

# TREES, BUGS, DIRT

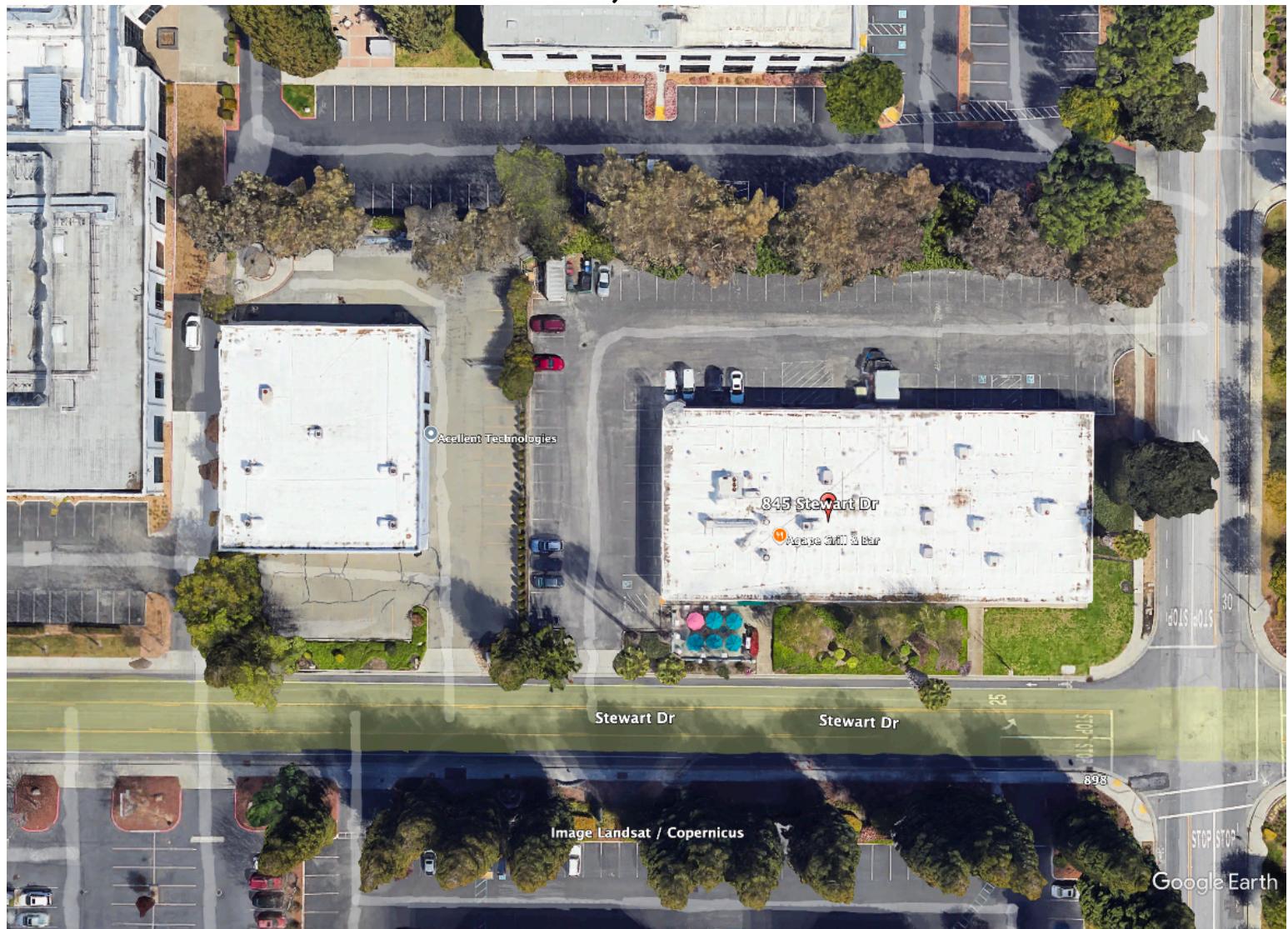
LANDSCAPE CONSULTING

---

## PRELIMINARY ARBORIST REPORT

845 Stewart Dr., Sunnyvale CA

January 31, 2025



Prepared For: City Ventures  
1185 Mason Street  
San Francisco CA

## TABLE OF CONTENTS

|  |             |
|--|-------------|
| <b>SUMMARY</b> .....                               | <b>3</b>    |
| <b>INTRODUCTION</b> .....                          | <b>3-4</b>  |
| ASSIGNMENT .....                                   | 3           |
| LIMITS OF ASSIGNMENT .....                         | 3           |
| PURPOSE AND USE.....                               | 3           |
| BACKGROUND .....                                   | 4           |
| <b>OBSERVATIONS</b> .....                          | <b>4</b>    |
| LOCATION.....                                      | 4           |
| SETTING .....                                      | 4           |
| METHODS.....                                       | 4           |
| DATA .....   | 4-5         |
| <b>ANALYSIS</b> .....                              | <b>5</b>    |
| <b>PRELIMINARY RECOMMENDATIONS</b> .....           | <b>6</b>    |
| <b>APPENDIX A – DATA + ANALYSIS</b> .....          | <b>7-10</b> |
| <b>APPENDIX B - GLOSSARY</b> .....                 | <b>11</b>   |
| <b>APPENDIX C – TREE LOCATION MAP</b> .....        | <b>12</b>   |
| <b>APPENDIX D - CERTIFICATE OF PERFORMANCE</b> ... | <b>13</b>   |

*@Trees, Bugs, Dirt 2025. All rights reserved. This report, dated Friday, January 31, 2025 is for the exclusive and confidential use of Trees, Bugs, Dirt clients and their representatives for this project only, and shall not be reproduced in whole or in part on other occasions without the written permission of Michael Baefsksy.*

## SUMMARY

I located twenty one trees on site within the proposed construction area. Sixteen of the trees are protected in Sunnyvale due to their sizes, four are protected street trees.. Eight tree species were identified. Tree trunk diameters range from 3.5 to 43.0 inches, averaging 16.4 inches. Tree health ranges from poor to good, averaging fair-good, structure & form ranges from very poor to good averaging fair. I found fifteen trees suitable for preservation based on health, structure, form, and species tolerances. Seventeen trees are proposed for removal by my Client due to their condition, locations relative to proposed grading, species being non-native, specimen not integrating well with proposed new landscaping. For those trees that are preserved I recommend tree protection fencing, establishment of tree protection zones, and evaluation for clearance pruning & root pruning.

## INTRODUCTION

### ASSIGNMENT

I was hired by City Ventures (Client), to measure, map, tag, digitally image, inventory & evaluate trees at 845 Stewart Drive in Sunnyvale, CA, and to provide an Arborist Report that includes a summary of my observations, a tree location map, and other relevant information.

### LIMITS OF ASSIGNMENT

- Trees were not evaluated below ground or aerially, nor were invasive or destructive methods used to assess tree health.
- Tree risk assessments were not conducted
- An evaluation of likely construction impacts was not carried out
- Recommendations for preservation are not provided beyond reporting the trees that Client wants to preserve
- A value appraisal is not provided
- A tree preservation plan is not provided

### PURPOSE AND USE

This report is intended to provide information for the Client, and the City of Sunnyvale as part of a development and tree removal permit process.

### BACKGROUND

The City of Sunnyvale Chapter 19.94. Tree Preservation Ordinance protects single trunk trees that are 12.1 inches in diameter and greater, and requires permitting for their removal. Multiple trunk trees with at least one trunk equal to 12.7 inches or multiple trunks equal to or exceeding 36 inches (cumulatively) in diameter are also protected. Street trees are also protected.

## OBSERVATIONS

### LOCATION

845 Stewart Drive, Sunnyvale CA

### SETTING

The site is flat, and includes paved streets, sidewalks, driveways, with landscaping next to the parking lot, between structures and street, and along streets.

### METHODS

On January 21, 2025 I identified and mapped all trees on site. I measured **trunk circumferences** at 4.6 feet above grade, tagged trunks with sequentially numbered blue tags, digitally imaged trees and assessed their **health, structural quality** and form.

Documents used:

- City of Sunnyvale Municipal Code, Chapter 19.94. Tree Preservation Ordinance
- Guide for Plant Appraisal, 10th Ed., Second Printing, 2019, International Society of Arboriculture (ISA)
- Managing Trees for Construction, A300 (Part 5), ANSI, TCIA publisher
- Undated, unattributed site topographic survey with some tree locations, vegetation blobs, site plan layout

### Measurements & Calculations

- Trunk circumferences measured at 4.6 feet above grade, unless otherwise noted due to access problems
- Multiple trunks are combined and reported as (cumulative) diameter for evaluating their protection status
- Trunk circumferences are divided by 3.14 to calculate diameter, and rounded off to one significant digit

### Health Structure & Form Evaluation Standards

+numerical rating; zero (dead), one (very poor), two (poor), three (fair), four (good), five (excellent)  
+ form assessed by rating specimens on their deviance from the norm for the species in this region, visual qualities such as attractiveness, and engineering functions such as screening, shading and creating views  
+qualitative descriptions and items assessed for health & structure include

- rooting zone - bare, mulched, limited space, weeds, competing vegetation, moisture, debris
- root crown region (trunk & root junction) - buried, clear, pests, diseases, wet, wounds, cavities
- trunk - taper, lack of taper, wounds, lean, growth cracks, stress cracks, pests, diseases, wounds
- scaffold (major) branches - taper, distribution branches, strength of branch connections, wounds, pests
- smaller branches - distribution, size, amount, strength of connections, pests, diseases
- twigs - annual growth, color, size, distribution, dead/live
- foliage - color, size, distribution, pests, diseases, leaf fall

DATA- See Appendix A for full data set

### NUMBER OF TREES

- 20 protected trees evaluated

#### SPECIES

Eight different species of trees were identified, and have the following tolerances of construction as follows:

| name                 | Genus               | species              | number per species | tolerance of construction |
|----------------------|---------------------|----------------------|--------------------|---------------------------|
| coast live oak       | <i>Quercus</i>      | <i>agrifolia</i>     | 1                  | Good                      |
| European white birch | <i>Betula</i>       | <i>pendula</i>       | 9                  | Poor-Moderate             |
| holly oak            | <i>Quercus</i>      | <i>illex</i>         | 3                  | Moderate                  |
| Hollywood juniper    | <i>Juniperus</i>    | <i>chinensis</i>     | 2                  | Good                      |
| Mexican fan palm     | <i>Washingtonia</i> | <i>robusta</i>       | 4                  | Good                      |
| queen palm           | <i>Syagrus</i>      | <i>romanzoffiana</i> | 1                  | Moderate                  |

#### SIZE

Tree trunk diameters range from 3.5 to 43.0 inches, averaging 16.4 inches.

#### HEALTH, STRUCTURE, AND FORM OF PROTECTED TREES

- health ranges from poor to good, averaging fair-good
- structure & form ranges from very poor to good averaging fair

#### ANALYSIS

##### SUITABILITY FOR PRESERVATION ON CONSTRUCTION SITES

- 15 trees suitable for preservation based on health, structure, form and species tolerances of construction
- 5 trees not suitable for preservation based on same criteria as above

PROTECTED STATUS- 16 trees because of size, 4 as street trees, 3 of which are also size protected

REMOVALS - 17 trees are proposed for removal due to their condition, locations relative to proposed grading, species being non-native, specimen not integrating well with proposed new landscaping

## **PRELIMINARY RECOMMENDATIONS for TREES TO BE PRESERVED**

**TREE PROTECTION FENCING** - Six feet high chain-link fencing

**TREE PROTECTION ZONES (TPZ's)**

Tree protection fencelines will outline needed tree protection zones from ground to six feet up

### **CLEARANCE PRUNING**

Prior to work within tree driplines consulting arborist or city arborist should evaluate trees with contractors and subcontracts for any needed clearance pruning.

### **ROOT PRUNING**

Prior to any work on the ground within TPZ's consulting arborist or city arborist should evaluate area with contractors and subcontractors, and be on site during any work within areas of concern. Since most of the area around most of the trees on site are paved, supervision will probably be limited to work within the fenced zones.

APPENDIX A - DATA & ANALYSIS

| tag# | name              | Genus species               | circumference inches               | diameter inches | Health | Structure | Form | notes   | Protected in Sunnyvale | Suitable for Preservation | Client Proposes                       |
|------|-------------------|-----------------------------|------------------------------------|-----------------|--------|-----------|------|---|------------------------|---------------------------|---------------------------------------|
| 362  | coast live oak    | <i>Quercus agrifolia</i>    | 20.5                               | 6.5             | fair   | fair      | fair | bare compacted soil, limited rooting zone, no trunk taper, 33% live crown ratio (lcr)   | YES                    | YES                       | PRESERVE                              |
| 363  | Hollywood juniper | <i>Juniperus chinensis</i>  | 48,20,1<br>2,17<br>(97)            | 30.9            | good   | poor      | poor | <i>Hedera canariensis</i> rooting zone limited, root crown buried, stump sprout, trunks with included bark, leaning twisted topped scaffolds, 66% lcr | YES                    | NO                        | REMOVE due to poor structure and form |
| 364  | coast redwood     | <i>Sequoia sempervirens</i> | 86                                 | 27.4            | good   | good      | fair | limited rooting zone, new top sprouting, lcr 85%  | YES                    | YES                       | PRESERVE                              |
| 365  | Hollywood juniper | <i>Juniperus chinensis</i>  | 23,19,2<br>4,42,15,<br>12<br>(135) | 43.0            | good   | poor      | fair | <i>Hedera canariensis</i> rooting zone limited, root crown buried, stump sprout, trunks with included bark, leaning twisted topped scaffolds, 75% lcr | YES                    | NO                        | REMOVE due to poor structure and form |
| 366  | Mexican fan palm  | <i>Washingtonia robusta</i> | 78                                 | 24.8            | good   | good      | good | <i>Hedera canariensis</i> rooting zone limited, root crown small wound  | YES                    | YES                       | REMOVE due to project grading         |
| 367  | Mexican fan palm  | <i>Washingtonia robusta</i> | 88                                 | 28.0            | good   | fair      | fair | <i>Hedera canariensis</i> rooting zone limited, trunk leaning twist   | YES                    | YES                       | REMOVE due to project grading         |

| tag# | name                 | Genus species                | circum-ference inches | diam-eter inches | Health | Structure | Form | notes  | Protected in Sunnyvale | Suitable for Preservation | Client Proposes                       |
|------|----------------------|------------------------------|-----------------------|------------------|--------|-----------|------|--|------------------------|---------------------------|---------------------------------------|
| 368  | queen palm           | <i>Syagrus romanzoffiana</i> | 41                    | 13.1             | good   | good      | good | <i>limited rooting zone</i>  | YES                    | YES                       | REMOVE because non-native             |
| 369  | Mexican fan palm     | <i>Washingtonia robusta</i>  | 72                    | 22.9             | good   | good      | good | <i>limited rooting zone</i>  | YES                    | YES                       | REMOVE because non-native             |
| 370  | Mexican fan palm     | <i>Washingtonia robusta</i>  | 75                    | 23.9             | good   | good      | good | <i>Hedera canariensis rooting zone, dead fronds to 5' above grade</i>  | YES                    | YES                       | REMOVE due to project grading         |
| 371  | holly oak            | <i>Quercus ilex</i>          | 61.5                  | 19.6             | good   | good      | good | <i>compacted limited rooting zone, root crown wound, lcr 60%</i>   | YES                    | YES                       | PRESERVE                              |
| 372  | European white birch | <i>Betula pendula</i>        | 27                    | 8.6              | fair   | fair      | fair | <i>Hedera canariensis &amp; river rock rooting decayed dead trunk remains, minimal taper, grove tree lcr70%</i>  | NO                     | YES                       | REMOVE due to poor structure and form |
| 373  | European white birch | <i>Betula pendula</i>        | 10,24                 | 10.8             | fair   | fair      | fair | <i>Hedera canariensis &amp; river rock girdling roots minimal taper, grove tree lcr70%</i>   | NO                     | YES                       | REMOVE due to project grading         |
| 374  | European white birch | <i>Betula pendula</i>        | 23                    | 7.3              | fair   | fair      | fair | <i>star jasmine, bare soil &amp; river rocks in rooting zone, root crown decay from sprinkler, leaning &amp; corrected lean trunk, grove tree lcr66%</i> | NO                     | YES                       | REMOVE due to project grading         |

| tag# | name                 | Genus species         | circum-ference inches | diam-eter inches | Health | Structure | Form | notes  | Protected in Sunnyvale | Suitable for Preservation | Client Proposes                          |
|------|----------------------|-----------------------|-----------------------|------------------|--------|-----------|------|--|------------------------|---------------------------|--|
| 375  | European white birch | <i>Betula pendula</i> | 29                    | 9.2              | good   | good      | good | star jasmine, bare soil & river rocks in rooting zone, grove tree lcr66%   | NO                     | YES                       | REMOVE due to project grading            |
| 376  | European white birch | <i>Betula pendula</i> | 11.5,5.5 ,7 (24)      | 10.8             | poor   | poor      | poor | star jasmine, bare soil & river rocks in rooting zone, suppressed grove tree lcr 60%   | NO                     | NO                        | REMOVE due to project grading            |
| 377  | European white birch | <i>Betula pendula</i> | 25                    | 8.0              | fair   | fair      | fair | star jasmine, bare soil & river rocks in rooting zone, grove tree lcr66%   | NO                     | YES                       | REMOVE due to project grading            |
| 378  | European white birch | <i>Betula pendula</i> | 17,19 (36)            | 11.5             | fair   | fair      | fair | star jasmine, bare soil & river rocks in rooting zone, codominant trunks with included bark, one dead top, dead patch of ground cover, grove tree lcr66% | NO                     | YES                       | REMOVE for new cohesive landscaping plan |
| 379  | European white birch | <i>Betula pendula</i> | 11.1                  | 3.5              | good   | good      | good | star jasmine, bare soil & river rocks in rooting zone, dominant grove tree lcr 75%   | NO                     | YES                       | REMOVE due to project grading            |
| 380  | European white birch | <i>Betula pendula</i> | 8.5,14 (22.5)         | 7.2              | poor   | poor      | poor | star jasmine, bare soil & river rocks in rooting zone, codominant trunks with included bark, dead tops, suppressed grove tree lcr 45%                    | NO                     | NO                        | REMOVE due to project grading            |

| tag# | name      | Genus species       | circum-ference inches | diam-eter inches | Health | Structure | Form      | notes   | Protected in Sunnyvale | Suitable for Preservation | Client Proposes               |
|------|-----------|---------------------|-----------------------|------------------|--------|-----------|-----------|---|------------------------|---------------------------|-------------------------------|
| 381  | holly oak | <i>Quercus ilex</i> | 16,9,17,<br>19 (61)   | 19.4             | good   | very poor | poor      | <i>suppressed stump sprout or seedling growing into fence</i> | NO                     | NO                        | REMOVE due to project grading |
| 382  | holly oak | <i>Quercus ilex</i> | 11,14<br>(25)         | 8.0              | fair   | very poor | very poor | <i>suppressed stump sprout or seedling growing into fence</i> | NO                     | NO                        | REMOVE due to project grading |

## APPENDIX B - GLOSSARY

**dripline** - region underneath tree canopy

**form** - genetically determined appearance that includes spread, height & configuration

**health** - tree growth as expressed by foliage, twigs, branches & trunks including resistance to pests

**root crown** – region where trunk and root system meet, also called ‘buttress’ or ‘butt’

**rooting zone** – area where roots are likely to survive, beginning at the trunk and extending up to three times the radius of a tree’s dripline region

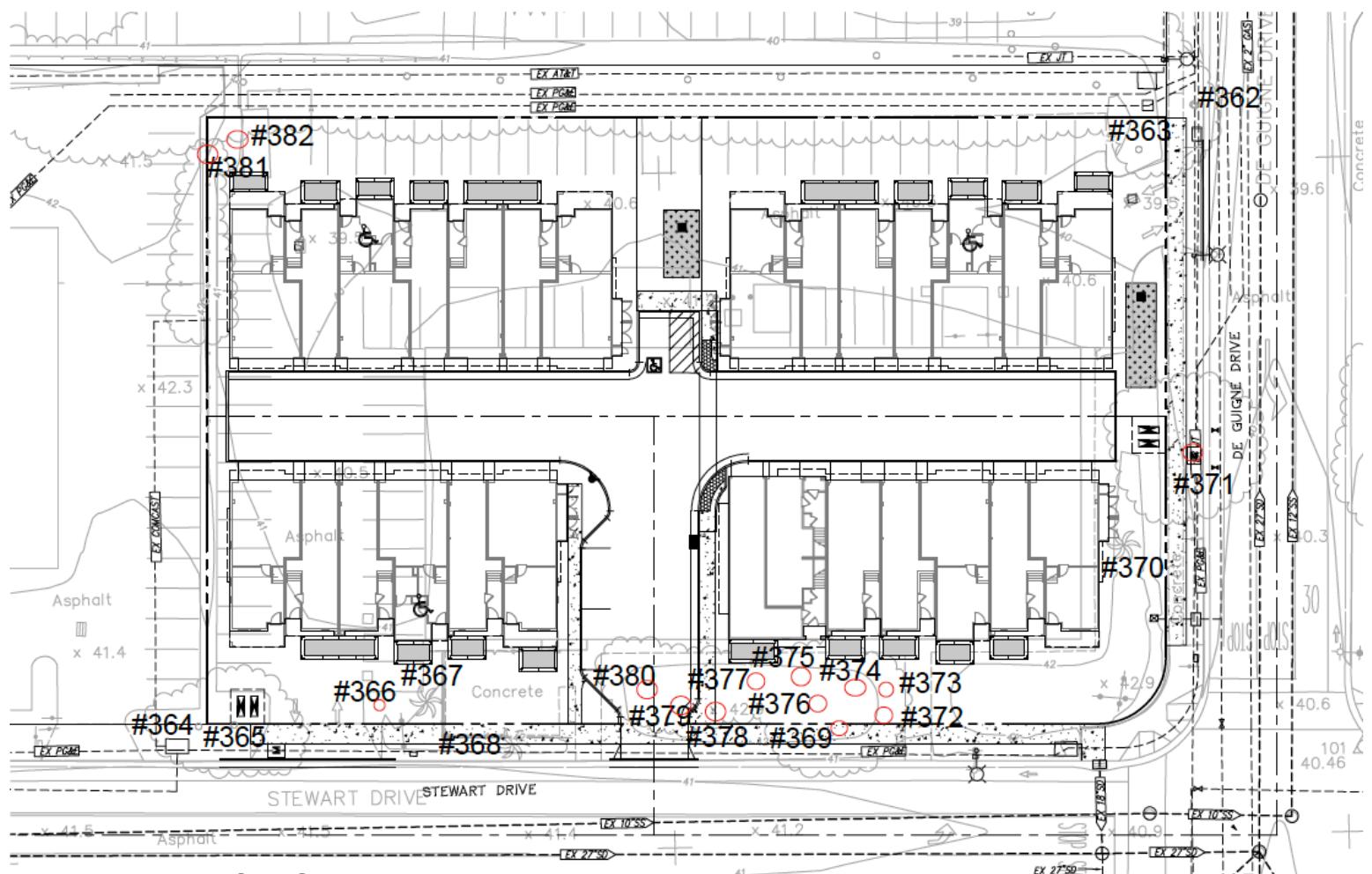
**scaffold** – large, structural branch

**structure** - physical and mechanical qualities of tree

**trunk circumference** – measurement of trunk, distance around

**trunk diameter** - trunk circumference divided by 3.14

## APPENDIX C - TREE LOCATION MAP



## APPENDIX D - CERTIFICATE OF PERFORMANCE

I, Michael Baefskey certify:

- That I have reviewed the City of Sunnyvale Municipal Code, Chapter 19.94. Tree Preservation Ordinance
- That I have evaluated the subject trees, and stated my findings accurately. The extent of the evaluation is stated in the attached report;
- That I have no current or prospective interest in the vegetation or the property that is the subject of this report and have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions, and conclusions stated herein are my own;
- That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted professional practices;
- That no one provided significant professional assistance to the consultant, except as indicated within the report;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party.

I certify that I am Registered Consulting Arborist #456, a member of the American Society of Consulting Arborists, and am Certified Arborist & Qualified Risk Assessor #WE0222A, Agricultural Pest Control Advisor #074617, Qualified Applicator #99864, Licensed Landscape Contractor (inactive) #931410, and have been involved in the practice of Arboriculture, Integrated Pest Management, Plant Health Care and Ecological Soils Management, and the study of soils and horticulture for over thirty five years.

