

WILSON & ASSOCIATES

LANDSCAPE ARCHITECTURE

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Date: February 26, 2018, *Revised December 12, 2018*

Re: Arborist Report

Proposed **Huntwood Town House** project

28538 Huntwood Avenue

Hayward, California

Memo:

At the request of the Owner, we evaluated existing trees at the above referenced property which is proposed to have a 14 unit town house project constructed on the site. Our office had previously visited this site and evaluated the existing trees in 2005. We re-visited the site on Tuesday, February 20, 2018 (*and again on December 3, 2018*) to reevaluate the existing trees on this site. Refer to separate plan Sheet L-1 "Preliminary Landscape Plan" dated 02-26-18 and the attached sketch, photos and information.

Refer to the Civil Engineering Plans by Triad / Holmes Associates and Architectural Plans by James M. T. Chao for the proposed site plan, grading, excavation, utility installation, drainage, building information and other Civil and Architectural related issues.

The site is 1.21 acres, now vacant with several small to mature existing trees. The site is generally level with some areas of soil fill deposited. Based on the latest proposed plans, most of the existing trees are proposed to be removed due to their location in or near the building footprints, parking areas, or driveway. Several trees were undesirable weed species, stump sprouts, or in poor condition. There were two very large trees, one Oak and one Sycamore in fair to good condition that are to be removed.

Per City of Hayward definition, "Heritage" trees are California native trees with a trunk diameter equal or larger than four inches and non-native trees with a trunk diameter equal or larger than eight inches. Per this definition all existing trees noted below are Heritage trees with the exception of ET17 and ET18.

Trees under 4" in caliper were not evaluated or located. All are to be removed.

"DBH" noted below refers to "Diameter at Breast Height" or at 54" above ground level from the base of the tree.

On-Site Trees.

Tree ET1

Juglans nigra / Black Walnut. 24" caliper DBH. Approximately 35' diameter and 30' height. Fair condition. Some poor branching structure and past pruning. Location at edge of proposed driveway and sidewalk. Not an especially desirable species. To be removed.

Tree ET2

Cedrus deodora / Deodar Cedar. 18" caliper DBH. Approximately 20' diameter and 20' height. Fair to poor condition. Severe lean to the tree makes it a falling hazard. Although potentially this tree could be saved, we recommend removal due to hazard potential.

Trees ET3, ET4 and ET5

Sequoia sempervirens / Coast Redwoods. 24", 12" and 15" caliper DBH. Approximately 20' to 35' height and 20' diameter. This is a close group of Redwoods in fair to poor condition. Very crowded together. We recommend removal of the smaller trees, ET4 and ET5 to allow the larger tree ET3 room to thrive. These trees have been affected by the drought.

Tree ET6

Schinus molle / California Pepper Tree. Double trunked, 15" and 12" caliper DBH. Fair to poor condition. Approximately 18' diameter and 18' height. Probably a "volunteer" planted by animals at the fence-line. Not a particularly desirable species. Can be very messy. To be removed.

Tree ET7

Deleted. Tree does not currently exist.

Tree ET8

Quercus agrifolia / Coast Live Oak. 48" caliper DBH. Approximately 50' spread and 30' height. Fair to good condition. Crown branching nearly to the ground. Native Oak tree of mature age. Fair to good condition. No diseases seen. Somewhat lop-sided due to adjunct development to the north. This would generally be considered a tree species to be saved, but its size, location and the density of proposed development requires its removal.

Tree ET9, ET10, ET11, ET12, and ET13

Sequoia sempervirens / Coast Redwoods. 16", 24", 20", 18", and 18" caliper DBH. 15'+/- diameters, and 30' to 35' height. A group of fairly closely spaced Redwood trees in fair to poor condition. These trees have clearly been affected by the drought. One had a dead top. To be removed due to location in proposed house.

Tree ET14

Schinus molle / California Pepper Tree. 20" caliper DBH. Approximate spread and height of 15' Poor condition. Crowded in corner of site. A "volunteer" tree. Messy and generally undesirable tree in a poor location. To be removed.

Tree ET15

Platanus acerifolia / London Plane Tree. 30" caliper DBH. Approximately 40' diameter and 35' 35' height. Fair to good condition. The size and species would generally be considered a tree to be saved, but its size and location in the proposed driveway requires its removal.

ET16

Deleted. Tree does not currently exist.

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ET17

Ulmus spp. / Elm. A group of small stump sprouts in poor condition. To be removed.

ET18

Acer negundo / Box Elder. Multi-trunked. Poor condition. Undesirable species to be removed.

ET19

Schinus molle / California Pepper Tree. 14" caliper DBH. Approximately 30' spread and 25' height. Fair to poor condition. To be removed due to location in proposed house.

ET20

Geijera parvifolia / Australian Willow. 12" caliper DBH. Approximately 15' spread and height. Fair condition. Street tree. To remain.

Off-Site Trees

ET21

Liquidamber Styraciflua / American Sweet Gum. 9" caliper DBH. Approximately 12' spread and 30' height. Fair to good condition. Trees ET21, ET22, ET23, ET24 and ET25 are in narrow planters and beginning to damage the nearby curbs and paving.

ET22

Liquidamber Styraciflua / American Sweet Gum. 7" caliper DBH. Approximately 12' spread and 30' height. Fair to good condition.

ET23

Populus alba / White Poplar. 14" caliper DBH. Approximately 15' spread and 25' height. Fair to poor condition. Split trunk.

ET24

Liquidamber Styraciflua / American Sweet Gum. 12" caliper DBH. Approximately 12' spread and 30' height. Fair to good condition.

ET25

Liquidamber Styraciflua / American Sweet Gum. 8" caliper DBH. Approximately 12' spread and 25' height. Fair to good condition. Crowding the large adjacent on-site Oak tree, ET8. Leans away from Oak.

ET26

Sequoia sempervirens / Coast Redwood. 24" caliper DBH. Approximately 15' spread and 30' height. Poor condition. Not maintained. Vines on trunk. Partially dying crown.

ET27

Washingtonia robusta / Mexican Fan Palm. 18" caliper DBH. Approximately 10' spread and 25' height. Good condition. Caliper not comparable to other trees due to growth pattern of palm trees.

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The valuations noted below are based on the ISA (International Society of Arboriculture) “Trunk Formula Method”.

Using the ISA “Trunk Formula Method” the values of the existing trees was determined as follows.

$$V = (RC + ((BP \times (ATA - ATr))) \times SR \times CR \times LR$$

Assume:

V = Value

RC = Replacement Cost = \$1,800.00

BP = Base Price = \$69.00

TA=Trunk Area = As shown below

ATA-ATr = Adjusted Trunk Area – Adjusted Trunk replacement value = As shown below for trees over 30” in diameter.

Species Rating = As shown below

Condition Rating = As shown below

Location Rating = As shown below

Tree No. ET1. Walnut. To be removed. 24” caliper.

Species Rating = 0.3

Condition Rating = 0.7

Location Rating = 0.7

$$V = (1,800 + (69 \times 452) \times 0.3 \times 0.7 \times 0.7$$

$$V = \$4,849.00$$

Tree No. ET2. Deodar Cedar. To be removed.

This tree is deemed a hazard. Assigned zero value.

Tree No. ET3. Coast Redwood. To remain. 24” caliper.

Species Rating = 0.8

Condition Rating = 0.5

Location Rating = 0.8

$$V = (1,800 + (69 \times 452) \times 0.8 \times 0.5 \times 0.8$$

$$V = \$10,556.00$$

Trees No. ET4 and ET5. Coast Redwood. To be removed.

Crowding Tree ET3. Assigned zero value.

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Tree No. ET6. California Pepper Tree. To be removed. 15" and 12" caliper.

Species Rating = 0.3

Condition Rating = 0.4

Location Rating = 0.2

$V = (1,800 + (69 \times 290)) \times 0.3 \times 0.4 \times 0.2$

V=\$523.00

Tree No. ET8. Coast Live Oak. To remain. 48" caliper.

Species Rating = 0.8

Condition Rating = 0.7

Location Rating = 0.7

$V = (1,800 + (69 \times 1,468)) \times 0.8 \times 0.7 \times 0.7$

V=\$40,412.00

Tree No. ET9. Coast Redwood. To be remain. 16" caliper.

Species Rating = 0.8

Condition Rating = 0.4

Location Rating = 0.8

$V = (1,800 + (69 \times 201)) \times 0.8 \times 0.4 \times 0.8$

V=\$4,011.00

Tree No. ET10. Coast Redwood. To remain. 24" caliper.

Species Rating = 0.8

Condition Rating = 0.5

Location Rating = 0.8

$V = (1,800 + (69 \times 452)) \times 0.8 \times 0.5 \times 0.8$

V=\$10,556.00

Tree No. ET11. Coast Redwood. To be remain. 20" caliper.

Species Rating = 0.8

Condition Rating = 0.5

Location Rating = 0.8

$V = (1,800 + (69 \times 314)) \times 0.8 \times 0.5 \times 0.8$

V=\$7,509.00

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Tree No. ET12. Coast Redwood. To be removed. 18" caliper.

Species Rating = 0.8

Condition Rating = 0.5

Location Rating = 0.8

$V = (1,800 + (69 \times 254)) \times 0.8 \times 0.5 \times 0.8$

V=\$6,184.00

Tree No. ET13. Coast Redwood. To be removed. 18" caliper.

Species Rating = 0.8

Condition Rating = 0.5

Location Rating = 0.8

$V = (1,800 + (69 \times 254)) \times 0.8 \times 0.5 \times 0.8$

V=\$6,184.00

Tree No. ET14. California Pepper Tree. To be removed. 20" caliper.

Species Rating = 0.3

Condition Rating = 0.4

Location Rating = 0.2

$V = (1,800 + (69 \times 314)) \times 0.3 \times 0.4 \times 0.2$

V=\$563.00

Tree No. ET15. London Plane Tree. To be removed. 30" caliper.

Species Rating = 0.8

Condition Rating = 0.7

Location Rating = 0.8

$V = (1,800 + (69 \times 706)) \times 0.8 \times 0.7 \times 0.8$

V=\$22,630.00

Tree No. ET17. Elms. To be removed.

Undesirable stump sprouts. Assigned zero value.

Tree No. ET18. Box Elder. To be removed.

Undesirable species. Assigned zero value.

Tree No. ET19. California Pepper Tree. To be removed. 14" caliper.

Species Rating = 0.3

Condition Rating = 0.4

Location Rating = 0.3

$V = (1,800 + (69 \times 154)) \times 0.3 \times 0.4 \times 0.3$

V=\$447.00

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Tree No. ET20. Australian Willow. To remain. 12" caliper.

Species Rating = 0.8

Condition Rating = 0.7

Location Rating = 0.8

$V = (1,800 + (69 \times 113) \times 0.8 \times 0.7 \times 0.8$

$V = \$4,299.00$

Off-Site Trees.

Tree No. ET21. Liquidamber. 9" caliper.

Species Rating=0.7

Condition Rating=0.5

Location Rating=0.3

$V = (1,800 + (69 \times 64) \times 0.7 \times 0.5 \times 0.8$

$V = \$1,740.00$

Tree No. ET22. Liquidamber. 7" caliper.

Species Rating=0.7

Condition Rating=0.5

Location Rating=0.3

$V = (1,800 + (69 \times 38) \times 0.7 \times 0.5 \times 0.3$

$V = \$464.00$

Tree No. ET23. White Poplar. 14" caliper.

Species Rating=0.4

Condition Rating=0.4

Location Rating=0.3

$V = (1,800 + (69 \times 154) \times 0.4 \times 0.5 \times 0.8$

$V = \$1,988.00$

Tree No. ET24. Liquidamber. 12" caliper.

Species Rating=0.7

Condition Rating=0.5

Location Rating=0.3

$V = (1,800 + (69 \times 113) \times 0.7 \times 0.5 \times 0.3$

$V = \$1,008.00$

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Tree No. ET25. Liquidamber. 8" caliper.

Species Rating=0.7

Condition Rating=0.5

Location Rating=0.2

$V = (1,800 + (69 \times 40) \times 0.7 \times 0.5 \times 0.2$

$V = \$325.00$

No. ET26. Coast Redwood. 24" caliper.

Tree Species Rating=0.8

Condition Rating=0.3

Location Rating=0.3

$V = (1,800 + (69 \times 452) \times 0.8 \times 0.3 \times 0.3$

$V = \$2,375.00$

Tree No. ET27. Mexican Fan Palm. 18" caliper.

Available in the nursery trade. Value=\$500.00

Value of on-site trees to remain = \$ 77,343.00

Value of on-site trees to be removed = \$ 41,380.00

Total on-site tree value = \$118,723.00

Proposed mitigation per the Landscape Plans is 10 (ten) new 48" box trees at \$2,000.00 each for a total of \$20,000.00 and 21 (twenty-one) new 36" box trees at \$1,000.00 each for a total of \$21,000.00. This is a grand total of \$41,000.00. This approximately the total value of the removed trees noted above.

Please contact us with any questions.

Sincerely,



Charles Wilson
Landscape Architect No. 1682
ISA Certified Arborist WE-7138A





Tree ET1, Walnut.



Tree ET2, Deodar Cedar showing lean.



Trees ET3, ET4, and ET5, Redwoods in center. ET2, Deodar Cedar to left and ET6, California Pepper Tree to right.



Tree ET8. Coast Live Oak.



Trees ET9 to ET13. Group of Redwoods.



Tree ET14. California Pepper Tree. Poor Redwood in rear and adjacent Hollywood Juniper are on adjacent parcel.



Tree ET15. London Plan Tree.



Trees ET17, Elm cluster in center. Palm to right is on adjacent property.



Trees ET18, Box Elder group.



Tree ET19, California Pepper Tree in center.

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Tree ET20, Australian Willow. Street Tree.



Off-site trees ET21, ET22 and ET23, Liquidambers and Poplar.



Off-site trees ET24 and ET25. Liquidambers.



Off-site tree ET26, Redwood. On right past fence.



Off-site Tree ET27. Mexican Fan Palm.