

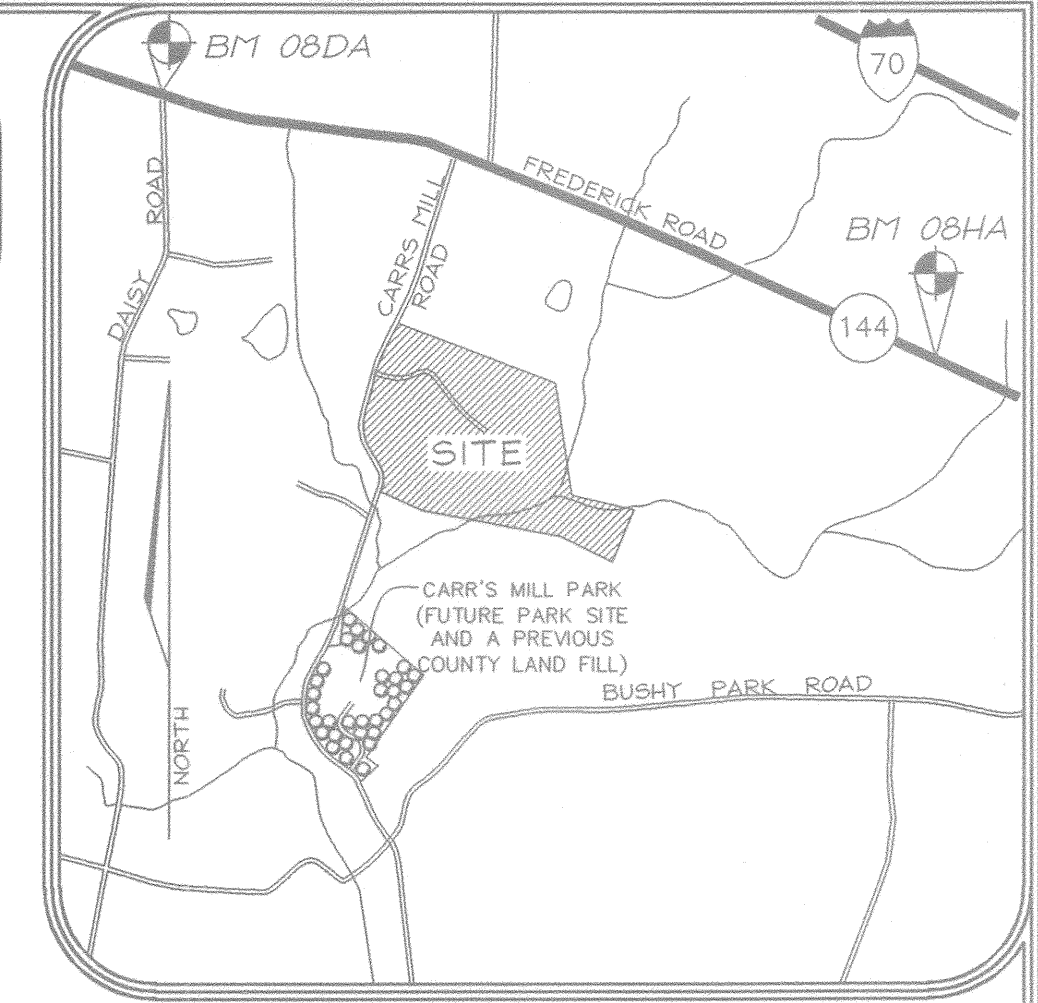
GENERAL NOTES

- Subject property zoned "RC-DEO" per 10/18/93 Comprehensive Zoning Plan.
- Private water and sewer to be utilized.
- Soils map no. 6.
- Gross area of site: 84.665 Ac.±
- Area of proposed public R/W: 0.965 Ac.±
- Number of proposed buildable lots: 18
Area of proposed buildable lots: 17.372 ac.±
- Number of proposed buildable preservation parcels: 1
Area of proposed buildable preservation parcels: 18.166 ac.±
- Number of proposed non-buildable preservation parcels: 3
Area of proposed non-buildable preservation parcels: 48.162 ac.±
- Density calculations:
a.) Number of lots based on own density:
84.665 ac / 4.25 = 19.92, therefore 19 units
b.) Number of dwelling units proposed = 19
- The lots shown hereon comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- Topography shown hereon is based on an aerial survey prepared by Harford Aerial Surveys in Jan., 2001.
- A.P.F.O. traffic study prepared by The Traffic Group Inc., approved under S-00-06 on 4/3/00.
- Wetlands delineation and report and forest stand delineation prepared by ECO-Science Professionals, Inc. approved under S-00-06 on 4/3/00.
- The project is not within the metropolitan district.
- Previous Howard County file numbers: F-91-72; S-00-06; P-01-05
- The project is in conformance with the latest Howard County Standards unless waivers have been approved.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based on the Maryland State Plane Coordinate system. Howard County monument numbers 08DA and 08HA were used for this project.
- The Microspatial Extended Detention S.H.M. facility, shown hereon, is designed to control C.P.v and N.Q.v. The pond will be privately owned and maintained by the Homeowners Association.
- No clearing, grading or construction is permitted within the wetlands, streams or their required buffers, unless approved by Howard County. In accordance with COMAR Title 01, Subtitle 05, Chapter 04, agricultural activities in the non-abandoned wetlands are exempt from permit requirements, also, a permit from the Army Corps of Engineers is not required for disturbance in the non-abandoned wetlands that are associated with agricultural activities.
- In accordance with section 16.115.(d) of the subdivision and land development regulations, this development has a non-critical floodplain and therefore is exempt from delineating the floodplain on the preservation parcel.
- The geotechnical report for this project was prepared by Herbst/Benson & Associates.
- Financial Surety for the required perimeter and S.H.M. landscaping shall be posted as part of the Developer's Agreement in the amount of \$37,500.00 for 99 shade trees (81 proposed trees + 18 proposed 2-1/2" cal. trees within forest conservation easement + 7 existing trees) + 52 evergreen trees.
- Financial surety for the required 48 street trees will be posted as part of the Developer's Agreement.
- 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.
- The contractor shall notify Miss Utility at 1-800-257-7777 at least 48 hours prior to any excavation work being done.
- Traffic control devices, markings and signs shall be in accordance with the latest edition of the Manual of Uniform Traffic Control Devices (MUTCD). All street and regulatory signs shall be in place prior to the placement of any asphalt.
- This area designates a private sewage easement of at least 10,000 square feet (or 10,000 square feet per lot for shared drain fields associated with a shared sewage disposal facility) as required by the Maryland State Department of the Environment for individual sewage disposal (COMAR 26.04.03). Improvements of any nature in this area are restricted until public sewage is available. These easements shall become null and void upon connection to a public sewage system. The County Health Officer shall have the authority to grant variances for encroachments into the private sewage easement. Recordation of a modified sewage easement shall not be necessary.
- All driveway culverts shall be 12" C.M.P. or approved equivalent.
- If impervious areas are increased above the allowable disconnect area (500 s.f. per disconnect) for lots 7, 8, 9 & the building on preservation parcel 'A', a new S.H.M. plan will be required for these new impervious areas. The rear half of the proposed buildings on lots 7, 8, & 9 are provided for S.H.M. at 1,500 sq.ft. (3 disconnects x 500 sq.ft. each). The building on preservation parcel 'A' is provided for S.H.M. at 2,500 sq.ft. (5 disconnects x 500 sq.ft. each). If impervious areas are increased above these amounts within these areas S.H.M. for this increase will be required.
- For flag or pipestem lots, refuse collection, snow removal and road maintenance are provided to the junction of the flag or pipestem and road right-of-way line and not to the pipestem lot driveway.
- This subdivision plan is grandfathered to the fourth edition of the subdivision and land development regulations and the October 1993 zoning regulations as revised 7/12/01.
- The 15' x 20' concrete pad and entrance walls or signs to be owned by the Maple Ridge Farms Homeowners Association.

CENTERLINE ROAD CURVE DATA							
CURVE NUMBER	STATIONS	DELTA	RADIUS	ARC LENGTH	CHORD BEARING	CHORD LENGTH	TANGENT
C1-Maple Ridge Dr.	PC 6+65.74 - PT 8+90.20	54°54'57"	230.00'	224.46'	N36°50'04"W	215.66	122.08

ROAD CONSTRUCTION PLANS

MAPLE RIDGE



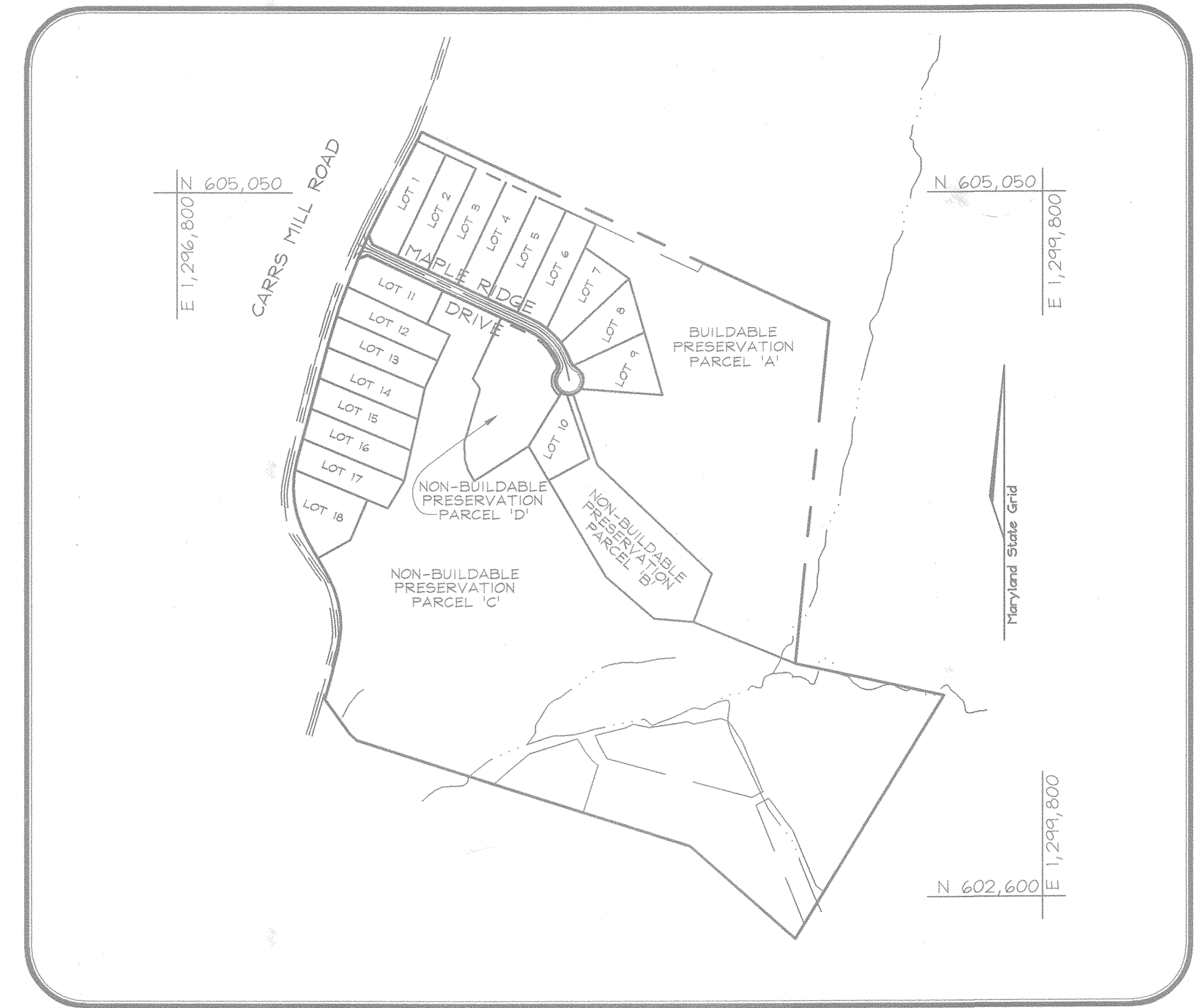
VICINITY MAP
SCALE: 1"=2000'

BENCHMARKS					
Sta.	08DA	N 606,934.189	E 1,295,730.523	El.: 554.836' (feet)	
		N 184,993.911	E 394,939.454	El.: 169.115' (meters)	
Sta.	08HA	N 604,769.622	E 1,302,045.281	El.: 621.796' (feet)	
		N 184,334.150	E 396,864.196	El.: 189.524' (meters)	

LEGEND	
Existing Contour	-----382
Proposed Contour	-----382
Existing Spot Elevation	382.2
Proposed Spot Elevation	+82.53
Direction of Flow	→
Existing Trees	
Existing Trees to Remain	
15-24.99% Slopes	
Wetlands	
Access Easement	
Forest Conservation Easement	
Proposed Grass Swale	→

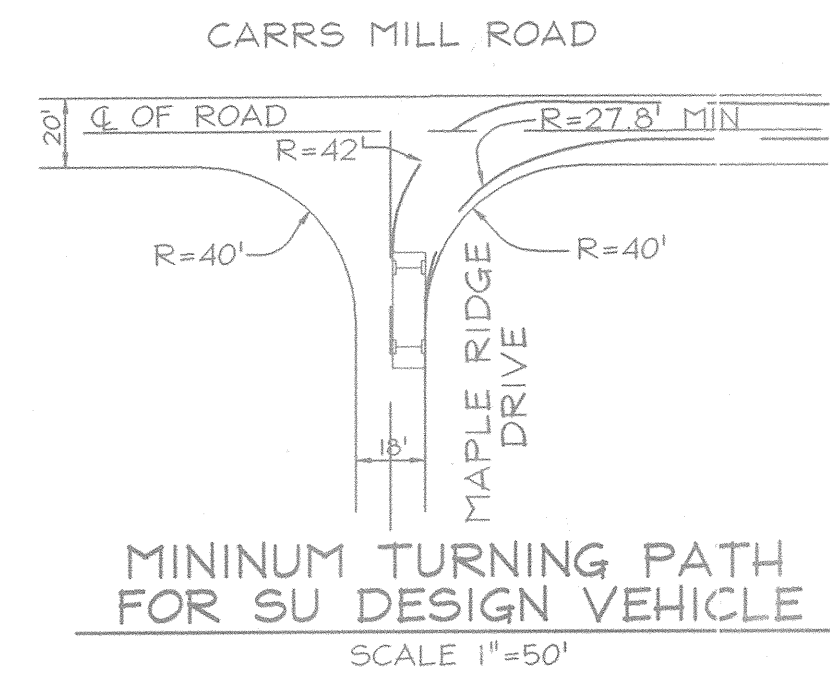
SHEET INDEX		
DESCRIPTION	SHEET No.	
Cover Sheet	1 of 9	
Road Plan and Profile	2 of 9	
Grading, Sediment and Erosion Control Plan	3 of 9	
Traffic Control Plan, Sediment and Erosion Control and Miscellaneous Details	4 of 9	
Storm Drain Drainage Area Map, Profiles and Details	5 of 9	
Stormwater Management Notes and Details	6 of 9	
Landscape Plan	7 of 9	
Forest Conservation Plan	8 of 9	
Forest Conservation Plan	9 of 9	

ROAD CLASSIFICATION		
ROAD NAME	CLASSIFICATION	R/W
Maple Ridge Drive	Public Access Place	40'



LOCATION MAP
SCALE: 1"=400'

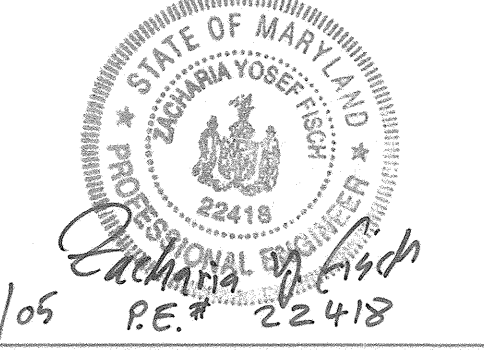
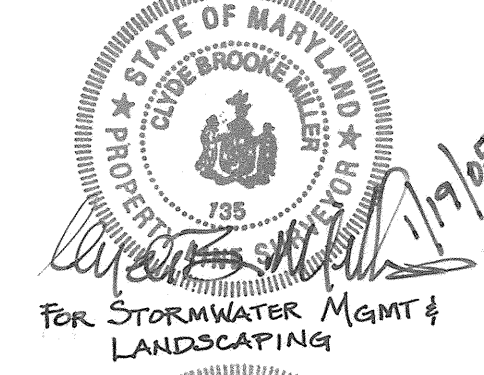
STREET LIGHT TABLE			
Street Name	Stations	Offset	Fixture
Maple Ridge Drive	Q Station 0+24	25' Right	150-Watt Premier Colonial Fixture Mounted On A 14-Foot Black Fiberglass Pole



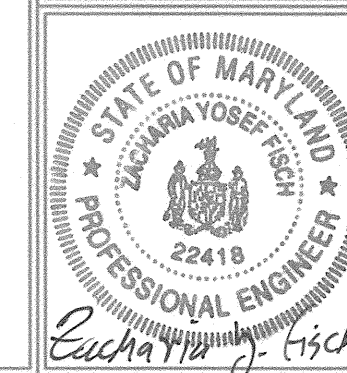
MINIMUM TURNING PATH FOR SU DESIGN VEHICLE
SCALE: 1"=50'

AS-BUILT

FOR ROADS, STORM DRAINS, EROSION & SEDIMENT CONTROL



COVER SHEET
MAPLE RIDGE
LOTS 1 THRU 18 AND PRESERVATION PARCELS 'A', 'B', 'C', AND 'D'
TAX MAP 8 GRID 14 & 20 PARCEL 51 & 378
4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND



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

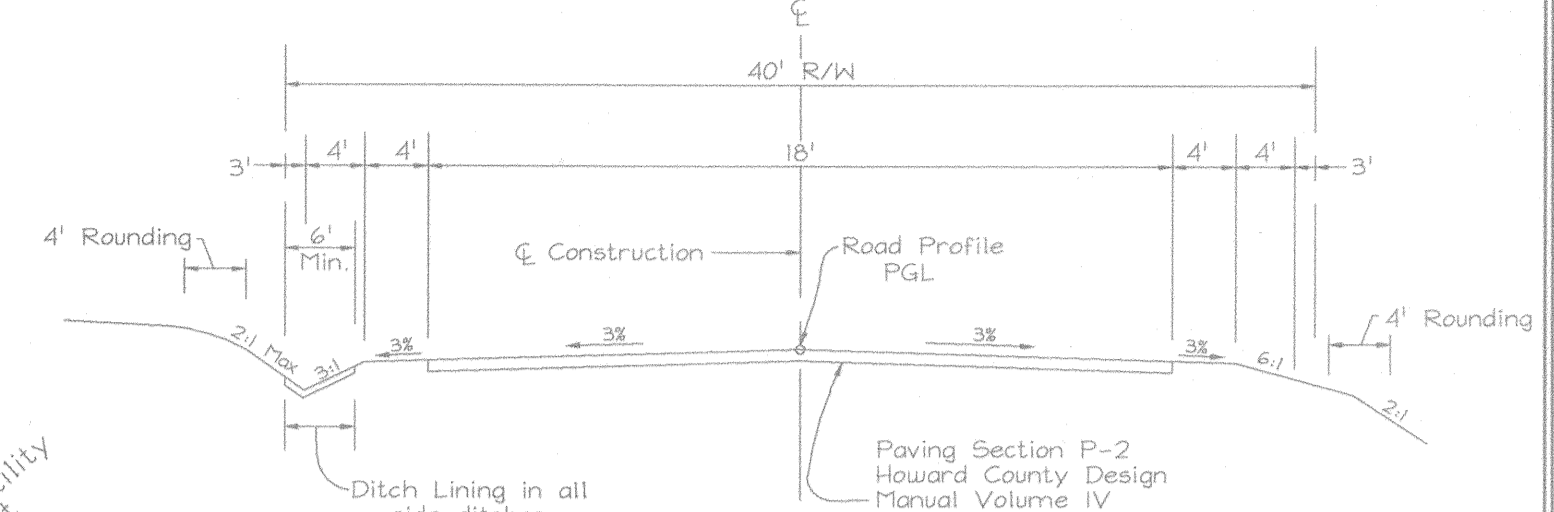
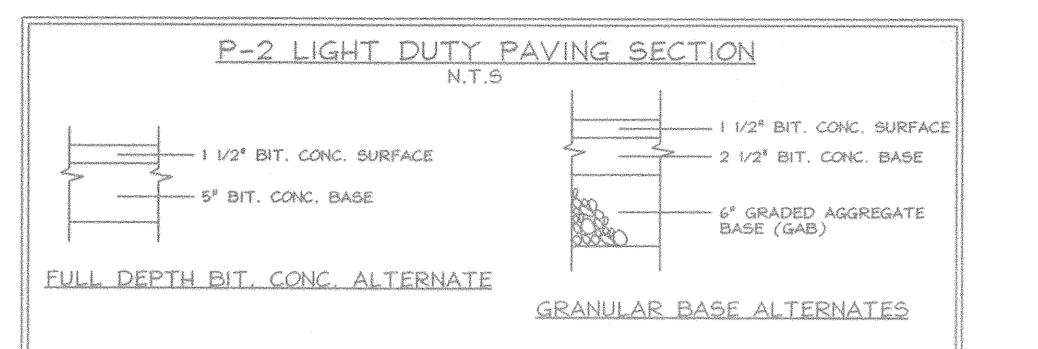
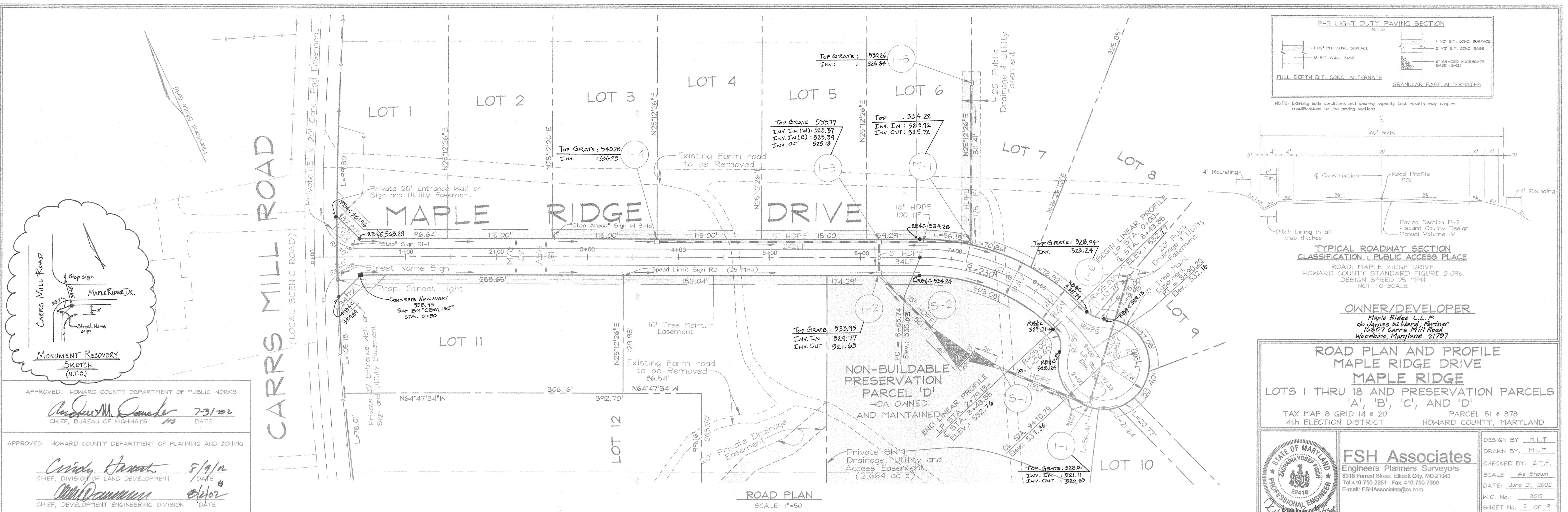
DESIGN BY: MLT
DRAWN BY: MLT
CHECKED BY: ZTF
SCALE: As Shown
DATE: July 21, 2002
W.O. No.: 3012
SHEET No. 1 OF 9

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Cindy Harris 8/9/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Andrew M. Daniels 7-31-02
CHIEF, BUREAU OF HIGHWAYS DATE

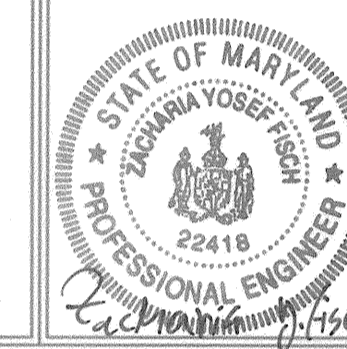
OWNER/DEVELOPER
Maple Ridge L.L.P.
c/o James W. Ward, Farmer
16307 Carrs Mill Road
Woodbine, Maryland 21797

1/18/05 P.E. # 22418



OWNER/DEVELOPER
 Maple Ridge L.L.P.
 c/o George W. Ward, Partner
 10307 Carrs Mill Road
 Woodlawn, Maryland 21797

ROAD PLAN AND PROFILE
MAPLE RIDGE DRIVE
MAPLE RIDGE
 LOTS 1 THRU 18 AND PRESERVATION PARCELS 'A', 'B', 'C', AND 'D'
 TAX MAP 8 GRID 14 & 20 PARCEL 51 & 378
 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND



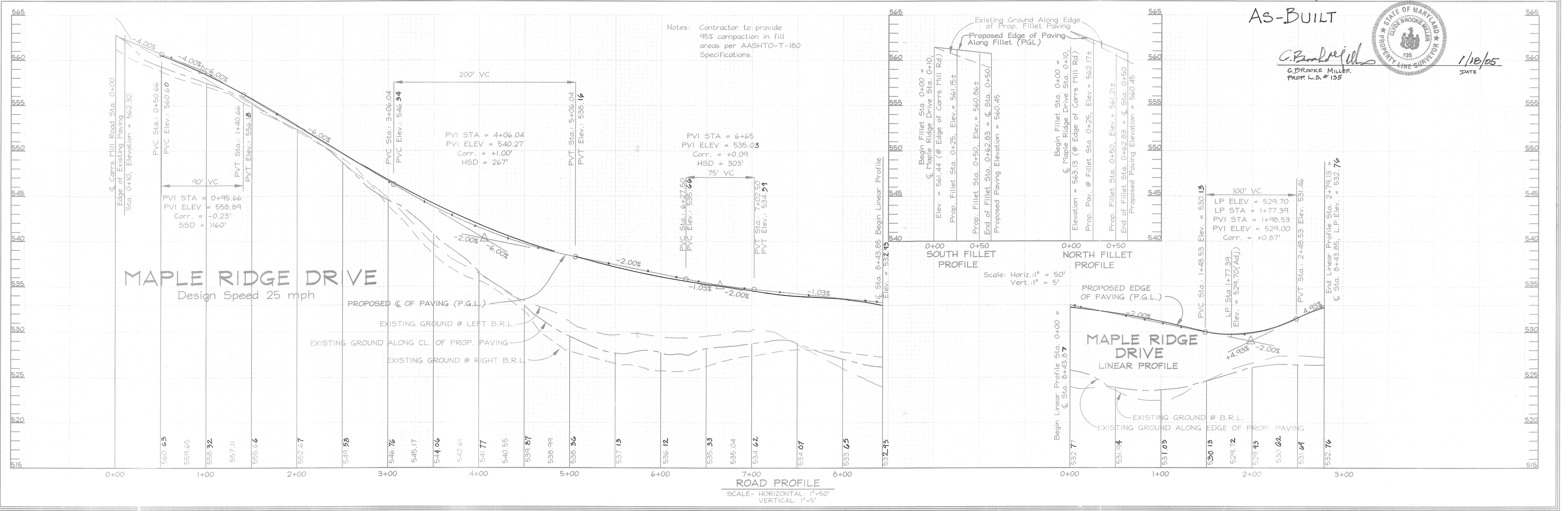
FSH Associates
 Engineers Planners Surveyors
 8318 Forrest Street, Elkridge City, MD 21043
 Tel: 410-750-2251 Fax: 410-750-7350
 E-mail: FSHAssociates@fsh.com

DESIGN BY: M.L.T.
 DRAWN BY: M.L.T.
 CHECKED BY: Z.Y.F.
 SCALE: As Shown
 DATE: June 21, 2002
 W.O. No.: 3012
 SHEET No. 2 OF 9

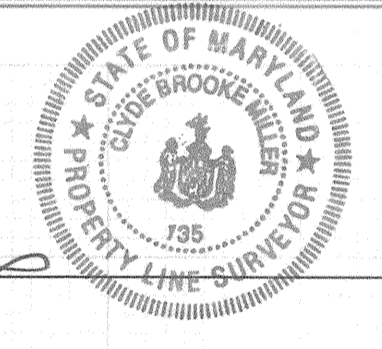
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
Andrew M. Canale 7-31-02
 CHIEF, BUREAU OF HIGHWAYS DATE

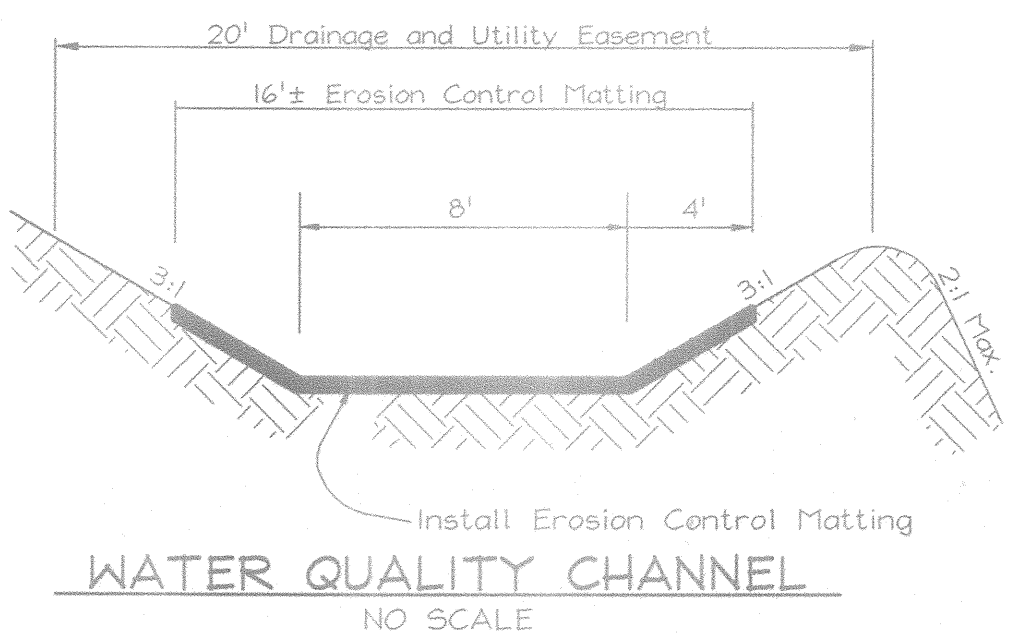
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
Cristy Bennett 8/9/02
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

William J. ... 8/10/02
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE



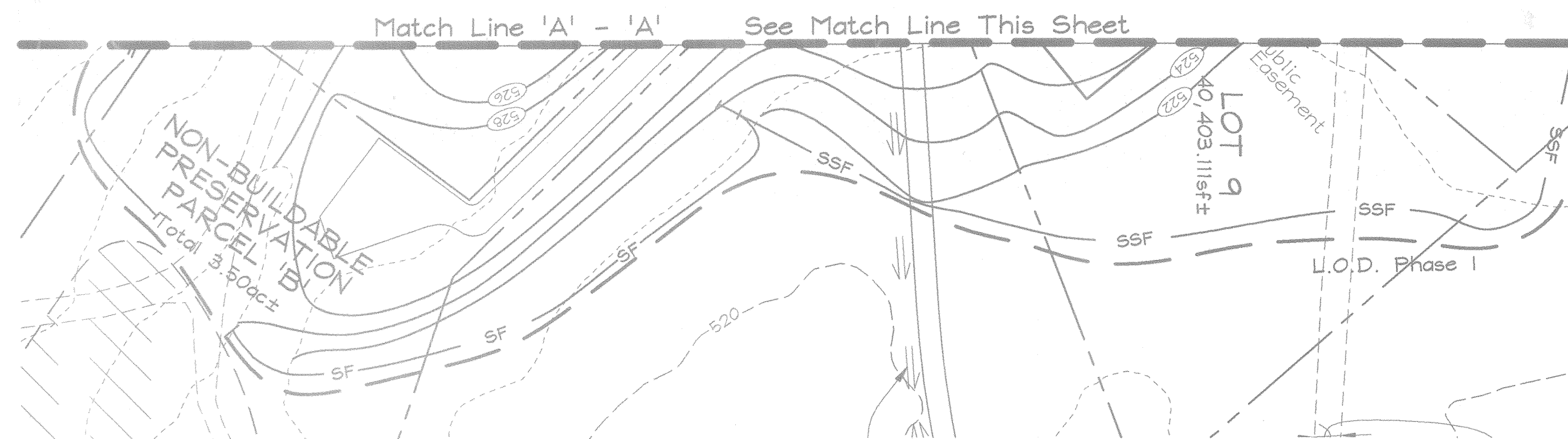
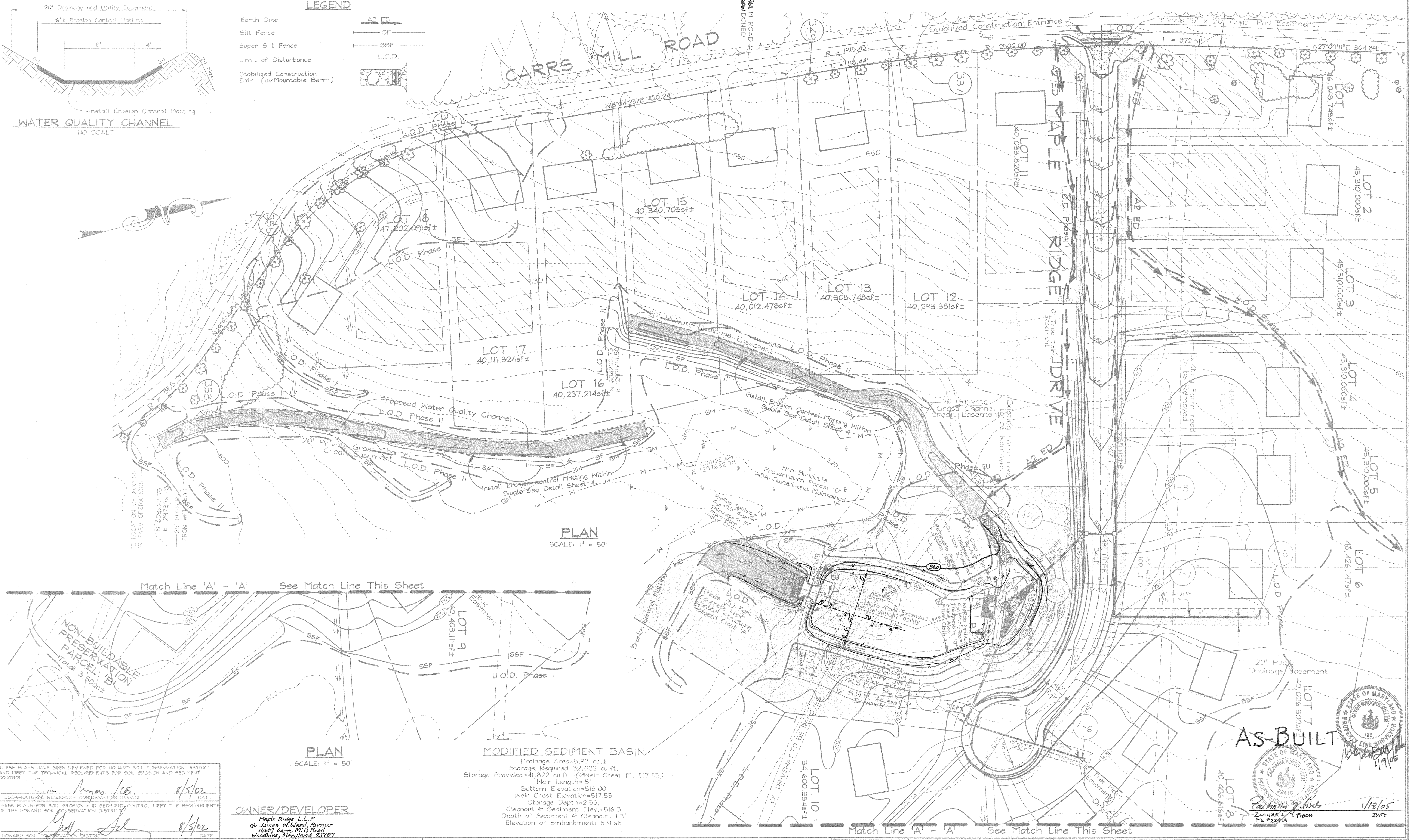
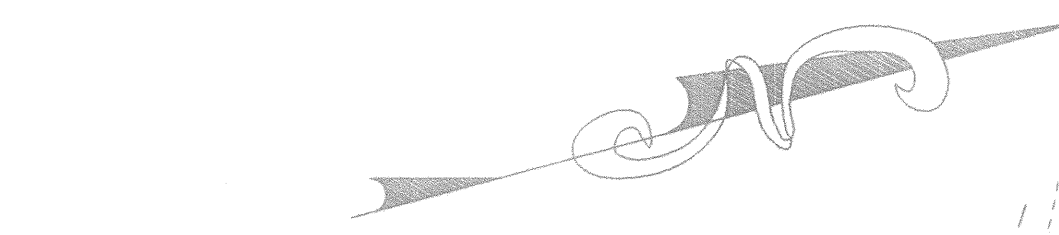
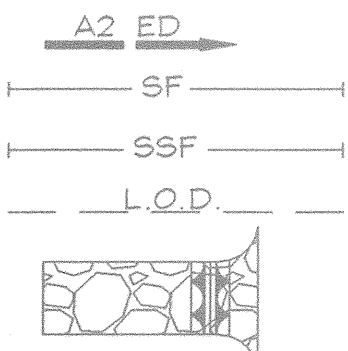
AS-BUILT
C. Brooke Miller 1/18/05
 C. BROOKE MILLER
 PROP. L.S. # 135
 DATE





LEGEND

- Earth Dike
- Silt Fence
- Super Silt Fence
- Limit of Disturbance
- Stabilized Construction Entr. (w/Mountable Berm)



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

Zacharia Y. Fisch 8/5/02
DATE

USDA-NATURAL RESOURCES CONSERVATION SERVICE

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

Guy Sel 8/5/02
DATE

HOWARD SOIL CONSERVATION DISTRICT

OWNER/DEVELOPER

Maple Ridge L.L.P.
c/o James W. Ward, Partner
16307 Carrs Mill Road
Woodbine, Maryland 21797

MODIFIED SEDIMENT BASIN

Drainage Area=5.93 ac.±
Storage Required=32,022 cu.ft.
Storage Provided=41,822 cu.ft. (@Weir Crest El. 517.55)
Weir Length=15'
Bottom Elevation=515.00
Weir Crest Elevation=517.55
Storage Depth=2.55'
Cleanout @ Sediment Elev.=516.3
Depth of Sediment @ Cleanout: 1.3'
Elevation of Embankment: 519.65

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Cindy Hamits 8/14/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Andrew M. Decker 8/2/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Andrew M. Decker 7/31/02
CHIEF, BUREAU OF HIGHWAYS DATE

DEVELOPER'S CERTIFICATE

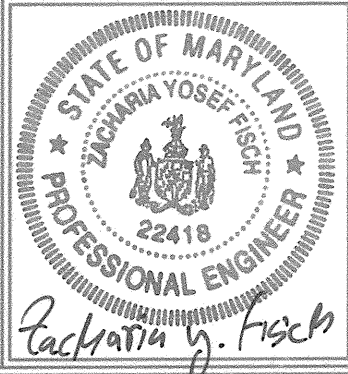
"I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT."

Zacharia Y. Fisch 7/22/02
SIGNATURE OF DEVELOPER DATE

ENGINEERS CERTIFICATE

"I 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 HAS BEEN PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT."

Zacharia Y. Fisch 7/22/02
SIGNATURE OF ENGINEER DATE
ZACHARIA Y. FISCH



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

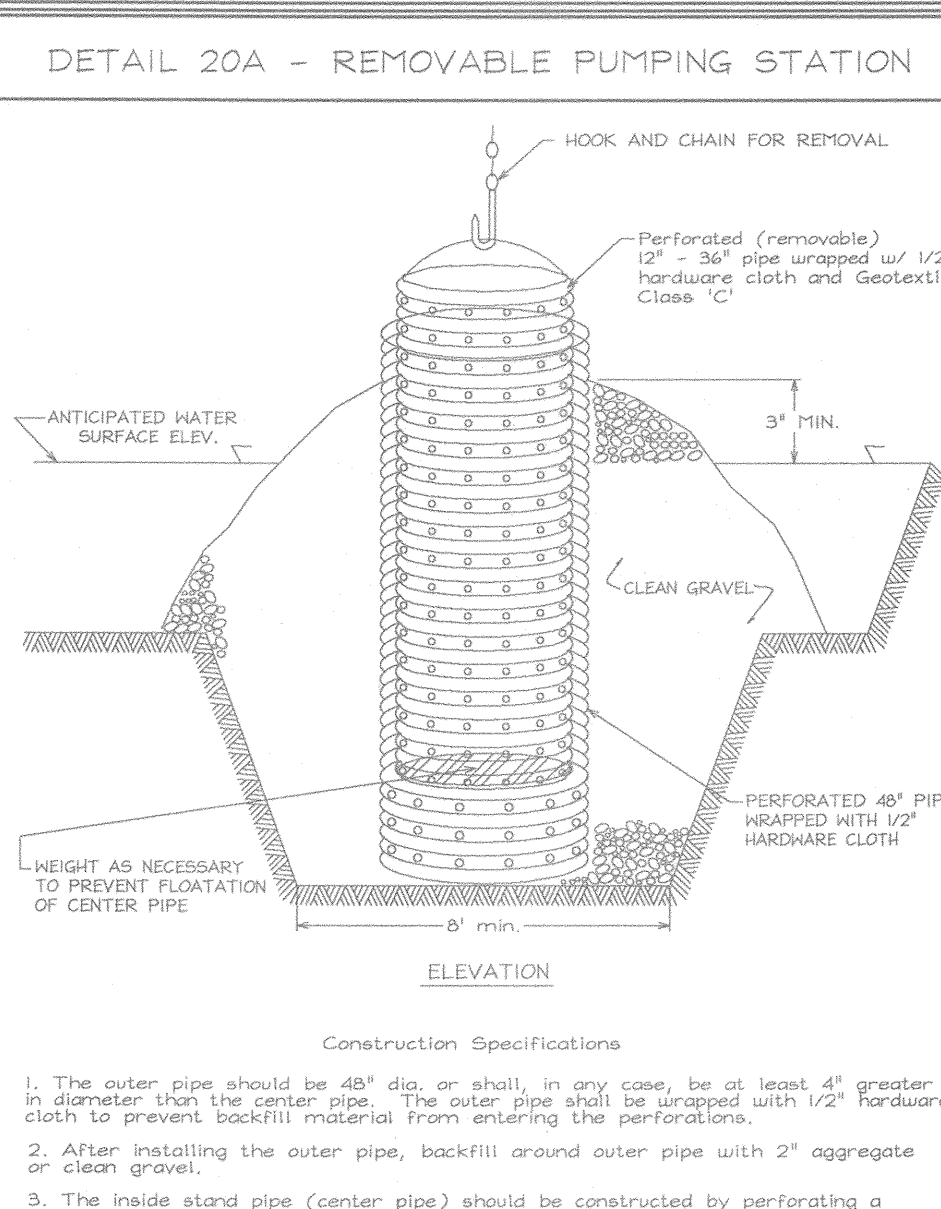
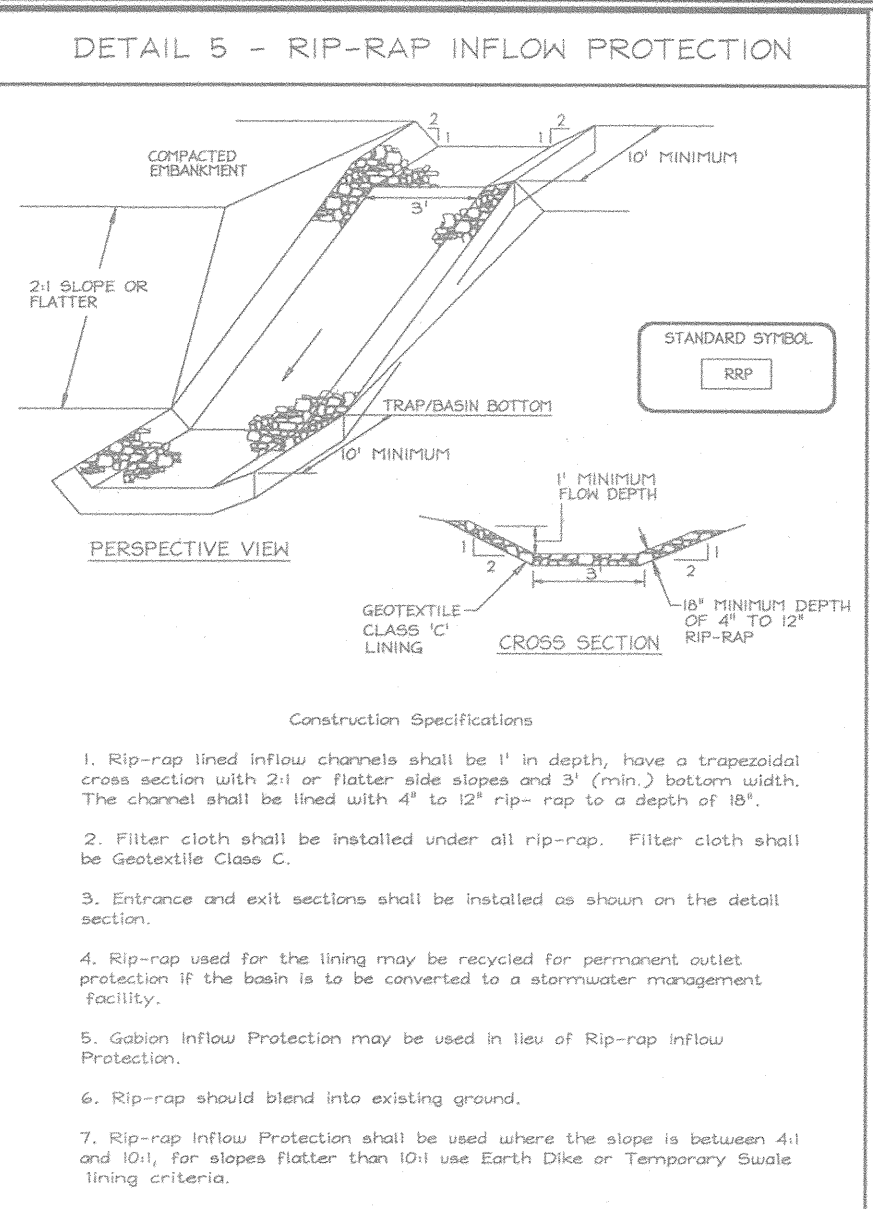
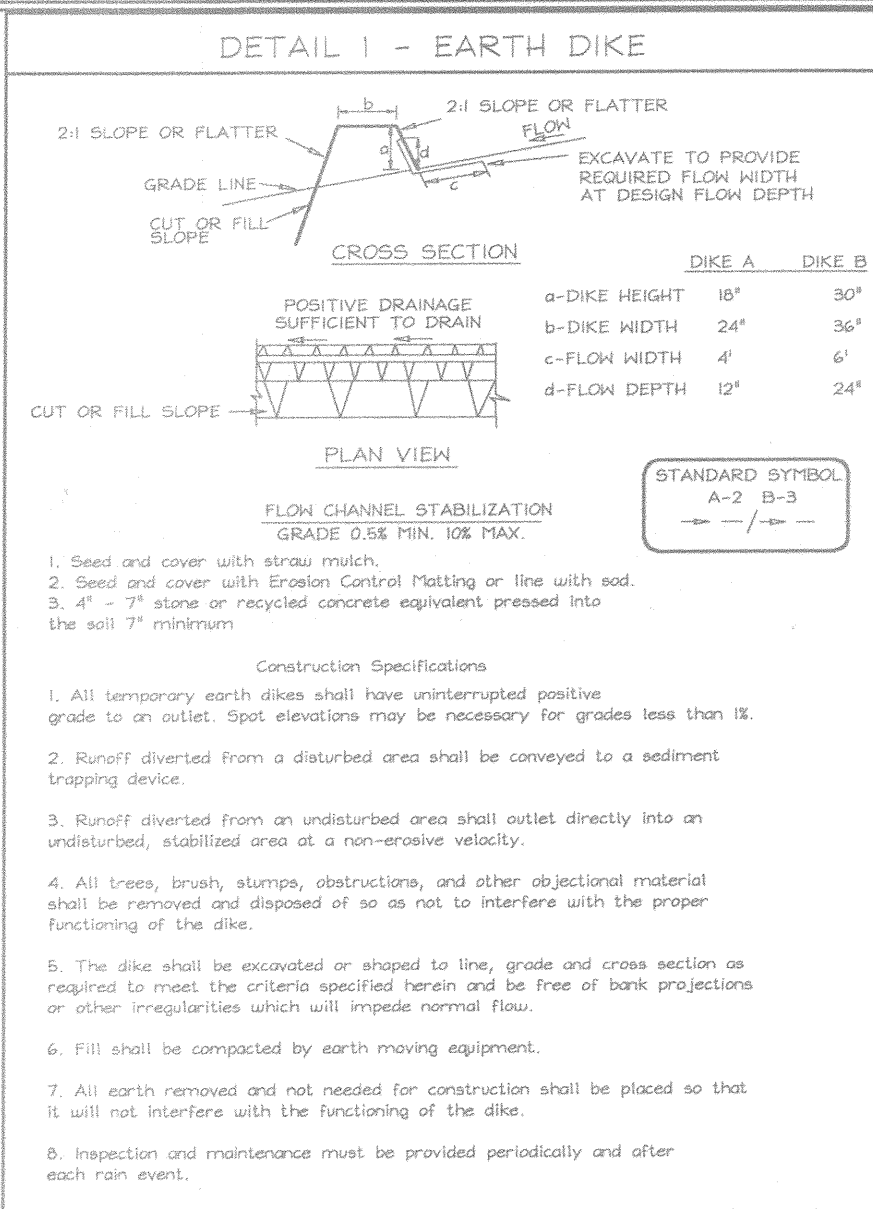
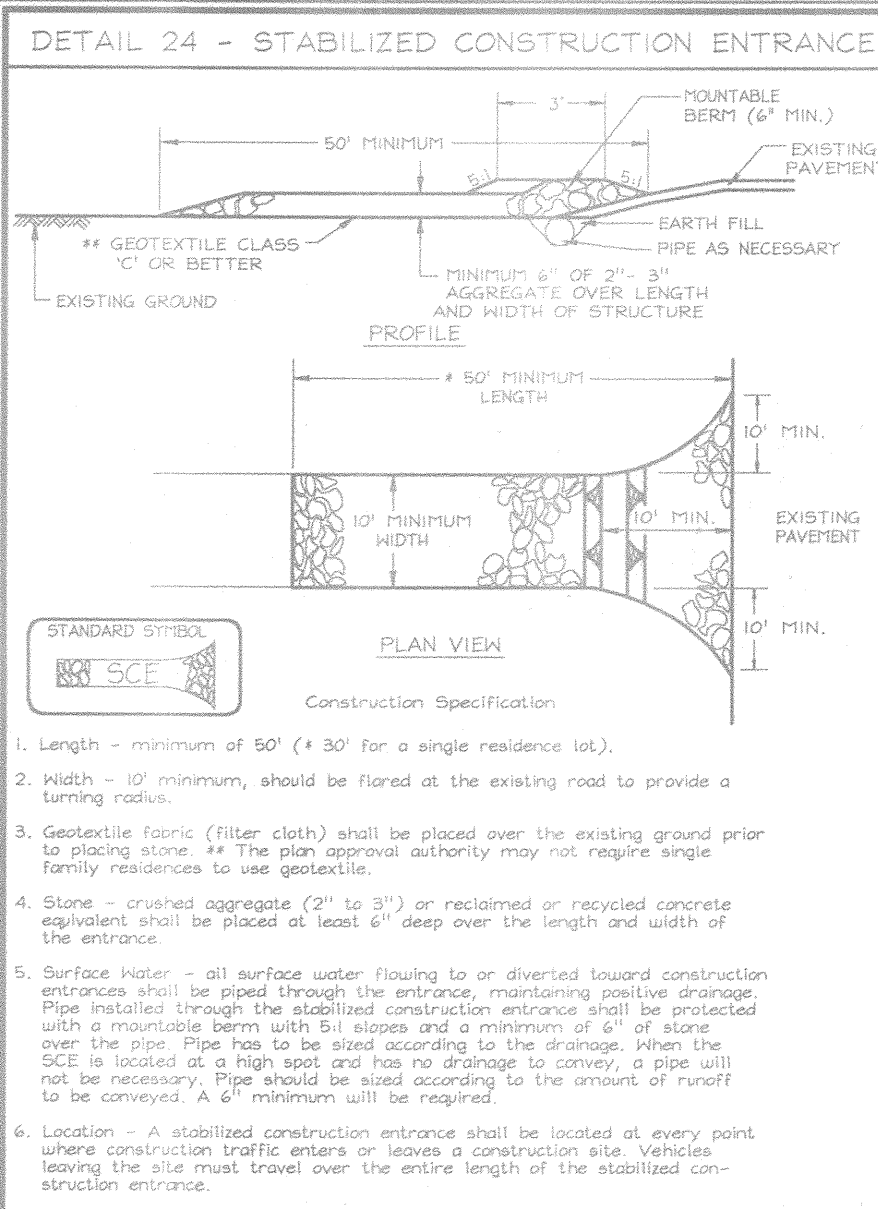
GRADING, SEDIMENT AND EROSION CONTROL PLAN
MAPLE RIDGE
LOTS 1 THRU 18 AND PRESERVATION PARCELS 'A', 'B', 'C', AND 'D'
TAX MAP 8 GRID 14 & 20 PARCEL 51 & 378
4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: MLT
DRAWN BY: MLT
CHECKED BY: ZYP
SCALE: 1"=50'
DATE: June 21, 2002
P.O. No.: 3012
SHEET No. 3 OF 9

AS-BUILT

Zacharia Y. Fisch 1/13/05
DATE

STATE OF MARYLAND PROFESSIONAL ENGINEER ZACHARIA Y. FISCH PE #22418



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, devoid of concrete, lime, moisture content, low nutrient levels, low pH, materials toxic to plants, and/or undesirable 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 acidic 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 as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS in cooperation with Maryland Agricultural Experiment Station.
2. Topsoil Specifications - Soil to be used as topsoil must meet the following:
 - a. Topsoil shall be a loam, sandy loam, clay loam, silt loam, sandy clay loam, loamy sand. Other soils may be used if recommended by an agronomist or a soil scientist, and approved by the appropriate approval authority. Regardless, topsoil shall not be a mixture of combining textures, subsoils and shall contain less than 5% by volume of clods, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 and 1/2\"/>
3. The inside stone pipe (center pipe) should be constructed by perforating a corrugated PVC pipe between 1/2\"/>
4. The center pipe should extend 12\"/>

II. For sites having disturbed areas under 5 acres:

- a. On soil meeting topsoil specifications, obtain test results detailing fertilizer and lime amendments required to bring the soil into compliance with the following:
 - i. 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. Lime shall not be less than 15 percent by weight.
 - ii. Topsoil having soil salt content greater than 500 parts per million shall not be used.
 - iii. No seed or seed shall be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient time has elapsed (14 days min.) to permit dissipation of phytotoxic elements.
- b. NOTE: Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
- c. Place topsoil (if required) and apply soil amendments specified in 21.0 Vegetative Stabilization-Section I-Vegetative Stabilization Methods and Materials.

V. Topsoil Application

- a. When topsoiling, maintain needed erosion and sediment control practices: such as diversions, Grade Stabilization Structures, Earth Dikes, Slope Silt Fence and Sediment Traps and Booms.
- b. Grading on the areas to be topsoiled, which have been previously established, shall be maintained, at least 4\"/>
- c. Topsoil shall be uniformly distributed in a 4\"/>
- d. Spreading shall be performed in such a manner that seeding or sowing can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations shall be corrected in order to prevent the formation of depressions or water pockets.
- e. Topsoil shall be placed while the topsoil or subsoil is in a firm or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation.
- f. Topsoil must be free of large plant parts such as Bermuda grass, quackgrass, Johnsongrass, nutgrass, poison ivy, thistle, or others as specified.
- g. Where the subsoil is either highly acidic or composed of heavy clays, ground limestone shall be spread at the rate of 4-8 tons/acre (200-400 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:
 - i. Place topsoil (if required) and apply soil amendments as specified in 21.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

VI. For sites having disturbed areas under 5 acres:

- a. Place topsoil (if required) and apply soil amendments as specified in 21.0 Vegetative Stabilization - Section I - Vegetative Stabilization Methods and Materials.

PERMANENT SEEDING NOTES

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

SEEDS PREPARATION: Loosen upper three inches of soil by raking, tilling or other acceptable means before seeding. If not previously loosed.

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

- 1) Preferred-Apply 2 tons per acre dolomitic limestone (40 lbs./100 sq.ft.) and 400 lbs. per acre 10-10-10 fertilizer (14 lbs./100 sq.ft.) before seeding. Harrow or disc the seed bed to a depth of 2 to 3 inches.
- 2) Acceptable-Apply 2 tons per acre dolomitic limestone (40 lbs./100 sq.ft.) and apply 1000 lbs. per acre 10-10-10 fertilizer (28 lbs./100 sq.ft.) before seeding. Harrow or disc the seed bed to a depth of 2 to 3 inches of soil.

SEEDING: For the periods March 1 thru April 30, and August 1 thru October 15, seed with 40 lbs. per acre (14 lbs./1000 sq.ft.) of Turf Type Tall Fescue. For the period May 1 thru July 31, seed with 40 lbs. per acre (14 lbs./1000 sq.ft.) of Turf Type Tall Fescue. For the period August 1 thru October 15, seed with 40 lbs. per acre (14 lbs./1000 sq.ft.) of Turf Type Tall Fescue. During the period of October 16 thru February 28, protect site by Option (1) 2 tons per acre well anchored straw mulch and seed as soon as possible in the spring. Option (2) Use soil. Option (3) Seed with 40 lbs/acre Kentucky 31 Tall Fescue and mulch with 2 tons/acre well anchored straw.

MULCHING: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq. ft.) of untreated straw mulch 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 5 feet or higher, use 348 gallons per acre (5 gal/1000 sq.ft.) for anchoring.

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

TEMPORARY SEEDING NOTES

SEEDS PREPARATION: Loosen upper three inches of soil by raking, tilling or other acceptable means before seeding. If not previously loosed.

SOIL AMENDMENTS: Apply 400 lbs. per acre 10-10-10 fertilizer (14 lbs./1000 sq.ft.).

SEEDING: For the periods March 1 thru April 30 and from August 15 thru November 15, seed with 2 1/2 tons per acre of (70 lbs./1000 sq.ft.) of untreated straw mulch immediately after seeding. Anchor mulch with 20 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas 5 feet or higher, use 348 gallons per acre (5 gal/1000 sq.ft.) for anchoring.

MAINTENANCE: Apply 1 1/2 to 2 tons per acre (70 to 90 lbs./1000 sq.ft.) of untreated straw mulch immediately after seeding. Anchor mulch with 20 gallons per acre (5 gal/1000 sq.ft.) of emulsified asphalt on flat areas 5 feet or higher, use 348 gallons per acre (5 gal/1000 sq.ft.) for anchoring.

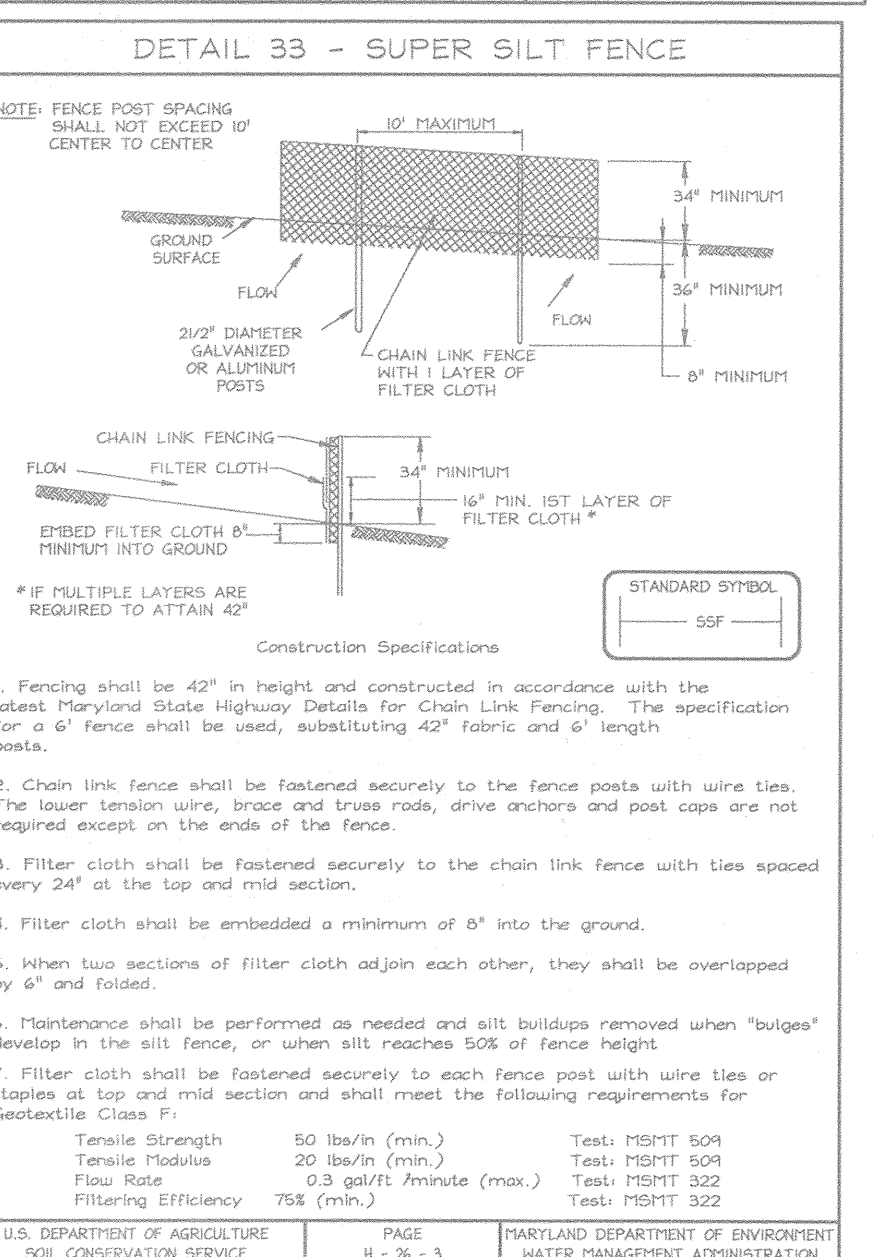
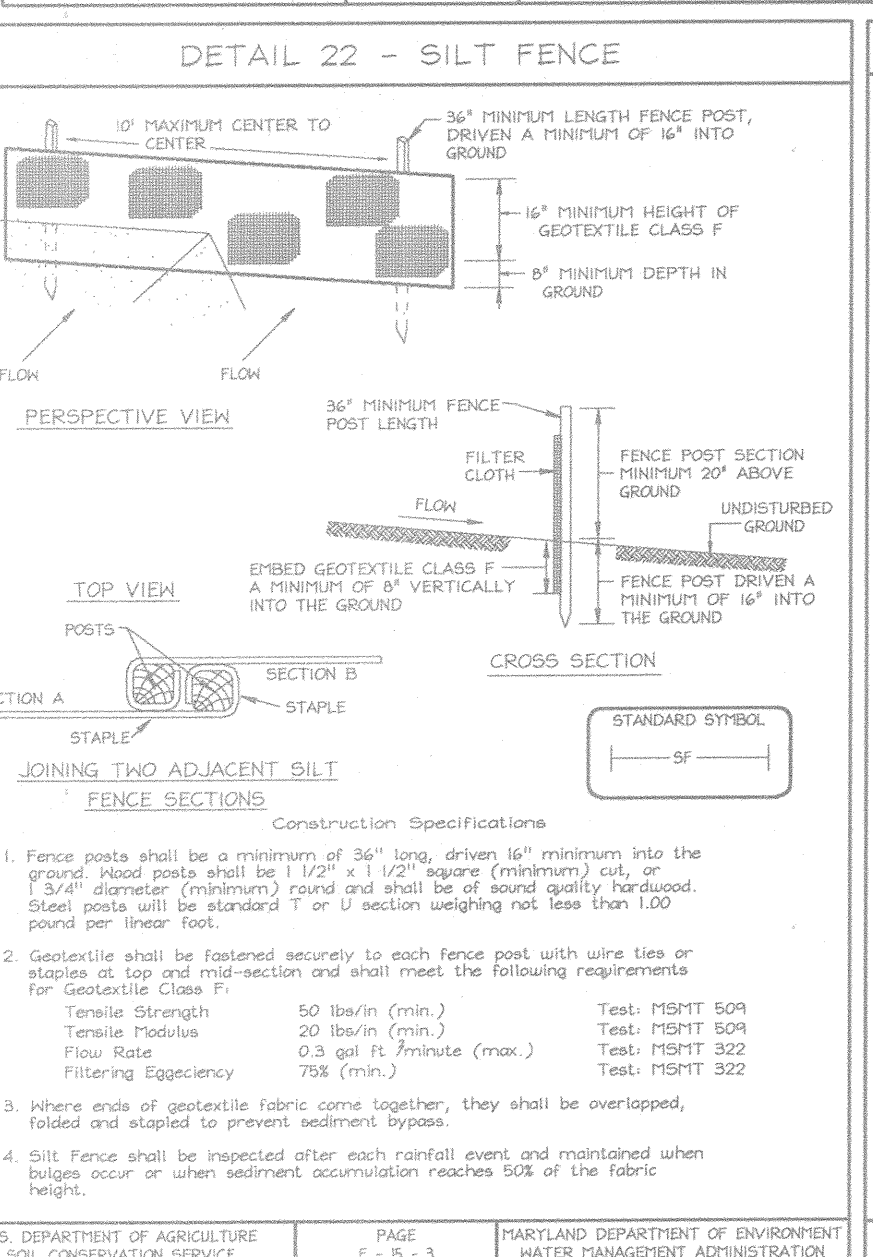
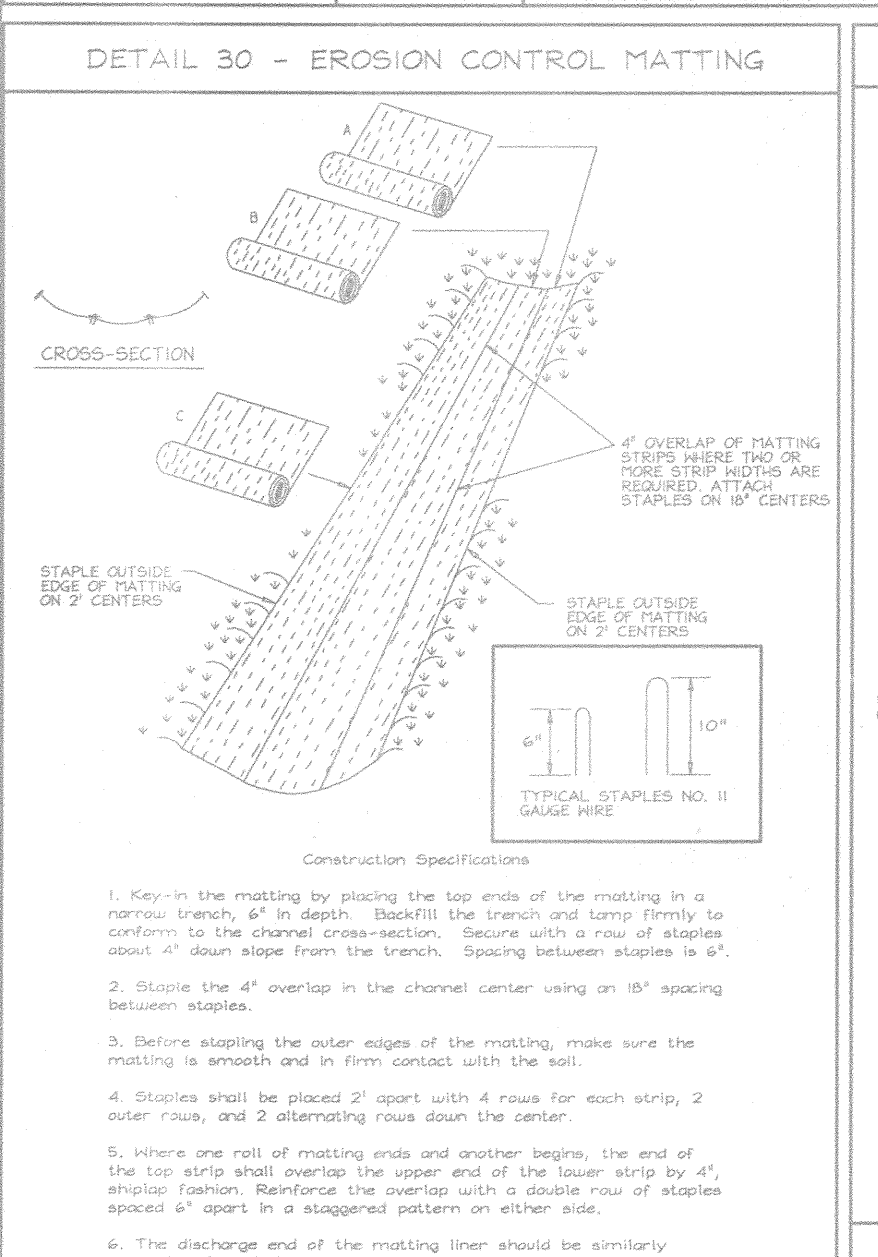
REFER TO THE 1984 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, FOR RATE AND METHOD NOT COVERED.

SEDIMENT CONTROL NOTES

1. A minimum of 48 hours notice must be given to the Howard County Department of Inspection, License and Permitte Sediment Control Division prior to the start of any construction (303-1655).
2. 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.
3. Following initial site disturbance or re-disturbance, permanent or temporary stabilization shall be completed within (a) 7 calendar days for all perimeter sediment control structures, dikes, perimeter slopes, and all slopes greater than 3:1, (b) 14 days on all other disturbed or graded areas on the project site.
4. 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.
5. 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, soil, temporary seeding, and mulching (Sec. 6). Temporary stabilization with mulch alone shall be done when recommended seeding sites do not allow for proper germination and establishment of grasses.
6. All sediment control structures are to remain in place and are to be maintained in operative condition until permission for their removal has been obtained from the Howard County Sediment Control Inspector.
7. Site Analysis:

Total Area	54,645 sq. ft.
Area Disturbed	12,312 sq. ft.
Area to be reseeded or paved	4,271 sq. ft.
Area to be vegetatively stabilized	17,929 sq. ft.
Total Filt.	10,000 sq. ft.
Off-site user/borrow area location	_____
8. Any sediment control practice which is disturbed by grading activity for placement of utilities must be repaired on the same day of disturbance.
9. Additional sediment controls must be provided, if deemed necessary by the Howard County Sediment Control Inspector.
10. On all sites with disturbed areas in excess of 2 acres, approval of the inspection agency shall be required upon completion of installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. Other holding or grading inspection approval may not be activated until this initial approval by the inspection agency is made.
11. 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.
12. * To be determined by contractor, with pre-approval of the Sediment Control Inspector with an approved and active grading permit.

*** Earthwork quantities are provided solely for the purpose of calculating fees. Contractor to verify all quantities prior to construction.**



SEQUENCE OF CONSTRUCTION

1. Obtain Grading permit.
2. Clear for and install all sediment controls within Phase I limit of disturbance (LOD). Install Skirt Pond for sediment basin, initial removable pumping station, baffles, erosion control matting at the weir structure outlet and install temporary modifications to weir structure as shown on this plan. Stabilize sediment basin and all disturbances with seed and mulch immediately following construction. (2 weeks)
3. With permission of the sediment control inspector, grade roads to subgrade and install storm drains. (3 weeks)
4. Fine grade and seed and mulch all areas within Phase I limit of disturbance (LOD). (2 weeks)
5. Pavement, provide final stabilization to all disturbed areas and flush storm drain system. (3 weeks)
6. With permission from the Howard County Sediment Control Inspector remove all sediment controls within Phase I limit of disturbance (LOD) (except sediment basin) and seed and mulch all disturbances. (1 week)
7. Clear for and install all sediment controls within Phase II limit of disturbance (LOD). (1 week)
8. Fine grade and immediately stabilize with seed and mulch the area along the front of lots 16 thru 18 and Carrs Mill Road. (1 week)
9. Begin construction of the swales at the rear of lots 11 thru 16. Contractor shall fine grade and install erosion control matting, from downstream to upstream, into segments that can be completed in one (1) working day. Permanently stabilize each segment with seed and mulch at the end of each day. (2 weeks)
10. Upon completion of the swales and with the sediment control inspectors approval remove all sediment controls from Phase II limit of disturbance (LOD). Convert sediment basin to permanent SWMP pond by removing gravel ground trash rack, removing sediment, grading bottom to final grade and stabilizing with seed and mulch. Stabilize all remaining disturbed areas with seed and mulch. (2 weeks)

THESE PLANS HAVE BEEN REVIEWED FOR HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING AND MEET THE TECHNICAL REQUIREMENTS FOR SOIL EROSION AND SEDIMENT CONTROL.

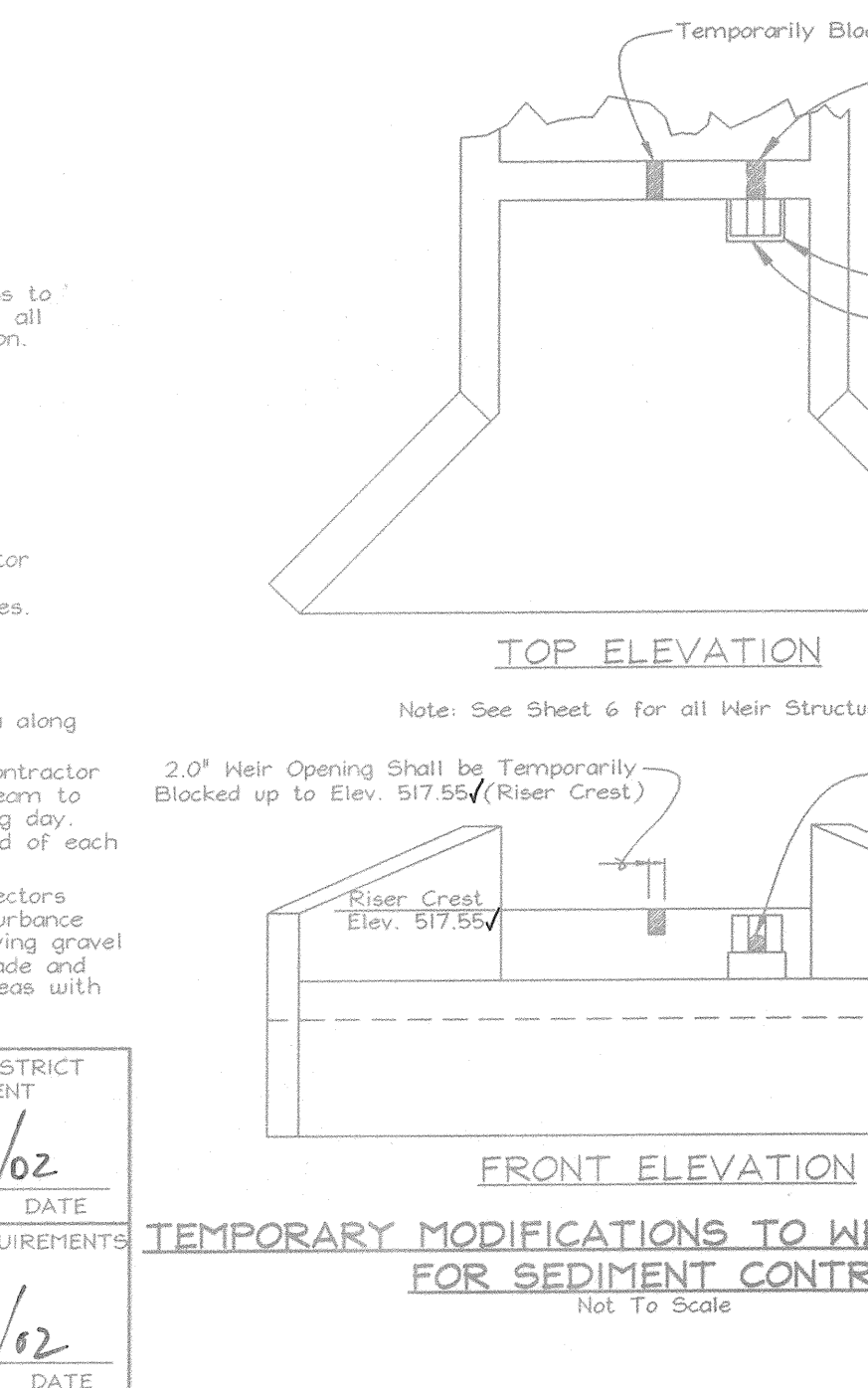
USDA-NATURAL RESOURCES CONSERVATION SERVICE DATE 8/5/02

THESE PLANS FOR SOIL EROSION AND SEDIMENT CONTROL MEET THE REQUIREMENTS OF THE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING.

HOARD COUNTY DEPARTMENT OF PLANNING AND ZONING DATE 8/5/02

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING DATE 8/9/02

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS DATE 7-31-02



OWNER/DEVELOPER
Maple Ridge L.L.P.
c/o James W. Ward, Partner
16307 Carrs Mill Road
Woodlawn, Maryland 21707

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 DEPARTMENT OF PLANNING AND ZONING.

ENGINEERS CERTIFICATE
I 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 DEPARTMENT OF PLANNING AND ZONING.

APPROVED: DATE 7/22/02



TRAFFIC CONTROL PLAN, SEDIMENT AND EROSION CONTROL AND MISCELLANEOUS DETAILS

LOTS 1 THRU 18 AND PRESERVATION PARCELS 'A', 'B' AND 'C'

TAX MAP B GRID 14 & 20
4TH ELECTION DISTRICT

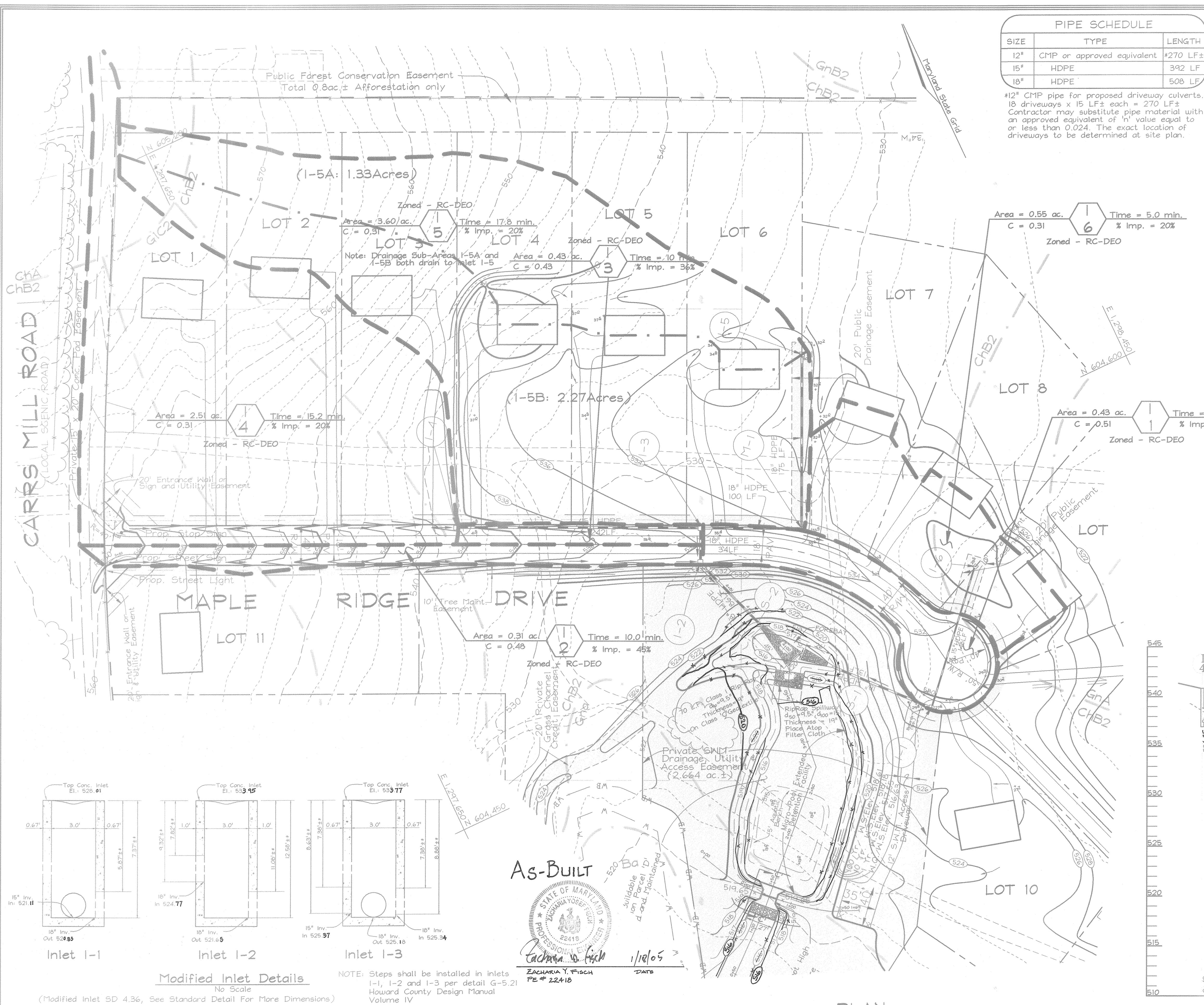
PARCEL 51 & 378
HOWARD COUNTY, MARYLAND

DESIGN BY: MLT
DRAWN BY: MLT
CHECKED BY: ZYF
SCALE: As Shown
DATE: June 21, 2002
W.O. No.: 3012
SHEET No. 4 OF 9

STATE OF MARYLAND
C. BROOKS MILLER
PROP. L.S. #195
1/19/05
DATE

STATE OF MARYLAND
ZACHARIA Y. FISCH
PE # 2248
1/18/05
DATE

STATE OF MARYLAND
PROFESSIONAL ENGINEER
22418
1/22/02
DATE

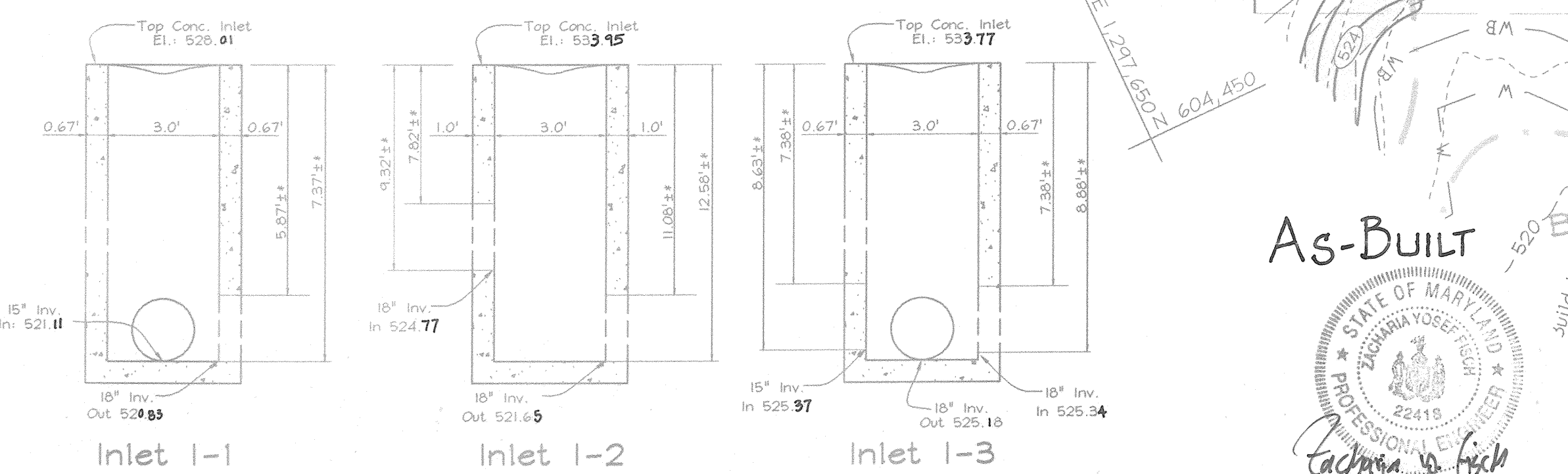
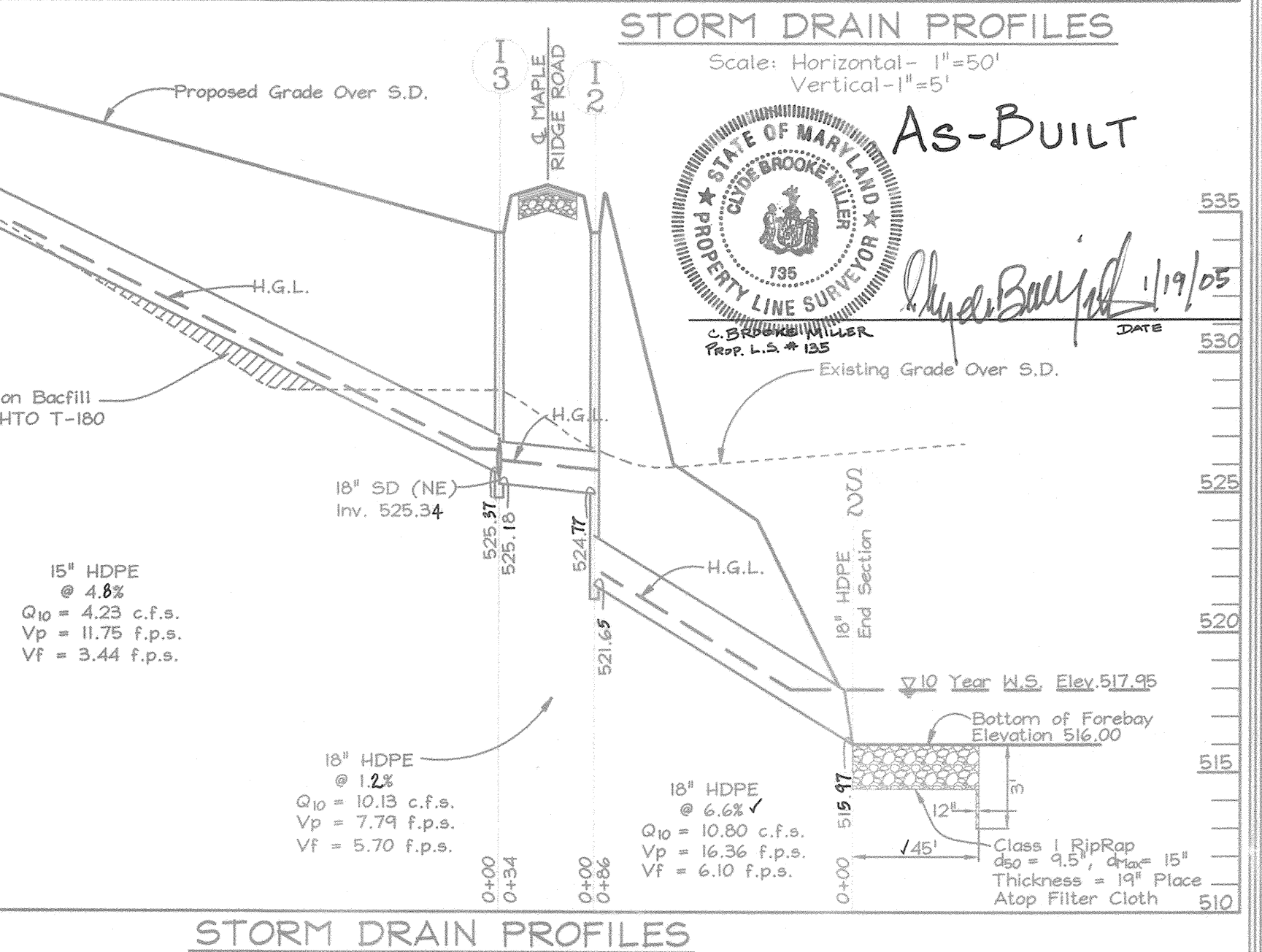
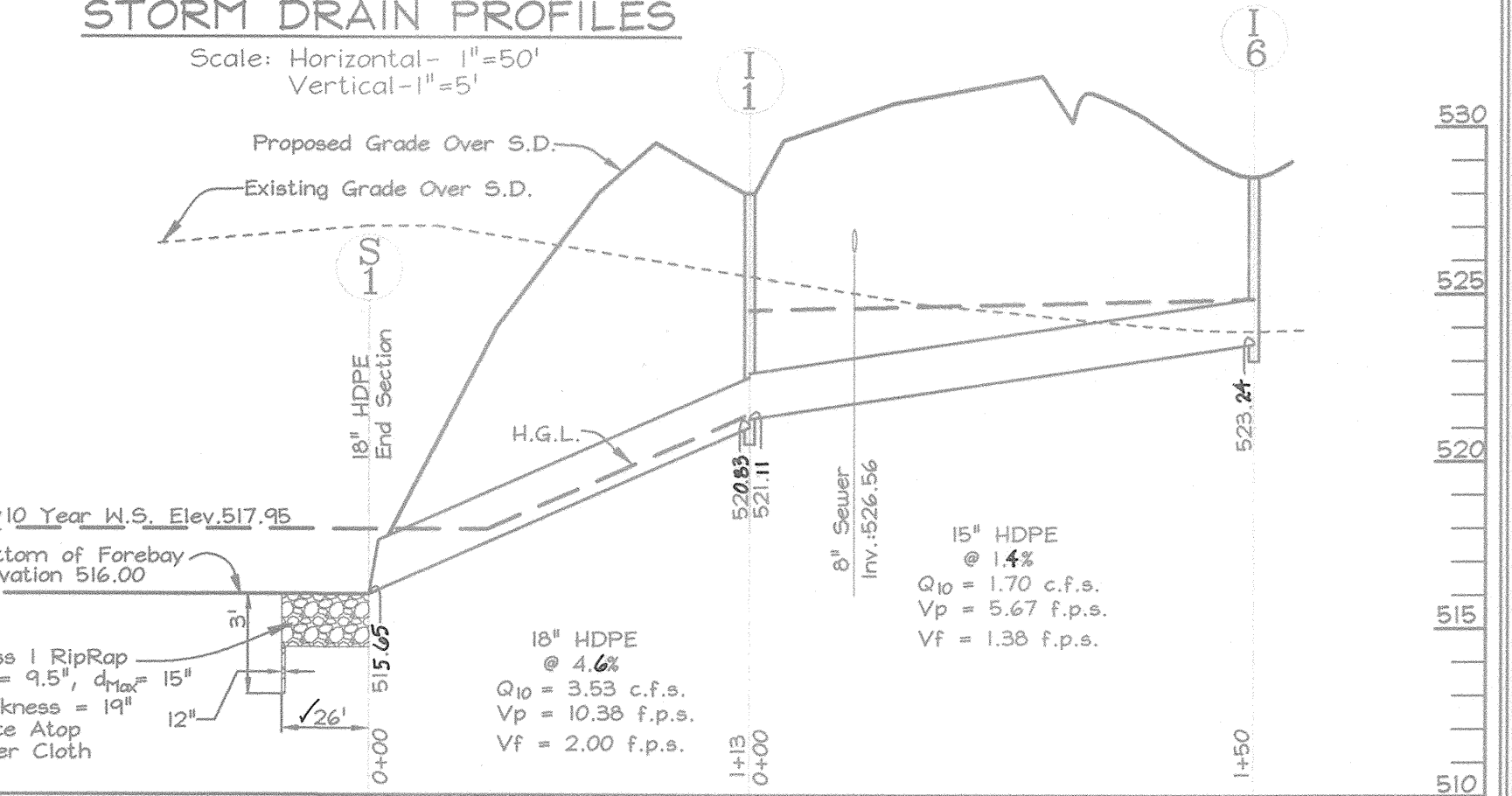
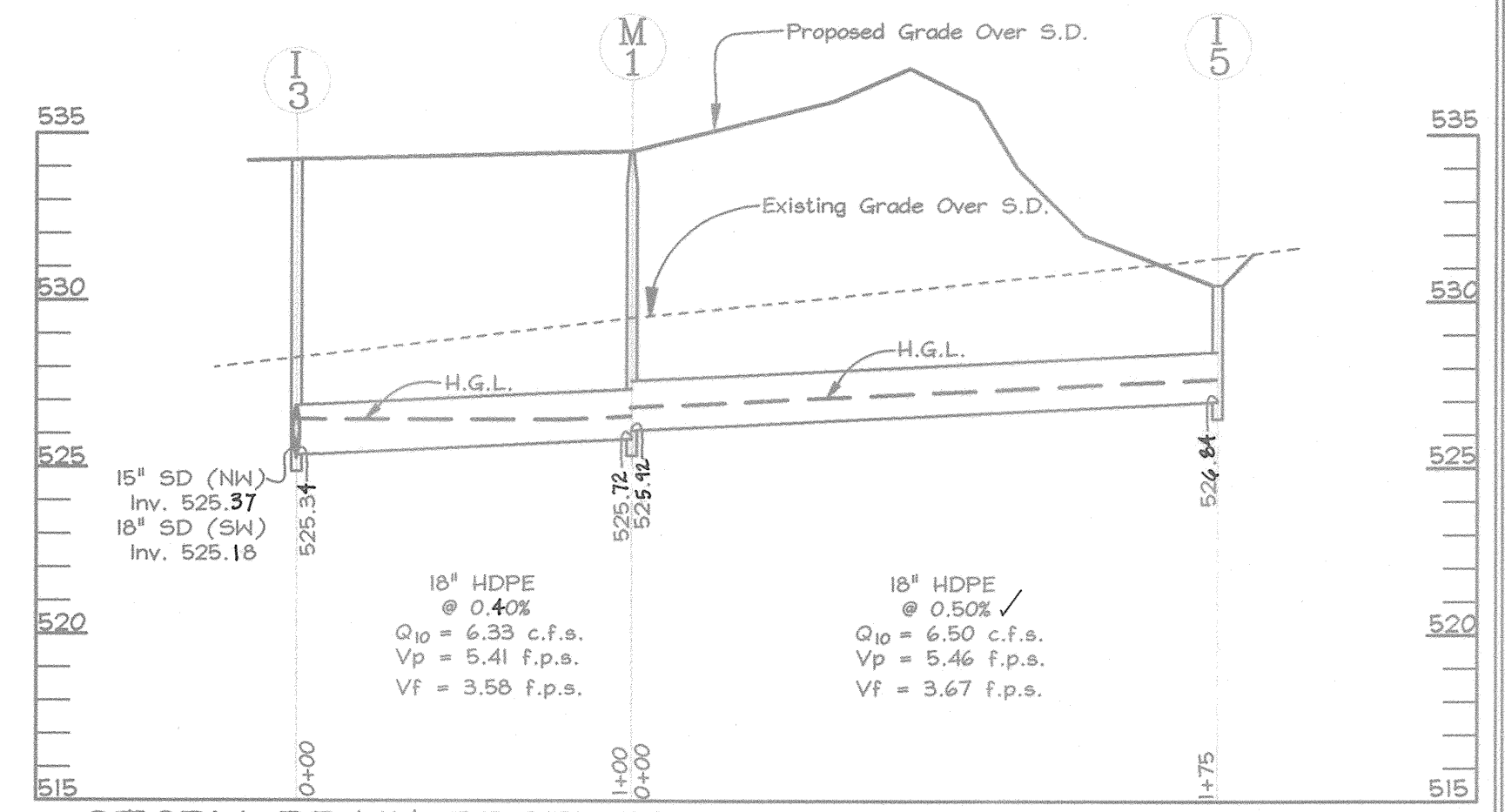


PIPE SCHEDULE		
SIZE	TYPE	LENGTH
12"	CMP or approved equivalent	#270 LF±
15"	HDPE	392 LF
18"	HDPE	508 LF

#12" CMP pipe for proposed driveway culverts. 18" driveways x 15 LF± each = 270 LF±. Contractor may substitute pipe material with an approved equivalent of 'N' value equal to or less than 0.024. The exact location of driveways to be determined at site plan.

STRUCTURE SCHEDULE						
NO.	TYPE	STATION AND OFFSET	TOP ELEV.***	INV. IN	INV. OUT	REMARKS
I-1	Modified Open End Grate(double opening)	L.P. @ Sta. 1+77.39, 4' Lt.	528.01	521.11	520.83	S.D. 4.36**
I-2	Modified Open End Grate(single opening)	@ Sta. 6+20.59, 17' Rt.	533.95	524.77	521.65	S.D. 4.36**
I-3	Modified Open End Grate(single opening)	@ Sta. 6+20.59, 17' Lt.	533.77	525.34	525.18	S.D. 4.36**
I-4	Precast Open End Grate(single opening)	@ Sta. 3+76.45, 17' Lt.	540.28	-	536.15	S.D. 4.36**
I-5	Precast Open End Grate(single opening)	N604, 739.70 E1, 298, 158.08	530.26	-	526.84	S.D. 4.36**
I-6	Precast Open End Grate(single opening)	N604, 472.49 E1, 298, 224.43	528.04	-	523.74	S.D. 4.36**
S-1	18" HDPE End Section	N604, 446.72 E1, 298, 048.57	N/A	-	519.65	Use HDPE
S-2	18" HDPE End Section	N604, 508.39 E1, 298, 005.96	N/A	-	519.47	Use HDPE
M-1	Standard 4.0' Manhole	@ Sta. 7+16.77, 23' Lt.	534.22	529.92	525.72	G 5.01

* Linear Profile (L.P.) Station Offset Distances (4' Lt.) Are Measured From The Edge Of Paving.
 ** Contractor Shall Determine The Exact HDPE Pipe Diameter Necessary For Opening At Inlet.
 *** Inlet Top Elevations are to the Top of Concrete Inlet.



NOTE: Steps shall be installed in inlets 1-1, 1-2 and 1-3 per detail G-5.21 Howard County Design Manual Volume IV

As-Built
 ZACHARIA Y. FISCH
 PROFESSIONAL SURVEYOR
 22418
 1/12/05

SOIL	NAME	CLASS
Ba	Balle silt loam	D
ChA	Chester silt loam, 0 to 3 percent slopes	B
ChB2	Chester silt loam, 3 to 8 percent slopes, moderately eroded	B
GIC2	Glenelig loam, 8 to 15 percent slopes, moderately eroded	B
GnA	Glenville silt loam, 0 to 3 percent slopes	C

PLAN
 Scale: 1"=50'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 Cindy Harvats, 8/1/02, CHIEF, DIVISION OF LAND DEVELOPMENT
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 Andrew M. Dauck, 7-31-02, CHIEF, BUREAU OF HIGHWAYS

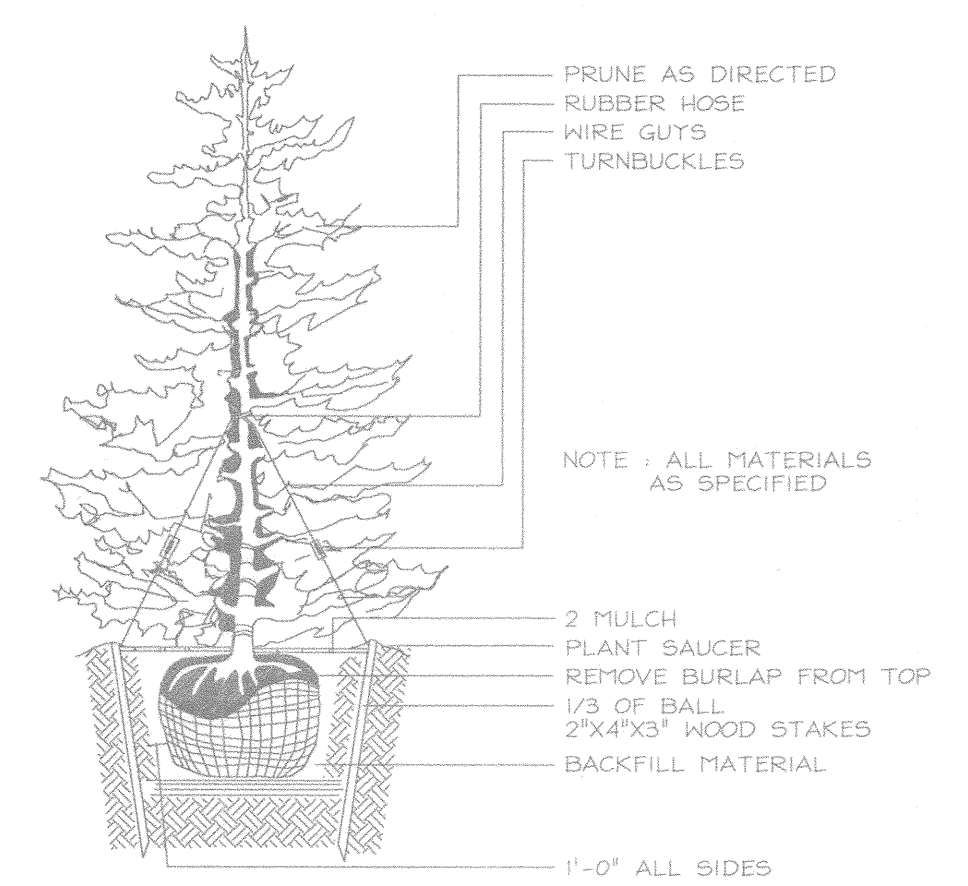
OWNER/DEVELOPER
 Maple Ridge L.L.P.
 de James W. Ward, Partner
 16307 Carrs Mill Road
 Woodbine, Maryland 21797

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

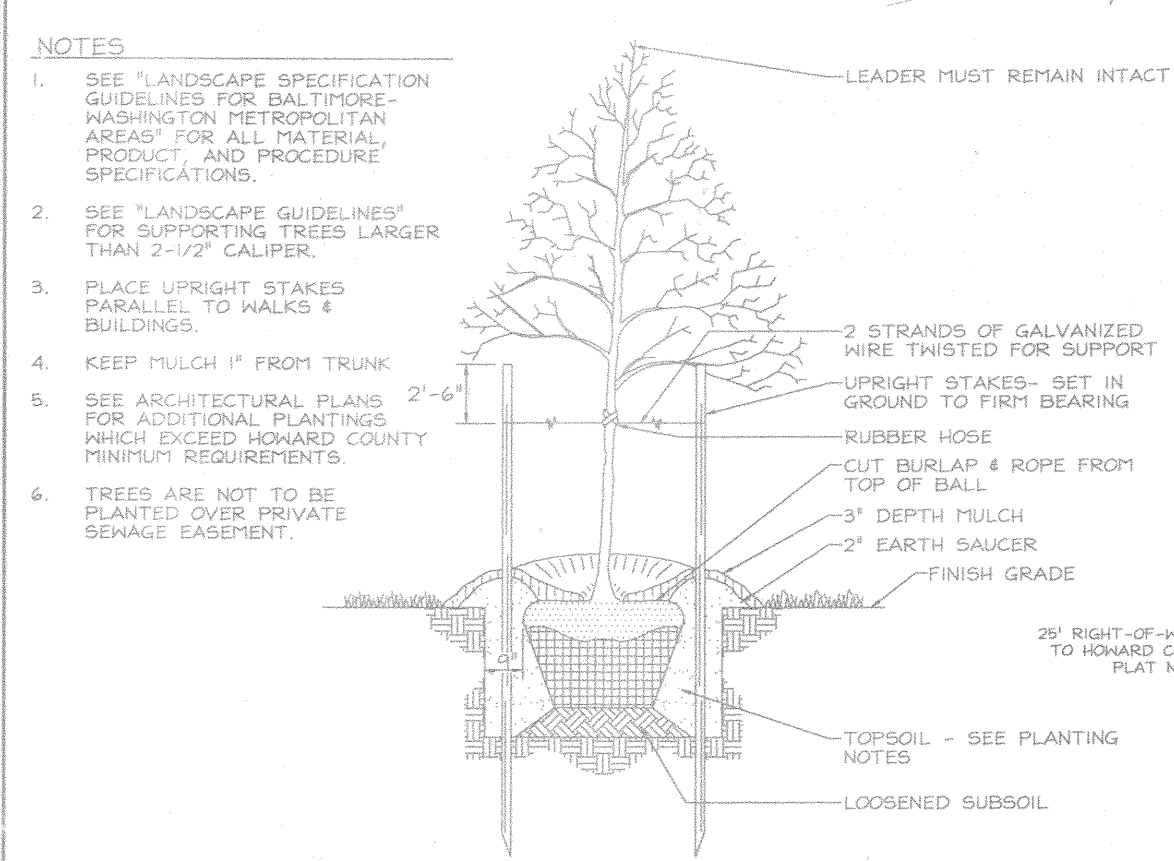
STORM DRAIN DRAINAGE AREA MAP
STORM DRAIN PROFILES AND DETAILS
MAPLE RIDGE
 LOTS 1 THRU 18 AND PRESERVATION PARCELS
 'A', 'B', 'C' AND 'D'
 TAX MAP 8 GRID 14 & 20 PARCEL 51 & 378
 4TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 DESIGN BY: MLT
 DRAWN BY: MLT
 CHECKED BY: ZYF
 SCALE: As Shown
 DATE: June 21, 2002
 W.O. No.: 3012
 SHEET No. 5 OF 9

KEY	QUAN.	BOTANICAL NAME	SIZE	NOTE
⊙	48	Acer Rubrum (Street Trees) October Glory Red Maple	2 1/2"-3" Cal.	B # B
⊙	74	Acer Rubrum (Shade Trees) October Glory Red Maple	2 1/2"-3" Cal.	B # B
⊙	7	Quercus Bicolor (Stormwater Management Pond) Swamp White Oak	2 1/2"-3" Cal.	B # B
⊙	32	Pinus Strobus Eastern White Pine	6'-8' Ht.	B # B
⊙	20	Pinus Taeda (Stormwater Management Pond) Loblolly Pine	6'-8' Ht.	B # B

- NOTES:
- All Street Trees and Shade Trees to be as specified or equivalent as approved by the Howard County Landscape Manual Appendix 'C'.
 - All Evergreen Trees to be as specified or equivalent as approved by the Howard County Landscape Manual Appendix 'C'.
 - For planting details see sheet 5 of 9.
 - Financial surety for the required 48 street trees will be posted as part of the Developer's Agreement.
 - Financial surety for the required perimeter and SWM landscaping will be provided as part of the Developer's Agreement for 99 shade trees (B) proposed trees + 11 proposed 2-1/2 cal. trees within forest conservation easement + 7 existing trees) + 52 evergreens in the amount of \$37,500.



TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



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

STREET TREE REQUIREMENTS

As outlined in the Howard County Landscape Manual medium or large street trees are to be planted 40 feet apart along the proposed right of way perimeter.

Length of proposed right of way perimeter = 1900' (800' x 2 + 300' (cut-de-sac))

Number of street trees required: 1900' / 40 = 47.5 trees

Number of street trees proposed = 48 trees

CATEGORY	ADJACENT TO ROADWAY'S				ADJACENT TO PERIMETER PROPERTIES				
	1	2	3	4	5	6	7	8	9
Perimeter/Frontage Designation Landscape Type	B	B	A	A	A	A	A	A	A
Linear Feet of Roadway Frontage/Perimeter	370	289	685	697	284	233	159	137	1220
Credit for Existing Vegetation (Yes, No, Linear Feet Describe below if needed)	**Yes 370'	No	**Yes 685	No	No	No	No	No	No
Credit for Walls, Fences or Berm (Yes, No, Linear Feet Describe below if needed)	No	No	No	No	No	No	No	No	No
Number of Plants Required									
Shade Trees	1:50 7	1:50 6	11	1:60 12	1:60 5	1:60 4	1:60 3	1:60 2	1:60 20
Evergreen Trees	1:40 9	1:40 7	-	-	-	-	-	-	-
Number of Plants Provided									
Shade Trees	0**	7	0*	12	5	4	3	2	20
Evergreen Trees	9	7	-	-	-	-	-	-	-
Other Trees (2:1 Substitution)	-	-	-	-	-	-	-	-	-
Shrubs (10:1 Substitution)	-	-	-	-	-	-	-	-	-
(Describe Plant Substitution Credits Below if needed)									

* Forest Conservation Planting in this Area is 2.5" Caliper Trees Therefore Credit is Allowable. ** Credit for shade tree component only.

SCHEDULE D : STORMWATER MANAGEMENT AREA LANDSCAPING	
Linear Feet of Perimeter	1,428lf
Credit for Existing Vegetation (No, Yes and Linear Feet)	No
Credit for other Landscaping (No, Yes and %)	No
Number of Trees Required	
Shade Trees	29
Evergreen Trees	36
Number of Trees Provided	
Shade Trees	29
Evergreen Trees	36
Other Trees(2:1 Substitution)	0

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Cindy Hammett 5/19/02
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chris Deane 5/20/02
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

Andrew M. Dwyer 7-31-02
CHIEF, BUREAU OF HIGHWAYS DATE

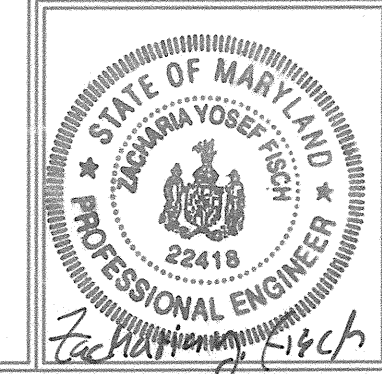
DEVELOPER'S BUILDER'S CERTIFICATE

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 CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE(1) YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

James W. ... 7/26/02
SIGNATURE OF DEVELOPER DATE

OWNER/DEVELOPER

Maple Ridge L.L.P.
c/o James W. Ward, Partner
16307 Carre Mill Road
Woodbine, Maryland 21797



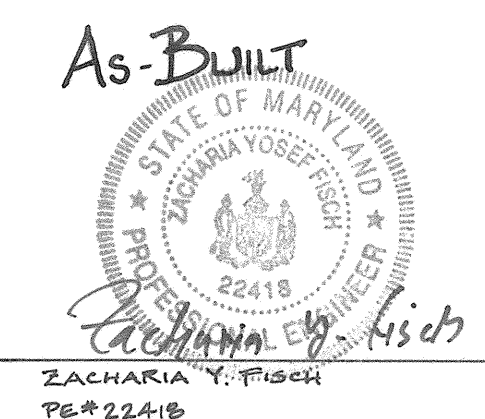
FSH Associates
Engineers Planners Surveyors
8318 Forrest Street Elkton City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@cs.com

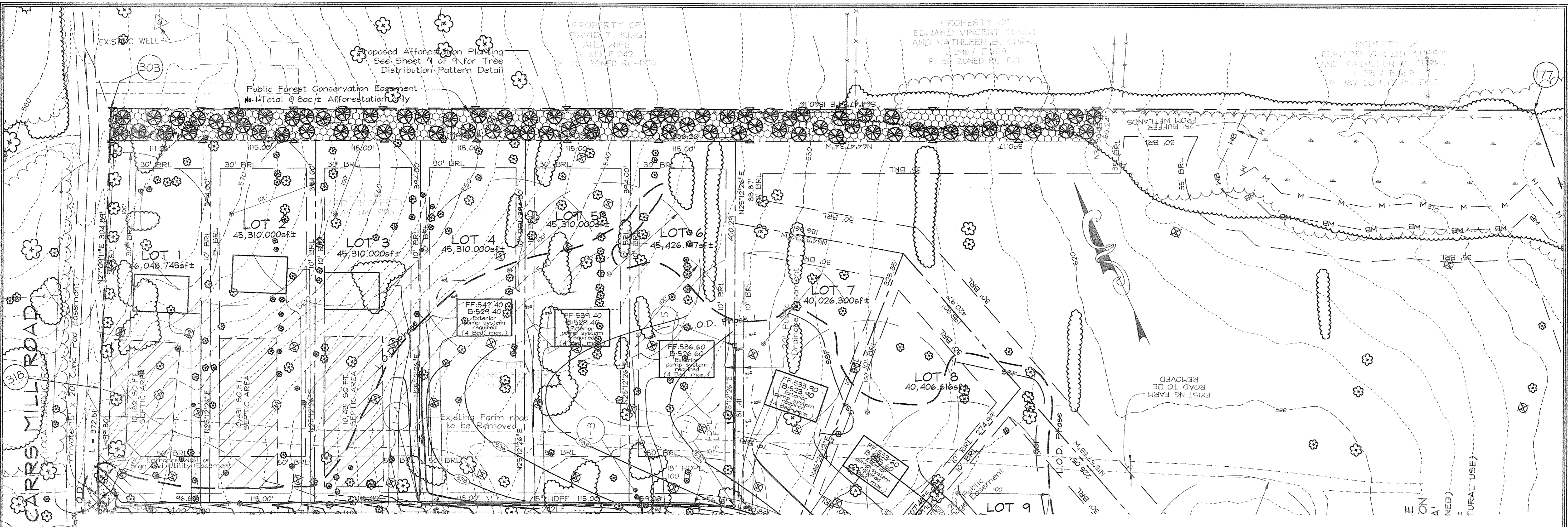
LANDSCAPE PLAN
MAPLE RIDGE
LOTS 1 THRU 18 AND PRESERVATION PARCELS 'A', 'B', 'C', AND 'D'

TAX MAP B GRID 14 # 20
4TH ELECTION DISTRICT

PARCEL 51 # 378
HOWARD COUNTY, MARYLAND

DESIGN BY: MLT
DRAWN BY: MLT
CHECKED BY: ZYF
SCALE: 1"=100'
DATE: June 21, 2002
I.O. No.: 3012
SHEET No. 7 OF 9





FOREST CONSERVATION EASEMENT TABLE	
EASEMENT 1	0.80 AC ALL AFFORESTATION
EASEMENT 2	2.13 AC ALL AFFORESTATION
EASEMENT 3	1.19 AC ALL AFFORESTATION
EASEMENT 4	0.78 AC ALL AFFORESTATION
TOTAL	4.90 AC ALL AFFORESTATION

FOREST CONSERVATION WORKSHEET	
Net Tract Area	Acres
A. Total Tract Area	84.67
B. Area Within 100 Year Floodplain	--
C. Other deductions *(See Option 'A' note this sheet)	60.17
D. Net Tract Area	24.50
Zoning Use Category: RESIDENTIAL-SUBURBAN	
Land Use Category	
E. Afforestation Minimum (20 % x D)	4.90
F. Conservation Threshold (25 % x D)	6.13
Existing Forest Cover	
G. Existing Forest on Net Tract Area	0
H. Forest Area Above Conservation Threshold	0
Breakeven Point	
I. Forest Retention Above Threshold with no Mitigation	NA
J. Clearing Permitted without Mitigation	NA
Proposed Forest Clearing	
K. Forest Areas to be Cleared	0
L. Forest Areas to be Retained	0
Planting Requirements	
M. Reforestation for Clearing Above Threshold	0
N. Reforestation for Clearing Below the Threshold	0
P. Credit for Retention Above Conservation Threshold	0
Q. Total Reforestation Required	0
R. Total Afforestation Required	4.90
S. Total Reforestation and Afforestation Requirement	4.90

This Forest Conservation Plan was prepared in accordance with the Howard County Forest Conservation Manual Guidelines for Rural Cluster Subdivisions. Only those areas affected by Forest Conservation obligations are shown.

*Option 'A' for Cluster Subdivisions will be utilized when the preservation parcel is excluded from all calculations. The existing site consists of 84.67 acres. A total of 60.17 acres of preservation parcels, which includes the entire floodplain, is excluded from the calculations (Pm, A & C). There is no existing forest on net tract area of the site. Most of the forest on-site is located within the floodplain. The afforestation requirement is 4.90 acres. Onsite afforestation proposed is 4.90 acres, to be placed within three Forest Conservation Easements of 0.80, 2.13, 0.78, and 1.19 acres.

Easement 1 is an unforested field. The planting would create a forested buffer along the site's east perimeter connected to existing forest on-site. It will be planted with 100 stems/acre, 2.5" caliper trees.

Easements 2, 3 and 4 are in unforested floodplain and wetlands and will be planted with 350 stems/acre, containerized whip stock.

PLANTING NOTES

- Multiflora rose control must be performed as part of this planting plan.
- Bare-root planting material may be used to offset the cost of multiflora rose removal and maintenance. If bare-root material is used it must be planted in March-April and an anti-desiccant gel shall be utilized to protect root systems. Container grown stock may be used.
- Plants should be flagged to aid on location during maintenance. Plantings should also be planted in a grid pattern to facilitate maintenance and removal of invasive and exotic species.

MULTIFLORA ROSE CONTROL NOTE

Prior to planting, all multiflora rose within planting areas shall be removed. Removal of the rose may be performed with mowing and herbicide treatments. Physical removal of all top growth followed by a periodic herbicide treatment of stump sprouts is recommended. Native tree and shrub species occurring within the rose thickets should be retained wherever possible. Herbicide treatments shall occur on 2 month intervals during the first growing season and once each in the spring and fall for subsequent years. Herbicide used shall be made specifically to address woody plant material and shall be applied as per manufacturer's specifications. Care should be taken not to spray planted trees or naturally occurring native tree/shrub seedlings. It is recommended that initiation of rose removal begin at least six months prior to planting.

Surety for the required afforestation obligation area of 4.90 acres will be posted with the Developer's Agreement in the amount of \$104,522.00. [4.90 acres=213,444 sq. ft. - 4400 sq. ft. (landscape credit of 11 shade trees x 400 sq. ft.) = 209,044 sq. ft.]

PLANTING SCHEDULE

EASEMENT 1 0.80 Ac = 80 Stems*100/Ac.

Qty.	Botanical Name	Common Name	Min. Size	Spacing	Notes
68	Acer rubrum	Red Maple	1.0" cal.	20' o.c.	
17	Acer saccharinum	Sugar Maple	2.5" cal.	20' o.c.	
22	Picea abies	Norway Spruce	2.5" cal.	20' o.c.	
10	Amelchier canadensis	Serviceberry	2.5" cal.	20' o.c.	

EASEMENT 3 1.19 Ac = 417 Stems*350/Ac.

Qty.	Botanical Name	Common Name	Min. Size	Spacing	Notes
80	Acer rubrum	Red Maple	WHIP 2-3'	11' o.c.	
90	Fraxinus pennsylvanica	Green Ash	WHIP 2-3'	11' o.c.	
30	Liriodendron tulipifera	Tulip Poplar	WHIP 2-3'	11' o.c. #	
30	Nyssa sylvatica	Black Gum	WHIP 2-3'	11' o.c.	
45	Platanus occidentalis	Sycamore	WHIP 2-3'	11' o.c.	
50	Quercus palustris	Pin Oak	WHIP 2-3'	11' o.c.	
47	Cornus florida	Flowering Dogwood	WHIP 2-3'	11' o.c. #	
45	Amelanchier canadensis	Shadbush	WHIP 2-3'	11' o.c.	

EASEMENT 2: 2.13 Ac = 746 Stems*350/Ac.

Qty.	Botanical Name	Common Name	Min. Size	Spacing	Notes
120	Acer rubrum	Red Maple	WHIP 2-3'	11' o.c.	
130	Fraxinus pennsylvanica	Green Ash	WHIP 2-3'	11' o.c.	
75	Liriodendron tulipifera	Tulip Poplar	WHIP 2-3'	11' o.c. #	
86	Nyssa sylvatica	Black Gum	WHIP 2-3'	11' o.c.	
90	Platanus occidentalis	Sycamore	WHIP 2-3'	11' o.c.	
95	Quercus palustris	Pin Oak	WHIP 2-3'	11' o.c.	
75	Cornus florida	Flowering Dogwood	WHIP 2-3'	11' o.c. #	
75	Amelanchier canadensis	Shadbush	WHIP 2-3'	11' o.c.	

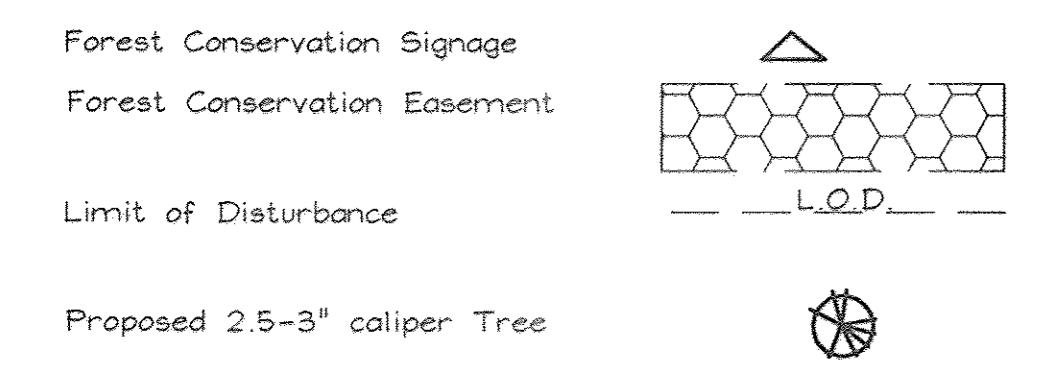
EASEMENT 4 0.78 Ac = 273 Stems*350/Ac.

Qty.	Botanical Name	Common Name	Min. Size	Spacing	Notes
35	Acer rubrum	Red Maple	WHIP 2-3'	11' o.c.	
40	Fraxinus pennsylvanica	Green Ash	WHIP 2-3'	11' o.c.	
30	Liriodendron tulipifera	Tulip Poplar	WHIP 2-3'	11' o.c. #	
30	Nyssa sylvatica	Black Gum	WHIP 2-3'	11' o.c.	
35	Platanus occidentalis	Sycamore	WHIP 2-3'	11' o.c.	
35	Quercus palustris	Pin Oak	WHIP 2-3'	11' o.c.	
34	Cornus florida	Flowering Dogwood	WHIP 2-3'	11' o.c. #	
34	Amelanchier canadensis	Shadbush	WHIP 2-3'	11' o.c.	

Whips should be planted in rows to facilitate future maintenance. Where possible rows should be made along contour.
- should not be planted in wetland areas, plant in buffer only

EXPLORATION RESEARCH, INC.
ENVIRONMENTAL CONSULTANTS
8110 FOREST STREET
BELLEVILLE CITY, MARYLAND 21043
TEL: (410) 760-1150 FAX: (410) 760-7850

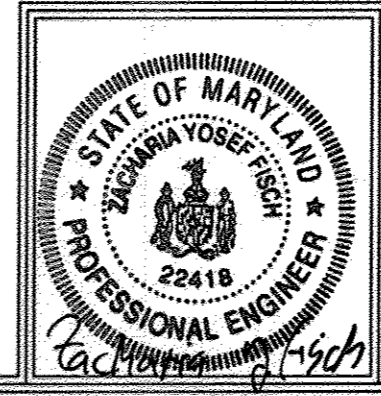
LEGEND



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
 APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.
 Chief, Division of Land Development
 Chief, Development Engineering Division
 Chief, Bureau of Highways

By	No.	REVISION	DATE
FSH	1	Revised Planting Schedule for Easement 1 to "As Built" Conditions	04.08.05

OWNER/DEVELOPER
 Maple Ridge L.L.P.
 c/o James Ward, Partner
 16307 Carrs Mill Road
 Woodbine, Maryland 21797

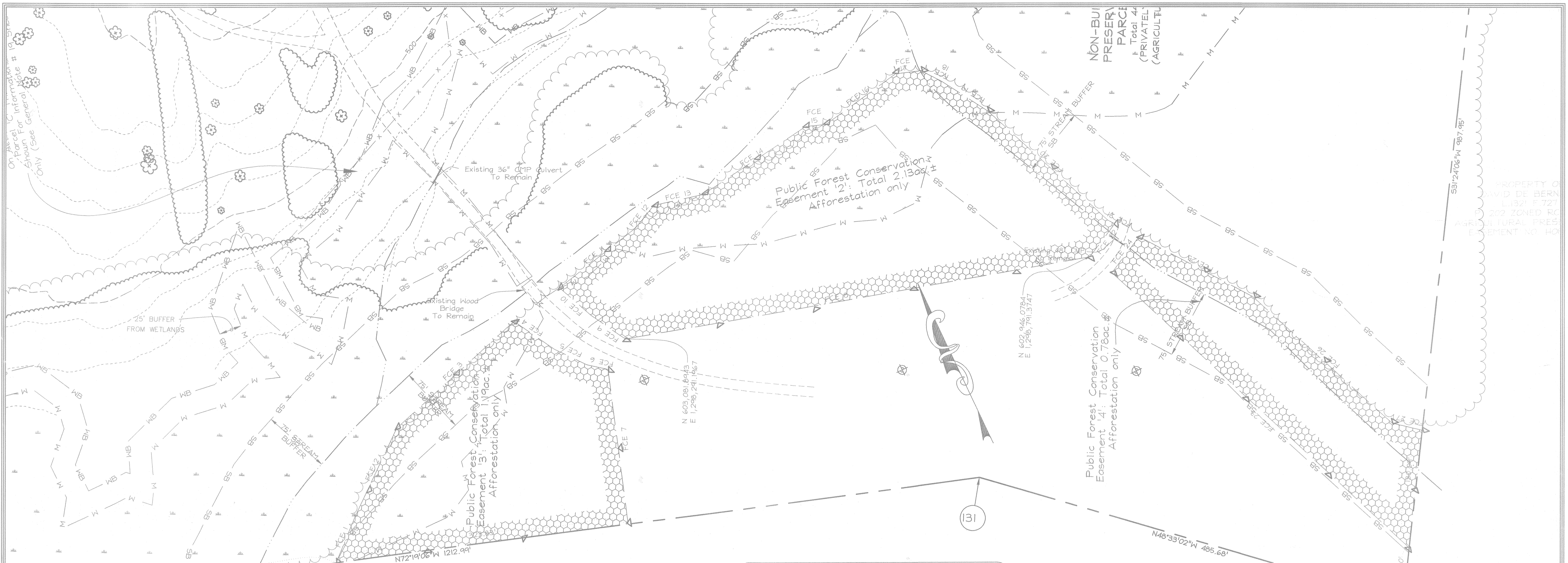


FSH Associates
 Engineers Planners Surveyors
 8318 Forest Street, Ellicott City, MD 21043
 Tel: 410-750-2251 Fax: 410-750-7350
 E-mail: FSHAssociates@cs.com

FOREST CONSERVATION PLAN
MAPLE RIDGE
 LOTS 1 THRU 18 AND PRESERVATION PARCELS
 'A', 'B', 'C' AND 'D'
 TAX MAP 8 GRID 14 # 20 PARCEL 51 # 378
 4th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGN BY: MLT
 DRAWN BY: RAB
 CHECKED BY: SLH
 SCALE: 1"=50'
 DATE: July 15, 2002
 W.O. No.: 3012
 SHEET No. 6 OF 9



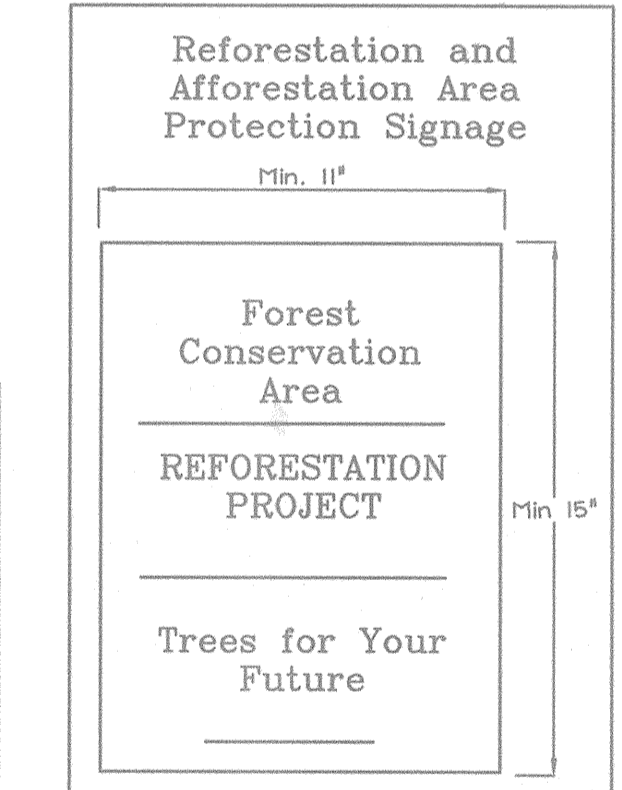
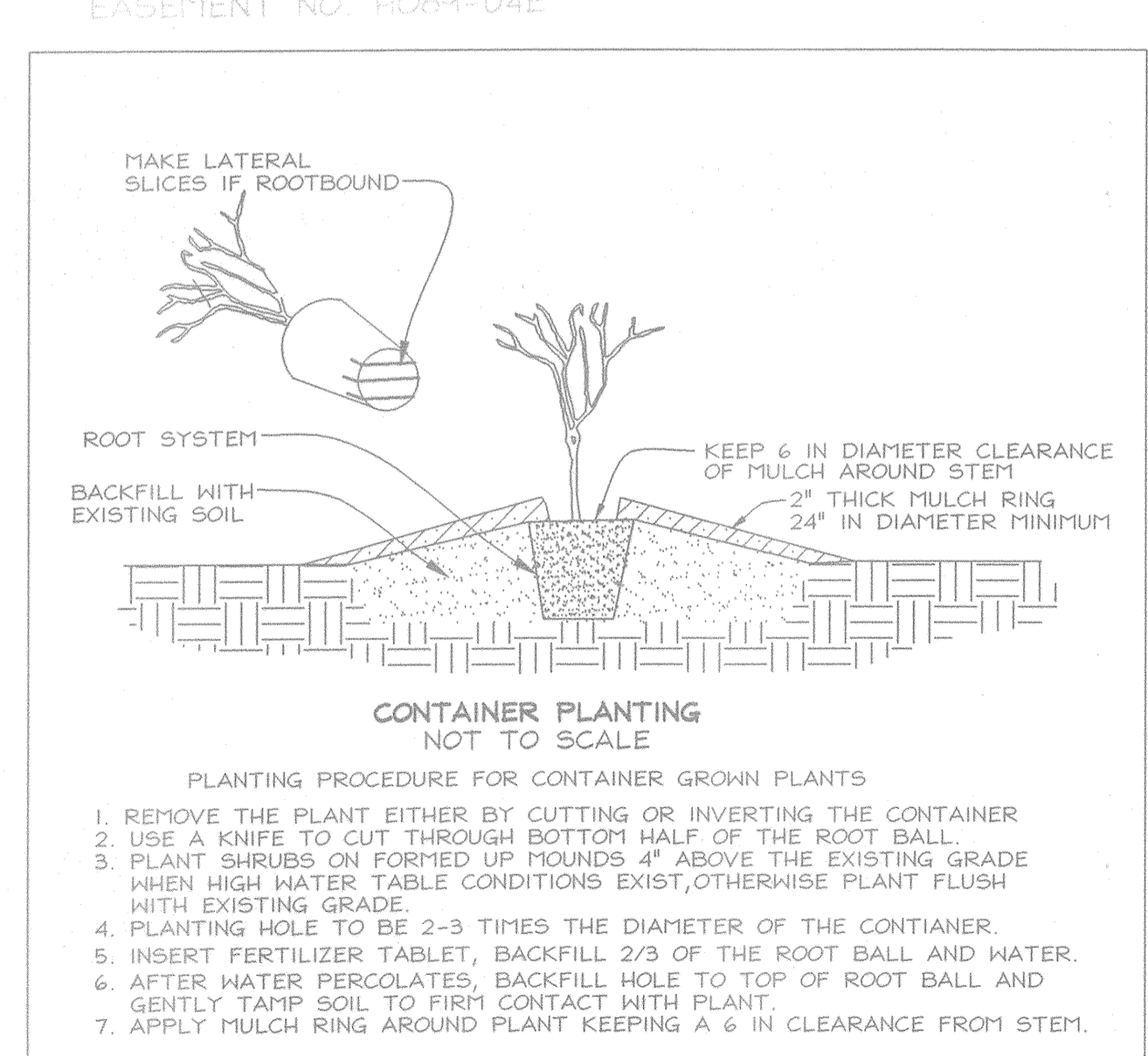


On Parcel Information #
Shown For General Note
Only (See General Note
#1)

PROPERTY OF
DAVID DE BERNARDI
L1321 F.727
P-202 ZONED RC-DEO
AGRICULTURAL PRESERVATION
EASEMENT NO. H069-04E

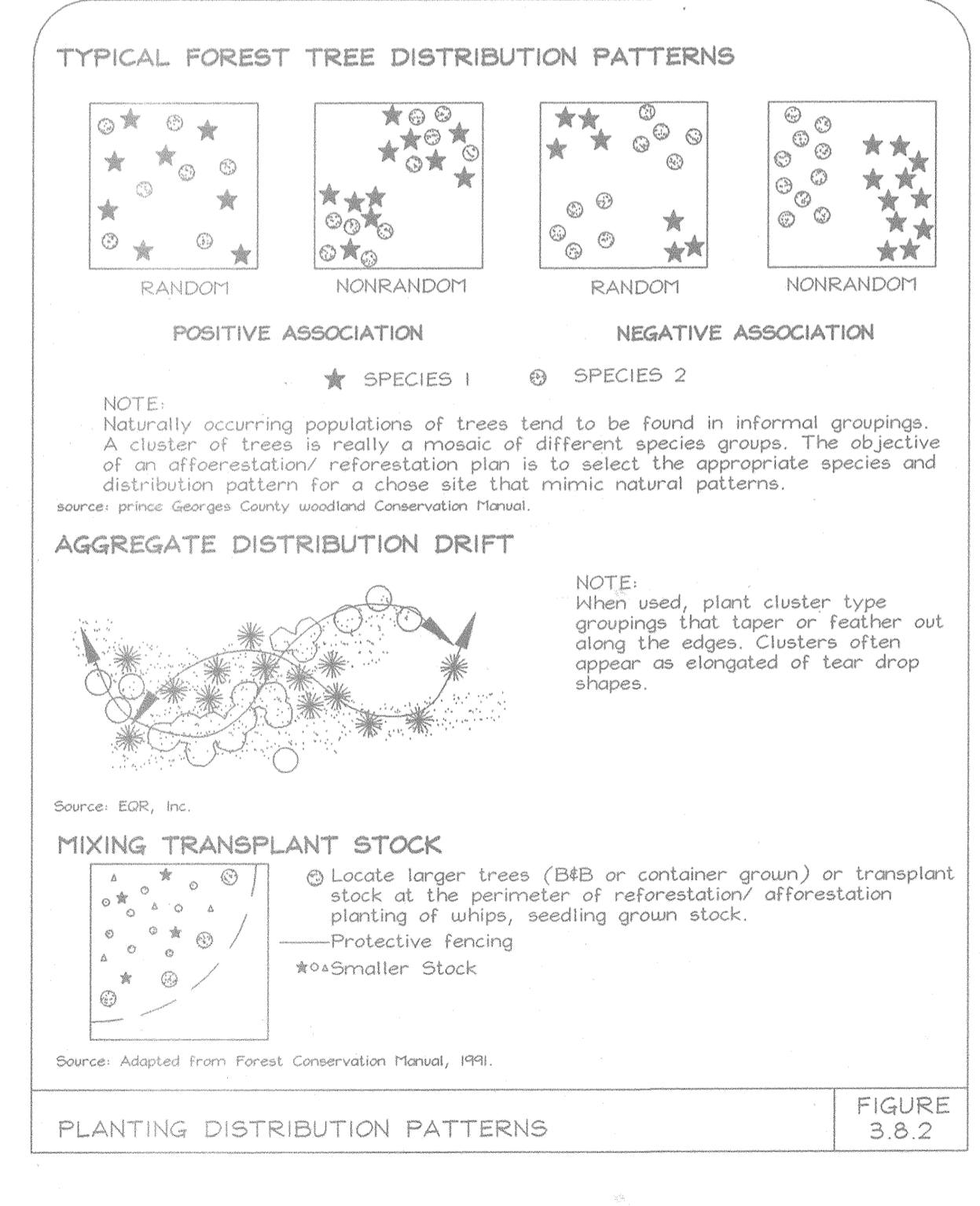
AFFORESTATION AREA MONITORING NOTES

- Monthly visits during the first growing season are to assess the success of the plantings and to determine if supplemental watering, pest control or other actions are necessary. Early spring visits will document winter kill and autumn visits will document summer kill.
- The minimum survival rate shall be 75% of the total number of trees planted per acre at the end of the two year maintenance period. Wild tree seedlings from natural regeneration on the planting site may be counted up to 50% toward the total survival number if they are healthy native species at least 12 inches tall.
- Survival will be determined by a stratified random sampling of the plantings. The species composition of the sample population should be proportionate to the amount of each species in the entire planting to be sampled.
- Effective monitoring will assess plant survivability during the first growing season and make recommendations for reinforcement plantings if required at that time.



EXPLORATION RESEARCH, INC.
ENVIRONMENTAL CONSULTANTS

8316 FORREST STREET
ELLSBOTH CITY, MARYLAND 21043
TEL: (410) 750-1150 FAX: (410) 750-7850



Surety for the required afforestation obligation area of 4.90 acres will be posted with the Developer's Agreement in the amount of \$104,522.00. [4.90 acres=213,444 sq. ft. - 4400 sq. ft. (landscape credit of 11 shade trees x 400 sq. ft.) = 209,044 sq. ft.]

AFFORESTATION PLANTING NOTES

- Afforestation areas shall be planted between March 15th and April 30th or September 15th and November 15th. Earliest planting dates will vary from year to year but planting may generally begin as soon as the ground is no longer frozen. Alternate planting dates may be considered as condition warrants.
- Soil amendments and fertilization recommendations will be made based upon the results of soil analysis for nitrogen, phosphorus, potassium, organic matter content and pH. If required, fertilizer will be provided using a slow release, soluble 16-8-16 analysis designed to last 5-8 years contained in polyethylene perforated bags such as manufactured by ADCO Works, P.O. Box 310 Hollins, N.Y. 11423 or approved equal.
- Plant materials will be planted in accordance with the Planting Distribution Diagram, Planting Details and plant schedule.
- Plant material shall be nursery grown and inspected prior to planting. Plants not conforming to the American Standard for Nursery Stock specifications for size, form, vigor, or roots, or due to trunk wounds, breakage, desiccation, insect or disease must be replaced.
- Planting stock must be protected from desiccation at all times prior to planting. Materials held for planting shall be moistened and placed in cool shaded areas until ready for placement.
- Newly planted trees may require watering at least once per week during the first growing season depending on rainfall in order to get established. The initial planting operation should allow for watering during installation to completely soak backfill material.
- Mulch shall be applied in accordance with the diagram provided and shall consist of composted, shredded hardwood bark mulch, free of wood alcohol.
- All nursery stock to be sprayed with deer repellent containing Bitrex such as Repellex All nursery stock to be grown with deer repellent tablets in growing medium, such as Repellex Tablets.



APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

Chief, Division of Land Use Planning

8/9/02

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

Chief, Bureau of Highways

7-31-02

LEGEND

Forest Conservation Signage

Forest Conservation Easement

OWNER/DEVELOPER

Maple Ridge L.L.P.
c/o James W. Ward, Partner
16307 Carro Mill Road
Woodbine, Maryland 21797

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MAPLE RIDGE
LOTS 1 THRU 18 AND PRESERVATION PARCELS 'A', 'B', 'C' AND 'D'

TAX MAP 8 GRID 14 # 20
4TH ELECTION DISTRICT

PARCEL 51 # 378
HOWARD COUNTY, MARYLAND

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