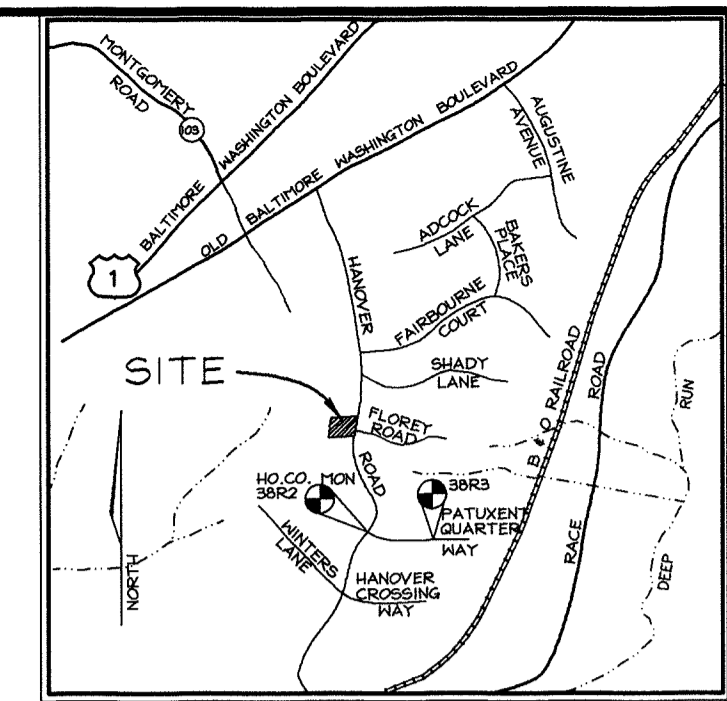


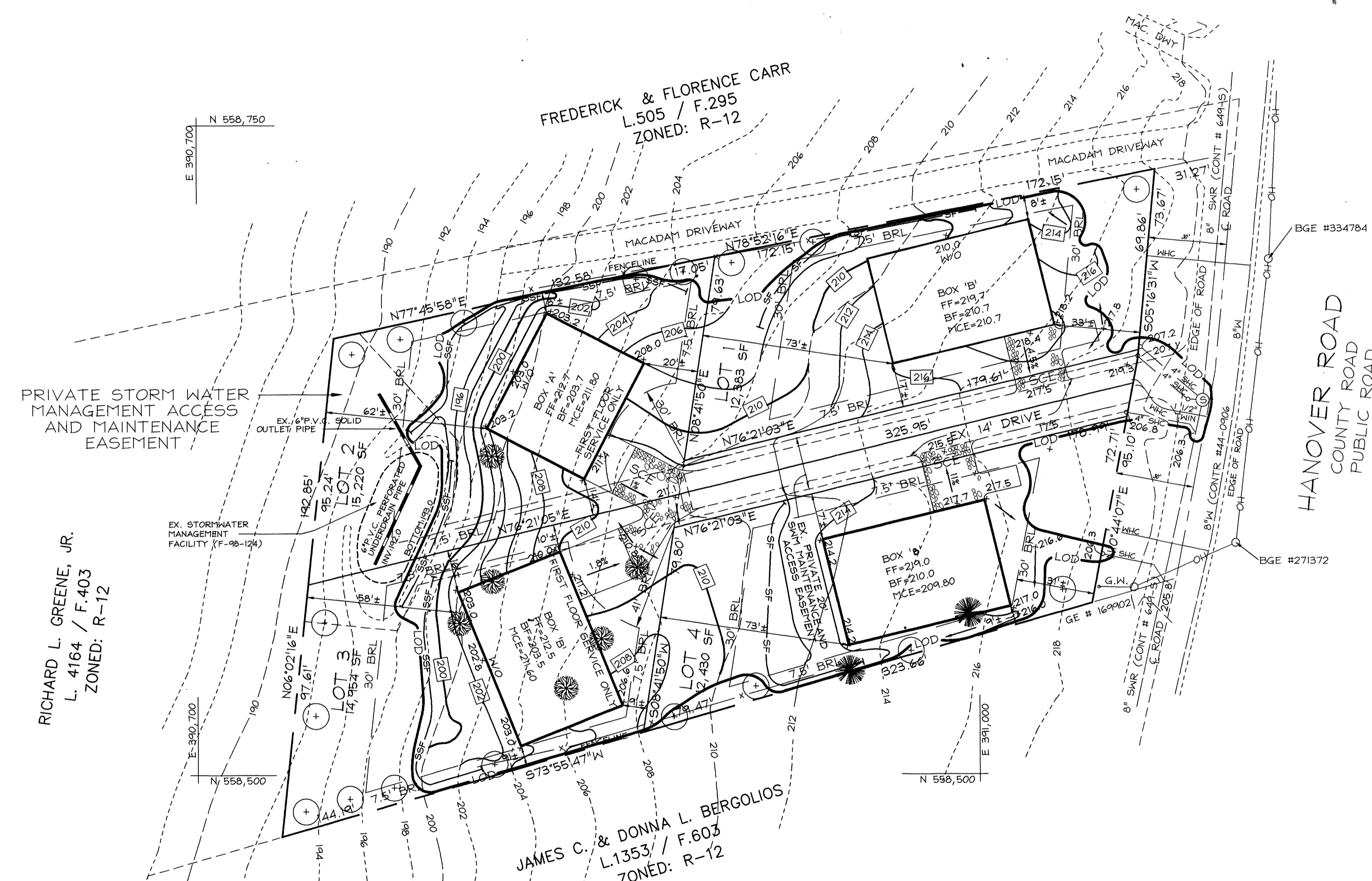
ADDRESS CHART		
LOT No.	STREET ADDRESS	
1	G212	HANOVER ROAD
2	G214	HANOVER ROAD
3	G216	HANOVER ROAD
4	G218	HANOVER ROAD

- LEGEND**
- EXISTING CONTOUR: ---214---
 - PROPOSED CONTOUR: ---214---
 - SPOT ELEVATION: x17.3
 - DIRECTION OF FLOW: [Symbol]
 - STABILIZED CONSTRUCTION ENTRANCE: [Symbol]
 - SILT FENCE: SF --- SF
 - SUPER SILT FENCE: SSF --- SSF
 - LIMIT OF DISTURBANCE: --- LOD ---
 - TREES PER F-98-124: (+)
 - EXISTING TREES: [Symbol]



GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.
- THE CONTRACTOR SHALL NOTIFY 'MISS UTILITY' AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 - MISS UTILITY: 1-800-257-7777
 - C & P TELEPHONE COMPANY: 725-9976
 - HOWARD COUNTY BUREAU OF UTILITIES: 313-2366
 - AT&T CABLE LOCATION DIVISION: 393-3553
 - B.G. & CO. CONTRACTOR SERVICES: 850-4620
 - B.G. & CO. UNDERGROUND DAMAGE CONTROL: 781-4620
 - STATE HIGHWAY ADMINISTRATION: 531-5533
- SITE ANALYSIS:
 - AREA OF SITE: 1.26 AC
 - AREA OF SUBMISSION: 1.26 AC
 - PRESENT ZONING: R-12
 - LIMIT OF DISTURBANCE: 0.97 AC
 - PROPOSED USE OF SITE: SINGLE FAMILY DWELLINGS
 - TOTAL NUMBER OF UNITS: 4
- PROJECT BACKGROUND:
 - LOCATION: TAX MAP: 38 PARCEL: 236
 - ZONING: R-12
 - SUBDIVISION: SCHAFFNER PROPERTY
 - DPZ REFERENCES: F-98-124
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- LANDSCAPING SHOWN WILL BE BONDED AS PART OF THE GRADING PERMIT, (FROM F-98-124) C # 1,400.00
- LOTS 2 & 3 WILL HAVE ON-SITE PRIVATE PUMPING UNITS.
- CONTRACTOR TO MAINTAIN 15 FEET BETWEEN REAR OF ACTUAL HOUSE TYPE AND SEWER ON LOTS 1 AND 4.
- DRIVEWAY MAINTENANCE AGREEMENT, RECORDED OF L-6607, F. 211



SHEET INDEX

SHEET NO.	DESCRIPTION
1	SITE DEVELOPMENT PLAN AND GRADING AND SEDIMENT CONTROL
2	DETAIL SHEET

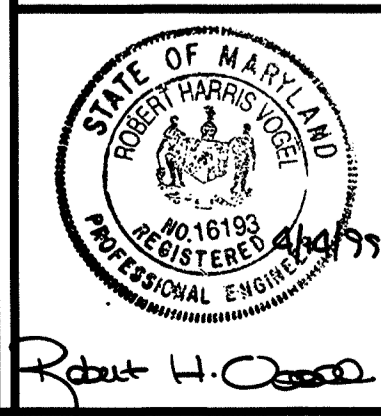
NO.	REVISION	DATE

OWNER / DEVELOPER
 MAIN STREET BUILDERS
 5705 LANDING ROAD
 ELKBRIDGE, MARYLAND 21075

SITE DEVELOPMENT PLAN AND GRADING AND SEDIMENT CONTROL
SCHAFFNER PROPERTY
 TAX MAP #38 PARCEL 236
 1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

VOGEL & ASSOCIATES
 ENGINEERS/SURVEYORS/PLANNERS

3691 Park Avenue, Suite 101 • Elkott City, Maryland 21043
 Tel 410.461.5828 Fax 410.465.3965



DESIGN BY: JCO
 DRAWN BY: PS/RJS
 CHECKED BY: RHV
 DATE: FEB. 2, 1999
 SCALE: 1"=30'
 W.O. NO.: 96-019

NOTE:
 FOR GENERIC BOX DIMENSIONS AND HOUSE TYPES SEE SHEET 2 OF 2.

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Chris Simmons / as 4/28/99
 USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert H. Vogel 4/28/99
 HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEERS CERTIFICATE

"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Robert H. Vogel 4/14/99
 SIGNATURE OF ENGINEER DATE
 ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE

"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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."

Joseph E. Ansdon 4-14-99
 SIGNATURE OF DEVELOPER DATE

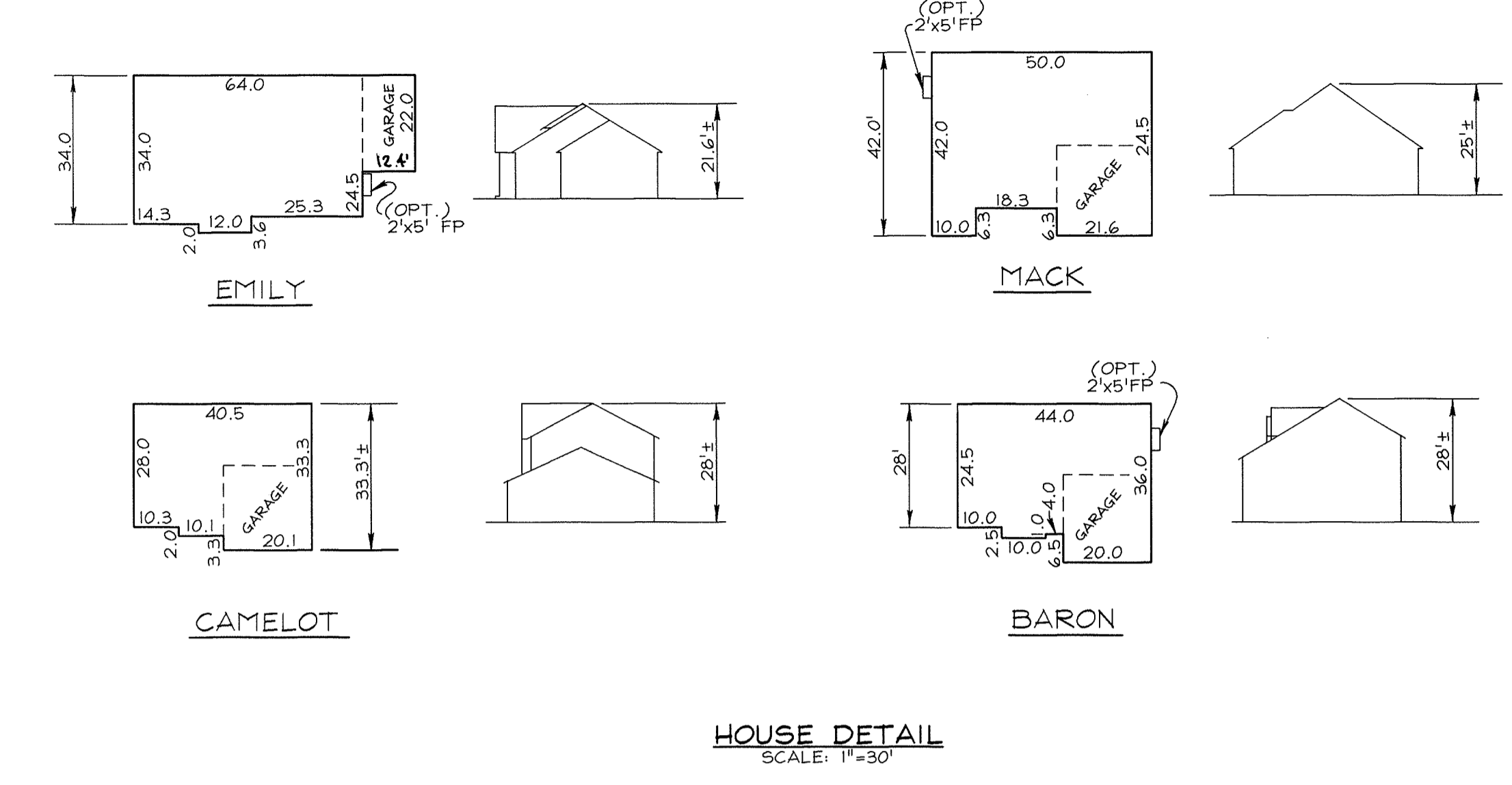
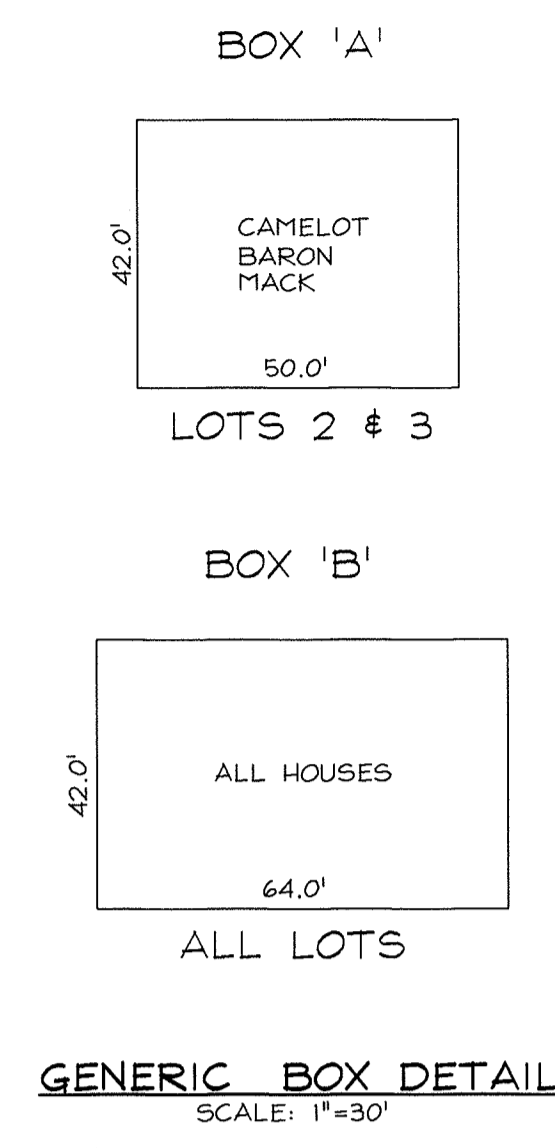
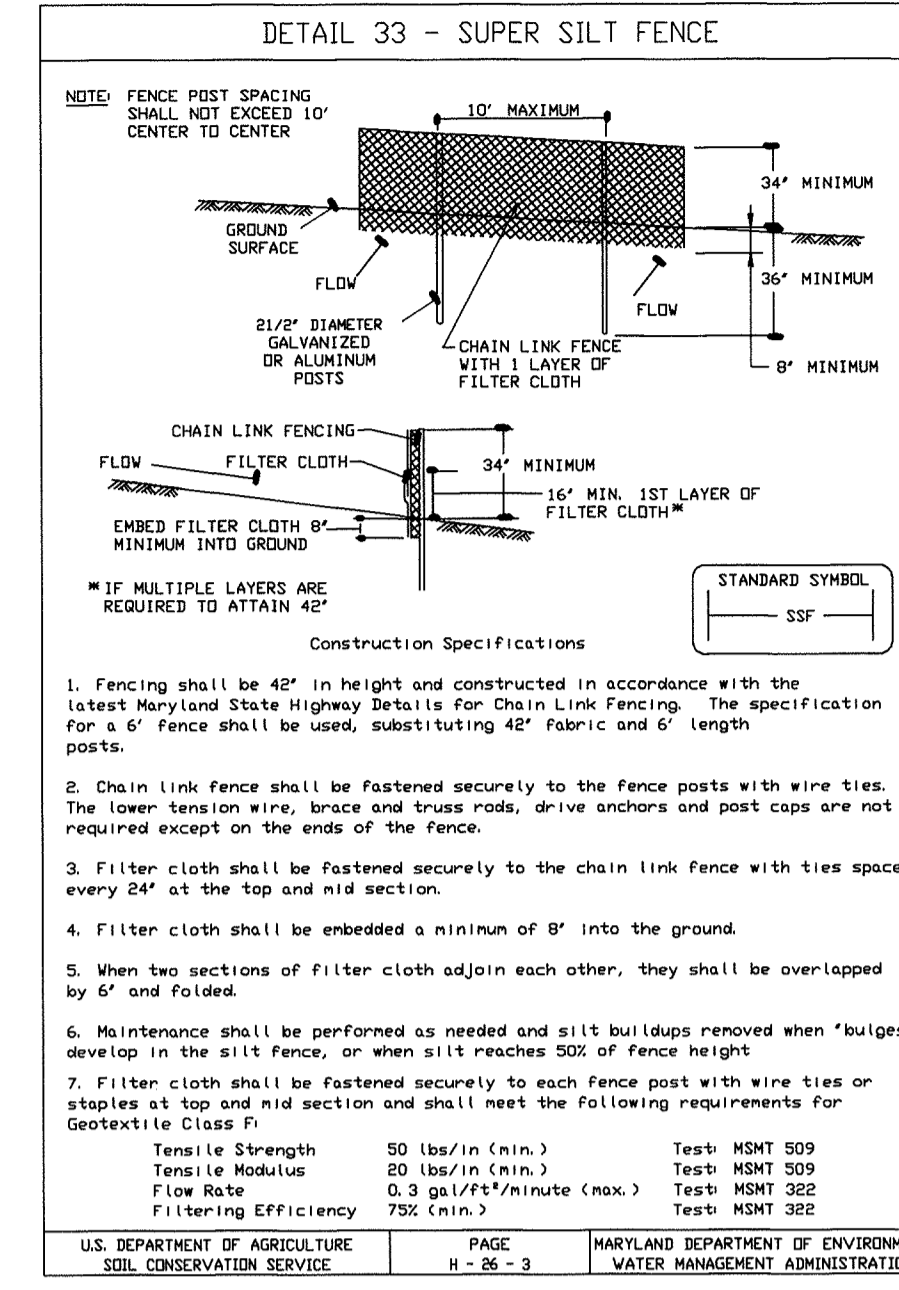
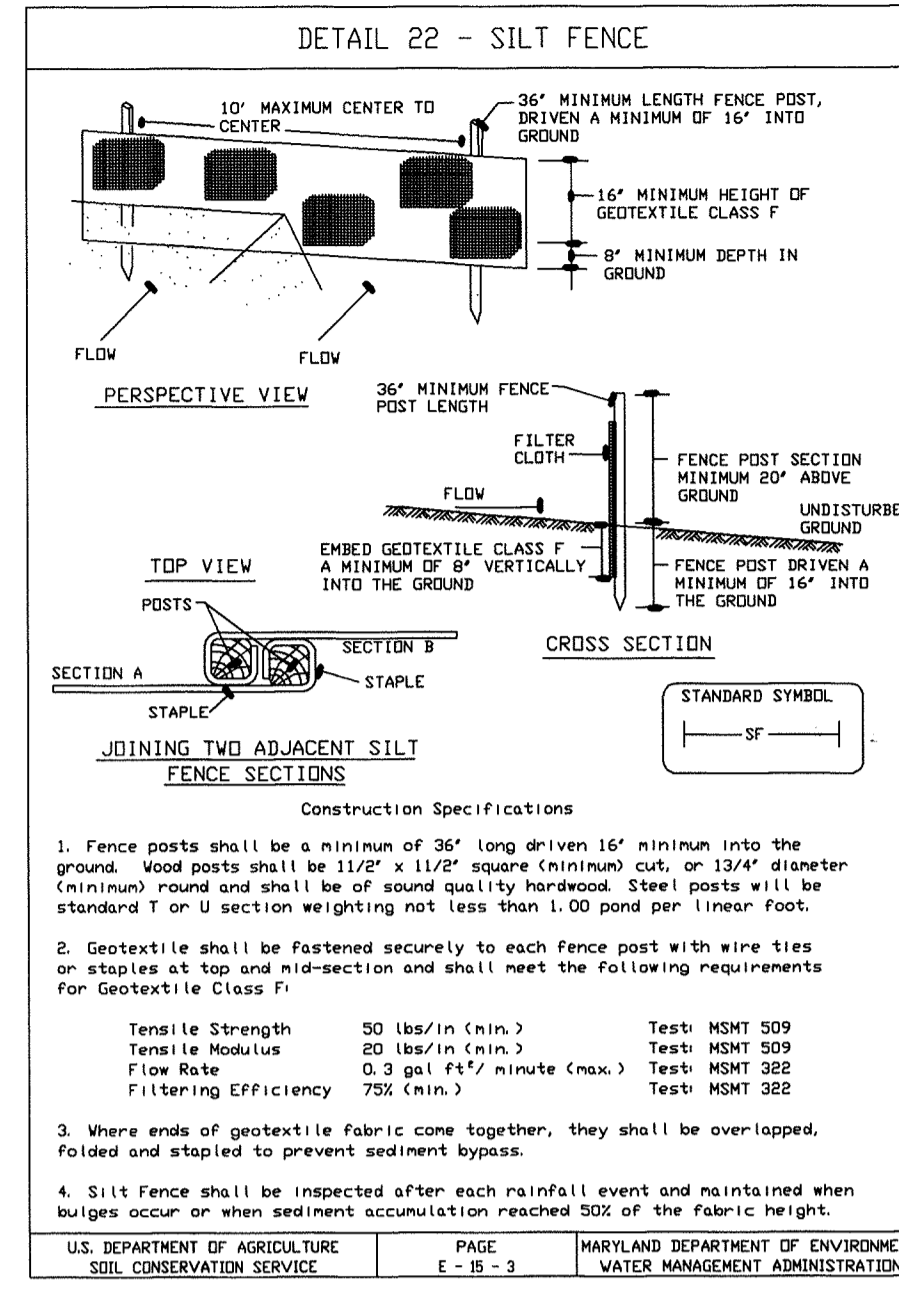
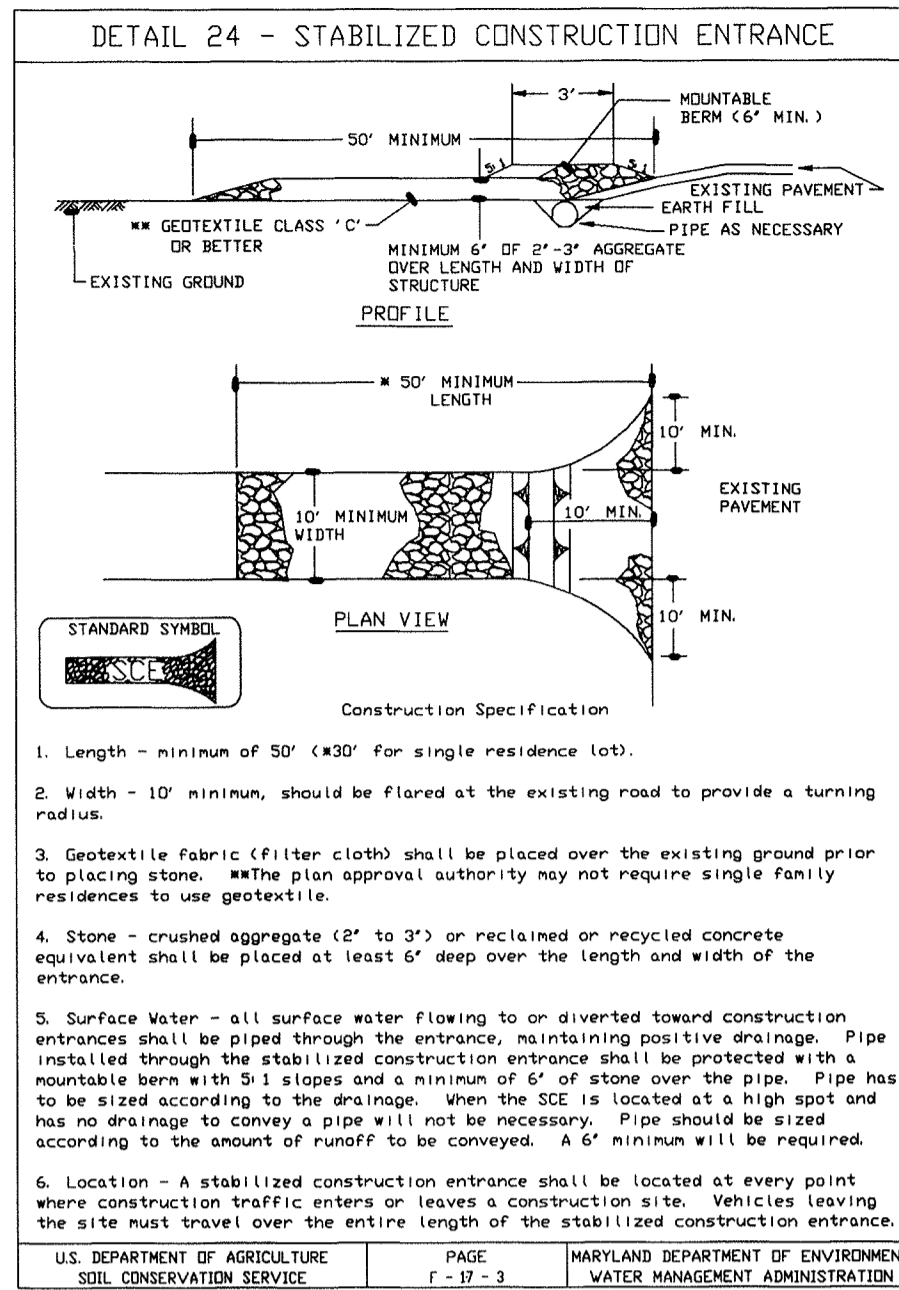
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Joseph E. Ansdon 5/14/99
 DIRECTOR DATE

Cynthia Hammit 5/18/99
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Robert H. Vogel 5/15/99
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
SCHAFFNER PROPERTY	N/A	236
PLAT NO. BLOCK NO. ZONE TAX/ZONE ELECT. DIST. CENSUS TR.		
13564 15 R-12 38 1ST 6012		
WATER CODE A01	SEWER CODE 2130000	



TEMPORARY SEEDING

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

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

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

Seeding: For periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (0.7 lbs./1000 sq. ft.). For the period November 16 thru February 29, 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./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gal. per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 348 gal. per acre (8 gal./1000 sq. ft.) for anchoring.

Refer to the 1988 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for more details and methods not covered.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent, long-lived vegetative cover is needed.

Seeded Preparation: Loosen upper 3 inches of soil by raking, discing, or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Use one of the following schedules:

- Preferred:** Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper 3 inches of soil. At time of seeding apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq. ft.).
- Acceptable:** Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 1000 lbs. per acre 0-0-10 fertilizer (23 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 thru April 30 and August 1 thru October 15, seed with 60 lbs. per acre (1.4 lbs./1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. of Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (0.5 lbs./1000 sq. ft.) of weeping lovegrass. During the period of October 16 thru February 29, protect site by Option 1 - 2 tons per acre of well-anchored straw mulch, and seed as soon as possible in the spring. Option 2 - Use sod. Option 3 - Seed with 60 lbs. per acre Kentucky 31 Tall Fescue, and mulch with 2 tons per acre well anchored straw.

Mulching: Apply 1 1/2 to 2 tons per acre (70-90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 218 gallons per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 6 feet or higher, use 348 gallons per acre (8 gal./1000 sq. ft.) for anchoring.

Maintenance: Inspect all seeded areas, and make needed repairs, replacements, and reseedings.

SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1855).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in accordance with the 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or redisturbance, permanent or temporary stabilization shall be completed within: (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 3:1, (b) 14 days as to all other disturbed or graded areas on the project site.
- All sediment traps/basins shown must be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, 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, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall 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	1.26 acres
Area Disturbed	0.97 acres
Area to be roofed or paved	0.33 acres
Area to be vegetatively stabilized	0.64 acres
Total Cut	825 cu. yds.
Total Fill	232 cu. yds.

 To be determined by contractor, with pre-approval of the Sediment Control Inspector and active grading permit.
- 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, 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.

SEQUENCE OF CONSTRUCTION

- Obtain grading permit.
- Notify Howard County Bureau of Inspection and Permits (313-1850) at least 24 hours before starting any work.
- Construct Stabilized Construction Entrances.
- Install silt fence & super silt fence.
- Rough grade site.
- Construct house. The first floor elevation cannot be more than 1' higher or 0.2' lower than the elevations shown on this plan. The foundation footprint must be within the generic block.
- Final lot grade to be in substantial conformance with site development plan.
- During grading and after each rainfall, the contractor shall inspect and provide the necessary maintenance on the sediment erosion control measures shown herein.
- Following initial soil disturbance or redisturbance permanent or temporary stabilization shall be completed on the sediment erosion control measures shown with:
 - 7 calendar days for all perimeter sediment control structures, dikes, swales, ditch perimeter slopes and all slopes greater than 3:1.
 - 14 calendar days for all other disturbed areas.
- Upon stabilization of all disturbed areas and with the approval of the sediment control inspector, remove all sediment control devices.

2.10 STANDARD AND SPECIFICATIONS FOR TOPSOIL DEFINITION

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

PURPOSE

To provide a suitable soil medium for vegetative growth. Soils of compacted fill, impure content, low nutrient level, low pH, material toxic to plants, and/or unacceptable soil gradation.

CONDITION WHERE PRACTICE APPLIES

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to produce vegetation.
 - The soil material is so shallow that the rooting zone is not adequate to produce vegetation.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, areas having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- Topsoil salvaged from the existing site may be used, provided it meets the standards set forth in these specifications. Topsoil salvaged from other sites may be salvaged for a different use. The use of salvaged topsoil is subject to the approval of the Howard County Department of Agriculture Experimental Station.
- Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, or silty clay loam. Topsoil shall not be used if it is more than 18" deep. Topsoil shall not be used if it is more than 18" deep. Topsoil shall not be used if it is more than 18" deep. Topsoil shall not be used if it is more than 18" deep.
 - Topsoil must be free of plants, or plant parts such as stems, roots, or other debris.
 - Where the subsoil is either highly acidic or composed of heavy clays, lime or other soil amendments shall be used prior to the placement of topsoil. Lime shall be distributed uniformly over the disturbed areas and worked into the soil in conjunction with tillage operations as described in the following procedures:
 - For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 2.06 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Material.
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall not be less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No soil or seed shall be placed on soil which has been treated with herbicides or other chemicals used for weed control until sufficient time has elapsed (14 days) to permit dissipation of phytotoxic materials.
- For sites having disturbed areas over 5 acres:
 - On soil meeting Topsoil specifications, obtain test results dictating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall not be less than 1.5 percent by weight.
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THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Cheryl Simms / 6/28/99
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert H. Vogel / 4/28/99
HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEERS CERTIFICATE

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Robert H. Vogel / 4/28/99
SIGNATURE OF ENGINEER DATE
ROBERT H. VOGEL

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Joseph E. Prodzga / 4.14.99
SIGNATURE OF DEVELOPER DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Joseph E. Prodzga / 5/19/99
DIRECTOR DATE

Chris Harvath / 5/18/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chris Harvath / 5/15/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SUBDIVISION NAME	SCHAFFNER PROPERTY	SECTION/AREA	N/A	PARCEL NUMBER	236
PLAT NO.	13569	BLOCK NO.	15	ZONE	R-12
TAX/ZONE	38	ELECT. DIST.	1ST	CENSUS TR.	6012
WATER CODE	A01	SEWER CODE	2130000		

DETAIL SHEET

SCHAFFNER PROPERTY

TAX MAP #38 PARCEL 236
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

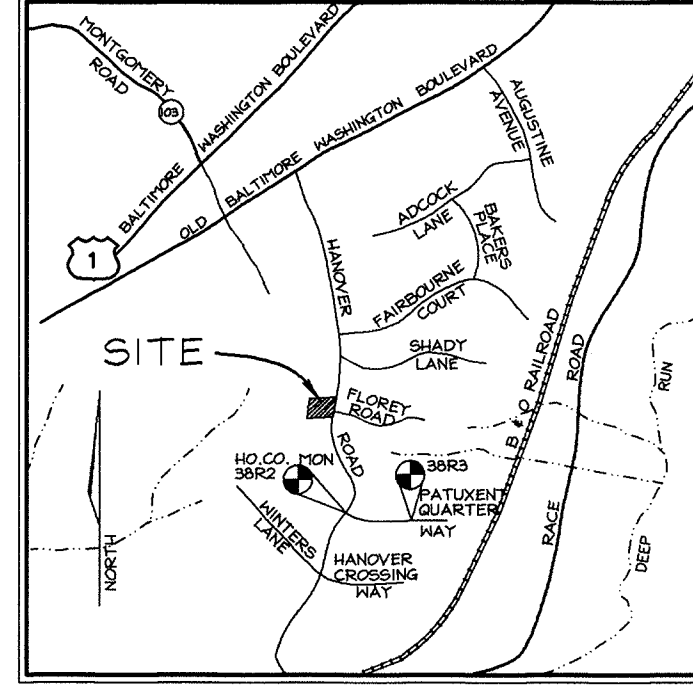
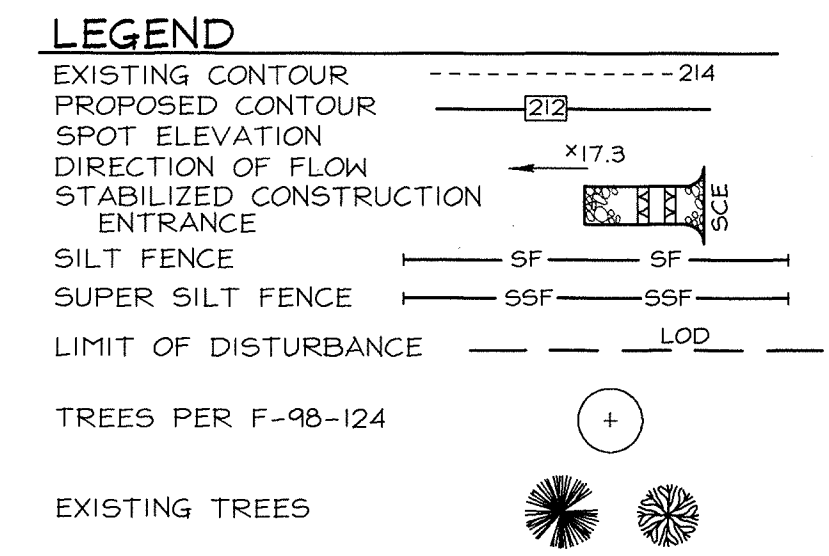
OWNER / DEVELOPER
MAIN STREET BUILDERS
5705 LANDING ROAD
ELKBRIDGE, MARYLAND 21075

VOGEL & ASSOCIATES
ENGINEERS/SURVEYORS/PLANNERS
3691 Park Avenue, Suite 101 • Elkott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3968

DESIGN BY: JCO
DRAWN BY: PS/RJS
CHECKED BY: RHV
DATE: FEB 2, 1999
SCALE: 1"=30'
W.O. NO.: 96-019

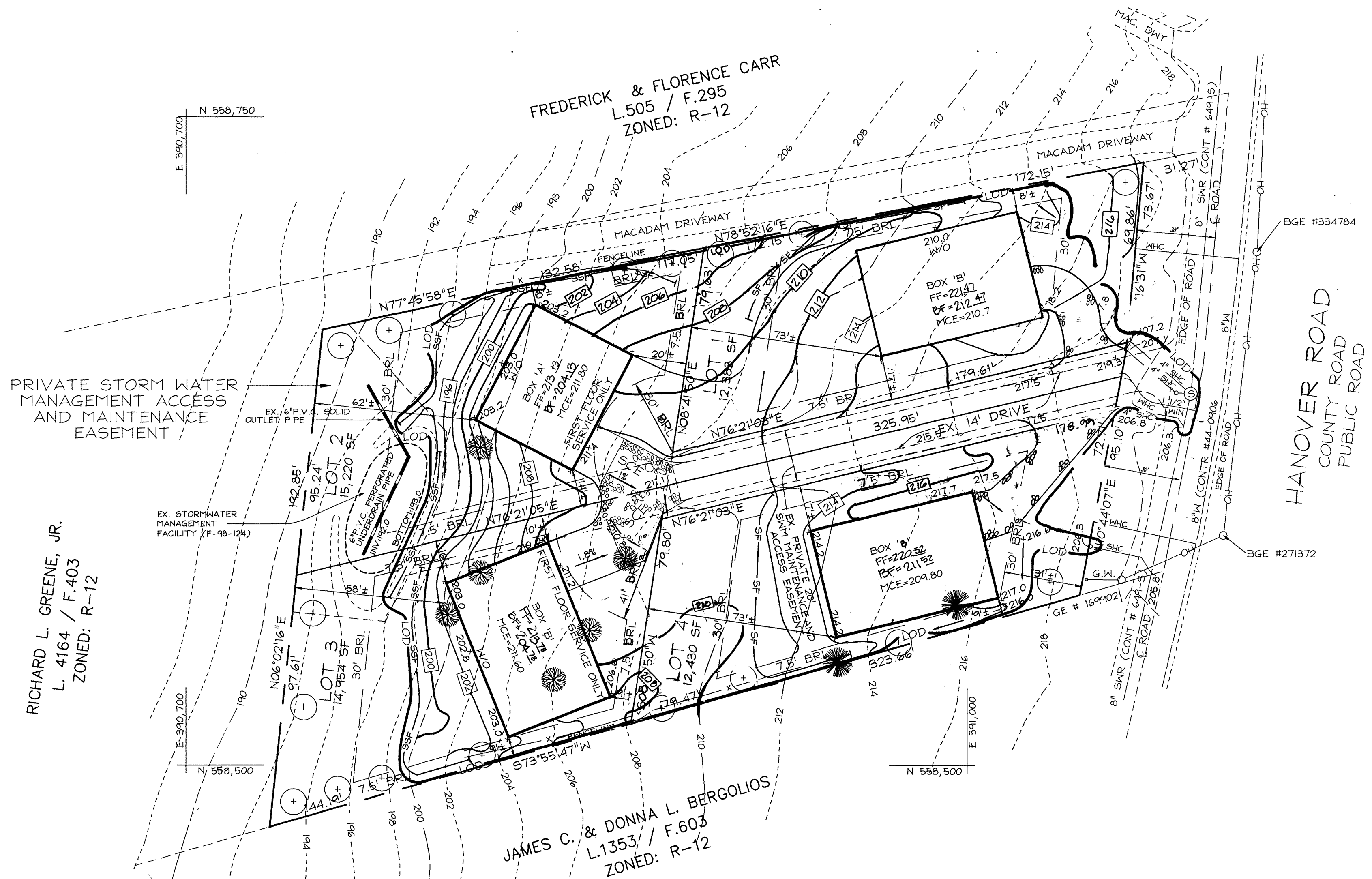
2 SHEET OF 2

ADDRESS CHART	
LOT No.	STREET ADDRESS
1	6212 HANOVER ROAD
2	6214 HANOVER ROAD
3	6216 HANOVER ROAD
4	6218 HANOVER ROAD



GENERAL NOTES

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 - AREA OF SUBMISSION: 1.26 AC
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 - LIMIT OF DISTURBANCE: 0.97 AC
 - PROPOSED USE OF SITE: SINGLE FAMILY DWELLINGS
 - TOTAL NUMBER OF UNITS: 4
- PROJECT BACKGROUND:
 - LOCATION: TAX MAP: 38 PARCEL: 236
 - ZONING: R-12
 - SUBDIVISION: SCHAFFNER PROPERTY
 - DPT REFERENCES: F-98-124
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- DRIVEWAY MAINTENANCE AGREEMENT RECORDED AS L.4607, F.11



SHEET INDEX

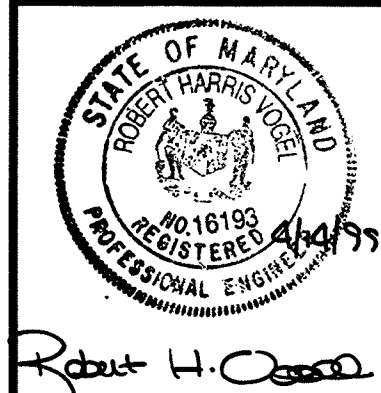
SHEET NO.	DESCRIPTION
1	SITE DEVELOPMENT PLAN AND GRADING AND SEDIMENT CONTROL
2	DETAIL SHEET

NO.	REVISION	DATE
1	REVISE HOUSE ELEV. & LOT GRADING	12/13/99
	REVISION	DATE

OWNER / DEVELOPER
MAIN STREET BUILDERS
5705 LANDING ROAD
ELKBRIDGE, MARYLAND 21075

SITE DEVELOPMENT PLAN AND GRADING AND SEDIMENT CONTROL
SCHAFFNER PROPERTY
TAX MAP #38 PARCEL 236
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

VOGEL & ASSOCIATES
ENGINEERS-SURVEYORS-PLANNERS
3681 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410.461.5828 Fax 410.465.3968



DESIGN BY: JCO
DRAWN BY: PS/RJS
CHECKED BY: RHV
DATE: FEB. 2, 1999
SCALE: 1"=30'
W.O. NO.: 96-019

1 SHEET OF 2

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

Chris Simmons / *as* / 4/28/99
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert H. Vogel / 4/28/99
HOWARD SOIL CONSERVATION DISTRICT DATE

ENGINEERS CERTIFICATE
"I HEREBY CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS. THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Robert H. Vogel / 4/14/99
SIGNATURE OF ENGINEER DATE
ROBERT H. VOGEL

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS 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."

Joseph E. Proctor / 4-14-99
SIGNATURE OF DEVELOPER DATE

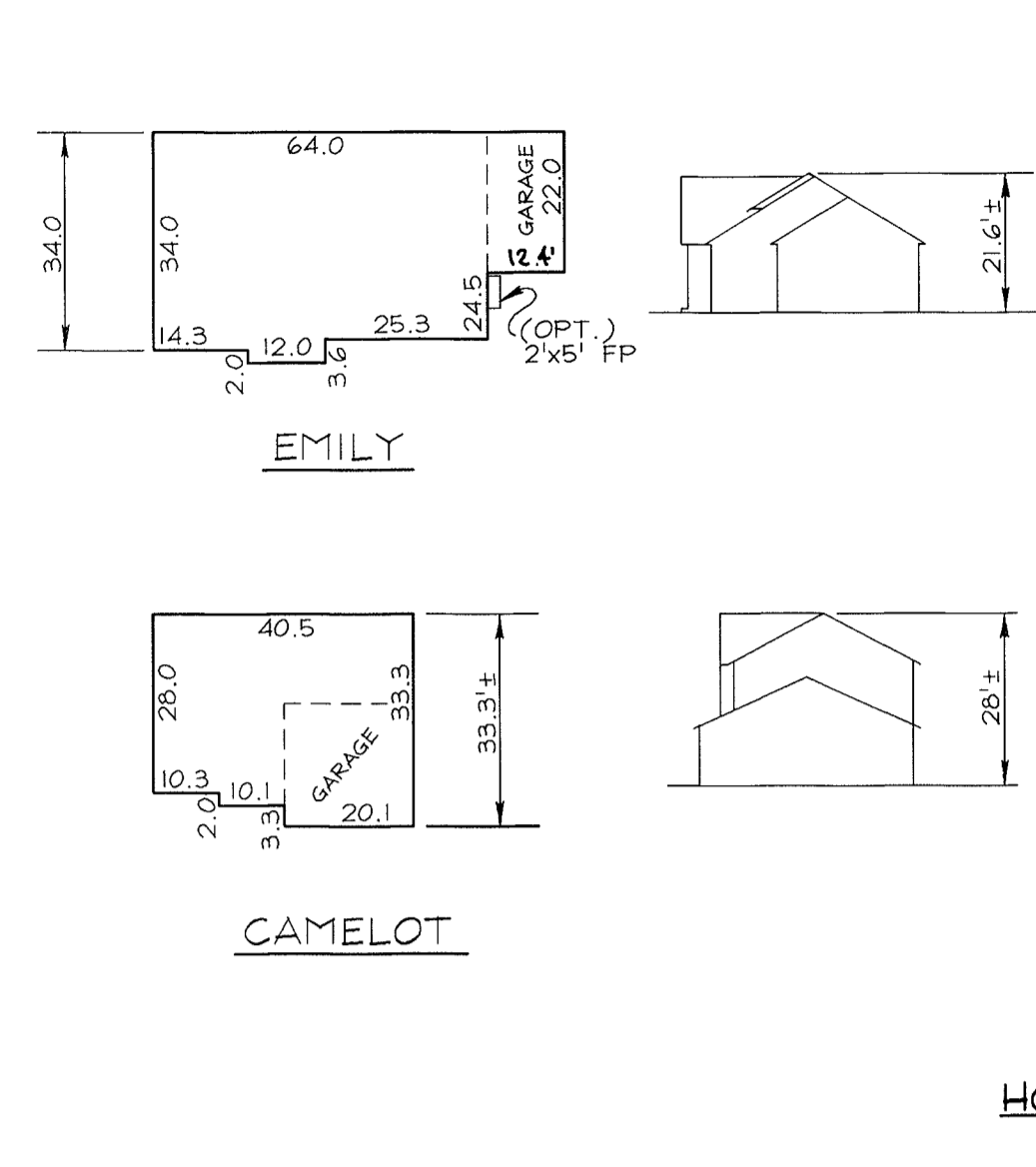
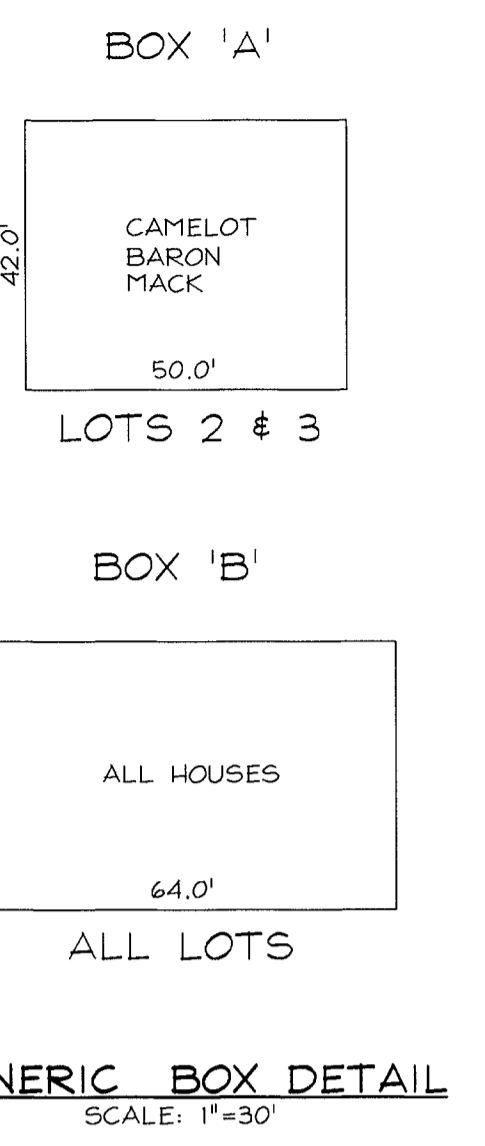
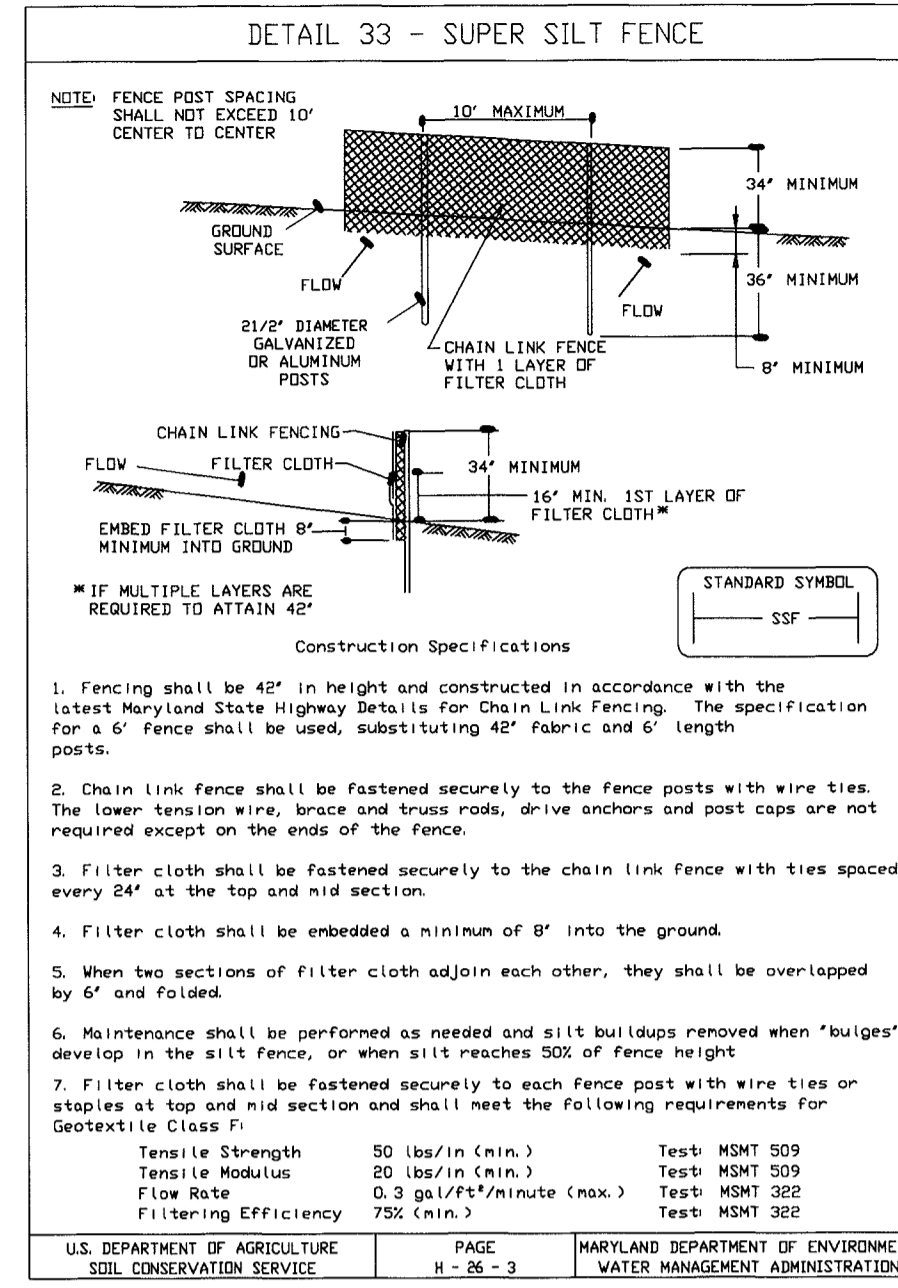
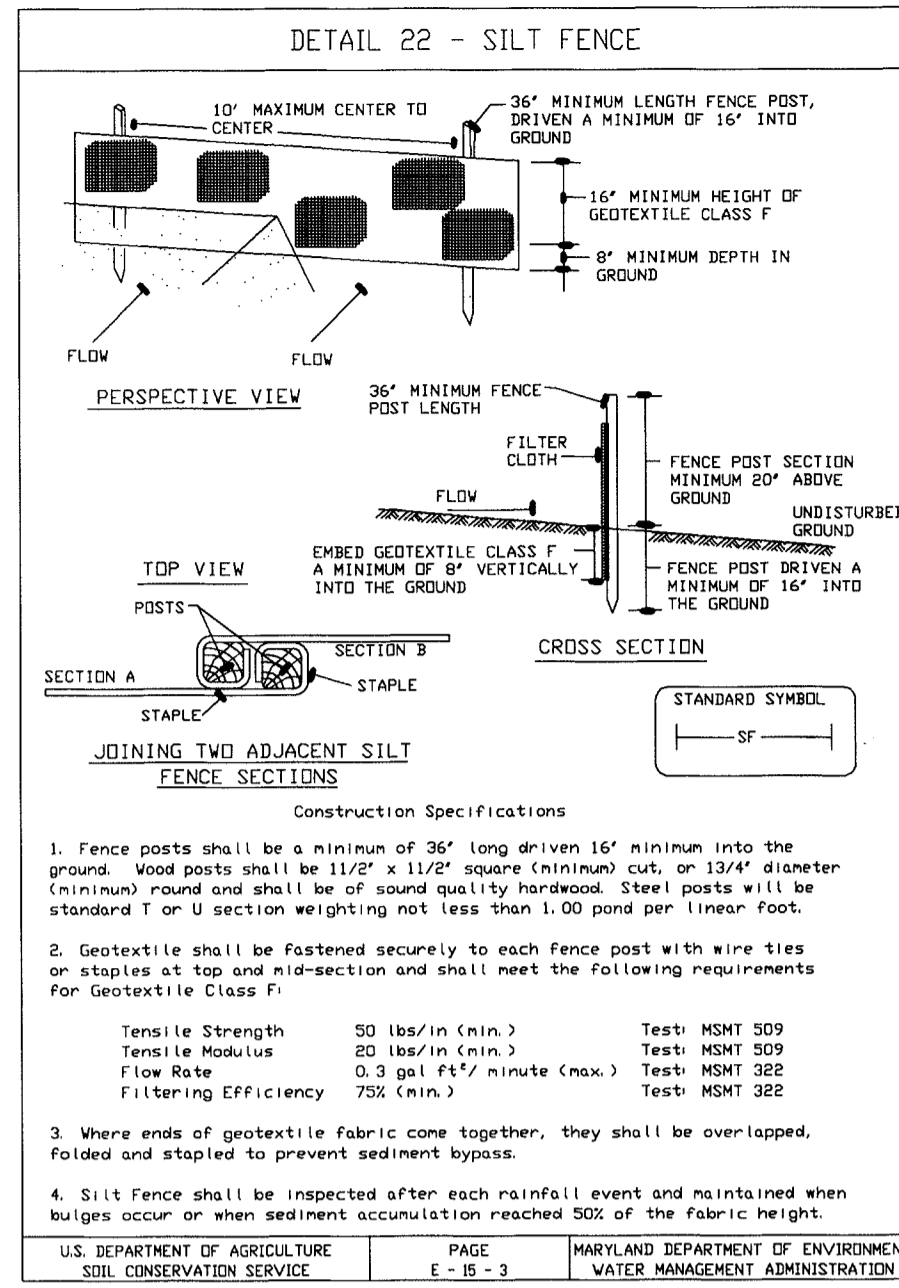
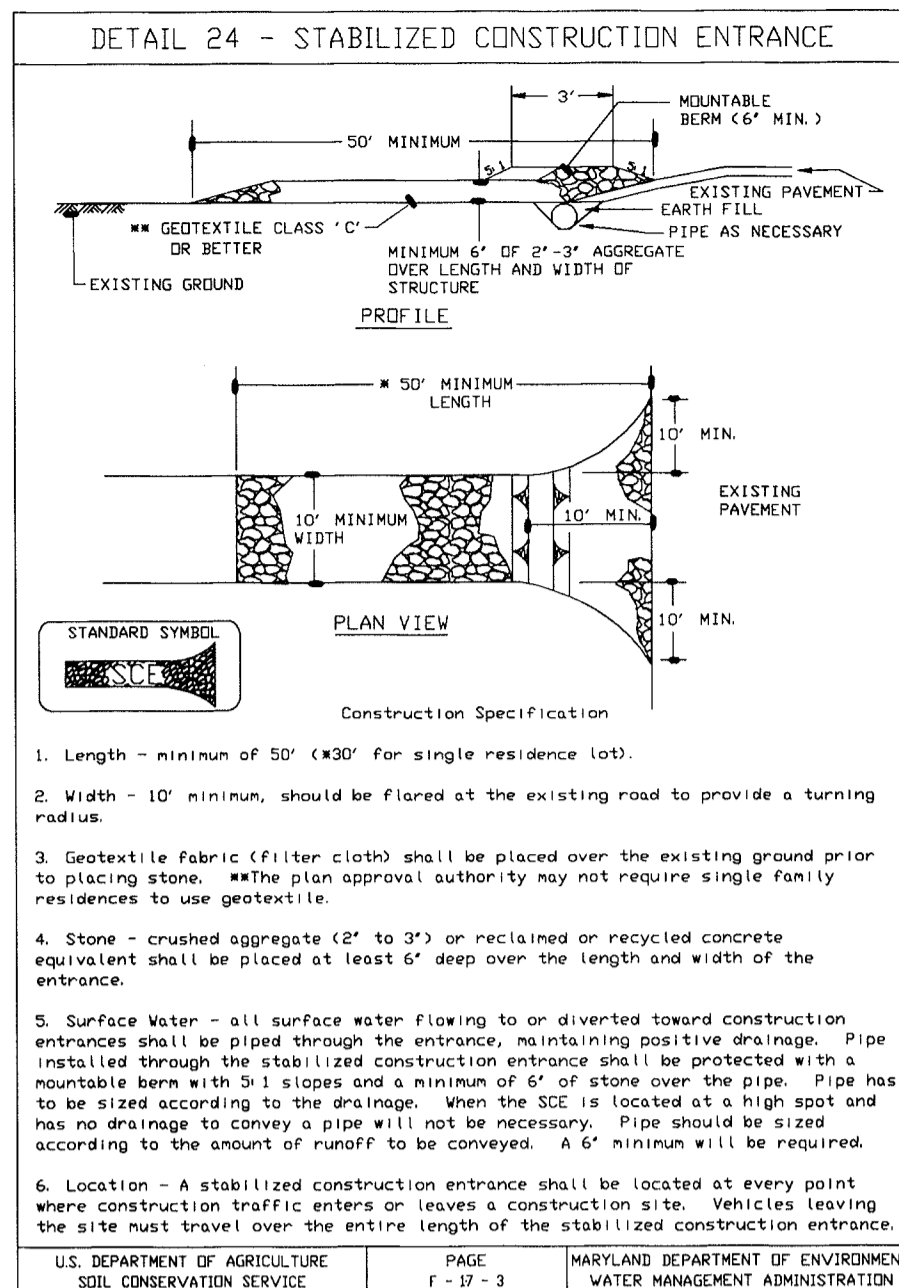
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Joseph E. Proctor / 5/14/99
DIRECTOR DATE

Cindy Hamstra / 5/18/99
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

William J. ... / 5/5/99
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
SCHAFFNER PROPERTY	N/A	236
PLAT NO. BLOCK NO. ZONE	TAX/ZONE ELECT. DIST.	CENSUS TR.
1356.9 15 R-12	38 1ST	6012
WATER CODE A01	SEWER CODE 2130000	



TEMPORARY SEEDING

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

Seedbed Preparation: Loosen upper three inches of soil by raking, discing, or other acceptable means before seeding, if not previously loosened.

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

Seeding: For periods March 1 thru April 30 and August 15 thru November 15, seed with 1/2 bushel per acre of annual rye (3.2 lbs./1000 sq. ft.). For the period May 1 thru August 14, seed with 3 lbs. per acre of weeping lovegrass (.07 lbs./1000 sq. ft.). For the period November 16 thru February 29, 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 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 210 gal. per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gal. per acre (8 gal./1000 sq. ft.) for anchoring.

Refer to the 1983 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. For rate and methods not covered.

PERMANENT SEEDING NOTES

Apply to graded or cleared areas not subject to immediate further disturbance where a permanent, long-lived vegetative cover is needed.

Seedbed Preparation: Loosen upper 3 inches of soil by raking, discing, or other acceptable means before seeding, if not previously loosened.

Soil Amendments: Use one of the following schedules:

- 1. Preferred - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 600 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper 3 inches of soil. At time of seeding apply 400 lbs. per acre 30-0-0 ureaform fertilizer (9 lbs./1000 sq. ft.).
- 2. Acceptable - Apply 2 tons per acre dolomitic limestone (92 lbs./1000 sq. ft.) and 1000 lbs. per acre 10-10-10 fertilizer (23 lbs./1000 sq. ft.) before seeding. Harrow or disc into upper three inches of soil.

Seeding: For the periods March 1 thru April 30 and August 1 thru October 15, seed with 40 lbs. per acre (1.4 lbs./1000 sq. ft.) of Kentucky 31 Tall Fescue. For the period May 1 thru July 31, seed with 60 lbs. of Kentucky 31 Tall Fescue per acre and 2 lbs. per acre (.05 lbs./1000 sq. ft.) of weeping lovegrass. During the period of October 16 thru February 29, protect site by Option 1 - 2 tons per acre of well-anchored straw mulch, and seed as soon as possible in the spring. Option 2 - Use soil. Option 3 - Seed with 60 lbs. per acre Kentucky 31 Tall Fescue, and mulch with 2 tons per acre well anchored straw.

Mulching: Apply 1/2 to 2 tons per acre (70-90 lbs./1000 sq. ft.) of unrotted small grain straw immediately after seeding. Anchor mulch immediately after application using mulch anchoring tool or 210 gallons per acre (5 gal./1000 sq. ft.) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 348 gallons per acre (8 gal./1000 sq. ft.) for anchoring.

Maintenance: Inspect all seeded areas, and make needed repairs, replacements, and reseeding.

SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permits Sediment Control Division prior to the start of any construction (313-1855).
- All vegetation and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.
- Following initial soil disturbance or redistribution, permanent or temporary stabilization shall be completed within: (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 3:1, (b) 14 days to all other disturbed or graded areas on the project site.
- All sediment traps/basins shall be fenced and warning signs posted around their perimeter in accordance with Vol. 1, Chapter 7, HOWARD COUNTY DESIGN MANUAL, Storm Drainage.
- All disturbed areas must be stabilized within the time period specified above in accordance with the 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL for permanent seeding, sod, temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall 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	1.26 acres
Area Disturbed	0.97 acres
Area to be seeded or paved	0.33 acres
Area to be vegetatively stabilized	0.64 acres
Total Cut	222 cu. yds.
Total Fill	202 cu. yds.

 Offsite waste/borrow area location To be determined by contractor, with pre-approval of the Sediment Control Inspector and active grading permit.
- 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, 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.

SEQUENCE OF CONSTRUCTION

- Obtain grading permit.
- Notify Howard County Bureau of Inspections and Permits (313-1850) at least 24 hours before starting any work.
- Construct Stabilized Construction Entrances.
- Install silt fence, 4 super silt fence.
- Rough grade site.
- Construct work. The first floor elevation cannot be more than 1' higher or 0.2' lower than the elevations shown on this plan. The foundation footprint must be within the generic block.
- Final lot grade to be in substantial conformance with site development plan.
- During grading and after each rainfall, the contractor shall inspect and provide the necessary maintenance on the sediment erosion control measures shown herein.
- Following initial soil disturbance or redistribution permanent or temporary stabilization shall be compiled on the sediment erosion control measures shown with:
 - 14 calendar days for all perimeter sediment control structures, dikes, sudes, ditch perimeter slopes and all slopes greater than 3:1.
 - 14 calendar days for all other disturbed areas.
- Upon stabilization of all disturbed areas and with the approval of the sediment control inspector, remove all sediment control devices.

21.0 STANDARD AND SPECIFICATIONS FOR TOPSOIL DEFINITION

Placement of topsoil over a prepared subsoil prior to establishment of permanent vegetation.

PURPOSE
To provide a suitable soil medium for vegetative growth. Soils of concern are: low moisture content, low nutrient levels, low pH, material toxic to plants, and/or unacceptable soil gradation.

CONDITION WHERE PRACTICE APPLIES

- This practice is limited to areas having 2:1 or flatter slopes where:
 - The texture of the exposed subsoil/parent material is not adequate to provide vegetation.
 - The soil material is so shallow that the rooting zone is not adequate to support plants or furnish continuing supplies of moisture and plant nutrients.
 - The original soil to be vegetated contains material toxic to plant growth.
 - The soil is so acidic that treatment with limestone is not feasible.
- For the purpose of these Standards and Specifications, grades having slopes steeper than 2:1 shall have the appropriate stabilization shown on the plans.

CONSTRUCTION AND MATERIAL SPECIFICATIONS

- Topsoil salvaged from the existing site may be used provided that it meets the standards as set forth in these specifications. Topsoil that does not meet these standards shall be salvaged in a different soil type can be found in the Maryland State Highway Department with Maryland Agriculture Experiment Station.
 - Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - Topsoil shall be a loam, sandy loam, clay loam, silt loam, or silty clay loam by loam, sandy loam, or silt loam. It shall not be a clay loam, silty clay loam, or silty clay. Topsoil shall not be a mixture of soil types. Topsoil shall be free of rocks, stumps, and other large pieces of debris. Topsoil shall contain less than 1% of material larger than 1/2" in diameter or other material that will not pass through a No. 20 sieve.
 - Topsoil must be free of plants or plant parts such as stems, roots, or debris, as specified.
 - Where the subsoil is either highly acidic or composed of heavy clay, organic topsoil shall be applied to the top 12" of the subsoil. The amount of organic topsoil shall be determined by a soil scientist and shall be worked into the soil in conjunction with tillage operations as described in the following procedures:
 - For sites having disturbed areas under 5 acres:
 - Place topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 - On soil meeting topsoil specifications, obtain test results indicating fertilizer and lime amendments required to bring the soil into compliance with the following:
 - pH for topsoil shall be between 6.0 and 7.5. If the tested soil demonstrates a pH of less than 6.0, sufficient lime shall be prescribed to raise the pH to 6.5 or higher.
 - Organic content of topsoil shall not be less than 1.5 percent by weight.
 - Topsoil having soluble salt content greater than 500 parts per million shall not be used.
 - No sod or seed shall be placed on soil which has been used until soil sufficient time has elapsed (14 days minimum) to permit dissipation of phytotoxic materials.
 - Place a topsoil (if required) and apply soil amendments as specified in 20.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.
 - Topsoil Application
 - When topsoiling, maintain needed erosion and sediment control practices, such as silt fences, slope stabilization, structures, erosion dikes, slope silt fence and sediment traps, in place until the topsoil is in place and maintained, at least 8" higher in elevation.
 - Grades on the areas to be topsoiled, which have been graded and are uniformly distributed in a 4"-8" layer and lightly compacted to a minimum thickness of 4", prepared and maintained in such a manner that sodding preparation can proceed with the application of additional soil until the topsoil is in place and maintained.
 - Topsoil shall not be placed while the topsoil or subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD COUNTY SOIL CONSERVATION DISTRICT AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE 4/28/99

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD COUNTY SOIL CONSERVATION DISTRICT.

HOWARD SOIL CONSERVATION DISTRICT DATE 4/28/99

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Signature of Engineer: Robert H. Vogel DATE: 4/28/99

DEVELOPER'S CERTIFICATE
"I/WE CERTIFY THAT ALL DEVELOPMENT AND/OR CONSTRUCTION WILL BE DONE IN ACCORDANCE TO THESE PLANS, 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."
Signature of Developer: Joseph E. Andrus DATE: 4.14.99

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Director: [Signature] DATE: 5/19/99
Chief, Division of Land Development: [Signature] DATE: 5/18/99
Chief, Development Engineering Division: [Signature] DATE: 5/5/99

SUBDIVISION NAME	SECTION/AREA	PARCEL NUMBER
SCHAFFNER PROPERTY	N/A	236
PLAT NO. BLOCK NO. ZONE	TAX/ZONE ELECT. DIST.	CENSUS TR.
13569 15 R-12	38 1ST	6012
WATER CODE A01	SEWER CODE 2130000	

NO.	REVISION	DATE

DETAIL SHEET

SCHAFFNER PROPERTY

TAX MAP #38 PARCEL 236
1ST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

OWNER / DEVELOPER
MAIN STREET BUILDERS
5705 LANDING ROAD
ELKBRIDGE, MARYLAND 21075

VOGEL & ASSOCIATES
ENGINEERS-SURVEYORS-PLANNERS
3681 Park Avenue, Suite 101 • Ellicott City, Maryland 21043
Tel 410-461-5828 Fax 410-465-3966

DESIGN BY: JCO
DRAWN BY: PS/RJS
CHECKED BY: RHV
DATE: FEB. 2, 1999
SCALE: 1"=30'
W.O. NO.: 96-019

2 SHEET OF 2