COUNTY OF SAN MATEO - PLANNING AND BUILDING DEPARTMENT

ATTACHMENT F

McClenahan Consulting, LLC
Arboriculturists Since 1911
1 Arastradero Road, Portola Valley, CA 94028-8012
Telephone (650) 326-8781
Fax (650) 854-1267
www.spmcclenahan.com

November 15, 2019
March 6, 2022 Revised

Grove Construction
Attention: **Mr. Ron Grove**
865 Sweeney Avenue
Redwood City, CA 94063

Re: 206 Sequoia Avenue
Redwood City, CA

Assignment
As requested, I performed a visual inspection of five trees to determine species, size and condition and provide tree protection and tree preservation guidelines.

Summary
Plans for the site are not yet developed. Proposed apartments or infill development proposed trees one through three will require removal, as they are located in the new building footprint or within the required excavation for new foundation. Tree four, a neighboring tree, should sustain impacts to less than 25 percent of the root environment. Tree five, a neighboring redwood, will not likely sustain adverse impacts from site development. Tree Protection Zones are defined to assist with design. It is understood that development may occur within a TPZ. During these situations further arborist review may be necessary. Any grading or excavation within a TPZ must be monitored by a qualified arborist. Any cutting of roots greater than one-inch diameter must be supervised by a qualified arborist. Should root cutting occur within a TPZ, project arborist must provide mitigation recommendations as needed. Although it is not known if trees will remain, general Tree Preservation Guidelines are included.

Methodology
No root crown exploration, climbing or plant tissue analysis was performed as part of this survey. For purposes of identification, trees have been numbered on the attached photos.

In determining Tree Condition several factors have been considered which include:

Rate of growth over several seasons;
Structural decays or weaknesses;
Presence of disease or insects; and
Life expectancy.

Tree Description/Observation

1 Coast live oak *(Quercus agrifolia)*
Diameter: 15.9"
Height: 25' **Spread:** 25'
Condition: Fair to Good
Location: Left rear
Observation:
Grows to a phototropic lean away from larger live oak. Minor accumulation of interior deadwood due to dense crown. The TPZ is 8-feet.

2 Coast live oak
Diameter: 34.4" Low Branching
Height: 35' **Spread:** 46'
Condition: Fair
Location: Left rear
Observation:
Crown exhibits normal vigor with a moderate accumulation of deadwood. Six primary scaffold limbs exhibit weak attachments. Two 1-inch diameter pipes are embedded in main crotch. The TPZ is 18-feet.

3 English walnut *(Juglans regia)*
Diameter: 20"
Height: 24' **Spread:** 32'
Condition: Fair
Location: Left rear corner
Observation:
Crown exhibits a moderate accumulation of interior deadwood. Measured just above graft. Located in proposed building foundation.

4 Black walnut *(Juglans hindsii)*
Diameter: EST 20"
Height: 20' **Spread:** 24'
Location: Neighbor's left rear side
Observation:
TPZ 12-feet. Proposed construction excavation is 10-feet from fence and should impact less than 25 percent of root environment.

5 Coast redwood *(Sequoia sempervirens)*
Diameter: Est 24"
Height: 40' **Spread:** 36'
Location: Neighbor's right rear corner
Observation:
TPZ 12-feet. Minimal impacts anticipated within TPZ. Proposed excavation should encroach no closer than 15-feet.


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TREE PRESERVATION GUIDELINES

Tree Preservation and Protection Plan
In providing recommendations for tree preservation, we recognize that injury to trees as a result of construction include mechanical injuries to trunks, roots and branches, and injury as a result of changes that occur in the growing environment.

To minimize these injuries, we recommend grading operations encroach no closer than six times the trunk diameter, (i.e. 30" diameter tree x 6=180" distance). At this distance, buttress/anchoring roots would be preserved and minimal injury to the functional root area would be anticipated. Should encroachment within the area become necessary, hand digging is ***mandatory.***

Barricades
Prior to initiation of construction activity, temporary barricades should be installed around all trees in the construction area. Six-foot high, chain link fences are to be mounted on steel posts, driven 2 feet into the ground, at no more than 10-foot spacing. The fences shall enclose the entire area under the drip line of the trees or as close to the drip line area as practical. These barricades will be placed around individual trees and/or groups of trees as the existing environment dictates.

The temporary barricades will serve to protect trunks, roots and branches from mechanical injuries, will inhibit stockpiling of construction materials or debris within the sensitive 'drip line' areas and will prevent soil compaction from increased vehicular/pedestrian traffic. No storage of material, topsoil, vehicles or equipment shall be permitted within the tree enclosure area. The ground around the tree canopy shall not be altered. Designated areas beyond the drip lines of any trees should be provided for construction materials and onsite parking.

Root Pruning (if necessary)
During and upon completion of any trenching/grading operation within a Tree Protection Zone, clean pruning cuts of exposed, damaged or severed roots greater than one inch diameter should be accomplished under the supervision of a qualified Arborist to minimize root deterioration beyond the soil line ***within twenty-four (24) hours.***

Pruning
Pruning of the foliar canopies to include removal of deadwood is recommended and should be initiated prior to construction operations. Such pruning will provide any necessary construction clearance, will lessen the likelihood or potential for limb breakage, reduce 'windsail' effect and provide an environment suitable for healthy and vigorous growth.

Irrigation
A supplemental irrigation program is recommended for the trees and should be accomplished at regular three to four-week intervals during the period of May 1st through October 31st. Irrigation is to be applied at or about the 'drip line' in an amount sufficient to supply approximately ten (10) gallons of water for each inch in trunk diameter.

Irrigation can be provided by means of a soil needle, 'soaker' or permeable hose. When using 'soaker' or permeable hoses, water is to be run at low pressure, avoiding runoff/puddling, allowing the needed moisture to penetrate the soil to feeder root depths.

Fertilization
A program of fertilization by means of deep root soil injection is recommended with applications in spring and summer for those trees to be impacted by construction. Fertilizer should include organic blends and components such as mycorrhizae and bio stimulants.

Such fertilization will serve to stimulate feeder root development, offset shock/stress as related to construction and/or environmental factors, encourage vigor, alleviate soil compaction and compensate for any encroachment of natural feeding root areas.

Inception of this fertilizing program is recommended prior to the initiation of construction activity.

Mulch
Mulching with wood chips (maximum depth 3") within tree environments (outer foliar perimeter) will lessen moisture evaporation from soil, protect and encourage adventitious roots and minimize possible soil compaction.

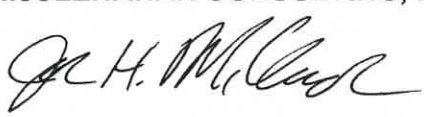
Inspection
Periodic inspections by the ***Site Arborist*** are recommended during construction activities, particularly as trees are impacted by trenching/grading operations.

Inspections at approximate four (4) week intervals would be sufficient to assess and monitor the effectiveness of the Tree Preservation Plan and to provide recommendations for any additional care or treatment.

We thank you for this opportunity to be of assistance in your tree preservation concerns.

Should you have any questions, or if we may be of further assistance in these concerns, kindly contact our office at any time.

McCLENAHAN CONSULTING, LLC



By: **John H. McClenahan**
ISA Board Certified Master Arborist, WE-1476B
member, American Society of Consulting Arborists

JHMc: cm

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ARBORIST DISCLOSURE STATEMENT

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the arborist, or seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like a medicine, cannot be guaranteed.

Treatment, pruning, and removal of trees may involve considerations beyond the scope of the arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, landlord-tenant matters, etc. Arborists cannot take such issues into account unless complete and accurate information is given to the arborist. The person hiring the arborist accepts full responsibility for authorizing the recommended treatment or remedial measures.

Trees can be managed, but they cannot be controlled. To live near a tree is to accept some degree of risk. The only way to eliminate all risks is to eliminate all trees.

Arborist: John H. McClenahan
Date: March 6, 2022