



IconEcho Resi & Office Tower
147 E. Santa Clara St.

Arborist Report

Prepared for:

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Divisions of The F.A. Bartlett Tree Expert Company

Arborist Report
IconEcho Resi & Office Tower
147 E. Santa Clara St.
San Jose CA

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Arborist Report

IconEcho Resi & Office Tower
147 E. Santa Clara St.
San Jose CA

Introduction and Overview

David J. Powers & Associates is preparing environmental documents related to the redevelopment of several parcels near 147 E. Santa Clara St. and construction of the IconEcho Resi & Office Tower in San Jose, CA. Current site use consists of buildings, parking, and associated landscape features. David J. Powers & Associates requested that HortScience | Bartlett Consulting, divisions of The F.A. Bartlett Tree Expert Company, prepare an **Arborist Report** for the site. This assessment provides the following information:

1. An assessment of trees currently growing at the two sites.
2. Estimated tree mitigation requirements.
3. Evaluation of project plans and recommendations for action.

Assessment Methods

Trees were assessed in December 2020. Trees were evaluated through a visual assessment from the ground and consisted of the following steps:

1. Tagging each tree with an identifying number and recording its location on a map.
2. Identifying the tree as to species.
3. Measuring the trunk diameter at 54" above grade.
4. Determining if the tree requires a permit for removal in the City of San Jose (ordinance size tree).
5. Evaluating the health and structural condition using a scale of 0 – 5 where 0 = dead, 1 = poor and 5 = excellent.
6. Noting any significant structural characteristics including decay, poor crown form, dieback, and a history of failure.
7. Rating the suitability for preservation as “high”, “moderate” or “low”. Suitability for preservation considers the health, age and structural condition of the tree, and its potential to remain an asset to the site for years to come.
8. Recording the tree’s location on a map.

Each tree is described in the attached ***Tree Assessment Form*** and its approximate location plotted in the ***Tree Assessment Plan*** located in the **Attachments**.

Description of Trees

Forty-two (42) trees were evaluated, representing 13 species (Table 1). All trees had been planted as part of landscape treatment. Species present were typical of landscape and orchard plants used in the San Jose area. Western sycamore is native to the San Jose area but trees were not indigenous to the site.

Table 1. Species present and tree condition. IconEcho Resi & Office Tower. 147 E. Santa Clara St. San Jose CA.

Common name	Scientific name	Condition				No. of Trees	
		Poor (1,2)	Fair (3)	Good (4)	Excell. (5)	Ordinance	Total
Italian cypress	<i>Cupressus sempervirens</i>	--	7	3	--	--	10
White ironbark	<i>Eucalyptus leucoxylon</i>	1	--	--	--	1	1
Australian willow	<i>Geijera parviflora</i>	1	--	--	--	1	1
Silk oak	<i>Grevillia robusta</i>	--	--	1	1	--	2
Crape myrtle	<i>Lagerstroemia cv.</i>	--	--	--	4	--	4
Glossy privet	<i>Ligustrum lucidum</i>	--	1	--	--	1	1
Sweetgum	<i>Liquidambar styraciflua</i>	--	--	1	--	--	1
Mulberry	<i>Morus alba</i>	--	3	--	--	--	3
Western sycamore	<i>Platanus racemosa</i>	--	1	--	1	2	2
London plane	<i>Platanus x hispanica</i>	--	5	2	2	6	9
Plum	<i>Prunus cv.</i>	--	1	--	--	--	1
Almond	<i>Prunus dulcis</i>	--	2	--	--	--	2
Chinese elm	<i>Ulmus parvifolia</i>	--	2	3	--	5	5
Total, all trees assessed		2	22	10	8	16	42

Italian cypresses #260 – 269 were located on the west side of the site in the gasoline station (Photo 1). Trees were installed in a narrow planting at or near the property line. Cypresses #260 – 262 were taller than the others with typical form and structure. Canopies of these three trees were one-sided to the east. Their condition was good.

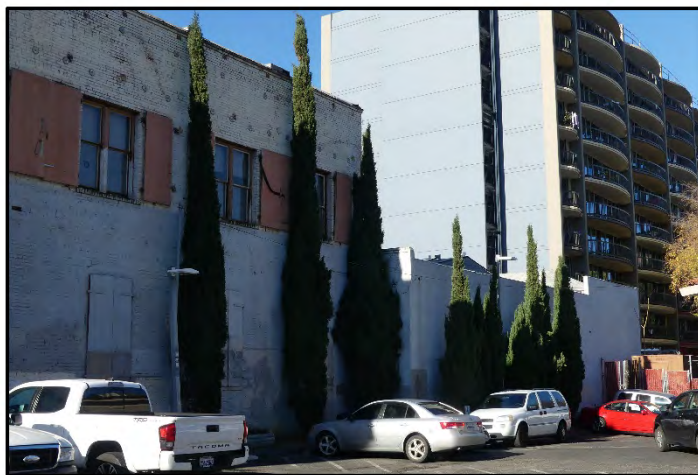


Photo 1. Looking west at Italian cypresses #260 – 269 (left to right).

Trees #263 – 269 had been topped near ground level and allowed to resprout. Canopy density was normal. Condition of trees #263 – 269 was fair due to the topping.

Nine London planes were street trees along 4th and E. Santa Clara Streets (Photo 2). Trees were semi-mature and mature in development with trunk diameters between 10 and 22 in. All were located in cutouts in the sidewalk. Tree condition was variable, ranging from fair (#253, 254, 255, 258, 259) to good (#251, 282) to excellent (#250, 257). Factors influencing tree condition included vigor and structure. Trees in fair condition lacked vigor and had poor structure including codominant and multiple attachments.

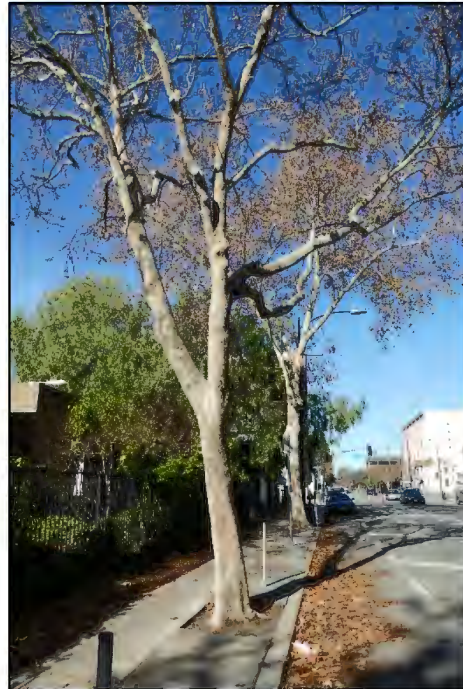


Photo 2. Looking north along 4th Street at London planes #251 (foreground) and #250.

Five Chinese elms were located in the parking lot area (Photo 3). Trees were generally mature in development with trunk diameters between 13 and 21 in. Elms #274 and 276 were in fair condition while #277, 278 and 279 were good. All trees had somewhat irregular crowns and had lost the center leader.



Photo 3. Chinese elm #274 (left) and crape myrtle #275 (right) were among trees located in the parking area.

Crape myrtles #270, 272, 273 and 275 were also located in the parking area, interspersed with the Chinese elms (Photo 3). Trees were mature in development with trunk diameters of 6 to 8 in. All crape myrtles were in excellent condition.

No other species was represented by more than three trees. Included in this group were:

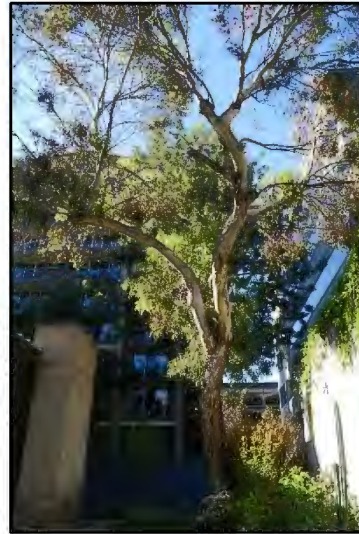
- Almonds #288 and 289 were small trees in fair condition. Neither tree was Ordinance site.
- Australian willow #284 was a multi-stem tree in poor condition (Photo 4). The stems arose at one point on the trunk and leaned away from one another. The tree had been topped one or more times resulting in poorly attached resprouts.

Photo 4. Looking north at Australian willow #284.



- White ironbark #285 was a large mature tree with a trunk diameter of 22 in. (Photo 5). Tree condition was poor due largely to a history of reduction pruning.

Photo 5. Looking west at white ironbark #285.



- Glossy privet #290 was a mature tree with numerous stems that arose near ground level (Photo 6). Tree condition was fair.

Photo 6. Looking south at glossy privet #290.

- Mulberries #280, 281 and 283 were mature trees with trunk diameters of 9, 11 and 11 in. respectively. All were in fair condition having been topped annually and allowed to resprouted. No decay was observed in the topping points.
- Plum #271 was a very small tree in fair condition.
- Silk oaks #286 and 287 were small seedings of 2 and 3 in. Both were in excellent condition.
- Sweetgum #291 was 10 in. and in good condition.
- Western sycamores #252 and 256 were street trees along 4th Street (Photo 7). Trunks diameters were 25 and 18 in. respectively. Tree #252 was in excellent condition while #256 was fair.

Photo 7. Looking west across 4th Street at western sycamore #252.

The City of San Jose defines Ordinance Sized Tree " *any live or dead woody perennial plant...having a main stem or trunk 38 inches or more in circumference (12 inches diameter) at a height measured 54 inches above natural grade slope*" (SJMC 13.32.20.I. Updated February 2018). Sixteen (16) of the 41 trees met this criterion. Ordinance Sized Trees are identified on the **Tree Assessment Form**.

The City of San Jose has also designated a number of Heritage Trees. No Heritage trees were present at this site.



Suitability for Preservation

Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape. Our goal is to identify trees that have the potential for long-term health, structural stability and longevity. Evaluation of suitability for preservation considers several factors:

- **Tree health**
Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.
- **Structural integrity**
Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.
- **Species response**
There is a wide variation in the response of individual species to construction impacts and changes in the environment. For example, London plane, crape myrtle and western sycamore are generally tolerant of construction impacts while Australian willow and white ironbark are intolerant.
- **Tree age and longevity**
Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.
- **Species invasiveness**
Species which spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced. The California Invasive Plant Inventory Database (www.cal-ipc.org) lists species identified as being invasive. San Jose is part of the Central West Floristic Province. Glossy privet and plum are included on the invasive list.

Each tree was rated for suitability for preservation based upon its age, health, structural condition and ability to safely coexist within a development environment (Table 2).

Table 2. Tree suitability for preservation. IconEcho Resi & Office Tower. 147 E. Santa Clara St. San Jose CA.

High Trees with good health and structural stability that have the potential for longevity at the site. Nine (9) trees were rated as having good suitability for preservation: crape myrtle #270, 272, 273, 275; London plane #250, 257; silk oak #286, 287; and western sycamore #252.

Moderate Trees in fair health and/or possessing structural defects that may be abated with treatment. Trees in this category require more intense management and monitoring, and may have shorter life-spans than those in the “high” category. Fourteen (14) trees were rated as having moderate suitability for preservation: London plane #251, 253, 254, 258, 259, 282; Chinese elm #277, 278, 279; Italian cypress #260, 261, 262; sweetgum #291; and western sycamore #256.

Low Trees in poor health or possessing significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas. Nineteen (19) trees were rated as having poor suitability for preservation including 7 Italian cypress, 3 mulberry, 2 almond, and 2 Chinese elm.

We consider trees with high suitability for preservation to be the best candidates for preservation. We do not normally recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

Evaluation of Impacts and Recommendations for Action

Appropriate tree retention develops a practical match between the location and intensity of construction activities and the quality and health of trees. The **Tree Assessment** was the reference point for tree condition and quality. Potential impacts from the proposed project were assessed using the site, grading and utility plans prepared by Civil Engineering Associates, project engineer (dated March 2021). Tree locations and canopies were included on the Existing Conditions and Demolition Plan.

The proposed IconEcho Resi & Office Tower would completely redevelop the site. Existing structures would be demolished. The site will be regraded with excavation of a below-grade parking garage. Given the extents of redevelopment, there is no opportunity to retain any of the assessed trees. All 42 trees will be removed.

Tree Mitigation

The City of San Jose requires mitigation of trees removed on development sites. The species and exact number of trees to be planted on the site will be determined in consultation with the City Arborist and the Department of Planning, Building, and Code Enforcement. The City of San Jose mitigation requirements are:

Diameter of Tree to be Removed	Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
12 inches or greater	5:1	4:1	3:1	24-inch box
6 to 12 inches	3:1	2:1	none	24-inch box
less than 6 inches	1:1	1:1	none	24-inch box

x:x = tree replacement to tree loss ratio

Note: Trees greater than 12 inches diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.

Where trees have more than one trunk, the diameters of individual trunks are added together to establish the diameter class for mitigation purposes.

Table 3. Tree mitigation. IconEcho Resi & Office Tower. 147 E. Santa Clara St. San Jose CA.

Diameter of tree to be removed	Number of Trees to be Removed			Replacement Tree Req'd
	Native	Non-Native	Orchard	24" Box
12 inches or greater	2	14	0	66
6 to 12 inches	0	19	0	38
less than 6 inches	0	5	2	5
Total	2	38	2	109

The mitigation requirements for removal of all 42 trees would be 109 24 in. box trees (Table 3).

Alternative Mitigation Measures

In the event the project site does not have sufficient area to accommodate the required tree mitigation, one or more of the following measures may be implemented, to the satisfaction of the City’s Environmental Principal Planner, at the development permit stage:

- The size of a 15-gallon replacement tree can be increased to 24-inch box and count as two replacement trees.
- An alternative site(s) will be identified for additional tree planting. Alternative sites may include local parks or schools or installation of trees on adjacent properties for screening

- A donation of \$755 per mitigation tree to Our City Forest or San Jose Beautiful for in-lieu off-site tree planting in the community. These funds will be used for tree planting and maintenance of planted trees for approximately three years. A donation receipt for off-site tree planting will be provided to the Planning Project Manager prior to issuance of a development permit.

Summary

Forty-two (42) trees were assessed at several parcels near 147 E. Santa Clara St. Thirteen (13) species were present. The most frequently occurring species were Italian cypress (10 trees) and London plane (9). Tree condition was variable with 22 trees in fair condition, 10 in good condition and eight in excellent. Sixteen (16) of the 42 trees met the City of San Jose's criteria as ordinance size.

Proposed project plans for the IconEcho Resi & Office Tower were reviewed. All 42 trees will be removed. The estimated mitigation requirement is 109 24 in. box trees.

HortScience | Bartlett Consulting



James R. Clark, Ph.D.
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Attachments

Tree Assessment Form

Tree Inventory Plan

Tree Assessment

147 E. Santa Clara Street
San Jose CA
December 2020



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION (0=dead) (5=excell.)	SUITABILITY for PRESERVATION	COMMENTS
250	London plane	22	Yes	5	High	Street tree in pavement cutout; minor displacement; high crown; nice tree.
251	London plane	15	Yes	4	Moderate	Street tree in pavement cutout; minor displacement; codominant trunks @ 9'; lacks vigor.
252	Western sycamore	25	Yes	5	High	Street tree in pavement cutout; some displacement; corrected lean S.; nice tree.
253	London plane	10	No	3	Moderate	Street tree in pavement cutout; 2 sets of codominant attachments; high crown; lacks vigor.
254	London plane	10	No	3	Moderate	Street tree in pavement cutout; multiple attachments @ 14'; lacks vigor.
255	London plane	7	No	3	Low	Street tree in pavement cutout; lost central leader; lacks vigor.
256	Western sycamore	18	Yes	3	Moderate	Street tree in pavement cutout; leaning & one-sided to S.; lost central leader.
257	London plane	19	Yes	5	High	Street tree in pavement cutout; nice tree.
258	London plane	16	Yes	3	Moderate	Street tree in pavement cutout; multiple attachments @ 7' & 12'; lost central leader.
259	London plane	18	Yes	3	Moderate	Street tree in pavement cutout; multiple attachments @ 6'; low branched; lost central leader.
260	Italian cypress	5	No	4	Moderate	6' wide planter; typical form & structure; one-sided to E.
261	Italian cypress	6	No	4	Moderate	6' wide planter; typical form & structure; one-sided to E.
262	Italian cypress	6	No	4	Moderate	6' wide planter; typical form & structure; one-sided to E.
263	Italian cypress	7	No	3	Low	3' wide planter; typical form & structure; topped @ 4'.
264	Italian cypress	5	No	3	Low	3' wide planter; typical form & structure; topped @ 4'.
265	Italian cypress	5	No	3	Low	3' wide planter; typical form & structure; topped @ 4'.
266	Italian cypress	8	No	3	Low	3' wide planter; typical form & structure; topped @ 1'.
267	Italian cypress	8	No	3	Low	3' wide planter; typical form & structure; topped @ 1'.
268	Italian cypress	8	No	3	Low	3' wide planter; typical form & structure; topped @ 1'.

Tree Assessment

147 E. Santa Clara Street
San Jose CA
December 2020



TREE No.	SPECIES	TRUNK DIAMETER (in.)	ORDINANCE SIZE?	CONDITION (0=dead) (5=excell.)	SUITABILITY for PRESERVATION	COMMENTS
269	Italian cypress	8	No	3	Low	3' wide planter; typical form & structure; topped @ 1'.
270	Crape myrtle	6	No	5	High	Good tree.
271	Plum	6	No	3	Low	Multiple attachments @ 1'.
272	Crape myrtle	6	No	5	High	Good tree.
273	Crape myrtle	7	No	5	High	Good tree.
274	Chinese elm	12	Yes	3	Low	Flat-topped; rangy form.
275	Crape myrtle	8	No	5	High	Good tree.
276	Chinese elm	13	Yes	3	Low	Leaning & one-sided to SW.; codominant trunks @ 8'.
277	Chinese elm	15	Yes	4	Moderate	Flat-topped; wide crown.
278	Chinese elm	18	Yes	4	Moderate	Large rangy crown; codominant trunks @ 7'.
279	Chinese elm	21	Yes	4	Moderate	Parking lot; pavement cutout; codominant trunks @ 6' & 10'; heavy lateral limb to S.; oval trunk; surface roots.
280	Mulberry	9	No	3	Low	Topped @ 10'; partly suppressed.
281	Mulberry	11	No	3	Low	Topped @ 14'.
282	London plane	17	Yes	4	Moderate	Multiple attachments @ 8'; round crown.
283	Mulberry	11	No	3	Low	Topped @ 10'; multiple attachments @ 6'.
284	Australian willow	16,11,10,10	Yes	2	Low	Multiple attachments @ 3'; lean apart; prev. topped.
285	White ironbark	22	Yes	2	Low	Poor form & structure.
286	Silk oak	3	No	5	High	18" planting space; good tree.
287	Silk oak	2	No	4	High	18" planting space; good tree.
288	Almond	1,1	No	3	Low	Codominant trunks @ base.
289	Almond	2,2,1	No	3	Low	Multiple attachments @ 2'.
290	Glossy privet	12,12,10,8,6	Yes	3	Low	Multiple attachments @ 1'; topped; upright; high crown.
291	Sweetgum	10	No	4	Moderate	Typical form & structure; large surface roots.

Tree Assessment Map

147 E. Santa Clara Street
San Jose, CA

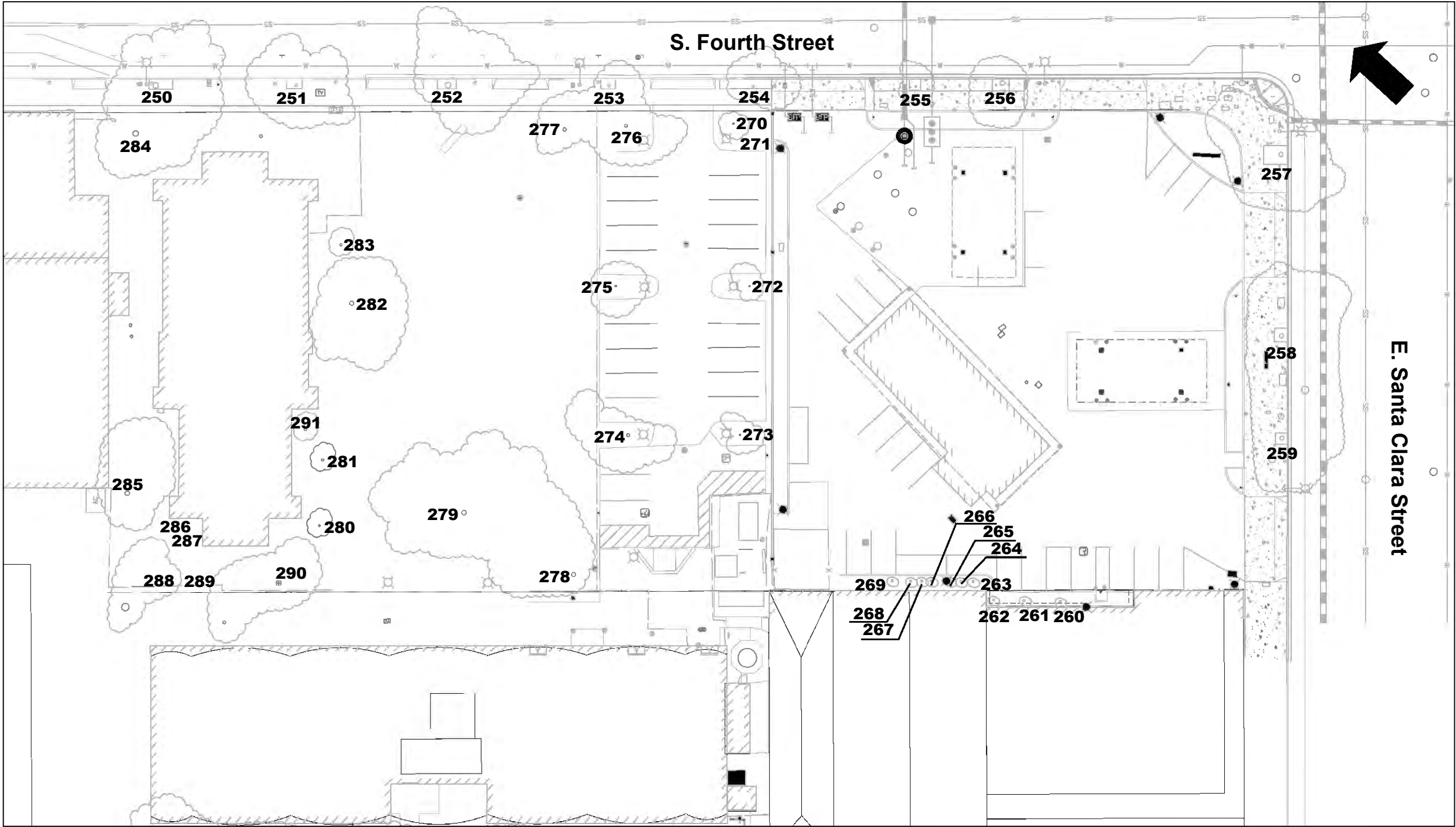
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No Scale

Notes

- Base map provided by:
WRNS Studio
San Francisco, CA
- Numbered tree locations are approximate.



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