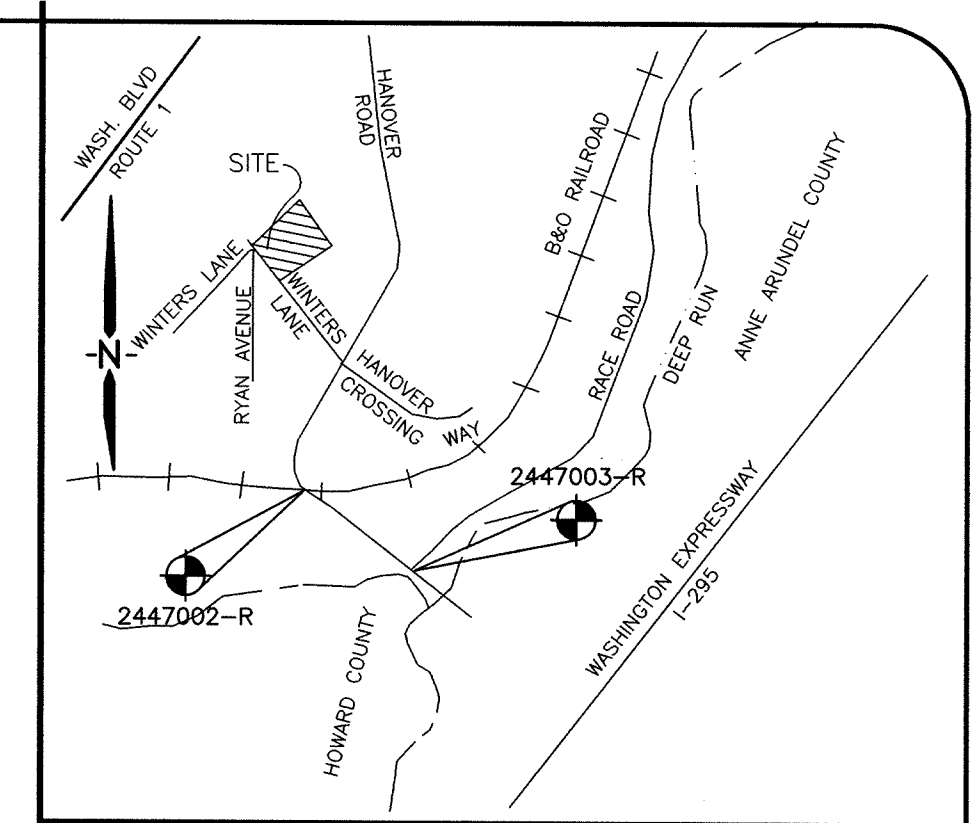


**DETAIL 1**  
SCALE: 1"=20'

CURVE TABLE						
CURVE #	RADIUS	LENGTH	TANGENT	CHORD	DISTANCE	DELTA
C1	45.00'	31.25'	16.28'	S19°19'36"W	30.62'	39°47'14"
C2	45.00'	73.15'	47.53'	S88°47'30"W	65.36'	93°07'56"
C3	45.00'	66.33'	42.70'	S88°08'33"E	61.95'	87°00'02"

MINIMUM LOT SIZE TABULATION			
LOT NUMBER	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
LOT 1	11,202 SQ. FT.	683 SQ. FT.	10,519 SQ. FT.
LOT 2	11,068 SQ. FT.	1,381 SQ. FT.	9,687 SQ. FT.
LOT 3	11,232 SQ. FT.	1,613 SQ. FT.	9,619 SQ. FT.
LOT 4	11,360 SQ. FT.	1,632 SQ. FT.	9,728 SQ. FT.
LOT 5	11,073 SQ. FT.	1,376 SQ. FT.	9,697 SQ. FT.
LOT 6	11,187 SQ. FT.	1,123 SQ. FT.	10,064 SQ. FT.
LOT 7	28,398 SQ. FT.	273 SQ. FT.	28,125 SQ. FT.

COORDINATE TABLE		
POINT	NORTHING	EASTING
1	496940.2734	877761.4171
2	497246.4500	878039.2900
3	497005.6186	878279.9417
4	496741.5814	877946.6304



**VICINITY MAP**  
Scale: 1" = 2000'

**GENERAL NOTES:**

- ALL ASPECTS OF THE PROJECT ARE IN ACCORDANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN GRANTED.
- PROJECT BACKGROUND:  
LOCATION: TAX MAP 38, PARCEL 868  
ZONING: R-12  
ELECTION DISTRICT: FIRST  
TOTAL AREA: 2.93 AC  
AREA OF BUILDABLE LOTS: 2.19 AC  
AREA OF OPEN SPACE REQ'D: 20% x 2.93 = 0.59 AC  
AREA OF OPEN SPACE PROV: 0.74 AC  
NUMBER OF BUILDABLE LOTS: 7  
NUMBER OF OPEN SPACE LOTS: 2  
TOTAL NUMBER OF LOTS: 9  
MINIMUM AREA OF BUILDABLE LOT: 9,600 SQ.FT.  
DPZ FILE: S-99-06
- DEED REFERENCE: LIBER 4411, FOLIO 335.
- TOPOGRAPHIC INFORMATION BASED ON AN AERIAL SURVEY FLOWN IN 1993 BY WINGS AERIAL MAPPING CO., INC.
- COORDINATES BASED ON NAD'27 MARYLAND COORDINATES SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO 2447002-R AND 2447003-R  
STA. 2447002-R N494994.546 E878209.358 EL. 89.819  
STA. 2447003-R N494376.047 E879030.173 EL. 46.266
- BOUNDARY INFORMATION BASED ON RECORD PLAT NO. 3342.
- FOREST STAND AND WETLANDS DELINEATION PERFORMED BY ECO-SCIENCE PROFESSIONALS ON JULY 31, 1998. NO WETLANDS EXIST ON SITE.
- PROPERTY IS WITHIN THE METROPOLITAN DISTRICT. WATER AND SEWER ARE PUBLIC. CONTRACT NUMBERS ARE S-6162 FOR SEWER AND 44-1937 FOR WATER.
- STORM WATER QUALITY AND QUANTITY CONTROL TO BE PROVIDED BY WETLAND RETENTION POND.
- STORM WATER MANAGEMENT FACILITY TO BE PRIVATELY OWNED AND MAINTAINED.
- GEOTECHNICAL REPORT PREPARED BY HILLIS-CARNES ENGINEERING ASSOC., INC. DATED OCTOBER 1999.
- NO BURIAL GROUNDS OR CEMETERY SITES ARE ON-SITE, PER HOWARD COUNTY RECORDS.
- APFO ROAD TEST NOT REQUIRED BY HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER THE TRAFFIC GROUP.
- NO FLOODPLAIN EXISTS ON SITE.
- WINTERS LANE TO BE IMPROVED UNDER CAPITAL PROJECT # J-4143.

16. HATCH PATTERNS:
- DENOTES FOREST CONSERVATION EASEMENT (RETENTION)
  - DENOTES FOREST CONSERVATION EASEMENT (REFORESTATION)
  - DENOTES SLOPES 15-25%
  - DENOTES SLOPES IN EXCESS OF 25%
  - DENOTES PRIVATE ROAD EASEMENT



TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY

*James R. Smith* 5/4/00  
PLANNING DIRECTOR DATE

**OWNER:**  
Howard-Winters LLC  
5570 Sterrett Place, Suite 201  
Columbia, Maryland 21044  
(410) 997-3815, (301) 596-3877

project	date	approval
99003	APR 2000	KR
illustration	engineering	KR
scale	1"=60'	

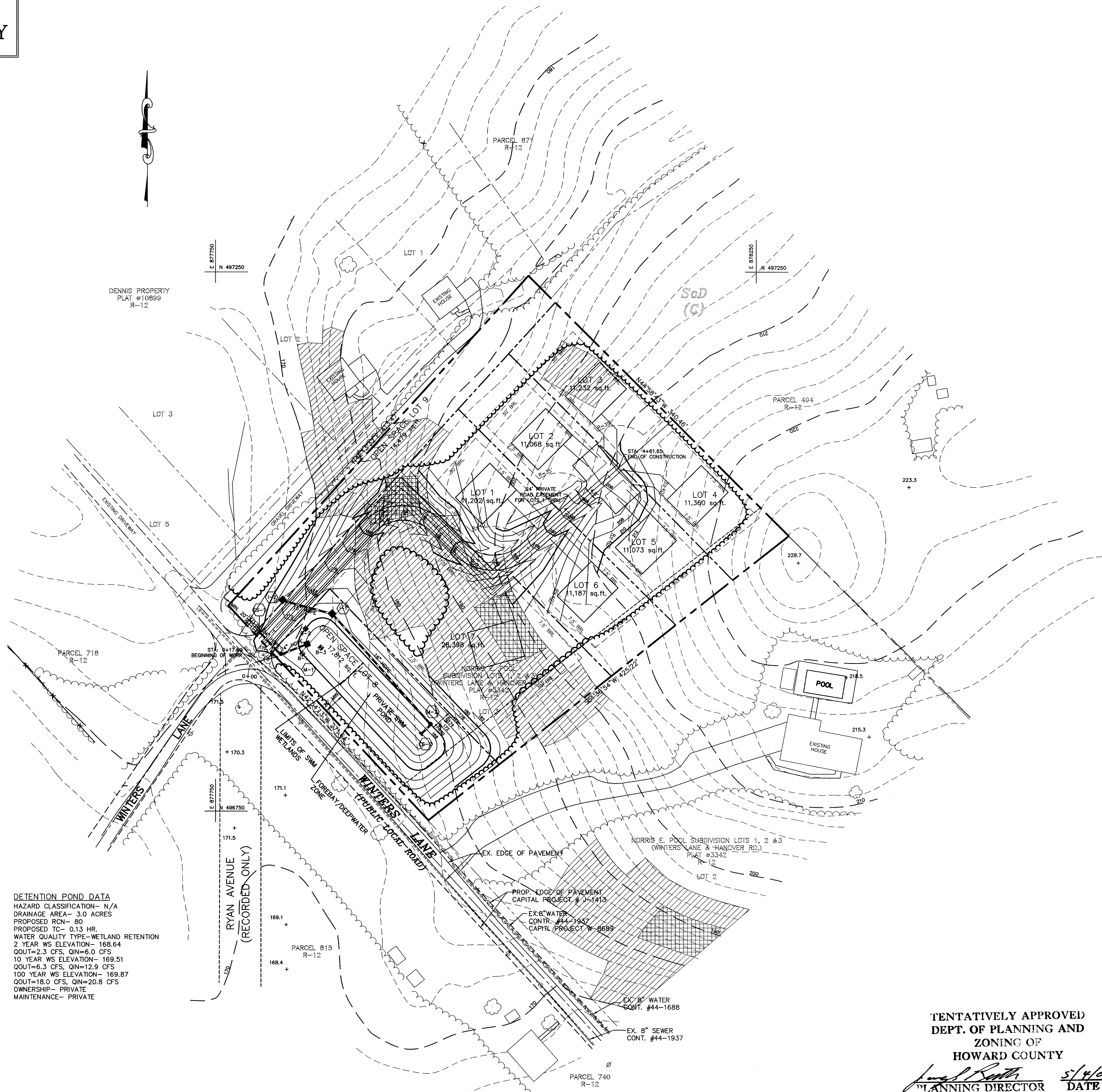
no.	description	date
	revisions	

**WINTERS RIDGE, LOTS 1 THRU 9**  
A RESUBDIVISION OF LOT 3, NORRIS E. POOL SUBDIVISION  
TAX MAP 38 PARCEL 868 GRID 15  
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
**PRELIMINARY PLAN**

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296, Fax: (301) 621-5521, Wash. (410) 997-0298 Fax.



THIS PLAN IS FOR  
GRADING PURPOSES ONLY

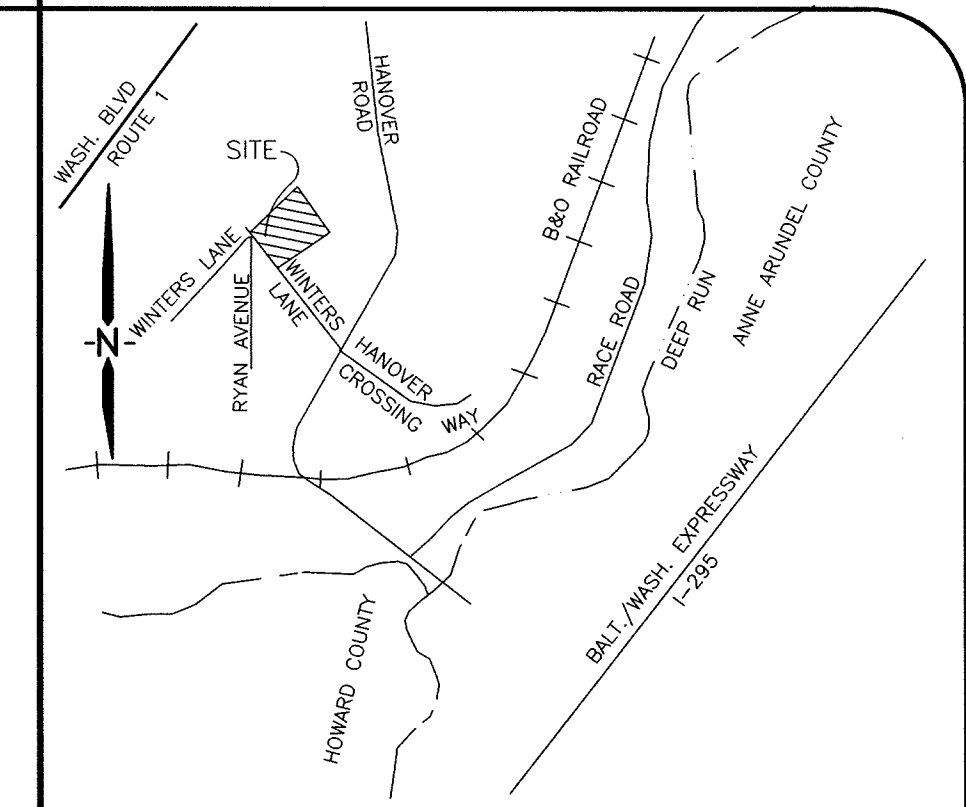


**DETENTION POND DATA**  
 HAZARD CLASSIFICATION- N/A  
 DRAINAGE AREA- 3.0 ACRES  
 PROPOSED RCN- 80  
 PROPOSED TC- 0.13 HR.  
 WATER QUALITY TYPE- WETLAND RETENTION  
 2 YEAR WS ELEVATION- 168.64  
 QOUT=2.3 CFS, QIN=6.0 CFS  
 10 YEAR WS ELEVATION- 169.51  
 QOUT=6.3 CFS, QIN=12.9 CFS  
 100 YEAR WS ELEVATION- 169.87  
 QOUT=18.0 CFS, QIN=20.8 CFS  
 OWNERSHIP- PRIVATE  
 MAINTENANCE- PRIVATE

TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND  
 ZONING OF  
 HOWARD COUNTY

*James R. Smith*  
 PLANNING DIRECTOR **5/4/00**  
 DATE

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VICINITY MAP  
 Scale: 1" = 2000'

Project	99003	date	APR 2000
Illustration	KR	engineering	KR
scale	1" = 50'	approval	KR

no.	description	date

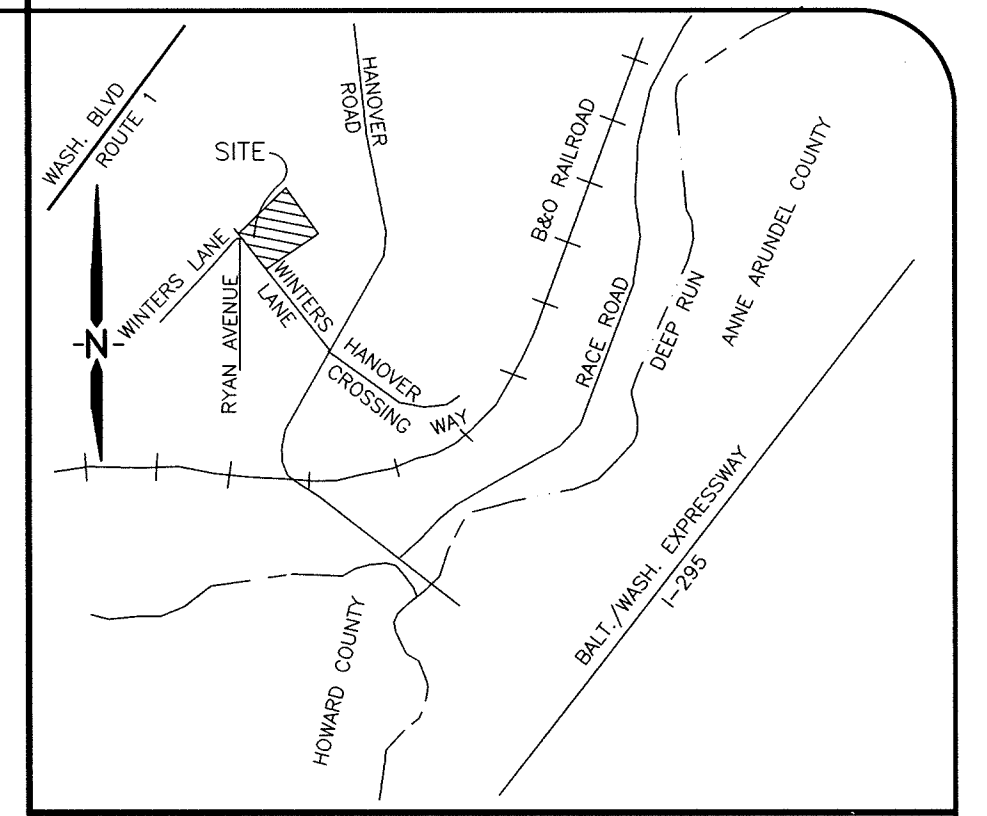
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 A RESUBDIVISION OF LOT 3, NORRIS E. POOL SUBDIVISION  
 TAX MAP 38 PARCEL 868 GRID 15  
 FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
**PRELIMINARY GRADING PLAN**

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 Engineers Planners Surveyors  
 5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
 (410) 997-0296 Buit. (301) 651-5521 Wash. (410) 997-0298 Fax.

NOTE: THIS DRAWING IS TO BE USED FOR PRELIMINARY LANDSCAPE PLAN PURPOSES ONLY.

**NOTES:**

1. THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL
2. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING IS THE RESPONSIBILITY OF THE DEVELOPER AS PART OF THE DPW DEVELOPERS AGREEMENT.



VICINITY MAP  
Scale: 1" = 2000'

**STREET TREE CALCULATIONS**

STREET NAME	LENGTH OF ROADSIDE	NUMBER OF TREES
ROAD A	950.0 LF	24
WINTER'S LANE	212.5 LF	5

**STREET TREE REQUIREMENT PLANTING SCHEDULE**

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
24		PYRUS CALLERYANA 'REDSPIRE'	REDSPIRE PEAR	2 1/2" - 3" CAL.
5		TILIA CORDATA 'GREENSPIRE'	GREENSPIRE LITTLELEAF LINDEN	2 1/2" - 3" CAL.
<b>TOTAL</b>				
29		SHADE TREES		

**SWM PERIMETER**

SWM PERIMETER	EDGE TYPE
SWM PERIMETER A - 185	B
1 SHADE TREE / 50 LF	
1 EVERGREEN / 40 LF	5
SWM PERIMETER B - 89 LF	B
1 SHADE TREE / 50 LF	
1 EVERGREEN / 40 LF	2
SWM PERIMETER C - 208 LF	B
1 SHADE TREE / 50 LF	
1 EVERGREEN / 40 LF	5
SWM PERIMETER D - 44 LF	B
1 SHADE TREE / 50 LF	
1 EVERGREEN / 40 LF	1

**TOTAL PLANTING OBLIGATION**

SHADE TREES	11
EVERGREEN TREES	13
SHRUBS	0

**SCHEDULE D : STORMWATER MANAGEMENT AREA LANDSCAPING**

LINEAR FEET OF PERIMETER	526 LF
CREDIT FOR EXISTING VEGETATION (NO, YES AND LINEAR FEET)	NO
CREDIT FOR OTHER LANDSCAPING (NO, YES AND %)	NO
NUMBER OF TREES REQUIRED	
SHADE TREES	11 SHADE TREES
EVERGREEN TREES	13 EVERGREEN TREES

**PERIMETER**

PERIMETER 1		A
SFD TO SFD - 187.9 LF		
1 SHADE TREE / 60 LF	3	
SFD TO SFD - 225.1 LF		A
CREDIT FOR EXISTING VEGETATION		
PERIMETER 2		A
SFD TO SFD - 284.9 LF		
1 SHADE TREE / 60 LF	5	
SFD TO SFD - 55.8 LF		A
CREDIT FOR EXISTING VEGETATION		
PERIMETER 3		A
SFD TO SFD - 305.0 LF		
CREDIT FOR EXISTING VEGETATION		
SFD TO SFD - 120.0 LF		A
1 SHADE TREE / 60 LF	2	
PERIMETER 4		B
SFD TO ROAD - 247.5 LF		
1 SHADE TREE / 50 LF	5	
1 EVERGREEN TREE / 40 LF	6	
ENTRANCE - 24.1 LF		N/A

**TOTAL PLANTING OBLIGATION**  
21 TREES (15 SHADE TREES, 6 EVERGREEN TREES)

**SCHEDULE A : PERIMETER LANDSCAPED EDGE**

CATEGORY	ADJ. TO PERIMETER PROPERTIES	ADJACENT TO ROADWAYS
LANDSCAPE TYPE	A (PERIMETERS 1 - 3)	B (PERIMETER 4)
LINEAR FEET OF PERIMETER	1178.7 LF	247.5 LF
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 621.0 LF	NO
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO
NUMBER OF PLANTS REQUIRED		
SHADE TREES	10 SHADE TREES	5 SHADE TREES
EVERGREEN TREES	0 EVERGREEN TREES	6 EVERGREEN TREES
SHRUBS	0 SHRUBS	0 SHRUBS

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING OF  
HOWARD COUNTY

*[Signature]*  
PLANNING DIRECTOR  
DATE: 5/14/00



**OWNER:**

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date	project	scale	approval
APR 2000	99003	KR/KS	KS
	illustration		
	engineering		

no.	description	revisions

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**CONSTRUCTION MONITORING**

- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
- THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

**NOTE :**

THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST CONSERVATION EASEMENTS EXCEPT AS PERMITTED BY THE HOWARD COUNTY FOREST CONSERVATION PROGRAM.

- FOR FOREST STAND DELINEATION INFORMATION, SEE PLAN PREPARED BY ECO-SCIENCE PROFESSIONALS, INC.

**REFORESTATION PLANT LISTS**

QTY.	SPECIES	SHADE TOL.	MOIST. REGIME	WET. STATUS	MIN.O.C.	SIZE & SPACING	REMARKS
10	Quercus prinus Chestnut Oak	MT	D-M	UPL	11'	CONT/B & B 3'-5' HEIGHT	
4	Quercus rubra Red Oak	MT	D-M	UPL	11'	CONT/B & B 3'-5' HEIGHT	
4	Quercus falcata Southern Red Oak	T	D-M	FACU	11'	CONT/B & B 3'-5' HEIGHT	
4	Acer rubrum Red Maple	VT	D-W	FAC	11'	CONT/B & B 3'-5' HEIGHT	
8	Nyssa sylvatica Black Gum	T	M-W	FAC	11'	CONT/B & B 3'-5' HEIGHT	

**TOTAL**  
30 1" CALIPER YOUNG TREES  
(IF USING WHIPS, MULTIPLY ABOVE NUMBERS BY 3.5)

**PLANTING SPECIFICATIONS AND NOTES**

**SITE PREPARATION AND SOILS**

- PROTECTION FENCING IS TO BE INSTALLED AS A FIRST ORDER OF BUSINESS. SEE PLAN FOR LOCATIONS.
- DISTURBANCE OF SOILS SHOULD BE LIMITED TO THE PLANTING FIELD FOR EACH PLANT AS SHOWN ON THE DETAIL VIEW. A PLANTING FIELD OF RADIUS = 5 X DIAMETER OF THE ROOT BALL OR CONTAINER IS RECOMMENDED.
- SOIL MIX FOR ALL PLANTS EXCEPT ERICACEOUS MATERIAL. SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME OF COMPOSTED SLUDGE.
- SOIL MIX FOR ERICACEOUS MATERIAL. SOIL MIX SHALL CONSIST OF EXISTING NATIVE TOPSOIL MIXTURE AT EACH PLANTING FIELD LOCATION INTO WHICH THE CONTRACTOR SHALL THOROUGHLY INCORPORATE 25% BY VOLUME PEAT MOSS.
- ALL MIXING IN 3 AND 4 SHALL BE LIMITED TO CONTAINER GROWN OR BALL AND BURLAP STOCK ONLY AND CONFINED TO THE PLANTING FIELD AND IMMEDIATE ADJACENT SOIL SURFACE AREA AND SHALL BE DONE TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

**PLANT STORAGE AND INSPECTION**

- FOR CONTAINER GROWN NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN 2 WEEKS AFTER DELIVERY TO THE SITE.
- FOR BALL AND BURLAP NURSERY STOCK, PLANTING SHOULD OCCUR WITHIN THREE DAYS AFTER DELIVERY TO THE SITE.
- PLANTING STOCK SHOULD BE INSPECTED PRIOR TO PLANTING. PLANTS NOT CONFORMING TO STANDARD NURSERYMAN SPECIFICATIONS FOR SIZE, FORM, VIGOR, ROOTS, TRUNK WOUNDS, INSECTS AND DISEASE SHOULD BE REPLACED.
- UNTIL PLANTED, ALL PLANT STOCK SHALL BE KEPT IN A SHADED, COOL, AND MOISTENED ENVIRONMENT.

**PLANT INSTALLATION**

- THE PLANTING FIELD SHOULD BE PREPARED AS SPECIFIED (SEE DETAIL). NATIVE STOCKPILED SOILS SHOULD BE USED FOR SOIL MIX AND BACKFILL FOR PLANTING FIELD. AFTER PLANT INSTALLATION, RAKE SOILS EVENLY OVER THE PLANTING FIELD AND COVER WITH AT LEAST 4 INCHES OF MULCH. WATER, GENEROUSLY, TO SETTLE SOIL BACKFILLED AROUND TREES.
- PLANTING FIELD DIAMETERS SHOULD BE REDUCED OR PLANTING FIELD MOVED IF IT APPEARS THAT EXCESSIVE ROOT DAMAGE MAY OCCUR DURING DIGGING OPERATION NEAR EXISTING FOREST.
- CARE SHALL BE TAKEN WHEN DIGGING EXISTING FIELDS NOT TO CHOP THROUGH LARGER EXISTING ROOTS FROM EXISTING MATURE TREES. IF ROOTS GREATER THAN 1/2 INCH ARE ENCOUNTERED PLEASE TRY TO DIG AROUND THEM AS MUCH AS POSSIBLE TO MINIMIZE IMPACT TO EXISTING TREES. THEY WERE HERE FIRST.
- CONTAINER GROWN STOCK SHOULD BE REMOVED FROM THE CONTAINER AND ROOTS GENTLY LOOSENED FROM THE SOIL. IF THE ROOTS EXHIBIT THE ROOT BALL, SUBSTITUTION IS STRONGLY RECOMMENDED.
- 3-SHAPED OR KINKED ROOT SYSTEMS SHOULD BE NOTED. ROOTS MAY NOT BE TRIMMED ON SITE, DUE TO THE INCREASED CHANCES OF SOIL BORNE DISEASES.
- FOR BALL AND BURLAP STOCK, PLACE TREE IN PREPARED PLANTING FIELD AND REMOVE WIRE AND/OR STRING FROM ROOT BALL. THEN PEEL BACK BURLAP TO BASE OF ROOT BALL AND COVER ENTIRE ROOT BALL WITH TOPSOIL MIXTURE INDICATED ABOVE AND WATER GENEROUSLY.
- FOR TREES PLANTED IN THE AFFORESTATION AREA, CONTRACTOR SHALL EVENLY DISPERSE SPECIES IN GROUPS OF TWO (2) TO FIVE (5), PER SPECIES, OVER THE ENTIRE DESIGNATED AREA TO BE PLANTED WHILE MAINTAINING AN AVERAGE RANDOM SPACING OF INDIVIDUAL TREES AT PROPER SPACING INDICATED ON PLANT LIST.
- AVOID PLANTING IN A STRAIGHT GRID PATTERN. TREES SHALL BE PLANTED ON AN AVERAGE SPACING AS INDICATED ON PLANT LISTS TO OBTAIN A MORE NATURAL APPEARANCE.
- NEWLY PLANTED TREES MAY NEED WATERING AS MUCH AS ONCE A WEEK FOR THE ENTIRE GROWING SEASON TO THE VERY DEEP WELL DRAINED NATURE OF THE NATIVE SOILS FOUND ON THIS SITE COMBINED WITH THE LOOSENESS OF THE BACKFILLED AREA WITHIN THE PLANTING FIELD. THE NEXT TWO YEARS MAY REQUIRE WATERING ONLY A FEW TIMES A YEAR DURING SUMMER AND DRY MONTHS. AFTER THAT PERIOD, TREES SHOULD ONLY NEED WATER IN SEVERE DROUGHTS. ANY WATERING PLAN SHOULD COMPENSATE FOR RECENT RAINFALL PATTERNS.

**FERTILIZING**

- DO NOT FERTILIZE NEWLY PLANTED TREES WITHIN THE FIRST GROWING SEASON AFTER PLANTING, LONG SO MAY CAUSE A SPURT OF CANOPY GROWTH WHICH THE ROOTS CANNOT SUPPORT AND ADD ADDITIONAL SHOCK TO THE ALREADY DISTURBED PLANT.
- NOTHING SHOULD BE ADDED TO THE SOIL WITHOUT TESTING IT FIRST TO DETERMINE ITS NEEDS.
- IF AND WHEN IT IS TIME TO FERTILIZE, ORGANIC FERTILIZERS ARE PREFERRED TO SYNTHETIC FERTILIZERS. BONE MEAL OR SEAWEED BASED PRODUCTS ARE AVAILABLE COMMERCIALY AND ARE RECOMMENDED. THEY HAVE THE ABILITY TO SUPPLY NUTRIENTS TO THE PLANT AS NEEDED WHILE MINIMIZING THE RISK OF EXCESS NUTRIENTS ENTERING THE FOREST SYSTEM AND WATER SUPPLY.

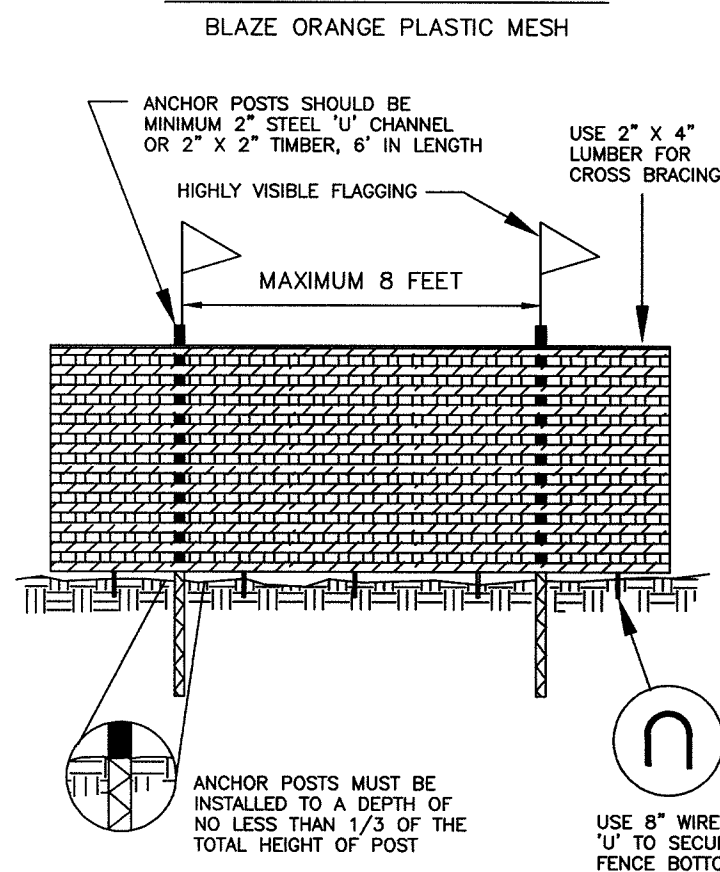
**MAINTENANCE SCHEDULE**

- ANNUAL MAINTENANCE DURING THE GROWING SEASON, FOR A THREE YEAR PERIOD.
- ASSESS TREE MORTALITY OF PLANTING STOCK, REMOVE AND REPLACE ANY DEAD OR DISEASED PLANTINGS.
- VOLUNTEER SEEDING OF NATIVE, LOCAL AND ENDEMIC VEGETATION IS TO BE EXPECTED. DO NOT DISCOURAGE THIS EFFORT UNLESS IT IS NEGATIVELY EFFECTING THE PLANTED STOCK.
- REMOVE THROUGH MANUAL MEANS (PULLING, CUTTING) AGGRESSIVE, NOXIOUS, INVASIVE SPECIES AND ALL HERBACEOUS VEGETATION WITHIN A 3-FOOT RADIUS SURROUNDING THE PLANTED WOODY NURSERY STOCK.
- REMOVE AND DISPOSE OF MAN-MADE TRASH, INCLUDING ITEMS CONTAINED WITHIN ENTIRE PLANTING AREA. DO NOT DISPOSE DOWN AND DEAD MATERIAL NATURALLY OCCURRING OR ACCUMULATING, UNLESS IT IS SMOTHERING PLANTING STOCK.
- A 75 PERCENT SURVIVAL OF PLANTED STOCK MUST BE ACHIEVED AT THE END OF THE 24 MONTH MANAGEMENT PERIOD. IF NOT, ADDITIONAL PLANTINGS MAY BE REQUIRED TO ACHIEVE THIS GOAL.

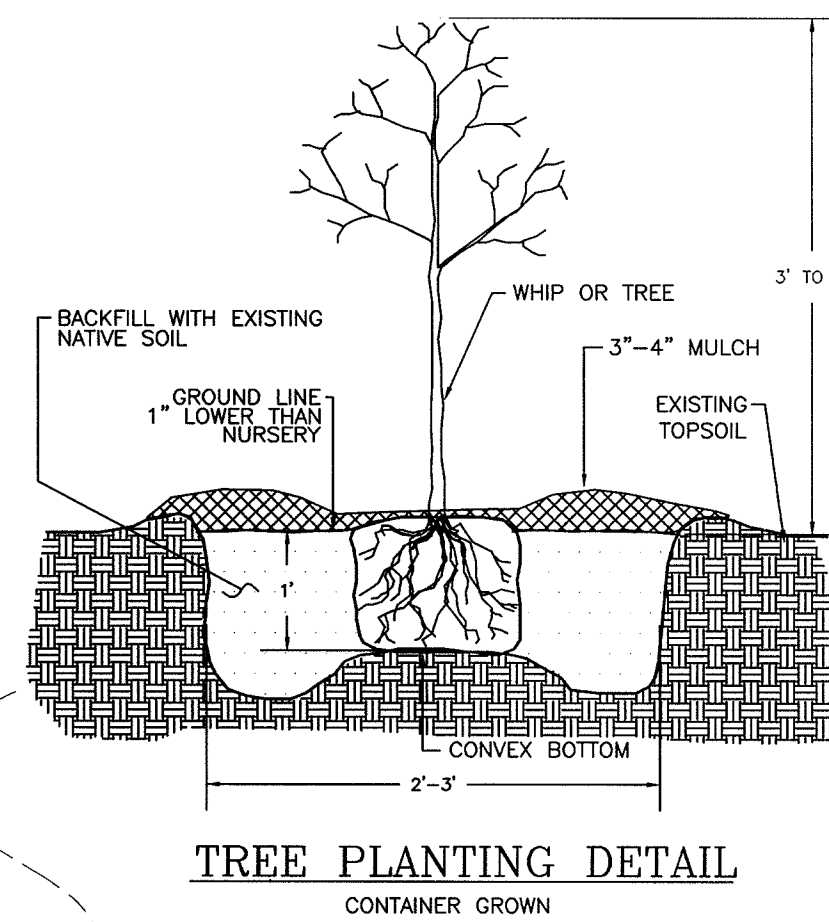
**SUPERVISION**

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**PROTECTIVE FENCE DETAIL**



- NOTES**
- FOREST PROTECTION DEVICE ONLY.
  - ANCHOR POSTS WILL BE INSTALLED TO THE DEPTH OF THE TOTAL HEIGHT OF POST.
  - BOUNDARIES OF RETENTION AREA SHOULD BE SIGNED AND FLAGGED PRIOR TO INSTALLING FENCE.
  - ROOT DAMAGE SHOULD BE AVOIDED.
  - PROTECTIVE SIGNAGE MAY ALSO BE USED.
  - DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION.



**TREE PLANTING DETAIL**  
CONTAINER GROWN

**FERTILIZING**

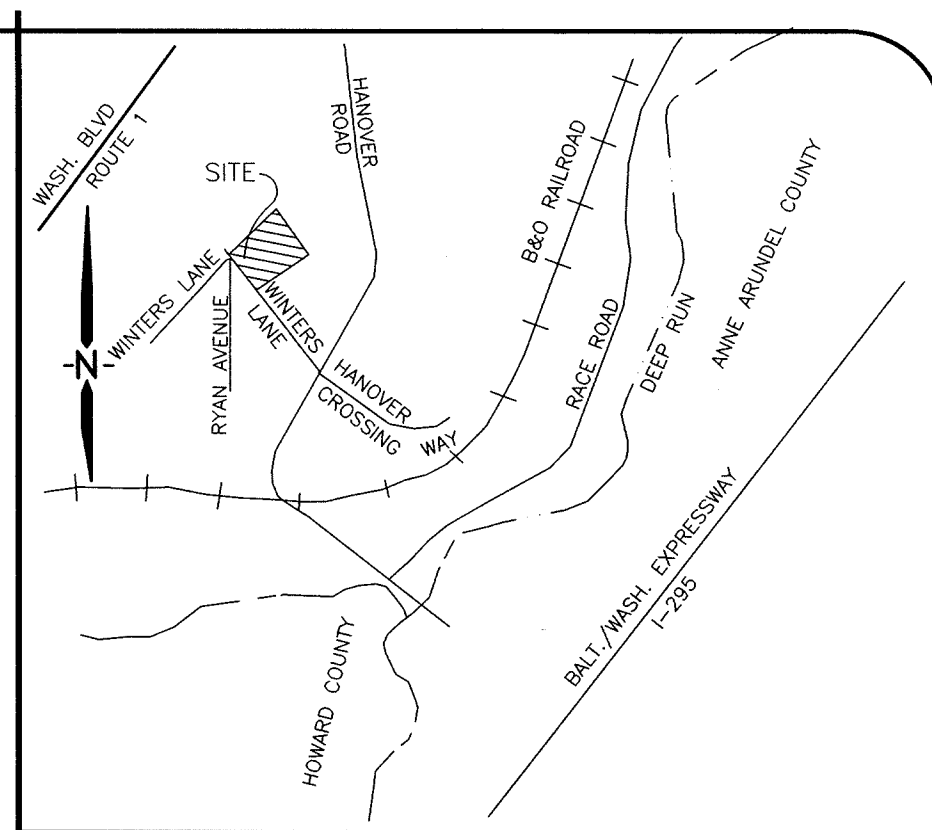
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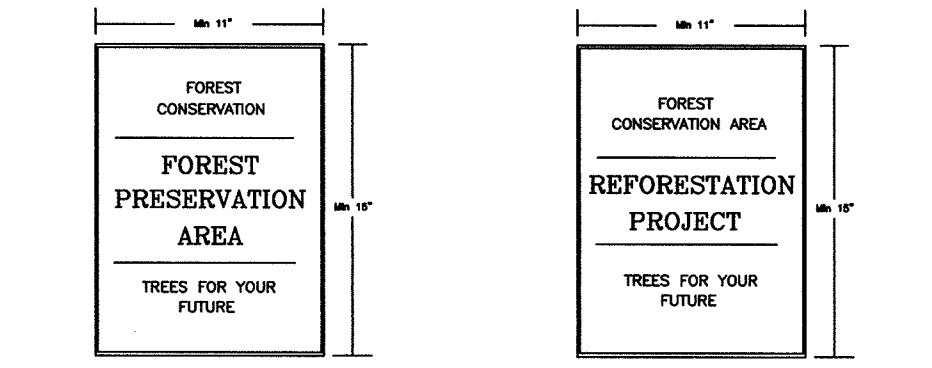
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**VICINITY MAP**  
Scale: 1" = 2000'



**SIGNAGE DETAIL**  
NOT TO SCALE

**FOREST PROTECTION**

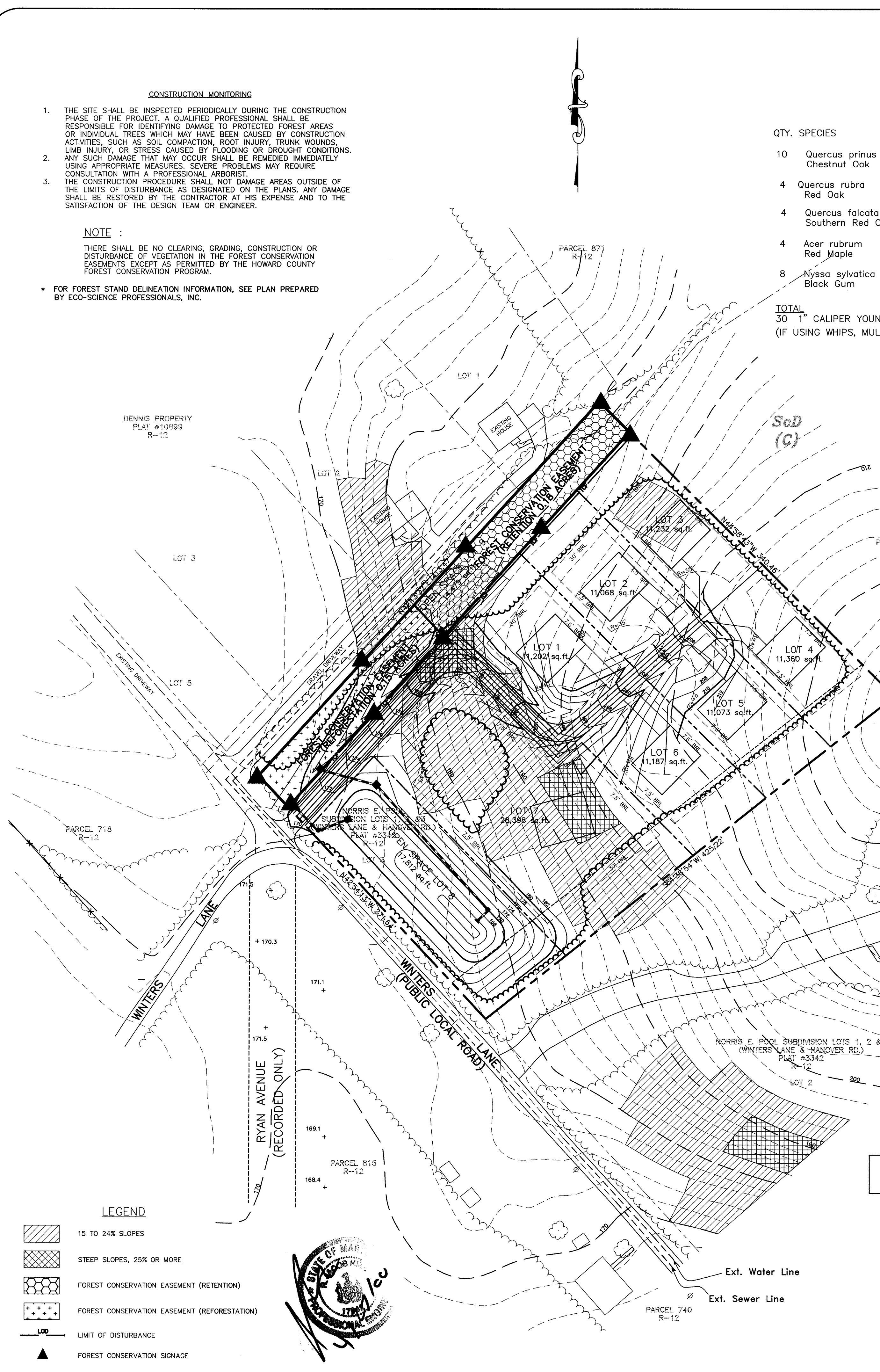
- ALL FOREST RETENTION AREAS AND ISOLATED POTENTIAL SPECIMEN TREES SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED, BLAZE ORANGE PLASTIC MESH FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY AND AROUND ISOLATED POTENTIAL SPECIMEN TREES PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.
  - THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES. IT IS UNDERSTOOD THAT THE INSTALLATION OF THE FENCING IN THIS MANNER WILL CREATE AN IRREGULAR EDGE.
  - ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
  - ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
  - THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORING OF BUILDING SUPPLIES OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS. AREA SHALL BE PROHIBITED.
  - THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENT OR ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL FORESTED AREAS. PLEASE REFER TO ROOT PRUNING DETAIL FOR FURTHER INFORMATION.
- PRE-CONSTRUCTION MEETING**
- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
    - TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
    - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
    - MAKE ALL NECESSARY ADJUSTMENTS;
    - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.
- CONSTRUCTION MONITORING**
- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
- THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.**

**FOREST CONSERVATION DATA**

I. BASIC SITE DATA	ACRES
GROSS SITE AREA	2.93
AREA WITHIN 100 YEAR FLOODPLAIN	0.00
AREA WITHIN AGRICULTURAL USE OR PRESERVATION PARCEL	0.00
NET TRACT AREA	2.93
LAND USE CATEGORY	RESIDENTIAL (HIGH DENSITY)
II. FOREST CONSERVATION WORKSHEET DATA SUMMARY	
B. REFORESTATION THRESHOLD (20%)	0.59
C. AFFORESTATION MINIMUM (15%)	0.44
D. EXISTING FOREST ON NET TRACT AREA	2.93
E. FOREST AREAS TO BE CLEARED	2.75
F. FOREST AREAS TO BE RETAINED	0.18
V. REFORESTATION CALCULATIONS	
TOTAL REFORESTATION REQUIRED (GX0.25) + (HX2)	1.40
0.15 ACRES REFORESTATION PROVIDED ON-SITE	
1.25 ACRES REMAINING - OFF-SITE PLANTINGS	

**NOTE**  
FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION WILL BE FULFILLED BY RETENTION OF EXISTING FOREST IN THE AMOUNT OF 0.18 ACRES, REFORESTATION PLANTING IN THE AMOUNT OF 0.15 ACRES ON-SITE AND 1.25 ACRES OFF-SITE IN FOREST CONSERVATION EASEMENTS AT A LOCATION TO BE DETERMINED WITH THE FINAL PLAT SUBMISSION.

**OWNER:**  
Howard-Winters LLC  
5570 Sterrett Place, Suite 201  
Columbia, Maryland 21044  
(410) 997-3815, (301) 596-3877



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

*[Signature]*  
**PLANNING DIRECTOR**  
5/14/00  
DATE

**SOILS LEGEND**

ScD SANDY AND CLAYEY LAND, MODERATELY SLOPING, READILY ERODED

**NOTE: THIS PLAN IS TO BE USED FOR FOREST CONSERVATION PURPOSES ONLY.**

MD DNR QUALIFIED PROFESSIONAL

*[Signature]*  
**KELLY SPALDING**

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
5072 Dorsey Hall Drive, Suite 202, Ellicott City, Maryland 21042  
(410) 997-0296 Balt. (301) 621-5521 Wash. (410) 997-0298 Fax.

**WINTERS RIDGE, LOTS 1 THRU 9**  
A RESUBDIVISION OF LOT 3, NORRIS E. POOL SUBDIVISION  
TAX MAP 38 PARCEL 868 GRID 15  
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
**PRELIMINARY FOREST CONSERVATION PLAN**

date	APR 2000	approval	RH
project	99003	illustration	KR
scale	1"=50'	description	revisions
no.			

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P 00-10