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 "Miss Utility" a minimum of 40 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 id 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 base 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 plan take 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 marker. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topsoil shall conform to 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 adaptability 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.

SURETY AMOUNT FOR THIS PLAN IS IN THE AMOUNT OF \$13,200.00

- 1. LANDSCAPING SURETY FOR LOTS 18,20 & 29-34 IS \$1,500.00 PER LOT.
- THE LANDSCAPING SURETY FOR LOT 19 IS \$1,200.00 PER LOT. STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS.
- 2. TYPE 'B' BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREDITED TOWARDS THE LANDSCAPING REQUIREMENTS.
- 3. LANDSCAPING CAN NOT BE PLANTED IN ANY PUBLIC EASEMENTS. 4. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTUAL
- 5. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTING HEREWITH LISTED AND
- APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH HOWARD COUNTY LANDSCPAE MANUAL. 6. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS FENCES AND WALLS. ALL PLANT
- REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED. 7. SIZES OF PLANT MATERIALS MUST CONFORM TO THE REQUIREMENTS OF THE LANDSCAPE

MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY,

MANUAL, CHAPTER IV AND APPENDIX C. KEY PROPERTY DEVELOPMENT CRITERIA, APPROVED 7/1/99

SECTION VII RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING THE QUANTITY AND GENERAL LOCATION OF TREES REQUIRED FOR INTERNAL LANDSCAPING ARE DETERMINED BY CRITERIA APPLIED BY THE ARCHITECTURAL COMMITTEE. THE COMMITTEE WILL CLASSIFY, DURING ARCHITECTURAL REVIEW, ALL LOTS AND PARCELS AS 1) NON-WOODED: 2) SEMI-WOODED; 3) WOODED, SUCH CLASSIFICATION SHALL TAKE INTO ACCOUNT THE EXISTING TREE COVER AND THE POTENTIAL FOR SAVING TREES IN CONNECTION WITH GRADING AND 517ING. FHIS CRITERIA ALSO CONSIDER THE SIZE OF THE LOT. AMOUNT OF EXISTING VEGETATION AND THE TYPE AND SITING OF RESIDENTIAL UNITS, IF, DURING OR AFTER CONSTRUCTION, THE COMMITTEE DETERMINES THAT A BUILDER HAS VIOLATED ANY PROVISION OF TREE PRESERVATION THE BUILDER WILL BE REQUIRED TO ADD NEW PLANT MATERIAL. SHADE TREE REQUIREMENTS ARE SPECIFIED BY THE FOLLOWING TABLE. DENSITIES REFER TO THE DENSITY OF THE INDIVIDUAL PARCEL.

SHADE TREE REQUIREMENTS

	NON WOODED	SEMI WOODED	WOODED
TYPE OF UNIT AND LOT SIZE	MINMUM NUMBER	OF SHADE	TREES REQUIRE
SMALL RESIDENTIAL LOT (4,000 - 7,000 SQUARE FEET FOR CLUSTER HOUSE)	4.0/LOT	2.25/LOT	1.25/LOT
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET) 2-4 D.U./ACRÉ	. > 5.0/LOT	3.0/LOT	2.0/LOT

SUBSTITUTION OF TWO FLOWERING TREES OR TWO EVERGREEN TREES FOR EACH SHADE TREE MAY BE PERMITTEDFOR UP TO 50% OF THE REQUIRED NUMBER OF SHADE TREES SHOWN IN THE TABLE SUBJECT TO THE APPROVAL OF THE ARCHITECTURAL COMMITTEE. CREDIT MAY ALSO BE GIVEN FOR ANY AREAS REQUIRED TO BE PROVIDED ALONG ROADWAYS, SUBJECT TO THE APPROVAL OF THE ARCHITECTURAL COMMITTEE.

BUILDER/DEVELOPER'S/ CERTIFICATE

I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT

REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON

COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN

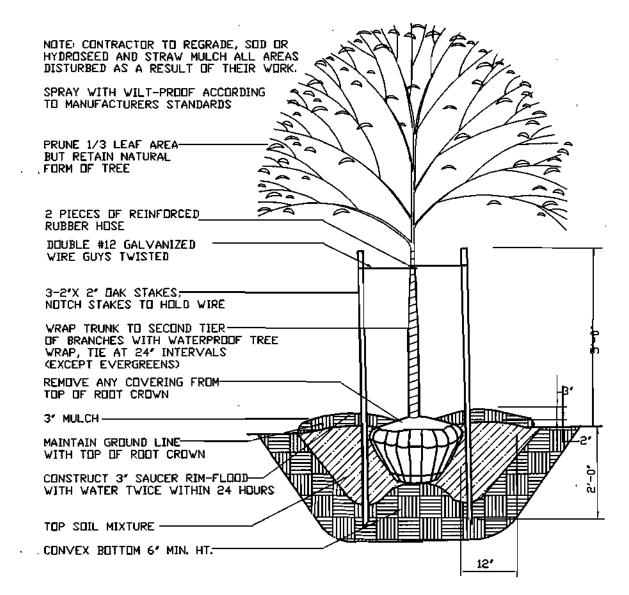
EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO

THE DEPARTMENT OF PLANNING AND ZONING.

GREENFIELD

2 PIECES OF REINFORCED RUBBER HDSE DOUBLE #12 GALVANIZED-WIRE GUYS TWISTED 2-2"X 2" DAK STAKES, NOTCH STAKES TO HOLD WIRE ~1/2 OF TREE HEIGHT (APPROX. 3 FEET) CONSTRUCT 3' SAUCER -RIM-FLOOD WITH WATER TWICE WITHIN 24 HOURS REMOVE ANY COVERING-AS IN NURSERY TOPSOIL MIXTURE ---

EVERGREEN PLANTING DETAIL NOT TO SCALE



TREE PLANTING DETAIL

MODIFIED SCHEDULE C LANDSCAPE CHART								
LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED	LANDSCAPING TYPE B REQUIRED TREE REQUIRED COSOUR AS		REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED		
	(# OF SHADE TREES)	5HADE	EVERGREEN			SHADE	EVERGREEN	
LOTS 18,20 29,30,32-34	NON-WOODED	5 TREES PER LOT	N/A	N/A	o	0	35	0
LOT 19	NON-WOODED	4 TREES PER LOT	N/A	· N/A	o	o	4	0
LOT 3i	NON-WOODED	5 TREES PER LOT	3	4	5	0	3	4
TOTAL 1	TOTAL TREES 42 4							

* THIS NUMBER REFLECTS THE MATHEMATICAL CONVERSION OF EVERGREEN TREES TO SHADE TREES (2:1) FOR THE PURPOSE OF MEETING THE INTERNAL PER LOT SHADE TREE OBLIGATION.

Landscape |

TYPE

CATEGORY

(PROPERTIES/

ROADWAYS)

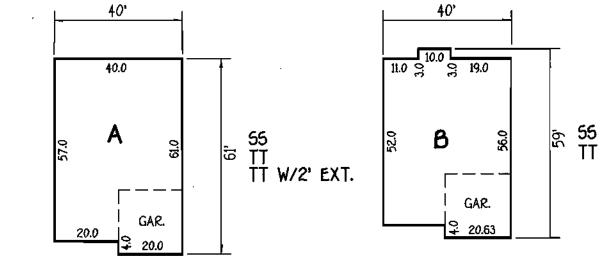
ADJACENT TO

ROADWAY

LOT NO. | PERIMETER |

SCHEDULE A

PERIMETER LANDSCAPE EDGE

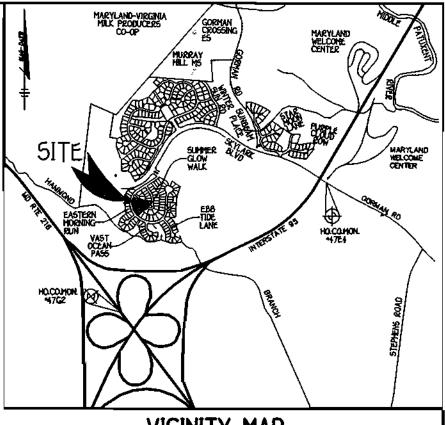


2214.40 50. FT. = 5536.00 50. FT.

<u>BENCH MARKS</u>

T.P. 47E4 ELEV 339.00 N. 535.846.148 E. 1,355,431.224 LOC. NEAR I-95 BRIDGE ALONG GORMAN ROAD

T.P. 47G2 ELEV. 363.53 N. 532,938,964 E. 1,351,224.095 LOC. NEAR MD. RTE 216 WEST NEAR EXIT RAMP TO 1-95



VICINITY MAP

GENERAL NOTES

- 1. SUBJECT PROPERTY ZONED PEC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/90 AS CASE NO. ZB-979M.
- TOTAL AREA OF SITE: 1.711 ACRES
- TOTAL NUMBER OF LOTS SUBMITTED: 9 SFD
- 4. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION
- AT (410)313-1080 24-HOURS PRIOR TO THE COMMENCEMENT OF WORK. 5. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 40 HOURS
- PRIOR TO ANY EXCAVATION WORK.
- 6. THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: 28-979M, WP 99-96, 5 99-12,
- PB-339, P-02-15, F-03-13, W&S CONT. •24-4043-D. THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR
- ABOUT JUNE, 1999 BY DAFT McCUNE WALKER, INC. 8. 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 535846.148 E 1355431.224
- HOWARD COUNTY MONUMENT 47G2 N 532936.964 E 1351224.095 9. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE
- DEVELOPER'S EXPENSE.
- 10. 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-03-13. AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4043-D.
- 11. CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR
- 12. STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION DRAWINGS FILED UNDER F-03-13.
- 13. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISION OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL AND DEVELOPMENT CRITERIA
- APPROVED BY THE PLANNING BOARD 7-1-99 PER CASE NO. PB-339 REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$13,200.00 FOR 42 SHADE TREES AND 4 EVERGREEN TREES.
- 14. PERIMETER LANDSCAPING AND STREET TREES SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL AND DEVELOPMENT
- CRITERIA APPROVED BY THE PLANNING BOARD 7-1-99 PER CASE NO. PB-339 AS SHOWN ON THE APPROVED ROAD CONSTRUCTION DRAWINGS FILED UNDER F-03-13.
- 15. FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-03-13. 16. FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.
- 7. OPEN SPACE REQUIREMENTS FOR THESE LOTS HAVE BEEN PROVIDE UNDER, F-03-13. 18. MINIMUM BUILDING RESTRICTION SETBACKS FROM PROPERTY LINES AND PUBLIC ROAD RIGHTS-OF-WAY ARE TO BE IN ACCORDANCE WITH THE DEVELOPMENT CRITERIA APPROVED
- WITH THE COMPREHENSIVE SKETCH PLAN 5-99-12 AND THE DECISION AND ORDER FOR P8-339 APPROVED ON JULY 1, 1999.
- 19. THE MINIMUM SETBACKS FOR STRUCTURES SHALL BE AS FOLLOWS:
 - FRONT SETBACK 15' FROM THE RIGHT-OF-WAY TO THE HOUSE OR GARAGE. SIDE SETBACK 5' TO THE PROPERTY LINE WITH A MINIMUM OF 15' BETWEEN STRUCTURES REAR SETBACK 10' FROM THE PROPERTY LINE TO AN OPEN DECK 20' FROM THE PROPERTY LINE TO THE HOUSE
- ANY DEVIATION FROM THESE SETBACK REQUIREMENTS WILL REQUIRE SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD.
- 20. LOT COVERAGE BY BUILDINGS WITHIN SINGLE FAMILY DETACHED LAND USE AREAS SHALL NOT EXCEED 40%. NO LIMITATION IS IMPOSED UPON THE AREA USED FOR SIDEWALKS, PAVED PARKING
- AREAS, PATIOS, DECKS, LANDSCAPING AND SIMILIAR MINOR STRUCTURE. 21. AS A CONSEQUENCE OF THIS SUBMISSION, ON JUNE 25, 2003, THIS SDP IS SUBJECT TO THE 5TH
- EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001. 22. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS,
- CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16' FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACKS, THE 15' MINIMUM DISTANCE BETWEEN STRUCTURES DOES NOT APPLY TO THOSE REFERENCED FEATURES NOR BETWEEN OPEN DECKS AND A DWELLING STRUCTURE OR ANOTHER DECK. AS AN ADVISORY, THE 15'
- DISTANCE DOES APPLY TO THE SECOND STORY OVERHANG. 23. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
 - A.) WIDTH 12" (14" IF SERVING MORE THAN ONE RESIDENCE) B.) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.)
 - C.) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT Turning Radius.
- D.) STRUCTURES (BRIDGES/CULVERTS) CAPABLE OF SUPPORTING 25 GROSS TONS (H25-LOADING)
- E.) DRAINAGE ELEMENTS CAPABLE OF SAFETY PASSING 100 YEAR FLOOD WITH NO MORE THAN I FOOT DEPTH OVER DRIVEWAY SURFACE.
- F.) STRUCTURE CLEARANCES MINIMUM 12 FEET
- G.) MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE.

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	INDEX CHART
SHEET	DESCRIPTION
SHEET 1	TITLE SHEET, HOUSE TYPES, TEMPLATES
SHEET 2	SITE DEVELOPMENT PLAN, LOTS 10-20 & 29-34
SHEET 3	SEDIMENT/EROSION CONTROL PLAN LOTS 18-20 & :
SHEET 4	SEDIMENT/EROSION CONTROL NOTES & DETAILS

		LEGEND			
_	SYMBOL	DESCRIPTION			
		EXISTING CONTOUR 2' INTERVAL			
	+362.2	SPOT ELEVATION			
	[WOB\$>	PROPOSED WALKOUT			
	-5F-5F-	SILT FENCE			
14	-55F55F-	SUPER SILT FENCE			
	ECM	EROSION CONTROL MATTING			
	LOD	LIMIT OF DISTURBANCE			

EXISTING STREET TREE TAKEN FROM F-03-13

GAR.

Min. Lot Size

TT W/2' EXT.

2207.73 SQ. FT. = 5719.33 SQ. FT.

ADDRESS CHART					
LOT NUMBER	STREET ADDRESS				
18	10128 SUMMER GLOW WALK				
19	10124 SUMMER GLOW WALK				
20	10120 SUMMER GLOW WALK				
29	10100 SNOWDRIFT DOWNS				
30	10104 SNOWDRIFT DOWNS				
31	10100 SNOWDRIFT DOWNS				
32	8551 EASTERN MORNING RUN				
33	8555 EASTERN MORNING RUN				
34	8559 EASTERN MORNING RUN				
•					

				1 5
FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS				
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042 (1410) 161 - 2855				
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				. ,
	MO	OFVICION	DATE	Lί

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."

OF ROADWAY

FRONTAGE

perimeter

161.11"

10.1.03 EARL D. COLLINS 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 10-1-03

LINEAR FEET | NUMBER OF PLANTS REQUIRED

TREES

SHADE | EVERGREEN |

Trees

TREES

Reviewed for HOWARD SCD and meets Technical Requirements. U.S.D.A.-Natural Resources WW Conservation Service 10-9-03 This development plan is approved for soil erosion and sediment control by HE HOWARD SOUL CONSERVATION DISTRICT. (0-9-03

GAR.

1060.65 50. FT. = 4651.63 5Q. FT.

OWNER **BUILDER/DEVELOPER** THE HOWARD RESEARCH & DEVELOPMENT CORP. COLUMBIA BUILDERS 10275 LITTLE PATUXENT PARKWAY P.O. BOX 999 COLUMBIA, MARYLAND 21044 COLUMBIA, MARYLAND 21044 410-992-6000 410-730-3940

irector - Department of Planning and Zoning PROJECT LOTS NO. SECTION 2 18-20 & 29-34 EMERSON PHASE 4 BLOCK NO. ZONE TAX/ZONE | ELEC. DIST. | CENSUS TR. 16077 PEC-MXD-3 6068.02 WATER CODE SEWER CODE E-15 7640000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

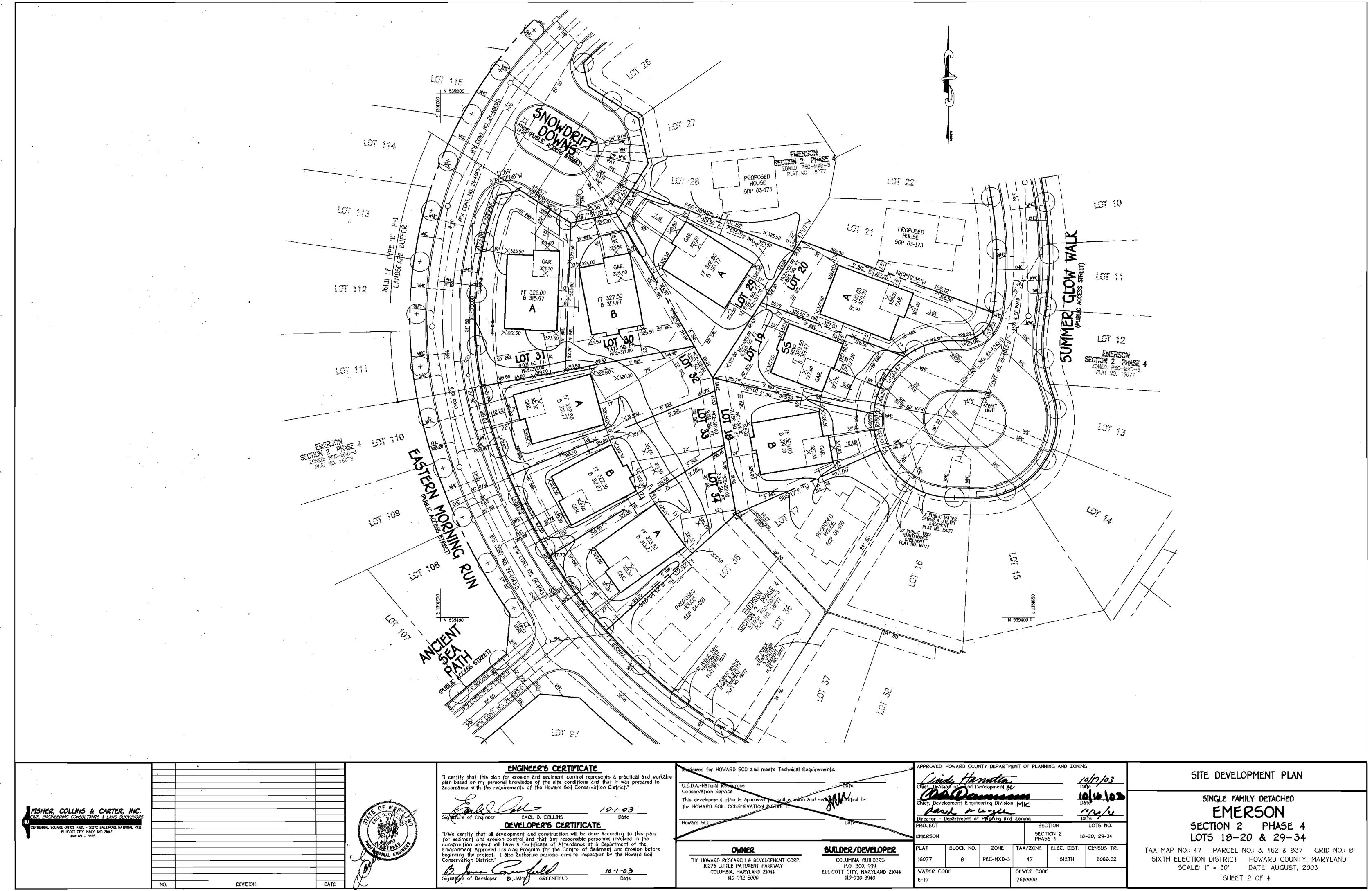
TITLE SHEET

SINGLE FAMILY DETACHED **EMERSON**

SECTION 2 PHASE 4 LOT5 18-20 & 29-34

TAX MAP NO: 47 PARCEL NO.: 3, 462 & 837 GRID NO.: 8 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1"= 30' DATE: AUGUST, 2003

SHEET 1 OF 4



Using vegetation as cover for barren soil to protect it from forces that cause erosion

PURPOSE Vegetative stabilization specifications are used to promote the establishment of vegetation on exposed soil. When soil is atabilized with vegetation, the soil is less likely to crode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and run-off to downstream areas, and improving wildlife habitat and visual resources. CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans 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 Olup 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 idle 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, seedbed 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

- A. Site Preparation Install erosion and sediment control structures (either temporary of permanent) such as diversions, arade stabilization structures, berms, waterways, or sediment control basins. ii. Perform all grading operations at right angles to the slope. Final grading and shaping is not usually
- necessary for temporary seeding.

 iii. Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed area over 5 acres.

 8. Soil Amendments (Fertilizer and Lime Specifications)
 - Amengments (retrilizer and clime opecifications)

 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 samples taken for engineering purposes may also be used for chemical analyses.
 - ii. 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 all be delivered to the site fully labeled according to the applicable state fertilizer laws and shall bear the name, trade name or trademark and warrantee
- iii. Line materials shall be ground timestone thydrated or burnt time 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 disking or other suitable means.
- i. Temporare lime and rerulizer into the top 3-5 of soil by disking or other suitable means.

 seedbed Preparation

 i. Temporary Seeding

 a. Seedbed 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. Sloped areas (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 plane

- running parallel to the contour of the slope.

 b. Apply fertilizer and lime as prescribed on the plans.

 c. In corporate lime and fertilizer into the top 3-5° of soil by disking or other suitable means.

 ii. Permanent Seeding

 a. Minimum soil conditions required for permanent vegetative establishment:

 1. Soil ph shall be between 6.0 and 7.0.

 2. Soluble salts shall be less than 500 parts per million (ppm).

 3. The soil shall contain less than 40% clay, but enough fine grained material 030% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if lovegrass or serecia lespedezas is to be planted, then a sandy soil (30% silt plus clay) would be accentable.
 - plus clay) would be acceptable. Soil shall contain 1.5% minimum organic matter by weight.
 - 50il stall contain 1.5% minimum organic matter by weight.
 5. Soil must contain sufficient pore space to permit adequate root penetration.
 6. 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 previously graded in conformance with the drawings 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 the surface area and to create horizontal erosion check slots to prevent topsoil from
 - sliding down a slope.

 Apply soil amendments as per soil test or as included on the plans.

 Mix soil amendments into the top 3-5° of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seedbed preparation, loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3:1) should be tracked by a dozer leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. The top 1-3 of soil should be loose and friable. Seedbed loosening may not be necessary on
- D. Seed Specifications i. All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the date of sowing such material on this lob.
- immediately preceding the date of sowing such material on this job.

 Note: Seed tags shall be made available to the inspector to verify type and rate of seed used.

 ii. Inoculant The inoculant for treating legume seed in the seed mixtures shall be a pure culture of introden-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than 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.

 E. Methods of Seeding

 i. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer), broadcast or drop seeded, or a cultipacker seeder.

 a. If fertilizer is being applied at the time of seeding, the application rates amounts will not exceed the following: nitrogen maximum of 100 bs. per acre total of soluble nitrogen P205 (phosphorous); 200 bs/ac; K20 (potassium): 200 bs/ac.

 b. Lime use only ground agricultural timestone, (Up 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 time when hydroseeding.
 - time. Do not use burnt or hydrated lime when hydroseeding. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and
- c. Seed and ferrillizer snan be injusted on any without interruption.

 ii. Dry Seeding: This includes use of conventional drop or broadcast spreaders.

 a. Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 26. The seeded area shall then be rolled with a weighted roller to provide good seed to soil confact.

 b. Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

 Merhanized seeders that apply and cover seed with soil.
- iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.

 a. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed 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, rive or oat straw, reasonable bright in color, and shall not be musty, moldy, caked, decayed, or excessively dusty and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
- ii. Wood Cellulose fiber Mulch (WCFM)

 a. WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
- WCFM shall be dived green or contain a green die in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry. WCFM, including die, shall contain no germination or growth inhibiting factors. WCFM materials shall be manufactured and processed in such a manner that the
- work majorials shall be manufactured and processed in such a maints 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 at concentration levels that will be phytol-toxic.
- f. WCFM must conform to the following physical requirements: fiber length to approximately 10 mm., diameter approximately 1 mm., pH range of 4.0 to 8.5, ash content of 1.6% maximum and water holding capacity of 90% minimum.

 Note: Only sterile straw much should be used in areas where one species of grass is desired.

- G. Mulching Seeded Areas Mulch shall be applied to all seeded areas immediately after seeding.

 i. If grading is completed outside of the seeding season, mulch along 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.

 ii. 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 between 1° and 2°. Mulch applied shall achieve a uniform distribution and depth so that the soil surface is not exposed. It a mulch anchoring tool is
- To be used, the rate expound be increased to 2.0 Tons/acre.

 iii. Wood cellulose fiber used as a mulch shall be applied at a net dry weight of 1,500 lbs. per acre. The wood cellulose fiber shall be mixed with water, and the mixture shall comfain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.

 Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by preference) depending upon size of acresion acresion. preference), depending upon size of area and erosion hazard
- i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of two (2) inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. It used on sloping land, this practice should be used on the contour if possible.

 ii. Wood cellulose fiber may be used for anchoring straw. The fiber binder shall be applied at a net dry weight of 750 pounds/acre. The wood cellulose fiber shall be mixed with water and the mixture shall contain a maximum of 50 pounds of wood cellulose fiber shall be mixed with water and
- the mixture shall contain a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.
- of water.

 iii. Application of liquid binders should be heavier at the edges where wind catches mulch, such as in valleys and crest of banks. The remainder of area should be appear uniform after binder application. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70 Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.

 iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer's recommendations. Netting is usually available in rolls 4' to 15' feet wide and 300 to 3,000 feet long.
- Incremental Stabilization Cut Stopes
- All cuts slopes shall be dressed, prepared, seeded and mulched as the work progresses. Slopes shall be excavated and stabilized in equal increments not to exceed 15°.

 ii. Construction sequence (Refer to Figure 3 below):
- a. Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the excavation.
 b. Perform Phase 1 excavation, dress, and stabilize.
- Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as necessary.

 Perform final phase excavation, dress and stabilize. Overseed previously seeded
- Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions int he operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization. Incremental Stabilization of Embankments - Fill Slopes
- Embankments shall be constructed in lifts as prescribed on the plans.
- ii. Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches

 15°, or when the grading operation ceases as prescribed in the plans.

 iii. At the end of each day, femporary berms and pipe slope drains should be constructed along the top edge of the embankment to intercept surface runoff and convey it down the slope in a non-crosive manner to a sediment trapping device.

 iv. Construction sequence: Refer to Figure 4 (below).
- - natruction sequence: Reter to Figure 4 (below).

 Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the fill. Construct slope silt fence on low side of fill as shown in figure 5, unless other methods shown on the plans address this area. Place Phase 1 embankment, dress and stabilize.

 Place Phase 2 embankment, dress and stabilize.

 Place final phase embankment, dress and stabilize.

 Overseed previously seeded areas as necessary.
- areas as necessary.

 Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of and placement of topsoil lif required grading and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

SEDIMENT CONTROL NOTES

- 1) A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LISCENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855). ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS
- FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THERETO.
 FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT
 OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1, b) 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING
 SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1,
 CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
 ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD
 SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS
 AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR
 PERMANENT SEEDING (SEC. 5D), SOD (SEC. 54), TEMPORARY SEEDING (SEC. 50),
 AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN
 ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER
 GERMINATION AND ESTABLISHMENT OF GRASSES.
 ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE
- TO 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 AREA DISTURBED L7493 ACRES AREA TO BE ROOFED OR PAVED 0.5455 ACRES BE VEGETATIVELY STABILIZED 1.2038 ACRES
- OFFSITE WASTE/BORROW AREA LOCATION N/A

 8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED 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 REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS AUTHORISES. 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 PIPE LENGHTS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent long-lived vegetative cover is needed. Seedbed Preparation : Loosen upper three inches of soil by raking. discing or other acceptable means before seeding, if not previously

Soil Amendments: In Ileu of soil test recommendations, use one of the following schedules :

- 1) Preferred Apply 2 tone per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs. per 1000 sq.ft.) before seeding. Harrow or disc into upper three inches of soil. At time of seeding, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs. per 1000 sq.ft.).
- 2) Acceptable Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 Ibs. per 1000 sq.ft.) before seeding. Horrow or disc into upper three inches of soil. Seeding: For the period March 1 thru April 30 and from August 1
- thru October 15, seed with 60 lbs. per ocre (1.4 lbs. per 1000 sq.ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. Kentucky 31 Tall Fescus per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegrass. During the period October 16 thru February 28, protect site by one of the following
- 1) 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.
- 3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per acre well anchored straw. Mulching: Apply 1-1/2 to 2 tans per acre (70 to 90 lbs. per 1000

eq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 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.

TEMPORARY SEEDING NOTES

Apply to graded or cleared areas likely to be redisturbed where a short-term vegetative cover is needed. Seedbed Preparation: Loosen upper three inches of soil by raking.

discing or other acceptable means before seeding, if not previously Soil Amendments: Apply 600 lbs. per acre 10-10-10 fertilizer (14

lbs. per 1000 sq.ft.). Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2-1/2 bushels per acre of annual rye (3.2 lbs.

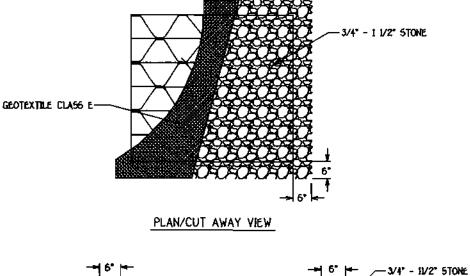
per 1000 sq.ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.07 lbs. per 1000 sq.ft.). For the period November 16 thru February 28, protect site by applying 2 tons per acre of well anchored straw mulch and seed as soon as possible in the spring, or use sod.

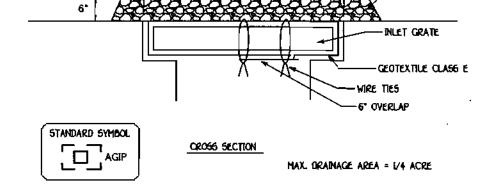
Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs, per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal. per 1000 sq.ft.) of emulsified asphalt on flot creas. On slopes, 8 ft. or higher, use 347 gal. per acre (8 gal. per 1000 sq.ft.) for anchoring.

Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

SEQUENCE OF CONSTRUCTION

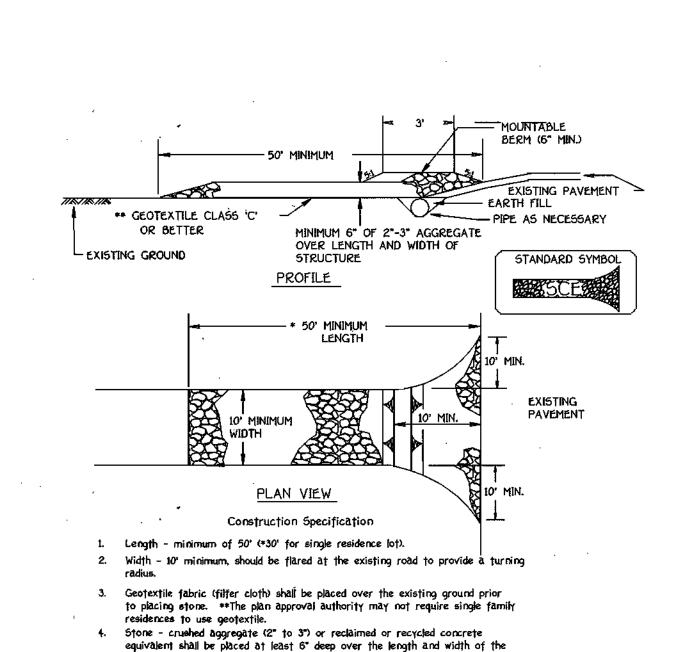
- L OBTAIN GRADING PERMIT 2. INSTALL SEDIMENT AND EROSION CONTROL DEVICES AS SHOWN ON PLAN 7 DAYS 3. CLEAR AND GRUB TO LIMITS OF DISTURBANCE 4 DAYS 4. INSTALL TEMPORARY SEEDING 2 DAYS 5. CONSTRUCT BUILDINGS 60 DAYS
- 6. FINE GRADE SITE AND INSTALL PERMANENT SEEDING AND LANDSCAPE 7. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR.





1. Lift grate and wrap with Geotextile Class E to completely cover all openings. then set grate back in place. 2. Place 3/4" to 11/2" stone, 4"-6" thick on the grate to secure the fabric and provide additional filtration

AT GRADE INLET PROTECTION



5. Surface Water - all surface water flowing to or diverted toward construction

entrances shall be piped through the entrance, maintaining positive drainage. Pipe

mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has

to be sized according to the drainage. When the SCE is located at a high spot and

nstalled through the stabilized construction entrance shall be protected with a

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

STABILIZED CONSTRUCTION ENTRANCE

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

10' MAXIMUM NOTE: FENCE POST SPACING SHALL NOT EXCEED 10 CENTER TO CENTER TETIETISTIST GROUND 1 SURFACE STANDARD SYMBOL FLOW 21/2" DIAMETER GALVANIZED - CHAIN LINK FENCE OR ALUMINUM WITH I LAYER OF FILTER CLOTH CHAIN LINK FENCING FILTER CLOTH FILTER CLOTH ' EMBED FILTER CLOTH 8" _____ TRIKIRIK MINIMUM INTO GROUND * IF MULTIPLE LAYERS ARE REQUIRED TO ATTAIN 42" Construction Specifications 1. Fencing shall be 42" in height and constructed in accordance with the

latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length

2. Chain link fence shall be tastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.

3. Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.

4. Filter cloth shall be embedded a minimum of 8" into the ground. .5. When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.

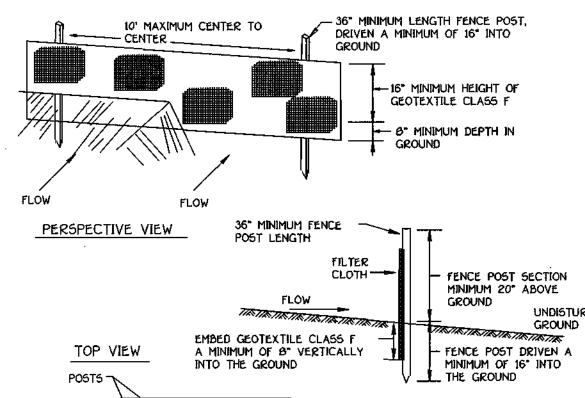
6. Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height 7. Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for

Geotextile Class F: Test: M5MT 509 Tensile Strength Test: M5MT 509 Tensile Modulus 20 |bs/in (min.) 0.3 gal/ft /minutê (max.) Test: MSMT 322 Flow Rate Test: MSMT 322 Filtering Efficiency

Design Criteria

5lope	5lope 5teepnese	Slope Length (maximum)	Silt Fence Length (maximum)
O - 10x	0 - 10:1	Unlimited	Unlimited
10 - 20 x	10:1 - 5:1	200 feet	1,500 feet
20 - 33%	5:1 - 3:1	100 feet	1,000 feet
33 - 50%	3:1 - 2:1	100 feet	500 feet
50% +	2:1 +	50 feet	250 feet

<u>SUPER SILT FENCE</u> NOT TO SCALE



CROSS SECTION SECTION B STANDARD SYMBOL STAPLE 4 JOINING TWO ADJACENT SILT FENCE SECTIONS

Construction Specifications 1. Fence posts shall be a minimum of 36° long driven 16° minimum into the ground. Wood posts shall be 11/2" x 11/2" square (minimum) cut, or 13/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard T or U section weighting not less than 1.00 pond per linear foot. 2. Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

Tensile Strength Test: MSMT 509 50 (bs/in (min.) Test: MSMT 509 Tensile Modulus 20 |bs/in (min) 0.3 gal ft / minute (max.)* flow Rate Test: MSMT 322 Filtering Efficiency 75% (min.) Test: MSMT 322 3. Where ends of geotextile fabric come together, they shall be overlapped.

folded and stapled to prevent sediment bypass. 4. Silt Fence shall be inspected after each rainfall event and maintained when bulges occur or when sediment accumulation reached 50% of the fabric height. Silt Fence Design Criteria

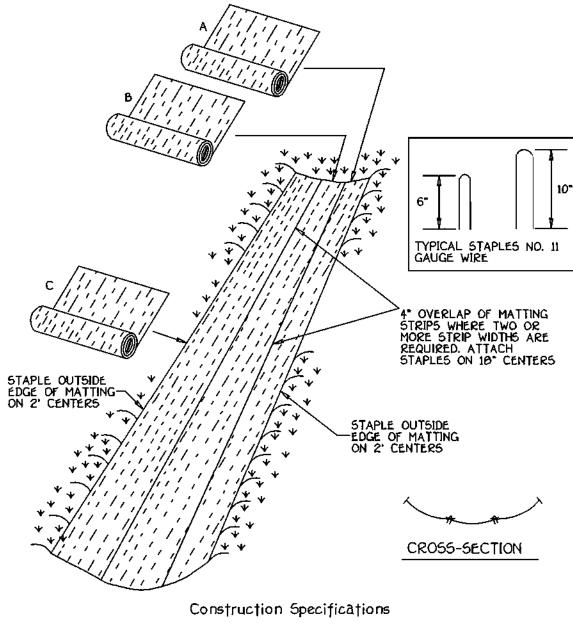
5lope Steepness Slope Length		Silt Fence Length
Flatter than 50:1	unlimited	unlimițed
50:1 to 10:1	125 feet	1.000 feet
10:1 to 5:1	100 feet	750 fee t
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet
In areas of less than 2%		

NOT TO SCALE

PPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

system, soil Class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence may be the only perimeter control

E-15



Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6". Staple the 4" overlap in the channel center using an 18" spacing

Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil. Staples shall be placed 2' apart with 4 rows for each strip, 2

outer rows, and 2 alternating rows down the center. Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4°, shiptap fashion. Reinforce the overlap with a double row of staples spaced 6° apart in a staggered pattern on either side. The discharge end of the matting liner should be similarly

> secured with 2 double rows of staples. Note: If flow will enter from the edge of the matting then the area. effected by the flow must be keyed-in

EROSION CONTROL MATTING NOT TO SCALE

FISHER, COLLINS & CARTER, INC CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS ELLICOTT CITY, MARYLAND 21042

REVISION

DATE

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."

10.1.03 EARL D. COLLINS 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." 10-1-03 Signature 🍂 Developer **B.** JAMES

Regiewed for HOWARD SCD and meets Technical Requirements. U.S.J.A.-Natural Resources

U.S.T.A.-Natural Resources

Conservation Service <u> 10-9-03</u> erosion and sediment control by

OWNER BUILDER/DEVELOPER THE HOWARD RESEARCH & DEVELOPMENT CORP. COLUMBIA BUILDERS 10275 LITTLE PATUXENT PARKWAY P.O. BOX 999 COLUMBIA, MARYLAND 21044 COLUMBIA, MARYLAND 21044 410-730-3940 410-992-6000

Janutton 1/2/03 karshe devolve rector - Department of Planning and Zoning LOTS NO. SECTION 2 18-20 & 29-34 EMERSON. PHASE 4 BLOCK NO. | ZONE | TAX/ZONE | ELEC. DIST. CENSUS TR 16077 PEC-MXD-3 6068.02 WATER CODE SEWER CODE

7640000

SEDIMENT/EROSION CONTROL NOTES & DETAILS

SINGLE FAMILY DETACHED **EMERSON**

LOTS 18-20 & 29-34

TAX MAP NO.: 47 PARCEL NO.: 3, 462 & 837 GRID NO.: 8 SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: AUGUST, 2003 SHEET 4 OF 4

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 (AAN) 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 healed-in plants from cold storage will be accepted. Unless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Areas", (hereinafter "Landscape Guidelines") approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architect, latest edition, including all agenda.

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 "Miss Utility" a minimum of 40 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 id 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 base 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 plan take precedence

All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except

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 material. 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 adaptability 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.

- SURETY AMOUNT FOR THIS PLAN IS IN THE AMOUNT OF \$13,200.00
- 1. LANDSCAPING SURETY FOR LOTS 18,20 & 29-34 15 \$1,500.00 PER LOT.
- THE LANDSCAPING SURETY FOR LOT 19 IS \$1,200.00 PER LOT.

 STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS.
- 2. TYPE 'B' BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREDITED TOWARDS THE LANDSCAPING REQUIREMENTS.
- 3. LANDSCAPING CAN NOT BE PLANTED IN ANY PUBLIC EASEMENTS.
 4. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTUAL
- COMMITTEE.

 5. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTING HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE
- WITH HOWARD COUNTY LANDSCPAE MANUAL.

 6. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE
- IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.

 7. SIZES OF PLANT MATERIALS MUST CONFORM TO THE REQUIREMENTS OF THE LANDSCAPE MANUAL, CHAPTER IV AND APPENDIX C.

REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED

KEY PROPERTY DEVELOPMENT CRITERIA, APPROVED 7/1/99 SECTION VII RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

THE QUANTITY AND GENERAL LOCATION OF TREES REQUIRED FOR INTERNAL LANDSCAPING ARE DETERMINED BY CRITERIA APPLIED BY THE ARCHITECTURAL COMMITTEE. THE COMMITTEE WILL CLASSIFY, DURING ARCHITECTURAL REVIEW, ALL LOTS AND PARCELS AS 1) NON-WOODED; 2) SEMI-WOODED; 3) WOODED. SUCH CLASSIFICATION SHALL TAKE INTO ACCOUNT THE EXISTING TREE COVER AND THE POTENTIAL FOR SAVING TREES IN CONNECTION WITH GRADING AND SITING. THIS CRITERIA ALSO CONSIDER THE SIZE OF THE LOT, AMOUNT OF EXISTING VEGETATION AND THE TYPE AND SITING OF RESIDENTIAL UNITS, IF, DURING OR AFTER CONSTRUCTION, THE COMMITEE DETERMINES THAT A BUILDER HAS VIOLATED ANY PROVISION OF TREE PRESERVATION, THE BUILDER WILL BE REQUIRED TO ADD NEW PLANT MATERIAL. SHADE TREE REQUIREMENTS ARE SPECIFIED BY THE FOLLOWING TABLE. DENSITIES REFER TO THE DENSITY OF THE INDIVIDUAL PARCEL.

SHADE TREE REQUIREMENTS

2-4 D.U./ACRE

	NON WOODED	SEMI WOODED	WOODED
TYPE OF UNIT AND LOT SIZE	MINMUM NUMBER	OF SHADE	TREES REQUIRE
SMALL RESIDENTIAL LOT (4,000 - 7,000 SQUARE FEET FOR CLUSTER HOUSE)	4.0/LOT	2.25/LOT	1.25/LOT
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET)	5.0/LOT	3.0/LOT	2.0/LOT

SUBSTITUTION OF TWO FLOWERING TREES OR TWO EVERGREEN TREES FOR EACH SHADE TREE MAY BE PERMITTEDFOR UP TO 50% OF THE REQUIRED NUMBER OF SHADE TREES SHOWN IN THE TABLE SUBJECT TO THE APPROVAL OF THE ARCHITECTURAL COMMITTEE CREDIT MAY ALSO BE GIVEN FOR ANY AREAS REQUIRED TO BE PROVIDED ALONG ROADWAYS, SUBJECT TO THE APPROVAL OF THE ARCHITECTURAL COMMITTEE.

BUILDER/DEVELOPER'S/ CERTIFICATE

I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE PLAN. SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT

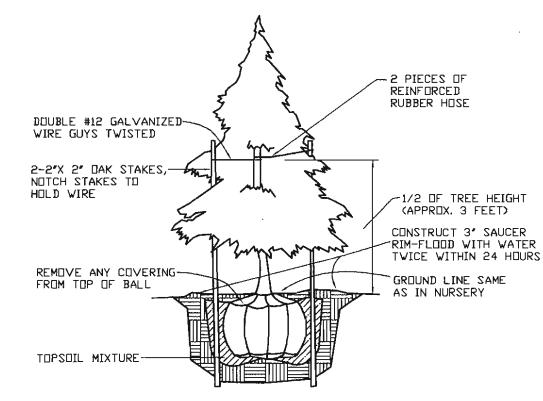
REGULATIONS AND THE LANDSCAPE MANUAL, I/WE FURTHER CERTIFY THAT UPON

COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN

EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO

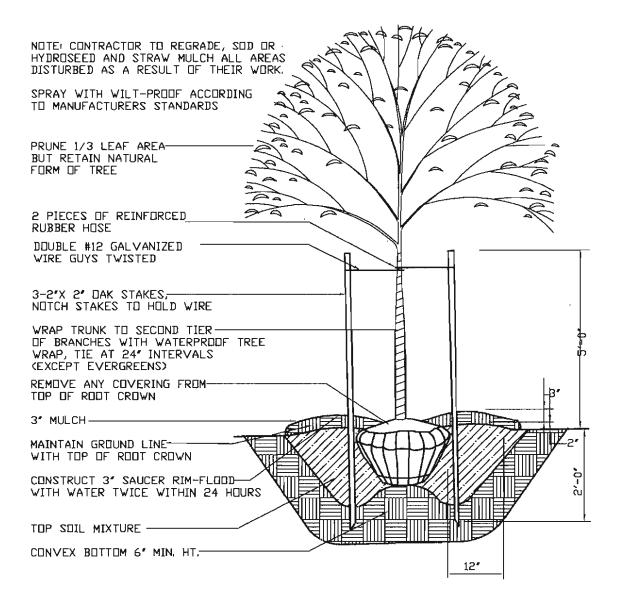
THE DEPARTMENT OF PLANNING AND ZONING.

B. JAMES GREENFIELD



EVERGREEN PLANTING DETAIL

NOT TO SCALE



TREE PLANTING DETAIL

	MODIFIED SCHEDULE C LANDSCAPE CHART							
LOT NO.	LOT CLA55IFICATION	INTERNAL LANDSCAPING REQUIRED	LANDSCAPING TYPE B REQUIRED 5 REQUIRED 5		SHADE TREE CREDIT *	REMAINING SHADE TREE OBLIGATION	TOTAL TREE5 REQUIRED	
		# OF SHADE TREES)	SHADE	EVERGREEN	CREDIT	000107(11011	5HADE	EVERGREEN
LOTS 18,20 29,30,32-34	NON-WOODED	5 TREES PER LOT	N/A.	N/A	0	0	35	0
LOT 19	NON-WOODED	4 TREES PER LOT	N/A	N/A	0	0	4	o
LOT 31	NON-WOODED	5 TREES PER LOT	3	4	5	0	3	4
TOTAL	TOTAL TREE5 42 4							

* THIS NUMBER REFLECTS THE MATHEMATICAL CONVERSION OF EVERGREEN TREES TO SHADE TREES (2:1) FOR THE PURPOSE OF MEETING THE INTERNAL PER LOT SHADE TREE OBLIGATION.

SCHEDULE A

TYPE

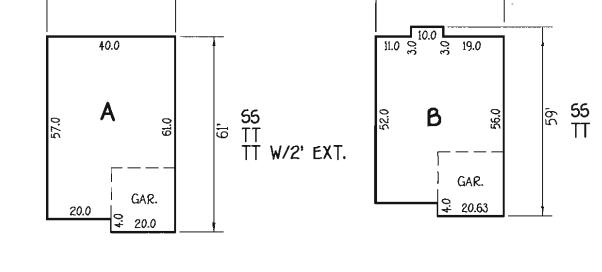
PERIMETER LANDSCAPE EDGE

ANDSCAPE OF ROADWAY

FRONTAGE

PERIMETER

16L11'



2.17'x9.75'-B/W

LOT 29

2294.40 SQ. FT. = 5736.00 SQ. FT.

GAR.

Min Lot Size

W/All Options

2214.40 SQ. FT. = 5536.00 SQ. FT.

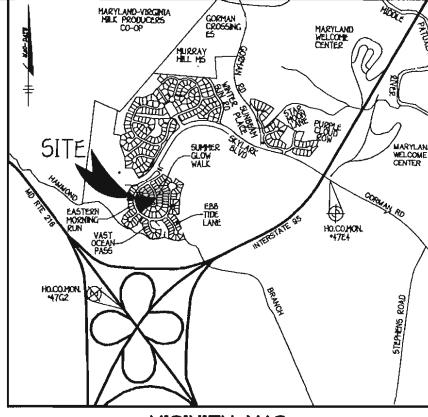
Min Lot Size

W/All Options

BENCH MARKS

T.P. 47E4 ELEV 339.00 N. 535,846.148 E. 1,355,431.224 LOC. NEAR I-95 BRIDGE ALONG GORMAN ROAD

T.P. 47G2 ELEV. 363.53 N. 532,930.964 E. 1,351,224.095 LOC. NEAR MD. RTE 216 WEST NEAR EXIT RAMP TO 1-95



VICINITY MAP

SCALE: 1" = 2000"

GENERAL NOTES

- 1. SUBJECT PROPERTY ZONED PEC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/90 AS CASE NO. ZB-979M.
- 2. TOTAL AREA OF SITE: 1.711 ACRES
- 3. TOTAL NUMBER OF LOTS SUBMITTED: 9 SFD 4. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION
- AT (410)313-1880 24-HOURS PRIOR TO THE COMMENCEMENT OF WORK.

 5. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS
- PRIOR TO ANY EXCAVATION WORK.

 6. THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: ZB-979M, WP 99-96, 5 99-12,
- PB-339, P-02-15, F-03-13, W&S CONT. *24-4043-D.
- 7. THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT JUNE, 1999 BY DAFT MCCUNE WALKER, INC.
- 8. 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 535046.140 E 1355431.224
 HOWARD COUNTY MONUMENT 47G2 N 532930.964 E 1351224.095
- 9. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- 10. 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-03-13.
 AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4043-D.
- 11. CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
- 12. STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION DRAWINGS FILED UNDER F-03-13.

 13. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVIDION OF SECTION 16124
- 13. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISION OF SECTION 16.124
 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL AND DEVELOPMENT CRITERIA
 APPROVED BY THE PLANNING BOARD 7-1-99 PER CASE NO. PB-339 REQUIRED LANDSCAPING
- HAS BEEN POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$13,200.00 FOR 42 SHADE TREES AND 4 EVERGREEN TREES.

 14. PERIMETER LANDSCAPING AND STREET TREES SHALL BE PROVIDED IN ACCORDANCE WITH
- SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL AND DEVELOPMENT CRITERIA APPROVED BY THE PLANNING BOARD 7-1-99 PER CASE NO. PB-339 AS SHOWN ON THE APPROVED ROAD CONSTRUCTION DRAWINGS FILED UNDER F-03-13.
- 15. FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-03-13.
 16. FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.
- 17. OPEN SPACE REQUIREMENTS FOR THESE LOTS HAVE BEEN PROVIDE UNDER. F-03-13.
 18. MINIMUM BUILDING RESTRICTION SETBACKS FROM PROPERTY LINES AND PUBLIC ROAD
- RIGHTS-OF-WAY ARE TO BE IN ACCORDANCE WITH THE DEVELOPMENT CRITERIA APPROVED
 WITH THE COMPREHENSIVE SKETCH PLAN 5-99-12 AND THE DECISION AND ORDER FOR PB-339
 APPROVED ON JULY 1, 1999.
- 19. THE MINIMUM SETBACKS FOR STRUCTURES SHALL BE AS FOLLOWS:
 FRONT SETBACK 15' FROM THE RICHT-OF-WAY TO THE HOUSE OR GARACE
- FRONT SETBACK

 5' FROM THE RIGHT-OF-WAY TO THE HOUSE OR GARAGE.

 5' TO THE PROPERTY LINE WITH A MINIMUM OF 15' BETWEEN STRUCTURES

 REAR SETBACK

 10' FROM THE PROPERTY LINE TO AN OPEN DECK

 20' FROM THE PROPERTY LINE TO THE HOUSE
- ANY DEVIATION FROM THESE SETBACK REQUIREMENTS WILL REQUIRE SITE DEVELOPMENT PLAN APPROVED BY THE HOWARD COUNTY PLANNING BOARD.
- 20. LOT COVERAGE BY BUILDINGS WITHIN SINGLE FAMILY DETACHED LAND USE AREAS SHALL NOT EXCEED 40%. NO LIMITATION IS IMPOSED UPON THE AREA USED FOR SIDEWALKS, PAVED PARKING
- AREAS, PATIOS, DECKS, LANDSCAPING AND SIMILIAR MINOR STRUCTURE.

 21. AS A CONSEQUENCE OF THIS SUBMISSION, ON JUNE 25, 2003, THIS SOP IS SUBJECT TO THE 5TH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING
- EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001.

 22. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS,
- CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16' FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACKS. THE 15' MINIMUM DISTANCE BETWEEN STRUCTURES DOES NOT APPLY TO THOSE REFERENCED FEATURES NOR BETWEEN OPEN DECKS AND A DWELLING STRUCTURE OR ANOTHER DECK. AS AN ADVISORY, THE 15'
- DISTANCE DOES APPLY TO THE SECOND STORY OVERHANG.

 23. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
- A.) WIDTH 12' (14' IF SERVING MORE THAN ONE RESIDENCE)

 B.) SURFACE 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.)

 C.) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT
- C.) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT
 TURNING RADIUS.
 D.) STRUCTURES (BRIDGES/CULVERTS) CAPABLE OF SUPPORTING 25 GROSS TONS
- (H25-LOADING)

 F) DRAINAGE FLEMENTS CAPABLE OF SAFETY PASSING 100 YEAR FLOOD WITH N
- E.) DRAINAGE ELEMENTS CAPABLE OF SAFETY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 F.) STRUCTURE CLEARANCES - MINIMUM 12 FEET
- G.) MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE

	INDEX CHART
SHEET	DESCRIPTION
SHEET 1	TITLE SHEET, HOUSE TYPES, TEMPLATES
SHEET 2	SITE DEVELOPMENT PLAN, LOTS 10-20 & 29-34
SHEET 3	SEDIMENT/EROSION CONTROL PLAN LOTS 18-20 & 29-34

SHEET 4 SEDIMENT/EROSION CONTROL NOTES & DETAILS

	LEGEND					
SYMBOL	DESCRIPTION					
	EXISTING CONTOUR 2' INTERVAL					
+362.2	SPOT ELEVATION					
(WOE)	PROPOSED WALKOUT					
5F 5F	SILT FENCE					
-55F55F-	SUPER SILT FENCE					
ECM	EROSION CONTROL MATTING					
LOD	LIMIT OF DISTURBANCE					

(*) EXISTING STREET TREE TAKEN FROM F-03-13

LOT NUMBER	STREET ADDRESS
18	10128 SUMMER GLOW WALK
19	10124 SUMMER GLOW WALK
20	10120 SUMMER GLOW WALK
29	10108 SNOWDRIFT DOWNS
30	10104 SNOWDRIFT DOWNS
31	10100 SNOWDRIFT DOWNS
32	8551 EASTERN MORNING RUN
33	8555 EASTERN MORNING RUN
34	8559 EASTERN MORNING RUN

ADDRESS CHART

FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS CENTENNIAL SQUARE OFFICE PARX - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042 (410) 461 - 28955 ADD HEE, THE 'T-T' FOR LOT 20

SELOCOLO COLORDO DE LA COLORDO

"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."

LINEAR FEET NUMBER OF PLANTS REQUIRED

SHADE EVERGREEN TOTAL

10.1.03

TREES TREES TREES

Signature of Engineer EARL D. COLLINS
BUILDER/DEVELOPER'S

CATEGORY

ROADWAYS)

ROADWAY

LOT NO. | PERIMETER | (PROPERTIES/

"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."

Reviewed for HOWARD SCD and meets Technical Requirements.

10-9:03

U.5D.A.-Natural Resources

Conservation Service

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

Howard SCD

Date

GAR.

Min Lot Size

W/All Options

1860.65 5Q. FT. = 4651.63 5Q. FT.

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

BUILDER/DEVELOPER

COLUMBIA BUILDERS
P.O. BOX 999
COLUMBIA, MARYLAND 21044
410-730-3940

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 110/02 Rank d'agli-Date LOTS NO. SECTION 2 18-20 & 29-34 MERSON TAX/ZONE ELEC. DIST. BLOCK NO. ZONE CENSUS TR. 16077 SIXTH 6068.02 PEC-MXD-3 WATER CODE SEWER CODE E-15 7640000

GAR.

TT W/2' EXT.

2287.73 50. FT. = 5719.33 50. FT.

TITLE SHEET

SINGLE FAMILY DETACHED

EMERSON SECTION 2 PHASE 4

SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

LOTS 18-20 & 29-34

TAX MAP NO: 47 PARCEL NO.: 3, 462 & 837 GRID NO.: 8

SCALE: 1"= 30' DATE: AUGUST, 2003 SHEET 1 OF 4