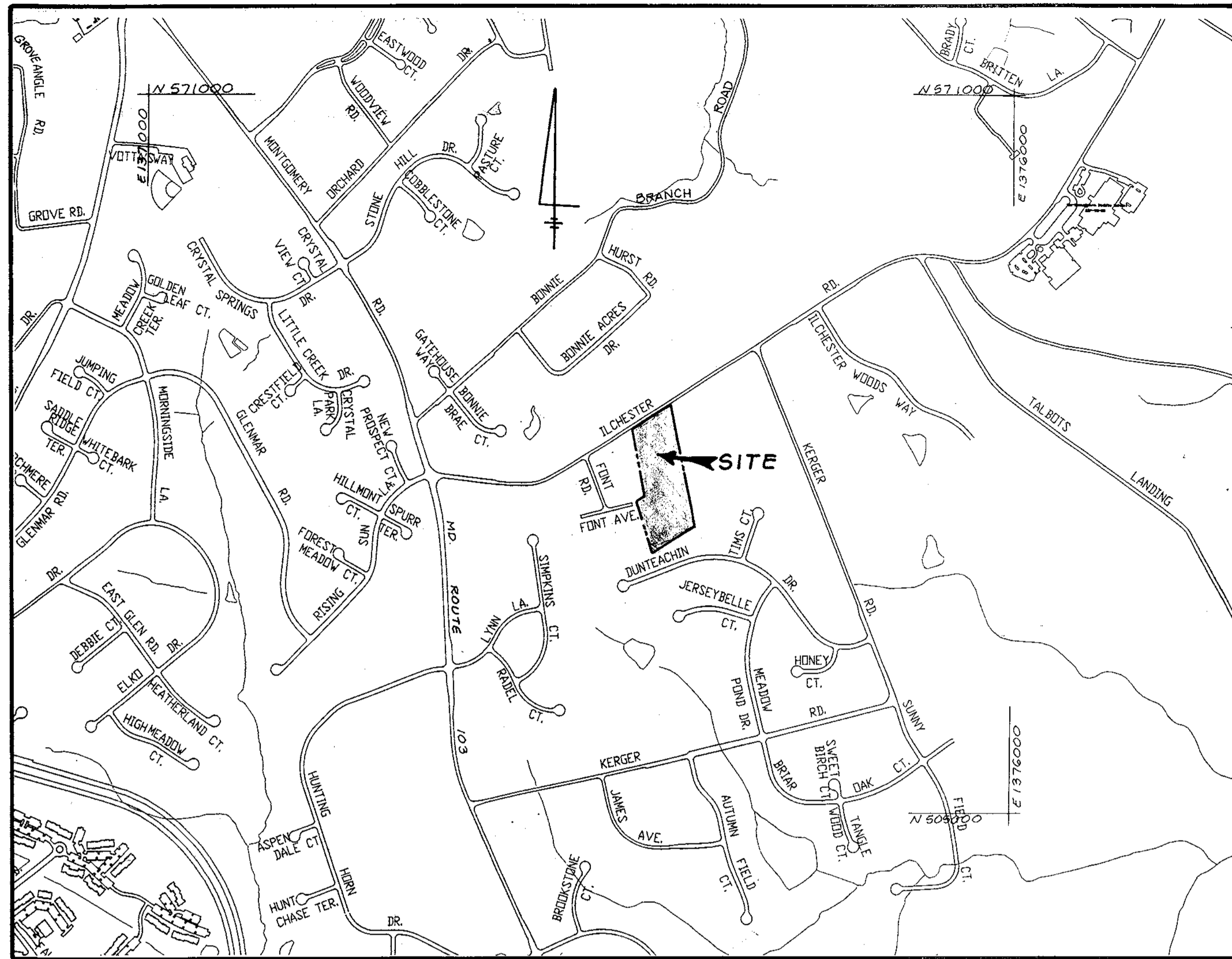
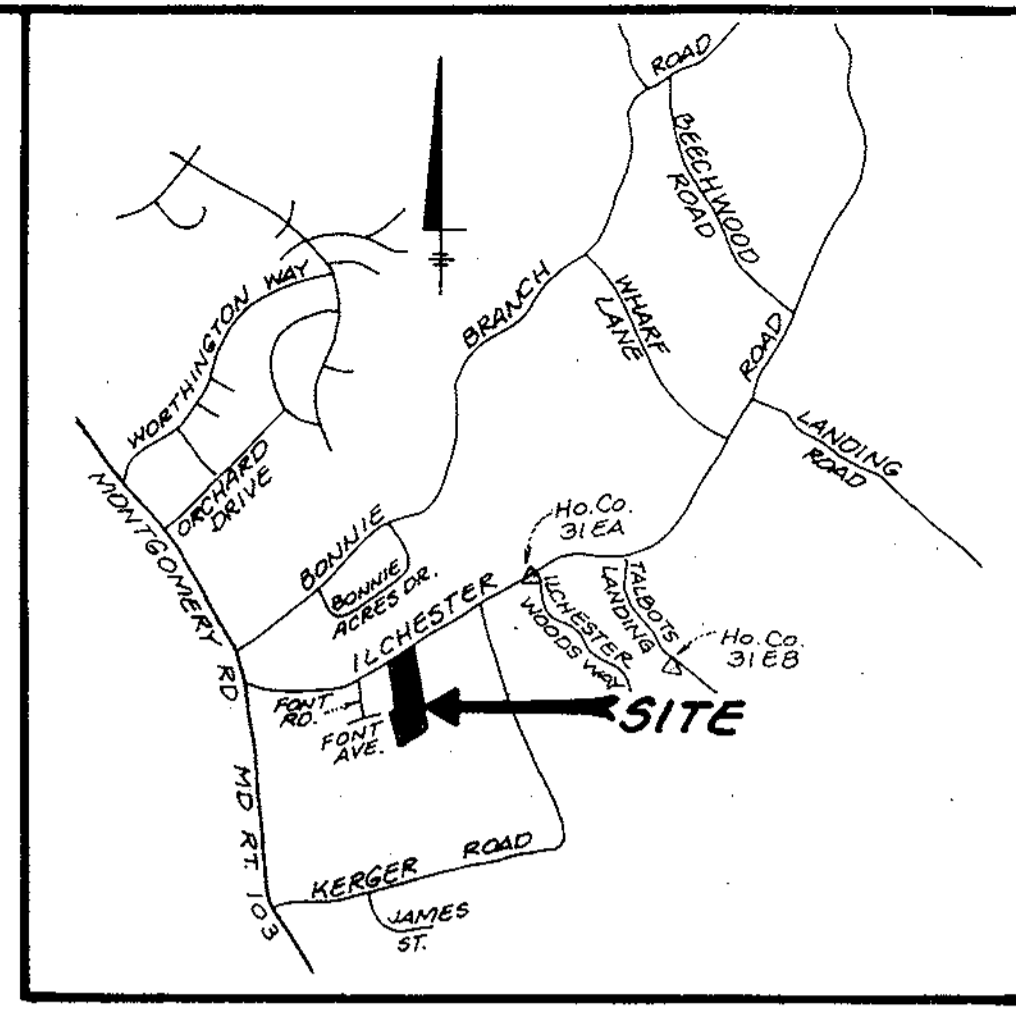


GENERAL NOTES

- All aspects of the project are in conformance with the latest standards and specifications of Howard County unless waivers have been approved.
- Project Background:
 - Location: Elkridge, Maryland
 - Tax Map/ Parcel: Map 31 / 217
 - Zoning: R-20 (Residential: Single)
 - Election District: 1st
 - Previous Submittals: S00-01
- Existing zoning: R-20 (Residential / Single) per 10/18/93 Comprehensive Zoning Plan.
- Deed References:
 - a. Parcel 217: J.J.M. Inc. L. 4689 / P. 516 Area = 6.4657 Ac +/-
- The property shown hereon is based on a field run boundary survey performed by LDE, Inc. dated January 1999.
- Gross Area of tract: 6.4657 Ac +/-
- Open Space Required: 1.9397 Ac +/- (30% / 14,000 Lot Size)
- Open Space Provided: 2.00 Ac +/-
- Area of proposed lots: 5.91 Ac +/-
 - a. Buildable Lots: 3.91 Ac +/-
 - b. Open Space: 2.00 Ac +/-
 - c. Proposed Roads: 0.555 Ac +/-
- Number of Lots: 14 (11 Lots + 3 Open Space Lot)
 - a. Buildable Lots: 10 Proposed + 1 Existing Home = 11 Total
 - b. Open Space Lot: 3
 - c. Existing Dwellings: 1 (Lot 8)
- The existing utilities shown hereon are approximate locations taken from drawings of public record.
- The topography shown hereon is run by LDE, Inc., August, 2000.
- Horizontal and vertical datum's are related to the Maryland State Plane Coordinate System as projected from Howard County control stations No. 31EA and No. 31EB and No. 31EB (NAD 83).
- The proposed Water and Sewer systems to be extensions of public water contracts # 64-W & # 511-W and sewer contract # 418-S.
- The property is located within the Metropolitan District.
- There are no existing contiguous slopes 25% or greater which are greater than 20,000 square feet within the boundaries of the site.
- See Forest Stand Delineation plan filed with S00-01 for steep slope analysis prepared by Dennis J. LaBare, M.S. & Associates dated May 5, 1999.
- The existing structure located on proposed Lot 8 will remain.
- The Sight Distance analysis was compiled as part of the Sketch Plan submission.
- The Traffic Study was completed by Robert L. Morris, Inc. dated May 12, 1999.
- Stormwater management for this development is provided in accordance with the Design Manual Waiver approved on February 23, 2001, utilizing the 2000 Maryland Stormwater Design Manual Volumes I & II.
- A dry swale will be utilized for water quality management.
- The Use-in-Common drive and Private Access Place shall be improved to current standards within a 24' wide Use-in-Common Access Easement.
- The Use-in-Common Maintenance Agreements shall be recorded immediately upon recordation of the plan.
- There are no wetlands or 100 Year Floodplain located on this site per a report prepared by Dennis J. LaBare, M.S., & Associates dated May 25, 1999.
- There are no burial grounds, cemeteries, or historic structures located on this site.
- Compliance with Section 16.136 of the Subdivision and Land Development Regulations and The Landscape Manual for the required street trees will be provided with the final plans per checklist item 12.
- A Centralized Refuse Storage Area will be provided near the Private Access Place & Ilchester Road Intersection as part of the Final Construction Plans.
- Street trees are required at 40' on center for the Private Access Place and landscaping is required around the trash collection pad in accordance with the Howard County Landscape Manual, Chapter IV. Surety for these plantings will be incorporated into the overall landscape/street tree surety for the DPW, Developers Agreement with the final plan.



LOCATION MAP
Scale: 1" = 600'



VICINITY MAP
Scale: 1" = 2000'

BENCHMARKS:
Howard County Geodetic Control Stations No. 31EA & 31EB
31EA: N 569641.149 E 1374816.064
Elevation 469.628
31EB: N 568731.012 E 1376273.622
Elevation: 453.415

INDEX OF SHEETS	
SHEET #	DESCRIPTION
1	Cover Sheet
2	Preliminary Plan
3	Preliminary Grading Plan
4	Preliminary Landscape & Forest Conservation Plan
5	Preliminary Landscape & Forest Conservation Tabulation And Details

MINIMUM LOT SIZE TABULATION			
LOT No.	GROSS AREA	PIPESTEM AREA	MIN. LOT SIZE
1	14822 SF	333 SF	14489 SF
2	15358 SF	626 SF	14732 SF
3	15544 SF	1028 SF	14516 SF
4	15534 SF	1083 SF	14451 SF
5	15533 SF	996 SF	14537 SF
6	14857 SF	751 SF	14106 SF
7	14338 SF	334 SF	14004 SF
9	16757 SF	1702 SF	15055 SF
10	15134 SF	1114 SF	14020 SF

COORDINATE TABLE		
No.	NORTH	EAST
1	568988.4215	1373714.6640
2	568949.3544	1373722.1154
3	568865.1664	1373584.9867
4	568051.8073	1373748.8536
5	567902.9371	1373505.9020
6	568224.4706	1373349.9256
7	568235.0886	1373397.7506
8	568742.6388	1373283.7112

PRELIMINARY PLAN
SPRING OAKS
LOTS 1 THRU 11
AND OPEN SPACE LOTS 12 THRU 14
1st ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TENTATIVELY APPROVED
DEPT. OF PLANNING AND ZONING
HOWARD COUNTY

[Signature] 4/19/01
PLANNING DIRECTOR



LDE, INC. 9250 Rumsey Road, Suite 106, Columbia, MD. 21045 (410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)		
DESIGNED: SWC	Cover Sheet SPRING OAKS LOTS 1 THRU 11 & OPEN SPACE LOTS 12 THRU 14 Tax Map 31 Grid 15 Parcel 217 1st Election District Howard County, MD Previous Submittals: S00 - 01	SCALE: As Shown
DRAWN: KBW		DRAWINGS: 1 of 5
CHECKED: BDB		LDE JOB No. 98-090
DATE: 10/2000	OWNER / DEVELOPER: J.J.M., Inc. 17901 Shaffers Mill Road Mt. Airy, Maryland 21771	FILE No. P01-12

LEGEND

- 464 ----- Ex. Ground
- 962 ----- Prop. Grade
- Ex. Paving
- Prop. Paving
- Ex. Tree Line
- Ex. Trees To Remain
- Ex. Storm Drain
- Prop. Storm Drain
- 1 ----- Lot Number Delineation
- Existing Paving to be Removed
- CRRC Pad ----- Central Refuse and Recycling Collection Pad



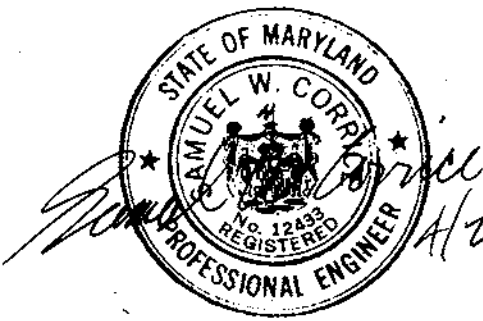
PLAT NO. 12903

PLAT NO. 9918

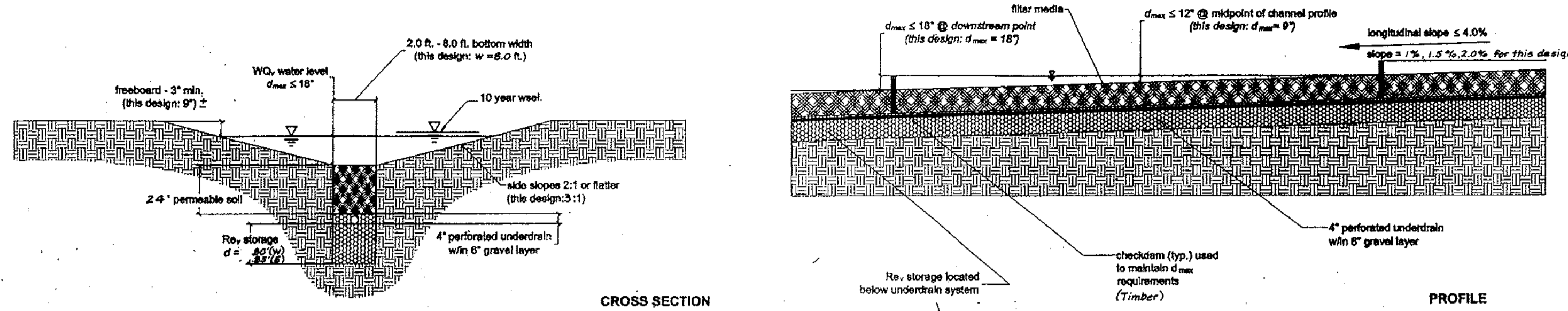
TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY

[Signature]
PLANNING DIRECTOR DATE 4/16/01

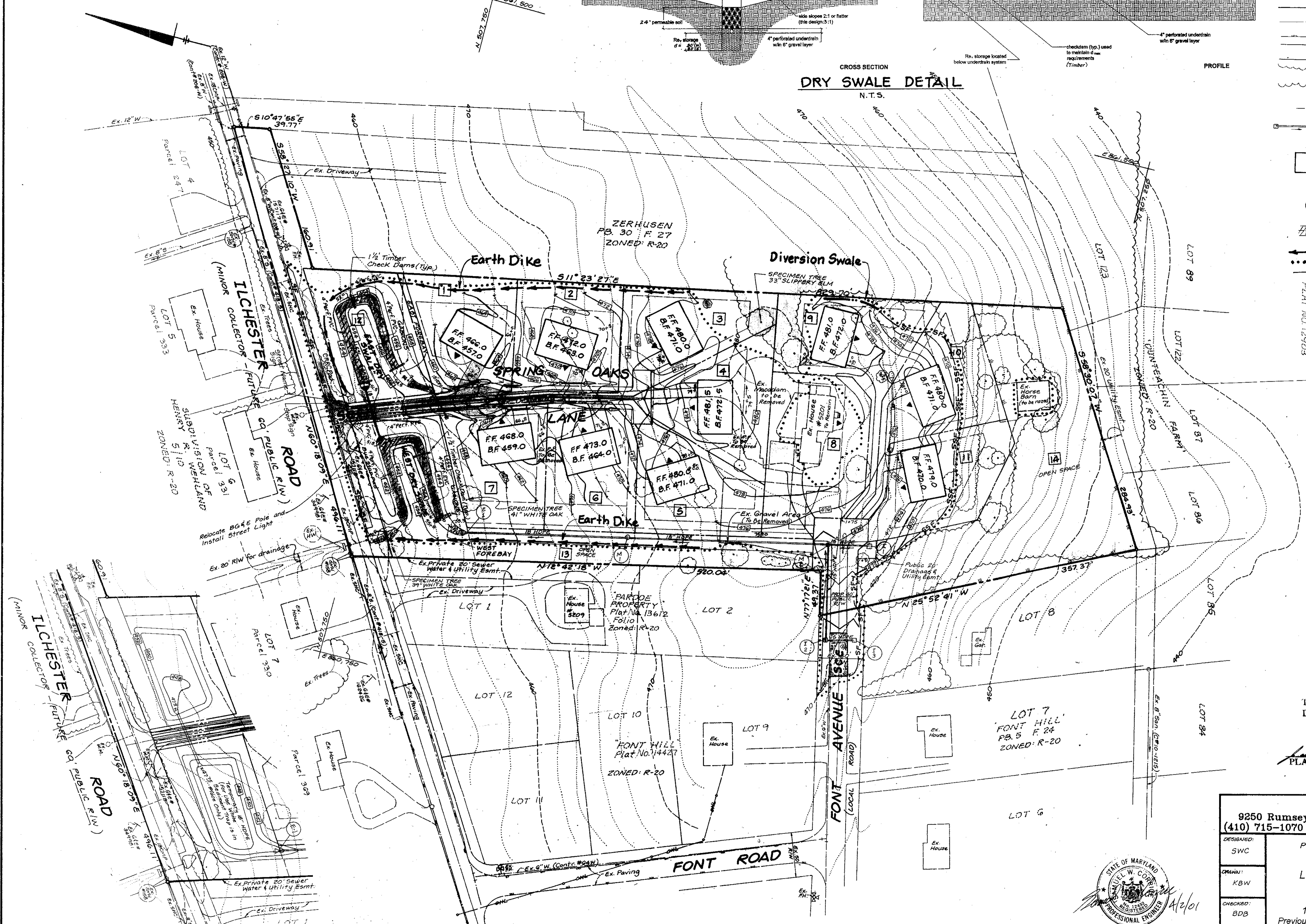
<p>LDE, INC. 9250 Rumsey Road, Suite 106, Columbia, MD. 21045 (410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)</p>			
DESIGNED: SWC	<p>PRELIMINARY PLAN SPRING OAKS LOTS 1 THRU 11 & OPEN SPACE LOTS 12 THRU 14 Tax Map 31 Grid 15 Parcel 217 1st Election District Howard County, MD Previous Submittals: S00 - 01</p>	SCALE: 1" = 50'	
DRAWN: KBW		DRAWING: 2 OF 5	
CHECKED: BDB		LOGS NO. NO. 98 - 090	
DATE: 10/2000		OWNER / DEVELOPER: J.J.M., Inc. 17901 Shaffers Mill Road Mt. Airy, Maryland 21771	FILE NO. P-01-12



Sediment Trap Schedule														
Trap No.	Max D.A.	Dry Stor. Req'D	Wet Stor. Req'D	Dry Stor. Prov'D	Wet Stor. Prov'D	Stor. Depth	Weir Length	Bottom Elev.	Clean. Elev.	Top Embank. Elev.	Weir Depth	Weir Inv. Elev.	Trap Size	Type
1	2.66	6840	6840	6984	17,016	3	2.1	448.00	449.50	452.5	1.5	451.00	see plan	ST-11



- LEGEND**
- 468 --- Ex. Ground
 - 968 --- Prop. Grade
 - --- Ex. Paving
 - --- Prop. Paving
 - --- Ex. Tree Line
 - --- Ex. Trees To Remain
 - --- Ex. Storm Drain
 - --- Prop. Storm Drain
 - --- Lot Number Delineation
 - --- Prop. Dwelling w/ Front Orientation
 - --- Prop. Driveways
 - --- Prop. Culverts
 - --- 4" Per F. PVC
 - --- Permeable Soil
 - --- Earth Dike
 - --- Limit of Disturbance
 - --- SF --- Silt Fence
 - --- SCE --- Stabilized Construction Entrance
 - --- SSF --- Super Silt Fence
 - --- CRRC Pad



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 HOWARD COUNTY
 Planning Director *[Signature]* 4/19/01
 DATE 15

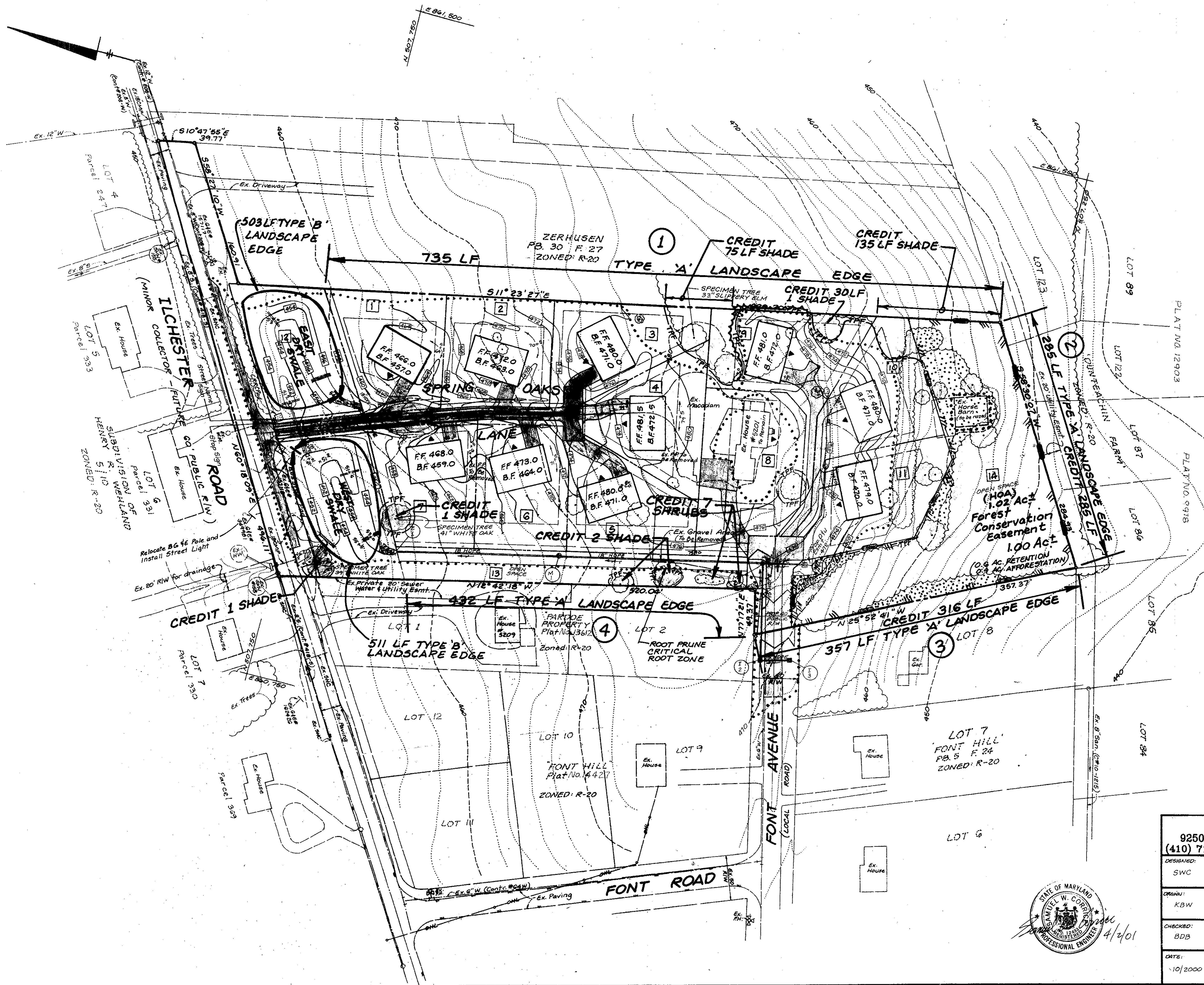
LDE, INC. 9250 Rumsey Road, Suite 106, Columbia, MD. 21045 (410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)		
DESIGNED: SWC	PRELIMINARY GRADING PLAN	SCALE: 1" = 50'
DRAWN: KBW	SPRING OAKS	DRAWING: 3 of 5
CHECKED: BDB	LOTS 1 THRU 11 & OPEN SPACE LOTS 12 THRU 14	LDE JOB NO. 98-090
DATE: 10/2000	Tax Map 31 Grid 15 Parcel 217 1st Election District Howard County, MD Previous Submittals: S00-01	FILE NO. P 01-12
OWNER / DEVELOPER: J.J.M., Inc. 17901 Shaffers Mill Road Mt. Airy, Maryland 21771		



**INTERIM GRADING PLAN
 TEMPORARY STORMWATER MANAGEMENT**
 SCALE: 1" = 50'

LEGEND

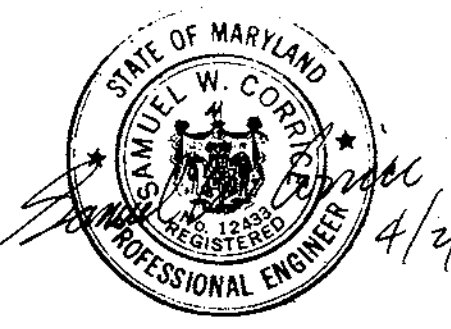
- 468 Ex. Ground
- 468 Prop. Grade
- Ex. Paving
- Prop. Paving
- Ex. Tree Line
- Ex. Trees To Remain
- Ex. Storm Drain
- Prop. Storm Drain
- Lot Number Delineation
- Prop. Dwelling w/ Front Orientation
- Prop. Driveways
- Prop. Culverts
- FOREST CONSERVATION SUPPLEMENTAL PLANTING AREA
- FOREST CONSERVATION EASEMENT
- LIMIT OF DISTURBANCE
- FOREST CONSERVATION SIGNAGE
- TREE PROTECTION FENCE
- CENTRAL REFUSE AND RECYCLING COLLECTION PAD



TENTATIVELY APPROVED
DEPT. OF PLANNING AND
ZONING OF
HOWARD COUNTY

[Signature]
PLANNING DIRECTOR DATE 4/19/01

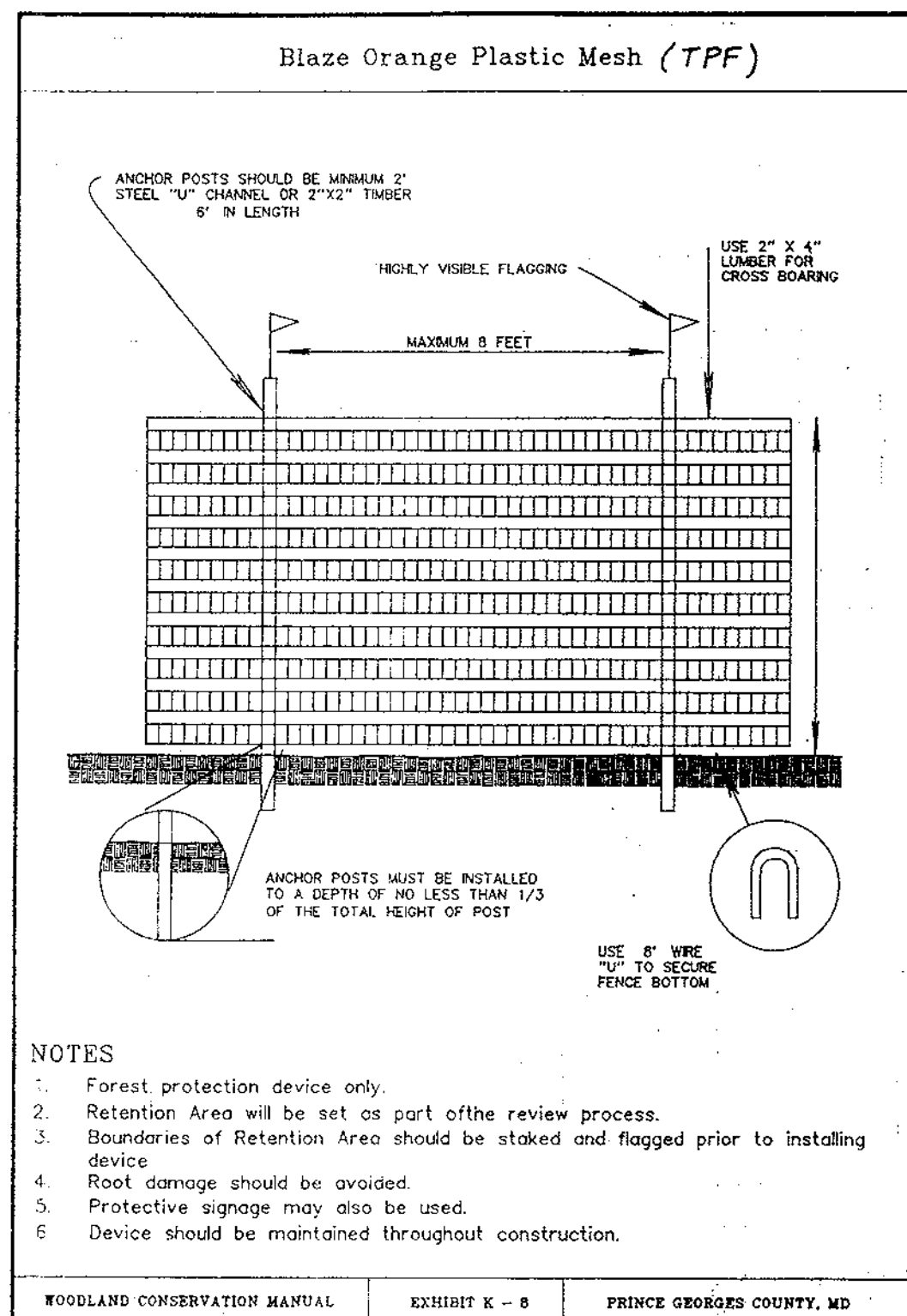
DENNIS J. LIBARE, M.S., & ASSOCIATES
Environmental Consulting Services
3923 Flagstone Circle
Randallstown, MD 21133
Tel: (410) 221-7476
Fax: (410) 221-7476



LDE, INC.		
9250 Rumsey Road, Suite 106, Columbia, MD. 21045 (410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)		
DESIGNED: SWC	PRELIMINARY LANDSCAPE / FOREST CONSERVATION PLAN SPRING OAKS LOTS 1 THRU 11 & OPEN SPACE LOTS 12 THRU 14 Tax Map 31 Grid 15 Parcel 217 1 st Election District Howard County, MD Previous Submittals: S00 - 01	SCALE: 1" = 50'
DRAWN: KBW		DRAWING: 4 of 5
CHECKED: BDB		LDE JOB NO. 98-090
DATE: 10/2000		FILE NO. P01-12
OWNER / DEVELOPER: J.J.M., Inc. 17901 Shaffers Mill Road Mt. Airy, Maryland 21771		

GENERAL NOTES

- This plan has been prepared in accordance with the provisions of Section 16.124 of the Howard County Code and Landscape Manual.
- Financial Surety for the required landscaping will be posted as part of the Department of Public Works Developer's Agreement.
- The Forest Conservation requirements of Section 16.1202 of the Howard County Code for this project is 1.0 Acre of obligation which will be fulfilled by the retention of 0.6 Acres of existing forest and the afforestation planting of 0.4 Acres on-site.



- NOTES**
- Forest protection device only.
 - Retention Area will be set as part of the review process.
 - Boundaries of Retention Area should be staked and flagged prior to installing device.
 - Root damage should be avoided.
 - Protective signage may also be used.
 - Device should be maintained throughout construction.

NOTE: (TPF) = Tree Protection Fence

**SCHEDULE A
PERIMETER LANDSCAPE EDGE**

Category	Adjacent to Roadways	Adjacent to Perimeter Properties
Linear Feet of Roadway Frontage/Perimeter	---	1809 LF
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	---	Yes 1003 LF 806 LF (Net)
Credit for Wall, Fence or Berm (Yes, No, Linear Feet) (Describe below if needed)	---	---
Number of Plants Required Shade Trees Evergreen Trees Shrubs	---	30 --- ---
Number of Plants Provided Shade Trees Evergreen Trees Other Trees (2:1 substitution) Shrubs (10:1 substitution) (Describe plant substitution credits below if needed)	---	---

Comments _____

Note: Complex projects may require expansion of the schedule to accommodate multiple land uses on-site or on adjacent properties.

**SCHEDULE D
STORMWATER MANAGEMENT AREA LANDSCAPING**

Linear Feet of Perimeter	1014 LF
Number of Trees Required Shade Trees Evergreen Trees	20 26
Credit for Existing Vegetation (No, Yes and %)	Yes 120 LF 894 LF (Net)
Credit for Other Landscaping (No, Yes and %)	---
Number of Trees Provided Shade Trees Evergreen Trees Other Trees (2:1 substitution)	---

**APPENDIX E
FOREST CONSERVATION WORKSHEET**

I. BASIC SITE DATA

Gross Site Area **6.5** ACRES (1/10 acre)
 Area Within 100 Year Floodplain **---**
 Area Within Agricultural Use or Preservation Parcel (If Applicable) **---**
 Net Tract Area **6.5**
 Land Use Category (R-RLD, R-RMD, R-S, C/HO, I) **RS**

II. INFORMATION FOR CALCULATIONS

A. Net Tract Area **6.5**
 B. Reforestation Threshold ($10\% \times A$) **1.3**
 C. Afforestation Minimum ($15\% \times A$) **1.0**
 D. Existing Forest on Net Tract Area **0.6**
 E. Forest Areas to Be Cleared **0**
 F. Forest Areas to Be Retained **0.6**

III. DETERMINING REQUIREMENTS: AFFORESTATION OR REFORESTATION

1. REFORESTATION

If existing forest areas equal or exceed the afforestation minimum (if D equals or is more than C), and clearing of forest areas is proposed, reforestation requirements may apply.

GO TO SECTION IV

If existing forests exceed the afforestation minimum (if D equals or is more than C) and no clearing of existing forest resources is proposed, no reforestation is required. No further calculations are needed.

2. AFFORESTATION

If existing forest area is less than the afforestation minimum (if D is less than C), afforestation requirements apply.

GO TO SECTION V

Total Reforestation required
 $(G \times 1/4) + (H \times 2)$ **---**

Since clearing occurs below the threshold, no forest retention credit is possible.

V. AFFORESTATION CALCULATIONS

A. Net Tract Area **6.5**
 B. Afforestation Minimum ($15\% \times A$) **1.0**
 C. Existing Forest on Net Tract Area **0.6**
 D. Forest Areas to Be Cleared **0**
 E. Forest Areas to Be Retained **0.6**

SELECT THE ALTERNATIVE THAT APPLIES:

1. No Clearing below the Minimum

If existing forests are less than the afforestation minimum (if D is less than C) and no clearing is proposed, the following calculations apply:

Total afforestation required C - D **0.4**

Afforestation must make total forest area equal the minimum required.

2. Clearing below the Minimum

If existing forests are less than the afforestation minimum (if D is less than C) and clearing is proposed, the following calculations apply:

Afforestation for unreforested areas below minimum C - D **---**

Afforestation for Clearing below Minimum E X 2 **---**

Total Afforestation Required (C - D) + (E X 2) **---**

Afforestation requires the total forest area be equal to the minimum and it requires compensation for clearing.

Forest Conservation Technique	Area/Sq. Ft.	Plant Density	Plants Req'd.
Afforestation w/ seedlings	17424	700 trees/ac.	280 trees

PLANTING SCHEDULE

QUANTITY	PLANT NAME
70	ACER RUBRUM RED MAPLE
70	PRUNUS SEROTINA BLACK CHERRY
70	LINDERA BENZOIN SPICEBUSH
70	JUNIPER VIRGINIANA RED CEDAR

FOREST PROTECTION PROCEDURES - PRECONSTRUCTION PHASE

Stress Reduction and Protection of Specimen Trees Isolated from Forest Retention Areas and General Forest Retention Areas (As They May Apply)

1.) The edge of the woods to be protected will be marked (staked or flagged) in the field per the limits of disturbance shown in the approved Final Construction Plans prior to the start of construction activity. All areas within protective fences are to be considered "off limits" to any construction activities. The protective fencing shall be installed at the outside edge of forested areas and specimen trees to be retained and should be combined with sediment control devices when possible. The limit of the critical root zone and therefore the location of the protective devices is to be determined as follows:

Isolated Specimen Trees - 1.5 feet of protective radius per inch of DBH

Edge of Forested Area - 1 foot of protective radius/inch of DBH or an eight foot protective radius, whichever ever is greater.

2.) Construction activities expressly prohibited within the preservation areas are:

- Placing or stockpiling backfill or top soil in protected areas
- Falling trees into protected area
- Driving construction equipment into or through protected areas
- Burning in or in close proximity to protected areas
- Stacking or storing supplies of any kind
- Concrete wash-off areas
- Conducting trenching operations
- Grading beyond the limits of disturbance
- Parking vehicles or construction equipment
- Removal of root mat or topsoil
- Siting and construction of:
 - Utility lines
 - Access roads
 - Impervious surfaces
 - Stormwater management devices
 - Staging areas

3.) Protective fencing (see Figure "Protective Fencing") shall be the responsibility of the general contractor. The general contractor shall affix signs to the fencing at 25' minimum intervals indicating that these areas are "Forest Retention Area" or "Specimen Tree" (see Figures "Signage"). The general contractor shall take great care to assure the restricted areas are not violated and that root systems are protected from smothering, flooding, excessive wetting from de-watering operations, off-site run-off, spillage, and drainage or solutions containing materials hazardous to tree roots.

4.) The general contractor shall be responsible for any tree damaged or destroyed within the preservation areas whether caused by the contractor, his agents, employees, sub-contractors, or licensees.

5.) Foot traffic shall be kept to a minimum in the protective areas.

6.) All trees which are not to be preserved within fifty feet of any tree preservation areas are to be removed in a manner that will not damage those trees that are designated for preservation. It is highly recommended that tree stumps within this fifty foot area be ground out with a stump grinding machine to minimize damage.

7.) The general contractor shall designate a "wash out" area on-site for concrete trucks which will not drain toward a protected area.

8.) A pre-construction meeting shall be held with local authorities before any disturbance has taken place on site.

FOREST PROTECTION PROCEDURES - CONSTRUCTION PHASE

Forest and tree conditions should be monitored during construction and corrective measures taken when appropriate.

The following shall be monitored:

- Soil compaction
- Root injury - prune and monitor; consider crown reduction
- Limb injury - prune and monitor
- Flooded conditions - drain and monitor; correct problem
- Drought conditions - water and monitor; correct problem
- Other stress signs - determine reason, correct and monitor

FOREST PROTECTION PROCEDURES - POST CONSTRUCTION PHASE

The following measures shall be taken:

- Corrective measures if damages were incurred due to negligence:
 - Stress reduction
 - Removal of dead or dying trees. This may be done only if trees pose an immediate safety hazard
- Removal of temporary structures:
 - No burial of discarded materials will occur on-site within the conservation area.
 - No open burning within 200 feet of a wooded area.
 - All temporary forest protection structures will be removed after construction.
 - Remove temporary roads by removing stone or broadcasting mulch; pre-construction elevation should be maintained.
 - Aerate compacted soil.
 - Replant disturbed sites with trees, shrubs and/or herbaceous plants.
 - Retain signs for retention areas or specimen trees.
 - A County official shall inspect the entire site.

LANDSCAPE PERIMETER SUMMARY

EDGE NO.	LENGTH	TYPE	CREDIT	PLANTS REQUIRED
1	735 LF	A	240 / 4 SHADE	12 SHADE
2	285 LF	A	285 / 5 SHADE	5 SHADE
3	357 LF	A	316 / 5 SHADE	6 SHADE
4	432 LF	A	162 / 2.7 SHADE	7 SHADE
SUB TOTAL:				1809 LF
SWM 1	503 LF	B	---	10 SHADE 13 EVERGREEN
SWM 2	511 LF	B	120 / 2 SHADE	10 SHADE 13 EVERGREEN
SUB TOTAL:				1014 LF
				20 SHADE 26 EVERGREEN

TOTAL PLANTS REQUIRED: 50 SHADE and 26 EVERGREEN

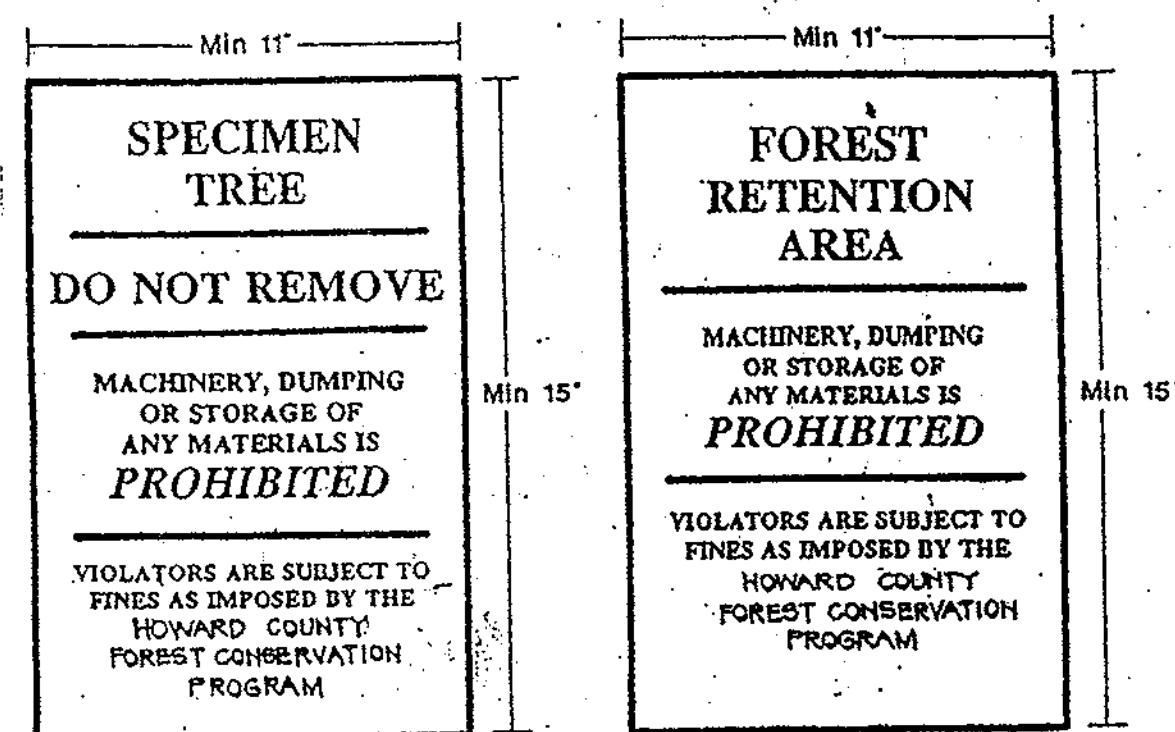
NOTE: Landscape planting is required around the private trash Pad located at Ilchester Road at Spring Okas Lane.

LOCATION / STREET NAME	LINEAR LENGTH	PLANTS REQUIRED
ILCHESTER ROAD *	335 LF	8
FONT AVENUE	100 LF	5
SPRING OAKS LANE	775 LF	19

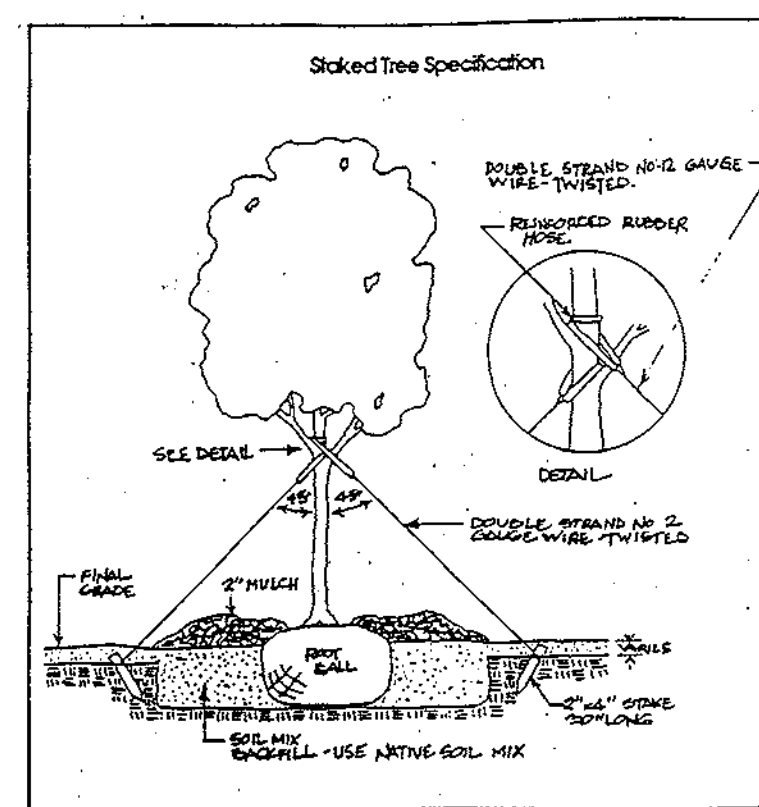
* Street trees to be provided along property frontage of proposed lots only.

FOREST CONSERVATION EASEMENT STANDARD NOTES:

The Forest Conservation Easement has 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 Easement; however, forest management practices as defined in the Deed of Forest Conservation Easement are allowed.



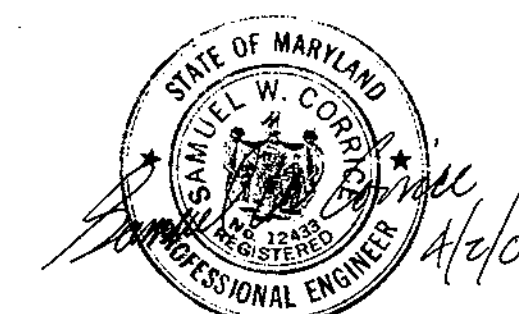
Signage



Staking of trees may be used only when there is a risk of high winds for trees larger than eight (8) inch diameter. Stakes and wire should be removed after the first growing season.

TENTATIVELY APPROVED
 DEPT. OF PLANNING AND ZONING OF
 HOWARD COUNTY

PLANNING DIRECTOR **4/19/01**
 DATE



DIENNIS F. LAHAYE, M.S., & ASSOCIATES
 Environmental Consulting Services
 3924 Flagstone Circle
 Manassas, MD 21101

- Wetland Delineations & Mitigation
- Stream Assessment & Restoration
- Waste Quality Monitoring
- Microinvertebrate Taxonomy
- Forest Stand Delineations
- Forest Conservation Plans

LDE, INC.
 9250 Rumsey Road, Suite 106, Columbia, MD. 21045
 (410) 715-1070 (301) 596-3424 (410) 715-9540 (Fax)

DESIGNED: SWC	PRELIMINARY LANDSCAPE & FOREST CONSERVATION TABULATION and DETAILS	SCALE: As Shown
DRAWN: KBW	SPRING OAKS LOTS 1 THRU 11 & OPEN SPACE LOTS 12 THRU 14	DRAWING: 5 of 5
CHECKED: BDB	Tax Map 31 Grid 15 Parcel 217 1 st Election District Howard County, MD Previous Submittals: S00 - 01	LDE Job No. 98-090
DATE: 10/2000	OWNER / DEVELOPER: J.J.M., Inc. 17901 Shaffers Mill Road Mt. Airy, Maryland 21771	File No. POI-12