

November 29, 2021

Toby Long, Project Architect
Clever Homes by Toby Long Design
6114 La Salle Avenue #552
Oakland CA 94611

Tree Inventory Report at 2801 Pinole Valley Road, Pinole, California

Toby,

Per your request we have prepared the following report evaluating the health of each tree within the vicinity of the proposed site improvements, preservation or removal recommendations, and general recommended tree protection measures. Per the City of Pinole's *Tree Policy Guidelines*, our work included the following:

1. Identification of each tree species diameters equal to, or greater than, 4" that have been numerically tagged on site.
2. Diameter of each tree
3. Existing tree health, structure and suitability for preservation
4. Identification of trees to be removed/preserved
5. Identification of 'protected trees'
6. Potential impact proposed development will place on tree
7. Restorative or other remedial action that might be feasible to address tree alterations
8. Recommended mitigations

INTRODUCTION

The purpose of this report is to document the existing trees and assess the structural integrity and general health of each species. Trees recommended for removal are privately owned, non-native species, some of which are a known invasive species. Other recommended tree removals are based on either structural deficiencies, potential hazards, or trees planted too closely to one another. The survey, dated March 20, 2019, prospered by Triad Holmes Associates is referenced below and serves as the 'background' on which the attached Tree Inventory Plan is based.

SITE SUMMARY

The 1.74 acre site is located along the eastern edge of Pinole Valley Road just south of the I-80 intersection. The 'L' shaped lot is accessed at the northern and southern corners at the northern leg of the 'L'. An existing, rectangular commercial building sits near the middle of the lot with surface parking surrounding the building. A generously sized green space sits behind the building. The relatively level lot slopes up from the edge of Pinole Valley Road to rear of the property at an approximate 3% grade.

Existing Trees

Trees on site include the following:

- Six (6) California pepper trees located between the sidewalk along Pinole Valley Road and the western parking area
- An ornamental cherry located in front of the existing building at the central breezeway
- The 'parking lot' trees, likely planted at the time of the original development of the site, include Raywood ash and Mayten
- Other species onsite include Japanese maple, pear, Japanese euonymus, *Pyracantha* and a privet

Five (5) additional trees were identified that are not shown on the survey.

This report is meant to accompany the development application for the proposed Site Improvements Plan.

All trees 4 inches, or greater, in diameter have been identified and numbered 1-35. Trees are listed in numerical order on the tree table below.

TREE INVENTORY & ASSESSMENT

A site visit was conducted on October 21, 2021.

Each tree was evaluated on a scale from 1-5 based on the following criteria:

- Structure (S) & Health (H) (1-5)
 - 1 = poorest rating
 - 5 = best rating
- Retention Value (RV) (1-5)
 - 1 = dead
 - 2 = Poor condition: extreme problems, or tree in severe decline (removal usually recommended based on poor health and potential hazard)
 - 3 = Fair condition: minor problems that can be usually remedied through basic arboriculture procedures, i.e. pruning, fertilization; (tree retention optional)
 - 4 = Good condition: no apparent problems (tree preservation recommended)
 - 5 = Tree exhibits balanced structure, vigor and exceptional health (tree preservation strongly encouraged)

While trees that receive a rating from 3-5 are deemed as worthy to preserve, it does not preclude them from being removed. The parameters of the site conditions, invasive attributes, construction layout, cost of development, and other unforeseen factors must all be considered in the preservation of any particular tree.

Diameters (DIA) were measured at 54" above grade with a diameter tape. For instances when it was difficult to use a diameter tape, diameters were approximated (i.e. ~24").

TREE SUMMARY

Thirty-six (36) trees were identified on-site, or just outside of the subject property.

A total of twenty-nine (29) trees are deemed to be removed due to the proposed site improvements, most of which are in decline. No native trees exist on site.

RECOMMENDED TREE PRESERVATIONS, REMOVALS & MITIGATIONS

Per the City of Pinole's Tree Ordinance, *protected trees* are defined as the following:

- Native species (redwood, coast live oak, redbud, toyon, California bay, buckeye, big leaf maple, black walnut) with a diameter of 4" or greater
- Non-native species with a minimum diameter of 18" or greater

For all proposed tree removals, a Tree Permit Removal Application must be submitted, stating reason for removal and a fee of \$201 for the removal of each protected tree.

Note: for multi-trunked trees, diameter calculations are based on the Council of Tree & Landscape Appraisers Guide for Plant Appraisal, 9th edition.

Recommended Mitigations

Per correspondence with the Project Team and Landscape Architect, the following replacement trees are proposed as mitigations for the removal of the existing five (5) California peppers along Pinole Valley Road (3 of which are protected)

- Five (5) 24" box Japanese zelkova (*Zelkova serrata*)

Proposed mitigations for the removal of interior ash and Mayten trees (of which 5 are protected)

- Eight (8) 24" box cork oaks (*Quercus suber*)

The recently updated Landscape Plan, dated November 24, 2021, reflects these proposed mitigations.

Tree Inventory and Observations for 2801 Pinole Valley Road (APN 360-010-029-5)

Key

DIA	Diameter (in inches) of trunk
S	Structure
H	Health
RV	Retention Value
P	Protected tree -mitigations required

Tree #	SPECIES	DIA	S	H	RV	OBSERVATIONS/RECOMMENDATIONS	P	SAVE/ REMOVE
1	California Pepper, <i>Schinus molle</i>	26	3	3.5	4	Located within the planting strip between the sidewalk along Pinole Valley Road and the front parking lot. Surface roots. Utility box at root crown. Girdling roots ¹ . Proposed site improvements show tree removal.	P	R
2	California Pepper, <i>Schinus molle</i>	15.5	2.5	2.5	3	Located within the planting strip between the sidewalk along Pinole Valley Road and the front parking lot. Hollow cavity at root crown; leans 45 degrees NE. Sparse canopy, woodpecker damage and codominant branch union 6' above grade with surface roots. Proposed site improvements show tree removal.		R
3	California Pepper, <i>Schinus molle</i>	11	2.5	3	3	Located within the planting strip between the sidewalk along Pinole Valley Road and the front parking lot. Lopsided canopy. Proposed site improvements show tree removal.		R
4	California Pepper, <i>Schinus molle</i>	20	3	3.5	3	Located within the planting strip between the sidewalk along Pinole Valley Road and the front parking lot. Sucker growth at root crown and at pruned leaders. Poor branch union at 6'-6" above grade, where central leader divides in 4. Proposed site improvements show tree removal.	P	R
5	California Pepper, <i>Schinus molle</i>	22, 9	3	3.5	4	Located within the planting strip between the sidewalk along Pinole Valley Road and the front parking lot. Multi-trunked. Poor branch union at 5' above grade with included bark ² . Surface roots. Poor branch union at 4' above ground with included bark ² . Proposed site improvements show tree removal.	P	R
6	Cherry, <i>Prunus</i> <i>sp.</i>	10	2.5	3	3	Located at the center breezeway at the existing commercial building. Poor branch union at 4' above ground, where central leader divides in 4. Proposed site improvements require removal.		R

Tree #	SPECIES	DIA	S	H	RV	OBSERVATIONS/RECOMMENDATIONS	P	SAVE/ REMOVE
7	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	6,6,7	2	2.5	2.5	Not shown on original survey. Located along the southwestern property line. Regarded as offsite tree. Poor branch union at 8" above ground where leader divides into 3 leaders. Mechanical damage. Limited foliage. 6" leader with bark. Broken branches. Moderate deadwood. Decay and rotten at base. <i>It appears tree may remain, but given the poor condition of the tree, removal is recommended with replacement with a healthier species.</i> (Multi-trunk correlates to 10" diameter tree)		S
8	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	11	3	2.5	3	Not shown on original survey. Located along the southwestern property line. Regarded as offsite tree. Girdling roots ¹ . Dead 6" leader. Moderate to significant deadwood. Poor branch union at 6' above ground.		S
9	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	22	3	3	3	Not shown on original survey. Located along the southwestern property line. Regarded as offsite tree. Surface roots. Poor branch union at 7' and 8' above ground. Codominant branch union 8' above grade. Extends into next door property around 20'. Proposed concrete crosswalk will likely require removal. Proposed site improvements may impact tree. <i>Arborist to be on-site during site disturbances within 10 feet of root crown. If tree remains, clearance pruning recommended for construction equipment access.</i>	P	S
10	Mayten, <i>Maytenus boaria</i>	9	3	1.5	1.5	Located along the southwestern property line. Growing and leaning into existing fence. Leaning East. Ivy growing at central leader. Deciduous. Limited foliage. May be dead. Proposed concrete walk requires removal.		R
11	Mayten, <i>Maytenus boaria</i>	5.5, 6	2.5	2.5	2.5	Codominant branch union at 4' above ground. Moderate to significant deadwood. Poorly pruned in the past. Proposed concrete walk will require removal of tree. (Multi-trunk correlates to 9.5" diameter tree)		R
12	Willow, <i>Salix laevigata</i>	14, 16, 22	2	2	--	Not included on original survey. Offsite. Northern leader is growing into fence. Covered with ivy. In significant decline.	P	S
13	Mayten, <i>Maytenus boaria</i>	8	2.5	2.5	2.5	Not included on original survey. Located southwestern property line behind neighboring convenience store. Ivy at lower trunk. Mainly a single leader. Limited branches. Suffering from lack of sunlight. Removal recommended.		R
14	Japanese euonymus, <i>Euonymus japonicus</i>	3, 5, 3, 2, 2	2.5	3	2.5	Not included on original survey. Located southwestern property line behind neighboring convenience store. Growing at property line. Narrow branch unions thorough. Likely a volunteer. Removal recommended. (Multi-trunk correlates to 6" diameter tree)		R

Tree #	SPECIES	DIA	S	H	RV	OBSERVATIONS/RECOMMENDATIONS	P	SAVE/ REMOVE
15	Mayten, <i>Maytenus boaria</i>	7	1.5	1.5	1	Not included on original survey. Located southwestern property line behind neighboring convenience store. Ivy growing at lower trunk. Leans into one side at 5' above ground. Removal recommended.		R
16	Mayten, <i>Maytenus boaria</i>	9.5, 6	3	2	2	Ivy grows at base and through canopy. Significant deadwood. Included bark ² . Site improvements require removal.		R
17	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	~22	2.5	3	3	Located along the southern property line. Ivy at base and canopy. Dead ivy in canopy. Moderate to significant die back. Poor branch union at 9' above grade. Central leader divides into 4. Site improvements require removal.	P	R
18	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	15.5	2.5	3.5	2.5	Located along the southern property line. Poor branch union at 6' above ground. Leader divides into 3, with included bark. Dead ivy. Moderate to significant dead wood. Fractured 12" leader at 9' above ground. Site improvements require removal.		R
19	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	~16	2.5	2	2	Located along the southern property line. Covered in ivy. Moderate to significant deadwood. Severe decline. Site improvements require removal.		R
20	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	12, 10	1	1	1	Located along the southern property line. Dead, covered in ivy. Site improvements require removal. (Multi-trunk correlates to 15.5" diameter tree)		R
21	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	16	2	1.5	1.5	Located in southeastern corner of site. Covered in ivy. Severe decline. Significant deadwood. Limited foliage. Site improvements require removal.		R
22	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	13.5, 8, 6	2.5	3	3	Located in southeastern corner of site. Poor branch union at 3' above ground, with included bark ² . The 2 smaller leaders missing portions of bark with signs of decay. Shown to remain. <i>Retain arborist to be onsite at time of demolition of existing curb that is located at the base of the tree.</i> (Multi-trunk correlates to 16.5" diameter tree) Proposed site improvements require removal.		R
23	Tree of heaven, <i>Ailanthus altissima</i>	4, 3	3	3	--	Offsite. Located outside eastern property line. Growing 12" from retaining wall at property line. Growing and embedding into chain fence. Extends into property. Invasive species.		S
24	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	19	3	3	3.5	Located along eastern property line near center of site. Strong central leader. Poorly pruned. Signs of open wound. Site improvements require removal.	P	R

Tree #	SPECIES	DIA	S	H	RV	OBSERVATIONS/RECOMMENDATIONS	P	SAVE/ REMOVE
25	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	19	3.5	3.5	3.5	Located in central green space at the rear of the existing building. Nice structure. Good foliage. Site improvements require removal.	P	R
26	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	13	3	3	3	Located in central green space at the rear of the existing building. Girdling roots ¹ . Surface roots. Moderate die back. Included bark in upper canopy. Site improvements require removal.		R
27	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	14	3	3	3	Located at the northeastern corner of the site. Surface roots. Significant sucker growth at base. Moderate to significant deadwood. Codominant branch union at 7' above ground with included bark ² . Shown to remain. <i>Prune deadwood. Structural pruning may improve tree structure. Arborist to be on-site for grade preparation for proposed trash enclosures. Surface roots may be in conflict with trash enclosure.</i>		S
28	Japanese maple, <i>Acer palmatum</i>	6.5, 6, 4.5, 5.5, 5.5	3	3	3	Located on the back side of the existing building. Bird nest. Codominant branch union at 3' above ground with included bark. Some previous prunings show decay. Ivy growing at root bound and lower trunk. Site improvements require removal. (Multi-trunk correlates to 13.5" diameter tree)		R
29	Japanese maple, <i>Acer palmatum</i>	3.5, 5, 5, 4, 4.5	2.5	2	2	Located on the back side of the existing building. Poor branch union at root bound with included bark. All center leader are missing bark with signs of decay. Growing towards N. Site improvements require removal.		R
30	Japanese maple, <i>Acer palmatum</i>	8, 4.5, 4.5, 7, 8, 8	2.5	3	3	Located on the back side of the existing building. Surface roots. Poor branch union at 12" above ground with included bark. Site improvements require removal.		R
31	Fruit tree, <i>Prunus</i> , sp.	5.5, 7, 7	3	3	3	Located on the back side of the existing building. Surface roots. Codominant branch union at 4' above ground with included bark. Codominant branch union at 6.5" above ground. Leans North. Site improvements require removal.		R
32	Privet, <i>Ligustrum</i> sp.	4, 5	3	3	3	Located on the back side of the existing building. Codominant branch union at 12" above grade with included bark. Site improvements require removal.		R
33	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	20	3.5	3.5	3.5	Located in planter island in rear parking lot. 7" leader lopped off. Some leaders are interfering and growing into each other. Could use some structural pruning. Site improvements require removal.	P	R
34	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	13	3.5	3.5	3.5	Located in planter island in rear parking lot. 6" pruned leader shows signs of decay. Minor deadwood. Site improvements require removal.		R

Tree #	SPECIES	DIA	S	H	RV	OBSERVATIONS/RECOMMENDATIONS	P	SAVE/ REMOVE
35	Raywood ash, <i>Fraxinus augustifolia</i> 'Raywood'	19	3	3	3	Leans N. 4 branch unions at 6' above grade with included bark ² . Could benefit from structural pruning. Site improvements require removal.	P	R
36	<i>Pyracantha coccinea</i>	3,2,2,2 ,2	3	3	3	Located along the northern property line at the front parking lot. <i>Tree may be retained due to proposed planter at tree location.</i>		S

¹ Girdling root: a root that grows around a portion of the trunk of tree at, or just below the root crown restricting the flow of water and nutrients by choking vascular elements. The longer this condition exists, the weaker and more unstable the tree.

² Included bark: bark that becomes embedded in crotch between branch and trunk or between codominant stems or leaders, causing weak structure. Such conditions may increase the likelihood of failure.

General Tree Protection and Preservation Guidelines

The objective of the tree protection and preservation guidelines is to provide the necessary information to ensure the continued health of existing trees within the proximity of construction and grading activities (yet to be determined). Trees selected for preservation should be structurally sound and healthy so that they may survive any adverse impacts due to construction activity. Future tree removal recommendations may be based on conflicts with the proposed site improvements.

Due to the number of existing trees and their proximity to proposed site improvements, strict adherence to the Tree Protection Guidelines is paramount.

As the project progresses, the following Tree Protection procedures must be exercised:

1.0 Tree Documentation

- 1.1 Indicate removal or preservation of all existing trees on an appropriately sized plan. Trees shall be identified and numbered as tagged on site. Dripline locations for each tree to remain should be shown on all relevant plans (as shown on the Tree Inventory Plan). See attached.

2.0 Tree Protection

- 2.1 The majority of the sensitive root structure of a tree is located within the top 6 to 12 inches of soil. This renders them vulnerable to soil compaction, often due to construction activity, limiting available oxygen and leading to stress and potential demise. This upper region of a tree is known as the critical root zone.
- 2.2 In an effort to protect the critical root zone, Tree Protective Fencing shall be erected. This temporary fencing will designate the Tree Protection Zone (TPZ). The fencing is a critical component to the preservation of existing trees.
- 2.3 Tree Protective Fencing (see Attachment 1) should ideally be placed at the dripline of the tree to be protected, or beyond. The following Tree Protective Fence criteria shall be employed:
 - 2.3.1 All protective fencing shall be located under the direction of the project arborist. The fencing is to remain in place until the end of construction activity.
 - 2.3.2 We recommend the fence be aligned with any proposed retaining walls or structural walls at the minimum distance which allows for the necessary excavation for wall installation (see Item 5.0).
 - 2.3.3 Protective fencing shall be continuous 6' high chainlink mounted to steel posts driven a minimum of 24" firmly into ground (not mounted into concrete bases and set at grade). The spacing of the posts shall not exceed 10 feet in distance.

- 2.3.4 Protective fencing shall be clearly indicated with a laminated sign reading 'DO NOT ENTER'. The sign shall also indicate that the project arborist is the only designated individual who may open, move or modify the location of the protective fencing.
- 2.3.5 No excavated fill, chemicals, debris, equipment, or any other materials shall be dumped or stored within the TPZ.
- 2.3.6 A minimum 3" layer of mulch shall be applied to all areas within the Tree Protection Zone for trees located outside the creek embankment. The mulch will help alleviate soil compaction and moderate temperatures. Keep a 6" clear mulch-free zone around the base of the tree (do not place mulch against root crown).
- 2.3.7 The use of hydrated lime or quick lime shall not be permitted within the vicinity of any existing trees.

3.0 Grading

- 3.1 The project arborist shall be on-site for all disturbances of grades within the dripline of existing trees to remain.
- 3.2 The existing grade shall be maintained within the Tree Protection Zone. Any changes in grade (cut or fill) shall be minimized, unless otherwise noted within the tree table, and if undertaken shall be supervised by the project arborist.
- 3.3 Root pruning shall be determined on an individual basis for each tree.
- 3.4 Supplemental water must be readily available during excavation activities if done during the summer months. Occasional spraying of the foliage with water to wash off dust may also be required.
- 3.5 If any cuts are made within the dripline of trees, roots shall be cut cleanly back to the excavated cut and covered with burlap or straw matting. This material shall be kept damp until the finished grade has been established.

4.0 Pruning

- 4.1 Trees to be pruned for clearance shall be done prior to construction activities to avoid damage.
- 4.2 All pruning shall be conducted by the project arborist and done in accordance to ISA procedures by certified tree workers or under the supervision of the project arborist.

5.0 Retaining Walls and Architectural Foundations

5.1 Existing plans show no proposed walls or foundations within the dripline of existing trees to remain.

6.0 Project Coordination

6.1 Prior to the commencement of construction activities, the general contractor shall meet with the project arborist to review Tree Protection Measures procedures mentioned within this report.

6.2 Beyond on-site inspection of grading operations occurring within the Tree Protection Zone, the project arborist shall make bi-weekly inspections of the site during the installation of the site improvements to monitor trees and ensure Tree Protection Measures are in place.

Conclusion and Continuing Maintenance

We believe that if the proper Tree Protection Measures and guidelines are addressed, the trees on the subject property shall continue to thrive or remain stable. As noted, mitigation measures shall ensue if any trees are significantly impacted. Regardless, site improvements will impact the existing trees. To what extent, time will tell as signs of decline show months and even years later. Vigilant monitoring is the most effective course of action to ensure continued health and failure prevention.

Assumptions and Limitations

InsideOut Design has no interest, either personal or monetary, on the outcome of the proposed site improvements. All observations and recommendations made within this review are objective and to the best of the author's ability. The findings in this report are dependent on the condition of the trees evaluated at the time of the site inspections. This assessment was limited to the visual examination of the trees listed within the report with no dissection, excavation, probing or coring. There is no guarantee, warranty, expressed or implied, that problems, deficiencies or failure may occur in the future. To live near trees, one must accept some degree of risk.

Please contact us with any questions you may have or if additional information is warranted.

Sincerely,

INSIDEOUT DESIGN, INC

A handwritten signature in black ink, appearing to read 'P. Phillips', with a long horizontal stroke extending to the right.

Pennell Phillips

ISA Certified Arborist, WE-6608A
Landscape Architect 5602



Tree #1, a 26" California pepper (to be removed and replaced)



Tree #2, a 15.5" California pepper (to be removed and replaced)



Tree #3, an 11" California pepper (to be removed and replaced)



Tree #4, a 20" California pepper (to be removed and replaced)



Tree #5, an 22", 9" California pepper (to be removed and replaced)



Tree #6, a 10" cherry (to be removed)



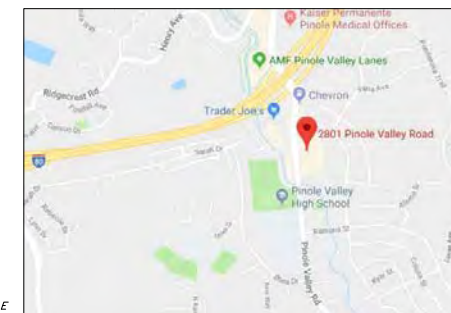
Tree #15 a Mayten in severe decline (to be removed and replaced)



Tree #17 a Raywood ash in decline (to be removed and replaced)

PENNELL PHILLIPS
CERTIFIED ARBORIST
#6608A

INSIDE OUT DESIGN
6000 HARDWOOD AVE
OAKLAND, CA 94618
510-655-7674



VICINITY MAP
N.T.S.

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REVISIONS: BY:

PREPARED FOR:
PINOLE VALLEY PARTNERS, LLC
2801 PINOLE VALLEY RD.
PINOLE, CA 94564

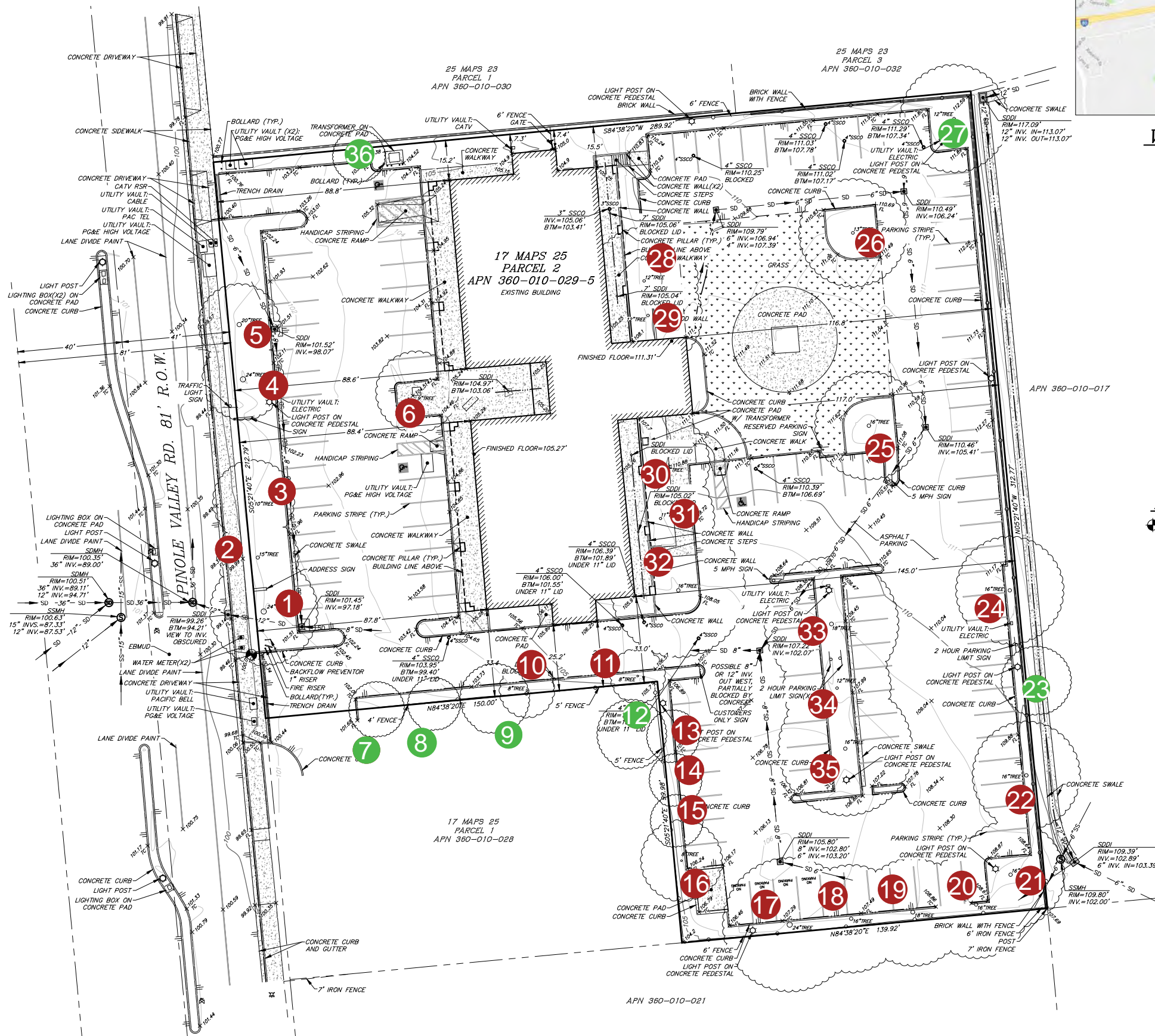
PARCEL 2
75,681 sq.ft.
1.74 ACRES

BENCHMARK
PROJECT BENCHMARK IS BASED ON ASSUMED ELEVATION AT CUT X IN SIDEWALK SOUTH DRIVEWAY
ELEVATION=100.00'

OWNER
PINOLE VALLEY PARTNERS, LLC
2801 PINOLE VALLEY ROAD
PINOLE, CA 94564

PARCEL 2, 17 MAPS 25
TOPOGRAPHIC SURVEY
IN THE CITY OF PINOLE, CONTRA COSTA COUNTY, STATE OF CALIFORNIA

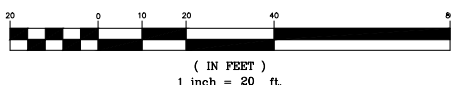
DATE 3/20/19
SCALE 1"=20'
DRAWN TJP
JOB NO. 09.1988
DWC
1
SHEET 1 OF 1



LEGEND

- 4 (EX) TREE TO BE REMOVED
- 1 (EX) TREE TO REMAIN

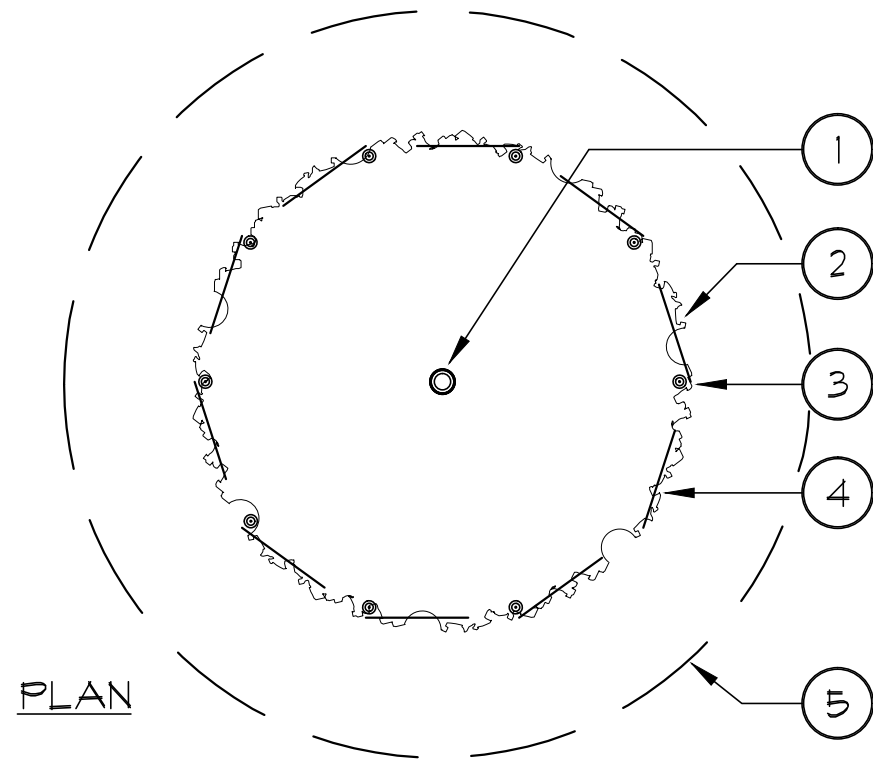
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CONTOUR INTERVAL: 1'
GRAPHIC SCALE



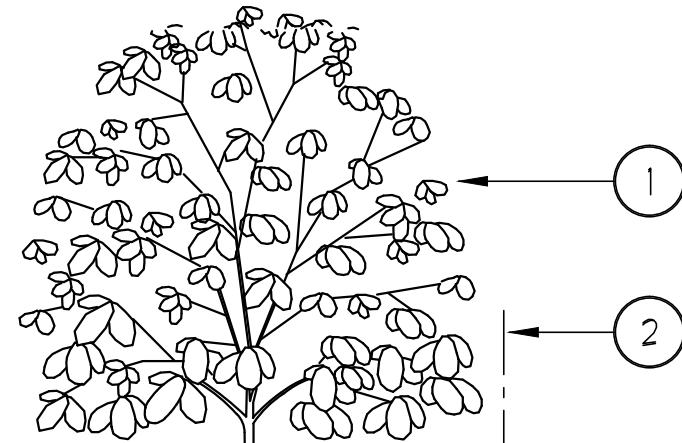
TREE INVENTORY PLAN

11/29/2021
TP1

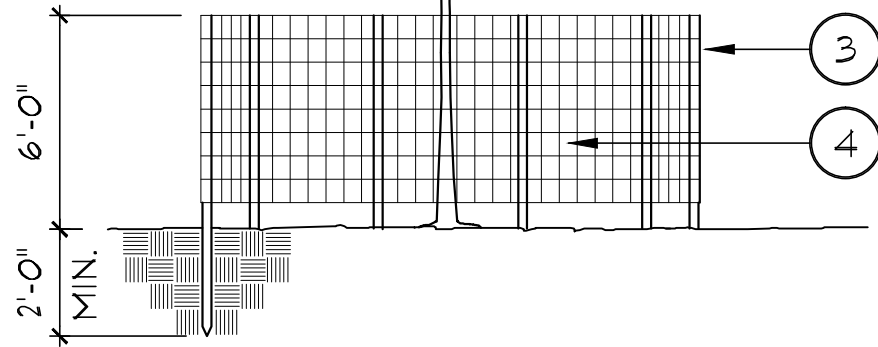
Z:\09_RVP\19-1988_Pinoe Valley Topo.dwg Aug 11, 2020 - 11:57am, triad



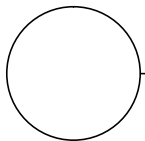
NOTE: FENCING SHALL BE LOCATED AS INDICATED BY STAKES/POSTS SET IN FIELD BY PROJECT ARBORIST



1. EXISTING TREE TO REMAIN.
2. DRIPLINE.
3. STEEL POST, 10'-0" O.C. MAX.
4. 6'-0" CHAINLINK FENCING.
5. EXTEND FENCING 50% BEYOND DRIPLINE OF MATURE SPECIMEN OAKS WHERE POSSIBLE.



ELEVATION



TREE PROTECTION FENCING

NTS