

SHEET INDEX

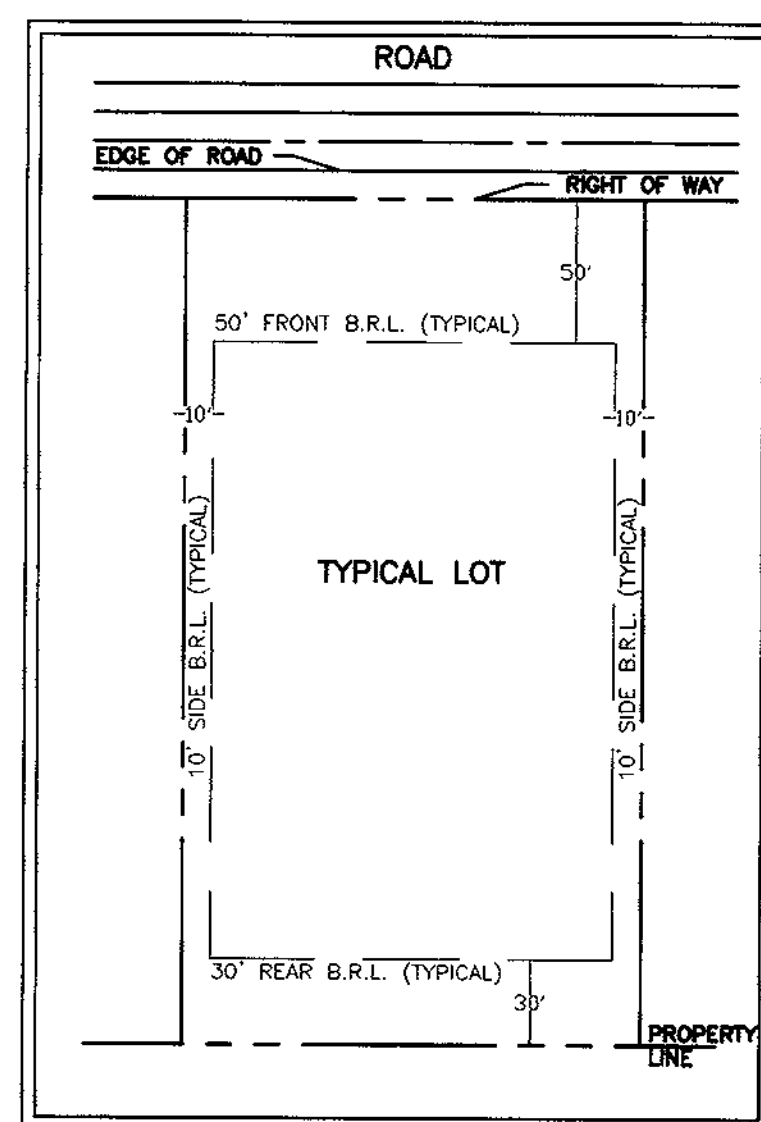
| No. | Description |
|-----|--|
| 1 | Title Sheet |
| 2 | Preliminary Plan |
| 3 | Schematic Grading, Landscape and Sediment Control Plan |
| 4 | Forest Conservation Plan & Details |
| 5 | Forest Conservation Plan & Details |

| ROAD CLASSIFICATION | | |
|---------------------|---------------------|-----|
| Road Name | Classification | R/W |
| Maple Ridge Dr | Public Access Place | 40' |

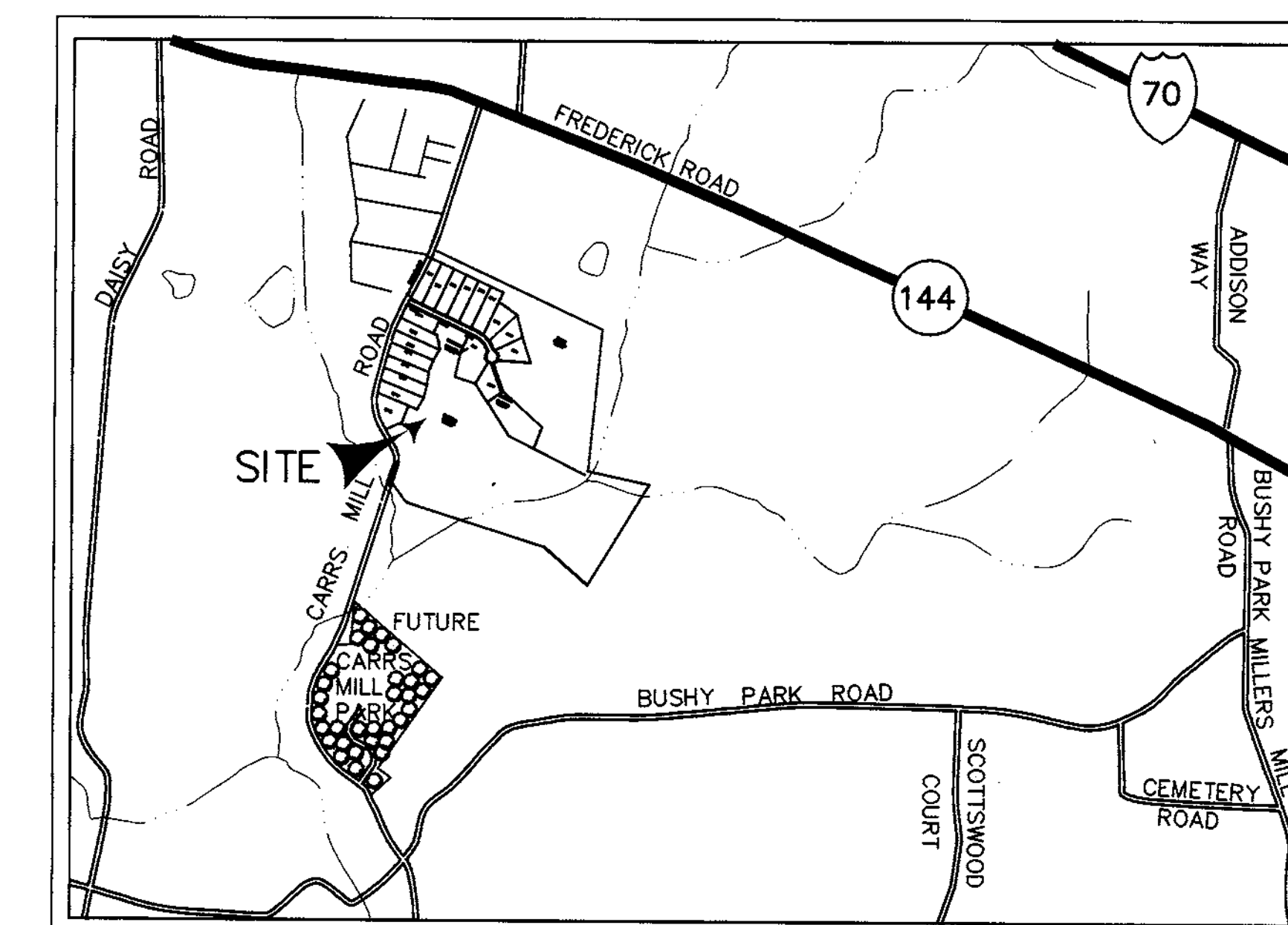
| CENTERLINE ROAD CURVE DATA | | | |
|----------------------------|-----------|---------|------------|
| Stations | Delta | Radius | Arc Length |
| 6+68 - 9+12.49 | 50°55'41" | 230.00' | 204.44' |

LEGEND:

- DENOTES NON-TIDAL WETLAND
- DENOTES STREAM
- DENOTES PROPOSED SEPTIC FIELD
- DENOTES PROPOSED WELL
- DENOTES PROPOSED DWELLING
- DENOTES PROPOSED STREET LIGHT



TYPICAL LOT AND BUILDING RESTRICTION LINES
N.T.S.



VICINITY MAP
SCALE: 1"=1200'

NOTES

- ALL WELLS AND SEPTICS WITHIN 100' OF PROPERTY BOUNDARY HAVE BEEN SHOWN.
- GROUNDWATER APPROPRIATIONS PERMIT SHALL BE OBTAINED PRIOR TO RECORD PLAT SIGNATURE.
- ALL WELLS SHALL BE DRILLED PRIOR TO RECORD PLAT SIGNATURE.
- FINAL APPROVAL OF THE SHARED SEPTIC SYSTEM IS CONTINGENT UPON CONCURRENT MDE, PUBLIC WORKS AND HEALTH DEPARTMENT REVIEW AND APPROVAL PRIOR TO RECORD PLAT APPROVAL. IN ADDITION, ENGINEER MUST DEMONSTRATE THAT SUFFICIENT SEPTIC AREA HAS BEEN ESTABLISHED FOR THE INSTALLATION OF AN INITIAL SEPTIC SYSTEM AND TWO REPAIRS.

| STREET LIGHT TABLE | | | |
|--------------------|---------------|--------|---|
| Street Name | Stations | Offset | Fixture |
| Maple Ridge Dr. | CL. STA. 0+35 | 18'R | 100-Watt "Traditionaire" H.P.S. Vapor Fixture Post Top Fixture Mounted On A 14-Foot Black Fiberglass Pole |
| Maple Ridge Dr. | CL. STA. 5+40 | 18'R | 100-Watt "Traditionaire" H.P.S. Vapor Fixture Post Top Fixture Mounted On A 14-Foot Black Fiberglass Pole |

TENTATIVELY APPROVED
DEPT. OF PLANNING AND ZONING OF
HOWARD COUNTY

James W. Ward, Jr.
PLANNING DIRECTOR
7/20/01
DATE

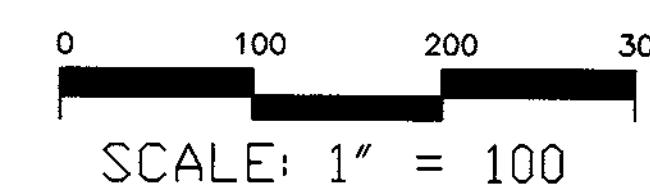


E. G. Gisch
5/14/01

OWNER AND DEVELOPER
JAMES W. WARD, JR. AND MEREDITH M. WARD
16307 CARRS MILL ROAD
WOODBINE, MARYLAND 21797

NOTES:

- (SEE GENERAL NOTE 8)
- IN ACCORDANCE WITH COMAR TITLE 08, SUBTITLE 05, CHAPTER 04, AGRICULTURAL ACTIVITIES IN WETLANDS ARE EXEMPT FROM PERMIT REQUIREMENTS. ALSO, A PERMIT FROM THE ARMY CORPS OF ENGINEERS IS NOT REQUIRED FOR DISTURBANCE IN WETLANDS THAT ARE ASSOCIATED WITH AGRICULTURAL ACTIVITIES.



PRELIMINARY PLAN FOR WARD PROPERTY

LOTS 1 THRU 18 AND
PRESERVATION PARCELS 'A' THRU 'C'
(A RESUBDIVISION OF WARD PROPERTY
LOTS 1-3 PLAT No. 9931)
ZONING "RC-DEO"
TAX MAP No. 8 GRIDS 14 & 20, PARCEL No. 51 & 378
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

| COORDINATE TABLE | | |
|------------------|-----------|------------|
| PT. | NORTH | EAST |
| 127 | 603411.50 | 1298941.84 |
| 128 | 603299.49 | 1298457.25 |
| 130 | 602456.24 | 1298942.49 |
| 131 | 602777.74 | 1298578.45 |
| 177 | 604599.55 | 1299059.31 |
| 217 | 603168.68 | 1297398.64 |
| 218 | 603146.15 | 1297422.77 |
| 303 | 605264.01 | 1297647.72 |
| 316 | 604649.91 | 1297363.72 |
| 318 | 604992.75 | 1297508.52 |
| 337 | 604640.92 | 1297360.69 |
| 349 | 604527.59 | 1297326.35 |
| 353 | 603718.42 | 1297322.76 |
| 355 | 603846.13 | 1297251.24 |
| 357 | 604141.83 | 1297216.99 |
| 361 | 603460.18 | 1297357.84 |
| 366 | 603292.13 | 1297314.01 |
| 368 | 603363.03 | 1297334.02 |
| 370 | 603288.95 | 1297312.99 |

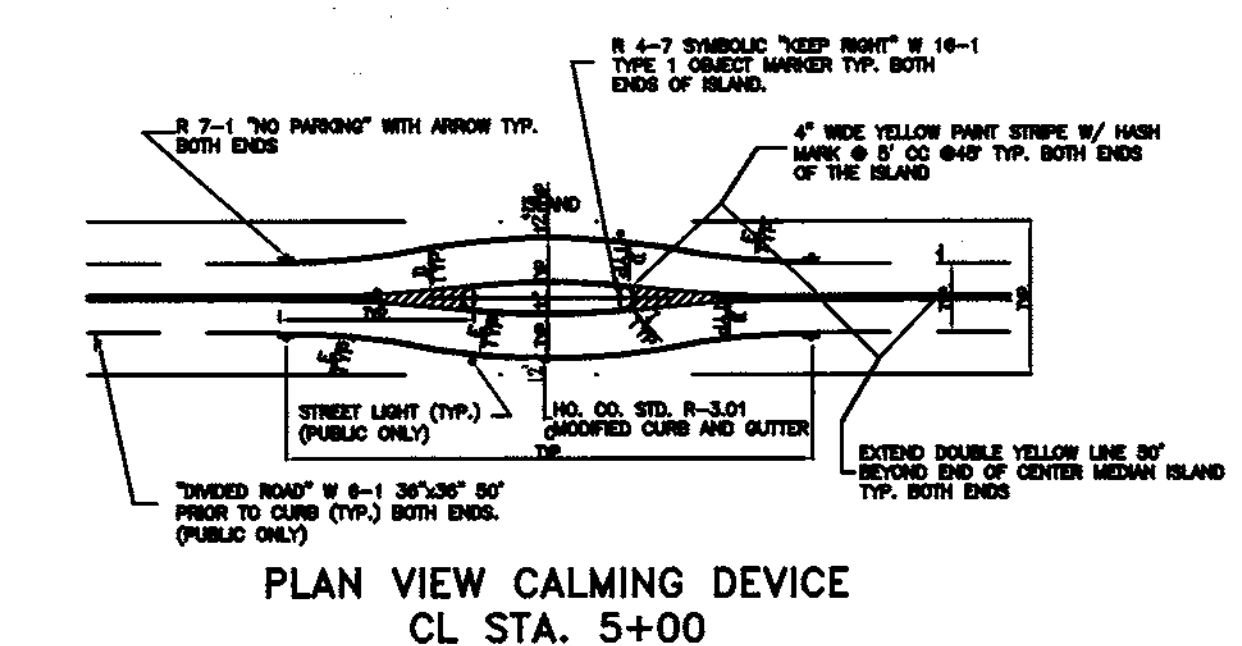
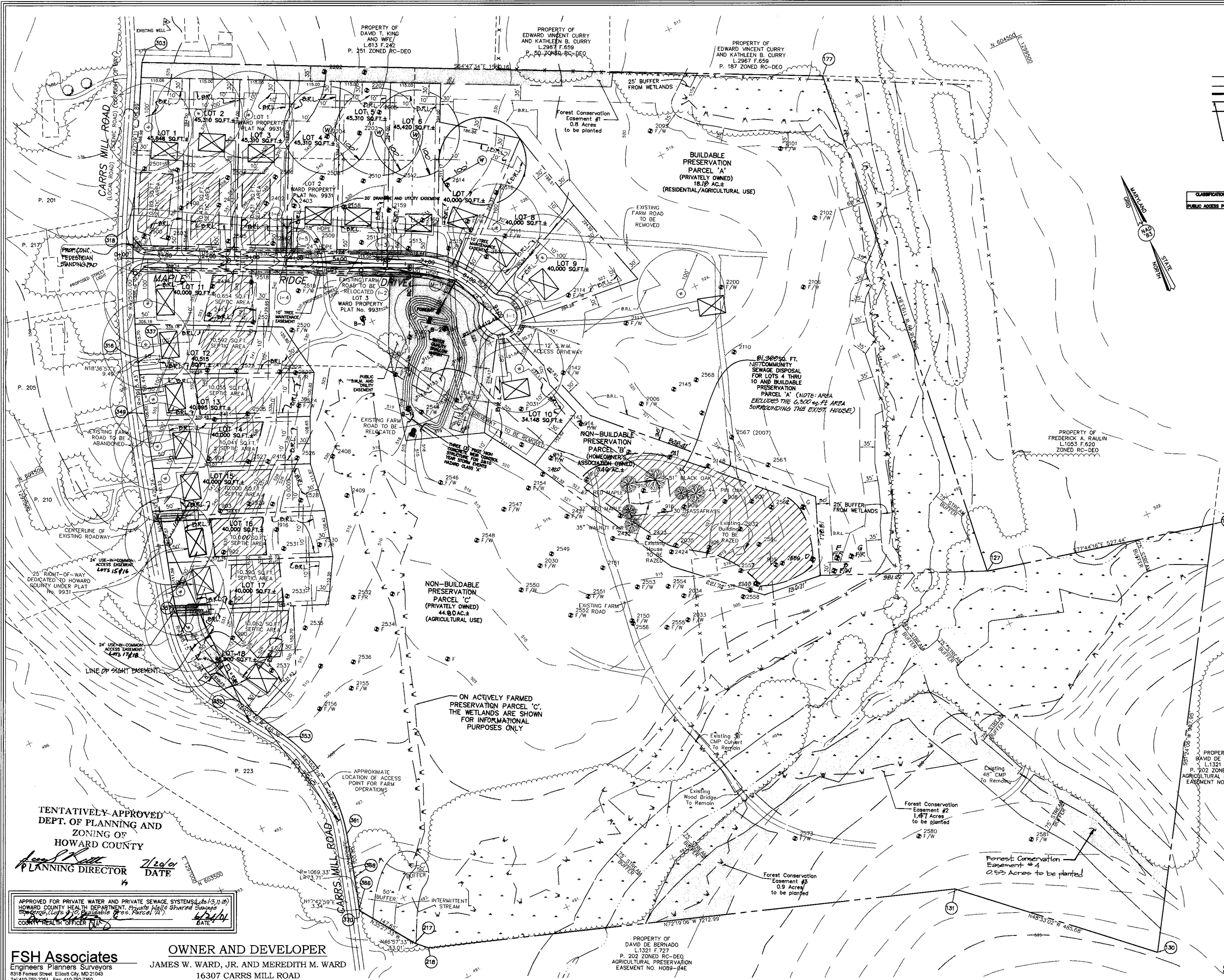
GENERAL NOTES:

- SUBJECT PROPERTY ZONED "RC-DEO".
- TOTAL AREA OF PROPERTY = 84.66 ac±
 - a.) AREA OF PROPOSED BUILDABLE LOTS= 17.28 ac±
 - b.) AREA OF ROAD RIGHT-OF-WAY= 0.94 ac±
 - c.) TOTAL NO. OF BUILDABLE LOTS= 18
 - d.) TOTAL NO. OF BUILDABLE PRESERVATION PARCELS= 1
 - e.) TOTAL AREA OF BUILDABLE PRESERVATION PARCEL= 18.10 ac±
 - f.) TOTAL NO. OF NON-BUILDABLE PRESERVATION PARCELS= 2
 - g.) TOTAL AREA OF NON-BUILDABLE PRESERVATION PARCELS= 48.26 ac±
- DENSITY CALCULATION:
 - a.) BASE DENSITY = $84.66 \div 4.25$ ac/UNIT = 19 UNITS
 - b.) PROPOSED NO. OF UNITS = 19
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- PRIVATE WATER, SEWER AND A SHARED SEPTIC SYSTEM WILL BE USED WITHIN THE PROJECT.
- THE WETLANDS AND FOREST STAND DELINEATION WAS PREPARED BY ECD-SCIENCE PROFESSIONALS INC. AND APPROVED UNDER S-00-06 ON 4/3/00.
- A.P.F.D. TRAFFIC STUDY PREPARED BY 'THE TRAFFIC GROUP INC.' DATED 1-27-2000 APPROVED UNDER S-00-06 ON 4/3/00.
- NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN WETLAND OR STREAM BUFFERS AND FOREST CONSERVATION EASEMENTS, UNLESS, APPROVED BY THE DEPARTMENT OF PLANNING AND ZONING OF HOWARD COUNTY, MARYLAND.
- THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWER DISPOSAL. 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 EASEMENTS. RECORDATION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
- THE LOTS HEREDON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF THE ENVIRONMENT.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM HOWARD COUNTY 1993 AERIAL TOPOGRAPHIC SURVEY.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING (MINIMUM) REQUIREMENTS:
 - A.) WIDTH - 12 FEET (4' FOR 2 TO 4 USERS)
 - B.) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.
 - C.) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% GRADE CHANGE AND MINIMUM OF 45 FOOT TURNING RADIUS.
 - D.) STRUCTURES (CULVERTS/BRIDGES) CAPABLE OF SUPPORTING 25 GROSS TONS (255 LBS/LOADING).
 - E.) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE.
 - F.) STRUCTURE CLEARANCES - MINIMUM 12 FEET.
 - G.) MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE.
- ALL AREAS ARE MORE OR LESS (±)
- REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE TO BE PROVIDED AT THE JUNCTION OF THE PIPE / FLAG STEM AND THE ROAD R/W AND NOT ONTO THE PIPE / FLAG STEM DRIVEWAY.
- PREVIOUS FILE NUMBER S-00-06, P. 91-72.
- STREET TREES AND LANDSCAPING TREES SHALL BE SHOWN AT FINAL PLAN STAGE IN ACCORDANCE WITH SECT. 16.124 OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
- THE COORDINATES SHOWN HEREDON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED ON THE MARYLAND STATE PLANE COORDINATE SYSTEM.
- A DETENTION STORM WATER MANAGEMENT FACILITY IS PROVIDED FOR THIS SITE. THE POND IS A PUBLIC FACILITY TO BE OWNED AND MAINTAINED BY HOWARD COUNTY.
- THERE ARE NO EXISTING UTILITIES ON SITE. THE SITE DOES NOT CONNECT TO ANY EXISTING UTILITIES.
- 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.
- IN ACCORDANCE WITH SECTION 16.116(d)(4) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS THIS DEVELOPMENT IS EXEMPT FROM DELINEATING WETLANDS ON THE PRESERVATION PARCEL. THE WETLANDS THAT ARE SHOWN ON THIS PLAN ARE SHOWN FOR INFORMATION PURPOSES ONLY.
- THERE ARE NO CEMETARIES OR HISTORIC STRUCTURES WHICH EXIST ON THE PROPERTY.
- FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION WILL BE FULLFILLED BY 3.7 ACRES OF AFFORESTATION PLANTING OBLIGATION FOR A TOTAL EASEMENT AREA OF 3.7 ACRES.
- EASEMENT HOLDERS FOR PRESERVATION PARCELS 'A' AND 'C' ARE HOWARD COUNTY AND H.I.A. EASEMENT HOLDER FOR PRESERVATION PARCEL 'B' IS HOWARD COUNTY.
- STORMWATER MANAGEMENT WILL BE PROVIDED IN ACCORDANCE WITH THE NEW "2000 M.D. SW.M. STANDARDS" AT FINAL PLAN STAGE.

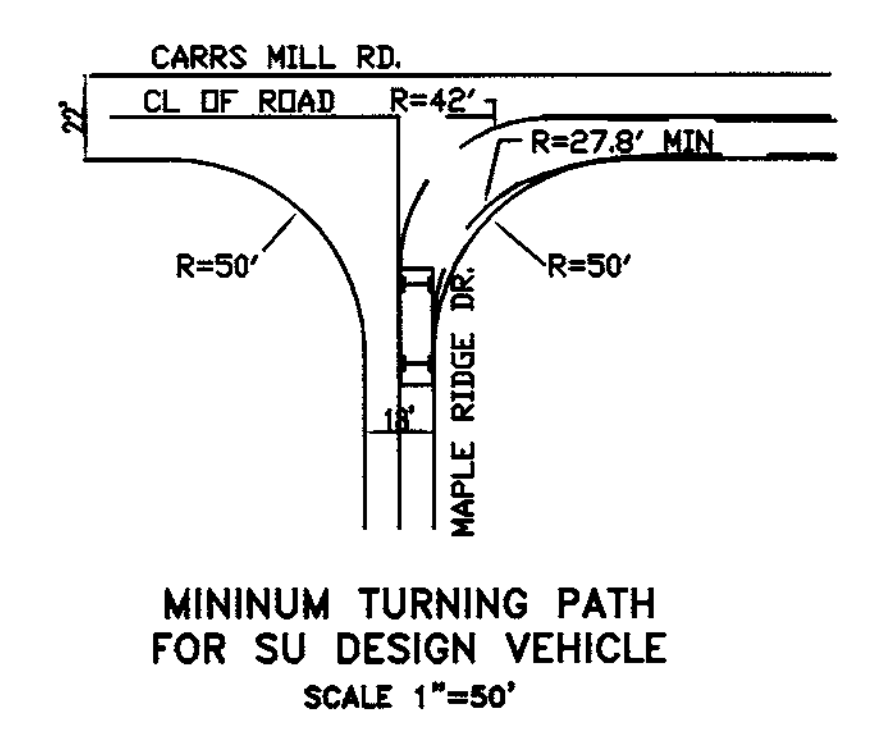
FSH Associates
Engineers Planners Surveyors
8318 Forest Street, Ellicott City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
E-mail: FSHAssociates@cs.com

APPROVED FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS (Lots 1, 11, 16)
HOWARD COUNTY HEALTH DEPARTMENT, Private Well & Shared Sewage
CARRS MILL PARK, WOODBINE, MARYLAND
James W. Ward, Jr.
COUNTY HEALTH OFFICER
6/14/01
DATE

PRELIMINARY PLAN
WARD PROPERTY
LOTS 1 THRU 18 AND PRESERVATION
PARCELS 'A' THRU 'C'
(A RESUBDIVISION OF WARD PROPERTY
LOTS 1-3 PLAT No. 9931)
TAX MAP No. 8 GRID 14 & 20
PARCEL Nos. 51 & 378
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
DATE: OCTOBER 12, 2000
SHEET 1 OF 5



| CLASSIFICATION | DESIGN SPEED (mph) | SECTION TYPE (OPEN/CLOSED) | A | B | C | D | E | F | G | H | |
|---------------------|--------------------|----------------------------|----|----|-------|-----|-----|-------|--------|---|-------|
| PUBLIC ACCESS PLACE | 25 | OPEN | 40 | 18 | 15/2' | 194 | 124 | 8.42' | 48/131 | 0 | 1.52' |



TENTATIVELY-APPROVED
DEPT. OF PLANNING AND ZONING OF
HOWARD COUNTY

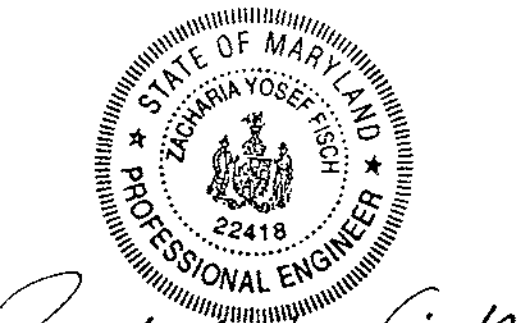
Ann S. Hill
PLANNING DIRECTOR

7/20/01
DATE

APPROVED FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS (Lots 1, 3, 11, 18)
HOWARD COUNTY HEALTH DEPARTMENT, Private Wells Shared Sewage Systems (Lots 9, 10, Buildable Pres. Parcel 'A')
COUNTY HEALTH OFFICER *ML* DATE 6/26/01

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

OWNER AND DEVELOPER
JAMES W. WARD, JR. AND MEREDITH M. WARD
16307 CARRS MILL ROAD
WOODBINE, MARYLAND 21797



Rachana G. Gish
5/14/01

**PRELIMINARY PLAN
WARD PROPERTY**
LOTS 1 THRU 18 AND PRESERVATION
PARCELS 'A' THRU 'C'
(A RESUBDIVISION OF WARD PROPERTY
LOTS 1-3 PLAT No. 9931)
TAX MAP No. 8 GRID 14 & 20
PARCEL Nos. 51 & 378
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 100' DATE: OCTOBER 12, 2000
SHEET 2 OF 5

| CATEGORY | PERIMETER LANDSCAPE EDGE | | | | | | | |
|---|--------------------------|-----|-----|-----|------|------|------|------|
| | P-1 | P-2 | P-3 | P-4 | P-5 | P-6 | P-7 | P-8 |
| LINEAR FEET OF PERIMETER | 8 | 4 | 4 | 4 | 200' | 145' | 150' | 200' |
| CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (INCLUDE IF NEEDED) | NO | YES | NO | NO | NO | NO | NO | NO |
| FOREST FOR WALL, FENCE, BURN (YES, NO, LINEAR FEET) (INCLUDE IF NEEDED) | NO | NO | NO | NO | NO | NO | NO | NO |
| LINEAR FEET OF PERIMETER | 7 | - | 12 | 5 | 4 | 3 | 5 | 10 |
| SHADE TREES | - | - | - | - | - | - | - | - |
| EVERGREEN TREES | - | - | - | - | - | - | - | - |
| SHRUBS | - | - | - | - | - | - | - | - |

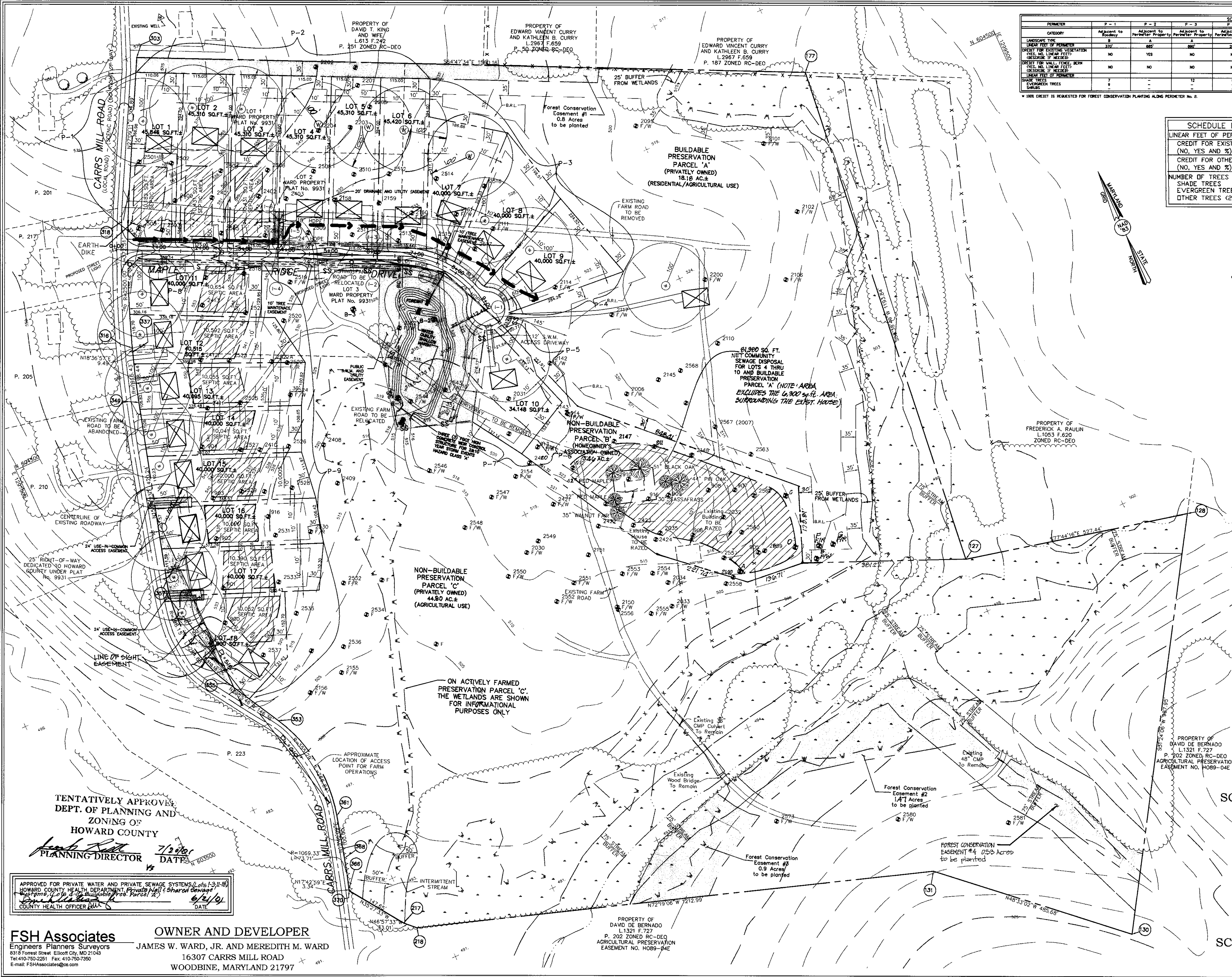
* JMR CREDIT IS REQUESTED FOR FOREST CONSERVATION PLANTING ALONG PERIMETER No. 2.

| SCHEDULE D STORMWATER MANAGEMENT AREA LANDSCAPING | |
|---|-------------|
| LINEAR FEET OF PERIMETER | DI : 1,100' |
| CREDIT FOR EXISTING VEGETATION (NO, YES AND %) | NO |
| CREDIT FOR OTHER LANDSCAPING (NO, YES AND %) | NO |
| NUMBER OF TREES REQUIRED: | |
| SHADE TREES | 22 |
| EVERGREEN TREES | 28 |
| OTHER TREES (2:1 SUBSTITUTION) | - |

- LEGEND:**
- DENOTES EARTH DIKE
 - SS— DENOTES SUPER SILT FENCE
 - S— DENOTES SILT FENCE

NOTES

1. ALL WELLS AND SEPTICS WITHIN 100' OF PROPERTY BOUNDARY HAVE BEEN SHOWN.
2. GROUNDWATER APPROPRIATIONS PERMIT SHALL BE OBTAINED PRIOR TO RECORD PLAT SIGNATURE.
3. ALL WELLS SHALL BE DRILLED PRIOR TO RECORD PLAT SIGNATURE.
4. FINAL APPROVAL OF THE SHARED SEPTIC SYSTEM IS CONTINGENT UPON CONCURRENT MDE, PUBLIC WORKS AND HEALTH DEPARTMENT REVIEW AND APPROVAL PRIOR TO RECORD PLAT APPROVAL. IN ADDITION, ENGINEER MUST DEMONSTRATE THAT SUFFICIENT SEPTIC AREA HAS BEEN ESTABLISHED FOR THE INSTALLATION OF AN INITIAL SEPTIC SYSTEM AND TWO REPAIRS.



TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY

Frank R. Smith
PLANNING DIRECTOR 7/30/01
DATE: 10/12/00

APPROVED FOR PRIVATE WATER AND PRIVATE SEWAGE SYSTEMS (Lots 1-3, 11-16)
HOWARD COUNTY HEALTH DEPARTMENT, Private Well / Shared Sewage
Systems, Lot 1-16, Buildable Parcel A
John A. ...
COUNTY HEALTH OFFICER 6/21/01
DATE:

FSH Associates
Engineers Planners Surveyors
8318 Forest Street, Ellicott City, MD 21043
Tel: 410-750-2251 Fax: 410-750-7350
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OWNER AND DEVELOPER
JAMES W. WARD, JR. AND MEREDITH M. WARD
16307 CARRS MILL ROAD
WOODBINE, MARYLAND 21797

STATE OF MARYLAND
JUDICIAL OFFICE
22418
PROFESSIONAL ENGINEER

Ericha W. Fisch
5/14/01

**SCHMATIC GRADING, LANDSCAPING
AND SEDIMENT CONTROL
WARD PROPERTY**

LOTS 1 THRU 18 AND PRESERVATION
PARCELS 'A' THRU 'C'
(A RESUBDIVISION OF WARD PROPERTY
LOTS 1-3 PLAT NO. 9931)
TAX MAP No. 8 GRID 14 & 20
PARCEL Nos. 51 & 378
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
SCALE: 1" = 100' DATE: OCTOBER 12,
2000
SHEET 3 OF 5

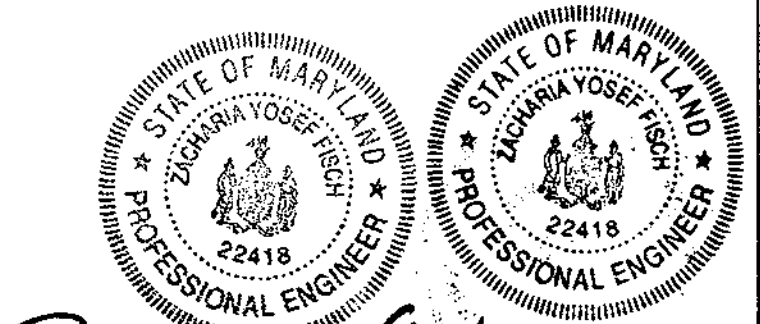
| SOILS LEGEND | | |
|--------------|---|-------|
| SOIL | NAME | CLASS |
| Bo | Belle silt loam | D |
| ChB2 | Chester silt loam, 3 to 8 percent slopes, moderately eroded | B |
| ChC2 | Chester silt loam, 8 to 15 percent slopes, moderately eroded | B |
| ChD2 | Chester silt loam, 15 to 25 percent slopes, moderately eroded | B |
| Co | Codorus silt loam | C |
| EA | Elk silt loam, 0 to 3 percent slopes | B |
| EB2 | Elk silt loam, 3 to 8 percent slopes, moderately eroded | B |
| GC2 | Glenora silt loam, 8 to 15 percent slopes, moderately eroded | B |
| GD3 | Glenora silt loam, 8 to 15 percent slopes, severely eroded | B |
| GD2 | Glenora silt loam, 15 to 25 percent slopes, moderately eroded | B |
| GD3 | Glenora silt loam, 15 to 25 percent slopes, severely eroded | B |
| GnA | Glenville silt loam, 0 to 3 percent slopes | C |
| GnB2 | Glenville silt loam, 3 to 8 percent slopes, moderately eroded | C |
| Ha | Hotboro silt loam | D |
| ME | Monon loam, 25 to 45 percent slopes | B |

NOTES:
 * Hydric soils and/or contains hydric inclusions
 ** May contain hydric inclusions
 † Generally only within 100-year floodplain areas

| FCP LEGEND | |
|------------|---|
| | Existing Contours |
| | Proposed Contours |
| | Ex. Specimen Tree |
| | Forest Conservation Easement/ Afforestation Area |
| | Protective Signage |

See Sheet 2 for FCP Notes, Planting Specifications and Details

TENTATIVELY APPROVED
 DEPT. OF PLANNING AND
 ZONING OF
 HOWARD COUNTY
 PLANNING DIRECTOR 7/20/04
 DATE



Rachana G. Fisch
 5/14/01

PRELIMINARY FOREST
 CONSERVATION PLAN
 WARD PROPERTY
 LOTS 1 THRU 18 AND PRESERVATION
 PARCELS 'A' THRU 'C'
 (A RESUBDIVISION OF WARD PROPERTY
 LOTS 1-3 PLAT No. 9931)
 TAX MAP No. 8 GRID 14 & 20
 PARCEL Nos. 51 & 378
 FOURTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 DATE: OCTOBER 12, 2000
 SCALE 1" = 100'
 SHEET 4 OF 5



MD DNR Qualified Professional
 ISACOE Wetland Delimitator
 Certification # WDC-P333D061004B2
 John P. Canoles
 Eco-Science Professionals, Inc.
 CONSULTING ECOLOGISTS
 P.O. Box 5006 Glen Arm, MD 21057 (410) 592-6752

OWNER AND DEVELOPER
 JAMES W. WARD, JR. AND MEREDITH M. WARD
 16307 CARRS MILL ROAD
 WOODBINE, MARYLAND 21797

Planting Schedule

Afforestation Area #1 (9.8 acres)

| Qty. | Species | Size | Spacing |
|------|------------------------------------|---------|---------|
| 24 | Acer rubrum - Red maple | 2" cal. | * |
| 24 | Fraxinus pennsylvanica - Green ash | 2" cal. | * |
| 24 | Liriodendron tulipifera - Poplar | 2" cal. | * |
| 24 | Platanus occidentalis - Sycamore | 2" cal. | * |

Afforestation Area #2 (1.5 acres)

| Qty. | Species | Size | Spacing |
|------|------------------------------------|----------|---------|
| 85 | Acer rubrum - Red maple | 2-3 whip | ** |
| 95 | Fraxinus pennsylvanica - Green ash | 2-3 whip | ** |
| 45 | Liriodendron tulipifera - Poplar | 2-3 whip | **# |
| 55 | Nyssa sylvatica - Black gum | 2-3 whip | ** |
| 65 | Platanus occidentalis - Sycamore | 2-3 whip | ** |
| 75 | Quercus palustris - Pin oak | 2-3 whip | ** |

Afforestation Area #3 (0.7 acres)

| Qty. | Species | Size | Spacing |
|------|------------------------------------|----------|---------|
| 65 | Acer rubrum - Red maple | 2-3 whip | ** |
| 75 | Fraxinus pennsylvanica - Green ash | 2-3 whip | ** |
| 28 | Liriodendron tulipifera - Poplar | 2-3 whip | **# |
| 20 | Nyssa sylvatica - Black gum | 2-3 whip | ** |
| 30 | Platanus occidentalis - Sycamore | 2-3 whip | ** |
| 40 | Quercus palustris - Pin oak | 2-3 whip | ** |

Afforestation Area #4 (0.5 acres)

| Qty. | Species | Size | Spacing |
|------|------------------------------------|----------|---------|
| 32 | Acer rubrum - Red maple | 2-3 whip | ** |
| 32 | Fraxinus pennsylvanica - Green ash | 2-3 whip | ** |
| 20 | Liriodendron tulipifera - Poplar | 2-3 whip | **# |
| 15 | Nyssa sylvatica - Black gum | 2-3 whip | ** |
| 25 | Platanus occidentalis - Sycamore | 2-3 whip | ** |
| 25 | Quercus palustris - Pin oak | 2-3 whip | ** |

| Qty. | Species | Size | Spacing |
|------|------------------------------------|----------|---------|
| 25 | Acer rubrum - Red maple | 2-3 whip | ** |
| 30 | Fraxinus pennsylvanica - Green ash | 2-3 whip | ** |
| 20 | Liriodendron tulipifera - Poplar | 2-3 whip | **# |
| 15 | Nyssa sylvatica - Black gum | 2-3 whip | ** |
| 25 | Platanus occidentalis - Sycamore | 2-3 whip | ** |
| 25 | Quercus palustris - Pin oak | 2-3 whip | ** |

Key:
 * - Plant units shall be spaced on 20 foot centers
 ** - Planting units to be spaced on 11 foot centers - plantings should be installed in rows to facilitate future maintenance. Where possible rows should be made along easement.
 # should not be planted in wetland areas - plant in buffer only
 h.t. - brunched transplant

Planting Notes:

- Multiflora rose control must be performed as part of this planting plan.
- Bareroot material may be used to offset the cost of multiflora rose removal and maintenance. If bareroot material is used it must be planted in March-April and an anti-desiccant gel should 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 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 following 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. Herbicides 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 manufacturers 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.

Planting/Soil Specifications

- Planting of nursery stock shall take place between March 15th and April 30th or September 15th - November 15th.
- A twelve (12) inch layer of topsoil shall be spread over all afforestation areas impacted by site grading to assure a suitable planting area. Disturbed areas shall be seeded and stabilized as per general construction plan for project. Planting areas not impacted by site grading shall have no additional topsoil installed.
- All bareroot planting stock shall have their root systems dipped into an anti-desiccant gel prior to planting.
- Plants shall be installed so that the top of root mass is level with the top of existing grade. Backfill in the planting pits shall consist of 3 parts existing soil to 1 part pine fines or equivalent.
- Fertilizer shall consist of Agriform 22-8-2, or equivalent, applied as per manufacturer's specifications.
- A two (2) inch layer of hardwood mulch shall be placed over the root area of all plantings.
- Plant material shall be transported to the site in a tarped or covered truck. Plants shall be kept moist prior to planting.
- All non-organic debris associated with the planting operation shall be removed from the site by the contractor.

Sequence of Construction

- Sediment control and tree protection devices shall be installed in accordance with general construction plan for site. Site shall be graded in accordance with general construction plans.
- Proposed afforestation areas impacted by site grading shall be topsoiled and stabilized as per #2 of Planting/Soil Specifications for project.
- Plants shall be installed as per Plant Schedule and the Planting/Soil Specifications for the project.
- Upon completion of the planting, signage shall be installed as per the Forest Protection Device shown on the Forest Conservation Plan.
- Plantings shall be maintained and guaranteed in accordance with the Maintenance and Guarantee requirements for project.

Maintenance of Plantings

- Maintenance of plantings shall last for a period of 26 months.
- All plant material shall be watered twice a month during the 1st growing season. Watering may be more or less frequent depending on weather conditions. During second growing season, once a month during May-September, if needed.
- Invasive exotics and noxious weeds will be removed from afforestation areas. Old field successional species will be retained.
- Plants will be examined a minimum two times during the growing season for serious plant pests and diseases. Serious problems will be treated with the appropriate agent.
- Dead branches will be pruned from plantings.

Guarantee Requirements

- A 75 percent survival rate of afforestation plantings will be required at the end of the 24 month maintenance period. All plant material below the 75 percent threshold will be replaced at the beginning of the next growing season.

Surety for Forestation

- The developer shall post a surety (bond, letter of credit) to ensure that forestation plantings are completed. Upon acceptance of the plantings by the County, the bond shall be released.

| FOREST DATA | |
|--------------------------|-------|
| | Acres |
| Gross Area: | 84.7 |
| Preservation Parcels: | 66.4 |
| Net Tract Area (NTA): | 18.3 |
| Existing Forest (NTA): | 0.0 |
| Afforestation Threshold: | 3.7 |
| Afforestation Required: | 3.7 |
| Afforestation Proposed: | 3.7 |

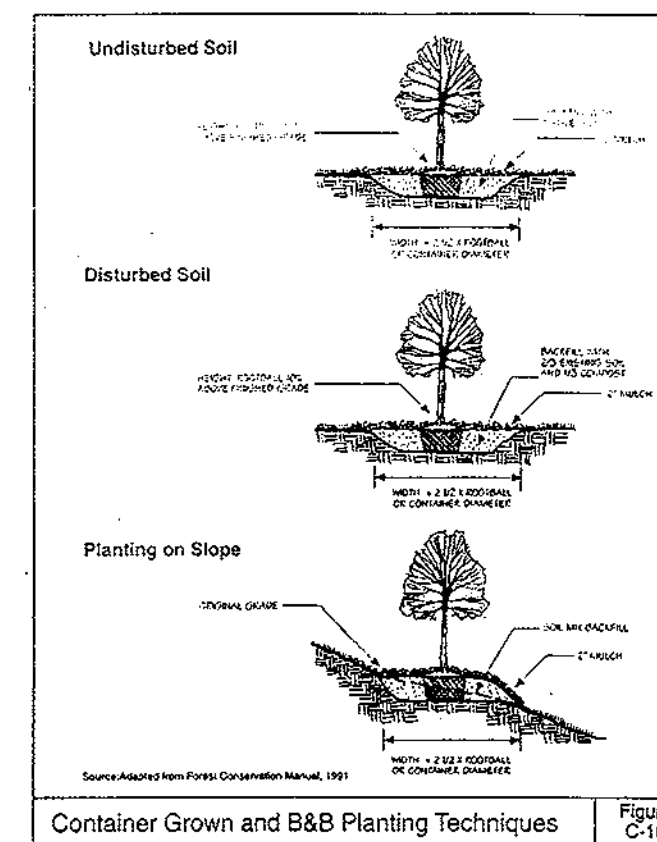
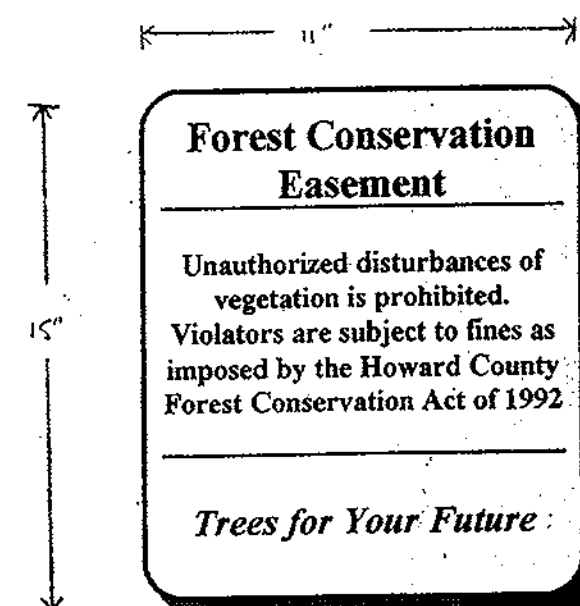
FCP NOTES

- Any Forest Conservation Easement (FCE) area shown hereon is subject to protective covenants which may be found in the Land Records of Howard County which restrict the disturbance and use of these areas.
- The forest conservation easements have been established to fulfill the requirements of Section 16.1200 of the Howard County Code, Forest Conservation Act. No clearing, grading, or construction is permitted within the forest conservation easements, however, forest management practices as defined in the Deed of Forest Conservation Easement are allowed.
- Forested areas occurring outside of the FCE shall not be considered part of the FCE and shall not be subject to protective land covenants.
- Limits of disturbance shall be restricted to areas outside the limit of temporary fencing or the FCE boundary, whichever is greater.
- There shall be no clearing, grading, construction or disturbance of vegetation in the Forest Conservation Easement, except as permitted by Howard County DPZ.
- No stockpiles, parking areas, equipment cleaning areas, etc. shall occur within areas designated as Forest Conservation Easements.
- Temporary fencing shall be used to protect forest resources during construction. The fencing shall be placed along all FCE boundaries which occur within 15 feet of the proposed limits of disturbance.
- Permanent signage shall be placed 50-100' apart along the boundaries of all areas included in Forest Conservation Easements.

Forest Conservation Worksheet

PROJECT NAME: Ward Property DATE: 10/10/00

| BASIC SITE DATA | ACRES |
|---|-------|
| Gross Site Area: | 84.7 |
| Area within 100 year floodplain: | 66.4 |
| Area within agricultural use or preservation parcel: | 18.3 |
| Area within overhead transmission lines: | 0 |
| Net Tract Area (NTA): | 18.3 |
| Land Use Category: | RC |
| INFORMATION FOR CALCULATIONS | |
| Net Tract Area (NTA): | 18.3 |
| Forest conservation threshold ($25\% \times \text{NTA}$): | 4.6 |
| Afforestation threshold ($20\% \times \text{NTA}$): | 3.7 |
| Existing forest on NTA: | 0 |
| Existing forest above conservation threshold: | 0 |
| Break even point (if applicable): | 0 |
| Forest to be cleared: | 0 |
| Forest to be retained: | 0 |
| AFFORESTATION CALCULATIONS | |
| No forest clearing: Afforestation Threshold - Existing Forest | 3.7 |



FSH Associates Eco-Science Professionals, Inc.
 Engineers Planners Surveyors
 8316 Forest Street, Ellicott City, MD 21043
 410-750-2251 FSHAssociates@cs.com
 CONSULTING ECOLOGISTS

MD DNR Qualified Professional
 USACOE Wetland Delineator
 Certification # WDCP93M/D061004482
 John P. Canoles

P.O. Box 5006 Glen Arm, MD 21057 (410) 552-6752

TENTATIVELY APPROVED
 DEPT. OF PLANNING AND ZONING OF
 HOWARD COUNTY

 PLANNING DIRECTOR DATE 7/20/01
 VS

OWNER AND DEVELOPER
 JAMES W. WARD, JR. AND MEREDITH M. WARD
 16307 CARRS MILL ROAD
 WOODBINE, MARYLAND 21797

Zachary J. Hiseb
 5/14/01

PRELIMINARY FOREST CONSERVATION PLAN
 WARD PROPERTY
 LOTS 1 THRU 18 AND PRESERVATION PARCELS 'A' THRU 'C'
 (A RESUBDIVISION OF WARD PROPERTY LOTS 1-3 PLAT No. 9931)
 TAX MAP No. 8 GRID 14 & 20
 PARCEL Nos. 51 & 378
 FOURTH ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND
 DATE: OCTOBER 12, 2000
 SHEET 5 OF 5