PROPOSED DEVELOPMENT CONDITIONS

SE 2013-HM-012

December 11, 2013

If it is the intent of the Board of Supervisors to approve SE 2013-HM-012 located at 9805 Leesburg Pike, Tax Map 19-1 ((1)) 27 to permit a waiver of the minimum lot width requirement pursuant to Sect. 9-610 of the Fairfax County Zoning Ordinance, the staff recommends that the Board condition the approval by requiring conformance with the following development conditions:

1. This Special Exception is granted for and runs with the land indicated in this application and is not transferable to other land.

2. This Special Exception is granted only for the purpose(s), structure(s) and/or use(s) indicated on the special exception plat approved with the application, as qualified by these development conditions.

3. This Special Exception is subject to the provisions of Article 17, Site Plans, as may be determined by the Director, Department of Public Works and Environmental Services (DPWES). Any plan submitted pursuant to this special exception shall be in substantial conformance with the approved Special Exception Plat (SE Plat) prepared by Pennoni, consisting of seven sheets dated April 23, 2013, and April 12, 2013, as revised through October 8, 2013, and these conditions. Minor modifications to the approved special exception may be permitted pursuant to Par. 4 of Sect. 9-004 of the Zoning Ordinance.

4. At the time of record plat approval, the applicant shall contribute $2,679 to the Fairfax County Park Authority for the provision of recreational facilities in the vicinity of the application property.

5. The proposed dwelling unit on Lot 1 shall be constructed to achieve qualification in accordance with ENERGY STAR® for Homes or certification in accordance with the National Green Building Standard (NGBS) using the ENERGY STAR® Qualified Homes path for energy performance, as demonstrated through documentation submitted to the Environment and Development review Branch of the Department of Planning and Zoning (DPZ) from a home energy rater certified through the Home Innovation Research Labs that demonstrates that the dwelling unit has attained the certification prior to the issuance of the Residential Use Permit (RUP). As an alternative, the new home shall be constructed to achieve certification in accordance with the Earth Craft House Program as demonstrated through documentation provided to DPWES and DPZ prior to the issuance of the RUP.

6. The applicant shall adhere to appropriate asbestos soil containment standards as recommended and administered by the Occupational Safety and Health Administration (OSHA) prior to commencing construction.

7. Stormwater Management

    a. Prior to approval of the record plat, the applicant shall conduct a geotechnical investigation to the satisfaction of DPWES to demonstrate that the proposed detention and Best Management Practices (BMP) facilities shown on the SE Plat are feasible and that detention requirements will be met pursuant to the Public Facilities Manual (PFM).

    b. Prior to approval of the record plat, the applicant shall demonstrate how BMP measures will be provided to the satisfaction of DPWES.

    c. Prior to approval of the record plat, the applicant shall construct the bioretention facility on Lot 2.

    d. Prior to approval of the grading plan, adequate outfall shall be demonstrated in accordance with the PFM, as determined by DPWES.

    e. If a modification of the PFM to permit the proposed facilities on individual lots as shown on the SE Plat is not granted by DPWES and facilities that are in substantial conformance with the SE Plat cannot be provided, then a Special Exception Amendment (SEA) shall be filed to provide water quantity and quality control measures in accordance with the PFM as determined by DPWES. Prior to record plat approval, residential covenants shall be recorded in the County Land Records which disclose to the existing and all subsequent property owners the maintenance obligations of the bioretention facilities.

8. Tree Preservation and Landscaping

    a. <u>Tree Preservation Plan</u>: For the purposes of maximizing the preservation of trees in tree save areas shown on Special Exception Plat, the Applicant shall prepare a tree preservation plan. The Applicant shall contract with a certified arborist or registered consulting arborist (the “Project Arborist”) to prepare a tree preservation plan to be submitted as part of the first site plan submittal and subsequent site plan submissions. The tree preservation plan shall be reviewed and approved by the Urban Forest Management Division (UFMD). The tree preservation plan shall seek to preserve the trees identified on the SE Plat for preservation. The tree preservation plan shall provide a tree inventory which includes the location, species, size, crown spread and condition rating percent of all trees 12 inches or greater in diameter, measured 4.5 feet from the ground

and located within twenty-five feet of the proposed limits of clearing and grading, within the undisturbed area and within 10 feet of the limits of clearing and grading in the disturbed area as depicted in PFM Plate 1A-12. The condition analysis shall be prepared using methods outlined in the latest edition of the Guide for Plant Appraisal. Specific tree preservation activities designed to maximize the survivability of trees designated for preservation shall be incorporated into the tree preservation plan. Activities should include, but are not limited to, crown pruning, root pruning, mulching and fertilization.

b. Limits of Clearing and Grading: Clearing, grading and construction shall conform to the limits of clearing and grading as shown on the SE Plat, subject to the installation of necessary utility lines and other required site improvements, all of which shall be installed in the least disruptive manner possible, considering cost and engineering, as determined in accordance with the approved plans.

c. Tree Preservation Walk-Through: The Applicant shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree preservation walk-through meeting, the Project Arborist shall walk the limits of clearing and grading with a UFMD representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw, and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump-grinding machine in a manner causing as little disturbance as possible to adjacent trees and associated understory vegetation and soil conditions.

d. Tree Preservation Fencing: All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fencing. Tree protection fencing, consisting of four foot high, 14 gauge welded wire attached to six foot steel posts driven 18 inches into the ground and placed no farther than ten feet apart or super silt fence, to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees, shall be placed at the limits of clearing and grading as shown on the erosion and sedimentary control sheets in all areas. The tree protection fencing shall be installed after the tree preservation walk-through meeting but prior to the performance of any clearing and grading activities on the site. Prior to the commencement of any clearing or grading on the site,

the Project Arborist shall verify in writing that the tree protection fencing has been properly installed.

e. Root Pruning and Mulching: The Applicant shall (1) root prune roots one inch in diameter or larger of trees to be preserved that may be damaged during clearing, demolition, grading, utility installation and/or the installation of retaining walls; and (2) mulch to a minimum depth of 3 inches areas within 15 feet of the limits of clearing and grading and within the critical root zones of trees to be preserved. Areas that will be root pruned and mulched shall be clearly identified on the Tree Preservation Plan. All treatments for such trees and vegetation shall be clearly specified, labeled, and detailed on the erosion and sediment control sheets of the grading plan submission. The details for these treatments shall be included in the Tree Preservation Plan and shall be subject to the review and approved of UFMD.

All root pruning and mulching work shall be performed in a manner that protects adjacent trees and vegetation that are required to be preserved and may include, but not be limited to, the following:

Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches, or as specified by UFMD at the pre-construction meeting.

- Root pruning shall take place prior to installation of tree protections fence.
- Root pruning shall not sever or significantly damage structural or compression roots in a manner that may compromise the structural integrity of trees or the ability of the root system to provide anchorage for the above ground portions of the trees.
- Root pruning shall be conducted with the on-site supervision of the Project Arborist.
- Tree protection fencing shall be installed immediately after root pruning, and shall be positioned directly in the root pruning trench and backfilled for stability, or just outside the trench within the disturbed area.
- Immediately after the Phase II erosion & sedimentary control activities are complete, mulch shall be applied at a depth of 3 inches within designated areas. Mulch may be placed within tree preservation areas at points designated by the Project Arborist to minimize impacts to existing vegetation. Motorized equipment may be used to reach over tree protection fence to place mulch at designated points. Mulch shall be spread by hand within trees preservation areas.
- Mulch shall consist of wood chips pine bark mulch. Hay or straw mulch shall not be used within tree preservation areas.
- UFMD shall be informed in writing (email is acceptable) when all root pruning and tree protection fence installation is complete.

f. Tree Protection Signage: The Applicant shall provide signs that identify and help protect all areas to be left undisturbed. These signs will be highly visible, posted in appropriate locations along the limits of clearing and grading, and attached to the tree protection fencing. Under no circumstances will the signs be nailed or in any manner attached to the trees or vegetation within the areas to left undisturbed.

g. Site Monitoring: During the installation of tree protection fencing, performance of root pruning and during any clearing or removal of trees, vegetation, or structures, or other activities in or adjacent to tree preservation areas prior to the approval of Phase I of the Erosion and Sediment Control Plan, the Project Arborist shall be present to effectively monitor the process and ensure that the activities are conducted in accordance with the proffers and as approved by the UFMD. Following approval of Phase I of the Erosion and Sediment Control Plan the Project Arborist shall actively monitor the Property to ensure that protection measures are maintained and functioning as intended and activities are conducted in accordance with the proffers and as approved by the UFMD. The monitoring schedule shall be described and detailed in the Tree Preservation Plan and shall be reviewed and approved in writing by UFMD. Inappropriate activities such as storage of construction materials, dumping of construction debris, and traffic by construction personnel shall not occur within these areas. Damage to understory plant materials, leaf litter and soil conditions resulting from activities not approved in writing by UFMD shall be restored to the satisfaction of UFMD.

h. Tree Value Determination: The Project Arborist shall determine the monetary value of each tree on the Property within fifteen feet of the clearing limits of clearing and grading and 15 inches in diameter and larger shown to be preserved in the Tree Inventory. The monetary value (herein, the “Tree Value”) shall be determined using the Trunk Formula Method contained in the 9th edition of the Guide for Plant Appraisal published by the International Society of Arboriculture, and shall be subject to review and approval by UFMD. The Location Factor of the Trunk Formula Method shall be based on projected post-development Contribution and Placements ratings. The Site rating component shall be equal to at least 80%. The combined total of monetary values identified in the approved grading plan for trees designated to be preserved shall serve as a baseline sum in determining the amount of the Tree Bond, as specified below.

i. Tree Bond: At the time of grading plan approval, the Applicant shall post both a letter of credit payable to the County of Fairfax and a cash deposit (herein, the “Tree Bond”) to ensure preservation and/or replacement of the trees within fifteen feet of the clearing limits of clearing and grading and 15

inches in diameter and larger shown to be preserved on the Tree Preservation Plan (herein, the "bonded trees"). The sum of the letter of credit shall be equal to one half (50%) of the total monetary value of the bonded trees and the cash deposit shall equal to 33% of the amount of the letter of credit. The Tree Bond letter of credit shall be prepared in a manner acceptable to the County Attorney naming the County as beneficiary to ensure the preservation, conservation, replacement, removal and/or treatment of the trees identified in the Tree Preservation Plan, and to ensure the undistributed areas identified on the SE Plat.

The cash deposit shall be held by the County as a cash reserve that can be used by the County to ensure the preservation, conservation, replacement, removal and/or treatment of the trees identified in the Tree Preservation Plan and as approved on the grading plan, and for work relating to the protection and management of undistributed areas identified on the SE Plat.

At any time prior to final bond release, should any bonded tree die, be removed, or severely decline as determined by UFMD, the Applicant shall replace such trees at its expense. Replacement trees shall be of equal size, species and/or canopy cover as approved by UFM. In addition to this replacement obligation, the Applicant shall also make a payment equal to the Tree Value of any bonded tree that is dead, severely declining, or improperly removed. This payment shall be paid to the Tree Preservation and Planting Fund, established by the County for the furtherance of tree conservation objectives.

At the time of approval of the RUP, the Applicant shall be entitled to request a release of any monies remaining in the cash deposit and a reduction in the letter of credit to an amount up to 20% of the total amounts originally committed.

Any cash or funds remaining in the Tree Bond shall be released two years from the date of the project's final bond-release, or sooner, if approved in writing by UFMD.

j. Tree Preservation Easement: At the time of recordation of the record plat, the Applicant shall record a Tree Preservation Easement running to the benefit both Fairfax County, in a form reviewed by UFMD and approved by the County Attorney, over the shaded tree save areas shown on Sheet 3A of the Special Exception Plat in the front yards of Lots 1 and 2 and between the existing and proposed dwellings, as generally shown in Attachment 1. The final location of the tree preservation easement(s) shall be determined at the time of record plat approval in consultation with the Urban Forest Management Division. The Tree Preservation Easement shall prohibit removal of any trees in the easement areas except those

which are dead, dying, diseased, or hazardous as determined by UFMD, or as necessary for construction of an accessory use or possible additions to the proposed dwelling and existing dwellings shown on the grading plan. The deed for each lot shall contain clear language delineating the Tree Preservation Easement and the restrictions within those areas. The property plats shall also delineate and label the Tree Preservation Easement on each lot.

The Applicant shall convey forested area management information prepared to satisfy Tree Preservation Plan requirements to the purchaser of each lot at the time ownership of the lot is transferred. Information shall include data collected for the Tree Inventory, updated to note completion of tree preservation activities required by the Tree Preservation Plan approved with the grading plan, and any additional work performed for preservation and/or maintenance in Tree Preservation Easements.

k. Proposed Landscaping: The applicant shall provide 18 trees and 12 shrubs as described on the SE Plat. The final location and species for these plantings shall be determined at the time of grading plan review and shall be subject to review and approval by UFMD. All plant materials to be installed shall be non-invasive species.

9. Irrespective of what is shown on the Existing Tree Inventory map on Sheet 3A of the SE Plat, tree #85 shall be preserved.

10. The applicant shall include a statement in the deed of conveyance for proposed Lots 1 and 2 that states that both properties are governed by a Special Exception Plat.

The above proposed conditions are staff recommendations and do not reflect the position of the Board of Supervisors unless and until adopted by that Board.

This approval, contingent on the above noted conditions, shall not relieve the applicant from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The applicant shall be himself responsible for obtaining the required Residential Use Permit through established procedures, and this Special Exception shall not be valid until this has been accomplished.

Pursuant to Section 9-015 of the Zoning Ordinance, this special exception shall automatically expire, without notice, thirty (30) months after the date of approval unless the use has been established or construction has commenced and been diligently prosecuted. The Board of Supervisors may grant additional time to establish the use or to commence construction if a written request for additional time is filed with the Zoning Administrator prior to the date of expiration of the special exception. The request must specify the amount of additional time requested, the basis for the amount of time requested and an explanation of why additional time is required.

A	Tree Preservation Target and Statement	
A1	Place the Tree Preservation Target calculations and statement here preceding the 10-year tree canopy calculations see § 12-0507.2 for list of required elements and worksheet	
B	**Tree Canopy Requirement**	
B1	Identify gross site area =	2.45 AC
B2	Subtract area dedicated to parks, road frontage	0.00 AC
B3	Subtract area of exemptions =	0.00 AC
B4	Adjusted gross site area (B1 – B2) =	2.45 AC
B5	Identify site's zoning and/or use	R-1
B6	Percentage of 10-year tree canopy required =	30 %
B7	Area of 10-year tree canopy required (B4 x B6) =	0.73 AC
B8	Modification of 10-year Tree Canopy Requirements requested?	NO
B9	If B8 is yes, then list plan sheet where modification request is located	N/A
C	**Tree Preservation**	
C1	Tree Preservation Target Area =	0.60 AC
C2	Total canopy area meeting standards of § 12-0200 =	1.26 AC
C3	C2 x 1.25 =	1.58 AC
C4	Total canopy area provided by unique or valuable forest or woodland communities =	0.00 AC
C5	C4 x 1.5 =	0.00 AC
C6	Total of canopy area provided by "Heritage,"'Memorial," "Specimen," or "Street" trees =	0.00 AC
C7	C6 x 1.5 to 3.0 =	0.00 AC
C8	Canopy area of trees within Resource Protection Areas and 100-year floodplains =	0.00 AC
C9	C8 x 1.0 =	0.00 AC
C10	Total of C3, C5, C7 and C9 =	1.58 AC

Table 12.3 Tree Preservation Target Calculations and Statement		
A	Pre-development area of existing tree canopy (from Existing Vegetation Map) =	2.00
B	Percentage of gross site area covered by existing tree canopy =	81.64
C	Percentage of 10-year tree canopy required for site (see Table 12.4) =	30.00
D	Percentage of the 10-year tree canopy requirement that should be met through tree preservation =	24.49
E	Proposed percentage of canopy requirement that will be met through tree preservation=	64.49
F	Has the Tree Preservation Target minimum been met?	YES

NOTE:
THIS SHEET TO BE USED FOR CONCEPT TREE PRESERVATION AND CONCEPT CALCULATIONS ONLY.

THE FINAL TREE CONSERVATION PLAN WILL BE PREPARED WITH THE SP PERMITTING DRAWINGS.

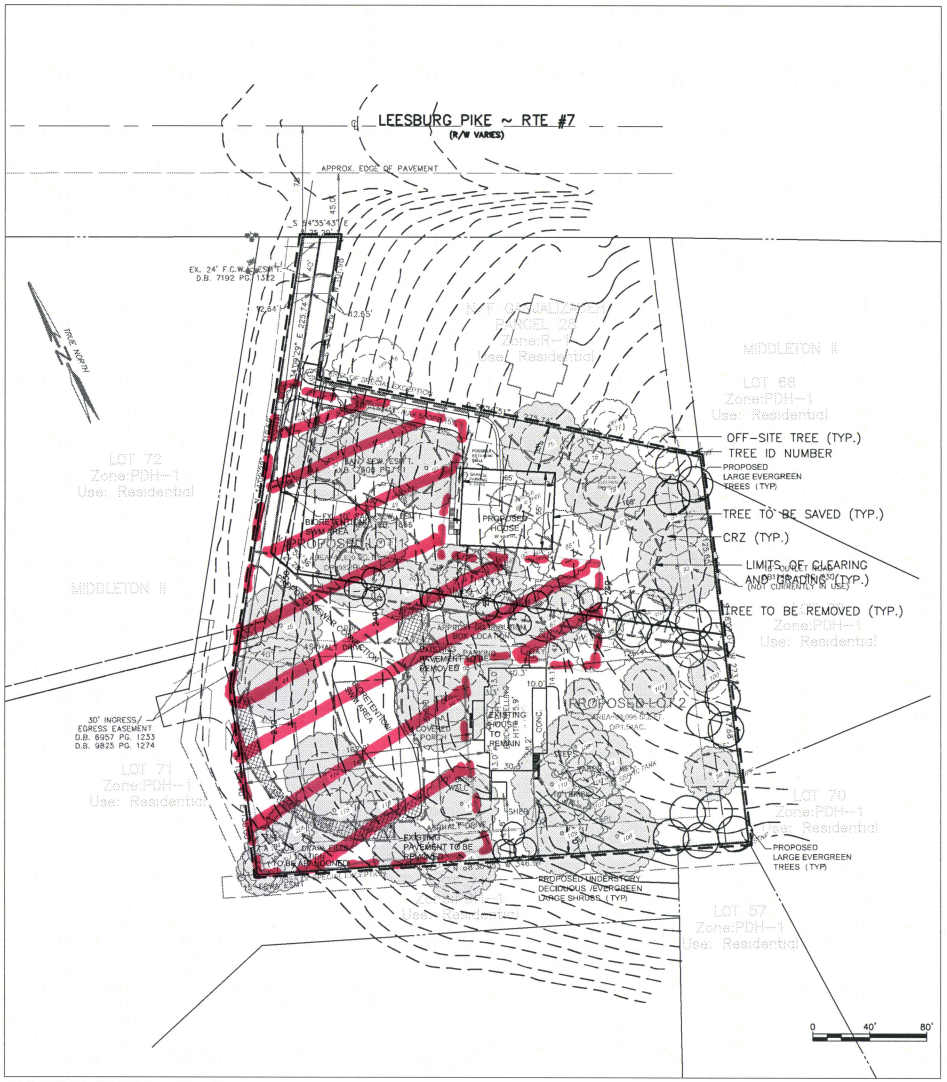
THE TREES HAVE BEEN FIELD LOCATED BY PENNONI ASSOCIATES FOR THE PURPOSES OF ESTABLISHING THE LIMITS OF CLEARING AND GRADING.

PROPOSED PLANT MATERIAL :
ADDITIONAL PLANTINGS HAVE BEEN PROPOSED ON LOT 1 & 2.

DUE TO THE LACK OF EVERGREEN TREES WE HAVE PROPOSED A TOTAL OF 18 LARGE EVERGREEN TREES PLANTED BETWEEN THE TWO LOTS- PRIMARILY ON THE PERIMETER

DUE TO THE ESTABLISHED EXISTING DECIDUOUS CANOPY WE HAVE PROPOSED A TOTAL OF 12 LARGE UNDERSTORY SHRUBS. THESE CAN BE A MIX OF DECIDUOUS AND EVERGREEN.

THE FINAL PLACEMENT AND SPECIES DETERMINATIONS WILL BE DETERMINED WITH THE FINAL ENGINEERING PLAN.



EXISTING TREE INVENTORY

TREE INVENTORY ANALYSIS					
TREE	DBH"	BOTANICAL	COMMON NAME	CONDITION	RECOMMENDATION
44	45	Quercus	Oak	Fair to Good	Save This Tree
45	36	Quercus	Oak	Fair to Good	Save This Tree
46	36	Quercus	Oak	Fair to Good	Save This Tree
47	30	Quercus	Oak	Fair to Good	Save This Tree
48	21	Quercus	Oak	Fair to Good	Save This Tree
49	***26***	***Quercus***	***Oak***	***Hazardous, Dead***	***Remove***
50	36	Quercus	Oak	Fair to Good	Save This Tree
51	30	Quercus	Oak	Fair to Good	Save This Tree
52	27	Quercus	Oak	Fair to Good	Save This Tree
53	21	Quercus	Oak	Fair to Good	***Remove***
54	27	Quercus	Oak	Fair to Good	***Remove***
73	33	Quercus	Oak	Fair to Good	Save This Tree
74	***30***	***Quercus***	***Oak***	***Stump***	***Remove***
75	30	Quercus	Oak	Fair to Good	Save This Tree
76	24	Quercus	Oak	Fair to Good	Save This Tree
77	21	Quercus	Oak	Fair to Good	Save This Tree
78	15	Carya	Hickory	Fair to Good	Save This Tree
79	30	Quercus	Oak	Fair to Good	Save This Tree
80	***36***	***Quercus***	***Oak***	***Stump***	***Remove***
81	***30***	***Quercus***	***Oak***	***Hazardous, Dead***	***Remove***
82	39	Quercus	Oak	Fair to Good	Save This Tree
83	***18***	***Quercus***	***Oak***	***Stump***	***Remove***
84	***36***	***Quercus***	***Oak***	***Hazardous, Dead***	***Remove***
85	30	Quercus	Oak	Fair to Good	Save This Tree
86	21	Quercus	Oak	Fair to Good	Save This Tree
87	27	Quercus	Oak	Fair to Good	Save This Tree
88	***27***	***Quercus***	***Oak***	***Fair to Good***	***Remove for building***
89	***15***	***Carya***	***Hickory***	***Fair to Good***	***Remove for building***
90	***27***	***Quercus***	***Oak***	***Fair to Good***	***Remove for building***
91	24	Quercus	Oak	Fair to Good	Save This Tree
92	21	Quercus	Oak	Fair to Good	Save This Tree
93	24	Quercus	Oak	Fair to Good	Save This Tree
94	24	Carya	Hickory	Fair to Good	Save This Tree
95	33	Quercus	Oak	Fair to Good	Save This Tree
96	36	Quercus	Oak	Fair to Good	Save This Tree
99	27	Quercus	Oak	Fair to Good	Save This Tree
100	36	Quercus	Oak	Fair to Good	Save This Tree
101	***24***	***Carya***	***Hickory***	***Hazardous, Dead***	***Remove***
102	15	Quercus	Oak	Fair to Good	Save This Tree
103	30	Quercus	Oak	Fair to Good	Save This Tree
104	30	Quercus	Oak	Fair to Good	Save This Tree
106	21	Quercus	Oak	Fair to Good	Save This Tree
107	24	Quercus	Oak	Fair to Good	Save This Tree
108	45	Quercus	Oak	Fair to Good	Save This Tree
109	30	Quercus	Oak	Fair to Good	Save This Tree
110	30	Quercus	Oak	Fair to Good	Save This Tree
112	27	Quercus	Oak	Fair to Good	Save This Tree
113	18	Carya	Hickory	Fair to Good	Save This Tree
114	30	Quercus	Oak	Fair to Good	Save This Tree
115	30	Quercus	Oak	Fair to Good	Save This Tree
116	48	Carya	Hickory	Twin, Fair to Good	Save This Tree
117	10	Quercus	Oak	Fair to Good	Save This Tree
202	24	Quercus	Oak	Fair to Good	Save This Tree
203	28	Quercus	Oak	Fair to Good	Save This Tree
204	16	Quercus	Oak	Fair to Good	Save This Tree
205	***24***	***Quercus***	***Oak***	***Hazardous, Dead***	***Remove***
206	16	Carya	Hickory	Fair to Good	Save This Tree

Pennoni Associates Inc.
Engineers • Surveyors • Planners • Landscape Architects

208 Church Street, SE
Leesburg, VA 20175 – 703.777.3616

Pennoni

DATE	NO.	REVISIONS	BY

ALL DIMENSIONS MUST BE VERIFIED BY CONTRACTOR AND OWNER MUST BE NOTIFIED OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK

COMMONWEALTH OF VIRGINIA
MARK W. THOMAS
Cert. No. 916
10-08-2013
LANDSCAPE ARCHITECT

SPECIAL EXCEPTION
9805 LEESBURG PIKE
TAX MAP 19-1((1)) PARCEL 27
TREE LOCATIONS AND CALCULATIONS
BLUE OCEAN DEVELOPMENT INC.
FAIRFAX COUNTY
HUNTER MILL DISTRICT

ALL DOCUMENTS PREPARED BY PENNONI ASSOCIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON THE EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY PENNONI ASSOCIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO PENNONI ASSOCIATE; AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS PENNONI ASSOCIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

NORTH
PROJECT NO. KICA1301
SHEET 3 OF 6

SCALE	DATE
1"=40'	2013-04-12
DRAWN BY: SME	APPROVED: MWT

DRAWING NO. 3A_SHEET TREE CALCS

PLOTTED: ------ BY: ELT, HHS PLOTSTYLE: PENNONI ACSS.STB, PROJECT STATUS: ----

ATTACHMENT 1