

Kielty Arborist Services

Certified Arborist WE#0476A
P.O. Box 6187
San Mateo, CA 94403
650-515-9783

January 13, 2014

David J. Powers and Associates
Attn: Ms. Amber Sharpe
1871 The Alameda, Suite 200
San Jose, CA 95126

Dear Ms. Sharpe,

Site: Morgan Hill Parking Site, 3rd and Depot, Morgan Hill CA

As requested on Sunday, January 12, 2014, I visited the above site for the purpose of inspecting and commenting on the trees. A construction project is planned for these sites and your concern as to the future health and safety of the trees has prompted this visit.

Method:

All inspections were made from the ground; the trees were not climbed for this inspection. The trees in question were located on a map provided by you. The trees were then measured for diameter at 54 inches above ground level (DBH). The trees were given a condition rating for form and vitality. The trees' condition rating is based on 50 percent vitality and 50 percent form, using the following scale.

1	-	29	Very Poor
30	-	49	Poor
50	-	69	Fair
70	-	89	Good
90	-	100	Excellent

The height of the tree was measured using a Nikon Forestry 550 Hypsometer. The spread was paced off. Comments and recommendations for future maintenance are provided.

Survey:

Tree#	Species	DBH	CON	HT/SP	Comments
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Sunsweet site:

1	Privet (<i>Ligustrum japonicum</i>)	16.6@ base	40	30/25	Poor-fair vigor, poor form, decay in lower trunk.
2	Redwood (<i>Sequoia sempervirens</i>)	16.6	50	50/20	Poor-fair vigor, fair form, stump sprouts, 14 inch diameter leader removed.
3	Redwood (<i>Sequoia sempervirens</i>)	34.8	50	50/30	Poor-fair vigor, fair form, leans northeast, shares root zone with #4.
4	Redwood (<i>Sequoia sempervirens</i>)	31.1	50	50/30	Poor-fair vigor, fair form, shares root zone with #3.
5	Redwood (<i>Sequoia sempervirens</i>)	20.1	40	35/15	Poor vigor, poor form, top is dead.
6	Valley oak (<i>Quercus lobata</i>)	18.2	70	40/35	Good vigor, good form, on southwest property line.
7	Black walnut (<i>Juglans hindsii</i>)	7.8	45	25/25	Good vigor, poor form, suppressed by #8.
8	Coast live oak (<i>Quercus agrifolia</i>)	28.9	55	45/50	Good vigor, fair form, scarring on eastern trunk from a past fire. Root crown buried From dirt piles.
9	Plum (<i>Prunus spp</i>)	5x3"	50	25/30	Good vigor, poor form, multi leader.
10	Valley oak (<i>Quercus lobata</i>)	10est	60	30/25	Good vigor, poor form, codominant.
11	Coast live oak (<i>Quercus agrifolia</i>)	8.4-8.8-9.6-7.4	55	25/30	Good vigor, poor form, multi leader at
12	Valley oak (<i>Quercus lobata</i>)	32.3	75	40/55	Good vigor, fair form, heavy lateral limbs.
13	Cottonwood (<i>Populus fremontii</i>)	18est	55	35/35	Good vigor, fair form.

Survey:

Tree#	Species	DBH	CON	HT/SP	Comments
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Light Rail Site:

1	Bradford pear (<i>Pyrus calleryana</i>)	9.9	55	25/20	Good vigor, fair form, multi leader at 7 feet with poor crotch formations.
2	Bradford pear (<i>Pyrus calleryana</i>)	8.4	60	20/20	Good vigor, fair form, multi leader at 7 feet with poor crotch formations.
3	Bradford pear (<i>Pyrus calleryana</i>)	11.4	50	25/25	Good vigor, fair form, multi leader at 7 feet with poor crotch formations.
4	London plane (<i>Platanus acerifolia</i>)	7.6	75	20/20	Good vigor, good form.
5	London plane (<i>Platanus acerifolia</i>)	9.7	80	30/20	Good vigor, fair form, leans east.
6	London plane (<i>Platanus acerifolia</i>)	9.2	70	30/20	Good vigor, fair form.
7	London plane (<i>Platanus acerifolia</i>)	9.5	75	30/25	Good vigor, good form.
8	London plane (<i>Platanus acerifolia</i>)	6.1	55	20/15	Good vigor, poor form, leans east, large surface roots.

Depot Site #3

1	Oleander (<i>Nerium oleander</i>)	4.2	45	10/5	Fair vigor, poor form, hedge like.
2	Potato vine (<i>Solanum jasminoides</i>)	10x.5"	40	10/5	Poor vigor, poor form, vine like, frost Damage.
3	Japanese maple (<i>Acer palmatum</i>)	3est	60	10/5	Good vigor, poor form, hedge like.
4	Potato vine (<i>Solanum jasminoides</i>)	10x.5	40	10/5	Poor vigor, poor form, vines, frost Damage.

Tree#	Species	DBH	CON	HT/SP	Comments
5	Leyland cypress (<i>Cupressocyparis leylandii</i>)	8.1	45	10/10	Good vigor, poor form, hedge like.
6*	Loquat (<i>Eriobotrya japonica</i>)	3x3"	70	20/10	Good vigor, fair form, multi leader.
7*	Orange (<i>Citrus sinensis</i>)	3x2"	70	15/20	Good vigor, fair form, multi leader.

*denotes neighbors tree

Summary:

The trees on the three sites above consist of native oaks on the Sunsweet site and imported trees located on all three sites. The trees are all in poor to good condition with no excellent trees. The Sunsweet site has several tree that would require removal. Privet #1 is a street tree in poor condition, privet is considered a poor species and should be removed. The redwoods #2, #3 and #4 are in poor condition. Years of no water have caused the trees to have less than optimum vigor. Removal of these trees would be required to facilitate construction. The walnut #7 and the live oak #8 would also have to be removed. The oak tree is in fair condition with fire scars on the eastern trunk.

The remaining trees can be retained with the large oak #12 becoming a focal point of the site. The proposed construction would be located within the dripline of the large oak with proper tree protection the site can be developed as planned and the oak will continue to be a landmark in the downtown area. Landscaping beneath the valley oak #12 (within 10 feet of the trunk) should be of a low water use species or of a gravel or decomposed granite hardscape. Benches or tables on the hardscape will not have a great impact on the tree. The outer dripline of tree #12 can use slightly higher water use plants including some turf if properly irrigated.

The depot site has imported trees that are in fair to good condition. The three Bradford pears would be removed the London plane trees (sycamores) can be relocated as their condition is good and are easy to move due to their size.

The Depot site #3 has small trees and vines that can be removed. The trees have been trimmed by the local shop owner in a hedge like manner that has destroyed the plants form. The neighbor's trees #6 and #7 can be retained if properly protected.

The following tree protection plan is generic in nature and can be improved as the plans are defined.

Tree Protection Plan:

Tree protection zones should be established and maintained throughout the entire length of the project. Fencing for the protection zones should be 6 foot tall metal chain link supported by metal poles pounded into the ground. The support poles should be spaced no more than 10 feet apart on center. The location for the protection fencing should be as close to the dripline as possible still allowing room for construction to safely continue. Signs should be placed on fencing signifying "Tree Protection Zone - Keep Out". No materials or equipment should be stored or cleaned inside the tree protection zones. Areas outside the fencing but still beneath the dripline of protected trees, where foot traffic is expected to be heavy, should be mulched with 4 to 6 inches of chipper chips.

Trenching for irrigation, electrical, drainage or any other reason should be hand dug when beneath the driplines of protected trees. Hand digging and carefully laying pipes below or beside protected roots will dramatically reduce root loss of desired trees thus reducing trauma to the entire tree. Trenches should be backfilled as soon as possible with native material and compacted to near its original level. Trenches that must be left exposed for a period of time should also be covered with layers of burlap or straw wattle and kept moist. Plywood over the top of the trench will also help protect exposed roots below.

Normal irrigation should be maintained throughout the entire length of the project. The imported trees on this site may require irrigation during the warm season months. Root damage from construction excavation or trenching will trigger the need for irrigation. Some irrigation may be required during the winter months depending on the seasonal rainfall. During the warm season months the trees on this site should receive heavy flood type irrigation 2 times a month. Irrigation can be provided by hand watering or with the use of a soaker hose. Mulching the root zone of protected trees will help the soil retain moisture, thus reducing water consumption. The site arborist may adjust the watering schedule as needed. The native oaks will only need irrigation if their roots are traumatized.

Post Construction Recommendations:

The retained trees that have been affected by the construction should be maintained and monitored for a period of three years. Maintenance should consist of annual inspections in the late summer when stress on the trees is most evident. Irrigation, fertilization and other maintenance needs will be provided by the site arborist in the form of follow up inspection reports. Non affected trees will be maintained as they have in the past. No additional irrigation for the oaks will be recommended unless root zones are traumatized.

The information included in this report is believed to be true and based on sound arboricultural principles and practices.

Sincerely,

Kevin R. Kiely
Certified Arborist WE#0476A