ARBORIST REPORT
TREE INVENTORY SUPPLEMENT
and
IMPACT ASSESSMENT

DIAMOND SPRINGS VILLAGE APARTMENTS PROJECT SITE
6035 Service Drive, Diamond Springs
County of El Dorado, California

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COPYRIGHT STATEMENT

This consultant's report, dated May 2, 2018, is for the exclusive and confidential use of CoreCare Foundation concerning potential development of the Diamond Springs Village Apartments Project Site, located at 6035 Service Drive, in Diamond Springs, California. Any use of this report, the accompanying appendices, or portions thereof, other than for project review and approval by appropriate governmental authorities, shall be subject to and require the written permission of Acorn Arboricultural Services. Unauthorized modification, distribution and/or use of this report, including the data or portions thereof contained within the accompanying appendices, is strictly prohibited.

QUALIFICATION STATEMENT

Acorn Arboricultural Services, Inc. is a fully insured, Roseville-based arboriculture consulting firm founded by its Principal, Jay Bate. Edwin E. Stirtz is an ISA Certified Arborist and a member of the American Society of Consulting Arborists and International Society of Arboriculture. Mr. Stirtz possesses in excess of 30 years of experience in horticulture and arboriculture, both maintenance and construction, and has spent the last 23 years as a consulting and preservation specialist in the Sacramento and surrounding regions.

INTRODUCTION

Acorn Arboricultural Services is pleased to present this Arborist Report, Tree Inventory Supplement and Impact assessment for the trees located within and/or overhanging the Diamond Springs Village Apartments Project Site, located at 6035 Service Drive in Diamond Springs, California. This Arborist Report, Tree Inventory Supplement, and Impact Assessment has been prepared for the CoreCare Foundation in an effort to provide a guide to aid in the development of this site. The Tree Inventory Supplement documents tree data obtained by Edwin E. Stirtz, ISA Certified Arborist WE-0510A, at the time of field reconnaissance and inventory efforts on May 1, 2018 for trees located on Black Rice Road. An Oak Tree Survey, Preservation & Replacement Plan prepared by Natural Investigations Company and dated April 2017 was provided to evaluate for comparison to The County of El Dorado's revised Oak Resource Management Plan (ORMP) and Oak Resource Conservation Ordinance (ORCO), which was adopted on October 24, 2017. The Natural Investigations Replacement Plan was prepared prior to the implementation of the new ordinance and Core Care Foundation has requested a review of the Replacement Plan for consistency with the revised ordinance and how the revised ORMP/ORCO may impact it.

SCOPE OF INVENTORY EFFORT

A tree inventory was performed on the project site in April 2017. This report documents data collected on additional trees along Black Rice Road (between Wimbledon Drive and Highway 49. Oak trees along this section 5 inches (10 inches for multi-stem trees) or more measured at 54 inches above ground level (diameter at standard height/DSH) were included in the inventory effort. Non-oak trees were noted on the Tree Inventory Field Exhibit, but not tagged or inventoried. There are various small trees (<5 inches) and shrubs along this section which were not tagged or included within this inventory.

METHODOLOGY

During field reconnaissance and inventory efforts on May 1, 2018, Edwin E. Stirtz of Acorn Arboricultural Services conducted a visual review from ground level of the trees within and/or overhanging Black Rice Road. The proposed improvements to this area include widening the road from 20 feet to 24 feet and adding a 6-foot wide sidewalk along the south side of this road. The trees which met the defined criteria were identified in the field by affixing pre-stamped, round, aluminum number tags to the tree trunks. The tree numbers utilized in this report and accompanying Tree Inventory Supplement correspond to the tree tags which were affixed to the trees in the field, and those tree numbers or grouping of numbers have been digitized on an aerial Tree Inventory Field Exhibit to document the trees general locations.

At the time of field identification and inventory efforts specific data was gathered for each tagged tree including the tree's species, diameter measured at breast height ("DBH") and dripline radius ("DLR"). Utilizing this data the tree's overall structural condition and vigor were separately assessed ranging from "excellent"[1] to "poor" based upon the observed characteristics noted within the tree and the Arborist's best professional judgment. Ratings are subjective and are dependent upon both the structure and vigor of the tree. The vigor rating considers factors such as foliage size, color and density; the amount of deadwood within the canopy; bud viability; evidence of reaction growth; and the presence or evidence of stress, disease, nutrient deficiency and insect infestation. The structural rating reflects the root crown/collar, trunk and branch configurations; canopy balance; the presence of included bark, weak crotches and other structural defects and decay and the potential for structural failure. Finally, notable characteristics were documented and recommendations on a tree-by-tree basis were made which logically followed the observed characteristics noted within the trees at the time of the field inventory effort. These recommendations and maintenance specifications are based on the typical requirements for the age and species of each tree as well as the condition of the tree in terms of a normal shape and structure for the species.

SUMMARY OF INVENTORY EFFORT

Field reconnaissance and inventory efforts found 11 trees measuring 5 inches in diameter and larger measured at breast height within and/or overhanging the proposed project area. Composition of the 11 inventoried trees includes the following species and accompanying aggregate diameter inches:

SPECIES DIVERSIFICATION			
Interior Live Oak	=	9 trees	(158 aggregate diameter inches)
Blue Oak	=	2 tree	(49 aggregate diameter inches)
TOTAL	**=**	**11 trees**	**(207 aggregate diameter inches)**

[1] It is rare that a tree qualifies in an "excellent" category, and it should be noted that there were no trees observed within the project area which fell within the criteria of an "excellent" or "good" rating. A complete description of the definitions and ratings utilized in this report and accompany inventory summary are found on pages 8-9.

Recommended Removals

At this time, one individual tree has been recommended for removal from the proposed project area due to the nature and extent of defects, compromised health, and/or structural instability noted at the time of field inventory efforts. For reference, the tree which has been recommended for removal due to the severity of noted defects, compromised health, and/or structural instability is highlighted in green within the accompanying Tree Inventory Summary and briefly summarized as follows:

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT		PRIORITY
						STRUCTURE	VIGOR	
774	Interior Live Oak	*(Quercus wislizeni)*	13,14	27	16	Poor	Poor	1

It is important to note that under the revised ORMP/ORCO, only Valley Oaks *(Quercus lobata)* need to be mitigated for this project type. Therefore, the removal recommended above does not require mitigation. There may be other inventoried trees along Black Rice Road that require removal to implement the proposed widening and improvements. Since none of the trees in the Supplemental Tree Inventory are Valley Oaks, none should require mitigation should they need to be removed. This statement does not apply to the original Tree Inventory performed in April 2017 where Valley Oaks were inventoried.

REVIEW OF NATURAL INVESTIGATIONS REPLACEMENT PLAN (DATED APRIL 18, 2017)

An Oak Tree Survey, Preservation and Replacement Plan prepared by Natural Investigations Co. dated April 18, 2017 concluded that the project site is "…dominated by annual grassland habitats. Remnants of mixed oak-conifer woodlands and a small riparian corridor and associated wetlands are interspersed within the grasslands." It also concluded that "The percentage of oak species in the canopy is greater than the 10% threshold to define it as oak woodland; thus the woodland is an oak woodland as defined by County regulations."

The author stated that "the Property is subject to Canopy Retention and Replacement because the Property is greater than 1 acre and it contains more than 1 percent oak canopy cover." The calculated area of oak canopy to be removed was 0.110 acres, approximately 10% of the total oak canopy. The 90% retention standard was met.

The revision to the El Dorado County Oak Resource Management Plan (ORMP) and Oak Resource Conservation Ordinance (ORCO; adopted October 24, 2017) does not change the original impact assessment. Since the canopy impacts are to Valley Oak trees the mitigation requirement of 22 new oak trees is still mandated by the ordinance.

ADDITIONAL COMMENTS ON ARBORIST'S REPORT (DATED APRIL 18, 2017)

The report correctly states that Tree 78 is a Heritage tree (as defined by the ORMP/ORCO). The current condition of this tree is summarized below:

TREE #	COMMON NAME	SPECIES	TOTAL DBH (inches)	DLR (feet)	CONDITIONAL ASSESSMENT					
					ROOT CROWN	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR
78	Valley Oak	*(Quercus lobata)*	46	50	Fair	Poor	Poor to fair	Dormant	Poor	Fair

Should the tree be retained, we recommend that additional examination of the tree take place prior to development. This should include an aerial inspection, decay inspection, and root crown inspection. Trees in this condition may be suited for intensive preservation efforts such as cabling, canopy reduction, and cleaning. Risk to humans may be mitigated by restricting access under it. Should the client decide to remove this tree, it meets the El Dorado County ORMP/ORCO criteria of "dead, dying or diseased" and should be exempt from mitigation requirements.

All recommendations are based on the current, applicable American National Standards Institute Standards (ANSI) for tree care activities (ANSI A300 (Part 1) – 2017) and all work performed under these specifications shall comply with the ANSI A300 standards and the International Society of Arboriculture Best Management Practices for pruning. All tree maintenance activities shall comply with ANSI Z133-2012 Safety requirements for Arboricultural Operations.

SUMMARY

No new mitigation required for Black Rice Road widening. No change in previous mitigation for on-site Oak Woodland/Individual Oak Impacts, 22 trees (based on 0.110 ac impact per Natural Investigations) which = $3,366.00 ($153 per/inch) or $911 using the acreage replacement calculation.

COMMENTS AND ARBORISTS' DISCLAIMER

The County of El Dorado regulates the removal of "protected trees" and prior to any tree removal it should be determined which if any trees proposed for removal require a tree permit which may then be obtained from the County.

Please bear in mind that implementation of the recommendations provided within this report will help to reduce risk associated with trees however, implementation of any

recommendations should not be viewed as a guarantee or warranty against the trees' ultimate demise and/or failure in the future. Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of the trees and ***attempt to reduce the risk of living near trees***. Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. There are some inherent risks with trees that cannot be predicted with any degree of certainty, even by a skilled and experienced arborist. Individuals who choose to live in treed areas accept a certain level of risk from unpredictable tree related hazards such as toppling in storms and limbs falling that may damage property at some time in the future. Since trees are living organisms their structure and vigor constantly change over time, and they are not immune to changes in site conditions or seasonal variations in the weather. Further, conditions are often hidden within the tree and/or below ground. Arborists and other tree care professionals cannot guarantee that a tree will be healthy and/or safe under all circumstances or for a specific period of time. Likewise remedial treatments cannot be guaranteed. Trees can be managed but they cannot be controlled. To develop land and live near trees is to accept some degree of risk and the only way to eliminate all risk associated with trees would be to eliminate all of the trees. Acorn Arboricultural Services cannot predict acts of nature including, without limitation, storms of sufficient strength which can even take down a tree with a structurally sound and vigorous appearance.

Finally, the trees included in the Diamond Springs Village Apartments Project Site should be regularly monitored on an annual basis as well as after significant storm events. As trees age, the likelihood of failure of branches or entire trees increases and occasional pruning, fertilization, mulch, pest management, replanting and/or irrigation may be required and annual inspections can often identify these items prior to a significant Therefore, ***the future management plan must include an annual inspection*** by a qualified ISA Certified Arborist to keep abreast of the trees' changing condition(s) and to assess the trees' ongoing structural integrity and potential for hazard in a developed environment.

Thank you for allowing Acorn Arboricultural Services to assist you with this tree inventory and maintenance specification. Please feel free to give me a call if you have any questions or require additional information and/or clarification.

Sincerely,

Edwin E. Stirtz
International Society of Arboriculture
Certified Arborist WE-0510A
ISA Tree Risk Assessment Qualified
Member, American Society of Consulting Arborists

ASSUMPTIONS AND LIMITING CONDITIONS

1. Any legal description provided to the consultant is assumed to be correct. Any titles and ownership to any property are assumed to be good and marketable. No responsibility is assumed for matters legal in character. Any and all property is appraised or evaluated as though free and clear, under responsible ownership and competent management.

2. It is assumed that any property is not in violation of any applicable codes, ordinances, statutes, or other governmental regulations.

3. Care has been taken to obtain all information from reliable sources. All data has been verified insofar as possible; however, the consultant can neither guarantee nor be responsible for the accuracy of information provided by others.

4. The consultant shall not be required to give a deposition and/or attend court by reason of this report unless subsequent contractual arrangements are made for in advance, including payment of an additional fee for such services according to our standard fee schedule, adjusted yearly, and terms of the subsequent contract of engagement.

5. Loss or alteration of any part of this report invalidates the entire report. Ownership of any documents produced passes to the Client only when all fess have been paid.

6. Possession of this report or a copy thereof does not imply right of publication or use for any purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant.

7. Neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without the prior expressed written or verbal consent of the consultant, particularly as to value conclusions, identity of the consultant, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant as stated in his qualifications.

8. This report and any values expressed herein represent the opinion of the consultant and the consultant's fee is in no way contingent upon the reporting of a specified value, a stipulated result, the occurrence of a subsequent event, nor upon any finding to be reported.

9. Sketches, diagrams, graphs, drawings and photographs within this report are intended as visual aids and are not necessarily to scale and should not be construed as engineering or architectural reports or surveys. The reproduction of information generated by other consultants is for coordination and ease of

reference. Inclusion of such information does not constitute a representation by the consultant as to the sufficiency or accuracy of the information.

10. Unless expressed otherwise: 1) information contained in this report covers only those items that were examined and reflects the condition of those items at the time of inspection; and 2) the inspection is limited to visual examination of accessible items without laboratory analysis, dissection, excavation, probing or coring, unless otherwise stated.

11. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

12. This report is based on the observations and opinions of Edwin E. Stirtz, and does not provide guarantees regarding the future performance, health, vigor, structural stability or safety of the plants described herein. Neither this author nor Acorn Arboricultural Services has assumed any responsibility for liability associated with the trees on or adjacent to this Project Site, their future demise and/or any damage which may result therefrom.

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13. The information contained within this report is true to the best of the author's knowledge and experience as of the date it was prepared; however, certain conditions may exist which only a comprehensive, scientific, investigation might reveal which should be performed by other consulting professionals.

14. The legal description, dimensions, and areas herein are assumed to be correct. No responsibility is assumed for matters that are legal in nature.

15. Any changes to an established tree's environment can cause its decline, death and/or structural failure.

DEFINITIONS

Tree Number:	Corresponds to aluminum tag attached to the tree.
Species Identification:	Scientific and common species name.
Diameter ("DSH"):	This is the trunk diameter measured at standard height (industry standard 4.5 feet above ground level).
Dripline radius ("DLR"):	A radius equal to the horizontal distance from the trunk of the tree to the end of the farthest most branch tip prior to any cutting. When depicted on a map, the dripline will appear as an irregularly shaped circle that follows the contour of the tree's branches as seen from overhead.
Protected Zone:	A circle equal to the largest radius of a protected tree's dripline plus 1 foot.
Root Crown:	Assessment of the root crown/collar area located at the base of the trunk of the tree at soil level.
Trunk:	Assessment of the tree's main trunk from ground level generally to the point of the primary crotch structure.
Limbs:	Assessment of both smaller and larger branching, generally from primary crotch structure to branch tips.
Foliage:	Tree's leaves.
Overall Condition:	Describes overall condition of the tree in terms of structure and vigor.
Recommendation:	Pre-development recommendations based upon observed characteristics noted at the time of the field inventory effort.
Obscured:	Occasionally some portion of the tree may be obscured from visual inspection due to the presence of dense vegetation which, during the course of inspection for the arborist report, prevented a complete evaluation of the tree. In these cases, if the tree is to be retained on site the vegetation should be removed to allow for a complete assessment of the tree prior to making final decisions regarding the suitability for retention.

TREE CONDITION RATING CRITERIA

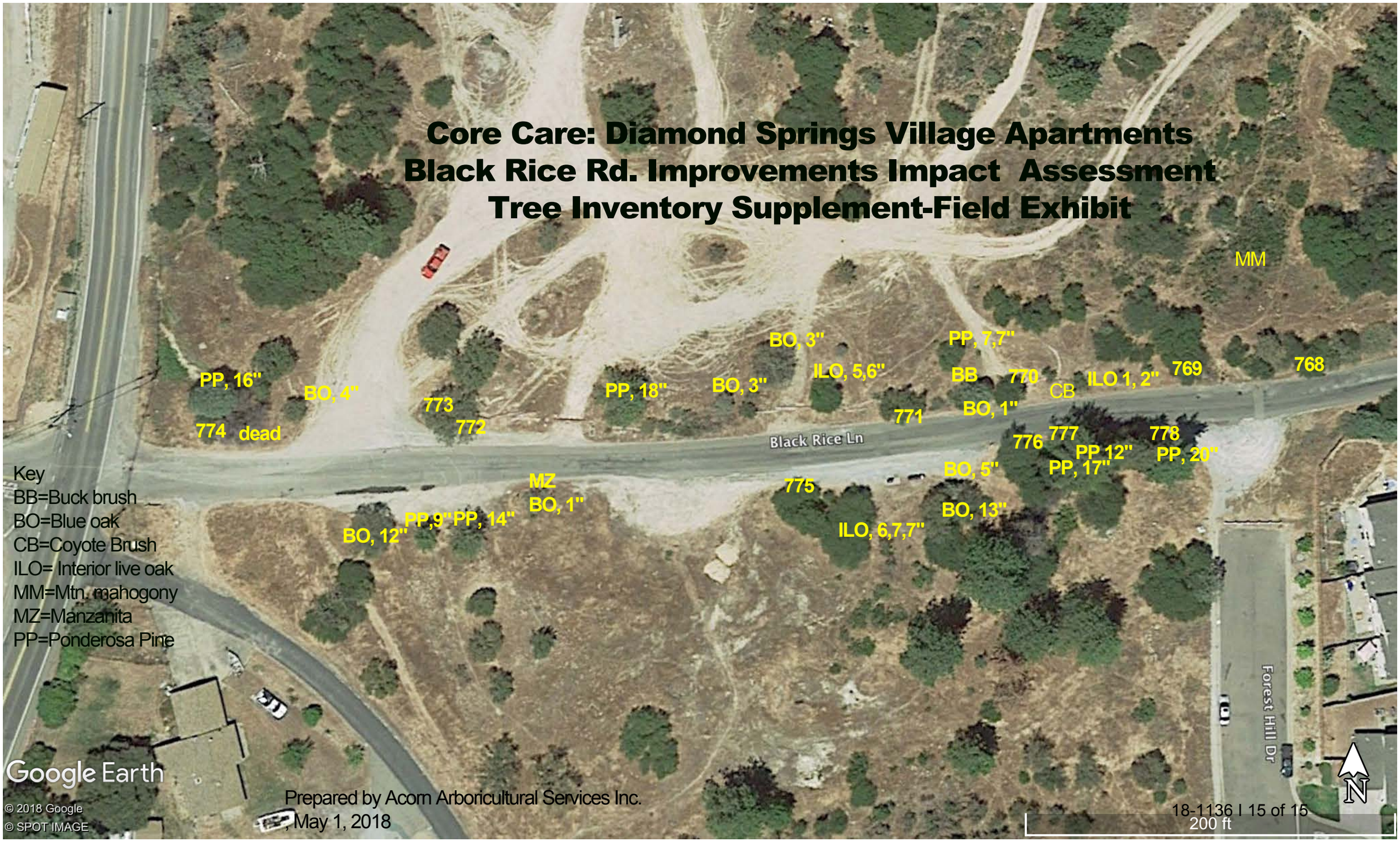
RATING TERM	ROOT CROWN	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR
Good	No apparent injuries, decay, cavities or evidence of hollowing; no anchoring roots exposed; no indications of infestation or disease	No apparent injuries, decay, cavities or evidence of hollowing; no codominant attachments or multiple trunk attachments are observed; no indications of infestation or disease	No apparent injuries, decay, cavities or evidence of hollowing; below average amount of dead limbs or twigs; no major limb failures or included bark; callus growth is vigorous	Leaf size, color and density are typical for the species; buds are normal in size, viable, abundant and uniform throughout the canopy; annual seasonal growth increments are average or above average; no insect or disease infestations/ infections evident	No apparent structural defects; no weak crotches; no excessively weighted branches and no significant cavities or decay	Tree appears healthy and has little or no significant deadwood; foliage is normal and healthy
Fair	Small to moderate injuries, decay, cavities or hollowing may be evident but are not currently affecting the overall structure; some evidence of infestation or disease may be present but is not currently affecting the tree's structure	Small to moderate injuries, decay, cavities or hollowing may be evident; codominant branching or multiple trunk attachments or minor bark inclusion may be observed; some infestation or disease may be present but not currently affecting the tree's structure	Small to moderate injuries, decay or cavities may be present; average or above average dead limbs or twigs may be present; some limb failures or bark inclusion observed; callus growth is average	Leaf size, color and density are typical or slightly below typical for the species; buds are normal or slightly sparse with potentially varied viability, abundance and distribution throughout the canopy; annual seasonal growth increments are average or slightly below average; minor insect or disease infestation/infection may be present	Minor structural problems such as weak crotches, minor wounds and/or cavities or moderate amount of excessive weight; non-critical structural defects which can be mitigated through pruning, cabling or bracing	Tree appears stressed or partially damaged; minimal vegetative growth since previous season; moderate amount of deadwood, abnormal foliage and minor lesions or cambium dieback
Poor	Moderate to severe injuries, decay, cavities or hollowing may be evident and are affecting the overall structure; presence of infestation or disease may be significant and affecting the tree's structure	Moderate to severe injuries, decay, cavities or hollowing may be evident and are affecting the tree's structure; presence of infestation or disease may be significant and affecting the tree's structure	Severe injuries, decay or cavities may be present; major deadwood, twig dieback, limb failures or bark inclusion observed; callus growth is below average	Leaf size, color and density are obviously abnormal; buds are obviously abnormal or absent; annual seasonal growth is well below average for the species; insect or disease problems may be severe	Obvious major structural problems which cannot be corrected with mitigation; potential for major limb, trunk or root system failure is high; significant decay or dieback may be present	Tree health is declining; no new vegetative growth; large amounts of deadwood; foliage is severely abnormal

The ratings "good to fair" and "fair to poor" are used to describe trees that fall between the described major categories and have elements of both

Tree Inventory Supplement
Core Care Foundation
Diamond Springs Village Apartments
Co. of El Dorado, CA

TREE #	COMMON NAME	SPECIES	MULTI-STEMS (inches)	TOTAL DBH INCHES	DLR (feet)	CONDITIONAL ASSESSMENT						NOTABLE CHARACTERISTICS	MAINTENANCE RECOMMENDATIONS
						RT CR	TRUNK	LIMBS	FOLIAGE	STRUCTURE	VIGOR		
768	Interior Live Oak	*(Quercus wislizeni)*	5,6,7	18	12	Poor-fair	Poor-fair	Poor-fair	Fair	Poor-fair	Fair	Callousing basal trunk cavity, partial stem fail	None at this time
769	Interior Live Oak	*(Quercus wislizeni)*	8,8	16	13	Poor-fair	Poor-fair	Fair	Fair	Poor-fair	Fair	Forks 1' above grade w/ weak attachments.	None at this time
770	Interior Live Oak	*(Quercus wislizeni)*	4,4,6	14	7	Fair	Fair	Fair	Fair	Fair	Fair	Slightly above average amount of deadwood	None at this time
771	Interior Live Oak	*(Quercus wislizeni)*	3,4,5,6,7	27	10	Poor-fair	Poor-fair	Fair	Fair	Poor-fair	Fair	Weak attachements; one-sided to the South	None at this time
772	Blue Oak	*(Quercus douglasii)*	5,6,7,7	25	12	Poor-fair	Poor-fair	Poor-fair	Fair	Poor	Fair	Callousing basal trunk wounds, moderate dec	None at this time
773	Blue Oak	*(Quercus douglasii)*	3,5,4,6,6	24	15	Poor-fair	Poor-fair	Poor-fair	Fair	Poor-fair	Fair	Fork at grade to 1' above grade. Out of balan	None at this time
774	Interior Live Oak	*(Quercus wislizeni)*	13,14	27	16	Poor-fair	Poor-fair	Poor-fair	Poor	Poor	Poor	85% dead	***Recommend removal due to nature and extent of noted defects.***
775	Interior Live Oak	*(Quercus wislizeni)*	7,7,12	26	12	Poor-fair	Poor-fair	Fair	Fair	Poor-fair	Fair	Minor decay on S side; weak attachments, sli	None at this time
776	Interior Live Oak	*(Quercus wislizeni)*		11	13	Fair	Fair	Fair	Fair	Fair	Fair		None at this time
777	Interior Live Oak	*(Quercus wislizeni)*	6,6	12	17	Poor-fair	poor	Poor-fair	Fair	Fair	Fair		None at this time
778	Interior Live Oak	*(Quercus wislizeni)*		7	12	Fair	Fair	Fair	Fair	Fair	Fair	Slightly above average amount of deadwood	None at this time

TOTAL INVENTORIED TREES = 11 trees (207 aggregate diameter inches)
TOTAL RECOMMENDED REMOVALS = 1 tree (27 aggregate diameter inches)


Core Care: Diamond Springs Village Apartments
Black Rice Rd. Improvements Impact Assessment
Tree Inventory Supplement-Field Exhibit
MM
PP, 16"
BO, 4"
774 dead
773
772
PP, 18"
BO, 3"
BO, 3"
ILO, 5,6"
771
PP, 7,7"
BB
770
CB
ILO 1, 2"
769
768
BO, 1"
776
777
778
PP 12"
PP, 17"
PP, 20"
BO, 5"
775
MZ
BO, 1"
BO, 13"
ILO, 6,7,7"
BO, 12"
PP,9"
PP, 14"
Black Rice Ln
Forest Hill Dr
Key
BB=Buck brush
BO=Blue oak
CB=Coyote Brush
ILO= Interior live oak
MM=Mtn. mahogony
MZ=Manzanita
PP=Ponderosa Pine
Google Earth
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, May 1, 2018
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200 ft