



TREE
ASSOCIATES

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March 30, 2017

Andi Panagopoulos
Cunningham Engineering Corporation
2120 20th Street, Suite Three
Sacramento, CA 95818

RE: Arborist Report: Twin Rivers, Sacramento, California

Dear Andi,

Attached is the report you requested. I appreciate the opportunity to work with you. Please do not hesitate to contact me should you have questions regarding this report.

Sincerely,

John M. Lichter, M.S.
ASCA Registered Consulting Arborist #375
ISA Board Certified Master Arborist #863
ISA Qualified Tree Risk Assessor





**ARBORIST REPORT:
TREE EVALUATION AND
PRESERVATION GUIDELINES
TWIN RIVERS, SACRAMENTO**

**Prepared for
CUNNINGHAM ENGINEERING CORPORATION
Sacramento, California**

**Prepared by
TREE ASSOCIATES
John M. Lichter, M.S.
ASCA Registered Consulting Arborist #375
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March 30, 2017

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Assignment

Ms. Andi Panagopoulos with Cunningham Engineering, Sacramento contacted me requesting an arborist report for the Twin Rivers Development Project in Sacramento, California.

The report was to include an evaluation and preservation guidelines for all on site trees. A second, upcoming phase of my work on this project is to provide a development impact assessment for trees to be preserved.

Tree Evaluation

For each of the on site trees (with the exception of small tree of heaven and small multi-trunked crepe myrtle), the following data were provided. An attached table, entitled "Tree Evaluation, Twin Rivers" is attached, which summarizes the results of the tree evaluation. The location of trees are shown on the attached topographic plan.

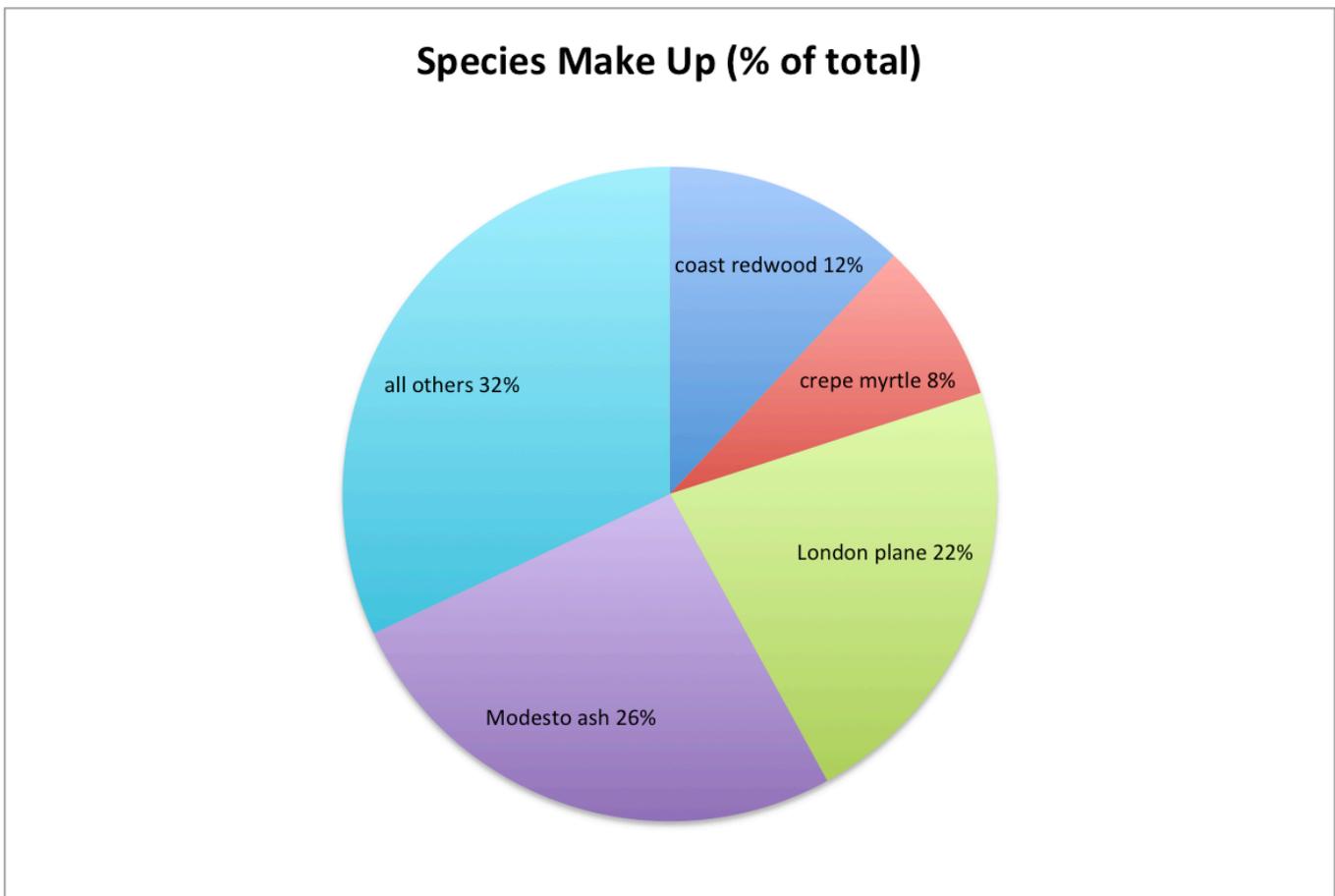
- Tree Number – corresponds to a round aluminum tag affixed to each tree.
- Species – common and Latin name of tree.
- Trunk Diameter – the diameter of the tree (in inches) at 4.5' above grade, unless measurement at another location between 1 and 5 feet above grade provided a more accurate reflection of the size of the tree.
- Dripline – the approximate maximum distance from the trunk to the edge of the branches, in feet.
- Tree Protection Zone (TPZ) – the radius in feet of a circular tree protection zone recommended by the author.
- Health Rating – rating of the health of the tree. A rating of fair-good indicates no significant health concerns.
- Structural Rating – rating of the structure of the tree. A rating of fair-good indicates no significant structural concerns.
- Comments – comments regarding tree and landscape features that influenced condition ratings.
- Recommendations – recommendations for tree work or treatments to improve tree structure or health or for further evaluation, where necessary. Note: recommendations are indicated in red where removal was recommended.



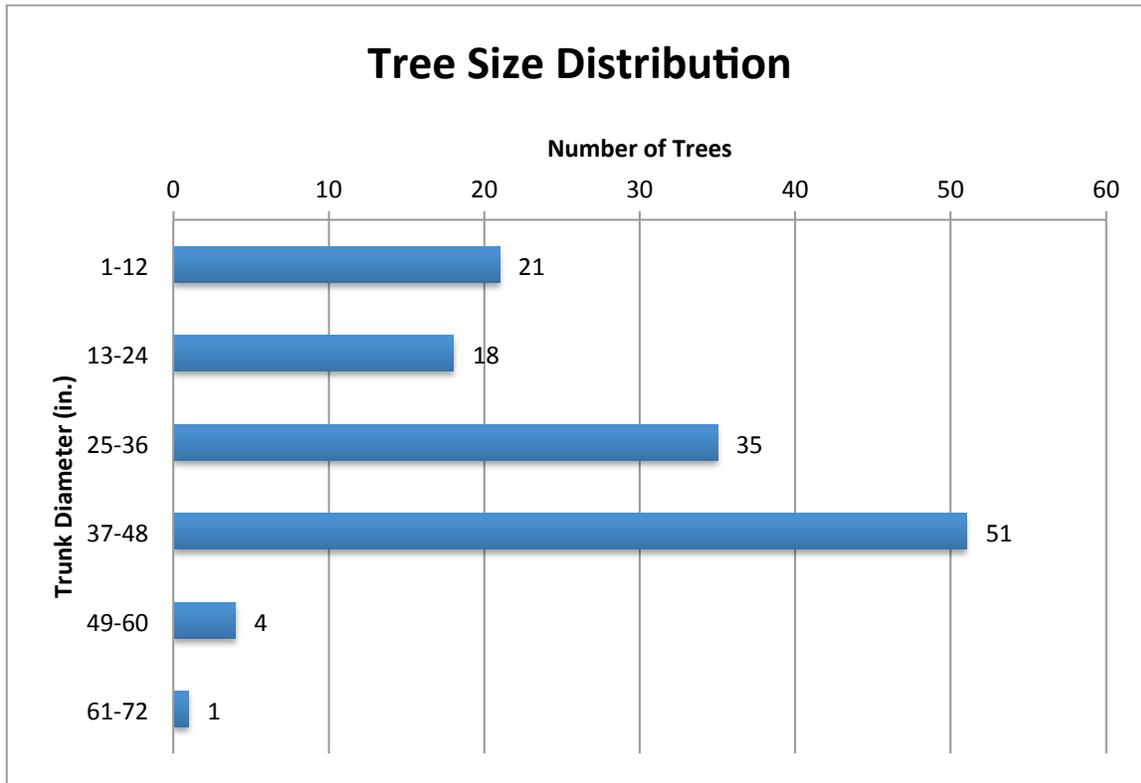
Tree Species and Size Distribution

I identified, tagged in the field, and evaluated the subject trees between March 13th and March 17th, 2017. There were 130 trees on the project site.

Twenty-six tree species were present on site. Nearly half of the trees (48%) were Modesto ash or London plane. Coast redwood (12% of total) and crepe myrtle (8% of total) were the next most common species. No other individual species represented more than 4% of the total population (see Species Distribution chart, below).

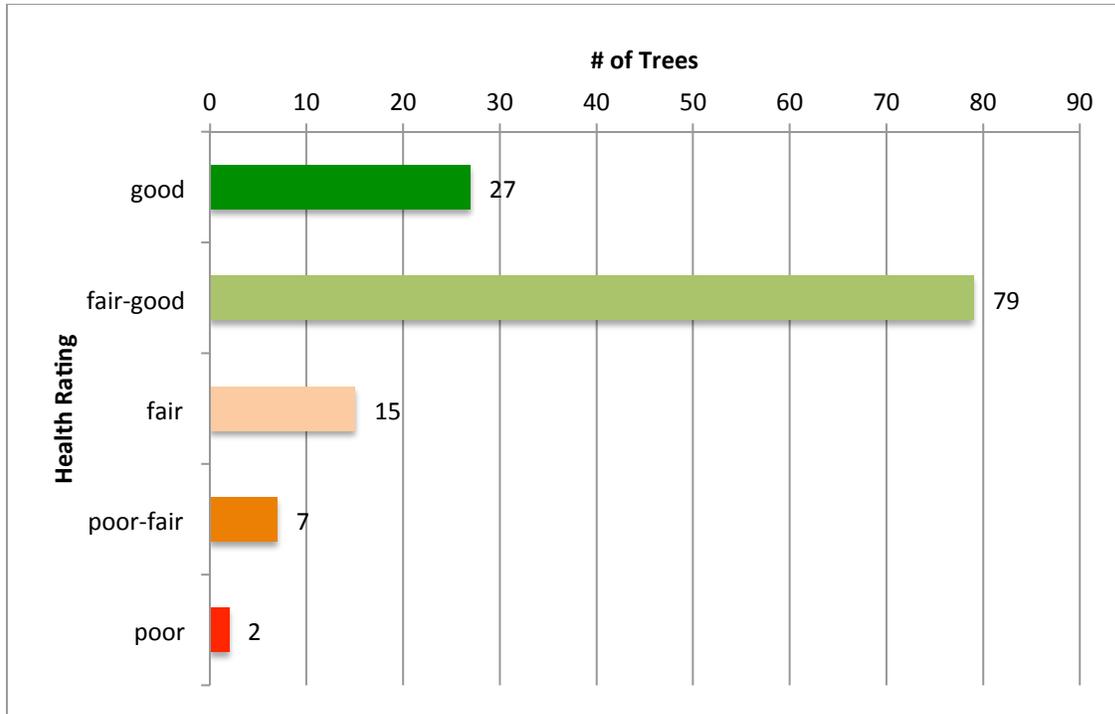


The vast majority of trees on site were large and mature (see Tree Size Distribution chart, below). The largest tree was 62 inches in diameter. Seventy percent of the trees had trunk diameters greater than 24 inches and 43% of the trees were greater than 36 inches in diameter.

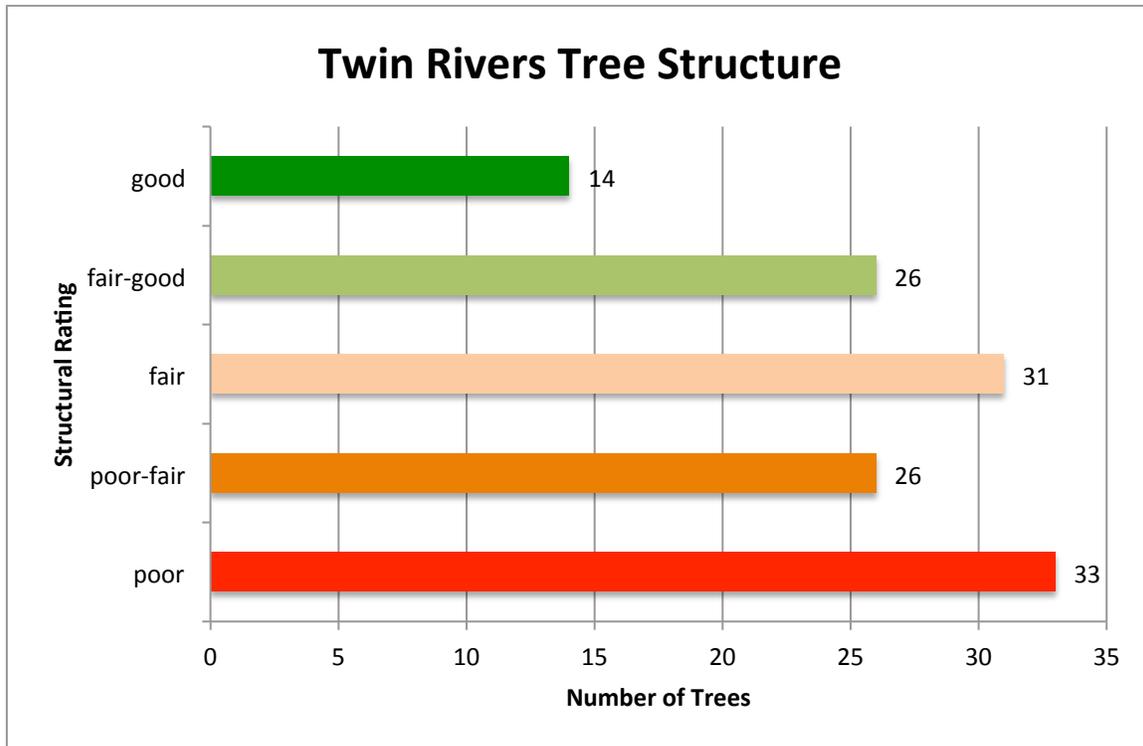


Tree Condition

Tree health was generally good. Ninety-six trees or 74% of the population was in fair-good or good health. Only seven percent (9 trees) were in poor-fair or poor health (see table, below).



Tree structure was generally poor, with 45% of the population (59 trees) with poor-fair or poor structure. This was largely due to the high number of Modesto ash with poor structure. I recommended 34 trees (26% of the total) be removed. Twenty-six of the trees recommended for removal were Modesto ash. I suggested a more detailed inspection (aerial inspection, decay mapping and/or root examination) of seventeen trees should be performed to better understand their structure and provide necessary risk-mitigation treatments.



Limits/Assumptions of the Assignment

- This evaluation reports on the condition of the subject trees at the time of my site visit. Tree conditions change over time and, as they change, the trees values may change and this report may need to be revised.



Arborist Disclosure Statement

The following statement pertains to my work and this report.

Arborists are tree specialists who use their education, knowledge, training and experience to examine trees, recommend measures to enhance the beauty and health of trees, and attempt to reduce the risk of living near trees. Clients may choose to accept or disregard the recommendations of the Arborist, or to seek additional advice.

Arborists cannot detect every condition that could possibly lead to the structural failure of a tree. Trees are living organisms that fail in ways we do not fully understand. Conditions are often hidden within trees and below ground. Arborists cannot guarantee that a tree will be healthy or safe under all circumstances, or for a specified period of time. Likewise, remedial treatments, like any medicine, cannot be guaranteed.

Treatment, pruning and removal of trees may involve considerations beyond the scope of the Arborist's services such as property boundaries, property ownership, site lines, disputes between neighbors, and other issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the Arborist. An Arborist should then be expected to reasonably rely upon the completeness and accuracy of the information provided.

Trees can be managed, but they cannot be controlled. To live near trees is to accept some degree of risk. The only way to eliminate all risk associated with trees is to eliminate all trees.



General Tree Preservation Guidelines

The guidelines presented below should be followed for all trees to be preserved to ensure the least impact considering the proposed construction.

- For trees to be preserved, trunk locations should be surveyed and trunk locations and tree protection zones (TPZ's) plotted on all civil and landscape plans.
- A development impact assessment, providing prognoses for trees, possible design modifications and tree preservation specifications should be provided by the Consulting Arborist once construction plans are drafted.
- Wherever possible, the design should avoid grading, compaction, trenching, rototilling, vehicle traffic, material storage, spoil, waste or washout or any other infrastructure and/or disturbance within TPZ's.
- Conduct a meeting to discuss tree preservation guidelines with Consulting Arborist and all contractors, subcontractors and project managers prior to the initiation of demolition and construction.
- Prior to any demolition activity on site, identify (tagged) trees to be preserved and install tree protection fencing in a circle centered at the tree trunk with a radius equal to the defined tree protection zone (see table) or as indicated on plans. Tree protection fences should be made of chain link with posts sunk into the ground. These fences should not be removed or moved until construction is complete. Avoid soil or above ground disturbances within the fenced area.
- Any work that is to occur within the protection zones of the trees should be monitored by the Consulting Arborist. The Project Manager, Inspector and or Superintendent will need to contact the Consulting Arborist to provide this monitoring.
- If roots larger than 2 inches or limbs larger than 3 inches in diameter are cut or damaged during construction, contact Consulting Arborist as soon as possible to inspect and recommend appropriate remedial treatments.
- Any pruning required for construction or recommended in this report should be performed by an ISA Certified Arborist or Tree Worker. Pruning for necessary clearance should be the minimum required to build the project and performed prior to demolition by an ISA Certified Arborist.
- All trees to be preserved should be irrigated once every two weeks during non-Winter months to wet the soil to a depth of at least 18 inches under and beyond their canopies.



Glossary¹

Bow – the gradual curve of a branch or stem.

Callus – growth resulting from and found at the margin of wounds.

Canker – a localized area of dead tissue on a stem or branch, caused by fungal or bacterial organisms.

Central Leader – the main stem of the tree.

Chlorotic – yellow.

Codominant – equal in size and relative importance.

Crown – parts of the tree above the trunk.

Crown Clean – the removal of dead, dying, diseased, broken, and weakly attached branches and watersprouts from a tree's crown.

Decay – process of degradation of woody tissues by fungi and bacteria.

Dieback – death of shoots and branches, generally from tip to base.

Dropcrotch – the process of shortening trunks or limbs by pruning back to dominant lateral limbs.

End Weight – the concentration of foliage at the distal ends of branches.

Epicormic – shoots which result from adventitious or latent buds; often indicates poor vigor.

Included bark – pattern of development at branch junctions where bark is turned inward rather than pushed out.

Primary limb – limb attached directly to the trunk.

Reduction cut – shortening the length of a branch or stem by cutting it back to a lateral branch of at least one-third the diameter of the cut stem.

Root crown – area at the base of a tree where the roots and stem merge.

Secondary limb – limb attached directly to a primary limb.

Sound wood – undecayed wood.

Suppressed – trees which have been overtopped and whose crown development is restricted from above.

Target – people or property potentially affected by tree failure.

Topped – Pruned to reduce height by cutting large branches back to stubs.

Train – to prune a young tree to establish a strong structure.

Vigor – overall health.

Watersprouts – vigorous, upright, epicormic shoots that grow from latent buds in older wood.

¹ Definitions from author or Matheny and Clark, Evaluation of Hazard Trees in Urban Areas, 2nd Edition c 1994, ISA.

Certification of Performance

I, John M. Lichter, certify:

- That I have personally inspected the tree(s) and/or the property referred to in this report, and have stated my findings accurately. The extent of the evaluation and/or appraisal is stated in the attached report and the Terms and Conditions;
- That I have no current or prospective interest in the vegetation or the property that is the subject of this report, and I have no personal interest or bias with respect to the parties involved;
- That the analysis, opinions and conclusions stated herein are my own, and are based on current scientific procedures and facts;
- That my compensation is not contingent upon the reporting of a predetermined conclusion that favors the cause of the client or any other party, nor upon the results of the assessment, the attainment of stipulated results, or the occurrence of any subsequent events;
- That my analysis, opinions, and conclusions were developed and this report has been prepared according to commonly accepted Arboricultural practices;
- That no one provided significant professional assistance to the consultant, except as indicated within the report.



John M. Lichter, M.S.

ASCA Registered Consulting Arborist #375

ISA Board Certified Master Arborist #863

ISA Qualified Tree Risk Assessor



ASSUMPTIONS AND LIMITING CONDITIONS: John M. Lichter dba TREE ASSOCIATES

1. Any legal description provided to the consultant/appraiser is assumed to be correct. Any titles and ownerships 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/appraiser can neither guarantee nor be responsible for the accuracy of information provided by others.
4. The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
5. Unless required by law otherwise, 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/appraiser.
6. Unless required by law otherwise, 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/appraiser - particularly as to value conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initialed designation conferred upon the consultant/appraiser as stated in his qualifications.
7. This report and any values expressed herein represent the opinion of the consultant/appraiser, and the consultant's/appraiser'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.
8. Sketches, drawings, and photographs in this report, being intended as visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys unless expressed otherwise. The reproduction of any information generated by architects, engineers, or other consultants on any sketches, drawings, or photographs is for the express purpose of coordination and ease of reference only. Inclusion of said information on any drawings or other documents does not constitute a representation by John M. Lichter or TREE ASSOCIATES as to the sufficiency or accuracy of said information.
9. 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 dissection, excavation, probing, or coring. 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.
10. Loss or alteration of any part of this report invalidates the entire report.



**Tree Evaluation
Twin Rivers**

**To Accompany
Tree Associates Report
Dated: March 30, 2017**

#	Species	Diameter (in.)	Max Dripline (ft.)	TPZ (ft.)	Comments	Health Rating	Structural Rating	Recommendations
701	almond	11	16	11	multiple trunks with included bark	fair	poor-fair	
702	London plane	41	36	41	primary limbs with excessive end weight; multiple trunks	fair-good	fair-good	use reduction cuts to remove 25% of the foliage of primary limbs > 1/3 trunk dia.
703	coast redwood	20	12	15	adjacent to sidewalk	good	good	
704	coast redwood	21	13	16	adjacent to sidewalk	good	good	
705	coast redwood	21	12	16	adjacent to sidewalk	good	good	
706	coast redwood	22	12	17	adjacent to sidewalk	good	good	
707	coast redwood	23	15	17	adjacent to sidewalk	good	good	
708	coast redwood	24	15	18	adjacent to sidewalk	good	good	
709	coast redwood	25	16	19	adjacent to sidewalk	good	good	
710	coast redwood	26	12	20	adjacent to sidewalk	good	good	
711	London plane	39	45	39	broken, hanging limbs; deadwood	fair-good	fair-good	crown clean.
712	red oak	22	33	22	codominant trunks	fair-good	fair-good	
714	ginkgo	5	9	5	codominant trunks	good	fair	
715	crepe myrtle	7	15	7		fair-good	fair-good	
716	sour gum	9	13	9	codominant trunks with included bark	fair-good	poor-fair	supress one trunk using reduction cuts over several prunings.
717	Japanese maple	9	12	9	declining health; limb dieback; roots cut	poor-fair	fair	remove tree.
718	Japanese maple	15	12	15	low vigor; limb dieback	fair	fair-good	
719	London plane	39	36	39	multiple trunks	fair-good	fair-good	
713	Podocarpus	8	12	8	adjacent to building; unbalanced crown; codominant trunks	good	fair	
720	Modesto ash	50	36	50	multiple trunks; trunk decay; previously topped	fair-good	poor	remove tree.
721	Modesto ash	39	39	39	previously topped; limb breaks; mistletoe; side pruned to clear high voltage lines; multiple trunks	fair-good	fair	crown reduction.

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722	Modesto ash	45	33	45	previously topped; cabled; bird nesting holes; limb decay; poor limb attachments; mistletoe; multiple trunks	fair-good	poor	remove tree.
723	Modesto ash	39	33	39	side pruned to clear high voltage lines; topped; trunk decay; multiple trunks	fair-good	poor-fair	aerial inspection. map decay. crown reduction.
724	Modesto ash	44	33	44	limb breaks; side pruned to clear high voltage lines; cracked limbs; multiple trunks	fair-good	poor	remove tree.
725	Modesto ash	47	33	47	previously topped; trunk decay; bird nesting holes; poor limb attachments; limb breaks; multiple trunks	fair-good	poor	remove tree.
726	Modesto ash	48	39	48	poor limb attachments; mistletoe; multiple trunks	fair-good	fair	crown reduction. aerial inspection. use reduction cuts to remove 25% of the foliage of primary limbs > 1/3 trunk dia.
727	Modesto ash	47	36	47	previously topped; trunk decay; multiple trunks with included bark; poor limb attachments; trunk decay	fair-good	poor-fair	aerial inspection. crown reduction.
728	London plane	28	39	28	codominant trunks	fair	fair	
729	London plane	27	39	27	topped to clear high voltage lines; bird nesting holes; codominant trunks	fair	poor-fair	
730	London plane	40	51	40	topped to clear high voltage lines; multiple trunks;	fair-good	poor-fair	crown reduction.
731	London plane	26	27	26	multiple trunks; topped to clear high voltage lines	fair-good	poor-fair	
732	London plane	27	25	27	topped to clear high voltage lines; codominant trunks	fair-good	poor-fair	

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#	Species	Diameter (in.)	Max Dripline (ft.)	TPZ (ft.)	Comments	Health Rating	Structural Rating	Recommendations
733	London plane	30	30	30	topped to clear high voltage lines; wide spreading crown	fair-good	poor-fair	crown reduction.
734	London plane	30	28	30	topped to clear high voltage lines; wide spreading crown	fair-good	fair	crown reduction.
735	London plane	31	22	31	topped to clear high voltage lines; codominant trunks; limb over street with decay; watersprouts	fair-good	poor-fair	aerial inspection. use reduction cut on limb over street as dictated by aerial inspection.
736	London plane	28	26	28	multiple trunks; topped to clear high voltage lines; wide spreading crown; watersprouts	fair-good	fair	crown reduction.
737	London plane	48	30	48	topped to clear high voltage lines; massive spreading crown; limb decay	fair-good	poor-fair	crown reduction. aerial inspection.
738	London plane	28	22	28	topped to clear high voltage lines	fair-good	poor-fair	crown reduction.
739	London plane	28	21	28	multiple trunks; topped to clear high voltage lines	fair-good	poor-fair	
740	London plane	26	25	26	topped to clear high voltage lines; trunk decay; codominant trunks	fair-good	poor-fair	aerial inspection. crown reduction.
741	London plane	27	20	27	topped to clear high voltage lines	fair-good	poor-fair	
742	Modesto ash	44	29	44	previously topped; poor limb attachments; limb decay; limb; attachments with included bark	fair-good	poor	remove tree.
743	zelkova	33	28	33	previously topped; poor limb attachments; codominant trunks	good	poor-fair	aerial inspection. crown reduction.
744	zelkova	34	30	34	multiple trunks with included bark; previously topped; poor limb attachments	good	fair	aerial inspection.
745	zelkova	46	35	46	previously topped; limb breaks; multiple trunks with included bark; limb dieback; limb wounds	good	fair	aerial inspection. crown reduction.

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#	Species	Diameter (in.)	Max Dripline (ft.)	TPZ (ft.)	Comments	Health Rating	Structural Rating	Recommendations
746	coast redwood	30	14	23	redwood canker symptoms; top dead	poor-fair	good	crown clean. irrigate.
747	coast redwood	24	12	18	redwood canker symptoms	poor-fair	good	crown clean.irrigate.
748	coast redwood	26	14	20	redwood canker symptoms; top dead; codominant trunks	fair	good	crown clean. irrigate. remove one trunk.
749	coast redwood	25	13	19	codominant trunks; top dead; redwood canker symptoms	poor-fair	poor-fair	remove one trunk. crown clean. irrigate.
750	coast redwood	33	14	25	redwood canker symptoms; codominant trunks	poor	fair	remove tree.
751	camphor	13	17	13	poor root architecture; in small planter; codominant trunks; likelihood of toppling will increase with time	fair-good	poor-fair	remove tree.
752	zilkova	34	29	34	multiple trunks with included bark; limb wounds; twig dieback	fair	fair	irrigate.
753	zilkova	41	34	41	limb dieback; multiple trunks with included bark; declining health	poor	poor	remove tree as soon as possible.
754	crepe myrtle	5	7	5		fair	fair-good	irrigate.
755	crepe myrtle	7	10	7		fair	fair-good	irrigate.
756	coast redwood	31	16	23		fair-good	good	irrigate.
757	coast redwood	37	17	28	codominant trunks with included bark; low vigor; sparse canopy; primary limbs with excessive end weight	poor-fair	poor	cable trunks. irrigate. remove large vertical primary limb.
758	zilkova	34	32	34	codominant trunks with included bark; primary limbs with excessive end weight	good	poor	brace trunks. use reduction cuts to remove 25% of the foliage of primary limbs > 1/3 trunk dia.
759	Modesto ash	51	25	51	previously topped; codominant trunks with included bark; limb breaks; poor trunk attachments; large, broken, hanging limbs	fair-good	poor	remove tree. Crown clean as soon as possible.

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#	Species	Diameter (in.)	Max Dripline (ft.)	TPZ (ft.)	Comments	Health Rating	Structural Rating	Recommendations
760	sour gum	6	12	6	previously topped; large trunk wound	fair-good	fair	remove tree.
761	walnut	14	20	14	<i>Not tagged</i> ; surrounded by blackberry; multiple trunks	good	fair-good	
762	London plane	34	30	34	codominant trunks; primary limbs with slightly excessive end weight	fair-good	fair-good	
763	California black walnut	16	24	16	codominant trunks; unbalanced crown	fair-good	fair	use reduction cuts to suppress competing leaders over several prunings.
764	pecan	16	35	16	codominant trunks; primary limbs with excessive end weight; limb wounds	good	poor-fair	use reduction cuts to remove 25% of the foliage of primary limbs > 1/3 trunk dia. select leader, drop crotch competing trunks or primary limbs.
765	London plane	35	28	35	multiple trunks; previously topped	fair-good	fair-good	aerial inspection.
766	zelkova	39	40	39	multiple trunks with included bark; limb breaks	fair-good	fair	crown clean.
767	eucalyptus sp.	36	33	36	limb breaks; limb wounds; codominant trunks	good	poor-fair	crown reduction.
768	zelkova	25	28	25	limb breaks; limb dieback	poor-fair	poor-fair	crown reduction. crown clean.
769	Modesto ash	45	38	45	previously topped; trunk decay; poor limb attachments multiple trunks with included bark; mistletoe; primary limbs with excessive end weight	fair-good	poor	remove tree.
770	Modesto ash	47	38	47	previously topped; poor limb attachments; mistletoe; trunk decay; multiple trunks with included bark	fair-good	poor	remove tree.
771	London plane	52	46	52	multiple trunks; primary limbs with excessive end weight	good	fair-good	use reduction cuts to remove 25% of the foliage of primary limbs > 1/3 trunk dia.
772	London plane	50	42	50	multiple trunks	good	fair-good	

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#	Species	Diameter (in.)	Max Dripline (ft.)	TPZ (ft.)	Comments	Health Rating	Structural Rating	Recommendations
773	Modesto ash	40	27	40	previously topped; poor limb attachments; root wound; multiple trunks with included bark	fair-good	poor	remove tree.
774	Modesto ash	41	26	41	bird nesting holes; previously topped; decay in crown; poor limb attachments; multiple trunks with included bark	fair-good	poor	remove tree.
775	London plane	37	36	37	broken, hanging limbs; limb dieback; primary limbs with excessive end weight	fair-good	fair	use reduction cuts to remove 25% of the foliage of primary limbs > 1/3 trunk dia.
776	Modesto ash	46	25	46	previously topped; multiple trunks with included bark; decay in crown; poor limb attachments; trunk decay; limb breaks; side pruned to clear high voltage lines	fair-good	poor	remove tree.
777	Modesto ash	29,39	26	47	side pruned to clear high voltage lines; previously topped; trunk decay	fair-good	poor	remove tree.
778	Modesto ash	47	28	47	side pruned to clear high voltage lines; unbalanced crown; previously topped; multiple trunks with included bark; limb breaks; crack between secondary trunks	fair-good	poor	remove tree as soon as possible.
779	eucalyptus sp.	45	38	45	multiple trunks with included bark	good	fair	
780	sweet gum	22	17	22	codominant trunks	fair-good	fair	
781	ginkgo	4	7	4	trunk wound; root wound; limbs attachments with included bark	good	fair	train to strong form.

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#	Species	Diameter (in.)	Max Dripline (ft.)	TPZ (ft.)	Comments	Health Rating	Structural Rating	Recommendations
782	Modesto ash	44	34		multiple trunks with included bark; mistletoe; limb attachments with included bark; decay in crown limb breaks; large primary limb with decay	fair-good	poor	remove tree.
783	sour gum	10	18	10	codominant trunks; previously topped	good	fair	train to strong form.
784	sour gum	5	9	5		fair-good	fair-good	
785	London plane	31	29	31	trunk decay; codominant trunks; primary limbs with excessive end weight	fair-good	fair	use reduction cuts to remove 25% of the foliage of primary limbs > 1/3 trunk dia.
786	Silver dollar eucalyptus	29	25	29	limb dieback	good	fair	crown clean.
787	Modesto ash	38	34	38	previously topped; decay in crown; poor limb attachments; trunk decay; unbalanced crown	fair-good	poor	remove tree.
788	Modesto ash	38	30	38	previously topped; multiple trunks with included bark; trunk decay; limb breaks	fair-good	poor	remove tree.
789	Modesto ash	40	36	40	multiple trunks with included bark; side pruned to clear high voltage lines; trunk decay; limbs attachments with included bark	fair-good	poor-fair	aerial inspection. crown reduction. determine extent of decay.
790	London plane	37	26	37	multiple trunks; low vigor	fair	fair	
791	Modesto ash	44	28	44	multiple trunks with included bark; previously topped; trunk decay; limb breaks; limbs attachments with included bark; poor limb attachments	fair-good	poor	remove tree.

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#	Species	Diameter (in.)	Max Dripline (ft.)	TPZ (ft.)	Comments	Health Rating	Structural Rating	Recommendations
792	Modesto ash	45	29	45	previously topped; multiple trunks with included bark; trunk decay; one of four trunks removed; poor limb attachment; limbs attachments with included bark	fair-good	poor	remove tree.
828	crepe myrtle	6	9	6		fair-good	fair-good	
793	tree of heaven	46	32	46	multiple trunks	fair-good	fair	
794	California incense cedar	48	14	48	Crack between two codominant trunks; cabled	fair	poor	remove tree.
795	Chinaberry	37	22	37	codominant trunks with included bark	fair-good	poor-fair	cabl trunks.
796	London plane	39	35	39	multiple trunks; deadwood to 3"; broken, hanging limbs	fair-good	fair-good	crown clean.
797	giant redwood	15	7	15	redwood canker symptoms	fair	good	crown clean.
798	Modesto ash	42	29	42	side pruned to clear high voltage lines; unbalanced crown; previously topped; limb breaks; trunk decay; multiple trunks with included bark; trunk decay	fair-good	poor	remove tree as soon as possible.
799	Modesto ash	43	32	43	side pruned to clear high voltage lines; previously topped; unbalanced crown; trunk wounds; decay in crown; multiple trunks with included bark; poor limb attachments	fair-good	poor	remove tree.
800	Modesto ash	40	30	40	previously topped; multiple trunks with included bark; poor limb attachments; trunk decay	fair-good	poor	remove tree.
801	Modesto ash	42	31	42	previously topped; multiple trunks with included bark; trunk decay; poor branch attachments	fair-good	poor	remove tree.

**Tree Evaluation
Twin Rivers**

**To Accompany
Tree Associates Report
Dated: March 30, 2017**

#	Species	Diameter (in.)	Max Dripline (ft.)	TPZ (ft.)	Comments	Health Rating	Structural Rating	Recommendations
802	ash	25	26	25	previously topped; broken, hanging limbs	fair-good	fair	aerial inspection. use reduction cuts to remove 25% of the foliage of primary limbs > 1/3 trunk dia. crown clean.
803	London plane	43	30	43	root decay; multiple trunks; previously topped; limb with decay over street; deadwood to 5"	fair-good	fair	determine extent of decay. remove decayed limb over street. conduct aerial inspection. crown clean.
804	Modesto ash	41	35	41	multiple trunks with included bark; trunk and primary limb decay extensive; previously topped; side pruned to clear high voltage lines; unbalanced crown; limb breaks	fair-good	poor	remove tree. Asap
805	ash	35,26	40	44	previously topped; codominant trunks	fair-good	fair	conduct aerial inspection. crown reduction. cable trunks.
806	California incense cedar	29	17	29	deadwood 3"; root wound	fair-good	fair-good	
807	ash	32	38	32	limb breaks; side pruned to clear high voltage lines; unbalanced crown; trunk wound; overextended limbs; decay at limb attachment	good	poor	conduct aerial inspection. crown reduction. remove long limb over house.
808	Modesto ash	46	34	46	trunk decay; limb breaks; large watersprouts	good	fair-good	conduct aerial inspection. crown reduction.
809	Modesto ash	47	26	47	previously topped; limb breaks; multiple trunks with included bark; trunk decay; poor limb attachments; trunks separating	fair-good	poor	remove tree. Asap
810	Modesto ash	47	33	47	previously topped; trunk and limb decay; trunk cracked and separating over house	fair-good	poor	remove tree. Asap
811	Modesto ash	47	32	47	previously topped; trunk decay; poor limb attachments; crack developing on trunk	fair-good	poor	remove tree.

