

**GENERAL NOTES**

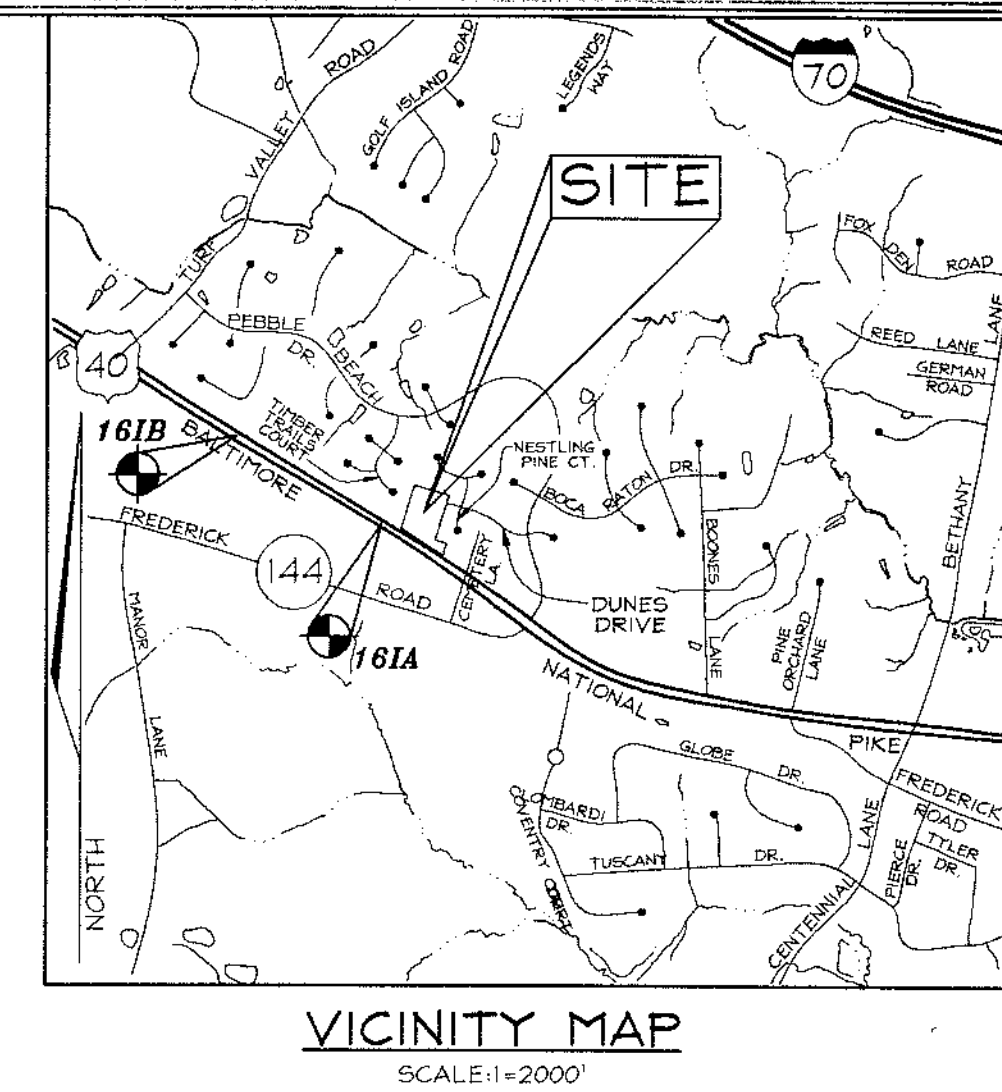
- Subject property Zoned "R-20" per 10/18/93 Comprehensive Zoning Plan.
- Public water and sewer to be utilized.
- Soils map no. 15.
- Total area of site subject to subdivision: 4.84 ac.±
- Area of proposed public r/w: 0.000 ac.±
- Number of proposed buildable lots: 10
- Area of proposed buildable lots: 3.40 ac.±
- Number of proposed Open Space lots: 1
- Area of proposed Open Space Lots: 1.44 ac.±
- Open space requirements:  
4.8 acres x 30% = 1.44 ac.±  
Open space provided: 1.44 ac.± (Lot II)  
Open space Lot II, including noise wall and SWM facility, will be owned and maintained by H.O.A.
- Recreational Open Space required:  
200 sf x 10 lots = 2,000 sf  
Recreational Open Space provided: 2,824 sf±
- The project is in conformance with the latest Howard County Standards unless Waivers have been approved.
- The lots shown hereon comply with the minimum ownership, width and lot area as required by the Maryland State Department of the Environment.
- There are no historic structures or cemeteries on-site.
- Field Run Boundary Survey prepared by C.B. Miller and Associates in June, 2001.
- The existing topography is based on a field run Topographic Survey prepared by C.B. Miller & Associates, Inc. in June 2001, with a 2 foot contour interval.
- The coordinates shown hereon are based upon the Howard County Geodetic Control which is based upon the Maryland State Plane Coordinate System. Howard County Monuments 161A and 161B were used for this project.
- Existing utilities are based on existing construction drawings, Contract #24-1994-D.
- The Stormwater Management systems shown on this plan is an approximation of the size, shape and location. It is understood that this system has not been designed and the actual design may change altering the number of units allocated for this development.
- A.P.F.O. Traffic Study prepared by Street Traffic Studies Ltd.
- Wetlands Delineation and Report and Forest Stand Delineation and Report prepared by Exploration Research Inc.
- The noise study for this project was prepared by Wilson T. Ballard Co. in April, 2002.
- The proposed noise mitigation wall shall be permitted and constructed prior to the issuance of building permits for lots 1-10.
- All proposed open channel ditches shall be lined with erosion control matting (see plan).
- Vehicular access is proposed along Dunes Drive and access is restricted along Maryland Route 40.
- This property is subject to the 5th edition of the Howard County Subdivision and Land Development Regulations.
- All landscaping requirements will be the responsibility of the developer.  
Previous Howard County file numbers: WP-03-32.
- Project is subject to waiver petition WP-03-33. On November 1, 2002 the planning director granted a waiver from sections 16.120(b)(4)(iv) and 16.121(c)(1) to reduce the frontage for access of open space lot II and the stormwater management facility from (40) feet to zero (0) feet, subject to recordation of a maintenance agreement for access to lots 1 thru 10 and open space lot II.

# PRELIMINARY EQUIVALENT SKETCH PLAN

## DUNES VISTAS

### LOTS 1 THRU 10 AND OPEN SPACE LOT II

#### HOWARD COUNTY, MARYLAND



**BENCHMARKS**

Howard County Monument 161A  
 N 179,682.821 E 410,366.3677 El: 141.3280 (meters)  
 N 589,504.388 E 1,346,343.658 El: 463.674 (feet)

Howard County Monument 161B  
 N 179,977.2258 E 409,881.8290 El: 143.4319 (meters)  
 N 590,475.291 E 1,344,753.967 El: 470.576 (feet)

**SHEET INDEX**

DESCRIPTION	SHEET No.
Cover Sheet	1 of 5
Preliminary Plan	2 of 5
Preliminary Grading Plan	3 of 5
Preliminary Sediment Control and Landscape Plan	4 of 5
Preliminary Forest Conservation Plan	5 of 5

**CENTERLINE ROAD CURVE DATA**

CURVE No.	RADIUS	LENGTH	DELTA	CHORD BEARING	CHORD LENGTH
C1	100.00	122.17	70°00'00"	N71°36'36"E	114.72
C2	100.00	34.73	19°53'49"	N46°33'30"E	34.55
C3	100.00	64.63	39°53'49"	N26°13'30"E	68.23

**MINIMUM LOT SIZE CHART**

LOT NUMBER	GROSS AREA (sf)	PIPESTEM AREA (sf)	MINIMUM LOT SIZE
2	14,252±	248±	14,004±
3	14,379±	342±	14,037±
4	17,857±	2,740±	15,117±
5	14,622±	48±	14,141±
6	14,668±	636±	14,032±
7	14,947±	810±	14,137±
8	14,738±	735±	14,003±
9	14,543±	537±	14,006±

**SCHEDULE A PERIMETER LANDSCAPE EDGE**

CATEGORY	ADJACENT TO ROADWAYS		ADJACENT TO PERIMETER PROPERTIES		
	2	3	1	3	4
Perimeter/Frontage Designation	B	A	A	A	A
Linear Feet of Roadway	519'	738'	477'	375'	
Frontage/Perimeter					
Credit for Existing Vegetation (Yes, No, Linear Feet Describe below if needed)	No	Yes** 48	Yes** 30'	Yes** 120	
Credit for Wall, Fence or Berm (Yes, No, Linear Feet Describe below if needed)	Yes* 519'	No	No	No	
Number of Plants Required					
Shade Trees	1:50 0	1:60 12	1:60 8	1:60 4	
Evergreen Trees	1:40 0	-	-	-	
Number of Plants Provided					
Shade Trees	0	12	8	4	
Evergreen Trees	0	-	-	-	
Other Trees (2:1 Substitution)	-	-	-	-	
Shrubs (10:1 Substitution) (Describe Plant Substitution Credits Below if needed)	-	-	-	-	

\* Credit taken for proposed Berm and Noise Wall  
 \*\* Credit Taken for existing trees

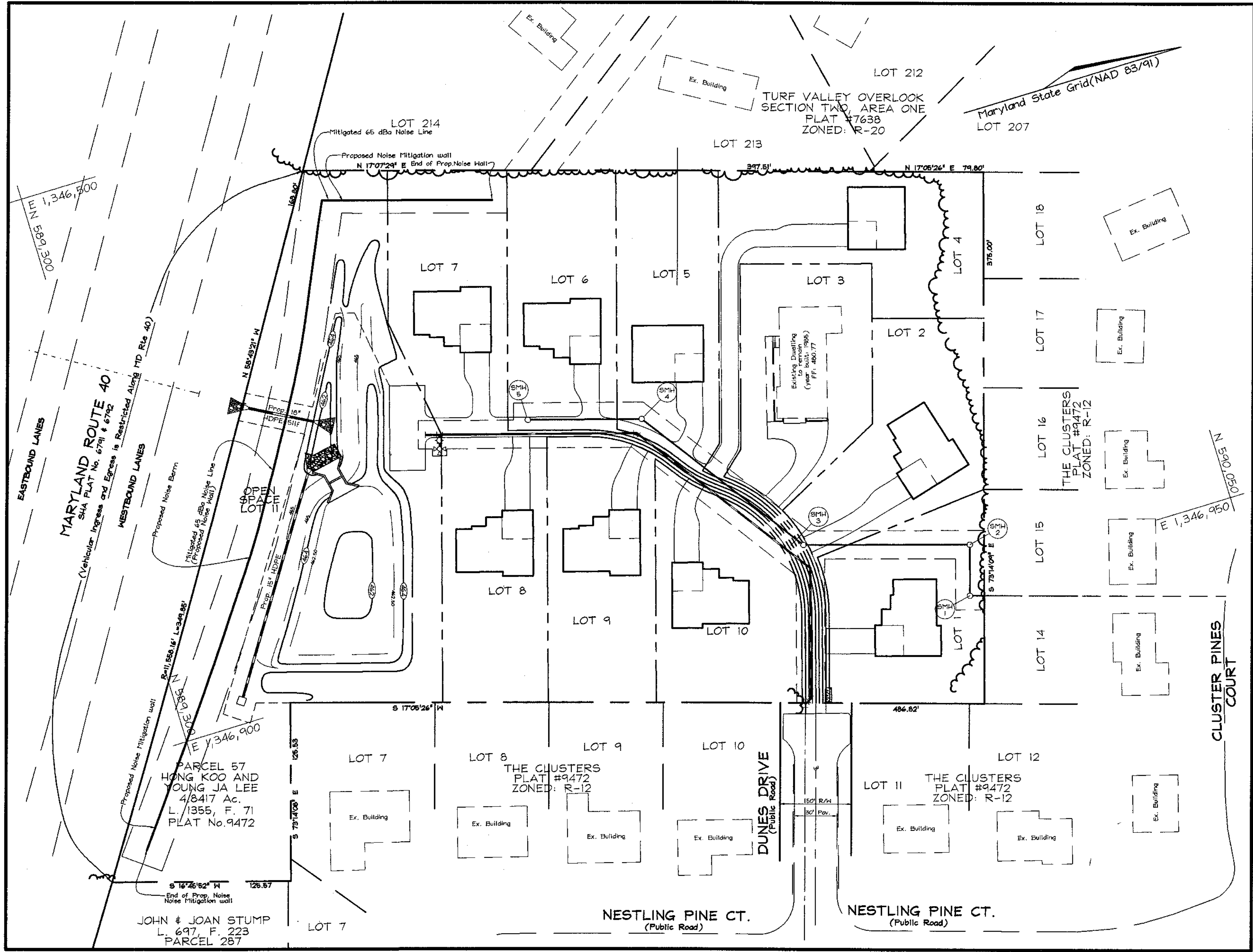
**SCHEDULE D: STORMWATER MANAGEMENT AREA LANDSCAPING**

Linear Feet of Perimeter	833 LF
Credit for Existing Vegetation (No, Yes and Linear Feet)	No
Credit for other Landscaping (No, Yes and %)	*Yes, Noise Berm & Wall (30% or 170 LF)
Number of Trees Required	
Shade Trees 1:50	17
Evergreen Trees 1:40	21
Number of Trees Provided	
Shade Trees	17
Evergreen Trees	21
Other Trees (2:1 Substitution)	0 Trees (0 Substitution Trees)

\* Full credit is requested for 170' of a Noise Berm and Wall combination along Maryland Route 40

**LEGEND**

Existing contours	--- 552	Common Access Easement	[Hatched Box]
Proposed Contour	--- 552.5	Recreational Open Space	[Dotted Box]
Existing Spot Elevation	382.5	Noise Easement	[Hexagonal Box]
Proposed Spot Elevation	+82.53	Existing 20' Utility Easement	[Hatched Box]
Direction of Flow	→	SWM Drainage & Utility Eas't	[Hatched Box]
Soils Line	--- 552	Erosion Control Matting	[Grid Box]
Limit of Disturbance	--- 552		
Existing Trees to Remain	[Tree Symbol]		
Water and Sewer Easement	[Line Symbol]		



**LOCATION MAP**  
SCALE: 1"=50'

TENTATIVELY APPROVAL  
 DEPT. OF PLANNING AND ZONING OF  
 HOWARD COUNTY  
 [Signature] 11/21/02  
 PLANNING DIRECTOR DATE

**OWNER**  
 HONG KOO & YOUNG JA LEE  
 3150 Dunes Drive  
 Ellicott City, MD 21042

**DEVELOPER**  
 CORNERSTONE HOLDINGS  
 9691 Norfolk Avenue  
 Laurel, MD 20723  
 410.792.2565

**COVER SHEET DUNES VISTAS**  
 LOTS 1 THRU 10 AND OPEN SPACE LOT II  
 TAX MAP 16 BLOCK 24 2ND ELECTION DISTRICT  
 PARCEL 57 HOWARD COUNTY, MARYLAND

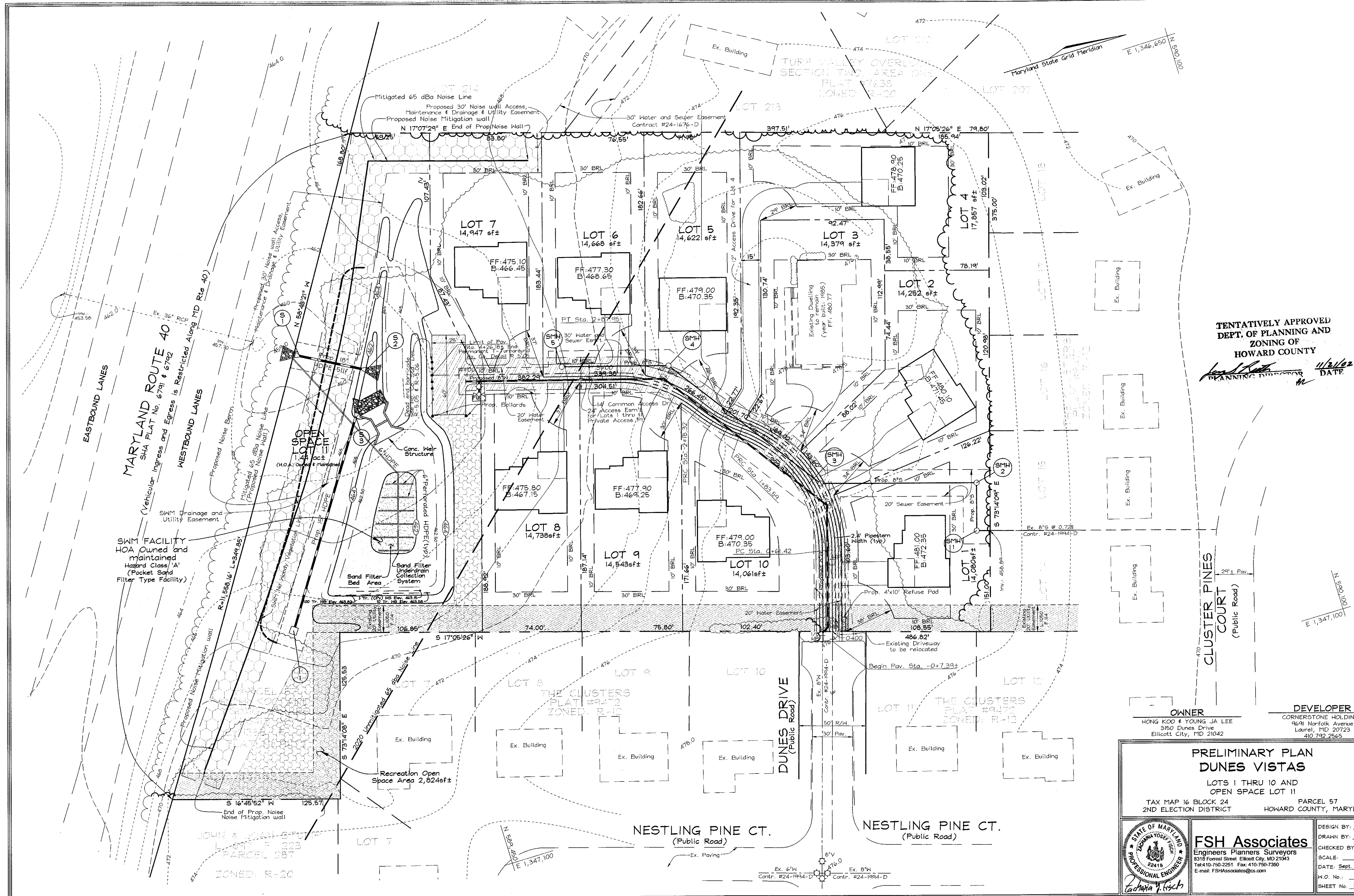
**FSH Associates**  
 Engineers Planners Surveyors  
 8318 Forest Street Ellicott City, MD 21043  
 Tel: 410-750-2251 Fax: 410-750-7350  
 E-mail: FSHAssociates@cs.com

DESIGN BY: MLT  
 DRAWN BY: MLT  
 CHECKED BY: ZYF  
 SCALE: As Shown  
 DATE: Sept. 20, 2002  
 W.O. No.: 3060  
 SHEET No. 1 OF 5

2nd Submittal Date: July 12, 2002  
 1st Submittal Date: April 17, 2002

SP-02-06 (SP-02-06)





TENTATIVELY APPROVED  
DEPT. OF PLANNING AND  
ZONING OF  
HOWARD COUNTY

*[Signature]* 11/26/02  
PLANNING DIRECTOR DATE

CLUSTER PINES  
COURT  
(Public Road)

**OWNER**

HONG KOO & YOUNG JIA LEE  
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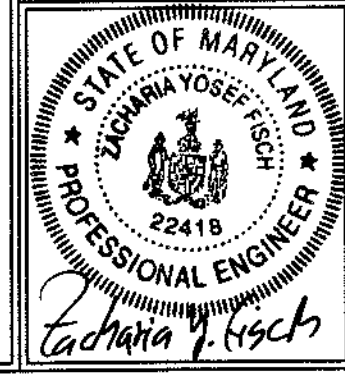
**DEVELOPER**

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9691 Norfolk Avenue  
Laurel, MD 20723  
410.742.2565

**PRELIMINARY PLAN  
DUNES VISTAS**

LOTS 1 THRU 10 AND  
OPEN SPACE LOT 11

TAX MAP 16 BLOCK 24 PARCEL 57  
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND



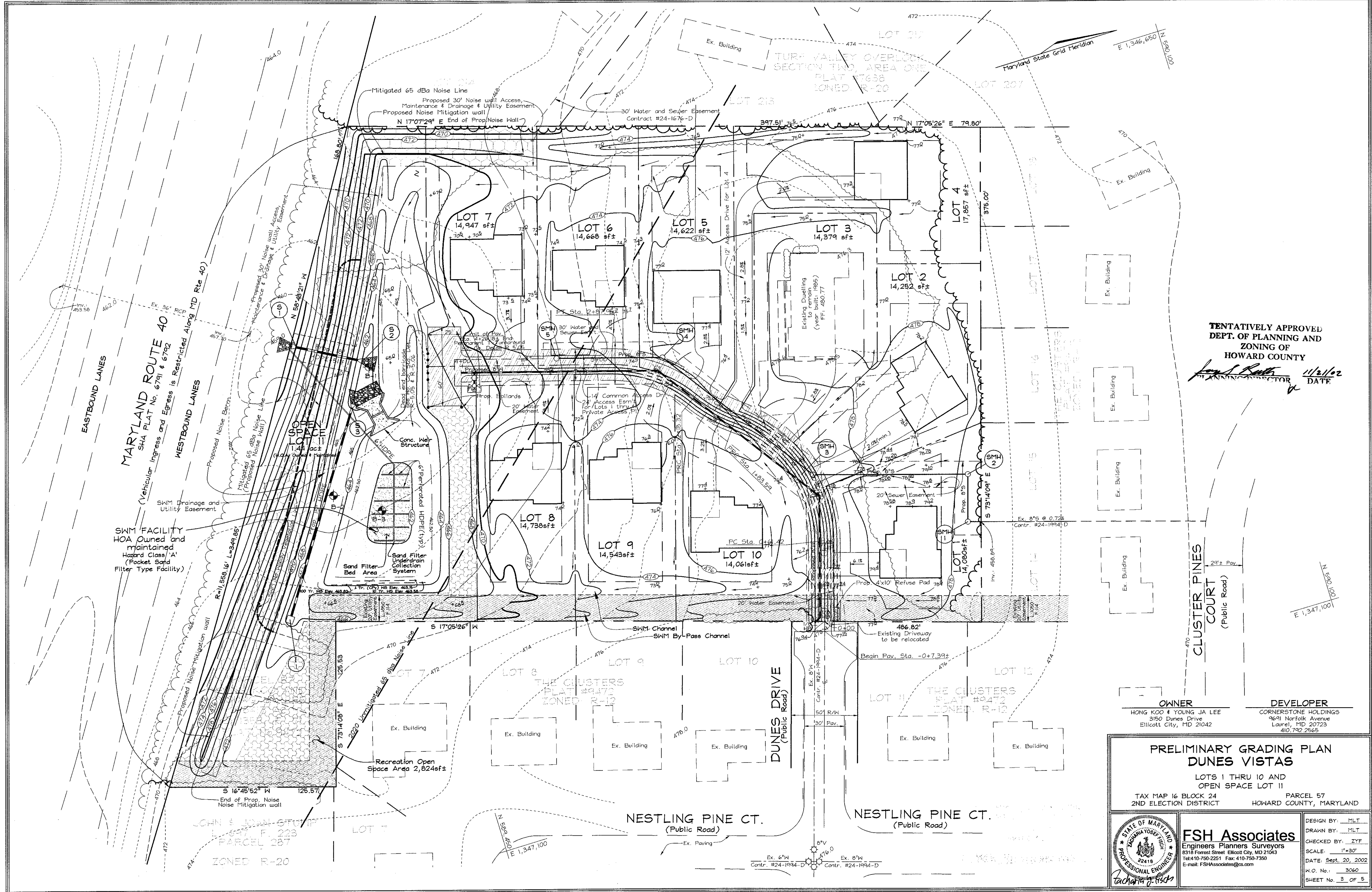
**FSH Associates**  
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8318 Forrest Street Ellicott City, MD 21043  
Tel: 410-750-2251 Fax: 410-750-7350  
E-mail: FSHAssociates@fcs.com

DESIGN BY: MLT  
DRAWN BY: PS  
CHECKED BY: ZYF  
SCALE: 1"=30'  
DATE: Sept. 20, 2002  
W.O. No.: 3060  
SHEET No. 2 OF 5

SP-02-06

(SP-02-06)





TENTATIVELY APPROVED  
 DEPT. OF PLANNING AND  
 ZONING OF  
 HOWARD COUNTY

*For: J. R. [Signature]* 11/2/02  
 PLANNING COMMISSIONER DATE

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**DEVELOPER**  
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 410.792.2625

**PRELIMINARY GRADING PLAN**  
**DUNES VISTAS**  
 LOTS 1 THRU 10 AND  
 OPEN SPACE LOT 11  
 TAX MAP 16 BLOCK 24 2ND ELECTION DISTRICT  
 PARCEL 57  
 HOWARD COUNTY, MARYLAND

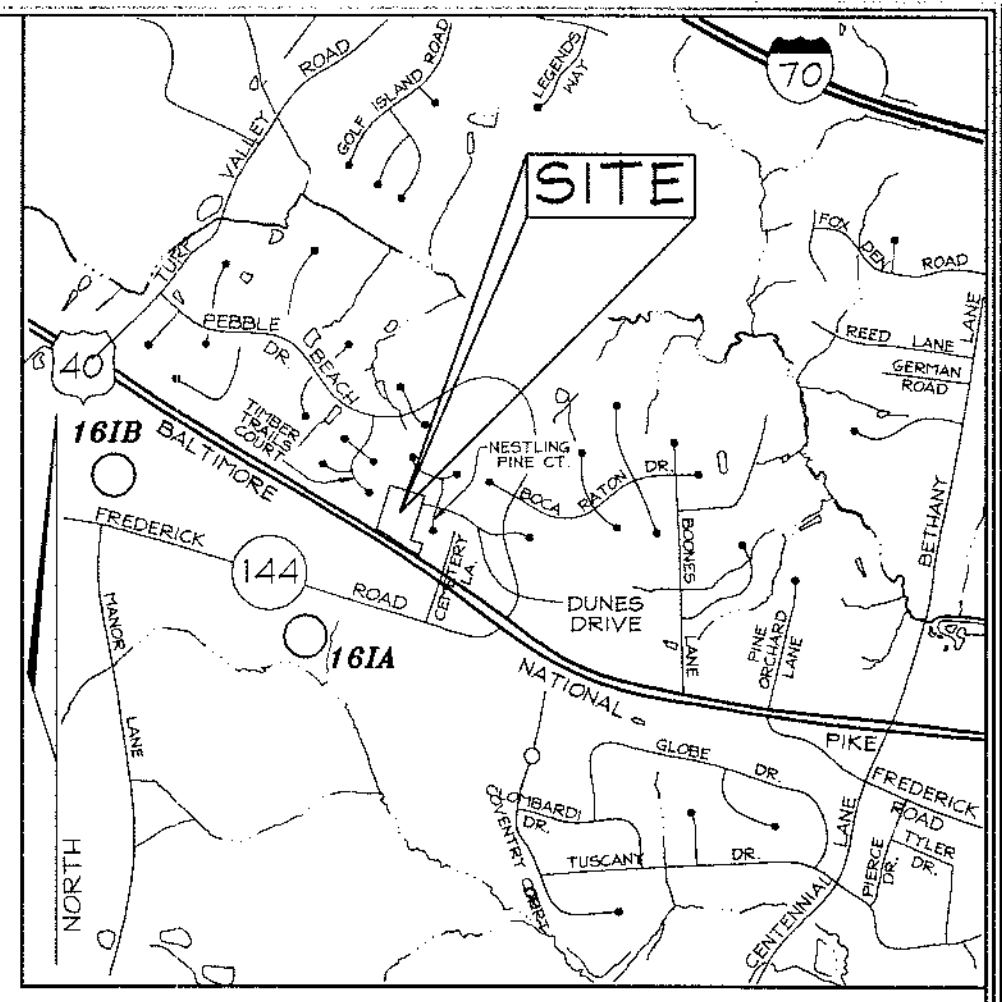
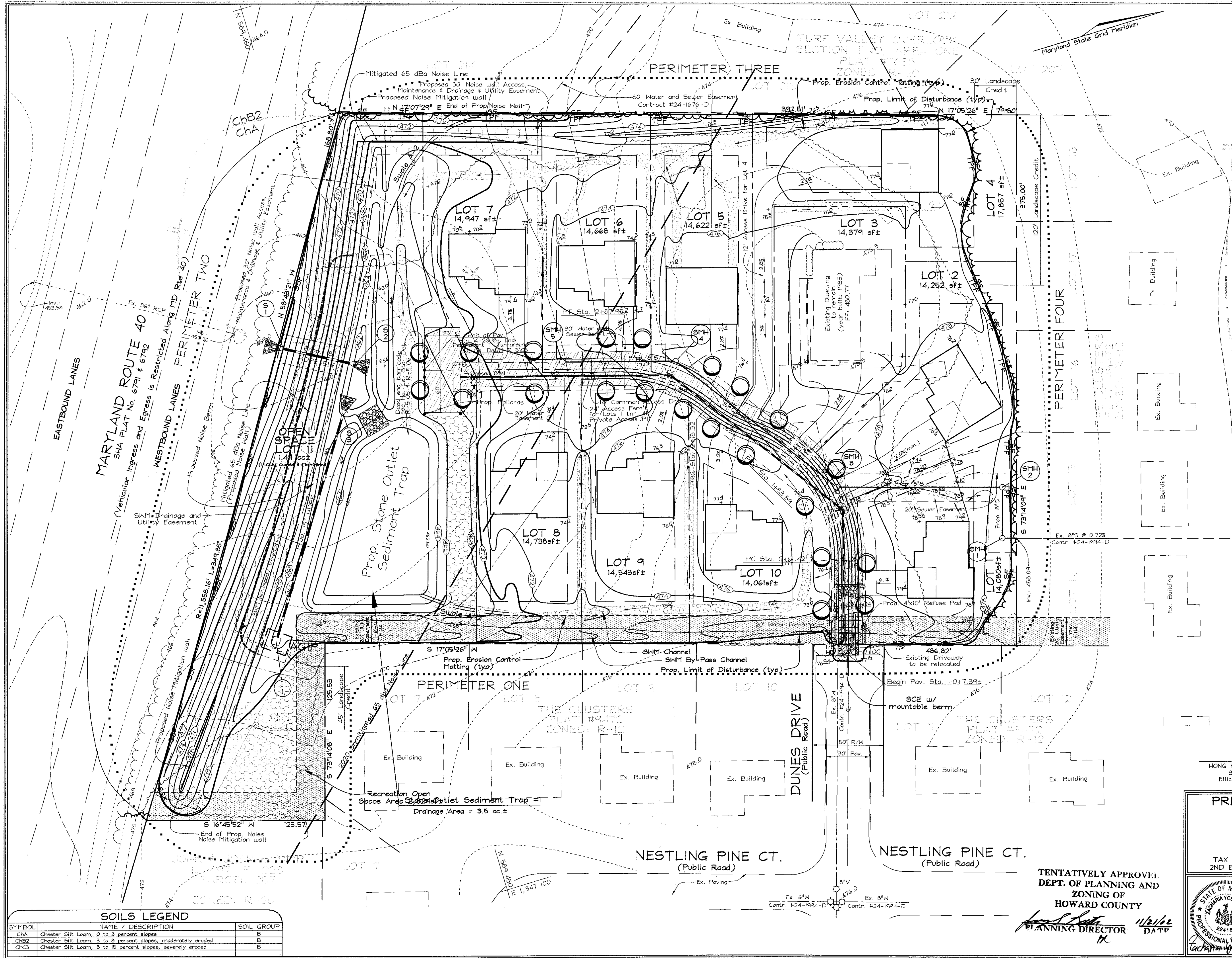


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DESIGN BY: MLT  
 DRAWN BY: MLT  
 CHECKED BY: ZYF  
 SCALE: 1"=30'  
 DATE: Sept. 20, 2002  
 P.O. No.: 3060  
 SHEET No. 3 OF 5

SP-02-06 (SP-02-06)





VICINITY MAP  
SCALE: 1:2000

**Notes**

- See sheet one (1) for perimeter landscaping requirements.
- Street tree calculations:  
 -Length of common access drive : 426.18'±  
 -Number of medium or large trees required:  
 $426.18' \times 2 / 40' = 22$  trees\*  
 -Number of medium or large trees provided:  
 22 trees medium or large trees\*  
 \*The street trees could not be spaced evenly because the trees must be within the access esmt and outside the paving and sewer esmt therefore, the trees were clustered as necessary.  
 \*If small trees are planted the requirement will be 30 trees per l.f. for a total of  $426.18' \times 2 / 30' = 28$  trees. Small trees must be at least 2 1/2" in caliper at the time of installation.
- See sheet one (1) for the legend.

MARYLAND ROUTE 40  
SHA PLAT No. 6791 & 6792  
(Vehicular Ingress and Egress is Restricted Along MD Rte 40)

WESTBOUND LANES PERIMETER TWO

PERIMETER FOUR

CLUSTER PINES COURT  
(Public Road)

DUNES DRIVE  
(Public Road)

NESTLING PINE CT.  
(Public Road)

NESTLING PINE CT.  
(Public Road)

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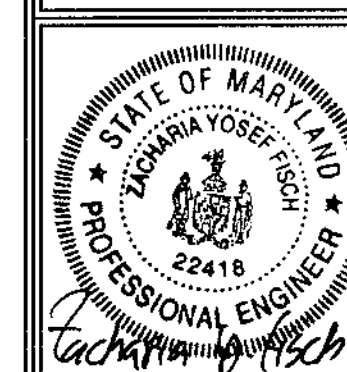
**PRELIMINARY SEDIMENT CONTROL AND LANDSCAPE PLAN DUNES VISTAS**

LOTS 1 THRU 10 AND OPEN SPACE LOT 11

TAX MAP 16 BLOCK 24 PARCEL 57  
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

TENTATIVELY APPROVED  
DEPT. OF PLANNING AND ZONING OF  
HOWARD COUNTY

PLANNING DIRECTOR  
DATE: 11/21/12



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SHEET No. 4 OF 5

**SOILS LEGEND**

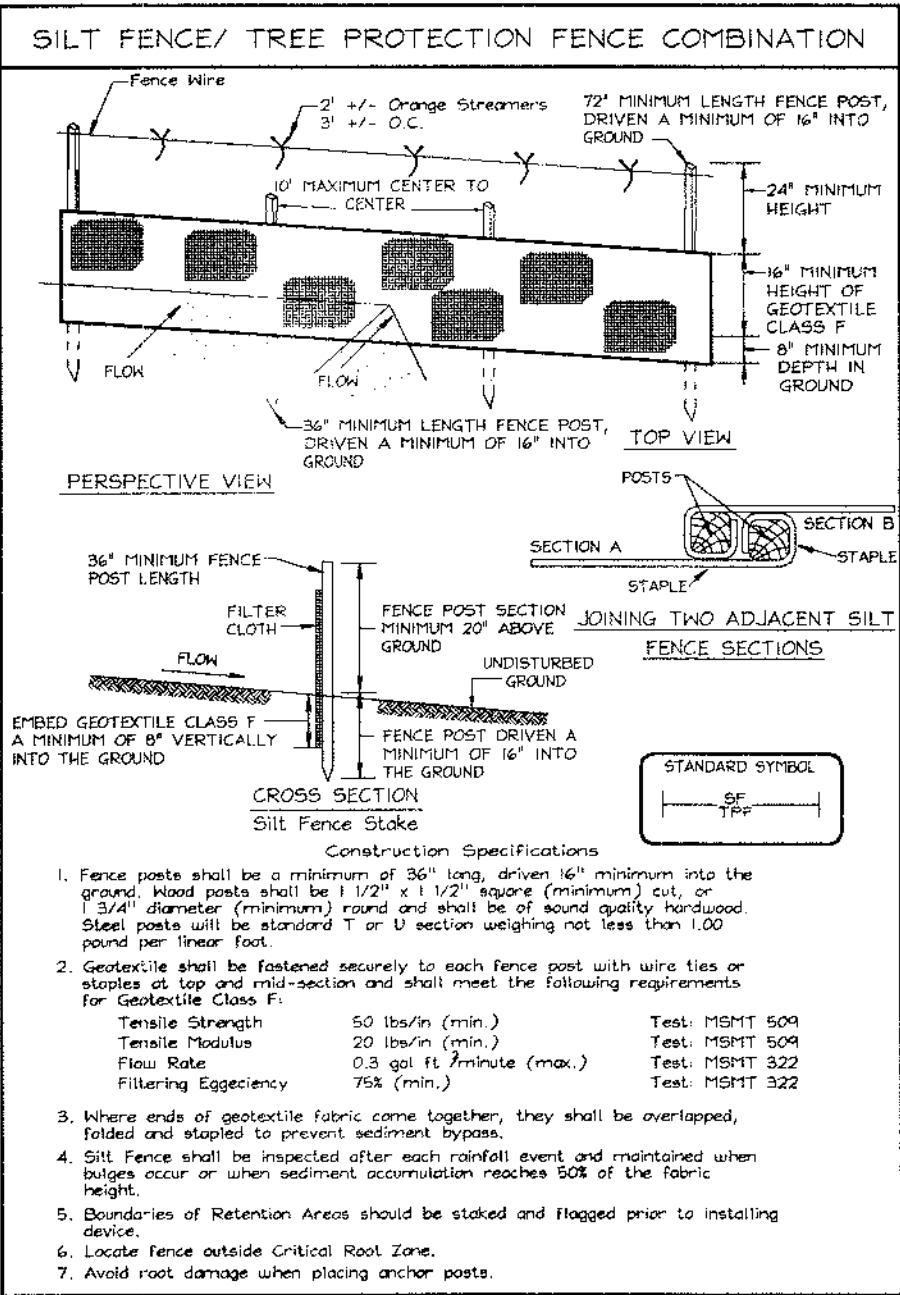
SYMBOL	NAME / DESCRIPTION	SOIL GROUP
CHA	Chester Silt Loam, 0 to 3 percent slopes	B
ChB2	Chester Silt Loam, 3 to 8 percent slopes, moderately eroded	B
ChC3	Chester Silt Loam, 8 to 15 percent slopes, severely eroded	B



**Forest Conservation Narrative**  
 This Forest Conservation Plan was prepared in accordance with the Howard County Forest Conservation Manual. The net tract area is 4.80 acres, with 0.9 acres of forest. There is no 100-year flood plain, wetlands, streams, steep slope or associated buffers on site. Clearing below the forest conservation threshold consists of 0.9 acres. The developer is currently reviewing options for off-site planting of the required 1.8 acres of reforestation or the use of a forest conservation bank.

**Soil Protection Zone Notes**

- The Soil Protection Zone shall include all areas contained inside the Limit of Disturbance.
- Where possible, the Soil Protection Zone shall extend to the drip line of specimen trees. For other groups of trees, the zone shall be the drip line or 40% of the height of the tree, whichever is greater.
- No construction activity is permitted within the Soil Protection Zone.
- If soil has been compacted or grading has taken place in the vicinity of the Soil Protection Zone, root pruning shall be implemented per Root Pruning detail, shown on this plan.
- Root pruning shall occur prior to the beginning of construction.
- Where the Soil Protection Zone must encroach inside the Critical Root Zone of a tree, soil disturbance shall be mitigated with vertical mulching, radial trenching, or another method approved by the ERI Forest Conservation Professional.
- Prior to construction, the Limits of Disturbance shall be marked and the ERI Professional shall determine which trees will need preventative treatment or removal.
- Tree maintenance and removal shall be undertaken by a qualified MD Tree Expert to ensure damage to surrounding trees is minimized.
- Brush and limbs removed for construction shall be chipped and spread on the edge of the Soil Protection Zone to a depth of 6 inches. This shall occur outside the Soil Protection Zone where compaction could impact otherwise unprotected Critical Root Zone.



**FOREST CONSERVATION WORKSHEET**

<b>Net Tract Area</b>	<b>Acres</b>
A. Total Tract Area	4.80
B. Area Within 100 Year Floodplain	--
C. Other deductions	--
D. Net Tract Area	4.80
<b>Zoning Use Category: RESIDENTIAL-SUBURBAN</b>	
<b>Land Use Category</b>	
E. Afforestation Minimum (15 % x D)	0.72
F. Conservation Threshold (20 % x D)	0.96
<b>Existing Forest Cover</b>	
G. Existing Forest on Net Tract Area	0.90
H. Forest Area Above Conservation Threshold	0.00
<b>Breakeven Point</b>	
I. Forest Retention Above Threshold with no Mitigation	0.96
J. Clearing Permitted without Mitigation	59
<b>Proposed Forest Clearing</b>	
K. Forest Areas to be Cleared	0.90
L. Forest Areas to be Retained	0
<b>Planting Requirements</b>	
M. Reforestation for Clearing Above Threshold	0
N. Reforestation for Clearing Below the Threshold	1.8
P. Credit for Retention Above Conservation Threshold	0
Q. Total Reforestation Required	1.8
R. Total Afforestation Required	0
S. Total Reforestation and Afforestation Requirement	0

**General Notes:**

- Base sheet provided by FSH Associates.
- All Silt Fence/ Tree Protection Fence Combinations to be trenched per root pruning specification.



**EXPLORATION RESEARCH, INC.**  
 ENVIRONMENTAL CONSULTANTS  
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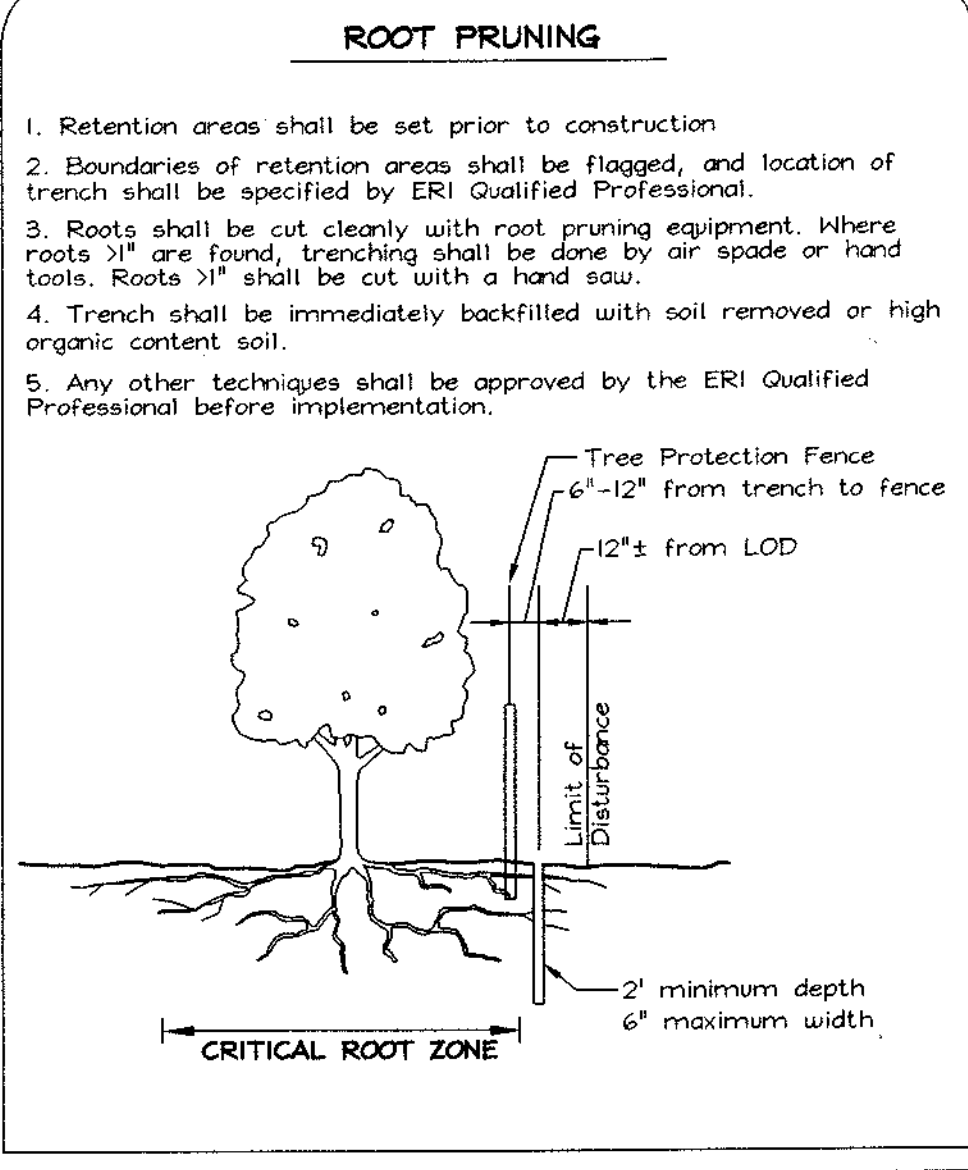
**DEVELOPER**  
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**PRELIMINARY FOREST CONSERVATION PLAN**  
**DUNES VISTAS**  
 LOTS 1 THRU 10 AND  
 OPEN SPACE LOT 11

TAX MAP 16 BLOCK 24 PARCEL 57  
 2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**FSH Associates**  
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DESIGN BY: DH  
 DRAWN BY: DH  
 CHECKED BY: SLH  
 SCALE: 1"=30'  
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 SHEET No. 5 OF 5

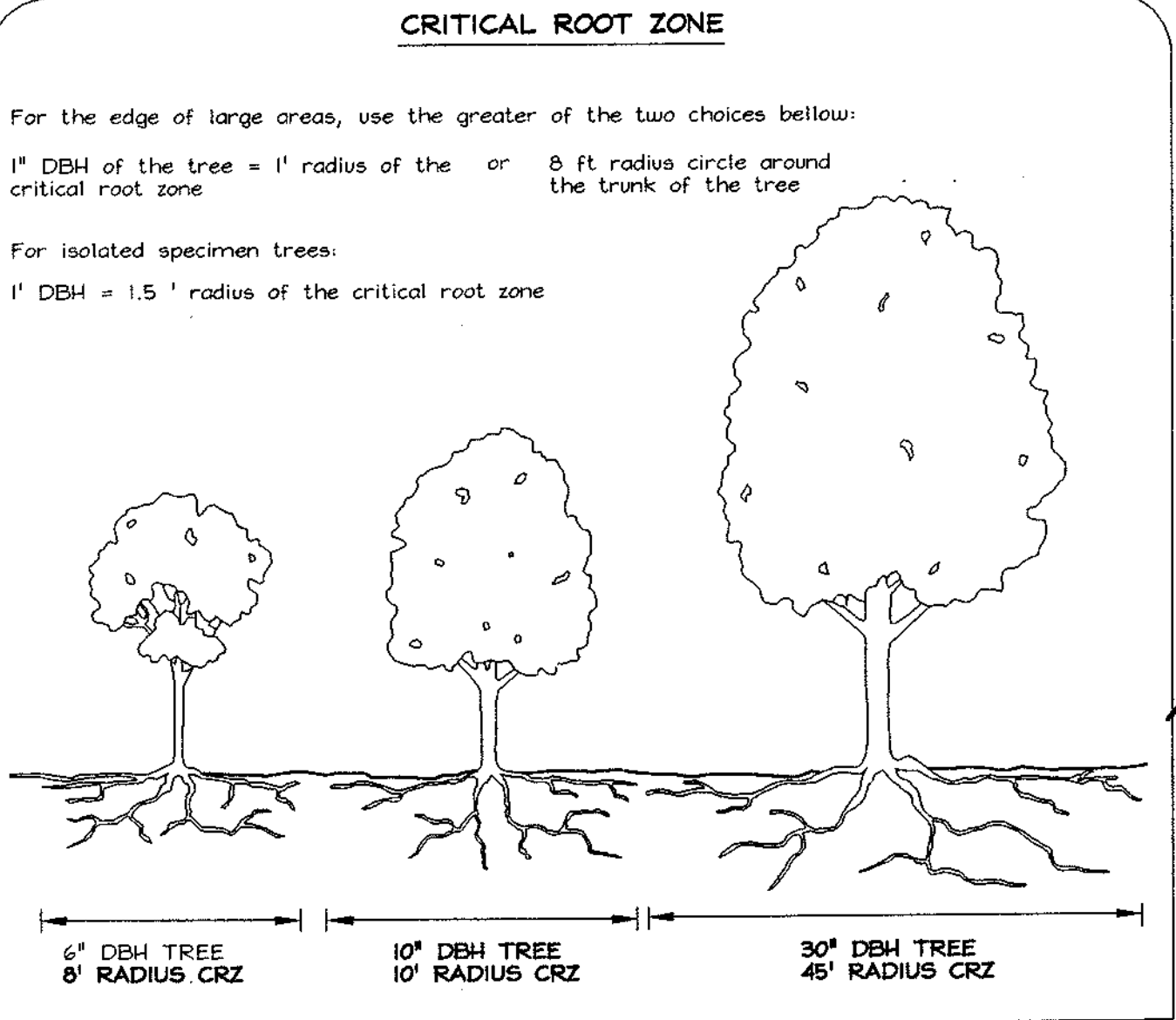


TENTATIVELY APPROVED  
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 HOWARD COUNTY

*John P. Ruff* 11/2/02  
 PLANNING DIRECTOR M. DATE

**SOILS LEGEND**

SYMBOL	NAME / DESCRIPTION	SOIL GROUP
CHA	Chester Silt Loam, 0 to 3 percent slopes	B
CHB2	Chester Silt Loam, 3 to 8 percent slopes, moderately eroded	B
CHC3	Chester Silt Loam, 8 to 15 percent slopes, severely eroded	B



**LEGEND**

Existing Contour	--- 382
Proposed Contour	--- 382
Existing Spot Elevation	+52.53
Direction of Flow	→
Existing Trees to Remain	
Light Poles	○ Post Top
Overhead	○ Overhead
Bollard	● Bollard
Halk Out Basement	○
Proposed Forest Clearing	
Silt Fence/ Tree Protection Fence Combination	SF TPF

