URBAN FORESTRY ASSOCIATES, INC.
8 Willow Street San Rafael, CA 94901
(415) 454-4212 info@urbanforestryassociates.com

TREE PRESERVATION / PROTECTION PLAN

for

Lot 7 Marinda Avenue, Fairfax California

Prepared for:
Marshal Rothman
415-272-5999
drswami@earthlink.net

Prepared by:
Urban Forestry Associates
8 Willow St.
San Rafael, CA
415.454.4212
info@urbanforestryassociates.com

SUMMARY

Total Trees included in survey 49

Total trees to be removed 34

- Trees to be removed with poor health and/or structure 0
- Protected trees to be removed 25
- Heritage trees to be removed 9
- Exempt trees to be removed 0

PURPOSE

Urban Forestry Associates (UFA) was hired to inspect the trees at 630 Marinda Avenue in Fairfax, California at the request of Marshal Rothman. The inspections occurred between August 8 and august 30, 2017. The purpose was to assess the condition of the trees and provide a prognosis on tree health, vigor, structural stability and potential impacts to the trees resulting from the proposed development of the property. This report documents the health and structural condition of the tree and provides our conclusions and recommendation in accordance with the Town of Fairfax tree ordinance. A full tree by tree inventory can be found on the arborist's map that is to accompany this report.

OBSERVATIONS

- The lot is composed of predominantly protected size coast live oak trees with scattered Pacific madrone and California bay laurel.
- The majority of tree impacts are occurring (to protected size oaks) within the footprint of the home and pool area in the southeast portion of the lot.
- Shifting the location of proposed improvements to accommodate trees may be challenging given the seemingly small buildable area.
- Trees 248, 251, 252, 253, 259, 260 are of most concern in terms of potential adverse impacts during construction. Pier style supports for the home and retaining walls are favorable to typical footings to avoid linear cuts through root systems.

SCOPE OF WORK / LIMITATIONS

Information regarding property boundaries, land ownership, and tree ownership was evident from a land survey, property fencing and/or provided by the client. UFA has no personal or monetary interest in the outcome of this matter. All determinations reflected in this report are objective and to the best of our ability. All observations regarding the sites and trees were made by UFA personnel, independently, based on our education and experience. Determinations of the health and hazard potential of the subject trees are through visual inspection only and of our best professional judgment.

The health and hazard assessments in this report are limited by the visual nature of the assessment. Defects may be obscured by soil, brush, vines, aerial foliage, branches, multiple trunks or other trees. None of the subject trees were examined using invasive techniques such as increment coring or Resistograph® tests. The probability of tree failure is dependent on a number of factors including: topography, geology, soil characteristics, wind patterns, species characteristics (both visually evident and concealed), structural defects, and the characteristics of a specific storm. Structurally sound, healthy trees fail during severe storms. Consequently, a conclusion that a tree does not require corrective surgery or removal is not a guarantee of no risk, hazard, or sound health.

TREE WORK STANDARDS AND QUALIFICATION

All tree work, removal, pruning, planting, shall be performed using industry standards as established by the International Society of Arboriculture. Contractor must have a State of California Contractors License for Tree Service (C61-D49) or Landscaping (C-27) with general liability, worker's compensation, and commercial auto/equipment insurance.
Contractor standards of workmanship shall adhere to current Best Management Practices of the International Society of Arboriculture (ISA) and the American National Standards Institute (ANSI) for tree pruning, fertilization and safety (ANSI A300 and Z133.1).

INSPECTION SCHEDULE

Inspection of site: Prior to Equipment and Materials Move In, Site Work, Demolition and Tree Removal: The Project Arborist will meet with the General Contractor, Architect / Engineer, and Owner or their representative

to review tree preservation measures, designate tree removals, delineate the location of tree protection / non-intrusion zone fencing, specify equipment access routes and materials storage areas, review the existing condition of trees and provide any necessary recommendations.

Inspection of site: After installation of NIZ fencing: Inspect site for the adequate installation of tree preservation measures. Review any requests by contractor for access, soil disturbance or excavation areas within root zones of protected trees. Assess any changes in the health of trees since last inspection.

Inspection of site: During excavation or any activities that could affect trees: Inspect site during any activity within the Non-Intrusion Zones of preserved trees and any recommendations implemented. Assess any changes in the health of trees since last inspection.

Final Inspection of Site: Inspection of site following completion of construction: Inspect for tree health and make any necessary recommendations.

ARBORIST'S CHECKLIST

- The project arborist shall establish the Tree Protection Zone (TPZ) prior to starting the demolition work. Four-foot-high metal wire deer fencing will be erected by the contractor as shown on the supplemental Arborist's Map and inspected by the arborist to limit access to the TPZ. This will protect the trunk and root zone throughout construction.

- The Arborist shall have a pre-demolition meeting with contractor or responsible party and all other foremen or crew managers on site prior to any work to review all work procedures, access and haul routes, and tree protection. The contractor must notify the Arborist if roots are exposed or if trunk or branches are wounded.

- Any trunk and root crown that is not protected by a TPZ fencing where heavy equipment operation is likely to wound the trunk, install a barrel stave-like trunk wrap out of 2 X 4 studs connected together with metal straps, attached to the 2 X 4's with driver screws or 1" nails (Tree 1).

- Storage of equipment shall be as far away from protected trees as possible and optimally on asphalt or ground protected by mulch / plywood.

- Heavy equipment use should be limited around trees and the roots. No equipment may be transported or used on bare ground within the root zone. If needed, a 6" layer of mulch and plywood must be placed under the path for access and egress as shown in Appendix A. The protective "bridge" shall be maintained by the contractor and inspected by the arborist when on site.

- Any damage to trees due to demolition or construction activities shall be reported to the arborist within 6 hours, so that remedial action can be taken. Any damage done to the trees in violation of the contract agreement shall be appraised as a casualty loss by the arborist and provided to the tree owner.

- All trenching within the TPZ shall be done pneumatically or by hand, being careful not to damage any of the bark of any root encountered.

- An arborist shall inspect all grading, trenching, tunneling or other excavation within the root zones of trees prior to backfill.

- No chemicals or other waste materials shall be dumped within 20' of the base of any tree. There shall be no material storage in the TPZ.

- Pier and at-grade beam foundation construction should be used around the tree to avoid root damage.

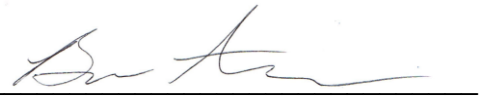
The top 3' of any pier located inside a TPZ shall be pneumatically excavated or hand dug then inspected by the arborist prior to drilling for piers to avoid major roots. Any minor roots (<3.5") encountered can be cut cleanly with a saw after excavation.

- Chimneys and other heat vents shall be screened and terminated or provided a trimmed clearance at least 10 feet from branches and foliage (See local fire codes).

- Any tree pruning will be done in accordance with ISA standards. All pruning will be inspected by the arborist.

- The arborist must perform a final inspection to ensure that no unmitigated damage has occurred and to specify any pest, disease or other health care. The arborist shall specify and oversee any necessary restorative actions.

- Any suspected omissions or conflict between various elements of the plan shall be brought to the attention of the arborist and resolved before proceeding with the work.



Benjamin Anderson, Urban Forester
ISA Certified Arborist

Zachary Vought, Urban Forester
ISA Certified Arborist