Timothy C. Ghirardelli
Consulting Arborist Services
1200 Mt. Diablo Blvd., Suite 204
Walnut Creek, CA 94596
Phone 925.899.8090

Timothy C. Ghirardelli
CONSULTING ARBORIST SERVICES

Tree Survey

Robinson Oil
1202 Oakland Road
San Jose, CA

February 21, 2017

Sustainable Solutions in the Urban Interface Since 1980

Certified Arborist #WE 0704 A

Introduction

I am retained by LHB & Associates for Rotten Robbie #67 to provide this tree survey for the proposed project pursuant to guidelines for documentation of trees defined in the City of San Jose Ordinance - Municipal Code, Title 13, Chapter 13.32, Tree Removal Controls. Trees 56-inches in circumference (17.83-inches in diameter) and greater are documented measured at 24-inches above grade. This tree evaluation is conducted within the City guidelines defined and subject to city review.

Existing trees are reviewed to evaluate their individual health, their contribution to the site and the affects of proposed construction. Trees are numerically tagged, sized and identified. Tree numbers in this survey correspond to those found in the Tree Inventory Site Plan enclosed.

My review of the site occurred on February 14, 2017. I have reviewed the Proposed Site Plan provided by LHB & Associates, drawings C-1 and existing site survey by Slooten Consulting, Inc. drawings sheets 1 and 2 dated 02.10.2014.

Summary

The site is located on the northeast corner of Oakland road and Commerce on a level parcel where existing buildings are proposed for removal and reconstruction. Two (2) trees are surveyed on the subject property that meets City size requirement and criteria for documentation. An additional eight (8) trees are found on site that measure below the size requirement and criteria for documentation. No other trees are found on site and no tree canopies were found overreaching from adjoining properties where proposed construction may influence tree health.

All trees are proposed for removal to facilitate construction of the new gas station and car wash facilities. All trees are in Fair to Poor condition considered to be mature and nearing the limits of their useful life expectancy with varying degrees of health and structural risks.

The following pages contain my evaluation.

Timothy C. Ghirardelli
CONSULTING ARBORIST
WC ISA CERTIFIED ARBORIST WE #0704 A

Construction Impact Evaluation

Most nutrient and water absorbing roots that sustain the trees can be found in the top 6 to 12 inches of soil. Raising or lowering grades just 4 to 6 inches, or trenching and compacting soils with equipment within natural tree canopies will all affect tree health and longevity.

Construction impact ratings are intended to serve as a guideline for evaluating the long term sustainability of trees as a result of impacts. Trees are evaluated to determine the potential impact of construction relative to their location on the site plan. Tree impact ratings are estimated and limited to the plan set provided. The rating system measures to canopy edges to establish the critical root zone. Viewing canopy edges as one hundred percent of the critical root zone, proposed impacts are rated in percentages of root loss to the critical area. The more root loss that occurs to a tree, the less it will be able to survive. Tree species, age, health and vigor influence impact ratings.

High Impact

Trees in the High Impact category are considered to be at, or beyond the maximum range of root loss for that specimen. Trees in this category are unlikely to sustain the proposed impacts for the long term. A significant change in the proposed plan is required in order to retain the tree. Specific recommendations are required from the Arborist to reduce proposed impacts.

- Grade cuts, fills and/or alterations that result in root loss to 30% and greater of the critical root zone.

Moderate Impact

Trees in the Moderate Impact category are considered to be within the range of sustainable root loss for that specimen. Trees in this category undergo alterations that require specific recommendations from the Arborist to reduce proposed impacts.

- Grade cuts, fills and/or alterations that result in root loss to less than 30% of the root zone.

Low Impact

Trees in the Low Impact category are considered to be well within the acceptable range of root loss for that specimen. Trees in this category may require specific recommendations from the Arborist to reduce proposed impacts.

- Grade cuts, fills at canopy edges or beyond and/or supervised alterations within the canopy.

Tree Survey

Tree No.	Species	~Size @ 24"	[1]Health Vigor		[3]Const. Impacts	Remove	[2]Retention Rating	Comments
422	Hollywood juniper *Juniperus chinensis `Torulosa`*	12-5	Fair		High	X	Fair-Poor	Plans call for tree removal to facilitate construction.
424	Australian willow *Geijera parviflora*	15-19-13*	Fair		High	X	Fair-Poor	Plans call for tree removal to facilitate construction.

[1,2,3] See Tree Health Evaluation ~Size in diameter meets or exceeds 56" inch circumference required for documentation *Measured slightly higher than 24" to address low multi-trunked branching

Tree Health Evaluation

Several factors are involved in the evaluation process. Healthy, vigorous trees are better able to tolerate impacts such as root injury, soil compaction and changes in soil moisture than are trees that are in poor condition prior to impact. The tree Health & Vigor ratings below provide an initial guideline for evaluating tree health. Trees with a Health & Vigor Rating of *excellent* or *good* will be more likely to survive development trauma than those with *fair* or *poor*.

[1]Health & Vigor Rating:

Excellent	A healthy, vigorous tree relatively free of signs and symptoms of disease.
Good	Tree with normal shoot elongation, interior dead wood, manageable twig dieback, and/or pest problems. Tree structure may influence considerations.
Fair	Tree with moderate amounts of twig and branch dieback, thinning canopy, reduced vigor, wounds that are slow to recover, with 65 to 80% of the canopy alive. May have poor branch structure and/or suppressed canopy. May have conditions that are manageable to improve tree health.
Poor	Tree with dieback of large limbs, large wounds with little callus growth, visible decay, and 30 to 60% of the canopy alive. Tree may also have dieback and decay in primary in scaffold limbs and/or trunk structure. May have large cavities and be structurally unsound beyond any reasonable management.

Retention Rating---*Factors Considered in the Evaluation of Trees Suitable for Retention*

1. Tree Location, Structure and Competition
   The location of the tree is considered with respect to the future environment. Site development increases the frequency of use thereby increasing the concern for structural deficiencies or trees in decline that might become a liability. Trunks and limbs are visually examined to evaluate structural defects and decay that could lead to breakage, or failure.

2. Species Tolerance
   Trees respond to environmental changes according to individual genetic ability. For example, Coast live oaks are more capable of withstanding development trauma than Valley oaks similar in size condition and relative construction impacts. Considerations also include age and longevity

3. Contribution
   Contribution refers to the evaluation of individual, and/or grove characteristics to the site, neighborhood and benefits to the public. Factors also weigh the above Health/Vigor assessments and both function and aesthetic:

   Functional considerations may include species, age and longevity, structure, stability and risks, benefits that include shade, screening and/or sun protection, wildlife habitat or ecological considerations, and the effects of competition.

   Aesthetic considerations may include species importance, rarity or uniqueness, natural or exotic, visual interest including seasonal and structural features, appearance and placement in the environment.

[2]Retention Rating

Excellent	Ideal specimen both functionally and aesthetically with good health and longevity.
Good	Tree suited to retention for the long term. Individual characteristics are weighed. Any health or structural concerns are manageable with reasonable care.
Fair	Tree may have age, health, and/or structural concerns that may, or may not be manageable. Aesthetics are likely to be affected or affect other more valuable trees. Removal may benefit others.
Poor	Tree is likely to be in decline and/or have non-manageable structural concerns. Removal is likely to benefit others.

[3]Proposed Construction Impacts

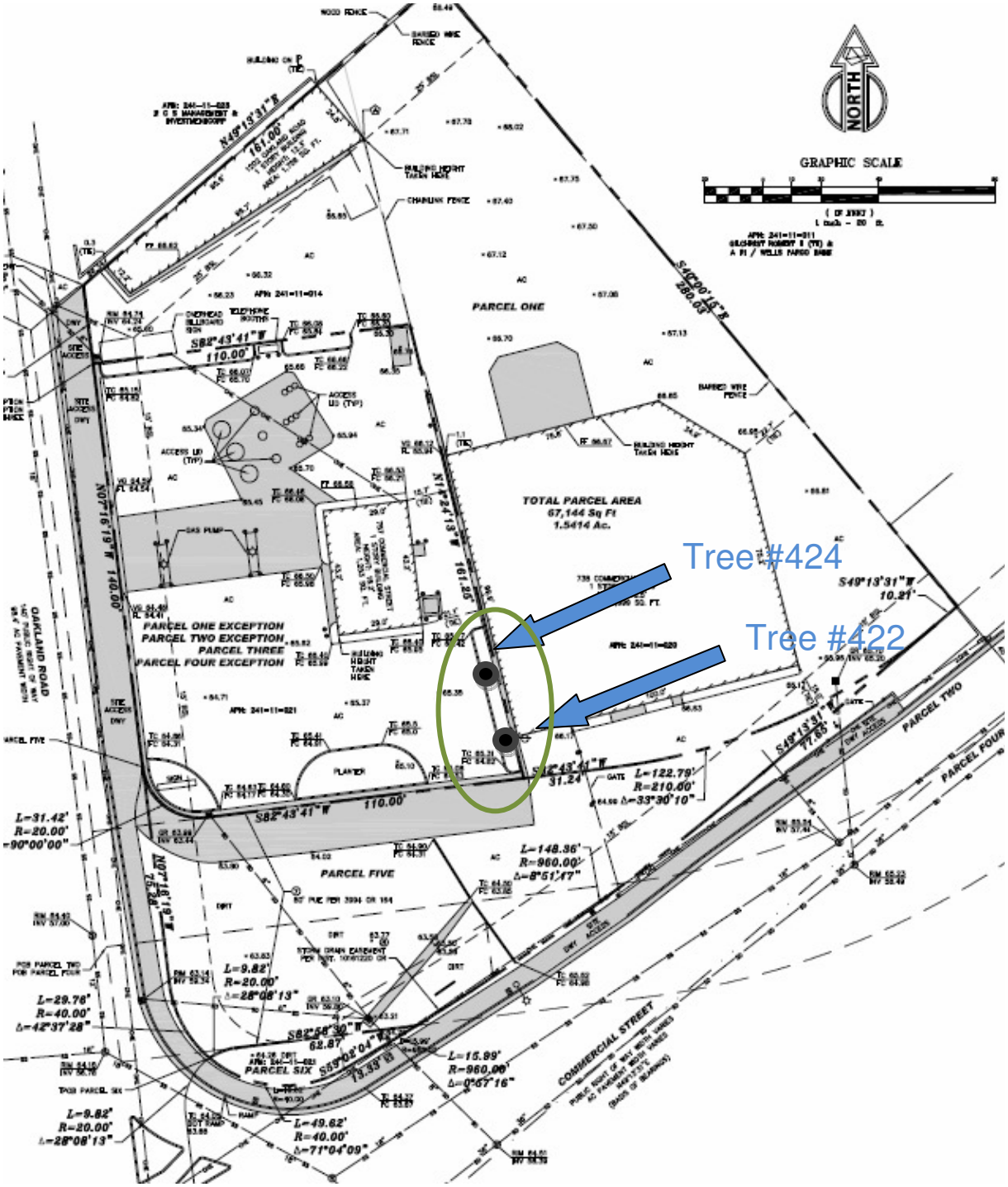
High Impact:	Impacts that are at, or beyond the maximum range of root loss. Significant changes in the proposed plan are required in order to retain the tree. Specific recommendations are required from the Arborist to reduce proposed impacts.
Moderate Impact:	Impacts considered to be within the range of sustainable root loss. Specific recommendations are required from the Arborist to reduce proposed impacts.
Low Impact:	Minor impacts well within the sustainable range of root loss. Arborist supervised alterations within the tree canopy are required.

Tree Photos

Tree #424

Tree #422

Existing Site Plan - Tree Inventory



Tree canopies shown are diagrammatic. Site Plan provided by LHB & Associates, Ltd. Not to Scale