

**BENCH MARKS**  
 T.P. 4764 ELEV. 339.00  
 N. 535,846.148  
 E. 1,355,431.224  
 LOC. NEAR I-95 BRIDGE  
 ALONG GORMAN ROAD

T.P. 4762 ELEV. 363.53  
 N. 532,938.964  
 E. 1,351,224.095  
 LOC. NEAR MD. RTE 216 WEST  
 NEAR EXIT RAMP TO I-95

**VICINITY MAP**  
 SCALE: 1" = 2000'

**GENERAL NOTES**

- SUBJECT PROPERTY ZONED PEC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/98 AS CASE NO. ZB93794.
- TOTAL AREA OF SITE: 1.2825 ACRES
- TOTAL NUMBER OF LOTS SUBMITTED: 8 SFD
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410)313-1880 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: ZB-979M, WP 99-96, S 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.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.  
 HOWARD COUNTY MONUMENT 4764 N 535846.148 E 1355431.224  
 HOWARD COUNTY MONUMENT 4762 N 532938.964 E 1351224.095
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHTS-OF-WAY OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION.  
 FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-03-13.  
 AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4043-D.
- CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
- STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION DRAWINGS FILED UNDER F-03-13.
- 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 \$10,800.00 FOR 39 INTERIOR LANDSCAPING TREES.
- 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.
- FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-03-13.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.
- OPEN SPACE REQUIREMENTS FOR THESE LOTS HAVE BEEN PROVIDED UNDER F-03-13.
- 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 S-99-12 AND THE DECISION AND ORDER FOR PB-339 APPROVED ON JULY 1, 1999.
- THE MINIMUM SETBACKS FOR STRUCTURES SHALL BE AS FOLLOWS:  
 FRONT SETBACK 15' FROM THE RIGHT-OF-WAY TO THE HOUSE OR GARAGE.  
 SIDE SETBACK 9' 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.
- 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 SIMILAR MINOR STRUCTURE.
- 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.
- IN ACCORDANCE WITH SECTION 12B 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.
- 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' IF SERVING MORE THAN ONE RESIDENCE  
 B.) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN) TURNING RADIUS.  
 C.) GEOMETRY MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT TURNING RADIUS.  
 D.) STRUCTURES - (BRIDGES/CULVERTS) CAPABLE OF SUPPORTING 25 GROSS TONS (425-LOADING)  
 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**

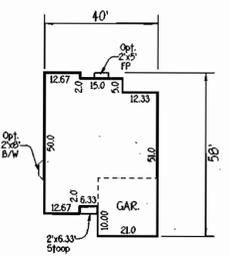
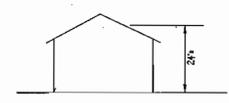
SHEET	DESCRIPTION
SHEET 1	TITLE SHEET, HOUSE TYPES, TEMPLATES
SHEET 2	SITE DEVELOPMENT PLAN, LOTS 1-6,24 & 25
SHEET 3	SEDIMENT/EROSION CONTROL PLAN LOTS 1-6,24 & 25
SHEET 4	SEDIMENT/EROSION CONTROL PLAN, LOTS 1-6,24 & 25

**ADDRESS CHART**

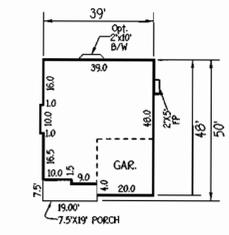
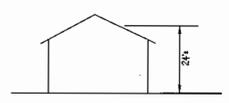
LOT NUMBER	STREET ADDRESS
1	8501 EASTERN MORNING RUN
2	8505 EASTERN MORNING RUN
3	8509 EASTERN MORNING RUN
4	8513 EASTERN MORNING RUN
5	10101 SUMMER GLOW WALK
6	10105 SUMMER GLOW WALK
24	10104 SUMMER GLOW WALK
25	10100 SUMMER GLOW WALK

**LEGEND**

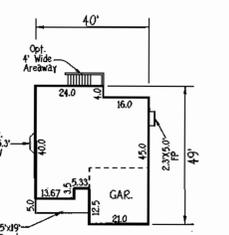
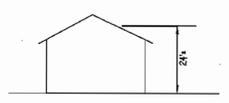
SYMBOL	DESCRIPTION
-----	EXISTING CONTOUR 2' INTERVAL
+362.2	SPOT ELEVATION
----->	PROPOSED WALKOUT
-SF-SF-	SILT FENCE
-SSF-SSF-	SUPER SILT FENCE
ECH	EROSION CONTROL MATTING
LOD	LIMIT OF DISTURBANCE
(*)	EXISTING STREET TREE TAKEN FROM F-03-13



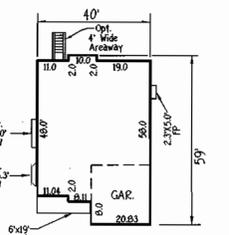
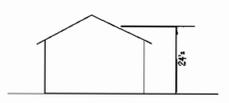
**ALLAN HOMES  
 FRESNO**  
 2073.69 SF = 504.23 SF  
 0.4 Min Lot Size  
 w/all Options



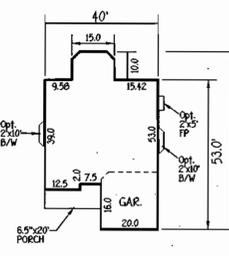
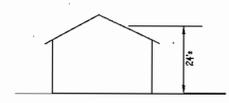
**DOUGLAS HOMES  
 HOUSE A**  
 1946.00 SF = 486.50 SF  
 0.4 Min Lot Size  
 w/all Options



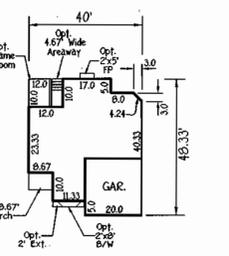
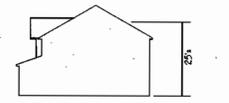
**GOODIER BUILDERS  
 T+**  
 1842.54 SF = 4606.35 SF  
 0.4 Min Lot Size  
 w/all Options



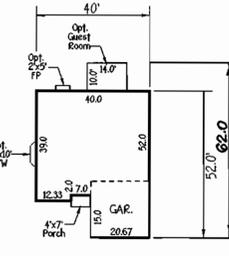
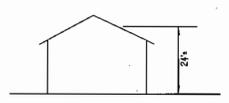
**COLUMBIA BUILDERS  
 TT**  
 2864.65 SF = 5411.62 SF  
 0.4 Min Lot Size  
 w/all Options



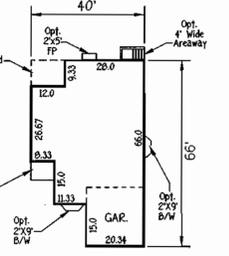
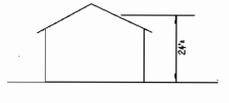
**NU-HOMES  
 CRISFIELD**  
 2166 SF = 5415.93 SF  
 0.4 Min Lot Size  
 w/all Options



**PATRIOT HOMES  
 NATHANEL GREENE**  
 1771.68 SF = 4429.20 SF  
 0.4 Min Lot Size  
 w/all Options



**RYLAND HOMES  
 HAMPTON**  
 1982.17 SF = 4955.4 SF  
 0.4 Min Lot Size  
 w/all Options



**WILLIAMSBURG BUILDERS  
 MAYFIELD**  
 2247.02 SF = 5617.55 SF  
 0.4 Min Lot Size  
 w/all Options

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE  
 ELLETTT CITY, MARYLAND 21042  
 410-481-2292

**STATE OF MARYLAND**  
 DEPARTMENT OF GENERAL SERVICES  
 PROFESSIONAL ENGINEER

**ENGINEER'S CERTIFICATE**  
 I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.  
 Signature of Engineer: *Earl D. Collins* Date: 8/13/03

**BUILDER/DEVELOPER'S CERTIFICATE**  
 I/We certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District.  
 Signature of Developer: *Dennis Miller* Date: 8/13/03

Reviewed for HOWARD SCD and meets Technical Requirements.

*Jim Myers* 8/13/03  
 Date

*John K. Robinson* 8/13/03  
 Date

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
*Cindy Hamner* 8/21/03  
 Chief, Planning and Development  
*John D. Williams* 8/19/03  
 Chief, Development Engineering Division MK  
*Paul D. Williams* 8/13/03  
 Director - Department of Planning and Zoning

PROJECT	EMERSON	SECTION	SECTION 2	LOTS NO.	1-6, 24 & 25
PLAT	16077	BLOCK NO.	8	ZONE	PEC-MXD-3
WATER CODE	E-15	TAX/ZONE	47	ELEC. DIST.	SIXTH
				CENSUS TR.	6068.02
				SEWER CODE	7640000

**TITLE SHEET**

**SINGLE FAMILY DETACHED  
 EMERSON  
 SECTION 2 PHASE 4  
 LOTS 1-6,24 & 25**

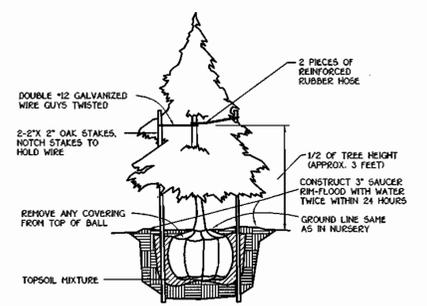
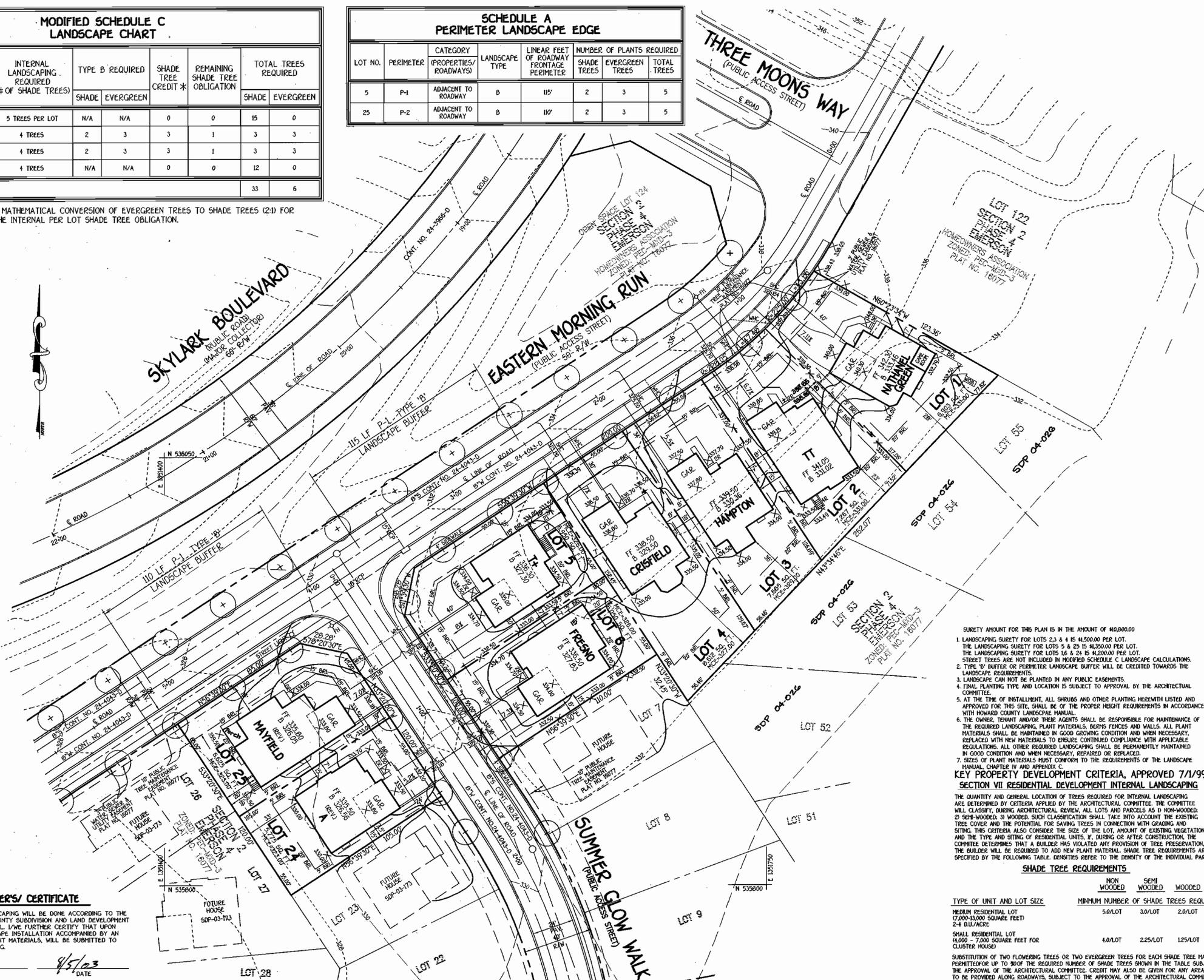
TAX MAP No: 47 PARCEL NO.: 3, 462 & 837 GRID 8  
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 30' DATE: JUNE, 2003  
 SHEET 1 OF 4

**SDP 03-159**

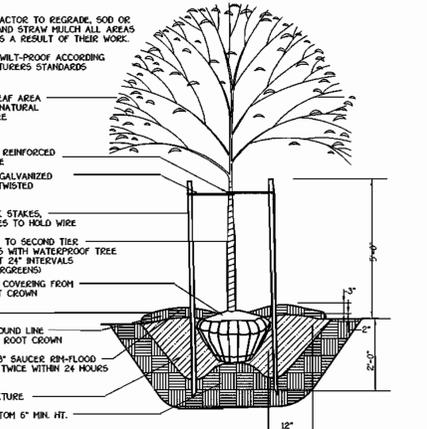
MODIFIED SCHEDULE C LANDSCAPE CHART								
LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED (## OF SHADE TREES)	TYPE B REQUIRED		SHADE TREE CREDIT *	REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED	
			SHADE	EVERGREEN			SHADE	EVERGREEN
LOTS 2, 3 & 4	NON-WOODED	5 TREES PER LOT	N/A	N/A	0	0	15	0
LOT 5 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 25 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 1, 6 & 24	NON-WOODED	4 TREES	N/A	N/A	0	0	12	0
TOTAL TREES							33	6

\* 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 PERIMETER LANDSCAPE EDGE							
LOT NO.	PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	SHADE TREES	EVERGREEN TREES	TOTAL TREES
5	P-1	ADJACENT TO ROADWAY	B	115'	2	3	5
25	P-2	ADJACENT TO ROADWAY	B	110'	2	3	5



EVERGREEN PLANTING DETAIL NOT TO SCALE



TREE PLANTING DETAIL NOT TO SCALE

**PLANTING SPECIFICATIONS**

Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein. All plant material unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plan list and the American Association of Nurserymen (AAN) standards. Plant material shall be healthy, vigorous, free from defects, decay, distorting roots, sun scald injuries, dieback 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 or balled-in plants from cold storage will be accepted. Unless otherwise specified, all general conditions, planting operations, standards and planting specifications shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area", hereinafter "Landscape Guidelines" approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition, including all appendices.

Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.

Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.

Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the dip line.

Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction.

Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.

Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plant list precedence.

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

Positive drainage shall be maintained in planting beds 2 percent slope.

Planting mix shall be as follows: Deciduous Plants - Two parts topsoil, one part well-rotted cow or horse manure. Add 3 lbs. of standard fertilizer per cubic yard of planting mix. Evergreen Plants - Two parts topsoil, one part humus or other approved organic material. Add 3 lbs. of evergreen (acidic) fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.

Irrigation Control: Irrigate a pre-emptive 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 \$100,000.00

1. LANDSCAPING SURETY FOR LOTS 2, 3 & 4 IS \$150,000 PER LOT.  
 2. LANDSCAPING SURETY FOR LOTS 5 & 25 IS \$150,000 PER LOT.  
 3. LANDSCAPING SURETY FOR LOTS 16 & 24 IS \$150,000 PER LOT.  
 4. LANDSCAPING SURETY FOR LOTS 1, 6 & 24 IS \$150,000 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 LANDSCAPE REQUIREMENTS.

3. LANDSCAPE CAN NOT BE PLANTED IN ANY PUBLIC EASEMENTS.

4. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTURAL 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 LANDSCAPE MANUAL.

6. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BORDERS, 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 OTHERS 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 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 B 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 CONSIDERS 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.

TYPE OF UNIT AND LOT SIZE	SHADE TREE REQUIREMENTS		
	NON WOODED	SEMI WOODED	WOODED
MEDIUM RESIDENTIAL LOT (2,000-5,000 SQUARE FEET) 2-4 B.U./ACRE	5.0/LOT	3.0/LOT	2.0/LOT
SMALL RESIDENTIAL LOT (1,000 - 2,000 SQUARE FEET FOR CLUSTER HOUSES)	4.0/LOT	2.25/LOT	1.25/LOT

SUBSTITUTION OF TWO FLOWERING TREES OR TWO EVERGREEN TREES FOR EACH SHADE TREE MAY BE PERMITTED UP TO 200% 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/DEVELOPERS/ CERTIFICATE**

I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE PLAN, SECTION 15124 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.

*Dennis Miller* 8/5/03  
 DENNIS MILLER 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.

*Earl D. Collins* 8/4/03  
 Signature of Engineer EARL D. COLLINS Date

**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.

*Dennis Miller* 8/5/03  
 Signature of Developer DENNIS MILLER Date

Reviewed for HOWARD SCD and meets Technical Requirements.

*Jim Myers* 8/13/03  
 U.S.D.A.-Natural Resources Conservation Service Date

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

*John R. Hunter* 8/13/03  
 Howard SCD Date

**OWNER/DEVELOPER**

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chris Hamata* 8/21/03  
 Chief, Planning and Zoning Date

*Chris Hamata* 8/13/03  
 Chief, Development Engineering Division Date

*Dennis Miller* 8/28/03  
 Director - Department of Planning and Zoning Date

PROJECT	EMERSON	SECTION	SECTION 2 PHASE 4	LOTS NO.	1-6, 24 & 25
PLAT	16077	BLOCK NO.	B	ZONE	PEC-MXD-3
TAX/ZONE	47	ELEC. DIST.	SIXTH	CENSUS TR.	606B.02
WATER CODE	E-15	SEWER CODE	7640000		

**SITE DEVELOPMENT PALM**

**SINGLE FAMILY DETACHED EMERSON**

SECTION 2 PHASE 4  
 LOTS 1-6, 24 & 25

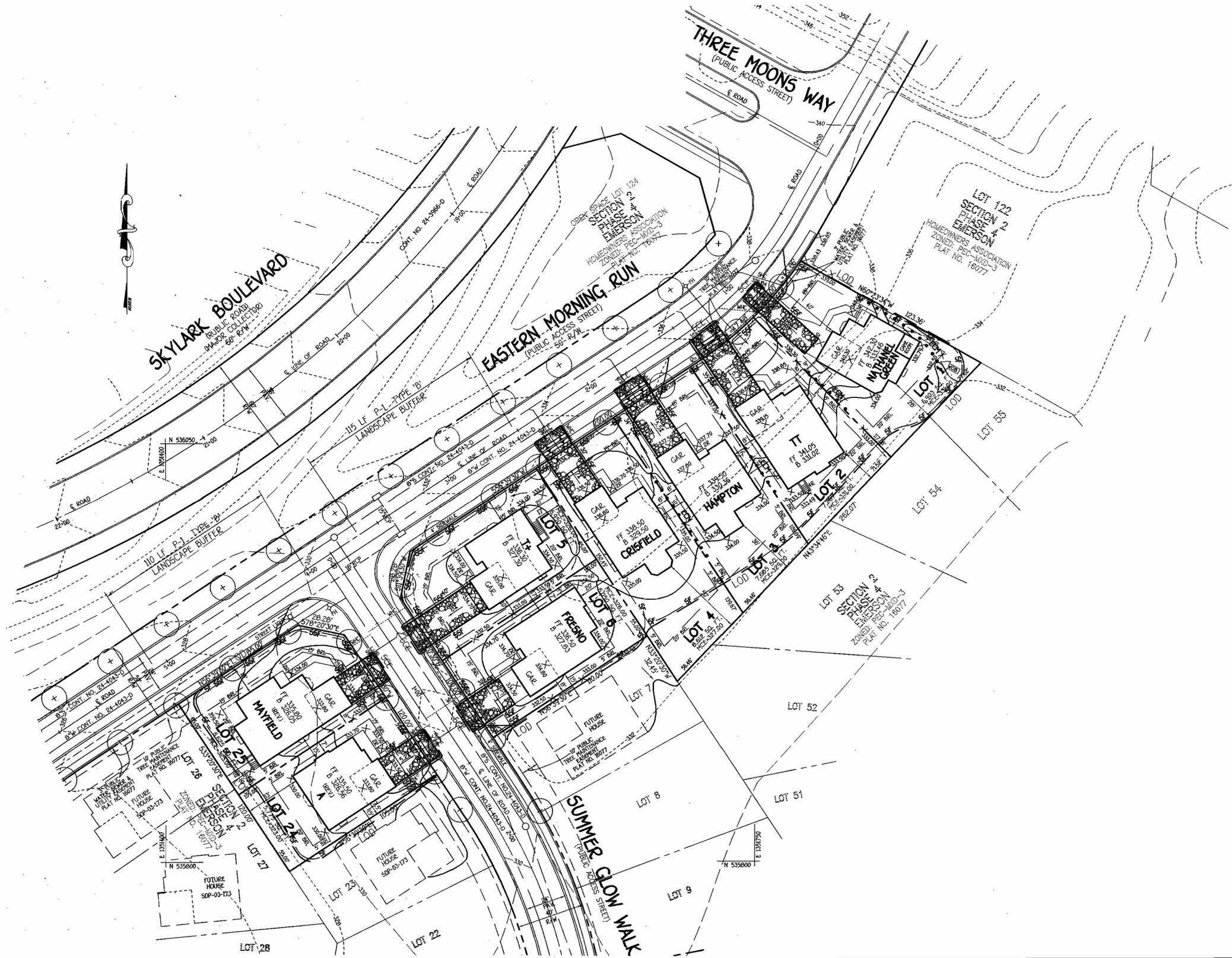
TAX MAP NO.: 47 PARCEL NO.: 3, 462 & 837 GRID NO.: B  
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 30' DATE: JUNE, 2003

SHEET 2 OF 4

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE  
 ELKLOTT CITY, MARYLAND 21042  
 410-992-6000

STATE OF MARYLAND  
 PROFESSIONAL ENGINEER

NO.	REVISION	DATE



**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE  
 ELICOTT CITY, MARYLAND 21042  
 410-992-2000



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

Signature of Engineer: *Earl D. Collins* Date: 8/4/03  
 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.

Signature of Developer: *Dennis Miller* Date: 8/5/03  
 DENNIS MILLER

Reviewed for HOWARD SCD and meets Technical Requirements.

U.S.D.A. - Natural Resources Conservation Service  
 This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.

Signature: *John E. Roberts* Date: 8/13/03  
 JOHN E. ROBERTS  
 HOWARD SCD

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature: *Colleen...* Date: 8/2/03  
 Chief, Division of Land Development

Signature: *...* Date: 8/19/03  
 Chief, Development Engineering Division

Signature: *...* Date: 8/28/03  
 Director - Department of Planning and Zoning

PROJECT	EMERSON	SECTION	SECTION 2 PHASE 4	LOTS NO.	1-6, 24 & 25
FLAT	16077	BLOCK NO.	8	ZONE	PEC-MXD-3
TAX/ZONE	47	ELEC. DIST.	SIXTH	CENSUS TR.	6068.02
WATER CODE	E-15	SEWER CODE	7640000		

**SEDIMENT/EROSION CONTROL PLAN**

**SINGLE FAMILY DETACHED**  
**EMERSON**  
 SECTION 2 PHASE 4  
 LOTS 1-6, 24 & 25

TAX MAP NO.: 47 PARCEL NO.: 3, 462 & 837 GRID NO.: 8  
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 30' DATE: JUNE, 2003  
 SHEET 3 OF 4

**SDP 03-159**

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## 20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION DEFINITION

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

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 practice includes Temporary Seeding, to quickly establish vegetative cover for short duration (up to one year), and Permanent Seeding, for long term vegetative cover. Examples of applicable areas for Temporary Seeding are temporary soil stockpiles, cleared areas being left idle between construction phases, earth dikes, etc. and for Permanent Seeding are lawns, dunes, cut and fill slopes and other areas at final grade, former stockpiles and staging areas, etc.

### EFFECTS ON WATER QUALITY AND QUANTITY

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

### SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- Site Preparation**
  - Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
  - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
  - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
- Soil Amendment (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.
  - 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 warranty of the producer.
  - Lime materials shall be ground limestone (hydrated or burnt lime) but not be substituted which contains at least 50% total calcium oxide. Limestone shall be ground to such fineness that at least 50% will pass through a #100 mesh sieve and 98-100% will pass through a #20 mesh sieve.
  - Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.

- Seeded Preparation**
  - Temporary Seeding**
    - Seeded preparation shall consist of loosening soil to a depth of 3" to 5" by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the rough condition. Slopes shall be graded to a minimum of 3:1 and should be tracked leaving the surface in an irregular condition with ridges running parallel to the contour of the slope.
    - Apply fertilizer and lime as prescribed on the plans.
    - Incorporate lime and fertilizer into the top 3-5" of soil by disking or other suitable means.
  - Permanent Seeding**
    - Minimum soil conditions required for permanent vegetative establishment:
      - 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% fine grained material (30% silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is for levees or areas where the soil is to be planted, then a sandy soil (50% silt plus clay) should be acceptable.
      - Soil shall contain 1.5% minimum organic matter by weight.
      - Soil must contain sufficient pore space to permit adequate root penetration.
      - If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standard and Specification for Topsoil.
    - Areas 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 rooting of the 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 rolled to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. When site conditions will not permit normal seeded 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. Seeded loosening may not be necessary on newly disturbed areas.

- Seed Specifications**
  - All seed must meet the requirements of the Maryland State Seed Law. All seed shall be subject to re-testing by the recipient seed laboratory. All seed lots 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.
  - Inoculant** - The inoculant for treating legume seed in the seed mixture 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.
    - 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; P2O5 (phosphorous) 200 lbs/acre; K2O (potassium) 200 lbs/acre.
    - 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.
  - Dry Seeding** - This includes use of conventional drop or broadcast spreaders.
    - Seed spread dry shall be incorporated into the subsoil at the rates prescribed on the Temporary or Permanent Seeding Summaries or Tables 265 or 266. The seeded area shall then be rolled with a weighted roller to provide good seed to soil contact.
    - Where practical, seed shall be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
  - Drill or Cultipacker Seeding** - Mechanized seeders that apply and cover seed with soil.
    - Cultipacker seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seeded must be firm after planting.
    - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.

- Mulch Specifications (in order of preference)**
  - Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonable bright in color, and shall not be frosty, rotted, or excessively dry, and shall be free of noxious weed seeds as specified in the Maryland Seed Law.
  - Wood Cellulose Fiber Mulch (WCFM)
    - WCFM shall consist of specially prepared wood cellulose processed into a uniform fibrous physical state.
    - WCFM shall be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the 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 biodegradable 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 concentrations levels that will be phytotoxic.
    - 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 16% maximum and water holding capacity of 90% minimum.

- Seeding Rates**
  - Seeding rates shall be as specified on the plans.
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- Mulching Seeded Areas** - Mulch shall be applied to all seeded areas immediately after seeding.
  - If seeding is completed outside of the seeding season, mulch shall be applied as prescribed in this section and maintained until the seeding season returns and seeding can be performed in accordance with these specifications.
  - When straw mulch is used, it shall be spread over all seeded areas at the rate of 2 tons/acre. Mulch shall be applied to a uniform loose depth of 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 shall be increased to 2.5 tons/acre.
  - 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.
- 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):
  - 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. If 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 of water.
  - 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 applied under binder application. Synthetic binders - such as Acrylic DLR (Agro-Tack), DCA-70 Petroseal, Terra Tack II, Terra Tack AR, or other approved equal may be used at rates recommended by the manufacturer to anchor mulch.
  - 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 cut 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'.
  - Construction sequence (Refer to Figure 3 below):
    - Excavate and stabilize all temporary swales, side ditches, or berms that will be used to convey runoff from the area to be stabilized.
    - 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 areas as necessary.

- Incremental Stabilization of Embankments - Fill Slopes**
  - Embankments shall be constructed in lifts as prescribed on the plans.
  - 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.
  - 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):
    - Excavate and stabilize all temporary swales, side ditches, or berms that will be used to divert runoff around the slope to be stabilized.
    - Place Phase 1 embankment, dress and stabilize.
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### SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSING AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1055).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE 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 THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
  - 7 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3:1.
  - 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 16 OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. 51), 500 (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 PERMSSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:**

TOTAL AREA OF SITE	1,2825 ACRES
AREA DISTURBED	11365 ACRES
AREA TO BE ROOFED OR PAVED	0,4810 ACRES
AREA TO BE VEGETATIVELY STABILIZED	0,8045 ACRES
TOTAL CUT	1842 CU.YDS.
TOTAL FILL	1911 CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION	N/A CU.YDS.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED OR REMOVED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED WITHIN ONE WORKING DAY, WHICHEVER IS SHORTER.

### PERMANENT SEEDING NOTES

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

**Seeded Preparation:** Loosen upper three inches of soil by rolling, disking or other acceptable means before seeding, if not previously loosened.

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

- 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, apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs. per 1000 sq.ft.).
- Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs. per 1000 sq.ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs. per 1000 sq.ft.) before seeding. Harrow 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 Tall Fescue per acre and 2 lbs. per acre (0.05 lbs. per 1000 sq.ft.) of unrolled small grain straw immediately after seeding. During the period October 16 thru February 28, protect site by one of the following options:

- 2 tons per acre of well-anchored mulch straw and seed as soon as possible in the spring.
- Use sod.
- 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 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrolled 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 redistributed where a short-term vegetative cover is needed.

**Seeded Preparation:** Loosen upper three inches of soil by rolling, disking or other acceptable means before seeding, if not previously loosened.

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

**Seeding:** For periods March 1 thru April 30 and from August 1 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.

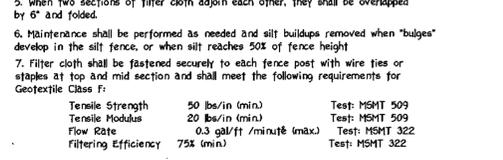
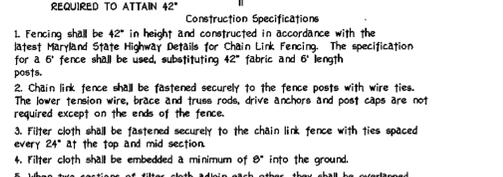
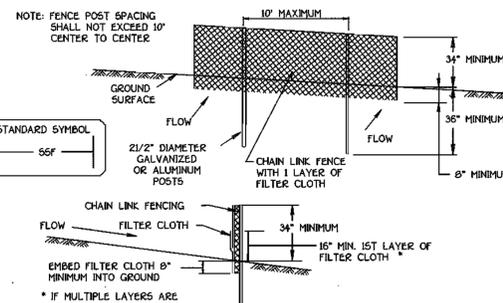
**Mulching:** Apply 1-1/2 to 2 tons per acre (70 to 90 lbs. per 1000 sq.ft.) of unrolled small grain straw immediately after seeding.

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.

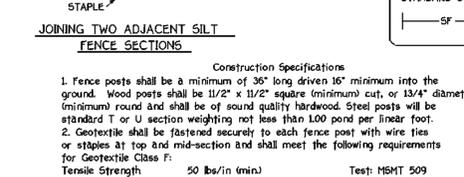
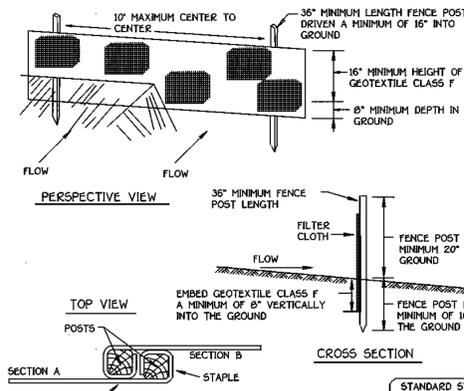
Refer to the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for rate and methods not covered.

### SEQUENCE OF CONSTRUCTION

- |   |         |
|---|---------|
| 1. OBTAIN GRADING PERMIT  | 7 DAYS  |
| 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  | 14 DAYS |
| 7. REMOVE SEDIMENT CONTROL DEVICES AS UPLAND AREAS ARE STABILIZED AND PERMISSION IS GRANTED BY E/S CONTROL INSPECTOR. | 7 DAYS  |

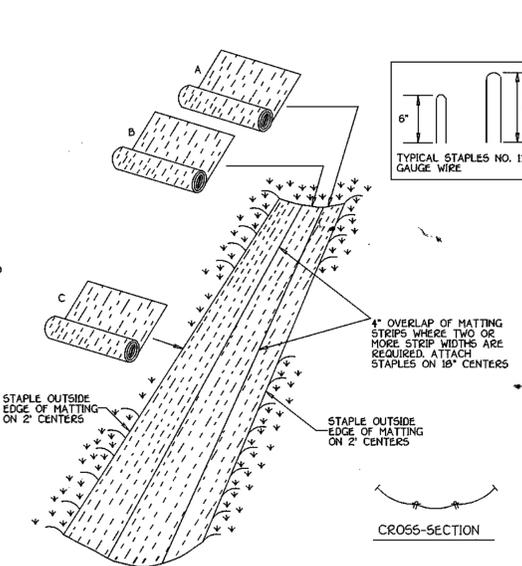


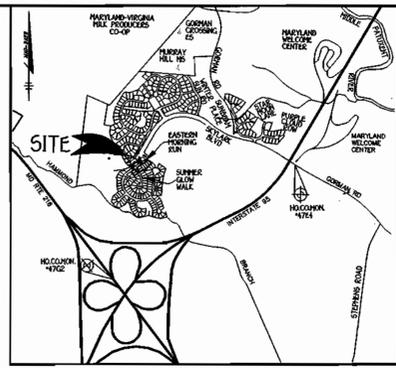
Slope Steepness	Slope Length (Maximum)	Silt Fence Length (Maximum)
0 - 10%	0 - 101'	Unlimited
10 - 20%	101 - 51'	200 feet
20 - 33%	51 - 31'	100 feet
33 - 50%	31 - 21'	100 feet
50% +	21' +	50 feet



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

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 limited. In these areas a silt fence may be the only perimeter control required.





VICINITY MAP  
SCALE: 1" = 200'

**BENCH MARKS**  
 T.P. 47E4 ELEV. 339.00  
 N. 535,846.149  
 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 I-95

**GENERAL NOTES**

- SUBJECT PROPERTY ZONED PEC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/98 AS CASE NO. ZB979M.
- TOTAL AREA OF SITE: 1.2825 ACRES
- TOTAL NUMBER OF LOTS SUBMITTED: 8 SFD
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410)313-1800 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: ZB-979M, WP 99-96, S 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 MCQUINE WALKER, INC.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.  
 HOWARD COUNTY MONUMENT 47E4 N 535846.149 E 1355431.224  
 HOWARD COUNTY MONUMENT 47G2 N 532938.964 E 1351224.095
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHTS-OF-WAY OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION.  
 FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-03-13 AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4043-D.
- CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
- STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION DRAWINGS FILED UNDER F-03-13.
- 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 \$10,000.00 FOR 39 INTERIOR LANDSCAPING TREES.
- 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.
- FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-03-13.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.
- OPEN SPACE REQUIREMENTS FOR THESE LOTS HAVE BEEN PROVIDED UNDER F-03-13.
- 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 S-99-12 AND THE DECISION AND ORDER FOR PB-339 APPROVED ON JULY 1, 1999.
- 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.
- 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 SIMILAR MINOR STRUCTURE.
- 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.
- IN ACCORDANCE WITH SECTION 12B 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.
- 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) TURNING RADII.  
 C) GRADE - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45 FOOT TURNING RADII.  
 D) STRUCTURES - (BRIDGES/CULVERTS) CAPABLE OF SUPPORTING 25 GROSS TONS (25-TON-LOADING)  
 E) DRAINAGE ELEMENTS CAPABLE OF SAFELY 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**

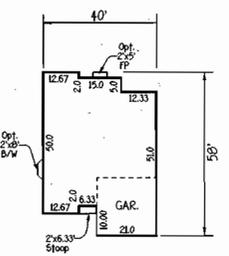
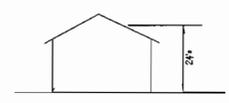
SHEET	DESCRIPTION
SHEET 1	TITLE SHEET, HOUSE TYPES, TEMPLATES
SHEET 2	SITE DEVELOPMENT PLAN, LOTS 1-6, 24 & 25
SHEET 3	SEDIMENT/EROSION CONTROL PLAN LOTS 1-6, 24 & 25
SHEET 4	SEDIMENT/EROSION CONTROL PLAN, LOTS 1-6, 24 & 25

**ADDRESS CHART**

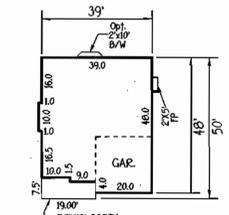
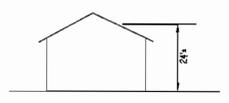
LOT NUMBER	STREET ADDRESS
1	8501 EASTERN MORNING RUN
2	8505 EASTERN MORNING RUN
3	8509 EASTERN MORNING RUN
4	8513 EASTERN MORNING RUN
5	10101 SUMMER GLOW WALK
6	10105 SUMMER GLOW WALK
24	10104 SUMMER GLOW WALK
25	10100 SUMMER GLOW WALK

**LEGEND**

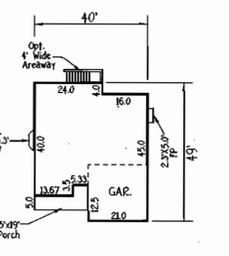
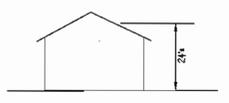
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
+362.2	SPOT ELEVATION
---	PROPOSED WALKOUT
-SF - SF	SILT FENCE
-SSF - SSF	SUPER SILT FENCE
ECH	EROSION CONTROL MATTING
LOD	LIMIT OF DISTURBANCE
⊗	EXISTING STREET TREE TAKEN FROM F-03-13



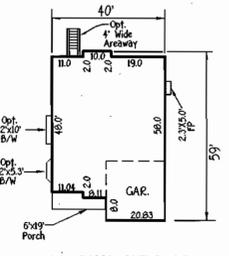
**ALLAN HOMES  
FRESNO**  
 2073.69 SF = 5464.23 SF  
 0.4 = Min Lot Size  
 w/all Options



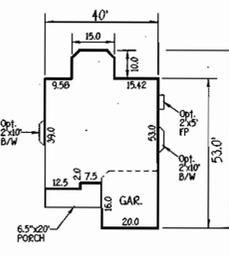
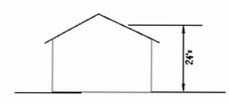
**DOUGLAS HOMES  
HOUSE A**  
 1946.00 SF = 4865.00 SF  
 0.4 = Min Lot Size  
 w/all Options



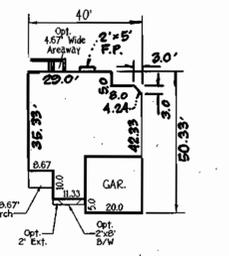
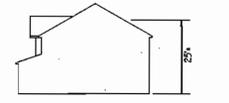
**GOODIER BUILDERS  
T+**  
 1842.54 SF = 4606.35 SF  
 0.4 = Min Lot Size  
 w/all Options



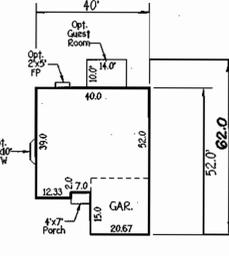
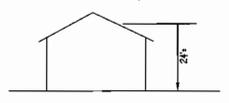
**COLUMBIA BUILDERS  
TT**  
 2164.65 SF = 5411.62 SF  
 0.4 = Min Lot Size  
 w/all Options



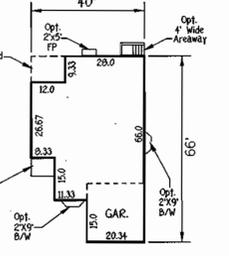
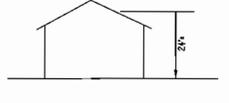
**NU-HOMES  
CRISFIELD**  
 2188 SF = 5415.93 SF  
 0.4 = Min Lot Size  
 w/all Options



**PATRIOT HOMES  
G III**  
 1852 SF = 4630 SF  
 0.4 = Min Lot Size  
 w/all Options



**RYLAND HOMES  
HAMPTON**  
 1982.17 SF = 4955.4 SF  
 0.4 = Min Lot Size  
 w/all Options



**WILLIAMSBURG BUILDERS  
MAYFIELD**  
 2247.02 SF = 5617.55 SF  
 0.4 = Min Lot Size  
 w/all Options

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CENTRAL SQUARE OFFICE PARK - 10772 DALLWOOD NATIONAL FREE  
 ELLICOTT CITY, MARYLAND 21114  
 410-816-2555



**ENGINEER'S CERTIFICATE**  
 "I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."  
 Signature of Engineer: *Earl D. Collins* Date: 8/4/03  
**BUILDER/DEVELOPER'S CERTIFICATE**  
 "I/we certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."  
 Signature of Developer: *Dennis Miller* Date: 8/5/03

Reviewed for HOWARD SCD and meets Technical Requirements.  
 Signature: *Jim Meyers* Date: 8/13/03  
 U.S.D.A.-Natural Resources Conservation Service  
 This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
 Signature: *Paul K. Robertson* Date: 8/13/03  
 HOWARD SCD  
**OWNER/DEVELOPER**  
 THE HOWARD RESEARCH & DEVELOPMENT CORP.  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 410-992-6000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Signature: *Cathy Hamilton* Date: 8/21/03  
 Chief, Division of Development  
 Signature: *Paul Dammann* Date: 8/19/03  
 Chief, Development Engineering Division MK  
 Signature: *Paul D. Wagoner* Date: 8/19/03  
 Director - Department of Planning and Zoning DL  
 PROJECT: EMERSON SECTION: SECTION 2 PHASE 4 LOTS NO.: 1-6, 24 & 25  
 PLAT: 16077 BLOCK NO.: 8 ZONE: PEC-MXD-3 TAX/ZONE: 47 ELEC. DIST.: SIXTH CENSUS TR.: 6068.02  
 WATER CODE: E-15 SEWER CODE: 7640000

**TITLE SHEET**  
 SINGLE FAMILY DETACHED  
**EMERSON**  
 SECTION 2 PHASE 4  
 LOTS 1-6, 24 & 25  
 TAX MAP No: 47 PARCEL NO.: 3, 462 & 837 GRID 8  
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 30' DATE: JUNE, 2003  
 SHEET 1 OF 4

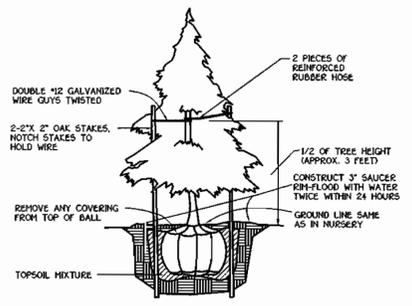
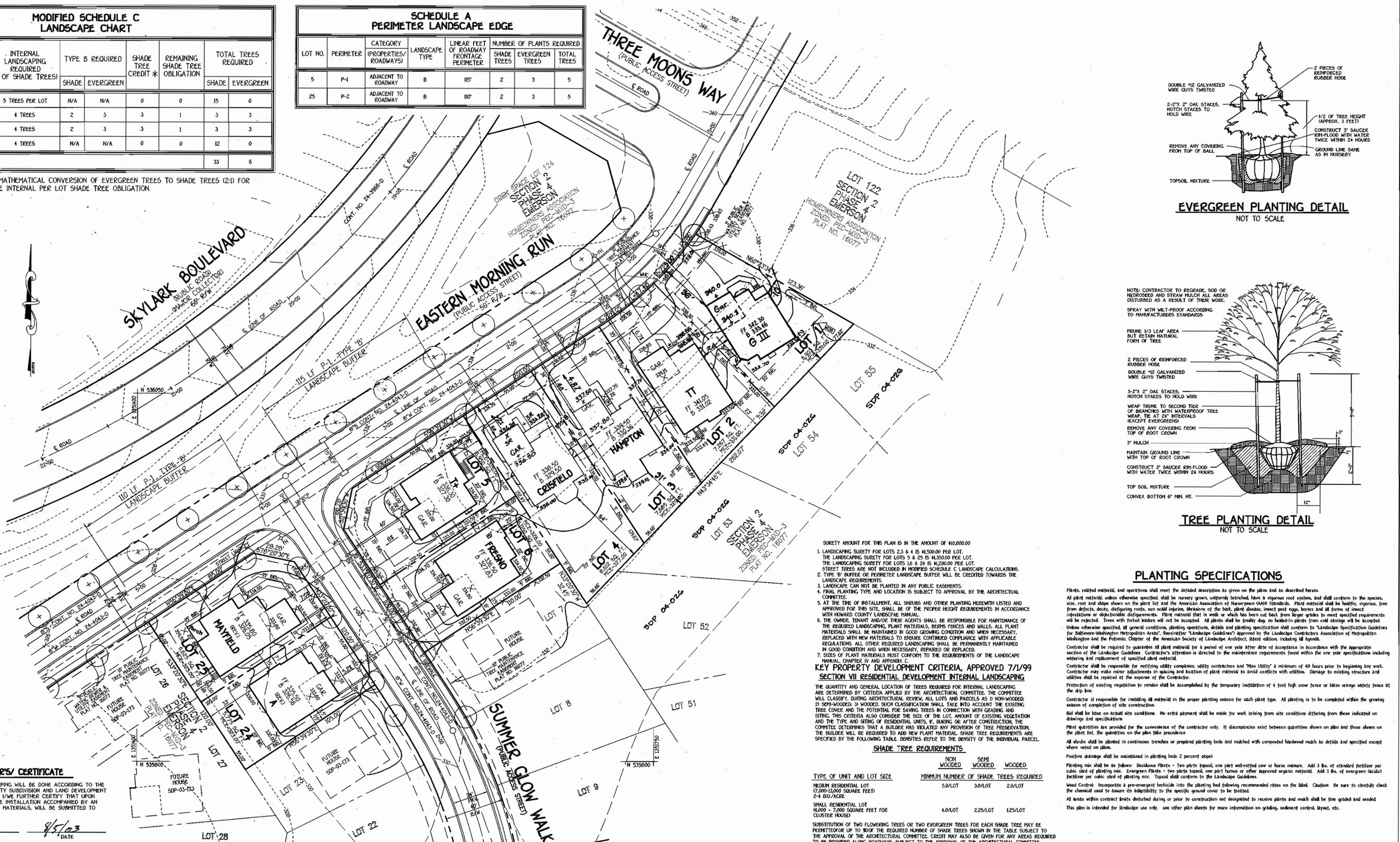
**MODIFIED SCHEDULE C  
LANDSCAPE CHART**

LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED (# OF SHADE TREES)	TYPE B REQUIRED		SHADE TREE CREDIT *	REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED	
			SHADE	EVERGREEN			SHADE	EVERGREEN
LOTS 2, 3 & 4	NON-WOODED	5 TREES PER LOT	N/A	N/A	0	0	15	0
LOT 5 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 25 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 1, 6, & 24	NON-WOODED	4 TREES	N/A	N/A	0	0	12	0
TOTAL TREES							33	6

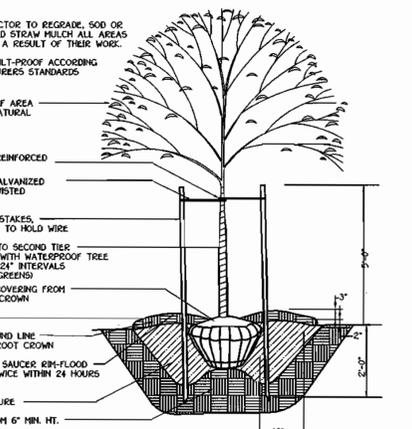
\* THIS NUMBER REFLECTS THE MATHEMATICAL CONVERSION OF EVERGREEN TREES TO SHADE TREES (2:1) FOR THE PURPOSE OF MEETING THE INTERNAL PER LOT SHADE TREE OBLIGATION.

**SCHEDULE A  
PERIMETER LANDSCAPE EDGE**

LOT NO.	PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER OF PLANTS REQUIRED		
					SHADE TREES	EVERGREEN TREES	TOTAL TREES
5	P-1	ADJACENT TO ROADWAY	B	115'	2	3	5
25	P-2	ADJACENT TO ROADWAY	B	110'	2	3	5



**EVERGREEN PLANTING DETAIL**  
NOT TO SCALE



**TREE PLANTING DETAIL**  
NOT TO SCALE

**PLANTING SPECIFICATIONS**

Plants, related material, and operations shall meet the detailed description as given on the plan 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 plan 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, not heeled-in plants from cold storage will be accepted. Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area", hereinafter "Landscape Guidelines" approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, Inc. (ASLA).

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 "Yes Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.

Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the drip line.

Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction.

Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.

Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the plant list precedence.

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

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.

Wood 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 \$10,000.00

- LANDSCAPING SURETY FOR LOTS 2, 3 & 4 IS \$15,000.00 PER LOT.
- LANDSCAPING SURETY FOR LOTS 5 & 25 IS \$15,000.00 PER LOT.
- LANDSCAPING SURETY FOR LOTS 1, 6 & 24 IS \$12,000.00 PER LOT.
- STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS.
- TYPE B BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREDITED TOWARDS THE LANDSCAPING REQUIREMENTS.
- LANDSCAPE CAN NOT BE PLANTED IN ANY PUBLIC EASEMENTS.
- FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTURAL COMMITTEE.
- 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.
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BENCHES, 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.
- SIZES OF PLANT MATERIALS MUST CONFORM TO THE REQUIREMENTS OF THE LANDSCAPE 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 SETTING. 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**

TYPE OF UNIT AND LOT SIZE	MINIMUM NUMBER OF SHADE TREES REQUIRED		
	NON WOODED	SEMI WOODED	WOODED
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET) 2-4 DU/ACRE	5.0/LOT	3.0/LOT	2.0/LOT
SMALL RESIDENTIAL LOT (4,000 - 7,000 SQUARE FEET FOR CLUSTER HOUSES)	4.0/LOT	2.25/LOT	1.25/LOT

SUBSTITUTION OF TWO FLOWERING TREES OR TWO EVERGREEN TREES FOR EACH SHADE TREE MAY BE PERMITTED UP TO 10% 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 16.224 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.

*Dennis Miller*  
DENNIS MILLER  
8/5/03  
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.

*Earl D. Collins*  
Earl D. Collins  
8/4/03  
Date

**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.

*Dennis Miller*  
DENNIS MILLER  
8/5/03  
Date

**OWNER/DEVELOPER**

Reviewed for HOWARD SCD and meets Technical Requirements.  
*Jim Myles*  
J.D.A. - Natural Resources Conservation Service  
8/13/03  
Date

This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
*John K. Lintner*  
John K. Lintner  
8/13/03  
Date

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

**APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING**

*Cindy Hanota*  
Chief, Division of Land Development  
8/21/03  
Date

*Mark J. Lovell*  
Chief, Development Engineering Division  
8/25/03  
Date

Director - Department of Planning and Zoning

PROJECT: EMERSON  
SECTION: SECTION 2 PHASE 4  
LOTS NO.: 1-6, 24 & 25

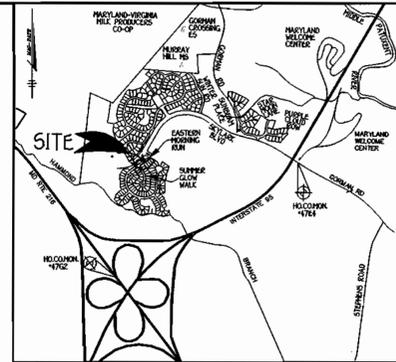
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
16077	8	PEC-MXD-3	47	SIXTH	6068.02

WATER CODE: E-15  
SEWER CODE: 7640000

**SITE DEVELOPMENT PLAN**

**SINGLE FAMILY DETACHED  
EMERSON  
SECTION 2 PHASE 4  
LOTS 1-6, 24 & 25**

TAX MAP NO.: 47 PARCEL NO.: 3, 462 & 837 GRID NO.: 8  
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1" = 30' DATE: JUNE, 2003  
SHEET 2 OF 4



**BENCH MARKS**  
 T.P. 4764 ELEV. 339.00  
 N. 535,846.148  
 E. 1,355,431.224  
 LOC. NEAR I-95 BRIDGE  
 ALONG GORMAN ROAD

T.P. 4762 ELEV. 363.53  
 N. 532,938.964  
 E. 1,351,224.095  
 LOC. NEAR MD. RTE 216 WEST  
 NEAR EXIT RAMP TO I-95

**VICINITY MAP**  
 SCALE: 1" = 2000'

**GENERAL NOTES**

- SUBJECT PROPERTY ZONED PEC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/98 AS CASE NO. ZB979M.
- TOTAL AREA OF SITE: 1.2825 ACRES
- TOTAL NUMBER OF LOTS SUBMITTED: 8 SFD
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410)313-1800 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: ZB-979M, WP 99-96, 5 99-12, PB-339, F-02-15, F-03-13, WAS 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.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS. HOWARD COUNTY MONUMENT 4764 N 535846.148 E 1355431.224 HOWARD COUNTY MONUMENT 4762 N 532938.964 E 1351224.095
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHTS-OF-WAY OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION. FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-03-13. AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4043-D.
- CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
- STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION DRAWINGS FILED UNDER F-03-13.
- 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 \$10,000.00 FOR 39 INTERIOR LANDSCAPING TREES.
- 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.
- FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-03-13.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.
- 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 S-99-12 AND THE DECISION AND ORDER FOR PB-339 APPROVED ON JULY 1, 1999.
- 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 10' 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.
- 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 SIMILAR MINOR STRUCTURE.
- AS A CONSEQUENCE OF THIS SUBMISSION ON JUNE 25, 2003, THIS S.D.P. IS SUBJECT TO THE 5TH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 50-2001.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 10 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.
- 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' (4" IF SERVING MORE THAN ONE RESIDENCE)  
 B) SURFACE - 6" OF COMPACTED CRUSHER RUN BASE W/TAR AND CHIP COATING (1-1/2" MIN) TURNING RADIUS.  
 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 SAFELY 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**

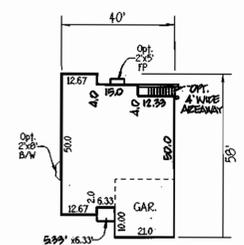
SHEET	DESCRIPTION
SHEET 1	TITLE SHEET, HOUSE TYPES, TEMPLATES
SHEET 2	SITE DEVELOPMENT PLAN, LOTS 1-6,24 & 25
SHEET 3	SEDIMENT/EROSION CONTROL PLAN LOTS 1-6,24 & 25
SHEET 4	SEDIMENT/EROSION CONTROL PLAN, LOTS 1-6,24 & 25

**ADDRESS CHART**

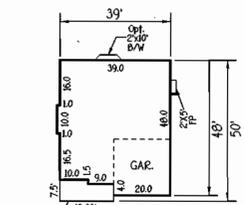
LOT NUMBER	STREET ADDRESS
1	8501 EASTERN MORNING RUN
2	8505 EASTERN MORNING RUN
3	8509 EASTERN MORNING RUN
4	8513 EASTERN MORNING RUN
5	10101 SUMMER GLOW WALK
6	10105 SUMMER GLOW WALK
24	10104 SUMMER GLOW WALK
25	10100 SUMMER GLOW WALK

**LEGEND**

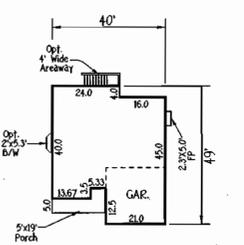
SYMBOL	DESCRIPTION
----	EXISTING CONTOUR 2' INTERVAL
+362.2	SPOT ELEVATION
---	PROPOSED WALKOUT
---	SILT FENCE
---	SUPER SILT FENCE
---	EROSION CONTROL MATTING
---	LIMIT OF DISTURBANCE
---	EXISTING STREET TREE TAKEN FROM F-03-13



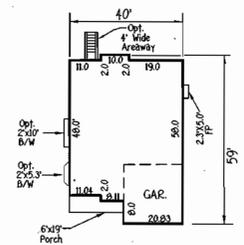
**ALLAN HOMES  
 FRESNO**  
 2083.64 SF = 5159.10 SF  
 0.4 Min. Lot Size  
 w/all Options



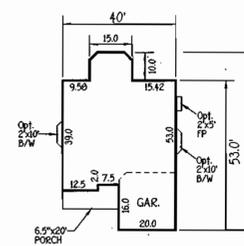
**DOUGLAS HOMES  
 HOUSE A**  
 1946.00 SF = 4865.00 SF  
 0.4 Min. Lot Size  
 w/all Options



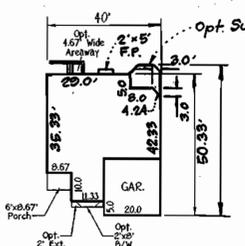
**GOODIER BUILDERS  
 T+**  
 1842.54 SF = 4606.35 SF  
 0.4 Min. Lot Size  
 w/all Options



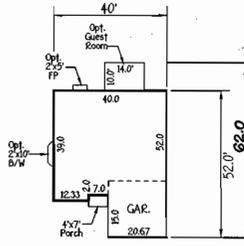
**COLUMBIA BUILDERS  
 TT**  
 2184.85 SF = 5411.62 SF  
 0.4 Min. Lot Size  
 w/all Options



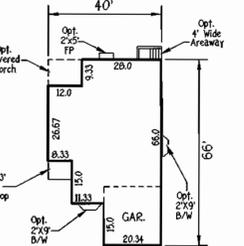
**NU-HOMES  
 CRISFIELD**  
 2165 SF = 5415.93 SF  
 0.4 Min. Lot Size  
 w/all Options



**PATRIOT HOMES  
 G III**  
 1904 SF = 4760 SF  
 0.4 Min. Lot Size  
 w/all Options



**RYLAND HOMES  
 HAMPTON**  
 1982.17 SF = 4954.4 SF  
 0.4 Min. Lot Size  
 w/all Options



**WILLIAMSBURG BUILDERS  
 MAYFIELD**  
 2247.02 SF = 5617.55 SF  
 0.4 Min. Lot Size  
 w/all Options

J:\50001 Emerson Property\Jong\Site\Phase4\30771 Model\Plan\30771 Model Plan Cover.dwg, 8/10/03 1:32:22 PM

**FISHER, COLLINS & CARTER, INC.**  
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS  
 CORTLAND SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL FREE  
 ELKLOFT CITY, MARYLAND 21042  
 410.461.2000

**STATE OF MARYLAND**  
 EARL D. COLLINS  
 PROFESSIONAL ENGINEER

NO.	REVISION	DATE
3	Add Opt. Sun Room to G III hse type	1-9-04
2	REVISE FLOOR PLAN TYPICAL	11/29/03
1	Revise Nathaniel Greene Hse. Typical to G III	12-2-03

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

Signature of Engineer: *Earl D. Collins* Date: 8/4/03  
 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 Conservation District."

Signature of Developer: *Dennis Miller* Date: 8/5/03  
 DENNIS MILLER

Reviewed for HOWARD SCD and meets Technical Requirements.

Signature: *Jim Meyer* Date: 8/13/03  
 JIM MEYER  
 U.S. Fish & Wildlife Service  
 Conservation Service

Signature: *John R. Robertson* Date: 8/13/03  
 JOHN R. ROBERTSON  
 HOWARD SCD

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature: *Cindy Hanota* Date: 8/21/03  
 CINDY HANOTA  
 Chief, Planning and Development

Signature: *David Dammann* Date: 8/19/03  
 DAVID DAMMANN  
 Chief, Development Engineering Division MK

Signature: *Mark A. Wagner* Date: 8/28/03  
 MARK A. WAGNER  
 Director - Department of Planning and Zoning

PROJECT	SECTION	LOTS NO.
EMERSON	SECTION 2 PHASE 4	1-6, 24 & 25

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
16077	B	PEC-MXD-3	47	SIXTH	6068.02

WATER CODE	SEWER CODE
E-15	7640000

**TITLE SHEET**

**SINGLE FAMILY DETACHED  
 EMERSON**

**SECTION 2 PHASE 4  
 LOTS 1-6,24 & 25**

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

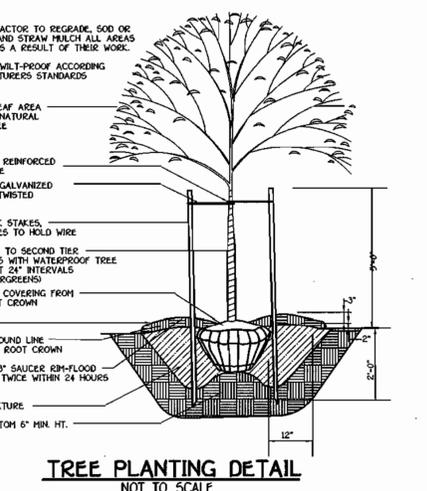
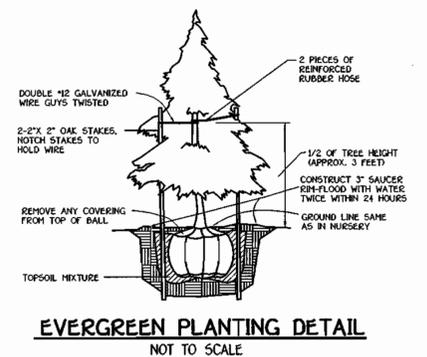
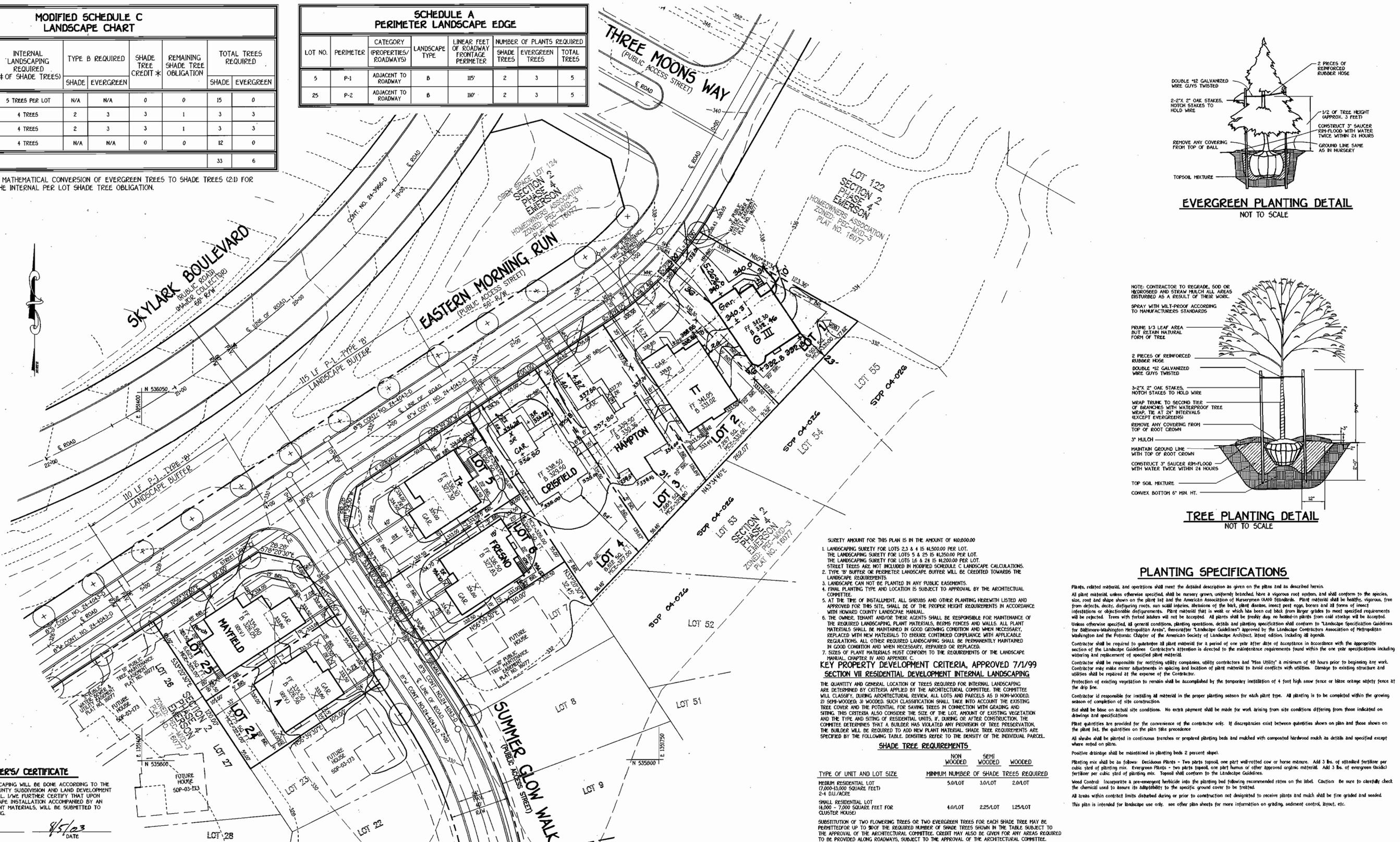
SHEET 1 OF 4

**SDP 03-159**

MODIFIED SCHEDULE C LANDSCAPE CHART								
LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED (# OF SHADE TREES)	TYPE B REQUIRED		SHADE TREE CREDIT *	REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED	
			SHADE	EVERGREEN			SHADE	EVERGREEN
LOTS 2, 3 & 4	NON-WOODED	5 TREES PER LOT	N/A	N/A	0	0	15	0
LOT 5 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 25 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 1, 6 & 24	NON-WOODED	4 TREES	N/A	N/A	0	0	12	0
TOTAL TREES							33	6

\* 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 PERIMETER LANDSCAPE EDGE							
LOT NO.	PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	SHADE TREES	EVERGREEN TREES	TOTAL TREES
5	P-1	ADJACENT TO ROADWAY	B	115'	2	3	5
25	P-2	ADJACENT TO ROADWAY	B	110'	2	3	5



**PLANTING SPECIFICATIONS**

Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein. All plant material unless otherwise specified shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shade shown on the plan 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 heated-in plants from cold storage will be accepted. Unless otherwise specified all general conditions, planting operations, details and planting specifications shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area," hereinafter "Landscape Guidelines" approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition including all appendices.

Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.

Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor.

Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high saw fence or blaze orange safety fence at the drip line.

Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction.

Plant shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.

Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plan list, the quantities on the plan list 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.

Mulch 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 \$40,000.00

1. LANDSCAPING SURETY FOR LOTS 2, 3 & 4 IS \$4,500.00 PER LOT.  
 2. LANDSCAPING SURETY FOR LOTS 5 & 25 IS \$1,500.00 PER LOT.  
 3. LANDSCAPING SURETY FOR LOTS 1 & 24 IS \$2,000.00 PER LOT.  
 STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS.

2. TYPE "B" BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREATED TOWARDS THE LANDSCAPE REQUIREMENTS.

3. LANDSCAPE CAN NOT BE PLANTED IN ANY PUBLIC EASEMENTS.

4. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTURAL 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 LANDSCAPE MANUAL.

6. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BORDERS, 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 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 B NON-WOODED, B SEMI-WOODED, B 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.

TYPE OF UNIT AND LOT SIZE	SHADE TREE REQUIREMENTS		
	NON WOODED	SEMI WOODED	WOODED
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET)	5.0/TOT	3.0/TOT	2.0/TOT
2-4 DU/ACRE			
SMALL RESIDENTIAL LOT (4,000 - 7,000 SQUARE FEET FOR CLUSTER HOUSES)	4.0/TOT	2.25/TOT	1.25/TOT

**BUILDER/DEVELOPER'S CERTIFICATE**

I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE PLAN, SECTION 15324 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.

*Dennis Miller* 8/5/03  
 DENNIS MILLER 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."

*Earl D. Collins* 8/4/03  
 Signature of Engineer EARL D. COLLINS Date

**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."

*Dennis Miller* 8/5/03  
 Signature of Developer DENNIS MILLER Date

Reviewed for HOWARD SCD and meets Technical Requirements.

*Jim Myers* 8/13/03  
 U.S.D.A. Natural Resources Conservation Service Date

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

*John R. ...* 8/13/03  
 Howard SCD Date

**OWNER/DEVELOPER**  
 THE HOWARD RESEARCH & DEVELOPMENT CORP.  
 10275 LITTLE PATUKENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 410-992-6000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Chris Hanata* 8/12/03  
 Chief, Planning and Development Date  
*Chris ...* 8/12/03  
 Chief, Development Engineering Division Date  
*David ...* 8/28/03  
 Director - Department of Planning and Zoning Date

PROJECT	EMERSON	SECTION	SECTION 2 PHASE 4	LOTS NO.	1-6, 24 & 25
PLAT	16077	BLOCK NO.	8	ZONE	PEC-MXD-3
TAX/ZONE	47	ELEC. DIST.	SIXTH	CENSUS TR.	6068.02
WATER CODE	E-15	SEWER CODE	7640000		

**SITE DEVELOPMENT PALM**

**SINGLE FAMILY DETACHED EMERSON**  
 SECTION 2 PHASE 4  
 LOTS 1-6, 24 & 25

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

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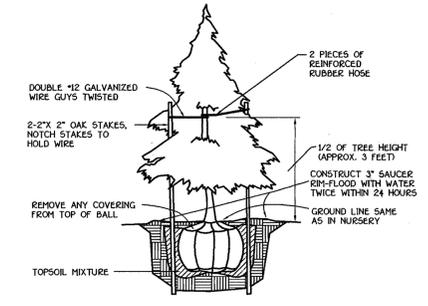
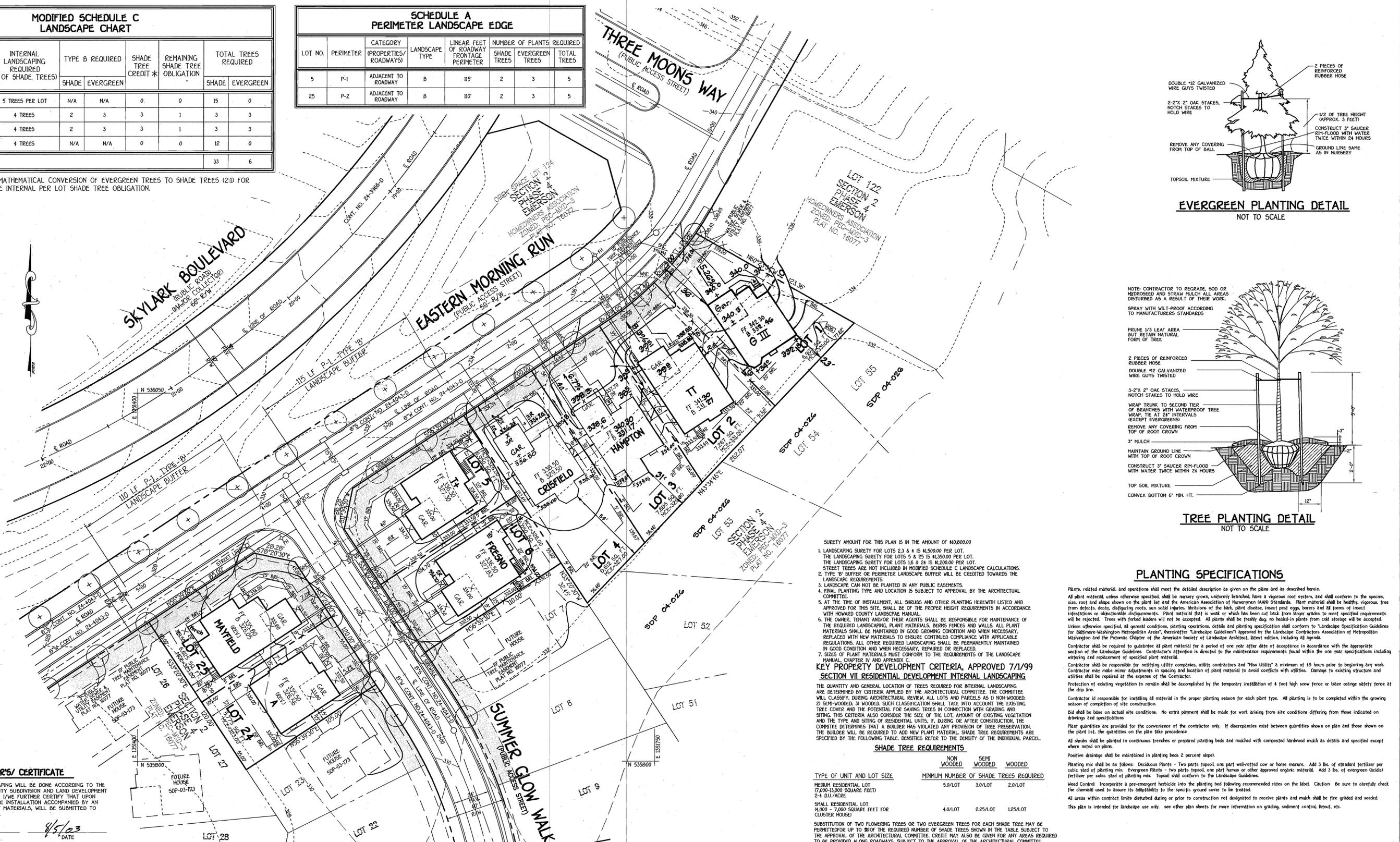
**MODIFIED SCHEDULE C  
LANDSCAPE CHART**

LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED (# OF SHADE TREES)	TYPE B REQUIRED		SHADE TREE CREDIT *	REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED	
			SHADE	EVERGREEN			SHADE	EVERGREEN
LOTS 2, 3 & 4	NON-WOODED	5 TREES PER LOT	N/A	N/A	0	0	15	0
LOT 5 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 25 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 1, 6, & 24	NON-WOODED	4 TREES	N/A	N/A	0	0	12	0
TOTAL TREES							33	6

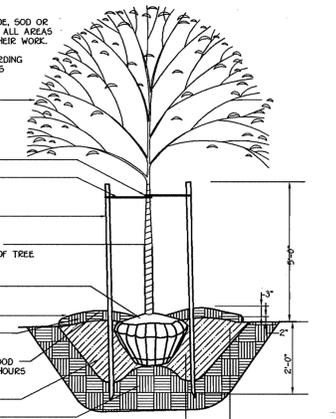
\* THIS NUMBER REFLECTS THE MATHEMATICAL CONVERSION OF EVERGREEN TREES TO SHADE TREES (2:1) FOR THE PURPOSE OF MEETING THE INTERNAL PER LOT SHADE TREE OBLIGATION.

**SCHEDULE A  
PERIMETER LANDSCAPE EDGE**

LOT NO.	PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER OF PLANTS REQUIRED		
					SHADE TREES	EVERGREEN TREES	TOTAL TREES
5	P-1	ADJACENT TO ROADWAY	B	115'	2	3	5
25	P-2	ADJACENT TO ROADWAY	B	110'	2	3	5



**EVERGREEN PLANTING DETAIL**  
NOT TO SCALE



**TREE PLANTING DETAIL**  
NOT TO SCALE

**PLANTING SPECIFICATIONS**

Plants, related material, and operations shall meet the detailed description as given on the plans and as described herein. All plant material unless otherwise specified, shall be nursery grown, uniformly branched, have a vigorous root system, and shall conform to the species, size, root and shape shown on the plant list and the American Association of Nurserymen (AANR) 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 infestations. 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, not held in plants from cold storage will be accepted. Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to "Landscaping Specification Guidelines for Baltimore-Washington Metropolitan Area", hereinafter "Landscaping Guidelines" published by the Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition, including all appendices. Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscaping Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material. Contractor shall be responsible for notifying utility companies, utility contractors and "Use Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor. Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blade orange safety fence at the 4'0" line. Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction. Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications. Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the 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 organic material. Add 3 lbs. of evergreen specific fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscaping 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 insure 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 \$10,000.00  
 1. LANDSCAPING SURETY FOR LOTS 2, 3 & 4 IS \$1,500.00 PER LOT.  
 2. LANDSCAPING SURETY FOR LOTS 5 & 25 IS \$1,500.00 PER LOT.  
 3. LANDSCAPING SURETY FOR LOTS 1, 6, & 24 IS \$1,200.00 PER LOT.  
 4. STREET TREES ARE NOT INCLUDED IN MODIFIED SCHEDULE C LANDSCAPE CALCULATIONS.  
 5. TYPE 'B' BUFFER OR PERIMETER LANDSCAPE BUFFER WILL BE CREDITED TOWARDS THE LANDSCAPE REQUIREMENTS.  
 6. LANDSCAPE CAN NOT BE PLANTED IN ANY PUBLIC EASEMENTS.  
 7. FINAL PLANTING TYPE AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTURAL COMMITTEE.  
 8. 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.  
 9. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BEEPS, 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.  
 10. SIZES OF PLANT MATERIALS MUST CONFORM TO THE REQUIREMENTS OF THE LANDSCAPE 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 SETTING. THIS CRITERIA ALSO CONSIDERS 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.

TYPE OF UNIT AND LOT SIZE	SHADE TREE REQUIREMENTS		
	NON WOODED	SEMI WOODED	WOODED
MINIMUM NUMBER OF SHADE TREES REQUIRED			
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET) 2-4 DU./ACRE	5.0/LOT	3.0/LOT	2.0/LOT
SMALL RESIDENTIAL LOT (4,000 - 7,000 SQUARE FEET FOR CLUSTER HOUSES)	4.0/LOT	2.25/LOT	1.25/LOT

**BUILDER/DEVELOPER'S CERTIFICATE**

I/WE CERTIFY THAT THE REQUIRED LANDSCAPING WILL BE DONE ACCORDING TO THE PLAN, SECTION 15124 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.

*Dennis Miller*  
DENNIS MILLER  
8/5/03  
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.

*Earl D. Collins*  
EARL D. COLLINS  
8/4/03  
Date

**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.

*Dennis Miller*  
DENNIS MILLER  
8/5/03  
Date

Reviewed for HOWARD SCD and meets Technical Requirements.

*Jim Myers*  
J.D.A.-Natural Resources  
8/13/03  
Date  
This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
*John K. Kratochvil*  
John K. Kratochvil  
8/13/03  
Date

**OWNER/DEVELOPER**  
THE HOWARD RESEARCH & DEVELOPMENT CORP.  
10275 LITTLE PATUKENT PARKWAY  
COLUMBIA, MARYLAND 21044  
410-992-6000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Cindy Hamstra*  
Cindy Hamstra  
8/21/03  
Date  
*Chris Danvers*  
Chris Danvers  
8/28/03  
Date  
Director - Department of Planning and Zoning

PROJECT	SECTION	LOTS NO.			
EMERSON	SECTION 2 PHASE 4	1-6, 24 & 25			
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
16077	8	PEC-MXD-3	47	SIXTH	6068.02
WATER CODE	SEWER CODE				
E-15	7640000				

**SITE DEVELOPMENT PLAN**

**SINGLE FAMILY DETACHED  
EMERSON  
SECTION 2 PHASE 4  
LOTS 1-6, 24 & 25**

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



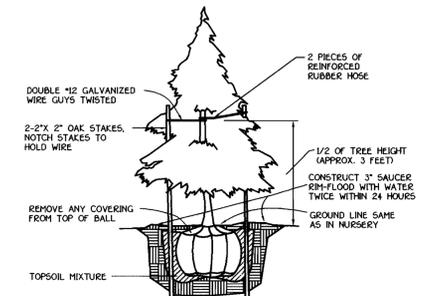
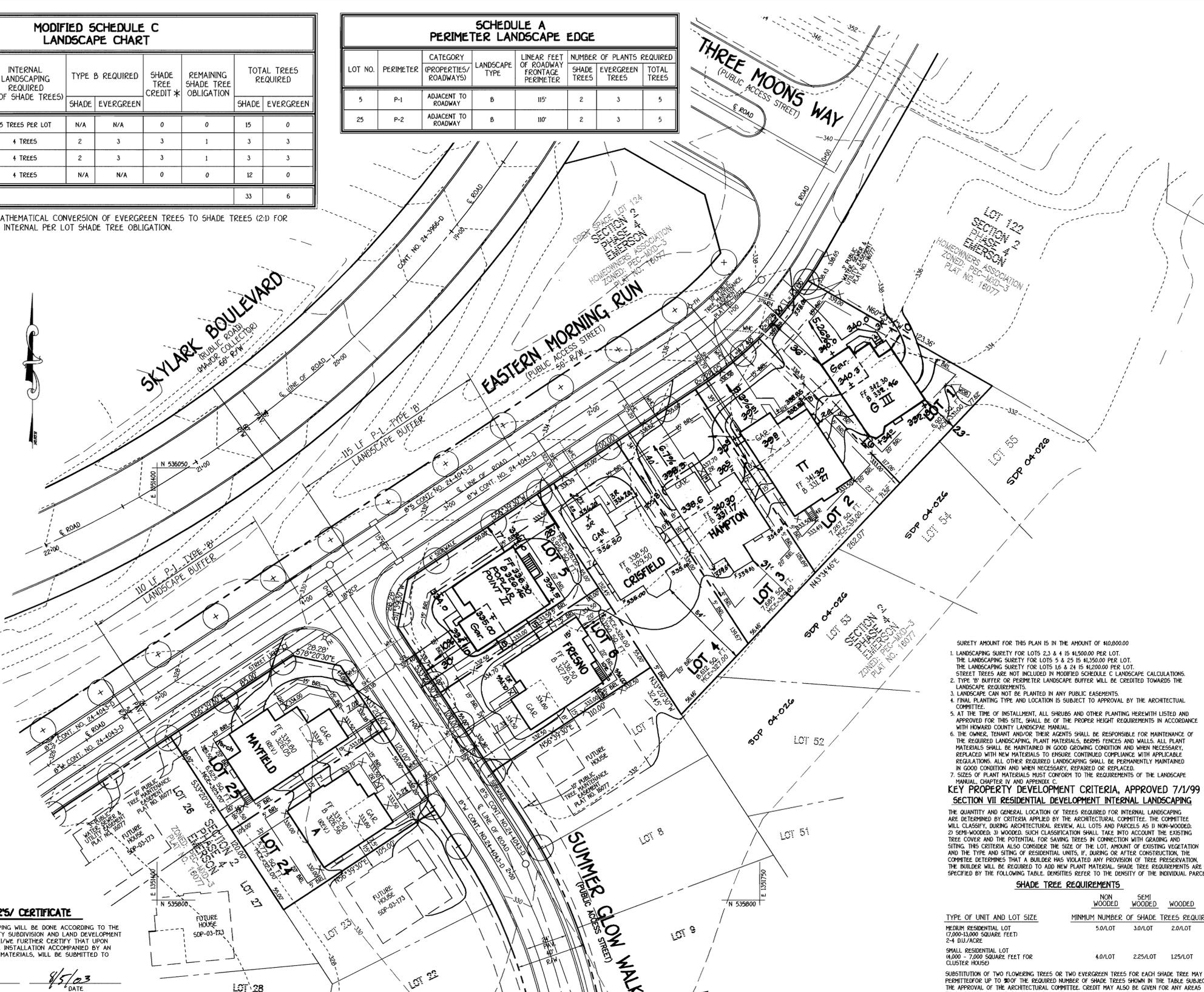
**MODIFIED SCHEDULE C  
LANDSCAPE CHART**

LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED (# OF SHADE TREES)	TYPE B REQUIRED		SHADE TREE CREDIT*	REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED	
			SHADE	EVERGREEN			SHADE	EVERGREEN
LOTS 23 & 4	NON-WOODED	5 TREES PER LOT	N/A	N/A	0	0	15	0
LOT 5 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 25 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 1, 6, & 24	NON-WOODED	4 TREES	N/A	N/A	0	0	12	0
TOTAL TREES							33	6

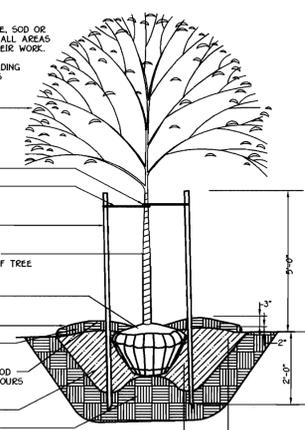
\* THIS NUMBER REFLECTS THE MATHEMATICAL CONVERSION OF EVERGREEN TREES TO SHADE TREES (2:1) FOR THE PURPOSE OF MEETING THE INTERNAL PER LOT SHADE TREE OBLIGATION.

**SCHEDULE A  
PERIMETER LANDSCAPE EDGE**

LOT NO.	PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER OF PLANTS REQUIRED	SHADE TREES	EVERGREEN TREES	TOTAL TREES
5	P-1	ADJACENT TO ROADWAY	B	115'	2	3	5	
25	P-2	ADJACENT TO ROADWAY	B	110'	2	3	5	



**EVERGREEN PLANTING DETAIL**  
NOT TO SCALE



**TREE PLANTING DETAIL**  
NOT TO SCALE

**PLANTING SPECIFICATIONS**

Plants, related material, and operations shall meet the detailed description as given on the plan 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, disease, disfiguring roots, sun scald injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable disfigurements. Plant material that is weak or which has been cut back from larger grades to meet specified requirements will be rejected. Trees with forked leaders will not be accepted. All plants shall be freshly dug, no hold-in plants from cold storage will be accepted. Unless otherwise specified, all general conditions, planting operations, details and planting specification shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area", hereinafter "Landscape Guidelines" approved by the Landscape Contractors Association of Metropolitan Washington and the Potomac Chapter of the American Society of Landscape Architects, latest edition, including all appendices. Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material. Contractor shall be responsible for notifying utility companies, utility contractors and "Miss Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Damage to existing structure and utilities shall be repaired at the expense of the Contractor. Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the drip line. Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction. Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications. Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the 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 liquid 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 \$10,800.00  
 1. LANDSCAPING SURETY FOR LOTS 2, 3 & 4 IS \$15,000.00 PER LOT. THE LANDSCAPING SURETY FOR LOTS 5 & 25 IS \$15,000.00 PER LOT. THE LANDSCAPING SURETY FOR LOTS 1, 6 & 24 IS \$12,000.00 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 LANDSCAPE REQUIREMENTS.  
 3. LANDSCAPE CAN NOT BE PLANTED IN ANY PUBLIC EASEMENTS.  
 4. FINAL PLANTING TIME AND LOCATION IS SUBJECT TO APPROVAL BY THE ARCHITECTURAL COMMITTEE.  
 5. AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTING HEREWIT 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, BENCHES, 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 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 EITHER NON-WOODED, SEMI-WOODED, OR 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 CONSIDERS THE SIZE OF THE LOT, AMOUNT OF EXISTING VEGETATION AND THE TYPE AND STING 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**

TYPE OF UNIT AND LOT SIZE	MINIMUM NUMBER OF SHADE TREES REQUIRED		
	NON WOODED	SEMI WOODED	WOODED
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET) 2-4 UNITS/ACRE	5.0/Lot	3.0/Lot	2.0/Lot
SMALL RESIDENTIAL LOT (4,000 - 7,000 SQUARE FEET FOR CLUSTER HOUSES)	4.0/Lot	2.25/Lot	1.25/Lot

SUBSTITUTION OF TWO FLOWERING TREES OR TWO EVERGREEN TREES FOR EACH SHADE TREE MAY BE PERMITTED UP TO MEET 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.

*Dennis Miller* 4/5/03  
DENNIS MILLER 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."

*Earl D. Collins* 8-4-03  
Signature of Engineer EARL D. COLLINS Date

**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 onsite inspection by the Howard Soil Conservation District."

*Dennis Miller* 4/5/03  
Signature of Developer DENNIS MILLER Date

**APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING**

Reviewed for HOWARD SCD and meets Technical Requirements.  
*Jim Magnus* 8/13/03  
Date  
 U.S.D.A.-Natural Resources Conservation Service  
 This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.  
*John K. Lambert* 8/13/03  
Date  
 Howard SCD

**APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING**

*Chad Hamilton* 8/21/03  
Date  
 Chief, Division of Land Development  
*Chris Dammann* 8/16/03  
Date  
 Chief, Development Engineering Division MK  
*Frank D. Lough* 8/28/03  
Date  
 Director - Department of Planning and Zoning

**SITE DEVELOPMENT PLAN**

**SINGLE FAMILY DETACHED  
EMERSON**  
**SECTION 2 PHASE 4**  
**LOTS 1-6, 24 & 25**  
 TAX MAP NO.: 47 PARCEL NO.: 3, 462 & 837 GRID NO.: 8  
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 30' DATE: JUNE, 2003  
 SHEET 2 OF 4

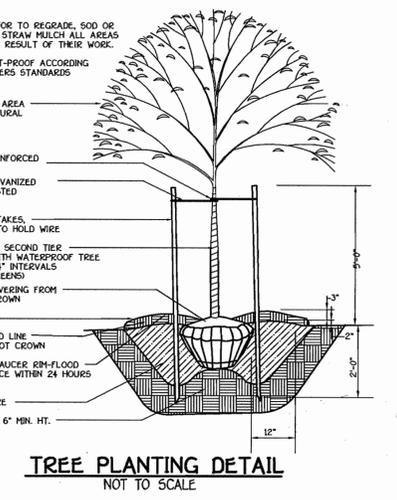
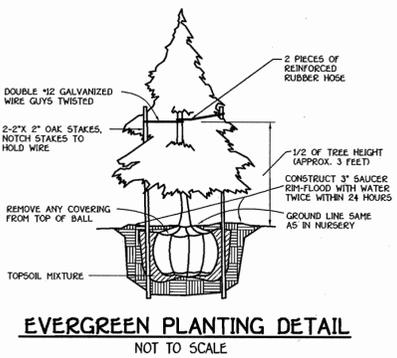
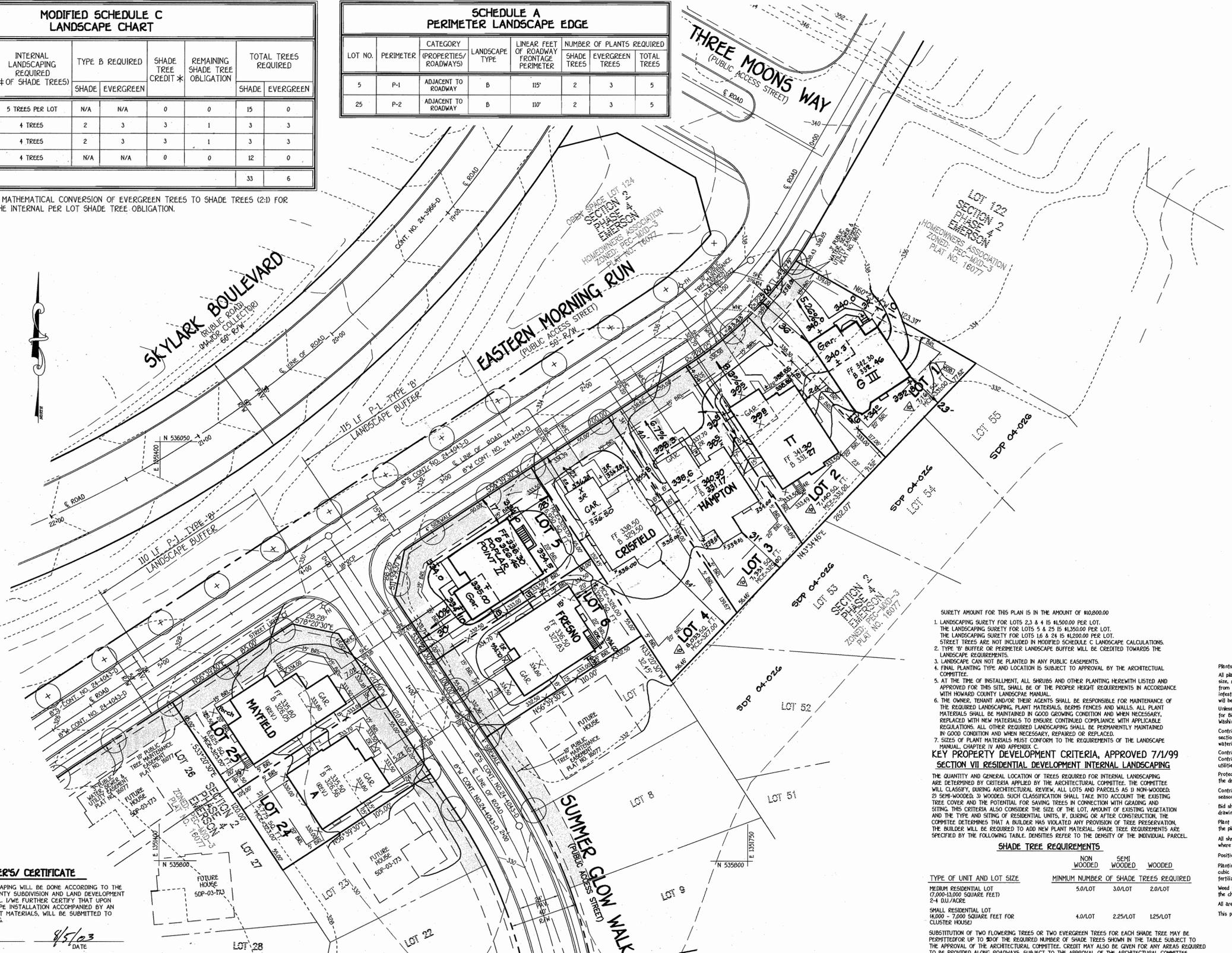


**OWNER/DEVELOPER**  
 THE HOWARD RESEARCH & DEVELOPMENT CORP.  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 410-992-6000

MODIFIED SCHEDULE C LANDSCAPE CHART								
LOT NO.	LOT CLASSIFICATION	INTERNAL LANDSCAPING REQUIRED (# OF SHADE TREES)	TYPE B REQUIRED		SHADE TREE CREDIT*	REMAINING SHADE TREE OBLIGATION	TOTAL TREES REQUIRED	
			SHADE	EVERGREEN			SHADE	EVERGREEN
LOTS 2, 3 & 4	NON-WOODED	5 TREES PER LOT	N/A	N/A	0	0	15	0
LOT 5 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 25 CORNER	NON-WOODED	4 TREES	2	3	3	1	3	3
LOT 1, 6, & 24	NON-WOODED	4 TREES	N/A	N/A	0	0	12	0
TOTAL TREES							33	6

\* 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 PERIMETER LANDSCAPE EDGE						
LOT NO.	PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER OF PLANTS REQUIRED	TOTAL TREES
5	P-1	ADJACENT TO ROADWAY	B	115'	2	3
25	P-2	ADJACENT TO ROADWAY	B	110'	2	3



**PLANTING SPECIFICATIONS**

Plants, related material, and operations shall meet the detailed description as given on the plan 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, departing roots, sun scald, injuries, abrasions of the bark, plant disease, insect pest eggs, borers and all forms of insect infestations or objectionable infestations. 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 heated-in plants from cold storage will be accepted. Unless otherwise specified, all general conditions, planting operations, details and planting specifications shall conform to "Landscape Specification Guidelines for Baltimore-Washington Metropolitan Area", then for "Landscape Guidelines" approved by the Landscape Contractors Association of Metropolitan Washington and the Institute of Landscape Architects, latest edition, including all appendices. Contractor shall be required to guarantee all plant material for a period of one year after date of acceptance in accordance with the appropriate section of the Landscape Guidelines. Contractor's attention is directed to the maintenance requirements found within the one year specifications including watering and replacement of specified plant material.

Contractor shall be responsible for notifying utility companies, utility contractors and "Fire Utility" a minimum of 48 hours prior to beginning any work. Contractor may make minor adjustments in spacing and location of plant material to avoid conflicts with utilities. Change to existing structure and utilities shall be repaired at the expense of the Contractor.

Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blaze orange safety fence at the drip line.

Contractor is responsible for installing all material in the proper planting season for each plant type. All planting is to be completed within the growing season of completion of site construction.

Bid shall be based on actual site conditions. No extra payment shall be made for work arising from site conditions differing from those indicated on drawings and specifications.

Plant quantities are provided for the convenience of the contractor only. If discrepancies exist between quantities shown on plan and those shown on the plant list, the quantities on the 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 plan.

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 specific 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 insure its adaptability to the specific ground 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.

**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 CONSIDERS 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. QUANTITIES REFER TO THE DENSITY OF THE INDIVIDUAL PARCEL.

TYPE OF UNIT AND LOT SIZE	SHADE TREE REQUIREMENTS		
	NON WOODED	SEMI WOODED	WOODED
MEDIUM RESIDENTIAL LOT (7,000-13,000 SQUARE FEET) 2-4 DU/ACRE	5.0/Lot	3.0/Lot	2.0/Lot
SMALL RESIDENTIAL LOT (4,000 - 7,000 SQUARE FEET FOR CLUSTER HOUSES)	4.0/Lot	2.25/Lot	1.25/Lot

SUBSTITUTION OF TWO FLOWERING TREES OR TWO EVERGREEN TREES FOR EACH SHADE TREE MAY BE PERMITTED FOR UP TO 200% 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 16124 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.

*Dennis Miller* 8/5/03  
DENNIS MILLER 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.

*Earl D. Collins* 8-4-03  
Signature of Engineer EARL D. COLLINS Date

**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.

*Dennis Miller* 8/5/03  
Signature of Developer DENNIS MILLER Date

Reviewed for HOWARD SCD and meets Technical Requirements.

*Jim Meyers* 8/13/03  
U.S.D.A.-Natural Resources Date

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

*John K. Rutter* 8/13/03  
Howard SCD Date

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

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

*Cindy Hamstra* 8/21/03  
Chief, Division of Land Development Date

*John Dammann* 8/21/03  
Chief, Development Engineering Division MK Date

*Drew L. Cooper* 8/28/03  
Director - Department of Planning and Zoning Date

PROJECT	EMERSON	SECTION	SECTION 2 PHASE 4	LOTS NO.	1-6, 24 & 25
PLAT	16077	BLOCK NO.	8	ZONE	PEC-MXD-3
TAX/ZONE	47	ELEC. DIST.	SIXTH	CENSUS TR.	6068.02
WATER CODE	E-15	SEWER CODE	7640000		

**SITE DEVELOPMENT PLAN**

**SINGLE FAMILY DETACHED DWELLINGS**

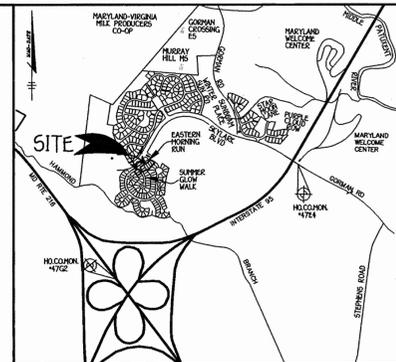
**EMERSON**

**SECTION 2 PHASE 4**

**LOTS 1-6, 24 & 25**

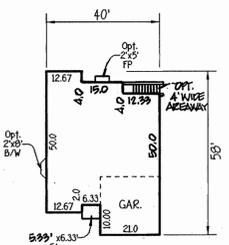
TAX MAP NO: 47 PARCEL NO: 1053 GRID NO: 8  
SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
SCALE: 1" = 30' DATE: JUNE, 2003  
SHEET 2 OF 4

**SDP 03-159**

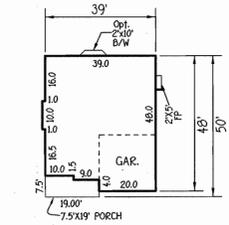
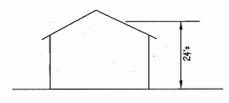


VICINITY MAP  
SCALE: 1" = 2000'

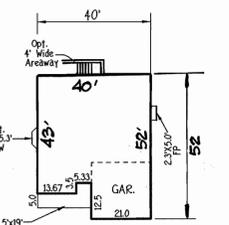
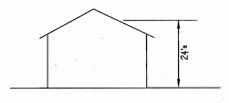
**BENCH MARKS**  
 T.P. 47E4 ELEV. 339.00  
 N. 535846.148 E. 1355431.224  
 LOC. NEAR I-95 BRIDGE  
 ALONG GORMAN ROAD  
 T.P. 47G2 ELEV. 363.53  
 N. 532938.964 E. 1352224.095  
 LOC. NEAR MD. RTE 216 WEST  
 NEAR EXIT RAMP TO I-95



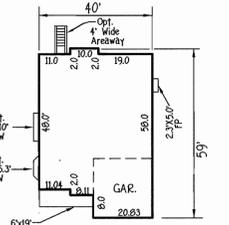
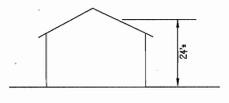
**ALLAN HOMES  
FRESNO**  
 2063.64 SF = 5199.10 SF  
 0.4 Min. Lot Size  
 w/all Options



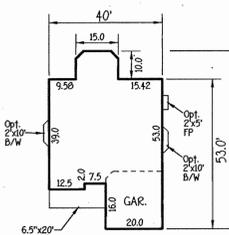
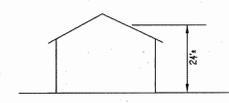
**DOUGLAS HOMES  
HOUSE A**  
 1946.00 SF = 4865.00 SF  
 0.4 Min. Lot Size  
 w/all Options



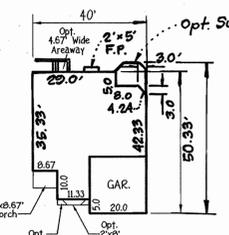
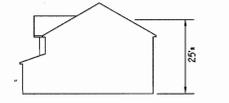
**GOODIER BUILDERS  
POPLAR POINT II**  
 1987 4968 SF  
 0.4 Min. Lot Size  
 w/all Options



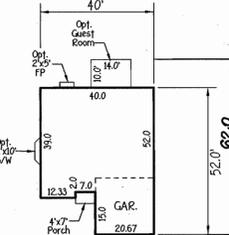
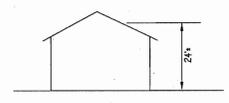
**COLUMBIA BUILDERS  
TT**  
 2164.65 SF = 5411.62 SF  
 0.4 Min. Lot Size  
 w/all Options



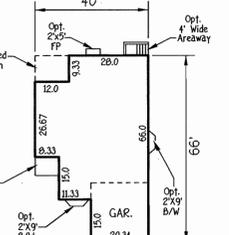
**NU-HOMES  
CRISFIELD**  
 2166 SF = 5415.93 SF  
 0.4 Min. Lot Size  
 w/all Options



**PATRIOT HOMES  
G III**  
 1904 SF = 4760 SF  
 0.4 Min. Lot Size  
 w/all Options



**RYLAND HOMES  
HAMPTON**  
 1982.17 SF = 4955.4 SF  
 0.4 Min. Lot Size  
 w/all Options



**WILLIAMSBURG BUILDERS  
MAYFIELD**  
 2247.02 SF = 5617.55 SF  
 0.4 Min. Lot Size  
 w/all Options

**GENERAL NOTES**

- SUBJECT PROPERTY ZONED PEC-MXD-3 AS GRANTED BY THE ZONING BOARD ON 9/3/98 AS CASE NO. ZB979M.
- TOTAL AREA OF SITE: 1.2825 ACRES
- TOTAL NUMBER OF LOTS SUBMITTED: 8 SD
- THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410)313-1880 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: ZB-979M, WP 99-96, 5 99-12, PB-339, P-02-15, F-03-13, W85 CONT. \*24-4043-D.
- THIS PLAN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT JUNE, 1999 BY DAFT MCCLINE WALKER, INC.
- HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS.  
HOWARD COUNTY MONUMENT 47E4 N 535846.148 E 1355431.224  
HOWARD COUNTY MONUMENT 47G2 N 532938.964 E 1352224.095
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THIS PLAN IS FOR HOUSE SITING AND GRADING ONLY. IMPROVEMENTS SHOWN WITHIN THE RIGHTS-OF-WAY OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION.  
FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-03-13.  
AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-4043-D.
- CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
- STORMWATER MANAGEMENT WILL BE PROVIDED AS APPROVED ON THE ROAD CONSTRUCTION DRAWINGS FILED UNDER F-03-13.
- 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 \$10,800.00 FOR 39 INTERIOR LANDSCAPING TREES.
- 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.
- FOREST CONSERVATION REQUIREMENTS HAVE BEEN ADDRESSED WITH F-03-13.
- FOR DRIVEWAY ENTRANCE DETAILS REFER TO HO. CODES MANUAL VOL. IV DETAILS R.6.03 & R.6.05.
- OPEN SPACE REQUIREMENTS FOR THESE LOTS HAVE BEEN PROVIDED UNDER F-03-13.
- 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.
- 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.
- 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 SIMILAR MINOR STRUCTURE.
- 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.
- IN ACCORDANCE WITH SECTION 12B 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.
- 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' (4' 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 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 1-6,24 & 25
SHEET 3	SEDIMENT/EROSION CONTROL PLAN LOTS 1-6,24 & 25
SHEET 4	SEDIMENT/EROSION CONTROL PLAN, LOTS 1-6,24 & 25

**ADDRESS CHART**

LOT NUMBER	STREET ADDRESS
1	8501 EASTERN MORNING RUN
2	8505 EASTERN MORNING RUN
3	8509 EASTERN MORNING RUN
4	8513 EASTERN MORNING RUN
5	10101 SUMMER GLOW WALK
6	10105 SUMMER GLOW WALK
24	10104 SUMMER GLOW WALK
25	10100 SUMMER GLOW WALK

**LEGEND**

SYMBOL	DESCRIPTION
-----	EXISTING CONTOUR 2' INTERVAL
+362.2	SPOT ELEVATION
WALK	PROPOSED WALKOUT
-SF-SF-	SILT FENCE
-SSF-SSF-	SUPER SILT FENCE
ECM	EROSION CONTROL MATTING
LOD	LIMIT OF DISTURBANCE
○	EXISTING STREET TREE TAKEN FROM F-03-13



**ENGINEER'S CERTIFICATE**  
 "I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District."  
 Signature of Engineer: *Earl D. Collins* Date: 8/1/03  
**BUILDER/DEVELOPER'S CERTIFICATE**  
 "I/We certify that all development and construction will be done according to this plan, for sediment and erosion control and that any responsible personnel involved in the construction project will have a Certificate of Attendance at a Department of the Environment Approved Training Program for the Control of Sediment and Erosion before beginning the project. I also authorize periodic on-site inspection by the Howard Soil Conservation District."  
 Signature of Developer: *Dennis Miller* Date: 8/5/03

Reviewed for HOWARD SCD and meets Technical Requirements.  
 Signature: *Jim Meyers* Date: 8/13/03  
 License: Natural Resources Conservation Service  
 Signature: *John K. Robertson* Date: 8/13/03  
 License: Howard SCD  
**OWNER/DEVELOPER**  
 THE HOWARD RESEARCH & DEVELOPMENT CORP.  
 10275 LITTLE PATUXENT PARKWAY  
 COLUMBIA, MARYLAND 21044  
 410-992-6000

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 Signature: *Wendy Hamata* Date: 8/21/03  
 License: Chief, Planning and Development  
 Signature: *Chris Dammann* Date: 8/19/03  
 License: Chief, Development Engineering Division MK  
 Signature: *Mark A. Weller* Date: 8/19/03  
 License: Director - Department of Planning and Zoning BL  
 PROJECT: EMERSON SECTION: SECTION 2 PHASE 4 LOTS NO. 1-6, 24 & 25  
 PLAT: 16077 BLOCK NO. 8 ZONE: PEC-MXD-3 TAX/ZONE: 47 ELEC. DIST.: SIXTH CENSUS TR.: 6068.02  
 WATER CODE: E-15 SEWER CODE: 7640000

**TITLE SHEET**  
 SINGLE FAMILY DETACHED  
**EMERSON**  
 SECTION 2 PHASE 4  
 LOTS 1-6,24 & 25  
 TAX MAP No: 47 PARCEL NO: 3, 462 & 837 GRID 8  
 SIXTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 SCALE: 1" = 30' DATE: JUNE, 2003  
 SHEET 1 OF 4

SDP 03-159

J:\65001 Emerson Property\Map\Phase4\SDP\Title Sheet.dwg, 8/12/03 1:22:22 PM