
Tree Preservation Report

For: Yorba Villas Residential, Chino

APNs 1013-211-21 and 1013-211-22

Prepared for: **Mr. Erik Pfahler**
Borstein Enterprises
11766 Wilshire Boulevard., Suite 820
Los Angeles, CA 90025

Prepared by: **Greg Applegate, ASCA**
Arborgate Consulting, Inc.
1131 Lucinda Way
Tustin, CA 92780
714/ 731-6240
email – greg@arborgate.occoxmail.com

Table of Contents

Introduction.....	1
Project Background	1
Findings.....	2
General Conditions Affecting Tree Health.....	2
Abbreviations in the Matrix of Findings	3
Matrix of Findings.....	3
Protected Trees	6
Health and Condition of Other Trees	6
Discussion	7
Tree Health and Condition	7
Recommendations.....	9
General Recommendations.....	9
Removals	10
Mitigation/Replacements.....	10
General Tree Protection.....	10
Photographic Documentation	12
Disclaimer	38
Appendix.....	39
A. Resume:	40
B. Glossary	40
C. Bibliography	44
D. Tree Map.....	45
Certification	46

Introduction

Project Background

Borstein Enterprises is planning to develop a residential project in unincorporated San Bernardino County within the Chino Sphere of Influence. The site is located at 4570 Francis Avenue, Chino, CA 91710 and consists of APNs 1013-211-21 and 1013-211-22. In years past the property was used for farming goats.

Arborgate Consulting was engaged by Mr. Erik Pfahler and asked to provide this tree evaluation report for about 50 mature trees located at 13.35-acre property at the corner of Francis Avenue and Yorba Avenue. Arborgate was asked to inspect all the trees six-inch caliper and above on site, and produce this report for the County. The site inspection was on January 26, 2021. This consultant has not been provided detailed plans for the site. Due to typical mass grading, it is clear to my client that all or nearly all the trees need to be removed. However, there were no protected species found on site.

A glossary is included for arboricultural terms used and a tree map is enclosed showing the order of tree numbering. Photographs are found in the appendix to document the tree conditions.

Findings

General Conditions Affecting Tree Health

The primary conditions affecting tree health at this site are previous grazing, physical injuries, and lack of appropriate tree care. Despite lack of proper tree maintenance and past droughts in southern California some of the subject trees, are in good health. The grazing of goats has severely limited the number of new seedlings and young trees are rare, except a few weed trees under the power lines.

There is no apparent reason or pattern to the tree positions, other than weed trees that came up below where birds sit on the wires. Some of the larger trees have been severely topped or headed back, and decay has progressed in many of them. There was a smaller residential portion of the property on the corner of Francis and Yorba, and some of the better trees were left behind in that area, but the buildings removed. Due to the large sizes and the low values, there are few if any trees that would be worth transplanting. The likelihood of any of the better trees being in a place where they would be well suited and be able to be protected is very low.

The decay and tangled mass of poorly placed limbs make many of the trees too hazardous to retain in a residential setting. Corrective pruning on such large, old trees is not likely to be helpful.

Abbreviations in the Matrix of Findings

Is=one-sided
 b = basal measurement (size)
 brk = broken limb
 Cod=codominant
 CrS = crowded scaffold limbs
 Db=dieback
 Dk=decay
 BDK=basal decay
 DL=Dog-leg
 EH=End heavy
 epi=epicormics
 FC = flush cut
 Gird = girdling root or vine
 Hd = headed

Inc=included bark
 Inj=injury
 Lt = lion-tailed
 m = used as a prefix = minor
 OL = over lifted
 OP = over pruned
 Rinj=root injury
 SDk = limb decay
 Sp=sparse
 T-bow = bowed trunk
 Tinj = trunk injury
 TO=tear out
 Xing = crossing limbs

Matrix of Findings

Tree#	Species	DBH	Ht.	Wd.	Health	Structure	Root cond	Comments
1	Juglans regia	26	30	32	D	D	Covered	Cod Db Hd under wires
2	Magnolia grandiflora	24	30	30	B	C-	okay	Hd Lt under wires
3	Morus alba	28	40	40	D	D	okay	Dk brk epi
4	Citrus limon	7.6 @ 3'	20	24	C	C-	fill	Sp wilted Xing
5	Washingtonia X 'Filabusta'	26	30	14	C-	B	fill	diamond scale
6	Washingtonia X 'Filabusta'	28	34	12	C	A	okay	diamond scale
7	Eucalyptus nicholii	24	40	38	C	C	okay	Cod inc Sp
8	Thuja orientalis	8" @ 1'	15	10	B	C	Covered	Cod inc OL
9	Afrocarpus falcatus	20	45	30	B	C-	Inj Sh	Cod topd Tinj
10	Afrocarpus falcatus	19	45	35	B	C-	okay	Cod Hd topd Tinj

Tree#	Species	DBH	Ht.	Wd.	Health	Structure	Root cond	Comments
11	Olea europea	12+10+8	28	34	B	C-	okay	Hd Dk epi
12	Juniperus c. Torulosa	13+14+13	28	34	B	C	fill	Cod inc OL Xing
13	Xylosma senticosa	13+13 @ 2'	22	30	B	C-	Covered	Cod FC OL OP DL
14	Cereus repandus	18"b	15	12	A	B	Sh	mBrk
15	Schinus molle	40	45	50	C	D-	Dk	TDk SDk BDk splitting
16	Prunus caroliniana	12	18	14	D	D	Covered	Db under wires
17	Prunus caroliniana	16	26	30	D	D	Covered	Db under wires
18	Sambucus mexicana	11+13	26	32	D	D	okay	Cod brk Db under wires
19	Phoenix canariensis	28	60'th	24	C	B	okay	T-bow Mg def, weak new fronds
20	Eucalyptus globulus	41	70	60	C	C	Covered	mDb DL CrS tortoise beetles
21	Ailanthus altissima	4+7+5+6+4	50	75	B	D	Covered	Thicket both sides of fence
22	Fraxinus velutina	24	40	50	B	D	okay	Cod CrS Xing
23	Ailanthus altissima	13+14	50	35	B	D	okay	Cod inc brk
24	Fraxinus velutina	40	45	50	B	D	okay	Cod inc Xing Dk 2long
25	Juglans regia	42	45	50	C	D	1sRF	Cod inc Xing Dk
26	Juglans regia	30	50	60	C	D	okay	Cod Hd OL big limbs cut
27	Juglans regia	30" @ 3';	25	30	D	D	okay	Topd epi
28	Juglans regia	40	28	45	D	D	okay	Topd epi under wires
29	Ailanthus altissima	7+5	30	26	B	D	okay	Leans cod suppressed
30	Ailanthus altissima	7+5	22	24	B	D	okay	Leans cod suppressed
31	Ailanthus altissima	38"b	40	50	B	D	okay	Cod inc CrS under wires
32	Sambucus mexicana	30"b	25	40	B	C	okay	Cod inc by meter, under wires
33	Ailanthus altissima	14	30	35	B	D	okay	Leans 45° 1s cod

Tree#	Species	DBH	Ht.	Wd.	Health	Structure	Root cond	Comments
34	Ailanthus altissima	5+4+3+3	20	20	B	D	Covered	Cod base 1s
35	Ailanthus altissima	6+6+5	25	18	B	D	Covered	Cod base 1s, tree fell on it
36	Washingtonia X Filabusta	24	50'th	14	B	A	okay	Long skirt
37	Washingtonia robusta	13	50'th	10	B	A	okay	Long skirt
38	Washingtonia robusta	14	70'th	10	B	A	okay	
39	Juglans regia	14	26	26	D	D	fill	Hd Db
40	Ailanthus altissima	15+13	40	24	B	C-	Covered	Cod inc
41	Ailanthus altissima	13	35	28	B	C	in fence	On PL Tinj cod inc
42	Ailanthus altissima	30" @ 1'	35	28	B	D	Covered	Cod inc brk
43	Ailanthus altissima	30"b	45	50	B	C	okay	Cod Xing
44	Washingtonia robusta	17	70'th	10	B	B	okay	Thin trunk
45	Cupressus sempervirens	7	35	4	B	D	Covered	T-gird by ivy OL
46	Platanus x Hispanica	25 @ 2'	32	30	C-	D	fill	Hd topd epi cod

Protected Trees

There are no protected trees and “No Protected Plants”. Trees along Yorba or Francis appear to be “CMRS (County Maintained Road System)” and may require additional permits for removal.

The protected plants for this region include native trees, unbranched cacti, yuccas, palms and Joshua’s. None of the trees found here are native to this area or California, except the Mexican elderberry, *Sambucus mexicana*, which on this site, are only found below the wires the birds sit on. There is only one cactus, the *Cereus repandus*, which is from South America, and it is highly branched. There are no yuccas of any species including Joshua trees, *Yucca brevifolia*. There are three kinds of palms on site: Canary Island date palm, *Phoenix canariensis*; the Mexican fan palm, *Washingtonia robusta*, from Mexico; and the hybrid fan palm, *Washingtonia* x ‘Filabusta’, a hybrid of the *W. robusta* and the *W. filifera*. *Washingtonia filifera* is native to the desert and in this area is borderline survival due to diamond scale, *Sphaerodothis neowashingtoniae*, a fungal disease. The hybrids still get some diamond scale, but not as much. They are distinguished by thicker trunks and bigger fronds, but not having the hanging filaments of *W. filifera*.

Health and Condition of Other Trees

The other trees on site include Walnuts, Arizona ash, California pepper, blue gum, willow-peppermint, tree of heaven, mulberry, lemon, fern pine, London plane, Carolina cherry and Italian cypress.

The walnuts are in fair to poor health and most were headed back or topped severely. Both ash trees are in good health but poor structural condition. The one California pepper is a hazard. The one blue gum is a hazard and being eaten by tortoise beetles. The other eucalypt, the willow-peppermint, is adequately healthy, but has a lot of included bark and is flat sided. It is also not very tolerant of root disturbance. Tree of heaven is a noxious weed from China and is somewhat out of control here. The one mulberry is severely decayed and has broken limbs. Citrus are not tolerant of root disturbance and seldom survive construction stresses. The one London plane was severely headed back and unattractive. Carolina cherries are only found under the power lines where birds drop seeds, and are in poor health with significant dieback. The Italian cypress has been limbed up too much and its trunk is being strangled by the ivy around it.

The Mexican fan palms are healthy and sound enough to be retained, but they are so inexpensive, it is usually cheaper to plant new ones. Although the fern pines have had some heading, they are healthy and attractive. If the space where they grow can be fenced and protected, they may be worthwhile to preserve. Similarly, the southern magnolia was lion-tailed, but would still make an attractive corner tree. The Canary Island date palm may be useful, but needs to be watered and treated for magnesium deficiency

Discussion

Tree Health and Condition

Young healthy trees can be transplanted with a higher degree of success. However, old or unhealthy trees the size and condition of the ones on site have a poor record of success. Since moving trees equal to the larger sizes on site could easily cost twenty-thousand dollars each, it would be a low odds - high risk, unnecessary operation. Due to their age and condition few of these trees would have a good chance of surviving transplanting or be worth the cost.

If it were not for the planned mass grading of the site, the best chance of saving them would be to preserve them in place during construction, with good protection measures, such as fencing, monitoring and dust control. If the better trees were given sufficient space and protection, they should continue to grow for decades to come. It would be nice to have some larger trees on opening day.

In evaluating the future of mature trees on a construction site, the root system and its depth should be estimated. The roots have been growing in response to the soil porosity, soil texture, soil depth, and compaction. But these trees have been growing near large areas of paving, with equipment and livestock compacting the soil over the years. These trees will have shallow, widespread root systems.

It does not appear that many trees can remain due to grading requirements. However, if some could be graded around, with secure fencing and consideration in design of the future development it would allow the retention a few better

trees. Competition and digging for understory plantings should be minimized. Natural leaf litter or coarse textured organic matter (mulch) is the best ground cover beneath trees. Nature does not place many flowering shrubs or plants beneath trees, and the final landscape design must respect this, if existing trees are to be retained.

If any shrubs are recommended for the area near or beneath their canopy they should be drought tolerant and spaced at least six feet away from tree trunks. An irrigation system that is specifically designed for trees will help preserve them for the longest potential useful life.

To summarize, the part of the trees we cannot see is just as important as the part we can see. If healthy, attractive specimens are desired, both the root zone and upper portion of the trees must be carefully protected and tended. If they are retained, they will be an attractive and valuable asset to the site and are worth the time and expense to preserve for the benefit of the new residents.

Recommendations

General Recommendations

If any trees can be retained, only trees #2, 9, 10, 11 and 13 are recommended for preservation. The following chart provides an minimum tree protection zone for the routing of underground utilities, grading, and for other design considerations. These recommendations are also discussed in the ISA publication “Trees & Development: A Technical Guide to Preservation of Trees During Land Development”, by Nelda Matheny & James Clark, 1998, Pg 74.

Tree#	Species	DBH	Ht.	Wd.	Health	Structure	Root cond	Clearance radius
9	Afrocarpus falcatus	20	45	30	B	C-	Inj Sh	20'
10	Afrocarpus falcatus	19	45	35	B	C-	okay	19'
2	Magnolia grandiflora	24	30	30	B	C-	okay	24'
11	Olea europea	12+10+8	28	34	B	C-	okay	16'
13	Xylosma senticosa	13+13 @ 2'	22	30	B	C-	Covered	16'

Note that none of these trees have good structure. Do not try to do *corrective* pruning for at least two years after construction.

Removals

Wherever reasonably possible, trees to be removed shall be transplanted or offered for transplant. Trees being removed near trees to remain need to have their roots severed before being ripped out. If there is a likelihood of their roots being intertwined, this will reduce the root damage to remaining trees.

A large tub grinder or chipper can produce good mulch from some portion of these trees. That mulch will be helpful to improve soil conditions around any trees that are retained or planted. Urban wood recyclers may be especially interested in the trunks of the walnuts. Tree movers may be interested in taking some of the better trees back to their own nurseries. Any or all of these strategies will reduce the amount of waste that ends up in landfills.

Mitigation/Replacements

The professional opinion of this consultant is that there are no protected species on site. However, replacements for any trees considered by the county as “protected species” that are removed will be supplied through future landscape plans as approved by the county. These replacement trees should be appropriate to the new use of the land and its then current soil and surroundings. The trees that are removed shall be replaced with a mixture of 15 gallon and 24-inch box container sizes. As the design and space allotment will be determined by an architect’s and landscape architects as yet undetermined design, this consultant has not addressed the exact species of replacements. Wherever possible, preservation of existing trees and shrubs shall be used to meet site-landscaping requirements.

General Tree Protection

1. Prior to any construction activities, the protection zones described above shall be fenced off with a 6 foot high chain link fence. Fencing shall remain until the beginning of the final landscape phase. See General Tree Mitigation #7.
2. Removals and all work within the protection zone must be done without the use of heavy equipment, such as backhoes or excavators. Track-mounted equipment will be considered individually if the soil is dry.
3. County tree permits are free, but are required for cutting, replacing and removing trees within any portion of a San Bernardino County Department of Public Works Maintained road right-of-way. Check for a map of CMRS roads at: <http://arcg.is/1Te4DEW>

4. The tree protection zone should have a locked gate, with a key provided to the arborist monitoring the project.
5. A consulting arborist should be retained by the developer to provide periodic inspections, enforce protection measures during construction and to speak for the trees' interest in interface with the architect and contractors.
6. Signage shall be placed at the trees, which indicates that no chemicals, machinery or materials shall be placed or stored within the confines of the fence.
7. Just after the removal of the protection zone fence, under the supervision of the Consulting Arborist, the trees shall be *minimally* pruned prior to occupancy to repair any damaged branches, elevate for essential access, and removal of deadwood. All work shall be performed by a firm drawn from a pre-qualified list of tree services. The selected firm shall provide a Certified Arborist to direct their crew on site.
8. Do not plant or irrigate below the canopies. Non-living ornament, such as boulders, river rock, or mulch are preferable to even native plantings. Irrigation lines shall not be dug at a tangent to the canopy.

Any pruning for removal of dead or broken limbs shall be in accordance with ANSI A-300, part 1 standards. Lower limbs should be maintained if possible to reduce minor injuries to the trees and any perceived need for under planting. No not thin-prune, top, or lion-tail the trees.

Photographic Documentation



#1 Walnut



#2 Magnolia



#3 Mulberry



#4 Lemon



#5 Hybrid fan palm



#6 Hybrid fan palm



#7 Willow peppermint



#8 Arborvitae



#9 Fern pine



#10 Fern pine



#11 Olive



#12 Hollywood juniper



#13 Shiny xylosma



#14 Cereus cactus, Peruvian apple



#15 California pepper



#20 Blue gum



East edge of property – note Carolina cherries under the wires



#16 & 17 Carolina cherries and #18 Mexican elderberry (right to left)



#18 Mexican elderberry



#19 Canary Island date palm



#21 Tree of heaven thicket in northeast corner.



#22 Arizona ash



#23 Tree of heaven – note tear out on the right side of the trunk.



#24 Arizona ash



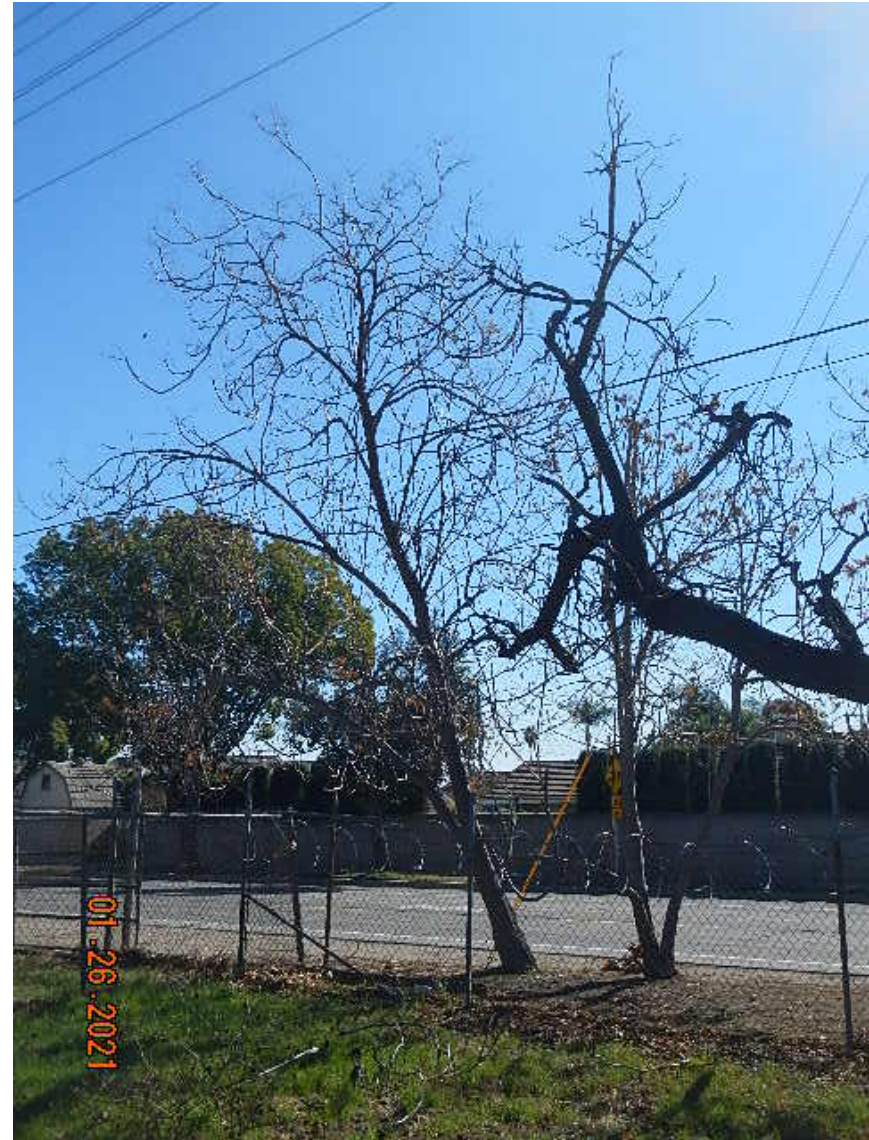
#25 Walnut



#26 Walnut



#27Walnut



#29 Tree of heaven



#28 Walnut



#31 Tree of heaven – note leaning trunk



#31 Tree of heaven



#32 Mexican elderberry



#33 Tree of heaven



#34 Tree of heaven



#35 Tree of heaven – note the tree that fell on it.



#36 & 37 Hybrid & Mexican fan palms (left to right)



#38 Mexican fan palm



#39 Walnut



#40 Tree of heaven



#41 Tree of heaven



#42 Tree of heaven



#43 Mexican fan palm



#44 Italian cypress



#45 :London plane tree



Looking northeast



Looking north



Looking east

Disclaimer

A tree hazard evaluation was not requested or part of this scope of work. The purposes of this assignment are related to tree inventory and preservation. Regardless, even when every tree is inspected, inspection involves sampling, therefore some areas of decay or weakness may be missed. Weather, winds and the magnitude and direction of storms are not predictable and failures may occur despite the best application of high professional standards. Future tree maintenance will also affect the trees' health and stability and is not under the supervision or scrutiny of this consultant. Continuing construction activity such as irrigation trenching will also affect the health and safety, but are unknown and unsupervised by this consultant. Trees are living, dynamic organisms and their future status cannot be predicted with complete certainty by any expert. This consultant does not assume liability for any tree failures involved with this property.

I recommend that any remaining trees be evaluated for stability and potential hazard after the site development is completed and before occupancy.

Appendix

- A. Resume
- B. Glossary
- C. Bibliography
- D. Tree Map

A. RESUME:

GREGORY W. APPLGATE, ASCA, ASLA emeritus

PROFESSIONAL REGISTRATIONS:

American Society of Consulting Arborists - Registration #365
American Society of Consulting Arborists – Tree & Plant Appraisal Qualified
International Society of Arboriculture, Certified Arborist Number WE-0180a
International Society of Arboriculture, Tree Risk Assessment Qualified

EXPERIENCE:

Mr. Applegate is an independent consulting arborist. He has been in the horticulture field since 1963, providing professional arboricultural consulting since 1984 within both private and public sectors. His expertise includes appraisal, tree preservation, diagnosis of tree growth problems, construction impact mitigation, environmental assessment, expert witness testimony, hazard evaluation, pruning programs, species selection and tree health monitoring.

Mr. Applegate has consulted for insurance companies, major developers, theme parks, homeowners, homeowners' associations, landscape architects, landscape contractors, property managers, attorneys and governmental bodies.

Notable projects on which he has consulted are: Disneyland, California Adventure, Disneyland Hotel, Disney's Wild Animal Kingdom, DisneySeas-Tokyo, Knott's Berry Farm, Newport Coast, Crystal Court, Newport Fashion Island, Big Canyon Golf Course, Oakcreek Golf Course, Tustin Ranch windrows, Laguna Canyon Road and Myford Road for The Irvine Company, Loyola Marymount University, UCI, Universal City Station/MTA tree inventory and the State of California review of the Landscape Architecture License exam (plant materials portion)

EDUCATION:

Bachelor of Science in Landscape Architecture,
California State Polytechnic University, Pomona 1973
Arboricultural Consulting Academy (by ASCA)
Arbor-Day Farm, Kansas City 1995
Continuing Education Courses in Arboriculture
required to maintain Certified Arborist status and for ASCA membership

PROFESSIONAL AFFILIATIONS:

American Society of Landscape Architects (ASLA), Full Member
American Society of Consulting Arborists (ASCA), Full Member
Diplomate American Board of Forensic Examiners
International Society of Arboriculture (ISA), Regular Member
California Tree Failure Report Program, UC Davis, Participant
Street Tree Seminar (STS), Member

COMMUNITY AFFILIATIONS:

Guest lecturer at Cal Poly, Saddleback College, & Palomar Junior College
Landscape Architecture License Exam, Reviewer, Cal Poly Pomona (1986-90)
American Institute of Landscape Architects (L.A.) Board of Directors (1980-82)
California Landscape Architect Student Scholarship Fund - Chairman (1985)
International Society of Arboriculture - Examiner-tree worker certification (1990)

Glossary

ANSI-A300	American National Standards Institute performance standards for the care and maintenance of trees, shrubs and other woody plants.
Appraisal	The act or process of reaching a monetary opinion of properly defined value which is disinterested, impartial, independent, and objective and of unambiguously reporting that opinion. Distinguished from valuation.
Arboricultural	Pertaining to the awareness, care, evaluation, identification, growing, maintenance, management, planting, selection, treatment, understanding, valuation and so forth of trees and other woody plants and their growing environments, particularly in shade and ornamental (non-crop/commodity) settings.
Arboriculture	The selection, cultivation, and care of trees, vines, and shrubs.
Arborist	A person possessing the technical competence through experience and related training to provide for or supervise the management of trees or other woody plants in a landscape setting.
ASCA	The American Society of Consulting Arborists, Inc. a professional society, as described in its by-laws.
Bark	Tissue on the outside of the vascular cambium. Bark is usually divided into inner bark - active phloem and aging and dead crushed phloem - and outer bark.
Basal flare	Most trees have a rapid increase in diameter as the trunk meets the soil line or root crown. This area is associated with both trunk and root tissue.
Canopy	The live, foliage-bearing part of a tree.
Codominant	Leaders equal in size and relative importance, developed from 2 apical buds at the top of a stem. Each codominant stem is an extension of the stem below it. There are no branch collars or trunk collars at the bases of codominant stems.
Compaction	(Soil Compaction) The compression of soil, causing a reduction of pore space and an increase in the bulk density of the soil. Tree roots cannot grow in compacted soil.
Crotch	The union of two or more branches; the axillary zone between branches.
Crown	The upper portions of a tree or shrub, including the main limbs, branches, and twigs.
DBH	Diameter of the trunk, measured at breast height or 54 inches above the average grade. See caliper.

Decay	Progressive deterioration of organic tissues, usually caused by fungal or bacterial organisms, resulting in loss of cell structure, strength, and function. In wood, the loss of structural strength.
Decline	Progressive reduction of health or vigor of a plant.
Dripline	A projected line on the ground that corresponds to the spread of branches in the canopy; the farthest spread of branches.
Evergreen	Retains its leaves throughout the year.
Fertilization	The process of adding nutrients to a tree or plant; usually done by incorporating the nutrients into the soil, but sometimes by foliar application or injection directly into living tissues.
Foliage	The live leaves or needles of the tree; the plant part primarily responsible for photosynthesis.
Grading	Also Regrading. Intentional altering of topography and soil levels, using machinery.
Growth Increment	The incremental growth added as new wood each growing season over existing wood. This is seen as (growth) rings in cross-sections of wood.
Heading	Pruning techniques where the cut is made to a bud, weak lateral branch or stub, indiscriminate of nodes and laterals
Included bark	Bark or cortex tissue that is included or trapped between close-growing branches. Usually found in narrow or tight crotches.
Increment	see growth increment
Limb	A large lateral branch growing from the main trunk.
Mulch/Mulching	Substances spread on top of the ground to conserve water, protect against erosion, retain moisture, and protect the roots of trees from heat, cold or drought. The substances are typically organic, such as compost, manure or bark chips.
Native	A plant that grows naturally in a particular country, state, or region, and is neither introduced through planting, nor naturalized.
Naturalized	A new, introduced plant which is successfully adjusted to a new environment.
Root crown	Area at the base of a tree where the roots and stem merge (synonym - root collar)
Root System	The portion of the tree containing the root organs, including buttress roots, transport roots, and fine absorbing roots; all underground parts of the tree.

Root Zone	The area and volume of soil around the tree in which roots are normally found. May extend to three or more times the branch spread of the tree, or several times the height of the tree.
Scaffold limb	Primary structural branch of the crown.
Shrub	A relatively low woody plant with several stems arising near the ground.
Stress	"Stress is a potentially injurious, reversible condition, caused by energy drain, disruption, or blockage, or by life processes operating near the limits for which they were genetically programmed." Alex Shigo
Topping	The practice of cutting large limbs back severely, without regard to form or habit of the tree. Cuts are usually made between lateral branch nodes. This practice is extremely injurious to trees, and promotes decay in the canopy.
Trees	with a single or few trunks near the base, and greater than 6 inches in trunk diameter, per Rick Sanders.
Valuation	An analysis or study of monetary value or the methodology used in determining monetary value or the giving of advice concerning monetary value, which is not constrained by the same duties as an appraisal and which is not held out or reported as an appraisal. An assignment involving such activity.
Value	The relative worth, merit, or importance of a thing, expressed as a single point, a range, or a relationship to a benchmark.
Vigor	Active, healthy growth of plants: ability to respond to stress factors.

C. Bibliography

Trees & Development: A Technical Guide to Preservation of Trees During Land Development, Nelda Matheny & James Clark, ISA 1998

D. Tree Map



The buildings and cars at the southeast corner ↑ have all been removed.

Certification

I, Gregory W. Applegate, certify to the best of my knowledge and belief:

That the statements of fact contained in this report, are true and correct. That the report analysis, opinions, and conclusions are limited only the reported assumptions and limiting conditions, and are my personal unbiased professional analysis, opinions and conclusions.

That the proposed tree removal, replacement, or revegetation activities are appropriate, supportive of a healthy environment, and in compliance with Chapter 88.01.050.


That I have no present or prospective interest in the vegetation that is the subject of this report, and I have no personal interest or bias with respect to the parties involved.

That my compensation is not contingent upon the reporting or a predetermined value or direction in value that favors the cause of the client, the amount of the value estimate, or the attainment of stipulated result.

That my analysis, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Guide for Plant Appraisal, authored by the Council of Tree & Landscape Appraisers and the standards of arboricultural practice.

That I have made a personal inspection of the plants that are the subject of this report. No one provided significant professional assistance to the person signing this report.

Gregory W. Applegate, ASCA
Registered Consulting Arborist #365



Date 01/28/2021