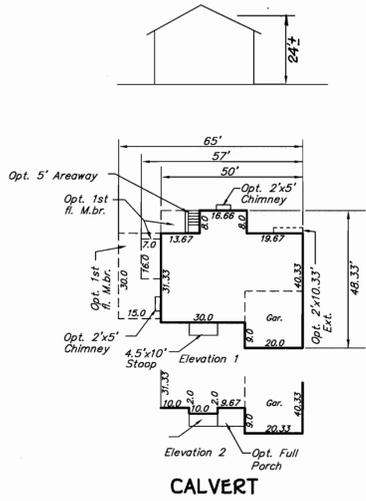
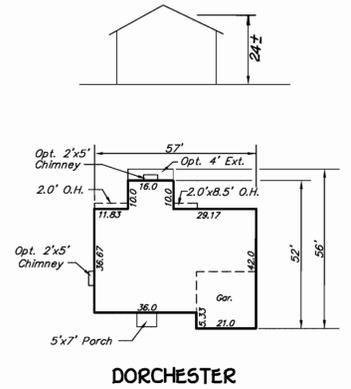


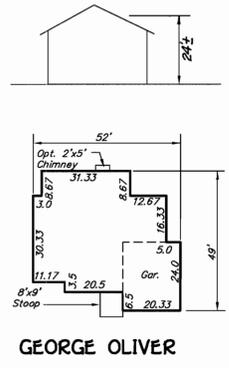
VICINITY MAP
SCALE: 1" = 2000'



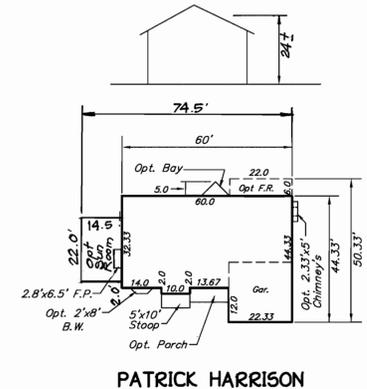
CALVERT



DORCHESTER



GEORGE OLIVER



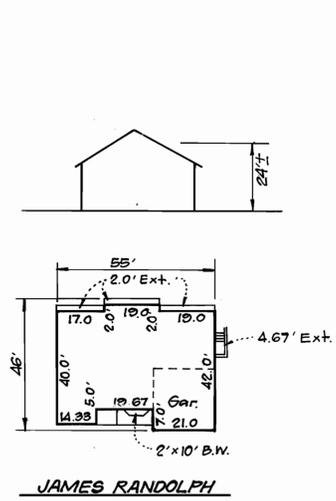
PATRICK HARRISON

BENCH MARKS
T.P. 102 ELEV. 348.19
N. 536,499.156
E. 1,353,974.017
LOC. NEAR THE INTERSECTION
OF GORMAN RD. & SKYLARK BLVD.

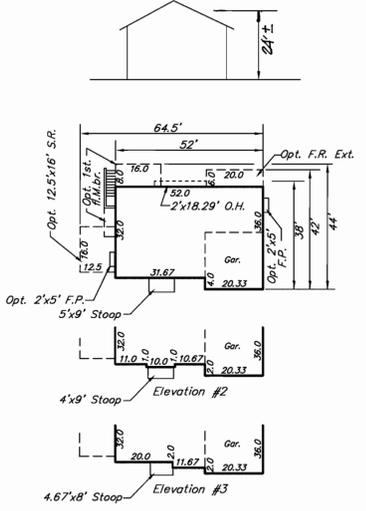
T.P. 1154 ELEV. 347.45
N. 536,018.069
E. 1,355,129.333
LOC. NEAR I-95 BRIDGE
ALONG GORMAN ROAD

GENERAL NOTES

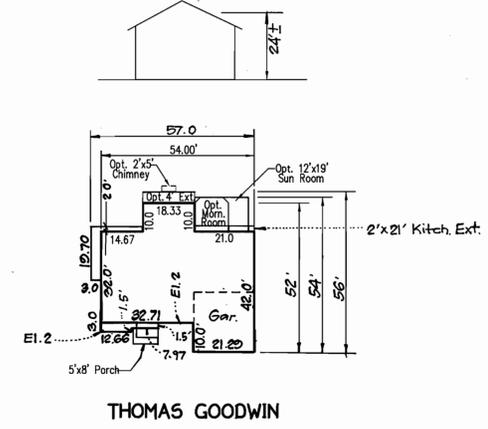
- SUBJECT PROPERTY ZONED R-ED PER 10/10/93 COMPREHENSIVE REZONING PLAN.
- TOTAL AREA OF SITE: 1.25 ACRES
- NUMBER OF LOTS SUBMITTED: 5
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410)313-1800 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: P-01-16, S-00-12, WP-01-39, WP-00-97, WP-01-99, F-01-140, W&S CONT. #34-3832-D.
- THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT JUNE, 1999 BY DAFT McCUNE WALKER, INC.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.
HOWARD COUNTY MONUMENT 47E4 N 535948.138 E 1355431.196
HOWARD COUNTY MONUMENT 47D4 N 535405.459 E 1349362.707
HOWARD COUNTY MONUMENT 47G2 N 532938.964 E 1351224.095
HOWARD COUNTY MONUMENT 47GA N 532404.176 E 1351627.338
HOWARD COUNTY MONUMENT 47GB N 529917.205 E 1353526.738
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHTS-OF-WAY OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION.
FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-01-140, AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 34-3832-D.
- CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
- STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION DRAWINGS FILED UNDER F-01-140.
- PERIMETER LANDSCAPING AND STREET TREES SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL AS SHOWN ON THE APPROVED ROAD CONSTRUCTION DRAWINGS FILED UNDER F-01-140.
- THIS PLAN COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION BY RETENTION OF FOREST RESOURCES. THE TOTAL ACREAGE OF RETENTION IS 23.699 ACRES. FOREST CONSERVATION EASEMENT AREAS A-D ON THE APPROVED ROAD CONSTRUCTION DRAWING FILED UNDER F-01-140. OPEN SPACE AREA FOR THESE LOTS HAS BEEN PROVIDED UNDER F-01-140.
- STORMWATER MANAGEMENT FOR THE DEVELOPMENT INCLUDING FUTURE DEVELOPMENT OF PARCEL A IS PROVIDED IN ACCORDANCE WITH THE 2000 MARYLAND DEPARTMENT OF ENVIRONMENT STORMWATER MANAGEMENT MANUAL. PORTIONS OF OPEN SPACE LOTS 36 & 39 ARE BEING USED AS NATURAL AREA CONSERVATION CREDIT AREA. TO RECEIVE THE CREDIT, THE PROPOSED CONSERVATION AREA:
A) SHALL NOT BE DISTRIBUTED DURING PROJECT CONSTRUCTION (E.G., CLEARED OR GRADED) EXCEPT FOR TEMPORARY IMPACTS ASSOCIATED WITH INCIDENTAL UTILITY CONSTRUCTION OR MITIGATION AND AFFORESTATION PROJECTS.
B) SHALL BE PROTECTED BY HAVING THE LIMITS OF DISTURBANCE CLEARLY SHOWN ON ALL CONSTRUCTION DRAWINGS ARE DELIMITED IN THE FIELD EXCEPT AS PROVIDED FOR ABOVE.
C) SHALL BE LOCATED WITHIN AN ACCEPTABLE CONSERVATION EASEMENT OR OTHER ENFORCEABLE INSTRUMENT THAT ENSURES PERPETUAL PROTECTION OF THE PROVIDED AREA. THE EASEMENT MUST CLEARLY SPECIFY HOW THE NATURAL AREA VEGETATION SHALL BE MANAGED AND BOUNDARIES WILL BE MARKED (NOTE: MANAGED TURF (E.G., PLAYGROUNDS, REGULARLY MAINTAINED OPEN AREAS) IS NOT AN ACCEPTABLE FORM OF VEGETATION MANAGEMENT), AND
D) SHALL BE LOCATED ON THE DEVELOPED PROJECT.
A CENTRAL PRIVATELY MAINTAINED STORMWATER WET POND IS BEING USED TO PROVIDE THE WATER QUALITY AND CHANNEL PROTECTION VOLUMES FOR THIS DEVELOPMENT.
- FOR DRIVE WAY ENTRANCE DETAILS REFER TO HO. CODES.MAN.VOL. IV DETAILS R.6.03 & R.6.05.
- SITE DEVELOPMENT PLAN FOR SINGLE FAMILY DETACHED UNITS.
- THIS PLAN IS GRANDFATHERED TO THE FOURTH EDITION OF THE SUBDIVISION REGULATIONS SINCE IT WAS SUBMITTED PRIOR TO NOVEMBER 15, 2001.
- FINANCIAL SURETY FOR THE REQ. LANDSCAPING HAS BEEN POSTED WITH THE GRD. PERMIT, IN THE AMOUNT OF \$2,250.00.
- IN ACCORDANCE WITH SECTION 12B (A)(I) OF THE HO.CO. ZONING REGULATION, BAYWINDOWS, CHIMNEY OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACK, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACKS.



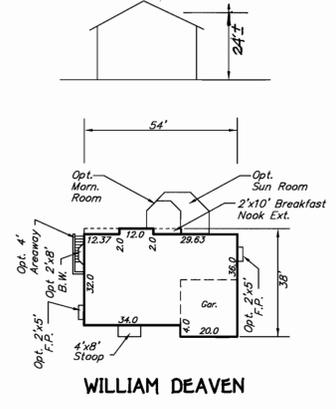
JAMES RANDOLPH



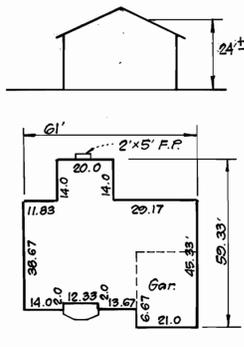
SARAH DUNMORE



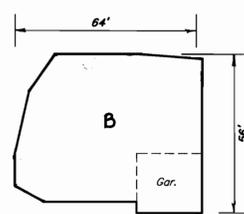
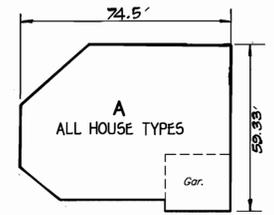
THOMAS GOODWIN



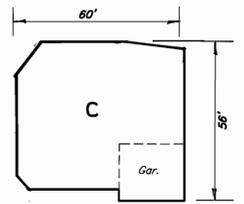
WILLIAM DEAVEN



HUNTINGTON



CALVERT NO/1ST FLOOR MSTR BDRM
DORCHESTER
GEORGE OLIVER
PATRICK HARRISON NO/SUN ROOM
SARAH DUNMORE
THOMAS GOODWIN
WILLIAM DEAVEN
JAMES RANDOLPH



CALVERT NO/1ST FLOOR MSTR BDRM
DORCHESTER
GEORGE OLIVER
PATRICK HARRISON NO/SUN ROOM
SARAH DUNMORE NO/SUN ROOM
THOMAS GOODWIN
WILLIAM DEAVEN
JAMES RANDOLPH

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
9	9519 STAR MOON LANE
10	9523 STAR MOON LANE
14	9536 STAR MOON LANE
24	9501 PURPLE CLOUD ROW
34	9500 PURPLE CLOUD ROW

LEGEND

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
+362.5	SPOT ELEVATION
-55' - 55'	SUPER SILT FENCE
[]	PROPOSED WALKOUT
==>	EXISTING EARTH DIKE
•••	EROSION CONTROL MATTING
L.O.D.	LIMIT OF DISTURBANCE
○	EXISTING STREET TREE TAKEN FROM F-01-140

INDEX CHART

SHEET	DESCRIPTION
SHEET 1	TITLE SHEET, HOUSE TYPES, TEMPLATES
SHEET 2	SITE DEVELOPMENT PLAN
SHEET 3	SEDIMENT AND EROSION CONTROL PLAN
SHEET 4	SED. & EROSION CONTROL DETAILS

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CONTINENTAL SQUARE OFFICE PARK - 10727 BALTIMORE NATIONAL PIKE
ELKLOTT CITY, MARYLAND 2242
4100 461 - 2099



ENGINEER'S CERTIFICATE
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

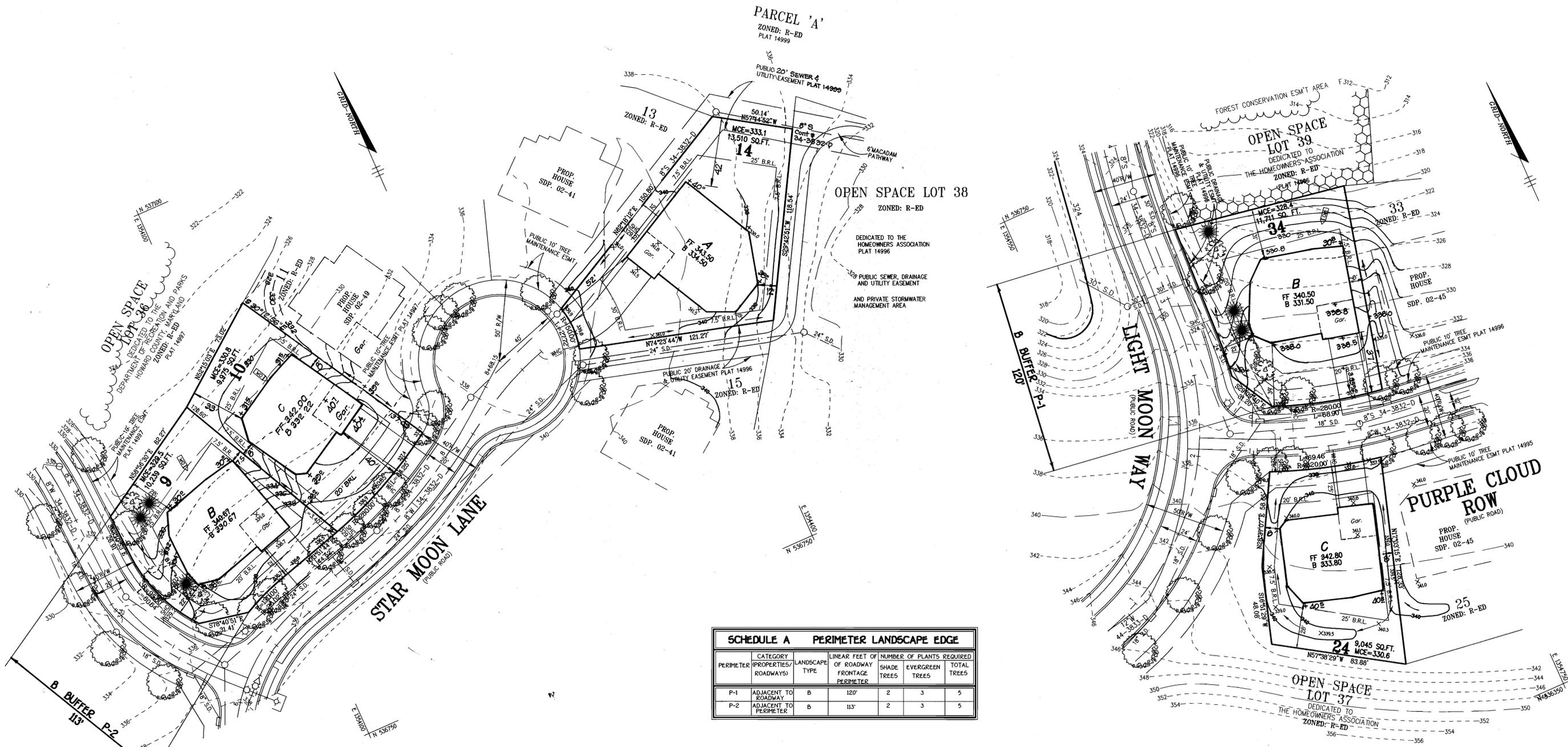
Signature of Engineer: CHARLES J. CROVO, SR. Date: 11/1/02
BUILDER/DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer: BOB CORBETT Date: 11-01-02

Reviewed for HOWARD SCD and meets Technical Requirements.
U.S.D. Natural Resources Conservation Service
Signature of Inspector: John R. Robertson Date: 2/12/02
Signature of Developer: Bob Corbett Date: 11-01-02
OWNER
THE HOWARD RESEARCH & DEVELOPMENT CORP.
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
410-992-6000
BUILDER/DEVELOPER
WILLIAMSBURG BUILDERS
5485 HARPERS FARM ROAD
COLUMBIA, MARYLAND 21044
410-997-8800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Chief, Division of Land Development: [Signature] Date: 2/15/02
Chief, Development Engineering Division: [Signature] Date: 2/12/02
Director, Department of Planning and Zoning: [Signature] Date: 2/21/02
PROJECT: EMERSON SECTION: 1/1 LOTS NO.: 9,10,14,24 & 34
PLAT: 14994 THRU: 15001 BLOCK NO.: 3, B f d ZONE: R-ED TAX/ZONE: 47 ELEC. DIST.: SIXTH CENSUS TR.: 6068.02
WATER CODE: E-15 SEWER CODE: 160000

SITE DEVELOPMENT PLAN
EMERSON
SECTION 1 AREA 1
LOTS 9,10,14,24 & 34
TAX MAP No: 47 P/O PARCEL: 837
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: DECEMBER, 2001
SHEET 1 OF 4



SCHEDULE A PERIMETER LANDSCAPE EDGE					
PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERMETER	NUMBER OF PLANTS REQUIRED	TOTAL TREES
P-1	ADJACENT TO ROADWAY	B	120'	2 3 5	5
P-2	ADJACENT TO PERIMETER	B	113'	2 3 5	5

LANDSCAPING PLANT LIST			
QTY.	KEY	NAME	SIZE
5		ACER SACCHARUM "GREEN MOUNTAIN" GREEN MOUNTAIN/SUGAR MAPLE	2 - 2 1/2" CALIPER FULL CROWN, B&B
5		PINUS STROBUS EASTERN WHITE PINE	6' - 8' HT.

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELKOTTS CITY, MARYLAND 21042
 MD REG. NO. 11000

STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 CHARLES J. GROVO, SR.
 11/16/01

ENGINEER'S CERTIFICATE
 "I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."
 Signature of Engineer: CHARLES J. GROVO, SR. Date: 11/16/01

BUILDER/DEVELOPER'S CERTIFICATE
 "I/we certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."
 Signature of Developer: BOB CORBETT Date: 11-01-01

Reviewed for HOWARD SCD and meets Technical Requirements.
 Jim M... 2/12/02
 John R. ... 2/12/02

OWNER
 THE HOWARD RESEARCH & DEVELOPMENT CORP.
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 410-992-6000

BUILDER/DEVELOPER
 WILLIAMSBURG BUILDERS
 5485 HARPERS FARM ROAD
 COLUMBIA, MARYLAND 21044
 410-997-8880

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Kathleen ... 2/15/02
 ... 2/13/02
 ... 2/21/02

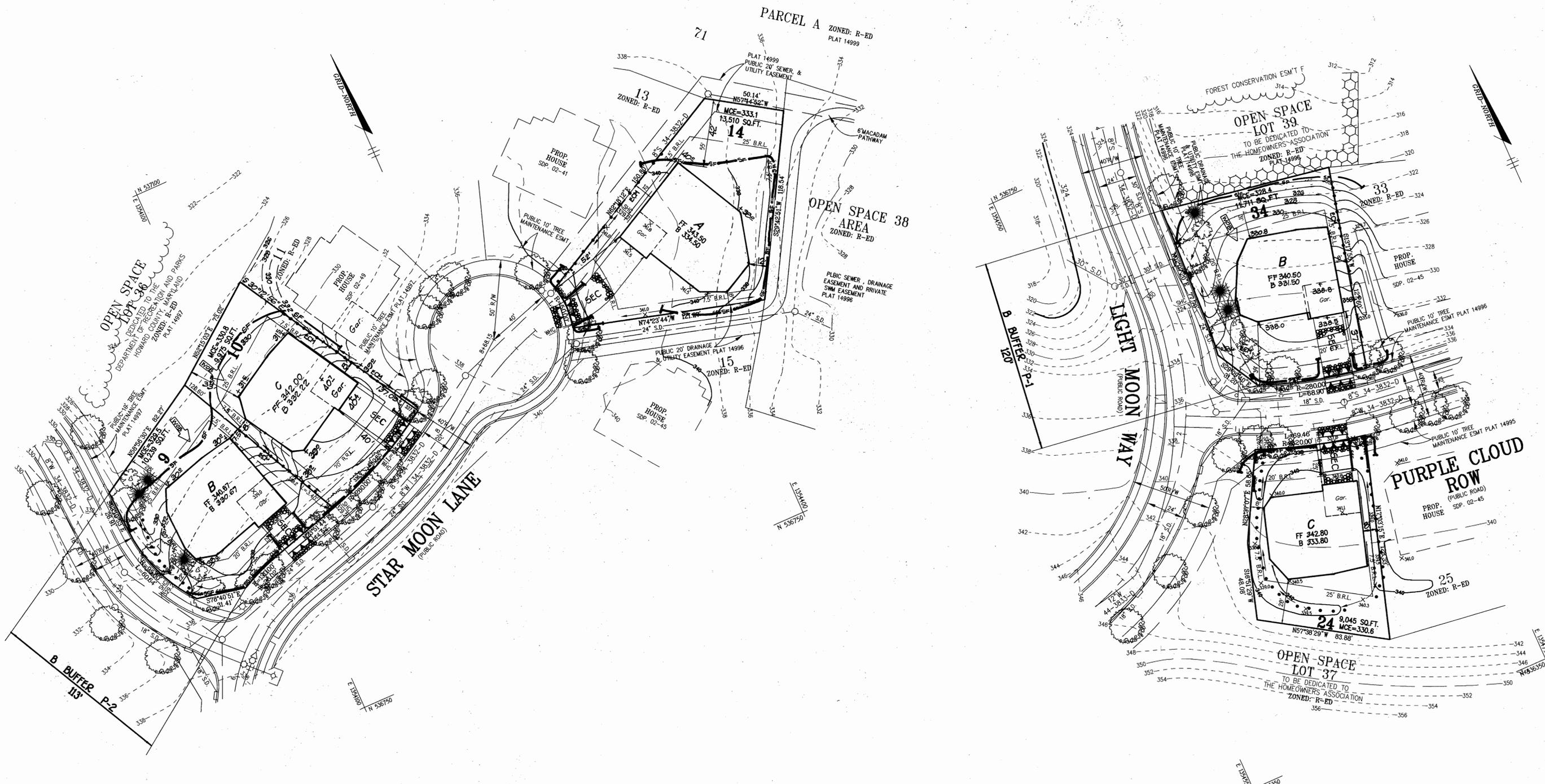
PROJECT: EMERSON SECTION: 1/1 LOTS NO.: 9,10,14,24 & 34

PLAT 14994	BLOCK NO. 3, B & D	ZONE R-ED	TAX/ZONE 47	ELEC. DIST. SIXTH	CENSUS TR. 6068.02
WATER CODE E-15	SEWER CODE 160000				

SITE DEVELOPMENT PLAN

EMERSON
 SECTION 1 AREA 1
 LOTS 9,10,14,24 & 34

TAX MAP No: 47 P/O PARCEL: 037
 SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: DECEMBER, 2001
 SHEET 2 OF 4



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELKLOTT CITY, MARYLAND 21042
 (410) 461-1299



ENGINEER'S CERTIFICATE
 I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature of Engineer: *Charles J. Crovo, Sr.* Date: 11/01/01
BUILDER/DEVELOPER'S CERTIFICATE
 I/We certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.
 Signature of Developer: *Bob Corbett* Date: 11-01-01

Reviewed for HOWARD SCD and meets Technical Requirements.
 U.S. Natural Resources Conservation Service
 Approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT
 Signature: *John K. Calvert* Date: 2/12/02
OWNER
 THE HOWARD RESEARCH & DEVELOPMENT CORP.
 10275 LITTLE PATUXENT PARKWAY
 COLUMBIA, MARYLAND 21044
 410-992-6000
BUILDER/DEVELOPER
 WILLIAMSBURG BUILDERS
 5495 HARPERS FARM ROAD
 COLUMBIA, MARYLAND 21044
 410-997-8800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Chief, Division of Land Development: *Kat Beland* Date: 2/15/02
 Chief, Development Engineering Division: *John R. ...* Date: 2/12/02
 Director, Department of Planning and Zoning: *Paul ...* Date: 2/21/02
 PROJECT: EMERSON SECTION 1/1 LOTS NO. 9,10,14,24 & 34
 PLAT 14994 THROUGH 15001 BLOCK NO. 3, 8 & 9 ZONE R-ED TAX/ZONE 47 ELEC. DIST. SIXTH CENSUS TR. 6068.02
 WATER CODE E-15 SEWER CODE 160000

SEDIMENT AND EROSION CONTROL PLAN
EMERSON
 SECTION 1 AREA 1
 LOTS 9,10,14,24 & 34
 TAX MAP No: 47 P/O PARCEL: 837
 SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: 1"= 30' DATE: DECEMBER, 2001
 SHEET 3 OF 4

2.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION DEFINITION

Using vegetation as cover for barren soil and erosion forces that cause erosion.

PURPOSE

Vegetative stabilization specifications are used to establish the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and runoff to downstream areas and improving wildlife habitat.

CONDITIONS WHERE PRACTICE APPLIES

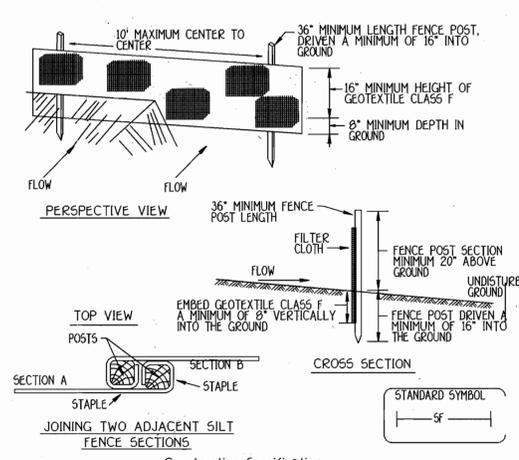
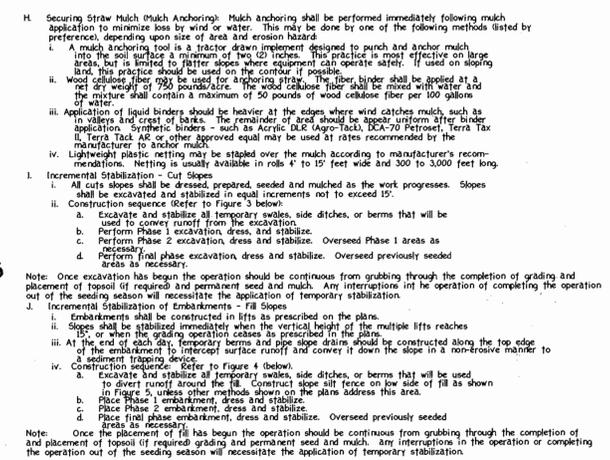
This practice shall be used on exposed soil and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration (up to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary Soil Stockpiles, cleared areas being left between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff. Infiltration evaporation, transpiration, percolation and groundwater recharge. Vegetation over time will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth. Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone. Sediment control devices must remain in place during grading, seeded preparation, seeding, mulching and vegetative establishment to prevent large quantities of sediment and associated chemicals and nutrients from washing into surface waters.

SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- Site Preparation**
 - Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
 - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
- Soil Amendments (Fertilizer and Soil Specifications)**
 - Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas over 5 acres. Soil analysis may be performed by the University of Maryland or a recognized commercial laboratory. Soil analysis taken for engineering purposes may also be used for chemical analysis.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers shall be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, brand or trademark and water content of the producer.
 - Lime materials shall be ground limestone (hydrated or burnt lime) may be substituted which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 90-100% will pass through a #20 mesh sieve.
 - Incorporate lime and fertilizer into the top 3"-5" of soil by digging or other suitable means.
- Seeded Preparation**
 - Temporary Seeding**
 - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Slopes greater than 3:1 should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
 - Apply fertilizer and lime as prescribed on the plans.
 - Incorporate lime and fertilizer into the top 3"-5" of soil by digging or other suitable means.
 - Permanent Seeding**
 - Final seed conditions for vegetative establishment:
 - Soil pH shall be between 6.0 and 7.0.
 - Soil shall contain less than 500 parts per million (ppm).
 - The soil shall contain less than 40% clay, but enough fine grained material (30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if loess or siltstone or siltstone is to be planted, then a sandy soil (30% silt plus clay) would be acceptable.
 - Soil shall contain 1.5% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 standard and Specification for Topsoil.
 - Areas which do not conform with the above conditions shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3"-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil to surface erosion and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 - Apply soil amendments as per soil test or as indicated on the plans.
 - Mix soil amendments into the top 3"-5" of topsoil by digging or other suitable means. Lawn areas should be rolled to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application, where site conditions will not permit seeded preparation, loosen surface soil by digging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1"-3" of soil should be loose and friable. Seeded loosening may not be necessary on newly disturbed areas.
- Seed Specifications**
 - All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to testing by a recognized seed laboratory. All seed used shall be tested within the 6 months immediately preceding the date of sowing such material on the job.
 - Seed lots shall be made available to the inspector to verify type and rate of seed used.
 - Inoculant** - The inoculant for treating legume seed in the seed mixtures shall be a pure culture of an nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used unless the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 75°-80° F. can weaken bacteria and make the inoculant less effective.
- Methods of Seeding**
 - Hydroseeding** - Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a comparable method.
 - If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: Nitrogen maximum of 100 lbs. per acre total of soluble nitrogen (2000 lbs. of fertilizer) and 500 lbs. of fertilizer.
 - Lime - use only organic agricultural limestone, 1/2 to 3 tons per acre may be applied by hydroseeding. Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
 - Seed and fertilizer shall be mixed on site and seed and fertilizer shall be done immediately and without interruption.
 - Dry Seeding** - This includes use of conventional drop or broadcast spreaders.
 - Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary Seeding Specifications or Tables 102 or 103. The seeded areas shall then be rolled with a weighted roller to provide good seed to soil contact.
 - Seed and fertilizer shall be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
 - Outdragger Seeding** - Mechanized seeders that apply and cover seed with soil.
 - Outdragger seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- Mulch Specifications (in order of preference)**
 - Straw shall consist of thoroughly threshed wheat, rye or oat straw, free of briars in color, and shall be spread evenly, not clumped, and not excessively dry and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
 - Wood Cellulose Fiber Mulch (WCFM)**
 - WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
 - WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniform spread slurry.
 - WCFM, including dye, shall contain no germination or growth inhibiting factors.
 - WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer, and other additives to form a homogeneous slurry. 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.
 - WCFM material shall contain no elements or compounds that inhibit germination levels that will be detrimental.
 - WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 6.0 to 8.5, ash content of 1.0% maximum and water holding capacity of 50% minimum.
- Mulching Seeded Areas** - Mulch shall be applied to all seeded areas immediately after seeding.
 - If grading is completed outside of the seeding season, mulch 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 tons/acre. Mulch shall be applied to a uniform loose depth of 1" and 2". Mulch applied shall achieve 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 tons/acre.
 - Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.



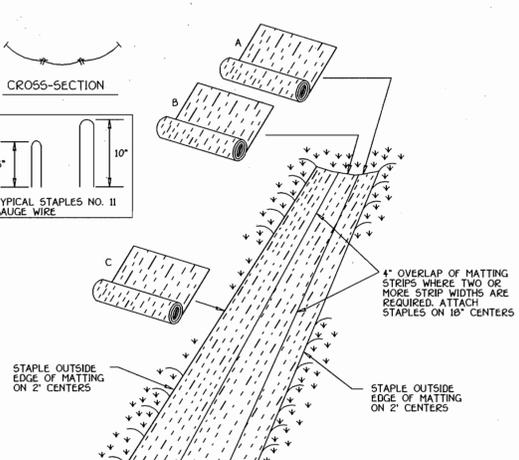
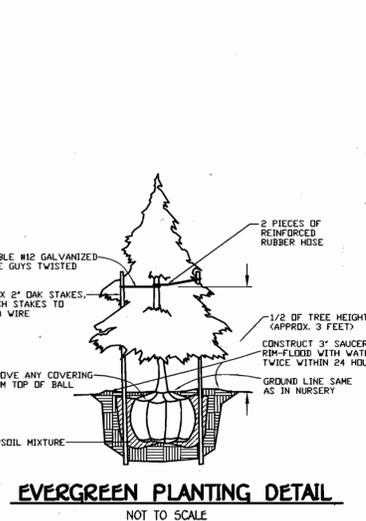
SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT 7 DAYS
- INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN 7 DAYS
- CLEAR AND GRUB TO LIMITS OF DISTURBANCE 4 DAYS
- INSTALL TEMPORARY SEEDING 2 DAYS
- CONSTRUCT BUILDINGS 60 DAYS
- FINE GRADE SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE 14 DAYS
- REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR. 7 DAYS

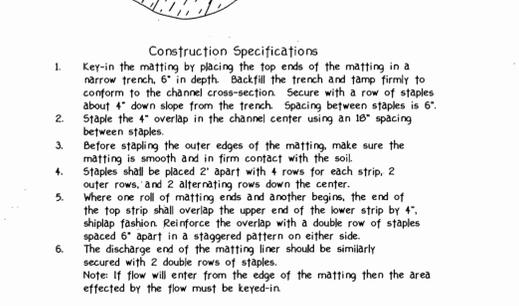
PLANTING SPECIFICATIONS

- Plants, related material and operations shall meet the detailed description as given on the plans and as described herein.
- All plant material, unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plant list and the American Association of Nurserymen (A.A.N.) Standards. Plant material shall be healthy, vigorous, free from defects, decay, disfiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug, no hold-in plants from cold storage will be accepted.
- Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area" (hereinafter "Landscape Specifications") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition, including all appendices.
- Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one-year specifications including watering and replacement of specified plant material.
- Contractor shall be responsible for notifying utility companies, utility contractors and "Use Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.
- Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the drip line.
- Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction.
- Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.
- Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plant list precedence.
- All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except where noted on plans.
- Positive drainage shall be maintained in planting beds 2 percent slope.
- Planting mix shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - Two parts topsoil, one part humus or other approved organic matter. Add 3 lbs. of evergreen acidic fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.
- Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its distribution to the specific ground cover to be treated.
- All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded. This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.

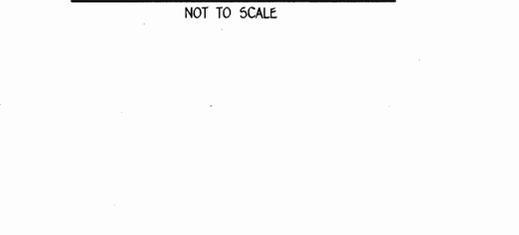
EVERGREEN PLANTING DETAIL



EROSION CONTROL MATTING



STABILIZED CONSTRUCTION ENTRANCE



DEVELOPER'S/BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THIS PLAN, SECTION 18.024 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF CERTAIN LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIAL WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

NAME: BOB CORBETT DATE: 11-1-01

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10722 BALDOR DRIVE, SUITE 100
ELKLOTT CITY, MARYLAND 21042
410-461-2292

ENGINEER'S CERTIFICATE
I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Signature of Engineer: CHARLES J. GROVO, SR. Date: 11/1/01

BUILDER/DEVELOPER'S CERTIFICATE
I/We certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.

Signature of Developer: BOB CORBETT Date: 11-01-01

Approved for HOWARD SCD and meets Technical Requirements.

Signature: *John R. Peltusa* Date: 11/1/02

Signature: *John R. Peltusa* Date: 11/1/02

OWNER
THE HOWARD RESEARCH & DEVELOPMENT CORP.
10275 LITTLE PATUXENT PARKWAY
COLUMBIA, MARYLAND 21044
410-992-6000

BUILDER/DEVELOPER
WILLIAMSBURG BUILDERS
5465 HARPERS FASH ROAD
COLUMBIA, MARYLAND 21044
410-997-8800

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature: *Kathleen...* Date: 2/15/02

Signature: *...* Date: 2/16/02

Signature: *...* Date: 2/21/02

PROJECT	SECTION	LOTS NO.
EMERSON	1/1	9,10,14,24 & 34

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
14994	15001	R-E	47	SIXTH	6068.02

WATER CODE: E-15 SEWER CODE: 150000

SEDIMENT, EROSION CONTROL NOTES & DETAILS

EMERSON
SECTION 1 AREA 1
LOTS 9,10,14,24 & 34

TAX MAP No: 47 P/O PARCEL: 837
SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1"= 30' DATE: DECEMBER, 2001
SHEET 4 OF 4

SDP 02-43