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 (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 quarantee 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

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

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 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 \$16,950.00

1. LANDSCAPING SURETY FOR LOTS 3-5,18,19,82 IS \$1,500.00 PER LOT. LANDSCAPING SURETY FOR LOTS 83 & 86 IS \$1,200.00 PER LOT LANDSCAPING SURETY FOR LOTS 84 & 85 IS \$1,800.00 PER LOT.

LANDSCAPING SURETY FOR LOT 87 IS \$1,950.00. STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS. 2. TYPE 'B' BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREDITED TOWARDS THE

LANDSCAPE REQUIREMENTS. 3. LANDSCAPING CAN NOT BE PLANTED IN PUBLIC EASEMENTS. 4. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTURAL

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 LANDSCAPE 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 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 KEMMEROPERTY ADEAPENDEMENT 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 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 WOODED MINMUM NUMBER OF SHADE TREES REQUIRED 4.0/LOT 2.25/LOT 1.25/LOT

SMALL RESIDENTIAL LOT (4,000-7,000 SQUARE FEET) CLUSTER HOUSING MEDIUM RESIDENTIAL LOT

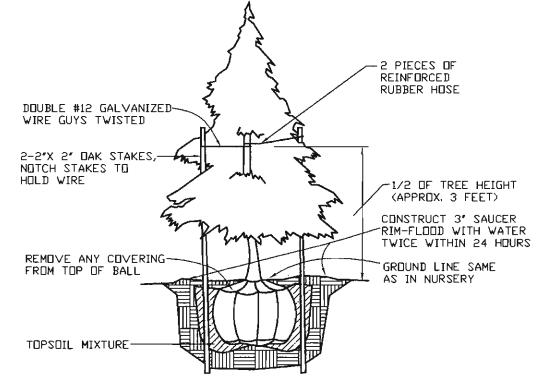
(7,000-13,000 SQUARE FEET)

2-4 D.U./ACRE

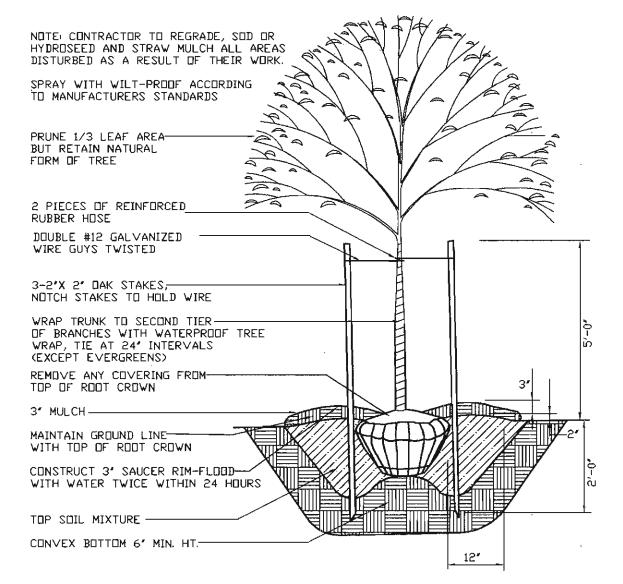
TYPE OF UNIT AND LOT SIZE

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.



# EVERGREEN PLANTING DETAIL NOT TO SCALE



# TREE PLANTING DETAIL

		• • •		CHEDULE PE CHAR				
LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED	TYPE B REQUIRED		SHADE TREE CREDIT *	REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED	
		(# OF SHADE TREES)	SHADE	EVERGREEN	-7,021,1		SHADE	EVERGREEN
LOTS 3-5 18, 19 & 82	NON-WOODED	5 TREES PER LOT	N/A	N/A	0	0	30	0
LOT 03 & 06	NON-WOODED	4 TREES PER LOT	N/A	N/A	0	0	8	0
LOT 04 CORNER	NON-WOODED	5 TREES PER LOT	3	2	3	2	5	2
LOT 85 CORNER	NON-WOODED	5 TREES PER LOT	3	2	3	2	5	2
LOT 07 CORNER	NON-WOODED	5 TREES PER LOT	2	3	3	2	5	3
TOTAL	TREE5		-	-			53	7

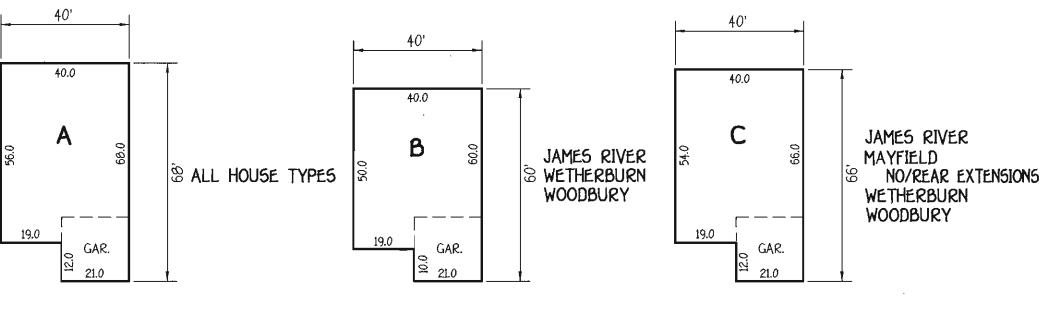
\* THIS NUMBER REFLECTS THE MATHEMATICAL CONVERSION OF EVERGREEN TREES TO SHADE TREES (2:1) FOR THE PURPOSE OF MEETING THE INTERNAL PER LOT SHADE TREE OBLIGATION.

ADJACENT TO

ROADWAY

#### SCHEDULE A PERIMETER LANDSCAPE EDGE BUILDER/DEVELOPER'S/ CERTIFICATE 1/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE LINEAR FEET | NUMBER OF PLANTS REQUIRED CATEGORY PLAN, SECTION 16.124 OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT LANDSCAPE | OF ROADWAY REGULATIONS AND THE LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON LOT NO. | PERIMETER | (PROPERTIES/ | FRONTAGE TYPE COMPLETION, A CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN ROADWAYS) PERIMETER EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING. ADJACENT TO 84 & 85 224.49 11-9-04 CORNER ROADWAY ROBERT CORBET DATE

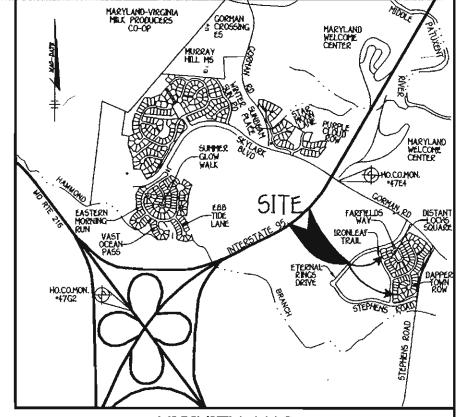
# Opt. 45~ GAR 7.0'x12.17'-JAMES RIVER MAYFIELD 2362.77 5Q. FT. = 5906.93 SQ. FT. 2016.14 SQ. FT. = 5040.35 SQ. FT Min Lot Size Min. Lot Size W/All Options W/All Options 1940.38 SQ. FT. = 4850.95 SQ. FT W/All Options WETHERBURN 2132.49 5Q. FT. = 5331.23 Min. Lot Size W/All Options



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

BENCH MARKS

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 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. ZB979M.

2. TOTAL AREA OF SITE: 2.286 ACRES TOTAL NUMBER OF LOTS SUBMITTED: 11 SFD

4. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 24 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. 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-04-53, W&S CONT. \*24-4120-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 532938.964 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-04-53. AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4120-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-04-53. 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 \$16,950.00 FOR 60 INTERIOR LANDSCAPING 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-04-53.

15. FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-04-53. 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-04-53. 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 RIGHT-OF-WAY TO THE HOUSE OR GARAGE.

5' TO THE PROPERTY LINE WITH A MINIMUM OF 15' BETWEEN STRUCTURES 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 5DP IS SUBJECT TO THE 5TH

EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001 AND THE ZONING REGULATIONS AS AMENDED BY CB 75-2003. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE BUILDING PERMIT. 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)

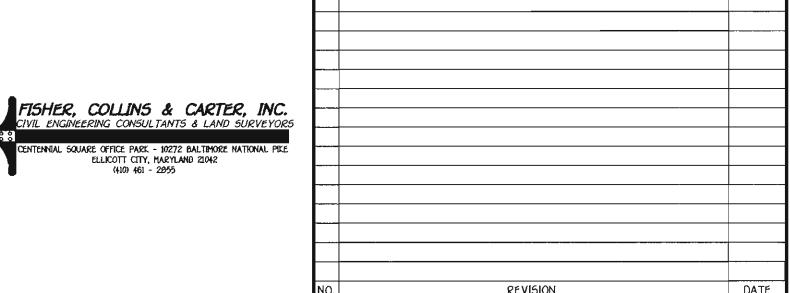
E.) DRAINAGE ELEMENTS CAPABLE OF SAFETY PASSING 100 YEAR FLOOD WITH NO MORE THAN I FOOT DEPTH OVER DRIVEWAY SURFACE. F.) STRUCTURE CLEARANCES - MINIMUM 12 FEET

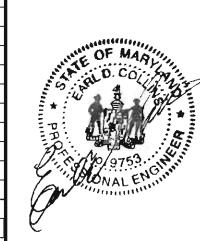
G.) MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE.

	LEGEND
SYMBOL	DESCRIPTION
	EXISTING CONTOUR 2' INTERVAL
+362.2	SPOT ELEVATION
(WOB)	PROPOSED WALKOUT
-5F-5F-	SILT FENCE
-55F55F-	SUPER SILT FENCE
<del>*************************************</del>	FOREST CONSERVATION EASEMENT
ECM	EROSION CONTROL MATTING
LOD	LIMIT OF DISTURBANCE
<del>→</del> ~~	

LOT NUMBER	STREET ADDRESS
3	9610 IRONLEAF TRAIL
4	9614 IRONLEAF TRAIL
5	9618 IRONLEAF TRAIL
18	9620 DAPPER TOWN ROW
19	9624 DAPPER TOWN ROW
82	8611 FAR FIELDS WAY
83	0607 FAR FIELDS WAY
84	8603 FAR FIELDS WAY
85	9678 IRONLEAF TRAIL
86	9602 IRONLEAF TRAIL
87	9686 IRONLEAF TRAIL

ADDRESS CHART





CORNER

EN	GINEER'S CERTIF	ICATE
"I certify that this plan for ero plan based on my personal know accordance with the requiremen	osion and sediment conv vledge of the site cond ots of the Howard Soil (	trol represents a practical and work itions and that it was prepared in Conservation District."
Sala Cell-	-	11.9.06
Signature of Engineer	EARL D. COLLINS	Date
BUILDER	DEVELOPER'S C	ERTIFICATE

123.481

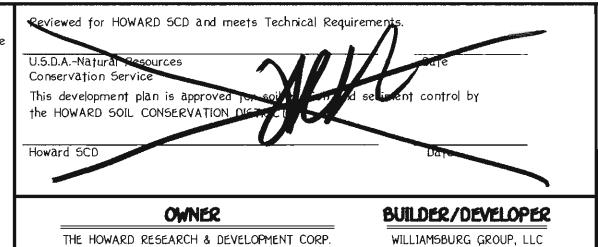
SHADE | EVERGREEN | TOTAL

TREES

TREES

TREES |

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 11-9-04 ōignāture of Devel∂per ROBERT CORBETT



COMMON DRIVEWAY DETAIL

10275 LITTLE PATUXENT PARKWAY

COLUMBIA, MARYLAND 21044

410-992-6000

NOT TO SCALE

\_11/2" BIT, CONC, SURFACE

一亿次" BIT, CONC, BASE

6" COMPACTED

CRUSHER

RUN BASE

BUILDER/DEVELOPER
WILLIAMSBURG GROUP, LLC 5405 HARPERS FARM ROAD COLUMBIA, MARYLAND 21044 410-997-8000

				3	₹ ( <u>₹</u> )	EXISTING STR	EET TREE TAKEN FROM F-03-13
Lin	HOWARD COUNT	min		ING AND 2	ONING.  Z  Da	/21/04	
Chief Davek	ppment Enginee	///////// ring Division	MK		12 Da <sup>1</sup> Da	127/04	5IN
PROJECT EMERSON	epai menjijoj s	Jamana ana	5ECTION	ION 2	LOTS	<u> </u>	SECT LOTS
PLAT 16992 THRU 16997	BLOCK NO. 9 & 15	ZONE PEC-MXD-3 R5C-MXD-3		ELEC. (	DIST.	CENSUS TR. 6069.02	TAX MAP NO.: 47 SIXTH ELECTION
WATER COL E-15	DE.		5EWER CODE 7640000	•	•		SCALE: 1"=

INDEX CHART

SHEET 2 SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN, LOTS 3-5,18,19

SHEET 3 SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN LOTS 82-87

SHEET 1 TITLE SHEET, HOUSE TYPES, TEMPLATES

SHEET 4 SEDIMENT/EROSION CONTROL NOTES & DETAILS

**DESCRIPTION** 

TITLE SHEET

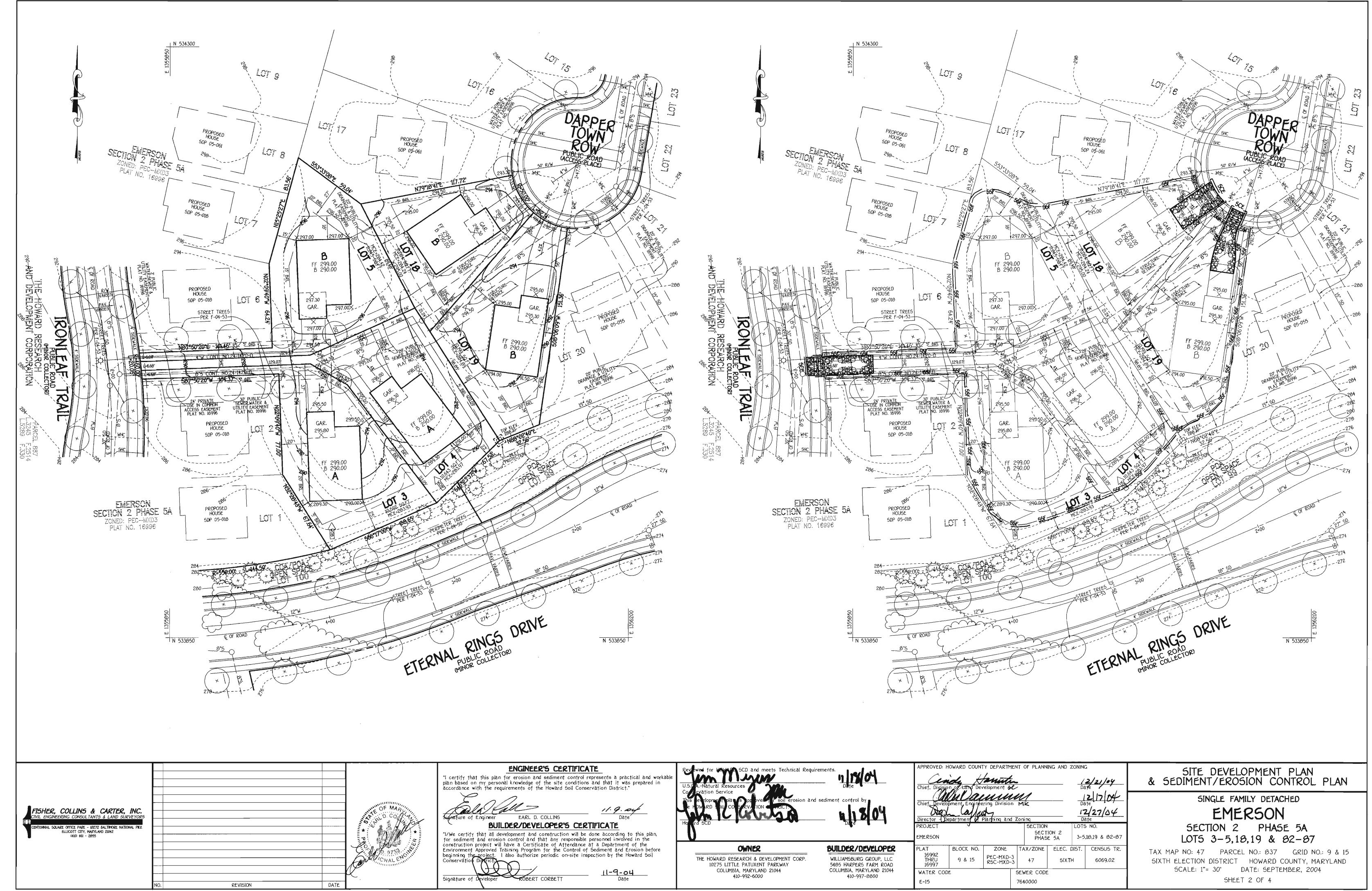
SINGLE FAMILY DETACHED

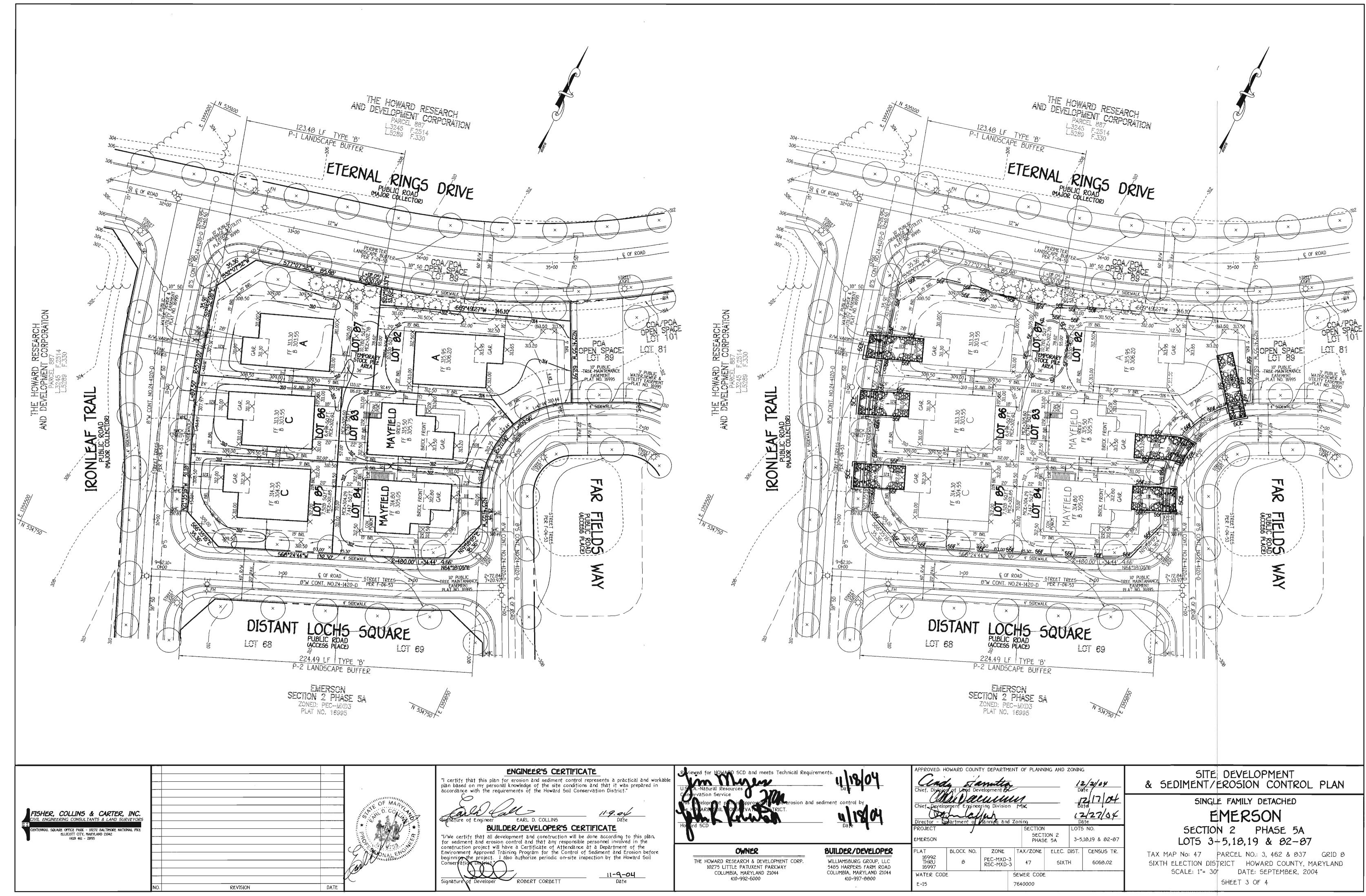
**EMERSON** 

SECTION 2 PHASE 5A LOTS 3-5,18,19 & 82-87

TAX MAP NO.: 47 PARCEL NO.: 837 GRID NO.: 9 & 15 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1"= 30' DATE: SEPTEMBER, 2004

SHEET 1 OF 4





908-05-052

PURP05E

Vegetative stabilization specifications are used to promote 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 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 O(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 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 QUANTIT'

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

Install erosion and sediment control structures (either temporary of permanent) such as diversions, grade 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. Soil Amendments (Fertilizer and Lime 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 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 of the producer. iii. 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. iv. Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means. C. Seedbed Preparation

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

Minimum soil conditions required for permanent vegetative establishment:

1. Soil pH shall be between 6.0 and 7.0.

Soluble salts shall be 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 lovegrass or serecia lespedezas 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. b. 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 slidina 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 o 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 newly disturbed areas.

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 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 nitrogen-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.

Methods of Seeding 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 lbs. per acre total of soluble nitrogen, P205 (phosphorous); 200 lbs/ac; K20 (potassium): 200 lbs/ac. Lime - use only ground agricultural limestone. (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 lime when hydroseeding. Seed and fertilizer shall be mixed on site and seeding shall be done immediately and 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 contact.

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

iii. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. 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, rye 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)

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 uniformly 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 at concentration levels that 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 mulch 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. If grading is completed outside of the seeding season, mulch along shall be applied as prescribed this section and maintained until the seeding season returns and seeding can be performed i 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. If a mulch anchoring tool is to be used, the rate should be increased to 2.5 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 contain a maximum of 50 lbs. of wood cellulose fiber per 100 gallons of water.

H. Securing Straw Mulch (Mulch Anchoring): Mulch anchoring shall be performed immediately following mulch application to minimize loss by wind or water. This may be done by one of the following methods (listed by 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. 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 per 100 gallons 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 Slopes 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

Perform Phase 1 excavation, dress, and stabilize. Perform Phase 2 excavation, dress and stabilize. Overseed Phase 1 areas as

necessary.
d. Perform final phase excavation, dress and stabilize. Overseed previously seeded areas as necessary

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 J. 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, temporary 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-erosive manner to

a sediment trapping device. Construction sequence: Refer to Figure 4 (below). a. 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.

Once the placement of fill has begun the operation should be continuous from grubbing through the completion of and placement of topsoil (if 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 40 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).

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

3) 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.

4) ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE. 5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR

ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES. 6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT

AND MULCHING (SEC. 52). TEMPORARY STABILIZATION WITH MULCH ALONE CAN

PERMANENT SEEDING (SEC. 51), SOD (SEC. 54), TEMPORARY SEEDING (SEC.

7) SITE ANALYSIS: TOTAL AREA OF SITE 2.286 ACRES AREA DISTURBED 2,286 ACRES AREA TO BE ROOFED OR PAVED 0.608 ACRES AREA TO BE VEGETATIVELY STABILIZED 1.174 ACRES TOTAL CUT 1290 CU.YDS. TOTAL FILL 8057 CU.YDS.

CONTROL INSPECTOR.

8) ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.

0 CHYDS

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,

OFFSITE WASTE/BORROW AREA LOCATION

APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. 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 lieu of soil test recommendations, use one of the following schedules :

1) Preferred - Apply 2 tons 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, opply 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.) ond 1000 lbs. per ocre 10-10-10 fertilizer (23 lbs. 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 acre (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 Toll Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of weeping lovegross. 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 soan as possible in the spring.

2) Use sod.

3) Seed with 60 lbs. per acre Kentucky 31 Tall Fescue and mulch with 2 tons per ocre well anchored strow.

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 gol. per 1000 sq.ft.) of emulsified ospholt on flat greas. On slopes, 8 ft. or higher, use 347 gol. per gcre (8 ggl. per 1000 sq.ft.) for onchoring. Maintenance: Inspect all seeded greas and make needed repairs.

replocements and reseedings.

36" MINIMUM LENGTH FENCE POST

DRIVEN A MINIMUM OF 16" INTO

GROUND

# 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: Far periods March 1 thru April 30 and from August 15 thru

November 15, seed with 2-1/2 bushels per ocre 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 onchored strow mulch and seed as soon as possible in the spring, or use sod.

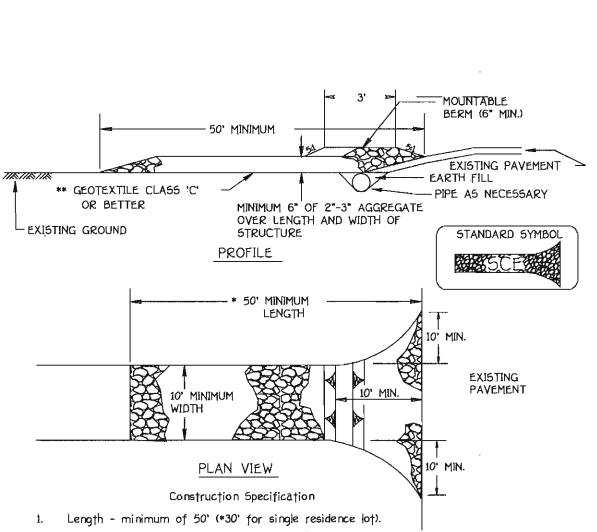
Mulching: Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gol. per ocre (5 gal. per 1000 sq.ft.) of emulsified osphalt on flat areas. On slopes, 8 ft. or 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

1. 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. 7 DAYS



Width - 10' minimum, should be flared at the existing road to provide a turning

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

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

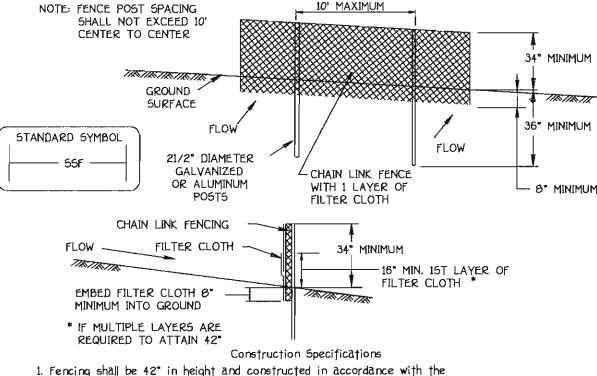
5. Surface Water - all surface water flowing to or diverted toward construction entrances shall be piped through the entrance, maintaining positive drainage. Pipe installed through the stabilized construction entrance shall be protected with a mountable berm with 5:1 slopes and a minimum of 6" of stone over the pipe. Pipe has to be sized according to the drainage. When the SCE is located at a high spot and

according to the amount of runoff to be conveyed. A 6" minimum will be required.

has no drainage to convey a pipe will not be necessary. Pipe should be sized

Location - A stabilized construction entrance shall be located at every point where construction traffic enters or leaves a construction site. Vehicles leaving the site must travel over the entire length of the stabilized construction entrance.

STABILIZED CONSTRUCTION ENTRANCE



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 fastened 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.

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: Tensile Strength 50 |bs/in (min.) Test: M5MT 509

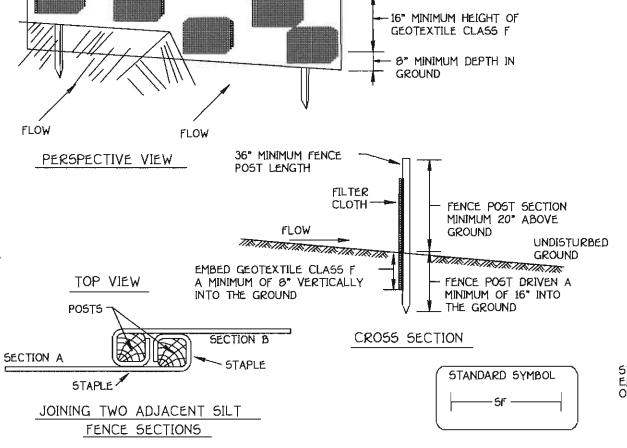
5. When two sections of filter cloth adjoin each other, they shall be overlapped

Tensile Modulus 20 |bs/in (min.) Test: MSMT 509 0.3 gal/ft /minute (max.) Test: MSMT 322 Flow Rate Filtering Efficiency 75% (min.) Test: M5MT 322

# Design Criteria

õlope	5lope 5teepness	Slope Length (maximum)	Silt Fence Length (maximum)
0 - 10%	0 - 10:1	 Unlimited	Unlimited
0 - 20%	10:1 - 5:1	200 feet	1,500 fee†
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

SUPER SILT FENCE



10' MAXIMUM CENTER TO

- CENTER

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: Test: MSMT 509 Tensile Strenath Tensile Modulus Test: MSMT 509 20 lbs/in (min.) Flow Rate 0.3 gal ft / minute (max.)2 Test: MSMT 322 75% (min.) Test: M5MT 322

Filtering Efficiency 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.

(Maximum) (Maximum) Silt Fence Length Slape Length Slope Steepness Flatter than 50: unlimited unlimited 50:1 to 10:1 125 feet 1,000 feet 10:1 to 5:1 100 feet 750 feet

60 feet

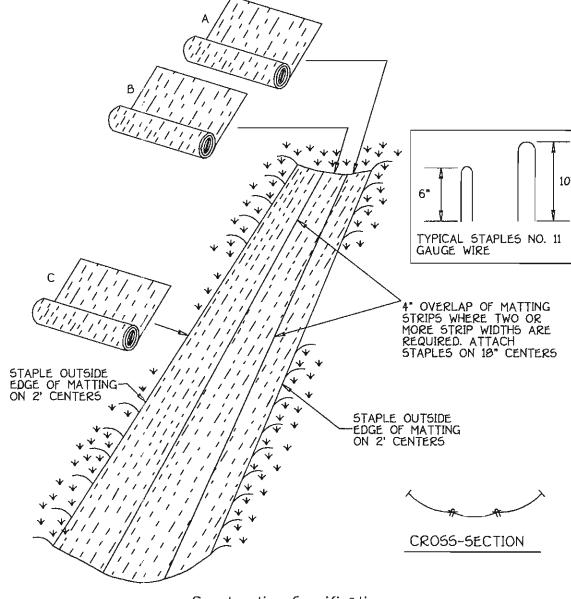
40 feet

Silt Fence Design Criteria

2:1 and steeper 20 feet 125 feet Note: In areas of less than 2% slope and sandy soils (USDA general classification 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

3:1 to 2:1

SILT FENCE NOT TO SCALE



Construction Specifications

1. 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". 2. Stuple the 4" overlap in the channel center using an 18" spacing

between staples. 3. Before stapling the outer edges of the matting, make sure the

4. Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center. 5. 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",

matting is smooth and in firm contact with the soil.

shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side. 6. 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

EROSION CONTROL MATTING

effected by the flow must be keyed-in.

FISHER, COLLINS & CARTER, INC. IVIL ENGINEERING CONSULTANTS & LAND SURVEYORS ELLICOTT CITY, MARYLAND 2104 (410) 461 - 2955

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." 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 Soi

ROBERT CORBET

and sediment control by

COLUMBIA, MARYLAND 21044

410-992-6000

OWNER THE HOWARD RESEARCH & DEVELOPMENT CORP. 10275 LITTLE PATUXENT PARKWAY

12/21/04 UNIL LOTS NO. SECTION : 3-5,18,19 & 82-87 MERSON PHASE 5A BLOCK NO. ZONE TAX/ZONE | ELEC. DIST. CENSUS TR. 16992 THRU 16997 SIXTH 6069.02 R5C-MXD-3 WATER CODE SEWER CODE 7640000

PPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

500 feet

250 feet

SEDIMENT/EROSION CONTROL NOTES & DETAILS

# SINGLE FAMILY DETACHED SECTION 2

TAX MAP NO.: 47 PARCEL NO.: 837 GRID NO.: 9 & 15 SIXTH ELECTION DISTRICT, HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: JUNE, 2004

LOTS 3-5,18,19 & 82-87

SHEET 4 OF 4

50P-05-052

DATE

11-9-04

BUILDER/DEVELOPER WILLIAMSBURG GROUP, LLC 5405 HARPERS FARM ROAD COLUMBIA, MARYLAND 21044

410-997-8800

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 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 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 \$16,950.00

1. LANDSCAPING SURETY FOR LOTS 3-5,10,19,82 IS \$1,500.00 PER LOT. LANDSCAPING SURETY FOR LOTS 83 & 86 IS \$1,200.00 PER LOT

LANDSCAPING SURETY FOR LOTS 84 & 85 IS \$1,800.00 PER LOT.

LANDSCAPING SURETY FOR LOT 87 IS \$1,950.00. STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS.

2. TYPE 'B' BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREDITED TOWARDS THE LANDSCAPE REQUIREMENTS.

3. LANDSCAPING CAN NOT BE PLANTED IN PUBLIC EASEMENTS. 4. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTURAL

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 LANDSCAPE 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 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 KEMNUPROPERTY MENTENDEMENT 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 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

WOODED WOODED WOODED

TYPE OF UNIT AND LOT SIZE MINMUM NUMBER OF SHADE TREES REQUIRED

SMALL RESIDENTIAL LOT (4,000-7,000 SQUARE FEET) CLUSTER HOUSING MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET)

2-4 D.U./ACRE

3.0/LOT 2.0/LOT

DATE

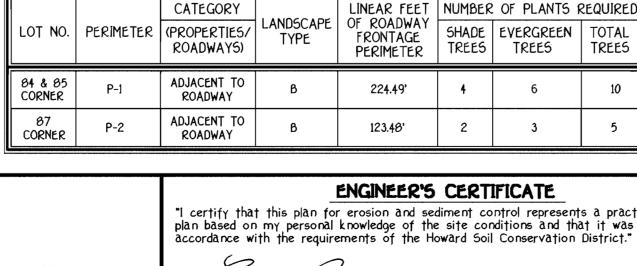
2.25/LOT

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.

11-9-04 ROBERT CORBE



Signature of Developer

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

REINFORCED

-1/2 OF TREE HEIGHT

(APPROX. 3 FEET)

CONSTRUCT 3' SAUCER

GROWN I INE SAME

AS IN NURSERY

RIM-FLOOD WITH WATER

TWICE WITHIN 24 HOURS

TOTAL TREES

REQUIRED

SHADE EVERGREEN

8

53

TREE5

DOUBLE #12 GALVANIZED~

WIRE GUYS TWISTED

2-2"X 2" DAK STAKES,-

REMOVE ANY COVERING-

TOPSOIL MIXTURE-

NOTE: CONTRACTOR TO REGRADE, SOD OR

HYDROSEED AND STRAW MULCH ALL AREAS

DISTURBED AS A RESULT OF THEIR WORK.

SPRAY WITH WILT-PROOF ACCORDING

TO MANUFACTURERS STANDARDS

PRUNE 1/3 LEAF AREA-

2 PIECES OF REINFORCED

DOUBLE #12 GALVANIZED

3-2'X 2' DAK STAKES,---

(EXCEPT EVERGREENS)

TOP OF ROOT CROWN

TOP SOIL MIXTURE -

MAINTAIN GROUND LINE

WITH TOP OF ROOT CROWN

CONVEX BOTTOM 6' MIN. HT.-

INTERNAL

LAND5CAPING

REQUIRED

(# OF SHADE TREES)

5 TREES PER LOT

4 TREES PER LOT

5 TREES PER LOT

5 TREES PER LOT

5 TREES PER LOT

THE PURPOSE OF MEETING THE INTERNAL PER LOT SHADE TREE OBLIGATION.

CLASSIFICATION

NON-WOODED

NON-WOODED

NON-WOODED

NON-WOODED

LOT 83 & 86 NON-WOODED

LOT 84 CORNER

LOT 05 CORNER

LOT 87 CORNER

TOTAL TREES

CONSTRUCT 3' SAUCER RIM-FLOOD-

WITH WATER TWICE WITHIN 24 HOURS

NOTCH STAKES TO HOLD WIRE

WRAP TRUNK TO SECOND TIER-

WRAP, TIE AT 24' INTERVALS

REMOVE ANY COVERING FROM-

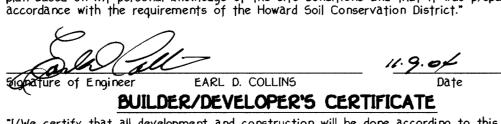
OF BRANCHES WITH WATERPROOF TREE

WIRE GUYS TWISTED

BUT RETAIN NATURAL

RUBBER HOSE

NOTCH STAKES TO



TREE PLANTING DETAIL

SHADE

TREE

0

REMAINING

SHADE TREE

0

CREDIT \* OBLIGATION

MODIFIED SCHEDULE C

LANDSCAPE CHART

TYPE B REQUIRED

SHADE | EVERGREEN

N/A

\* THIS NUMBER REFLECTS THE MATHEMATICAL CONVERSION OF EVERGREEN TREES TO SHADE TREES (2:1) FOR

SCHEDULE A

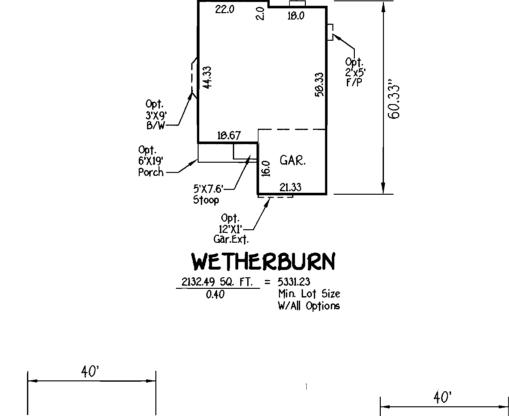
PERIMETER LANDSCAPE EDGE

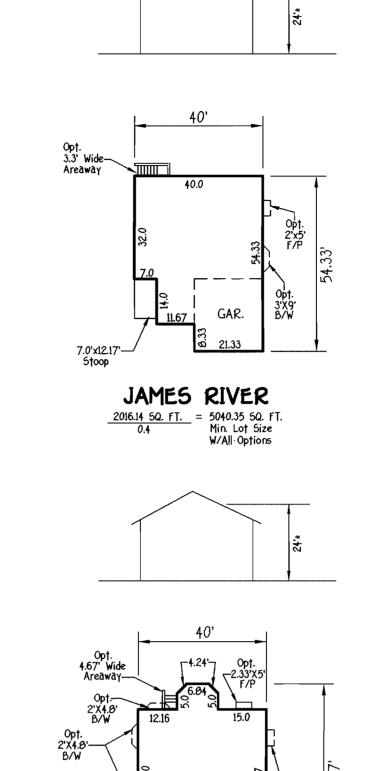
N/A

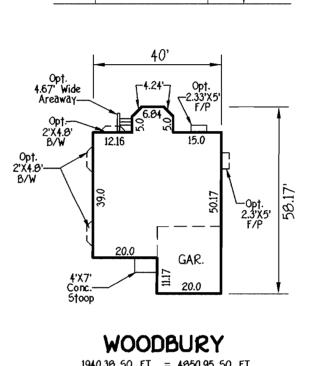
"I/We certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation Distr 11-9-04

ROBERT CORBETT

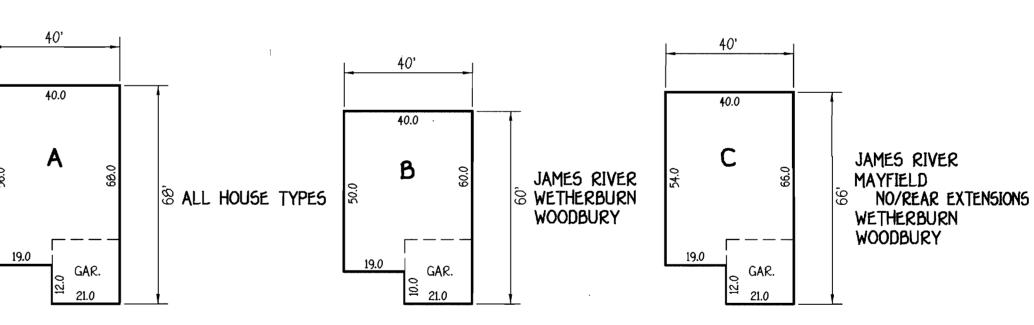
EVERGREEN PLANTING DETAIL MAYFIELD 2362.77 5Q. FT. = 5906.93 5Q. FT. Min. Lot Size W/All Options Sar. 2328.64 0.4 Lot Size, Incl. 18.0 5'X7.6'—







1940.30 SQ. FT. = 4050.95 SQ. FT. Min. Lot Size W/All Options



-11/2" BIT, CONC, SURFACE ノマグ" BIT, CONC, BASE INDEX CHART SHEET DESCRIPTION

SHEET 1 TITLE SHEET, HOUSE TYPES, TEMPLATES SHEET 2 SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN, LOTS 3-5,18,19 SHEET 3. SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN LOTS 82-87 SHEET 4 SEDIMENT/EROSION CONTROL NOTES & DETAILS

LEGEND **SYMBOL** DESCRIPTION ----- EXISTING CONTOUR 2' INTERVAL +362.2 SPOT ELEVATION DWOES PROPOSED WALKOUT -SF-SF-SILT FENCE -55F-55F-SUPER SILT FENCE SSSSS FOREST CONSERVATION EASEMENT ECM EROSION CONTROL MATTING LIMIT OF DISTURBANCE LOD (x) EXISTING STREET TREE TAKEN FROM F-03-13

<u>BENCH MARKS</u>

T.P. 47E4 ELEV 339.00

LOC. NEAR 1-95 BRIDGE

ALONG GORMAN ROAD

T.P. 47G2 ELEV. 363.53

LOC. NEAR MD. RTE 216 WEST

GENERAL NOTES

2. TOTAL AREA OF SITE: 2.286 ACRES

PRIOR TO ANY EXCAVATION WORK.

3. TOTAL NUMBER OF LOTS SUBMITTED: 11 SFD

PB-339, P-02-15, F-04-53, W&S CONT. •24-4120-D.

ABOUT JUNE, 1999 BY DAFT McCUNE WALKER, INC.

CASE NO. ZB979M.

DEVELOPER'S EXPENSE.

TO CONSTRUCTION.

DRAWINGS FILED UNDER F-04-53.

60 INTERIOR LANDSCAPING TREES.

APPROVED ON JULY 1, 1999.

SIDE SETBACK

REAR SETBACK

NEAR EXIT RAMP TO 1-95

N. 535,846,148

E. 1,355,431.224

N. 532,938.964

E. 1,351,224.095

ADDRESS CHART LOT NUMBER STREET ADDRESS 9610 IRONLEAF TRAIL 9614 IRONLEAF TRAIL 9618 IRONLEAF TRAIL 9620 DAPPER TOWN ROW 19 9624 DAPPER TOWN ROW 82 8611 FAR FIELDS WAY 8607 FAR FIELDS WAY 83 8603 FAR FIELDS WAY 9678 IRONLEAF TRAIL 85 9682 IRONLEAF TRAIL 86 9686 IRONLEAF TRAIL 87

VICINITY MAP

SCALE: 1" = 2000"

1. SUBJECT PROPERTY ZONED PEC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/98 AS

4. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION

5. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS

7. THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR

6. HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE

AT (410) 313-1880 24 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

6. THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: ZB-979M, WP 99-96, S 99-12,

SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.

9. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE

RIGHTS-OF-WAY OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION.

FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-04-53.

AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4120-D.

THE APPROVED ROAD CONSTRUCTION DRAWINGS FILED UNDER F-04-53.

19. THE MINIMUM SETBACKS FOR STRUCTURES SHALL BE AS FOLLOWS:

APPROVED BY THE HOWARD COUNTY PLANNING BOARD.

DISTANCE DOES APPLY TO THE SECOND STORY OVERHANG.

F.) STRUCTURE CLEARANCES - MINIMUM 12 FEET

A.) WIDTH - 12' (14') IF SERVING MORE THAN ONE RESIDENCE.

MORE THAN I FOOT DEPTH OVER DRIVEWAY SURFACE.

G.) MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE.

FOLLOWING (MINIMUM) REQUIREMENTS:

TURNING RADIUS.

(H25-LOADING)

15. FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-04-53.

AREAS, PATIOS, DECKS, LANDSCAPING AND SIMILIAR MINOR STRUCTURE.

HOWARD COUNTY MONUMENT 47E4 N 535846.148 E 1355431.224

HOWARD COUNTY MONUMENT 47G2 N 532938.964 E 1351224.095

10. THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE

11. CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR

12. STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION

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

CRITERIA APPROVED BY THE PLANNING BOARD 7-1-99 PER CASE NO. PB-339 AS SHOWN ON

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

FRONT SETBACK 15' FROM THE RIGHT-OF-WAY TO THE HOUSE OR GARAGE.

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

EXCEED 40%. NO LIMITATION IS IMPOSED UPON THE AREA USED FOR SIDEWALKS, PAVED PARKING

REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001 AND THE ZONING REGULATIONS AS AMENDED

BY CB 75-2003. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND

20. LOT COVERAGE BY BUILDINGS WITHIN SINGLE FAMILY DETACHED LAND USE AREAS SHALL NOT

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

BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE BUILDING PERMIT.

22. IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS. BAY WINDOWS

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'

23. DRIVEWAYS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR

C.) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT

D.) STRUCTURES - (BRIDGES/CULVERTS) CAPABLE OF SUPPORTING 25 GROSS TONS

E.) DRAINAGE ELEMENTS CAPABLE OF SAFETY PASSING 100 YEAR FLOOD WITH NO

ANY NEW DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE

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

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

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

SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL AND DEVELOPMENT

16. FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.

HAS BEEN POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$16,950.00 FOR

14. PERIMETER LANDSCAPING AND STREET TREES SHALL BE PROVIDED IN ACCORDANCE WITH

17. OPEN SPACE REQUIREMENTS FOR THESE LOTS HAVE BEEN PROVIDE UNDER, F-04-53.

18. MINIMUM BUILDING RESTRICTION SETBACKS FROM PROPERTY LINES AND PUBLIC ROAD

FISHER, COLLINS & CARTER, INC. IVIL ENGINEERING CONSULTANTS & LAND SURVEYOR FILLICOTT CITY, MARYLAND 21042 Add Mayfield II house typical 1-18-09

Reviewed for HOWARD SCD and meets Technical Requireme U.S.D.A.-Natur Conservation Serv This development plan is appr the HOWARD SOIL CONSERVATION 1 Howard SCD OWNER BUILDER/DEVELOPER

6" COMPACTED

WILLIAMSBURG GROUP, LLC

5485 HARPERS FARM ROAD

COLUMBIA, MARYLAND 21044

410-997-8800

CRUSHER

RUN BASE

NOT TO SCALE

COMMON DRIVEWAY DETAIL

THE HOWARD RESEARCH & DEVELOPMENT CORP.

10275 LITTLE PATUXENT PARKWAY

COLUMBIA, MARYLAND 21044

410-992-6000

12/21/04 Janun irector Department of Planning and Zoning LOTS NO. SECTION 3-5,18,19 & 82-87 MERSON PHASE 5A BLOCK NO. ZONE TAX/ZONE | ELEC. DIST. | CENSUS TR. 16992 THRU 16997 PEC-MXD-3 9 & 15 6069.02 RSC-MXD-3 WATER CODE SEWER CODE E-15 7640000

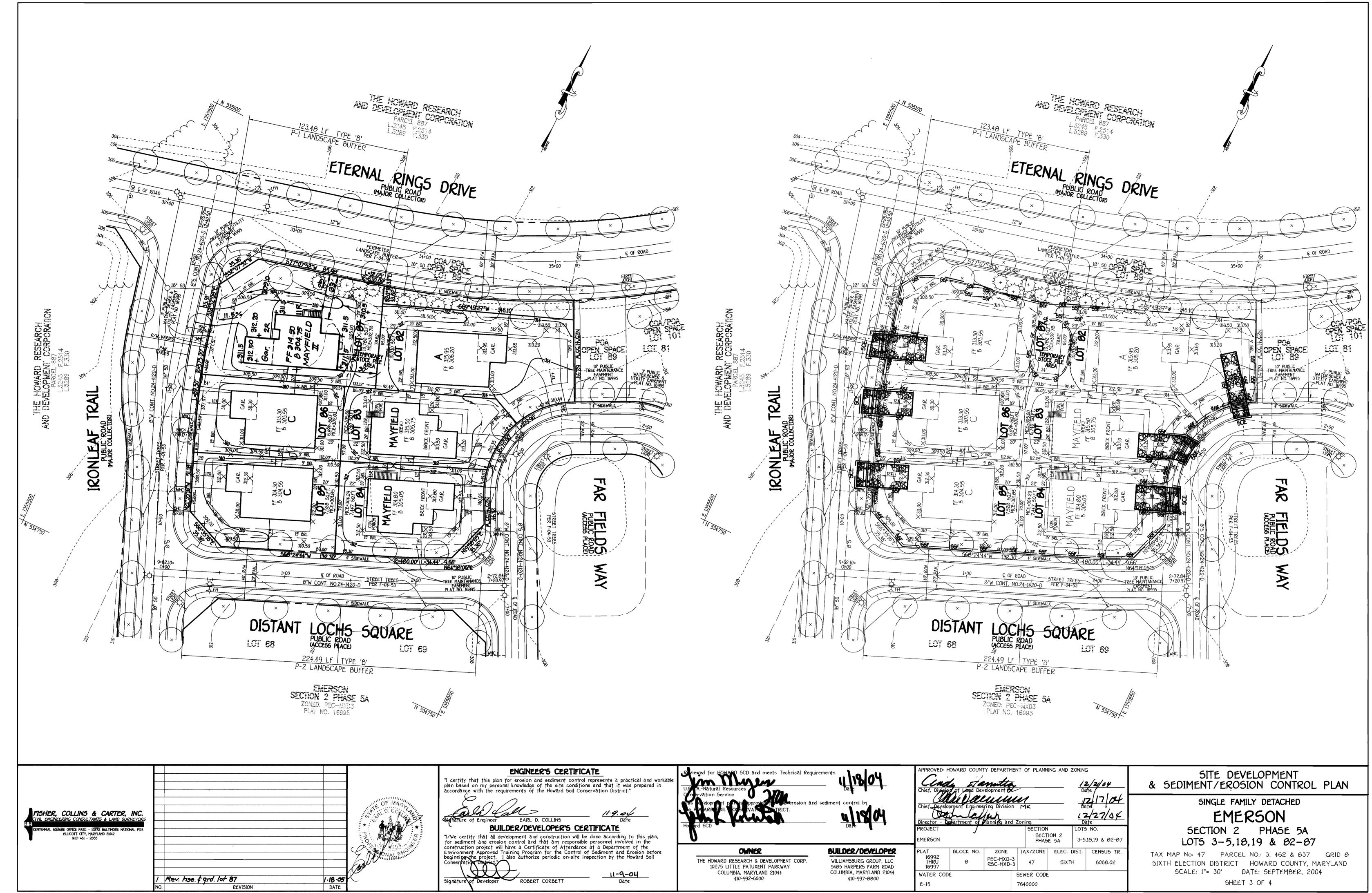
PPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

TITLE SHEET

SINGLE FAMILY DETACHED **EMERSON** SECTION 2 PHASE 5A LOTS 3-5,18,19 & 82-87

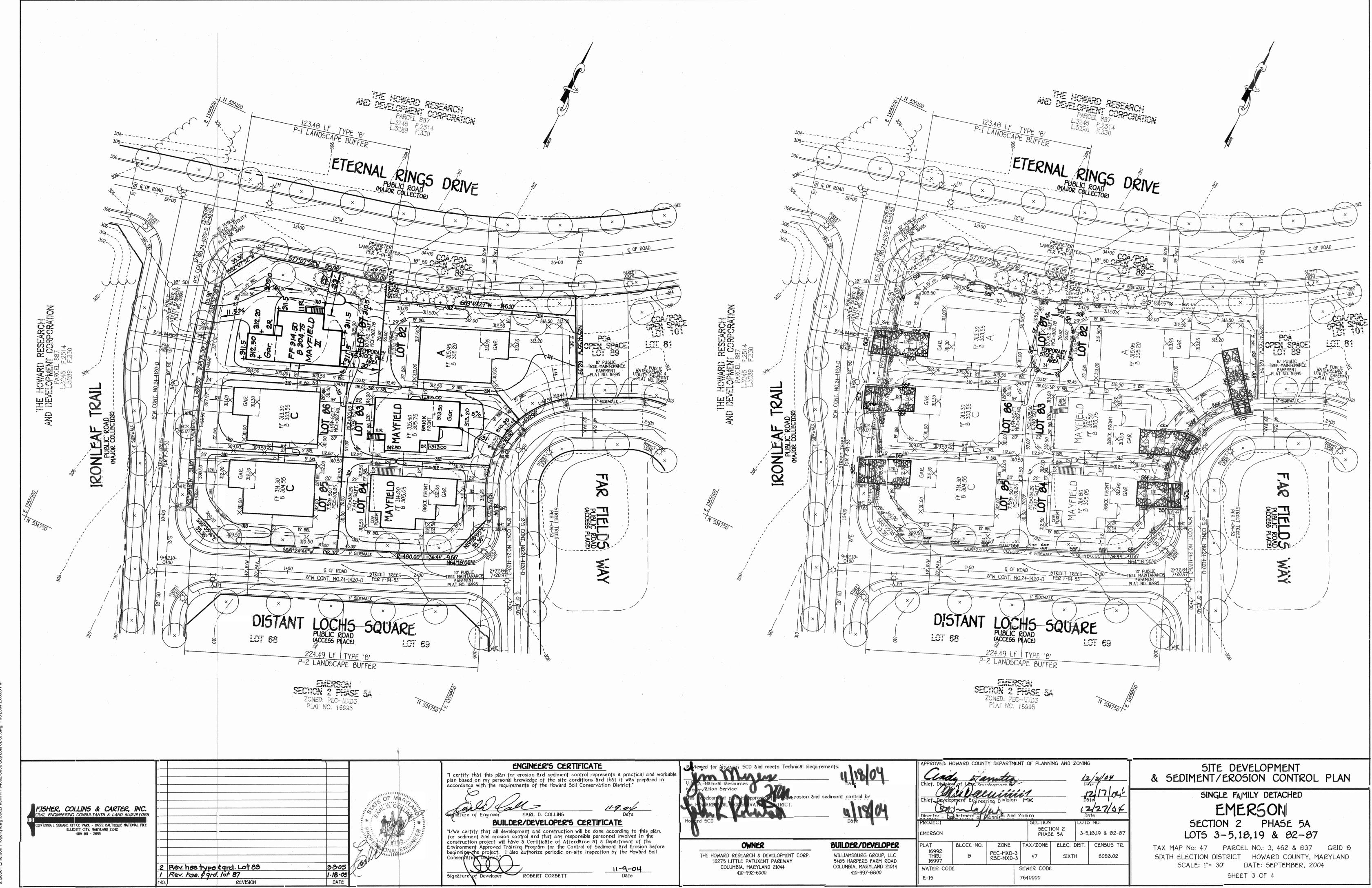
TAX MAP NO.: 47 PARCEL NO.: 837 GRID NO.: 9 & 15 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1"= 30' DATE: SEPTEMBER, 2004

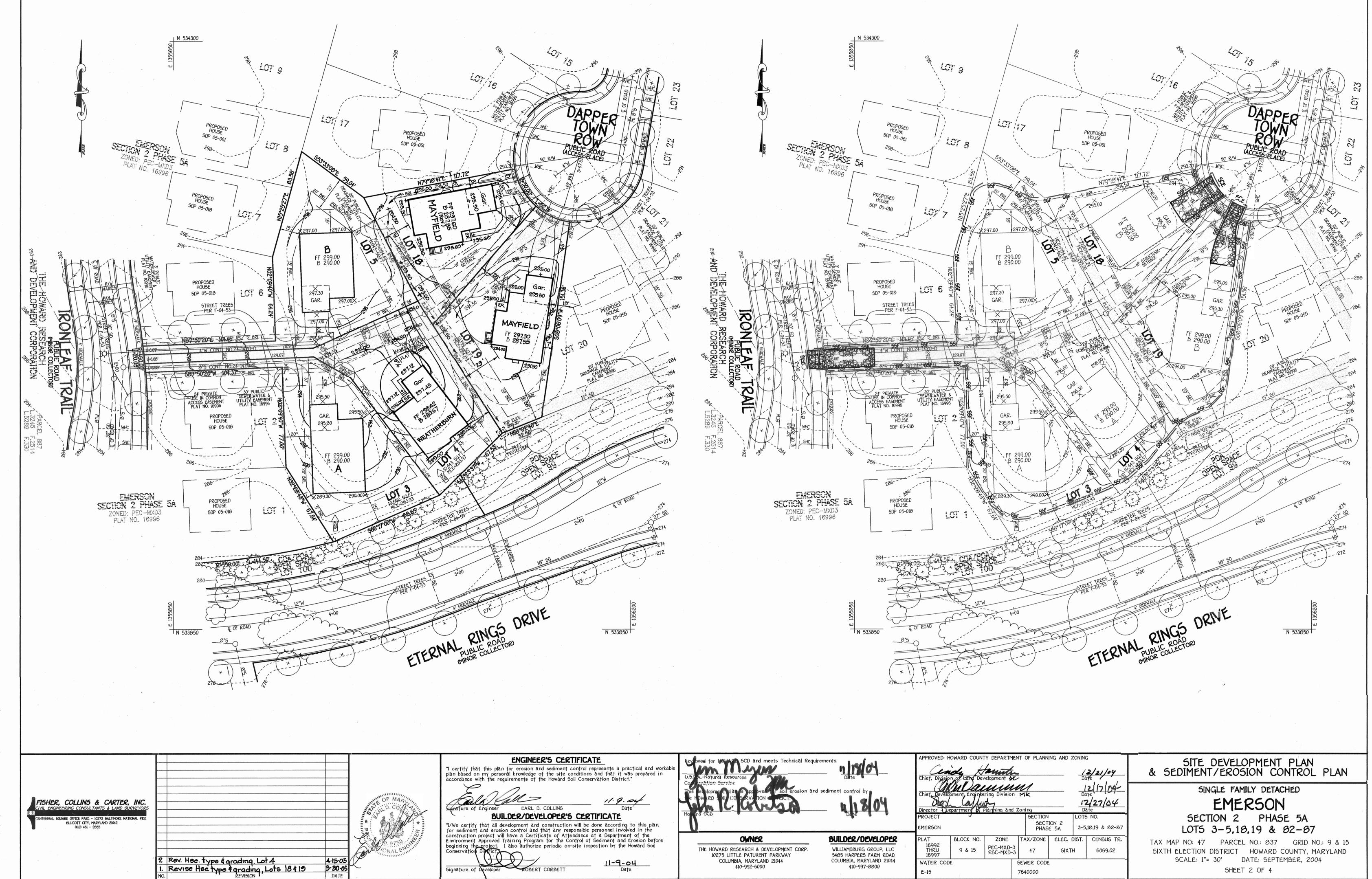
SHEET 1 OF 4



E-15

7640000





J:\50001 Emerson Property\dwg\Sec2Phase5A\04092-6008 Sdp Lots 3-5

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 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 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 \$16,950.00

1. LANDSCAPING SURETY FOR LOTS 3-5,18,19,82 IS \$1,500.00 PER LOT. LANDSCAPING SURETY FOR LOTS 83 & 86 IS \$1,200.00 PER LOT

IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.

- LANDSCAPING SURETY FOR LOTS 84 & 85 IS \$1,800.00 PER LOT. LANDSCAPING SURETY FOR LOT 87 IS \$1,950.00.
- STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS. 2. TYPE 'B' BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREDITED TOWARDS THE LANDSCAPE REQUIREMENTS.
- 3. LANDSCAPING CAN NOT BE PLANTED IN PUBLIC EASEMENTS. 4. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTURAL
- 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 LANDSCAPE 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 REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED

#### 7. SIZES OF PLANT MATERIALS MUST CONFORM TO THE REQUIREMENTS OF THE LANDSCAPE KEMMUMROMERTY MOENTENOPMENT CRITERIA, APPROVED 7/1/99 SECTION VII RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

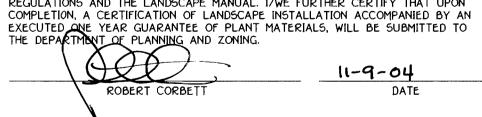
THE QUANTITY AND GENERAL LOCATION OF TREES REQUIRED FOR INTERNAL LANDSCAPING ARE DETERMINED BY CRITERIA APPLIED BY THE ARCHITECTURAL COMMITTEE. THE COMMITTEE WILL CLASSIFY, DURING ARCHITECTURAL REVIEW, ALL LOTS AND PARCELS AS 1) NON-WOODED; 2) SEMI-WOODED; 3) WOODED, SUCH CLASSIFICATION SHALL TAKE INTO 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

SHADE	IVLL	KLWOIKEI (LITTO			
		NON WOODED	SEMI WOODED	WOODED	
TYPE OF UNIT AND LOT SIZE		MINMUM NUMBER	OF SHADE	TREES REQUI	RED
SMALL RESIDENTIAL LOT (4,000-7,000 SQUARE FEET) CLUSTER HOUSING		4.0/LOT	2.25/LOT	1.25/LOT	
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET) 2-4 D.U./ACRE		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

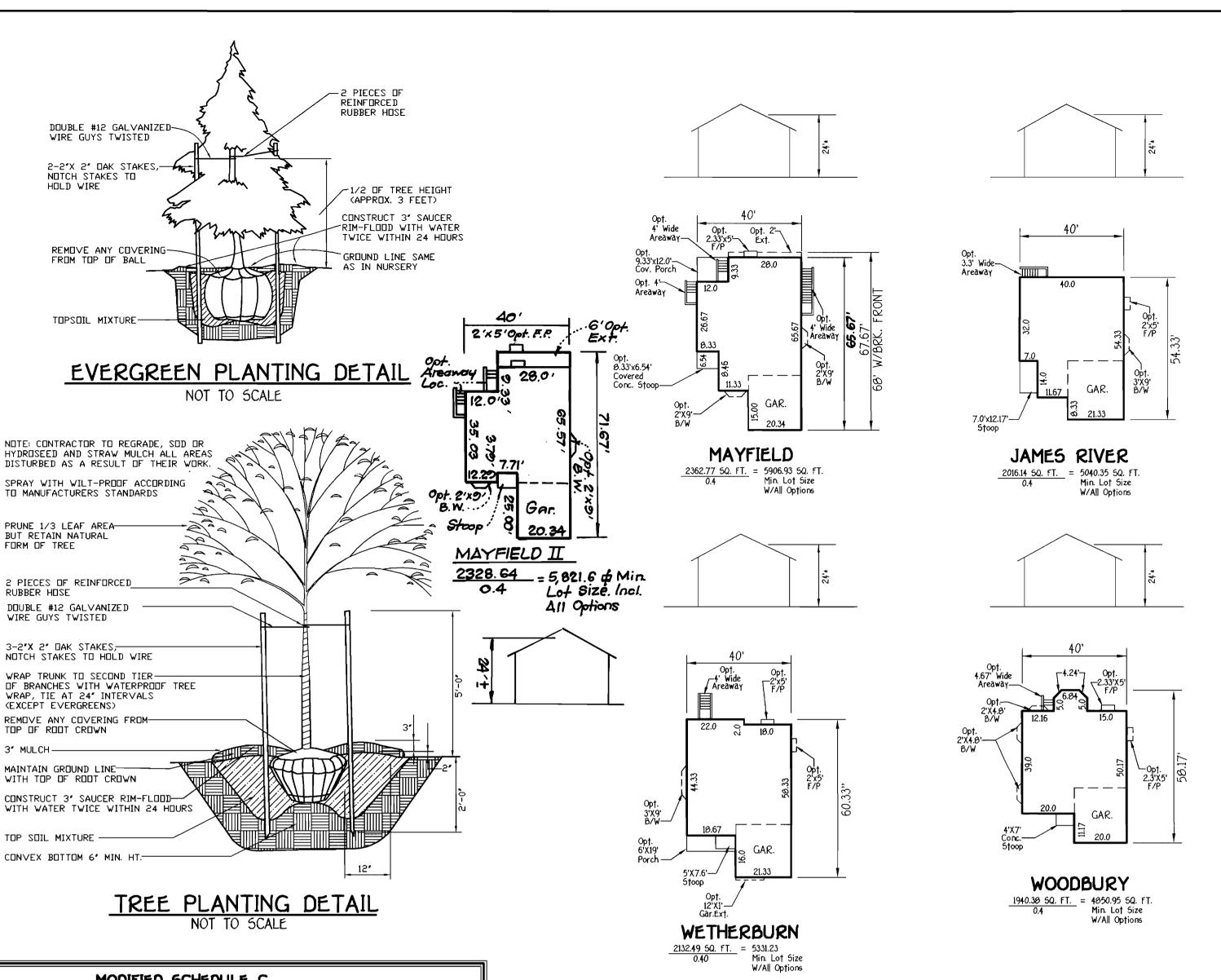


		PERIME"	SCHEDL TER LAN	JLE A IDSCAPE	EDGE		
LOT NO.	PERIMETER	CATEGORY (PROPERTIES/ ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER SHADE TREES	OF PLANTS A EVERGREEN TREES	REQUIRED TOTAL TREES
84 & 85 CORNER	P1	ADJACENT TO ROADWAY	В	224.49'	4	6	10
87 CORNER	P-2	ADJACENT TO ROADWAY	В	123.48'	2	3	5

ROADWAY		120.10		ŭ		
						J
		engineer's	CERT	FICATE		
plan based or	my personal	r erosion and sec knowledge of the ements of the Ho	site cor	nditions and tha	at it was pi	al and workabk repared in

EARL D. COLLINS BUILDER/DEVELOPER'S CERTIFICATE I/We certify that all development and construction will be done according to this plan,

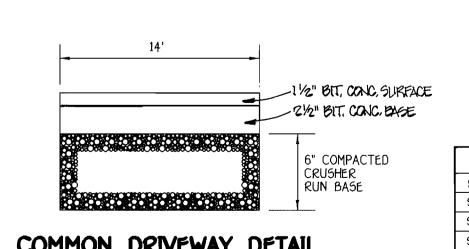
for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation Distri 11-9-04 ROBERT CORBETT Signature of Developer



		•		PE CHAR				
LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED	TYPE	B REQUIRED	SHADE TREE CREDIT *	REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED	
		(# OF SHADE TREES)	SHADE	EVERGREEN			SHADE	EVERGREEN
LOTS 3-5 18, 19 & 82	NON-WOODED	5 TREES PER LOT	N/A	N/A	0	0	30	0
LOT 83 & 86	NON-WOODED	4 TREES PER LOT	N/A	N/A	0	0	8	0
LOT 84 CORNER	NON-WOODED	5 TREES PER LOT	3	2	3	2	5	2
LOT 05 CORNER	NON-WOODED	5 TREES PER LOT	3	2	3	2	5	2
LOT 87 C <b>ORNE</b> R	NON-WOODED	5 TREES PER LOT	2	3	3	2	5	3
TOTAL	rrees				<u> </u>	·	53	7

FORM OF TREE

\* 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.



ALL HOUSE TYPES

COMMON DRIVEWAY DETAIL NOT TO SCALE

10275 LITTLE PATUXENT PARKWAY

COLLIMBIA, MARYLAND 21044

410-992-6000

GAR.

	INDEX CHART
SHEET	DESCRIPTION
SHEET 1	TITLE SHEET, HOUSE TYPES, TEMPLATES
SHEET 2	SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN, LOTS 3-5,18,19
SHEET 3	SITE DEVELOPMENT & SEDIMENT/EROSION CONTROL PLAN LOTS 82-87
SHEET 4	SEDIMENT/EROSION CONTROL NOTES & DETAILS

JAMES RIVER

WETHERBURN

WOODBURY

LEGEND 5YMBOL DESCRIPTION ----- EXISTING CONTOUR 2' INTERVAL +362.2 | SPOT ELEVATION PROPOSED WALKOUT -SF-SF-SILT FENCE -55F-55F-SUPER SILT FENCE FOREST CONSERVATION EASEMENT ECM EROSION CONTROL MATTING LIMIT OF DISTURBANCE

JAMES RIVER

WETHERBURN

WOODBURY

GAR.

NO/REAR EXTENSIONS

MAYFIELD

BENCH MARKS

T.P. 47E4 ELEV 339.00

LOC. NEAR 1-95 BRIDGE

ALONG GORMAN ROAD

T.P. 47G2 ELEV. 363.53

LOC. NEAR MD. RTE 216 WEST

GENERAL NOTES

2. TOTAL AREA OF SITE: 2.286 ACRES

PRIOR TO ANY EXCAVATION WORK.

3. TOTAL NUMBER OF LOTS SUBMITTED: 11 SFD

PB-339, P-02-15, F-04-53, W&S CONT. •24-4120-D.

ABOUT JUNE, 1999 BY DAFT McCUNE WALKER, INC.

CASE NO. ZB979M.

DEVELOPER'S EXPENSE.

TO CONSTRUCTION.

DRAWINGS FILED UNDER F-04-53.

60 INTERIOR LANDSCAPING TREES.

APPROVED ON JULY 1, 1999.

FRONT SETBACK

REAR SETBACK

SIDE SETBACK

NEAR EXIT RAMP TO 1-95

N. 535,846.148

E. 1,355,431.224

N. 532,938.964

E. 1,351,224.095

ADDRESS CHART STREET ADDRESS 9610 IRONLEAF TRAIL 9614 IRONLEAF TRAIL 9618 IRONLEAF TRAIL 18 9620 DAPPER TOWN ROW 9624 DAPPER TOWN ROW 82 8611 FAR FIELDS WAY 8607 FAR FIELDS WAY 8603 FAR FIELDS WAY 9678 IRONLEAF TRAIL 86 9682 IRONLEAF TRAIL 87 9686 IRONLEAF TRAIL ₹\*} (\*) | EXISTING STREET TREE TAKEN FROM F-03-13

VICINITY MAP

5CALE: 1" = 2000"

1. SUBJECT PROPERTY ZONED PEC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/90 AS

4. THE CONTRACTOR OR DEVELOPER SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION

5. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS

7. THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR

9. HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE

AT (410) 313-1880 24 HOURS PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

6. THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: ZB-979M, WP 99-96, 5 99-12,

SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.

9. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE

FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-04-53.

AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4120-D.

THE APPROVED ROAD CONSTRUCTION DRAWINGS FILED UNDER F-04-53.

19. THE MINIMUM SETBACKS FOR STRUCTURES SHALL BE AS FOLLOWS:

APPROVED BY THE HOWARD COUNTY PLANNING BOARD.

DISTANCE DOES APPLY TO THE SECOND STORY OVERHANG.

F.) STRUCTURE CLEARANCES - MINIMUM 12 FEET

A.) WIDTH - 12' (14') IF SERVING MORE THAN ONE RESIDENCE.

MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.

G.) MAINTENANCE SUFFICIENT TO INSURE ALL WEATHER USE.

FOLLOWING (MINIMUM) REQUIREMENTS:

TURNING RADIUS.

(H25-LOADING)

15. FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-04-53.

AREAS, PATIOS, DECKS, LANDSCAPING AND SIMILIAR MINOR STRUCTURE.

17. OPEN SPACE REQUIREMENTS FOR THESE LOTS HAVE BEEN PROVIDE UNDER. F-04-53.

18. MINIMUM BUILDING RESTRICTION SETBACKS FROM PROPERTY LINES AND PUBLIC ROAD

RIGHTS-OF-WAY OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION.

HOWARD COUNTY MONUMENT 47E4 N 535846.148 E 1355431.224

HOWARD COUNTY MONUMENT 47G2 N 532938.964 E 1351224.095

10. THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE

11. CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR

12. STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION

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

14. PERIMETER LANDSCAPING AND STREET TREES SHALL BE PROVIDED IN ACCORDANCE WITH

APPROVED BY THE PLANNING BOARD 7-1-99 PER CASE NO. PB-339 REQUIRED LANDSCAPING

CRITERIA APPROVED BY THE PLANNING BOARD 7-1-99 PER CASE NO. PB-339 AS SHOWN ON

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

SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL AND DEVELOPMENT

16. FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.

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

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

EXCEED 40%. NO LIMITATION IS IMPOSED UPON THE AREA USED FOR SIDEWALKS, PAVED PARKING

REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001 AND THE ZONING REGULATIONS AS AMENDED BY CB 75-2003. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AN

20. LOT COVERAGE BY BUILDINGS WITHIN SINGLE FAMILY DETACHED LAND USE AREAS SHALL NOT

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

BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE BUILDING PERMIT. 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'

C.) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT

D.) STRUCTURES - (BRIDGES/CULVERTS) CAPABLE OF SUPPORTING 25 GROSS TONS

E.) DRAINAGE ELEMENTS CAPABLE OF SAFETY PASSING 100 YEAR FLOOD WITH NO

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

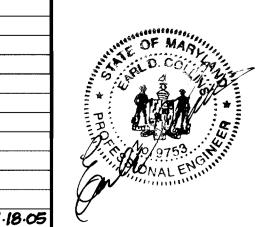
B.) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN.)

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

HAS BEEN POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$16,950.00 FOR

FISHER, COLLINS & CARTER, INC.

Add Mayfield II house typical



eviewed for HOWARD SCD and meets Technical Requiremen Conservation Servi This development plan is approv the HOWARD SOIL CONSERVATION\_ Howard SC[ OWNER BUILDER/DEVELOPER THE HOWARD RESEARCH & DEVELOPMENT CORP. WILLIAMSBURG GROUP, LLC

5485 HARPERS FARM ROAD

COLUMBIA, MARYLAND 21044

410-<del>9</del>97-8800

auuun 12/27/04 ector Department Vof Planning and Zoning LOTS NO. SECTION 2 3-5,18,19 & 82-87 MERSON PHASE 5A BLOCK NO. ZONE TAX/ZONE | ELEC. DIST. | CENSUS TR 16992 THRU 16997 9 & 15 RSC-MXD-3 WATER CODE SEWER CODE E-15 7640000

PPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

TITLE SHEET

SINGLE FAMILY DETACHED

**EMERSON** SECTION 2 PHASE 5A LOTS 3-5,18,19 & 82-87

TAX MAP NO.: 47 PARCEL NO.: 837 GRID NO.: 9 & 15 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: 1"= 30' DATE: SEPTEMBER, 2004

SHEET 1 OF 4

J:\50001 Emerson Property\dwg\Sec2Phase5A\04092-6008 Sdp Lots 82-87.d

