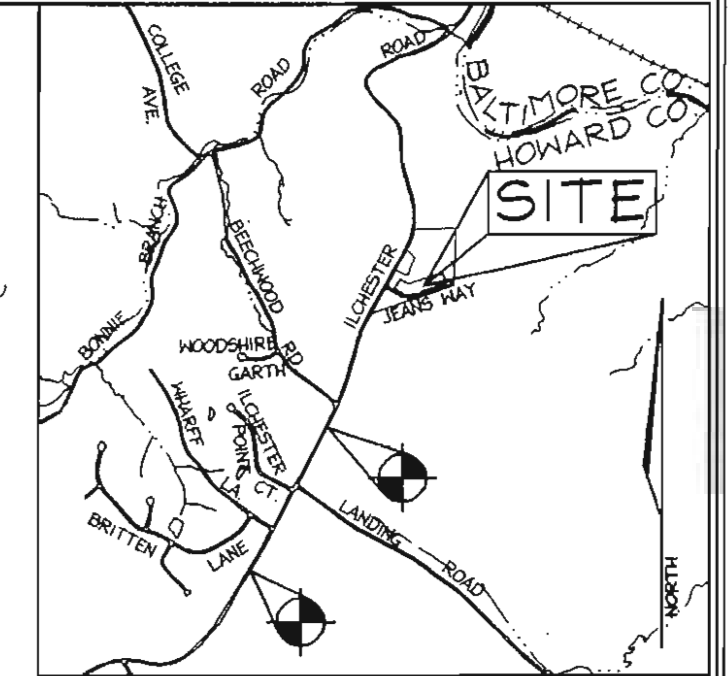


LEGEND

- Existing Contour
- Proposed Contour
- Spot Elevation
- Direction of Flow
- Existing Trees to Remain
- Ex. Light Poles

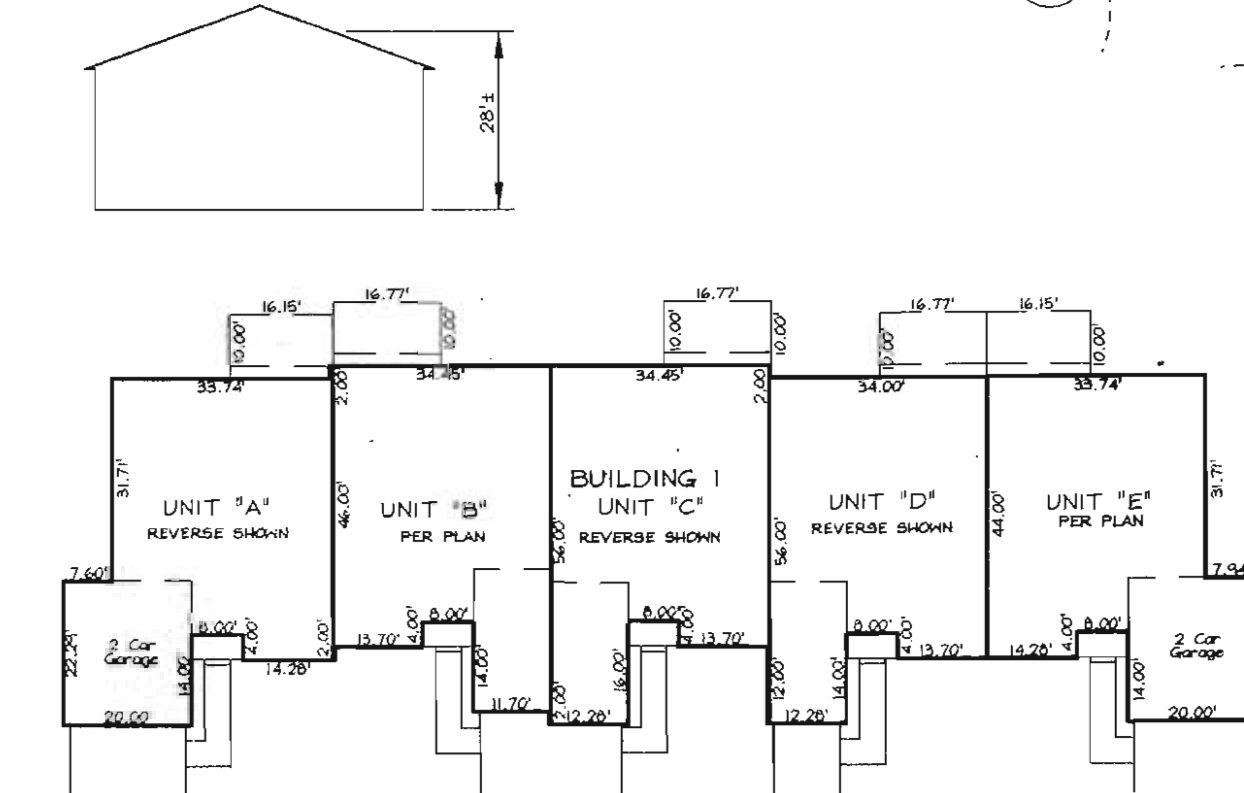
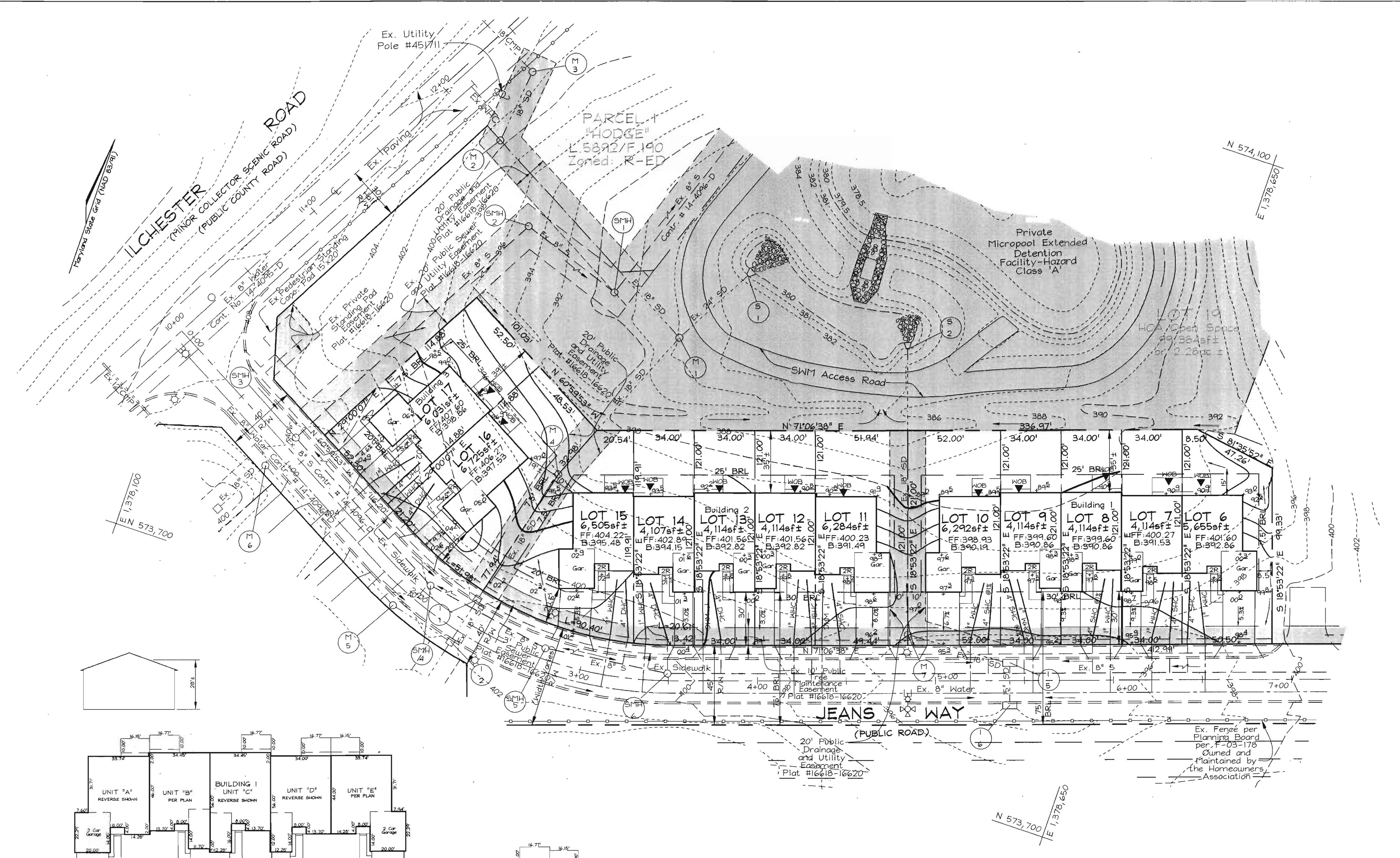


BENCHMARKS

Sta. 31E6	N 173,996.1454 E 419,619.1591	El.: 147.1455 (meters)
	N 570,852.353 E 1,376,700.524	El.: 482.760 (feet)
	5'-SW of edge of road # 500'-W of Wharf Lane.	
	Concrete Monument	
Sta. 31E7	N 174,448.1551 E 419,864.0348	El.: 145.8922 (meters)
	N 572,335.322 E 1,377,503.920	El.: 478.648 (feet)
	4'-SE of edge of road # 250'-W of Beechwood Road.	
	Concrete Monument	

GENERAL NOTES

1. Property is within the Metropolitan District.
2. Public water and sewer will be used within this site.
3. The Contractor shall notify the following utility companies or agencies at least five(5) working days before starting work shown on these plans:
 - Verizon 1.800.743.0033/410.224.9210
 - AT&T 1.800.252.1133
 - State Highway Administration 410.531.5533
 - BGE(Contractor Services) 410.850.4620
 - BGE(Underground Damage Control) 410.787.9068
 - Miss Utility 1.800.257.7777
 - Colonial Pipeline Company 410.795.1390
 - Howard County, Dept. of Public Works, Bureau of Utilities 410.313.4900
 - Howard County Health Department 410.313.2640
4. The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
5. The contractor shall notify the Department of Public Works/Bureau of Engineering Construction Inspection Division at (410) 313-1880 at least five (5) working days prior the start of work.
6. The lots shown herein comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
7. Topography taken from Road Conservation Plan F-03-178.
8. Contractor to confirm all dimension, utilities and topography in the field. If any conflicts arise, contact Engineer before beginning any work.
9. Howard County Soil Map #20 and #21.
10. There are no floodplains on site, see F-03-178.
11. The project is in conformance with the latest Howard County Standards unless waivers have been approved.
12. The coordinates shown herein are based upon the Howard County Geodetic Control which is based on the Maryland State Plane Coordinate system. Howard County monument numbers 31E6 and 31E7 were used for this project.
13. In accordance with section 128 of the Howard County Zoning Regulations, bay windows, chimneys, or exterior stairways not more than 16 feet in width may project not more than 4 feet into any setbacks. Porches, or decks, open or enclosed may project not more than 10 feet into the front or rear yard setback. BRL's shown taken from Howard County Zoning Regulation for the Zoning District.
14. Driveway(s) shall be provided prior to issuance of a use and occupancy permit for any new dwelling to insure safe access for fire and emergency vehicles per the following (minimum) requirements:
 - a.) Width-12 feet (14' serving more than one residence).
 - b.) Surface-6 inches of compacted crusher run base with 1 1/2" Min. tar and chip coating.
 - c.) Geometry-max. 15% grade, max. 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 one foot depth over driveway surface.
 - f.) Structure clearance-minimum 12 feet.
 - g.) Maintenance-sufficient to insure all weather use.
15. All Sewer House Connections to be a minimum of 2% and a maximum of 5% except Lots 8, 9, and 10 which are to be 1%. If no slope is shown, 2.0% may be assumed.
16. No clearing, grading or construction is permitted within wetland or stream system buffers unless approved by the Department of Planning and Zoning.
17. Residential Driveway Entrance per Howard County Standard Detail R-6.03
18. Public Water and Sewer installed under Contract #14-4096-D
19. Financial surety for the required landscaping per P.B. 357 must be posted as part of the Grading Permit in the amount of \$5,400.00 (12 shade trees @ \$300.00 each, 60 shrubs @ \$30.00 each).
20. Property is subject to PB Case 357 approving Sketch plan S-01-13, Ilchester Hills, per section 107.5 of the Zoning regulations for 5 single family detached residential lots and 12 single family attached residential lots and open space lots on 9.320 Acres of land, subject to the following:
 - a.) Providing fencing along the entry road and Landscape Perimeter 7.
 - b.) Providing additional landscaping along the rear of the townhouse lots.
 - c.) Maximizing the water surface on the future Stormwater Management Pond.



STONEHURST BUILDING TEMPLATES
SCALE: 1"=30'

LOT COVERAGE CHART

Lot #	Lot Size	Building Coverage	Lot Coverage
6	5655sf±	1921sf±	34%
7	4114sf±	1750sf±	43%
8	4114sf±	1773sf±	44%
9	4114sf±	1748sf±	43%
10	6292sf±	1934sf±	31%
11	6284sf±	1928sf±	31%
12	4114sf±	1751sf±	43%
13	4114sf±	1771sf±	44%
14	4107sf±	1747sf±	43%
15	6505sf±	1927sf±	30%
16	6725sf±	1927sf±	29%
17	6031sf±	1928sf±	32%

SEWER HOUSE CONNECTION CHART

Lot #	Inv. @ Easement Min.	Cellar El.	Basmt. El.	First Floor El.
6	387.86	391.50	392.86	401.60
7	385.71	389.35	391.53	400.27
8	385.30	388.67	390.86	399.60
9	385.11	388.48	390.86	399.60
10	385.01	388.38	390.19	398.93
11	384.78	389.02	391.49	400.23
12	384.70	388.94	392.82	401.56
13	386.76	391.00	392.82	401.56
14	387.40	391.54	394.15	402.89
15	389.89	393.50	395.48	404.22
16	392.03	395.50	397.53	406.27
17	394.03	397.50	398.86	407.60

SITE ANALYSIS DATA CHART

- a. Total project area: 1.43 Acres±
- b. Area of plan submission: 1.43 Acres±
- c. Limit of disturbed area: 1.43 Acres±
- d. Subject property zoned R-ED per 2/2/04 Comprehensive Zoning Plan.
- e. Proposed uses for site: 4 structures, single family attached.
- f. Floor space on each level of building(s) per use: See house templates this sheet
- g. Total number of units allowed: 12
- h. Total number of units proposed: 12
- i. Proposed building coverage of site: 0.47 acre±; 33.0% of gross lot area
- j. Howard County file references: S-01-13, WP-02-12, P-03-04, F-03-178; Cont. # 14-4096-D; Contr. # 14-4096-D; Plat #16618-16620
- k. Parking Tabulation:
 - Required: 12 Lots x 2 Spaces Per Lot = 24 Spaces
 - Provided: 18 within Garages
 - 18 on Driveway Pads
 - 36 Spaces Total

ADDRESS CHART

Lot	Street
6	7446 Jeans Way
7	7442 Jeans Way
8	7438 Jeans Way
9	7434 Jeans Way
10	7430 Jeans Way
11	7426 Jeans Way
12	7422 Jeans Way
13	7418 Jeans Way
14	7414 Jeans Way
15	7410 Jeans Way
16	7406 Jeans Way

PERMIT INFORMATION CHART

Subdivision Name: ILCHESTER HILLS	Section/Area: N/A	Parcel No.: 419
Plat #: 16618-16620 L.5842 F.190	Grid: 5	Zoning: R-ED
Water Code: G-09	Tax Map No.: 31	Elect. District: 1st
	Census Tract: 6011.01	Sewer Code: 1251659

SHEET INDEX

DESCRIPTION	SHEET No.
Site Development Plan	1 of 2
Sediment and Erosion Control and Landscaping Plan and Details	2 of 2

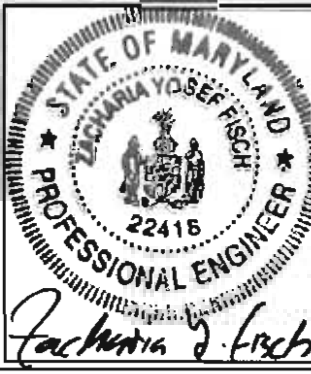
OWNER/DEVELOPER

RYAN HOMES
11460 Cronridge Drive, Suite 128
Owings Mills, MD 21117
Tel: 410-654-0501

SITE DEVELOPMENT PLAN

ILCHESTER HILLS

LOTS 6-17
PROPOSED SINGLE FAMILY ATTACHED DWELLING UNITS
TAX MAP 31 GRID 5
1ST ELECTION DISTRICT



FSH Associates

Engineers Planners Surveyors
8318 Forest Street, Ellicott City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@cs.com

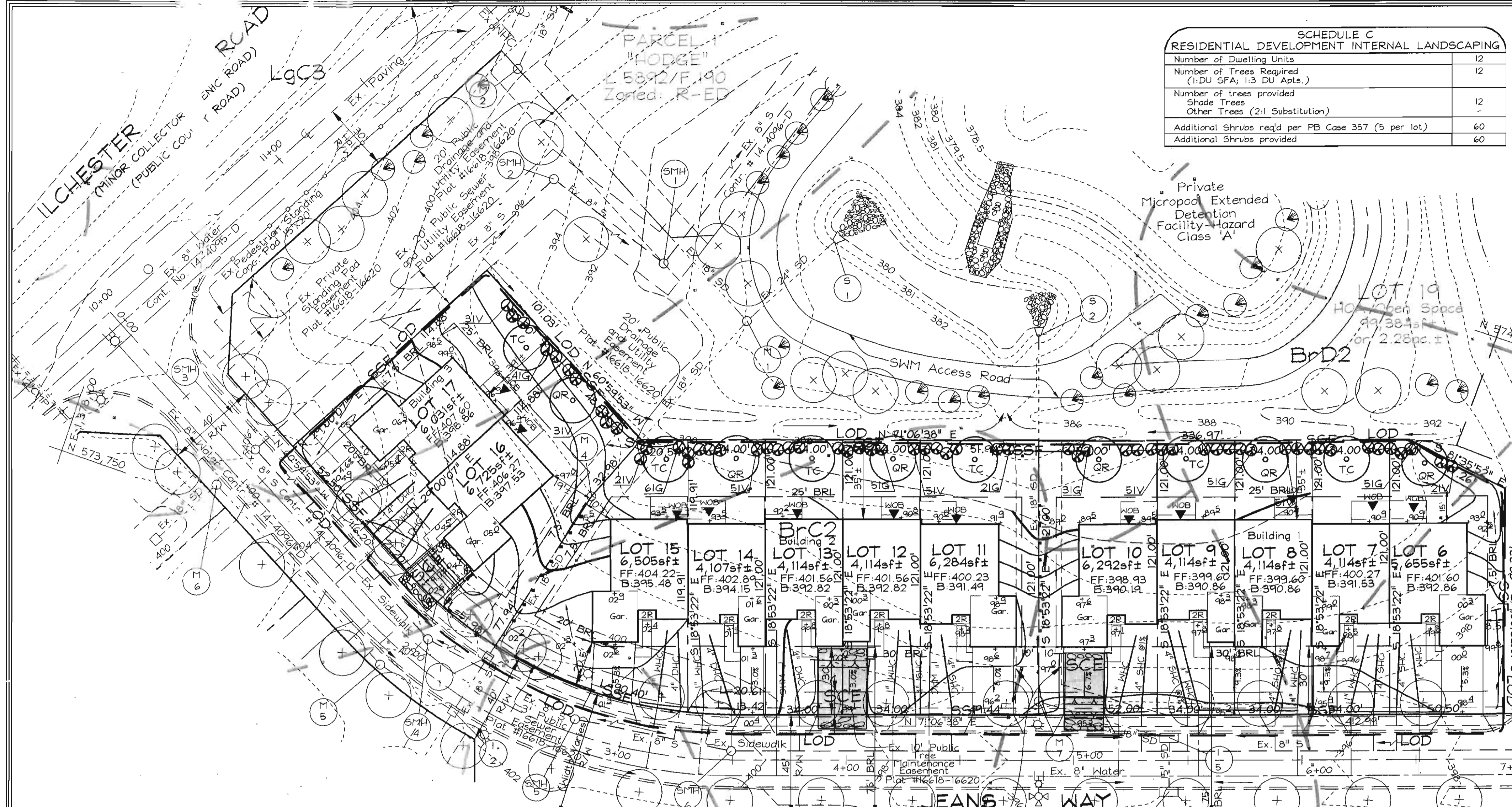
DESIGN BY: PS
DRAWN BY: DSH
CHECKED BY: ZYF
SCALE: 1"=30'
DATE: May 10, 2004
I.O. No.: 3186
SHEET No.: 1 OF 2

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Mark Dawson 5/26/04
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

Conrad Hamada 5/28/04
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

Stephen Caffery 5/28/04
DIRECTOR (Acting)
DATE



SCHEDULE C RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

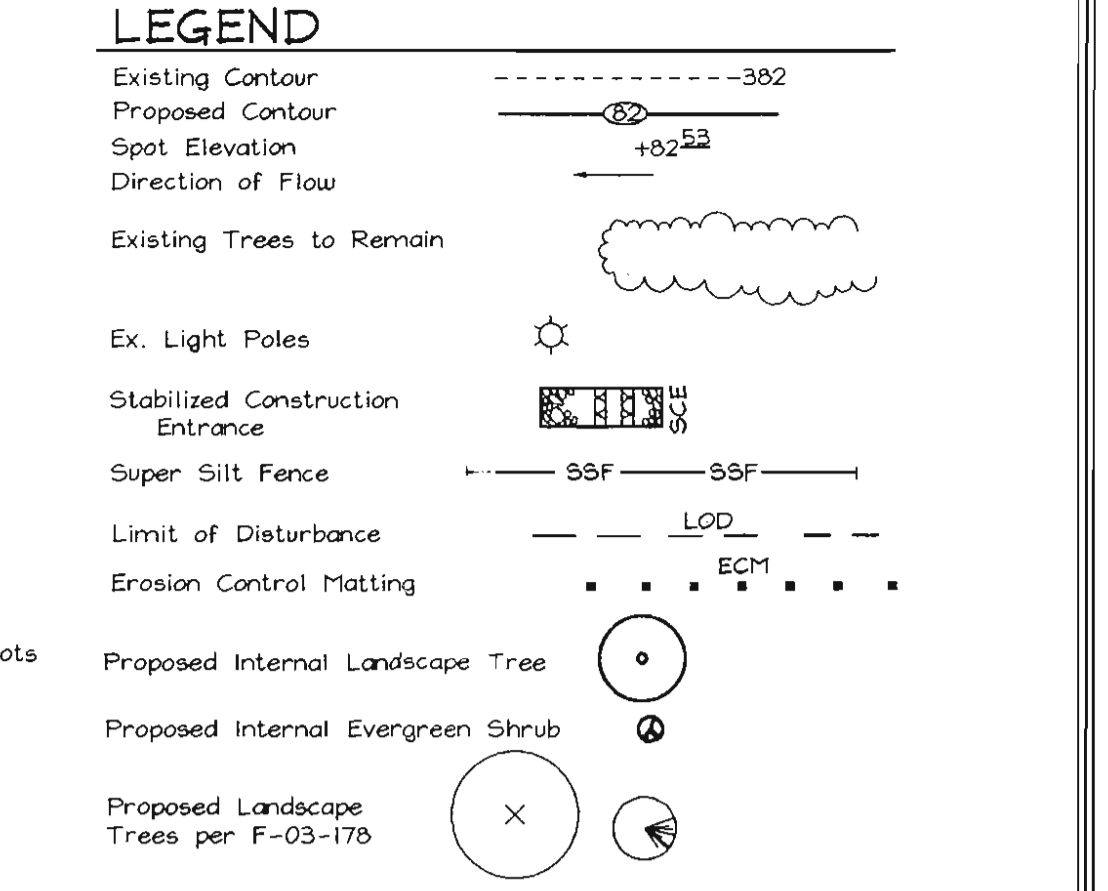
Number of Dwelling Units	12
Number of Trees Required (1 DU SFA, 1.3 DU Apts.)	12
Number of Trees provided	12
Shade Trees (2:1 Substitution)	60
Additional Shrubs req'd per PB Case 357 (5 per lot)	60
Additional Shrubs provided	60

LANDSCAPE SCHEDULE - INTERNAL LOT LANDSCAPING

KEY QUAN.	BOTANICAL NAME	SIZE	NOTE
TC 6	Filia cordata 'Greenspire'	2 1/2'-3' Cal.	B # B
QR 6	Quercus rubra (Shade Trees) 'Red Oak'	2 1/2'-3' Cal.	B # B
IG 30	Ilex glabra 'Compacta'	2.5'-3' Ht.	Cont.
IV 30	Virginia Sweetspire	2.5'-3' Ht.	Cont.

GENERAL NOTES

- At the time of installation, all trees/evergreens/shrubs listed and approved for this site shall be of the proper height requirements in accordance with the Howard County Landscaping Manual. In addition, no substitutions or relocation of required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviation from this approved Landscape Plan may result in denial or delay in the release of landscape surety until such time as all required materials are planted and/or revisions are made to applicable plans and certificates.
- Financial surety for the required landscaping must be posted as part of the Developer's Agreement in the amount of \$5,400.00 (12 shade trees @ \$300.00 each, 60 shrubs @ \$30.00 each).
- Per the Planning Board's requirements landscaping is required along the rear of townhouse lots.



SOILS LEGEND

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
BrB2	Brandywine loam, 3 to 8 percent slopes, moderately eroded	C
BrC2	Brandywine loam, 8 to 15 percent slopes, moderately eroded	C
BrD2	Brandywine loam, 15 to 25 percent slopes, moderately eroded	C
GnB2	Glenville silt loam, 3 to 8 percent slopes, moderately eroded	C
LgC3	Lagone silt clay loam, 8 to 15 percent slopes, severely eroded	C
M-E	Montalto and Relay soils, 15 to 45 percent slopes	B

SEDIMENT CONTROL NOTES

- A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permit 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 1994 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL and revisions thereto.
- Following initial soil disturbance or reinstallation, 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 and temporary seeding, and mulching (Sec. G). Temporary stabilization with mulch alone shall be done when recommended seedings 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	1.43 Acres
Area Disturbed	1.43 Acres
Area to be reseeded or planted	0.24 Acres
Area to be vegetatively stabilized	0.50 Acres
Total Cut	7815 CFT
Total Fill	4183 CFT
Offsite water/borrow area location	11
- 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.
- Earthwork quantities are solely for the purpose of calculating fees. Contractor to verify all quantities prior to the start of construction.
- To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.

PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE WHERE A PERMANENT LONG-LIVED VEGETATIVE COVER IS NEEDED.

SEEDING PREPARATION: Loosen upper three inches of soil by raking, slicing or other acceptable means before seeding, if not previously loosened.

SOIL AMENDMENTS: In lieu of soil test recommendations, use one of the following schemes:

- 1) Preferred-Apply 2 tons per acre dolomitic limestone (42 lbs/100 sq ft) and apply 100 lbs per acre 10-20-20 fertilizer (14 lbs/100 sq ft) before seeding. Harrow or disc into upper three inches of soil. At the time of seeding, apply 400 lbs per acre 30-0-0 granular fertilizer (4 lbs/1000 sq ft).
- 2) Acceptable-Apply 2 tons per acre dolomitic limestone (42 lbs/100 sq ft) and apply 100 lbs per acre 10-20-20 fertilizer (14 lbs/100 sq ft) before seeding. Harrow or disc into upper three inches of soil. In the spring, Option (2) Use seed Option (3) Seed with 60 before January 31. Tall Fescue and match with 2.5 lbs/acre well anchored straw.

SEEDING: For the periods March 1 thru April 30 and August 1 thru October 15, seed with 40 lbs Kentucky 31 Tall Fescue per acre and 2 lbs per acre 30-0-0 granular fertilizer (3 lbs/1000 sq ft) of urea nitrogen. During the period of October 1 thru February 28, protect site by Option (1) 2 tons per acre well anchored straw and seed as soon as possible. In the spring, Option (2) Use seed Option (3) Seed with 60 before January 31. Tall Fescue and match with 2.5 lbs/acre well anchored straw.

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 20 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 300 gallons per acre (30 gal/1000 sq ft) for anchoring.

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

TEMPORARY SEEDING NOTES

SEEDING PREPARATION: Loosen upper three inches of soil by raking, slicing 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 wintering vetches (07 lbs/1000 sq ft). For the period November 15 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.

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 20 gallons per acre (5 gal/1000 sq ft) of emulsified asphalt on flat areas. On slopes 8 feet or higher, use 300 gallons per acre (30 gal/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.

21.0 STANDARDS 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 vegetable growth. Soils of concern have low moisture content, low nutrient levels, low pH, excessive toxic to plants, and/or unacceptable soil gradation.

Conditions Where Practice Applies:

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

Construction and Material Specifications:

1. Topsoil salvaged from the existing site may be used provided that it meets the standards set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil can be found in the representative soil profile section in the Soil Survey of the USDA-SCS in cooperation with Maryland Agricultural Experiment Station.
2. Topsoil must be free of plants or plant parts such as Bermuda grass, spurge, etc., and weeds, roots, or other as specified.
3. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-6 lbs/1000 sq ft (200-600 pounds per 1,000 square feet) prior to the placement of topsoil. Lime shall be distributed uniformly over designated areas and worked into the soil in conjunction with tillage operations as described in the following procedures.

NOTES

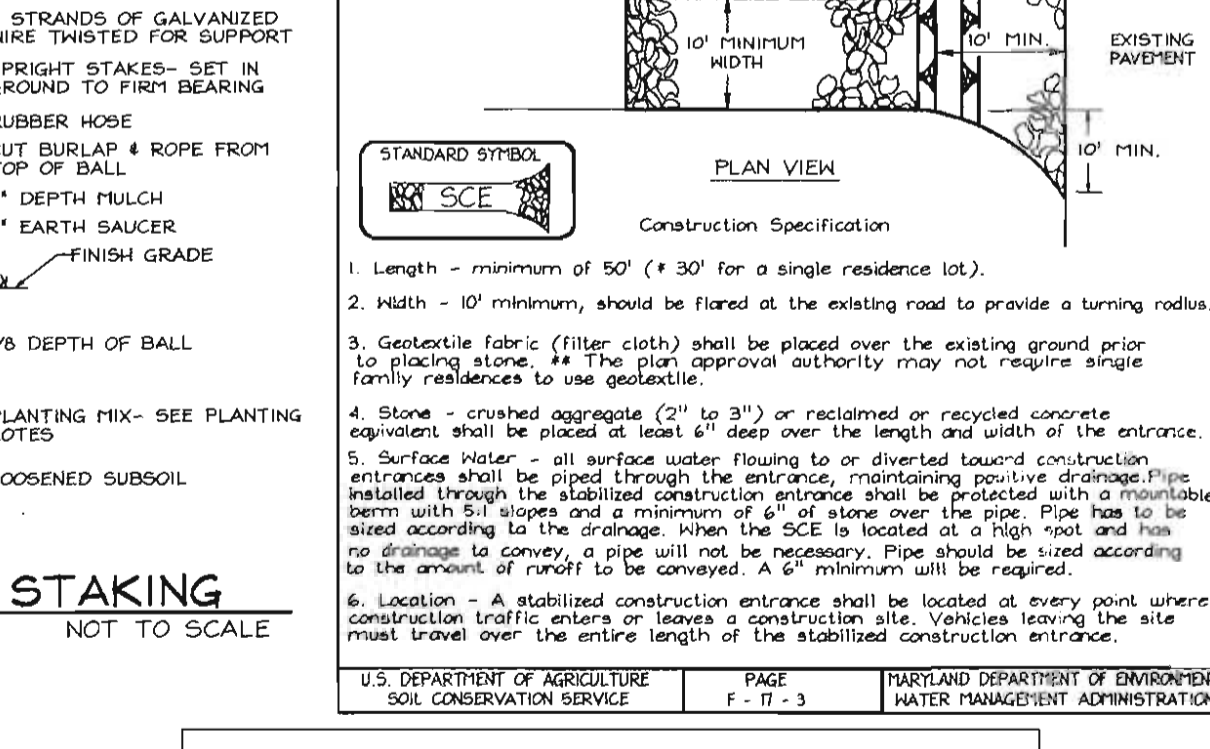
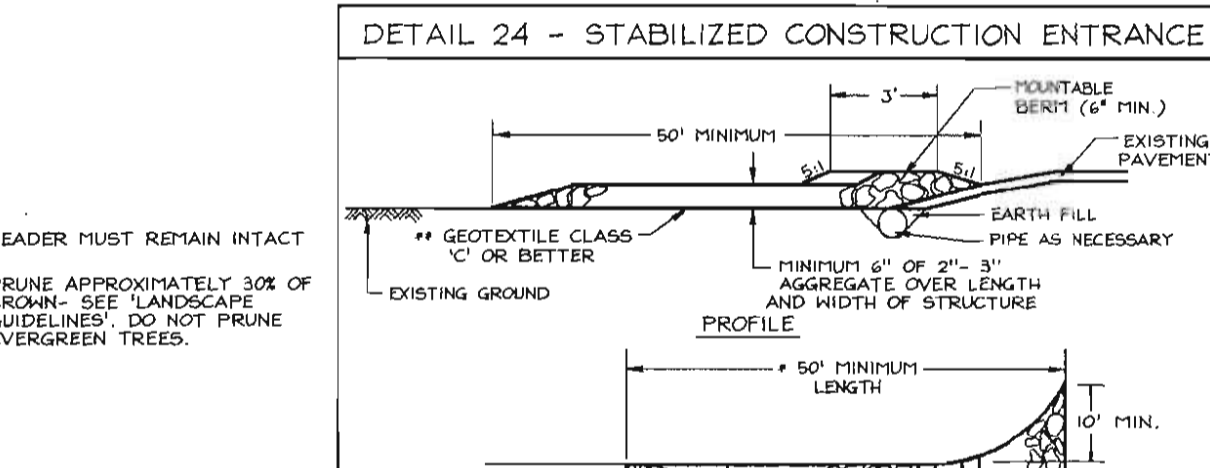
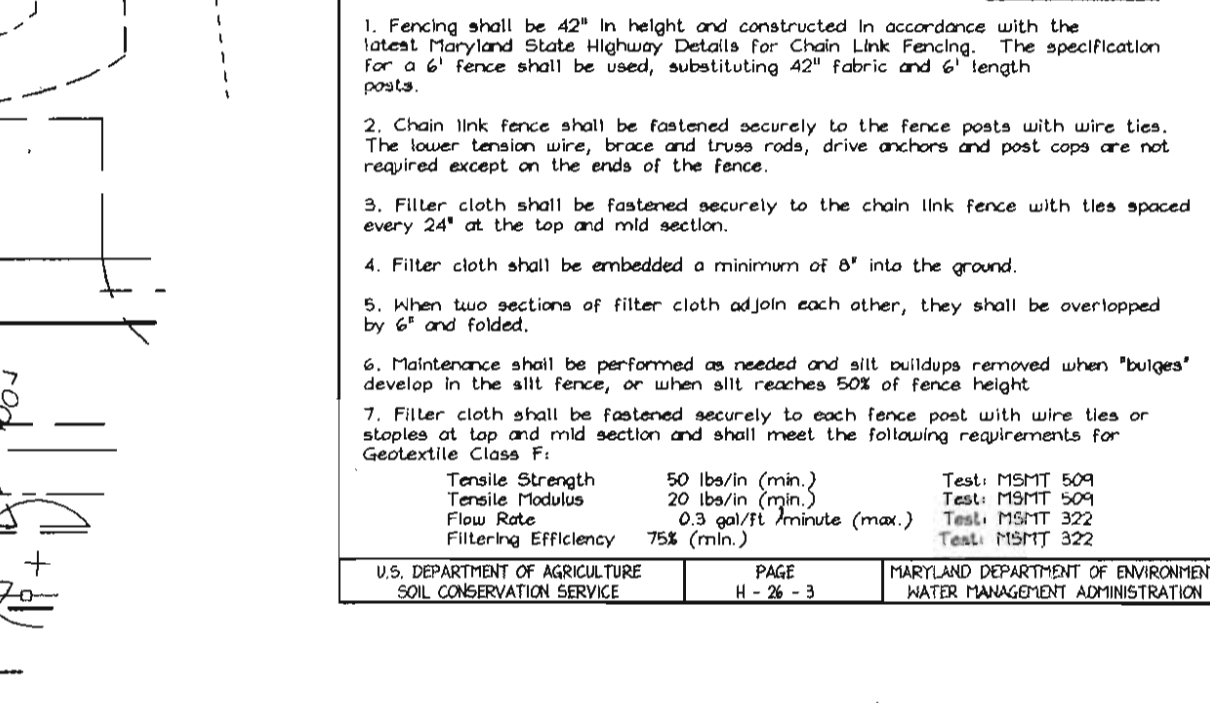
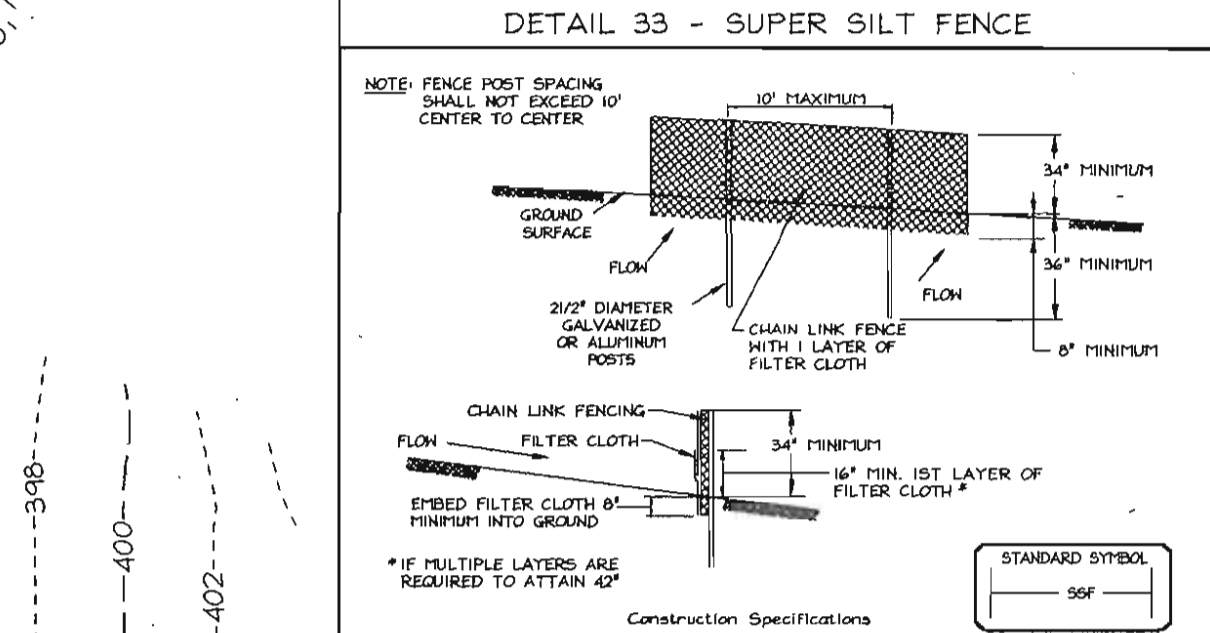
1. SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-MARYLAND METROPOLITAN AREAS" FOR ALL MATERIAL, PROJECT AND PROCEDURE SPECIFICATIONS.
2. SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
3. PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
4. KEEP MULCH 1" FROM TRUNK.
5. SEE ARCHITECTURAL PLANS 2'-6" FOR ADDITIONAL PLANTING REQUIREMENTS.
6. TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.

TYPICAL TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

DEVELOPER'S BUILDER'S CERTIFICATE

I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION, A LETTER OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

John Lewis 5/11/04
SIGNATURE OF DEVELOPER DATE



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

John Lewis 5/26/04
CHIEF, DEVELOPMENT DIVISION DATE

John Lewis 5/28/04
CHIEF, DIVISION OF PLANNING AND ZONING DATE

John Lewis 5/28/04
DIRECTOR (ACTING) DATE

REVIEWED FOR HOWARD SCD AND MEETS TECHNICAL REQUIREMENTS

Jim Myers 5/21/04
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT

John R. Robertson 5/21/04
HOWARD SCD DATE

ENGINEER'S CERTIFICATE

I/WE CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION 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 COUNTY SOIL CONSERVATION DISTRICT.

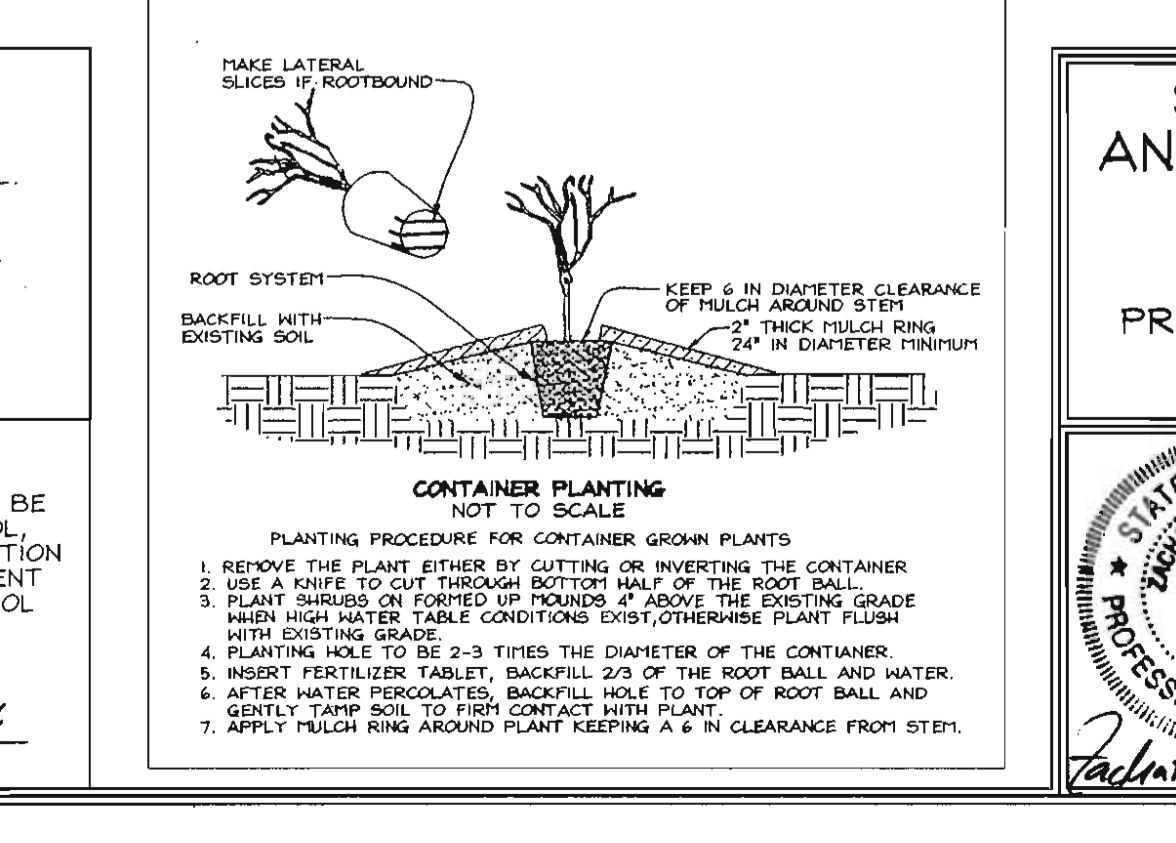
Zacharia Y. Fisch 5/11/04
SIGNATURE OF ENGINEER DATE

Zacharia Y. Fisch 5/11/04
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 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 COUNTY SOIL CONSERVATION DISTRICT.

John Lewis 5/11/04
SIGNATURE OF DEVELOPER DATE



FSH Associates
Engineers Planners Surveyors
8318 Forrest Street, Suite 21043
Columbia, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates.com

Zacharia Y. Fisch