Appendices

Appendix A

Arboricultural Inventory and Report

6136 Manchester Project
Arboricultural Inventory and Report

PREPARED
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1.0 INTRODUCTION & LOCATION

6136 Manchester Avenue Apartments, LLC - a Delaware limited liability company, retained NOREAS Inc., (NOREAS) to support the 6136 Manchester Project (hereafter "Project"), in Los Angeles, California. More specifically, the Project is located at 6136 W. Manchester Avenue and 8651 La Tijera Boulevard, Los Angeles, California 90045 (Figure 1). NOREAS conducted an arboricultural inventory, under the auspices of an International Society of Arboriculture Certified Arborist. To that end, Certified Arborist No. 4190 Benjamin Zamora oversaw pedestrian-based field census and survey for the Project to document the location and overall health rating of individual trees. For the purposes of this report, the "study area" includes the Project's proposed ground disturbance footprint (Project Site) and a buffer (Figure 2). Therefore, the study area includes those locales to be affected directly or indirectly by the Project, and is not merely the immediate lands involved in the Project itself.

In summary, a total of 61 trees were assessed, all were nonnative species.

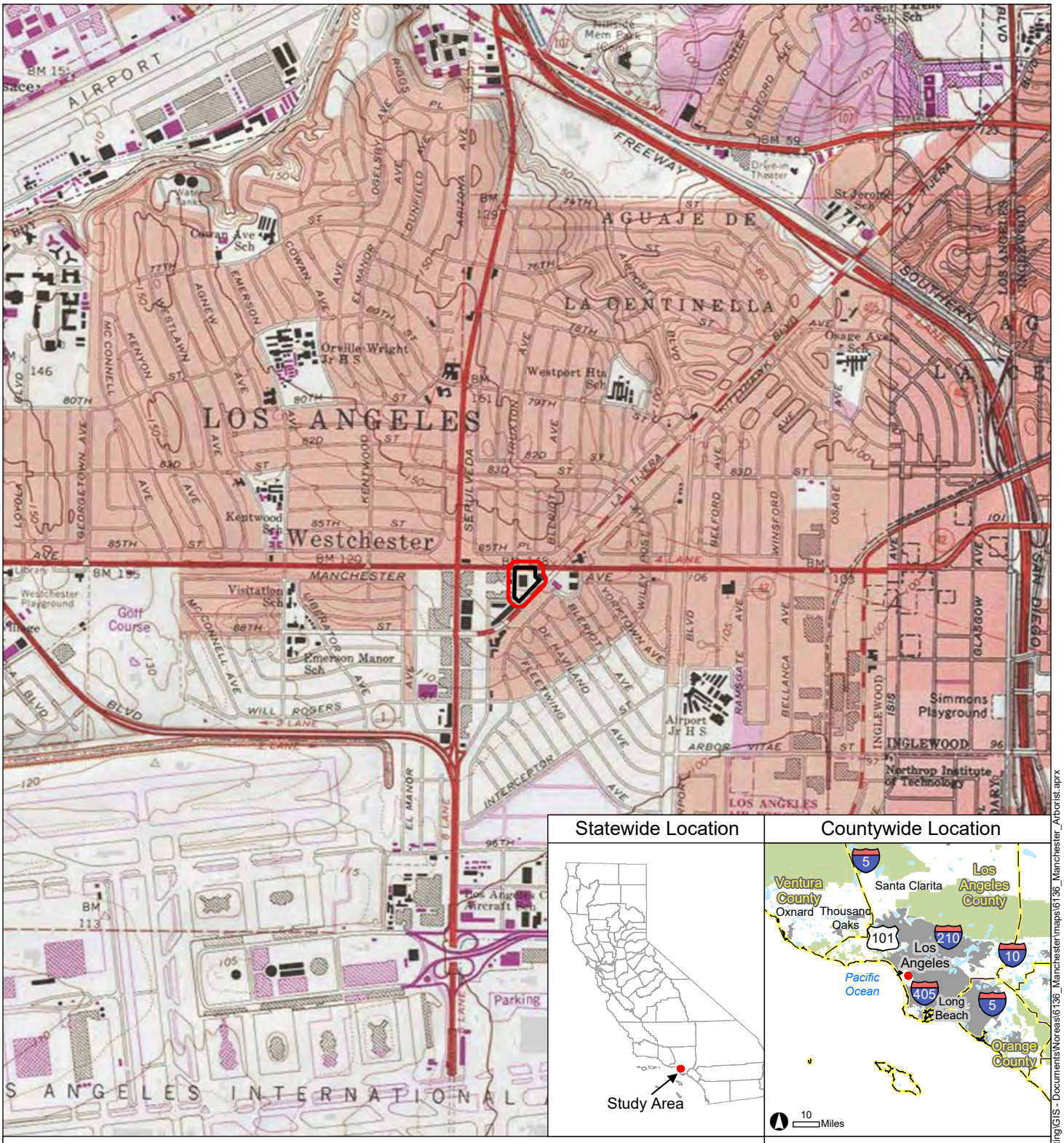


Figure 1. Regional Location



Project Site

Study Area

0 100 200 Feet

1 inch = 200 feet

Data Sources:
- Bing Maps Hybrid accessed Jul 2022

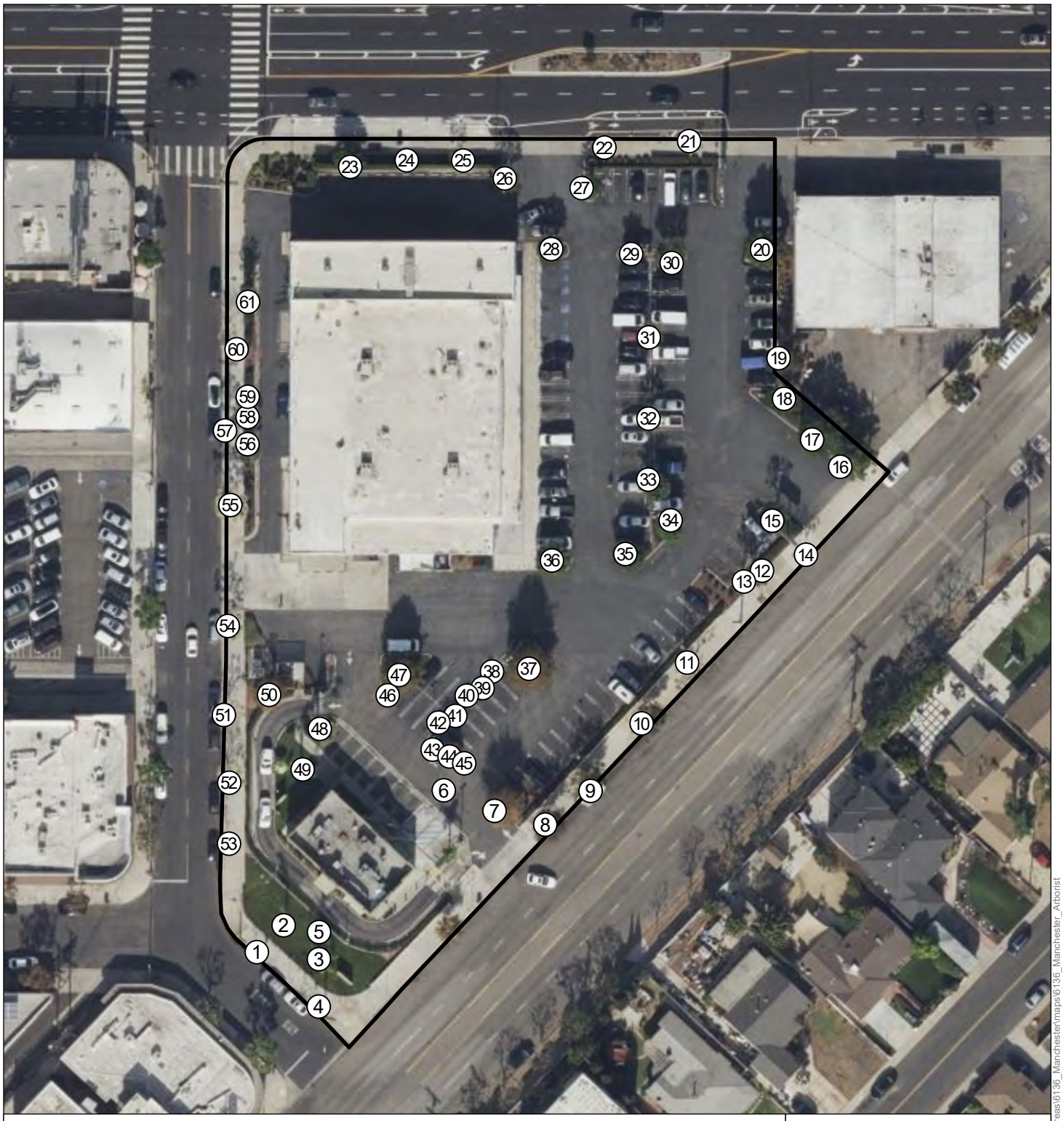
Map Prepared: 7-27-22

Prepared by:

NOREAS
Environmental Engineering and Science

C:\Users\DavidDuncan\Bargas Environmental Consulting\GIS - Documents\Noreas\6136_Manchester\maps\6136_Manchester_Arborist.aprx

Figure 2. Site Vicinity



Project Site

\# Tree Location

Please note that Trees with Unique Identifiers #1, #4, #8, #9, #12, #13, #14, #21, #22, #51, #52, #53, #54, #55, #57 and #60 are not within the Project's ground disturbance footprint and shall be protected in place; while Trees with Unique Identifiers #2, #3, #5, #6, #7, #11, #15, #16, #17, #18, #19, #20, #23, #24, #25, #26, #27, #28, #29, #30, #31, #32, #33, #34, #35, #36, #37, #38, #39, #40, #41, #42, #43, #44, #45, #46, #47, #48, #49, #50, #56, #58, #59 and #61 are within the Project's ground disturbance footprint and will need to be removed.

0 37.5 75 Feet

1 inch = 75 feet

Data Sources:
- Bing Maps Aerial accessed Jul 2022

Map Prepared: 7-28-22

Prepared by:
NOREAS
Environmental Engineering and Science

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Figure 3. Tree Inventory

2.0 METHODS

Field surveys were conducted in July 2022 by NOREAS arboricultural and botanical staff; under the auspices of an International Society of Arboriculture Certified Arborist - Benjamin Zamora (Certified Arborist No. 4190). Pedestrian-based field census consisted of surveying the entire study area with transects and recording the location of any species of the appropriate size by means of a handheld global positioning system. Tree specimens were identified to the lowest taxonomic level sufficient to determine whether the tree observed was non-native, native, or special status. Species of uncertain identity were subsequently identified from taxonomic keys (Baldwin et al. 2012). Scientific and common species names were recorded according to *The Jepson Manual Higher Plants of California* (Baldwin et al. 2012). Survey methods were derived from the published regional procedures.

With regard to trees with a trunk diameter at breast height of 4 inches or greater, the following data was assessed: tree height, canopy width, trunk diameter at breast height (DBH), and asymmetrical lean information. Evaluation characteristics included but were not limited to documentation of structural defects, health and vigor, and existing damage. An overall health rating was also assigned to these specimens of A, B, C, D or F, and is further detailed below.

- ✓ A – Excellent: Absence of insect wounding or mechanical damage to tissue. Specimen color is vibrant, and appears to be hydrated (i.e., does not show evidence of cracking from shrinkage or overexpansion of the trunk). Specimen is free of substantial insect or disease damage. Trunk is not buried with excess soil.
- ✓ B – Good: ≤25% of specimen is affected by disease, stress, cavities, or insect infestation. Specimen color is generally vibrant, and individual appears to be adequately hydrated. Minor insect or disease damage. Minor cavities may exist, but do not constitute ≥25% of total trunk circumference.
- ✓ C – Fair: 25% to 50% of specimen affected by disease, stress, cavities, or insect infestation (e.g., dead branches and stems are present). Specimen color is muted and individual shows signs of stress (i.e., poor hydration). Significant (>25%) tissue die-back, trunk damage, or cavities are present (e.g., 25% to 50% of total trunk circumference is damaged).
- ✓ D – Struggling: ≥50% of specimen is affected by disease, stress, cavities, or insect infestation. Specimen is necrotic and individual shows obvious signs of drought stress. Significant tissue die-back, trunk damage, cavities or bark sloughing are apparent.
- ✓ F – Dead.

3.0 RESULTS

A total of 61 trees were assessed (Table 1. Tree Inventory).

Table 1. Tree Inventory

Unique Identifier	Common Name	Scientific Name	DBH (inches)	Height (Feet)	Spread (Feet)	Lat/Long	Health Rating
1	Taiwanese Rain Tree	*Koelreuteria elegans*	4	15	10	Lat: 33.95855 Long: -118.39340	C
2	Queen Palm	*Syagrus romanzoffiana*	-	-	-	Lat: 33.39860 Long: -118.39335	F
3	Queen Palm	*Syagrus romanzoffiana*	13	20	10	Lat: 33.95854 Long: -118.39329	A
4	Taiwanese Rain Tree	*Koelreuteria elegans*	6	20	12	Lat: 33.95847 Long: -118.39333	C
5	Taiwanese Rain Tree	*Koelreuteria elegans*	6	20	12	Lat: 33.95858 Long: -118.39307	B
6	Queen Palm	*Syagrus romanzoffiana*	12	18	15	Lat: 33.95879 Long: -118.39307	B
7	London Plane	*Platanus acerifolia*	12	15	12	Lat: 33.95876 Long: -118.39298	D
8	Taiwanese Rain Tree	*Koelreuteria elegans*	8	20	18	Lat: 33.95874 Long: -118.39289	B
9	Taiwanese Rain Tree	*Koelreuteria elegans*	9	20	20	Lat: 33.95879 Long: -118.39281	B
10	Taiwanese Rain Tree	*Koelreuteria elegans*	8	20	15	Lat: 33.95889 Long: -118.39272	B
11	Taiwanese Rain Tree	*Koelreuteria elegans*	12	25	25	Lat: 33.95898 Long: -118.39264	C
12	Taiwanese Rain Tree	*Koelreuteria elegans*	5	15	12	Lat: 33.95920 Long: -118.39242	C
13	Liquid Amber	*Liquidambar styraciflua*	16	35	20	Lat: 33.95910 Long: -118.39254	C
14	Taiwanese Rain Tree	*Koelreuteria elegans*	8	23	20	Lat: 33.95914 Long: -118.39243	B
15	Liquid Amber	*Liquidambar styraciflua*	14	25	18	Lat: 33.95919 Long: -118.39249	B

Unique Identifier	Common Name	Scientific Name	DBH (inches)	Height (Feet)	Spread (Feet)	Lat/Long	Health Rating
16	Camphor	*Cinnamomum camphora*	13	18	12	Lat: 33.95927 Long: -118.39237	C
17	Camphor	*Cinnamomum camphora*	17	18	15	Lat: 33.95931 Long: -118.39242	C
18	Camphor	*Cinnamomum camphora*	10	15	12	Lat: 33.95937 Long: -118.39247	D
19	Camphor	*Cinnamomum camphora*	11	15	15	Lat: 33.95943 Long: -118.39248	D
20	Camphor	*Cinnamomum camphora*	17	25	18	Lat: 33.95959 Long: -118.39251	C
21	Taiwanese Rain Tree	*Koelreuteria elegans*	2	10	5	Lat: 33.95975 Long: -118.39264	C
22	Ginkgo	*Ginkgo biloba*	2	10	5	Lat: 33.95974 Long: -118.39279	C
23	Tuckeroo	*Cupaniopsis anacardioides*	20	20	20	Lat: 33.95971 Long: -118.39324	C
24	Tuckeroo	*Cupaniopsis anacardioides*	-	-	-	Lat: 33.95972 Long: -118.39314	F
25	Tuckeroo	*Cupaniopsis anacardioides*	6	18	15	Lat: 33.95972 Long: -118.39304	D
26	Tuckeroo	*Cupaniopsis anacardioides*	20	20	18	Lat: 33.95970 Long: -118.39297	C
27	Tuckeroo	*Cupaniopsis anacardioides*	20	20	16	Lat: 33.95968 Long: -118.39283	C
28	Chinese Pistache	*Pistacia chinensis*	10	20	20	Lat: 33.95970 Long: -118.39297	C
29	Chinese Pistache	*Pistacia chinensis*	7	16	12	Lat: 33.95958 Long: -118.276	D
30	Chinese Pistache	*Pistacia chinensis*	10	25	22	Lat: 33.95957 Long: -118.39267	C
31	Chinese Pistache	*Pistacia chinensis*	7	15	12	Lat: 33.95946 Long: -118.39271	C
32	Chinese Pistache	*Pistacia chinensis*	10	23	23	Lat: 33.95934 Long: -118.39271	B

Unique Identifier	Common Name	Scientific Name	DBH (inches)	Height (Feet)	Spread (Feet)	Lat/Long	Health Rating
33	Chinese Pistache	*Pistacia chinensis*	9	19	19	Lat: 33.95925 Long: -118.39271	C
34	Chinese Pistache	*Pistacia chinensis*	12	25	20	Lat: 33.95919 Long: -118.39267	C
35	Chinese Pistache	*Pistacia chinensis*	10	20	20	Lat: 33.95914 Long: -118.39275	C
36	Chinese Pistache	*Pistacia chinensis*	11	20	20	Lat: 33.95913 Long: -118.39288	C
37	London Plane	*Platanus acerifolia*	17	20	12	Lat: 33.95897 Long: -118.39292	C
38	Pygmy date palm	*Phoenix roebelinii*	3	5.5	4	Lat: 33.95896 Long: -118.39299	C
39	Pygmy date palm	*Phoenix roebelinii*	2	3.5	2	Lat: 33.95894 Long: -118.39301	C
40	Pygmy date palm	*Phoenix roebelinii*	3	6	4	Lat: 33.95893 Long: -118.39303	C
41	Pygmy date palm	*Phoenix roebelinii*	2	3.5	3	Lat: 33.95890 Long: -118.39305	C
42	Pygmy date palm	*Phoenix roebelinii*	6	6	6	Lat: 33.95889 Long: -118.39308	C
43	Pygmy date palm	*Phoenix roebelinii*	8	8	6	Lat: 33.95885 Long: -118.39309	C
44	London Plane	*Platanus acerifolia*	10	17	12	Lat: 33.95884 Long: -118.39306	C
45	Pygmy date palm	*Phoenix roebelinii*	6	6	6	Lat: 33.95883 Long: -118.39304	C
46	Pygmy date palm	*Phoenix roebelinii*	15	20	13	Lat: 33.95893 Long: -118.39317	C
47	London Plane	*Platanus acerifolia*	15	20	13	Lat: 33.95896 Long: -118.39315	C
48	Queen Palm	*Syagrus romanzoffiana*	10	20	20	Lat: 33.95888 Long: -118.39329	B
49	Queen Palm	*Syagrus romanzoffiana*	14	18	18	Lat: 33.95882 Long: -118.39332	B

Unique Identifier	Common Name	Scientific Name	DBH (inches)	Height (Feet)	Spread (Feet)	Lat/Long	Health Rating
50	London Plane	*Platanus acerifolia*	11	15	10	Lat: 33.95893 Long: -118.39338	C
51	Taiwanese Rain Tree	*Koelreuteria elegans*	8	17	15	Lat: 33.95890 Long: -118.39346	B
52	Taiwanese Rain Tree	*Koelreuteria elegans*	10	17	15	Lat: 33.95880 Long: -118.39345	C
53	Taiwanese Rain Tree	*Koelreuteria elegans*	4	15	10	Lat: 33.95871 Long: -118.39345	C
54	Taiwanese Rain Tree	*Koelreuteria elegans*	9	17	13	Lat: 33.95904 Long: -118.392345	B
55	Taiwanese Rain Tree	*Koelreuteria elegans*	10	17	13	Lat: 33.95921 Long: -118.39345	B
56	Liquid Amber	*Liquidambar styraciflua*	11	25	20	Lat: 33.95930 Long: -118.39342	B
57	Taiwanese Rain Tree	*Koelreuteria elegans*	9	20	13	Lat: 33.95932 Long: -118.39346	B
58	Liquid Amber	*Liquidambar styraciflua*	8	18	15	Lat: 33.95934 Long: -118.39342	C
59	Liquid Amber	*Liquidambar styraciflua*	10	23	15	Lat: 33.95937 Long: -118.39342	C
60	Taiwanese Rain Tree	*Koelreuteria elegans*	8	10	15	Lat: 33.95944 Long: -118.39344	B
61	Liquid Amber	*Liquidambar styraciflua*	10	23	15	Lat: 33.95951 Long: -118.39342	B

For the purposes of this analysis, an impact is being defined as removal or pruning of greater than 1/3 of a specimen's live crown, grade alteration that buries or unearths any portion of a tree, any action that significantly undercuts a tree's root system, or otherwise substantively disturbs the ground within the drip line of the specimen (i.e., soil compaction, root pruning, etc.).

Specimen No. 1 is a Taiwanese Rain Tree - 4 inches DBH, 15 feet (ft.) tall, with a crown spread of approximately 10 ft. (Photo 1).

- Specimen No. 1 has been adversely affected by stress, and trunk damage (i.e., Overall Health Rating - C). There is a wound near the root flare (or root collar) at the base of a tree where the trunk transitions - from trunk and bark tissues, into root system tissues. Additionally, the individual tree shows signs of stress (i.e., poor hydration) with notable browning and muted color in leaf tips.

- Specimen No. 1 is also constrained within in a narrow sidewalk planter. In this instance, the tree has limited space for its roots/trunk to grow. Because the root growth space is limited and there are adjacent utilities, there is a restricted amount of space for proper development.

Specimen No. 2 is a Queen Palm (Photo 2).

- Specimen No. 2 is a standing, dead, landscape tree (i.e., Overall Health Rating - F). Tree lacks a notable live crown and there is no obvious indication of functioning vascular tissue.

Specimen No. 3 is a Queen Palm - 13 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 10 ft. (Photo 3).

- Specimen No. 3 has vibrant color, and appears to be hydrated. Specimen is free of substantial insect or disease damage, and there are no signs of mechanical damage to tissue (i.e., Overall Health Rating - A).

Specimen No. 4 is a Taiwanese Rain Tree - 6 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 12 ft. (Photo 4).

- Specimen No. 4 has been affected by stress, bark tears and wounds from historic pruning events (i.e., Overall Health Rating – C, Photo 5). The individual tree shows signs of stress (i.e., poor hydration), with notable browning and muted color in leaf tips.

- Specimen No. 4 is also constrained within in a narrow sidewalk planter. In this instance, the tree has limited space for its root growth. This is evidenced by the lifted and cracked sidewalk which is being impacted by the tree's subsurface roots.

Specimen No. 5 is a Taiwanese Rain Tree - 6 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 12 ft. (Photo 6).

- Specimen No. 5 has been affected by stress and wounds from historic pruning events (i.e., Overall Health Rating – B).

- Specimen No. 5 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots to grow.

Specimen No. 6 is a Queen Palm - 13 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 10 ft. (Photo 7).

- Specimen No. 6 is generally vibrant in color landscape tree, and the individual appears to be adequately hydrated (i.e., Overall Health Rating - B).

- Specimen No. 2 is constrained within in a narrow parking lot planter, which is undersized for a palm this size. The planter is curtailed by existing sidewalk, driveway and parking stalls. In this situation, the specimen has limited space for its roots to grow.

Specimen No. 7 is a London Plane - 12 inches DBH, 15 feet (ft.) tall, with a crown spread of approximately 12 ft. (Photo 8).

- Specimen No. 7 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - D).

- Specimen No. 7 has been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. The result, is that poorly attached suckers have sprouted, which need to be actively managed (removed on a regular basis) to prevent them from end weighted as they get larger. End weighted suckers/limbs will eventually self-prune, drop to the ground, and fall on any intermittent target, creating a potential hazard for pedestrians, property, etc. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

- Specimen No. 7 has powdery mildew, dark lesions on leaves, leaf spots, wilting, and withering leaves. These are the initial signs and symptoms of *anthracnose*, a fungal disease. The severity of the infection ranges from mere unsightliness, to death.

- Specimen No.7 also includes the remains of materials used for supporting it after planting (Photo 9). These materials were not checked and maintained appropriately. To that end, support straps and a metal stake are buried within this tree (Photo 10). The material is girdling new stem growth, results in structural weakness and has prevented the trunk from developing its natural girth and strength.

Specimen No. 8 is a Taiwanese Rain Tree - 8 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 18 ft. (Photo 11).

- Specimen No. 8 has been affected by stress (i.e., Overall Health Rating – B).

- Specimen No. 8 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots to grow (Photo 12). This is evidenced by the lifted and cracked sidewalk which is being impacted by the tree's subsurface roots.

Specimen No. 9 is a Taiwanese Rain Tree - 9 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 13).

- Specimen No. 9 has been affected by stress (i.e., Overall Health Rating – B).

- Specimen No. 9 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots to grow (Photo 14). This is evidenced by the lifted and cracked sidewalk which is being impacted by the tree's subsurface roots.

Specimen No. 10 is a Taiwanese Rain Tree - 8 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 15 ft. (Photo 15).

- Specimen No. 10 has been affected by stress (i.e., Overall Health Rating – B).

- Specimen No. 10 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots.

Specimen No. 11 is a Taiwanese Rain Tree - 12 inches DBH, 25 feet (ft.) tall, with a crown spread of approximately 25 ft. (Photo 16).

- Specimen No. 11 has been affected by stress, with some browning and muted color in leaf tips (i.e., Overall Health Rating – C).

- Specimen No. 11 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots to grow (Photo 17). This is evidenced by the lifted and cracked sidewalk which is being impacted by the tree's subsurface roots (Photo 18).

Specimen No. 12 is a Taiwanese Rain Tree - 5 inches DBH, 15 feet (ft.) tall, with a crown spread of approximately 12 ft. (Photo 19).

- Specimen No. 12 has been affected by stress, has a 5 degree lean to the west, with some browning and muted color in leaf tips (i.e., Overall Health Rating – C). Additionally, this tree has a poor root flare (or root collar) at the base of a tree where the trunk transitions - from trunk and bark tissues, into root system tissues.

- Specimen No. 12 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots to grow.

Specimen No. 13 is a Liquid Amber Tree - 16 inches DBH, 35 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 20).

- Specimen No. 13 has been affected by stress (i.e., Overall Health Rating – C).

- Specimen No. 13 is also constrained within a planter that is significantly undersized for a tree that is roughly 20 ft. tall. In this circumstance, the tree has limited space for its roots to grow. Because the roots' growth are limited to the container's diameter, notable root damage was observed (Photo 21). With the existing environmental factors surrounding this tree, a significant portion of its root system has already been adversely affected by this planting location.

Specimen No. 14 is a Taiwanese Rain Tree - 8 inches DBH, 23 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 22).

- Specimen No. 14 has been affected by stress (i.e., Overall Health Rating – B).

- Specimen No. 14 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots/trunk to grow, as there are also adjacent utilities/signs restricting space for unconstrained development. This is also evidenced by the lifted and cracked sidewalk which is being impacted by the tree's subsurface roots.

Specimen No. 15 is a Liquid Amber Tree - 14 inches DBH, 25 feet (ft.) tall, with a crown spread of approximately 18 ft. (Photo 23).

- Specimen No. 15 has been affected by stress and as a lean to the northeast (i.e., Overall Health Rating – B).

- Specimen No. 15 is constrained within in a parking lot planter. Therefore, the tree has limited space for its roots/trunk to grow, as space is limited and there is adjacent commercial signage.

Specimen No. 16 is a Camphor Tree - 13 inches DBH, 18 feet (ft.) tall, with a crown spread of approximately 12ft. (Photo 24).

- Specimen No. 16 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C). This tree is experiencing chlorosis throughout 50% of its canopy. Chlorosis a yellowing of leaf tissue, due to a lack of chlorophyll. Possible causes of chlorosis include poor drainage, damaged roots, compacted roots, high alkalinity, and nutrient deficiencies in the plant.

- Specimen No. 16 has also been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

Specimen No. 17 is a Camphor Tree - 17 inches DBH, 18 feet (ft.) tall, with a crown spread of approximately 15ft. (Photo 25).

- Specimen No. 17 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C). This tree is experiencing chlorosis throughout 50% of its canopy. Chlorosis a yellowing of leaf tissue, due to a lack of chlorophyll. Possible causes of chlorosis include poor drainage, damaged roots, compacted roots, high alkalinity, and nutrient deficiencies in the plant.

- Specimen No. 17 has also been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

Specimen No. 18 is a Camphor Tree - 10 inches DBH, 15 feet (ft.) tall, with a crown spread of approximately 12ft. (Photo 26).

- Specimen No. 18 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - D).

- Specimen No. 18 is experiencing chlorosis. Chlorosis a yellowing of leaf tissue, due to a lack of chlorophyll. Possible causes of chlorosis include poor drainage, damaged roots, compacted roots, high alkalinity, and nutrient deficiencies in the plant. Additionally, the

tree is constrained within a planter which has resulted in notable surface damage (Photo 27). The tree also evidences significant tissue die-back in the live crown.

- Specimen No. 18 has also been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

Specimen No. 19 is a Camphor Tree - 11 inches DBH, 15 feet (ft.) tall, with a crown spread of approximately 15ft. (Photo 28).

- Specimen No. 19 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - D).

- Specimen No. 19 is experiencing chlorosis. Chlorosis a yellowing of leaf tissue, due to a lack of chlorophyll. Possible causes of chlorosis include poor drainage, damaged roots, compacted roots, high alkalinity, and nutrient deficiencies in the plant. The tree also evidences significant tissue die-back in the live crown.

- Specimen No. 19 has also been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

Specimen No. 20 is a Camphor Tree - 17 inches DBH, 25 feet (ft.) tall, with a crown spread of approximately 18ft. (Photo 29).

- Specimen No. 20 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C).

- Specimen No.20 includes the remains of materials used for supporting it after planting (Photo 30). These materials were not checked and maintained appropriately. To that end, a support stake with included bard are buried within this tree. Included bark or "ingrown" bark tissues often develop where two or more stems grow closely together causing weak, under-supported branch angles. Bark often grows around the branching stem attachment and into the union between the two stems. Bark has no strong supportive fiber strength as wood does so the connection is much weaker than a union without included bark. The material left in the tree results in structural weakness and has prevented the trunk from developing its natural girth and strength.

- Specimen No. 20 is experiencing significant tissue die-back in the live crown. Additionally, the tree is constrained within a planter which has resulted in notable surface root damage (Photo 31).

- Specimen No. 20 has also been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

Specimen No. 21 is a Taiwanese Rain Tree - 2 inches DBH, 10 feet (ft.) tall, with a crown spread of approximately 5 ft. (Photo 32).

- Specimen No. 21 has been affected by stress, and has muted color and browning leaves (i.e., Overall Health Rating – C).

- Specimen No. 21 has a poor trunk taper (Photo 32). Trunk taper is the degree to which a tree's stem or bole decreases in diameter as a function of height above ground. Trees with a high degree of taper are said to have poor form, while those with low taper have good form. Trunk taper helps to assure a more durable structure, less likely to fail as the tree matures.

- Specimen No. 21 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots to grow.

Specimen No. 22 is a Ginkgo Tree - 2 inches DBH, 10 feet (ft.) tall, with a crown spread of approximately 5 ft. (Photo 34).

- Specimen No. 22 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C). This tree is experiencing chlorosis of its canopy. Chlorosis a yellowing of leaf tissue, due to a lack of chlorophyll. Possible causes of chlorosis include poor drainage, damaged roots, compacted roots, high alkalinity, and nutrient deficiencies in the plant.

- Specimen No. 22 has a poor trunk taper (Photo 35). Trunk taper is the degree to which a tree's stem or bole decreases in diameter as a function of height above ground. Trees with a high degree of taper are said to have poor form, while those with low taper have good form. Trunk taper helps to assure a more durable structure, less likely to fail as the tree matures.

Specimen No. 23 is a Tuckeroo Tree - 20 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 36).

- Specimen No. 23 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C).

- Specimen No. 23 has vines climbing up it, and essentially engulfing it (Photo 37). When vines smothers a tree’s trunk, it will siphon resources (water and nutrients) from the surrounding soil to support its own growth; taking those resources away from this tree. Vines covering this tree means that its structural defects - or damage, could become an even greater hazard, as they’ll be difficult to see, and excessively weighted when covered by vines. A coating of vines can also be expected to hold plant debris and

create conditions for the bloom of fungal spores that can compromise this tree's health. Since the vines use the tree's trunk and branch structure as a scaffold to climb, eventually covering many (or even all) of its branches, the weight and spread can create unbalanced branches that are more likely to break, especially during storms. Over time, these growth habits will significantly weaken this tree by compromising its ability to take up water and nutrients from below and to convert sunlight into energy from above; increasing its susceptibility to insect pests, diseases, and failure.

- Specimen No. 23 also has a notable concertation of powdery mildew within its live crown. Powdery mildew is a fungal disease that is evidenced by the presence of white powdery spots on a trees leaves and stems (Photo 38). As the disease progresses, the spots get larger and denser as large numbers of asexual spores are formed, and the mildew may spread and significantly reduce tree health and vigor.

Specimen No. 24 is a Tuckeroo Tree (Photo 39).

- Specimen No. 24 is a standing, dead, landscape tree (i.e., Overall Health Rating - F). Tree lacks a notable live crown and there is no obvious indication of functioning vascular tissue.

Specimen No. 25 is a Tuckeroo Tree - 6 inches DBH, 18 feet (ft.) tall, with a crown spread of approximately 15 ft. (Photo 40).

- Specimen No. 25 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - D).

- Specimen No. 25 evidences significant tissue die-back in the live crown and has sparse foliage.

- Specimen No. 25 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. This is evidenced by cracks in the wood of the tree where sap is oozing out (Photo 41). The sap seeps out of the cracks slowly and flows down the bark, robbing the tree of nutrients. A tree bleeding sap, is an indication that there is a health problem. It is not a sure signal that it's going to die; but it simply means a tree has been injured, and something needs to be done about it before the problem becomes chronic or fatal.

Specimen No. 26 is a Tuckeroo Tree - 20 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 18 ft. (Photo 42).

- Specimen No. 26 is a landscape tree that has been affected by stress (i.e., Overall Health Rating – C).

- Specimen No. 26 is constrained within in a parking lot planter. Therefore, the tree has limited space for its roots to grow and it has been impacted by historic directional pruning events (Photo 42). There are also notable broken branches in the live crown, as this tree is also being used to support decorative signage (Photo 44). Because the growth space is limited by the parking lot planter and commercial signage, there is a restricted amount of space for unconstrained growth.

Specimen No. 27 is a Tuckeroo Tree - 20 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 45).

- Specimen No. 27 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C).

- Specimen No. 27 is constrained within in a parking lot planter. Therefore, the tree has limited space for its roots to grow. There are also notable broken branches in the live crown, visible trunk damage and wounding (Photo 46 and 47). Because the growth space is limited by the parking lot planter, there is a restricted amount of space for unconstrained growth.

Specimen No. 28 is a Chinese Pistache Tree - 10 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 48).

- Specimen No. 28 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C).

- Specimen No.28 includes the remains of materials used for supporting it after planting (Photo 49). These materials were not checked and maintained appropriately. To that end, an adjacent support stake, and connection strap with included bard are buried within this tree. Included bark or "ingrown" bark tissues often develops causing structural weakness and the strap is girdling the trunk – limiting this tree's girth and strength.

- Specimen No. 28 is constrained within in a parking lot planter. Therefore, the tree has limited space for its roots to grow as well.

Specimen No. 29 is a Chinese Pistache Tree - 7 inches DBH, 16 feet (ft.) tall, with a crown spread of approximately 12 ft. (Photo 50).

- Specimen No. 29 has been adversely affected by numerous stress factors as it's located in a parking lot planter (i.e., Overall Health Rating - D). In the past, this tree had a crown reduction - method of pruning used to reduce the height of a tree, which has adversely effected its health and vigor.

- Specimen No. 29 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree shows obvious signs of drought stress, root damage, and lacks viable foliage.

- Specimen No. 29 is constrained within in a parking lot planter. Therefore, the tree has limited space for its roots to grow.

Specimen No. 30 is a Chinese Pistache Tree - 10 inches DBH, 25 feet (ft.) tall, with a crown spread of approximately 22 ft. (Photo 51).

- Specimen No. 30 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a parking lot planter (i.e., Overall Health Rating - C). In the past, this tree had a crown reduction - method of pruning used to reduce the height of a tree.

- Specimen No. 30 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree shows obvious signs of drought stress with notable die-back on new foliage. It is also constrained within in a parking lot planter. Therefore, the tree has limited space for its roots to grow.

Specimen No. 31 is a Chinese Pistache Tree - 7 inches DBH, 15 feet (ft.) tall, with a crown spread of approximately 12 ft. (Photo 52).

- Specimen No. 31 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a parking lot planter (i.e., Overall Health Rating - C). In the past, this tree had a crown reduction - method of pruning used to reduce the height of a tree.

- Specimen No. 31 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree shows obvious signs of drought stress with notable die-back on new foliage. It is also constrained within in a parking lot planter. Therefore, the tree has limited space for its roots to grow.

Specimen No. 32 is a Chinese Pistache Tree - 10 inches DBH, 23 feet (ft.) tall, with a crown spread of approximately 23 ft. (Photo 53).

- Specimen No. 32 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a parking lot planter (i.e., Overall Health Rating - C). In the past, this tree had a crown reduction - method of pruning used to reduce the height of a tree.

- Specimen No. 31 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree shows signs of drought stress with die-back on new foliage. It is also constrained within in a parking lot planter with signage attached to it (Photo 54). Therefore, the tree has limited space for its roots to grow.

Specimen No. 33 is a Chinese Pistache Tree - 9 inches DBH, 19 feet (ft.) tall, with a crown spread of approximately 19 ft. (Photo 55).

- Specimen No. 33 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a parking lot planter (i.e., Overall Health Rating - C). In the past, this tree had a crown reduction - method of pruning used to reduce the height of a tree.

- Specimen No. 33 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree shows signs of drought stress with die-back on new foliage. It is also constrained within in a parking lot planter with limited space for its roots to grow.

Specimen No. 34 is a Chinese Pistache Tree - 12 inches DBH, 25 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 56).

- Specimen No. 34 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a parking lot planter (i.e., Overall Health Rating - C). In the past, this tree had a crown reduction - method of pruning used to reduce the height of a tree.

- Specimen No. 34 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree shows signs of drought stress with die-back on new foliage. It is also constrained within in a parking lot planter with limited space for its roots to grow.

Specimen No. 35 is a Chinese Pistache Tree - 10 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 57).

- Specimen No. 35 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a parking lot planter (i.e., Overall Health Rating - C). In the past, this tree had a crown reduction - method of pruning used to reduce the height of a tree.

- Specimen No. 35 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree shows signs of drought stress with die-back on new foliage. It is also constrained within in a parking lot planter with limited space for its roots to grow.

Specimen No. 36 is a Chinese Pistache Tree - 11 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 58).

- Specimen No. 36 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a parking lot planter (i.e., Overall Health Rating - C). In the past, this tree had a crown reduction - method of pruning used to reduce the height of a tree.

- Specimen No. 36 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree shows signs of drought stress with die-back on new foliage. It is also constrained within in a parking lot planter with limited space for its roots to grow.

Specimen No. 37 is a London Plane - 17 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 12 ft. (Photo 59).

- Specimen No. 37 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C).

- Specimen No. 37 has been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. The result, is that long poorly attached suckers have sprouted, which need to be actively managed (removed on a regular basis) to prevent them from end weighted as they get larger. End weighted suckers/limbs will eventually self-prune, drop to the ground, and fall on any intermittent target, creating a potential hazard for pedestrians, property, etc. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to

disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

- Specimen No. 37 has powdery mildew, dark lesions on leaves, leaf spots, wilting, and withering leaves. These are the initial signs and symptoms of anthracnose, a fungal disease (Photo 60). The severity of the infection ranges from mere unsightliness, to death.

Specimen No. 38 is a Pygmy date palm Tree - 3 inches DBH, 5.5 feet (ft.) tall, with a crown spread of approximately 4 ft. (Photo 61).

- Specimen No. 38 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a narrow parking lot planter (i.e., Overall Health Rating - C).

- Specimen No. 38 has dangerous needles that can pose harm to pedestrians at its current height. This tree also extends into the existing parking lot, thereby limiting pedestrian and vehicle traffic.

- Specimen No. 38 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree is constrained within in a narrow parking lot planter - which is undersized for this tree, with limited space for root growth which will adversely affect the specimen's ability to grow properly, as it continues matures.

Specimen No. 39 is a Pygmy date palm Tree - 2 inches DBH, 3.5 feet (ft.) tall, with a crown spread of approximately 2 ft. (Photo 62).

- Specimen No. 39 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a narrow parking lot planter (i.e., Overall Health Rating - C).

- Specimen No. 39 has dangerous needles that can pose harm to pedestrians at its current height. This tree also extends into the existing parking lot, thereby limiting pedestrian and vehicle traffic.

- Specimen No. 39 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree is constrained within in a narrow parking lot planter - which is undersized for this tree, with limited space for root growth which will adversely affect the specimen's ability to grow properly, as it continues matures.

Specimen No. 40 is a Pygmy date palm Tree - 3 inches DBH, 6 feet (ft.) tall, with a crown spread of approximately 4 ft. (Photo 63).

- Specimen No. 40 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a narrow parking lot planter (i.e., Overall Health Rating - C).

- Specimen No. 40 has dangerous needles that can pose harm to pedestrians at its current height. This tree also extends into the existing parking lot, thereby limiting pedestrian and vehicle traffic.

- Specimen No. 40 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree is constrained within in a narrow parking lot planter - which is undersized for this tree, with limited space for root growth which will adversely affect the specimen's ability to grow properly, as it continues matures.

Specimen No. 41 is a Pygmy date palm Tree - 2 inches DBH, 3.5 feet (ft.) tall, with a crown spread of approximately 2 ft. (Photo 64).

- Specimen No. 41 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a narrow parking lot planter (i.e., Overall Health Rating - C).

- Specimen No. 41 has dangerous needles that can pose harm to pedestrians at its current height. This tree also extends into the existing parking lot, thereby limiting pedestrian and vehicle traffic.

- Specimen No. 41 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree is constrained within in a narrow parking lot planter - which is undersized for this tree, with limited space for root growth which will adversely affect the specimen's ability to grow properly, as it continues matures.

Specimen No. 42 is a Pygmy date palm Tree - 6 inches DBH, 6 feet (ft.) tall, with a crown spread of approximately 6 ft. (Photo 65).

- Specimen No. 42 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a narrow parking lot planter (i.e., Overall Health Rating - C).

- Specimen No. 42 has dangerous needles that can pose harm to pedestrians at its current height. This tree also extends into the existing parking lot, thereby limiting pedestrian and vehicle traffic.

- Specimen No. 42 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree is constrained within in a narrow parking lot planter - which is undersized for this tree, with limited space for root growth which will adversely affect the specimen's ability to grow properly, as it continues matures.

Specimen No. 43 is a Pygmy date palm Tree - 8 inches DBH, 8 feet (ft.) tall, with a crown spread of approximately 6 ft. (Photo 66).

- Specimen No. 43 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a narrow parking lot planter (i.e., Overall Health Rating - C).

- Specimen No. 43 has dangerous needles that can pose harm to pedestrians at its current height (Photo 67). This tree also extends into the existing parking lot, thereby limiting pedestrian and vehicle traffic.

- Specimen No. 43 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree is constrained within in a narrow parking lot planter - which is undersized for this tree, with limited space for root growth which will adversely affect the specimen's ability to grow properly, as it continues matures.

Specimen No. 44 is a London Plane - 10 inches DBH, 17 feet (ft.) tall, with a crown spread of approximately 12 ft. (Photo 68).

- Specimen No. 44 has been adversely affected by numerous stress factors and has a 10 degree lean to the north (i.e., Overall Health Rating - C).

- Specimen No. 44 has been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. The result, is that long poorly attached suckers have sprouted, which need to be actively managed (removed on a regular basis) to prevent them from end weighted as they get larger. End weighted suckers/limbs will eventually self-prune, drop to the ground, and fall on any intermittent target, creating a potential hazard for pedestrians, property, etc. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

- Specimen No. 44 has powdery mildew, dark lesions on leaves, leaf spots, wilting, and withering leaves. These are the initial signs and symptoms of anthracnose, a fungal disease. The severity of the infection ranges from mere unsightliness, to death.

Specimen No. 45 is a Pygmy date palm Tree - 6 inches DBH, 6 feet (ft.) tall, with a crown spread of approximately 6 ft. (Photo 69).

- Specimen No. 45 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a narrow parking lot planter (i.e., Overall Health Rating - C).

- Specimen No. 45 has dangerous needles that can pose harm to pedestrians at its current height. This tree also extends into the existing parking lot, thereby limiting pedestrian and vehicle traffic.

- Specimen No. 45 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree is constrained within in a narrow parking lot planter - which is undersized for this tree, with limited space for root growth which will adversely affect the specimen's ability to grow properly, as it continues matures.

Specimen No. 46 is a Pygmy date palm Tree - 15 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 13 ft. (Photo 70).

- Specimen No. 46 has been adversely affected by numerous stress factors (i.e., poor hydration) as it's located in a narrow parking lot planter (i.e., Overall Health Rating - C).

- Specimen No. 46 has dangerous needles that can pose harm to pedestrians at its current height. This tree also extends into the existing parking lot, thereby limiting pedestrian and vehicle traffic.

- Specimen No. 46 is growing under adverse conditions, or conditions that aren't optimal for this particular tree. The tree is constrained within in a narrow parking lot planter -

which is undersized for this tree, with limited space for root growth which will adversely affect the specimen's ability to grow properly, as it continues matures.

Specimen No. 47 is a London Plane - 15 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 13 ft. (Photo 71).

- Specimen No. 47 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C).

- Specimen No. 47 has been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. The result, is that long poorly attached suckers have sprouted, which need to be actively managed (removed on a regular basis) to prevent them from end weighted as they get larger. End weighted suckers/limbs will eventually self-prune, drop to the ground, and fall on any intermittent target, creating a potential hazard for pedestrians, property, etc. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

- Specimen No. 47 has powdery mildew, dark lesions on leaves, leaf spots, wilting, and withering leaves. These are the initial signs and symptoms of anthracnose, a fungal disease. The severity of the infection ranges from mere unsightliness, to death.

Specimen No. 48 is a Queen Palm - 10 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 72).

- Specimen No. 48 is generally vibrant in color landscape tree, and the individual appears to be adequately hydrated (i.e., Overall Health Rating - B).

Specimen No. 49 is a Queen Palm - 14 inches DBH, 18 feet (ft.) tall, with a crown spread of approximately 18 ft. (Photo 73).

- Specimen No. 48 is generally vibrant in color landscape tree, and the individual appears to be adequately hydrated (i.e., Overall Health Rating - B).

Specimen No. 50 is a London Plane - 15 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 13 ft. (Photo 74).

- Specimen No. 50 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C).

- Specimen No. 50 has been hard topped, and more than 1/3 of its photosynthetic material was removed in the past. The result, is that long poorly attached suckers have sprouted, which need to be actively managed (removed on a regular basis) to prevent them from end weighted as they get larger. End weighted suckers/limbs will eventually self-prune, drop to the ground, and fall on any intermittent target, creating a potential hazard for pedestrians, property, etc. Tree topping is a drastic removal and heading back of significant branches in trees, leaving large, open wounds which subject the tree to

disease, decay, and improper branch attachments. Topping causes immediate injury to the tree, photosynthetic stress, and can ultimately predispose trees to branch failure, death, pest or disease infestation, etc.

- Specimen No. 50 has powdery mildew, dark lesions on leaves, leaf spots, wilting, and withering leaves. These are the initial signs and symptoms of anthracnose, a fungal disease. The severity of the infection ranges from mere unsightliness, to death.

Specimen No. 51 is a Taiwanese Rain Tree - 8 inches DBH, 17 feet (ft.) tall, with a crown spread of approximately 15 ft. (Photo 75).

- Specimen No. 51 has been affected by stress and has a 10 degree lean to the north (i.e., Overall Health Rating – B). A canker - or dead sections of bark, are forming on the street side of the tree. This is likely from mechanical injuries or by plant pathogens, especially fungi and bacteria. As most plant pathogens are unable to penetrate bark directly but will quickly colonize wounded tissue.

- Specimen No. 51 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its root o grow.

Specimen No. 52 is a Taiwanese Rain Tree - 6 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 12 ft. (Photo 76).

- Specimen No. 52 has been affected by stress and wounds (i.e., Overall Health Rating – C). The individual tree shows signs of stress (i.e., poor hydration), with notable browning and muted color in leaf tips. A trunk canker - or dead sections of bark, are forming on the tree as well (Photo 78 and 79). This is likely from mechanical injuries or by plant pathogens, especially fungi and bacteria. As most plant pathogens are unable to penetrate bark directly but will quickly colonize wounded tissue.

- Specimen No. 52 is also constrained within in a narrow sidewalk planter. In this instance, the tree has limited space for its roots to grow. This is evidenced by the lifted and cracked sidewalk which is being impacted by the tree's subsurface roots (Photo 77).

Specimen No. 53 is a Taiwanese Rain Tree - 4 inches DBH, 15 feet (ft.) tall, with a crown spread of approximately 10 ft. (Photo 80).

- Specimen No. 53 has been affected by stress and wounds (i.e., Overall Health Rating – C). The individual tree shows signs of stress (i.e., poor hydration), with notable browning and muted color in leaf tips. A trunk wound is notable as well (Photo 81).

- Specimen No. 53 is also constrained within in a narrow sidewalk planter. In this instance, the tree has limited space for its roots to grow.

Specimen No. 54 is a Taiwanese Rain Tree - 9 inches DBH, 17 feet (ft.) tall, with a crown spread of approximately 13 ft. (Photo 82).

- Specimen No. 54 has been affected by stress (i.e., Overall Health Rating – B). This tree also possess notable crossing branch with included bark (Photo 83). Included bark or "ingrown" bark tissues often develop where two or more stems grow closely together causing weak, under-supported branch angles. Bark often grows around the branching stem attachment and into the union between the two stems. Bark has no strong supportive fiber strength as wood does so the connection is much weaker than a union without included bark. The result is structural weakness.

- Specimen No. 54 is constrained within in a narrow planter. Therefore, the tree has limited space for its roots to grow.

Specimen No. 55 is a Taiwanese Rain Tree - 10 inches DBH, 17 feet (ft.) tall, with a crown spread of approximately 13 ft. (Photo 84).

- Specimen No. 55 has been affected by stress (i.e., Overall Health Rating – B).

- Specimen No. 55 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots to grow. This is evidenced by the lifted and cracked sidewalk which is being impacted by the tree's subsurface roots

Specimen No. 56 is a Liquid Amber Tree - 11 inches DBH, 25 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 86).

- Specimen No. 56 has been affected by stress (i.e., Overall Health Rating – B).

- Specimen No. 56 is also constrained within a planter that is significantly undersized for a tree that is roughly 20 ft. tall. In this circumstance, the tree has limited space for its roots to grow. This tree is also adjacent to the utility lines, which is less than optimal given this species fast growth rate and notoriously week wood.

Specimen No. 57 is a Taiwanese Rain Tree - 9 inches DBH, 20 feet (ft.) tall, with a crown spread of approximately 13 ft. (Photo 87).

- Specimen No. 54 has been affected by stress (i.e., Overall Health Rating – B).

- Specimen No. 54 is constrained within in a narrow sidewalk planter. Therefore, the tree has limited space for its roots to grow.

Specimen No. 58 is a Liquid Amber Tree - 8 inches DBH, 18 feet (ft.) tall, with a crown spread of approximately 15 ft. (Photo 88).

- Specimen No. 58 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C).

- Specimen No. 58 shows signs of stress (i.e., poor hydration), with notable browning and muted color in leaf tips.

- Specimen No. 58 is also constrained within in a narrow sidewalk planter. In this instance, the tree has limited space for its roots/trunk to grow. Because the root growth space is limited, there is a restricted amount of space for unconstrained growth.

Specimen No. 59 is a Liquid Amber Tree - 10 inches DBH, 23 feet (ft.) tall, with a crown spread of approximately 15 ft. (Photo 89).

- Specimen No. 59 has been adversely affected by numerous stress factors (i.e., Overall Health Rating - C).

- Specimen No. 59 shows signs of stress (i.e., poor hydration), with notable browning and muted color in leaf tips.

- Specimen No. 59 is also constrained within in a narrow sidewalk planter. In this instance, the tree has limited space for its roots/trunk to grow.

- Specimen No.59 also includes the remains of materials used for supporting it after planting (Photo 90). These materials were not checked and maintained appropriately. To that end, support straps are buried within this tree and metal stakes are present around it. The material is girdling new stem growth, results in structural weakness and has prevented the trunk from developing its natural girth and strength.

Specimen No. 60 is a Taiwanese Rain Tree - 8 inches DBH, 10 feet (ft.) tall, with a crown spread of approximately 15 ft. (Photo 91).

- Specimen No. 60 has been affected by stress (i.e., Overall Health Rating – B).

- Specimen No. 60 is constrained within in a sidewalk planter. Therefore, the tree has limited space for its roots to grow.

Specimen No. 61 is a Liquid Amber Tree - 11 inches DBH, 25 feet (ft.) tall, with a crown spread of approximately 20 ft. (Photo 92).

- Specimen No. 61 has been affected by stress (i.e., Overall Health Rating – B).

- Specimen No. 61 is also constrained within a sidewalk planter that is undersized for a tree that is roughly 20 ft. tall. In this circumstance, the tree has limited space for its roots to grow. This tree is also adjacent to the utility lines, which is less than optimal given this species fast growth rate and notoriously week wood.

4.0 RECOMMEDATIONS

The following measures are recommended:

1. If tree removal activities are proposed between March 15th and September 1st, a pre-action survey for nesting birds would be prudent to safeguard that no eggs, young or active nests are taken as a result of the Project.

Please also note that there are 45 trees proposed for removal as a result of Project implementation. This includes only two street tree (Specimens No.10 & No.11). Street tree removals are subject to replacement per Los Angeles Urban Forestry specification - as well as, approval by Los Angeles Board of Public Works.

The services performed and documented in this report have been conducted in a manner consistent with the level of care and skill ordinarily exercised by other professional consultants under similar circumstances. No other representations are either expressed or implied, and no warranty or guarantee is included or intended in this report. Opinions relating to presence, absence, or potential for occurrence of biological resources are based on limited data and actual conditions may vary from those encountered at the times and locations where the data were obtained despite due professional care.

5.0 REFERENCES

Baldwin, J., D. Goldman, D. Keil, R. Patterson, and T. Rosatti. 2012. The Jepson Manual: Higher Plants of California. Berkeley: University of California Press.

USGS (United States Geological Service). 1988. 7.5-Minute Quadrangle Yorba Linda California.

APPENDIX A

Representative Photographs

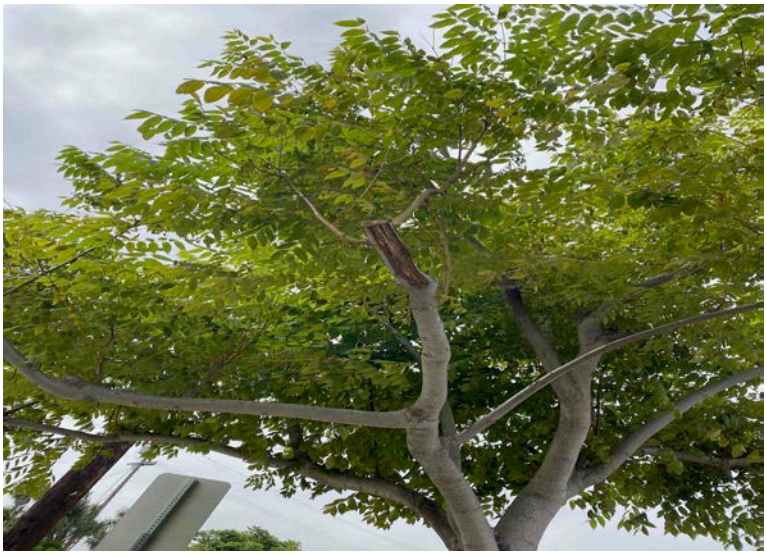
	**Photograph 1:** Tree #1
	**Photograph 2:** Tree #2, Dead.



Photograph 3: Tree #3



Photograph 4: Tree #4



Photograph 5: Tree #4



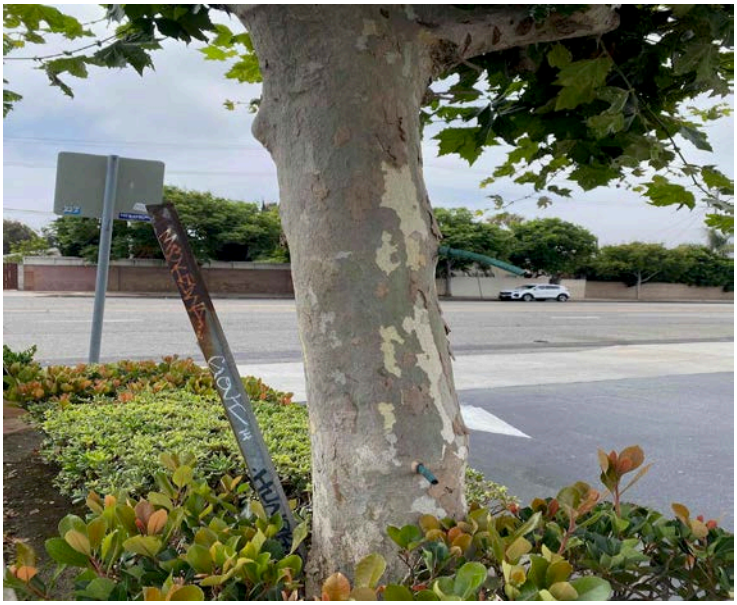
Photograph 6: Tree #5



Photograph 7: Tree #6



Photograph 8: Tree #7

	**Photograph 9:** Tree #7
	**Photograph 10:** Tree #7



Photograph 11: Tree #8



Photograph 12: Tree #8



Photograph 13: Tree # 9



Photograph 14: Tree # 9



Photograph 15: Tree #10



Photograph 16: Tree #11



Photograph 17: Tree #11



Photograph 18: Tree # 11



Photograph 19: Tree #12



Photograph 20: Tree #13



Photograph 21: Tree #13



Photograph 22: Tree #14



Photograph 23: Tree #15



Photograph 24: Tree #16



Photograph 25: Tree #17



Photograph 26: Tree #18



Photograph 27: Tree #18



Photograph 28: Tree #19



Photograph 29: Tree #20



Photograph 30: Tree #20



Photograph 31: Tree #20



Photograph 32: Tree #21



Photograph 33: Tree #21



Photograph 34: Tree #22



Photograph 35: Tree #22



Photograph 36: Tree #23



Photograph 37: Tree #23



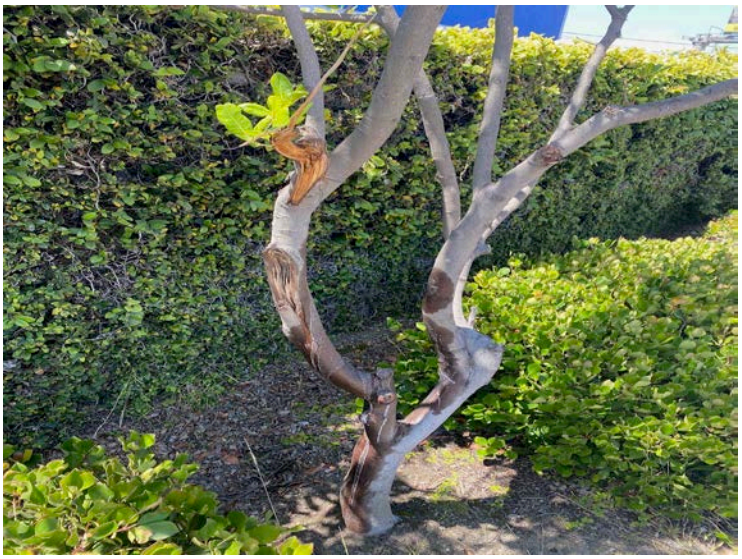
Photograph 38: Tree #23



Photograph 39: Tree #24



Photograph 40: Tree #25



Photograph 41: Tree #25



Photograph 42: Tree # 26



Photograph 43: Tree #26



Photograph 44: Tree #26

	**Photograph 45:** Tree #27
	**Photograph 46:** Tree #27



Photograph 47: Tree # 27



Photograph 48: Tree #28



Photograph 49: Tree #28



Photograph 50: Tree #29



Photograph 51: Tree #30



Photograph 52: Tree #31



Photograph 53: Tree #32



Photograph 54: Tree #32



Photograph 55: Tree #33



Photograph 56: Tree #34



Photograph 57: Tree #35



Photograph 58: Tree #36

	**Photograph 59:** Tree #37
	**Photograph 60:** Tree #37



Photograph 61: Tree #38



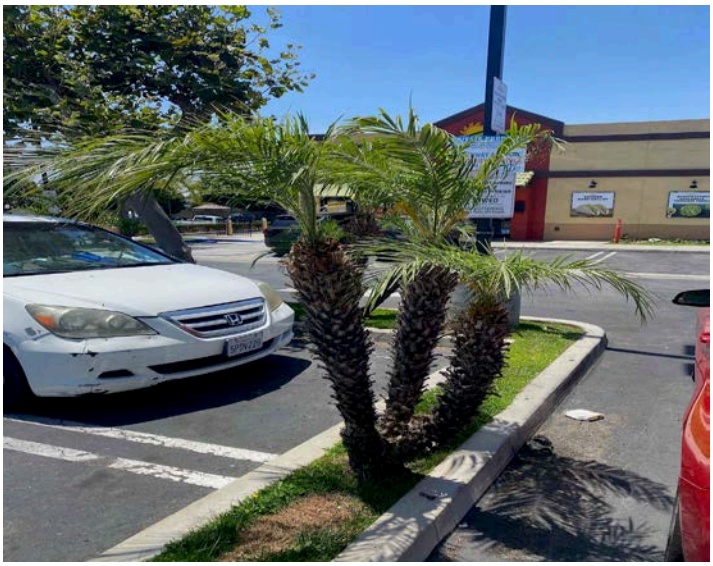
Photograph 62: Tree #39



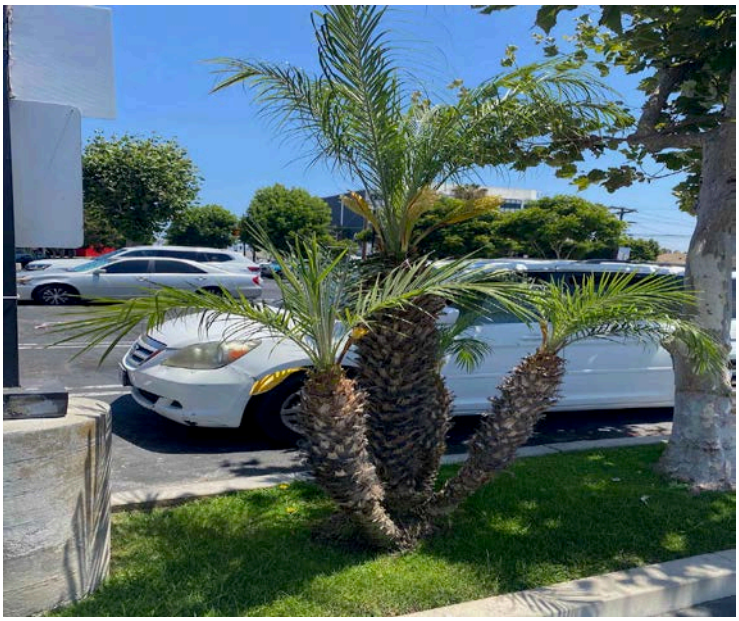
Photograph 63: Tree #40



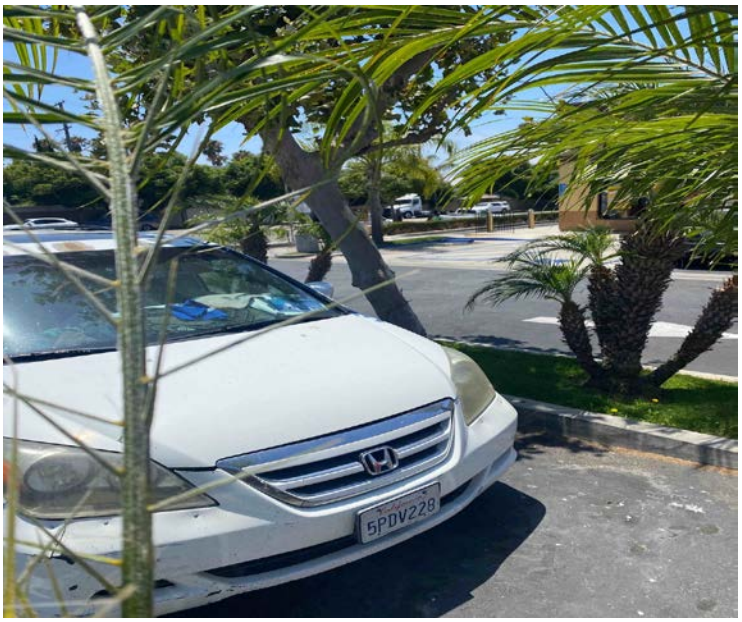
Photograph 64: Tree #41



Photograph 65: Tree #42



Photograph 66: Tree #43



Photograph 67: Tree #43



Photograph 68: Tree #44



Photograph 69: Tree #45



Photograph 70: Tree #46



Photograph 71: Tree #47



Photograph 72: Tree #48



Photograph 73: Tree #49



Photograph 74: Tree #50



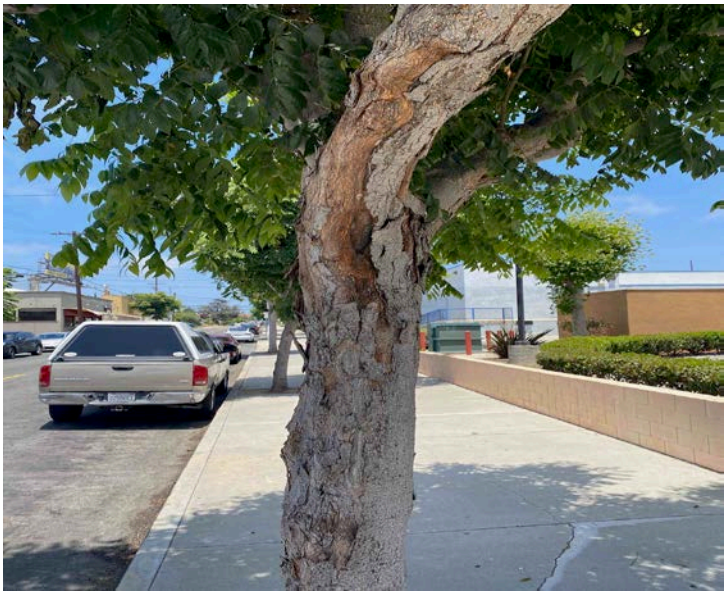
Photograph 75: Tree #51



Photograph 76: Tree #52



Photograph 77: Tree #52



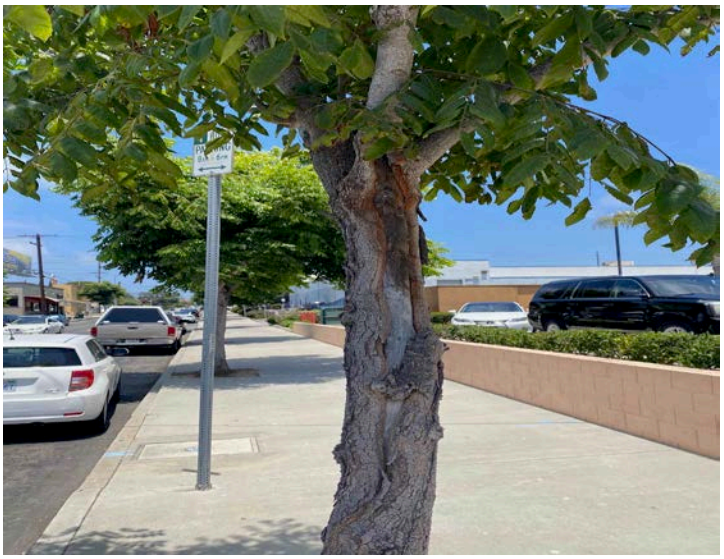
Photograph 78: Tree #52



Photograph 79: Tree #52



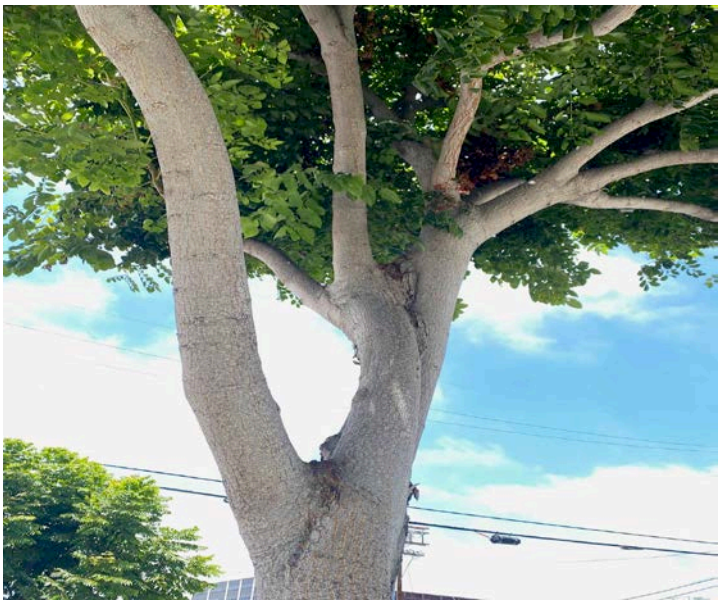
Photograph 80: Tree #53



Photograph 81: Tree #53



Photograph 82: Tree #54



Photograph 83: Tree #54



Photograph 84: Tree #55



Photograph 85: Tree #55



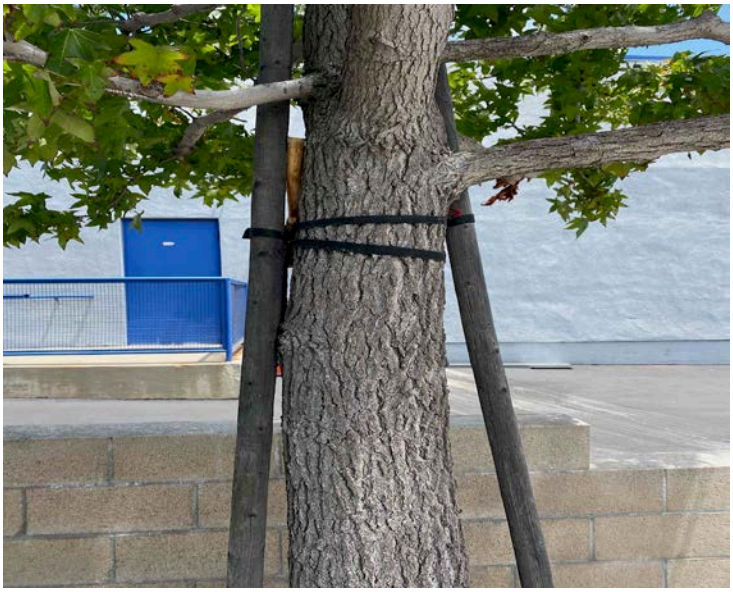
Photograph 86: Tree #56



Photograph 87: Tree #57



Photograph 88: Tree #58

	**Photograph 89:** Tree #59
	**Photograph 90:** Tree #59



Photograph 91: Tree #60



Photograph 92: Tree #61