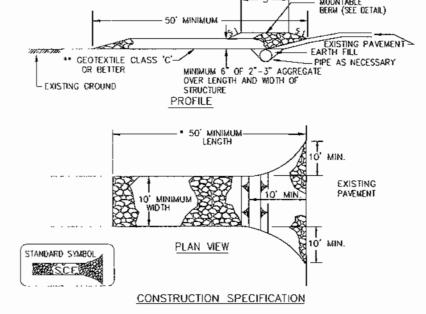
- FENCE POST DRIVEN

UNDISTURBED GROUND

BY THE DEVELOPER:

I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE ACCORDING TO 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 "RAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTIONS BY THE HOWARD SOIL CONSERVATION DISTRICT.

STABILIZED CONSTRUCTION ENTRANCE



1. Length - minimum of 50' (*30' for single residence tot). 2. Width - 10' minimum, should be flored at the existing road to provide a turning

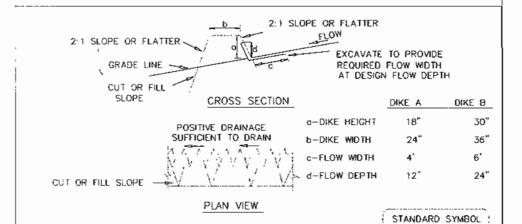
. Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.

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

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

EARTH DIKE

where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.



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

A-2 B-3

3. 4" - 7" stone or recycled concrete equivalent pressed into the soil 7" minimum Construction Specifications

2. Seed and cover with Erosion Control Matting or line with sod.

1. All temporary earth dikes shall have uninterrupted positive grade to an outlet. Spot elevations may be necessary for grades less than 1%. 2. Runoff diverted from a disturbed area shall be conveyed to a sediment

3. Runoff diverted from an undisturbed area shall outlet directly into an 4. All trees, brush, stumps, obstructions, and other objectional material shall be removed and disposed of so as not to interfere with the proper functioning of the dike

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

6 Fill shall be compacted by earth moving equipment. 7 All earth removed and not needed for construction shall be placed so that it will not interfere with the functioning of the dike. 8. Inspection and maintenance must be provided periodically and after each rain event

SEDIMENT CONTROL NOTES

STANDARD INLET PROTECTION

EXCAVATE, BACKELL AND

STANDARD SYMBOL

SIP

2" X 4" FRAMING

GEOTEXTILE CLASS E

MAX. DRAINAGE AREA = 1/4 ACRE

notch elevation

TOP ELEVATION

-NOTCH ELEVATION

NAILING -STRIP

CONSTRUCTION SPECIFICATIONS

1. Excavote completely around the inlet to a depth of 18" below the

2. Drive the 2" x 4" construction grade lumber posts 1' into the

ground at each corner of the inlet. Place nail strips between the posts on the ends of the inlet. Assemble the top portion of the

op of the frame (weir) must be 6" below adjacent roadways where

2" x 4" frame using the overlap joint shown on Detail 23A. The

3. Stretch the $1/2" \times 1/2"$ wire mesh tightly around the frame and fasten securely. The ends must meet and overlap at a

4 Stretch the Geotextile Class E tightly over the wire mesh with

the geotixtile extending from the top of the frame to 18" below the

nlet notch elevation. Fasten the geotextile firmly to the frame.

The ends of the geotextile must meet at a post, be overlopped and

5. Backfill around the inlet in compacted 6" layers until the

should be at least 6" higher than the top of the frame

layer of earth is level with the notch elevation on the ends and

The structure must be inspected periodically and after each rain and the geotextile replaced when it becomes clagged.

6. If the injet is not in a sump, construct a compacted earth dike

flooding and safety issues may arise.

folded, then fastened down

- A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF INSPECTION AND PERMITS PRIOR TO THE START OF ANY CONSTRUCTION (410) 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 REVISION THERE TO
- FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY A) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3-1. 3) 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 12, 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 SEEDINGS (SEC. 51) SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50) AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO RE 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 43,560 SQ.FT. 1.00 Ac. 54,350 SQ.FT. 1.25 Ac. AREA DISTURBED AREA TO BE ROOFED OR PAVED (NEW CONSCTR.) 32,938 SQ.FT. 076 Ac AREA TO BE VEGETATIVELY STABILIZED TOTAL FILL OFFSITE WASTE/BORROW AREA LOCATION

- 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 CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR
- 10 ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THE PIPE LENGTHS OR THAT WHICH SHALL BE BACK FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE IN ACCORDANCE WITH THIS SEDIMENT AND EROSION CONTROL PLAN, AND FURTHER, AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE HOWARD COUNTY INSPECTION STAFF OR THEIR AUTHORIZED AGENTS.
- 13. ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT'S APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.
- THE DEVELOPER IS RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, RIGHT-OF-WAY(S) THAT MAY BE REQUIRED FOR THE SEDIMENT AND EROSION CONTROL PRACTICES, STORMWATER MANAGEMENT PRACTICES, AND THE DISCHARGE OF STORMWATER ONTO OR ACROSS ADJACENT OR DOWNSTREAM PROPERTIES INCLUDED IN HIS PLAN. HE IS ALSO RESPONSIBLE FOR THE ACQUISITION OF ALL EASEMENTS, RIGHTS, AND/OR RIGHT-OF-WAY(S) THAT MAY BE REQUIRED FOR GRADING AND/OR
- 15. THE SEDIMENT CONTROL APPROVALS ON THIS PLAN EXTEND ONLY TO AREAS AND PRACTICES IDENTIFIED AS PROPOSED WORK
- 16. THE APPROVAL OF THIS PLAN FOR SEDIMENT AND EROSION CONTROL DOES NOT RELIEVE THE DEVELOPER/CONSULTANT FROM COMPLYING WITH ANY FEDERAL/STATE COUNTY REQUIREMENTS APPURTENANT TO ENVIRONMENTAL ISSUES

TECHNOLOGIES

G. MULCHING SELDED AREAS

contour, if possible

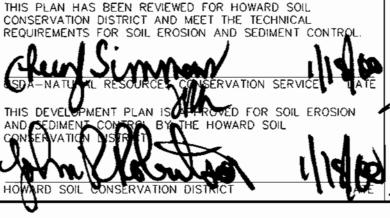
KCW Engineering Technologies, Inc. 3104 Timanus Lane, Suite 101 Baltimore, MD 21244 (410) 281-0033 Fax (410) 281-1065 www.KCW-ET.com

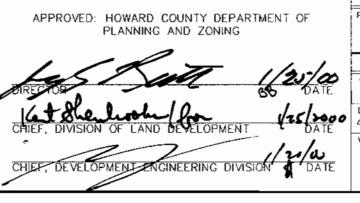


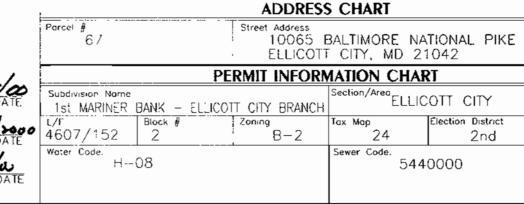
DEVELOPER 1st MARINER BANK

1801 South Clinton Street Baltimore, Maryland 21224 Attn: Kenneth C. Jones Tele: (410) 342-1500

CARROLL'S DEVELOPMENT, LLC 10065 Baltimore National Pike Ellicott City, Maryland 21042 Attn: Ashton Menefee Tele: (410) 235-1066







KCW J.O.: 98432 SCALE 1" = 20DESIGNED: K.M.W. DRAWN: K.M.W. CHECKED: N.S.H. Election District Cenus Tract 6023.01 DATE: JAN. 4, 2000 DRAWING NO.

SEDIMENT CONTROL DETAILS 1ST MARINER BANK

ELLICOTT CITY BRANCH 10065 BALTIMORE NATIONAL PIKE

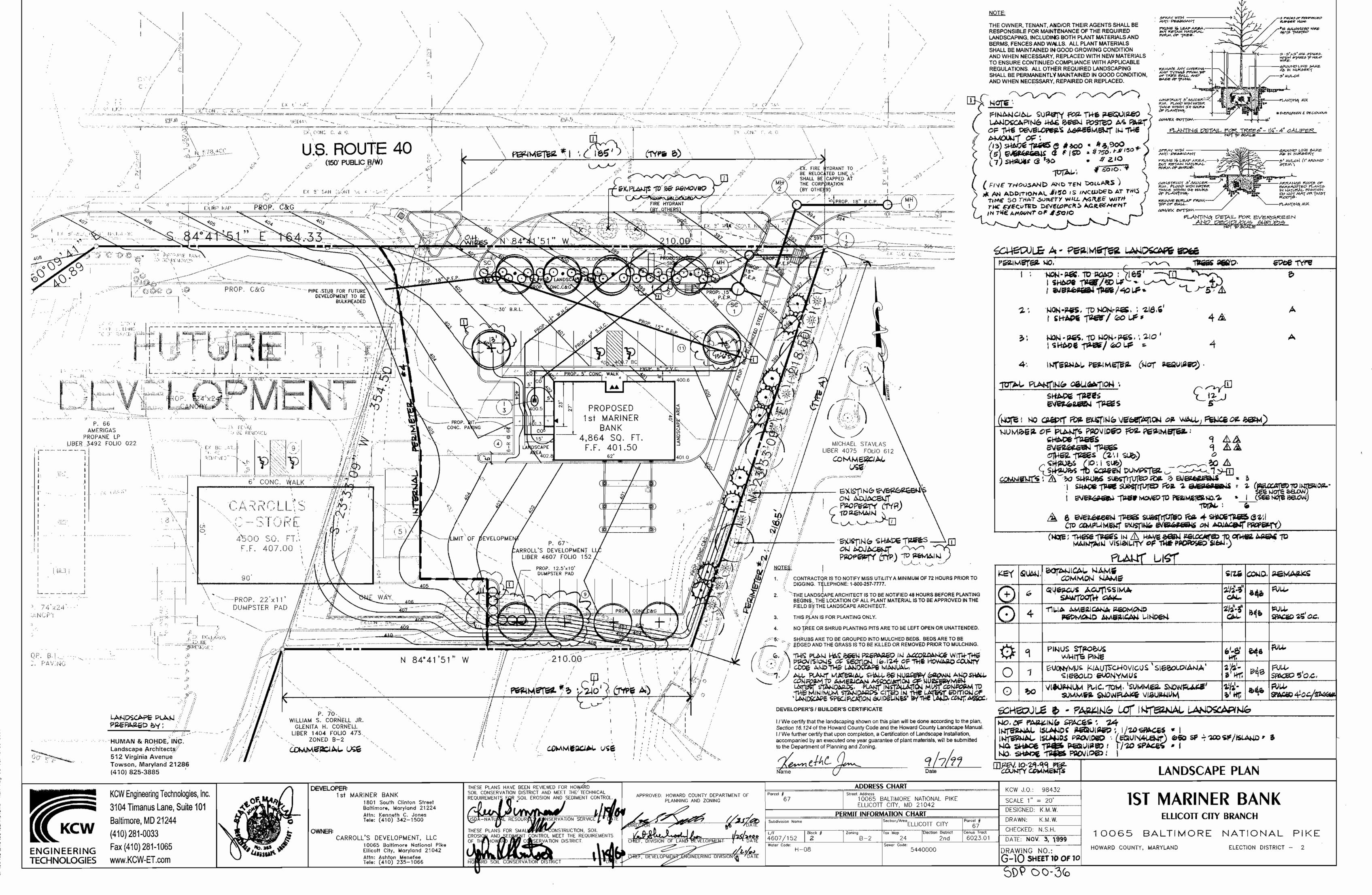
HOWARD COUNTY, MARYLAND

ELECTION DISTRICT - 2

SDP 00-36

G-9 SHEET 9 OF 10

2nd



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