

N/A 37 LENOX ST

Cherry Chase Village Historic District



LANDSCAPE ARCHITECTS LLC

TRANSMITTAL

Date: October 4, 2006

Via: Messenger

Attention: Tania Tully

Company: Montgomery County HPC

Phone number: 301.563.3400

From: Patrick Carter 

Cc: Jay Powell, Elissa Leonard, Stephen Muse, Todd Brown

Project: Powell Residence – 37 W Lenox St.

Description	Qty.	Pages	
Reduced Site Plan and Site Sections/Elevations	2	5	



LANDSCAPE ARCHITECTS LLC

TRANSMITTAL

Date: October 11, 2006

Via: Messenger

Attention: Tania Georgiou Tully

Company: Montgomery County Historic Preservation Commission  
1109 Spring Street, Suite 801  
Silver Spring, MD 20910

Phone number: 301-563-3400

From: Patrick Carter

Cc: Stephen Muse, Jay & Elissa Powell, Todd Brown

Project: Powell Residence

Description	Qty.	Pages	
Village Approved Tree Preservation Plan	1	2	

Robert Rapenz

PO Box 7548

SS 20910

**HAWP APPLICATION: MAILING ADDRESSES FOR NOTIFYING**  
[Owner, Owner's Agent, Adjacent and Confronting Property Owners]

<b>Owner's mailing address</b>	<b>Owner's Agent's mailing address</b>
Jerome H. Powell & Elissa A. Leonard 37 West Lenox Street Chevy Chase, MD 20815-4208	Muse Architects Attn: Stephen Muse 7401 Wisconsin Avenue Bethesda, MD 20814
<b>Adjacent and confronting Property Owners mailing addresses</b>	
Scott W. Muller 20 Magnolia Parkway Chevy Chase, MD 20815-4205	Jerome H. Powell & Elissa A. Leonard 5921 Cedar Parkway Chevy Chase, MD 20815-4250
William C. Holder 45 Goodwin Road Princeton, MA 01541	Donna J. Holverson 35 West Lenox Street Chevy Chase, MD 20815
Cary M. Euwer, Jr. 11111 Sunset Hills Road Suite 111 Reston, VA 20190-5339	Chevy Chase Club Luke O'Boyle (General Mgr.) 6100 Connecticut Avenue & Bradley Lane Chevy Chase, MD 20815

<p>Chevy Chase Village Geoffrey B. Biddle (Gen. Mgr.) 5906 Connecticut Avenue Chevy Chase, MD 20815</p>	
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(No. 89) Note Photo 92657

4.52 N00189N1N KNN. 2 8573 872557



## Tully, Tania

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**From:** Tully, Tania  
**Sent:** Monday, August 21, 2006 3:32 PM  
**To:** 'elissa.leonard@gmail.com'

Ms. Leonard-

Thank you for the "email." The email is correct, perhaps the images were too large. Anyway, try the University of Maryland for earlier Sanborn maps. I found this reference to their existence online.

<http://www.lib.umd.edu/RARE/MarylandCollection/MDResourceGuide/washington.html>

1916, vol. 3, reel 13. Includes key map to edition. Includes Chevy Chase and Takoma Park, MD.

1927, vol. 5, reel 14. Includes Chevy Chase, Bethesda, Somerset Heights, Friendship Heights and Glen Echo Park, MD. Includes key map to edition. Suburban volume of Montgomery County.

Tania Georgiou Tully  
Historic Preservation Planner  
Montgomery County Department of Park and Planning  
8787 Georgia Avenue  
Silver Spring, MD 20910  
301-563-3400  
301-563-3412 (fax)  
[www.mc-mncppc.org](http://www.mc-mncppc.org)

Dear Ms Tully,

I'm submitting this  
hard copy because I think  
the email to you bounced  
back.

Thanks again for your  
work on our restoration of  
37 West Lenox Street.

Sincerely,  
Elisa Leonard Powell  
301-656-3760



Elissa Leonard &lt;elissa.leonard@gmail.com&gt;

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## 37 West Lenox, Chevy Chase

4 messages

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**Elissa Leonard** <elissa.leonard@gmail.com>

Mon, Aug 21, 2006 at 9:40 AM

To: Tania.Tully@mncppc-mc.org, geoff.biddle@montgomerycountymd.gov

Cc: Stephen Muse &lt;smuse@musearchitects.com&gt;, Richard Arentz &lt;arentz@arentzdc.com&gt;

Dear Ms. Tully,

Jay and I meant to introduce ourselves to you at the meeting last Wednesday night. We thank you for your very thorough report about 37 West Lenox Street. We continue to be very excited about taking the house back to its former shingle and stucco days. As Stephen Muse said in the hearing, we will keep the roof line as is and we will have him change the plans accordingly.

I'm looking for the appropriate Sanborn map regarding the addition of the current garage and driveway. These non-historic garish additions must be removed in order for us to restore the house and garden. I know you are comfortable with the fact that the garage was not part of the 1903 house. The Model T wasn't even invented yet! It wasn't until the 1920s and 30s that integrated garages were part of the architecture of Chevy Chase houses. Obviously our garage is not an integral part of the house; it was tacked on sometime after cars were introduced. We will make sure to provide the corroborating evidence for you and the Commissioners.

Bill Dunn, the Village arborist, approved the removal of the Norway maple. It is a diseased, damaged, invasive tree and the Village permits it to be removed. Because we share ownership of the tree with our abutting neighbors, Donna Holverson and Brian Smith, we will work with them on mutually agreeable replacement plantings. We have applied for permits to remove only two mature trees on the property (a dying oak in the back and the hollow Norway maple to the side.) Both trees are diseased, damaged and dangerous and the Village has approved their removal. The actual permit for the Norway Maple is now awaiting a signature from the Holverson/Smiths. My understanding is that they gave the arborist their verbal agreement but the Village would like to have it in writing. In any case, the discredited tree has no bearing on our renovation.

Geoff Biddle, the Village Manager, has determined that our plans for the new driveway are fine. He even sent the police chief to look at the proposed curb cut and assures me that the location is safe and legal. We are designing the driveway to be as discrete, attractive, appropriate and "pervious" as possible. While I'm hoping for a grass and brick carriage road look to it, our landscape architect Richard Arentz is looking into all the alternatives. The driveway will go in a corridor of lawn (photo attached) and will not disturb any mature trees or landscaping and therefore is subject to lenient scrutiny by the HPC, as stated in your report. It will be screened on the east with lush plantings.

The hearing was a learning experience for us! We had no idea until the morning of the hearing that Brian Smith and Donna Holverson would contest our driveway. We have been their friendly neighbors for 8 years and have been discussing our plans with them ever since we bought the house. They did not call us with their concerns, but instead wrote to the Commission making inflammatory and spurious claims that we would hurt trees, cause safety problems and devalue their property. These claims are groundless and disingenuous. Brian and Donna's own renovation greatly expanded their footprint, covered their front and rear yards with stone, and built a 6 ft retaining wall that looms, barren of landscaping, over our garden (photo attached.)

On the other hand, we will continue to provide ample green screen between the two houses.

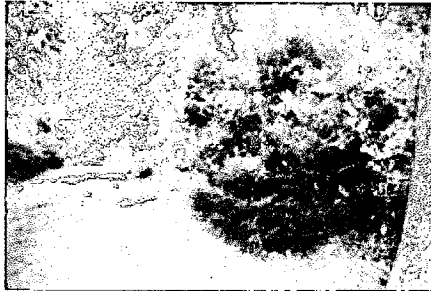
We felt blindsided by Brian and Donna at the meeting and did not believe that a preliminary consultation was the time for point by point counter-arguments. Please be assured that everything we propose to do to the property strictly follows the codes and rules of Montgomery County, the HPC and the Village of Chevy Chase.

Thank you again for your thoughtful and helpful work on our proposed restoration of 37 West Lenox Street.

Elissa Leonard and Jay Powell  
301-656-3760

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**2 attachments**



**corridor of lawn where new driveway will go.JPG**  
6057K



**6 ft retaining wall built by Holverson:Smith. 4 ft from our property line.JPG**  
3966K

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Mail Delivery Subsystem <MAILER-DAEMON@mcg-smtp08.mcgov.org> Mon, Aug 21, 2006 at 9:41 AM  
To: elissa.leonard@gmail.com



The original message was received at Mon, 21 Aug 2006 09:40:58 -0400 from [ug-out-1314.google.com](mailto:ug-out-1314.google.com) [66.249.92.174]

----- The following addresses had permanent fatal errors -----  
<[geoff.biddle@montgomerycountymd.gov](mailto:geoff.biddle@montgomerycountymd.gov)>  
(reason: 552 5.3.4 Message size exceeds fixed maximum message size)

----- Transcript of session follows -----  
... while talking to [172.29.21.96]:  
>>> MAIL From:<[elissa.leonard@gmail.com](mailto:elissa.leonard@gmail.com)> SIZE=13869012  
<<< 552 5.3.4 Message size exceeds fixed maximum message size  
554 5.0.0 Service unavailable

Final-Recipient: RFC822; [geoff.biddle@montgomerycountymd.gov](mailto:geoff.biddle@montgomerycountymd.gov)  
Action: failed  
Status: 5.3.4  
Diagnostic-Code: SMTP; 552 5.3.4 Message size exceeds fixed maximum message size  
Last-Attempt-Date: Mon, 21 Aug 2006 09:41:52 -0400

 noname  
2K

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**Mail Delivery Subsystem** <[mailer-daemon@googlemail.com](mailto:mailer-daemon@googlemail.com)>  
To: [elissa.leonard@gmail.com](mailto:elissa.leonard@gmail.com)

Mon, Aug 21, 2006 at 9:43 AM

This is an automatically generated Delivery Status Notification

Delivery to the following recipient failed permanently:

[Tania.Tully@mncppc-mc.org](mailto:Tania.Tully@mncppc-mc.org)

Technical details of permanent failure:  
PERM\_FAILURE: SMTP Error (state 12): 552 4.3.1 Message size exceeds fixed maximum message size

----- Original message -----

Received: by [10.66.244.10](mailto:10.66.244.10) with SMTP id r10mr3641171ugh;  
Mon, 21 Aug 2006 06:40:53 -0700 (PDT)  
Received: by [10.66.233.14](mailto:10.66.233.14) with HTTP; Mon, 21 Aug 2006 06:40:44 -0700 (PDT)  
Message-ID: <[9586545d0608210640o6e801301qace1d815c86cd41c@mail.gmail.com](mailto:9586545d0608210640o6e801301qace1d815c86cd41c@mail.gmail.com)>  
Date: Mon, 21 Aug 2006 09:40:44 -0400  
From: "Elissa Leonard" <[elissa.leonard@gmail.com](mailto:elissa.leonard@gmail.com)>  
To: [Tania.Tully@mncppc-mc.org](mailto:Tania.Tully@mncppc-mc.org), [geoff.biddle@montgomerycountymd.gov](mailto:geoff.biddle@montgomerycountymd.gov)  
Subject: 37 West Lenox, Chevy Chase  
Cc: "Stephen Muse" <[smuse@musearchitects.com](mailto:smuse@musearchitects.com)>, "Richard Arentz" <[rarentz@arentzdc.com](mailto:rarentz@arentzdc.com)>  
MIME-Version: 1.0  
Content-Type: multipart/mixed;  
boundary="-----\_Part\_54512\_18029081.1156167644147"

-----\_Part\_54512\_18029081.1156167644147  
Content-Type: text/plain; charset=ISO-8859-1; format=flowed

Content-Transfer-Encoding: 7bit  
Content-Disposition: inline

Dear Ms. Tully,

Jay and I meant to introduce ourselves to you at the meeting last Wednesday night. We thank you for your very thorough report about 37 West Lenox Street. We continue to be very excited about taking the

----- Message truncated -----

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**Elissa Leonard** <[elissa.leonard@gmail.com](mailto:elissa.leonard@gmail.com)>

**Mon, Aug 21, 2006 at 10:04 AM**

To: "Tania Tully" <[tania.tully@mncppc-mc.org](mailto:tania.tully@mncppc-mc.org)> <[ccv@montgomerycountymd.gov](mailto:ccv@montgomerycountymd.gov)>

----- Forwarded message -----

From: **Elissa Leonard** <[elissa.leonard@gmail.com](mailto:elissa.leonard@gmail.com)>

Date: Aug 21, 2006 9:40 AM

Subject: 37 West Lenox, Chevy Chase

To: [Tania.Tully@mncppc-mc.org](mailto:Tania.Tully@mncppc-mc.org), [geoff.biddle@montgomerycountymd.gov](mailto:geoff.biddle@montgomerycountymd.gov)

Cc: Stephen Muse <[smuse@musearchitects.com](mailto:smuse@musearchitects.com)>, Richard Arentz <[rarentz@arentzdc.com](mailto:rarentz@arentzdc.com)>

[Quoted text hidden]

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**2 attachments**



**corridor of lawn where new driveway will go.JPG**  
6057K



**6 ft retaining wall built by Holverson:Smith. 4 ft from our property line.JPG**  
3966K

## Tully, Tania

---

**From:** Tully, Tania  
**Sent:** Thursday, September 14, 2006 2:40 PM  
**To:** 'Holver5@aol.com'  
**Subject:** RE: hi tania

Donna -

For Sanborn Maps I think your next best bet is the Library of Congress.  
[http://www.loc.gov/rr/ElectronicResources/full\\_description.php?MainID=181](http://www.loc.gov/rr/ElectronicResources/full_description.php?MainID=181)

[http://lib.berkeley.edu/EART/sanbul\\_DC.html#Washington](http://lib.berkeley.edu/EART/sanbul_DC.html#Washington)  
Washington, D.C. v. 3; 1916 - 93 sheets (includes Chevy Chase & Takoma Park, Maryland)  
Washington, D.C. v. 5; 1927 - 99 sheets (Suburban vol. of Montgomery County; includes Bethesda, Chevy Chase, Friendship Heights, Glen Echo Park & Somerset Heights, Maryland)

Or I guess you can buy one here: <http://www.edrnet.com/sanborn.htm>

**Ordering Sanborn™ Maps** The Sanborn Map Company directs requests for historical Sanborn Maps to Environmental Data Resources, Inc. (EDR), which offers maps from the largest and most complete Sanborn Map collection. To order Sanborn Maps, please contact an EDR Account Executive at 1-800-352-0050.

You are articulating your points well so far. Staff and the Commission use the Chevy Chase Village Guidelines in making recommendations and opinions. I've included an excerpt below.

-Tania

### *Chevy Chase Village Historic District Guidelines*

The *Guidelines* break down specific projects into three levels of review - Lenient, Moderate and Strict Scrutiny.

**“Lenient Scrutiny”** means that the emphasis of the review should be on issues of general massing and scale, and compatibility with the surrounding streetscape, and should allow for a very liberal interpretation of preservation rules. Most changes should be permitted unless there are major problems with massing, scale or compatibility.

**“Moderate Scrutiny”** involves a higher standard of review than “lenient scrutiny.” Besides issues of massing, scale and compatibility, preserving the integrity of the resource is taken into account. Alterations should be designed so that the altered structure still contributes to the district. Use of compatible new materials, rather than the original building materials, should be permitted. Planned changes should be compatible with the structure’s existing design, but should not be required to replicate its architectural style.

**“Strict Scrutiny”** means that the planned changes should be reviewed to insure that the integrity of the significant exterior architectural or landscaping features and details is not compromised. However, strict scrutiny should not be “strict in theory but fatal in fact” i.e. it does not mean that there can be no changes but simply that the proposed changes should be reviewed with extra care.

HAWP applications for exterior alterations, changes, and/or additions to non-contributing/out-of-period resources should receive the most lenient level of review. Most alterations and additions should be approved as a matter of course. The only exceptions would be major additions and alterations to the scale and massing of the structure, which affect the surrounding streetscape and/or landscape and could impair the character of the district as a whole.

- Awnings should be subject to moderate scrutiny. Addition of plastic or metal awnings should be discouraged.
- Balconies should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not.
- Decks should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not

- Doors should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not.
  - Dormers should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not.
  - Driveways should be subject to strict scrutiny only with regard to their impact on landscaping, particularly mature trees. In all other respects, driveways should be subject to lenient scrutiny. Parking pads and other paving in front yards should be discouraged.
  - Exterior trim (such as moldings on doors and windows) on contributing resources should be subject to moderate scrutiny if it is visible from the public right-of-way, lenient scrutiny if it is not. Exterior trim on Outstanding resources should be subject to strict scrutiny if it is visible from the public right-of-way.
  - Fences should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not.
  - Fire damage repair should be subject to lenient scrutiny. No one should be required, on grounds of historic preservation, to undertake fire damage repairs that would not result in a reasonable return on investment.
  - Garages and accessory buildings which are detached from the main house should be subject to lenient scrutiny but should be compatible with the main building. If an existing garage or accessory building has any common walls with, or attachment to, the main residence, then any addition to the garage or accessory building should be subject to review in accordance with the Guidelines applicable to “major additions.” Any proposed garage or accessory building which is to have a common wall with or major attachment to the main residence should also be reviewed in accordance with the Guidelines applicable to “major additions.”
  - Gazebos and other garden structures should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not.
  - Gutters are not currently subject to review and should not be reviewed.
  - Lamposts and other exterior lights should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not.
  - Lot coverage should be subject to strict scrutiny, in view of the critical importance of preserving the Village’s open park-like character.
  - Major additions should, where feasible, be placed to the rear of the existing structure so that they are less visible from the public right-of-way.
  - Porches should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not. Enclosures of existing side and rear porches have occurred throughout the Village with little or no adverse impact on its character, and they should be permitted where compatibly designed.
  - Roofing materials should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not. In general, materials differing from the original should be approved for contributing resources. These guidelines recognize that for outstanding resources replacement in kind is always advocated
  - Second or third story additions or expansions which do not exceed the footprint of the first story should be subject to moderate scrutiny, in view of the predominance of large scale houses in the Village. For outstanding resources, however, such additions or expansions should be subject to strict scrutiny if they are visible from the public right-of-way.
  - Shutters should be subject to moderate scrutiny if they are visible from the public right-of-way.
  - Siding should be subject to moderate scrutiny if it is visible from the public right-of-way, lenient scrutiny if it is not.
  - Skylights should be subject to strict scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not.
  - Tree removal should be subject to strict scrutiny and consistent with the Chevy Chase Village Urban Forest Ordinance.
  - Windows (including window replacement) should be subject to moderate scrutiny if they are visible from the public right-of-way, lenient scrutiny if they are not. Addition of compatible exterior storm windows should be encouraged, whether visible from the public-right-of-way or not. Vinyl and aluminum windows (other than storm windows) should be discouraged.
- The *Guidelines* state five basic policies that should be adhered to, including:
    - Preserving the integrity of the Chevy Chase Village Historic District. Any alterations should, at a minimum,

- perpetuate the ability to perceive the sense of time and place portrayed by the district.
- Preserving the integrity of contributing structures. Alterations should be designed in such a way that the altered structure still contributes to the district.
  - Maintaining the variety of architectural styles and the tradition of architectural excellence.
  - Design review emphasis should be restricted to changes that will be visible from the front or side public right-of-way, or that would be visible in the absence of vegetation or landscaping.
  - Alterations to the portion of a property that are not visible from the public-right-of-way should be subject to a very lenient review. Most changes to the rear of the properties should be approved as a matter of course.

Tania Georgiou Tully  
Historic Preservation Planner  
Montgomery County Department of Park and Planning  
8787 Georgia Avenue  
Silver Spring, MD 20910  
301-563-3400  
301-563-3412 (fax)  
www.mc-mncppc.org

-----Original Message-----

From: Holver5@aol.com [mailto:Holver5@aol.com]  
Sent: Wednesday, September 13, 2006 5:51 PM  
To: Tully, Tania  
Subject: Re: hi tania

Hi , It's me again. Do you have any idea where the 1927 Sanborn maps are that were not revised in 1959? The reel and volume info I received did not seem to include Chevy Chase at least on the microfiche at the university library. Do you have this reel or do you have books from 1927 at park and planning?

Also is there anything other than the historic location of driveway, the streetscape, the parking problem, the tree endangerment issue, that could help persuade the commission and staff to recommend that the driveway and garage remain on the east side of the house?

Following is the note I wrote to some of the members of the Chevy Chase LAP:

**VIEW AND STREETScape:** The proposed twenty foot curb cut is directly opposite the mouth of Magnolia Parkway. It will definitely change the view from Magnolia Parkway as well as from Lenox Street. Now instead of looking down Magnolia into green space, there will be 20' of concrete curbcut, 10' around the tree, and then a long 15' wide and steep alleyway type driveway.

**TREE DAMAGE AND REMOVAL:** No trees will be affected or harmed if the driveway remains on the East side of house in its historic location. The proposed driveway is very close to the mature White Oak in the front yard and to the Beech tree on our property line in rear. Even though the owners and their landscapers say they will do all they can to protect these trees and follow any village stipulations, we know from experience that construction so close kills trees even when precautions are followed.

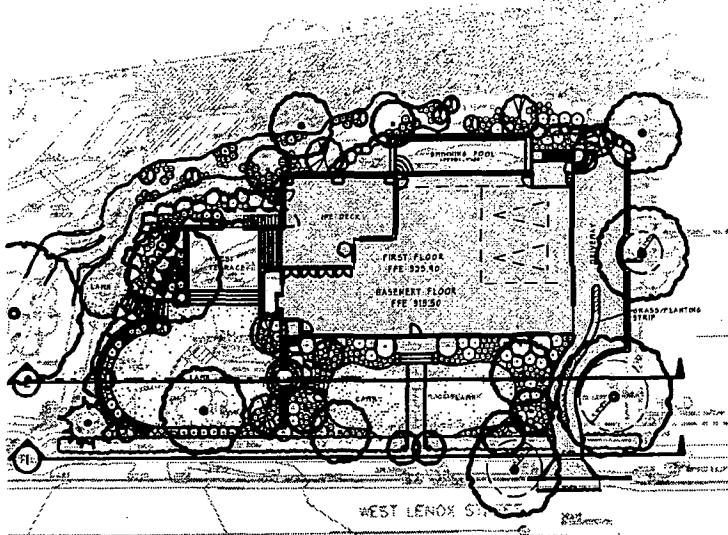
The owners of #37 actually applied for a permit to remove my mature maple tree. (Its trunk is a couple of inches over the property line). It's true, it has a disease but I was told by the village arborist that it could well live 20 or more years. It is fully 'greened-out' and fully alive. Why should my tree be removed for an arbitrarily and unnecessarily relocated driveway so wide and so ugly! Why does one need a 15' driveway? Our driveway shared with 33 West Lenox is 8' wide.

PARKING: Normally not an issue but #33 and #35 have very little street parking in front of the homes. Our steep shared driveway is unusable in winter when it is icy or when there is snow. The 20' curb cut and the 5' restricted parking on either side causes the loss of 30' of street parking essential in winter adjacent to my house. We cannot park across the street on Lenox because of the snow plow and how narrow width of the street. The historical driveway location is near other driveways, both flat and private so there is no such concern.

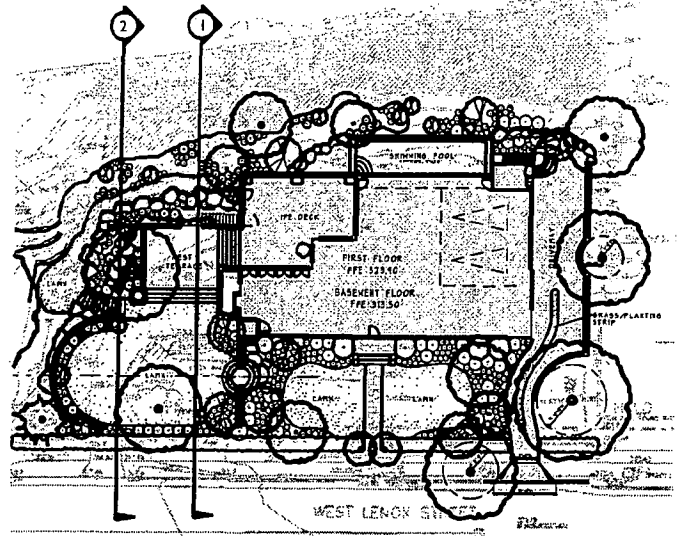
Thank you for reading this.

Sincerely,

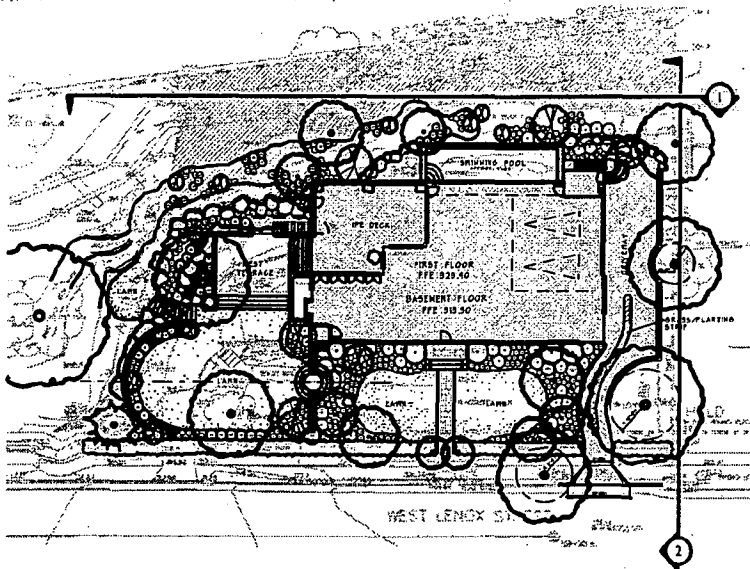
Donna



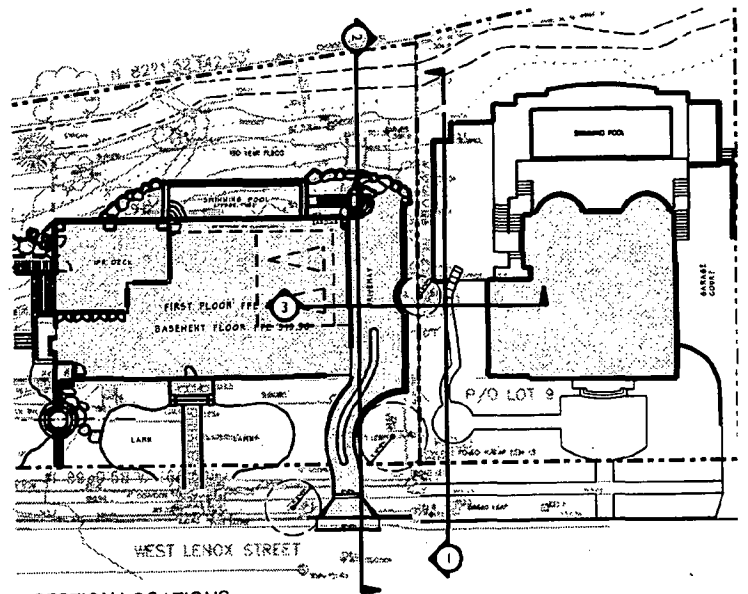
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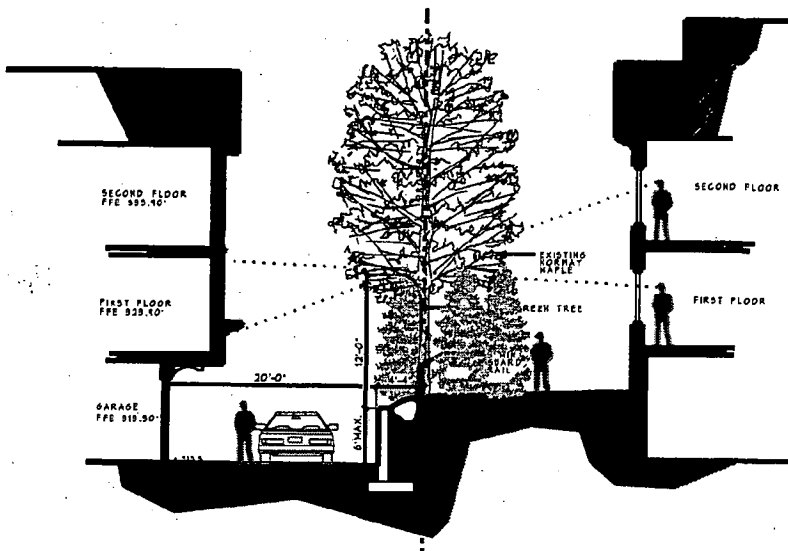
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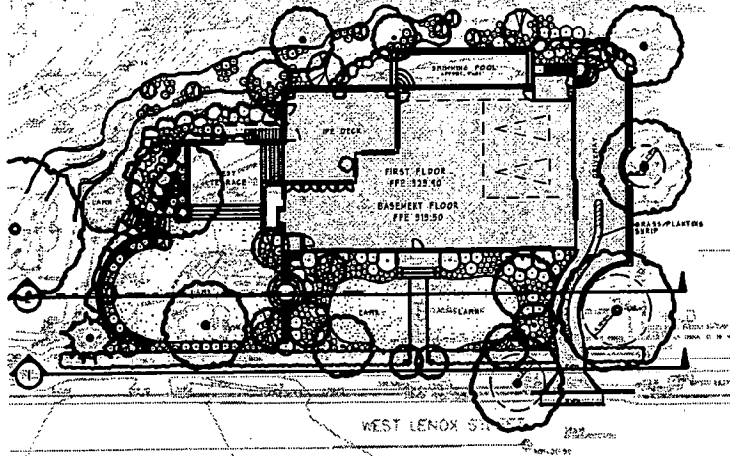
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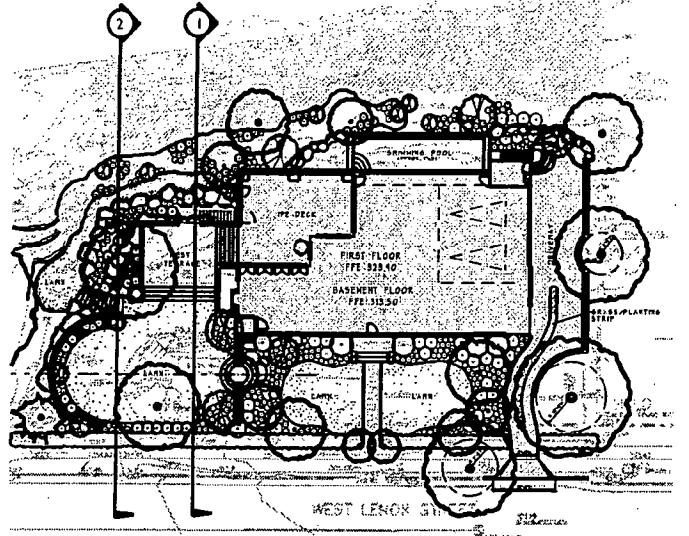
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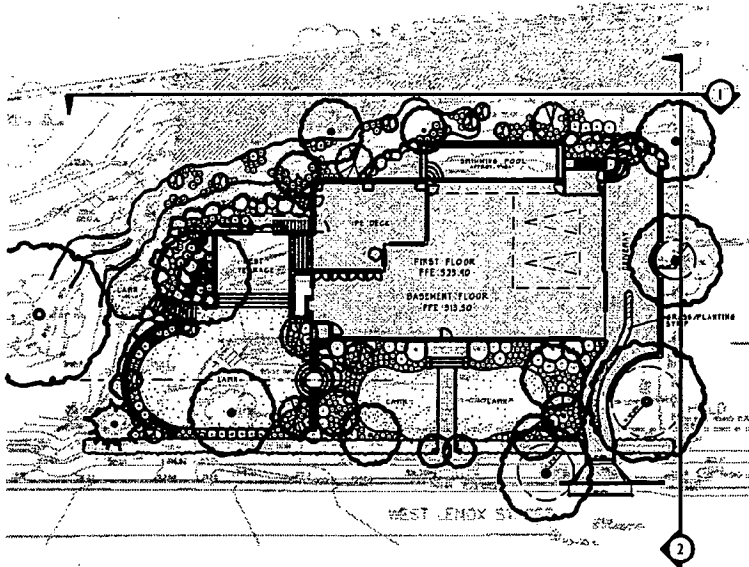
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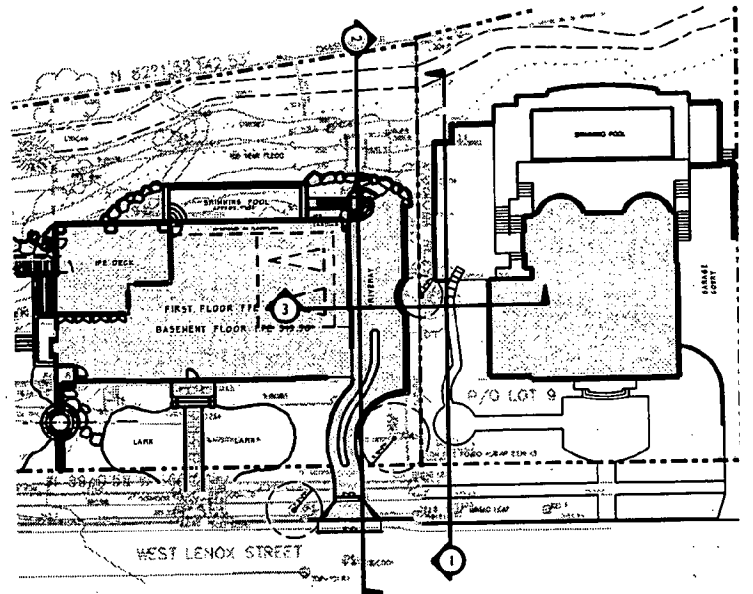
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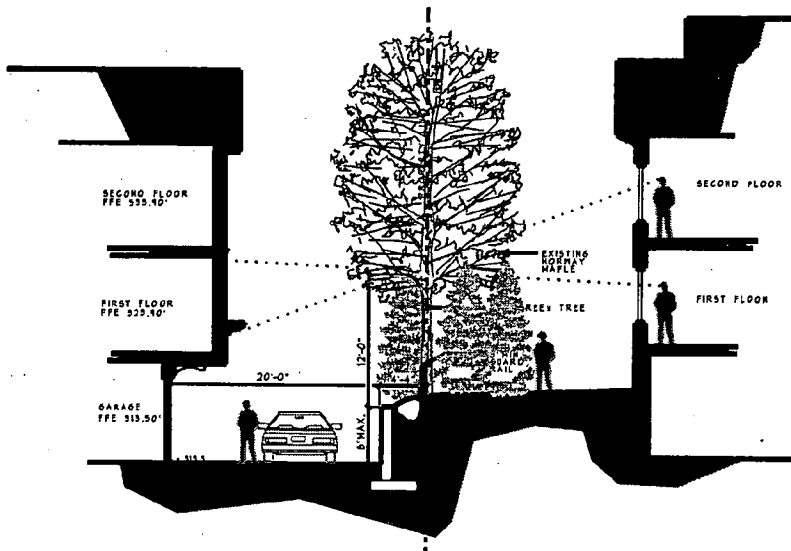
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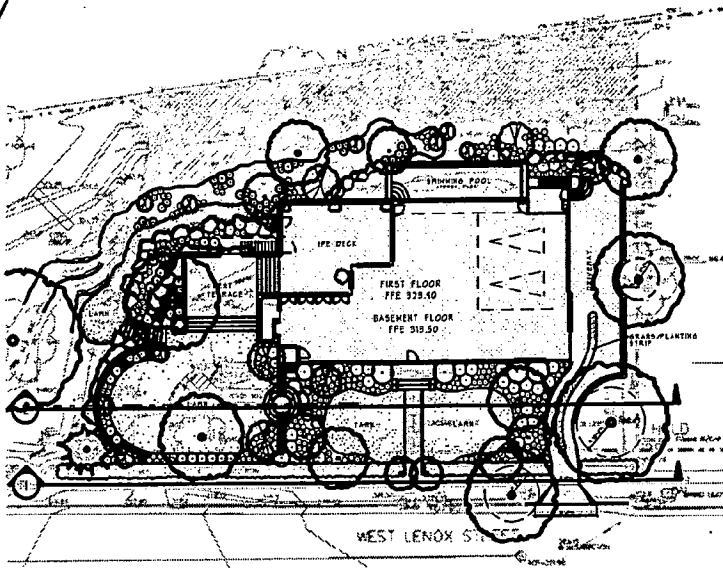


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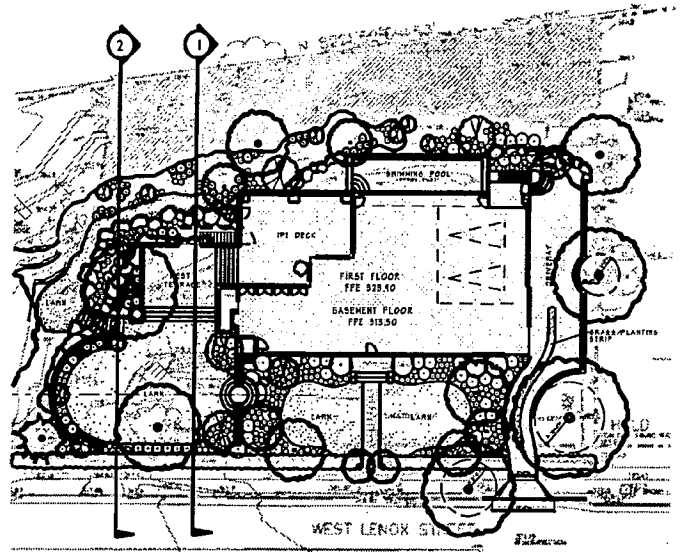


3 DRIVEWAY SECTION

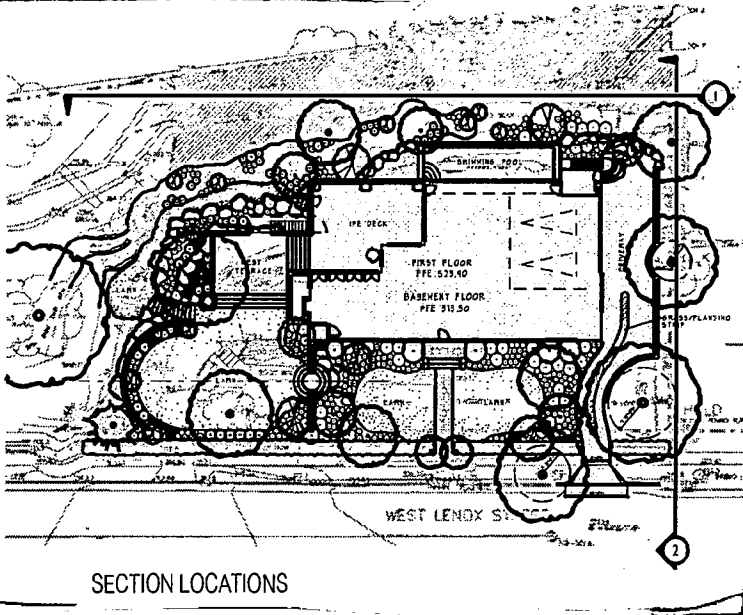




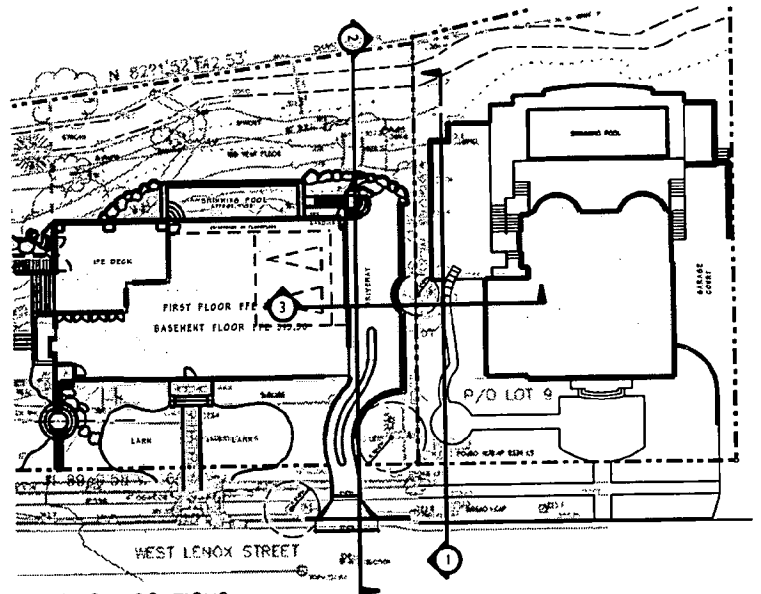
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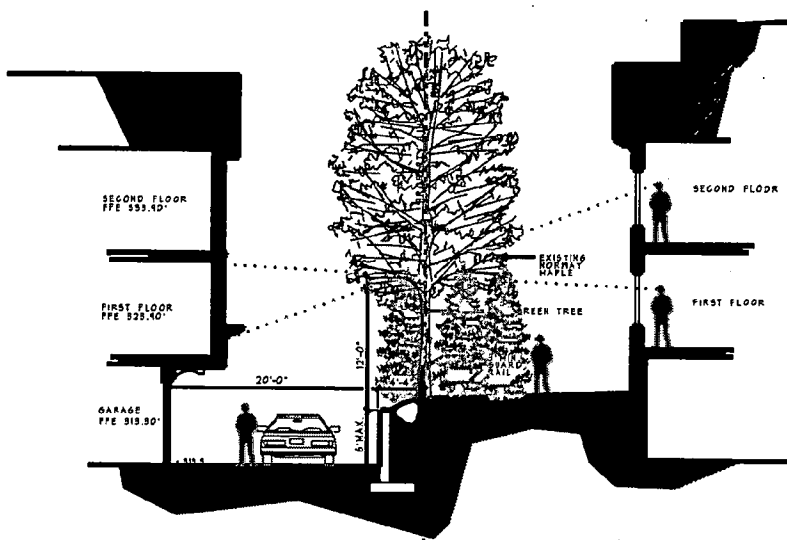
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SECTION LOCATIONS



SECTION LOCATIONS



3 DRIVEWAY SECTION

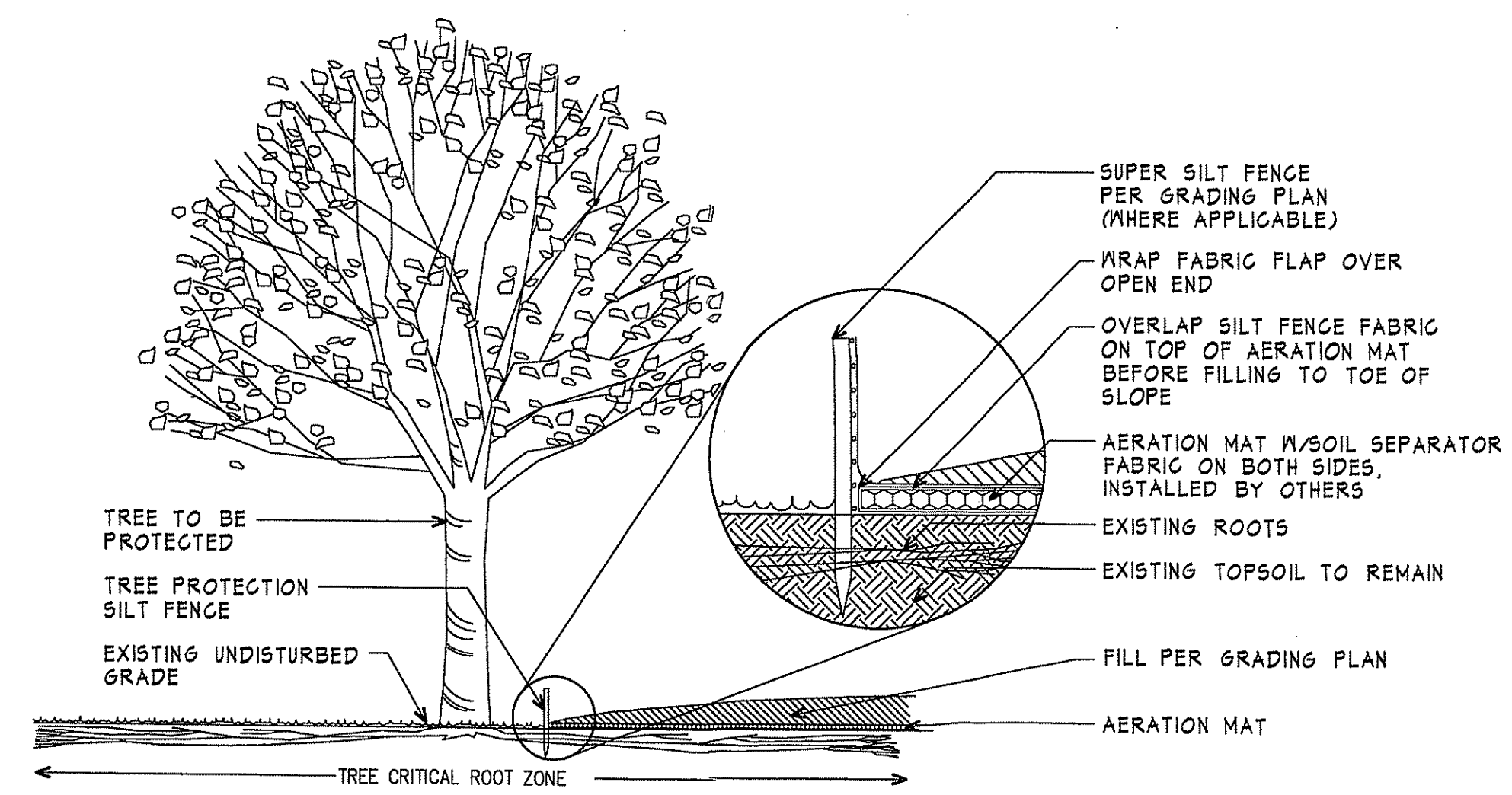
T 202.537.8020 F 202.537.9910 PCARTER@ARENTZDC.COM

PATRICK CARTER, AAIA  
SENIOR ASSOCIATE

4201 CONNECTICUT AVENUE, NW, SUITE 407, WASHINGTON, DC 20008

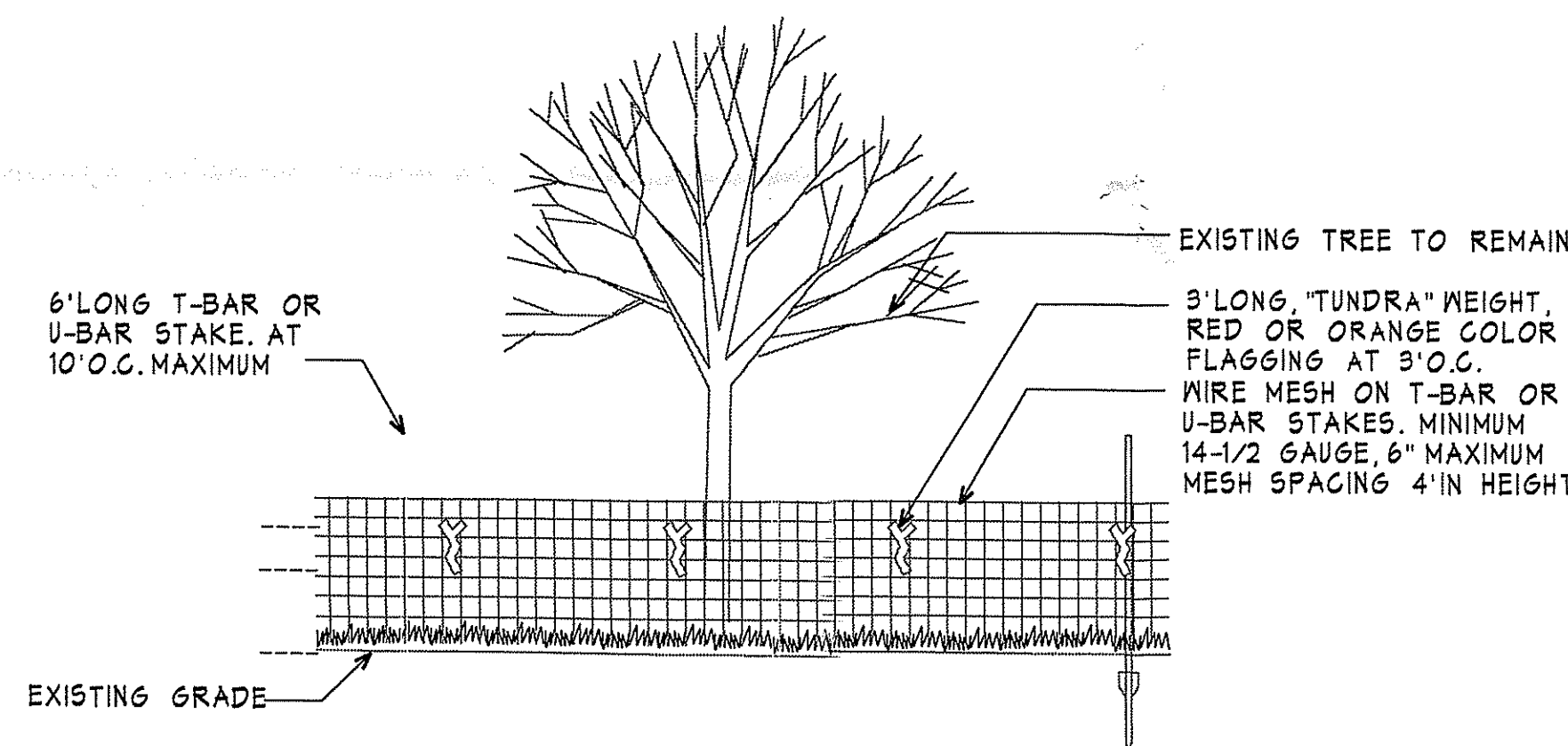
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*arentz*  
LANDSCAPE ARCHITECTS INC



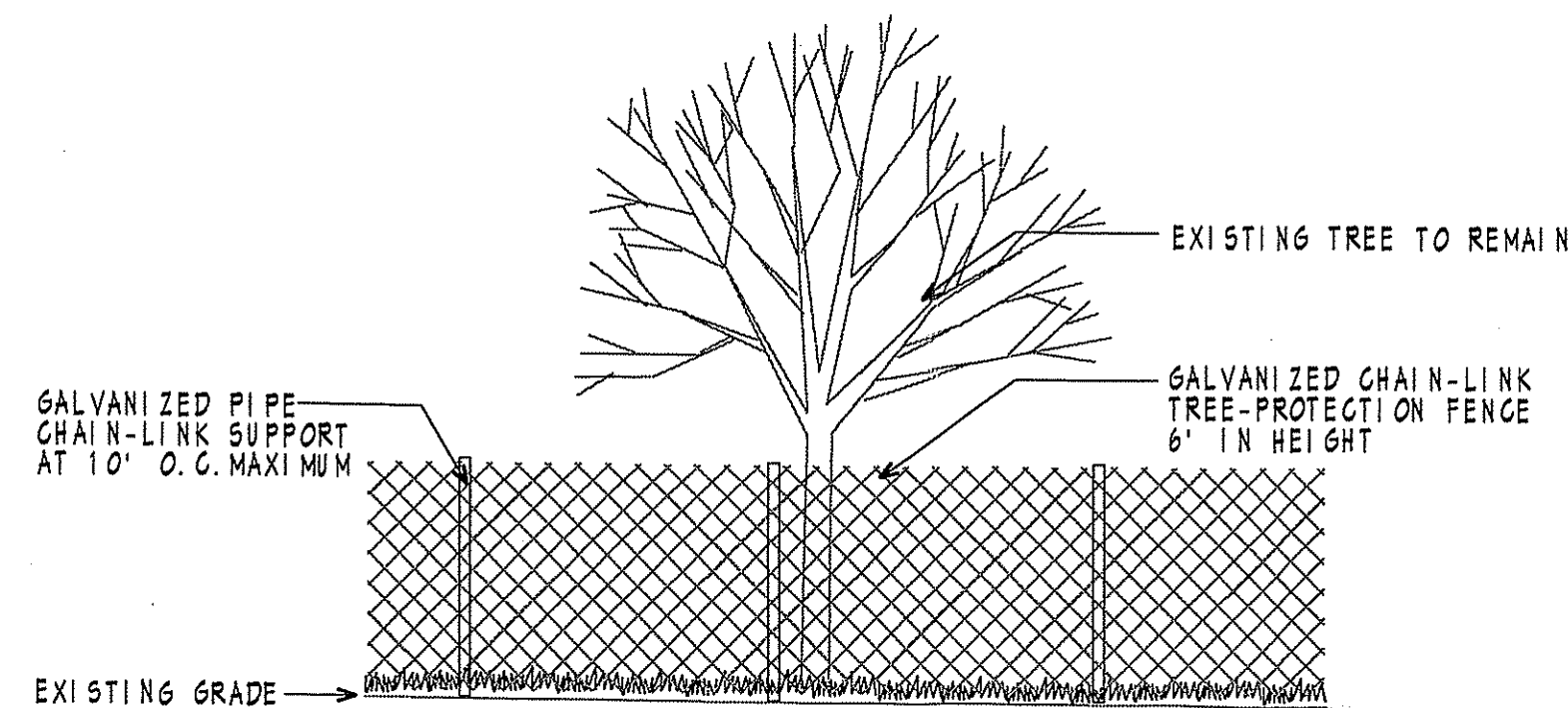
**1 ROOT AERATION MAT**

SCALE N.T.S.



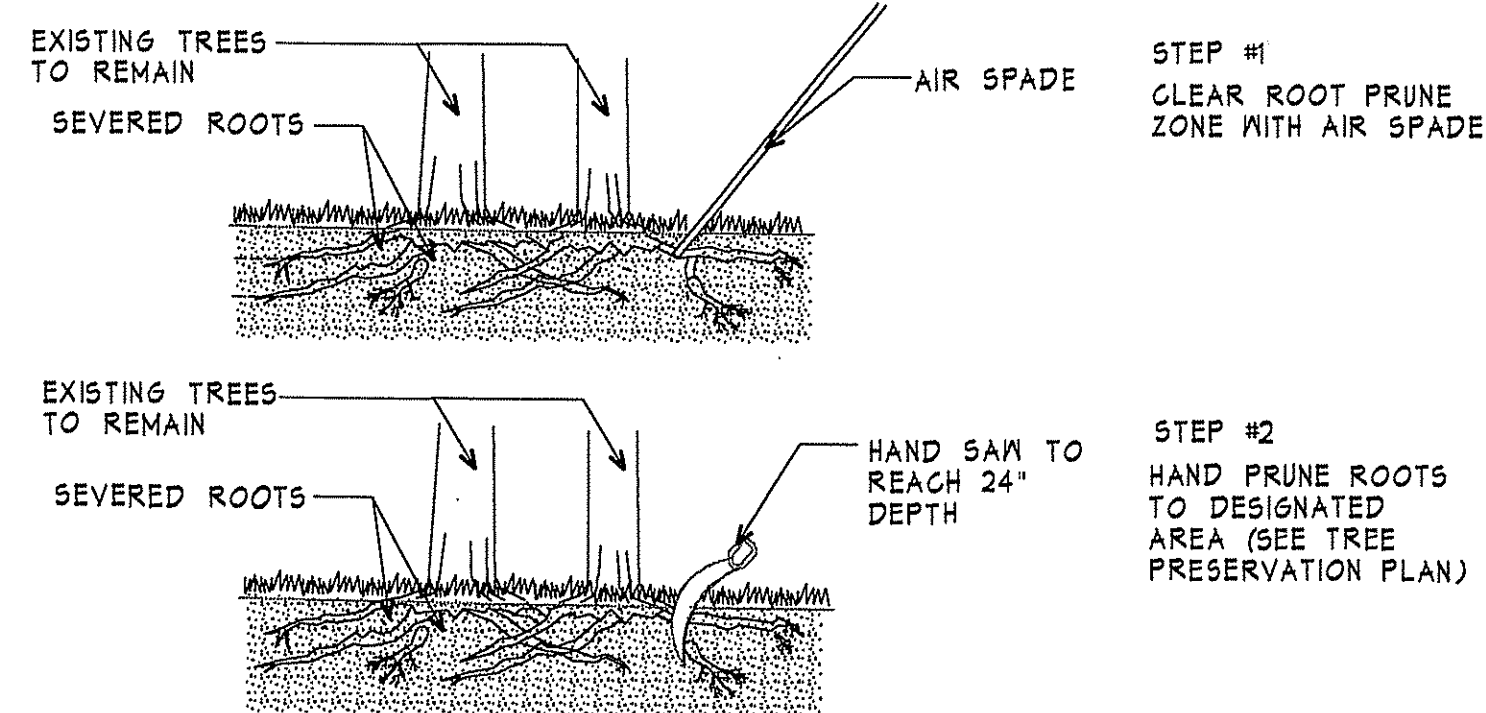
**2 TREE PRESERVATION: LIGHT WEIGHT TREE PROTECTION FENCE TYPE - WIRE MESH**

NOT TO SCALE



**3 TREE PRESERVATION: HEAVY DUTY TREE PROTECTION FENCE TYPE 'B': CHAIN LINK**

NOT TO SCALE



**4 TREE PRESERVATION: ROOT PRUNE - AIR SPADE METHOD**

NOT TO SCALE

**Tree Protection General Notes and Sequence**

- 1) Flag trees to be retained with Blue, to receive protection and stress reduction measures, and paint in Red trees to be selectively removed within tree save area.
- 2) Review site with owner representative.
- 3) Review demolition and clearing procedures and strategy on site with contractor, owner and project forester to determine access, staging, equipment, and overhead clearance.
- 4) Pre-construction meeting to include review of tree protection measures.
- 5) No demolition or site preparation work shall begin in areas where tree preservation and protection measures have not been completed and approved by the project forester.
- 6) Begin root pruning operation per forester's layout. Install root protection mat (if specified) and mulch for selected trees.
- 7) Install temporary tree protection fence prior to demolition and clearing.
- 8) Selective tree removal in tree save areas and clearing to begin. Review large trees to be felled close to trees to be protected to ensure no canopy or root damage occurs. If in question the contract arborist may be designated to provide directional felling or piece down selected trees.
- 9) Pre-construction contractor's layout of selected retaining walls, curbs, excavations, and underground utilities adjacent to tree preservation will be necessary for accurate installation of tree protection measures.
- 10) Location of the following items will be determined at or prior to the pre-construction meeting and reviewed for impact to tree environment areas. Once the tree protection fence is installed these activities are not allowed to occur within the protected area without prior approval and special conditions met:
 

construction parking	concrete wash-out
construction trailers	equipment access
materials storage	staging areas
fuel & chemical storage	soil stockpile
masonry staging	demolition access & dumpsters
- 11) Tree preservation and sequence of tree protection measures will be determined based upon season and schedule of construction:
  - a. Layout of tree protection
  - b. Mulching
  - c. Root pruning
  - d. Supplemental Watering
  - e. Selective removals
  - f. Tree protection fencing
  - g. Canopy pruning
  - h. Limb cabling
  - i. Liquid root biostimulant/soil conditioners
  - j. Cambistat Tree Growth Regulator
  - k. Radial Mulching
  - l. Root Protection / Aeration Matting
  - m. Insect and disease (IPM arborist) monitoring/ treatment
  - n. Tree protection sign installation
- 12) Above measures to be directed in the field by the project forester.
- 13) Tree protection fencing will be maintained & repaired by the contractor for the duration of the project.
- 14) Damages to the protected trees will be assessed by the project forester. Costs for remedial work or replacement will be paid by the negligent party.
- 15) Construction access to fenced tree protection areas will be permitted only with pre-approval of owner's representative.
- 16) The project forester or owner's representative shall approve any clearing, grading, stockpile, demolition, or excavation required within the fenced tree protection areas. Special conditions may apply.
- 17) Clearing of trees designated for demolition shall not damage trees designated for protection.
- 18) Electrical contractor and landscape sprinkler to arrange site meeting with project forester to review layout of site lighting within tree protection area and methods for installation.

**Construction Strategy for Tree Protection**

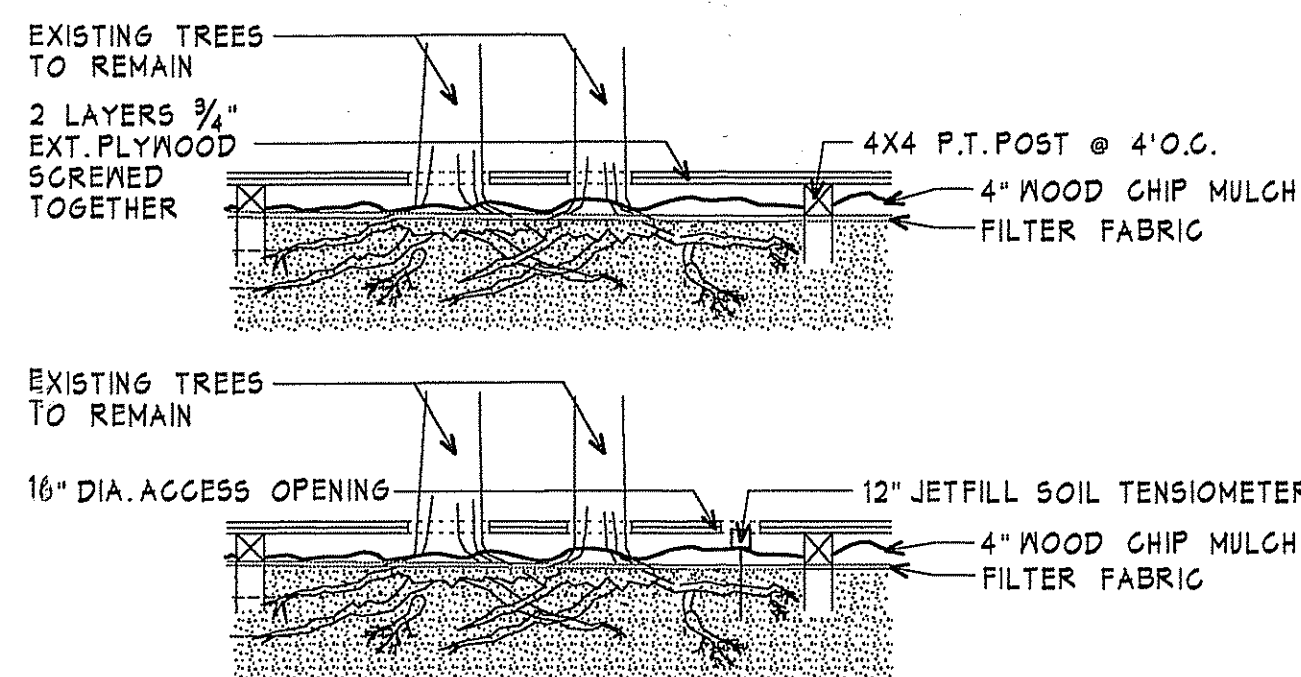
**General Demolition Procedures**  
These procedures apply only to demolition within or adjacent to proposed tree save areas. Demolition of existing structures, asphalt, walks, poles, or trash piles shall follow procedures to minimize impact to root system, trunk, and branches. This includes demolition of underground storage tanks and wells. Prior to any demolition or burning the Contractor will review the designated trees, procedures, access, and equipment with the project forester. Branches subject to equipment impact will either be pruned out of the way or alternate equipment or methods used for the demolition. Install temporary tree protection fence prior to demolition. Equipment and loading will be positioned to access on existing pavement and stone drives where possible to not impact root systems or use Root Protection Mat. Backfill voids with suitable topsoil on the upper 12-18" and lightly grade to avoid additional compaction for work within protected CRZs.

**Retaining Wall Footer / Foundation Excavation Procedures**  
Excavation for footers adjacent to and impacting critical root zones shall follow the following procedures: Superintendent to review all locations with project forester prior to layout to determine issues of access, overhead clearance, stockpile of spoils, need for special equipment, special arboricultural measures, and timing of layout to allow special preservation and arboricultural measures. Formed and poured concrete foundation walls will minimize intrusion into the CRZ. Superintendent shall notify project forester of layout for final review. Discrepancies between plans and site conditions will be noted. Project forester shall review start up of excavation to insure construction procedures are being followed. Root pruning and 6" chain link protective fencing shall be installed prior to excavation. Root Protection Mat may be installed outside the excavation envelop for protection during exterior masonry work, scaffolding, and to facilitate backfill operations. Heavy plastic sheathing shall be installed where concrete will be earth formed poured against CRZs. 3 feet depth from surface is sufficient. Plastic sheathing is held in place with earth nails. Once concrete is set, excess plastic can be cut away and disposed.

**Landscape Construction**  
Large root balled trees will be reviewed for locations and number to minimally impact protected CRZs. No roots larger than 1.5" diameter will be cut. Planting bed location and preparation will also be reviewed and altered for minimal impact. Initial beds within CRZs over layer of root protection mat perforated to allow plant root penetration into parent soils. Minimal turf grass is anticipated. A large mulch bed for the trees will provide more favorable growing conditions for the existing tree and plantings. Review proposed irrigation system within any tree save area. High impact specimen trees require significant amounts of moisture during the growing season for 2-3 years after construction thus irrigation design should consider this. 200-350 gallons per large tree per watering (1-3 x per week) is anticipated. Thus drip irrigation on separate valves is recommended. Laterals and electrical should skirt the perimeter of the tree save areas unless special installation procedures are allowed such as the use of Supersonic Air-tools (SSAAT) to minimize damage.

**Additional Construction Strategy**  
The location of the following items will be determined at or prior to the pre-construction meeting and reviewed for impact to tree environment areas. Once the tree protection fence is installed these activities are not allowed to occur within the protected area without prior approval and special conditions met:

- |                         |                               |
|-------------------------|-------------------------------|
| construction parking    | concrete wash-out             |
| construction trailers   | equipment access              |
| materials storage       | staging areas                 |
| scaffolding             | soil stockpile                |
| fuel & chemical storage | demolition access & dumpsters |
| masonry staging         | crane access                  |



**5 TREE PRESERVATION: PLANKING - TENSIO-METER DETAIL**

NOT TO SCALE

**Tree Protection and Stress Reduction Measures**

Refer to the Tree Protection Action Key for specific measures determined for each tree.

**Tree Protection Fence.** Temporary fencing for the purpose of controlling demolition, infrastructure construction, and multi-story construction. Steel fencing gains the most protection against soil compaction or plastic. Exact location on site to be determined in conjunction with Root Prune line by Project Forester. Fence type shall be 6" chain-link fence in-ground with minimum 1.5 g.c. average fabric @ 10' O.C. average. Attach tree protection area signs @ 10' spacing. Typically, install after root pruning prior to clearing & grading. For minimum site work such as drain fields or temporary small equipment access install 48" welded wire 14 gauge fabric @ 6" steel T-posts @ 10' o.c. average. Super-silt fence may substitute for tree protection fence provided TP signs are attached 30' o.c. Install at LOD or Root Prune line per detail. Silt fence may be attached to tree protection fence where appropriate in conjunction with Root Protection Mat, root Aeration Mat or where major excavations, soils or material stockpile is within or adjacent to tree save areas.

**Wood chip mulch.** Mulching will increase moisture-holding capacity, minimize soil compaction, and increase needed organic composition. Install mulch bed rings for designated significant trees impacted by proposed construction. Mulch shall be 3"-4" thick, double ground composted chips brought in from an approved source. Insufficiently or improperly aged mulch containing high bacterial counts or high levels of bark mulch resistant to decomposition are not recommended. Compost tea / humate oversprays may be needed for composted mulch products less than 12 months. Mulch will not contact trunk of trees. Diameter of the mulch ring is determined by converting trunk DBH inches to mulch diameter in feet. (Ex: 30" DBH = 30" diameter mulch).

**Prescribed Pruning and Cabling.** Size, health, species, and impact from proposed construction will be taken into consideration in determining pruning type for each tree. Crown Clean Pruning will remove dead, dying, and declining limbs to 1.5" minimum as well as some selective thinning for overall tree health. Minimal interior green including sprouts will be removed. Meet at site with Landscape Architect to determine overhead height issues with new rooflines and lower limbs. Determine long term impact on tree health to pruning lateral scaffold limbs. Lower limbs obstructing equipment will be clearance pruned to avoid treelegs. All work will be specified by ANSI A-300 arboricultural standards. To provide safer support of weak forks of significant trees adjacent to public areas, trees to receive cables will be designated. An aerial assessment shall be made for all trees climbed to report any structural weakness of concern to the project forester. Prior to climbing any tree a risk assessment will be performed using visual, sounding, or basic drilling as needed.

**Selective Removals within CRZs.** Trees designated for Selective Removal will be taken down sectionally, or directionally felled to minimize damage to adjacent tree canopies or root systems. All work will be done by hand. Soft soils or heavy loads will require frozen soils or root protection Aeration Mat equipment. Stumps are to be ground 12" below ground level in turf and 6" depth in mulched or natural areas. Wood debris may be left for clearing contractor to reduce haul off costs. Construction clearing equipment or tree trucks will be barred from any intrusion into the Tree Protection Zone except as noted.

**Root Prune prior to fencing.** Purpose of the root pruning is to provide a more suitable cut so as to not rip or tear roots during excavations and grading with standard construction equipment. The exact location and depth along the LOD or edge of utility excavation will be determined during the Forester's layout. Equipment & methods will be determined based upon depth & tree impact. Root prune where necessary for roots within 30' of large trees anticipating roots over 1.5" diameter, using the Supersonic Airtools (SSAAT). Deep excavations will be reviewed when on site for hand root pruning during construction. Backfill all root prune trenches and mark with flags unless open trench is coordinated for use in silt fence installation.

**Lightning Protection for high-standing trees.** Dominant, tall specimens on higher sites are susceptible to lightning strikes and may suffer rapid or slow decline and mortality as a result. Installation of copper fixtures, cable, and ground rods per ANSI A300 specifications is highly recommended. Review trees once clearing is complete with Landscape Architect to determine exact tree locations. Coordinate with builder for usage of common ground rods. Install ground lateral lines with SSAAT to minimize root damage within protected CRZ.

**Special Preservation Measures for High Impact Trees:**

In addition to the measures outlined above, trees designated as "High Impact" will be considered for one or more of the following treatments.

**Subsurface Fertilization / Soil Biostimulant.**  
A liquid mix of the following three components for the purpose of enhancing overall tree health. Apply once during construction. "PHC for Trees, Nutrient Management System" or equivalent: 27-9-9, consisting of the following components: Nitrogen from Ureammoniumchloride, Urea, Potassium Phosphate, Potassium Nitrate, Boric Acid, Iron EDTA, Manganese EDTA, Zinc EDTA, Copper EDTA, Ammonium Molybdate, Potential Acidity of 9.00 lbs of Calcium Carbonate equivalent per ton, Soluble Humates derived from Leonardite, Soluble Seaweed Extract, Natural Sugars, B-Vitamins, RZ-3 Surfactant, Rhizosphere Bacteria.

**Cambistat Tree Growth Regulator (Pre OR Post construction)**  
Cambistat is a newly recognized material shown to be effective when applied to high impacted trees. Tree Growth Regulator it reduces canopy growth for 2-3 years into the close-in root system thus increased absorption of nutrients and moisture during the stress recovery period. Specific methods and dosage is dictated by species and trunk diameter and prescribed by the contract arborist's IPM specialist.

**Supplemental Water (Pre construction)**  
This action is for high impact trees of significance during drought times. Based upon the number and size of trees various strategies can be considered to maintain adequate soil moisture during these times. A prescription for the number of gallons and strategy for watering designated trees will be developed. Large mature trees with impacts to root systems require as much as 200-350 gallons per week during 90 degree days during summer drought times. Periodic inspections by the project forester/arborist at this time are critical. Supplemental watering should commence once Root Pruning is complete within the growing season. During drought years pre-root prune watering is highly recommended. Temporary drip system sprinklers shall be installed for each of the high impact trees, #s 1, 2, 3, 4, & 5. Water source shall either be temporary above ground gravity tanks with battery timers or direct connection to house plumbing or a combination. Soil Tensiometers (12" Jetfill Soil Tensiometer, Model 2725-RL, with Service Kit and Soil Coring Tool for installation) will be used at each tree to monitor a level of soils moisture prior to and during supplemental watering.

**Integrated Pest Management (Pre construction)**  
Develop a seasonal program appropriate to species and existing health issues to focus on minimizing stress from insect and disease. Exact number and timing of treatments to be determined by IPM Arborist during final tree preservation plan development. Propylactic, systemic injections and drenches for boring insects is top priority for stressed trees. Due to the life cycle of many insects and diseases, the "window of opportunity" for most effective treatment requires planning and approval during the prior season's inspections. 6 to 9 inspection / treatments are typically prescribed depending upon species of plant, pre-existing conditions, impacts from construction, and seasonal changes of weather extremes.

**Root Aeration Mat.** Installed on grade prior to permanent grading fill operation, thereby leaving the topsoil intact. The purpose is to provide a layer of ventilation for atmospheric gas exchange to roots of designated significant tree to receive fill inside construction envelope. Situations for its use can include paving sections under walks, patios, courtyards, parking and drives. Structural situations require careful review by the urban forester and geotechnical specialist. Exact locations to be determined in final tree preservation plan once all grading and underground utilities are known. Manifold ventilation pipe locations are determined in the field by the project forester.

**Root Protection Mat (RPM).** The purpose of the Root Protection Mat is to reduce compaction, rutting, and contamination of soils and root systems for specimen trees of high impact within the construction zone. Trees anticipated to receive temporary or repetitive materials staging, foot traffic, or equipment access within protected root zone are to receive Root Protection Mat. Wood chip mulch is often incorporated with matting. Exact location and materials to be determined in final tree preservation plan. High traffic area to receive two ply RPM under construction stone. Removal of the temporary stone and Root Protection Mat shall be done with care to not impact protected root zones. The project forester shall review the final demolition and surface topsoils to prescribe any final clean-up or remedial measures. The Norway Maple, tree #2, shall receive wood planking, or double gonal RPM, above 4'-6" wood chip mulch, behind the tree protection fence, as additional protection.

**Penalties for Damages**  
The Owner / Architect will develop and implement a definition of damages, assessments, and penalties for damage to the trees to be protected or tree protection areas

**Remedial Arboricultural Measures**  
Prescribe remedial or cultural measures after construction is completed. These may include but are not limited to Radial Mulching with SSAAT for compacted or silted areas, Supplemental Watering, Soil Amendments / Biostimulant, and pruning of broken limbs.

**Post Construction Maintenance Prescription for Impacted Trees**  
Develop a multi-year maintenance plan two years into construction to promote enhancement of the remnant forest. A 3-5 year maintenance plan would consider the following measures:  
a. Seasonal inspections of soil moisture, invasive weed monitoring, foliar characteristics, insect and disease monitoring.  
b. Hazard pruning of dead, dying, declining limbs  
c. Granular and liquid biostimulant, microbial inoculants, compost teas / amendments based upon test results and construction impacts.  
d. Supplemental mulching 3rd year or as needed.  
e. Supplemental watering during growing season / drought conditions as inspections indicate the need.  
f. Insect / disease treatment based upon seasonal inspections.

**CHEVY CHASE VILLAGE TREE PRESERVATION PLAN APPROVALS:**

_____	DATE
Geoff Biddle, Village Manager	
_____	DATE
William Dunn, Village Arborist	10-11-06

FOR APPROVAL

ISSUE DATE: 10-10-06

DRAWING: TREE PRESERVATION DETAILS

LA-2

SCALE: 1" = 10'

JOB NO. 606

POWELL RESIDENCE  
37 WEST LENOX  
CHEVY CHASE, MD

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