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RESPONSES TO CEC STAFF DATA REQUEST SET 2

AVAIO Pittsburg Backup Generating Facility (24-SPPE-01)

SUBMITTED TO: CALIFORNIA ENERGY COMMISSION
SUBMITTED BY: Pittsburg Data Hub, LLC

January 2025

DAYZEN LLC

INTRODUCTION

Attached are Pittsburg Data Hub, LLC's (hereinafter "AVAIO") responses to California Energy Commission (CEC) Staff Data Request Set No. 2[1] for the Pittsburg Backup Generating Facility Application for Small Power Plant Exemption (SPPE) (24-SPPE-1). Staff issued Data Request Set No. 2 on December 2, 2024.

The Data Responses are grouped by individual discipline or topic area. Within each discipline area, the responses are presented in the same order as Staff presented them and are keyed to the Data Request numbers. Additional tables, figures, or documents submitted in response to a data request (e.g., supporting data, stand-alone documents such as plans, folding graphics, etc.) are found in Attachments at the end of the document and labeled with the Data Request Number for ease of reference.

For context, the text of the Background and Data Request precede each Data Response.

GENERAL OBJECTIONS

AVAIO objects to all data requests that require analysis beyond which is necessary to comply with the California Environmental Quality Act (CEQA) or which require AVAIO to provide data that is in the control of third parties and not reasonably available to AVAIO. Notwithstanding this objection, AVAIO has worked diligently to provide these responses swiftly to allow the CEC Staff to prepare the Draft Initial Study/Mitigated Negative Declaration.

[1] DRs VIS-1 through VIS-6; LU-1 and LU-2; and TSD-1 through TSD-6

AESTHETICS

BACKGROUND

The small power plant exemption (SPPE) application indicated that the PBGF will include:

- ***a three-story approximately 347,740 square foot data center building AVAIO Pittsburg Data Hub (PDH))***
- ***a project substation***
- ***a Pacific Gas and Electric (PG&E) switching station and transmission lines***
- ***the PBGF***
- ***site access and surface parking***

In reviewing the SPPE Application, staff has found that adequate data to fully visualize the project impact was not provided. To analyze whether the proposed PDH and PBGF (project) would be consistent with the Pittsburg Technology Park Specific Plan, staff requires data.

DATA REQUESTS

DR VIS-1 Please provide an Arborist Report.

RESPONSE TO DATA REQUEST VIS-1

The Arborist Report was provided in Appendix C of the SPPE Application. It is also attached here at Attachment DR VIS-1. Also included in Attachment DR VIS-1 is an updated assessment performed by the same arborist in August 2024.

DR VIS-2 Please provide the Tree Disposition Plan & Details.

RESPONSE TO DATA REQUEST VIS-2

The Tree Disposition Plan and details are provided in Attachment DR VIS-2 as drawings L2.0 and L2.1.

DR VIS-3 Please provide the Preliminary Landscape Plan & Details.

RESPONSE TO DATA REQUEST VIS-3

The Preliminary Landscape Plans are provided in Attachment DR VIS-3 as drawings L3.0 Preliminary Landscape Plan and L3.1 Landscape Details.

DR VIS-4 Please provide before and after color photographic simulations illustrating one year after completion of the site (for all four sides). Clearly show the views of the project from adjacent housing along Golf Club Road.

RESPONSE TO DATA REQUEST VIS-4

The PDC and PBGF are located in an urbanized area and does not obstruct protected viewsheds as discussed in Section 4.2.3.3 of the SPPE Application. Although visual simulations are unnecessary to confirm the project will not result in significant visual resource impacts in this urbanized area, AVAIO provides photographic simulations in Attachment DR VIS-4.

DR VIS-5 Please provide building two-dimensional elevations for all sides.

RESPONSE TO DATA REQUEST VIS-5

The building elevation drawings were provided in Appendix A of the SPPE (drawings A201 and A310.1. The elevation drawings are also provided in Attachment DR VIS-5.

DR VIS-6 Please provide project specific conceptual outdoor lighting control and management plan (lighting plan) and explain the control of reflectance from exterior surfaces offsite.

RESPONSE TO DATA REQUEST VIS-6

A project specific conceptual outdoor lighting control and management plan is provided in Attachment DR VIS-6. The Pittsburg Technology Park Specific Plan outlines the lighting guidelines for the project. Specifically, the PDH and the PBGF lighting plan will include the following:

- maintaining dark skies through minimal illuminance and spread,
- directed lighting that does not adversely affect adjacent properties,
- limiting the height of luminaires with a ninety degree or greater cutoff to 24 feet, nighttime security lighting for parking facilities, and incorporating motion sensors,
- The control of reflectance from exterior surfaces offsite is achieved through a combination of methods including:
    - careful placement and orientation of the fixtures.
    - fixtures are specified with shielding that controls the light distribution.
    - shielding methods include a backlight control distribution type, an external glare shield, and an integrated motion sensor to dim light output to 50% in parking lots, when vacant.

LAND USE AND PLANNING

BACKGROUND: Pittsburg Technology Park Specific Plan

The project would be located within Phase I of the proposed Pittsburg Technology Park Specific Plan area. On November 4, 2024, the City Council for the City of Pittsburg approved the following actions:

- ***Certified the Final Program Environmental Impact Report for the Pittsburg Technology Park Specific Plan;***
- ***Adopted the CEQA Findings of Fact and the Mitigation Monitoring and Reporting Program;***
- ***Approved the Vesting Tentative Map for a 12-lot Major Subdivision on the approximately 76.38-acre site;***
- ***Rezoned the Pittsburg Technology Park Specific Plan Area as a Planned Development District; and***
- ***Adopted the Pittsburg Technology Park Specific Plan.***

The Specific Plan provides the policy, zoning, and implementation framework for development with its planning area, which includes the project site.

In reviewing the SPPE Application, staff has found that the following descriptions for the proposed project site are inconsistent with the Pittsburg Technology Park Specific Plan description of the Phase I site:

- ***The SPPE Application describes the proposed project site as follows:***
  - ***22.31 acres in size (SPPE Application section 2.2.1);***
  - ***Includes three parcels: APN 095-160-001, APN 095-160-002, and APN 095-150-032 (SPPE Application section 2.2.1); and***
  - ***The Project site would be subdivided into four parcels (SPPE Application Appendix A, Figure C2.0, Preliminary Site Plan).***
- ***The Pittsburg Technology Park Specific Plan describes the Phase I plan area as follows:***
  - ***22.05 acres in size (Pittsburg Technology Park Specific Plan Draft PEIR section 2.3);***

- ***Includes two parcels: APN 095-160-001 and APN 095-160-002 (Pittsburg Technology Park Specific Plan Draft PEIR Figure 2-1); and***
- ***The Phase I plan area would be subdivided into five parcels (Specific Plan Vesting Tentative Map: https://onbaseweb.pittsburgca.gov/OnBaseAgendaOnline/Documents/DownloadFile/ATT%201%20-%20EXH%20A%20-%20TENTATIVE%20MAP.PDF.pdf?documentType=1&meetingId=1160&itemId=14391&publishId=13345&isSection=False&isAttachment=True).***

To analyze whether the proposed project would be consistent with the Pittsburg Technology Park Specific Plan, staff requires correct data on the size of the project site and the parcels to be included in the project site.

DATA REQUEST

DR LU-1 Please clarify the following characteristics of the project site:

- What is the exact acreage of the proposed PDH and PBGF, and the project site as a whole?
- Please clarify which assessor parcel numbers (APNs) are included in the project site. Please provide this information for the current APNs and for the vesting tentative tract map.

RESPONSE TO DATA REQUEST LU-1

The proposed Project site is currently one parcel, APN 095-160-008. APNs for new parcels proposed (as indicated on Vesting Tentative Map) will not be available until Final Map is recorded and County Assessor assigns APN numbers. The Parcel Waiver, APN map and PMW 24-01 are attached for reference in Attachment DR LU-1.

Parcel A (PMW24-01) is 960,456 SF and encompasses entire Project area. As shown on C2.0 Preliminary Site Plan, the PDH and PBGF are on one parcel that is 745,771 SF.

The difference in area between 22.31 acres identified in the application and 22.05 acres described in the Specific Plan is due to off-site area identified as part of the SPPE application for the transmission line interconnection to the existing adjacent (but offsite) PG&E transmission line and the stormwater outfall, which for the purposes of the Specific Plan are not included in site area since off-site areas are also partly included in the boundary of the Specific Plan.

BACKGROUND: Consistency with Site Zoning Requirements

The following City of Pittsburg planning and zoning regulations currently apply to the project site:

- ***Land Use Designation: Employment Center Industrial (ECI), per City Council adoption of 2040 General Plan on May 6, 2024***
- ***Zoning: Planned Development District Per the Pittsburg Technology Park Specific Plan, the following development standards apply to all development projects with the Plan Area:***
    - ***Minimum lot area: 5,000 square feet***
    - ***Minimum lot width: 70 feet***
    - ***Maximum height of structure(s): 99 feet (Note: Height shall be calculated from the proposed finished grade to top of roof membrane. This excludes screening and architectural facades, i.e., parapet)***
    - ***Maximum lot coverage: 60%***
    - ***Maximum floor area ratio (FAR): 0.5***
    - ***Minimum site landscaping: 7%***

The SPPE application states the following:

- ***Section 2.3.1 states that the PDH would be 347,740 square feet, while Appendix A (Figure C2.0) states the PDH would be 745,771 square feet;***
- ***Section 2.2.1 states that the project site would be 22.31 acres; and***
- ***Section 4.11.2.1 states that the project FAR would be 0.47.***

Using the applicant's square footage and site acreage numbers provided in the SPPE application, staff is unable to produce the same FAR calculation as the applicant. Also, the SPPE application, section 4.11.2.1, states, "The GP Update designates the project site as Employment Center Industrial, which expressly allows data center uses and establishes a FAR of up to 1.5." Please note that the Pittsburg Technology Park Specific Plan has a maximum FAR of 0.5.

DATA REQUEST

DR LU-2 Please clarify the following data for the project:

- What is the exact square footage of the proposed PDH?
- Please explain what numbers were used by the applicant to calculate a Project FAR of 0.47.

RESPONSE TO DATA REQUEST LU-2

The FAR reflected in the application is based on the area of the PDH and the area of the parcel it is sited on (Parcel 1), 347,740 SF/ 745,771 SF = 0.47.

As shown on C2.0 Preliminary Site Plan in Appendix A of the SPPE Application, the PDH and PBGF are on one parcel that is 745,771 SF. The Vesting Tentative Map (Vesting Tentative Subdivision Map Pittsburg Technology Center Tract No. 9700) added an additional parcel (Parcel 1), reducing the area of the PDH and PBGF (Parcel 2) to 680,783 SF. Reducing Parcel 2 area results in FAR above 0.50. During implementation of the first phase of the Final Map (north of Contra Costa Canal, or Project site), the parcelization will be modified to reduce FAR for PDH and PBGF to less than 0.50 by combing Parcels 2 and 4, which will increase the area of the parcel for the PDH to 764,308 and reduce the FAR to 0.45 (347,740 SF / 764,308 SF).

TRANSMISSION SYSTEM DESIGN

BACKGROUND

The SPPE application indicated that the PBGF would deliver electricity to PDH. The PBGF includes an onsite substation with two electrical supply lines that would connect to a new PG&E switchyard. Staff requires a complete description of the both the PBGF interconnection to the PG&E transmission grid and the reliability of the PG&E grid to understand the potential operation of the back-up generators.

DATA REQUESTS

DR TSD-1 Please provide pole configurations that would support the 230 kilovolt (kV) overhead line which would loop into the new PG&E switching station.

RESPONSE TO DR TSD-1

To provide further clarity to the description in the Background Section of these data requests, AVAIO provides the following. The PBGF will only deliver electricity to the PDH during times when PG&E is unable to deliver electricity to the PDH. The PDH, not the PBGF, will be interconnected to the new PG&E Switching Station through the project substation. The new PG&E switching station and the looped configuration are shown on Drawing TX-101 in Appendix A of the SPPE Application and described in Section 2.3.4.

At this time, the full design of the looped connection has not been completed by PG&E. For CEQA purposes, as described in the SPPE Application and as shown on Drawing TX-101, the looped connection will involve the installation of two new monopoles and the removal of one lattice towers. The height of the monopoles are anticipated to be equal to or less than the existing lattice tower that would be removed. These two monopoles would be the only poles outside of the project site boundary. The conductors will be hung on the two new monopoles and will extend into the new PG&E Switching Station through new takeoff structures.

DR TSD-2 Please provide pole configurations that would support the 230 kV overhead line which would connect the new PG&E switching station to the on- site substation.

RESPONSE TO DR TSD-2

There will not be any poles between the PG&E Switching Station and the Project Substation. The conductors will be strung from the structures inside the PG&E Switching Station to the takeoff structures within the Project Substation. Heights of these structures is anticipated to be between 90 and 120 feet.

DR TSD-3 Please provide description and maps showing the Pittsburg-Eastshore 230 kV line "looped" into the new switching station. Provide the length of the route.

RESPONSE TO DR TSD-3

Please see Figure TX-101 contained in Appendix A of the SPPE Application.

DR TSD-4 Please provide information that reviews the frequency and duration of historic outages of the Pittsburg-Eastshore 230 kV line and related facilities that would likely trigger the loss of electric service to the proposed onsite substation and could lead to the emergency operations of the backup generators. This response should identify the reliability of service historically provided by PG&E to similar customers in this part of its service territory.

RESPONSE TO DR TSD-4

AVAIO has requested this information from PG&E and will docket the response once received.

DR TSD-5 Please explain whether adding the PBGF would result in overloads or otherwise result in upgrades to the PG&E transmission system.

RESPONSE TO DR TSD-5

Again, adding the PBGF will not result in any effects to the PG&E system because it is not connected to the grid and will only generate electricity in the unlikely event that PG&E cannot deliver electricity to the PDH. PG&E has not identified any physical upgrades to the transmission system to serve the PDH beyond the looped interconnection and the new PG&E Switching Station, described in the SPPE Application.

DR TSD-6 Please provide the following information regarding Public Safety Power Shutoff events:

a. Would historical Public Safety Power Shutoff events have resulted in the emergency operations at the proposed PBGF?

b. Have there been changes to the PG&E system around the PBGF that would affect the likelihood that future Public Safety Power Shutoff events would result in the operation of emergency generators at the proposed PBGF?

RESPONSE TO DATA REQUEST TSD-6

AVAIO has requested this information from PG&E and will docket the response once received.

ATTACHMENT DR VIS-1

Arborist Report and August 2024 Update

Tree Protection and Preservation Report
for
Kimley-Horn

Prepared by: Dave Laczko PN #1233A

Project Address

2232 Golf Club Road

Pittsburg, CA 94565

Anderson's Tree Care Specialists, Inc.
121 N. 27th Street
San Jose, CA 95116
(408) 226-8733
info@andersonstreecare.com

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2/5/2024

Kimley-Horn
Attn: Ryan Bernal
100 W. San Fernando Street
San Jose, CA 95113
(925) 876-5812
ryan.bernal@kimley-horn.com

Re: Development impacts on existing trees.
2232 Golf Club Road
Pittsburg, CA 94565

Greetings Ryan,

At your request I have visited the above referenced address to assess the effects upon existing trees related to your plans to re-develop the property. This letter will serve to summarize my observations and recommendations.

SUMMARY

Anderson's Tree Care Specialists, Inc. (ATC) was asked by Kimley-Horn to assess the effects upon existing trees related to their plans to construct an approximately 350,000 square feet data center with its supporting infrastructure. The trees that were inventoried are located in the northernmost portion of the now closed Delta View Golf Course in Tract 1 and Tract 3.

- Seventy-five living and dead standing trees were inventoried. Only three native trees were present in the areas that were inventoried; one living Valley Oak, and two dead Cottonwoods. Of the seventy-five trees inventoried, nearly one quarter are dead standing trees.
- All seventy-five trees are requested for removal. Criteria for removal: *18.84.850 Tree removal permit procedure and requirements (E), (1), (a), (b), and (c).*

Summary continued.

- Two-hundred thirty-two (232) 24-inch boxed specimen trees are required to be planted based on the removal of fifty-eight (58) living trees. The final number of required replacement trees is subject to *18.84.855 Replacement trees (A), (B), (C), and (D).*
- Some portion of the fifty-eight living trees requested for removal may prove to be suitable for preservation. Suitability for preservation will be determined for individual trees after impacts are reviewed by ATC. More specifically, after review of the final plan set depicting beginning and finished grade elevations, changes to existing drainage characteristics, as well as the exact location of proposed structures with their associated infrastructure.
- Standardized tree protection and preservation recommendations are provided herein. See *Defining the Tree Protection Zone* and Appendices C & D.
    - Should particular trees indeed be deemed suitable for preservation at a later date, an addendum to this report recommending specific tree protection and preservation efforts will likely be required.

ASSIGNMENT

Prepare a tree protection and preservation plan consistent with Pittsburg planning requirements for the project located 2232 Golf Club Road, Pittsburg, CA 94565. Present finding in written format.

BACKGROUND

I conducted my first site visit on or about February 10, 2023 to assess the scope of work and to familiarize myself with the areas and trees to be inspected.

I returned to the site on Tuesday, November 28, 2023 to survey and inventory the trees. During the time between the two visits numerous trees depicted on the original plan set had died, or failed and were on the ground.

Additionally, parties unknown to me masticated weeds throughout the site and chainsaws were used to buck-up some of the failed trees.

Numerous other trees depicted along the western edge of the parking lot in Tract 2, Parcel 1 were removed, presumably by the adjacent property owner.

Only the living and dead standing trees that measured 15.6 inches in diameter at breast height (DBH) or greater were inventoried. Trees not included in the inventory include:

1. Trees depicted on ALTA/NSPS MAP, sheets 4-6 of 8, dated 12/24/2022 that have suffered a catastrophic failure,
2. trees that were bucked-up, and
3. trees that were previously removed by unknown parties.

LIMITS OF ASSIGNMENT

All observations were made from the ground. No Architectural or Grading and Drainage plans were reviewed by me.

PURPOSE & USE OF REPORT

This report is purposed for use by Kimley-Horn and its agents as the arborist report of record for the project located at 2232 Golf Club Road, Pittsburg, CA 94565. This report is valid for a period of eighteen months.

OBSERVATIONS

Pittsburg Municipal Code: Title 18 Zoning – Chapter 18.84 Special Land Use Regulations Applicable to Specific Uses – Article XIX Tree Preservation and Protection:

18.84.835 Definitions

F. "Protected tree" is defined as any of the following:

1. A California native tree, as identified in the Calflora online database of wild California plants, that measures at least 50 inches in circumference (15.6 inches diameter) at four and one-half feet above grade, regardless of location or health; or
2. A tree of a species other than a California native that measures at least 50 inches in circumference at four and one-half feet above grade and is either on an undeveloped property, located on public property or within the right-of-way, or located on private property and is found to provide benefits to the subject property as well as neighboring properties, subject to determination by the city planner; or
3. A tree required to be planted, relocated, or preserved as a condition of approval of a tree removal permit or other discretionary permit, and/or as environmental mitigation for a discretionary permit.

18.84.850 Tree removal permit procedure and requirements.

E. Standards for Reviewing Applications.

1. Required Findings. Prior to the issuance of a tree removal permit, the applicable decision-making body must find that:
    a. The condition of the tree or trees with respect to disease, danger of falling and the potential for endangering other nearby trees warrants removal and such condition represents a risk to public health and safety and cannot be reasonably remedied through less drastic measure; or
    b. The burden to the applicant in preserving the tree or trees greatly outweighs the tree's or trees' benefit to the public or environment; or
    c. If part of a development plan, subdivision or other discretionary project, preservation of the tree or trees would severely reduce the scale or feasibility of the development.

2. Factors to Be Considered. In making the foregoing determinations, the zoning administrator shall consider the following aspects of each application to the extent that they are applicable to the proposal:

a. Whether the tree or trees act as host or habitat for plants or animals;
b. The proximity to, or potential to interfere with, existing utilities or buildings;
c. The necessity to remove the tree or trees in order to allow economic enjoyment of the property;
d. Topography of the land and the effect of removal of the tree or trees on erosion, soil retention, and diversion or increased flow of surface waters;
e. Whether a tree is part of an important grove of trees;
f. Whether a tree has particular historical or heritage value;
g. The number, size, and type of replacement trees to be provided;
h. The visibility and value of the tree or trees to the neighborhood and the public;
i. The contribution of the tree or trees to the character of the site and the neighborhood.

F. Conditions. In approving the tree removal permit, the applicable reviewing body may impose such conditions considered necessary to ensure compliance with the intent and purpose of this article, in line with the standards prescribed in this article and with the general plan. If a permit is denied, the decision-making body shall state in writing the reasons for said denial based on the above findings and factors.

G. Approval Term. The permit shall be effective for a period no longer than 120 days after issuance. [Ord. 15-1390 § 3 (Exh. A), 2015.]

18.84.855 Replacement trees.

A. Where it has been determined that preservation of protected trees associated with a construction or development project is infeasible, replacement plantings shall be required as part of the tree removal permit. Subject to the discretion of the decision-making body, replacement options shall include:

1. Replacement of the removed tree(s) at a four-to-one ratio with 24-inch box trees;
2. Replacement of the tree(s) at a 12-to-one ratio with 15-gallon trees;
3. Payment of in-lieu fees equal to the replacement trees' value, installation costs and one year of maintenance costs, as calculated with a 12-to-one ratio of 15-gallon trees; or
4. A combination of replacement and payment of in-lieu fees.

B. If any replacement tree fails to survive for a period of one year from the date of installation, then the applicant shall replace the tree at the applicant's sole expense.

C. Location and Specifications.

1. Replacement trees shall be planted on site, except in instances where on-site planting and future tree survival is shown to be infeasible, in which case the decision-making body shall consider authorizing other off-site locations where maintenance will be guaranteed;

2. If California native trees are removed, all replacement trees shall be of the same species as the trees being replaced, except when a replacement tree is approved in a location that is not suitable for the native species;

3. Replacement trees shall be in addition to any trees required by any other provisions of this title, as a condition of approval of another discretionary permit, or as environmental mitigation for a discretionary permit.

D. Any in-lieu fees collected by the city pursuant to this section shall be used only for the installation or replacement of trees in city parks, open space or other areas of benefit to the city, and for any associated maintenance. [Ord. 15-1390 § 3 (Exh. A), 2015.]

End of cited municipal codes.

Project Scope
Kimley-Horn proposes to perform mass grading and drainage operations in the area north and east of the Contra Costa Canal to accommodate the construction of an approximately 350,000 square feet data center and its supporting infrastructure.

Site Plan Review

The latest set of site plans reviewed by me were drawn by UNICO Engineering which included: ALTA/NSPS MAP, sheets 1-6 of 8, dated 12/24/2022; a.k.a. 2023.11.06-Pittsburg-ArboristScopeMarkup_supplemental.pdf.

Site Characteristics
Closed and dilapidated golf course. All golf course structures have been demolished and the debris removed. The fairways, greens, beaches and lakes have been overgrown with mustard weed and various other weeds. Trees throughout the surveyed areas are in varying degrees of decline, are dead, or are overgrown. Fire damage and water deprivation have caused distress and/or death to a vast number of trees. Some attempts have been made to suppress the weeds using a masticator and there is evidence someone is bucking-up tree debris.

Tree Characteristics
One-inch blue anodized numbered tree tags #1-75 were placed on each living and dead standing tree that measured 15.6 inches in diameter or greater at or about fifty-four inches above level grade. See Appendix B: Site Map.

Seventy-five living and dead standing trees were inventoried, they include: 15 Aleppo Pine (***Pinus halepensis***), 9 Stone Pine (***Pinus pinea***), 1 Monterey Pine (***Pinus radiata***), 1 Canary Island Pine (***Pinus canariensis***), 14 Shamel Ash (***Fraxinus uhdei***), 3 Raywood Ash (***Fraxinus angustifolia 'Raywood'***), 2 Ash (***Fraxinus spp.***), 8 Peruvian Pepper (***Schinus molle***), 6 Silver Dollar Eucalyptus (***Eucalyptus polyanthemos***), 6 Eucalyptus (***Eucalyptus spp***.), 4 Mexican Fan Palm (***Washingtonia robusta***), 1 Blackwood Acacia (***Acacia melanoxylon***), 1 Deodar Cedar (***Cedrus deodara***), 1 Fig (***Ficus carica***), 2 Black Cottonwood (***Populus trichocarpa***), and 1 Valley Oak (***Quercus lobata***). See Appendix A: Tree Table for individual tree characteristics and Appendix E: Supporting Photographs.

Percentages of Tree Species that were inventoried:
34.6 percent Pine (*Pinus spp.*) – 26 trees; many with bark beetles.
25.3 percent Ash (*Fraxinus spp.*) – 19 trees; multiple dead trees.
16 percent Eucalyptus (*Eucalyptus spp*.) – 12 trees; multiple fire damaged trees.
10.6 percent Pepper (*Schinus molle*) – 8 trees in varying degrees of health and condition.
5.3 percent Palm (*Washingtonia robusta*) – 4 trees, some with fire damage.
2.6 percent Cottonwood (*Populus trichocarpa*) – 2 dead native trees.
1.3 percent Acacia (*Acacia melanoxylon*) – 1 tree in good condition.
1.3 percent Fig (*Ficus carica*) – 1 multi-stemmed tree engulfing a chained-link fence.
1.3 percent Cedar (*Cedrus deodara*) – 1 tree in good health and condition.
1.3 percent Oak (*Quercus lobata*) – 1 living native tree in good health and condtion.

Percentages of Living and Dead Standing Trees:
77.3 percent living trees (58).
22.6 percent dead standing trees (17).

Percentage of Native Species:
3.9 percent native species (1 living Valley Oak, 2 dead Black Cottonwoods).

Trees Requested for Removal:
Fifty-eight living trees and seventeen dead standing trees are requested for removal. Criteria for removal: *18.84.850 Tree removal permit procedure and requirements (E), (1), (a), (b), and (c).*

Replacement Trees
Two-hundred thirty-two (232) 24-inch boxed specimen trees are required to be planted based on the removal of fifty-eight (58) living trees. The total number of required replacement trees are subject to *18.84.855 Replacement trees (A), (B), (C), and (D).*

ADDITIONAL OBSERVATIONS

Some portion of the fifty-eight living trees requested for removal may prove to be suitable for preservation. Suitability for preservation will be determined for individual trees after impacts are reviewed by ATC. More specifically, after review of the final plan set depicting beginning and finished grade elevations, changes to existing drainage characteristics, as well as the exact location of proposed structures with their associated infrastructure.

Should retention and preservation efforts be deemed applicable and required for any living tree discussed herein, an addendum to this report will suffice to ensure proper tree protection and preservation efforts are applied adhering to industry best management practices.

TESTING & ANALYSIS

The site and trees were surveyed and inventoried on foot using a diameter tape and camera.

DISCUSSION

Contrary to common depictions of how and where tree roots grow, tree roots are generally found growing in the upper 18 to 24 inches of soil sprouting out laterally and perpendicular from the base of the tree's trunk.

Defining the Tree Protection Zone
"A tree's critical root zone is the area immediately adjacent to the trunk where roots essential for tree health and stability are located. The CRZ is subjective: there is no accepted formula to biologically define it. However, there may be regulations that define it." (Fite pg. 10)

A Tee Protection Zone (TPZ) is an arborist-defined area surrounding the trunk intended to protect roots and soil within the critical root zone and beyond…There are many methods for determining the size of a TPZ. (Fite pg. 10) Determining the effect of root loss upon a particular tree is based mostly on the species of tree, its age, its health and condition, and the species relative tolerance to withstand development impacts.

The optimal TPZ radius is in most circumstances is equal to the tree's dripline which coincidentally is in many cases equal to 12x trunk diameter. Erecting a TPZ zone fence at distance equal 12x the tree's trunk diameter can sometimes impede construction activities and most times the TPZ radius can be reduced to 6x trunk diameter (on one side of the tree); with 3x trunk diameter having proved feasible in certain circumstances as well. There are times when

there is not enough room to erect a tree protection zone fence. Tree wrap can be used in this case but will only prevent damages from direct strikes. See Appendices: C & D.

Selective Root Pruning v. Non-Selective Root Pruning
Selective root pruning consists of soil excavation (exploratory trenching) prior to root pruning to determine the best places to make cuts. This can make it possible to cut as few roots as possible or to make several smaller cuts instead of a single larger diameter cut.

Non-selective root cutting is less targeted, usually causing root damage as the result of trenching or soil excavation that does not intentionally target tree roots. The tools used for root pruning are usually hand pruners, loppers, hand saws, reciprocating saw, oscillating saws, or small chain saws. (Costello pg. 18)

Pitch Moths
Conifers are attacked by several *Synanthedon* species. The Sequoia Pitch Moth (***Synanthedon sequoiae***) is found in Pines throughout California. Pitch moth infestations are recognized by the unsightly masses of gummy white, yellow, or pink pitch on the trunk and limbs. People unfamiliar with the damage sometimes confuse pitch moth masses with bark beetle pitch tubes. See tree #39 pictured right.

Pines vary greatly in their susceptibility to sequoia pitch moth. If conifers must be pruned, prune only from October through January so that injuries begin closing before the egg-laying female pitch moths appear in the spring. Scraping away or prying off resinous pitch is the only direct method of controlling pitch masses and larvae, except possibly for pruning off smaller branches. If resin masses are carefully excised, larvae or pupae can be found and killed. Properly removing pitch masses from all nearby tree can reduce reinfestations and control local moth populations. Once the borer is removed, sap flow will slow and the wound will close. (Dreistadt pg. 191)

Red Turpentine Bark Beetle
The Red Turpentine Bark Beetle (RTB) pictured below right, occurs in the Midwest and western United States. RTB is usually not a serious pest. Vigorous trees can

survive a few RTB, and only a small area of the tree cambium may die. Weakened trees attacked by this beetle may die, especially Monterey Pines, usually because they are under stress from a combination of other factors in addition to beetles. They usually attack the trunk no more than 6 to 8 feet above ground. (Dreistadt pg. 174)

Tree Construction Tolerance

Healthy trees are generally better able to withstand construction stressors than are unhealthy trees, as they have stored nutrients available to use for recovery. A tree's roots grow in unpredictable patterns, generally within the top two feet of soil and the root systems of mature trees may extend much farther than the dripline. The tolerance of disturbance varies widely among species**.**

Soil Compaction

Most soil compaction results from vehicle and equipment traffic, although foot traffic and rainwater impacts may also contribute to a lesser extent. The severity of compaction depends on the force per area unit applied to the soil, frequency of application, surface cover, soil texture, and soil moisture. Soils with a clay or loam texture, high moisture content, or low levels of organic matter are more susceptible to compaction than are dry or frozen, coarse-textured soils, and those high in organic matter. (Fite pg. 3)

Pruning Specifications

All tree pruning activities shall be performed prior to beginning development activities by a qualified Arborist with a C-61/D-49 California Contractors License. Tree maintenance and care shall be specified in writing according to American National Standard (ANSI) for Tree Care Operations: Tree, Shrub and Other woody Plant Management: Standard Practices parts 1 through 10, adhering to ANSI Z133.1 safety standards and local regulations. Work shall be performed according to the most recent edition of the International Society of Arboriculture© Best Management Practices for each subject matter (Tree Pruning etc.) *The use of spikes and/or gaffs when climbing is strictly prohibited unless the tree is being removed.*

- *Elevate Crown* (a.k.a. raise crown)-The selective removal of lower growing or low hanging limbs to gain vertical clearance. Do not remove living stems greater than 4" in diameter without the approval of the Project Arborist.
- *Reduce end-weight*-Cut the offending stem[s] back to a lateral that is ⅓ the diameter or more of the parent stem and capable of maintaining apical

dominance. Remove no more than 25 percent of the living tissue from the offending stem[s]. Remove all existing dead stubs and/or damaged branches per occurrence. Do not cut back into living stems that are 4" or greater in diameter without the approval of the Project Arborist.

Root Pruning Specifications

Root pruning is the process of cleanly cutting roots prior to mechanical excavation to minimize damage to the tree's root system. Root pruning and root damage from excavation can cause great harm to a tree, especially if structural roots are affected. Damage to these roots can reduce tree health and/or structural stability…Air, water, [or hand excavation] prior to root pruning allows the arborist to examine the roots and determine the best places to make cuts, preferably beyond sinker roots or outside root branch unions. (Fite pg. 17)

The principles of **Compartmentalization of Decay in Trees (CODIT)** apply to roots as well as to stems. Because root injuries are common in nature, roots have evolved to be strong compartmentalizers. Small root cuts do not usually lead to extensive decay. Decay development because of root cutting can take years or decades to develop in temperate climates.
Just as flush cutting branches is no longer an acceptable practice, a pruning cut that removes a root at its point of origin should not cut into the parent root. The final cut should result in a flat surface with adjacent bark firmly attached. Smaller pruning cuts are preferred. (Costello pg. 17)

Should roots 2" in diameter or greater be unearthed near protected trees, root pruning may prove necessary. Halt activities and contact the project arborist to advise. The following guidelines should be adhered to with the project Arborist on site to advise work crews.

- Pruning roots 2" in diameter or greater requires the use of a commercial grade 15-amp reciprocating saw with at least 3 new unused wood cutting blades available while on-site.
- Cleanly sever the root without ripping or tearing the root tissue. It is preferable to cut back to a lateral root, much like when reducing the length of a stem or branch.
- Exposed pruning wounds left more than 24 hours should be covered with burlap and wetted and kept wet until area is backfilled. If pour cement against exposed pruning wounds, cover end of root with plastic with a rubber band before pouring cement.
- A new unused Arborist hand saw will also be allowed i.e. Fanno™ Tri-Edge Blade Hand Saw.

Rating the trees suitability for preservation.

High:

- Trees with good health and structural stability that have the potential for long-term survivability at the site.
- Species that have good to moderate tolerance for root loss

Moderate:

- Trees with somewhat declining health and/or structural defects than can be abated with treatment.
- Species that have moderate tolerance for root loss

Low:

- Trees dead, in poor health or with significant structural defects that cannot be mitigated.
- Tree is expected to continue to decline.
- Species that have poor tolerance for root loss

Type I Tree Protection Zone

- Is a fenced area erected around a tree or group of trees prior to beginning any demolition, grading, excavation, or other construction activities to protect the roots and soil from compaction, and to keep the tree trunk and branches clear from damage by construction activities.
- A typical TPZ consists of a six-foot-high chained link fence that is securely installed in the ground with 2" posts driven 24" below grade to surround the tree[s] with a radius equal to or as close as possible to the drip line. A sign stating, "Tree Protection Zone-No Entry" is placed in clear view on the fence visible from all points of ingress and egress and left in place for the duration of the construction phase.
- Mulch to a depth of six inches is placed within the TPZ to further protect the tree[s] critical root zone and soil (if needed)—do not cover the base of the trunk with the mulch. Storage of construction materials within the TPZ is strictly prohibited, and physical entry is limited to designated personnel (one or two people preferably). If any work is required with the TPZ, all work is to be done by hand with the project arborist present. No self-propelled equipment may enter the TPZ. The contractor is responsible for contacting the project arborist in a timely manner to have the project arborist present for all work performed within the TPZ of significant trees.

Type III Tree Protection Zone

- Alternate form of tree protection by wrapping the tree when sufficient room for a Type I TPZ is unavailable.
- Wooden slats at least one inch thick at least 6 feet long are bound securely, edge to edge, around the trunk. A single layer or more of orange plastic construction fencing is then wrapped and secured around the outside of the wooden slats.
- Alternatively, straw wattle can be used as a tree wrap by coiling the wattle around the trunk to a minimum height of 6 feet above grade. A single layer or more of orange plastic construction fencing is then wrapped and secured around the straw wattle.
- No portion of the tree wrap is to be affixed directly to the tree with nails, lag bolts, spikes, etc. The purpose of Type III tree protection is to protect the trunk from damage by

direct impacts of equipment, vehicles, tools, etc. and nailing the wrap directly to the tree will cause the exact type of damage we are trying to avoid.

- The removal of any tree protection fencing authorized only after an on-site inspection by the City Arborist.

CONCLUSIONS

The subject property is dilapidated and the vast majority of the living trees are in a fair to poor state of structural and physiological well-being. All seventy-five trees are requested for removal and are proper candidates for removal based on the following conditions:

1. The poor health and condition of the tree or trees with respect to neglected maintenance, being dead standing trees, water deprivation and fire damage; and/or
2. the burden to the applicant in preserving the tree or trees greatly outweighs the tree's or trees' benefit to the public or environment; and/or
3. the preservation of the tree or trees would severely reduce the scale or feasibility of the development.

Should retention and preservation efforts be deemed applicable and required for any living tree discussed herein, an addendum to this report will suffice to ensure proper tree protection and preservation efforts are applied adhering to industry standard best management practices.

RECOMMENDATIONS

1. Submit this report accompanied by a tree removal permit application with your development plans to the City of Pittsburg for review.
2. With the permits in hand, remove all seventy-five trees discussed herein.
3. Replace the fifty-eight living trees that were removed with two-hundred thirty-two (232) twenty-four (24) inch boxed specimen trees after construction activities and during the final landscape phase. Tree Genus/species and planting locations to be determined.

BIBLIOGRAPHY

City of Pittsburg's *Municipal Code: Chapter 18.84 Special Land Use Regulations Applicable to Specific Uses/Article XIX Tree Preservation and Protection.* https://www.codepublishing.com/CA/Pittsburg/#!/Pittsburg18/Pittsburg1884.html#18.84.825

Costello, Larry, Ph.D., Gary Watson, Ph.D., et al. Best Management Practices. Root Management 2017. Champaign, IL; International Society of Arboriculture.

Dreistadt, Steve H., et al. Pests of Landscape Trees and Shrubs. An Integrated Pest Management Guide: Second Edition, Pub. 3359. Oakland, CA: 2004. University of California Division of Agriculture and Natural Resources.

Fite, Kelby, Ph. D. and E. Thomas Smiley, Ph. D. Best Management Practices. Managing Trees During Construction. Companion to ANSI A300 Part 5. Second Edition 2016. Champaign, IL: International --Society of Arboriculture, 1998.

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.

Appendix A: Tree Table

Tree #	Common Name	Botanical Name	Native	Protected	DBH (in.)	Spread (ft.)	Condition (0-5)	Disposition	Notes
1	Balckwood Acacia	***Acacia Melanoxylon***	No	Yes	19.7	40	4	Remove	
2	Mexican Fan Palm	***Washingtonia robusta***	No	Yes	17	10	4	Remove	
3	Mexican Fan Palm	***Washingtonia robusta***	No	Yes	19	10	4	Remove	
4	Italian Stone Pine	***Pinus pinea***	No	Yes	35[1]	50	4	Remove	
5	Italian Stone Pine	***Pinus pinea***	No	Yes	47[1]	60	4	Remove	Utility side trimmed.
6	Mexican Fan Palm	***Washingtonia robusta***	No	Yes	25	15	4	Remove	Fire damage lower trunk.
7	Black Cottonwood	***Populus trichocarpa***	Yes	Yes	45[2]	30	Dead	Remove	Fire damage.
8	Mexican Fan Palm	***Washingtonia robusta***	No	Yes	18.7	15	4	Remove	Fire damage lower trunk.
9	Aleppo Pine	***Pinus halepensis***	No	Yes	17.9	30	2	Remove	Fire damage lower trunk.
10	Aleppo Pine	***Pinus halepensis***	No	Yes	24.5[2]	50	4	Remove	
11	Aleppo Pine	***Pinus halepensis***	No	Yes	19.7	35	2	Remove	Fire damage lower trunk.
12	Aleppo Pine	***Pinus halepensis***	No	Yes	18.8[1]	30	2	Remove	Fire damage lower trunk.
13	Italian Stone Pine	***Pinus pinea***	No	Yes	32.7	60	2	Remove	Fire damage.
14	Italian Stone Pine	***Pinus pinea***	No	Yes	23.3, 13	60	2	Remove	Fire damage.
15	Italian Stone Pine	***Pinus pinea***	No	Yes	19	40	3	Remove	Heavy infestation Sequoia Pitch Moth.
16	Italian Stone Pine	***Pinus pinea***	No	Yes	32[1]	70	4	Remove	Previous failures, poor structure.
17	Italian Stone Pine	***Pinus pinea***	No	Yes	25	70	3	Remove	Previous failures, poor structure.
18	Italian Stone Pine	***Pinus pinea***	No	Yes	32	60	3	Remove	Previous failures, poor structure.
19	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	14.8	20	3	Remove	Fire damage, water deprivation.
20	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	18.7	30	3	Remove	Fire damage, water deprivation.
21	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	21.2	30	Dead	Remove	Fire damage, water deprivation.
22	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	12.3, 15	30	3	Remove	Fire damage, water deprivation.
23	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	25.5	45	3	Remove	Fire damage, water deprivation.
24	Stone Pine	***Pinus pinea***	No	Yes	31.3[1]	60	4	Remove	
25	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	Multi-stemmed	60	4	Remove	
26	Eucalyptus	***Eucalyptus spp.***	No	Yes	26	40	4	Remove	
27	Eucalyptus	***Eucalyptus spp.***	No	Yes	19.3	40	3	Remove	Previous co-dominant stem failure.
28	Eucalyptus	***Eucalyptus spp.***	No	Yes	23.4	40	4	Remove	
29	Eucalyptus	***Eucalyptus spp.***	No	Yes	14.3	30	4	Remove	
30	Eucalyptus	***Eucalyptus spp.***	No	Yes	29.2	45	4	Remove	

Tree #	Common Name	Botanical Name	Native	Protected	DBH (in.)	Spread (ft.)	Condition (0-5)	Disposition	Notes
31	Peruvian Pepper	***Schinus molle***	No	Yes	16.5[3]	30	4	Remove	
32	Peruvian Pepper	***Schinus molle***	No	Yes	14, 16.5[2]	35	4	Remove	
33	Deodar Cedar	***Cedrus deodara***	No	Yes	19.2	40	4	Remove	
34	Aleppo Pine	***Pinus pinea***	No	Yes	35.5[2]	75	4	Remove	
35	Monterey Pine	***Pinus radiata***	No	Yes	26[1]	30	Dead	Remove	
36	Fig	***Ficus carica***	No	Yes	Multi-stemmed	40	3	Remove	Growing around a chained link fence.
37	Canary Island Pine	***Pinus canariensis***	No	Yes	17.6	25	4	Remove	
38	Aleppo Pine	***Pinus halepensis***	No	Yes	25.2	40	4	Remove	
39	Aleppo Pine	***Pinus halepensis***	No	Yes	17	35	3	Remove	Heavy lean
40	Valley Oak	***Quercus lobata***	Yes	Yes	17	35	4	Remove	
41	Aleppo Pine	***Pinus halepensis***	No	Yes	21.7	35	3	Remove	Heavy infestation Sequoia Pitch Moth and Red Turpentine Bark Beetle.
42	Aleppo Pine	***Pinus halepensis***	No	Yes	16.5[1]	45	3	Remove	Previous large limb failures.
43	Aleppo Pine	***Pinus halepensis***	No	Yes	30[2]	40	3	Remove	Heavy infestation Sequoia Pitch Moth.
44	Aleppo Pine	***Pinus halepensis***	No	Yes	18.3	35	3	Remove	Heavy lean
45	Peruvian Pepper	***Schinus molle***	No	Yes	19.8	45	4	Remove	
46	Shamel Ash	***Fraxinus uhdei***	No	Yes	22.5	40	Dead	Remove	
47	Shamel Ash	***Fraxinus uhdei***	No	Yes	22	45	Dead	Remove	
48	Aleppo Pine	***Pinus halepensis***	No	Yes	26.5	50	3	Remove	Previeous large limb failures.
49	Peruvian Pepper	***Schinus molle***	No	Yes	23	40	3	Remove	Water deprivation
50	Shamel Ash	***Fraxinus uhdei***	No	Yes	22	30	Dead	Remove	
51	Aleppo Pine	***Pinus halepensis***	No	Yes	30[1]	30	Dead	Remove	
52	Peruvian Pepper	***Schinus molle***	No	Yes	27	60	3	Remove	Water deprivation
53	Shamel Ash	***Fraxinus uhdei***	No	Yes	14	40	Dead	Remove	
54	Peruvian Pepper	***Schinus molle***	No	Yes	27.3	70	4	Remove	
55	Shamel Ash	***Fraxinus uhdei***	No	Yes	18.6	45	Dead	Remove	
56	Shamel Ash	***Fraxinus uhdei***	No	Yes	15.6	35	Dead	Remove	
57	Aleppo Pine	***Pinus halepensis***	No	Yes	16.1, 16.2	40	Dead	Remove	
58	Aleppo Pine	***Pinus halepensis***	No	Yes	27.5[1]	60	3	Remove	Heavy infestation Sequoia Pitch Moth.
59	Shamel Ash	***Fraxinus uhdei***	No	Yes	21.3	45	Dead	Remove	
60	Eucalyptus	***Eucalyptus spp.***	No	Yes	16.5	15	Dead	Remove	
61	Shamel Ash	***Fraxinus uhdei***	No	Yes	20.7	50	3	Remove	Water deprivation
62	Shamel Ash	***Fraxinus uhdei***	No	Yes	21.2[4]	35	4	Remove	
63	Shamel Ash	***Fraxinus uhdei***	No	Yes	20.9	45	Dead	Remove	
64	Shamel Ash	***Fraxinus uhdei***	No	Yes	15.7	20	Dead	Remove	

Tree #	Common Name	Botanical Name	Native	Protected	DBH (in.)	Spread (ft.)	Condition (0-5)	Disposition	Notes
65	Shamel Ash	***Fraxinus uhdei***	No	Yes	15.8	20	Dead	Remove	
66	Shamel Ash	***Fraxinus uhdei***	No	Yes	14.4	30	3	Remove	Water deprivation
67	Ash	***Fraxinux spp.***	No	Yes	19.8	60	3	Remove	Water deprivation
68	Ash	***Fraxinux spp.***	No	Yes	23.4	75	3	Remove	Water deprivation
69	Black Cottonwood	***Populus trichocarpa***	Yes	Yes	48	45	Dead	Remove	
70	Peruvian Pepper	***Schinus molle***	No	Yes	32[4]	35	4	Remove	
71	Raywood Ash	***Fraxinus angustifolia 'Raywood'***	No	Yes	18.1	40	4	Remove	
72	Raywood Ash	***Fraxinus angustifolia 'Raywood'***	No	Yes	18.1	30	4	Remove	
73	Raywood Ash	***Fraxinus angustifolia 'Raywood'***	No	No	11.7	35	4	Remove	
74	Shamel Ash	***Fraxinus uhdei***	No	Yes	20	35	4	Remove	
75	Peruvian Pepper	***Schinus molle***	No	Yes	25.5	55	4	Remove	

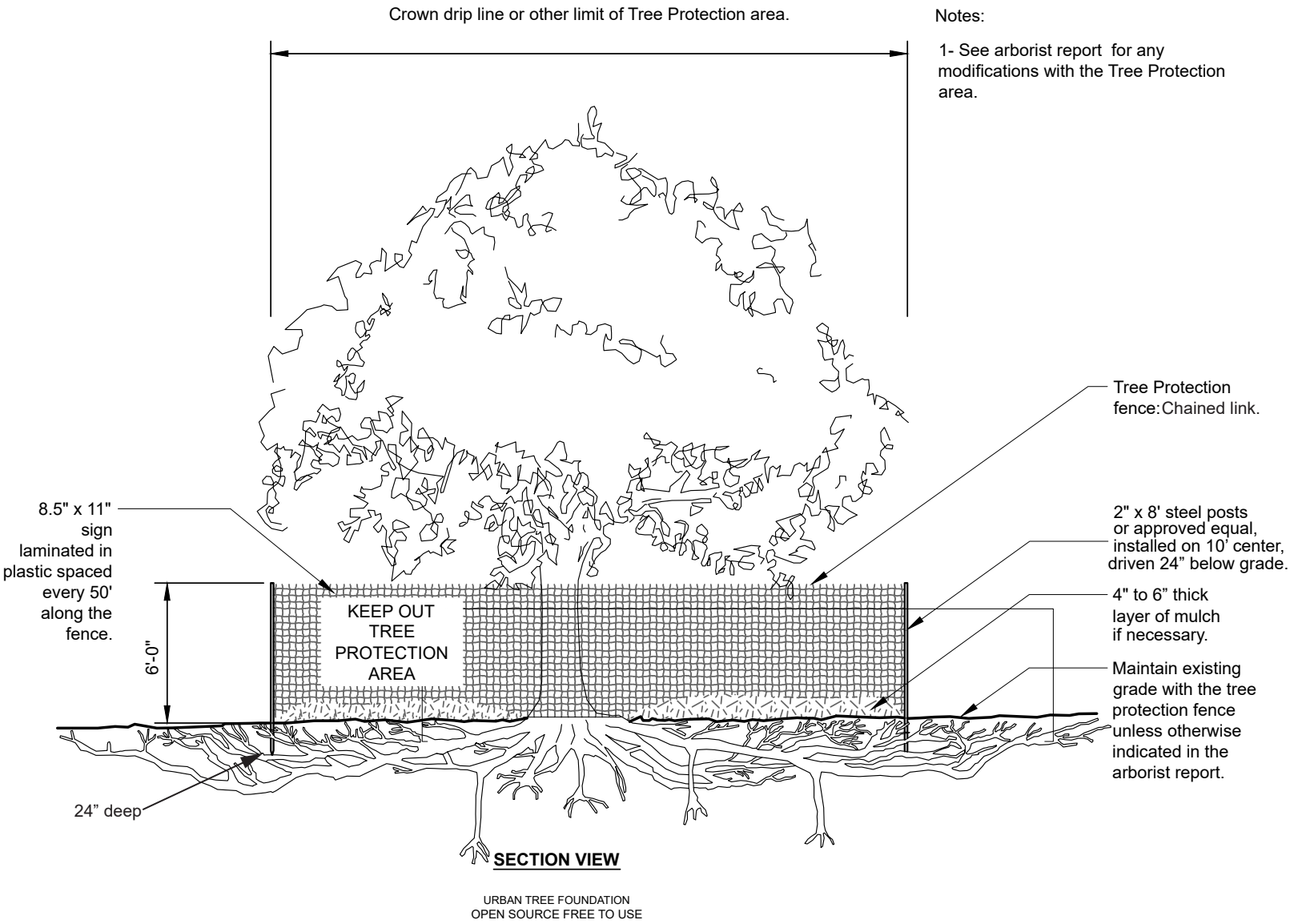
[1]: Measured at 36 inches above level grade.
[2]: Measured at 24 inches above level grade.
[3]: Measured at near grade.
[4]:Measured at 12 inches above level grade.

SITE MAP WITH TREE LOCATIONS

2232 Golf Club Road
Pittsburg, CA 94565

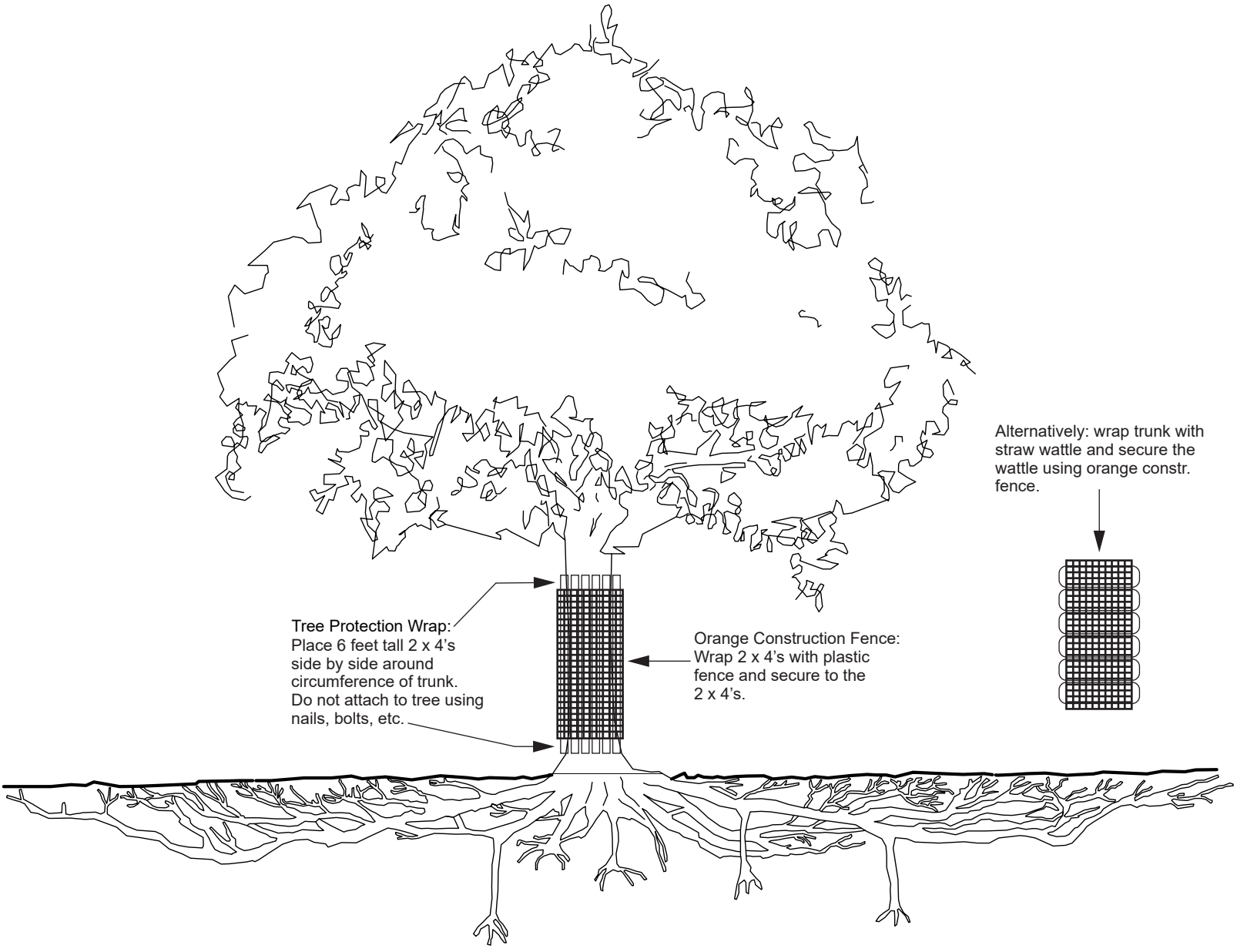
Appendix C: Type I TPZ Diagram

Type I TPZ Diagram



Appendix D: Type III TPZ Diagram

Type III TPZ Diagram



SECTION VIEW

URBAN TREE FOUNDATION
OPEN SOURCE FREE TO USE

Appendix E: Supporting Photographs - Image 1

This area intentionally left blank.

Image 2

Image 3


#3 Mexican Fan Palm
(*Washingtonia robusta*)
#4 Stone Pine
(*Pinus pinea*)
#5 Stone Pine
(*Pinus pinea*)

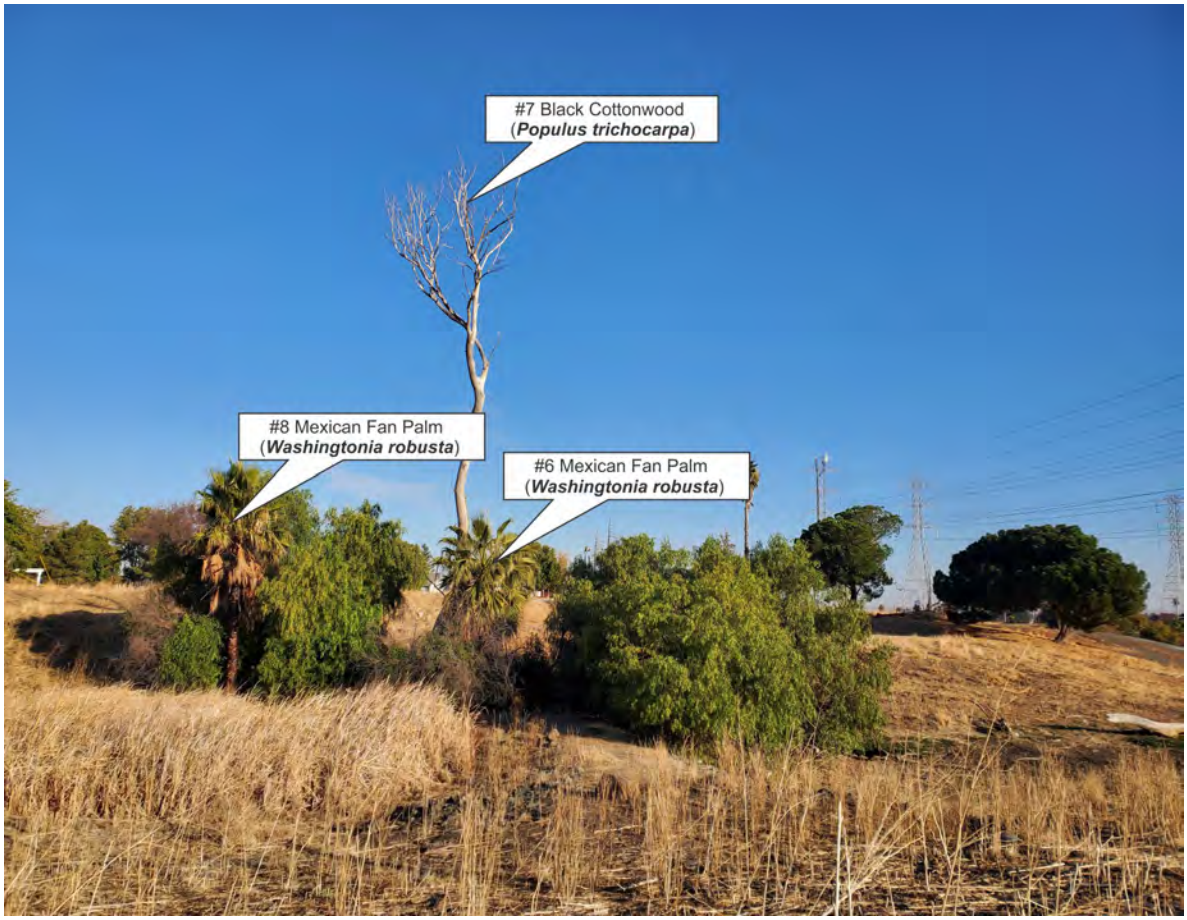
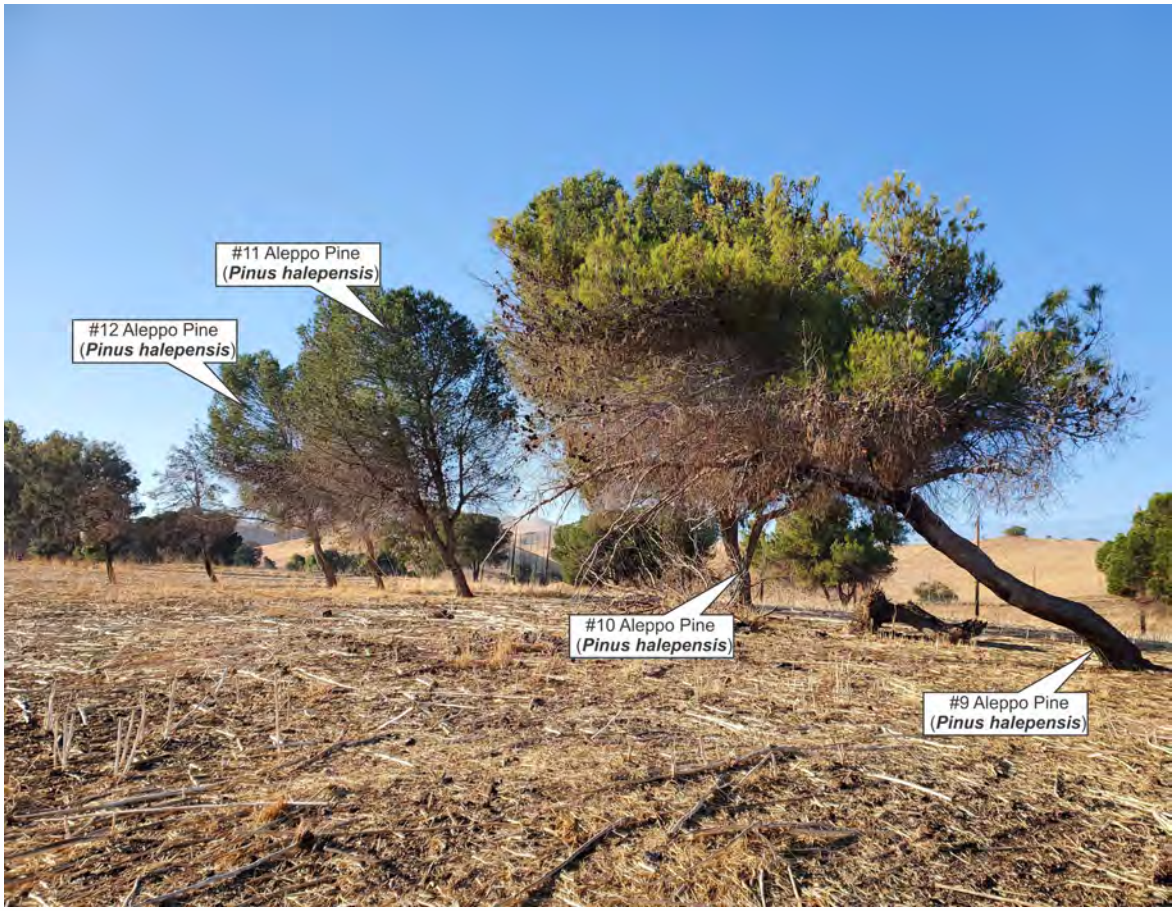

#7 Black Cottonwood
(*Populus trichocarpa*)
#8 Mexican Fan Palm
(*Washingtonia robusta*)
#6 Mexican Fan Palm
(*Washingtonia robusta*)

Image 4


#11 Aleppo Pine
(*Pinus halepensis*)
#12 Aleppo Pine
(*Pinus halepensis*)
#10 Aleppo Pine
(*Pinus halepensis*)
#9 Aleppo Pine
(*Pinus halepensis*)


#14 Stone Pine
(*Pinus pinea*)
#13 Stone Pine
(*Pinus pinea*)

Image 5


#18 Stone Pine
(*Pinus pinea*)
#17 Stone Pine
(*Pinus pinea*)
#15 Stone Pine
(*Pinus pinea*)
#16 Stone Pine
(*Pinus pinea*)

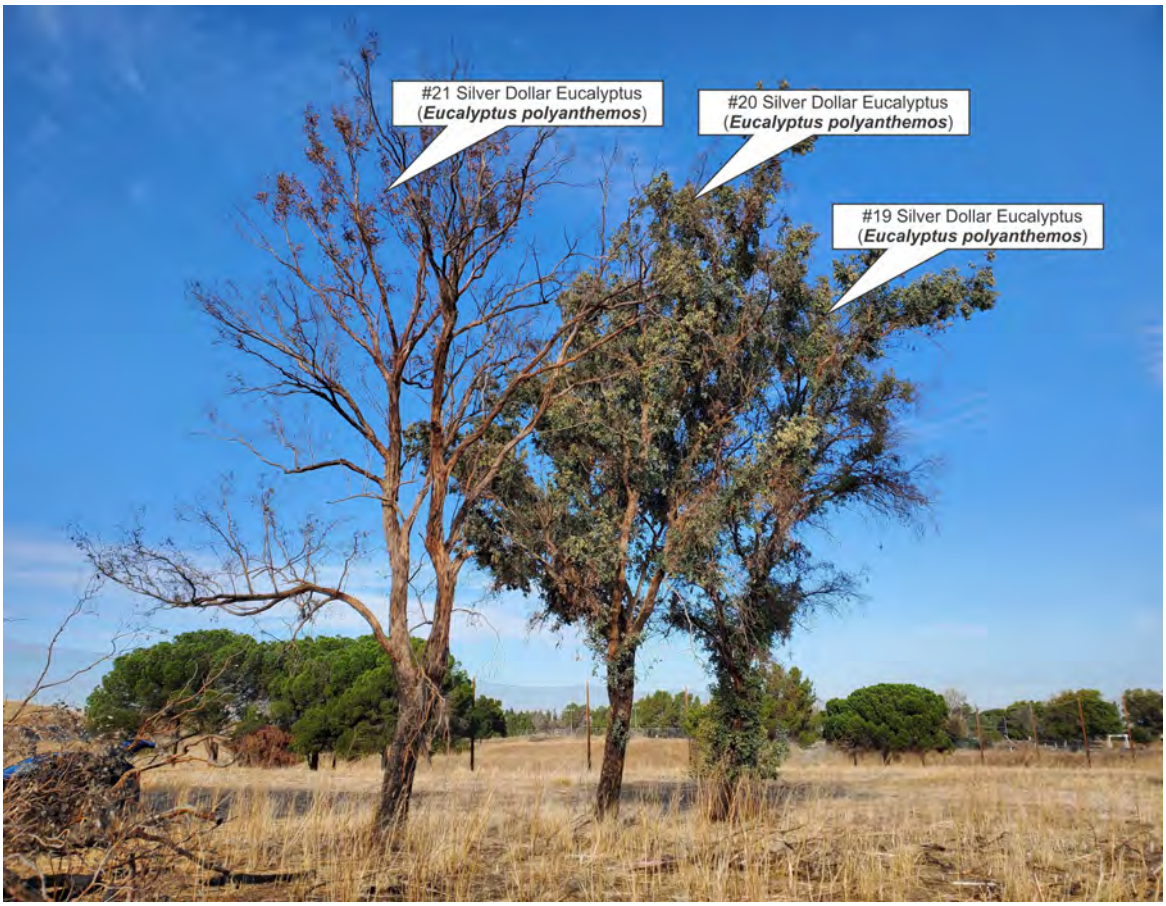

#21 Silver Dollar Eucalyptus
(*Eucalyptus polyanthemos*)
#20 Silver Dollar Eucalyptus
(*Eucalyptus polyanthemos*)
#19 Silver Dollar Eucalyptus
(*Eucalyptus polyanthemos*)

Image 5


#23 Silver Dollar Eucalyptus
(*Eucalyptus polyanthemos*)
#22 Silver Dollar Eucalyptus
(*Eucalyptus polyanthemos*)


#25 Silver Dollar Eucalyptus
(*Eucalyptus polyanthemos*)
#24 Stone Pine
(*Pinus pinea*)

Image 6

Image 7


#32 Peruvian Pepper
(*Schinus molle*)
#31 Peruvian Pepper
(*Schinus molle*)


#34 Stone Pine
(*Pinus pinea*)
#33 Deodar Cedar
(*Cedrus deodara*)

Image 8

Image 9


#37 Canary Island Pine
(*Pinus canariensis*)
#38 Aleppo Pine
(*Pinus halepensis*)
#39 Aleppo Pine
(*Pinus halepensis*)

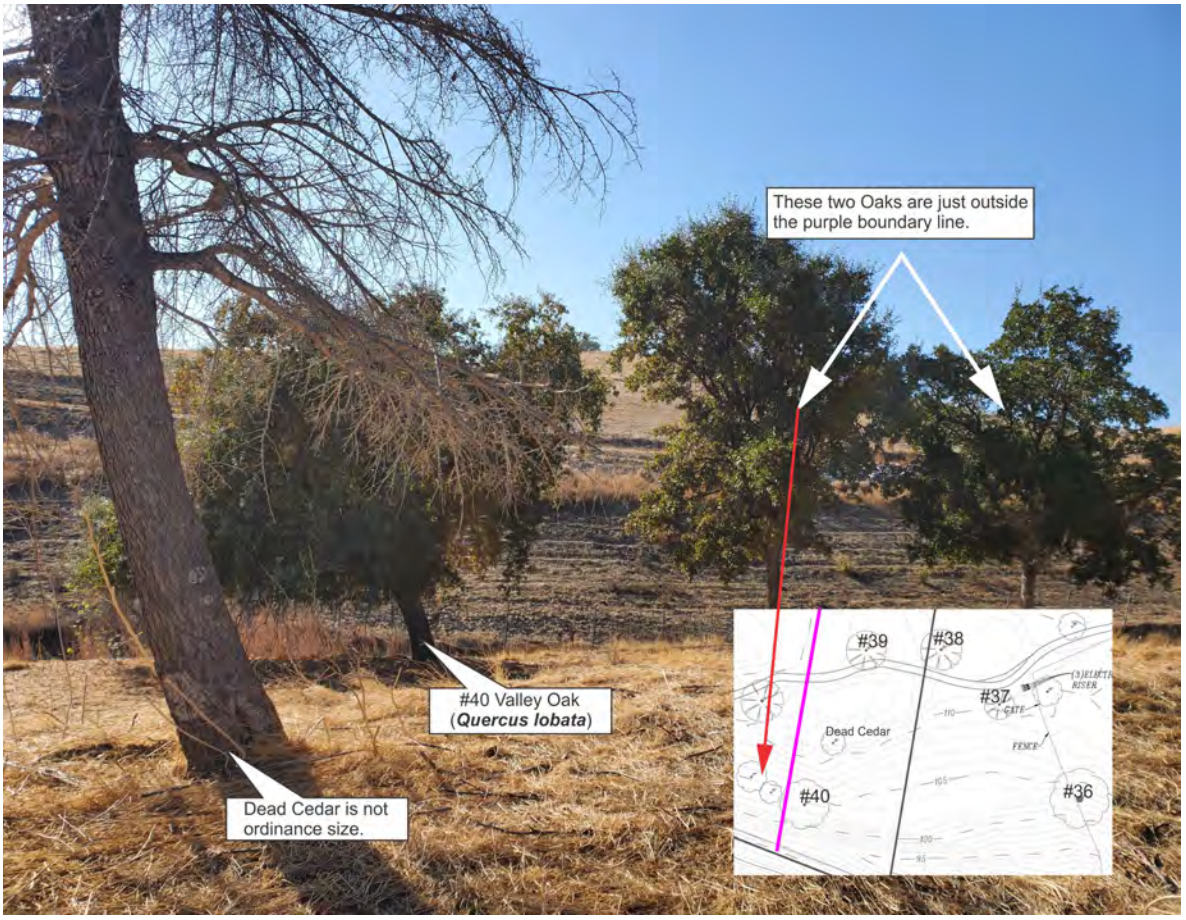
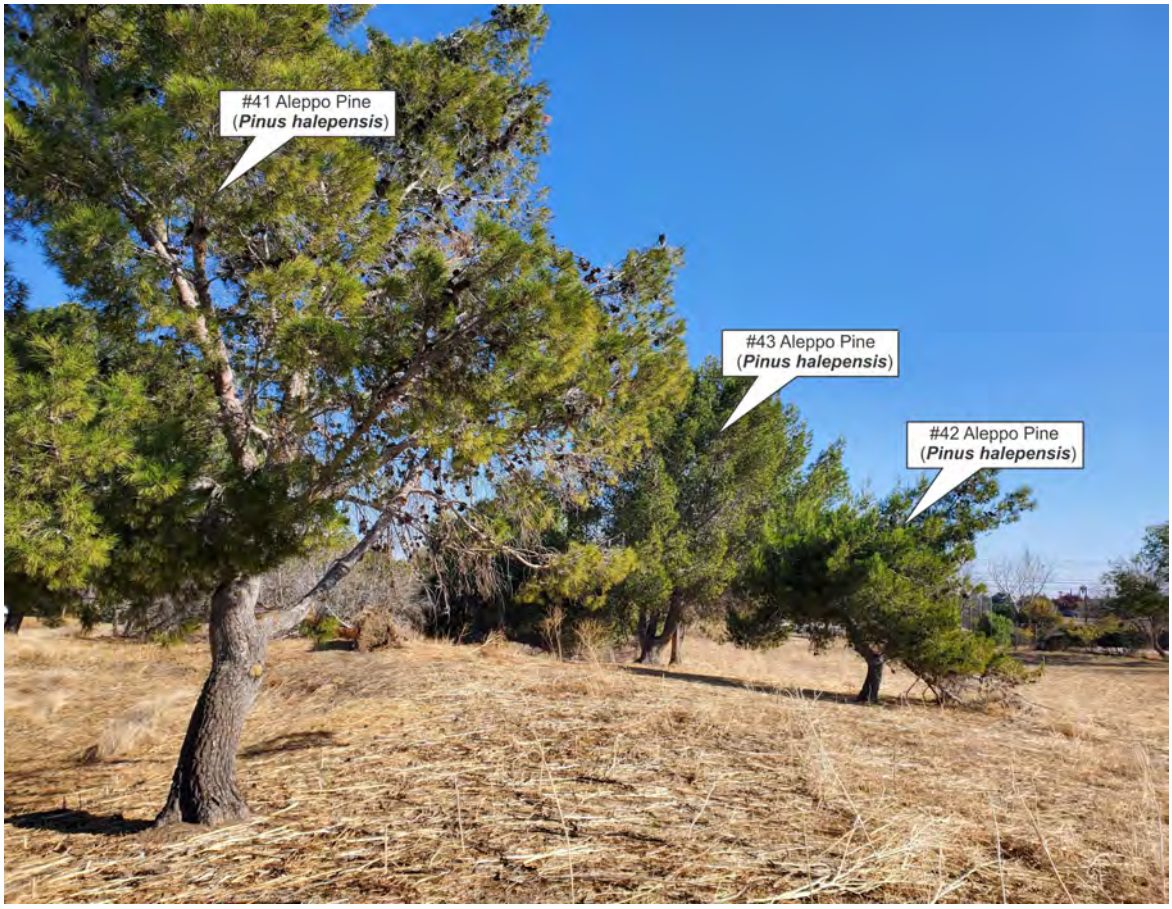

These two Oaks are just outside the purple boundary line.
#40 Valley Oak
(*Quercus lobata*)
Dead Cedar is not ordinance size.
#39
#38
#37
Dead Cedar
#40
#36
FENCE
GATE

Image 10


#41 Aleppo Pine
(*Pinus halepensis*)
#43 Aleppo Pine
(*Pinus halepensis*)
#42 Aleppo Pine
(*Pinus halepensis*)

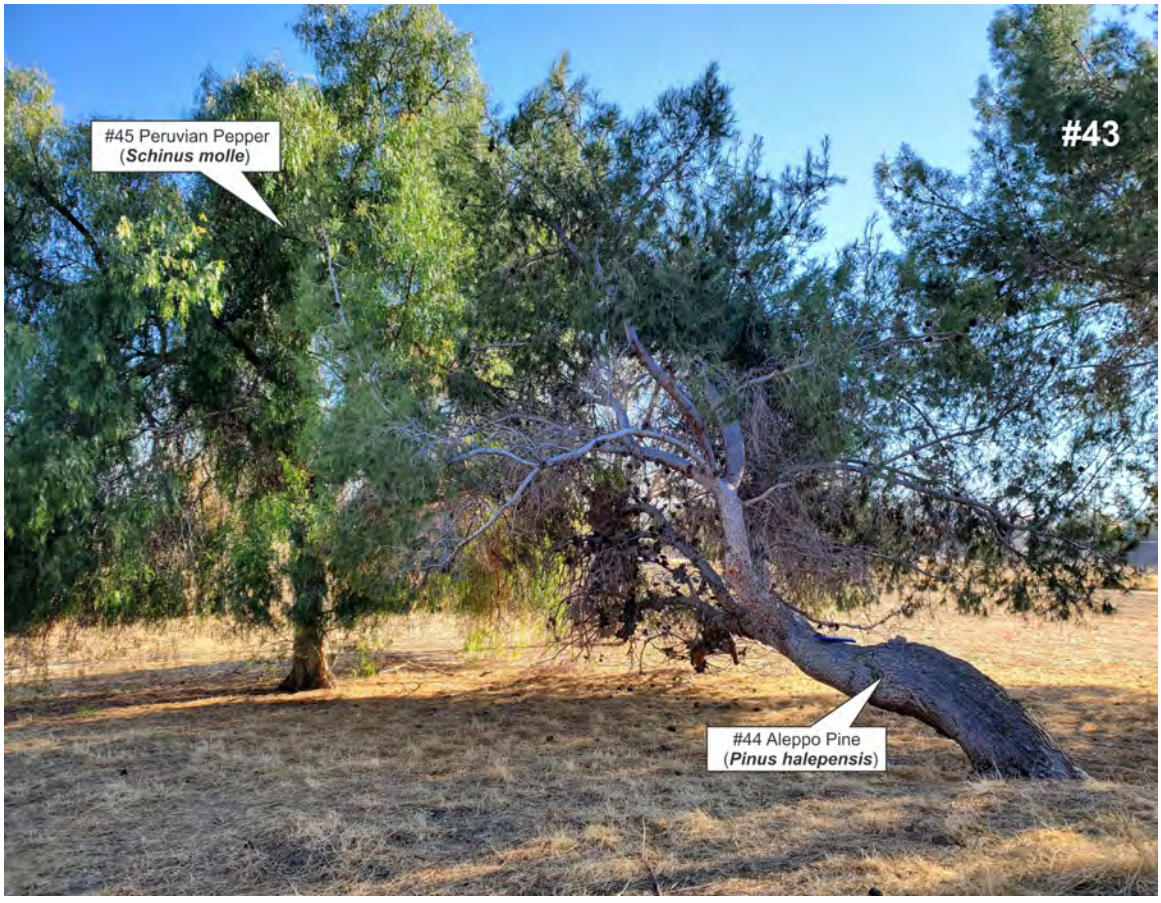

#45 Peruvian Pepper
(*Schinus molle*)
#43
#44 Aleppo Pine
(*Pinus halepensis*)

Image 11


#46 Shamel Ash
(*Fraxinus uhdei*)
#43
#44
#45

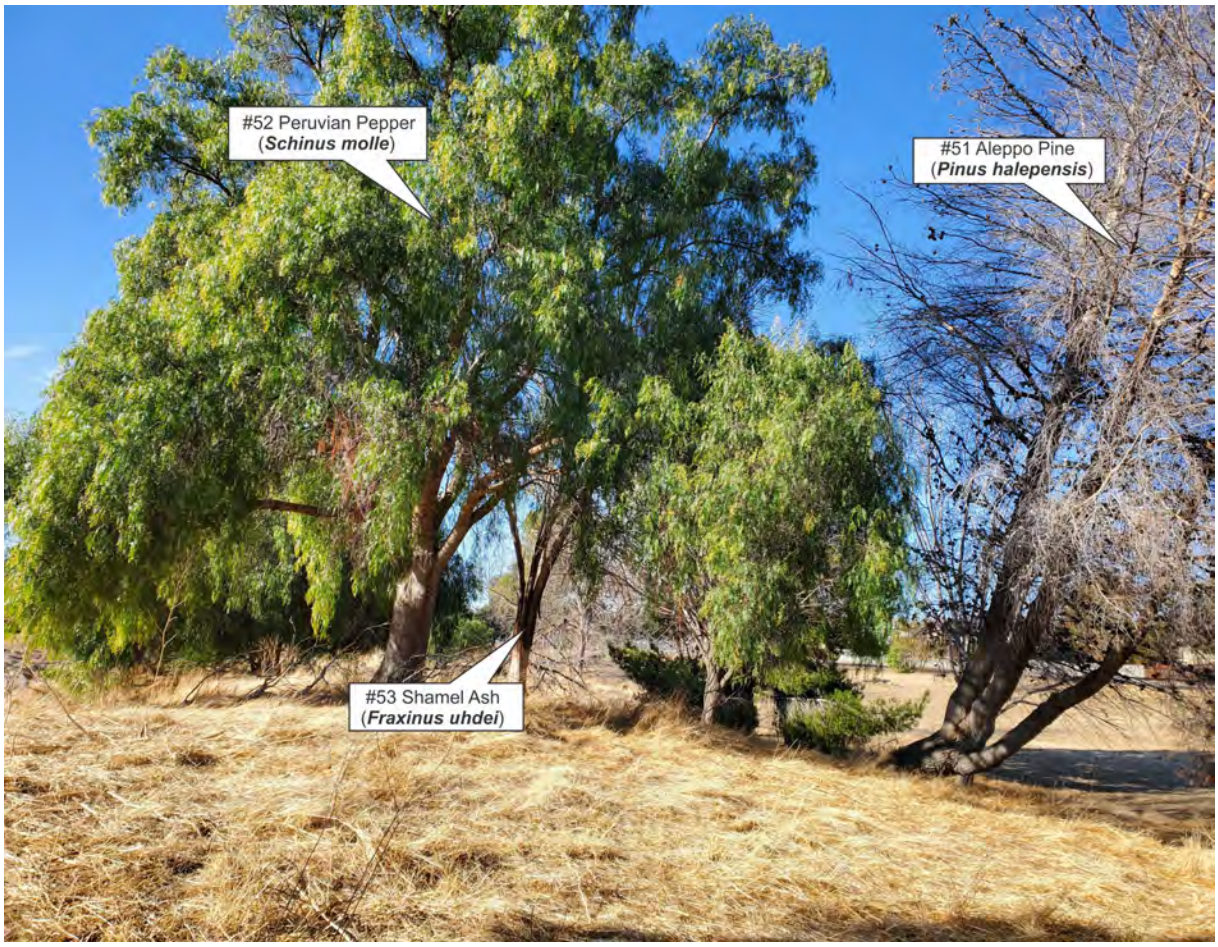

#47 Shamel Ash
(*Fraxinus uhdei*)

Image 12


#48 Aleppo Pine
(*Pinus halepensis*)
#49 Peruvian Pepper
(*Schinus molle*)
Neglected to get a full
picture of the tree.

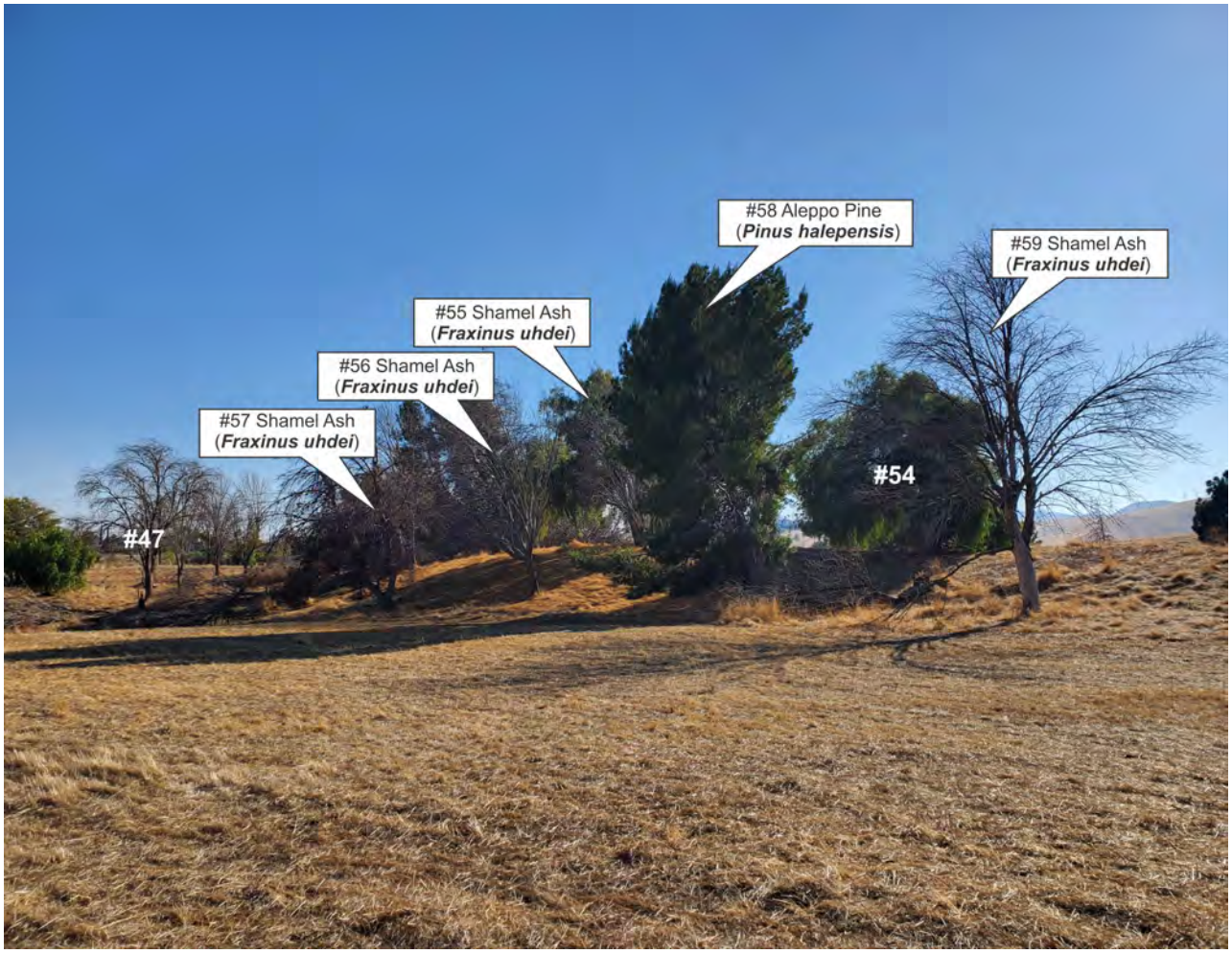

#50 Shamel Ash
(*Fraxinus uhdei*)
#48

Image 13


#52 Peruvian Pepper
(*Schinus molle*)
#51 Aleppo Pine
(*Pinus halepensis*)
#53 Shamel Ash
(*Fraxinus uhdei*)


#54 Peruvian Pepper
(*Schinus molle*)

Image 14


#58 Aleppo Pine
(*Pinus halepensis*)
#59 Shamel Ash
(*Fraxinus uhdei*)
#55 Shamel Ash
(*Fraxinus uhdei*)
#56 Shamel Ash
(*Fraxinus uhdei*)
#57 Shamel Ash
(*Fraxinus uhdei*)
#54
#47


#60 *Eucalyuptus spp.*
#60
Not ordinance size.

Image 15


#61 Shamel Ash
(*Fraxinus uhdei*)
#62 Shamel Ash
(*Fraxinus uhdei*)
#63 Shamel Ash
(*Fraxinus uhdei*)

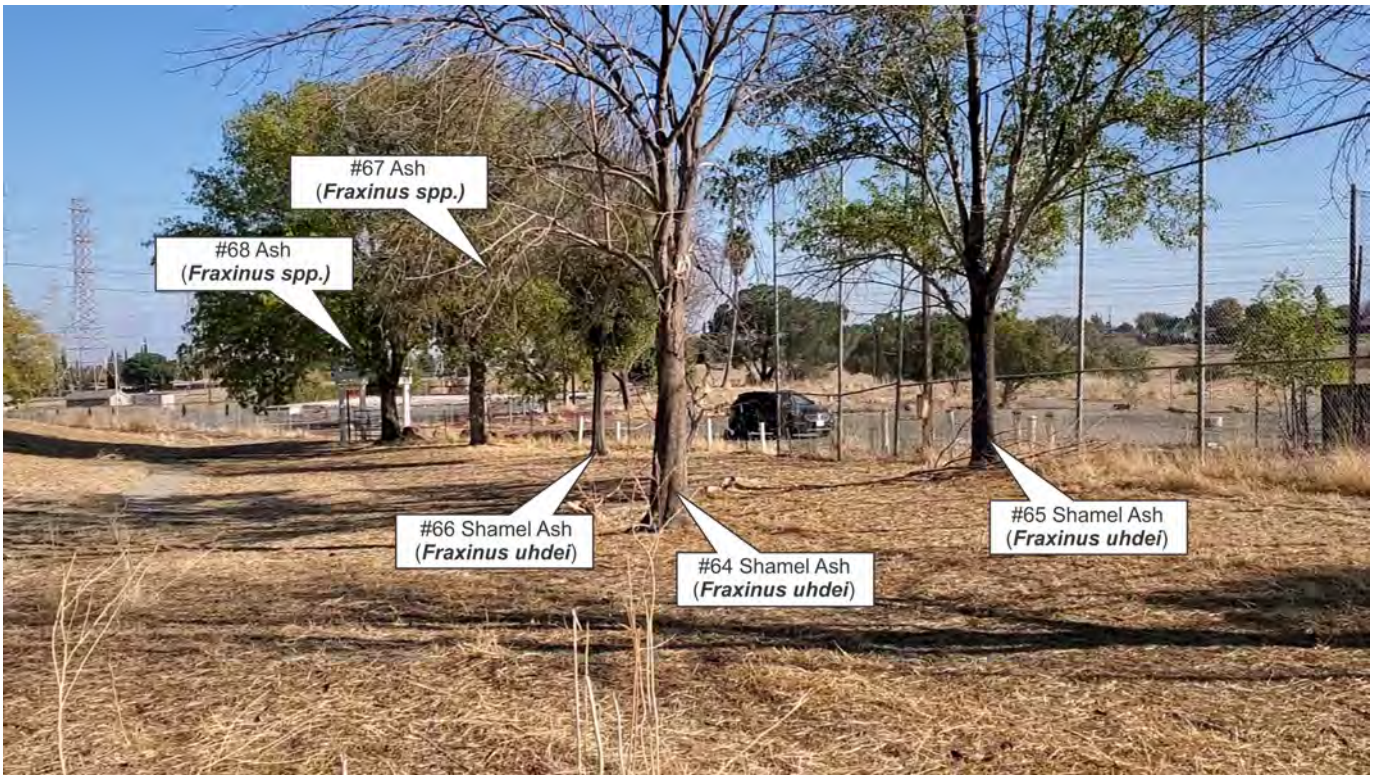

#67 Ash
(*Fraxinus spp.*)
#68 Ash
(*Fraxinus spp.*)
#66 Shamel Ash
(*Fraxinus uhdei*)
#64 Shamel Ash
(*Fraxinus uhdei*)
#65 Shamel Ash
(*Fraxinus uhdei*)

Image 16

Image 17


#70 Peruvian Pepper
(*Schinus molle*)

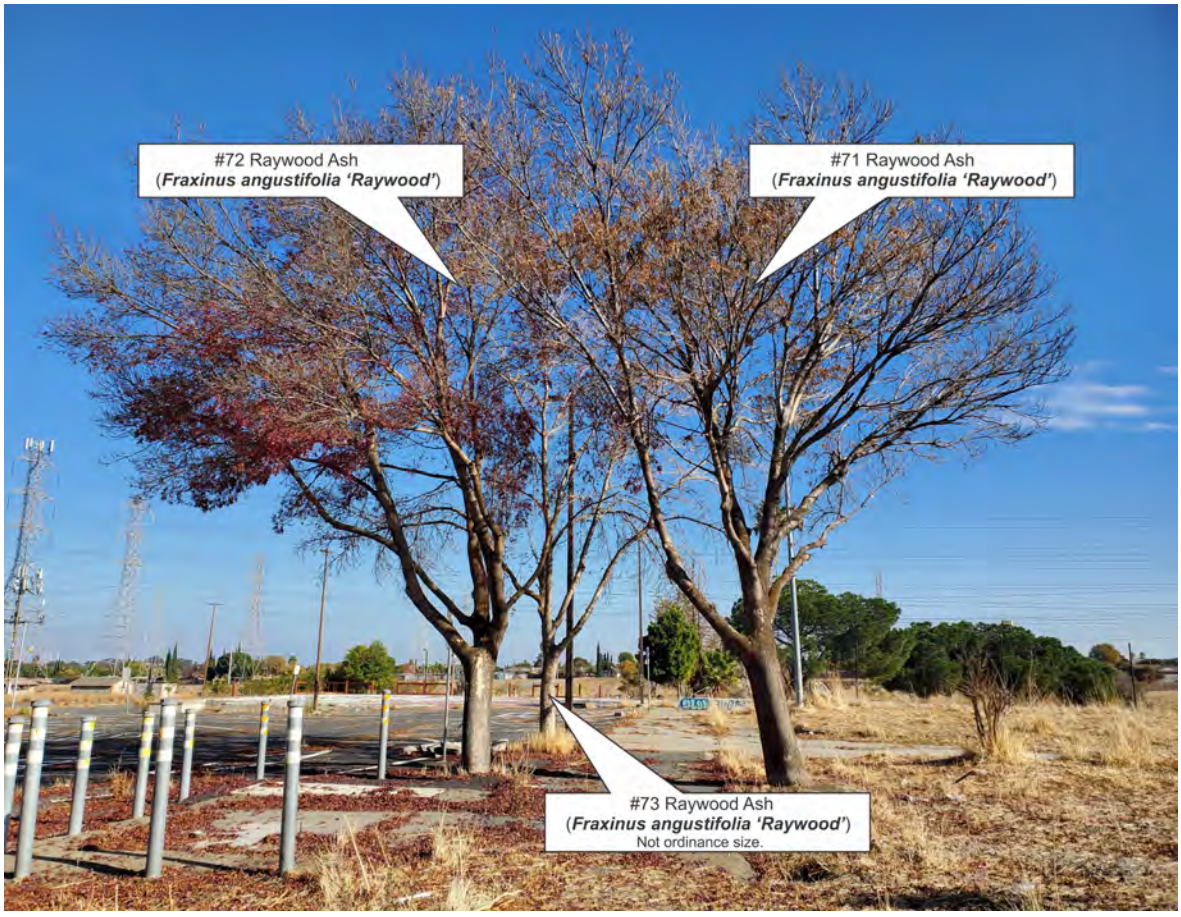

#72 Raywood Ash
(*Fraxinus angustifolia 'Raywood'*)
#71 Raywood Ash
(*Fraxinus angustifolia 'Raywood'*)
#73 Raywood Ash
(*Fraxinus angustifolia 'Raywood'*)
Not ordinance size.

Image 18

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ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownerships to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other government regulations.
3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.
4. The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
5. Loss, alteration, or reproduction of any part of this report invalidates the entire report.
6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.
7. Neither all nor any part of this report, nor any copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of the consultant/appraiser particularly as to value conclusions, identity of the consultant/appraiser, or any reference to any professional society or initialed designation conferred upon the consultant/appraiser as stated in his qualification.
8. This report and the values expressed herein represent the opinion of the consult/appraiser, and the consult/appraiser's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.
9. Sketches, diagrams, graphs, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys.
10. Unless expressed otherwise: 1) information in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in future.

Certification of Performance

I, Dave Laczko, certify that:

I have personally inspected the trees and the property referred to in this report and have stated my findings accurately. The extent of the evaluation or appraisal is stated in the attached report.

- 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.
- The analysis opinions and conclusions stated herein are my own and are based on current scientific procedures and facts.
- My analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices.
- No one provided significant professional assistance to me, except as indicated within the report.
- My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing of the American Society of Consulting Arborists, the International Society of Arboriculture, and the Tree Care Industry Association. I have been involved in the field of Arboriculture in a full-time capacity for a period of more than thirty years.

Respectfully submitted,

Dave Laczko, Arborist
Anderson's Tree Care Specialists, Inc.
A TCIA Accredited Company
ISA Certified Arborist #1233A PN
TRAQ Qualified
Office: 408 226-8733
Cell: 408 724-0168

08/19/2024

Kimley-Horn
Attn: Ryan Bernal
100 W. San Fernando Street
San Jose, CA 95113
(925) 876-5812
ryan.bernal@kimley-horn.com

Re: Development impacts on existing trees – Report Addition
Pittsburg, CA 94565

At your request I have visited the above referenced address to survey the site and inventory the trees. This letter will serve to summarize my observations and recommendations.

SUMMARY

Anderson's Tree Care Specialists, Inc. was asked to survey and inventory the 2 trees located within Tract 3 near the Golf Club Road Entrance of the closed Delta View Golf Course in Pittsburg, CA. These two trees are both Black Cottonwoods (***Populus trichocarpa***) and in poor condition and should be removed. If not removed, trees should have all deadwood removed from the canopy and retrenchment pruning to prevent any additional limb failures as well as limit the risk to the public. In addition, these trees would require Type I Tree Protection.

ASSIGNMENT

Make site visit, evaluate tree(s) condition, take photographs, measure trees and create tree inventory/survey per "ArboristScopeMarkup.pdf" dated 02/07/2023. Present findings in written format.

BACKGROUND

This site was previously inventoried by David Laczko – Certified Arborist #1233A PN and these trees are an addition to his arborist report dated 12/15/2023. I conducted my first site visit on August 13th, 2024, to survey and inventory the trees.

LIMITS OF ASSIGNMENT

All observations were made from the ground.

PURPOSE & USE OF REPORT

This report is purposed for use by Kimley-Horn as the arborist report of record for the project located at 2232 Golf Club Road, Pittsburg, CA 94565.

OBSERVATIONS

Pittsburg Municipal Code:

Title 18 Zoning – Chapter 18.84 Special Land Use Regulations Applicable to Specific Uses – Article XIX Tree Preservation and Protection:

18.84.835 Definitions

F. "Protected tree" is defined as any of the following:

1. A California native tree, as identified in the Calflora online database of wild California plants, that measures at least 50 inches in circumference (15.6 inches diameter) at four and one-half feet above grade, regardless of location or health; or

2. A tree of a species other than a California native that measures at least 50 inches in circumference at four and one-half feet above grade and is either on an undeveloped property, located on public property or within the right-of-way, or located on private property and is found to provide benefits to the subject property as well as neighboring properties, subject to determination by the city planner; or

3. A tree required to be planted, relocated, or preserved as a condition of approval of a tree removal permit or other discretionary permit, and/or as environmental mitigation for a discretionary permit.

18.84.855 Replacement trees.

A. Where it has been determined that preservation of protected trees associated with a construction or development project is infeasible, replacement plantings shall be required as part of the tree removal permit. Subject to the discretion of the decision making body, replacement options shall include:

1. Replacement of the removed tree(s) at a four-to-one ratio with 24-inch box trees;
2. Replacement of the tree(s) at a 12-to-one ratio with 15-gallon trees;
3. Payment of in-lieu fees equal to the replacement trees' value, installation costs and one year of maintenance costs, as calculated with a 12-to-one ratio of 15-gallon trees; or
4. A combination of replacement and payment of in-lieu fees.

B. If any replacement tree fails to survive for a period of one year from the date of installation, then the applicant shall replace the tree at the applicant's sole expense.

C. Location and Specifications.

1. Replacement trees shall be planted on site, except in instances where on-site planting and future tree survival is shown to be infeasible, in which case the decision making body shall consider authorizing other off-site locations where maintenance will be guaranteed;

2. If California native trees are removed, all replacement trees shall be of the same species as the trees being replaced, except when a replacement tree is approved in a location that is not suitable for the native species;

3. Replacement trees shall be in addition to any trees required by any other provisions of this title, as a condition of approval of another discretionary permit, or as environmental mitigation for a discretionary permit.

D. Any in-lieu fees collected by the city pursuant to this section shall be used only for the installation or replacement of trees in city parks, open space or other areas of benefit to the city, and for any associated maintenance. [Ord. 15-1390 § 3 (Exh. A), 2015.]

18.84.860 Standards for development on sites with protected trees not approved for removal.

The following regulations apply to all activities as specified, within 25 feet of the drip line of **protected trees** that are not approved for removal, regardless of whether new development will occur or other **trees** have been approved for removal:

A. Required Plans and Additional Studies. Prior to the granting of a building or grading permit, the applicant shall provide to the city planner a site plan showing all **protected trees** as defined by this article. If grading, excavation or construction is proposed within the drip line of **protected trees** not approved for removal, specific plans shall be submitted to the city planner that indicate how work within the drip line is to be carried out without critically harming the **tree**. Additional arborist's studies may be required to support the grading, excavation, or construction proposed.

B. Demolition and Grading. Prior to and during any demolition, grading or construction, all **protected trees** not approved for removal within the construction limits for any project shall be **protected** by a six-foot-high chain link (or other material approved by the city planner) fence installed around the drip line of each **tree**. All fence sections shall be clearly marked with a sign stating "This is a **Tree Protection** Zone (TPZ) and disturbance of this area is not allowed." The sign shall also list contact information for the contractor and the arborist and clearly state that a violation of the TPZ will result in a stop work order.

Site Plan Review

A site plan for Tract 3 and 4 was provided by Kimley-Horn. They were dated 7/23/2024 and designed by RKB.

Site Characteristics

Closed and dilapidated golf course. The trees inventoried were close to the main gate and there are biohazards present (used needles).

Tree Characteristics

One-inch blue anodized numbered tree tags were placed on each tree.

#298 Black Cottonwood – 20 DBH, this tree has a dead top that is being used by cavity nesters. The tree is in decline, has poor structure, and is overall in a poor condition. This tree has another tag in the shape of a green acorn and says "CALTLC AUBRN, CA 6087 TREE TAG DO NOT REMOVE". If tree is not removed, this tree will be protected by erecting Type I TPZ fencing with a radius of no less than 10 ft.

#299 Black Cottonwood – 27 DBH, this tree has significant dieback in its canopy. The tree has a codominant stem at about 10 feet and includes 4 feet of included bark. There is evidence of multiple limb failures within the canopy. Tree is in decline, has poor structure and is overall in a poor condition. If tree is not removed, this tree will be protected by erecting Type I TPZ fencing with a radius of no less than 14 ft.

TESTING & ANALYSIS

The site and trees were surveyed and inventoried on foot using diameter tape and camera.

CONCLUSIONS

The subject property and its trees have been neglected. Due to lack of maintenance, these trees are also becoming overgrown with overextended limbs that cause those limbs to fail and without proper pruning, previously correctable structural issues have now become more difficult to manage. If these protected trees are removed, a total of 24 15-gallon trees would be required to be planted or in-lieu fees will be required to be paid. The area should be cleaned by a bio-hazard company to remove the dirty needles that are in the area.

RECOMMENDATIONS

These two cottonwood trees should be removed due to their declining state and to protect the public. These two trees are adjacent to the street and the neighboring church. If the trees are not removed, removal of all dead limbs would be required, and the trees should have retrenchment pruning to prevent additional limb failures. If the trees are retained, a Type I Tree Protection Zone should be placed around the trees. Tree protection fencing shall consist of 6 feet tall, chained link fence secured 24 inches below grade by 2-inch diameter steel poles spaced no more than 10 feet apart. Tree protection fences shall be posted at all points of ingress and egress with signs stating: “TREE PROTECTION WRAP – DO NOT MOVE OR REMOVE WITHOUT APPROVAL FROM ARBORIST”.

ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownerships to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.
2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other government regulations.
3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.
4. The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
5. Loss, alteration, or reproduction of any part of this report invalidates the entire report.

6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.
7. Neither all nor any part of this report, nor any copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales or other media, without the prior expressed written or verbal consent of the consultant/appraiser particularly as to value conclusions, identity of the consultant/appraiser, or any reference to any professional society or initialed designation conferred upon the consultant/appraiser as stated in his qualification.
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Certification of Performance

I, Kaitlyn Shelton, certify that:

I have personally inspected the trees and the property referred to in this report and have stated my findings accurately. The extent of the evaluation or appraisal is stated in the attached report.

- 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.
- The analysis opinions and conclusions stated herein are my own and are based on current scientific procedures and facts.
- My analysis, opinions, and conclusions were developed, and this report has been prepared according to commonly accepted arboricultural practices.
- No one provided significant professional assistance to me, except as indicated within the report.
- My compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events.

I further certify that I am a member in good standing of the International Society of Arboriculture. I have been involved in the field of Arboriculture in a full-time capacity for a period of more than 8 years.

Signed:

ANDERSON'S
TREE CARE SPECIALISTS, INC
thoughtful care for the urban forest

Kaitlyn Shelton
Arborist
Cell : 669-236-0137
Office :408.226.8733
TCIA Accredited Company CA-042
ISA Certified Arborist WE-12733A
TRAQ Qualified
California State Contractors License #705171
www.Andersonstreecare.com

Appendix

Table 1: Tree Recommended Maintenance for All Trees

Tree #	Common Species	Scientific	Recommended Maintenance	Prune Cycle (Years)
298	Black Cottonwood	*Populus trichocarpa*	Remove	1
299	Black Cottonwood	*Populus trichocarpa*	Remove	1

Table 2: Protected Trees and Recommended Removal

Tree #	**Common Name**	**Scientific Name**	**DBH (in)**	**Protected**	**Native**
298	Black Cottonwood	*Populus trichocarpa*	20	YES	YES
299	Black Cottonwood	*Populus trichocarpa*	27	YES	YES
		Total Protected Trees			2
		Total Potential 15-Gallon Replants			24

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Image 1: Tree #298 Black Cottonwood

Image 2: Tree #298 Black Cottonwood – Dead limbs, previous limb failure, and cavity nester hole

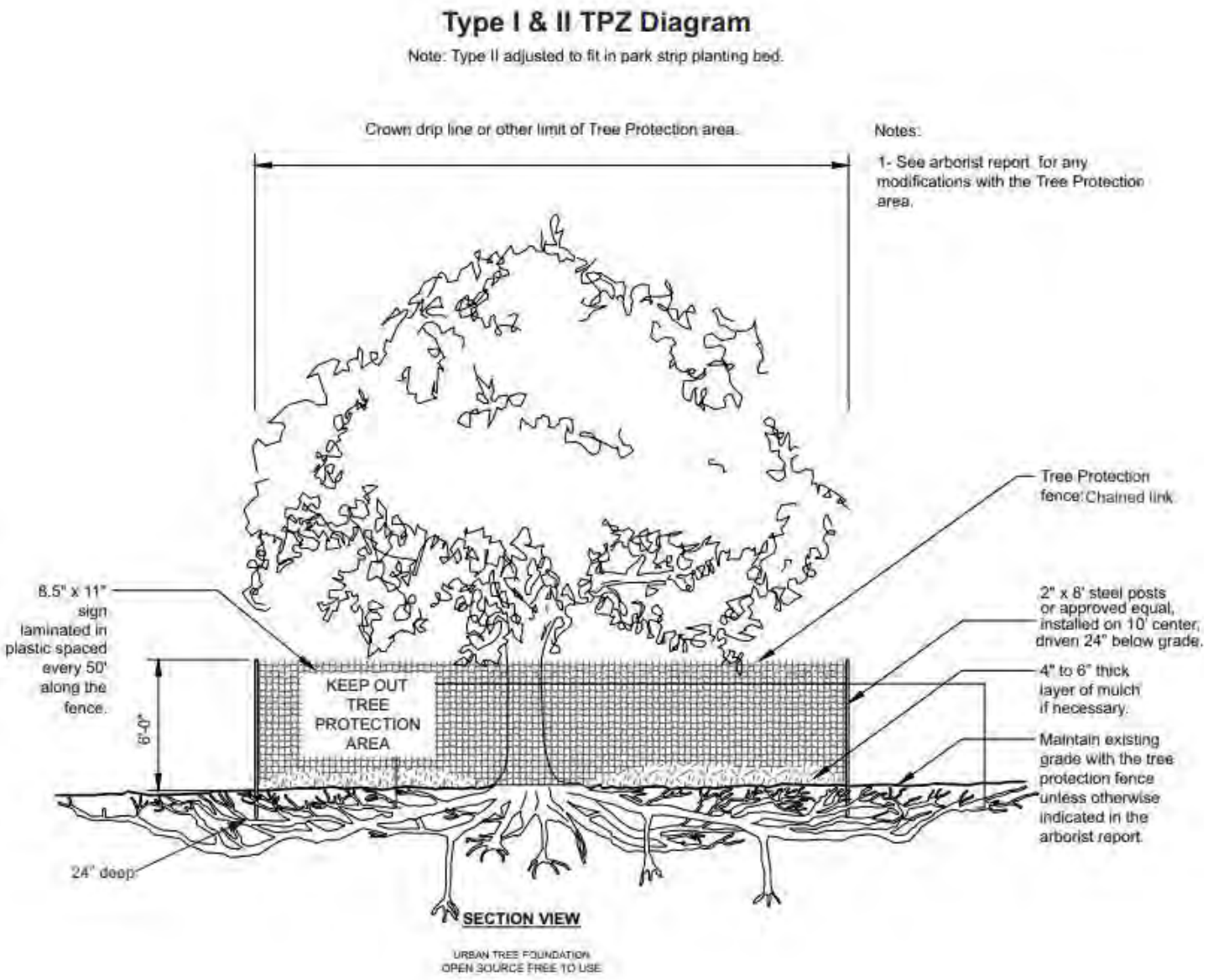
Image 3: Tree #298 Black Cottonwood – Dead Limbs and Cavity Nester Holes

Image 4: Tree #299 Black Cottonwood

Image 5: #299 Black Cottonwood – Dead Limbs in canopy

Image 6: #299 Black Cottonwood – Included Bark

: Tree Protection Zone Diagram



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ATTACHMENT DR VIS-2

Tree Disposition Plan

Appendix A: Tree Table

Tree #	Common Name	Botanical Name	Native	Protected	DBH (in.)	Spread (ft.)	Condition (0-5)	Disposition	Notes
1	Balckwood Acacia	***Acacia Melanoxylon***	No	Yes	19.7	40	4	Remove	
2	Mexican Fan Palm	***Washingtonia robusta***	No	Yes	17	10	4	Remove	
3	Mexican Fan Palm	***Washingtonia robusta***	No	Yes	19	10	4	Remove	
4	Italian Stone Pine	***Pinus pinea***	No	Yes	35[1]	50	4	Remove	
5	Italian Stone Pine	***Pinus pinea***	No	Yes	47[1]	60	4	Remove	Utility side trimmed.
6	Mexican Fan Palm	***Washingtonia robusta***	No	Yes	25	15	4	Remove	Fire damage lower trunk.
7	Black Cottonwood	***Populus trichocarpa***	Yes	Yes	45[2]	30	Dead	Remove	Fire damage.
8	Mexican Fan Palm	***Washingtonia robusta***	No	Yes	18.7	15	4	Remove	Fire damage lower trunk.
9	Aleppo Pine	***Pinus halepensis***	No	Yes	17.9	30	2	Remove	Fire damage lower trunk.
10	Aleppo Pine	***Pinus halepensis***	No	Yes	24.5[2]	50	4	Remove	
11	Aleppo Pine	***Pinus halepensis***	No	Yes	19.7	35	2	Remove	Fire damage lower trunk.
12	Aleppo Pine	***Pinus halepensis***	No	Yes	18.8[1]	30	2	Remove	Fire damage lower trunk.
13	Italian Stone Pine	***Pinus pinea***	No	Yes	32.7	60	2	Remove	Fire damage.
14	Italian Stone Pine	***Pinus pinea***	No	Yes	23.3, 13	60	2	Remove	Fire damage.
15	Italian Stone Pine	***Pinus pinea***	No	Yes	19	40	3	Remove	Heavy infestation Sequoia Pitch Moth.
16	Italian Stone Pine	***Pinus pinea***	No	Yes	32[1]	70	4	Remove	Previous failures, poor structure.
17	Italian Stone Pine	***Pinus pinea***	No	Yes	25	70	3	Remove	Previous failures, poor structure.
18	Italian Stone Pine	***Pinus pinea***	No	Yes	32	60	3	Remove	Previous failures, poor structure.
19	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	14.8	20	3	Remove	Fire damage, water deprivation.
20	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	18.7	30	3	Remove	Fire damage, water deprivation.
21	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	21.2	30	Dead	Remove	Fire damage, water deprivation.
22	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	12.3, 15	30	3	Remove	Fire damage, water deprivation.
23	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	25.5	45	3	Remove	Fire damage, water deprivation.
24	Stone Pine	***Pinus pinea***	No	Yes	31.3[1]	60	4	Remove	
25	Silver Dollar Eucalyptus	***Eucalyptus polyanthemos***	No	Yes	Multi-stemmed	60	4	Remove	
26	Eucalyptus	***Eucalyptus spp.***	No	Yes	26	40	4	Remove	
27	Eucalyptus	***Eucalyptus spp.***	No	Yes	19.3	40	3	Remove	Previous co-dominant stem failure.
28	Eucalyptus	***Eucalyptus spp.***	No	Yes	23.4	40	4	Remove	
29	Eucalyptus	***Eucalyptus spp.***	No	Yes	14.3	30	4	Remove	
30	Eucalyptus	***Eucalyptus spp.***	No	Yes	29.2	45	4	Remove	

A2: Page 2

Tree #	Common Name	Botanical Name	Native	Protected	DBH (in.)	Spread (ft.)	Condition (0-5)	Disposition	Notes
31	Peruvian Pepper	***Schinus molle***	No	Yes	16.5[3]	30	4	Remove	
32	Peruvian Pepper	***Schinus molle***	No	Yes	14, 16.5[2]	35	4	Remove	
33	Deodar Cedar	***Cedrus deodara***	No	Yes	19.2	40	4	Remove	
34	Aleppo Pine	***Pinus pinea***	No	Yes	35.5[2]	75	4	Remove	
35	Monterey Pine	***Pinus radiata***	No	Yes	26[1]	30	Dead	Remove	
36	Fig	***Ficus carica***	No	Yes	Multi-stemmed	40	3	Remove	Growing around a chained link fence.
37	Canary Island Pine	***Pinus canariensis***	No	Yes	17.6	25	4	Remove	
38	Aleppo Pine	***Pinus halepensis***	No	Yes	25.2	40	4	Remove	
39	Aleppo Pine	***Pinus halepensis***	No	Yes	17	35	3	Remove	Heavy lean
40	Valley Oak	***Quercus lobata***	Yes	Yes	17	35	4	Remove	
41	Aleppo Pine	***Pinus halepensis***	No	Yes	21.7	35	3	Remove	Heavy infestation Sequoia Pitch Moth and Red Turpentine Bark Beetle.
42	Aleppo Pine	***Pinus halepensis***	No	Yes	16.5[1]	45	3	Remove	Previous large limb failures.
43	Aleppo Pine	***Pinus halepensis***	No	Yes	30[2]	40	3	Remove	Heavy infestation Sequoia Pitch Moth.
44	Aleppo Pine	***Pinus halepensis***	No	Yes	18.3	35	3	Remove	Heavy lean
45	Peruvian Pepper	***Schinus molle***	No	Yes	19.8	45	4	Remove	
46	Shamel Ash	***Fraxinus uhdei***	No	Yes	22.5	40	Dead	Remove	
47	Shamel Ash	***Fraxinus uhdei***	No	Yes	22	45	Dead	Remove	
48	Aleppo Pine	***Pinus halepensis***	No	Yes	26.5	50	3	Remove	Previeous large limb failures.
49	Peruvian Pepper	***Schinus molle***	No	Yes	23	40	3	Remove	Water deprivation
50	Shamel Ash	***Fraxinus uhdei***	No	Yes	22	30	Dead	Remove	
51	Aleppo Pine	***Pinus halepensis***	No	Yes	30[1]	30	Dead	Remove	
52	Peruvian Pepper	***Schinus molle***	No	Yes	27	60	3	Remove	Water deprivation
53	Shamel Ash	***Fraxinus uhdei***	No	Yes	14	40	Dead	Remove	
54	Peruvian Pepper	***Schinus molle***	No	Yes	27.3	70	4	Remove	
55	Shamel Ash	***Fraxinus uhdei***	No	Yes	18.6	45	Dead	Remove	
56	Shamel Ash	***Fraxinus uhdei***	No	Yes	15.6	35	Dead	Remove	
57	Aleppo Pine	***Pinus halepensis***	No	Yes	16.1, 16.2	40	Dead	Remove	
58	Aleppo Pine	***Pinus halepensis***	No	Yes	27.5[1]	60	3	Remove	Heavy infestation Sequoia Pitch Moth.
59	Shamel Ash	***Fraxinus uhdei***	No	Yes	21.3	45	Dead	Remove	
60	Eucalyptus	***Eucalyptus spp.***	No	Yes	16.5	15	Dead	Remove	
61	Shamel Ash	***Fraxinus uhdei***	No	Yes	20.7	50	3	Remove	Water deprivation
62	Shamel Ash	***Fraxinus uhdei***	No	Yes	21.2[4]	35	4	Remove	
63	Shamel Ash	***Fraxinus uhdei***	No	Yes	20.9	45	Dead	Remove	
64	Shamel Ash	***Fraxinus uhdei***	No	Yes	15.7	20	Dead	Remove	

A2: Page 3

Tree #	Common Name	Botanical Name	Native	Protected	DBH (in.)	Spread (ft.)	Condition (0-5)	Disposition	Notes
65	Shamel Ash	***Fraxinus uhdei***	No	Yes	15.8	20	Dead	Remove	
66	Shamel Ash	***Fraxinus uhdei***	No	Yes	14.4	30	3	Remove	Water deprivation
67	Ash	***Fraxinux spp.***	No	Yes	19.8	60	3	Remove	Water deprivation
68	Ash	***Fraxinux spp.***	No	Yes	23.4	75	3	Remove	Water deprivation
69	Black Cottonwood	***Populus trichocarpa***	Yes	Yes	48	45	Dead	Remove	
70	Peruvian Pepper	***Schinus molle***	No	Yes	32[4]	35	4	Remove	
71	Raywood Ash	***Fraxinus angustifolia 'Raywood'***	No	Yes	18.1	40	4	Remove	
72	Raywood Ash	***Fraxinus angustifolia 'Raywood'***	No	Yes	18.1	30	4	Remove	
73	Raywood Ash	***Fraxinus angustifolia 'Raywood'***	No	No	11.7	35	4	Remove	
74	Shamel Ash	***Fraxinus uhdei***	No	Yes	20	35	4	Remove	
75	Peruvian Pepper	***Schinus molle***	No	Yes	25.5	55	4	Remove	

[1]: Measured at 36 inches above level grade.
[2]: Measured at 24 inches above level grade.
[3]: Measured at near grade.
[4]:Measured at 12 inches above level grade.

OWNER

AVAIO DIGITAL

CONTRACTOR

ARCHITECT

SNHA A WOOLPERT COMPANY 130 East Randolph Suite 3100 Chicago, IL 60601 312.633.2900

CIVIL

Kimley»Horn

STRUCTURAL

MEP, FP, FA, TCOM

kW Mission Critical Engineering Member of WSP

SEC, CTRL, AV

PROGRESS SET NOT FOR CONSTRUCTION

No.	Description	Date
A	SSPE Design Package	12/15/2023

AVAIO PITTSBURG

2232 Golf Club Rd, Pittsburg, CA 94565

SPPE Design Package

ARBORIST REPORT

L1.0

SCALE: Scale as Noted

SITE PREPARATION NOTES

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL MEET THE OWNER OR OWNER'S REPRESENTATIVE AND IDENTIFY TREES WHICH ARE TO BE PROTECTED AS WELL AS THOSE WHICH ARE TO BE REMOVED. DO NOT PROCEED WITHOUT A CLEAR UNDERSTANDING OF EXISTING CONDITIONS TO BE PRESERVED.
2. TREE REMOVAL SHALL INCLUDE THE FILLING, CUTTING, GRUBBING OUT OF ENTIRE ROOTBALLS AND SATISFACTORY OFF-SITE DISPOSAL OF TREES, SHRUBS, STUMPS, VEGETATIVE AND EXTRANEOUS DEBRIS PRODUCED BY THE REMOVAL OPERATIONS.
3. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE INSIDE AND OUTSIDE THE PROPERTY LINE DUE TO HIS OR HER CONTRACT OPERATIONS.
4. ALL REFUSE, DEBRIS, UNSUITABLE MATERIALS AND MISCELLANEOUS MATERIALS TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OFF-SITE BY THE CONTRACTOR.
5. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES IN THE SITE SURVEY TO THE OWNER OR OWNER'S REPRESENTATIVE PRIOR TO STARTING WORK.

TREE REMOVAL NOTES

1. TREE REMOVAL - NO PERSON SHALL CUT, TRIM, PRUNE, PLANT, REMOVE, SPRAY, OR IN ANY OTHER MANNER INTERFERE WITH ANY STREET TREE WITHOUT FIRST HAVING OBTAINED THE PROPER PERMITS.
2. OBTAINING WRITTEN PERMISSION TO CUT, TRIM OR PRUNE A STREET TREE SHALL BE DONE IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE. ANY PRIVATE BUSINESS PERFORMING CUTTING, TRIMMING OR PRUNING OPERATIONS ON STREET TREES SHALL EMPLOY AN ISA CERTIFIED ARBORIST ON STAFF AND SHALL PERFORM ALL WORK ON STREET TREES IN ACCORDANCE WITH THE STANDARDS ADOPTED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE.
3. ALL ATTEMPTS SHALL BE MADE TO PROTECT THE EXISTING TREES TO REMAIN ON SITE.
4. PRIOR TO AND DURING LAND CLEARING, INCLUDING GRUBBING, ALL TREES TO BE REMOVED SHALL BE CLEARLY MARKED WITH RED SURVEY RIBBONS AT 36 INCHES MINIMUM ABOVE GRADE.
5. ALL WOOD AND STUMPS FROM REMOVALS SHALL BE HAULED FROM THE SITE THE SAME DAY, EXCEPT FOR TOPS. ALL TOPS ARE TO BE MULCHED AND STOCKPILED OR HAULED DIRECTLY TO MULCHED AREAS FOR RELOCATED TREES IF SCHEDULING PERMITS. TOPS SHALL BE CHIPPED AND PLACED IN THE TREE PROTECTION ZONE TO A DEPTH OF THREE (3) INCHES. ALL EXCESS WOOD CHIPS SHOULD BE HAULED OFF SITE AFTER TRANSPLANTING IS COMPLETE.
6. BURN PITS ARE PROHIBITED.
7. TREES TO BE REMOVED THAT HAVE BRANCHES EXTENDING INTO THE CANOPY OF TREES TO REMAIN SHALL BE REMOVED BY THE CONSTRUCTION CONTRACTORS. THE CONTRACTOR SHALL REMOVE THE TREE IN A MANNER THAT CAUSES NO DAMAGE TO THE TREES AND UNDERSTORY VEGETATION TO REMAIN

ONSITE TREE DISPOSITION SCHEDULE

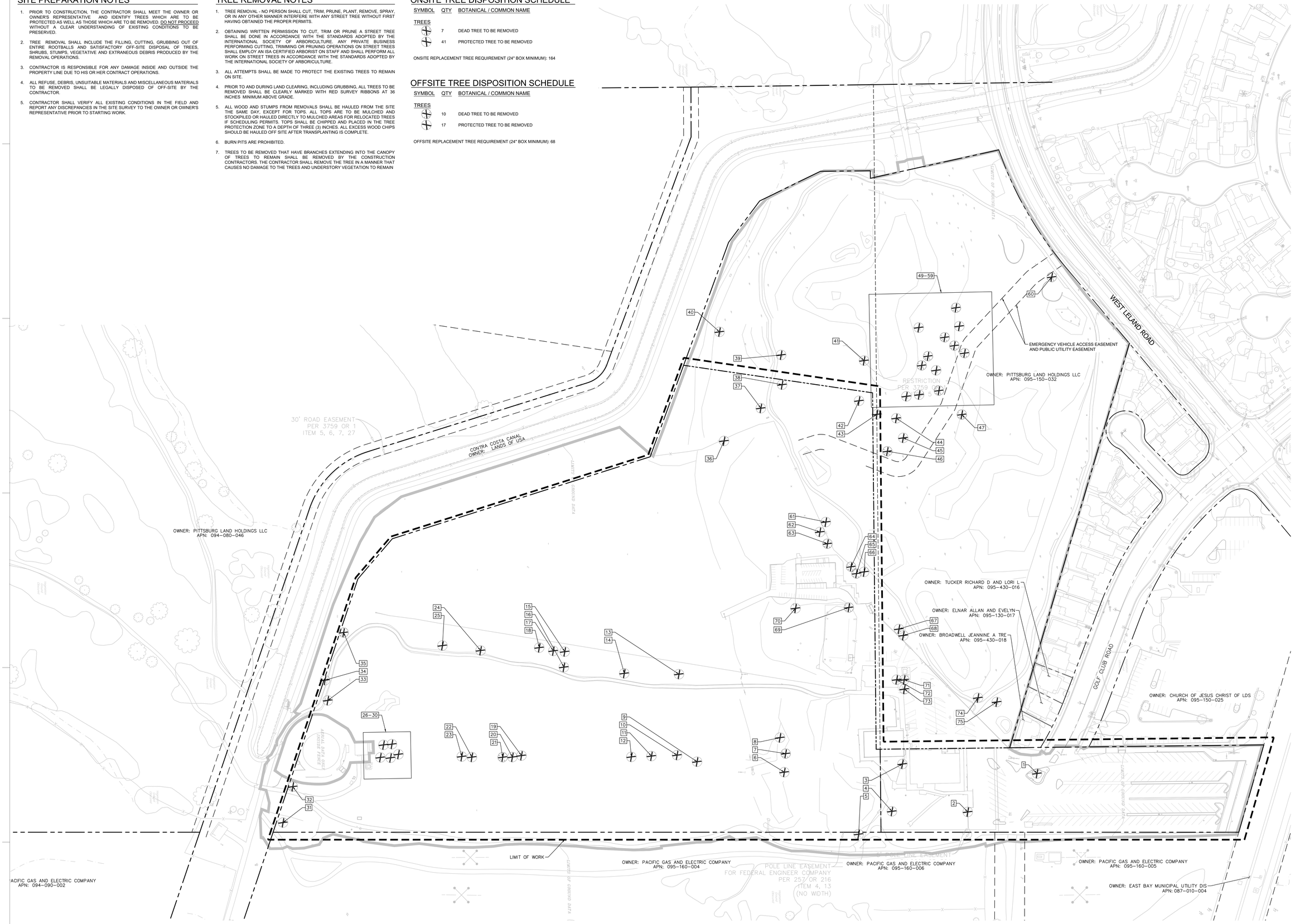
SYMBOL	QTY	BOTANICAL / COMMON NAME
TREES		
	7	DEAD TREE TO BE REMOVED
	41	PROTECTED TREE TO BE REMOVED

ONSITE REPLACEMENT TREE REQUIREMENT (24" BOX MINIMUM): 164

OFFSITE TREE DISPOSITION SCHEDULE

SYMBOL	QTY	BOTANICAL / COMMON NAME
TREES		
	10	DEAD TREE TO BE REMOVED
	17	PROTECTED TREE TO BE REMOVED

OFFSITE REPLACEMENT TREE REQUIREMENT (24" BOX MINIMUM): 68



GRAPHIC SCALE IN FEET
0 30 60 120

OWNER

AVAIO DIGITAL

CONTRACTOR

ARCHITECT

SNHA
A WOOLPERT COMPANY
130 East Randolph
Suite 3100
Chicago, IL 60601
312.633.2900

CIVIL

Kimley»Horn

STRUCTURAL

MEP, FP, FA, TCOM

kW Mission Critical Engineering
Member of WSP

SEC, CTRL, AV

PROGRESS SET
NOT FOR CONSTRUCTION

No.	Description	Date
A	SSPE Design Package	12/15/2023

AVAIO PITTSBURG

2232 Golf Club Rd,
Pittsburg, CA 94565

SPPE Design Package

TREE DISPOSITION PLAN

L2.0

SCALE: Scale as Noted