

SHEET INDEX	
No.	DESCRIPTION
1	SITE DEVELOPMENT & LANDSCAPE PLAN
2	NOTES AND DETAILS

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS NEHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- TRAFFIC CONTROL, 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.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOCIATES, INC., DATED OCTOBER, 1998.
- THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY NAD83, NAD 83, AND 3001 HERE USED FOR THIS PROJECT.
- WATER IS PUBLIC, CONTRACT NO. 44-0100.
- SEWER IS PRIVATE.
- STORMWATER MANAGEMENT IS DEFERRED UNTIL THE SUBSEQUENT PHASE OF DEVELOPMENT DUE TO THE HAZARDOUS NATURE OF THE WORK.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- 100-YEAR FLOODPLAIN IS BASED ON HOWARD COUNTY'S LITTLE PATUENT RIVER STUDY.
- NO WETLANDS ARE IMPACTED BY THIS DEVELOPMENT.
- THERE IS NO TRAFFIC VOLUME INCREASE FOR THIS PHASE DUE TO NUMBER OF STUDENTS REMAINING REMAINING UNCHANGED.
- NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
- NO GEOTECHNICAL STUDY IS REQUIRED FOR STORMWATER MANAGEMENT FOR THIS PROJECT.
- SUBJECT PROPERTY ZONED R-20 PER 10-18-83 COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NO. S. BOA-80-32 EV, SDP-83-25
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (3) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN FINISHED WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDING SHALL BE CLASS "C" AS SHOWN IN FIG. 11.4, VOLUME I OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT "I" ELEVATIONS.
- STORM DRAIN TRENCHES WITHIN ROAD RIGHT OF WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE CONSTRUCTED TO A MINIMUM OF 95% COMPACTION OF AASHTO T100.
- BOARD OF APPEALS CASE BOA-80-32 EV FOR A SPECIAL EXCEPTION FOR THE ENLARGEMENT OF AN EXISTING RELIGIOUS FACILITY AND FOR A PRIVATE ACADEMIC SCHOOL AND A VARIANCE TO REDUCE THE USE SETBACK FROM A COLLECTOR PUBLIC STREET RIGHT-OF-WAY, COLUMBIA ROAD, FROM 20 FEET TO 10 FEET FOR A VEHICLE CIRCULATION DRIVE TO THE EAST OF THE PROPOSED PHASE II ADDITION WAS APPROVED BY THE BOARD ON FEBRUARY 11, 1998, SUBJECT TO THE FOLLOWING CONDITIONS:
 1. THAT THE VARIANCE SHALL APPLY ONLY TO THE VEHICLE CIRCULATION DRIVE BEING REQUESTED AS PART OF PHASE II AND NOT ANY NEW STRUCTURES OR USES ON THE SUBJECT PROPERTY OR TO ANY ADJUNCTION THEREIN.
 2. THE SPECIAL EXCEPTION SHALL APPLY ONLY TO THE PROPOSED PHASE II ENLARGEMENT TO THE EXISTING RELIGIOUS FACILITY AND PRIVATE ACADEMIC SCHOOL, AS DESCRIBED IN THE PETITION, AND NOT TO ANY OTHER ACTIVITIES, USES, OR STRUCTURES ON THE SUBJECT PROPERTY.
 3. BUILDING PERMITS FOR PHASE II SHALL BE OBTAINED WITHIN TWO YEARS OF THE DATE OF THIS DECISION AND SUBSTANTIAL CONSTRUCTION OF PHASE II SHALL BE COMPLETED WITHIN THREE YEARS OF THE DATE OF THIS DECISION.
 4. SUBSTANTIAL CONSTRUCTION OF PHASE III SHALL BE COMPLETED BY DECEMBER 31, 2006.
 5. ANY NEW OUTDOOR LIGHTING ESTABLISHED ON THE SITE SHALL COMPLY WITH SECTION 134 OF THE ZONING REGULATIONS.
 6. THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND COUNTY LAWS AND REGULATIONS.

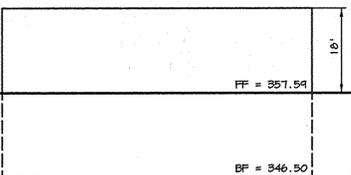
LANDSCAPE NOTES:

- "THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE.
- "FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$ 1,650.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PROPOSED LANDSCAPING PROVIDED FOR THE PROPOSED BUILDING ADDITION ONLY. THE BUILDING INCREASED BY LESS THAN 50%. NO PARKING OR SWM ARE PROPOSED DURING THIS PHASE.
- ADDITIONAL LANDSCAPE OBLIGATIONS WILL BE MET WITH THE SITE DEVELOPMENT PLANS FOR PHASES III & IV.

DEVELOPER'S/BUILDER'S CERTIFICATE:

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: Edward E. Simpson DATE: 10/15/99



PLANT LIST					
SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT	REMARKS
AS	3	Acer saccharum 'Green Mountain' / Green Mountain Sugar Maple	21"-3" cal.	B&B	
AG	24	Abelia x grandiflora / Glossy Abelia	30-36" ht.	Cont.	Plant 4' o.c.
EC	1	Enkianthus campanulatus / Redvein Enkianthus	3-4' ht.	Cont.	

- General Notes
- Proposed Conditions
- Profile and Cross Sections
- Erosion and Sediment Control
- E&S Details
- Planting Plan

PLANTING LEGEND	
PROP. SHADE TREE	
PROP. DECIDUOUS SHRUB	
EXISTING TREES	
EXISTING TREELINE	

SITE ANALYSIS

SITE AREA	19.5 AC (508,060 SF)
DISTURBED AREA	0.30 AC (13,060 SF)
EXISTING ZONING	R-20
PROPOSED USE	RELIGIOUS FACILITY & SCHOOL (80 STUDENTS)
EXISTING BUILDING COVERAGE	6400 SF
PROPOSED ADDITION	BF = 1580 SF FF = 1580 SF TOTAL = 3760 SF
EXISTING PARKING	104 SP (INCL. 2 HC)
PROPOSED PARKING	104 SP (INCL. 2 HC)

NOTE: THIS ADDITION DOES NOT AFFECT THE PEAK PARKING REQUIREMENTS. ULTIMATE PHASES 3 AND 4 WILL ADDRESS PARKING INCREASES.



VICINITY MAP

SCALE: 1"=2000'

BY THE DEVELOPER :

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

Edward E. Simpson 10/15/99
DEVELOPER DATE

BY THE ENGINEER :

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

Arthur E. Muegge 10/11/99
ENGINEER DATE

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

Charles Simmons 10/21/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John P. Robertson 10/21/99
HOWARD SOIL CONSERVATION DISTRICT DATE

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

COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

James Butler 11/2/99
DIRECTOR DATE

Chief, Development Engineering Division DATE

Charles Hamstra 11/1/99
Chief, Division of Land Development DATE

01/31-01/31/99
ADDED BIORETENTION, SHEETS 3-5
REVISED SEWER HOUSE CONNECTION

DATE NO. REVISION

OWNER / DEVELOPER
HARVESTER BAPTIST CHURCH
C/O PASTOR ED SIMPSON
P. O. BOX 381
COLUMBIA, MD. 21044
410-997-4942

PROJECT
HARVESTER BAPTIST CHURCH
PHASE II

AREA
2nd ELECTION DISTRICT
TAX MAP 30 PARCEL 50 BLOCK 9
HOWARD COUNTY, MARYLAND

TITLE
SITE DEVELOPMENT PLAN
& LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, MD 21045
tel 410.997.8900 fax 410.997.9282

10/11/99 DATE
DESIGNED BY: CJR
DRAWN BY: MAD
PROJECT NO: 99048 / SDP1.DWG
DATE: OCTOBER 11, 1999
SCALE: AS SHOWN
DRAWING NO. 1 OF 2

ADDRESS CHART			
PARCEL	STREET ADDRESS	SECT./AREA	PARCEL
50	9605 OLD ANNAPOLIS ROAD		50

SUBDIVISION NAME	SECT./AREA	PARCEL
HARVESTER BAPTIST CHURCH		50
PLAT #	BLOCK #	ZONING/TAX MAP NO.
L. 95, F. 261	4	R-20 30
WATER CODE	F-15	ELECT. DIST.
		2
		CENSUS TRACT
		6023.01
		SEWER CODE

NOTES:

- ALL LIGHTS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
- ALL CURB ROOTS ARE 5" UNLESS OTHERWISE LABELED.
- ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE SHOWN.
- ALL ON-SITE ROADS ARE PRIVATE.
- CONTRACTOR TO PLACE UTILITY TRENCH EXCAVATION ON UPHILL SIDE OF TRENCH. CONTRACTOR TO OPEN TRENCH FOR MAXIMUM OF THREE PIPE LENGTH OR THAT LENGTH WHICH CAN BE BACKFILLED BY END OF DAY.

SEPTIC ABANDONMENT PROCEDURE

- CONTACT HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO WORK AT 410-313-2640.
- CONTRACTOR LICENSED IN HOWARD COUNTY TO PUMP ALL ACCESSIBLE SEWAGE FROM TANKS, CHLORINE PIT AND DRY WELLS, REMOVE LIDS, BREAK-UP STRUCTURE(S) AND BACK FILL.

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose

To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these standards and specifications, areas having slopes steeper than 2:1 require special consideration and care for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SCS in cooperation with Maryland Agricultural Experimentation Station.
- Topsoil Specifications - soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of clinders, stones, slag, coarse fragments, gravel, sticks, roots, trash or other materials larger than 1 1/2" in diameter.
 - Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, Johnsongrass, nutsedge, poison ivy, thistle, or others as specified.
 - Where subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-6 tons per acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil. Line shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No soil or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

Note: Topsoil substitutes to amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority may be used in lieu of natural topsoil.

- Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

V. Topsoil Application

- When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, earth dikes, slope silt fence and sediment traps and basins.
- Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 8" higher in elevation.
- Topsoil shall be uniformly distributed in a 4" - 8" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

VI. Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:

- Composted Sludge Material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for site having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by, or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMA 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

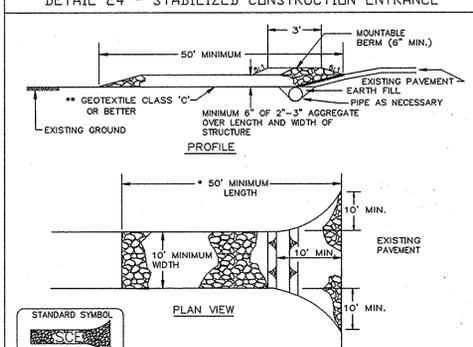
References: guideline Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1978.

STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (319-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN A 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1, BY 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 THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 1, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING, SO2, TEMPORARY SEEDING, AND MULCHING (SEC. 6.7). TEMPORARY STABILIZATION WITH MULCH ALONE SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHED OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	19.5 ACRES
AREA DISTURBED	0.30 ACRES
AREA TO BE ROOFED OR PAVED	0.04 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.26 ACRES
TOTAL CUT	350 CU. YARDS
TOTAL FILL	350 CU. YARDS
- 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 SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.
- SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.
- SEDIMENT WILL BE REMOVED FROM TRAPS WHEN ITS DEPTH REACHES CLEAN OUT ELEVATION SHOWN ON THE PLANS.
- CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURAL FILL OR EMBANKMENT MATERIAL, NOR DO THEY REFLECT CONSIDERATION OF UNDESIRABLE OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.

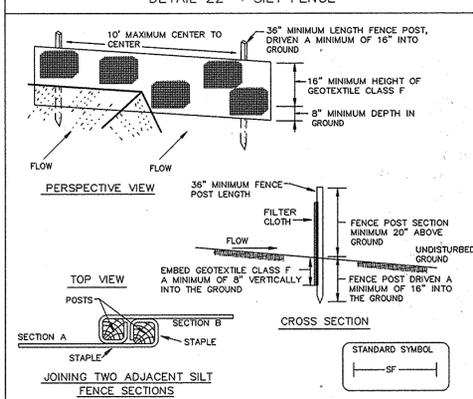
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



- Length - minimum of 50' (*30' for single residence lot).
- Width - 10' minimum, should be flared at the existing road to provide a turning radius.
- Geotextile fabric (filter cloth) shall be placed over the existing ground prior to placing stone. **The plan approval authority may not require single family residences to use geotextile.
- Stone - crushed aggregate (2" to 3") or reclaimed or recycled concrete equivalent shall be placed at least 6" deep over the length and width of the entrance.
- Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mounded 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.
- Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE E-12-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

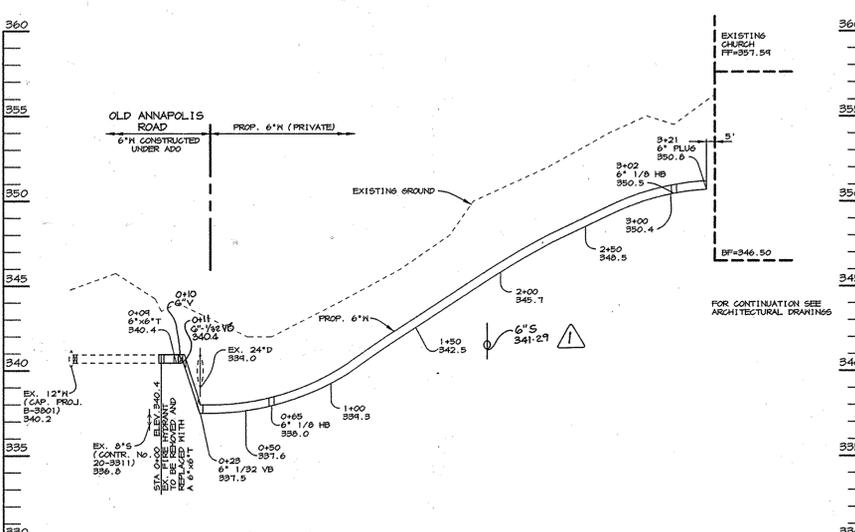
DETAIL 22 - SILT FENCE



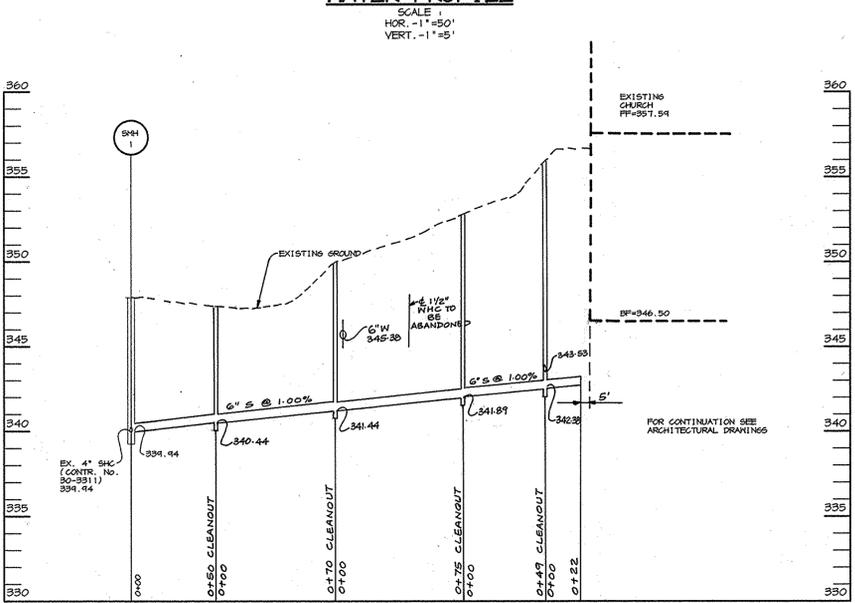
- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min.)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min.)	Test: MSMT 509
Flow Rate	0.3 gal ft / minute (max.)	Test: MSMT 322
Filtering Efficiency	75% (min.)	Test: MSMT 322
- Where ends of geotextile fabric come together, they shall be overlapped, folded and stapled to prevent sediment bypass.
- Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height.

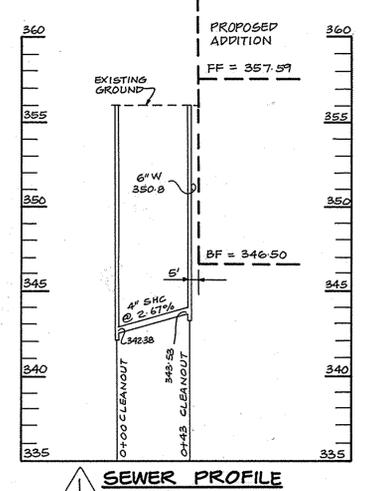
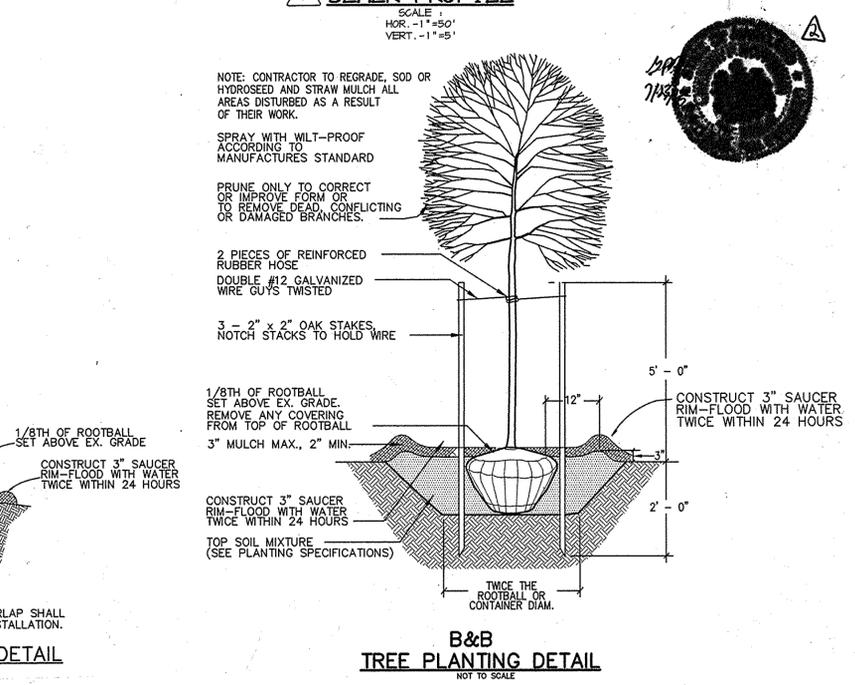
U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE PAGE E-15-3 MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



WATER PROFILE



SEWER PROFILE



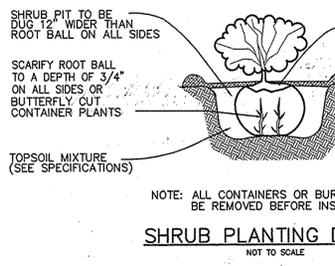
SEWER PROFILE

SEQUENCE OF CONSTRUCTION

- OBTAIN A GRADING PERMIT.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE PER DIRECTION OF HOWARD COUNTY DILP INSPECTOR. INSTALL SILT FENCE. (1 DAY)
- BEGIN BUILDING CONSTRUCTION.
- INSTALL WATER AND SEWER HOUSE CONNECTIONS. (2 WEEKS)
- COMPLETE BUILDING CONSTRUCTION AND WITH PERMISSION OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE ALL REMAINING DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (4 MONTHS)

PERIMETER LANDSCAPE EDGE

	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO ROADWAYS
PERIMETER	1	3
LANDSCAPE TYPE	C	E
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	48	40
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES, 48	NO
CREDIT FOR MALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO
NUMBER OF PLANTS REQUIRED		
SHADE TREES	2	1
EVERGREEN TREES	-	-
SHRUBS	15	10
NUMBER OF PLANTS PROVIDED		
SHADE TREES	2	1
EVERGREEN TREES	-	-
SMALL LOWERING TREES	-	-
SHRUBS	15	10



SHRUB PLANTING DETAIL

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

Edwin E. Soper 10/15/99
DEVELOPER DATE

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

Arthur E. Muegge 10/11/99
ENGINEER DATE

THESE PLANS HAVE BEEN REVIEWED FOR THE HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.
Reynold Simmons 10/19/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
John R. Rutter 10/21/99
HOWARD SOIL CONSERVATION DISTRICT DATE

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

COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Leon S. Smith 11/2/99
DIRECTOR DATE

Arthur E. Muegge 11/2/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Conrad Hamilton 11/9/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

05/24/96 (2) ADD DETAILING, SHEETS 3-9
01-31-01 (1) REVISED SEWER PROFILE; ADD SEWER PROFILE

DATE	NO.	REVISION

OWNER / DEVELOPER
HARVESTER BAPTIST CHURCH
C/O PASTOR ED SIMPSON
P.O. BOX 931
COLUMBIA, MD. 21044
410-997-4492

PROJECT
HARVESTER BAPTIST CHURCH PHASE II

AREA
2nd ELECTION DISTRICT
TAX MAP 30 PARCEL 5B BLOCK 9
HOWARD COUNTY, MARYLAND

TITLE
NOTES AND DETAILS

RIEMER MUEGGE & ASSOCIATES INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8618 Centre Park Drive, Columbia, MD 21045
tel 410.997.8900 fax 410.997.9282

10/1/99
DESIGNED BY: CJR
DRAWN BY: MAD
PROJECT NO: 99048 SDP2.DWG
DATE: OCTOBER 11, 1999
SCALE: AS SHOWN
DRAWING NO. 2 OF 8

SHEET INDEX	
No.	DESCRIPTION
1	SITE DEVELOPMENT & LANDSCAPE PLAN
2	NOTES AND DETAILS

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUMBING STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/DIVISION OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITIES" AT 1-800-251-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.
- 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.
- ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM "OLD RIVER SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY RIEMER MUEGGE & ASSOCIATES, INC., DATED OCTOBER, 1985.
- 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. 300A AND 300' WERE USED FOR THIS PROJECT.
- WATER IS PUBLIC. CONTRACT NO. 44-0500
- SEWER IS PRIVATE.
- STORMWATER MANAGEMENT IS DEFERRED UNTIL THE SUBSEQUENT PHASE OF DEVELOPMENT DUE TO THE NATURE OF THE WORK.
- APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.
- 100-YEAR FLOODPLAIN IS BASED ON HOWARD COUNTY'S LITTLE PATUENT RIVER STUDY.
- NO WETLANDS ARE IMPACTED BY THIS DEVELOPMENT.
- THERE IS NO TRAFFIC VOLUME INCREASE FOR THIS PHASE DUE TO NUMBER OF STUDENTS REMAINING REMAINING UNCHANGED.
- NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.
- NO GEOTECHNICAL STUDY IS REQUIRED FOR STORMWATER MANAGEMENT FOR THIS PROJECT.
- SUBJECT PROPERTY ZONED R-20 PER 10-18-83 COMPREHENSIVE ZONING PLAN.
- ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND O.S. MEAN SEA LEVEL DATUM, 1929.
- SEE DEPARTMENT OF PLANNING AND ZONING FILE NO. B-146-82 ELEV. 500-83-25
- THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PIPE SHALL NOT BE INSTALLED BY THE CONTRACTOR UNTIL THE LENGTH CALLED FOR AT EACH STATION HAS BEEN APPROVED BY THE ENGINEER IN THE FIELD.
- NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BRUSHED WITHIN 6" OF FINISHED GRADE.
- ALL STORM DRAIN PIPE BEDDINGS SHALL BE CLASS "C" AS SHOWN IN FIG. 11.4, VOLUME 1 OF HOWARD COUNTY DESIGN MANUAL UNLESS OTHERWISE NOTED.
- ALL INLETS SHALL BE CONSTRUCTED IN ACCORDANCE WITH HOWARD COUNTY STANDARDS.
- ALL PIPE ELEVATIONS SHOWN ARE INVERT ELEVATIONS.
- STORM DRAIN FRENCHES WITHIN ROAD RIGHT-OF-WAY SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, I.E., STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION, LATEST AMENDMENTS.
- PROFILE STATIONS SHALL BE ADJUSTED AS NECESSARY TO CONFORM TO PLAN DIMENSIONS.
- ALL FILL AREAS WITHIN ROADWAY AND UNDER STRUCTURES TO BE COMPACTED TO A MINIMUM OF 95% COMPACTION OF AASHO T100.
- BOARD OF APPEALS CASE B-146-82 ELEV FOR A SPECIAL EXCEPTION FOR THE ENLARGEMENT OF AN EXISTING RELIGIOUS FACILITY AND FOR A PRIVATE ACADEMIC SCHOOL AND A VARIANCE TO REMOVE THE USE RESTRICTION FROM A COLLECTOR PUBLIC STREET RIGHT-OF-WAY, COLUMBIA ROAD, FROM 20 FEET TO 10 FEET FOR A VEHICLE CIRCULATION DRIVE TO THE EAST OF THE PROPOSED PHASE II ADDITION APPROVED BY THE BOARD ON FEBRUARY 11, 1999, SUBJECT TO THE FOLLOWING CONDITIONS:
 1. THAT THE VARIANCE SHALL APPLY ONLY TO THE VEHICLE CIRCULATION DRIVE BEING REQUESTED AS PART OF PHASE II AND NOT ANY NEW STRUCTURES OR USES ON THE SUBJECT PROPERTY OR TO ANY ADDITIONS THEREON.
 2. THE SPECIAL EXCEPTION SHALL APPLY ONLY TO THE PROPOSED PHASE II ENLARGEMENT TO THE EXISTING RELIGIOUS FACILITY AND PRIVATE ACADEMIC SCHOOL AS DESCRIBED IN THE PETITION AND DEPEND ON THE SPECIAL EXCEPTION PLAN FOR HARVESTER BAPTIST CHURCH SUBMITTED ON JUNE 24, 1988, AND NOT TO ANY OTHER ACTIVITIES, USES, OR STRUCTURES ON THE SUBJECT PROPERTY.
 3. BUILDING PERMITS FOR PHASE II SHALL BE OBTAINED WITHIN TWO YEARS OF THE DATE OF THIS DECISION AND SUBSTANTIAL CONSTRUCTION OF PHASE II SHALL BE COMPLETED WITHIN THREE YEARS OF THE DATE OF THIS DECISION.
 4. SUBSTANTIAL CONSTRUCTION OF PHASE III SHALL BE COMPLETED BY DECEMBER 31, 2004. SUBSTANTIAL CONSTRUCTION OF PHASE IV SHALL BE COMPLETED BY DECEMBER 31, 2006.
 5. ANY NEW OUTDOOR LIGHTING ESTABLISHED ON THE SITE SHALL COMPLY WITH SECTION 134 OF THE ZONING REGULATIONS.
 6. THE PETITIONERS SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE, AND COUNTY LAWS AND REGULATIONS.

LANDSCAPE NOTES:

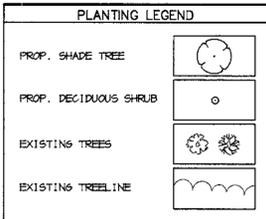
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE.
- "FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$ 1,650.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.
- PROPOSED LANDSCAPING PROVIDED FOR THE PROPOSED BUILDING ADDITION ONLY. THE BUILDING INCREASED BY LESS THAN 50%. NO PARKING OR SWM ARE PROPOSED DURING THIS PHASE.
- ADDITIONAL LANDSCAPE OBLIGATIONS WILL BE MET WITH THE SITE DEVELOPMENT PLANS FOR PHASES III & IV.

DEVELOPER'S/BUILDER'S CERTIFICATE:

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: *Ed Simpson* DATE: 10/15/99

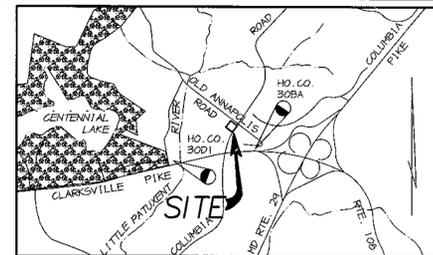
PLANT LIST					
SYMBOL	QTY.	SCIENTIFIC/COMMON NAME	SIZE	ROOT	REMARKS
AS	3	Acer saccharum Green Mountain / Green Mountain Sugar Maple	21-3" cal.	B&B	
AG	24	Abelia x grandiflora / Glossy Abelia	30-36" ht.	Cont.	Plant 4' o.c.
EC	1	Enkianthus campanulatus / Redvein Enkianthus	3-4' ht.	Cont.	



SITE ANALYSIS

SITE AREA	19.5 AC (500,000 SF)
DISTURBED AREA	0.30 AC (13,000 SF)
EXISTING ZONING	R-20
EXISTING USE	RELIGIOUS FACILITY & SCHOOL (80 STUDENTS)
PROPOSED USE	RELIGIOUS FACILITY & SCHOOL (50 STUDENTS)
EXISTING BUILDING COVERAGE	6400 SF
PROPOSED ADDITION	BF = 1800 SF RF = 1800 SF TOTAL = 3760 SF
EXISTING PARKING	104 SP (INCL. 2 HO)
PROPOSED PARKING	104 SP (INCL. 2 HO)

NOTE: THIS ADDITION DOES NOT AFFECT THE PEAK PARKING REQUIREMENTS. ULTIMATE PHASES 3 AND 4 WILL ADDRESS PARKING INCREASES.



VICINITY MAP

SCALE: 1"=2000'

BY THE DEVELOPER :

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

Ed Simpson 10/15/99
DEVELOPER DATE

BY THE ENGINEER :

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

Arthur E. Muegge 10-11-99
ENGINEER DATE

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

Cheef Simmons 10/21/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John P. Robertson 10/21/99
HOWARD SOIL CONSERVATION DISTRICT DATE

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

COUNTY HEALTH OFFICER DATE

APPROVED : HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

Joseph R. Rutter 11/2/99
DIRECTOR DATE

Chief, Development Engineering Division DATE

Chris Hamstra 11/1/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

01-31-01 REVISED SEWER HOUSE CONNECTION

DATE NO. REVISION

OWNER / DEVELOPER
HARVESTER BAPTIST CHURCH
C/O PASTOR ED SIMPSON
P.O. BOX 431
COLUMBIA, MD. 21044
410-997-4492

PROJECT
HARVESTER BAPTIST CHURCH
PHASE II

AREA
2nd ELECTION DISTRICT
TAX MAP 30 PARCEL 58 BLOCK 9
HOWARD COUNTY, MARYLAND

TITLE
SITE DEVELOPMENT PLAN
& LANDSCAPE PLAN

RIEMER MUEGGE & ASSOCIATES INC
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, MD 21045
tel 410.997.8800 fax 410.997.9282

10/11/99 DATE
DESIGNED BY : CJR

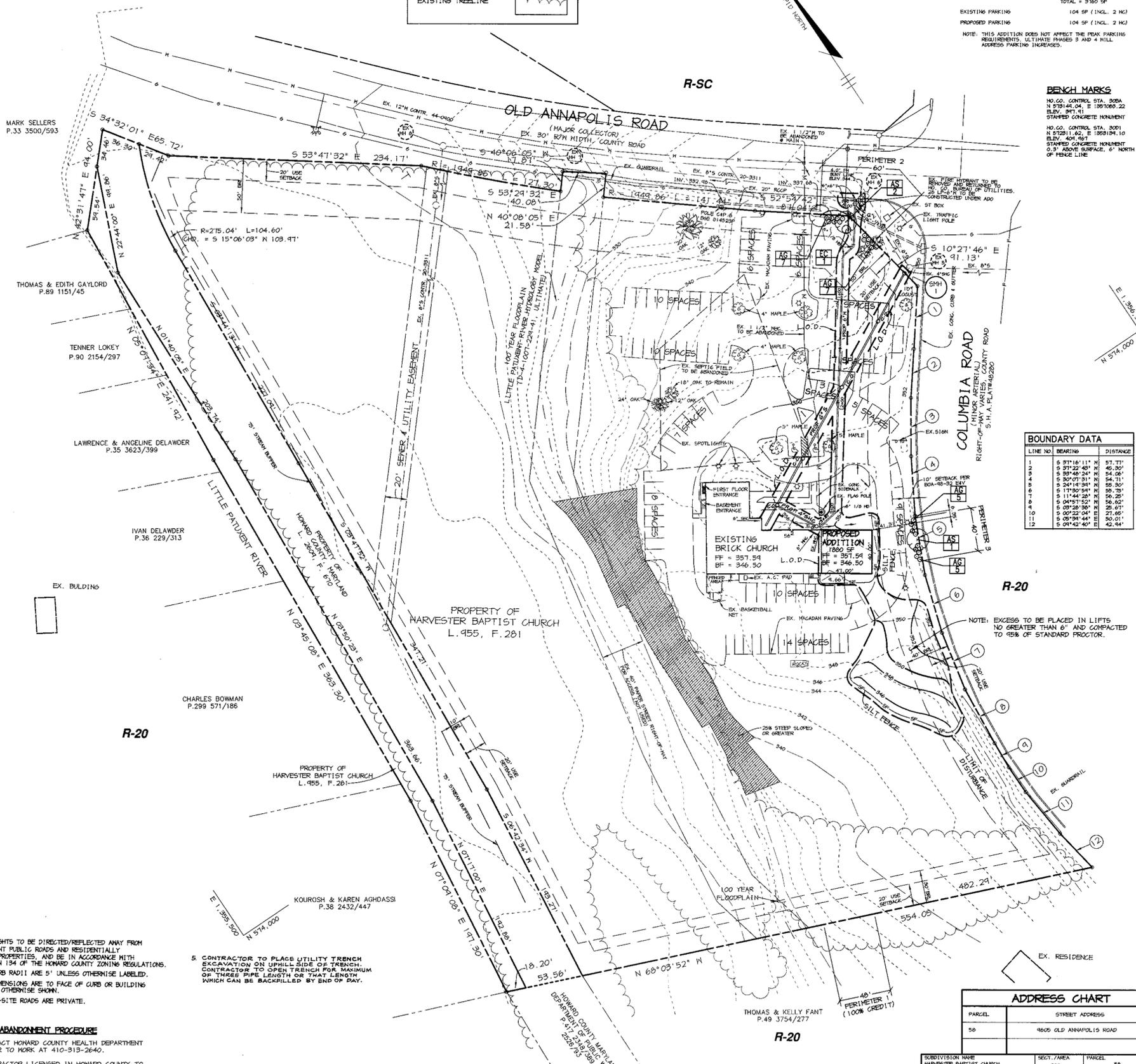
DRAWN BY: MAD

PROJECT NO : 99048\SDP1.DWG

DATE : OCTOBER 11, 1999

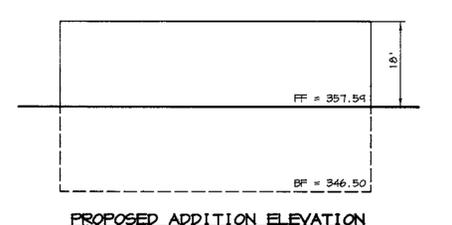
SCALE : AS SHOWN

DRAWING NO. 1 OF 2



BOUNDARY DATA

LINE NO.	BEARING	DISTANCE
1	S 51°16'11" E	57.77'
2	S 87°22'45" E	45.20'
3	S 90°46'24" E	54.06'
4	S 30°07'31" E	54.06'
5	S 24°14'34" E	55.30'
6	S 17°50'54" E	55.30'
7	S 11°44'22" E	56.25'
8	S 04°51'52" E	56.66'
9	S 02°28'20" E	57.67'
10	S 00°22'04" E	57.66'
11	S 02°51'44" E	40.011'
12	S 09°42'40" E	42.94'



NOTES:

- ALL LIGHTS TO BE DIRECTED/REFLECTED AWAY FROM ADJACENT PUBLIC ROADS AND RESIDENTIALLY ZONED PROPERTIES, AND BE IN ACCORDANCE WITH SECTION 134 OF THE HOWARD COUNTY ZONING REGULATIONS.
- ALL CURB RADIUS ARE 5' UNLESS OTHERWISE LABELED.
- ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING UNLESS OTHERWISE SHOWN.
- ALL ON-SITE ROADS ARE PRIVATE.
- CONTRACTOR TO PLACE UTILITY TRENCH EXCAVATION ON UPHILL SIDE OF TRENCH. CONTRACTOR TO OPEN TRENCH FOR MAXIMUM OF THREE PIPE LENGTH OR THAT LENGTH WHICH CAN BE BACKFILLED BY END OF DAY.

SEPTIC ABANDONMENT PROCEDURE

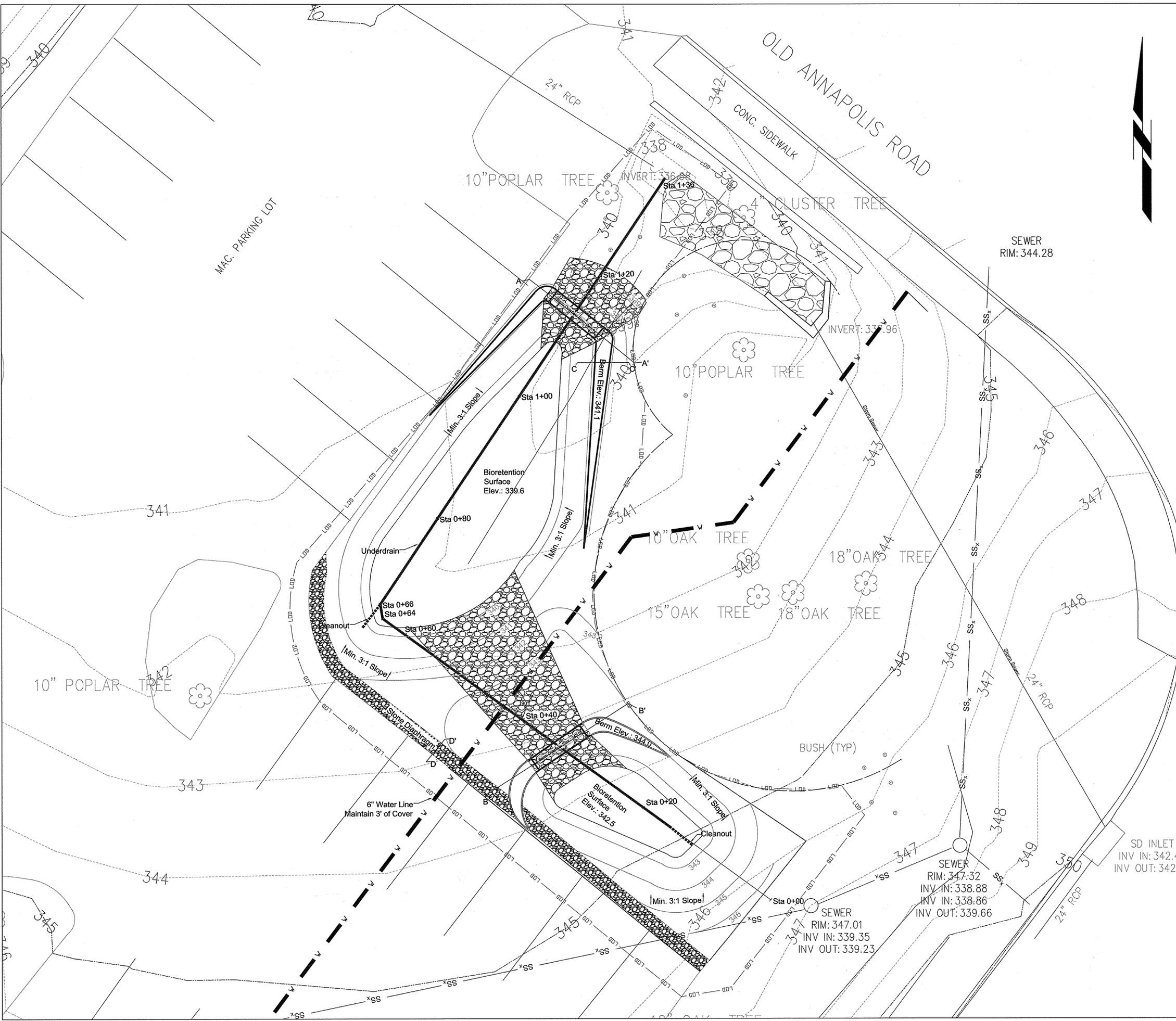
- CONTACT HOWARD COUNTY HEALTH DEPARTMENT PRIOR TO WORK AT 410-313-2640.
- CONTRACTOR LICENSED IN HOWARD COUNTY TO PUMP ALL ACCESSIBLE SEWAGE FROM TANKS, CHLORINE PIT AND DRY WELLS, REMOVE LIDS, BREAK-UP STRUCTURE(S) AND BACK FILL.

PLAN
SCALE: 1"=50'

ADDRESS CHART

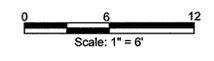
PARCEL	STREET ADDRESS
50	1805 OLD ANNAPOLIS ROAD

SUBDIVISION NAME	SECT. AREA	PARCEL
HARVESTER BAPTIST CHURCH		50
PLAT #	BLOCK #	ZONING/TAX MAP NO.
L. 455, P. 291	4	R-20 30
		ELECT. DIST.
		6023.01
WATER CODE	SEWER CODE	
F-15		



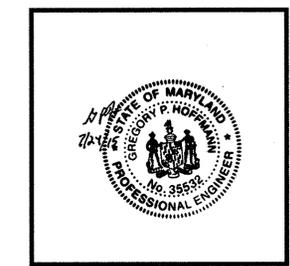
Legend

- Existing**
- 400 --- Existing Contours - Major
 - 397 --- Existing Contours - Minor
 - ☼ Tree
 - Shrub
 - Pavement Edge
 - - - Sanitary Sewer
 - Storm Sewer
- Proposed**
- 400 --- Proposed Contours
 - Perforated Underdrain
 - Solid-Walled Underdrain
 - Limits of Excavation
 - - - SF - Silt Fence
 - - - Tree Protection
 - LOD - Limits of Disturbance
 - Stabilized Construction Entrance



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 35532
 EXPIRATION DATE 3/13/2016
 NAME Gregory Hoffmann DATE 7/2/15



ENGINEER'S SEAL

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John R. Roberts 8/3/15
 HOWARD SCD Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division *[Signature]* 8/5/15 Date
 Chief, Division of Land Development *[Signature]* 8-7-15 Date
 Director *[Signature]* 8-10-15 Date

DATE: May 26, 2015	SCALE: 1 inch = 6 feet	DESIGN BY: GPH	PROJECT ID: W-14016	SHEET NUMBER: 4 OF 8
REVISION NUMBER:	REVISION TYPE:	DRAWN BY:	CHECKED BY:	
SURVEY COMPLETED BY: Carl F. Kreutter, L.S. Howard County Office of Environmental Sustainability 3430 Court House Drive Ellicott City, MD 21043 (Phone) 301-974-9065				
PREPARED FOR: The Center for Watershed Protection 3290 Main Street, Suite 290 Ellicott City, MD 21043 410-461-8323				
PROPOSED CONDITIONS Harvester Baptist Church Ellicott City, Maryland				

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL

Definition
Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

Purpose
To provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

Conditions These Practice Applies

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
 - The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 require special consideration and design for adequate stabilization. Areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

Construction and Material Specifications

I. Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-SOS in cooperation with Maryland Agricultural Experiment Station.

II. Topsoil Specifications - Soil to be used as topsoil must meet the following:

- Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of contrasting textured subsoils and shall contain less than 5% by volume of clinders, stones, slag, coarse fragments, gravel, sticks, trash, or other materials larger than 1 1/2" in diameter.
- Topsoil must be free of plants or plant parts such as bermuda grass, quackgrass, johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
- Where subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 200-400 pounds per 1,000 square feet prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.
- For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.2 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.
- For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall be not less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic materials.

Note: Topsoil substitutes to amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority may be used in lieu of natural topsoil.

II. Place topsoil (if required) and apply soil amendments as specified in 20.2 Vegetative Stabilization - Section 1 - Vegetative Stabilization Methods and Materials.

V. Topsoil Application

- When topsoiling, maintain needed erosion and sediment control practices such as diversions, grade stabilization structures, earth dikes, slope silt fence and sediment traps and basins.
- Grades on the areas to be topsoiled, which have been previously established, shall be maintained, albeit 4" - 6" higher in elevation.
- Topsoil shall be uniformly distributed in a 4" - 6" layer and lightly compacted to a minimum thickness of 4". Spreading shall be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- Topsoil shall not be placed while the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.
- Alternative for Permanent Seeding - Instead of applying the full amounts of lime and commercial fertilizer, composted sludge and amendments may be applied as specified below:
 - Composted sludge material for use as a soil conditioner for sites having disturbed areas over 5 acres shall be tested to prescribe amendments and for site having disturbed areas under 5 acres shall conform to the following requirements:
 - Composted sludge shall be supplied by or originate from, a person or persons that are permitted (at the time of acquisition of the compost) by the Maryland Department of the Environment under COMAR 26.04.06.
 - Composted sludge shall contain at least 1 percent nitrogen, 1.5 percent phosphorus, and 0.2 percent potassium and have a pH of 7.0 to 8.0. If compost does not meet these requirements, the appropriate constituents must be added to meet the requirements prior to use.
 - Composted sludge shall be applied at a rate of 1 ton/1,000 square feet.
 - Composted sludge shall be amended with a potassium fertilizer applied at the rate of 4 lb/1,000 square feet, and 1/3 the normal lime application rate.

References: Guideline Specifications, Soil Preparation and Sodding, MD-VA, Pub. #1, Cooperative Extension Service, University of Maryland and Virginia Polytechnic Institutes. Revised 1973.

STANDARD SEDIMENT CONTROL NOTES

1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (318-1650).

2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.

3. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 14 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3:1. 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4. ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND MARKING SIGNS POSTED AROUND THE PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 7, OF THE HOWARD COUNTY DESIGN MANUAL, STORE DRAINAGE.

5. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. FOR PERMANENT SEEDING, SO2, TEMPORARY SEEDING, AND MULCHING (SEC. 6.) TEMPORARY STABILIZATION WITH MULCH APPLICATION SHALL ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.

6. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

7. SITE ANALYSIS:

TOTAL AREA OF SITE	19.5 ACRES
AREA DISTURBED	0.30 ACRES
AREA TO BE ROOFED OR PAVED	0.24 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0.26 ACRES
TOTAL CUT	850 CU. YARDS
TOTAL FILL	350 CU. YARDS

8. ANY SEDIMENT CONTROL STRUCTURES MUST BE REPAIRED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

9. ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

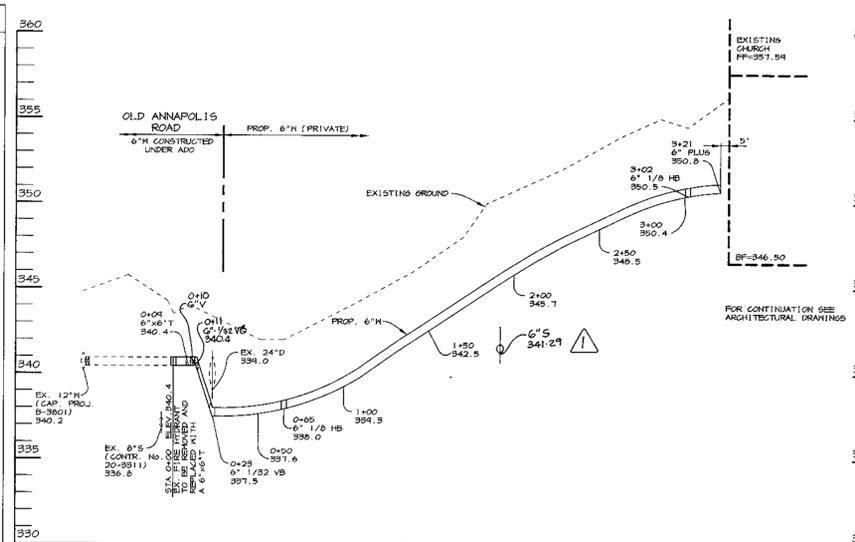
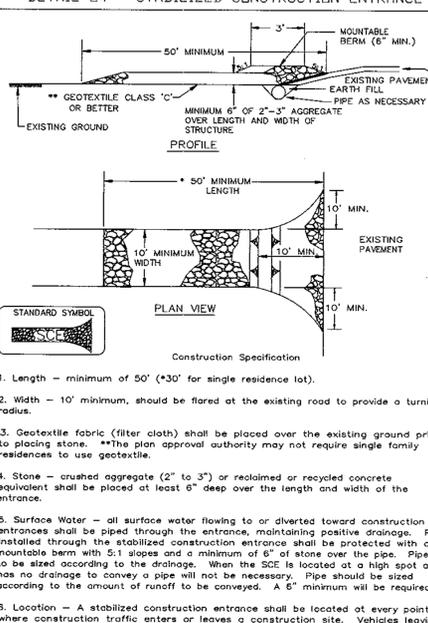
10. ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUIRED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

11. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PILE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

12. SITE GRADING WILL BEGIN ONLY AFTER ALL PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED AND ARE IN A FUNCTIONING CONDITION.

13. CUT AND FILL QUANTITIES PROVIDED UNDER SITE ANALYSIS DO NOT REPRESENT BID QUANTITIES. THESE QUANTITIES DO NOT DISTINGUISH BETWEEN TOPSOIL, STRUCTURE FILL OR UNDERLAYMENT MATERIAL. NOR DO THEY REFLECT CONSIDERATION OF UNDERCUTTING OR REMOVAL OF UNSUITABLE MATERIAL. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH SITE CONDITIONS WHICH MAY AFFECT THE WORK.

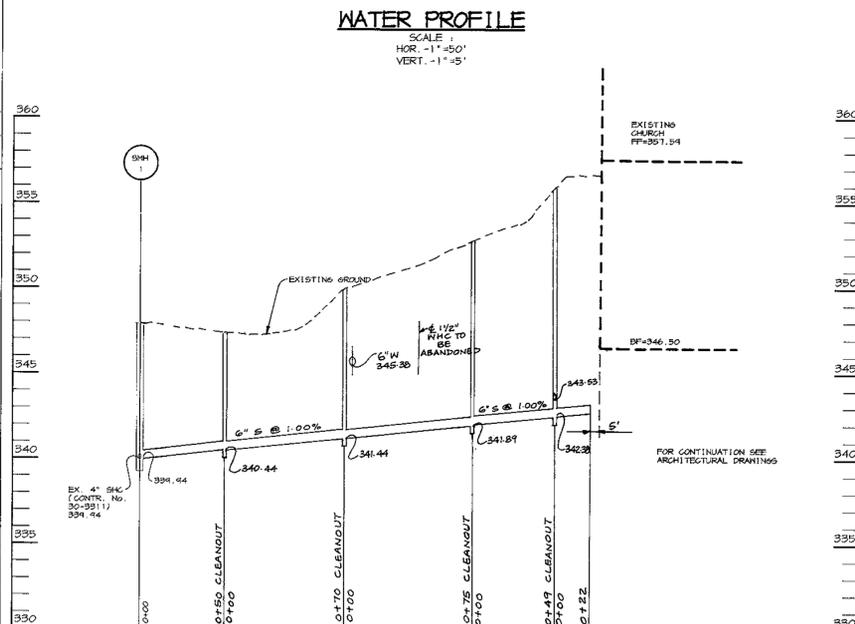
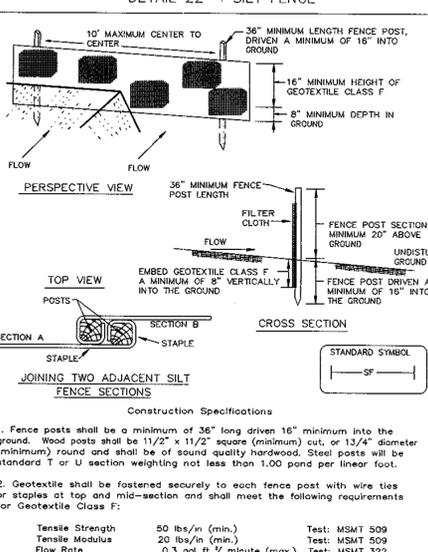
DETAIL 24 - STABILIZED CONSTRUCTION ENTRANCE



WATER PROFILE

SCALE: HOR. - 1"=50' VERT. - 1"=5'

DETAIL 22 - SILT FENCE



SEWER PROFILE

SCALE: HOR. - 1"=50' VERT. - 1"=5'

TEMPORARY SEEDING NOTES

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

Seeded Preparation - Loosen upper three inches of soil by raking, plowing or other acceptable means before seeding, if not previously loosened.

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

Seeding - For the period March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushels per acre of annual ryegrass (3.2 lbs. per 1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of creeping lovegrass (1.0 lbs. per 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 10-10-10 fertilizer (14 lbs. per 1000 sq. ft.) of untreated small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 2lb. gal. per acre (5 gal. per 1000 sq. ft.) of emulsified asphalt on flat areas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq. ft.) for anchoring.

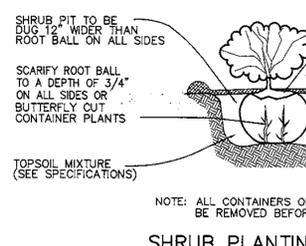
Maintenance - Inspect all seeded areas and make needed repairs, replacements and reseedings.

SEQUENCE OF CONSTRUCTION

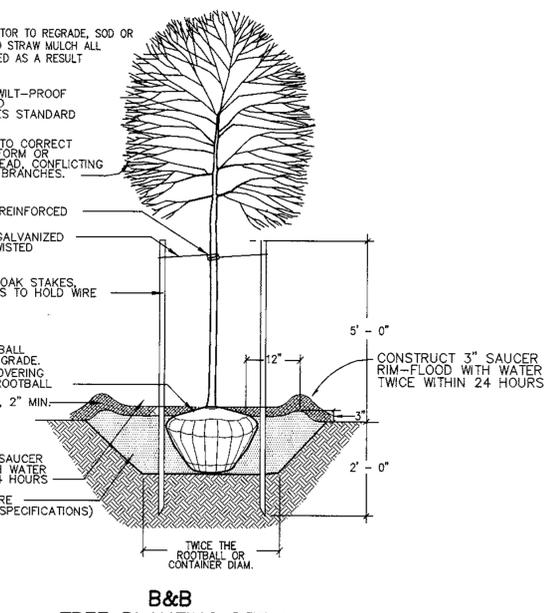
- OBTAIN A GRADING PERMIT.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE PER DIRECTION OF HOWARD COUNTY DILP INSPECTOR. INSTALL SILT FENCE. (1 DAY)
- BEGIN BUILDING CONSTRUCTION.
- INSTALL WATER AND SEWER HOUSE CONNECTIONS. (2 WEEKS)
- COMPLETE BUILDING CONSTRUCTION AND WITH PERMISSION OF HOWARD COUNTY DILP SEDIMENT CONTROL INSPECTOR REMOVE SEDIMENT CONTROL DEVICES AND STABILIZE ALL REMAINING DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (4 MONTHS)

PERIMETER LANDSCAPE EDGE

	ADJACENT TO PERIMETER PROPERTIES	ADJACENT TO ROADWAYS
PERIMETER	1	2 3
LANDSCAPE TYPE	C	E E
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	48	60 40
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES, 48	NO NO
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO NO
NUMBER OF PLANTS REQUIRED		
SHADE TREES	-	2 1
EVERGREEN TREES	-	2 1
SHRUBS	-	15 10
NUMBER OF PLANTS PROVIDED		
SHADE TREES	-	2 1
EVERGREEN TREES	-	2 1
SMALL FLOWERING TREES	-	2 1
SHRUBS	-	15 10



SHRUB PLANTING DETAIL



B&B TREE PLANTING DETAIL

BY THE DEVELOPER :

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

Edwin E. Simpson 10/15/99
DEVELOPER DATE

BY THE ENGINEER :

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

Arthur E. Muegge 10/11/99
ENGINEER DATE

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

Keyel Simmons 10/21/99
NATURAL RESOURCES CONSERVATION SERVICE DATE

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

John R. Rhoton 10/21/99
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS, HOWARD COUNTY HEALTH DEPARTMENT.

COUNTY HEALTH OFFICER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

James B. Smith 11/2/99
DIRECTOR DATE

Candy Hamilton 10/15/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Candy Hamilton 11/4/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

REVISION: REVISED SEWER PROFILE; ADD SEWER PROFILE

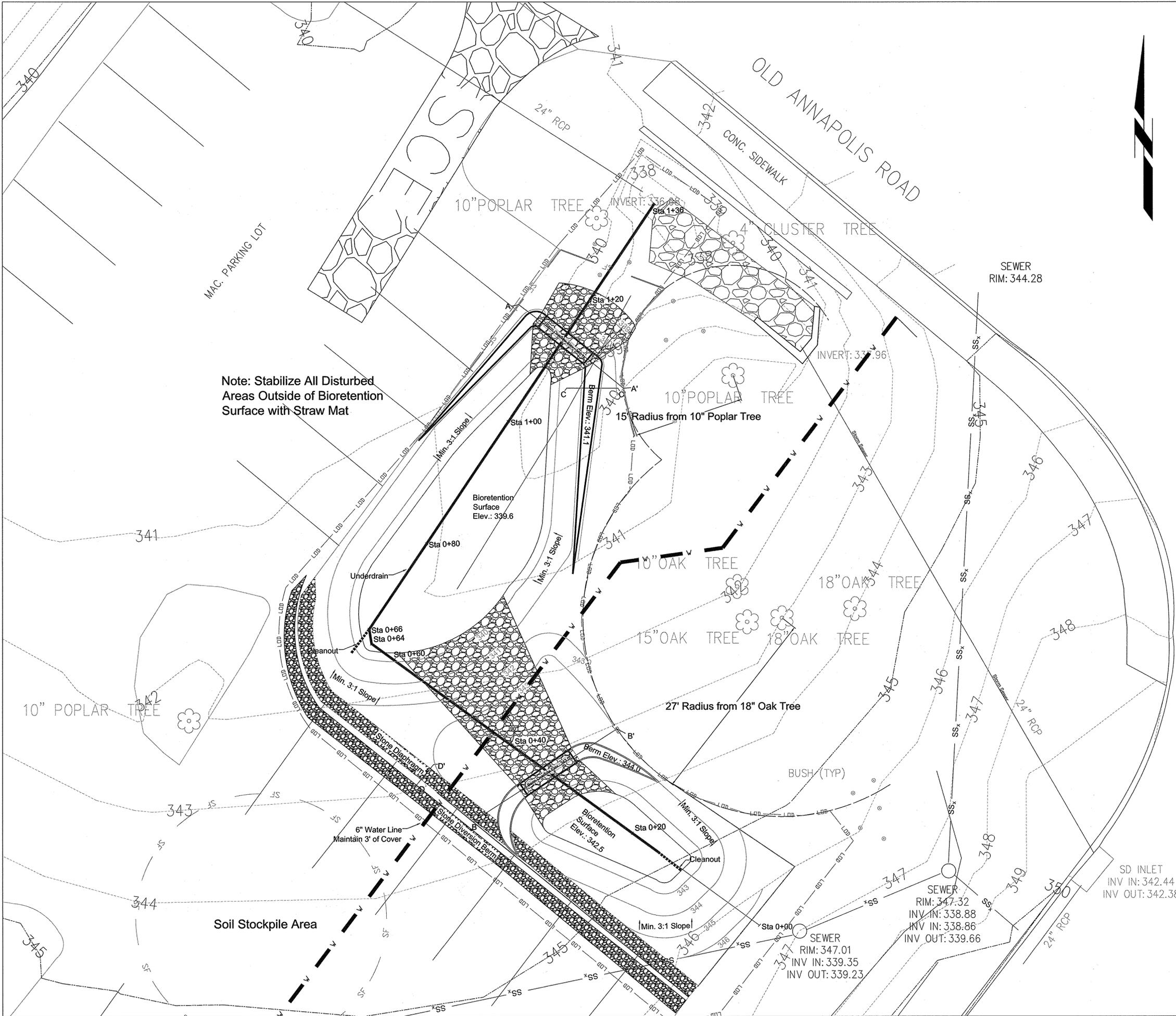
OWNER / DEVELOPER
HARVESTER BAPTIST CHURCH
C/O PASTOR ED SIMPSON
P.O. BOX 931
COLUMBIA, MD. 21044
410-947-4492

PROJECT: HARVESTER BAPTIST CHURCH PHASE II
AREA: 2nd ELECTION DISTRICT
TAX MAP 30 PARCEL 58 BLOCK 9
HOWARD COUNTY, MARYLAND

NOTES AND DETAILS

RIEMER MUEGGE & ASSOCIATES INC.
ENGINEERING • ENVIRONMENTAL SERVICES • PLANNING • SURVEYING
8818 Centre Park Drive, Columbia, MD 21046
tel 410.987.8800 fax 410.987.8282

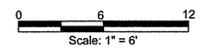
DESIGNED BY: CJR
DRAWN BY: MAD
PROJECT NO: 99048
DATE: OCTOBER 11, 1999
SCALE: AS SHOWN
DRAWING NO. 2 OF 2



Note: Stabilize All Disturbed Areas Outside of Bioretention Surface with Straw Mat

Legend

- Existing**
- 400--- Existing Contours - Major
 - 397--- Existing Contours - Minor
 - ⊗ Tree
 - Shrub
 - Pavement Edge
 - - - Sanitary Sewer
 - Storm Sewer
- Proposed**
- 400 Proposed Contours
 - Perforated Underdrain
 - Solid-Walled Underdrain
 - Limits of Excavation
 - SF Silt Fence
 - Tree Protection
 - LDD Limits of Disturbance
 - Stabilized Construction Entrance



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 35532
 EXPIRATION DATE 3/13/2016
 NAME Gregory Hoffmann DATE 7/24/15



ENGINEER'S SEAL

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

John R. Robertson 8/3/15
 HOWARD SCD Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division 8/5/15 Date

Chief, Division of Land Development 8-7-15 Date

Director 8-10-15 Date

DATE: May 26, 2015 SCALE: 1 inch = 6 feet

REVISION NUMBER: DESIGN BY: GPH

REVISION TYPE: DRAWN BY: GPH

REVISION DATE: CHECKED BY: JOB

REVISION NUMBER: PROJECT ID: W-14-016

REVISION DATE: PROJECT ID: W-14-016

REVISION TYPE: SHEET NUMBER 6 OF 8

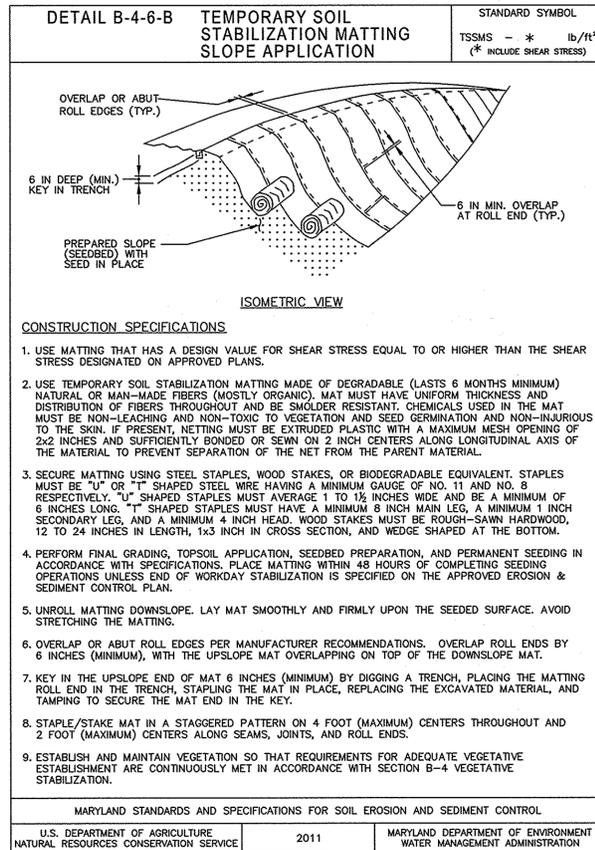
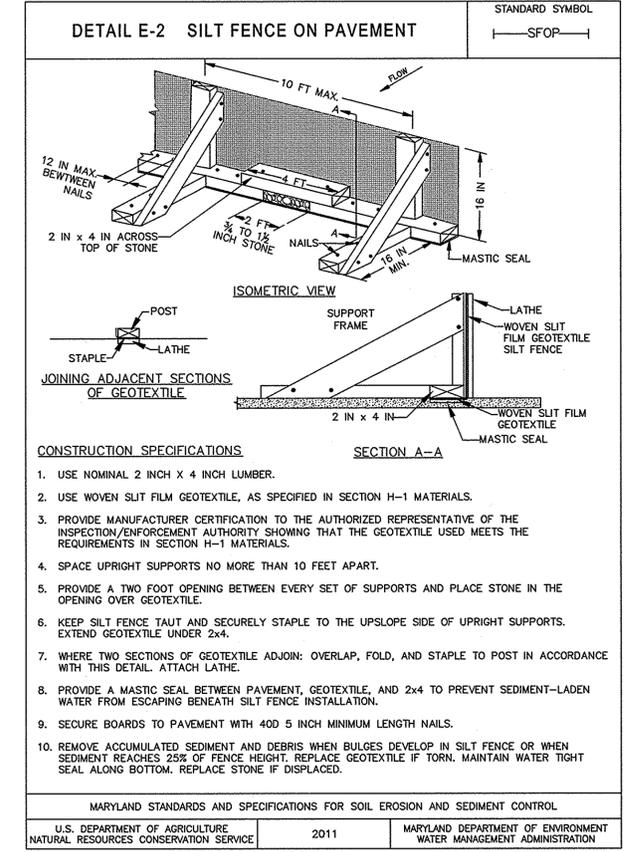
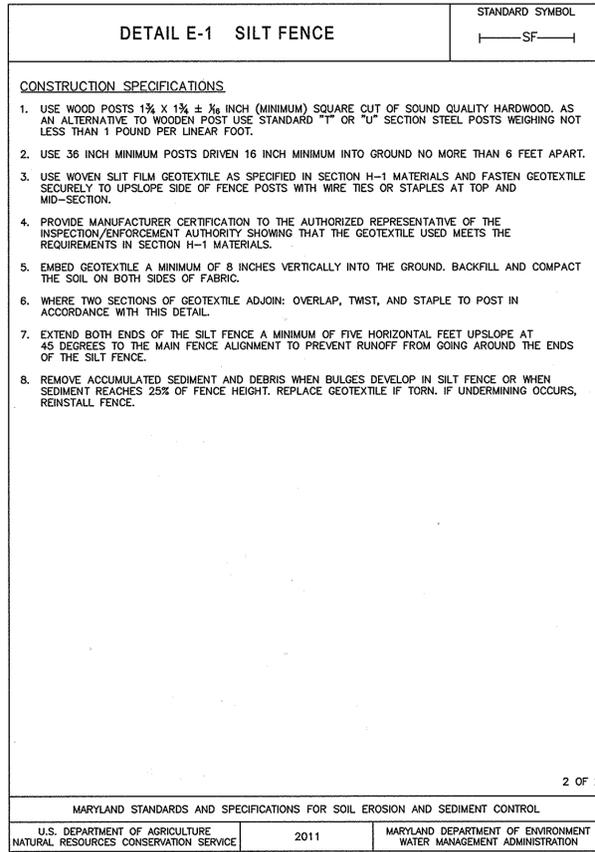
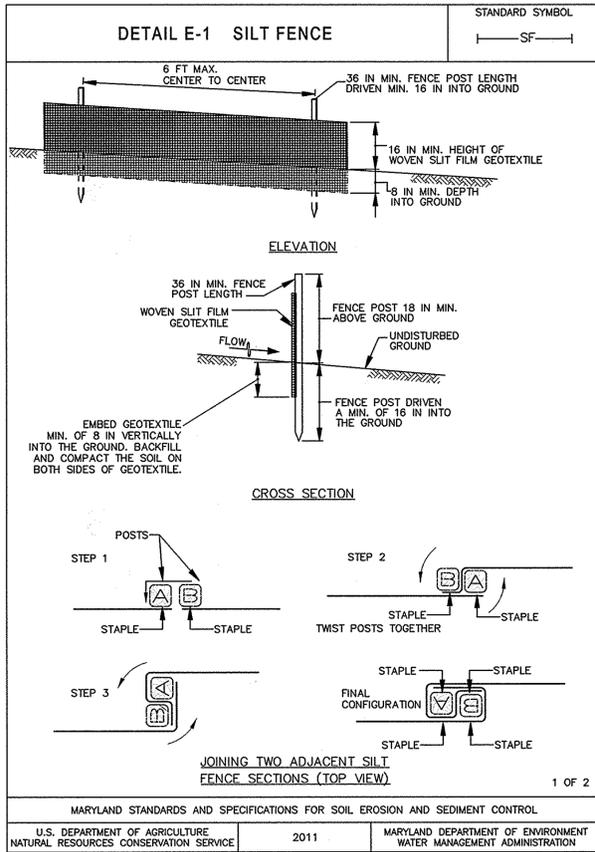
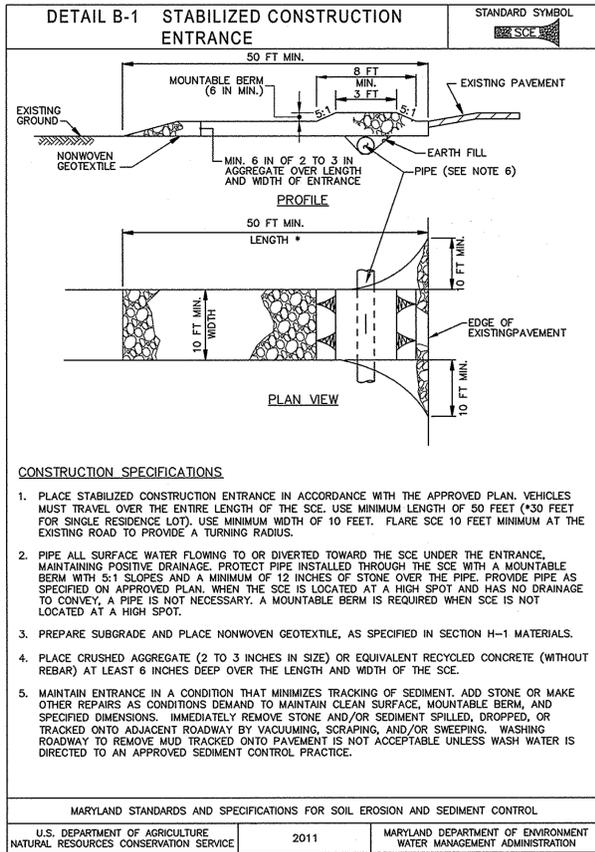
SURVEY COMPLETED BY: Carl F. Kreutter & Associates, Inc.

PREPARED FOR: The Center for Watershed Protection
 3290 Main Street, Suite 280
 Ellicott City, MD 21043
 410-481-8323

EROSION AND SEDIMENT CONTROL

Harvester Baptist Church
 Ellicott City, Maryland

SDP-99-107



Water Quality Volume	Cell 1	Cell 2	Total
Drainage Area, DA			0.54 ac
Imperviousness, I			61%
Runoff Coefficient, Rv = 0.009 (I) + 0.05			0.60
Design Storm, P			1 in
Water Quality Volume, WQv = P*Rv*DA			1174 cf

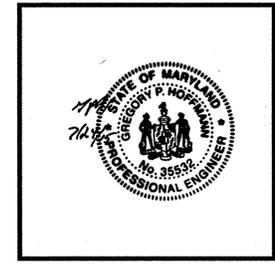
Ponding Calculations	Cell 1	Cell 2	Total
Area at Bioretention Surface	95 sf	859 sf	
Area at Top of Ponding	237 sf	1126 sf	
Maximum Ponding Depth, hmax	1.0 ft	0.7 ft	
Ponding Volume	166 cf	993 cf	1159 cf
% of WQV in Ponding Volume			99%

Storage Volume Calculations	Cell 1	Cell 2	Total
Area at Bioretention Surface	95 sf	859 sf	
Area at Top of Ponding	237 sf	1126 sf	
Maximum Ponding Depth, hmax	1.0 ft	0.7 ft	
Ponding Volume	166 cf	993 cf	1159 cf
Gravel Depth	0.83 ft	0.83 ft	
Gravel Porosity	0.4	0.4	
Gravel Storage Volume	31.5 cf	285 cf	317 cf
Filter Bed Depth (includes choker stone and mulch)	2.58 ft	2.58 ft	
Filter Bed Porosity	0.25	0.25	
Filter Bed Storage Volume	61.3 cf	554 cf	615 cf
Total Storage Volume	259	1832	2091 cf
% of WQV Captured			178%

ESC Details	
Total Area Disturbed for Construction	3,344 sf
Average Site Slope	4.7%
Maximum Site Slope	12%

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

LICENSE NO. 35532
 EXPIRATION DATE 3/13/2016
 NAME Gregory Hoffmann DATE 7/24/15



ENGINEER'S SEAL

Disturbed Area Quantity:
 The total area to be disturbed as shown on these plans has been determined to be approximately 3,344 sq. ft. and the total amount of excavation and fill as shown on the plans has been computed to be approximately 170 cubic yards of fill and 293 cubic yards of excavation. These quantities are approximate and should not be used by the contractor for bidding purposes.

Erosion and Sediment Control Notes

- All erosion and sediment control measures shall be installed and maintained in continuous compliance with the latest version of the Maryland Standards and Specifications for Soil and Erosion Sediment Control.
- All utilities, such as storm drain, public water, sanitary sewer, electric power, telephone, and cable and gas lines, which are not in paved areas and are not undergoing active grading, shall be temporarily or permanently stabilized within 3 days of initial disturbance.
- The owner/developer or their designate is responsible for conducting routine inspections and required maintenance. The site and controls should be inspected weekly and the next day after each rain event.** Any accumulated sediment shall be removed and disposed of in a suitable area and shall be temporarily or permanently stabilized.

**Any project that has a state issued N.O.I permit must document each inspection and maintain an inspection log. (Please see the N.O.I for details.)

Standard Stabilization Note
 Following initial soil disturbance or re-disturbance, permanent or temporary stabilization must be completed within:

- Three (3) calendar days as to the surface of all perimeter dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and
- Seven (7) calendar days as to all other disturbed or graded areas on project site not under active grading.

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John R. Kauter 8/3/15
 HOWARD SCD Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division *NJ* 8/5/15 Date
 Chief, Division of Land Development *KB* 8-7-15 Date
 Director *William J. Lee* 8-10-15 Date

DATE: May 26, 2015 SCALE: N/A
 REVISION NUMBER: REVISION TYPE: DRAWN BY: C.F. Kreuter & Associates, Inc. CHECKED BY: PROJECT ID: W-14-016
 SURVEY COMPLETED BY: Carl F. Kreuter, L.S. PREPARED FOR: Howard County Office of Environmental Sustainability, 1613 Fullerton Rd., Edgewater, MD 21037 (Phone) 301-974-9065
 SHEET NUMBER: 7 OF 8
 CENTER FOR WATERSHED PROTECTION
 E & S Details
 Harvester Baptist Church
 Ellicott City, Maryland
 SDP-99-107

MAC

Legend

-  Arrowwood - *Viburnum dentatum*
-  Inkberry - *Ilex glabra*
-  Winterberry - *Ilex verticillata*
-  Turf grass - seed mix specified below

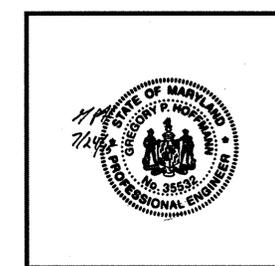


Planting Schedule				
Key	Common Name	Botanical Name	Spacing	Quantity
AW	Arrowwood	<i>Viburnum dentatum</i>	8-10'	3
IB	Inkberry	<i>Ilex glabra</i>	5-7'	5
WB	Winterberry	<i>Ilex verticillata</i>	5-7'	6

Turfgrass seed mix shall match that specified for permanent seeding on Sheet 2 - General Notes, but be applied without any fertilizer. The seed quality shall conform to Maryland State Highway Administration standards and specifications, specifically, MD SHA 920.06.06 - Standards for Seed Species, and the mix, purity, weed content, and minimum germination proportions shall conform to those species listed in the table, "TURFGRASS SEED SPECIES".

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.

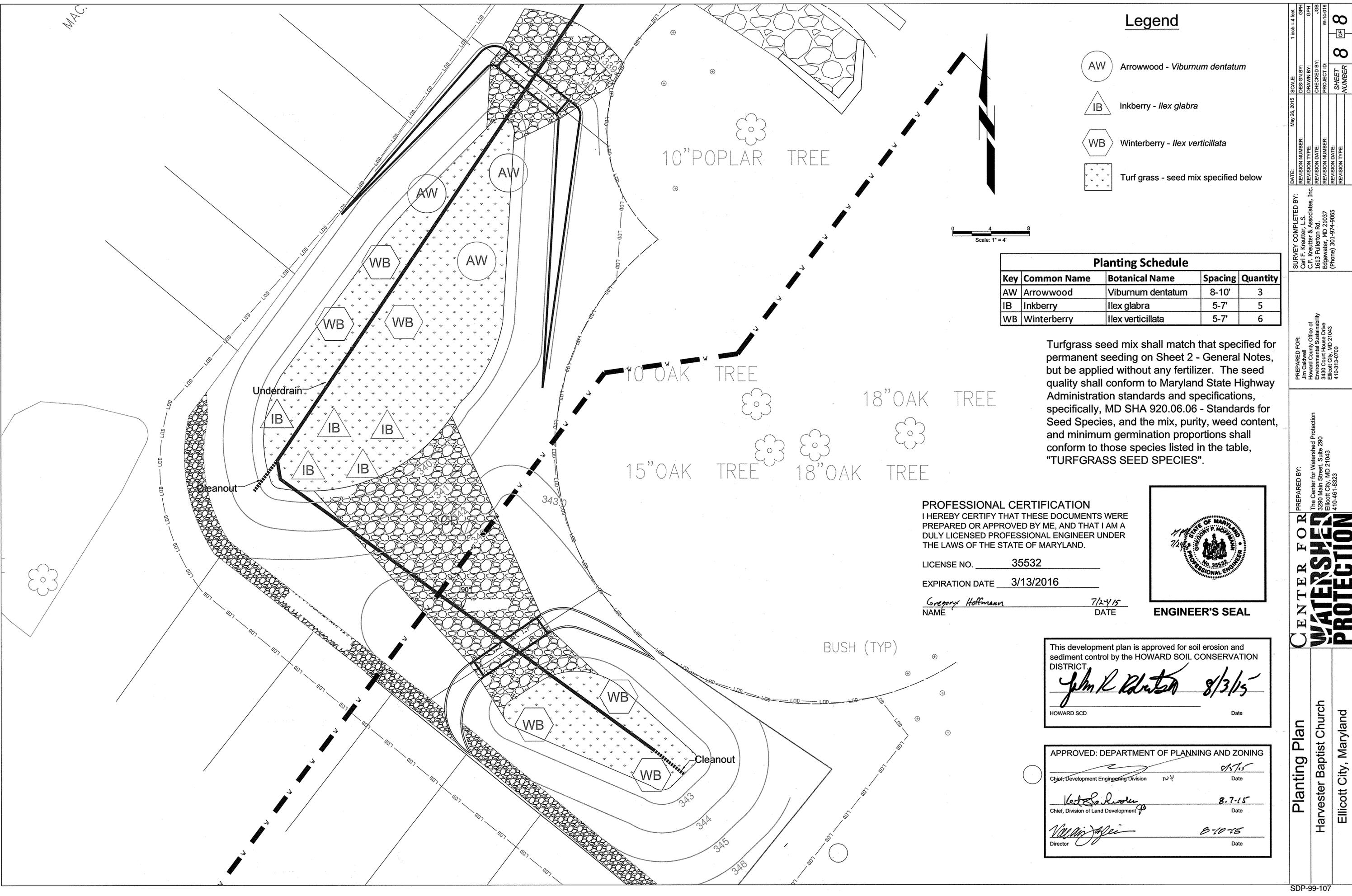
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 NAME Gregory Hoffmann DATE 7/24/15



ENGINEER'S SEAL

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John R. Roberts 8/3/15
 HOWARD SCD Date

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division 8/5/15 Date
 Chief, Division of Land Development 8-7-15 Date
 Director 8-10-15 Date



DATE: May 26, 2015 SCALE: 1 inch = 4 feet

REVISION NUMBER: DESIGN BY: GPH
 REVISION TYPE: DRAWN BY: GPH
 REVISION DATE: PROJECT ID: W-14-016
 REVISION NUMBER: CHECKED BY:
 REVISION DATE: SHEET NUMBER: 8 OF 8

PREPARED FOR:
 Jim Caldwell
 Howard County Office of
 Environmental Sustainability
 3400 Court House Drive
 Ellicott City, MD 21043
 410-313-9700

PREPARED BY:
 The Center for Watershed Protection
 3290 Main Street, Suite 290
 Ellicott City, MD 21043
 410-461-6323

CENTER FOR WATERSHED PROTECTION

Planting Plan
 Harvester Baptist Church
 Ellicott City, Maryland

SDP-99-107