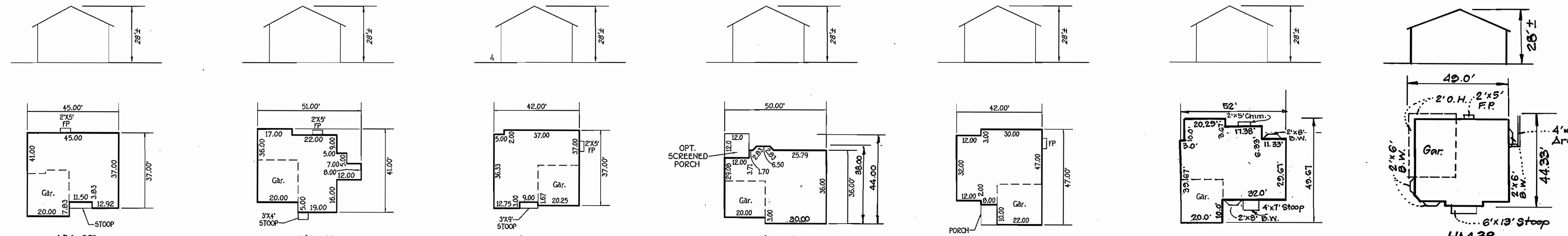
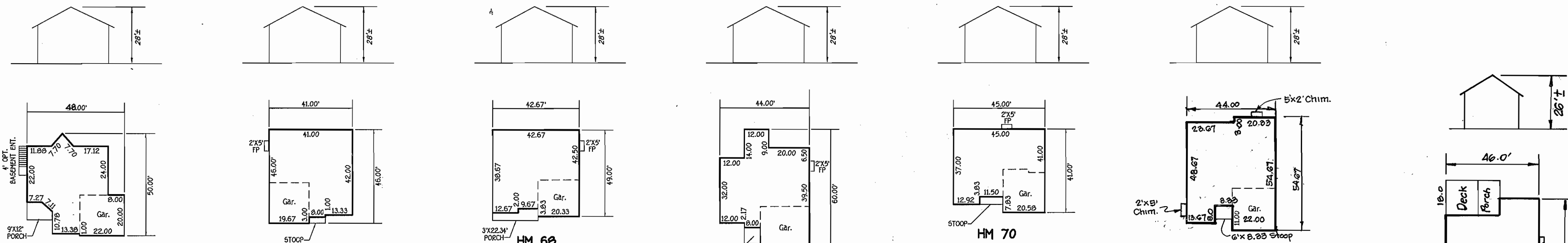


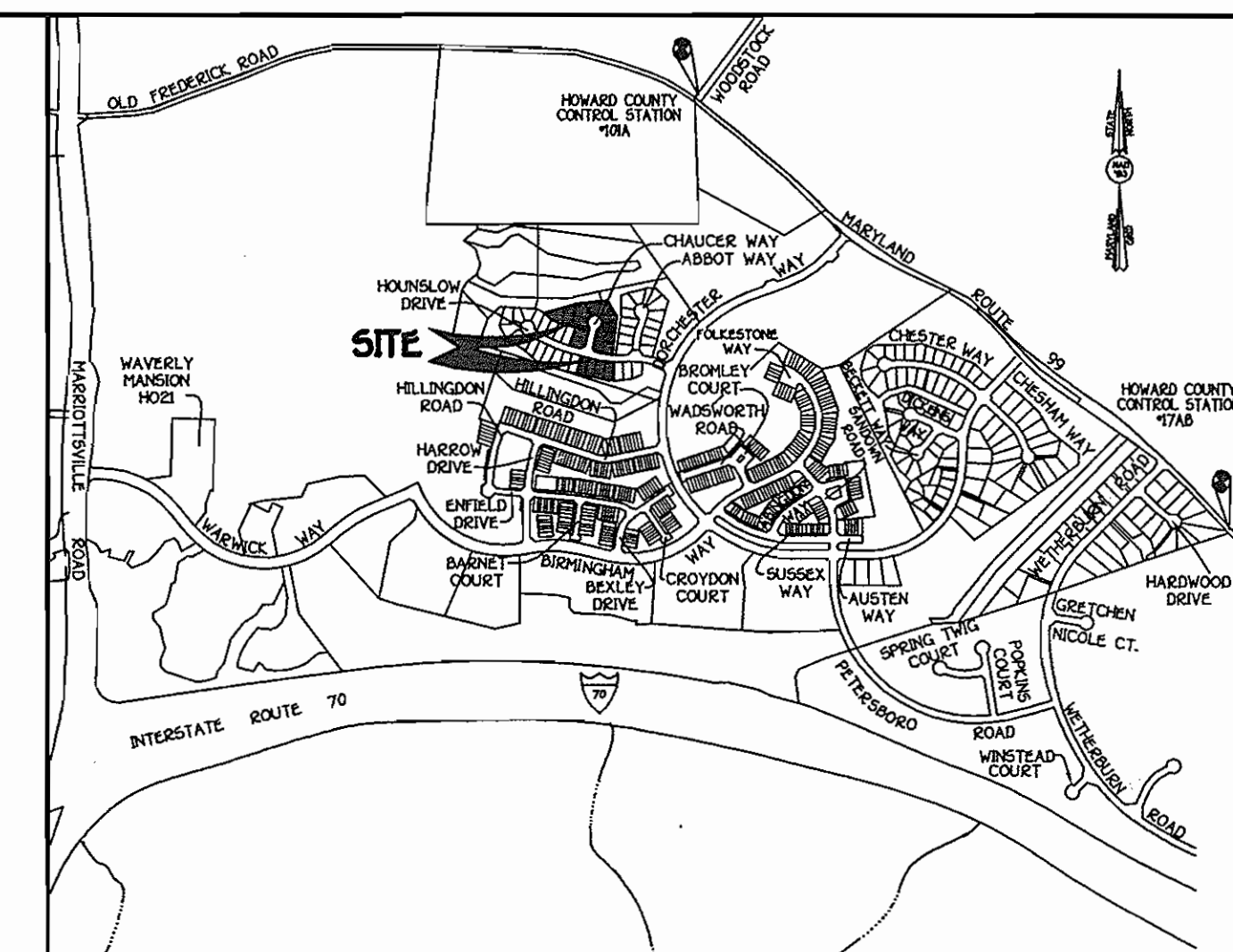
ASHFORD BARRINGTON COLLINS HAMILTON HASTINGS VICTORIA B YINGLING B



HM 37 HM 41 HM 42 (REV.) HM 43 HM 44 HM 46 HM 38



HM 47 HM 49 HM 68 HM 69 HM 70 HM 71 HM 39



VICINITY MAP SCALE: 1" = 200'

BENCH MARKS

HO. CO. *101A	N600995.111	E1345340.404
		ELEV. +442.703
HO. CO. *17AB	N594335.250	E 1348615.250
		ELEV. +509.190

- GENERAL NOTES**
- SUBJECT PROPERTY ZONED R5C PER 10/18/93 COMPREHENSIVE PLAN.
 - TOTAL AREA OF SITE: 3.39 ACRES
 - TOTAL NUMBER OF LOTS SUBMITTED: 10
 - THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION INSPECTION DIVISION AT (410)313-1800 AT LEAST (5) FIVE WORKING DAYS PRIOR TO THE START OF WORK.
 - THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
 - THIS PROJECT IS SUBJECT TO HOWARD COUNTY FILES: P-00-18, 5-94-07, F-01-93 WAS CONT. #24-3943-D.
 - THIS PLAN IS BASED ON A BOUNDARY SURVEY PERFORMED BY FISHER, COLLINS & CARTER, INC. ON OR ABOUT AUGUST, 1990.
 - HORIZONTAL AND VERTICAL CONTROL DATUM IS BASED ON NAD 83, MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS. HOWARD COUNTY MONUMENT 101A N 600995.111 E 1345340.404 HOWARD COUNTY MONUMENT 17AB N 594335.250 E 1348615.250
 - 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 RIGHT-OF-WAYS OF THIS S.D.P. ARE NOT USED FOR CONSTRUCTION. FOR CONSTRUCTION SEE APPROVED ROAD CONSTRUCTION PLANS F-01-93 AND/OR APPROVED WATER AND SEWER PLANS CONTRACT NO. 24-3943-D.
 - CONTRACTOR WILL CHECK SEWER HOUSE CONNECTION ELEVATION AT EASEMENT LINE PRIOR TO CONSTRUCTION.
 - THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISION OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING HAS BEEN POSTED AS PART OF THE GRADING PERMIT IN THE AMOUNT OF \$1,950.00 FOR 3 SHADE TREES AND 3 EVERGREEN TREES.
 - STORMWATER QUANTITY AND QUALITY FOR THIS SUBDIVISION IS PROVIDED IN THE EXISTING POND CONSTRUCTED AT THE NORTHWEST CORNER OF THE INTERSECTION OF DORCHESTER WAY AND MD. RTE. 99 IN OPEN SPACE 21, 4/2, GTW WAVERLY WOODS F-95-174.
 - THE FOREST CONSERVATION EASEMENT HAS BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.2000 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
 - PERIMETER LANDSCAPING FOR LOTS 37-49 & 67-71 IS PROVIDED IN ACCORDANCE WITH A CERTIFIED LANDSCAPE PLAN ON FILE WITH THE APPROVED ROAD CONSTRUCTION DRAWINGS F-01-93 IN ACCORDANCE WITH THIS PLAN IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
 - HOWARD COUNTY STANDARD DRIVEWAY DETAIL R-6.03 & R-6.05
 - PROPOSED USE FOR SITE DEVELOPMENT PLAN: SINGLE FAMILY DETACHED DWELLING UNITS.
 - USE-IN-COMMON DRIVEWAY(S) SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
 - A) WIDTH - 12 FEET (14 FEET SERVING MORE THAN ONE RESIDENCE)
 - B) SURFACE - SIX (6") INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING, (1-1/2" MINIMUM)
 - C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND 45-FOOT TURNING RADIUS;
 - D) STRUCTURES (CULVERTS/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (425-LOADING);
 - E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER SURFACE;
 - F) STRUCTURE CLEARANCES - MINIMUM 12 FEET;
 - G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
 - IN ACCORDANCE WITH SECTION 12B. A. 1 (a),(b),(c) & (d) OF THE HO.CO. ZONING REGULATIONS, BAYWINDOWS, CHIMNEY OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FT. IN WIDTH MAY PROJECT NOT MORE THAN 4 FT. INTO ANY SETBACK, PORCHES OR DECKS OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FT. INTO THE FRONT OR REAR YARD SETBACKS

ADDRESS CHART

LOT NUMBER	STREET ADDRESS
37	10528 HOUNSLOW DRIVE
38	2100 CHAUCER WAY
39	2104 CHAUCER WAY
40	2109 CHAUCER WAY
41	2112 CHAUCER WAY
42	2116 CHAUCER WAY
43	2125 CHAUCER WAY
44	2121 CHAUCER WAY
45	2117 CHAUCER WAY
46	2113 CHAUCER WAY
47	2109 CHAUCER WAY
48	2105 CHAUCER WAY
49	10544 HOUNSLOW DRIVE
67	10535 HOUNSLOW DRIVE
68	10531 HOUNSLOW DRIVE
69	10527 HOUNSLOW DRIVE
70	10523 HOUNSLOW DRIVE
71	10519 HOUNSLOW DRIVE

LEGEND

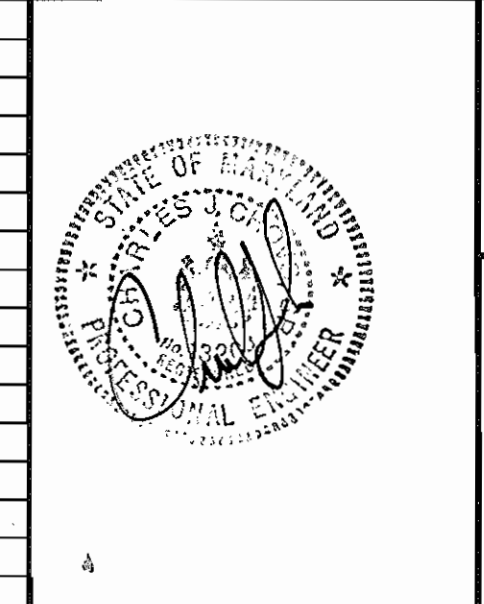
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
+362.2	SPOT ELEVATION
SF-SF	SILT FENCE
SS-SF	SUPER SILT FENCE
WALK	PROPOSED WALKOUT
●●●	EROSION CONTROL MATTING
---	EXISTING TREE LINE
L.O.D.	LIMIT OF DISTURBANCE
---	EXISTING STREET/PERIMETER TREE TAKEN FROM F-01-93

INDEX CHART

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

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10275 BALTIMORE NATIONAL FREE
ELLCOTT CITY, MARYLAND 21042
410-480-0367

DATE	DESCRIPTION
3-11-03	Add hse. typicals for lots 38 & 39
5-23-02	Add HM 40 House Typical
5-15-02	Add HM 39 Model
4-25-02	Rev. Model HM 46
4-12-02	Rev Model HM 71



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

Signature of Engineer: CHARLES J. CROVO, SR. Date: 1/16/02

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

Signature of Developer: STEVE FORNEY Date: 1-04-02

Reviewed for HOWARD SCD and meets Technical Requirements.
Date: 3/18/02
John Meyer, Director, Natural Resources Conservation Service

This development plan is approved and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
Date: 3/18/02
John K. Roberts, Director, Howard SCD

OWNER
WAVERLY WOODS DEVELOPMENT CORPORATION
C/O LAND DESIGN AND DEVELOPMENT, LLC
8000 MAIN STREET
ELLCOTT CITY, MARYLAND 21042
410-480-0367

BUILDER/DEVELOPER
HAMILTON REED
C/O LAND DESIGN AND DEVELOPMENT, LLC
8000 MAIN STREET
ELLCOTT CITY, MARYLAND 21042
410-480-0367

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Date: 3/22/02
Chief, Division of Land Development

Date: 3/20/02
Chief, Development Engineering Division

Date: 3/22/02
Director - Department of Planning and Zoning

PROJECT: GTW'S WAVERLY WOODS SECTION: 11/4 LOTS NO.: 37-49 & 67-71

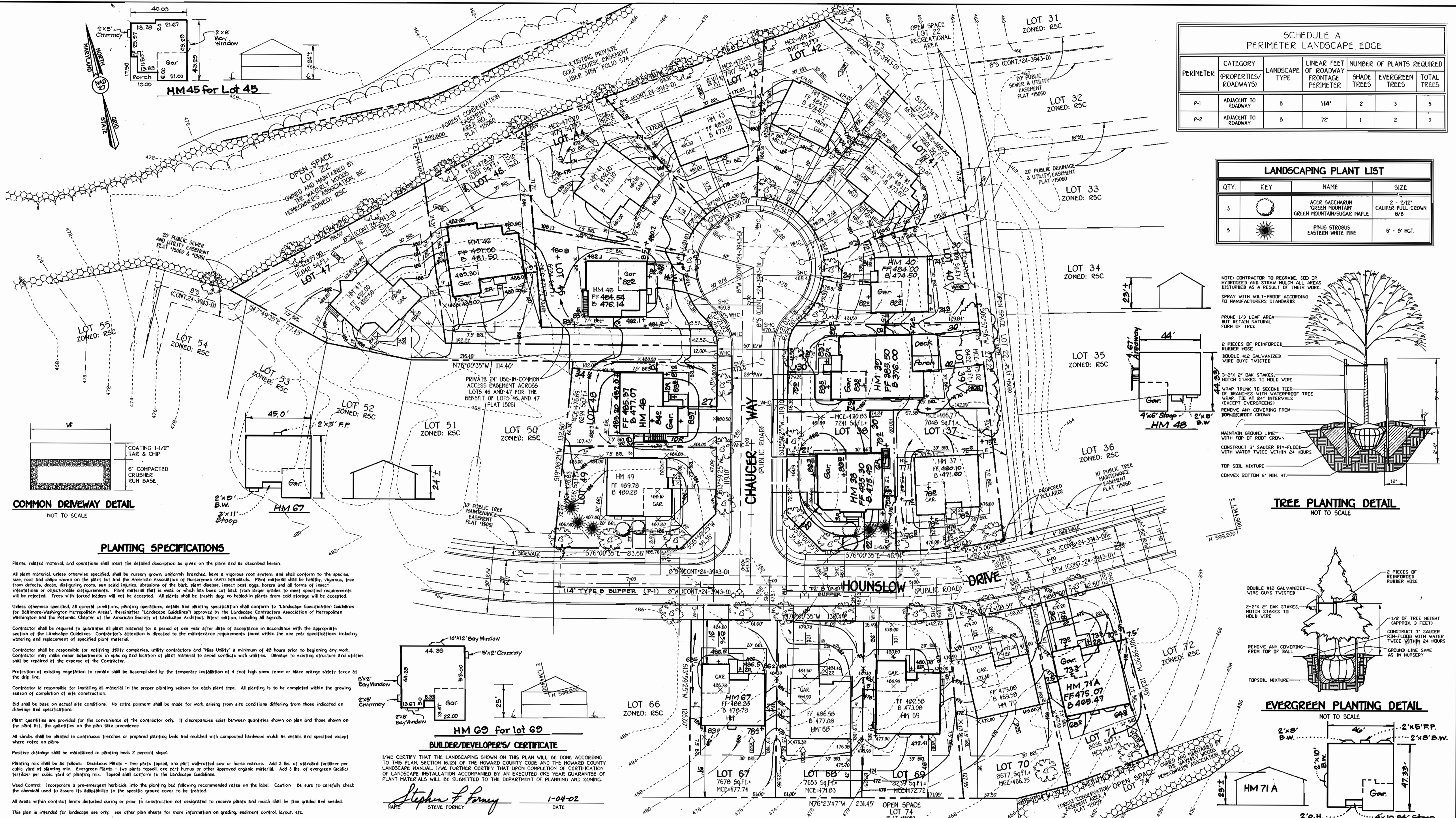
PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
15059, 15060 & 15061	5	R5C	16	THIRD	6030

WATER CODE: H-05 SEWER CODE: 5992500

SITE DEVELOPMENT PLAN

GTW'S WAVERLY WOODS
SECTION 11 AREA 4
LOTS 37-49 & 67-71

TAX MAP No: 16 PART OF PARCEL: 20
THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JANUARY, 2002
SHEET 1 OF 4

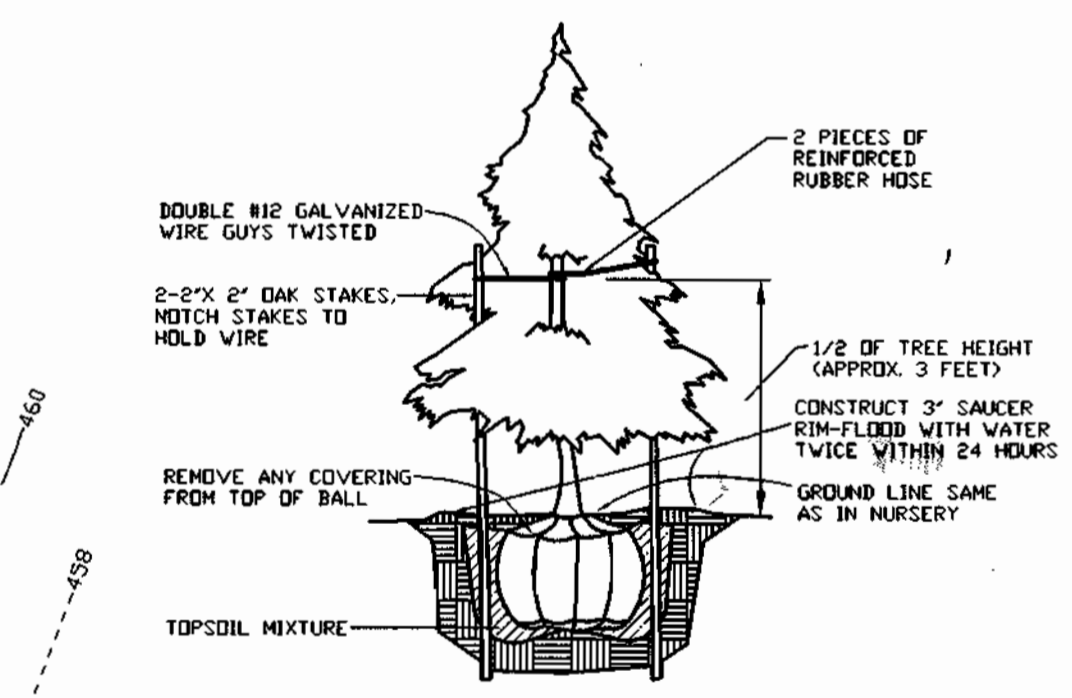
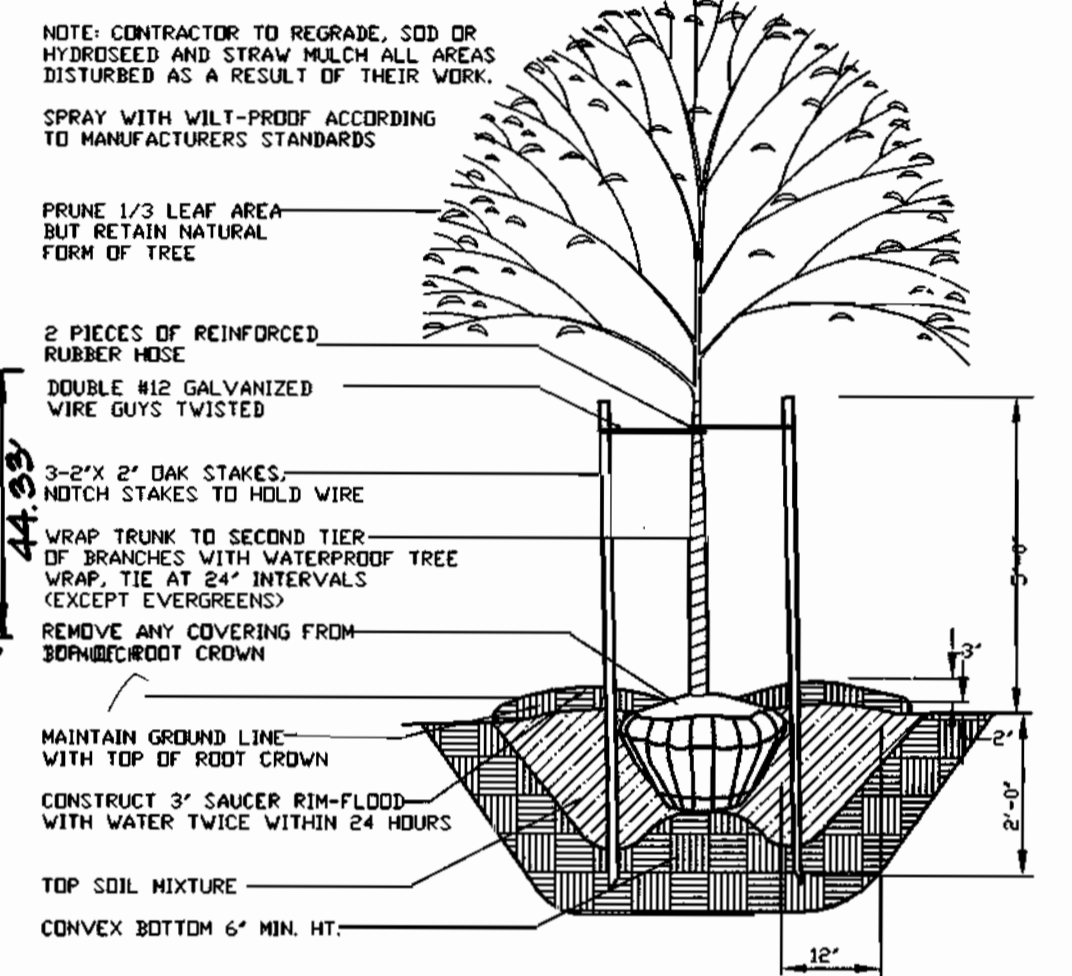


**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER OF PLANTS REQUIRED		
				SHADE TREES	EVERGREEN TREES	TOTAL TREES
P-1	ADJACENT TO ROADWAY	B	114'	2	3	5
P-2	ADJACENT TO ROADWAY	B	72'	1	2	3

LANDSCAPING PLANT LIST

QTY.	KEY	NAME	SIZE
3		ACER SACCHARUM GREEN MOUNTAIN/SUGAR MAPLE	2" - 2 1/2" CALIPER FULL CROWN B/B
5		PINUS STROBUS EASTERN WHITE PINE	6' - 8' HGT.



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, 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, 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 addenda.

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

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

Protection of existing vegetation to remain shall be accomplished by the temporary installation of 4 foot high snow fence or blue 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.

Contractor 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 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 suitability 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 fire graded and seeded. This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.

BUILDER/DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THIS PLAN, SECTION 16124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Stephen F. Forney
NAME: STEVE FORNEY DATE: 1-04-02

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.

Charles J. Crovo, Sr.
Signature of Engineer CHARLES J. CROVO, SR. DATE: 1/4/02

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Stephen F. Forney
Signature of Developer STEVE FORNEY DATE: 1-04-02

Reviewed for HOWARD SCD and meets Technical Requirements.

John Meyer 3/15/02
Signature of Natural Resources Conservation Service DATE

John R. Robertson 3/15/02
Signature of Howard Soil Conservation District DATE

OWNER

WAVELY WOODS DEVELOPMENT CORPORATION
C/O LAND DESIGN AND DEVELOPMENT, LLC
8000 MAIN STREET
ELLICOTT CITY, MARYLAND 21042
410-480-0387

BUILDER/DEVELOPER

HAMILTON REED
C/O LAND DESIGN AND DEVELOPMENT, LLC
8000 MAIN STREET
ELLICOTT CITY, MARYLAND 21042
410-480-0387

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Cindy Harms 3/22/02
Chief, Division of Land Development DATE

John J. Smith 3/22/02
Chief, Development Engineering Division DATE

John J. Smith 3/22/02
Director, Department of Planning and Zoning DATE

PROJECT: GTW'S WAVELY WOODS SECTION: 11/4 LOTS NO.: 37-49 & 67-71

PLAT: 15059, 15060 & 15061 BLOCK NO.: 5 ZONE: RSC TAX/ZONE: 16 ELEC. DIST.: THIRD CENSUS TR.: 6030

WATER CODE: H-05 SEWER CODE: 5992500

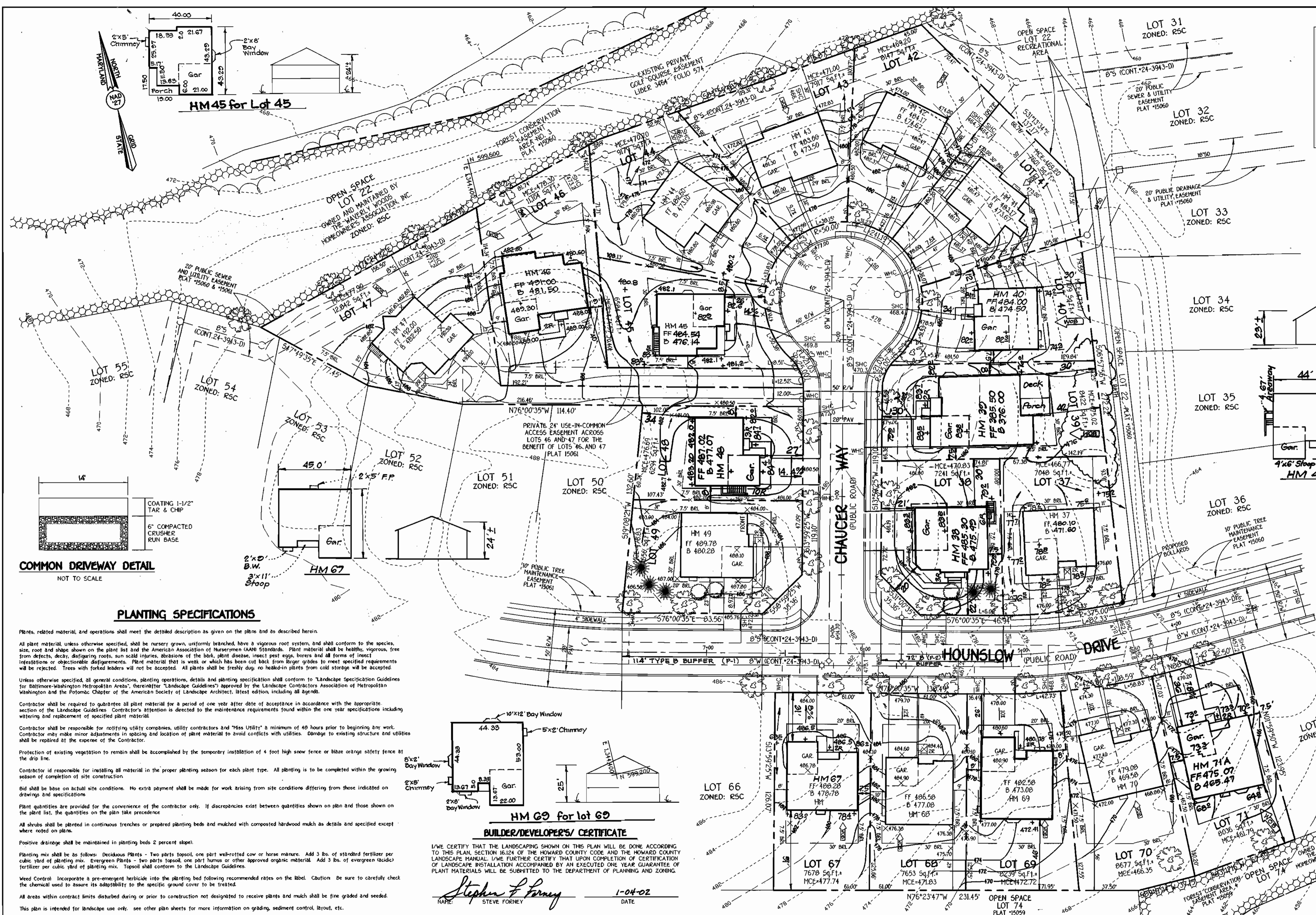
SITE DEVELOPMENT PLAN

GTW'S WAVELY WOODS
SECTION 11 AREA 4
LOTS 37-49 & 67-71

TAX MAP NO: 16 PART OF PARCEL: 20
THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JANUARY, 2002

SHEET 2 OF 4

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10732 BALTIMORE NATIONAL FREE
ELLICOTT CITY, MARYLAND 21042
410-481-2800

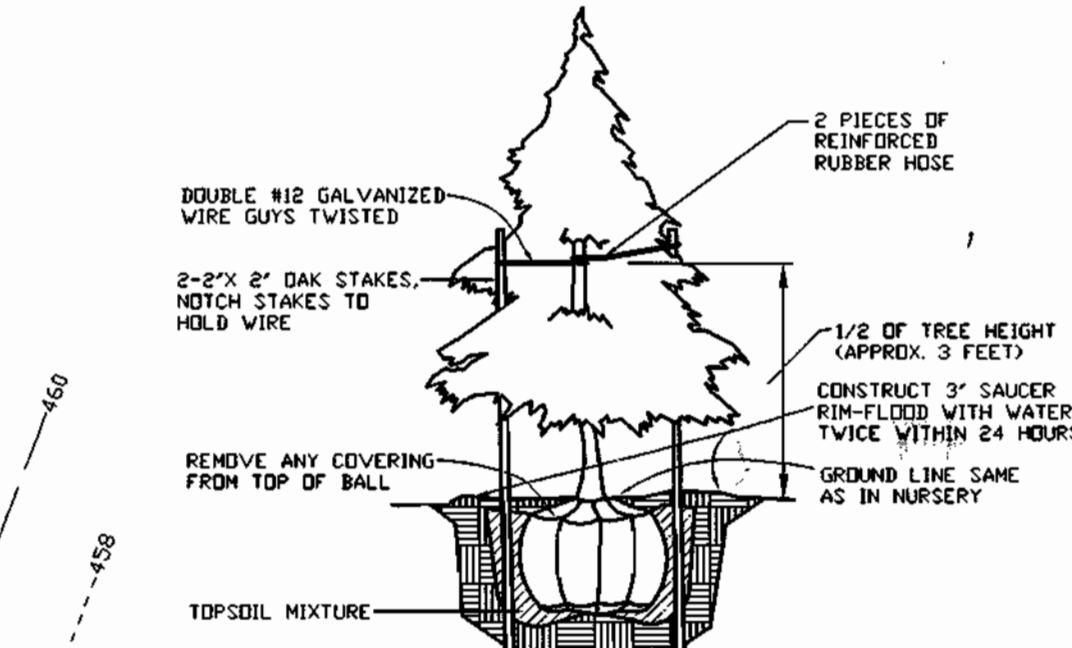
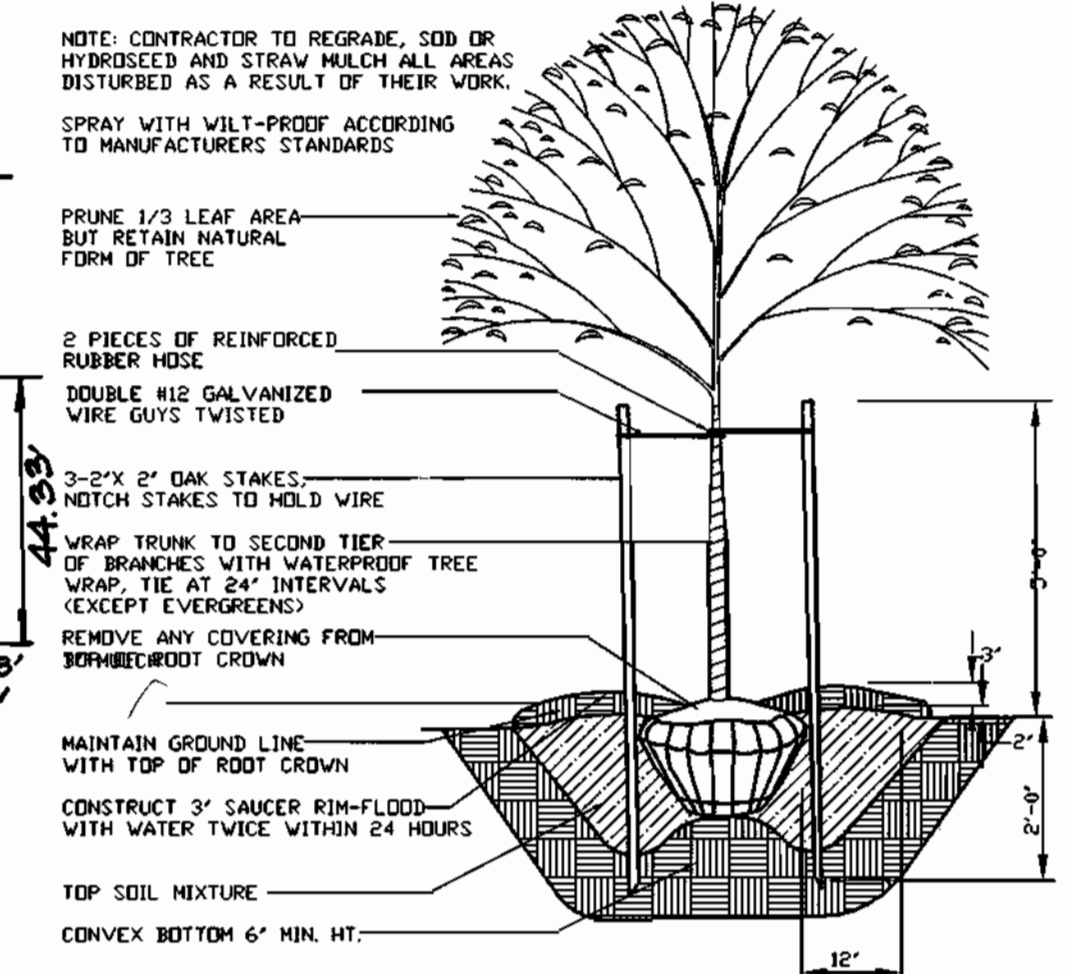


**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER OF PLANTS REQUIRED SHADE TREES	NUMBER OF PLANTS REQUIRED EVERGREEN TREES	TOTAL TREES
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LANDSCAPING PLANT LIST

QTY.	KEY	NAME	SIZE
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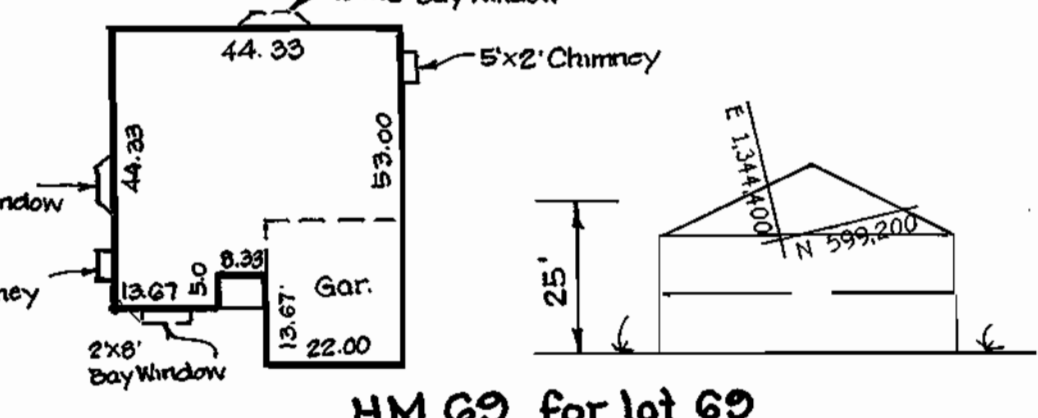
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Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its applicability to the specific ground cover to be treated.

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Stephen F. Loney 1-04-02
STEVE FORNEY DATE

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Charles J. Grovo, Sr. 1/4/02
Signature of Engineer CHARLES J. GROVO, SR. DATE

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Stephen F. Loney 1-04-02
Signature of Developer STEVE FORNEY DATE

Reviewed for HOWARD SCD and meets Technical Requirements.

Jim Meyer 3/18/02
USDA-Natural Resource Conservation Service
John R. Robertson 3/18/02
HOWARD SCD

OWNER
WAVERLY WOODS DEVELOPMENT CORPORATION
C/O LAND DESIGN AND DEVELOPMENT, LLC
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APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Charles J. Grovo, Sr. 3/22/02
Chief, Division of Land Development
John R. Robertson 3/22/02
Chief, Department Engineering Division
John R. Robertson 3/22/02
Director, Department of Planning and Zoning

PROJECT: GTW'S WAVERLY WOODS SECTION: 11/4 LOTS NO.: 37-49 & 67-71

PLAT: 15099, 15060 & 15061 BLOCK NO.: 5 ZONE: RSC TAX/ZONE: 16 ELEC. DIST.: 6030

WATER CODE: H-05 SEWER CODE: 5992500

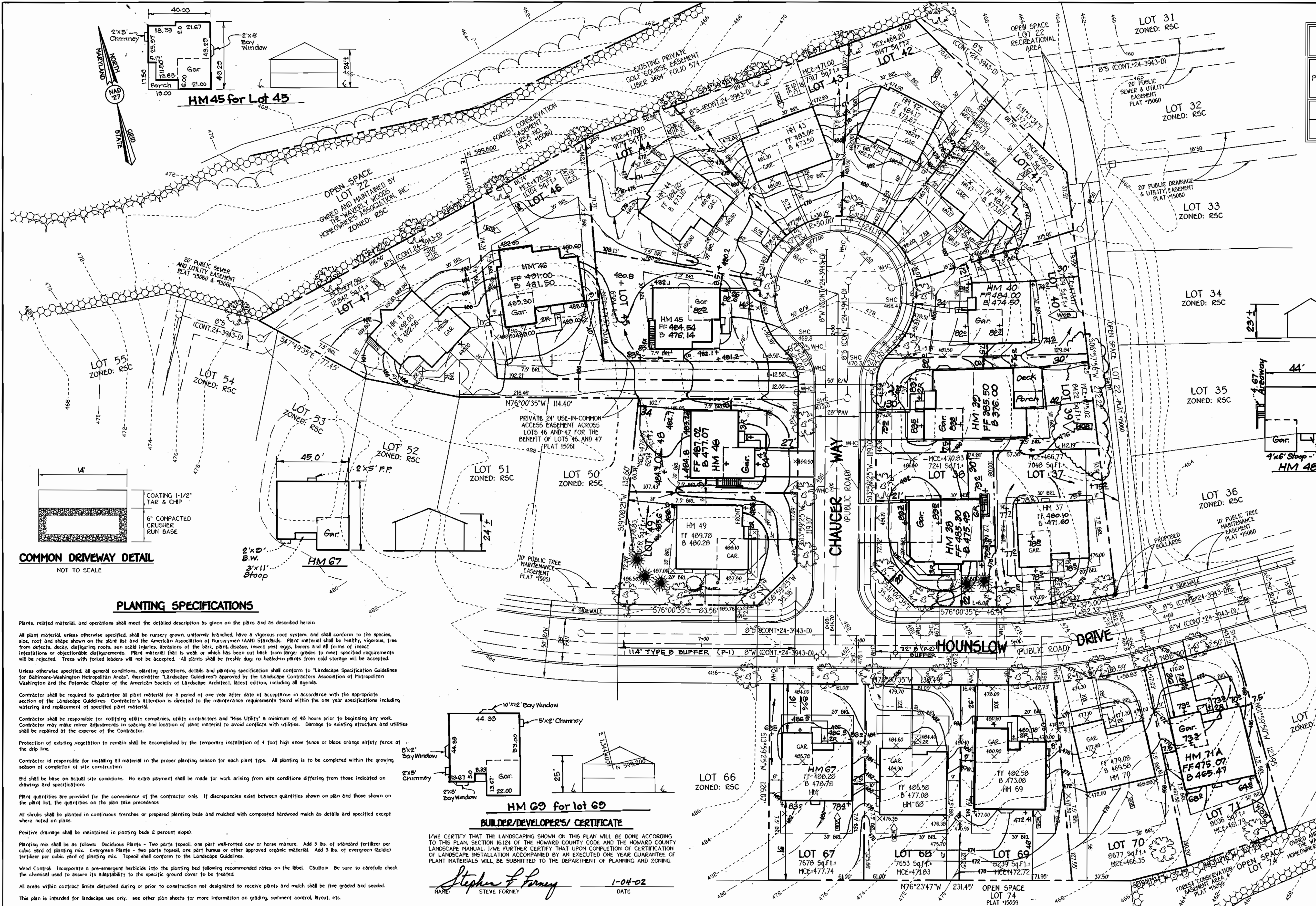
SITE DEVELOPMENT PLAN

GTW'S WAVERLY WOODS
SECTION 11 AREA 4
LOTS 37-49 & 67-71

TAX MAP No: 16 PART OF PARCEL: 20
THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JANUARY, 2002
SHEET 2 OF 4

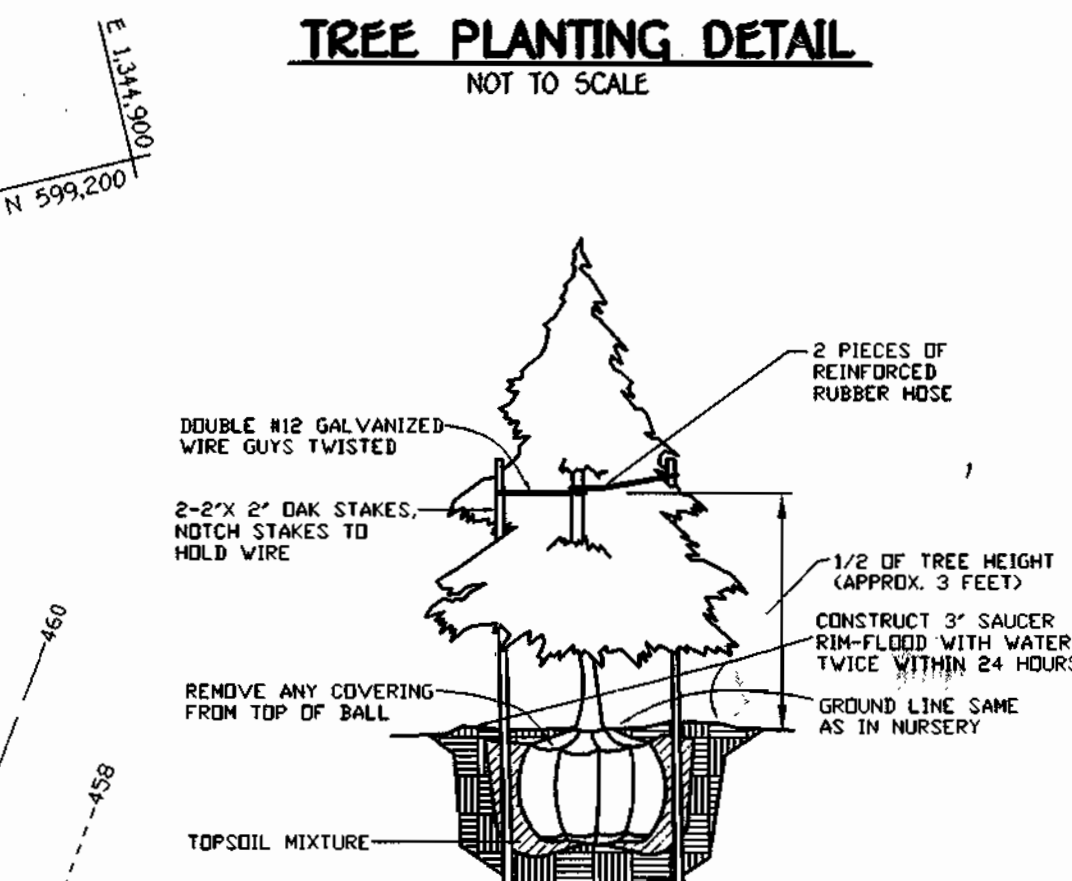
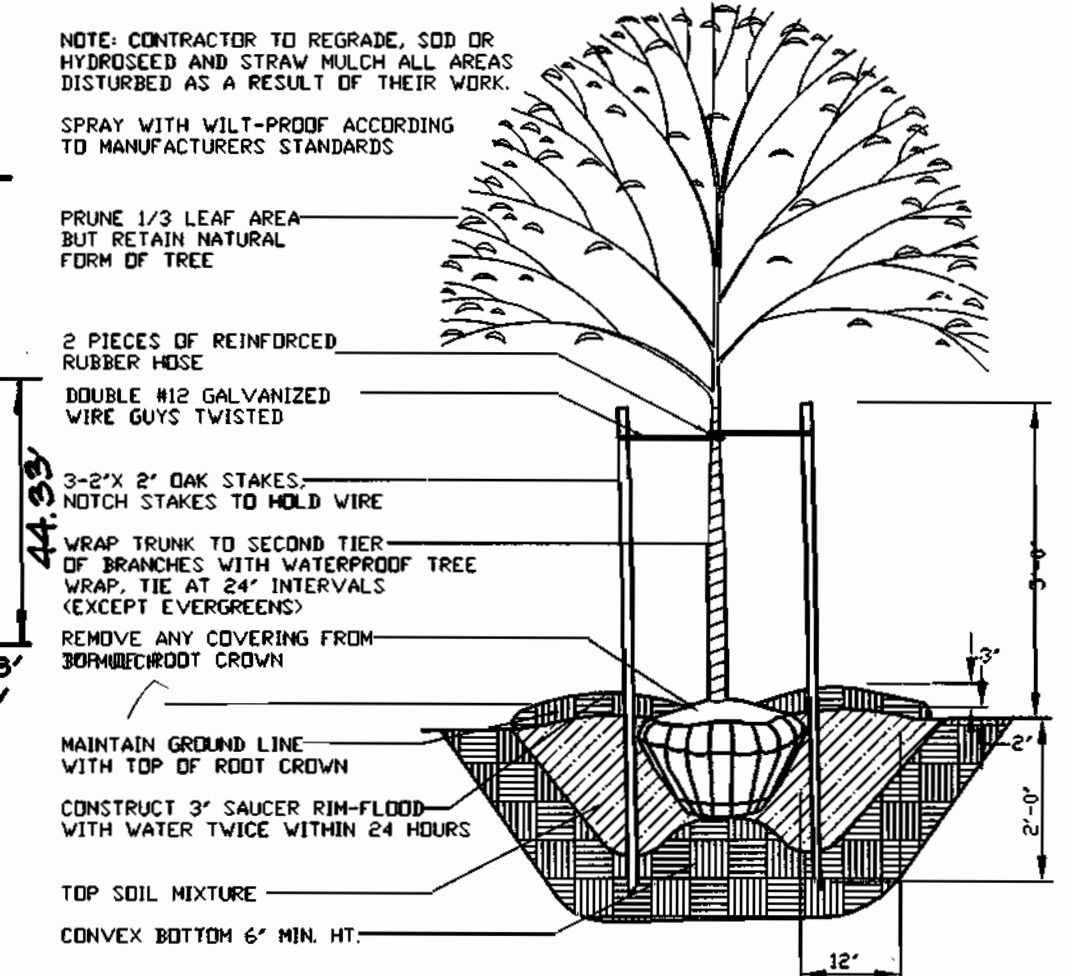
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
410-461-5995





SCHEDULE A PERIMETER LANDSCAPE EDGE						
PERIMETER	CATEGORY (PROPERTIES/ ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER OF PLANTS REQUIRED SHADE TREES	NUMBER OF PLANTS REQUIRED EVERGREEN TREES	TOTAL TREES
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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, diseases 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 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 Architect, latest edition, including all agenda.

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

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

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 fertilizer per cubic yard of planting mix. Topsoil shall conform to the Landscape Guidelines.

Misc 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.

BUILDER/DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THIS PLAN, SECTION 16.24 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF CERTIFICATION OF LANDSCAPE INSTALLATION ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Signature: *Stephen F. Forney* DATE: 1-04-02

ENGINEER'S CERTIFICATE

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

Signature of Engineer: CHARLES J. CROVO, SR. DATE: 1/4/02

BUILDER/DEVELOPER'S CERTIFICATE

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

Signature of Developer: *Stephen F. Forney* DATE: 1-04-02

Reviewed for HOWARD SCD and meets Technical Requirements.

Signature: *John R. Kobontow* DATE: 3/18/02

OWNER
WAVERLY WOODS DEVELOPMENT CORPORATION
C/O LAND DESIGN AND DEVELOPMENT, LLC
8000 HAIN STREET
ELLCOTT CITY, MARYLAND 21042
410-480-0387

BUILDER/DEVELOPER
HAMILTON REED
C/O LAND DESIGN AND DEVELOPMENT, LLC
8000 HAIN STREET
ELLCOTT CITY, MARYLAND 21042
410-480-0387

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature: *Chris Gorman* DATE: 3/22/02

Signature: *John R. Kobontow* DATE: 3/22/02

Signature: *John R. Kobontow* DATE: 3/22/02

PROJECT: GTW'S WAVERLY WOODS SECTION: 11/4 LOTS: 37-49 & 67-71

PLAT: 15069, 15060 & 15061 BLOCK NO. 5 ZONE RSC TAX/ZONE ELEC. DIST. THIRDO CENSUS TR. 6030

WATER CODE H-05 SEWER CODE 5992500

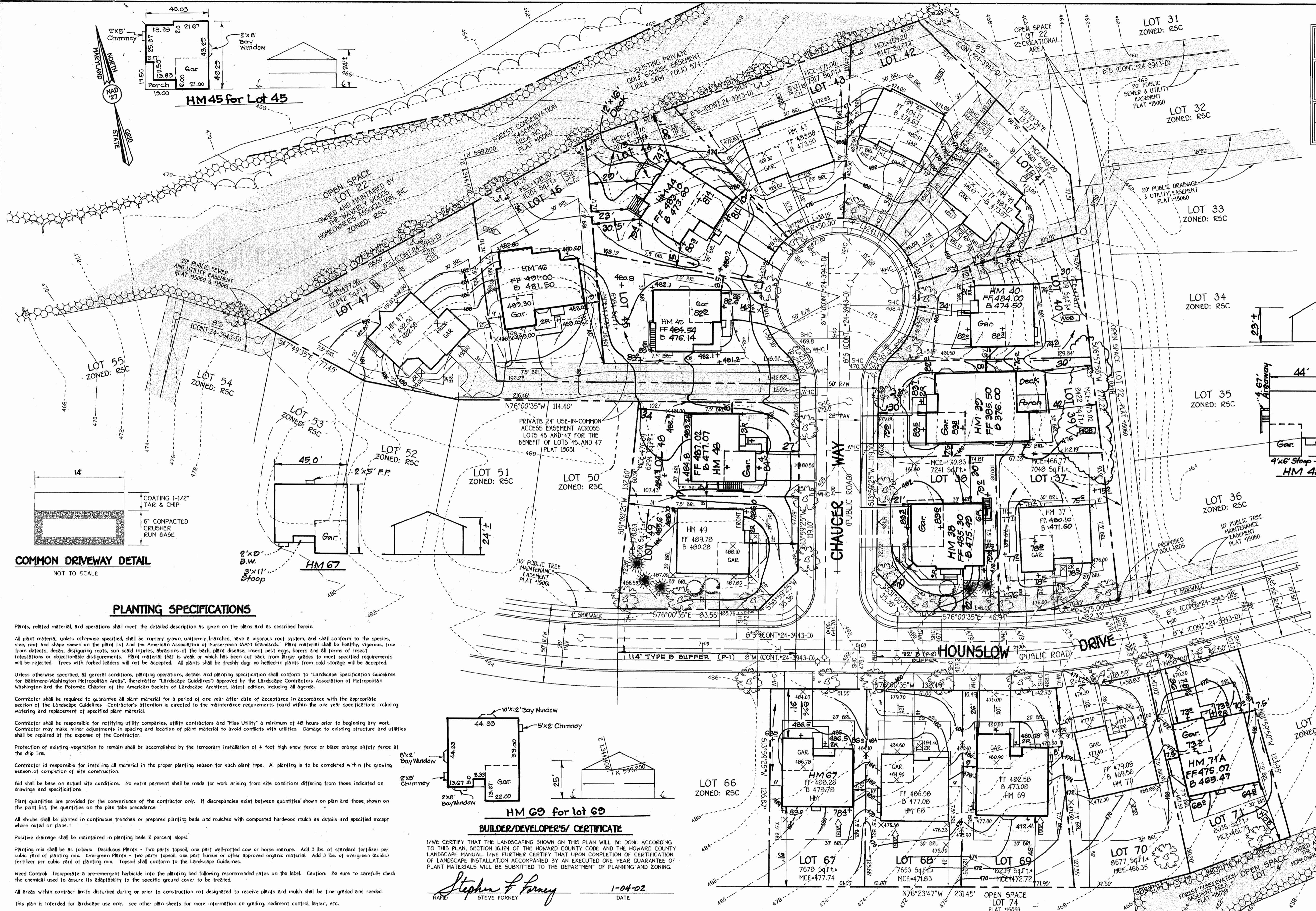
SITE DEVELOPMENT PLAN

GTW'S WAVERLY WOODS
SECTION 11 AREA 4
LOTS 37-49 & 67-71

TAX MAP No: 16 PART OF PARCEL: 20
THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JANUARY, 2002
SHEET 2 OF 4

FISHER, COLLINS & CARTER, INC.
ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10722 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
410-481-2855



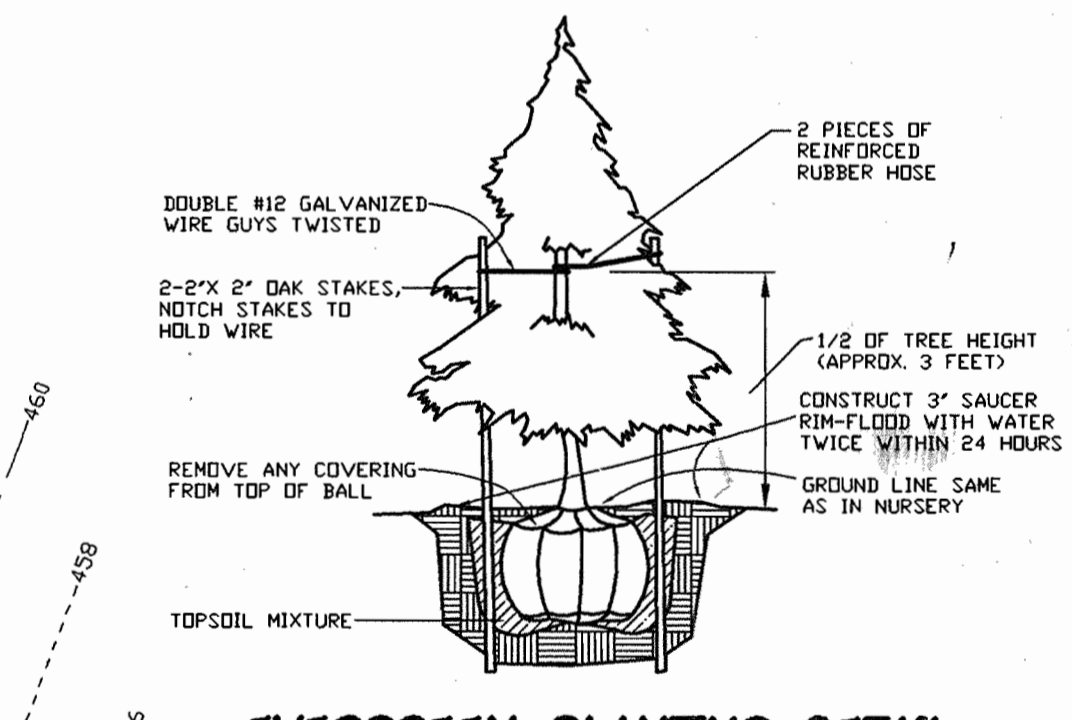
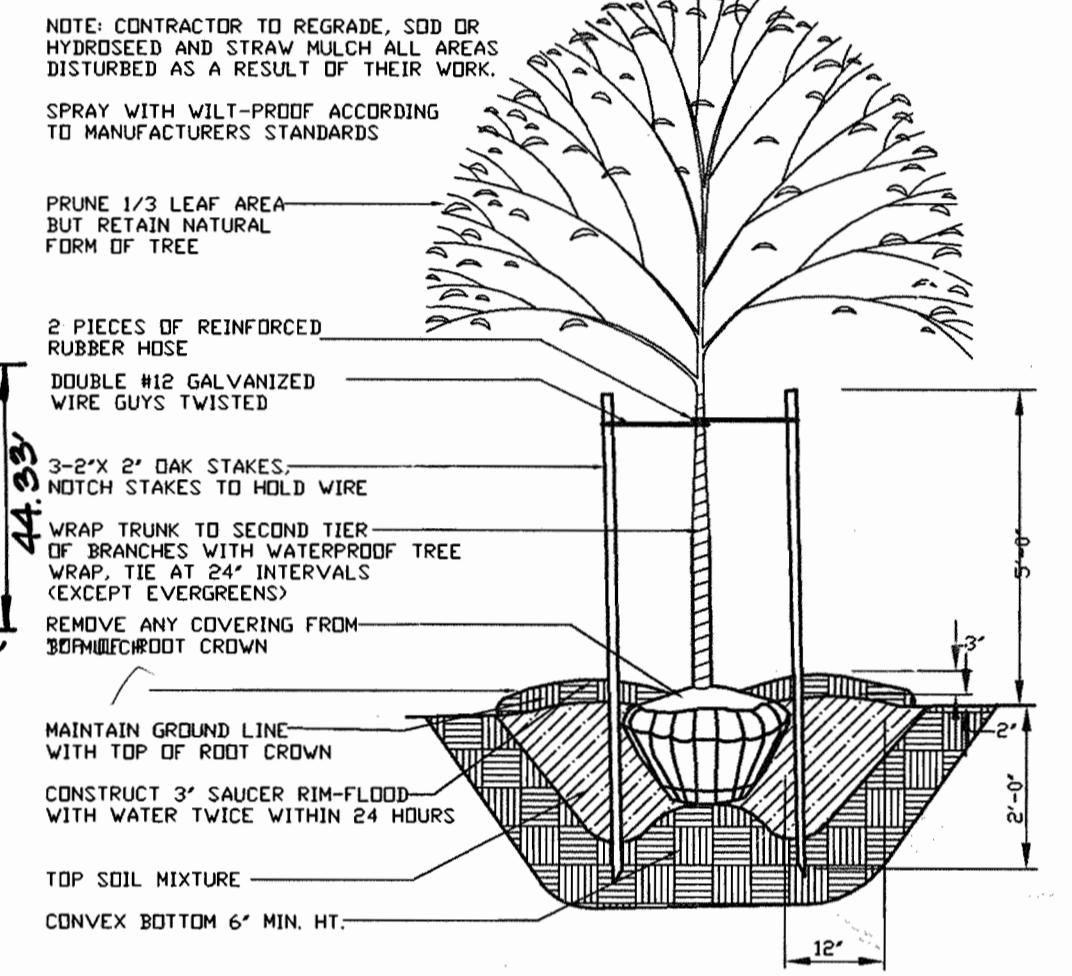


SCHEDULE A PERIMETER LANDSCAPE EDGE

PERIMETER	CATEGORY (PROPERTIES/ROADWAYS)	LANDSCAPE TYPE	LINEAR FEET OF ROADWAY FRONTAGE PERIMETER	NUMBER OF PLANTS REQUIRED		
				SHADE TREES	EVERGREEN TREES	TOTAL TREES
P-1	ADJACENT TO ROADWAY	B	114'	2	3	5
P-2	ADJACENT TO ROADWAY	B	72'	1	2	3

LANDSCAPING PLANT LIST

QTY.	KEY	NAME	SIZE
3		ACER SACCHARUM GREEN MOUNTAIN/SUGAR MAPLE	2 - 2 1/2" CALIPER FULL CROWN B/B
5		PRUNUS STROBUS EASTERN WHITE PINE	6' - 8' HGT.



PLANTING SPECIFICATIONS

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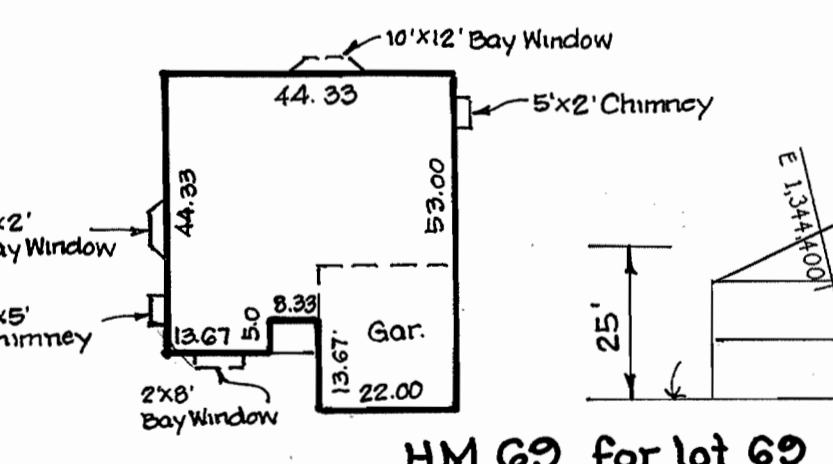
All shrubs shall be planted in continuous trenches or prepared planting beds and mulched with composted hardwood mulch as details and specified except where noted on plans.

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

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

Weed Control: Incorporate a pre-emergent herbicide into the planting bed following recommended rates on the label. Caution: Be sure to carefully check the chemical used to assure its adaptability to the specific ground cover to be treated.

All areas within contract limits disturbed during or prior to construction not designated to receive plants and mulch shall be fine graded and seeded. This plan is intended for landscape use only. See other plan sheets for more information on grading, sediment control, layout, etc.



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Signature of Developer: *Stephen F. Forney* DATE: 1-04-02

Reviewed for HOWARD SCD and meets Technical Requirements.

Jan Meyer 3/15/02
John R. Robertson 3/15/02

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 410-480-9387

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Cindy Harrod 3/22/02
 Chief, Division of Land Development
John R. Robertson 3/22/02
 Chief, Development Engineering Division
 Director, Department of Planning and Zoning

PROJECT: GTW'S WAVERLY WOODS SECTION: 11/4 LOTS NO.: 37-49 & 67-71

PLAT: 15059, 15066 & 15061 BLOCK NO.: 5 ZONE: RSC TAX/ZONE: 16 ELEC. DIST.: THIRD CENSUS TR.: 6030

WATER CODE: H-05 SEWER CODE: 5992500

SITE DEVELOPMENT PLAN

GTW'S WAVERLY WOODS
 SECTION 11 AREA 4
 LOTS 37-49 & 67-71

TAX MAP NO: 16 PART OF PARCEL: 20
 THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: JANUARY, 2002

SHEET 2 OF 4

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10772 BALTIMORE NATIONAL PIKE
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 410-461-2855

20.0 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION DEFINITION

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

PURPOSE

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

CONDITIONS WHERE PRACTICE APPLIES

This practice shall be used on denuded areas as specified on the plans and may be used on highly erodible or critically eroding areas. This specification is divided into Temporary Seeding, to quickly establish vegetative cover for short duration (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 ditches, etc. and for Permanent Seeding are lawns, dams, cut and fill slopes and other areas at final grade, former stockpile and staging areas, etc.

EFFECTS ON WATER QUALITY AND QUANTITY

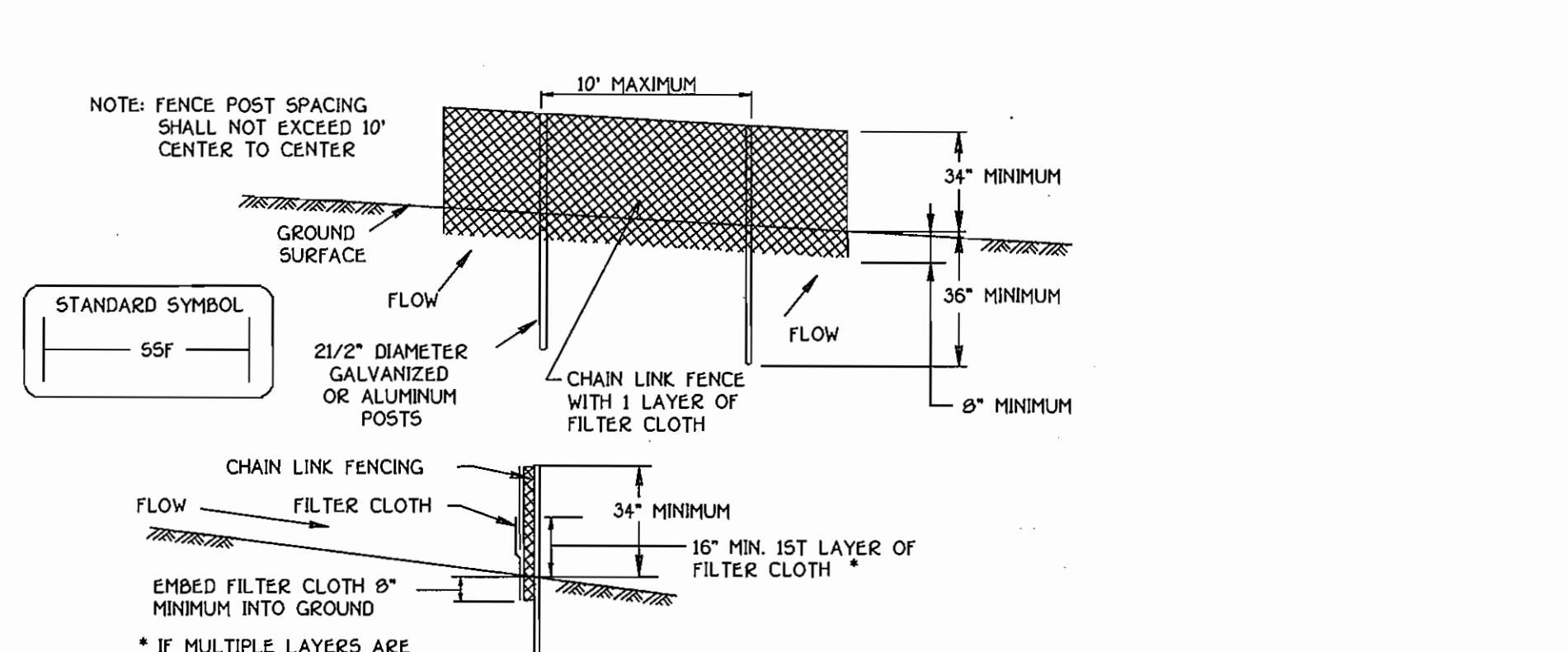
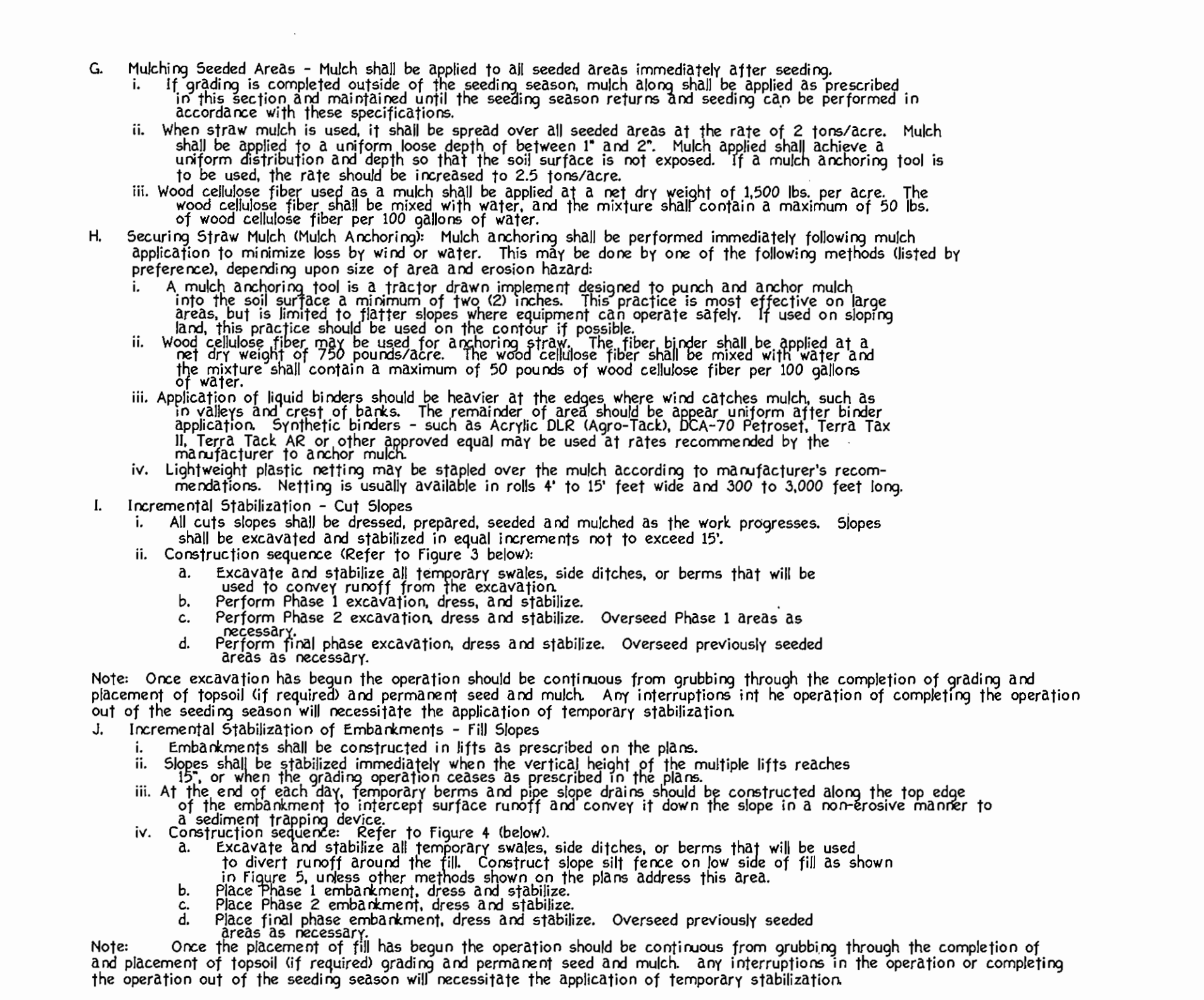
Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Vegetation, over time, will increase organic matter content and improve the water holding capacity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

SECTION 1 - VEGETATIVE STABILIZATION METHODS AND MATERIALS

- Site Preparation
 - Install erosion and sediment control structures (either temporary or permanent) such as diversions, grade stabilization structures, berms, waterways, or sediment control basins.
 - Perform all grading operations at right angles to the slope. Final grading and shaping is not usually necessary for temporary seeding.
 - Schedule required soil tests to determine soil amendment composition and application rates for sites having disturbed areas over 5 acres.
- Soil Amendments (Fertilizer and 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 analysis.
 - Fertilizers shall be uniform in composition, free flowing and suitable for accurate application by approved equipment. Fertilizer must 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) which contains at least 50% total oxides (calcium oxide plus magnesium oxide). Limestone shall be ground to such fineness that at least 50% will pass through a #200 mesh sieve and 99-100% 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 hitches or chisel plows or rippers mounted on construction equipment. After the soil is loosened it should not be rolled or dragged smooth, but left in the roughened condition. Sloped areas (greater than 3%) 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% clay, but enough fine grained material (D300 silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception is if loesses or sercia lespezdezas is to be planted, then a sandy soil (D300 silt plus clay) would be acceptable.
 - Soil shall contain 1.5% minimum organic matter by weight.
 - Soil must contain sufficient pore space to permit adequate root penetration.
 - If these conditions cannot be met by soils on site, adding topsoil is required in accordance with Section 21 Standards and Specifications for Topsoil.
 - Areas previously graded in conformance with the drawings shall be maintained in a true and even grade, then scarified or otherwise loosened to a depth of 3-5" to permit bonding of the topsoil to the surface area and to create horizontal erosion check slots to prevent topsoil from sliding down a slope.
 - Apply soil amendments as per soil test or as included on the plans.
 - Mix soil amendments into the top 3-5" of topsoil by disking or other suitable means. Lawn areas should be raked to smooth the surface, remove large objects like stones and branches, and ready the area for seed and application. Where site conditions will not permit normal seeded preparation, loose surface soil by dragging with a heavy chain or other equipment to roughen the surface. Steep slopes (steeper than 3%) 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 a recognized seed laboratory. All seed used shall have been tested within the 6 months immediately preceding the material on the job.
 - 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 mixtures shall be a pure culture of nitrogen-fixing bacteria prepared specifically for the species. Inoculants shall not be used later than the date indicated on the container. Add fresh inoculant as directed on package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as cool as possible until used. Temperatures above 72-80°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 cut/packer 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, seeds should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
 - Drill or Cut/packer Seeding: Mechanized seeders that apply and cover seed with soil.
 - Cut/packer seeders are required to bury the seed in such a fashion as to provide at least 1/4" of soil covering the seed.
 - Where practical, seed should be applied in two directions perpendicular to each other. Apply half the seeding rate in each direction.
- Mulch Specifications (In order of preference)
 - Straw shall consist of thoroughly threshed wheat, rye or oat straw, reasonable bright in color, and shall not be musty, moldy, called, excessively dusty 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 dried green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniform spread slurry.
 - WCFM, including dye, shall contain no germination or growth inhibiting factors.
 - WCFM materials shall be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material shall form a blotter-like ground cover, on application, having moisture absorption and percolation properties and shall cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
 - WCFM material shall contain no elements or compounds at concentration 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 15% maximum and water holding capacity of 90% minimum.

- 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 excavation.
 - Perform Phase I excavation, dress, and stabilize.
 - Perform Phase II excavation, dress and stabilize. Overseed Phase I areas as necessary.
 - Perform final phase excavation, dress and stabilize. Overseed previously seeded areas as necessary.
- Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation of completing the operation out of the seeding season will necessitate the application of temporary stabilization.
- Incremental Stabilization of Embankments - Fill Slopes
 - Embankments shall be constructed in lifts as prescribed on the plans.
 - Slopes shall be stabilized immediately when the vertical height of the multiple lifts reaches 15' or when the grading operation ceases as prescribed on 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 fill. Construct slope silt fence on low side of fill as shown in Figure 5, unless other methods shown on the plans address this area.
 - Place Phase I embankment, dress and stabilize.
 - Place Phase 2 embankment, dress and stabilize.
 - Place final phase embankment, dress and stabilize. Overseed previously seeded areas as necessary.
- Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.



Construction Specifications

- Fencing shall be 42" in height and constructed in accordance with the latest Maryland State Highway Details for Chain Link Fencing. The specification for a 6' fence shall be used, substituting 42" fabric and 6' length posts.
- Chain link fence shall be fastened securely to the fence posts with wire ties. The lower tension wire, brace and truss rods, drive anchors and post caps are not required except on the ends of the fence.
- Filter cloth shall be fastened securely to the chain link fence with ties spaced every 24" at the top and mid section.
- Filter cloth shall be embedded a minimum of 8" into the ground.
- When two sections of filter cloth adjoin each other, they shall be overlapped by 6" and folded.
- Maintenance shall be performed as needed and silt buildups removed when "bulges" develop in the silt fence, or when silt reaches 50% of fence height.
- Filter cloth shall be fastened securely to each fence post with wire ties or staples at top and mid section and shall meet the following requirements for Geotextile Class F:

Tensile Strength	50 lbs/in (min)	Test: MSMT 509
Tensile Modulus	20 lbs/in (min)	Test: MSMT 509
Flow Rate	0.3 gal/ft / minute (max)	Test: MSMT 322
Filtering Efficiency	75% (min)	Test: MSMT 322

SEQUENCE OF CONSTRUCTION

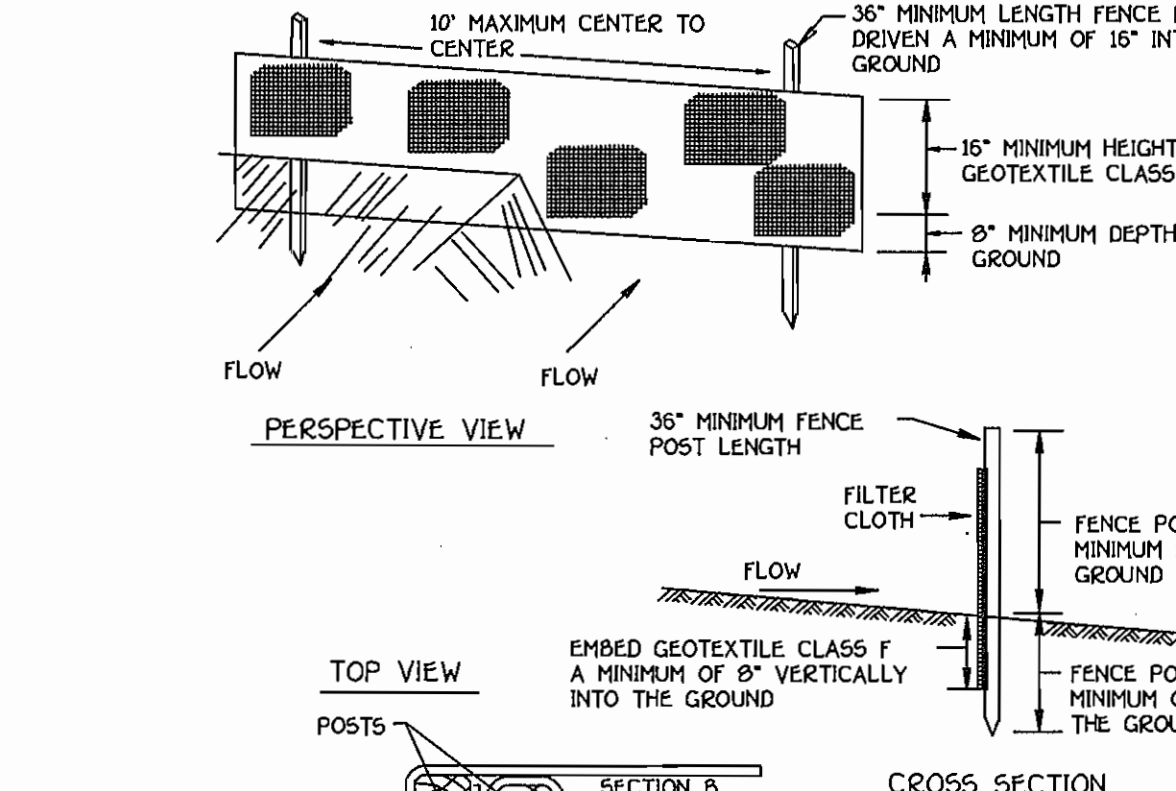
Slope Steepness	Slope Length	Silt Fence Length
Flatter than 50:1	unlimited	unlimited
50:1 to 10:1	125 feet	1,000 feet
10:1 to 5:1	100 feet	750 feet
5:1 to 3:1	60 feet	500 feet
3:1 to 2:1	40 feet	250 feet
2:1 and steeper	20 feet	125 feet

Note: In areas of less than 2X slope and sandy soils (USDA general classification system, soil class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence will be the only perimeter control required.

SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (31-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN 30 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 5:1, BY 14 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE 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 PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	3.38 ACRES
AREA DISTURBED	2.81 ACRES
AREA TO BE ROOFED OR PAVED	1.02 ACRES
AREA TO BE VEGETATIVELY STABILIZED	1.79 ACRES
TOTAL CUT	3935 CU.YDS.
TOTAL FILL	3935 CU.YDS.
OFFSITE WASTE/BORROW AREA LOCATION	0.00 CU.YDS.
- ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES.
- APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, 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.



Construction Specifications

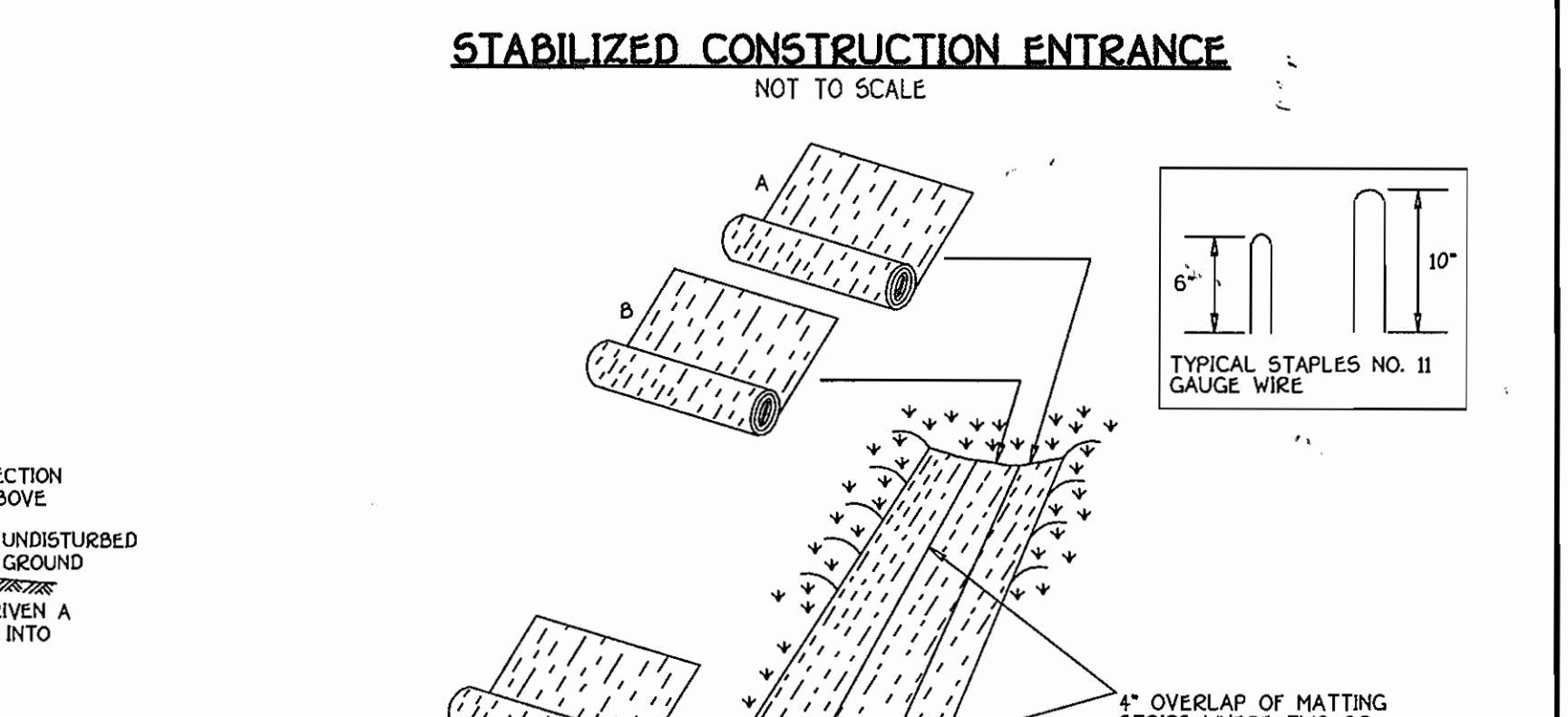
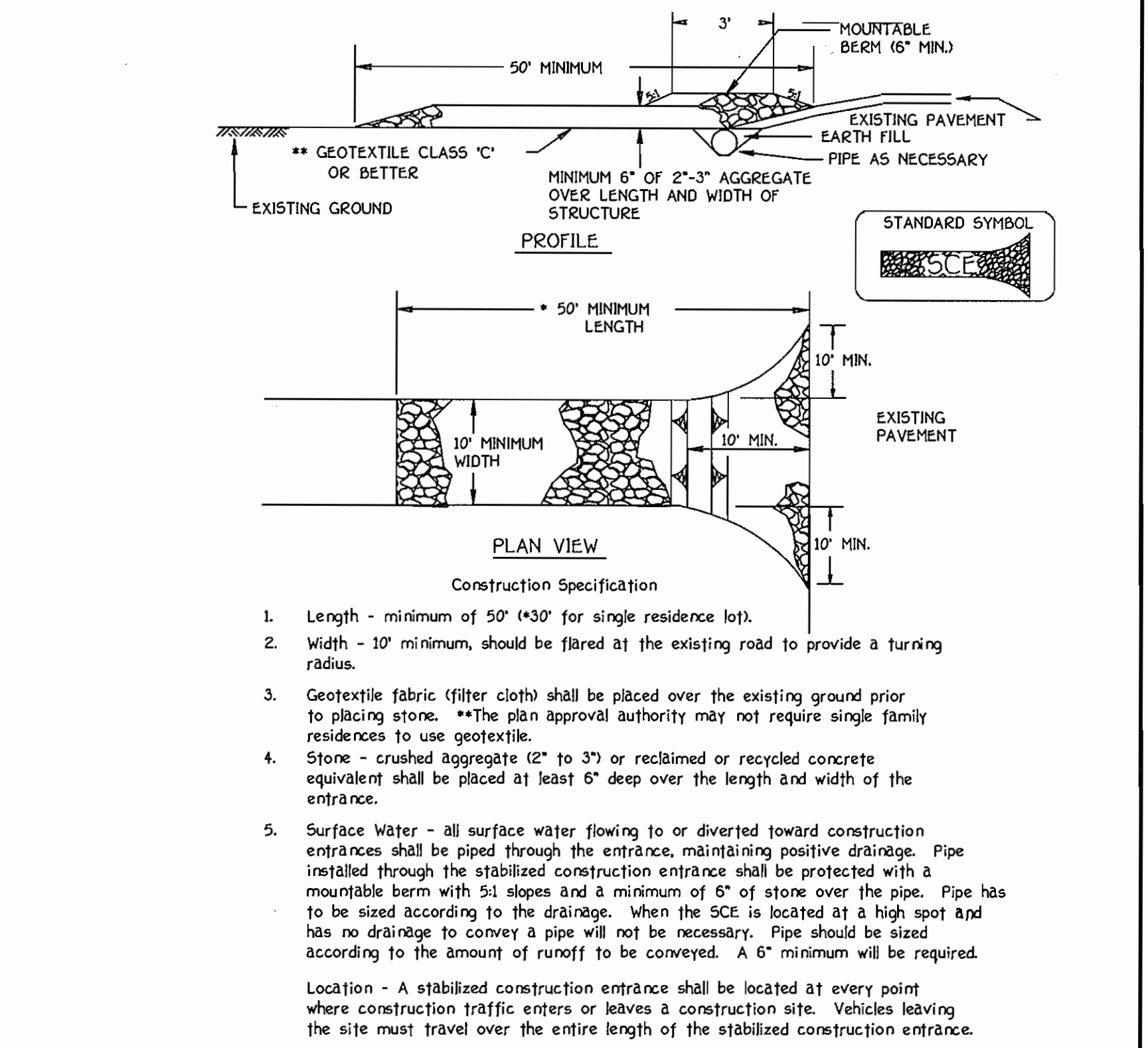
- Fence posts shall be a minimum of 36" long driven 16" minimum into the ground. Wood posts shall be 1 1/2" x 1 1/2" square (minimum) cut, or 1 3/4" diameter (minimum) round and shall be of sound quality hardwood. Steel posts will be standard 1" or 1 1/4" section weighing not less than 10.00 pound per linear foot.
- Geotextile shall be fastened securely to each fence post with wire ties or staples at top and mid-section and shall meet the following requirements for Geotextile Class F:

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

Silt Fence Design Criteria

Slope Steepness	Slope Length	Silt Fence Length
Flatter 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 2X slope and sandy soils (USDA general classification system, soil class A) maximum slope length and silt fence length will be unlimited. In these areas a silt fence will be the only perimeter control required.



Construction Specifications

- Key-in the matting by placing the top ends of the matting in a narrow trench, 6" in depth. Backfill the trench and tamp firmly to conform to the channel cross-section. Secure with a row of staples about 4" down slope from the trench. Spacing between staples is 6".
- Staple the 4" overlap in the channel center using an 18" spacing between staples.
- Before stapling the outer edges of the matting, make sure the matting is smooth and in firm contact with the soil.
- Staples shall be placed 2' apart with 4 rows for each strip, 2 outer rows, and 2 alternating rows down the center.
- Where one roll of matting ends and another begins, the end of the top strip shall overlap the upper end of the lower strip by 4", shiplap fashion. Reinforce the overlap with a double row of staples spaced 6" apart in a staggered pattern on either side.
- The discharge end of the matting liner should be similarly secured with 2 double rows of staples.

Note: If flow will enter from the edge of the matting then the area affected by the flow must be keyed-in.

EROSION CONTROL MATTING

NOT TO SCALE

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
10222 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
410-481-2955

DATE: _____ DESCRIPTION: _____

ENGINEER'S CERTIFICATE

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

Signature of Engineer: CHARLES J. CROVO, SR. Date: 1/6/02

BUILDER/DEVELOPER'S CERTIFICATE

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

Signature of Builder/Developer: STEVE FORNEY Date: 1-04/02

Reviewed for HOWARD SCD and meets Technical Requirements.

Signature: Jim Murray Date: 3/12/02

Signature: Steve Forney Date: 3/12/02

OWNER
WAVERLY WOODS DEVELOPMENT CORPORATION
C/O LAND DESIGN AND DEVELOPMENT, LLC
ELLCOTT CITY, MARYLAND 21042
410-480-0387

BUILDER/DEVELOPER
HAMILTON REED
C/O LAND DESIGN AND DEVELOPMENT, LLC
ELLCOTT CITY, MARYLAND 21042
410-480-0387

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Signature: _____ Date: 3/22/02

Signature: _____ Date: 3/22/02

Signature: _____ Date: 3/22/02

PROJECT: GTW'S WAVERLY WOODS SECTION: 11/4 LOTS NO.: 37-49 & 67-71

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
15059, 15060 & 15061	5	R5C	16	THIRD	6030
WATER CODE H-05	SEWER CODE	5992500			

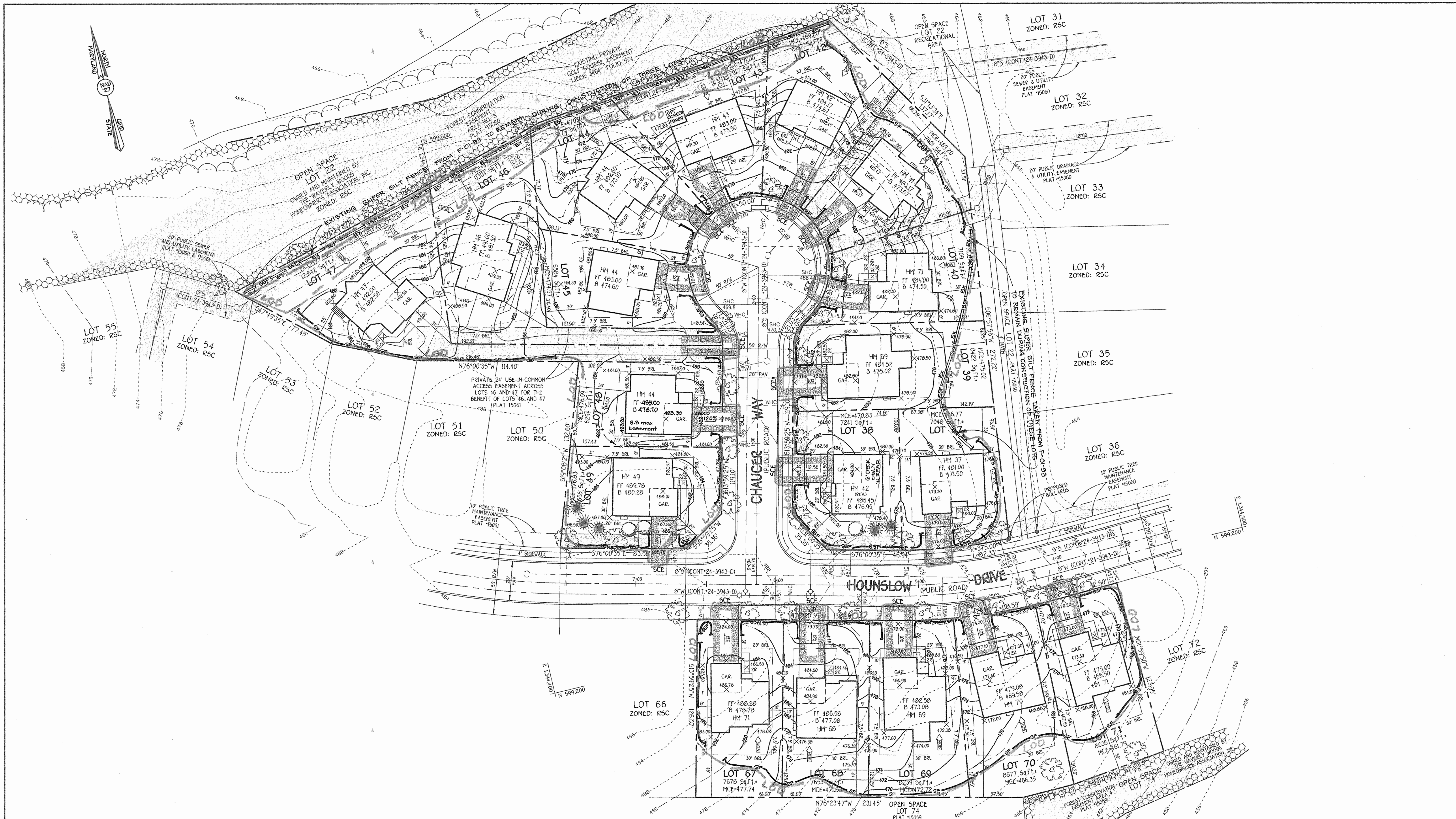
SEDIMENT, EROSION CONTROL NOTES & DETAILS

GTW'S WAVERLY WOODS

SECTION 11, AREA 4
LOTS 37-49 & 67-71

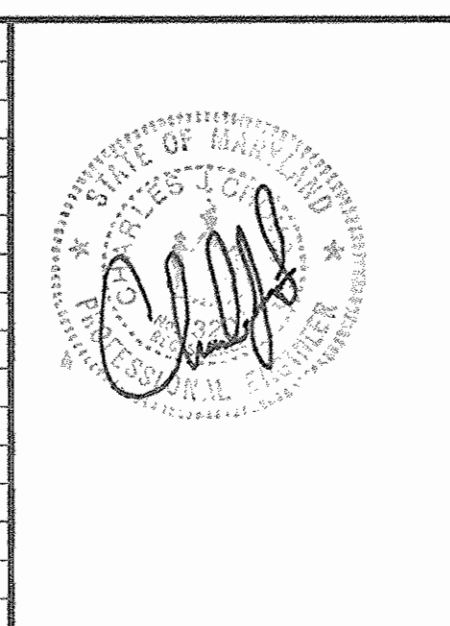
TAX MAP No: 16 PART OF PARCEL: 20
THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
SCALE: 1" = 30' DATE: JANUARY, 2002

SHEET 4 OF 4



FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 410-461-2995

DATE	DESCRIPTION



ENGINEER'S CERTIFICATE
 I certify that this plan for erosion and sediment control represents a practical and workable plan based on my personal knowledge of the site conditions and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.
 Signature of Engineer: *Charles J. Crovo* Date: *1/14/02*
CHARLES J. CROVO, SR.
 Date

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 all 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: *Stephen F. Torrey* Date: *1-04-02*
STEVE TORREY
 BUILDER

Reviewed for HOWARD SCD and meets Technical Requirements.
Jim Myers Date: *3/14/02*
 USGS National Resources Conservation Service
 This development plan is approved for soil erosion and sediment control by the HOWARD SOIL CONSERVATION DISTRICT.
John McClinton Date: *3/14/02*
 Howard SCD

OWNER
 WAVERLY WOODS DEVELOPMENT CORPORATION
 C/O LAND DESIGN AND DEVELOPMENT, LLC
 8000 MAIN STREET
 ELLICOTT CITY, MARYLAND 21042
 410-460-0397

BUILDER/DEVELOPER
 HAMILTON REED
 C/O LAND DESIGN AND DEVELOPMENT, LLC
 8000 MAIN STREET
 ELLICOTT CITY, MARYLAND 21042
 410-460-0397

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Condy Harvath Date: *3/22/02*
 Chief, Division of Land Development
John Cummings Date: *3/22/02*
 Chief, Development Engineering Division
John Smith Date: *3/22/02*
 Director - Department of Planning and Zoning

PROJECT: GTW'S WAVERLY WOODS SECTION: 11/4 LOTS NO.: 37-49 & 67-71

PLAT	BLOCK NO.	ZONE	TAX/ZONE	ELEC. DIST.	CENSUS TR.
15059, 15060 & 15061	5	RSC	16 THIRD		6030
WATER CODE	SEWER CODE				
H-05	5992500				

SEDIMENT/EROSION CONTROL PLAN

GTW'S WAVERLY WOODS
 SECTION 11 AREA 4
 LOTS 37-49 & 67-71

TAX MAP NO: 16 PART OF PARCEL: 20
 THIRD ELECTION DISTRICT, HOWARD COUNTY, MARYLAND
 SCALE: 1" = 30' DATE: JANUARY, 2002

SHEET 3 OF 4