



**CITY OF SOUTH PASADENA
NATURAL RESOURCES AND ENVIRONMENTAL COMMISSION**

**A G E N D A
REGULAR MEETING
TUESDAY, JANURARY 28, 2025, AT 7:00 P.M.**

**CITY MANAGERS CONFERENCE ROOM
1414 MISSION STREET 2ND FLOOR, SOUTH PASADENA, CA 91030**

South Pasadena Commission Statement of Civility

As your appointed governing board, we will treat each other, members of the public, and city employees with patience, civility and courtesy as a model of the same behavior we wish to reflect in South Pasadena for the conduct of all city business and community participation. The decisions made today will be for the benefit of the South Pasadena community and not for personal gain.

NOTICE ON PUBLIC PARTICIPATION & ACCESSIBILITY

The South Pasadena Natural Resources and Environmental Commission Meeting will be conducted in-person from the Council Chambers, Amedee O. "Dick" Richards, Jr., located at 1424 Mission Street, South Pasadena.

The meeting will be available:

- In Person – City Manager Conference Room, 1414 Mission Street
- Via Zoom – **Webinar ID: 880 7206 2700**

To maximize public safety while still maintaining transparency and public access, members of the public can observe the meeting via Zoom in one of the three methods below.

1. Go to the Zoom website, <https://zoom.us/join> and enter the Zoom Meeting information; or
2. Click on the following unique Zoom meeting link: <https://us06web.zoom.us/j/88072062700>; or
3. You may listen to the meeting by calling +1-669-900-6833 and entering the Zoom Meeting ID.

CALL TO ORDER:

ROLL CALL:

Chair	Michael Siegel
Vice Chair	Emily Ng
Commissioner	Liam R. de Villa Bourke
Commissioner	Amy Davis Jones
Commissioner	Casey Law

PLEDGE OF ALLEGIANCE:

Chair	Michael Siegel
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PUBLIC COMMENT GUIDELINES (*Public Comments are limited to 3 minutes*)

The City welcomes public input. Members of the public can comment on a non-agenda subject under the jurisdiction of the City Council or on an agenda item, you may participate **by one of the following options:**

Option 1:

Participate in-person at the City Manager's Conference Room.

Option 2:

Public Comment speakers have three minutes to address the Commission, however, the Chair and Commission can adjust time allotted as needed. Participants will be able to "raise their hand" using the Zoom icon during the meeting, and they will have their microphone un-muted during comment portions of the agenda to speak.

Option 3:

Email public comment(s) to NRECPublicComment@SouthPasadenaCA.gov.

Public Comments received in writing will not be read aloud at the meeting, but will be part of the meeting record. Written public comments will be uploaded online for public viewing under Additional Documents. There is no word limit on emailed Public Comment(s). Please make sure to indicate:

- 1) Name (optional), and
- 2) Agenda item you are submitting public comment on.
- 3) Submit by no later than **12:00 p.m., January 28, 2025**

PLEASE NOTE: The Chair may exercise the Chair's discretion, subject to the approval of the majority of the Commission to adjust public comment(s) to less than three minutes.

NOTE: Pursuant to State law, the Commission may not discuss or take action on issues not on the meeting agenda, except that members of the Commission or staff may briefly respond to statements made or questions posed by persons exercising public testimony rights (Government Code Section 54954.2). Staff may be asked to follow up on such items.

PUBLIC COMMENT**1. GENERAL (NON-AGENDA ITEMS)****TREE HEARING****2. TREE HEARING: 405 HERMOSA PLACE**Recommendation

It is recommended that the Natural Resources and Environmental Commission review and provide recommendation to the planning review authority for the decision of the removal of fifteen existing trees at 405 Hermosa Place.

PRESENTATION**3. UPDATE ON THE REVIEW OF CITY TREES & SHRUBS ORDINANCE****ACTION****4. APPROVAL OF MINUTES OF DECEMBER 2, 2024 NREC MEETING**Recommendation

It is recommended that the Commission review and approve the December 2, 2024 Meeting Minutes.

COMMUNICATIONS**5. CITY COUNCIL LIAISON COMMUNICATIONS****6. COMMISSIONER COMMUNICATIONS****7. STAFF LIAISON COMMUNICATIONS****8. UPCOMING EVENTS**

- Landscape Academy: *Turf Removal, Replace or Maintain It* Landscape Training
February 8th, 11:00am, *South Pasadena Senior Center*
(<https://greengardensgroup.com/g3-events/goodbye-grass-hello-garden-qualify-for-rebates-in-person-city-of-south-pasadena-250208/>)
- LA County Smart Gardening Webinars
(<https://www.ladpw.org/epd/sq/webinars.cfm>)
- MWD Turf Removal + CA Native Landscape Webinars
(<https://greengardensgroup.com/turf-transformation/>)

ADJOURNMENT**FOR YOUR INFORMATION****FUTURE NATURAL RESOURCES AND ENVIRONMENTAL COMMISSION MEETINGS**

February 25, 2025	Regular Meeting	7:00 p.m.
March 25, 2025	Regular Meeting	7:00 p.m.
April 22, 2025	Regular Meeting	7:00 p.m.

PUBLIC ACCESS TO AGENDA DOCUMENTS AND BROADCASTING OF MEETINGS

Commission meeting agenda packets, any agenda related documents, and additional documents are available online for public inspection on the City's website:


<https://www.southpasadenaca.gov/government/boards-commissions>

Meeting recordings will be available for public viewing after the meeting. Recordings will be uploaded to the City’s YouTube Channel no later than the next business day after the meeting. The City’s YouTube Channel may be accessed at: https://www.youtube.com/channel/UCnR169ohzi1AlewD_6sfwDA/featured

AGENDA NOTIFICATION SUBSCRIPTION

If you wish to receive an agenda email notification please contact the Sustainability Division via email at NRECPublicComment@SouthPasadenaCA.gov or call (626) 403-7240.

ACCOMMODATIONS

 The City of South Pasadena wishes to make all of its public meetings accessible to the public. If special assistance is needed to participate in this meeting, please contact the City Clerk’s Division at (626) 403-7230 or CityClerk@southpasadenaca.gov. Upon request, this agenda will be made available in appropriate alternative formats to persons with disabilities. Notification at least 48 hours prior to the meeting will assist staff in assuring that reasonable arrangements can be made to provide accessibility to the meeting (28 CFR 35.102-35.104 ADA Title II).

CERTIFICATION OF POSTING

*I declare under penalty of perjury that I posted this notice of agenda for the meeting to be held on **January 28, 2025**, on the bulletin board in the courtyard of City Hall at 1414 Mission Street, South Pasadena, CA 91030, and on the City’s, website as required by law, on the date listed below.*

1/23/2025	<i>Arpy Kasparian</i>
Date	Arpy Kasparian, Environmental Services & Sustainability Manager

ITEM 2

Tree Hearing:

405 Hermosa



Natural Resources & Environmental Commission Agenda Report

ITEM NO. 2

DATE: January 28, 2025

FROM: H. Ted Gerber, Public Works Director
Michael Vartanians, Principal Engineer

SUBJECT: **Proposed Removal of 15 Trees at 405 Hermosa Place**

Recommendation

It is recommended that the Natural Resources and Environmental Commission (NREC) review and provide recommendation to the planning review authority for the decision of the removal of fifteen trees at 405 Hermosa Place.

Background

On February 15, 2024, the applicant submitted an application for a private property tree removal/replacement permit (Attachment 1). The application identified 15 trees for removal, which were necessary due to a preliminary site plan for a proposed Accessory Dwelling Unit (ADU). Among the 15 trees, three were significant and five were mature native trees. The full list of trees proposed for removal is included in the original application inventory and arborist report (Attachment 2).

The Public Works Department and the Natural Resources and Environmental Commission (NREC) review tree removal permit applications related to land development projects in an advisory capacity. The application was inspected by the City Arborist, who recommended approval of the removal request. A public notice was mailed to property owners and tenants within a 100-foot radius of the site, inviting comments. Two objections were received during the notification period. These objections, along with the related correspondence, are included in Attachment 3.

Under the initial tree removal proposal, the applicant would have been required to replant 47 twenty-four-inch box trees to meet the replacement requirements. However, no draft replacement plan was provided at that time, as the architect indicated that the project was still in its preliminary stage. The applicant has since noted that, due to space limitations on the property, they may need to forfeit the deposit because the required number of replacement trees could not be accommodated.

The NREC reviewed the tree removal application on June 25, 2024. During that meeting, the commission recommended that the applicant revisit the proposed structure's footprint to see if adjusting its location could reduce the number of trees needing removal.

On December 16, 2024, the applicant submitted a revised site plan (Attachment 4) that relocated the proposed structure and included retaining walls to better accommodate construction. As a result, the number of trees proposed for removal remained at 15, but the specific trees impacted changed. Notably, trees 22, 23, and 38 would remain, while trees 8, 11, and 32 would be removed.

The following trees will now remain:

- Tree 22: 7-inch Diameter Toyon
- Tree 23: 27-inch Diameter Coast Live Oak
- Tree 38: 42-inch Diameter Canary Island Pine

The following trees will be removed:

- Tree 8: Multi-trunk 27-inch Crape Myrtle
- Tree 11: 14-inch Southern Magnolia
- Tree 32: 10-inch Japanese Loquat

It is important to note that trees 34 and 35, both Canary Island Pines, will still be removed with the revised plan, as these trees obstruct the construction of a necessary driveway for the ADU.

With the updated tree removal proposal, the applicant would need to replant 36 twenty-four-inch box trees to meet the replacement requirement. However, the applicant has indicated that due to the site's topography and the presence of other trees, it will still not be possible to accommodate the required number of replacement trees. No draft landscaping plan has yet been submitted.

Discussion/Analysis

Per SPMC 34.9(b), staff has been provided an arborist report to identify the condition of all trees on the property and a proposed development plan depicting the actual and proposed location of structures, topography and existing trees on the site. An arborist report was received on June 12, 2024, and is included as Attachment 2. A revised arborist report was provided on December 16, 2024 and is included as Attachment 4.

Tree removals associated with development shall only be conditionally approved subject to the applicant receiving their development building permit, paying all fees associated with the tree removal as established by resolution of the city council, and paying a deposit in the amount of \$15,264 for the thirty-six (36) replacement trees. Upon the planning review authority's approval of the development application and satisfaction of all conditions of approval, and payment of all required fees, the applicant shall be issued a tree removal permit, SPMC 34.10(5).

Fiscal Impact

The applicant has paid the initial tree removal inspection fee of \$141.00 and will be required to pay any permit fees for the permit.

405 Hermosa Place Tree Removal Application

January 28, 2025

Page 3 of 3

Attachments

1. Tree Removal Application
2. Arborist Report and Supporting Documents
3. Received Letters
4. Updated Arborist Report and Site Plan

ATTACHMENT 1

Tree Removal Application

**CITY OF SOUTH PASADENA
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
1414 Mission Street - South Pasadena - CA 91030 - 626-403-7240**

PRIVATE PROPERTY TREE REMOVAL/REPLACEMENT PERMIT APPLICATION

Please submit site plan if more than three (3) trees are involved.

Inspection Fee: \$141

PERMIT NO. _____

Permit Fee: \$364; 4 or more \$504

All fees are nonrefundable

Job Site: 405 Hermosa Court ^{Plan}

Property Owner's Name(S): Zixuan Xu Phone: _____

Address: 405 Hermosa Court

Contractor's Name: T.B.D.

Address: _____ Phone: _____

City Business License No: _____

**Trees 4" in diameter or greater are Mature Trees - Include all conditions warranting the removal
Please Submit plan if more than three (3) trees are involved**

Tree(s) Diameter	Type of Tree(s)	Location of Tree	Reason for Removal
See attached Arborist Report			

Office Use Only:
 Application Received: _____ Tree Removal and Replacement Plan: _____ Arborist Report: _____
 Project Narrative: _____ Proposed Development Plan: _____ Site Plan: _____ NREC Hearing Date: _____
 Comment Period Begins: _____ Comment Period Ends: _____ Permit Ready: _____

PRIVATE PROPERTY TREE REMOVAL/REPLACEMENT PERMIT CONDITIONS:

- (1) Conditions must exist to warrant the removal of any mature tree. Healthy trees which are not causing a hardship on the property owner shall not be approved for removal.
- (2) Tree removals will include complete removal of the stump and backfill of the hole.
- (3) For every tree approved for removal, multiple replacement trees must be planted anywhere on the owner's property or on City's property upon City's approval. For replacement tree(s) planted in the parkway, root barriers will be required to control the root system. The size of the replacement tree(s) is (are) based on the diameter of the trunk and the type of tree(s) for removal. The replacement tree(s) must be a minimum of 24" box size or as specified by the Engineering Division.
- (4) Replacement trees must be planted within 90 days of the **issuance date on the permit**.
- (5) Prior to planting the replacement trees, a final inspection must be conducted by the City inspector to verify conformance with tree replacement requirements. Please call to schedule an appointment at (626) 403-7370, Monday through Thursday, 7:30 a.m. to 4:00 p.m.
- (6) **A 100-foot radius map and mailing labels shall be required to provide public notice of the tree removal. Residents within a 100-foot radius of the property shall be given 15-days to comment on the tree removal prior to issuance of the permit.**

APPLICANT SIGNATURE: Charles Minyard DATE: 02/15/24

City use only

1. Recommended for Approval or Denial Type/Variety Inspected: _____
Size of Tree: _____ Replacement Tree Size: _____ Qty: _____ Due by: _____
Comments: _____

Inspected By: _____ Date Inspected: _____

2. Recommended for Approval or Denial Type/Variety Inspected: _____
Size of Tree: _____ Replacement Tree Size: _____ Qty: _____ Due by: _____
Comments: _____




Inspected By: _____ Date Inspected: _____

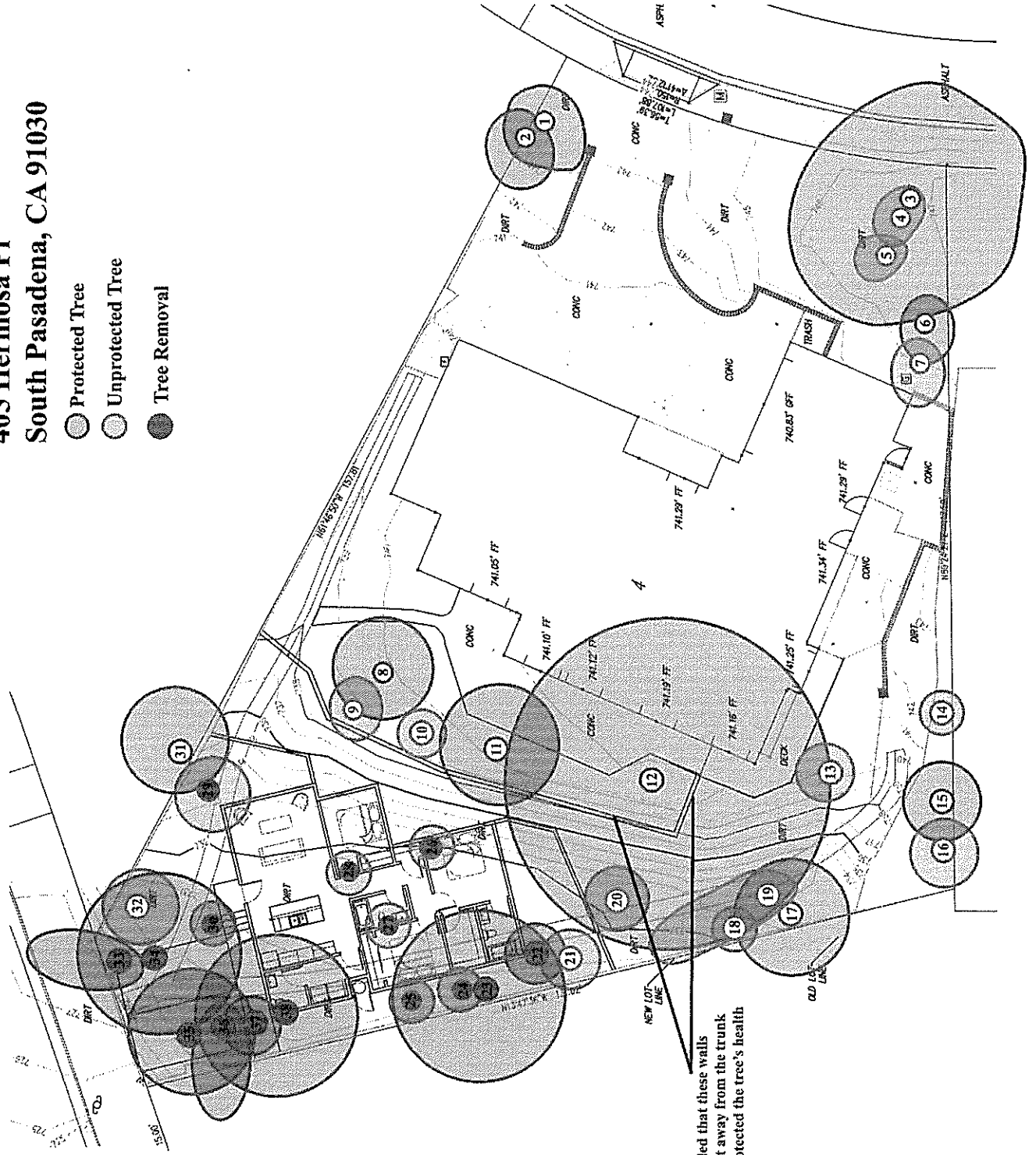
3. Recommended for Approval or Denial Type/Variety Inspected: _____
Size of Tree: _____ Replacement Tree Size: _____ Qty: _____ Due by: _____
Comments: _____

Inspected By: _____ Date Inspected: _____

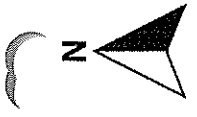
Tree Map

405 Hermosa Pl
 South Pasadena, CA 91030

-  Protected Tree
-  Unprotected Tree
-  Tree Removal



It is recommended that these walls be placed 15 feet away from the trunk of Tree 12 to protect the tree's health and stability.



ALL REMOVALS HAVE
BEEN VERIFIED.

TREE DATA

Matrix of All Trees

Tree #	Tag #	Species	Scientific Name	# of Stems	Stem(s) DBH (in)	Total DBH (in)	Ordinance Classification	Protected	Canopy Height (ft)	Canopy Width (ft)	Location	Removal
1	736	Lemon Bottlebrush	<i>Callistemon citrinus</i>	2	14.6	20	Significant	Yes	22	20	On-site	No
2	737	Coast Live Oak	<i>Quercus agrifolia</i>	1	8	8	Mature Oak	Yes	25	15	On-site	No
3	738	Deodar Cedar	<i>Cedrus deodara</i>	1	33	33	Significant	Yes	75	45	On-site	No
4	739	Victorian Box	<i>Pittosporum undulatum</i>	2	6.4	10	Mature	No	22	15	On-site	No
5	740	Victorian Box	<i>Pittosporum undulatum</i>	1	7	7	Mature	No	20	18	On-site	No
6	741	Pittosporum	<i>Pittosporum sp.</i>	2	6.6	12	Significant	Yes	25	18	On-site	No
7	742	Pittosporum	<i>Pittosporum sp.</i>	1	11	11	Mature	No	30	20	On-site	No
8	743	Crape Myrtle	<i>Lagerstroemia indica</i>	6	4.5,6,3,4,5	27	Significant	Yes	25	25	On-site	No
9	744	Chinese Elm	<i>Ulmus parvifolia</i>	1	5	5	Mature	No	20	16	On-site	No
10	745	Pittosporum	<i>Pittosporum sp.</i>	2	5.3	8	Mature	No	15	10	On-site	No
11	746	Southern Magnolia	<i>Magnolia grandiflora</i>	1	14	14	Significant	Yes	35	25	On-site	No
12	747	Coast Live Oak	<i>Quercus agrifolia</i>	1	35	35	Mature Oak	Yes	55	60	On-site	No
13	748	Crape Myrtle	<i>Lagerstroemia indica</i>	1	7	7	Mature	No	28	16	On-site	No
14	749	Fern Pine	<i>Araucaria falcatus</i>	3	3,3,3	9	Mature	No	18	10	On-site	No
15	750	Incense Cedar	<i>Calocedrus decurrens</i>	1	18	18	Significant	Yes	32	16	On-site	No
16	751	Pittosporum	<i>Pittosporum sp.</i>	1	10	10	Mature	No	30	20	On-site	No
17	752	Canary Island Date Palm	<i>Phoenix canariensis</i>	1	24	24	Significant	Yes	40	25	On-site	No
18	753	Carolina Cherry	<i>Prunus caroliniana</i>	1	7	7	Mature	No	18	15	On-site	No
19	754	Pittosporum	<i>Pittosporum sp.</i>	1	8	8	Mature	No	12	15	On-site	No
20	755	Avocado	<i>Persea americana</i>	1	7	7	Mature	No	20	12	On-site	No
21	756	Carolina Cherry	<i>Prunus caroliniana</i>	1	7	7	Mature	No	20	15	On-site	No
22	757	Toyon	<i>Heteromeles arbustifolia</i>	2	4.6	10	Mature Native	Yes	20	20	On-site	Yes
23	758	Coast Live Oak	<i>Quercus agrifolia</i>	1	27	27	Mature Oak	Yes	40	40	On-site	Yes
24	759	Carolina Cherry	<i>Prunus caroliniana</i>	1	5	5	Mature	No	18	12	On-site	Yes
25	760	Carolina Cherry	<i>Prunus caroliniana</i>	1	6	6	Mature	No	20	15	On-site	Yes
26	761	Citrus	<i>Citrus sp.</i>	2	4.6	10	Mature	No	15	12	On-site	Yes
27	762	Citrus	<i>Citrus sp.</i>	3	3,4,4	11	Mature	No	15	10	On-site	Yes
28	763	Citrus	<i>Citrus sp.</i>	2	3.4	7	Mature	No	10	8	On-site	Yes
29	764	Rubber Tree	<i>Ficus elastica</i>	1	7	7	Mature	No	35	25	On-site	Yes
30	765	Citrus	<i>Citrus sp.</i>	4	4,3,3,1	11	Mature	No	15	10	On-site	Yes
31	None	Evergreen Ash	<i>Fraxinus uhdei</i>	1	12 (estimated)	12	Significant	Yes	40	30	Adjacent Property	No
32	766	Japanese Loquat	<i>Eriobotrya japonica</i>	2	6.4	10	Mature	No	25	20	On-site	No
33	767	Coast Live Oak	<i>Quercus agrifolia</i>	1	10	10	Mature Oak	Yes	20	22	On-site	Yes
34	768	Canary Island Pine	<i>Pinus canariensis</i>	1	28	28	Significant	Yes	100	30	On-site	Yes
35	769	Canary Island Pine	<i>Pinus canariensis</i>	1	27	27	Significant	Yes	80	30	On-site	Yes
36	770	Coast Live Oak	<i>Quercus agrifolia</i>	2	13.5	18	Mature Oak	Yes	20	15	On-site	Yes
37	771	Toyon	<i>Heteromeles arbustifolia</i>	multiple	multiple	14	Mature Native	Yes	15	12	On-site	Yes
38	772	Canary Island Pine	<i>Pinus canariensis</i>	1	42	42	Significant	Yes	100	30	On-site	Yes



City of South Pasadena
Public Works Department
Engineering Division

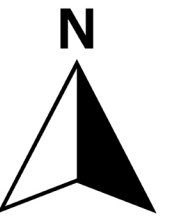
1414 Mission Street, South Pasadena, CA 91030 (626) 403-7240

Private Property Tree Removal Location: 405 HERMOSA PL.

NUMBER	TREE SPECIES	SIZE	VERIFY HEALTH	NOTES
1 22	TOYON (HETEROMELES ARBUTIFOLIA)	10"	DOUBLE STEMMED FAIR HEALTH	ALL INFORMATION IN THE ARBORIST REPORT FOR TREE
2 23	COAST LIVE OAK (QUERCUS AERIFOLIA)	27"		REMOVAL IS ACCURATE. THESE TREES ARE
3 24	CAROLINA CHERRY (PRUNUS CAROLINIANA)	5"		APPROVED FOR REMOVAL PENDING
4 25	CAROLINA CHERRY (P. CAROLINIANA)	6"		SITE DEVELOPMENT - REBECCA MEJIA ISA WE-2355A
5 26	CITRUS (CITRUS SP.)	10"	FAIR	3-20-2024
6 27	CITRUS	11"	FAIR	
7 28	CITRUS	7"	FAIR	
8 29	RUBBER TREE (FICUS ELASTICA)	7"		
9 30	CITRUS	11"	FAIR	
10 33	COAST LIVE OAK (Q. AERIFOLIA)	10"		
11 34	CANARY ISLAND PINE (PINUS CANARIENSIS)	28"		
12 35	CANARY ISLAND PINE (P. CANARIENSIS)	27"		
13 36	COAST LIVE OAK (Q. AERIFOLIA)	18"		
14 37	TOYON. (H. ARBUTIFOLIA)	14"		
15 38	CANARY ISLAND PINE (P. CANARIENSIS)	42"		

ATTACHMENT 2




Tree Map and Arborist Report

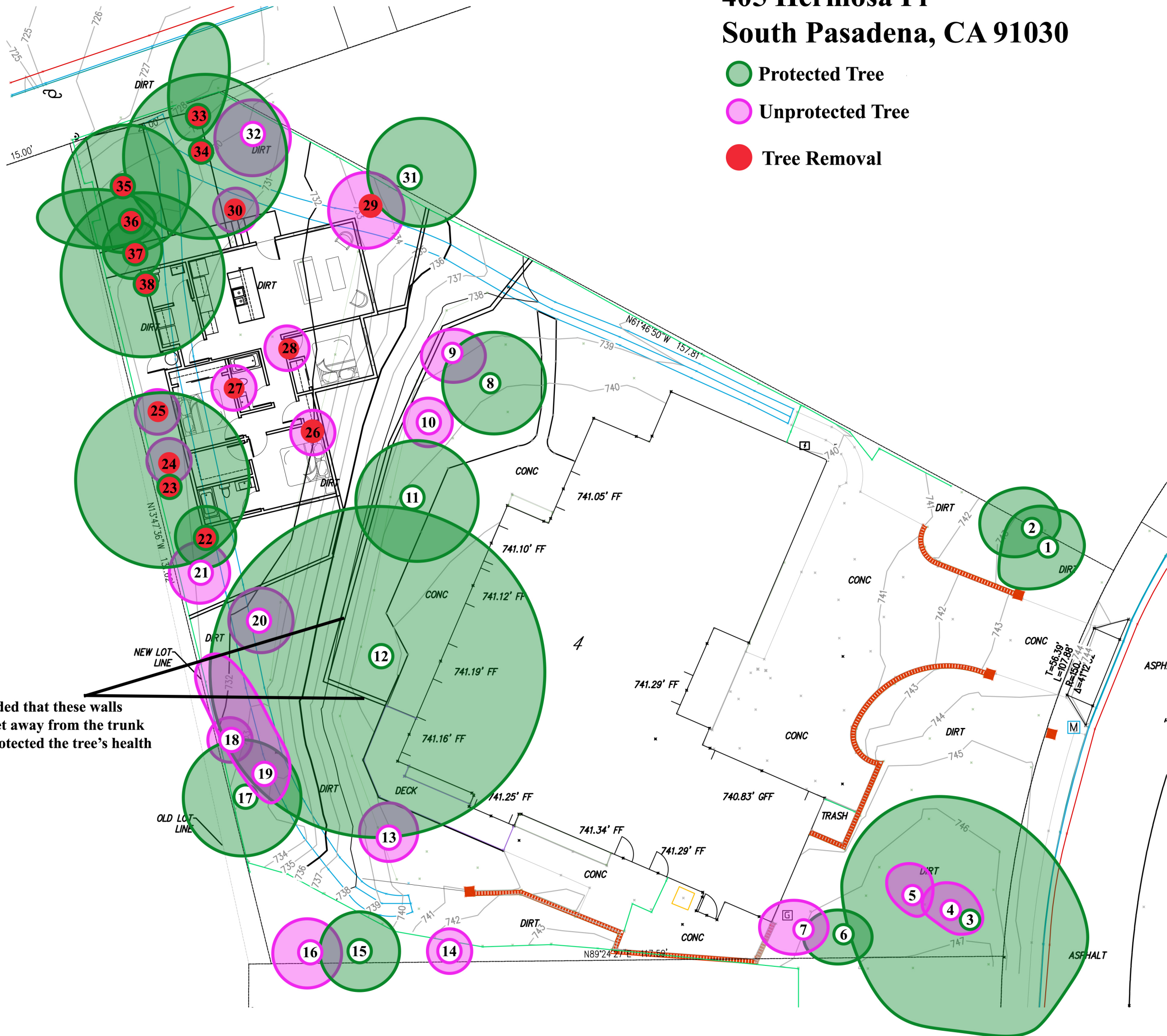


Tree Map

405 Hermosa Pl

South Pasadena, CA 91030

-  Protected Tree
-  Unprotected Tree
-  Tree Removal



It is recommended that these walls be placed 15 feet away from the trunk of Tree 12 to protect the tree's health and stability.

405 Hermosa Pl

3.14.24 Tree Report

SUBMITTED TO:

Chuck Minyard
Primior Property Management
750 N Diamond Bar Blvd, Ste 188
Diamond Bar, CA 91765

PREPARED BY:

Cris Falco
(619) 313-3939
1318 E Walnut Creek Pkwy
West Covina, CA 91790

Board Certified Master Arborist WE-7490B
Registered Consulting Arborist #557
Pest Control Adviser #128017
Qualified Tree Risk Assessor

 **RCA #557**
Registered Consulting Arborist®



MARCH 14, 2024

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Appendix B: <u>South Pasadena Resident’s Guide to the City’s Tree Ordinance</u>	48

Tree Map PDF separately attached

BACKGROUND AND ASSIGNMENT

In February of 2024, I was contracted by Primior Property Management to prepare a Protected Tree Report for 405 Hermosa Pl, South Pasadena, CA 91030. The property owner intends to construct an ADU in the northwest corner of the property (the Project), and the City of South Pasadena requires a Protected Tree Report for this construction because there are protected trees in the vicinity of the Project. The agreed-upon consulting assignment was to prepare a Protected Tree Report per the requirements of South Pasadena's Construction Project Tree Information form (see Appendix A) and South Pasadena's tree protection ordinance (Chapter 34: Trees and Shrubs). I visited the subject property on February 24, 2024, to collect data for this report.

The consulting assignment did not include a tree risk assessment¹, and I do not guarantee the safety, health, or condition of the trees on the subject property or any other tree in the vicinity of the subject property. There is no warranty or guarantee, expressed or implied, that problems or deficiencies in the subject trees may not arise in the future. My expertise in this matter is limited to arboriculture, and this report is not intended to be legal advice. This report has been written for and intended to be used by the property owner and Primior Property Management for development purposes.

¹ <https://www.isa-arbor.com/Credentials/ISA-Tree-Risk-Assessment-Qualification>

PROJECT DESCRIPTION

405 Hermosa Pl is a .32-acre property with an existing single-family residence. The property owner intends to build an ADU (the Project) in the northwest corner of the property with its own street entrance and carport.

For this Protected Tree Report, I inventoried 38 trees, 37 on the subject property, and one (Tree 31) on the adjacent property (the extent of its dripline is within 15 feet of the Project). Of the 38 trees, 18 are protected because they fit the description of a “significant tree,” “mature oak,” or “mature native tree,” as defined by Chapter 34 of the City’s municipal code. A total of 15 trees will need to be removed because they are in the footprint of the Project. Eight of the 15 trees to be removed are protected (Trees # 22-23 and 33-38).

On the Tree Map, a potential retaining wall is indicated west and south of Tree 12 (coast live oak). Since this tree has a 35-inch DBH², it is recommended that the wall be placed at least 12 feet away from the trunk of the tree.

² Diameter at Breast Height (DBH) is the trunk diameter measured 4.5 feet above ground/grade level.

TREE DATA

Matrix of All Trees

Tree #	Tag #	Species	Scientific Name	# of Stems	Stem(s) DBH (in)	Total DBH (in)	Ordinance Classification	Protected	Canopy Height (ft)	Canopy Width (ft)	Location	Removal
1	736	Lemon Bottlebrush	<i>Callistemon citrinus</i>	2	14,6	20	Significant	Yes	22	20	On-site	No
2	737	Coast Live Oak	<i>Quercus agrifolia</i>	1	8	8	Mature Oak	Yes	25	15	On-site	No
3	738	Deodar Cedar	<i>Cedrus deodara</i>	1	33	33	Significant	Yes	75	45	On-site	No
4	739	Victorian Box	<i>Pittosporum undulatum</i>	2	6,4	10	Mature	No	22	15	On-site	No
5	740	Victorian Box	<i>Pittosporum undulatum</i>	1	7	7	Mature	No	20	18	On-site	No
6	741	Pittosporum	<i>Pittosporum sp.</i>	2	6,6	12	Significant	Yes	25	18	On-site	No
7	742	Pittosporum	<i>Pittosporum sp.</i>	1	11	11	Mature	No	30	20	On-site	No
8	743	Crape Myrtle	<i>Lagerstroemia indica</i>	6	4,5,6,3,4,5	27	Significant	Yes	25	25	On-site	No
9	744	Chinese Elm	<i>Ulmus parvifolia</i>	1	5	5	Mature	No	20	16	On-site	No
10	745	Pittosporum	<i>Pittosporum sp.</i>	2	5,3	8	Mature	No	15	10	On-site	No
11	746	Southern Magnolia	<i>Magnolia grandiflora</i>	1	14	14	Significant	Yes	35	25	On-site	No
12	747	Coast Live Oak	<i>Quercus agrifolia</i>	1	35	35	Mature Oak	Yes	55	60	On-site	No
13	748	Crape Myrtle	<i>Lagerstroemia indica</i>	1	7	7	Mature	No	28	16	On-site	No
14	749	Fern Pine	<i>Afrocarpus falcatus</i>	3	3,3,3	9	Mature	No	18	10	On-site	No
15	750	Incense Cedar	<i>Calocedrus decurrens</i>	1	18	18	Significant	Yes	32	16	On-site	No
16	751	Pittosporum	<i>Pittosporum sp.</i>	1	10	10	Mature	No	30	20	On-site	No
17	752	Canary Island Date Palm	<i>Phoenix canariensis</i>	1	24	24	Significant	Yes	40	25	On-site	No
18	753	Carolina Cherry	<i>Prunus caroliniana</i>	1	7	7	Mature	No	18	15	On-site	No
19	754	Pittosporum	<i>Pittosporum sp.</i>	1	8	8	Mature	No	12	15	On-site	No
20	755	Avocado	<i>Persea americana</i>	1	7	7	Mature	No	20	12	On-site	No
21	756	Carolina Cherry	<i>Prunus caroliniana</i>	1	7	7	Mature	No	20	15	On-site	No
22	757	Toyon	<i>Heteromeles arbutifolia</i>	2	4,6	10	Mature Native	Yes	20	20	On-site	Yes
23	758	Coast Live Oak	<i>Quercus agrifolia</i>	1	27	27	Mature Oak	Yes	40	40	On-site	Yes
24	759	Carolina Cherry	<i>Prunus caroliniana</i>	1	5	5	Mature	No	18	12	On-site	Yes
25	760	Carolina Cherry	<i>Prunus caroliniana</i>	1	6	6	Mature	No	20	15	On-site	Yes
26	761	Citrus	<i>Citrus sp.</i>	2	4,6	10	Mature	No	15	12	On-site	Yes
27	762	Citrus	<i>Citrus sp.</i>	3	3,4,4	11	Mature	No	15	10	On-site	Yes
28	763	Citrus	<i>Citrus sp.</i>	2	3,4	7	Mature	No	10	8	On-site	Yes
29	764	Rubber Tree	<i>Ficus elastica</i>	1	7	7	Mature	No	35	25	On-site	Yes
30	765	Citrus	<i>Citrus sp.</i>	4	4,3,3,1	11	Mature	No	15	10	On-site	Yes
31	None	Evergreen Ash	<i>Fraxinus uhdei</i>	1	12 (estimated)	12	Significant	Yes	40	30	Adjacent Property	No
32	766	Japanese Loquat	<i>Eriobotrya japonica</i>	2	6,4	10	Mature	No	25	20	On-site	No
33	767	Coast Live Oak	<i>Quercus agrifolia</i>	1	10	10	Mature Oak	Yes	20	22	On-site	Yes
34	768	Canary Island Pine	<i>Pinus canariensis</i>	1	28	28	Significant	Yes	100	30	On-site	Yes
35	769	Canary Island Pine	<i>Pinus canariensis</i>	1	27	27	Significant	Yes	80	30	On-site	Yes
36	770	Coast Live Oak	<i>Quercus agrifolia</i>	2	13,5	18	Mature Oak	Yes	20	15	On-site	Yes
37	771	Toyon	<i>Heteromeles arbutifolia</i>	multiple	multiple	14	Mature Native	Yes	15	12	On-site	Yes
38	772	Canary Island Pine	<i>Pinus canariensis</i>	1	42	42	Significant	Yes	100	30	On-site	Yes

Matrix of “Mature Native” and “Mature Oak” Removals

Tree #	Tag #	Species	Scientific Name	# of Stems	Stem(s) DBH (in)	Total DBH (in)	Ordinance Classification	Protected	Canopy Height (ft)	Canopy Width (ft)	Location	Removal
22	757	Toyon	<i>Heteromeles arbutifolia</i>	2	4,6	10	Mature Native	Yes	20	20	On-site	Yes
23	758	Coast Live Oak	<i>Quercus agrifolia</i>	1	27	27	Mature Oak	Yes	40	40	On-site	Yes
33	767	Coast Live Oak	<i>Quercus agrifolia</i>	1	10	10	Mature Oak	Yes	20	22	On-site	Yes
36	770	Coast Live Oak	<i>Quercus agrifolia</i>	2	13,5	18	Mature Oak	Yes	20	15	On-site	Yes
37	771	Toyon	<i>Heteromeles arbutifolia</i>	multiple	multiple	14	Mature Native	Yes	15	12	On-site	Yes
					Total DBH inches	79						

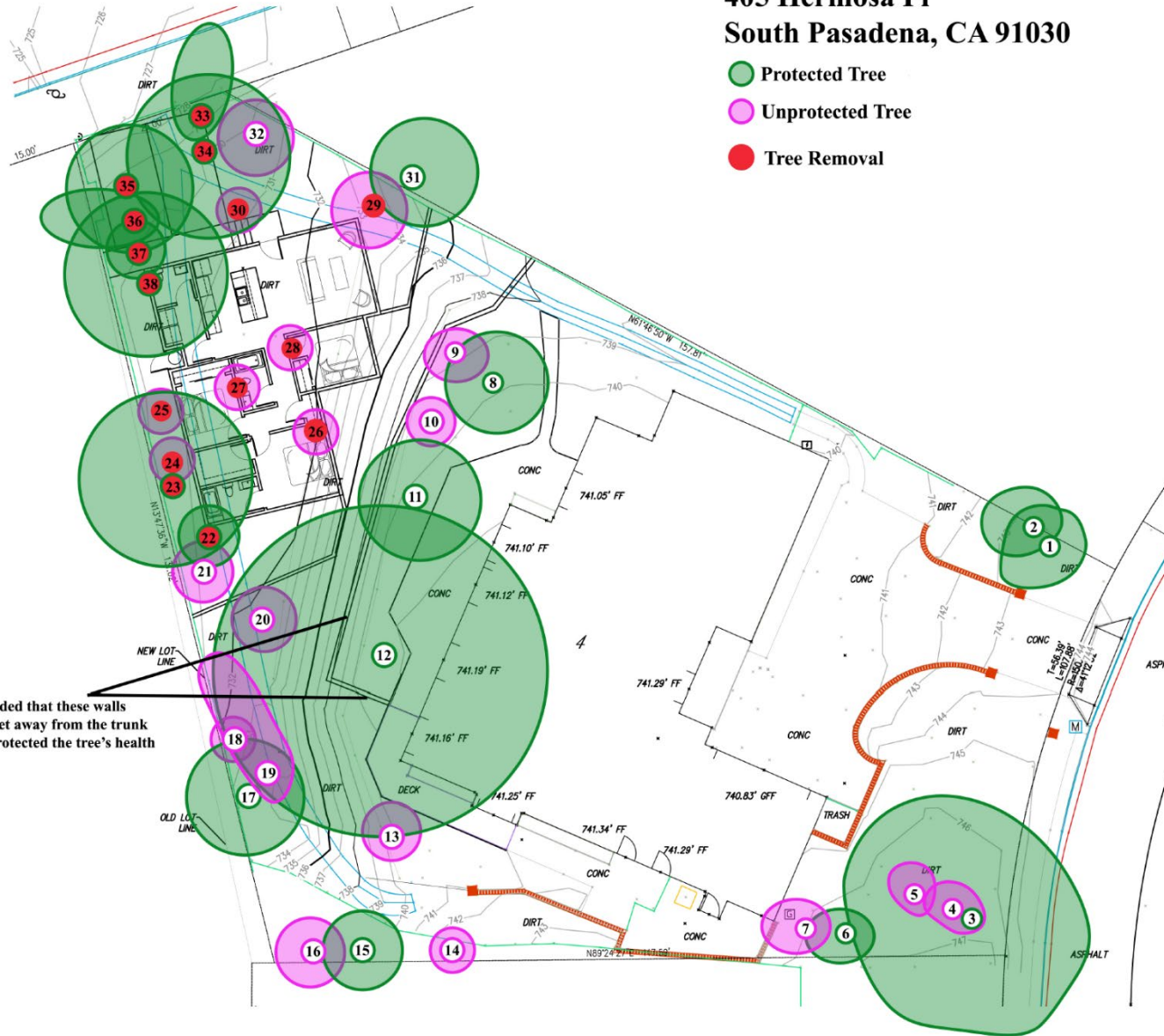
Matrix of “Significant Tree” Removals

Tree #	Tag #	Species	Scientific Name	# of Stems	Stem(s) DBH (in)	Total DBH (in)	Ordinance Classification	Protected	Canopy Height (ft)	Canopy Width (ft)	Location	Removal
34	768	Canary Island Pine	<i>Pinus canariensis</i>	1	28	28	Significant	Yes	100	30	On-site	Yes
35	769	Canary Island Pine	<i>Pinus canariensis</i>	1	27	27	Significant	Yes	80	30	On-site	Yes
38	772	Canary Island Pine	<i>Pinus canariensis</i>	1	42	42	Significant	Yes	100	30	On-site	Yes
					Total DBH inches	97						

Tree Map
405 Hermosa Pl
South Pasadena, CA 91030



- Protected Tree
- Unprotected Tree
- Tree Removal



It is recommended that these walls be placed 15 feet away from the trunk of Tree 12 to protect the tree's health and stability.

MITIGATION TREES

In the “Development or Construction Replacement Trees” section of the South Pasadena Resident’s Guide to the City’s Tree Ordinance document (Appendix B), it states that “For non-native tree removals associated with development or construction, one 24” box tree will be required as a replacement for each six-inch increment of the diameter of the tree being removed. For native tree removals associated with development or construction, two 24” box trees will be required as a replacement for each six-inch increment.”

The Tree Data section of this report, as seen above, indicates that there are 5 “mature oak” and/or “mature native trees” to be removed, with a total of 79 DBH inches. Based on the language in the paragraph above, 26 24-inch box trees would be required as mitigation. There are also 3 “significant trees” that require removal as part of the Project, with a total of 97 DBH inches. For these trees, 16 24-inch box trees would be required as mitigation. In total, there would be 42 24-inch box trees required to mitigate for the Project’s required tree removals.

Planting 42 24-inch box trees on the subject property would not be practical. Per the South Pasadena Resident’s Guide to the City’s Tree Ordinance document, it is recommended that the homeowner donate the trees to the City and the Public Works Department who “will plant the trees on city property, such as in parkways, parks and medians.”

TREE PHOTOS



Tree 1
Lemon Bottlebrush (*Callistemon citrinus*)
Protected (Significant)



Tree 2
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 3
Deodar Cedar (*Cedrus deodara*)
Protected (Significant)



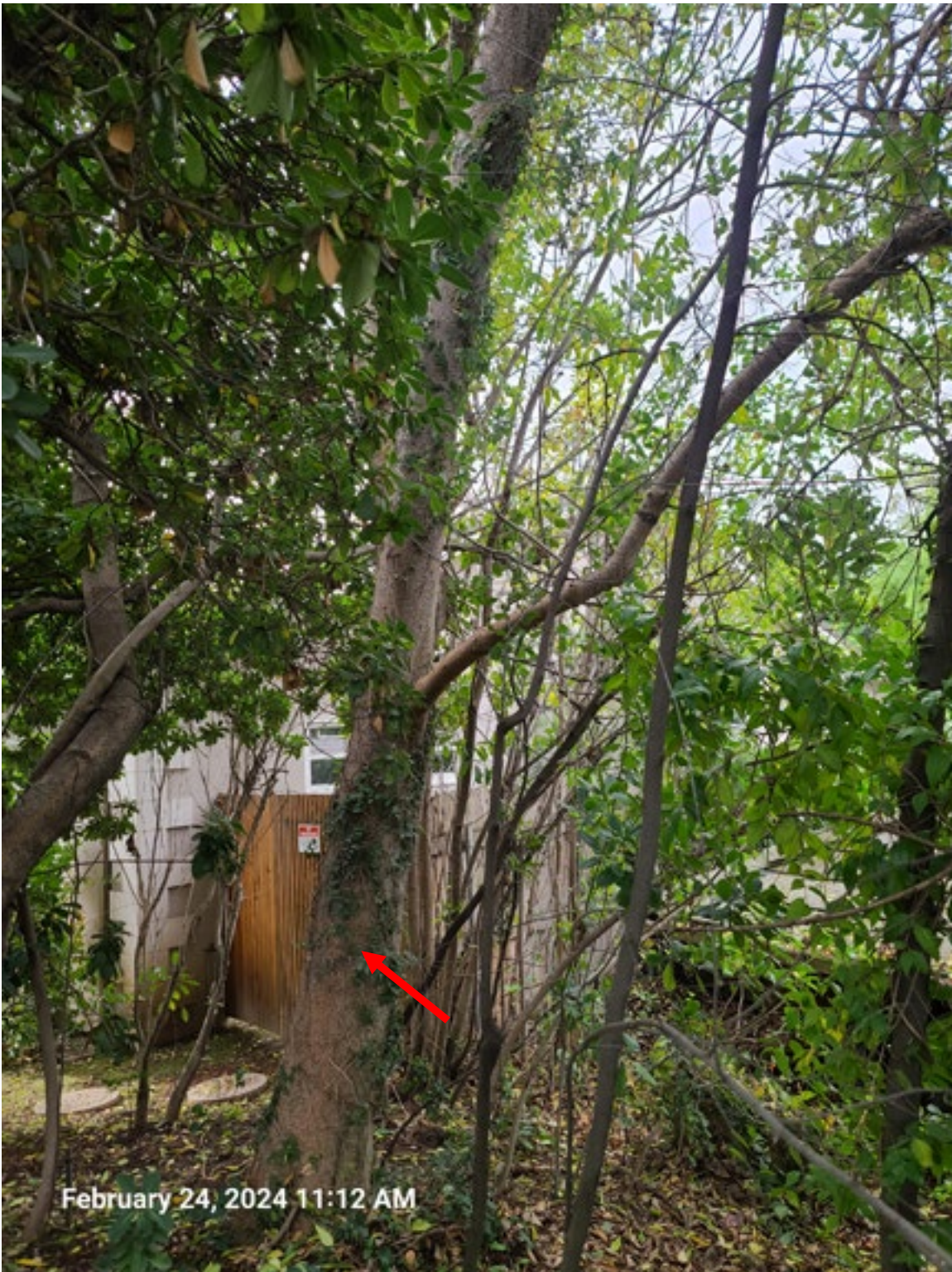
Tree 4
Victorian Box (*Pittosporum undulatum*)
Not Protected



Tree 5
Victorian Box (*Pittosporum undulatum*)
Not Protected



Tree 6
Pittosporum (*Pittosporum* sp.)
Protected (Significant)



Tree 7
Pittosporum (*Pittosporum* sp.)
Not Protected



Tree 8
Crape Myrtle (*Lagerstroemia indica*)
Protected (Significant)



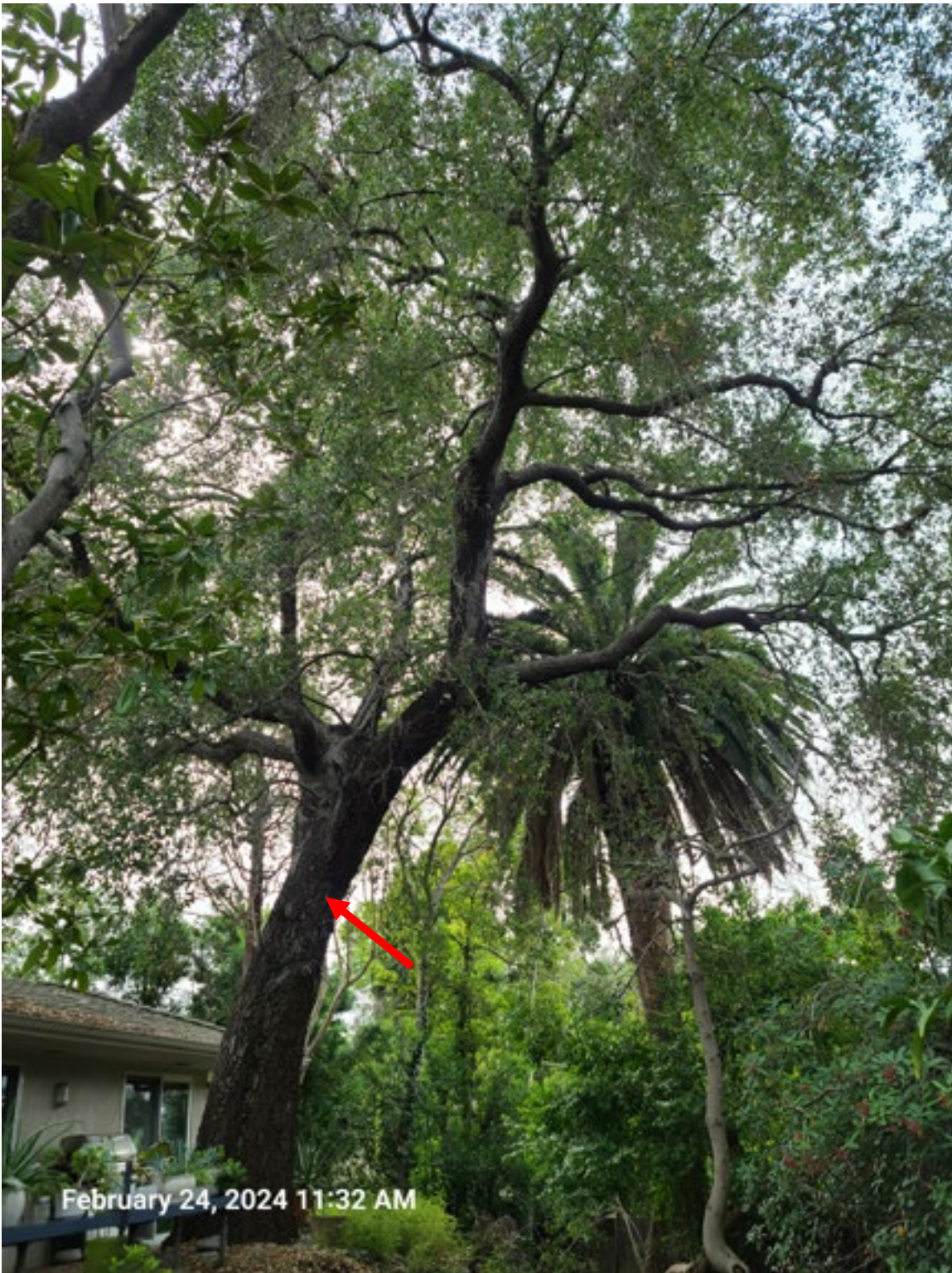
Tree 9
Chinese Elm (*Ulmus parvifolia*)
Not Protected



Tree 10
Pittosporum (*Pittosporum* sp.)
Not Protected



Tree 11
Southern Magnolia (*Magnolia grandiflora*)
Protected (Significant)



Tree 12
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 13
Crape Myrtle (*Lagerstroemia indica*)
Not Protected



Tree 14
Fern Pine (*Afrocarpus falcatus*)
Not Protected



Tree 15
Incense Cedar (*Calocedrus decurrens*)
Protected (Significant)



Tree 16
Pittosporum (*Pittosporum* sp.)
Not Protected



Tree 17
Canary Island Date Palm (*Phoenix canariensis*)
Protected (Significant)



Tree 18
Carolina Cherry (*Prunus caroliniana*)
Not Protected



Tree 19
Pittosporum (*Pittosporum* sp.)
Not Protected



Tree 20
Avocado (*Persea americana*)
Not Protected



Tree 21
Carolina Cherry (*Prunus caroliniana*)
Not Protected



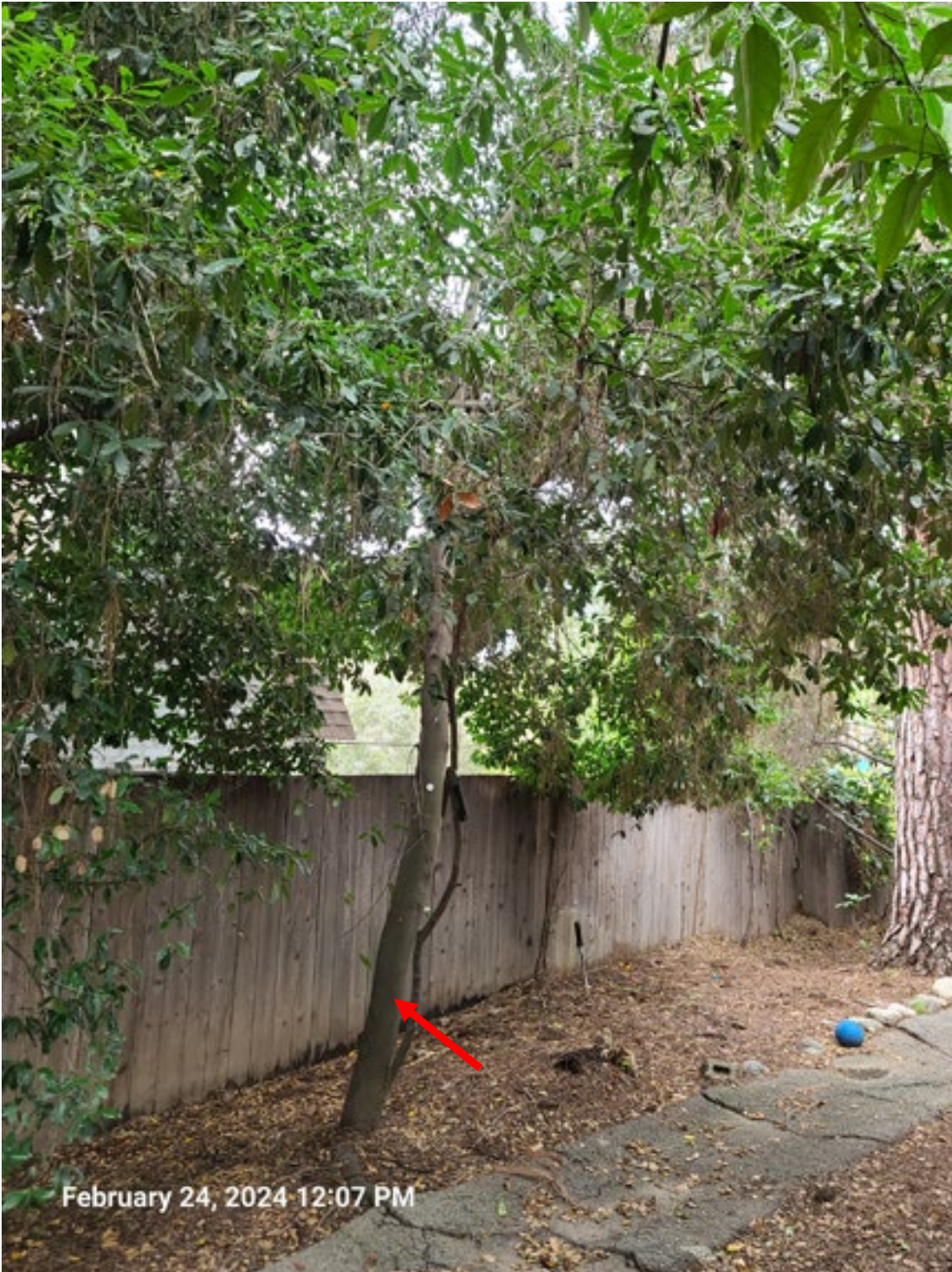
Tree 22
Toyon (*Heteromeles arbutifolia*)
Protected (Mature Native)



Tree 23
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 24
Carolina Cherry (*Prunus caroliniana*)
Not Protected



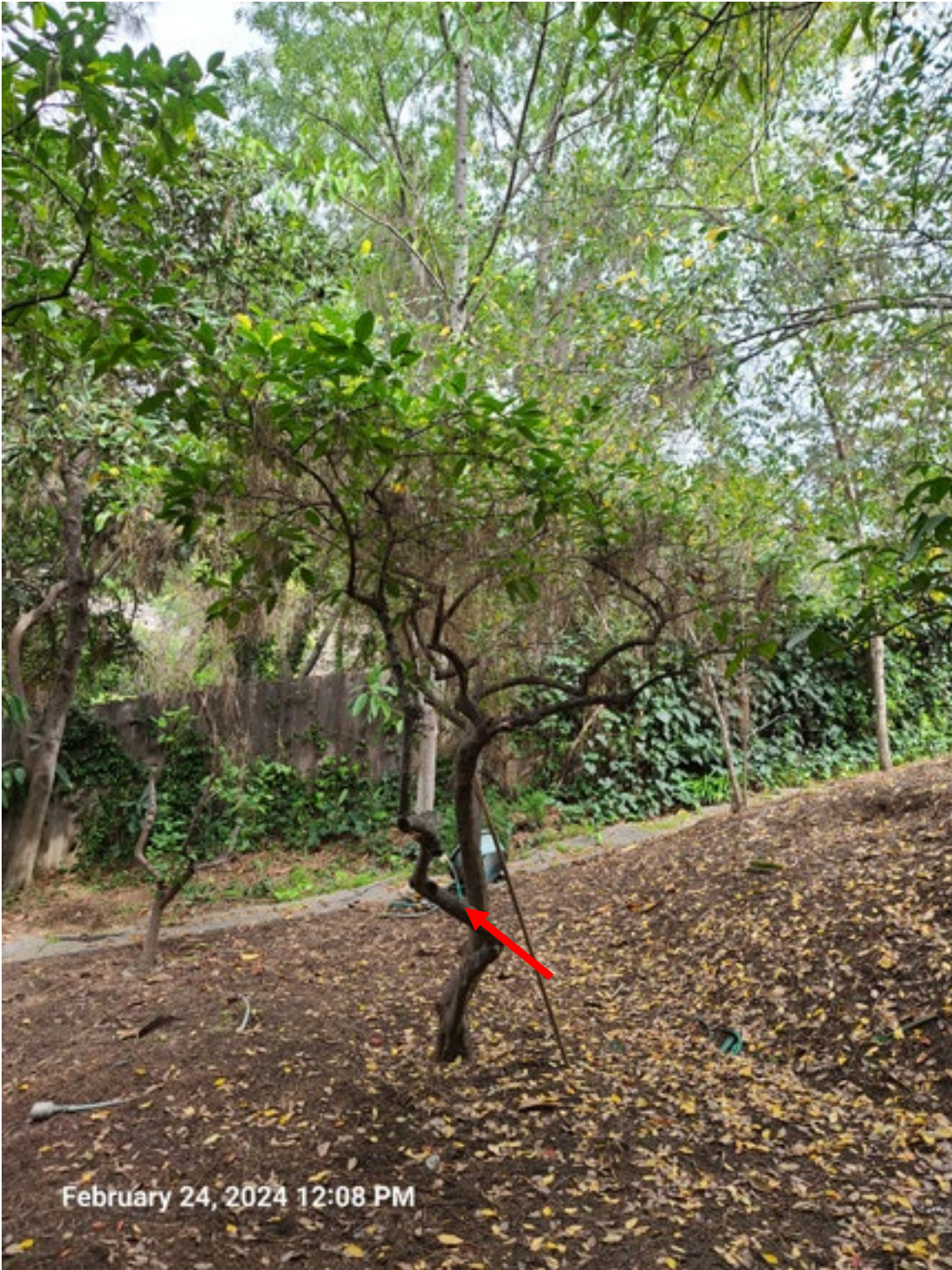
Tree 25
Carolina Cherry (*Prunus caroliniana*)
Not Protected



Tree 26
Citrus (*Citrus* sp.)
Not Protected



Tree 27
Citrus (*Citrus* sp.)
Not Protected



Tree 28
Citrus (*Citrus* sp.)
Not Protected



Tree 29
Rubber Tree (*Ficus elastica*)
Not Protected



Tree 30
Citrus (*Citrus* sp.)
Not Protected



Tree 31
Evergreen Ash (*Fraxinus uhdei*)
Protected (Significant)



Tree 32
Japanese Loquat (*Eriobotrya japonica*)
Not Protected



Tree 33
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 34
Canary Island Pine (*Pinus canariensis*)
Protected (Significant)



Tree 35
Canary Island Pine (*Pinus canariensis*)
Protected (Significant)



Tree 36
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 37
Toyon (*Heteromeles arbutifolia*)
Protected (Mature Native)



Tree 38
Canary Island Pine (*Pinus canariensis*)
Protected (Significant)

ASSUMPTIONS AND LIMITING CONDITIONS

1. 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. Standard of Care has been met with regards to this project within reasonable and normal conditions.
2. The Consultant will not be required to give testimony or to attend court by reason of this report unless subsequent contractual agreements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
3. Loss or alteration of any part of this report invalidates the entire report.
4. 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 written consent of the Consultant.
5. 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 stipulated result, a specified value, the occurrence of a subsequent event, nor upon any finding to be reported.
6. 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, or coring, unless otherwise stated. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the tree(s) or property in question may not arise in the future.
7. 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. It is highly recommended that you follow the arborist recommendations; however, you may choose to accept or disregard the recommendations and/or seek additional advice.
8. 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 specific period of time.

9. Any recommendation and/or performed treatments (including, but not limited to, pruning or 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 any other related issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist can then be expected to consider and reasonably rely on the completeness and accuracy of the information provided.

10. The author has no personal interest or bias with respect to the subject matter of this report or the parties involved. He/she has inspected the subject tree(s) and to the best of their knowledge and belief, all statements and information presented in the report are true and correct.

11. Unless otherwise stated, trees were examined using the risk assessment criteria detailed by the International Society of Arboriculture's publications *Best Management Practices – Tree Risk Assessment* and the *Tree Risk Assessment Manual (Second Edition)*.

APPENDIX A

CONSTRUCTION PROJECT TREE INFORMATION

The City of South Pasadena has regulations to protect trees¹, including those on private property. Construction projects are reviewed for their potential effects on trees located on both the subject property and neighboring properties. This review is also mandated by State law [the California Environmental Quality Act -CEQA]. Trees will be reviewed by the Public Works department as part of the City's review of the formal project submittal (for Design Review, a Certificate of Appropriateness, a Hillside Development Permit, etc.)². Trees are also reviewed for smaller projects (such as swimming pools, driveways, fences, etc.). *Applications that lack the required tree details will not be reviewed until these are provided in full.*

The following details are required on either a separate tree plan or on the site plan:

1. 1/8" scale (or larger)
2. All property lines
3. Footprint of existing structures
4. Area of addition/s (or new construction if a new project)
5. Area/s of any new driveways, parking areas, decks, swimming pools, etc.
6. Locations of fill.³ Mature, Heritage, Significant, oak or native trees on the lot⁴
7. Locations of all trees on neighboring properties within 15' of the area of proposed construction (measured from the closest point of construction to the closest point of the tree canopy). [This is to ascertain the possible impact on root systems and overhead limbs.]
8. All trees are to be numbered.
9. Indicate any trees that will be removed or trimmed to accommodate the proposed project.
10. Show the canopy of each tree (accurately drawn to scale-do not use generic CAD templates).
11. Provide a table:

Tree number	Species	DBH (Diameter at breast height {4' above the around})	Effect of project (remove, trim, protect, none, etc.)

12. Provide an aerial photo (Google Earth or similar) of the lot and adjacent lots.
13. Arborist's report. If an arborist has already evaluated the trees, please provide a copy of this report. Note: The City may require an arborist's report, depending on the types/sizes of trees and the impact of the proposed project on them.

Because trees can also be affected by construction activity, the following information should be provided as soon as it is available. (These specific details may not be available until the construction phase of the project [so must be shown on the construction drawings], but the City strongly recommends that these potential impacts are taken into consideration during the design phase of the project.) The Planning department will advise if these details are required prior to project approval.

- a. Show the path/s of travel for construction vehicles (trucks, concrete trucks, etc.)
- b. Indicate any areas where a crane/lift truck, etc. will operate (this could impact tree limbs)
- c. Indicate any areas where dumpsters, building materials, etc. will be stored during construction

Tree removals require a Tree Removal Permit. Fees apply, and the City's tree ordinance requires that replacement trees be planted (or in-lieu fees paid to the City). Details of this process can be obtained from the Public Works department (p26 403 7240)

¹ The City's tree regulations can be found at <http://www.qcode.us/codes/southpasadena/view.php?topic=34&showAll=1&frames=on>

² It is strongly recommended that homeowners discuss proposed projects with the Public Works department early in the design process. Trees can be affected by construction activity (for example, cranes can damage tree limbs; heavy trucks can damage roots, excavation for foundations or swimming pools can cut roots, etc.). And certain costs (permit fees and replacement trees) apply for tree removal. Early identification of these issues may allow the project to be designed as to avoid impacting trees, which are a valuable natural resource.

³ Most project submittals only require that the listed trees be shown. The City will advise if additional trees must also be shown.

⁴ See reverse for further information (SPMC 34.1)

APPENDIX B



South Pasadena Resident's Guide to the City's Tree Ordinance

Help Keep South Pasadena Green & Beautiful

South Pasadena's charm is closely related to its lush canopy of trees. Trees provide shade for buildings – saving energy for air conditioning—hold soil in place, and protect our watershed. They provide habitat for birds and other animals. Indeed, South Pasadena's efforts to maintain its urban forest have won the community acclaim as a "Tree City USA", a designation made by the National Arbor Day Foundation, in cooperation with the U.S. forest Service and the National Associate of State Foresters.

To maintain the urban canopy that makes South Pasadena so inviting, the city in 1991 adopted an ordinance which governs removal and replacement of trees. Tree removals are to be reviewed by the city Public Works Department, which has a certified arborist on staff. When the Department denies a tree removal permit application, residents are free to appeal to the City's Natural Resources and Environmental Commission (NREC). At times the Department also may choose to refer some applications for removal permits for consideration by the commission, which is a volunteer panel of residents appointed by the City Council that meets once a month.



The ordinance (attached) allows tree removals only when specific conditions exist. These are when:

1. Where the tree itself, its excess foliage or its limbs poses a reasonable risk of injury or harm to persons or property, or is interfering with a structure or building, and there is no feasible and reasonable alternative to mitigate the interference.
(Interference generally does not occur unless a tree is planted within three times its diameter of a structure. Interference with plumbing pipes, which can be rerouted or repaired and protected through root trimming, generally does not constitute grounds for tree removal.)
2. Where, upon taking into account the size, shape, topography and existing trees upon the lot, the denial of the permit would create an unreasonable hardship on the property owner.
3. When a written determination has been made by an ISA certified arborist, after a visual inspection and scientific evaluation that the tree is so diseased or damaged that it is no longer viable or is a threat to property or to other trees. The Public Works Director or NREC may waive the requirement for an Arborist's statement when the tree can reasonably be determined to be dead by a lay person's visual inspection, or after conducting an inspection of the tree, the Director determines that the tree poses an obvious and imminent threat to life or property.
4. For the removal of significant or mature trees, where the replacement tree planting provides greater benefits than the existing tree's value, benefits or species.

Applicants must demonstrate greater benefits including, but not limited to:

- Reduction in energy use when trees are planted to shade structures
- Reduction in water use when planting native species, etc.
- Promotion of native species
- Increasing the number of trees on the property
- When trees are planted to abate urban noise
- When planting larger tree species

To apply for a tree removal permit you must:

- Fill out the application form, and
- Pay a permit processing fee

You will need the following information in order to complete the application forms:

- Type of tree or tree species (common name)
- Diameter of tree. To determine the diameter, place a tape measure around the trunk 4 feet above the ground to get the circumference. Divide the circumference by 3.14(pi) to get the diameter. If there are multiple trunks at four feet above ground, measure each the same way and add their diameters together to determine the total diameter.
- Location of tree, including measurements in feet from any structures (submit site plan to demonstrate tree interference to structures that are within 3 diameters of the tree). If the foundation damage is not obvious by visual inspection, a foundation report may be submitted to prove the structural interference.
- Reason for removal, that is, at least one of the following:
 - The tree is encroaching on a structure and causing damage: (damage to fences, sidewalks, or curbs do not qualify. Likewise, interferences with plumbing or sewers is not considered hardship and will not be allowed as a reason for tree removal)
 - The tree is diseased or dead;
 - The tree is creating an imminent threat to property or life; or
 - The tree is creating an undue hardship.
 - Documents to support item #4 above.
- A certified arborist's report documenting all of this information.
- Submit Diagram or Plan showing existing tree(s) onsite including common names and dbh (diameter at breast height) for all trees.

In general, tree removal will not be approved if trimming, root trimming, or minor structural modifications, including rerouting or repair of pipes accompanied with root trimming can solve your problem. It can be less expensive to perform such minor work than to remove a tree. Trees will not be removed for aesthetic reasons.

If the Department of Public Works denies your application, you can appeal its decision to the Natural Resources and Environmental Commission (NREC). The Commission will want to examine all of the information listed above, as well as hear from you. However, in order to hear other cases in a timely manner and conduct other necessary business, the volunteer commission will limit discussion.

If your tree removal permit is approved, ***one 24" box tree will be required as a replacement for each ten-inch increment*** of the diameter of the tree being removed as follows:

- Up to 10 inches (one replacement)
- 11-20 inches (two replacements)
- 21-30 inches (three replacements)
- 31-40 inches (four replacements)
- Etc.

For native tree removals, ***two 24" box trees will be required as a replacement for each ten-inch increment.***

Development or Construction Replacement Trees

For non-native tree removals associated with development or construction, ***one 24" box tree will be required as a replacement for each six-inch increment*** of the diameter of the tree being removed. For native tree removals associated with development or construction, ***two 24" box trees will be required as a replacement for each six-inch increment.***

The city prefers that you plant native trees as replacements. Should you not have room to plant the trees on your property, you may arrange to have them planted on a neighbor's property. Optionally, you can donate a tree to the City and the Public Works Department will plant the trees on city property, such as in parkways, parks and medians.

Other rules apply under the ordinance, including special requirements for development and construction projects. Please read the ordinance carefully. It is illegal to remove trees without prior approval and penalties will apply when violations occur.

Permit fees and restitution in excess of \$8,000 could be imposed for tree removals without a permit.

Only you can help keep South Pasadena green and beautiful by observing the city tree ordinance.

ATTACHMENT 3

Public Notice Responses

Mark Hess

718 Hermosa St.

South Pasadena, CA 91030

We, neighbors of 405 Hermosa Place, formally protest the Application for Tree Removal submitted by the owners of 705 Hermosa Place, South Pasadena, CA 91030.

What we know:

- Owners have filed an application for the removal of 15 natural and mature trees that are on their property. At this time, we do not know which trees will be removed. Note, there are 3 very large pine trees that are >75' in height.

What we have heard:

- After tree removal, the owners would like to build an ADU (Additional Dwelling Unit) on the property, adding a private access driveway with entry from Hermosa Street. While we do not know the specific intent of how the ADU will be used, it most definitely will be used for rental income: either long-term or Airbnb/VRBO/short term rental.

We, as neighbors, welcome individual projects that improve our surroundings. Many of us have invested money and time in landscaping and outdoor lighting to the benefit of all. It's not just for the individual homeowner to enjoy, it brings beauty and value to all our properties, where we live and take pride. It is this combined effort that improves where and how we live; it brings us satisfaction and a sense of comfort. You might call it neighborly for us to all take care of our properties and it just is the right thing to do.

Furthermore, we have been told that the owners of 405 Hermosa Place are "owners in absentia", residing in Australia, that they have never seen this property, nor set foot on it or anywhere around our neighborhood or South Pasadena. How can they understand and appreciate the impact of their request that inserts a massive change to our neighborhood? What would happen if properties all around were owned by people who did not live here? It's a concerning and bothersome thought.

Fifteen trees are targeted to be removed. We understand that typically, the City states that "Conditions must exist to warrant the removal of any mature tree" and further states that "Healthy trees, which are not causing a hardship on the property owner, shall not be approved for removal" (note: Marc Perkins application in 2016) And of course, we are not talking about the removal of 1 mature tree but rather removing 15 mature trees on the property.

The removal of these mature trees, possibly including the 3 massive 75'+ pine trees would have a significant visual impact on our neighborhood. As for the pine trees, they serve as regular habitat for Red-shouldered Hawks and owls. Removing these trees means impacting these raptors from our neighborhood. Please note we will be notifying the California Department of Fish and Wildlife of this potential wildlife disturbance. NREC (Natural Resources and Environmental Commission) will also be notified. These raptors must be protected from people who have a greater sense of greed than protecting nature.

The reason for all this turmoil is to build an ADU. What does that mean to each of us? Generally, we have no issues with people being able to rent an ADU. We all know the cost of real estate and ADU's can provide added capacity and availability. There is concern if this ADU to be used in the short-term rental market. We've all heard and know the long list of issues: noise and nuisance factors could be significant and can beat down the quality of life we have all grown to love here in South Pasadena. Have the owners already checked into the Zoning Department for building such a unit? Has all this been done before so that 15 mature trees don't have to be removed? How about our local laws/community rules on short-term rentals? Have these "owners in absentia" researched the enforcement of nuisance, noise and related ordinances or are they simply trying to max out their capital investment with no consideration of where and how this would impact us, individually and collectively? While the impact of the 15 trees is very significant, we also must consider the long-term impact on our neighborhood, our properties and personal value of where we live.

April 22, 2024

Neal Mathisen
410 Floral Park Terrace
South Pasadena, CA 91030
nmathisen@ymail.com

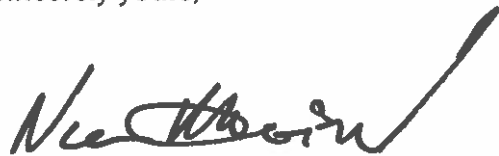
To Whom It May Concern:

I am writing in reference to the potential multiple tree removal at 405 Hermosa Place. I strenuously object to this action as it involves the removal of fifteen mature trees which would significantly alter the overall aesthetic of the neighborhood. Furthermore, it will affect the view that we enjoy from our back garden. South Pasadena is a "Tree City" and every effort should be made to preserve that distinction.

It should also be noted that this tree removal is being requested by a non-resident owner who will not have to live with the consequences of his/her actions. On the contrary, it will deeply affect the residents who so enjoy this beautiful and green neighborhood.

Please feel free to contact me should you have any questions.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Neal Mathisen", with a long, sweeping flourish extending upwards and to the right.

Neal Mathisen

ATTACHMENT 4

Updated Tree Map and Arborist Report

405 Hermosa Pl

12.13.24 Tree Report

SUBMITTED TO:

Chuck Minyard
Primior Property Management
750 N Diamond Bar Blvd, Ste 188
Diamond Bar, CA 91765

PREPARED BY:

Cris Falco
(619) 313-3939
1318 E Walnut Creek Pkwy
West Covina, CA 91790

Board Certified Master Arborist WE-7490B
Registered Consulting Arborist #557
Pest Control Adviser #128017
Qualified Tree Risk Assessor

 **RCA #557**
Registered Consulting Arborist®



DECEMBER 13, 2024

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Appendix C: <u>Root Pruning and Stability of Young Willow Oak</u> Arboriculture & Urban Forestry 34(2): March 2008	no page numbering

Tree Map PDF separately attached

BACKGROUND AND ASSIGNMENT

In February of 2024, I was contracted by Primior Property Management to prepare a Protected Tree Report for 405 Hermosa Pl, South Pasadena, CA 91030. The property owner intends to construct an ADU in the northwest corner of the property (the Project), and the City of South Pasadena requires a Protected Tree Report for this construction because there are protected trees in the vicinity of the Project. The agreed-upon consulting assignment was to prepare a Protected Tree Report per the requirements of South Pasadena's Construction Project Tree Information form (see Appendix A) and South Pasadena's tree protection ordinance (Chapter 34: Trees and Shrubs). I visited the subject property on February 24, 2024, to collect data and submitted a report titled "405 Hermosa Pl - 3.14.24 Tree Report."

In December of 2024, Primior Property Management sent me a revised Project design and asked that I submit a new report based on the design, which is the consulting assignment for this report. To calculate stem diameters on multi-trunk trees, I used the formula below (quadratic combined diameter) because it more accurately represents the actual trunk area of multi-trunk trees:

<https://support.treeplogger.com/knowledge-base/multi-stem-dbh-calculator/>

1. Measure the diameter of each stem.
2. Find the square of each value of diameter.
3. Add the squares.
4. Find the square root of the sum.

The consulting assignment did not include a tree risk assessment¹, and I do not guarantee the safety, health, or condition of the trees on the subject property or any other tree in the vicinity of the subject property. There is no warranty or guarantee, expressed or implied, that problems or deficiencies in the subject trees may not arise in the future. My expertise in this matter is limited to arboriculture, and this report is not intended to be legal advice. This report has been written for and intended to be used by the property owner and Primior Property Management for development purposes.

¹ <https://www.isa-arbor.com/Credentials/ISA-Tree-Risk-Assessment-Qualification>

PROJECT DESCRIPTION

405 Hermosa Pl is a .32-acre property with an existing single-family residence. The property owner intends to build an ADU (the Project) in the northwest corner of the property with its own street entrance and carport.

For this Protected Tree Report, I inventoried 38 trees, 37 of which were on the subject property and one (Tree 31) on the adjacent property (the extent of its dripline is within 15 feet of the Project). Of the 38 trees, 16 are protected because they fit the description of a “significant tree,” “mature oak,” or “mature native tree,” as defined by Chapter 34 of the City’s municipal code. A total of 15 trees will need to be removed because they are in the footprint of the Project or will be significantly impacted due to proximity to the proposed construction. Six of the 15 trees to be removed are protected (Trees # 11 and 33-37).

Trees 12, 23, and 38 are protected trees that will be encroached upon by the proposed construction.

- Tree 12 is a coast live oak (35-inch DBH²) that will be encroached upon by a retaining wall about 13 feet from the north side of the tree’s trunk. The digging required for the wall footing is far enough from the trunk to not constitute a significant encroachment.
- Tree 23 is a coast live oak (27-inch DBH) that will be encroached upon on its north side by the wall footing for the ADU. The digging will be near the edge of the tree’s canopy and should not constitute a significant encroachment.
- Tree 38 is a Canary Island pine (42-inch DBH) that will be encroached upon by the driveway grading and construction to the north. To preserve the structural stability of the root system, it is recommended that no trenching be performed next to the trunk within a distance of 3 to 5 times the trunk diameter. In other words, trenching should not come within at least 10 feet of the subject tree’s trunk but should preferably be no closer than 18 feet. This recommendation is based on the root pruning study included in Appendix C of this report.

² Diameter at Breast Height (DBH) is the trunk diameter measured 4.5 feet above ground/grade level.

TREE DATA

Matrix of All Trees

Tree #	Tag #	Species	Scientific Name	# of Stems	Stem(s) DBH (in)	Total DBH (in)	Ordinance Classification	Protected	Canopy Height (ft)	Canopy Width (ft)	Location	Removal
1	736	Lemon Bottlebrush	<i>Callistemon citrinus</i>	2	14,6	15	Significant	Yes	22	20	On-site	No
2	737	Coast Live Oak	<i>Quercus agrifolia</i>	1	8	8	Mature Oak	Yes	25	15	On-site	No
3	738	Deodar Cedar	<i>Cedrus deodara</i>	1	33	33	Significant	Yes	75	45	On-site	No
4	739	Victorian Box	<i>Pittosporum undulatum</i>	2	6,4	7	Mature	No	22	15	On-site	No
5	740	Victorian Box	<i>Pittosporum undulatum</i>	1	7	7	Mature	No	20	18	On-site	No
6	741	Pittosporum	<i>Pittosporum</i> sp.	2	6,6	8	Mature	No	25	18	On-site	No
7	742	Pittosporum	<i>Pittosporum</i> sp.	1	11	11	Mature	No	30	20	On-site	No
8	743	Crape Myrtle	<i>Lagerstroemia indica</i>	6	4,5,6,3,4,5	11	Mature	No	25	25	On-site	Yes
9	744	Chinese Elm	<i>Ulmus parvifolia</i>	1	5	5	Mature	No	20	16	On-site	No
10	745	Pittosporum	<i>Pittosporum</i> sp.	2	5,3	6	Mature	No	15	10	On-site	No
11	746	Southern Magnolia	<i>Magnolia grandiflora</i>	1	14	14	Significant	Yes	35	25	On-site	Yes
12	747	Coast Live Oak	<i>Quercus agrifolia</i>	1	35	35	Mature Oak	Yes	55	60	On-site	No
13	748	Crape Myrtle	<i>Lagerstroemia indica</i>	1	7	7	Mature	No	28	16	On-site	No
14	749	Fern Pine	<i>Afrocarpus falcatus</i>	3	3,3,3	5	Mature	No	18	10	On-site	No
15	750	Incense Cedar	<i>Calocedrus decurrens</i>	1	18	18	Significant	Yes	32	16	On-site	No
16	751	Pittosporum	<i>Pittosporum</i> sp.	1	10	10	Mature	No	30	20	On-site	No
17	752	Canary Island Date Palm	<i>Phoenix canariensis</i>	1	24	24	Significant	Yes	40	25	On-site	No
18	753	Carolina Cherry	<i>Prunus caroliniana</i>	1	7	7	Mature	No	18	15	On-site	No
19	754	Pittosporum	<i>Pittosporum</i> sp.	1	8	8	Mature	No	12	15	On-site	No
20	755	Avocado	<i>Persea americana</i>	1	7	7	Mature	No	20	12	On-site	No
21	756	Carolina Cherry	<i>Prunus caroliniana</i>	1	7	7	Mature	No	20	15	On-site	No
22	757	Toyon	<i>Heteromeles arbutifolia</i>	2	4,6	7	Mature Native	Yes	20	20	On-site	No
23	758	Coast Live Oak	<i>Quercus agrifolia</i>	1	27	27	Mature Oak	Yes	40	40	On-site	No
24	759	Carolina Cherry	<i>Prunus caroliniana</i>	1	5	5	Mature	No	18	12	On-site	Yes
25	760	Carolina Cherry	<i>Prunus caroliniana</i>	1	6	6	Mature	No	20	15	On-site	Yes
26	761	Citrus	<i>Citrus</i> sp.	2	4,6	7	Mature	No	15	12	On-site	Yes
27	762	Citrus	<i>Citrus</i> sp.	3	3,4,4	6	Mature	No	15	10	On-site	Yes
28	763	Citrus	<i>Citrus</i> sp.	2	3,4	5	Mature	No	10	8	On-site	Yes
29	764	Rubber Tree	<i>Ficus elastica</i>	1	7	7	Mature	No	35	25	On-site	Yes
30	765	Citrus	<i>Citrus</i> sp.	4	4,3,3,1	6	Mature	No	15	10	On-site	Yes
31	None	Evergreen Ash	<i>Fraxinus uhdei</i>	1	12 (estimated)	12	Significant	Yes	40	30	Adjacent Property	No
32	766	Japanese Loquat	<i>Eriobotrya japonica</i>	2	6,4	7	Mature	No	25	20	On-site	Yes
33	767	Coast Live Oak	<i>Quercus agrifolia</i>	1	10	10	Mature Oak	Yes	20	22	On-site	Yes
34	768	Canary Island Pine	<i>Pinus canariensis</i>	1	28	28	Significant	Yes	100	30	On-site	Yes
35	769	Canary Island Pine	<i>Pinus canariensis</i>	1	27	27	Significant	Yes	80	30	On-site	Yes
36	770	Coast Live Oak	<i>Quercus agrifolia</i>	2	13,5	14	Mature Oak	Yes	20	15	On-site	Yes
37	771	Toyon	<i>Heteromeles arbutifolia</i>	multiple	multiple	14	Mature Native	Yes	15	12	On-site	Yes
38	772	Canary Island Pine	<i>Pinus canariensis</i>	1	42	42	Significant	Yes	100	30	On-site	No

Matrix of “Mature Native” and “Mature Oak” Removals

Tree #	Tag #	Species	Scientific Name	# of Stems	Stem(s) DBH (in)	Total DBH (in)	Ordinance Classification	Protected	Canopy Height (ft)	Canopy Width (ft)	Location	Removal
33	767	Coast Live Oak	<i>Quercus agrifolia</i>	1	10	10	Mature Oak	Yes	20	22	On-site	Yes
36	770	Coast Live Oak	<i>Quercus agrifolia</i>	2	13,5	14	Mature Oak	Yes	20	15	On-site	Yes
37	771	Toyon	<i>Heteromeles arbutifolia</i>	multiple	multiple	14	Mature Native	Yes	15	12	On-site	Yes
					Total DBH inches	38						

Matrix of “Significant Tree” Removals

Tree #	Tag #	Species	Scientific Name	# of Stems	Stem(s) DBH (in)	Total DBH (in)	Ordinance Classification	Protected	Canopy Height (ft)	Canopy Width (ft)	Location	Removal
11	746	Southern Magnolia	<i>Magnolia grandiflora</i>	1	14	14	Significant	Yes	35	25	On-site	Yes
34	768	Canary Island Pine	<i>Pinus canariensis</i>	1	28	28	Significant	Yes	100	30	On-site	Yes
35	769	Canary Island Pine	<i>Pinus canariensis</i>	1	27	27	Significant	Yes	80	30	On-site	Yes
					Total DBH inches	69						

Tree Map

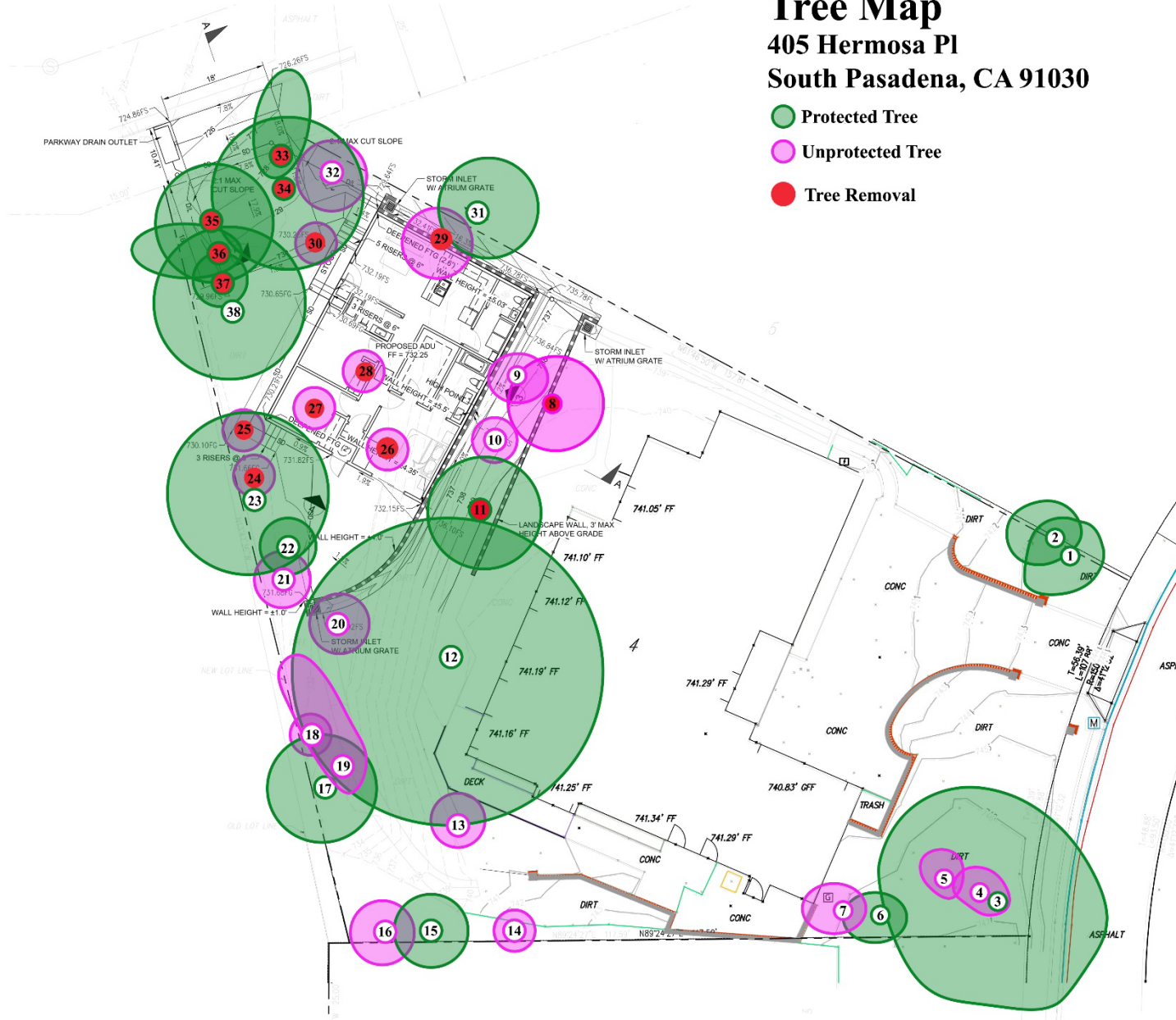
405 Hermosa Pl South Pasadena, CA 91030



Scale: 1" = 10'

Cris Falco
BCMA 7490B
RCA 557
cfalco@treepath.com
(619)313-3939

- Protected Tree
- Unprotected Tree
- Tree Removal



MITIGATION TREES

In the “Development or Construction Replacement Trees” section of the South Pasadena Resident’s Guide to the City’s Tree Ordinance document (Appendix B), it states that “For non-native tree removals associated with development or construction, one 24” box tree will be required as a replacement for each six-inch increment of the diameter of the tree being removed. For native tree removals associated with development or construction, two 24” box trees will be required as a replacement for each six-inch increment.”

The Tree Data section of this report, as seen above, indicates that there are 3 “mature oak” and/or “mature native trees” to be removed, with a total of 38 DBH inches. Based on the language in the paragraph above, 13 (24-inch) box trees would be required as mitigation. There are also 3 “significant trees” that require removal as part of the Project, with a total of 69 DBH inches. For these trees, 12 (24-inch) box trees would be required as mitigation. In total, there would be 25 (24-inch) box trees required to mitigate for the Project’s required tree removals.

Planting 25 (24-inch) box trees on the subject property would not be practical. Per the South Pasadena Resident’s Guide to the City’s Tree Ordinance document, it is recommended that the homeowner donate trees to the City and the Public Works Department, which “will plant the trees on city property, such as in parkways, parks and medians.” The reduction of required mitigation trees may also be possible via the tree ordinance language below:

34.11 Criteria for approving tree removal permit. (see Ordinance 2188)

(b) A tree removal permit may be issued that is conditional upon the replacement or transplanting of the tree(s) either onsite or offsite. Such replacement shall be subject to the following provisions:

(1) Designation by the director or the commission of the number, size, species and location of replacement tree(s) based on consideration of the size and species of the established tree(s) proposed for removal, the significance the tree(s) proposed to be removed has on the landscaping as seen from public view, the size of the lot, and the number of existing trees on the lot.

TREE PHOTOS



Tree 1
Lemon Bottlebrush (*Callistemon citrinus*)
Protected (Significant)



Tree 2
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 3
Deodar Cedar (*Cedrus deodara*)
Protected (Significant)



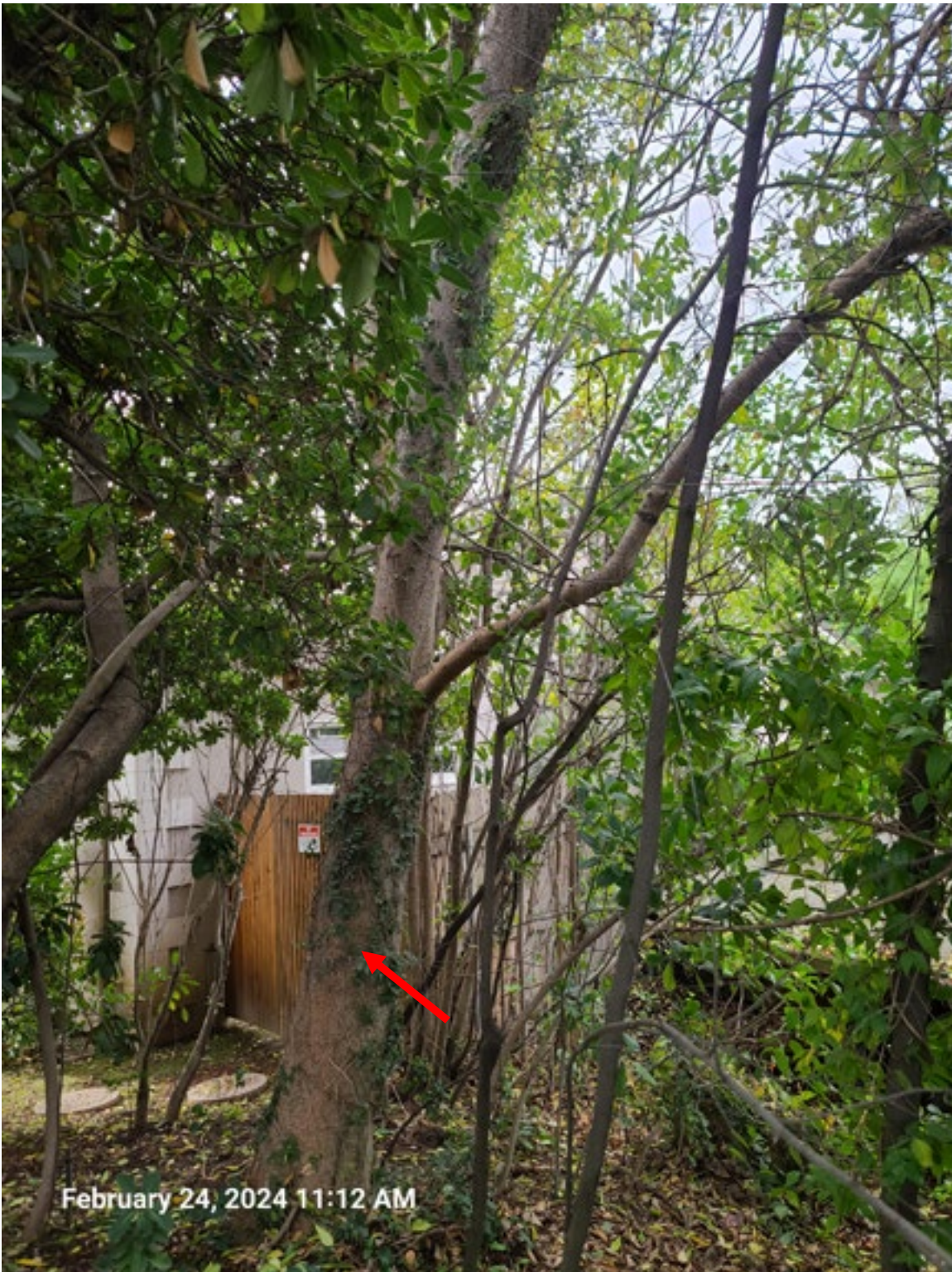
Tree 4
Victorian Box (*Pittosporum undulatum*)
Not Protected



Tree 5
Victorian Box (*Pittosporum undulatum*)
Not Protected



Tree 6
Pittosporum (*Pittosporum* sp.)
Protected (Significant)



Tree 7
Pittosporum (*Pittosporum* sp.)
Not Protected



Tree 8
Crape Myrtle (*Lagerstroemia indica*)
Protected (Significant)



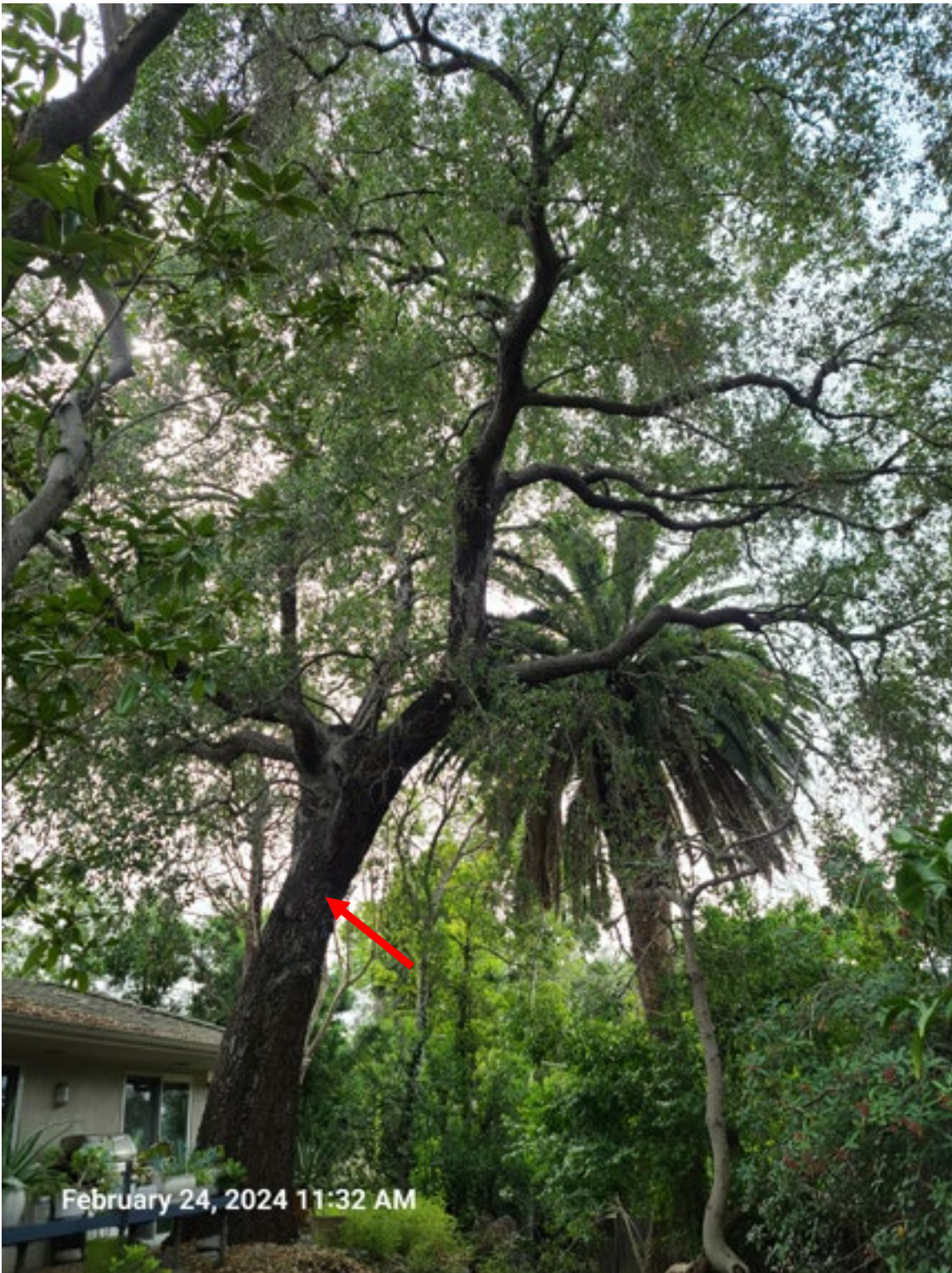
Tree 9
Chinese Elm (*Ulmus parvifolia*)
Not Protected



Tree 10
Pittosporum (*Pittosporum* sp.)
Not Protected



Tree 11
Southern Magnolia (*Magnolia grandiflora*)
Protected (Significant)



Tree 12
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 13
Crape Myrtle (*Lagerstroemia indica*)
Not Protected



Tree 14
Fern Pine (*Afrocarpus falcatus*)
Not Protected



Tree 15
Incense Cedar (*Calocedrus decurrens*)
Protected (Significant)



Tree 16
Pittosporum (*Pittosporum* sp.)
Not Protected



Tree 17
Canary Island Date Palm (*Phoenix canariensis*)
Protected (Significant)



Tree 18
Carolina Cherry (*Prunus caroliniana*)
Not Protected



Tree 19
Pittosporum (*Pittosporum* sp.)
Not Protected



Tree 20
Avocado (*Persea americana*)
Not Protected



Tree 21
Carolina Cherry (*Prunus caroliniana*)
Not Protected



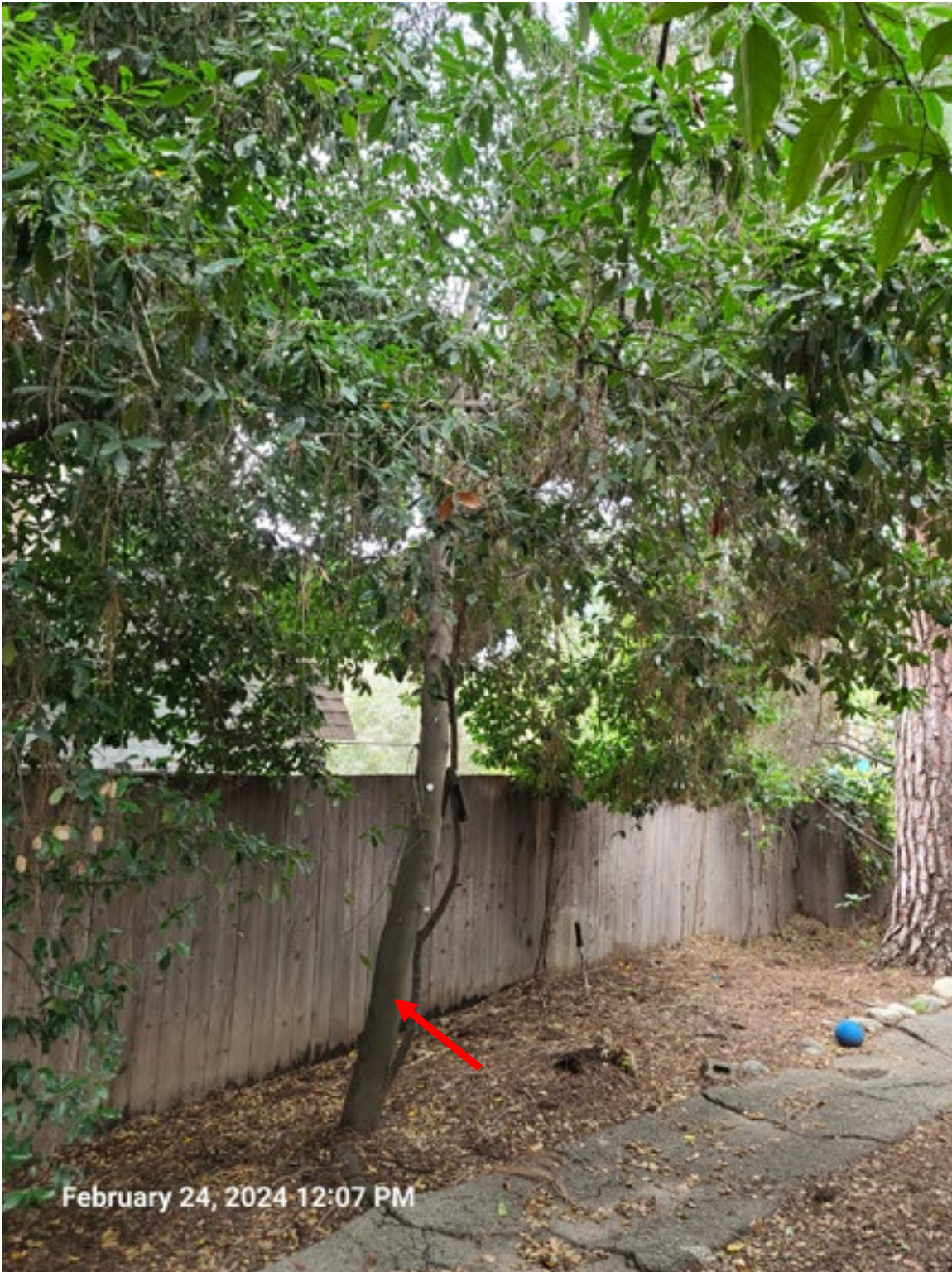
Tree 22
Toyon (*Heteromeles arbutifolia*)
Protected (Mature Native)



Tree 23
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 24
Carolina Cherry (*Prunus caroliniana*)
Not Protected



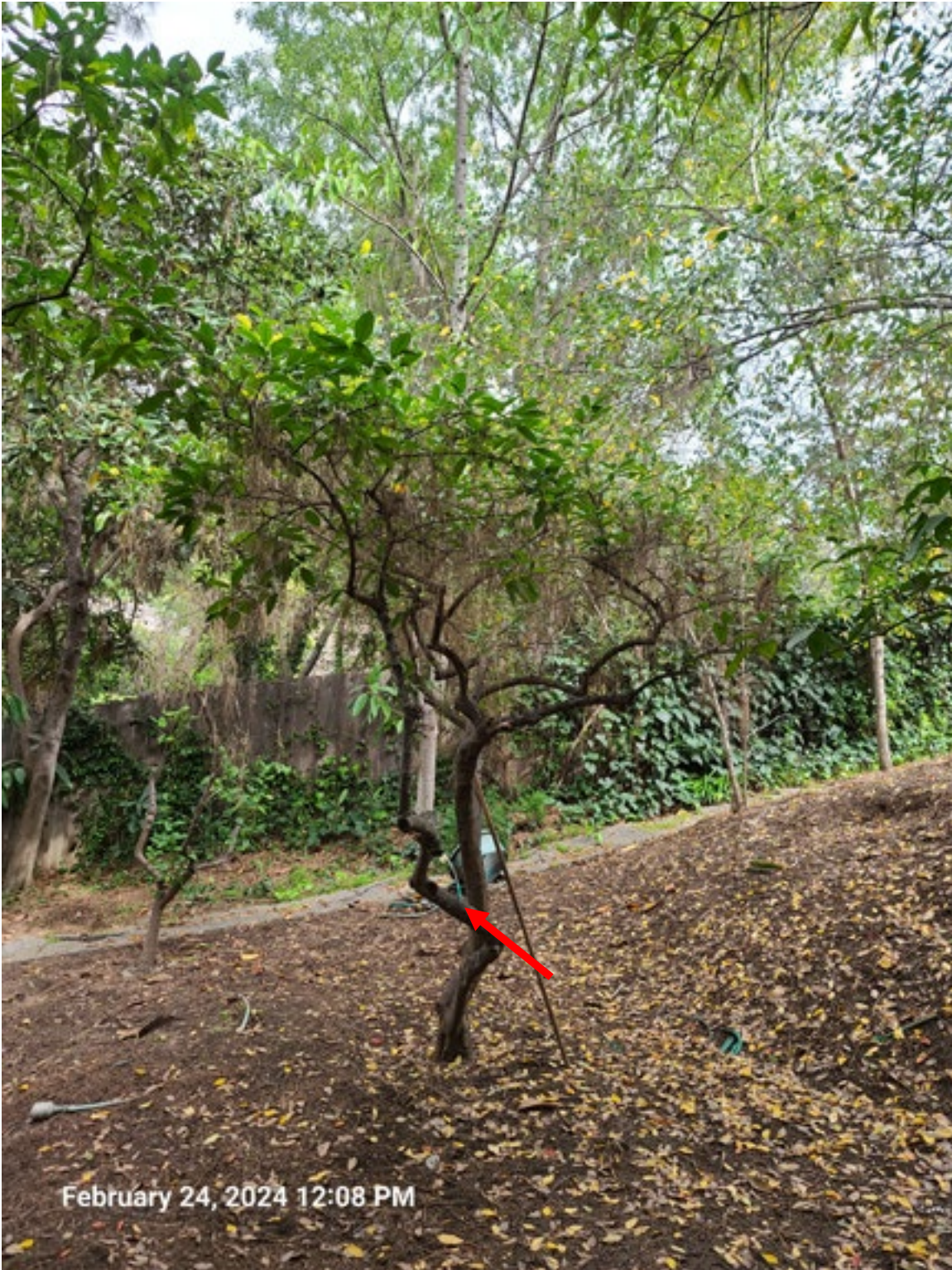
Tree 25
Carolina Cherry (*Prunus caroliniana*)
Not Protected



Tree 26
Citrus (*Citrus* sp.)
Not Protected



Tree 27
Citrus (*Citrus* sp.)
Not Protected



Tree 28
Citrus (*Citrus* sp.)
Not Protected



Tree 29
Rubber Tree (*Ficus elastica*)
Not Protected



Tree 30
Citrus (*Citrus* sp.)
Not Protected



Tree 31
Evergreen Ash (*Fraxinus uhdei*)
Protected (Significant)



Tree 32
Japanese Loquat (*Eriobotrya japonica*)
Not Protected



Tree 33
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 34
Canary Island Pine (*Pinus canariensis*)
Protected (Significant)



Tree 35
Canary Island Pine (*Pinus canariensis*)
Protected (Significant)



Tree 36
Coast Live Oak (*Quercus agrifolia*)
Protected (Mature Oak)



Tree 37
Toyon (*Heteromeles arbutifolia*)
Protected (Mature Native)



Tree 38
Canary Island Pine (*Pinus canariensis*)
Protected (Significant)

ASSUMPTIONS AND LIMITING CONDITIONS

1. 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. Standard of Care has been met with regards to this project within reasonable and normal conditions.
2. The Consultant will not be required to give testimony or to attend court by reason of this report unless subsequent contractual agreements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.
3. Loss or alteration of any part of this report invalidates the entire report.
4. 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 written consent of the Consultant.
5. 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 stipulated result, a specified value, the occurrence of a subsequent event, nor upon any finding to be reported.
6. 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, or coring, unless otherwise stated. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the tree(s) or property in question may not arise in the future.
7. 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. It is highly recommended that you follow the arborist recommendations; however, you may choose to accept or disregard the recommendations and/or seek additional advice.
8. 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 specific period of time.

9. Any recommendation and/or performed treatments (including, but not limited to, pruning or 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 any other related issues. Arborists cannot take such considerations into account unless complete and accurate information is disclosed to the arborist. An arborist can then be expected to consider and reasonably rely on the completeness and accuracy of the information provided.

10. The author has no personal interest or bias with respect to the subject matter of this report or the parties involved. He/she has inspected the subject tree(s) and to the best of their knowledge and belief, all statements and information presented in the report are true and correct.

11. Unless otherwise stated, trees were examined using the risk assessment criteria detailed by the International Society of Arboriculture's publications *Best Management Practices – Tree Risk Assessment* and the *Tree Risk Assessment Manual (Second Edition)*.

APPENDIX A

CONSTRUCTION PROJECT TREE INFORMATION

The City of South Pasadena has regulations to protect trees¹, including those on private property. Construction projects are reviewed for their potential effects on trees located on both the subject property and neighboring properties. This review is also mandated by State law [the California Environmental Quality Act -CEQA]. Trees will be reviewed by the Public Works department as part of the City's review of the formal project submittal (for Design Review, a Certificate of Appropriateness, a Hillside Development Permit, etc.)². Trees are also reviewed for smaller projects (such as swimming pools, driveways, fences, etc.). *Applications that lack the required tree details will not be reviewed until these are provided in full.*

The following details are required on either a separate tree plan or on the site plan:

1. 1/8" scale (or larger)
2. All property lines
3. Footprint of existing structures
4. Area of addition/s (or new construction if a new project)
5. Area/s of any new driveways, parking areas, decks, swimming pools, etc.
6. Locations of fill.³ Mature, Heritage, Significant, oak or native trees on the lot⁴
7. Locations of all trees on neighboring properties within 15' of the area of proposed construction (measured from the closest point of construction to the closest point of the tree canopy). [This is to ascertain the possible impact on root systems and overhead limbs.]
8. All trees are to be numbered.
9. Indicate any trees that will be removed or trimmed to accommodate the proposed project.
10. Show the canopy of each tree (accurately drawn to scale-do not use generic CAD templates).
11. Provide a table:

Tree number	Species	DBH (Diameter at breast height {4' above the around})	Effect of project (remove, trim, protect, none, etc.)

12. Provide an aerial photo (Google Earth or similar) of the lot and adjacent lots.
13. Arborist's report. If an arborist has already evaluated the trees, please provide a copy of this report. Note: The City may require an arborist's report, depending on the types/sizes of trees and the impact of the proposed project on them.

Because trees can also be affected by construction activity, the following information should be provided as soon as it is available. (These specific details may not be available until the construction phase of the project [so must be shown on the construction drawings], but the City strongly recommends that these potential impacts are taken into consideration during the design phase of the project.) The Planning department will advise if these details are required prior to project approval.

- a. Show the path/s of travel for construction vehicles (trucks, concrete trucks, etc.)
- b. Indicate any areas where a crane/lift truck, etc. will operate (this could impact tree limbs)
- c. Indicate any areas where dumpsters, building materials, etc. will be stored during construction

Tree removals require a Tree Removal Permit. Fees apply, and the City's tree ordinance requires that replacement trees be planted (or in-lieu fees paid to the City). Details of this process can be obtained from the Public Works department (p26 403 7240)

¹ The City's tree regulations can be found at <http://www.qcode.us/codes/southpasadena/view.php?topic=34&showAll=1&frames=on>

² It is strongly recommended that homeowners discuss proposed projects with the Public Works department early in the design process. Trees can be affected by construction activity (for example, cranes can damage tree limbs; heavy trucks can damage roots, excavation for foundations or swimming pools can cut roots, etc.). And certain costs (permit fees and replacement trees) apply for tree removal. Early identification of these issues may allow the project to be designed as to avoid impacting trees, which are a valuable natural resource.

³ Most project submittals only require that the listed trees be shown. The City will advise if additional trees must also be shown.

⁴ See reverse for further information (SPMC 34.1)

APPENDIX B



South Pasadena Resident's Guide to the City's Tree Ordinance

Help Keep South Pasadena Green & Beautiful

South Pasadena's charm is closely related to its lush canopy of trees. Trees provide shade for buildings – saving energy for air conditioning—hold soil in place, and protect our watershed. They provide habitat for birds and other animals. Indeed, South Pasadena's efforts to maintain its urban forest have won the community acclaim as a "Tree City USA", a designation made by the National Arbor Day Foundation, in cooperation with the U.S. forest Service and the National Associate of State Foresters.

To maintain the urban canopy that makes South Pasadena so inviting, the city in 1991 adopted an ordinance which governs removal and replacement of trees. Tree removals are to be reviewed by the city Public Works Department, which has a certified arborist on staff. When the Department denies a tree removal permit application, residents are free to appeal to the City's Natural Resources and Environmental Commission (NREC). At times the Department also may choose to refer some applications for removal permits for consideration by the commission, which is a volunteer panel of residents appointed by the City Council that meets once a month.



The ordinance (attached) allows tree removals only when specific conditions exist. These are when:

1. Where the tree itself, its excess foliage or its limbs poses a reasonable risk of injury or harm to persons or property, or is interfering with a structure or building, and there is no feasible and reasonable alternative to mitigate the interference.
(Interference generally does not occur unless a tree is planted within three times its diameter of a structure. Interference with plumbing pipes, which can be rerouted or repaired and protected through root trimming, generally does not constitute grounds for tree removal.)
2. Where, upon taking into account the size, shape, topography and existing trees upon the lot, the denial of the permit would create an unreasonable hardship on the property owner.
3. When a written determination has been made by an ISA certified arborist, after a visual inspection and scientific evaluation that the tree is so diseased or damaged that it is no longer viable or is a threat to property or to other trees. The Public Works Director or NREC may waive the requirement for an Arborist's statement when the tree can reasonably be determined to be dead by a lay person's visual inspection, or after conducting an inspection of the tree, the Director determines that the tree poses an obvious and imminent threat to life or property.
4. For the removal of significant or mature trees, where the replacement tree planting provides greater benefits than the existing tree's value, benefits or species.

Applicants must demonstrate greater benefits including, but not limited to:

- Reduction in energy use when trees are planted to shade structures
- Reduction in water use when planting native species, etc.
- Promotion of native species
- Increasing the number of trees on the property
- When trees are planted to abate urban noise
- When planting larger tree species

To apply for a tree removal permit you must:

- Fill out the application form, and
- Pay a permit processing fee

You will need the following information in order to complete the application forms:

- Type of tree or tree species (common name)
- Diameter of tree. To determine the diameter, place a tape measure around the trunk 4 feet above the ground to get the circumference. Divide the circumference by 3.14(pi) to get the diameter. If there are multiple trunks at four feet above ground, measure each the same way and add their diameters together to determine the total diameter.
- Location of tree, including measurements in feet from any structures (submit site plan to demonstrate tree interference to structures that are within 3 diameters of the tree). If the foundation damage is not obvious by visual inspection, a foundation report may be submitted to prove the structural interference.
- Reason for removal, that is, at least one of the following:
 - The tree is encroaching on a structure and causing damage: (damage to fences, sidewalks, or curbs do not qualify. Likewise, interferences with plumbing or sewers is not considered hardship and will not be allowed as a reason for tree removal)
 - The tree is diseased or dead;
 - The tree is creating an imminent threat to property or life; or
 - The tree is creating an undue hardship.
 - Documents to support item #4 above.
- A certified arborist's report documenting all of this information.
- Submit Diagram or Plan showing existing tree(s) onsite including common names and dbh (diameter at breast height) for all trees.

In general, tree removal will not be approved if trimming, root trimming, or minor structural modifications, including rerouting or repair of pipes accompanied with root trimming can solve your problem. It can be less expensive to perform such minor work than to remove a tree. Trees will not be removed for aesthetic reasons.

If the Department of Public Works denies your application, you can appeal its decision to the Natural Resources and Environmental Commission (NREC). The Commission will want to examine all of the information listed above, as well as hear from you. However, in order to hear other cases in a timely manner and conduct other necessary business, the volunteer commission will limit discussion.

If your tree removal permit is approved, ***one 24" box tree will be required as a replacement for each ten-inch increment*** of the diameter of the tree being removed as follows:

- Up to 10 inches (one replacement)
- 11-20 inches (two replacements)
- 21-30 inches (three replacements)
- 31-40 inches (four replacements)
- Etc.

For native tree removals, ***two 24" box trees will be required as a replacement for each ten-inch increment.***

Development or Construction Replacement Trees

For non-native tree removals associated with development or construction, ***one 24" box tree will be required as a replacement for each six-inch increment*** of the diameter of the tree being removed. For native tree removals associated with development or construction, ***two 24" box trees will be required as a replacement for each six-inch increment.***

The city prefers that you plant native trees as replacements. Should you not have room to plant the trees on your property, you may arrange to have them planted on a neighbor's property. Optionally, you can donate a tree to the City and the Public Works Department will plant the trees on city property, such as in parkways, parks and medians.

Other rules apply under the ordinance, including special requirements for development and construction projects. Please read the ordinance carefully. It is illegal to remove trees without prior approval and penalties will apply when violations occur.

Permit fees and restitution in excess of \$8,000 could be imposed for tree removals without a permit.

Only you can help keep South Pasadena green and beautiful by observing the city tree ordinance.

Root Pruning and Stability of Young Willow Oak

E. Thomas Smiley

Abstract. Two root-pruning methods simulated construction-related trenching and individual root cuts such as from decay after root pruning. Tree trunks were pulled to an angle of 1° from vertical using measured force. A third of the study trees were pulled to failure to determine the relationship between the 1° pull force and the pull-to-failure force. The regression had correlation with r^2 equal to 0.76. Utility trenching was simulated with linear cuts across the root zone. Measurable decreases in force applied occurred when cuts were within three times the trunk diameter from the trunk. Force decreased by 35% when a tangential cut was made at the trunk. When individual roots were severed, the pull force was reduced with each root cut. When one root was severed, the decrease in force averaged 12%; when half of the exposed buttress roots were severed, the decrease was 30%. Arborists should avoid cutting any tree roots near the trunk. Linear trenching should not be closer to the trunk than a distance equal to or greater than three times the trunk diameter.

Key Words. Construction damage; pull testing; root anchorage; root barrier; root decay; root plate; utility trenching; windthrow.

Root systems are a key component in tree stability. Roots must have the strength to withstand the force of wind without breaking or uprooting (Coutts 1983; Mattheck et al. 1997; Harris et al. 2004). When roots are decayed, cut, or damaged, tree stability and health may be reduced (Matheny and Clark 1994; Hamilton 1998). The threshold point at which root damage increases the risk of tree failure has not been well studied.

According to the International Tree Failure Database, 35% of reported tree failures are root-related (ITFD 2007). Root failure patterns vary with tree species, size, age, and soil conditions (Mattheck et al. 1997; Stokes 1999; Mickovski and Ennos 2003; Dupuy et al. 2005b). Genet et al. (2005) found significant differences in root strength among tree species with *Fagus sylvatica* > *Picea abies* > *Castanea sativa* > *Pinus pinaster* ≈ *Pinus nigra*. They also found that root tensile strength was higher in smaller diameter roots.

Root system morphology is a function of species characteristics and soil conditions (Busgen et al. 1929; Stokes and Mattheck 1996). Tree anchorage depends on root system morphology and soil type (Ennos 1993; Stokes et al. 1996; Stokes and Mattheck 1996). Stokes (1999) found that 13-year-old pines tended to fail either at the base of the trunk or at the tap root, whereas 17-year-old pines failed at the tap root or lateral roots. Anchorage strength was found to be proportional to trunk diameter in several studies (Stokes 1999; Mickovski and Ennos 2003).

In studies of stability of green ash (*Fraxinus pennsylvanica*), roots broke in different locations dependent on soil moisture levels and root configuration (Smiley et al. 2000). When trees were pulled to failure in wet soil (33% water, w/w), either smaller roots failed or intact roots pulled out of the soil. When the soil was drier (13% water), roots tended to break in the larger diameter classes located near the trunk. In both soil moisture conditions, deeper-rooted trees were more resistant to failure than the shallow-rooted trees. This has also been demonstrated using tree root models (Stokes et al. 1996). Looking at soil failures associated with wet soil, Coutts (1983) concluded that the components of tree anchorage included the size and weight of the root plate, strength of the roots and soil, and the fulcrum force of leeward roots.

In a survey of fallen and standing trees after hurricane force winds, Smiley et al. (1998) proposed a method of evaluating the effects of decay on tree roots. Results of this study concluded that tree stability was dependent on both the amount of decay in individual roots and the number of roots that were decayed. Dupuy et al. (2005a) also concluded that the number and diameter of roots affected the resistance to tree uprooting.

Trenching near the tree trunk has been shown to significantly reduce the force required to cause tree failure (Hamilton 1988; O'Sullivan and Ritchie 1993). Fraedrich and Smiley et al. (2002) proposed limits to trenching near the trunk: no closer than three times the trunk diameter. When Watson (1988) cut roots at this distance, however, a significant reduction in health was not detected until roots on three or four sides of the tree were cut. Miller and Neely (1993) found reductions in tree growth only when linear trenches were closer than three times the trunk diameter.

Forest tree research on stability has focused on pulling trunks or tall stumps to the point of failure (Coutts 1983; Crook and Ennos 1996; Mickovski and Ennos 2002, 2003). An alternative method of is the static pull test (Brudi and van Wassenaer 2002). Tension is applied to an intact tree using a cable, dynamometer, and winch and the angle of trunk lean is measured. This method requires less force and does not destroy the tree, so the same tree can be tested multiple times.

The purpose of this study was to examine two types of root cutting and determine the impact of root severance on tree stability. These root-cutting methods were intended to simulate construction-related trenching and individual root cutting.

MATERIALS AND METHODS

On 8 November 2000, 30 willow oaks (*Quercus phellos*) were planted in two rows 4.6 m (15.2 ft) apart and 7.6 m (25.1 ft) between rows. Soil was a moderately well-drained Cecil sandy clay loam (CeB2, thermic typic hapludults). At planting, the balled-and-burlapped trees were 5 cm (2 in) caliper. Sprinkler irrigation was applied during drought periods and 30N-7P-9K slow-release fertilizer was applied on an annual basis. All trees were mulched annually with fresh wood chips. Weed growth was

managed with glyphosate herbicide. Trees were not staked or guyed.

Various root barriers were at the time of planting 60 cm (24 in) from the trunk (Smiley 2005). The root barriers affected root growth at the root barriers, causing the roots to grow deeper in the soil. This was not thought to affect results as a result of the distance from the trunk and direction of the pull force applied.

Trees were pull-tested between 25 and 30 January 2007. At the time of testing, tree height, diameter at 1.4 m (4.6 ft, diameter at breast height [dbh]), caliper at 15 cm (6 in), and branch spread perpendicular to the pull angle were measured. Branches below 1.4 m (4.6 ft) were removed from all trees to facilitate trunk access.

Two 5 cm (2 in) roofing nails were driven into the trunk xylem 15 and 75 cm (6 and 30 in) above grade (Figure 1). The nail at 75 cm (30 in) was installed directly above the nail driven at 15 cm (6 in). Nail depth was adjusted at the beginning of the experiment using a digital level (Smart Level; Maryland Building Products, Oklahoma City, OK, U.S.) to read $90^\circ (\pm 0.05^\circ)$.

A dynamometer (Dillon ED-200+, Fairmont, MN) was attached to the trunk of the subject tree 1.4 m (4.6 ft) above grade using a webbing sling. A low stretch line or steel cable was run horizontally to a redirecting pulley on the next tree in the row. The line or cable was then connected to an anchor tree or truck. The line or cable was then connected to an anchor tree or truck. A 4-to-1 rope pulley system was used to pull the trees to an angle of 89° (1° of trunk lean). A hand-operated mechanical winch was used to pull to the point of failure. The peak dynamometer reading was recorded for both 1° pull and pull-to-failure. Failure was defined by the point at which peak force was followed by a drop in the pull force.

The first three trees tested were pulled so that the trunk achieved a maximum angle of 1° from vertical. Force was released after each pull and the tree trunk returned to vertical; this was repeated seven times. There was no significant difference between the first and the seventh pull force so it was determined that the force to pull the trunk to an angle of 1° was within the elastic range of the trunk, that is, no permanent structural changes occurred within this pull range. For all subsequent measurements, trees were pulled to 1° and then released three times. An average of the three peak readings was recorded and used for analysis. This procedure was defined as a "pull test."

Trees were randomized and three different treatments were applied. The first group of eight oaks was pull-tested to 1° without root damage and then pulled to failure.

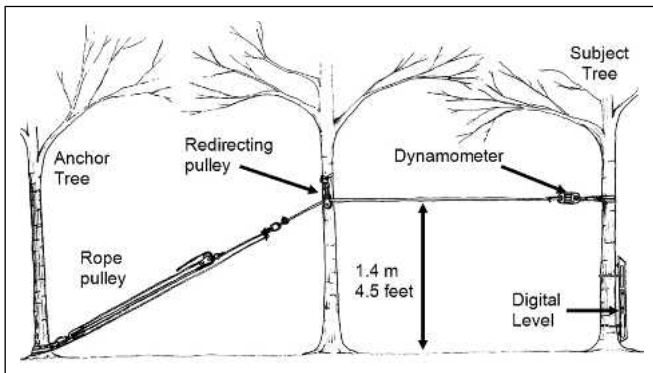


Figure 1. Diagrammatic representation of the pull-testing setup.

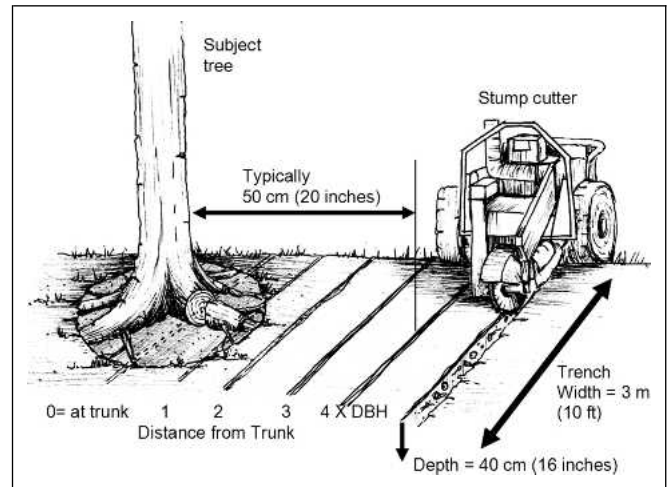


Figure 2. Linear cuts were made with a stump grinder starting at a distance equal to five times the trunk diameter. The trencher was moved closer to the trunk in distance increments equal to the trunk diameter ending with a cut tangential to the trunk.

The second group of 11 trees was pull-tested to 1° and then a linear root cut was made at a distance of five times the diameter of the trunk away from the base of the tree (Figure 2). Trenches were made with a stump-cutting machine 3 m (9.9 ft) long and 40 cm (16 in) deep. After the cut, the tree was again pull-tested. This distance was repeated for three trees, but was then discontinued because there were no significant differences between these force measurements and pretreatment pull force. The root-cutting and pull-testing procedure was repeated with linear cuts at four, three, two, and one times the diameter distances from the trunk. The final cut was at the tree trunk removing a small portion of the trunk and the entire buttress root(s).

The third group of ten trees was partially excavated at the base using a supersonic air tool (Air Spade™; Concept Engineering Group, Pittsburgh, PA) to expose the buttress roots. A count of all visible buttress roots was made and the initial pull test was conducted. A root directly opposite the pull line was severed at two points and a section of the root was removed, removing any

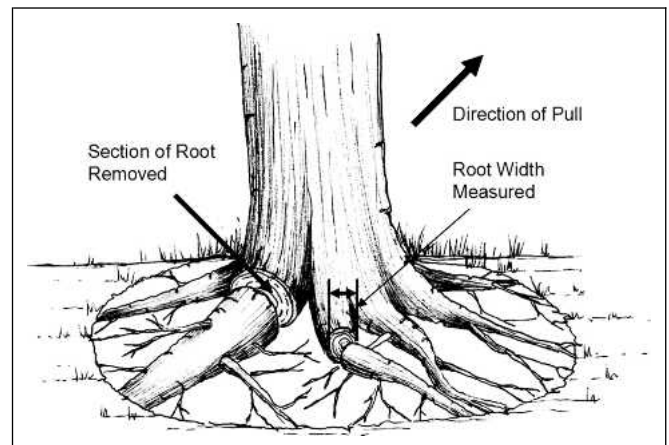


Figure 3. Roots in Group 3 trees were severed one at a time starting opposite the pull line and alternating right and left until all of the roots on 50% of the circumference were severed and a section removed.

Table 1. Dimensions of willow oak trees tested.

Parameter	Group 1		Group 2		Group 3	
	Pulled to failure		Linear root cut		Individual cuts	
	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
dbh at 1.4 m (4.6 ft)	12.6 cm (5 in)	1.2	12.2 cm (4.9 in)	1.9	13.6 cm (5.4 in)	1.4
Caliper at 15 cm (6 in)	16.5 cm (6.6 in)	1.3	15.8 cm (6.3 in)	2.1	17.9 cm (7.2 in)	1.8
Height	7.3 m (24.1 ft)	0.8	7.2 m (23.8 ft)	0.4	6.8 m (22.4 ft)	0.6
Branch spread	4.6 m (15.2 ft)	0.5	4.9 m (16.2 ft)	0.5	4.5 m (14.9 ft)	0.6
Number of trees	8		11		10	

dbh = diameter at breast height.

connection between the trunk and root (Figure 3). The horizontal width of the severed root section was measured. The tree was again pulled to 1°. This procedure was repeated with cutting roots on alternating sides of the first root cut until roots were severed from 50% of the root flare circumference. A comparison of the reduction in force required to pull the trunk to an angle of 1° was made both with the percentage of roots (% of roots cut = number of roots cut/total number of roots) that were cut and the cross-sectional area factor (root area factor = sum of width of roots/trunk diameter) of the roots that were cut.

Pull force measurements were standardized to remove the influence of trunk diameter by dividing the peak force to move the trunk 1° after root cutting by the peak force before cutting any roots and multiplying by 100. Correlation coefficients, paired sample t-tests, and regression analyses were conducted on the data using SPSS (SPSS Inc., Chicago, IL). For linear root cuts, standardized force means were compared with 4× dbh using paired sample t-test ($P = 0.05$).

RESULTS

At the time of pull testing, mean trunk diameter at 1.4 m (4.6 ft) was 12.8 cm (5.1 in) (Table 1). Soil moisture level at the time of testing was 20% (w/w).

When trees were pulled to the point of failure, roots were heard splitting below grade near the trunk, soil lifted on several trees on the side opposite of the pull, and few roots pulled out of the ground. No trunk breakage occurred. Trunk angle at the point of failure was typically 35°. In the pulling-to-failure trial (Group 1), there was a highly significant ($P = 0.005$) correlation ($r^2 = 0.76$) between the 1° pull and the peak force at the point of failure (Figure 4).

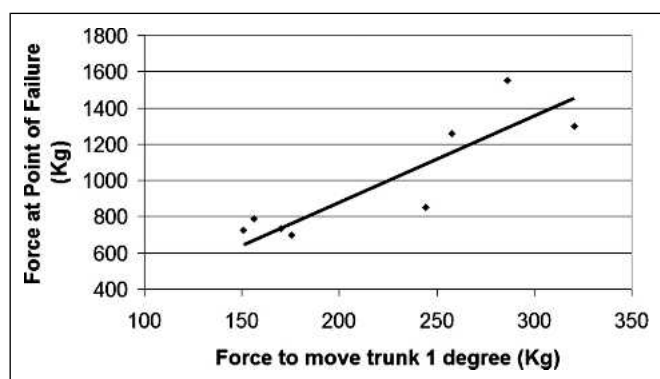


Figure 4. Correlation between the force required to pull the trunk to an angle of 1° and the force required to pull the tree to the point of failure ($F_{\text{Failure}} = 4.35(F_1) + 27$; $r^2 = 0.76$).

Linear root severance caused no significant reduction in the force required to move the trunk 1° until cuts were closer than three times the trunk diameter (Figure 5). At two times the trunk diameter, the force was reduced 15%. At a distance from the trunk equal to the trunk diameter, the force was reduced approximately 23% and when cut tangential to the trunk, the force was reduced by 35%. At all root-cutting distances, there were highly significant relationships ($r^2 = 0.76$ to 0.84) between pull force and trunk diameter; the larger the diameter, the greater the force required to move the trunk (Table 2).

All of the trees subjected to individual root removal had seven to nine buttress roots, so each root removed corresponded to 11% to 14% of the buttress roots. A comparison of the reduction in force required to pull the trunk to an angle of 1° was made both with the percentage of roots cut and the cross-sectional area removed (Figures 6 and 7). The r^2 value was higher with the percent-of-roots-cut method ($r^2 = 0.80$) as compared with the area method ($r^2 = 0.64$). Typically, there was a 15% to 25% variation in the force measurements using the percent-of-roots-cut method. The variation in force was greater with the width method. When the first root was cut, the force was reduced by 12%. When 50% of the roots were cut, the average force reduction was 30%. In one case, 90% of the tree's buttress roots arose

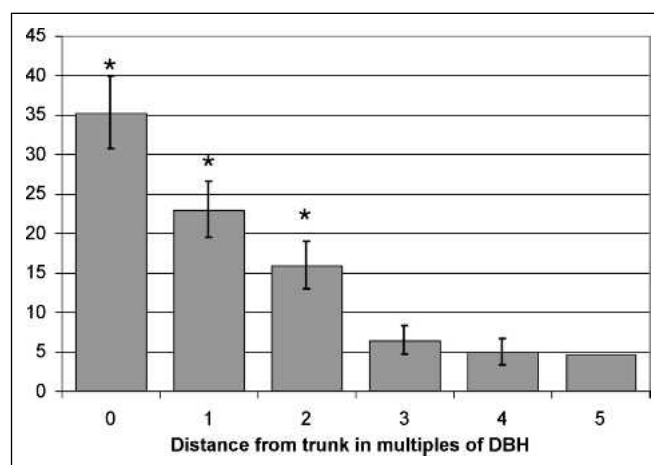


Figure 5. Standardized force to move the trunk 1° compared with the distance from the trunk of the linear root cuts. Each point is an average of 11 pull tests with the exception of the 5× diameter at breast height (dbh), which is the average of three pull tests. Asterisk indicates that a significant difference exists ($P = 0.05$) with the 4× dbh value using paired sample t-tests.

Table 2. Mean reduction in pull force compared with linear root cutting at different distances from the trunk.

Distance	Regression	r ²
No cuts	F ₁ = 75 (dbh) -710	0.78
Four	F ₁ = 65 (dbh) -580	0.76
Three	F ₁ = 80 (dbh) -790	0.81
Two	F ₁ = 80 (dbh) -820	0.84
One	F ₁ = 66 (dbh) -660	0.84
Zero	F ₁ = 75 (dbh) -800	0.81

dbh multiples where F₁ = force to pull trunk 1° in kilograms and dbh = diameter at 1.4 m (4.6 ft) in centimeters.

from 50% of the tree's root collar circumference and were cut off. This resulted in greater than a 50% reduction in force.

DISCUSSION

Force to pull willow oaks to a trunk angle of 1° correlated well with the force required to pull the trees to failure. This is consistent with Brudi and van Wassenaer (2002). The strength of this relationship allowed us to translate the subsequent 1° pull-testing data to failure with some degree of certainty.

The effects of cutting individual roots on tree stability are highly variable. Cutting one root (10% to 15% of buttress roots) may have little impact on tree stability or it may reduce the force required to cause failure by more than 20% (Figure 6). When 30% of the roots (three of nine buttress roots) are severed, the force required to cause failure is reduced by approximately 20%; however, on some trees, this number was over 30%. When 50% of the roots were cut off, force was reduced on average by one-third.

When comparing two methods of assessing the amount of root loss, percentage-of-roots-cut (Figure 6) or area-of-roots-cut (Figure 7), this study found less variability when using the percentage-of-roots-cut method. Although this does simplify root assessment, results may be different if root width is highly variable on an individual tree.

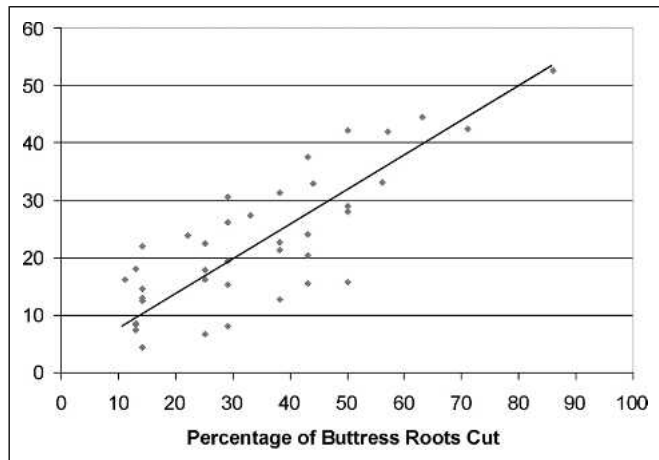


Figure 6. Comparison of the percentage of buttress roots cut ($R_{cut}/R_{Total} \times 100$) and the standardized force ($F_{Std} = \text{peak force to move the trunk } 1^\circ \text{ after root cutting divided by the peak force before cutting roots multiplied by } 100$) to move the trunk 1°. $F_{Std} = 1.99 + 0.59(R_{cut}/R_{Total} \times 100)$, $r^2 = 0.80$.

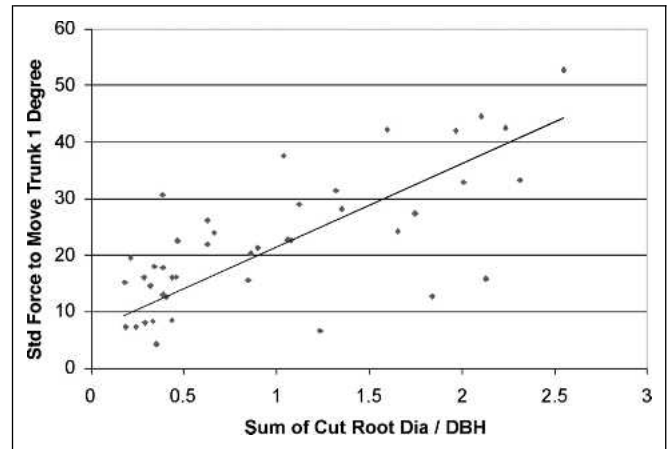


Figure 7. The sum of diameters of all roots that were severed divided by dbh ($\sum R_{cut\ dia}/dbh \times 100$) compared with the standardized force ($F_{Std} = \text{peak force to move the trunk } 1^\circ \text{ after root cutting divided by the peak force before cutting roots multiplied by } 100$) to move the trunk 1°. $F_{Std} = 6.49 + 15(\sum R_{cut\ dia}/dbh \times 100)$, $r^2 = 0.64$. dbh = diameter at breast height.

Force reduction numbers were lower than expected. This may reflect the influence of uncut deep roots (heart roots, oblique roots) that develop on many species of trees. Working in conjunction with the buttress roots, deep roots play an important role in tree stability on small trees (Stokes and Mattheck 1996). This has previously been demonstrated with tap and sinker roots, which provide a major portion of the anchorage strength on some species, especially pines (Mickovski and Ennos 2002; Dupuy et al. 2005b). Larger-diameter mature angiosperms often do not have deep roots or tap roots as a result of species genetics, root decay, or soil depth limitation; thus, larger trees may be more susceptible to damage from lateral root cutting than the smaller trees (pers. obs.).

As a result of the variability in these data on individual root cuts, a general rule as to the maximum percentage of roots that can be cut cannot be stated at this time. Cutting any roots at the trunk may increase the risk of premature tree failure. Roots on the uphill side of a tree, those on the side opposite of a trunk lean, or a large individual root may be more important for tree stability than their individual percentage that the root system reflects (Smiley et al. 2002).

Linear root cuts similar to those made while utility trenching had a higher correlation with force than the individual root cuts. When the trench line was closer than three times the trunk diameter, there was a significant change in the force required to move the trunk. Therefore, cutting roots closer than three times the trunk diameter should not be recommended. That understood, it is surprising that when linear cuts were made at the trunk, the average force reduction was only 35%. Mattheck and Breloer (1994) suggest that trees have a "safety factor" of 5, indicating that trees develop stronger than necessary structure so as not to fail under high winds. In the case of small tree roots, the mechanism is very likely the oblique root system (Stokes and Mattheck 1996). This smaller-than-expected reduction in force may explain why so many trees survive root cutting at the trunk during sidewalk repair operations. Tree species also plays a very important role when linear cuts are made close to the trunk;

many species cannot tolerate cutting close to the trunk (Hamilton 1998).

A one-third reduction in force was found with 50% root removal and a linear tangential root cut at the trunk. This may indicate that trenching tends to cut more of the oblique roots and that roots directly opposite the force are far more important to stability than those perpendicular to the direction of force. Under dynamic wind conditions, in which wind intensity and direction may change rapidly, the impact of 50% root removal would be expected to be greater than a one-sided linear root cut near the trunk. The dynamic oscillation of the wind forces are known to cause a progressive failure at lower wind velocities (O'Sullivan and Ritchie 1993; James et al. 2006)

Cutting large-diameter roots may make the root more susceptible to root decay. The maximum size root that can be cut that will not readily decay has yet to be determined. It is possible that cutting roots at a distance of three times the trunk diameter makes the roots more susceptible to decay than cutting roots at a greater distance. Therefore, to be safe when linear root cuts are made, cuts should be at the greatest distance possible from the trunk.

Caution should be exercised in extrapolating these findings to large trees in urban areas. These results are only on one species and the trees were relatively small. More research is needed to see if the conclusions presented here will hold up for other species and larger trees. More information is also needed on the forces that wind exerts on the tree so that pull forces could be correlated with wind speed.

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Résumé. Le but de cette étude était d'examiner deux types de taille des racines et de déterminer l'impact de la perte en racines sur la stabilité de l'arbre. Les troncs des arbres ont été tirés à un angle de 1° de la verticale au moyen d'une force mesurée. Un tiers des arbres étudiés ont été tirés jusqu'au point de rupture afin de déterminer une corrélation

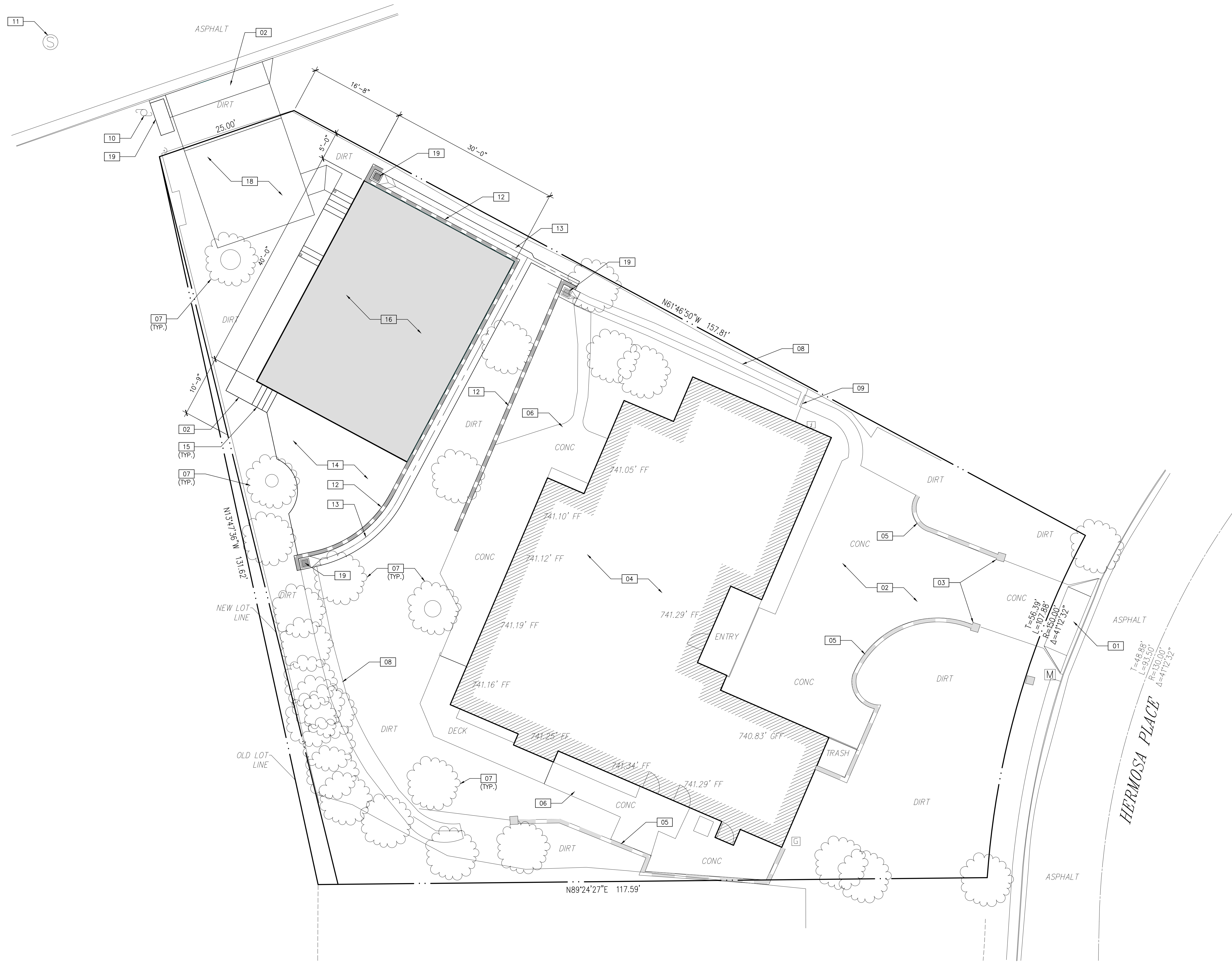
entre une force de tirage de 1° et une force de tirage jusqu'au point de rupture. Lorsque des coupes linéaires ont été faites au travers de la zone racinaire afin de simuler une tranchée de conduits souterrains, des variations mesurables dans la force ont été observées lorsque les coupes étaient faites à l'intérieur d'une zone correspondante à trois fois le diamètre du tronc; les forces étaient modifiées de 35% lorsqu'une coupe tangentielle était faite au tronc. Lorsque des racines individuelles étaient coupées, la force était modifiée pour chacune des coupes de racines. Lorsqu'une racine seulement était coupée, la variation dans la force était de 12%, et lorsque 50% des racines étaient coupées, la variation dans la force était de 30%. Les tranchées linéaires devraient être gardées à une distance équivalente ou supérieure à trois fois le diamètre du tronc.

Zusammenfassung. Die Absicht dieser Studie lag in der Untersuchung von zwei Arten des Wurzelrückschnitts und der Bestimmung des Einflusses der Wurzelverletzung auf die Baumstabilität. Baumstämme wurden bis zu einem Winkel von 1 Grad vertikal mit kontrollierter Kraft gezogen. Ein Drittel der untersuchten Bäume wurde bis zum Baumversagen gezogen, um die Korrelation zwischen 1-Grad Zugkraft und totaler Bruchkraft zu bestimmen. Wenn in der Wurzelzone lineare Schnitte gemacht wurden, die Schachtbau simulieren sollten, wurden messbare Unterschiede in der Kraft festgestellt, wenn die Schnitte im Abstand von

dreimal des Stammdurchmessers gemacht wurden, und die Kraft änderte sich um 35 %, wenn ein tangentialer Schnitt am Stammfuß gezogen wurde. Wenn eine Wurzel riss, änderte sich die Kraft um 12 % und wenn 50 % der Wurzeln verletzt wurden, veränderte sich Kraft um 30 %. Lineare Grabungen sollten in einem Abstand von wenigstens dreimal des Stammdurchmessers gehalten werden.

Resumen. El propósito de este estudio fue examinar dos tipos de poda de raíces y determinar el impacto de la corta de las raíces en la estabilidad del árbol. Los troncos de los árboles fueron tironeados a un ángulo de 1 grado de la vertical usando una fuerza registrada. Un tercio de los árboles estudiados fueron tironeados hasta el rompimiento para determinar la correlación entre 1 grado de fuerza y la fuerza de falla. Cuando los cortes fueron hechos a través de la zona de raíces, simulando excavaciones para servicios, se encontraron cambios cuando las cortas estuvieron dentro de tres veces el diámetro del tronco y la fuerza cambió en 35% cuando un corte tangencial fue hecho en el tronco. Cuando las raíces individuales fueron cortas severamente, la fuerza cambió con cada corte de raíz. Cuando una raíz fue cortada el cambio en fuerza fue 12% y cuando 50% de las raíces fueron cortadas la fuerza en cambio fue del 30%. El zanjeo lineal deberá mantener una distancia igual o mayor a tres veces el diámetro del tronco.

HERMOSA STREET



PROJECT DATA

BUILDING DEPARTMENT: _____ CITY OF SOUTH PASADENA
 BUILDING CODES: _____ 2022 CALIFORNIA BUILDING CODE WITH CITY OF SOUTH PASADENA AMENDMENTS
 2022 CALIFORNIA ELECTRICAL CODE
 2022 CALIFORNIA MECHANICAL CODE
 2022 CALIFORNIA PLUMBING CODE
 2022 CALIFORNIA FIRE CODE
 2022 CALIFORNIA GREEN BUILDING CODE
 TITLE 24 (ADA) CALIFORNIA ADMINISTRATIVE CODE
 2022 TITLE 24 ENERGY STANDARDS
 PROJECT ADDRESS: _____ 405 HERMOSA PLACE
 CITY OF SOUTH PASADENA, 91030
 ASSESSORS PARCEL NUMBER: _____ LOT 4 - TRACT 17012 M.B. PAGE 485 P.24-25
 ZONING: _____ -
 PROPOSED ZONING: _____ -
 LAND USE: _____ RESIDENTIAL
 LAND AREA: _____ 14,306 SF.
 BUILDING SQ. FT.: _____ EXISTING MAIN RESIDENCE: 2,640 SF.
 NEW ADU: 1,200 SF.
 TOTAL SF.: 3,840 SF.
 LOT COVERAGE: _____ 26.84%
 OCCUPANCY CLASSIFICATION: _____ R-3
 TYPE OF CONSTRUCTION: _____ V-B
 SPRINKLERED: _____ NOT SPRINKLERED
 NUMBER OF STORIES: _____ 1-STORY
 PROJECT SCOPE: _____ NEW 1200 SF ADU

SITE PLAN NOTES

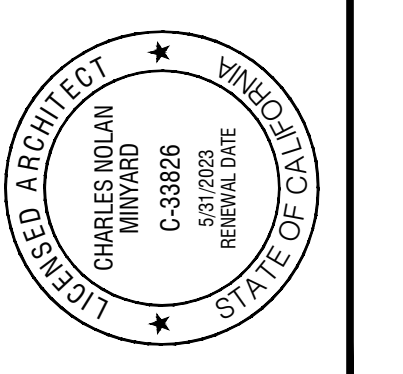
- 1 EXISTING DRIVEWAY TO REMAIN
- 2 EXISTING DRIVE APPROACH TO REMAIN
- 3 EXISTING YARDLIGHT TO REMAIN
- 4 EXISTING MAIN RESIDENCE TO REMAIN
- 5 EXISTING RETAINING WALL TO REMAIN
- 6 EXISTING CONCRETE WALKWAY TO REMAIN
- 7 EXISTING TREE TO REMAIN
- 8 EXISTING CONCRETE SWALE TO REMAIN
- 9 EXISTING GATE TO REMAIN
- 10 EXISTING POWER POLE TO REMAIN
- 11 EXISTING SEWER MANHOLE TO REMAIN
- 12 NEW CMU RETAINING WALL - SEE CIVIL
- 13 NEW CONCRETE SWALE - SEE CIVIL
- 14 NEW CONCRETE PATIO SLAB - SEE CIVIL
- 15 NEW CONCRETE STAIRS
- 16 NEW 1,200 SF. ADU - SEE 1/A2.0
- 17 NEW CONCRETE WALKWAY - SEE CIVIL
- 18 NEW PARKING AREA - SEE CIVIL
- 19 NEW STORM INLET - SEE CIVIL

SITE PLAN GENERAL NOTES:

1. ALL DIMENSIONS ON SITE PLAN ARE TO BE FACE OF CONCRETE SLAB, FACE OF CONCRETE CURB, PROPERTY LINE, OR CENTERLINE OF PARKING STALL, U.O.N.
2. CONCRETE WALK SHALL RECEIVE EXPANSION JOINTS AT 15'-0" O.C. MAX. AND CONTROL JOINTS AT 5'-0" O.C. MAX. BETWEEN EXPANSION JOINTS, U.O.N.

OVERALL SITE PLAN
 SCALE: 1"=40'-0"
 North

PRIMIOF
 750 N. DIAMOND BAR BLVD., SUITE 101
 DIAMOND BAR, CA 91765
 (800) 735-9973 | WWW.PRIMIOF.COM

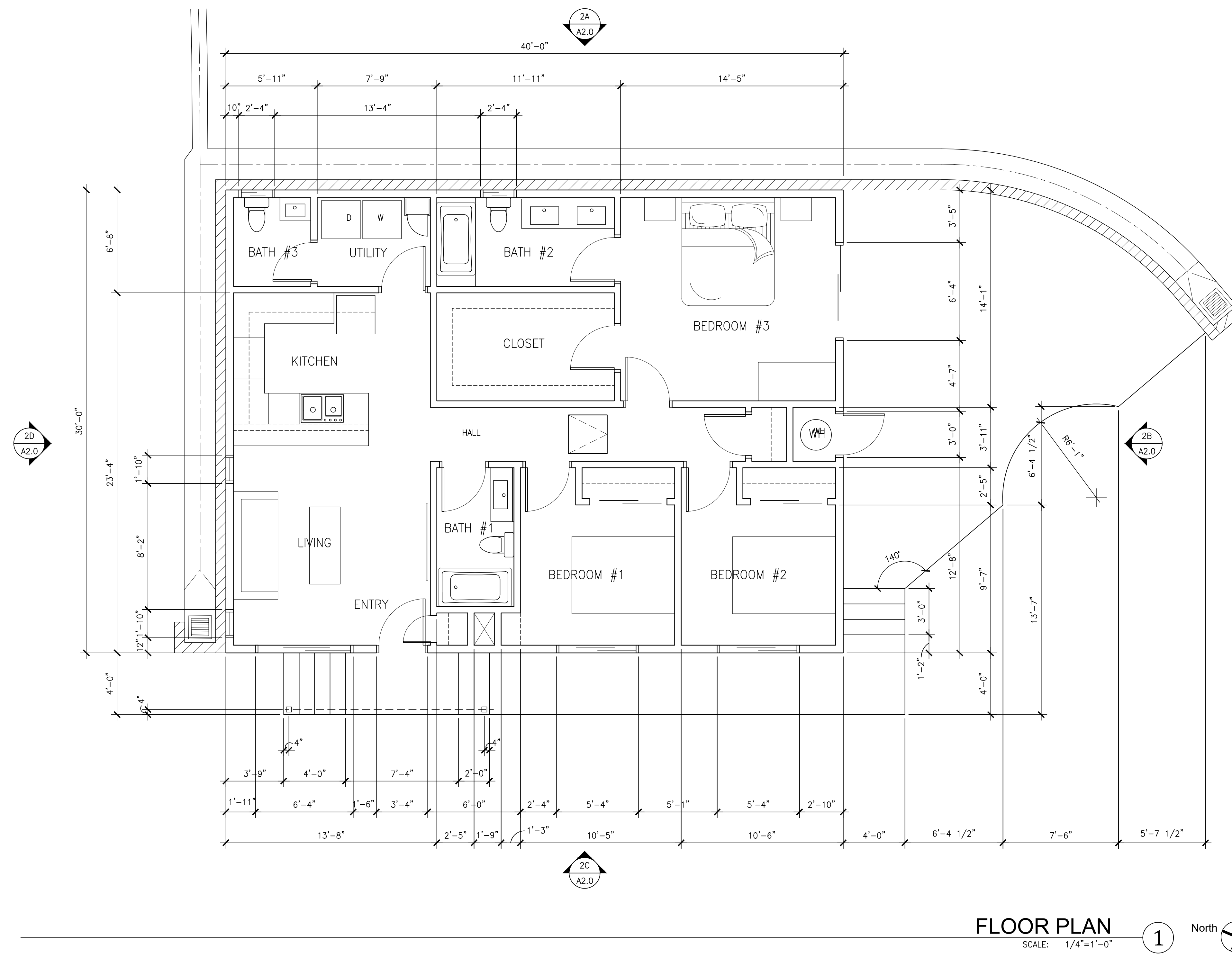


PROJECT:
NEW ACCESSORY DWELLING UNIT (ADU)
405 HERMOSA PLACE
SOUTH PASADENA, CALIFORNIA 91030

DATE	REMARKS
11/15/2024	PLANNING SUBMITTAL

DATE: 12/4/2024
 DRAWN BY: CNM

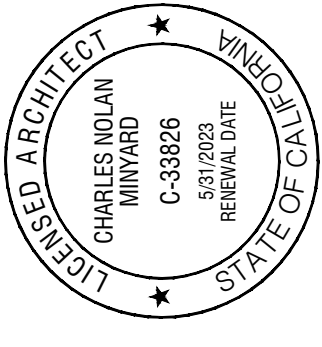
SHEET NUMBER:
A1.0



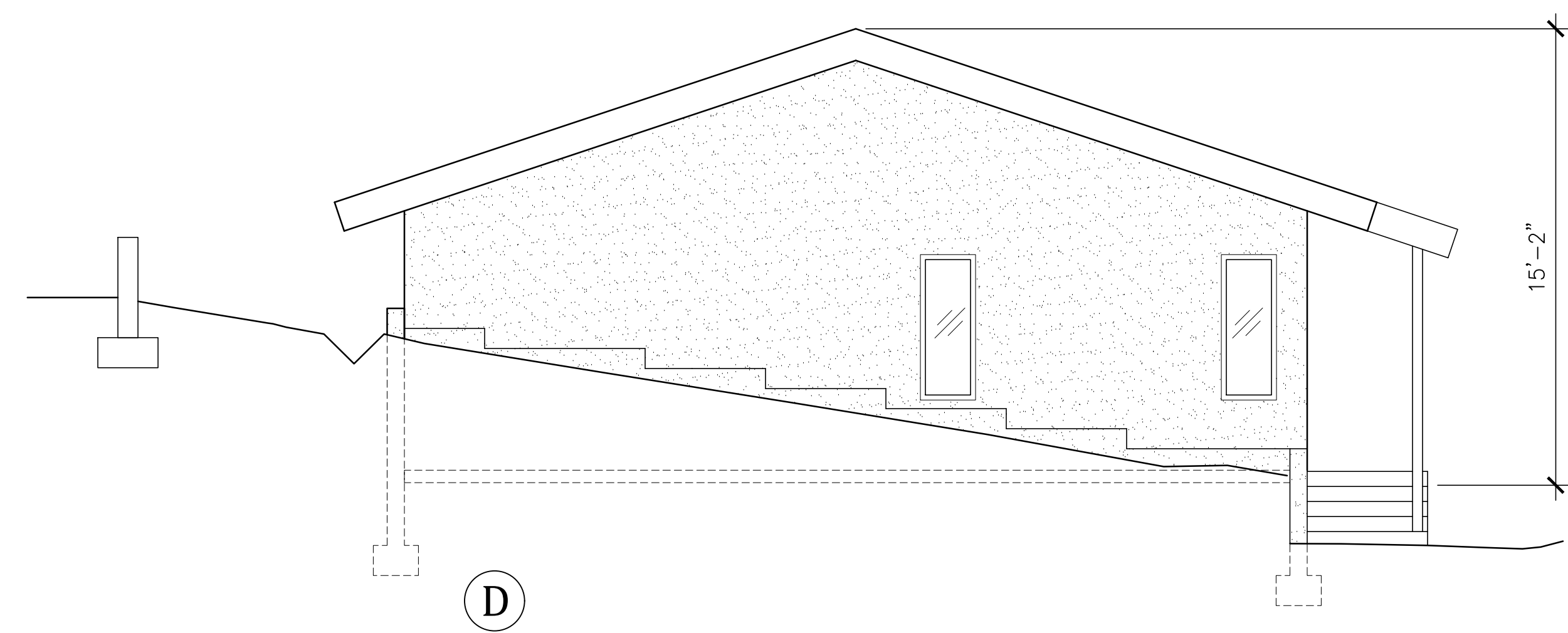
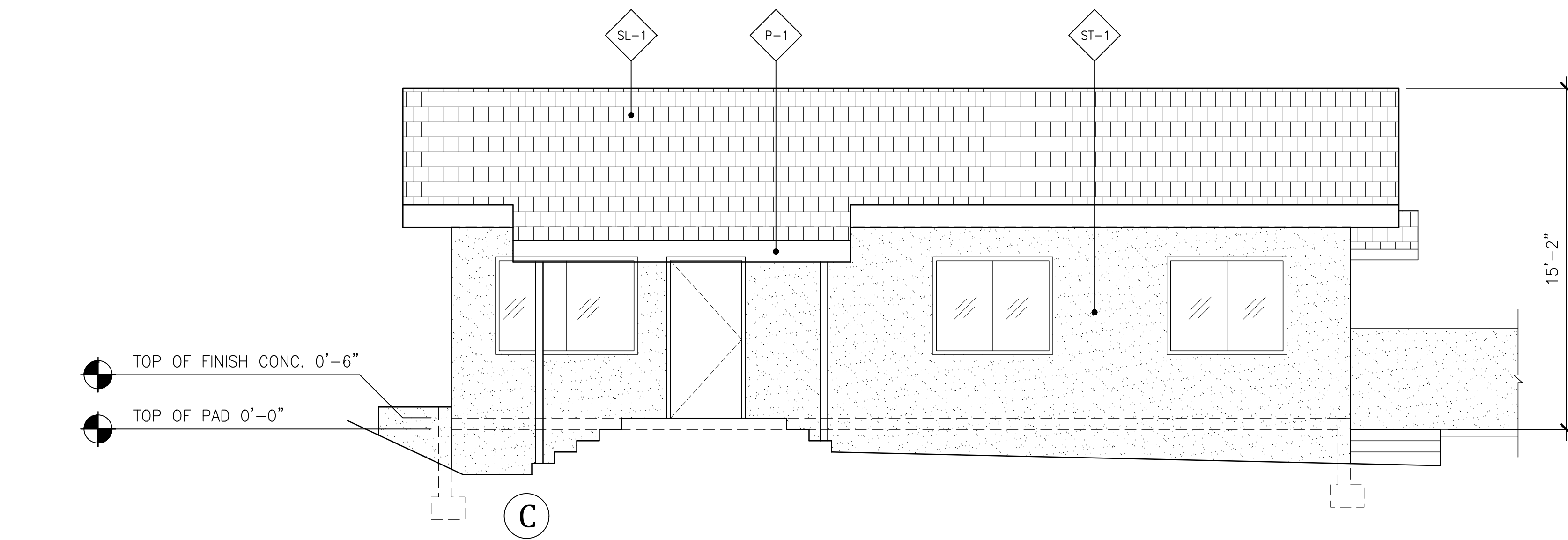
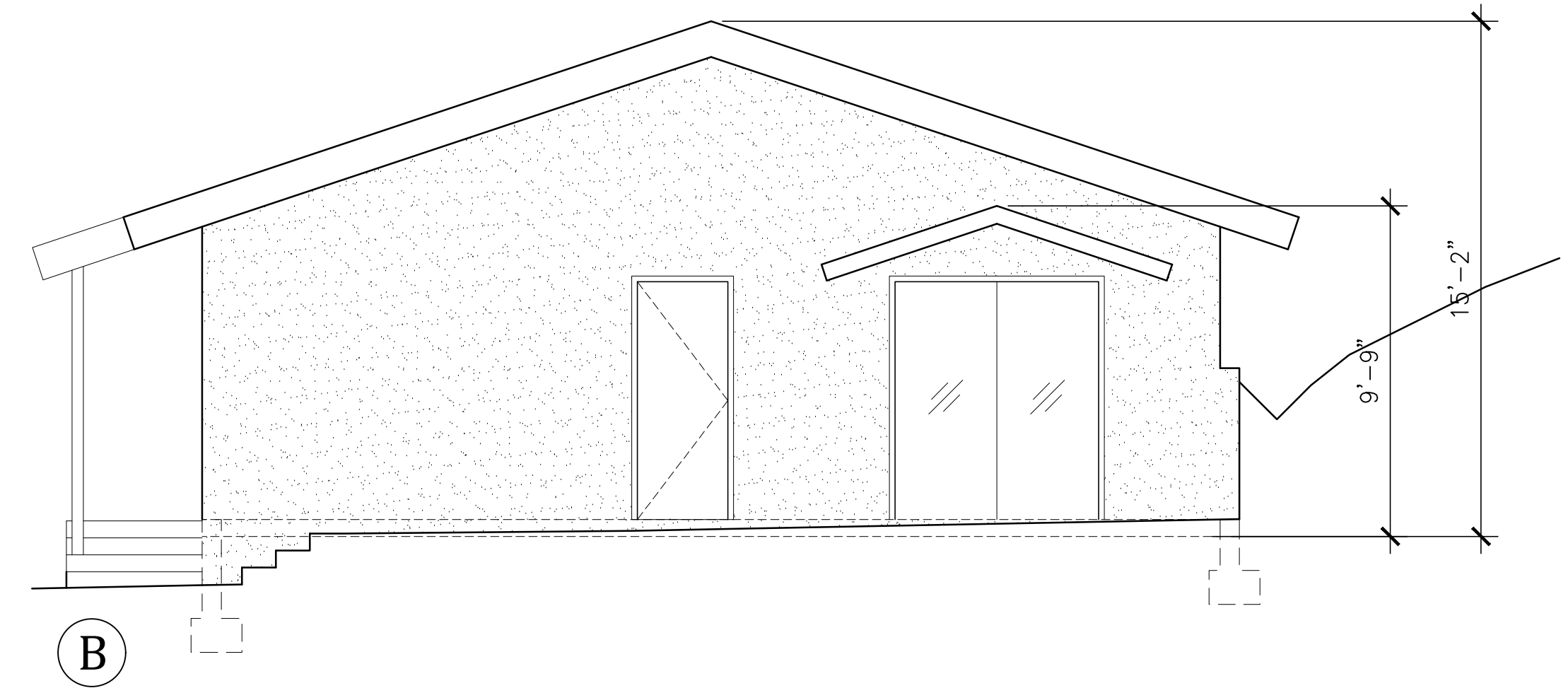
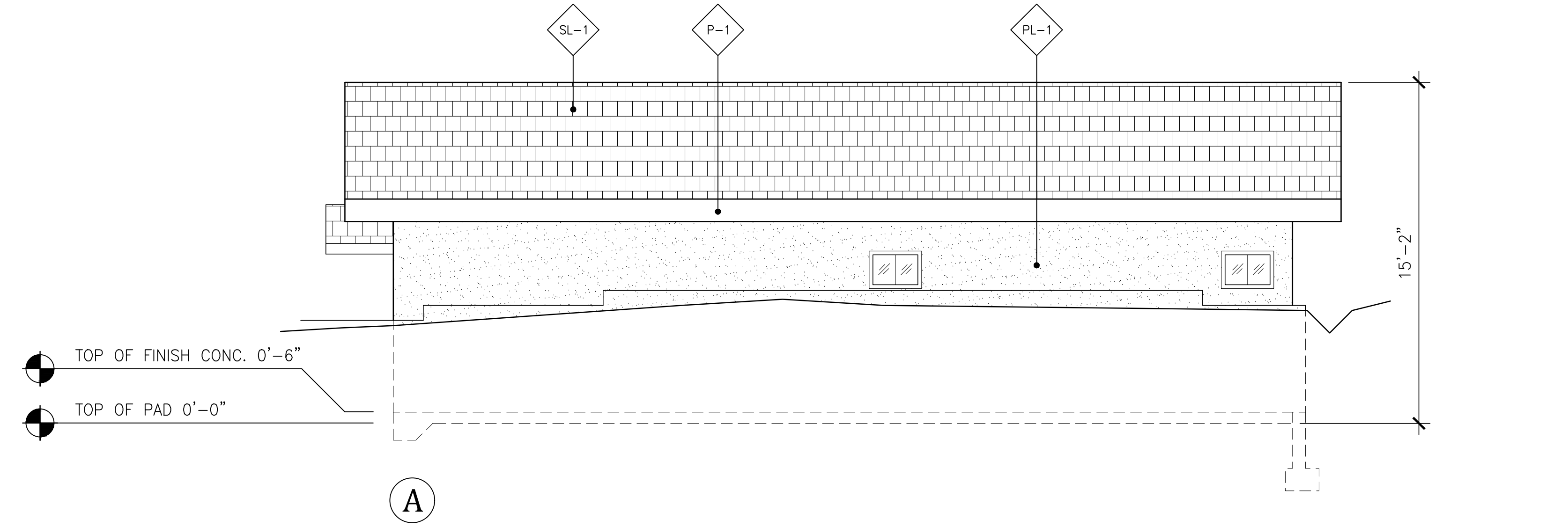
FINISH LEGEND

- ◆ PL-1 EXTERIOR STUCCO FINISH TO MATCH EXISTING RESIDENCE
- ◆ P-1 SOFFIT BOARD TO BE PAINTED TO MATCH EXISTING RESIDENCE
- ◆ SL-1 SLATE ROOF TILES TO MATCH EXISTING ROOF

PRIMIOF
750 N. DIAMOND BAR BLVD., SUITE 101
DIAMOND BAR, CA 91765
(800) 735-9973 | WWW.PRIMIOF.COM



PROJECT:
NEW ACCESSORY DWELLING UNIT (ADU)
405 HERMOSA PLACE
SOUTH PASADENA, CALIFORNIA 91030



EXTERIOR ELEVATIONS

SCALE: 1/4"=1'-0" ②

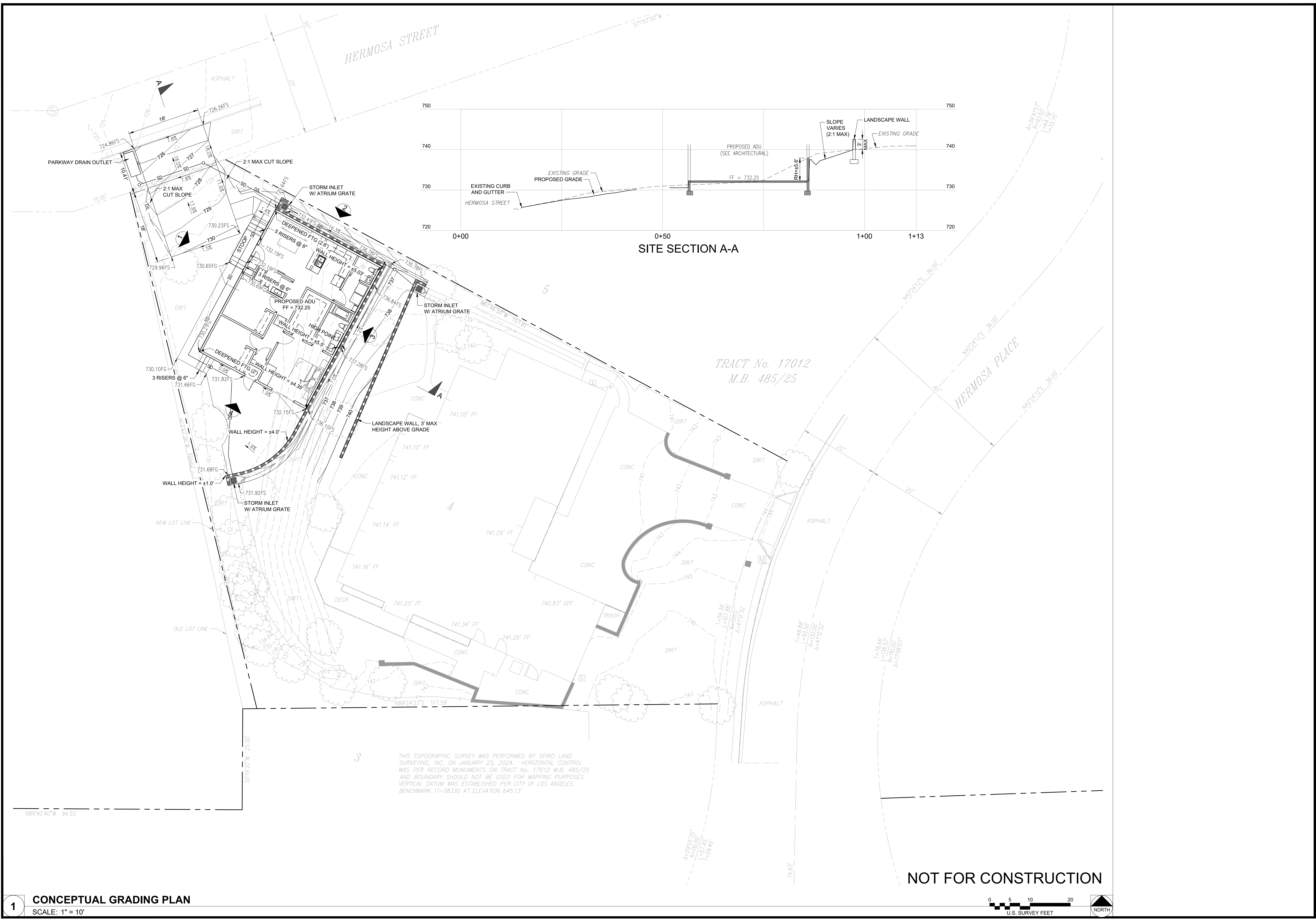
FLOOR PLANS AND ELEVATIONS

DATE	REMARKS
11/15/2024	PLANNING SUBMITTAL

DATE: 12/4/2024
DRAWN BY: CNM

SHEET NUMBER:
A2.0

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1 CONCEPTUAL GRADING PLAN
SCALE: 1" = 10'

THIS TOPOGRAPHIC SURVEY WAS PERFORMED BY SPIRO LAND SURVEYING, INC. ON JANUARY 25, 2024. HORIZONTAL CONTROL WAS PER RECORD MONUMENTS ON TRACT No. 17012 M.B. 485/25 AND BOUNDARY SHOULD NOT BE USED FOR MAPPING PURPOSES. VERTICAL DATUM WAS ESTABLISHED PER CITY OF LOS ANGELES BENCHMARK 11-08330 AT ELEVATION 645.13'.

SITE SECTION A-A

NOT FOR CONSTRUCTION



DAX CONSULTING, INC.
4500 PARK GRANADA, SUITE 202
CALABASAS, CALIFORNIA 91302
PHONE: (818) 806-8329

NO.	DESCRIPTION	BY	DATE

PROJECT
PROPOSED ADU
PROJECT ADDRESS
405 S. HERMOSA PLACE
SOUTH PASADENA, CA 91030

SHEET TITLE
CONCEPTUAL GRADING PLAN

DESIGN: MJP	REVIEWED: DAX
DRAWN: MJP	DATE: 12/03/24
SCALE: AS SHOWN	

C1.0
PROJECT NUMBER
2024-162

GL CONCEPTUAL GRADING PLAN - 2024-162.DWG December 3, 2024

ITEM 3

Approval of Minutes – Meeting of December 2, 2024



**CITY OF SOUTH PASADENA
NATURAL RESOURCES AND ENVIRONMENTAL COMMISSION**

**MINUTES
SPECIAL MEETING
MONDAY, DECEMBER 2, 2024, AT 6:00 P.M.**

**CITY COUNCIL CHAMBERS
1424 MISSION STREET, SOUTH PASADENA, CA 91030**

CALL TO ORDER:

The Meeting of the South Pasadena Natural Resources and Environmental Commission was called to order by Commissioner Jones on December 2, 2024, at 6:15 P.M. in the City Council Chambers, 1424 Mission Street, South Pasadena, California.

ROLL CALL:

PRESENT

Commissioner	Casey Law
Commissioner	Liam R. de Villa Bourke
Commissioner	Rona Bortz
Commissioner	Amy Davis Jones
Staff Liaison	Councilmember Michael Cacciotti

ABSENT

Chair	Michael Siegel
Vice Chair	Emily Ng
Commissioner	Richard Tom

Management Analyst, Danielle Garcia, announced a quorum.

CITY STAFF PRESENT:

Ted Gerber, Public Works Director; Arpy Kasparian, Environmental Services & Sustainability Manager; Danielle Garcia, Water Conservation Management Analyst; and Michael Vartanians, Public Works Principal Engineer were present at Roll Call. Other staff members presented reports or responded to questions as indicated in the minutes.

PLEDGE OF ALLEGIANCE:

The Pledge of Allegiance was led by Commissioner de Villa Bourke.

PUBLIC COMMENT

1. PUBLIC COMMENT - GENERAL (NON-AGENDA ITEMS)

In Person Public Comments:

None.

Zoom Public Comments:

None.

TREE HEARING

2. TREE HEARING: 1040 ORANGE GROVE AVE.

Recommendation

It is recommended that the Natural Resources and Environmental Commission review and provide a decision of the removal of two existing palm trees at 1040 Orange Grove Ave.

Michael Vartanians, Principal Engineer, presented the reevaluation of a tree removal application, highlighting the arborist report previously requested by the commission. The applicant additionally contributed to the case citing safety risks from infected roots and a sunken trunk, calling out the proposed replacement trees offering greater value.

In Person Public Comments:

Angelo Gladding expressed concerns about the circumstances that tree removal applications are presenting and emphasized the importance of native replacements for environmental sustainability.

Zoom Public Comments:

None

COMMISSION ACTION AND MOTION

A motion was made by Commissioner Law, seconded by Commissioner de Villa Bourke and approved by roll call vote for the approval of the tree removal application at 1040 Orange Grove Ave. The motion carried 4-0-0, by the following vote:

AYES: de Villa Bourke, Jones, Law, and Rona

NOES: None.

ABSENT: Siegel, Ng and Tom

ABSTAINED: None.

3. TREE HEARING: 1108 DIAMOND AVE.

Recommendation

It is recommended that the Natural Resources and Environmental Commission review and provide decision on the removal of two existing oak trees at 1108 Diamond Ave.

Michael Vartanians, Principal Engineer, presented the details of the application and staff's recommendation to approve the removal of the two oak trees. The applicants and their certified arborist further explained the safety concerns, particularly highlighting how the tree's canopy leans over the house.

In Person Public Comments:

David Malling, neighbor to applicants, emphasized the need for tree removal – specifically calling out the tree leaning against the house.

Angelo Gladding commented on the urgency of the hazard claim and stressed the importance of significant on-site tree replacements to maintain the city's tree canopy.

Carla Nue, neighbor to applicants, continued to voice support for the tree removal and expressed concern about the leaning trees and safety of the residents.

Zoom Public Comments:

None.

COMMISSION ACTION AND MOTION

A motion was made by Commissioner Law, seconded by Commissioner de Villa Bourke and approved by roll call vote for the approval of the tree removal application at 1108 Diamond Ave. The motion carried 3-0-1, by the following vote:

AYES: de Villa Bourke, Law, and Rona

NOES: None.

ABSENT: Siegel, Ng and Tom

ABSTAINED: Jones.

ACTION**4. APPROVAL OF MINUTES OF OCTOBER 22, 2024 NREC MEETING**Recommendation

It is recommended that the Natural Resources and Environmental Commission review and approve the October 22, 2024 meeting minutes.

COMMISSION ACTION AND MOTION

A motion was made by Commissioner Bortz, seconded by Commissioner Law and approved by roll call vote to approve the October 22, 2024, NREC Meeting Minutes. The motion carried 4-0-0, by the following vote:

AYES: de Villa Bourke, Jones, Law, and Rona

NOES: None.

ABSENT: Siegel, Ng and Tom

ABSTAINED: None.

COMMUNICATIONS

5. CITY COUNCIL LIAISON COMMUNICATIONS

Council Member Cacciotti provided updates on the presentation of the success/impact of the City's electric police fleet at a national conference, additionally provided an update on the Gold Line progress.

6. COMMISSIONER COMMUNICATIONS

Commissioner Rona shared that this would be her last meeting with this commission and how much of an honor it has been to serve South Pasadena.

Commissioner Jones commemorates Commissioner Rona on her service to the commission. Additionally provides an update on progress being made between the plastics committee and Chamber of Commerce.

7. STAFF LIAISON COMMUNICATIONS

Water Conservation Management Analyst Danielle Garcia recapped a successful start to the Landscape Academy training – kicking off the program on November 13th with nearly 50 residents participating in the first training.

Environmental Services & Sustainability Manager Arpy Kasparian announced a virtual community meeting on December 5th for updates on the leaf blower implementation, provided a reminder that the December 24th NREC meeting is cancelled, and encouraged commissioners whose terms are ending to seek reappointment.

Public Works Director Ted Gerber announced the return of the Mission to Mission event for 2025, now called "Mission at Twilight," which will take place on June 22nd from 3 to 8 PM.

8. UPCOMING EVENTS

- Leaf Blower Ban Implementation Update Virtual Meeting
December 5, 4:00pm
(<https://us06web.zoom.us/j/81736096996>)
- Landscape Academy: California Friendly and Native Plants Landscape Training
December 7, 11:00am, *South Pasadena Senior Center*
(<https://www.greengardensgroup.com/g3-events/lawn-care-maintenance-city-of-south-pasadena-241207/>)
- LA County Smart Gardening Webinars
(<https://www.ladpw.org/epd/sg/webinars.cfm>)
- MWD Turf Removal + CA Native Landscape Webinars
(<https://greengardensgroup.com/turf-transformation/>)

ADJOURNMENT

There being no further matters, Commissioner Jones adjourned the meeting of the Natural Resources and Environmental Commission at 7:25 P.M. PT to the next Regular Commission meeting scheduled for January 28th, 2025.

Respectfully submitted:

Arpy Kasparian
Staff Liaison, Environmental Services
& Sustainability Manager

APPROVED:

Amy Davis Jones
Commissioner

Approved at Commission Meeting:

ITEM 7

Upcoming Events



Landscape Academy

FREE

LANDSCAPE TRAINING SERIES

SPOTS ARE LIMITED!

REGISTER FOR THE SECOND TRAINING TODAY:

WWW.SOUTHPASADENACA.GOV/ENVIRONMENTALPROGRAMS

OPEN TO ALL SOUTH PASADENA RESIDENTS

TURF REMOVAL, REPLACE OR MAINTAIN IT

DATE: SATURDAY - FEBRUARY 8TH, 2025

TIME: 11:00AM - 12:15 PM

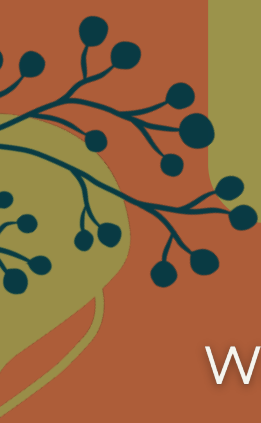
LOCATION: SENIOR CENTER - 1102 OXLEY ST.

Residents have the opportunity to ditch the lawn, go green with climate-friendly plants, and keep it all thriving naturally—no chemicals needed!

For more information, contact:

WaterConservation@SouthPasadenaCA.gov

626.403.7289





LANDSCAPE ACADEMY

SCHEDULE

UPCOMING

2025

FEBRUARY 8

SATURDAY
11:00AM

TURF REMOVAL, REPLACE OR MAINTAIN
IT

MARCH 19

WEDNESDAY
6:00PM

OUTDOOR LEAK DETECTION

APRIL 23

WEDNESDAY
6:00PM

BEAUTIFUL GARDENS ON MINIMAL WATER

MAY 17

SATURDAY
10:00AM

LANDSCAPE TRANSFORMATIONS
ON A BUDGET

