

Kielty Arborist Services LLC

Certified Arborist WE#0476A

P.O. Box 6187

San Mateo, CA 94403

650- 515-9783

April 10, 2019

David J. Powers & Associates, Inc.

Attn: Amber Sharpe

1871 The Alameda, Suite 200

San Jose, CA 95126

Site: Carpenters Center, 18640 Madrone Parkway, Morgan Hill CA

Dear Ms. Sharpe,

As requested on Friday, March 15, 2019, I visited the above site for the purpose of inspecting and commenting on the trees. Development is proposed on this lot consisting of a new carpenters training center and parking lot. Site plan A1.0 dated 1/28/19 and landscape plans L1-L3 were reviewed for writing this report. Your concerns as to the future health and safety of the trees on site has prompted this report.

Method:

All inspections were made from the ground; the trees were not climbed for this inspection. The trees in question were located on a site plan 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.

18640 Madrone Parkway 4/10/19

(2)

Survey:

Tree#	Species	DBH	CON	HT/SP	Comments
1	Purple leaf plum (<i>Prunus cerasifera</i>)	6.1	40	10/10	Fair vigor, poor form, heavy decay on trunk, sunscald.
2P	Tulip tree (<i>Liriodendron tulipifera</i>)	11.3	30	35/15	Fair vigor, fair form, decay/damage at roots from lawn mower, decay to 3 feet.
3P	Tulip tree (<i>Liriodendron tulipifera</i>)	8.2	60	35/15	Fair vigor, fair form, damage to roots from lawn mower in past.
4	Purple leaf plum (<i>Prunus cerasifera</i>)	8.2	60	18/12	Fair vigor, fair form, abundance of sprout growth.
5	Purple leaf plum (<i>Prunus cerasifera</i>)	3.2	60	14/6	Fair vigor, fair form, young tree.
6	Purple leaf plum (<i>Prunus cerasifera</i>)	5.8	60	12/12	Fair vigor, fair form, minor sunscald.
7	Purple leaf plum (<i>Prunus cerasifera</i>)	7.0	65	12/12	Fair vigor, fair form.
8	Purple leaf plum (<i>Prunus cerasifera</i>)	7.2	65	14/10	Fair vigor, fair form, sprout growth.
9	Purple leaf plum (<i>Prunus cerasifera</i>)	8.0	65	14/10	Fair vigor, fair form, sprout growth.
10	Purple leaf plum (<i>Prunus cerasifera</i>)	8.7	65	14/10	Fair vigor, fair form, sprout growth.
11	Purple leaf plum (<i>Prunus cerasifera</i>)	8.5	65	14/10	Fair vigor, fair form, sprout growth.
12	Purple leaf plum (<i>Prunus cerasifera</i>)	8.3	65	14/10	Fair vigor, fair form, sprout growth.
13P	Tulip tree (<i>Liriodendron tulipifera</i>)	13.1	50	45/12	Fair vigor, fair form, damage to buttress roots from lawn mower.
14	Tulip tree (<i>Liriodendron tulipifera</i>)	9.2	45	30/12	Fair vigor, poor form, decay on trunk near grade, lawn mower damage.

18640 Madrone Parkway 4/10/19 (3)

Survey:

Tree#	Species	DBH	CON	HT/SP	Comments
15	Tulip tree (<i>Liriodendron tulipifera</i>)	7.5	45	20/10	Fair vigor, poor form, decay at grade on trunk, lawn mower damage.
16P	Tulip tree (<i>Liriodendron tulipifera</i>)	11.8	40	40/12	Fair vigor, poor form, damage to buttress roots from lawn mower, codominant at 15' with included bark.
17	Southern live oak (<i>Quercus virginiana</i>)	6.7	80	15/15	Good vigor, fair form.
18	Southern live oak (<i>Quercus virginiana</i>)	7.3	70	15/15	Fair vigor, fair form.
19	Southern live oak (<i>Quercus virginiana</i>)	9.1	80	20/15	Fair vigor, fair form.
20	Southern live oak (<i>Quercus virginiana</i>)	8.6	70	20/15	Fair vigor, fair form.
21	Southern live oak (<i>Quercus virginiana</i>)	7.1	80	20/15	Good vigor, fair form.
22	Southern live oak (<i>Quercus virginiana</i>)	6.4	70	15/15	Fair vigor, fair form.
23	Southern live oak (<i>Quercus virginiana</i>)	7.4	65	20/15	Fair vigor, fair form.
24	Southern live oak (<i>Quercus virginiana</i>)	5.5	70	15/10	Fair vigor, fair form.
25	Southern live oak (<i>Quercus virginiana</i>)	5.0	70	12/10	Fair vigor, fair form.
26	Monterey pine (<i>Pinus radiata</i>)	11.1	50	20/10	Fair vigor, fair form, young, poor species, in swale.
27R	Monterey pine (<i>Pinus radiata</i>)	11.8	60	20/12	Fair vigor, fair form, young, poor species, in swale.
28R	Monterey pine (<i>Pinus radiata</i>)	9.5	55	20/8	Fair vigor, fair form, poor species, in swale.

18640 Madrone Parkway 4/10/19 (4)

Survey:

Tree#	Species	DBH	CON	HT/SP	Comments
29 R	Monterey pine (<i>Pinus radiata</i>)	12.5	60	35/15	Fair vigor, fair form, in swale, poor species.
30 R/P	Monterey pine (<i>Pinus radiata</i>)	16.0	50	35/15	Fair vigor, fair form, pine pitch canker, in swale, poor species.
31 R	Monterey pine (<i>Pinus radiata</i>)	4.0	40	15/5	Fair vigor, poor form, suppressed, leaning trunk, in swale.
32*	Crape myrtle (<i>Lagerstroemia sp.</i>)	1"x12	60	10/8	Fair vigor, poor form, multi leader at grade.
33*	Crape myrtle (<i>Lagerstroemia sp.</i>)	4.0	70	12/8	Good vigor, good form.
34*	Tulip tree (<i>Liriodendron tulipifera</i>)	10.7	50	40/12	Fair vigor, fair form, lawn mower damage at buttress roots.
35*	Tulip tree (<i>Liriodendron tulipifera</i>)	3.7	30	12/4	Poor vigor, poor form, heavy decay on trunk, sun scald.
36* P	Tulip tree (<i>Liriodendron tulipifera</i>)	12.8	60	45/15	Fair vigor, fair form, minor lawn mower damage.

P-Indicates protected tree by city ordinance *-Indicates tree on neighboring property

R-Indicates proposed tree removal



Showing purple leaf plum trees

Summary:

The trees on site are a mix of imported trees. No native trees were observed. All street trees are considered protected trees in Morgan Hill. All trees with a diameter measurement over 12.7' are also considered to be protected trees. Trees #1-16 are located within the existing 30' landscape easement and may be considered protected street trees regardless of size. Trees #2,3, and 16 are located with the 10' public service easement and are considered to be street trees. The majority of the purple leaf plum trees are in fair condition. These trees will likely be retained as a part of the new landscape. A proposed walkway is near plum tree #9 and may raise the need to remove the tree. If to be retained, excavation near the tree should stay as minimal as possible and be done by hand. Base rock can be packed around roots to reduce impacts/root cutting. Significant irrigation should be provided for the tree if root loss is to take place. The tree should be irrigated every week until the top 6 inches of soil is saturated.



The majority of the surveyed tulip street trees were given poor condition ratings due to decay observed at the root crown and on the tree trunks. In the past turf was installed all the way up to the tree trunks. The turf has been cut with a lawn mower, and has caused significant damage to surface roots. The damaged surface roots have decayed back to the tree trunks in some cases. Decay at the root crown can significantly impact the tree structural stability. The tulip trees with condition ratings under 50 are recommended to be removed and replaced. Mulch should be placed at least 5 feet from the base of any new tree to be planted in order to avoid root damage this close to a tree trunk.

Showing decay and root damage caused by a lawn mower



Trees #17-25 consist of southern live oak trees. These trees are all in fair to good condition. These trees act as a good screen at the property line. Tree protection fencing for these trees is recommended to be placed as close as possible to the proposed parking lot. Because these trees are young they are able to handle minor impacts. This species prefers minor irrigation during the dry season. It is recommended to irrigate these trees every 2 weeks during the dry season.

Showing southern live oak trees



Trees #26-31 consist of Monterey pine trees at the property line. Pine tree #26 is the only pine tree to be retained. The other pine trees are proposed for removal to facilitate construction of the parking lot. Fencing should be placed at the dripline of the retained pine tree. The following tree protection plan will help reduce impacts from the planned construction.

Showing Monterey pine trees

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 type supported by 2 inch metal poles pounded into the ground by no less than 2 feet. The support poles should be spaced no more than 10 feet apart on center. The location for the protection fencing should be located 5 feet beyond the tree driplines where possible. Where not possible because of existing hardscapes, the tree protection fencing shall be placed at the edge of the existing hardscapes. If approved work is located underneath the dripline of a tree, tree protection fencing shall still be placed as close as possible to the approved work. 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.

Landscape Buffer

Where tree protection does not cover the entire root zone of the trees, or when a smaller tree protection zone is needed for access, a landscape buffer consisting of wood chips spread to a depth of six inches with plywood or steel plates placed on top will be placed where foot traffic is expected to be heavy. The landscape buffer will help to reduce compaction to the unprotected root zone.

Tree Pruning

During construction any trimming will be supervised by the site arborist and must stay underneath 25% of the trees total foliage. At this time no pruning is proposed. All pruning shall be done by a licensed tree care provider. No pruning is expected for this site.

Root Cutting

Any roots to be cut should be monitored and documented. All roots measuring 2 inches in diameter or larger must first be shown to the Project Arborist before being cut. The Project Arborist may recommend irrigation and a tree monitoring program at that time if needed. Cut all roots clean with a saw or loppers. Roots to be left exposed for a period of time should be covered with layers of burlap and kept moist to avoid desiccation.

Trenching and Excavation

Trenching and excavation shall strive to stay outside of the tree protection zones. If not possible trenching for any reason, should be hand dug when beneath the dripline of desired trees. Hand digging and careful placement of pipes below or beside protected roots will dramatically reduce root loss, thus reducing trauma to desired trees. Trenches should be back filled as soon as possible using native materials and compacted to near original levels. Trenches to be left open with exposed roots shall be covered with burlap and kept moist. Plywood laid over the trench will help to protect roots below.

Irrigation

All of the surveyed trees are imported trees that will require supplemental irrigation to maintain a healthy canopy. It is recommended to irrigate the trees every 2 weeks during the construction.

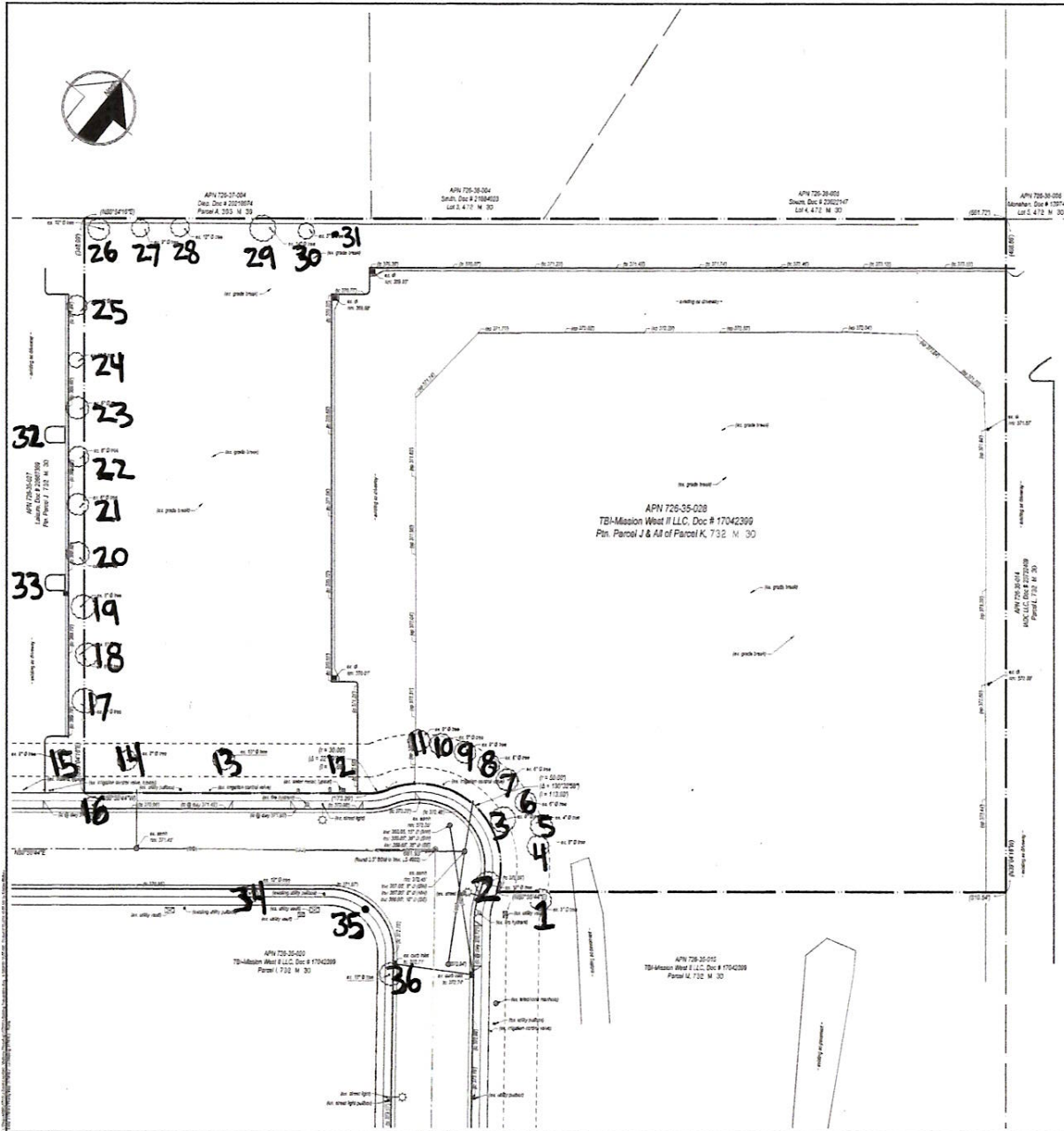
Inspections

The site will be inspected after the tree protection measures are installed to insure adequate placement. Inspections will be carried out during any proposed work underneath the dripline of a protected tree on site. The inspections will be documented with inspection letters being provided to the owner and contractor. Other inspections will be carried out on an as needed basis. It is the contractors responsibility to notify the site arborist when construction is to start, and whenever there is to be work preformed underneath the dripline of a protected tree on site at least 48 hours in advance. Kielty Arborist Services can be reached at 650-515-9783(Kevin), 650-532-4418(David), or by email at kkarbor0476@yahoo.com

This information should be kept on site at all times. The information included in this report is believed to be true and based on sound arboricultural principles and practices.

Sincerely,

Kevin R. Kielty
Certified Arborist WE#0476A



Vicinity Map



MH engineering Co.
 100% Woman Owned
 Morgan Hill, CA 95037

Existing Topography
Carpenter's Union - Madrone Parkway

Engineer:
 William J. MacIntosh, RCE 04093
 MH Engineering
 100% Woman Owned
 Morgan Hill, CA 95037
 408.775.7251
 bill@mh-engineering.com

Project Information:
 APN 726-35-028
 Present Use: Vacant
 Proposed Use: Commercial
 Present Zoning: PUJ
 Proposed Zoning: PUJ
 Sanitary Sewer: PG&E
 Gas and Electric: PG&E
 Water: PG&E
 Telephone: As Shown
 Existing Improvements: 4.93 ac
 Top: Field Topo

Benchmark: Elevations shown on this plan are based on the top of curb level located at the southwesterly return of the angle point in Madrone Parkway. Elevation=372.71' (NAVD 88)

Boundary Note: Property lines shown on this plan are based on record data and boundary monumentation measured in field.

Flood Zone: The property lies wholly in Zone D, areas in which flood hazards are undetermined, but possible per FEMA Firm Plans 06095C0443H, effective May 18, 2009.

Underground Utility Note: Observed surface evidence of utility lines including facilities, appurtenances and markings were used in depicting the locations of underground features. Cannot be accurately, completely and reliably depicted. Where additional or more detailed information is required, the client is advised that excavation may be necessary.

DATE	BY	SCALE
11/13/13	WJM	AS SHOWN
11/13/13	WJM	AS SHOWN
11/13/13	WJM	AS SHOWN
SHEET		
1		
OF 1		