Appendix IS-2

Tree Inventory Report

Appendix IS-2

Tree Inventory Report

Carlberg ASSOCIATES

Horticulturists and
Registered Consulting
ARBORISTS

CITY OF LOS ANGELES TREE REPORT
1811 SACRAMENTO STREET
LOS ANGELES, CALIFORNIA 90021

SUBMITTED TO:

FEI YE
SCD 1811 SACRAMENTO LLC
C/O SKANSKA USA COMMERCIAL DEVELOPMENT INC.
633 W. FIFTH STREET, 68TH FLOOR
LOS ANGELES, CALIFORNIA 90071

PREPARED BY:

CY CARLBERG
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DANIEL COWELL
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MARCH 21, 2023

TREE INVENTORY AND REPORT – 1811 SACRAMENTO STREET

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ADDITIONAL EXHIBITS / APPENDICES / ATTACHMENTS

Carlberg ASSOCIATES
Horticulturists and
Registered Consulting
ARBORISTS

March 21, 2023

Fei Ye
SCD 1811 Sacramento LLC
c/o Skanska USA Commercial Development Inc.
633 W. Fifth Street, 68th Floor
Los Angeles, CA 90071

Re: 1811 Sacramento Street, Los Angeles, CA 90021 – City of Los Angeles Tree Report

Dear Ms. Ye,

This report is submitted in response to your request for arboricultural consulting services for the property located at 1811 Sacramento Street in Los Angeles, California.

EXECUTIVE SUMMARY

The 1811 Sacramento Street Project (Project) includes the development of a commercial office building on a 74,277-square-foot (1.71-acre) site located at 1727–1829 East Sacramento Street in the Central City North Community Plan area in the City of Los Angeles ("City"). The Project would include approximately 277,700 square feet of office space, approximately 8,000 square feet of restaurant space, and approximately 5,200 square feet of retail space, resulting in a total floor area of approximately 290,900 square feet upon completion of the Project. Additionally, the Project would include approximately 41,500 square feet of uncovered outdoor areas throughout the Project Site that include exterior office space, outdoor dining space, a rooftop deck and an outdoor amenity deck. The proposed net zero carbon office building has been designed to redefine the workplace by maximizing the use of indoor and outdoor spaces and further creating a convertible design of the parking garage to be adaptable for potential future office uses. The three existing warehouse structures totaling approximately 40,479 square feet of floor area would be removed as part of the Project.

Carlberg Associates (Carlberg) was retained to conduct a tree inventory and to prepare a Tree Report in accordance with guidelines set forth by the City of Los Angeles's Tree Protection Ordinance and Tree Report Template.

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Carlberg arborists conducted the tree inventory on October 3, 2022. The 1.71-acre project was traversed on foot in order to capture all trees, regardless of species or size, in the inventory. The inventory included immediately adjacent street trees and offsite trees whose canopies or protected zones overhang the project site boundaries.

Carlberg inventoried a total of five trees: three onsite trees and two street trees. The three onsite trees are of an unprotected species and are proposed to be removed. No Ordinance-protected trees were encountered on the project site.

ASSIGNMENT AND PURPOSE OF THE TREE REPORT

Carlberg was retained to conduct a tree inventory and to prepare a Tree Report in accordance with guidelines set forth by the City of Los Angeles's Tree Protection Ordinance and Tree Report Template.

City of Los Angeles's Tree Protection Ordinance No. 186,873 (Ordinance)
Protected trees and shrubs as set forth in the Ordinance comprise the following species that measure four inches or greater in "cumulative"[1] trunk diameter (measured at 4.5 feet above natural grade):

- coast live oak (*Quercus agrifolia*)
- valley oak (*Quercus lobata*)
- any other southern California indigenous oak trees but excluding scrub oak (*Quercus berberidifolia*)
- western sycamore (*Platanus racemosa*)
- Southern California black walnut (*Juglans californica)*
- California bay laurel (*Umbellularia californica*)
- Mexican elderberry (*Sambucus mexicana*)
- toyon (*Heteromeles californica*)

Public rights-of-way, parkway, median, and street trees are protected regardless of species or size and must be included in the tree inventory and report.

Los Angeles City Planning CP-4068 [07.07.2022] Tree Report Template (Template)
The Template (dated September 7, 2022) requires the collection and reporting on additional data beyond that required by the Ordinance, both on- and offsite. Some key requirements of the Template include inventory and assessment of all onsite trees regardless of species or size, inventory of offsite trees whose protected zones (15-feet from the edge of their canopy) may be impacted by the project, inventory of all adjacent street trees, photographs of each tree along with a photograph of a leaf from each tree type, mapping of all trees' locations and their canopies (driplines) plus protected zones, and the tree expert's opinion as to whether the tree occurs naturally or was planted. The Template also requires an analysis of impacts to Ordinance-protected trees that occur within 200 feet of the property boundaries. These impacts may be estimated if access is restricted.

This Tree Report will be used during the entitlement and environmental approval process to aid decision-makers and the public in understanding the existing tree resources present on and immediately adjacent to the project site, the potential impacts of the project on the existing tree resources, and the proposed

[1] For purposes of value assessments and other analyses, trunk diameters of multi-stemmed trees will be converted to a single trunk diameter using the methodology set forth in the *Guide for Plant Appraisal*, 10th Edition.

recommendations for tree protection, monitoring, and required mitigation during implementation of the Master Plan.

PROJECT OVERVIEW

Project Location

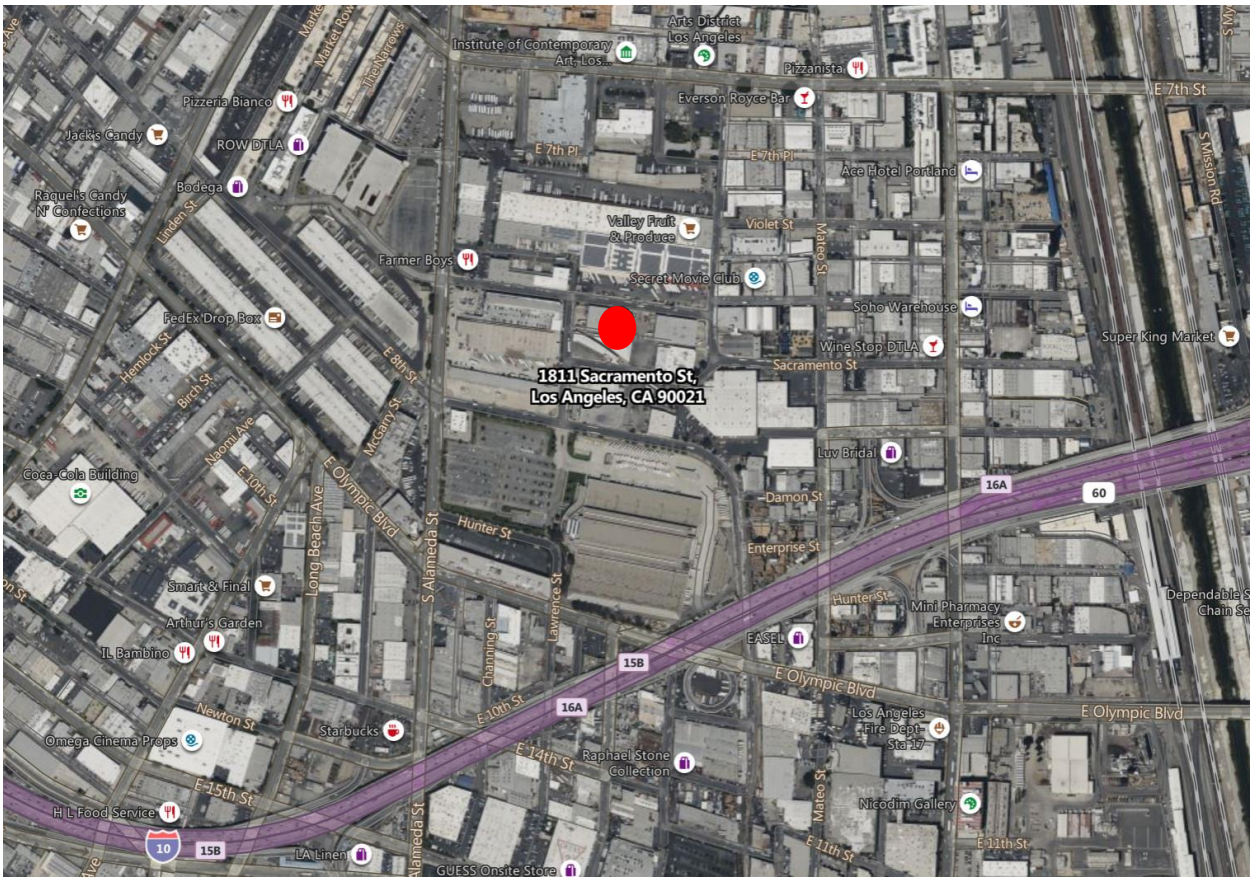
Table 1 includes basic project information for the 1811 Sacramento LLC project.

TABLE 1 – PROJECT INFORMATION

Project Name	SCD 1811 Sacramento LLC – City of Los Angeles Tree Reports
Project Address	1811 Sacramento Street, Los Angeles, CA 90021
Project APN	5166-030-008, 5166-030-009
Project Site Area	1.71 acres
Entitlement Case No.	CPC-2022-7196-GPA-VZC-HD-MCUP-SPR
Environmental Case No.	ENV-2022-7197-EAF
Owner / Applicant	SCD 1811 Sacramento LLC
Owner Representative	Fei Ye SCD 1811 Sacramento LLC c/o Skanska USA Commercial Development Inc. 633 W. Fifth Street, 68th Floor Los Angeles, CA 90071

Exhibits A and B on the following pages illustrate the general project location and an aerial image of the site.

EXHIBIT A – PROJECT LOCATION MAP



1811 Sacramento Street, Los Angeles, California 90021

Source – Bing Maps
No Scale

EXHIBIT B – AERIAL IMAGE OF THE PROJECT SITE

1811 Sacramento Street, Los Angeles, California 90021

N

Source – Bing Maps
No Scale

Project Description

The 1811 Sacramento Street Project (Project) includes the development of a commercial office building on a 74,277-square-foot (1.71-acre) site located at 1727–1829 East Sacramento Street in the Central City North Community Plan area in the City of Los Angeles ("City"). The Project would include approximately 277,700 square feet of office space, approximately 8,000 square feet of restaurant space, and approximately 5,200 square feet of retail space, resulting in a total floor area of approximately 290,900 square feet upon completion of the Project. Additionally, the Project would include approximately 41,500 square feet of uncovered outdoor areas throughout the Project Site that include exterior office space, outdoor dining space, a rooftop deck and an outdoor amenity deck. The proposed net zero carbon office building has been designed to redefine the workplace by maximizing the use of indoor and outdoor spaces and further creating a convertible design of the parking garage to be adaptable for potential future office uses. The three existing warehouse structures totaling approximately 40,479 square feet of floor area would be removed as part of the Project.

TREE ASSESSMENT METHODOLOGY AND DATA PRESENTATION

Project Trees

Carlberg arborists and field technicians conducted the tree inventory on October 3, 2022. Weather conditions were mostly clear and sunny, with the morning and late afternoon marked by light clouds and breeziness associated with the local marine influence.

The tree inventory was conducted on foot. We walked the entire project site to inventory and assess all onsite trees and all offsite trees whose canopies or protected zones[2] extended into the project site. Offsite trees were generally not tagged, and the tree inventory information was estimated due to access restrictions. Individually numbered tree identification tags were nailed or tied with nursery wire to each tree.

The trees were identified, their health and structural condition evaluated[3], trunk diameters measured, heights and canopy spreads approximated, and trunk locations plotted on the topographic survey map provided to us by the project team. More specifically, the inventory included the following assessment factors for protected and non-protected, onsite, immediately offsite, and street trees:

- **Tree Number** (unique tree number engraved on an aluminum tag affixed to each tree, as access allowed)
- **Botanical and Common Name**
- **Trunk Diameter** (diameter at standard height (DSH) / diameter at breast height (DBH) is measured at 4.5 feet above natural grade, or as indicted in the spreadsheet if deviated)
- **Indication** if the tree is a sapling or has a diameter of less than 4 inches
- **Height and Canopy Spread** (approximated)
- **Physiological Condition (health)**
- **Structural Condition**
- **Presence of infectious tree diseases and / or pests**

[2] 'Protected zone' equals 15 feet from the dripline of a tree or 15 feet from the trunk of an unbalanced or young tree, whichever is greater.
[3] Each tree is assigned two letter grades, one for overall health and one for structure. Definitions for the letter grades are included in the appendices of this report.

- **Treatments** (if pests or diseases are outwardly apparent, treatment is generally recommended, but no specific treatment will be called out since only a licensed pest control advisor may opine on specific treatments)
- **Expert opinion** if the tree appears to be naturally occurring or intentionally planted
- **Photographs of All Trees** (or groups of trees where applicable)
- **Leaf photographs** close-up of the individual leaf

Field data was collected on tablets, tree trunk locations were generally mapped on a 50-scale, 36" x 48" topographic sheet map, and photographs were recorded with digital cameras. Tree identification numbers, trunk locations, and tree canopies with protection zones are graphically represented on the Tree Location Exhibit prepared by Carlberg in AutoCAD. Protected and non-protected trees are color-coded as required by the Template and the Ordinance. A full-sized, color copy of the Tree Location Exhibit (in 10, 36" x 48" sheets) is included in the back pocket(s) of this report.

A Tree Photograph Exhibit provides captioned photographs of the trees, and provides an idea of site context, tree densities, conformation, and vigor. Photographs of a leaf or leaves, as appropriate, for each of the different inventoried tree species are included in the Tree Leaf Photographic Exhibit.

OBSERVATIONS

PROJECT SITE TREES

We inventoried and assessed five trees of two different species on and immediately adjacent to the 1.71-acre property: three onsite trees and two street trees are associated with this project site.

Of the five trees, none are Ordinance-Protected species. **Table 2** summarizes the two types of trees found, their onsite, offsite, or street tree status, and how many of each type are included in the inventory.

TABLE 2 – SUMMARY OF INVENTORIED PROJECT SITE, IMMEDIATE OFFSITE, AND IMMEDIATELY ADJACENT STREET TREES

COMMON NAME	BOTANICAL NAME	TOTAL NO. ONSITE	TOTAL NO. OFFSITE PRIVATE	TOTAL NO. STREET TREE	TOTAL NO. TREE SPECIES
Canary Island pine	*Pinus canariensis*	3	0	0	3
lemon bottlebrush	*Callistemon citrinus*	0	0	2	2
		3	**0**	**2**	**5**

Exhibit C – **Reduced Copy of the Tree Location Exhibit** on page 9 provides an illustrative presentation of the existing trees. The full-sized, color copy of the Tree Location Exhibit (in 10, 36" x 48" sheets) is included in the back pocket(s) of this report.

Exhibit I of the appendices includes **Tables 6 and 7 - Tree Inventory Field Data,** which comprises the complete field data spreadsheets for all trees. The Tree Photograph Exhibit, included as **Exhibit J**, provides

captioned photographs of the trees, their site context, canopy densities, conformation, and vigor. Photographs of leaves for each of inventoried tree species is included in **Exhibit K** – Tree Leaf Photographs.

The following **Table 3** summarizes the two street trees. Complete field data information on all other inventoried trees can be found in **Exhibit I**.

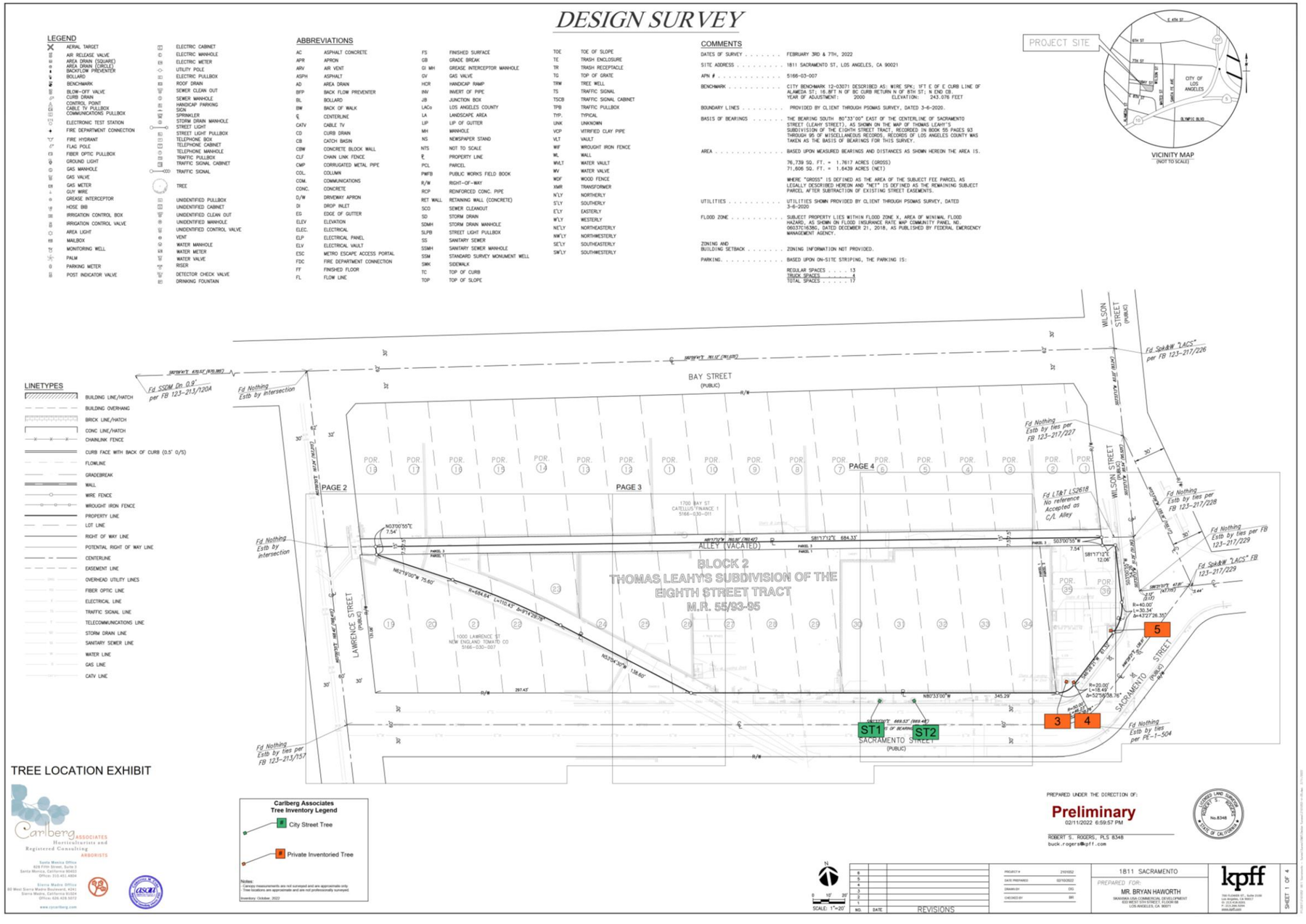
TABLE 3 – SUMMARY OF STREET TREES

STREET TREE (ST)	TREE ID NO.	COMMON NAME	BOTANICAL NAME	DSH /DBH (IN.)	DSH < 4" OR SAPLING	HEIGHT (FT.)	CANOPY N (FT.)	CANOPY E (FT.)	CANOPY S (FT.)	CANOPY W (FT.)	HEALTH GRADE	STRUCTURE GRADE
ST	1	lemon bottlebrush	*Callistemon citrinus*	14.2		25	5	8	12	9	B	B
ST	2	lemon bottlebrush	*Callistemon citrinus*	15.3		22	6	6	12	9	B	B

In our opinion, it is obvious that the street trees associated with this project have been planted into the landscape.

Dbh: diameter at breast height – a forestry term used to describe a tree trunk's diameter measured at 4.5 feet above grade; typically used as a representation of tree size. Also known as Diameter at Shoulder Height.

EXHIBIT C – REDUCED COPY OF THE TREE LOCATION EXHIBIT (NOT TO SCALE)

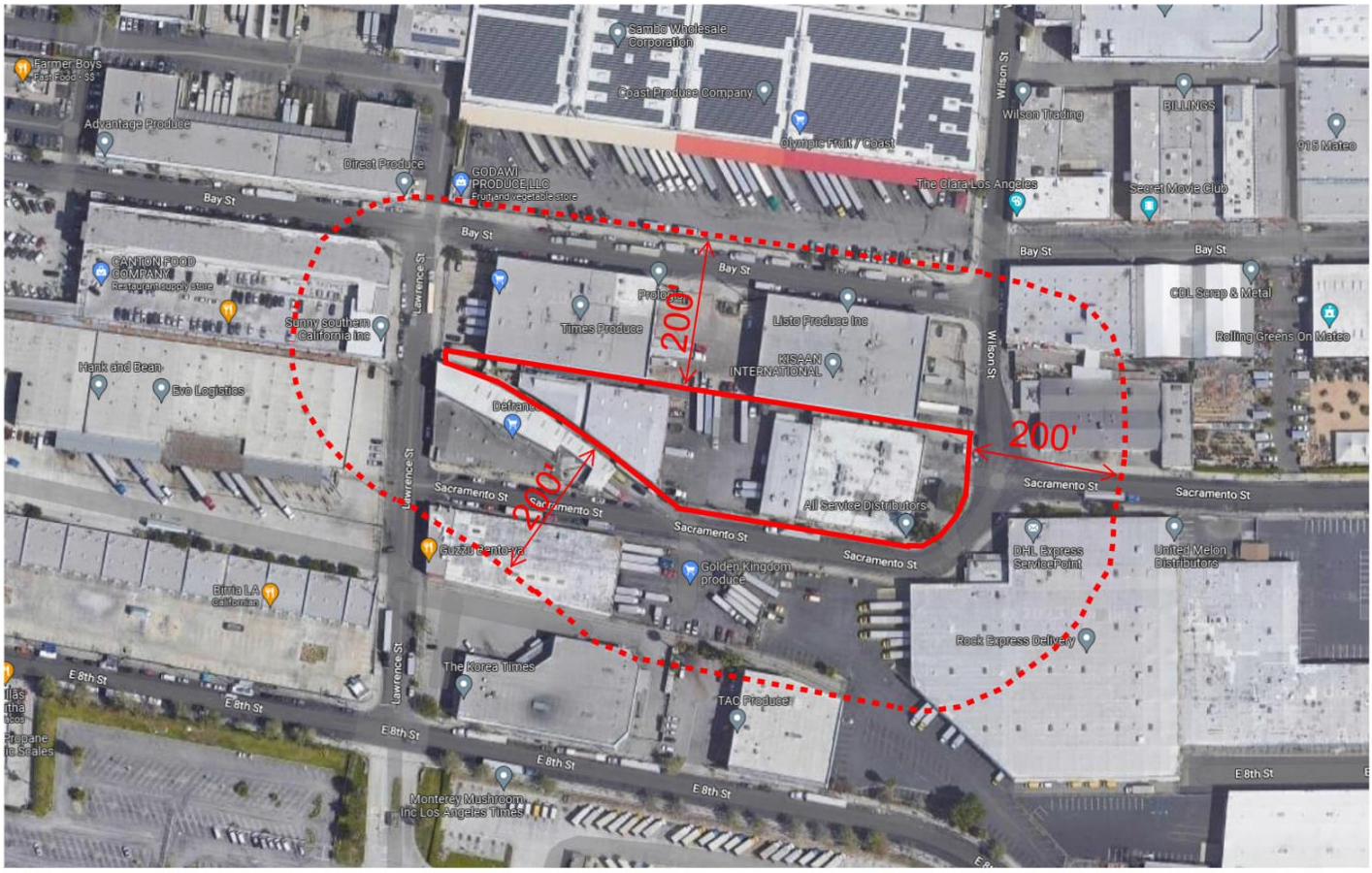


200-FEET RADIUS TREES

There are approximately 15 street trees and five private property trees within the 200-feet radius envelope outside the Project boundaries. None of these offsite trees will be, in our opinion, affected by the Project's grading or construction activities. (see Exhibit D).

Exhibit D illustrates on an aerial image trees within approximately 200 feet of the project site.

EXHIBIT D – 200-FEET RADIUS MAP TREE EXHIBIT



DISCUSSION OF PROJECT IMPACTS

There are numerous potential consequences related to construction that may affect trees during and after a typical construction process. They are as follows:

- EXCAVATION - ROOT SEVERANCE
- SOIL COMPACTION (DURING AND POST-CONSTRUCTION)
- ALTERATION OF THE WATER TABLE/SITE DRAINAGE
- CHANGES IN GRADE – CUT OR FILL
- SUBSTANTIAL TRIMMING OF CANOPY OR ROOTS

A. Excavation/Trenching—Root Severance

Trenching can include excavation for irrigation, utility, or drainage lines. Trenching and excavation can also be required for foundations of structures and free-standing walls. Trenching and excavation removes soil and tree roots. When performed in the critical root zone (approximately 5x the trunk diameter of any tree) or within the dripline (outer edge of the natural canopy), there is the potential to remove large areas of root mass, and to shatter and tear roots that will remain connected to the tree(s). Torn and shattered roots cannot callous over or generate new roots in the manner of cleanly-cut roots. Torn and shattered roots are potentially unstable, are entry points for disease and decay organisms, and eventually die. Significant root loss and/or severance can be critical to the health and structure of trees to remain in a landscape.

B. Soil Compaction

Soil compaction is a complex set of physical, chemical, and biological constraints on tree growth. Principal components leading to limited growth are the loss of aeration and pore space, poor gas exchange with the atmosphere, lack of available water, and mechanical hindrance of root growth. Soil compaction is considered the largest single factor responsible for the decline of trees on construction sites.

C. Changes in Grade

Changes in grade, by the addition or removal of soil (filling or cutting), can be injurious. Lowering the grade around trees can have immediate and long-term effects on trees. The addition of soil and compaction for common engineering practices also results in long-term effects on trees. Typically, the vast majority of the root mass exists within the top three feet of soil, and most of the fine roots active in water and nutrient absorption are in the top 12 inches.

D. Alteration of the Water Table/Site Drainage

The water table is the upper surface of the zone in which soil macropores are saturated with water; water tables may vary seasonally. Rather than a flat, static surface, the water moves down a gradient. Its depth varies, depending on the structure of the soil and rocks through which it flows. A perched water table may form in soils that have impermeable strata. Swamps are created where the water table intersects level ground.

Structures such as footings, basements, subterranean buildings, and retaining walls may intercept impermeable layers in the soil on which water perches. If adequate drainage is not provided, the water table uphill may gradually rise and interfere with tree roots. This type of damage usually takes a period of time to be recognized and diagnosed.[4]

[4] Nelda Matheny and James R. Clark, Trees and Development: A Technical Guide to Preservation of Trees During Land Development, (Champaign, Illinois: International Society of Arboriculture, 1998), pp. 88-89.

Numerous trees are particularly susceptible to root infections, such as Armillaria and Phytophthora. Both of these fungal diseases can progressively weaken a root system, resulting in dead branches in the canopy of the tree, loss of stability of the entire tree because of decaying roots, and premature death of the tree. Trees form roots in accordance with existing soil composition and water availability. Minor drainage changes in the winter and spring months are significant to the health of the trees.

E. Canopy and Root Pruning

Leaves perform vital functions for trees. Through photosynthesis, they manufacture sugars that feed the tree and are used to create the building blocks of wood. Leaves help to move water and nutrients up from the roots and around the tree through their vascular system and cool the tree down through transpiration.
Leaves moderate temperatures beneath the tree, lessen the drying action of winds, and intercept rainfall, which reduces erosion. On the ground, they moderate soil temperatures, retain moisture, and as they decompose, return their nutrients back to the soil to be recycled and reused by the tree. A healthy canopy of leaves is essential to ensure an adequate food supply for the roots to perform their important functions.

Typically, root systems extend outward past the dripline, two to four times the diameter of the average tree's crown. Main root functions include water and mineral conduction, food and water storage, and anchorage of the tree to the soil. Root systems consist of short-lived, fine-textured, feeder roots and larger, woody, perennial roots. Feeder roots, while averaging only 1/16 inch in diameter, constitute the major portion of the root system's surface area. Feeder roots act like sponges, growing predominantly outward and upward from the large roots near the soil surface where minerals, water, and oxygen are usually abundant. Larger, woody roots and their subordinates tend to annually increase in diameter and grow horizontally. Predominantly located in the top 6 to 24 inches of the soil, these structural and storage roots usually do not grow deeper than three to seven feet. Root growth is generally inhibited by soil compaction and temperature. As the depth increases, soil compaction increases, and the availability of water, minerals, oxygen, and soil temperature all decrease.

Removal of significant amounts of the canopy and/or root system can lead to both immediate and long-term detrimental effects on trees. Effects can be physiological, structural, or both.

Trees to be preserved or removed, along with the proposed location of recommended protective fencing, are illustrated on the reduced and full-sized copies of the Tree Impact Exhibit and Protection Plan. The reduced copies are included as **Exhibit E** on page 10. Full-size copies of the Tree Impact Exhibit and Protection Plan (10 sheets) are included in pockets at the end of this report.

Tables 4 – 5 on the following pages provide details of the trees proposed for preservation and removal. As summarized in the tables:

- **2 street trees will be removed**
- **0 street trees will be preserved**
- **3 non-protected trees will be removed**
- **0 non-protected trees will be preserved**
- **0 offsite trees will be removed**
- **0 offsite tree will be preserved**

TABLE 4 – ONSITE NON-PROTECTED TREES TO BE REMOVED

Street or Parkway (ST)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
	3	Canary Island pine	*Pinus canariensis*	25.3		65	15	24	16	15	A	A	P	Development	
	4	Canary Island pine	*Pinus canariensis*	23		60	12	19	12	10	A	A	P	Development	
	5	Canary Island pine	*Pinus canariensis*	29		45	18	30	18	15	A	A	P	Development	

As listed, three onsite non-protected trees are proposed for removal within the project site.

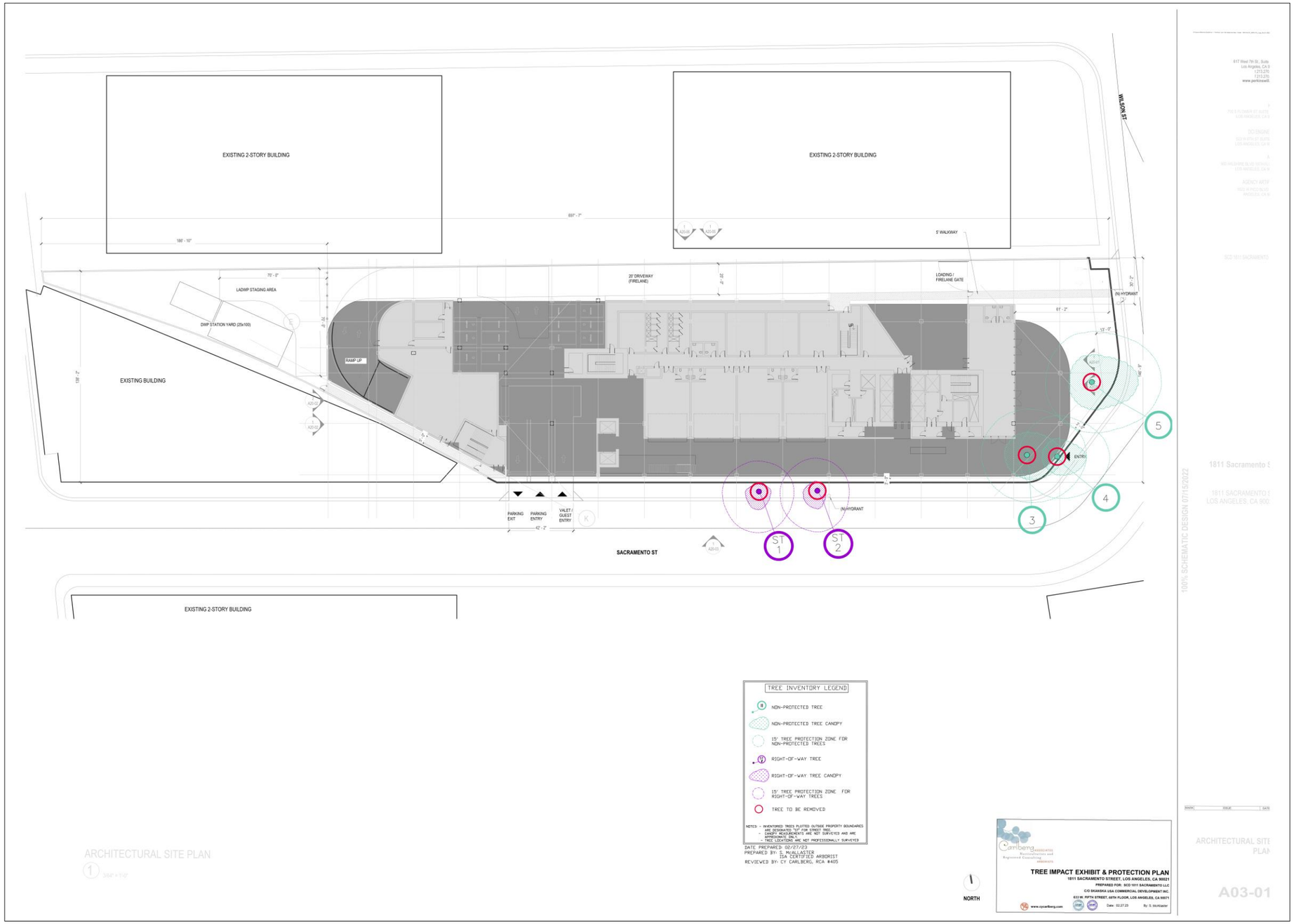
No Ordinance-Protected trees are proposed for removal, therefore there is no table for removal of Ordinance-protected trees.

TABLE 5 – STREET TREES TO BE REMOVED

Street or Parkway (ST)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Naturally Occurring (N) or Planted (P)	Reason for Removal	Replacement Ratio
ST	1	lemon bottlebrush	*Callistemon citrinus*	14.2		25	5	8	12	9	B	B	P	Development	6:1
ST	2	lemon bottlebrush	*Callistemon citrinus*	15.3		22	6	6	12	9	B	B	P	Development	6:1

As listed, two City street trees are proposed for removal. The Project proposes to replace the two trees with 12 new street tree plantings.

EXHIBIT E – TREE IMPACT EXHIBIT AND PROTECTION PLAN



CONCLUSION AND RECOMMENDATIONS

Implementation of the 1811 Sacramento Street project, including demolition, grading, construction of improvements, and installation of streets and utilities for the proposed new parking, roads (driveways), new entry, buildings and utility changes will likely result in the following:

Total Offsite Ordinance- Protected Trees = 0
Removals = 0
Preserve = 0

Total Street Trees = 2
Removals = 2
Preserve = 0

Total Offsite, Non-Protected, Private Property Trees whose Canopies Overhang the Project Site = 0
Removals = 0
Preserve = 0

Total Non-Protected trees = 3
Removals = 3
Preserve = 0

In my professional opinion, the following Best Management Practices (BMPs), recommendations, and conditions should be implemented through the Master Plan process:

'Protected' and Street Tree Removals:

1. Street trees proposed for removal are generally mitigated with 24-inch box specimens using a 2:1 ratio. (Bureau of Street Services, Urban Forestry Division).
2. Mitigation trees shall be guaranteed under a bond for a period of three years. The bond amount will be determined through negotiations between the applicant team and the Urban Forestry Division prior to issuance of a grading permit. The bond will be posted prior to issuance of a grading permit.
3. The Urban Forestry Division shall be notified at least ten (10) days prior to the date of the approved Protected Tree removals. The applicant's Tree Expert (project arborist) shall be on-site for the duration of the tree removals to ensure that the proper trees are removed. A post-tree removal site meeting with an Urban Forestry Division arborist will be required one day after the removals are complete.
4. The Urban Forestry Division shall be notified no later than five days after completion of the tree replacement plantings.
5. The applicant, along with the project arborist and landscape architect, shall be responsible to ensure that the tree removal permit tree replacement conditions are met. Monitoring and compliance documentation will be required as outlined in the General Recommendations below.
6. The mitigation tree bond will be released upon satisfactory compliance with the Protected Tree Removal Permit and all associated conditions.
7. An automatic irrigation should be provided for all mitigation trees.
8. The City Planning Department will make the final determination in the CEQA document and /or other conditions of approval as to the final number of mitigation trees required, the container sizes, and the species to be planted on-site.

General Recommendations and Best Management Practices:

9. Any demolition, digging, excavating, or trenching within the protected zone of any protected tree to remain shall be monitored by the project arborist.
10. Exposed roots to remain should be covered with burlap, carpet remnants or other material that may be kept moist until soil can be replaced.
11. This report shall be part of the set of plans given to the contractors. Contractors should be familiar with the specific instructions and responsibilities pertaining to protected trees. It is recommended that a professional arborist be retained and meet with the contractor and his personnel prior to commencement of the project.
12. If canopy pruning is found to be necessary for trees to remain, it should only be performed by a qualified ISA Certified Arborist or ISA Certified Tree Worker. Climbing "gaffs" shall not be used by any tree climber except in an emergency to reach an injured climber or when removing a tree.
13. Protected trees shall not be removed until/unless approval is granted by the City of Los Angeles' Urban Forestry Division.
14. Pruning or Removals shall occur outside of the nesting bird season as defined by the California Department of Fish and Wildlife and other jurisdictional agencies. If removals must occur in nesting bird season, biological monitoring should be required.
15. Construction monitoring reports will be submitted to the Urban Forestry Division at appropriate intervals. Intervals may vary depending on the level of activity on-site. A monitoring and reporting program will be developed by the project arborist for various phases of the development process. This program will be submitted to the Urban Forestry Division prior to issuance of grubbing, grading, or demolition permits. A final compliance report will be prepared for submission to Urban Forestry upon completion of the project.
16. A maintenance and monitoring program for mitigation trees will be included in the monitoring and reporting program that will be developed by the project arborist. This program will be developed in coordination with the project landscape architect. At least three (3) years of monitoring for mitigation trees is recommended. The Urban Forestry Division will dictate the actual monitoring period for mitigation trees.
17. Equipment, materials, and vehicles shall not be stored, parked, or operated within the protected zone of trees to remain.
18. Equipment with overhead exhaust shall not be placed in such a manner as to scorch overhanging branches or foliage. Smaller equipment shall be used in such areas as deemed necessary by the monitoring arborist.
19. Five (5) foot high chain link fencing shall be installed as illustrated on the Tree Protection Plan prior to submission of this report to the Urban Forestry Division of the City of Los Angeles (reports may not be deemed complete by the Division if fencing is not in place). Photographs of the fencing should be submitted with the report. When performing their inspection, Urban Forestry requires that the protective fencing be in place.

20. A 'Warning' sign shall be prominently displayed on each protective enclosure. The sign will be a minimum of 8.5 inches x 11 inches and clearly state the following:

> TREE PROTECTION ZONE
> THIS FENCE SHALL NOT BE REMOVED
>
> PROJECT ARBORIST: CY CARLBERG
> PHONE: (310) 451-4804
> EMAIL: CY@CYCARLBERG.COM

21. Because of the close proximity of construction to protected and non-protected trees, a professional arborist with construction monitoring experience should be retained to monitor and report on various phases of the project.
22. The Urban Forestry Division shall be notified immediately if any Protected Tree Removal Permit conditions have been violated or cannot be fulfilled.
23. If additional protected, native trees that are not currently "of-size" but grow to 'protected' size during the course of the build-out need to be removed, the UF Division will be advised in writing and the trees will be mitigated at the mitigation ratio required in the project's final conditions of approval and the tree removal permit. The as-built landscape plans will reflect any additional mitigation trees.

Please feel welcome to contact me at our Santa Monica office if you have any immediate questions or concerns.

Respectfully submitted,

Cy Carlberg, Registered Consulting Arborist
Principal, Carlberg Associates

This report comprises a total of 48 pages and two full-size map sets. Unauthorized separation or removal of any portion of this report deems it invalid as a whole.

Conditions represented in this report are limited to the inventory dates and times. Formal risk assessments were not performed for the purposes of this report. Ratings for health, aesthetics, and structure do not constitute a health or structural guarantee beyond that date and time.

CERTIFICATION OF PERFORMANCE

I, Cy Carlberg, certify:

- That I have personally inspected the tree(s) and/or the property referred to in this report and have stated my findings accurately. The extent of the evaluation and appraisal is stated in the attached report and the Terms of Assignment.

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

- That the analysis, opinions, and conclusions stated herein are my own.

- That my analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices.

- That no one provided significant professional assistance to the consultant, except as indicated within the report.

- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I further certify that I am a Registered Consulting Arborist and member of the American Society of Consulting Arborists, and that I acknowledge, accept, and adhere to the ASCA Standards of Professional Practice. I am an International Society of Arboriculture Certified Arborist and Qualified Tree Risk Assessor and have been involved in the practice of arboriculture and the study of trees for over thirty-five years.

Signed:

Date: March 21, 2023

Cy Carlberg
ASCA Registered Consulting Arborist #405
ISA Certified Arborist, WE-0575A
Qualified Tree Risk Assessor
CAUFC Certified Urban Forester #013

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 to 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 any 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, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees contribute greatly to our enjoyment and appreciation of life. Nonetheless, they are subject to the laws of gravity and physiological decline. Therefore, neither arborists nor tree owners can be reasonably expected to warrant unfailing predictability or elimination of risk.

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

LIST OF CONTIBUTORS AND RESUMES OF KEY STAFF

Ms. Cy Carlberg, Principal
Ms. Christy Cuba, Senior Arborist
Mr. Scott McAllaster, Staff Arborist and AutoCAD Drafter
Mr. Daniel Cowell, Staff Arborist, Biologist
Mr. Robert Fessler, Field Technician

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Education
B.S., Landscape Architecture, California State Polytechnic University, Pomona, 1985
Graduate, Arboricultural Consulting Academy, American Society of Consulting Arborists, Chicago, Illinois, February 2002
Graduate, Municipal Forestry Institute, Lied, Nebraska, 2012

Experience
Consulting Arborist, Carlberg Associates, 1998-present
Manager of Grounds Services, California Institute of Technology, Pasadena, 1992-1998
Director of Grounds, Scripps College, Claremont, 1988-1992

Certificates
Certified Arborist (#WE-0575A), International Society of Arboriculture, 1990
Registered Consulting Arborist (#405), American Society of Consulting Arborists, 2002
Certified Urban Forester (#013), California Urban Forests Council, 2004
Qualified Tree Risk Assessor, International Society of Arboriculture, 2011

AREAS OF EXPERTISE

Ms. Carlberg is experienced in the following areas of tree management and preservation:

- Tree health and risk assessment
- Master Planning
- Historic landscape assessments, preservation plans, reports
- Tree inventories and reports to satisfy jurisdictional requirements
- Expert Testimony
- Post-fire assessment, valuation, and mitigation for trees and native plant communities
- Value assessments for native and non-native trees
- Pest and disease identification
- Guidelines for oak preservation
- Selection of appropriate tree species
- Planting, pruning, and maintenance specifications
- Tree and landscape resource mapping – GPS, GIS, and AutoCAD
- Planning Commission, City Council, and community meetings representation

PREVIOUS CONSULTING EXPERIENCE

Ms. Carlberg has overseen residential and commercial construction projects to prevent damage to protected and specimen trees. She has thirty-five years of experience in arboriculture and horticulture and has performed tree health evaluation, value and risk assessment, and expert testimony for private clients, government agencies, cities, school districts, and colleges. Representative clients include:

The Huntington Library and Botanical Gardens
The Los Angeles Zoo and Botanical Gardens
The Rose Bowl and Brookside Golf Course, Pasadena
Walt Disney Concert Hall and Gardens
The Art Center College of Design, Pasadena
Pepperdine University
Loyola Marymount University
The Claremont Colleges (Pomona, Scripps, CMC, Harvey Mudd, Claremont Graduate University, Pitzer, Claremont University Center)
Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)
Getty Trust – Eames House
Historic Resources Group
Mia Lehrer + Associates
The City of Claremont
The City of Beverly Hills
The City of Pasadena
The City of Los Angeles
The City of Santa Monica
Santa Monica/Malibu Unified School District
San Diego Gas & Electric
Los Angeles Department of Water and Power
Rancho Santa Ana Botanic Garden, Claremont
Latham & Watkins, LLP (attorneys at law)
Architectural Resources Group
AHBE Landscape Architects
Moule and Polyzoides, Architects and Urbanists

AFFILIATIONS

Ms. Carlberg serves with the following national, state, and community professional organizations:

- California Urban Forests Council, Board Member, 1995-2006
- Street Tree Seminar, Past President, 2000-present
- American Society of Consulting Arborists Academy, Faculty Member, 2003-2005; 2014
- American Society of Consulting Arborists, Board of Directors, 2013-2015
- Member, Los Angeles Oak Woodland Habitat Conservation Strategic Alliance, 2010-present

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Education
B.A., Environmental Analysis & Design, Cum Laude, University of California, Irvine, 1993
Graduate, International Society of Arboriculture Certification Study Program, April 1998
Graduate, Consulting Academy, American Society of Consulting Arborists, February 2008

Experience
Senior Arborist/Associate, Carlberg Associates, 2011 - Present
Director of Environmental Services & Senior Arborist, Land Design Consultants, Pasadena, 1994 – 2011
Park Specialist/Naturalist, City of Monrovia, 1988-1996

Certificates
Certified Arborist, WE-1982A, International Society of Arboriculture, 1998
Registered Consulting Arborist, #502, American Society of Consulting Arborists, 2011
Qualified Tree Risk Assessor, International Society of Arboriculture, 2013

AREAS OF EXPERTISE

Ms. Cuba is experienced in the following areas of tree management and preservation:

- Tree health & risk assessments
- Inventories & reports for native and non-native trees
- Master planning
- Evaluation of trees for preservation, encroachment, relocation, restoration, and hazards
- Value assessments (appraisals) for native and non-native trees
- Post-fire inventories, assessments, and valuations for native and non-native trees
- Guidelines for tree preservation, planting, pruning and maintenance specifications
- Pest and disease identification
- Tree and landscape resource mapping – GPS, GIS, and AutoCAD
- Planning Commission, City Council, and community meetings representation
- Review of landscape plans for mitigation compliance & fire fuel modification planning
- Preparation of native habitat and woodland management plans
- Performance of long-term mitigation compliance monitoring & reporting
- Expert testimony

PREVIOUS CONSULTING EXPERIENCE

Ms. Cuba has performed hundreds of tree inventories, health evaluations, impact analyses, hazard, and value assessments for counties, cities, sanitation districts, and water districts, as well as private developers, architects, engineers, and homeowners. She has over 23 of experience in arboriculture and is trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, and habitat mitigation planning and implementation. Representative clients include:

City of Pasadena
City of Monrovia
City of Santa Clarita
City of Glendora
Los Angeles County Fire Department
California Institute of Technology
Mia Lehrer + Associates
Pulte/Centex Homes
Newhall Land and Farming
KOVAC Design Studio
EPT Design
Pamela Burton & Company
Chandler School
San Diego Gas & Electric
Quinn, Emanuel, Urquhart and Sullivan (attorneys at law)
The New Home Company
City of South Gate
City of Sierra Madre
Belzberg Architects
Occidental College
Rose Bowl Stadium
Las Encinas Hospital/Aurora Health Services
The Claremont Colleges (Pomona College, Claremont University Consortium, Claremont Graduate University)
Gensler Architects
Mesivta of Greater Los Angeles

AFFILIATIONS

Ms. Cuba serves with the following national and regional professional organizations:

- Member, American Society of Consulting Arborists
- Member, International Society of Arboriculture, Western Chapter
- Member, Los Angeles Oak Woodland Habitat Conservation Strategic Alliance
- Past President (2015), Street Tree Seminar, Inc.

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Education — B.A., Environmental Studies, University of California, Santa Barbara, 2000

Experience — Project Planner & Senior Arborist, Land Design Consultants, Inc.
Pasadena, 1999 – 2014

Certificates — Certified Arborist, WE-7011A, International Society of Arboriculture, 2004
Qualified Tree Risk Assessor, International Society of Arboriculture, 2015

AREAS OF EXPERTISE

Mr. McAllaster is experienced in the following areas of tree management and preservation:

- Tree health & risk assessments
- Inventories & reports for native and non-native trees
- Master planning
- Evaluation of trees for preservation, encroachment, relocation, restoration, and hazards
- Construction monitoring and reporting
- Value assessments (appraisals) for native and non-native trees
- Post-fire inventories, assessments, and valuations for native and non-native trees
- Guidelines for tree preservation, planting, pruning and maintenance specifications
- Tree and landscape resource mapping – GPS, GIS, and AutoCAD
- Planning Commission, City Council, and community meetings representation
- Review of landscape plans for mitigation compliance & fire fuel modification planning
- Performance of long-term mitigation compliance monitoring & reporting

PREVIOUS CONSULTING EXPERIENCE

Mr. McAllaster has performed hundreds of tree inventories, health evaluations, impact analyses, hazard, and value assessments for counties, cities, sanitation districts, and water districts, as well as private developers, architects, engineers, and homeowners. He has over 16 years of experience in arboriculture and is trained in environmental planning, state and federal regulatory permitting, preparation of CEQA analyses, and habitat mitigation planning and implementation. Representative clients include:

City of Pasadena
City of Santa Clarita
City of Glendora
Los Angeles County Fire Department
Los Angeles County Sanitation Districts
Newhall County Water District
Pulte/Centex Homes
Newhall Land and Farming
E & S Ring, Inc.
Hollywood Forever Cemetery
Archdiocese of Los Angeles
St. John's Hospital, Santa Monica
Kovac Architects
Tim Barber, Ltd., Architects
Ojai Valley Community Hospital
The Kibo Group
El Monte Garden Senior Center
IMT Capital, LLC
San Diego Gas & Electric
Corky McMillin Companies
City of South Gate
City of Arcadia
D2 Development
Burrtec, Inc.
The Claremont Colleges
The New Home Company
William Carey University
Claremont Golf Course
Universal Hilton
Gensler Architects
Marmol Radziner, Architects
NAC Architecture
Aurora/Signature Health Services
Monte Vista Grove Homes
Highpointe Communities
Claremont University Center

AFFILIATIONS

Mr. McAllaster serves with the following national and regional professional organizations:

- Member, International Society of Arboriculture, Western Chapter
- Member, Street Tree Seminar, Inc.

EXHIBIT F – DEFINITION OF HEALTH AND STRUCTURE GRADES

Health and structure ratings of the trees are based on the archetype tree of the same species through a subjective evaluation of its physiological health, aesthetic quality, and structural integrity.

Overall physiological condition (health) and structural condition were rated A-F:

Health

A) Outstanding – Exceptional trees of good growth form and vigor for their age class; exhibiting very good to excellent health as evidenced by normal to exceptional shoot growth during current season, good bud development and leaf color, lack of leaf, twig or branch dieback throughout the crown, and the absence of decay, bleeding, or cankers. Common leaf and/or twig pests may be noted at very minor levels.

B) Above average – Good to very good trees that exhibit minor necrotic or physiological symptoms of stress and/or disease; shoot growth is less than reasonably expected, leaf color is less than optimal in some areas, the crown may be thinning, minor levels of leaf, twig, and branch dieback may be present, and minor areas of decay, bleeding, or cankers may be manifesting. Minor amounts of epicormic growth may be present. Minor amounts of fire damage or mechanical damage may be present. Still healthy, but with moderately diminished vigor and vitality. No significant decline noted.

C) Average – Average, moderately good trees whose growth habit and physiological or fire-induced symptoms indicate an equal chance to either decline or continue with good health into the near future. Most of these trees exhibit moderate to significant small deadwood in outer crown areas, decreased shoot growth and diminished leaf color and mass. Some stem and branch dieback are usually present and epicormic growth may be moderate to extensive. Cavities, pockets of decay, relatively significant fire damage, bark exfoliation, or cracks may be present. Moderate to significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it is expected to negatively impact the lifespan of the tree. Tree may be in early decline.

D) Below Average/Poor - trees whose growth habit and physiological or fire-induced symptoms indicate significant, irreversible decline. Most of these trees exhibit significant dieback of wood in the crown, possibly accompanied by significant epicormic sprouting. Shoot growth and leaf color and mass is either significantly diminished or nonexistent throughout the crown. Cavities, pockets of decay, significant fire damage, bark exfoliation, and/or cracks may be present. Significant amounts of insect or disease symptoms may be present; the tree may be shaded or crowded in such a way that it has negatively impacted the lifespan of the tree. Tree appears to be in irreversible decline.

F) Dead or in spiral of decline – this tree exhibits very little to no signs of life.

STRUCTURE

A) Outstanding – Trees with outstanding structure for their species exhibit trunk and branch arrangement and orientation that result in a sturdy form or architecture that resists failure under normal circumstances. The spacing, orientation, and size of the branches relative to the trunk are quintessential for the species and free from defects. No outward sign of decay or pathological disease is present. Some trees exhibit naturally inherent branching defects, like multiple, narrow

points of attachment from one point on the trunk, which would preclude them from achieving an "A" grade.

B) Above average - Trees with good to very good structure for their species. They exhibit trunk and branch arrangement and orientation that result in a relatively sturdy form or architecture that resists failure under normal circumstances, but may have some mechanical damage, over-pruning, or other minor structural defects. The spacing, orientation, and size of the branches relative to the trunk are still in the normal range for the species, but they exhibit a minor degree of defects. Minor, sub-critical levels of decay or pathological disease may be present, but the degree of damage is not yet structurally significant. Trees that exhibit naturally inherent branching defects, like multiple, narrow points of attachment from one point on the trunk, would generally fall in to this category. A small percentage of the canopy may be shaded or crowded, but not in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree.

C) Average - Trees with moderately good structure for their species, but with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a less than sturdy form or architecture, which reduces their resistance to failure under normal circumstances. Moderate levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of some of the branches relative to the trunk are not in the normal range for the species. Moderate to significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A moderate to significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be moderately elevated.

D) Well Below Average/Poor - Trees poor structure for their species and with obvious defects. They exhibit trunk and branch arrangement and orientation that result in a significantly less than sturdy form or architecture, significantly reducing their resistance to failure under normal circumstances. Significant levels of mechanical damage, over-pruning, or other structural defects may be present. The spacing, orientation, and size of many of the branches relative to the trunk are not in the normal range for the species. Significant levels of decay or pathological disease may be present that increase the likelihood of structural instability. Influences such as an excessive trunk lean, slope erosion, root pruning, or other growth-inhibiting factors may be present. A significant percentage of the canopy may be shaded or crowded in such a way that it is expected to negatively impact the structural integrity or lifespan of the tree. Risk of full or partial failure in the near future appears to be advanced.

F) Severely Compromised – trees with very poor structure and numerous or severe defects due to growing conditions, historical or recent pruning, mechanical damage, history of limb or trunk failures, advanced decay, disease, or severe fire damage. Risk of full or partial failure in the near future appears to be severe.

EXHIBIT G - GLOSSARY OF ARBORICULTURAL & DENDROLOGICAL TERMS

Abiotic: Non-living agents including environmental, physiological, & other nonbiological factors (i.e., aeration or water deficit, mechanical injury, or gas line leak).

***Arboriculture*:** Management of individual trees or groups of trees primarily for their amenity value.

***Basal wound*:** A cut or puncture at the base of the trunk of a tree, particularly bad in younger (developing) specimens. Often these wounds are caused by mowers and other gardening equipment and can be prevented by protective staking and the creation of dirt (no turf) surrounding areas - adjacent to the trunk.

Bleeding (from wood): Flow of sap, typically from pruning wounds.

Branch collar: The swelling at the base of a branch, to be left intact in any pruning.

Callus / wound wood: Lignified, partially differentiated tissue which develops from the callus associated with wounds.

Cambium / cambial: Meristematic tissue that gives rise to phloem & xylem.

Canker: An area of dead or malformed bark caused by a pathogen.

Canopy: A term used for the crown or spread of a tree's branches to emphasize its size and enclosing character. Parts of the tree above the trunk, including scaffold limbs, lateral branches, twigs, and leaves.
The canopy spread is often measured in feet.

Cavity: A void in a tree trunk, branch or root that may or may not be open to the exterior, generally created by decay. Over many years the wound may become entirely grown over (occluded) while the decay progresses within.

Co-dominant stems: Branches and *stems* that are nearly equal in size and relative importance

Compartmentalization: A form of defense in woody plants, in which barriers resistant to invasion by pathogens or wood decay fungi are laid down while the wood is living (sapwood), and which continue to act passively once the wood is incorporated into heartwood.

***Conifer*:** A botanical definition embracing trees with cones (ie. seeds not formed within ovaries), mostly with needle-like or scale-like leaves and mostly evergreen. Sometimes conifers are called 'softwoods'.

***Crotch*:** Where two branches of a tree intersect. A narrow crotch arise at an acute (narrow) angle, as when both branches are close to the vertical. The union is relatively weak if there is included bark.

Crown: The branches, twigs and foliage of a tree, considered collectively.

***Crown thinning, crown reduction and crown raising*:** Crown thinning removes branches from the crown without reducing the extent of the crown. Crown reduction decreases the extent of the crown without decreasing its density. Crown raising increases the headroom to the base of the canopy by removing lower branches.

Crown cleaning: The removal of dead, dying, damaged or diseased wood from the crown of a tree.

Deadwood: In the growth and development of a tree, branches compete with each other and weaker branches are eventually suppressed and die. The deadwood is then liable to fall (sometimes called 'natural pruning'). Deadwood develops naturally, largely in the inner and lower crown, of all trees that are mature and unmanaged.

***Decay*:** The progressive degradation of woody tissues caused by specialized fungi & bacteria through decomposition of cellulose & lignin. The pathogen typically enters through wounds in the roots (root rots), main stem or branches (butt and stem rots) and can then extend internally, over a timescale of years or decades, longitudinally or horizontally.

Deciduous: Leaves are lost in winter, as opposed to evergreen.

Diameter at breast height (dbh): The diameter of a tree measured at height 4.5 feet above natural grade. Typically used as a representation of tree size.

***Dieback*:** Death of shoots or roots starting at the extremities.

***Dripline*:** The outermost edge of the tree's canopy. When depicted on a map, the dripline will appear as an irregular shape that follows the contour of the tree's branches as seen from overhead.

***Epicormic shoots*:** Shoots arising from the base of a tree, its trunk or main framework branches, from buds dormant more than one season. May be stimulated by pruning (which increases the light reaching the lower part of the tree), or indicative of damage or decline in the upper crown.

Evergreen: Foliated throughout the year (although there is a gradual turnover of leaves).

Flush cut: A pruning cut that removes the branch collar and/or part of the branch ridge, slowing the occlusion of the wound or damaging its compartmentalization.

***Framework*:** Typically, the main branches (sometimes also called scaffold branches), each of which supports a significant portion of the crown. They largely determine the shape of the tree's crown depending on their height of origin, orientation etc. There is no precise distinction between framework branches and other lesser branches.

Gall: Abnormal growth of leaves, buds, stems etc. in reaction to the presence of an intrusive parasite, often an insect or mite.

***Girdle/girdling*:** Damage that kills the bark all the way round the stem; such as caused by wires or ties that were never removed when the tree was young. That which circles & constricts the stem or roots causing death of phloem &/or cambial tissue.

Habit (growth habit): Giving a tree its characteristic form, for example owing to the stoutness and orientation (fastigiated, ascending, spreading, pendulous, weeping etc.) of a tree's branches.

Hanger: Dead branch fallen from the crown but caught by, and resting on, branches lower down, which be liable to fall.

Heart rot: Decay in the center of the tree (heartwood).

***Included bark*:** Areas of bark on adjacent parts of a tree, typically on the inner faces of a narrow fork, which becomes grown over to occupy part of the internal joint. The bark-to-bark contact is weaker than the more usual woody union.

Lateral branch / limb: The next order of branch that rises from the scaffold limbs.

Leader: The topmost vertical shoot of a tree, present if the tree has strong apical dominance, characteristic of young trees and conifers. Trees with a rounded crown have no leader.

Mulch: a material (such as decaying leaves, bark, or compost) spread around or over a plant to enrich or insulate the soil.

***Parasite*:** An organism that exploits another, e.g., for food, to the prejudice of the host. Parasites may kill their hosts, be pathogenic or have little significant effect.

***Pathogen*:** A kind of parasite that causes disease.

Phloem: A transport tissue characterized by sieve tubes and companion cells, found the vascular bundles of higher plants. Functions in the transport of dissolved organic substances by translocation.

Photosynthesis: The chemical process by which chlorophyll-containing plants use light to convert carbon dioxide and water into carbohydrates, releasing oxygen as a by-product.

Pruning: The cutting off or cutting back of shoots or branches from a tree, whether to direct growth (formative pruning), make safe, to remove an obstructing or diseased part, to increase longevity (veteran trees), to maintain productivity (fruit trees) etc.

Root crown /collar / Root flare: The outwardly curving base of a tree where it joins the roots, often distinguishable as individual root buttresses.

Root crown inspection: Extensive examination of the junction of root & stem, including the area immediately below, aimed at determining stability, presence of disease, decay, etc.

Root plate**:** The area needed by a tree's root system to keep the tree stable; broadly, that part of the root system displaced when a tree is uprooted.

Root zone: The area of ground around the base of a tree that supports root growth; often extends far beyond the dripline of a tree.

Scaffold branch / limb**:** The first order of limbs or branches that arise from the trunk of a tree.

Soil: A mixture of mineral particles, often of various sizes due to weathering, roots and other living things, soil organic matter and the associated voids (pores) filled with air and/or water.

Soil aeration: The movement of gases in soil, primarily by diffusion through the soil pores. For example, oxygen diffuses from the atmosphere to the vicinity of the plant root while carbon dioxide diffuses in the opposite direction. The rate of diffusion is related to the proportion of the soil volume that contains air

Soil compaction: An increase in bulk density due to the pressure exerted by animals, vehicles, (locally) by root growth *etc*. Pore space is reduced, which may also restrict soil aeration, water infiltration and drainage.

Soil structure: The aggregation of soil particles into clumps (peds) of various shapes and the associated spaces between them, affecting many properties of soil including its porosity to air and water, and its fertility.

Soil texture: The size of the mineral particles in the soil, classified (from fine to coarse) as clay, silt, sand, gravel or stones, or some mixture of these to give a characteristic particle size distribution. Sandy soils give a light texture, clayey soils give a heavy texture.

Stub**:** That part of a pruned branch protruding beyond the branch collar. It is not good practice to leave stubs since they impede occlusion and are prone to decay.

Suckers: Shoots arising from the roots of a tree, which can arise surprisingly far from the parent.

Target: A target is the subject of injury or damage within range of a tree hazard

Topping**:** A kind of pruning in which the branches of a tree are all decapitated to reduce the tree to a specific height. An indiscriminate form of pruning not regarded as good practice, to which some trees, such most conifers, are intolerant.

Training: To change the shape of a tree by means other than (formative) pruning, typically by tying young branches into a particular position.

Transpiration**:** Loss of water vapor from the surface of leaves & other aboveground parts of the plant.

Vigor / vigorous**:** Overall health; the capacity to grow & resist physiological stress.

EXHIBIT H – LIST OF ACRONYMS

ANTH – Anthracnose disease

BT – brown trunk – commonly used to measure palm tree trunk heights instead of diameters; it excludes the palm head, or canopy

CANK – canker – an area of dead tissue; can be caused by sunburn or disease

CLPD – common leaf pests and diseases (usually subcritical and non-lethal to tree)

COD – codominant stems or trunks – similar diameter trunks or stems arising from the same point of origin – can be a defect depending on the angle of attachment

Compass directions – N=north, E=east, S=south, W=west

DBH – Diameter at breast height (4 ft. 6 in. from grade) – a standard forestry term / protocol used for measuring tree trunk diameter

DSH – Diameter Standard Height – same as DBH but politically correct without the reference to breasts

DN – drippy nut (acorn) disease (common and non-lethal bacterial infection of acorns)

DW – dead wood

EG – epicormic growth – usually stress-induced growth that originates from previously dormant buds located on trunks or branches

GR – girdling root – can cause structural instability

HOB – history of breakage – usually refers to branches, not twiggy growth

HR – heart rot – decay of the heartwood

H2O – water or irrigation

IB – included bark – can cause structurally weak attachments

LCR – live crown ratio – a ratio of canopy foliage to bare trunk – informs structural grade, as low LCR can increase likelihood of failures

Lerp psyllid / Tipu psyllid – sap sucking insects

Lg - large

MBA – multiple branch attachments – can be a structural defect

Mech. Dam or MD – mechanical damage

MPE – multiple pruning events – can lead to reduced structural integrity based on secondary growth characteristics

P/D – pest/disease

PP – poor pruning – usually refers to stub cuts, flush cuts, excessive thinning, topping, etc.

Prune/DPR-QA - prune out dead/infested/diseased portion(s) & consult a licensed Department of Pesticide Regulation Qualified Applicator for potential chemical pest/disease treatments

RRD – root rot disease

SB – sycamore borer – a clear-winged moth that lays eggs on the bark of trees (mostly sycamore and oak species) – larvae burrow and feed in bark layer, usually non-damaging to tree

SS – stump sprouts – epicormic growth that arises from cut trunks – can originate from the remaining trunk tissue or the root crown

T – trunk

TG – Twig girdler – a stem girdling insect (this condition may also be noted under the umbrella of 'CLPD'

Topping cuts – refers to the substandard practice of arbitrarily pruning with no regard to lateral branch points; can include excessive and disfiguring pruning

WW – wound wood – callus tissue growing over a wound

Xylella = suspected bacterial infection with Xylella fastidiosa

EXHIBIT I – TREE INVENTORY FIELD DATA

THE FOLLOWING SHEETS ARE 11” X 17”

TABLE 6 – STREET TREES FIELD DATA AND PROPOSED DISPOSITIONS
(THIS TABLE IS 11” X 17”)

Street Tree (ST)	Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (P - Preserve, R - Remove)	Reason for Removal	Replacement Ratio
ST	1	lemon bottlebrush	*Callistemon citrinus*	14.2			25	5	8	12	9	B	B			P		R	Development	6:1
ST	2	lemon bottlebrush	*Callistemon citrinus*	15.3			22	6	6	12	9	B	B			P		R	Development	6:1

TABLE 7 – ONSITE PROJECT TREES - FIELD DATA AND PROPOSED DISPOSTIONS
(THIS TABLE IS 11” X 17”)

Tree ID No.	Common Name	Botanical Name	DSH / DBH (in.)	BT Ht. (palms/palm-like) (Ft.)	DSH < 4" or Sapling	Height (Ft.)	Canopy N (Ft.)	Canopy E (Ft.)	Canopy S (Ft.)	Canopy W (Ft.)	Health Grade	Structure Grade	Infectious Disease	Suggested Treatments	Naturally Occurring (N) or Planted (P)	Comments	Disposition (P - Preserve, R - Remove)	Reason for Removal	Replacement Ratio
3	Canary Island pine	*Pinus canariensis*	25.3			65	15	24	16	15	A	A			P		R	Development	
4	Canary Island pine	*Pinus canariensis*	23			60	12	19	12	10	A	A			P		R	Development	
5	Canary Island pine	*Pinus canariensi*	29			45	18	30	18	15	A	A			P		R	Development	

EXHIBIT J – TREE PHOTOGRAPHS

Tree ST1 – *Callistemon citrinus* facing north

Tree ST2 – *Callistemon citrinus* facing east

Trees 3-4 (left to right) – *Pinus canariensis* facing northeast

Tree 5 – *Pinus canariensis* facing north

Shown is the remaining stump from a previously removed street tree

EXHIBIT K – TREE LEAF PHOTOGRAPHS

Canary Island pine (*Pinus canariensis)*

lemon bottlebrush (*Callistemon citrinus)*

EXHIBIT L – BIBLIOGRAPHY OF GENERAL REFERENCES USED TO PREPARE THE DOCUMENT

Rev. 2022

Sunset Western Garden Book. 5th ed. By the Editors of Sunset Books and Sunset Magazine. Menlo Park, CA: Sunset Publishing Corporation, 1988.

Abeyta, Dorothy, ASCA. *Guide to Report Writing for Consulting Arborist.* Champaign, IL: International Society of Arboriculture, 1995.

Costello, Laurence R., Pamela M. Geisel, J. Michael Henry, Edward J. Perry, and Nelda P. Matheny. *Abiotic Disorders of Landscape Plants, A Diagnostic Guide.* Oakland: University of California Agriculture and Natural Resources, 2003

Ewing, Reid. *Best Development Practices.* Chicago: American Planning Association, 1996.

Johnson, Warren T., and Howard H. Lyon. *Insects that Feed on Trees and Shrubs.* 2nd ed. Ithaca and London: Comstock Publishing Associates, a division of Cornell University Press, 1991

Mattheck, Claus, and Helge Breloer. *The Body Language of Trees.* London: The Stationary Office, 2001.

Matheny, Nelda P., and James R. Clark. *A Photographic Guide to Evaluation of Hazard Trees in Urban Areas.* 2nd ed. Champaign, IL: International Society of Arboriculture, 1994.

Matheny, Nelda, and James R. Clark. *Trees and Development – a technical guide to preservation of trees during land development.* Champaign, IL: International Society of Arboriculture, 1998.

Meerow, Alan W. *Betrock's Landscape Palms.* Hollywood, FL: Betrock Information Systems, Inc., 2006.

Pavlik, Bruce M., Pamela C. Muick, Sharon G. Johnson, and Marjorie Popper. *Oaks of California.* Los Olivos, CA: Cachuma Press, 1991.

Pirone, P.P., J.R. Hartman, T.P. Pirone, and M.A. Sall. *Tree Maintenance.* 6th ed. New York: Oxford University Press, 1988.

Shigo, Alex L. *Modern Arboriculture.* Durham, NH: Shigo and Trees, Associates, 1991.

Sinclair, Wayne A., Howard H. Lyon, and Warren T. Johnson. *Diseases of Trees and Shrubs*. Ithaca and London: Comstock Publishing Associates, a division of Cornell University Press, 1987.

Watson, Gary W., and E.B. Himelick. *Principals and Practice of Planting Trees and Shrubs.* Champaign, IL: International Society of Arboriculture, 1997.

Watson, Gary W., and Dr. Dan Neely. *Trees and Building Sites.* Champaign, IL: International Society of Arboriculture, 1995.

Costello, L. R. , and K.S. Jones. *Reducing Infrastructure Damage by Tree Roots: A Compendium of Strategies*. Porterville, CA: Western Chapter International Society of Arboriculture, 2003.

Council of Tree & Landscape Appraisers. *Guide for Plant Appraisal, 9th Edition*. Champaign, IL: International Society of Arboriculture, 2000.

Gilman, Edward F. *An Illustrated Guide to Pruning, 3rd Edition*. Clifton Park, NY. Delmar, Cengage Learning, 2012.

Hatch, Charles R. *Trees of the California Landscape*. Berkeley and Los Angeles, California. University of California Press, 2007

Mattheck, Claus and Weber, Karlheinz. *Manual of Wood Decays in Trees*. Cheltenham, Gloucestershire, UK. Arboricultural Association, 2003

Schwarze, Francis W.M.R., Engles, Julia, and Mattheck, Claus. *Fungal Strategies of Wood Decay in Trees*. Springer -Verlag, Berlin, Heidelberg, New York, 2000

Hickman, Gary W. and Perry, Ed. *Ten Common Wood Decay Fungi on California Landscape Trees – Identification Handbook.* The Western Chapter of the International Society of Arboriculture. Sacramento, CA. 1997

Swiecki, Tedmund J. and Bernhardt, Elizabeth A. *A Field Guide to Insects and Diseases of California Oaks*. Gen. Tech Rep. PSW-GTR-197. Albany, CA: Pacific Southwest Research Station, Forest Service, U.S. Department of Agriculture. 2006

APPLICATIONS

TREE DISCLOSURE STATEMENT

Los Angeles Municipal Code (LAMC) Section 46.00 requires disclosure and protection of certain trees located on private and public property, and that they be shown on submitted and approved site plans. Any discretionary application that includes changes to the building footprint, including demolition or grading permit applications, shall provide a Tree Disclosure Statement completed and signed by the Property Owner.

If there are any protected trees or protected shrubs on the project site and/or any trees within the adjacent public right-of-way that may be impacted or removed as a result of the project, a Tree Report will be required, and the field visit must be conducted by a qualified Tree Expert.

Property Address: **1811 Sacramento Street, Los Angeles, California 90021**

Date Of Field Visit: October 3, 2022

Does the property contain any of the following protected trees or shrubs?

☐ **Yes** (Mark any that apply below)

- ☐ Oak, including Valley Oak *(Quercus lobota*) and California Live Oak (*Quercus agrifolia*) or any other tree of the oak genus indigenous to California, but excluding the Scrub Oak
- ☐ Southern California Black Walnut (*Juglans californica*)
- ☐ Western Sycamore (*Platanus racemosa*)
- ☐ California Bay (*Umbellularia californica*)
- ☐ Mexican Elderberry (*Sambucus mexicana*)
- ☐ Toyon (*Heteromeles arbutifolia*)

☑ **No**

Does the property contain any street trees in the adjacent public right-of-way?

☑ **Yes** ☐ **No**

Does the project occur within the Mt. Washington/Glassell Park Specific Plan Area and contain any trees 12 inches or more diameter at 4.5 feet above average natural grade at base of tree and/or is more than 35 feet in height?

☐ **Yes** ☑ **No**

Does the project occur within the Coastal Zone and contain any of the following trees?

☐ **Yes** (Mark any that apply below)

- ☐ Blue Gum Eucalyptus *(Eucalyptus globulus)*
- ☐ Red River Gum Eucalyptus *(Eucalyptus camaldulensis)*
- ☐ Other Eucalyptus species

☑ **No**

Tree Expert Credentials (if applicable)

Name of Tree Expert: Cy Carlberg, ISA Certified Arborist and ASCA Registered Consulting Arborist

Mark which of the following qualifications apply:

- ☐ Certified arborist with the International Society of Arboriculture who holds a license as an agricultural pest control advisor
- ☐ Certified arborist with the International Society of Arboriculture who is a licensed landscape architect
- ☑ Registered consulting arborist with the American Society of Consulting Arborists

Certification/License No.: ISA Certified Arborist # 0575A; Registered Consulting Arborist #405

Owner's Declaration

I acknowledge and understand that knowingly or negligently providing false or misleading information in response to this disclosure requirement constitutes a violation of the Los Angeles Municipal Code Section 46.00, which can lead to criminal and/or civil legal action. I certify that the information provided on this form relating to the project site and any of the above biological resources is accurate to the best of my knowledge.

Name of the Owner (Print) _____

Owner Signature _____ Date _____