



MEETING OF JULY 19, 2011

AGENDA ITEM 5A

Application I.D.: 2011-0017

Application Type: Single Family Design Review

Location: 1731 Valley View Drive

Applicant/Owner: Ethan & Rita Stock

APN: 044-331-080

Zoning: R-1B – Single Family Residential

General Plan Designation: RL – Low Density Residential

Environmental Determination: Categorically Exempt, Section 15301, Class 1(e)(2)(a&b)

PROJECT DESCRIPTION

The applicant requests Single Family Design Review approval to construct an 897 square foot addition to the existing 2,089 square foot single family residence for a total of 2,986 square feet that is below the zoning district permitted 3,500 square feet for the site.

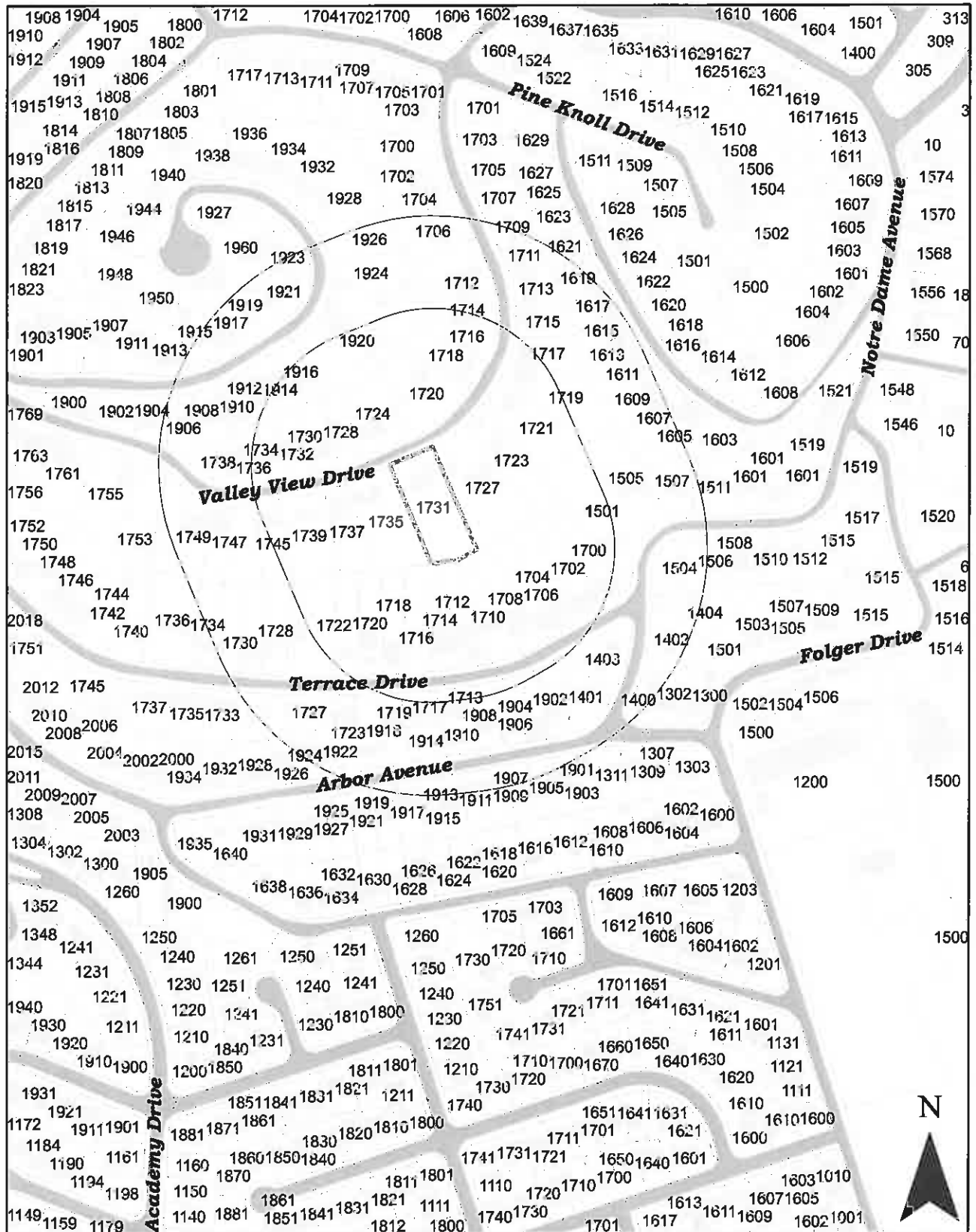
RECOMMENDATION

Staff recommends that the Planning Commission **approve** the Single Family Design Review subject to the conditions of approval contained in the attached draft resolution¹.

ZONING/GENERAL PLAN DESIGNATION

The existing single-family residence is a permitted use in the designated R-1B (Single Family Residential) zoning district, and is conforming to the General Plan Designation RL - Low Density Residential.

¹ Please note: This recommendation is made in advance of public testimony or Commission discussion of the project. At the public hearing, these two factors, in conjunction with the staff analysis, will be considered by the Commission in rendering a decision on the project.



1 inch = 312.503125 feet

PRIOR ACTIONS

The site encompasses Lots 31 and 32 of Block 11 of the Belmont Country Club Properties, which was recorded in 1924; the house was built in 1952. There have been no other planning actions for this property.

SITE CONDITIONS

The subject property is located in a single-family neighborhood developed primarily with one and two-story single-family homes with wood and stucco exterior finishes. The 23,893 square foot lot is irregular in shape with an average slope of approximately 27%. The site is developed with a split-level four-bedroom, two-bath house that includes a legal-nonconforming attached two-car garage.

The site is covered in native grasses, shrubs, and several mature trees (surveyed by the City Arborist) that are on site. The west side yard area includes a walkway area to the rear yard, and the rear yard includes an attached deck and a pool.

Existing Dwelling Floor Area/Layout

The existing dwelling consists of a kitchen, living room and dining (unpermitted) room, four bedrooms (one unpermitted), two bathrooms, laundry room, and a legal nonconforming two-car attached garage. (See *Zoning Conformance* discussion of the unpermitted dining room and bedroom #1 on Pg. 6).

PROJECT ANALYSIS

Proposed Dwelling Modifications

The applicants propose a substantial remodel and addition to the existing dwelling. The resulting floor plan would include an entry, kitchen, living and dining areas, four bedrooms, three full bathrooms, laundry room, and a garage.

Dwelling Floor Area Summary	
Proposed Square Footage	Proposed Modifications/Addition
<u>Ground Floor</u> Existing – 2,398 sq. ft square feet* Total – 2,398 sq. ft.	<u>Existing</u> – Kitchen, living and dining rooms, four bedrooms, two bathrooms, laundry room, and two-car garage.

Dwelling Floor Area Summary	
Proposed Square Footage	Proposed Modifications/Addition
<u>Revised Ground Floor</u> Existing – 2,398 sq. ft.* Proposed addition – 588 square feet Total – 2,986 sq. ft.	<u>Proposed</u> – Entry, kitchen, living and dining areas, four bedrooms, three bathrooms, laundry room and two-car garage.

*Existing square footage as shown in the table includes legal and future-permitted (dining room and bedroom) floor area.

Exterior Materials/Colors

The existing dwelling is finished in wood siding (oriented horizontally and vertically) painted a dark brown color. The remodeled house will be sheathed in wood siding. The majority of the façade will be stained in natural wood tones and the remainder of the dwelling painted a brown color. New windows and doors will be wood clad, painted a brown color. All other trim elements (roof eaves, fascia, and concrete foundation) for the dwelling will be painted in brown tones. All new roofing material will continue the tar and gravel application. The building colors and materials are illustrated on the attached sample sheet and project plans (See Attachment V).

Landscaping and Groundwork

The property is covered in native grasses, shrubs, and several mature trees that are on site. The City Arborist surveyed the mature trees within the site boundaries and prepared a report (dated April 21, 2011 – see Attachment IV) that lists protection measures. No trees would be pruned or removed to allow for construction of the project.

The applicant proposes new shrub (five to one gallon size) and ground cover plantings on site. The majority of the site will remain in its natural condition (native grasses and mature trees). Other exterior site improvements would include gravel pathways with railroad tie/steps, a front yard concrete patio, concrete pool decking and wood-based retaining walls (3') within the rear yard.

To accommodate the dwelling expansion/exterior site improvements, the project would require approximately 47 cubic yards of fill to be imported to the site. Should the project be approved, the City's Public Works Department and Building Division will evaluate the proposed grading quantities and design layout in conjunction with the building permit submittal when the construction drawings, including those for the foundation and footings are available.

PROJECT DATA

Criteria	Existing	Proposed	Required or Max. Allowed
Lot Size	23,894 sq. ft.	No Change	No Change
Slope	Approx. 27%	No Change	No Change
FAR	0.100	0.125	0.146 (corresponds to 3,477 sq. ft. max.)
Square Footage	2,398 sq. ft.	2,986 sq. ft.	3,477 sq. ft.
Parking	Two-car garage (19' 4" x 19' 5") Two uncovered	No Change Two uncovered	Two-car garage* (17' x 18') Two uncovered
Setbacks:			
Front	29' 4"	No Change	15 ft. to 30 ft.*
Side (West)	12' 1"	Approx. 9' 4"	9 ft.
Side (East)	Approx. 6' 10"	No Change	9 ft.
Rear (East)	Approx. 155' 7"	Approx. 153' 7"	15 ft.
Driveway length	29' 4"	No Change	18 ft.
Height	16' 5"	19' 2"	28 ft.

* The existing two car garage does not meet the required 20' x 20' minimum interior measurements but does comply with the floor area reserve exception outlined in BZO Section 8.3.1 (e) and discussed in the *Zoning Conformance* section of this report.

**As the proposed addition does not further encroach upon the existing front yard setback, the provisions of Section 9.7.4(a) or 4.2.4 were not required to be evaluated.

GENERAL PLAN CONFORMANCE

The proposed addition for the single-family residence does not change the land use of the site. The residence is in conformance with the low-density residential general plan designation.

ZONING CONFORMANCE

The following sections of the Belmont Zoning Ordinance (BZO) address elements of the existing site/dwelling and proposed addition:

1. The project is consistent with BZO Section 8.3.1(e) which states "...a garage containing two parking spaces shall have an inside dimension of not less than 20 feet by 20 feet; however, any garage constructed prior to (effective date of the ordinance) having a minimum interior dimension of 17 feet in width by 18 feet in depth shall be considered a legal nonconforming two-car garage for purposes of this Ordinance. Any such dwelling with a 17' X 18' legal nonconforming garage may continue its nonconformity provided the square footage necessary to establish a 20' x 20' garage be reserved from the maximum permitted dwelling floor area for a future garage upgrade."

As described above, this section requires a reservation of floor area for future garage upgrades to establish a 20' x 20' standard (in this case 400 sf (standard) – 377 sf (existing garage) = 23 sf of floor area reserve). Thus, the site is allowed a maximum of 3,477 sf (3,500 sf – 23 sf = 3,477) until such time as the garage is expanded to a 20' x 20' dimension. The project proposes 2,986 sf for the site, thus meeting this standard.

2. The City has no permit records for the construction of the existing dining room and bedroom (#1). The applicant proposes to remove the unpermitted bedroom and add a master bath and closet. The applicant proposes to legalize the dining area. During construction, the City will require all unpermitted work to be subject to a structural inspection to insure that the work was completed in compliance with the Uniform Building Code.

The proposed additions meet all other setback, height, FAR, and permitted use regulations of the R-1B zoning district.

NEIGHBORHOOD OUTREACH

The applicant performed neighborhood outreach as detailed in the Neighborhood Outreach Strategy attached to this report. The applicant reported mailing notices to all property owners within 300 feet of the site informing residents of the project and requesting questions/comments via e-mail or phone. The applicant also reported holding an open house on June 4, 2011, in which no comments of opposition were received. Staff has not received any public comments regarding this project as of the writing of this report. The applicant appears to have achieved the outreach strategy tasks.

ENVIRONMENTAL CLEARANCE (CEQA)

The proposed addition to the single-family home is categorically exempt from the provisions of the California Environmental Quality Act by provision of Section 15301, Class 1 (e) (2)(a&b):

“Additions to existing structures provided that the addition will not result in an increase of more than 10,000 square feet if:

(A) The project is in an area where all public services and facilities are available to allow for maximum development permissible in the General Plan and

(B) The area in which the project is located is not environmentally sensitive.

The existing residence meets the above requirements for CEQA exemption.

SINGLE FAMILY DESIGN REVIEW EVALUATION

The Belmont Zoning Ordinance establishes the following findings for the review of single-family residential projects (Section 13A.5(A-H)). Each finding is listed below with staff's analysis of whether this project meets each finding in the affirmative.

- A. *The buildings and structures shown on the site plan are located to be consistent with the character of existing development on the site and in the neighborhood, as defined; minimize disruptions of existing public views; protect the profile of prominent ridgelines.*

The design, materials and color palette of the proposed addition and remodel are consistent with the established character of other one and two story homes within the neighborhood. Although the proposed addition would increase the roof height of the dwelling from 16' 5" to 19' 2", staff believes the project will not disrupt any existing public views as assessed from the Public right-of-way. Staff believes this finding can be made in the affirmative.

- B. *The overall site and building plans achieve an acceptable balance among the following factors:*
- (1) building bulk*
 - (2) grading, including*
 - (a) disturbed surface area and*
 - (b) total cubic yards, cut and fill*
 - (3) hardscape, and*
 - (4) tree removal*

Building bulk

The proposed first story addition to the home will not significantly increase the perceivable building bulk. The proposed residential project will be designed in a manner that is consistent with the existing dwelling. The remodeled house will be sheathed in wood siding. The façade will be stained in natural wood tones, and the remainder of the dwelling painted a brown color. New windows and doors will be wood clad, painted a brown color. All other trim elements (roof eaves, fascia, and concrete foundation) for the dwelling will be painted in brown tones. Staff believes the proposed architectural design of the remodel/addition moderates the building bulk and is appropriate for this structure and the neighborhood.

Grading/Hardscape

The addition will have minimal impact on the ground areas. To accommodate the dwelling expansion/exterior site improvements, the project would require approximately 47 cubic yards of imported fill. The building expansion does not significantly increase the hardscape of the lot.

Tree Removal

No trees will be removed to allow for the dwelling remodel/addition; protection measures for the surveyed trees as recommended by the City Arborist are included in the proposed conditions of approval.

All four factors (building bulk, grading, hardscape, and tree removal) appear to be appropriately addressed in the building design and site/groundwork to achieve a complementary balance for the project. Staff believes this finding can be made in the affirmative.

C. *All accessways shown on the site plan and on the topographic map are arranged to provide safe vehicular and pedestrian access to all buildings and structures.*

The existing parking area/driveway appears to have clear access to the street. The proposed walkway from the right-of-way to the proposed entry appears to be safe for pedestrian usage. Staff believes this finding can be made in the affirmative.

D. *All proposed grading and site preparation have been adequately reviewed to protect against site stability and ground movement hazards, erosion and flooding potential, and habitat and stream degradation.*

To accommodate the dwelling expansion/exterior site improvements, the project would require approximately 47 cubic yards of fill to be imported to the site. Should the project be approved, the City's Public Works Department and Building Division will evaluate the proposed grading quantities and design layout in conjunction with the building permit submittal when the construction drawings, including those for the foundation and footings are available. There are no known geological or flooding hazards in the immediate neighborhood of the subject property, and there are no streams on or near the property. Staff believes this finding can be made in the affirmative.

E. *All accessory and support features, including driveway and parking surfaces, underfloor areas, retaining walls, utility services and other accessory structures are integrated into the overall project design.*

There are no proposed changes to the driveway or utility services. The project does not include significant accessory structures (3' wood-based retaining wall proposed within the rear yard). Staff believes this finding can be made in the affirmative.

F. *The landscape plan incorporates:*

(1) *Native plants appropriate to the site's environmental setting and microclimate, and*

- (2) *Appropriate landscape screening of accessory and support structures, and Replacement trees in sufficient quantity to comply with the standards of Section 25 (Trees) of the Belmont City Code.*

The subject property is covered with native grasses, shrubs and protected/regulated trees; no trees will be removed to allow for construction of the project. The applicant proposes additional landscaping for the site that includes shrub and groundcover plantings (five and one gallon size). Tree protection measures as recommended by the City Arborist have been included as part of the project conditions of approval. Staff believes this finding can be made in the affirmative.

- G. *Adequate measures have been developed for construction-related impacts, such as haul routes, material storage, erosion control, tree protection, waste recycling and disposal, and other potential hazards.*

Review of staging areas, recycling and disposal procedures and adequacy of erosion control measures would be reviewed by the Building Division as part of the structural plan check. All construction would be completed in compliance with the California Building Code and NPDES standards as administered by the City of Belmont. Staff believes this finding can be made in the affirmative.

- H. *Structural encroachments into the public right-of-way associated with the project comply with the standards of Section 22, Article 1 (Encroachments) of the Belmont City Code.*

The proposal includes no encroachments into the public right-of-way. Staff believes this finding can be made in the affirmative.

CONCLUSION AND RECOMMENDATION

Based on the analysis and required findings, staff recommends approval of the Single-Family Design Review application with the Conditions of Approval in Attachment III.

ACTION ALTERNATIVES

1. Continue the application for redesign.
2. Deny the Single Family Design Review. The Commission will identify specific facts to support a denial, and a resolution would be returned to the Commission for final action.

ATTACHMENTS

- I. 300/500 foot radius map of project site (Located on Page 2 of staff report)
- II. Resolution approving the Single Family Design Review
- III. Conditions of Approval
- IV. Neighborhood Outreach Materials
- V. Arborist Report

PLANNING COMMISSION STAFF REPORT
RE: 1731 Valley View Drive, PA#2011-0017
July 19, 2011
Page 10

Respectfully submitted,



Rob D. Gill
Assistant Planner



Carlos de Melo
Community Development Director

CC: Applicant/Owner

RESOLUTION NO. 2011-

RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF BELMONT
APPROVING A SINGLE FAMILY DESIGN REVIEW
AT 1731 VALLEY VIEW DRIVE (APPL. NO.2011-0007)

WHEREAS, Ethan & Rita Stock, applicants/owners, request Single Family Design Review approval to construct an 897 square foot addition to the existing 2,089 square foot residence for a total of 2,986 square feet; and,

WHEREAS, a public hearing was duly noticed, held, and closed on July 19, 2011; and,

WHEREAS, the Planning Commission of the City of Belmont finds the project to be categorically exempt pursuant to the California Environmental Quality Act, Section 15301; and,

WHEREAS, the Planning Commission hereby adopts the staff report dated July 19, 2011 and the facts contained therein as its own findings of facts; and,

WHEREAS, the Planning Commission finds the required Single Family Design Review Findings of Section 13A.5, are made in the affirmative as follows:

- A. *The buildings and structures shown on the site plan are located to be consistent with the character of existing development on the site and in the neighborhood, as defined; minimize disruptions of existing public views; protect the profile of prominent ridgelines.*

The design, materials and color palette of the proposed addition and remodel are consistent with the established character of other one and two story homes within the neighborhood. Although the proposed addition would increase the roof height of the dwelling from 16' 5" to 19' 2", The Planning Commission believes the project will not disrupt any existing public views as assessed from the public right-of-way. This finding is affirmed.

- B. *The overall site and building plans achieve an acceptable balance among the following factors:*

- (1) building bulk*
- (2) grading, including*
 - a. disturbed surface area and*
 - b. total cubic yards, cut and fill*
- (3) hardscape, and*
- (4) tree removal*

Building bulk

The proposed first story addition to the home will not significantly increase the perceivable building bulk. The proposed residential project will be designed in a manner that is consistent with the existing dwelling. The remodeled house will be sheathed in wood siding. The majority of the façade will be stained in natural wood tones and the remainder of the dwelling painted a brown color. New windows and doors will be wood clad, painted a brown color. All other trim

elements (roof eaves, fascia, and concrete foundation) for the dwelling will be painted in brown tones.

The Planning Commission believes the proposed architectural design of the addition/remodel moderates the building bulk and is appropriate for this structure and the neighborhood.

Grading/Hardscape

The addition will have minimal impact on the ground areas. To accommodate the dwelling expansion/exterior site improvements, the project would require approximately 47 cubic yards of imported fill. The building expansion does not significantly increase the hardscape of the lot.

Tree Removal

No trees will be removed to allow for the dwelling remodel/addition; protection measures for the surveyed trees as recommended by the City Arborist are included in the proposed conditions of approval.

All four factors (building bulk, grading, hardscape, and tree removal) appear to be appropriately addressed in the building design and site/groundwork to achieve a complementary balance for the project. The Planning Commission believes this finding can be made in the affirmative.

C. All accessways shown on the site plan and on the topographic map are arranged to provide safe vehicular and pedestrian access to all buildings and structures.

The existing parking area/driveway appears to have clear access to the street. The proposed walkway from the right-of-way to the proposed entry appears to be safe for pedestrian usage. This finding is affirmed.

D. All proposed grading and site preparation have been adequately reviewed to protect against site stability and ground movement hazards, erosion and flooding potential, and habitat and stream degradation.

To accommodate the dwelling expansion/exterior site improvements, the project would require approximately 47 cubic yards of fill to be imported to the site. Should the project be approved, the City's Public Works Department and Building Division will evaluate the proposed grading quantities and design layout in conjunction with the building permit submittal when the construction drawings, including those for the foundation and footings are available. There are no known geological or flooding hazards in the immediate neighborhood of the subject property, and there are no streams on or near the property. This finding is affirmed.

E. All accessory and support features, including driveway and parking surfaces, underfloor areas, retaining walls, utility services and other accessory structures are integrated into the overall project design.

There are no proposed changes to the driveway or utility services. The project does not include significant accessory structures (3' wood-based retaining wall proposed within the rear yard). This finding is affirmed.

F. The landscape plan incorporates:

- (1) Native plants appropriate to the site's environmental setting and microclimate; and,*
- (2) Appropriate landscape screening of accessory and support structure; and,*
- (3) Replacement trees in sufficient quantity to comply with the standards of Section 25 (Trees) of the Belmont Municipal Code.*

The subject property is covered with native grasses, shrubs and protected/regulating trees; no trees will be removed to allow for construction of the project. The applicant proposes additional landscaping for the site that includes shrub and groundcover plantings (five and one gallon size). Tree protection measures as recommended by the City Arborist have been included as part of the project conditions of approval. This finding is affirmed.

G. Adequate measures have been developed for construction-related impacts, such as haul routes, material storage, erosion control, tree protection, waste recycling and disposal, and other potential hazards.

Review of staging areas, recycling and disposal procedures and adequacy of erosion control measures would be reviewed by the Building Division as part of the structural plan check. All construction would be completed in compliance with the California Building Code and NPDES standards as administered by the City of Belmont. This finding is affirmed.

H. Structural encroachments into the public right-of-way associated with the project comply with the standards of Section 22, Article 1 (Encroachments) of the Belmont City Code.

The proposal includes no encroachments into the public right-of-way. This finding is affirmed.

Resolution
1731 Valley View Drive
July 19, 2011
Page 4 of 4

NOW, THEREFORE, BE IT RESOLVED that the Planning Commission approves the Single Family Design Review to construct an 897 square foot addition to the existing 2,089 square foot residence for a total of 2,986 square feet at 1731 Valley View Drive, subject to the attached conditions in Exhibit "A".

* * * * *

Passed and adopted at a regular meeting of the Planning Commission of the City of Belmont held on July 19, 2011 by the following vote:

AYES,
COMMISSIONERS: _____
NOES,
COMMISSIONERS: _____
ABSENT,
COMMISSIONERS: _____
ABSTAIN,
COMMISSIONERS: _____
RECUSED,
COMMISSIONERS: _____

Carlos de Melo
Planning Commission Secretary

EXHIBIT "A"

CONDITIONS OF PROJECT APPROVAL
SINGLE FAMILY DESIGN REVIEW
1731 VALLEY VIEW DRIVE (2011-0017)

- I. COMPLY WITH THE FOLLOWING CONDITIONS OF THE COMMUNITY DEVELOPMENT DEPARTMENT:
 - A. The following conditions shall be shown on plans submitted for a building permit and/or site development permit or otherwise met prior to issuance of the first building permit (i.e., foundation permit) and shall be completed and/or installed prior to occupancy and remain in place at all times that the use occupies the premises except as otherwise specified in the conditions:

Planning Division

1. Plans submitted for building permit and all construction shall conform to the plans on file in the Planning Division for Appl. No. 2011-0017 prepared by Jason Kaldis Architect, Inc., date stamped 6/7/11. The Director of Community Development may approve minor modifications to the plans.
2. All construction and related activities which require a City building permit shall be allowed only during the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday, and 10:00 a.m. to 5:00 p.m. on Saturdays. No construction activity or related activities shall be allowed outside of the aforementioned hours or on Sundays and the following holidays: New Year's Day, President's Day, Memorial Day, 4th of July, Labor Day, Thanksgiving Day and Christmas Day. All gasoline powered construction equipment shall be equipped with an operating muffler or baffling system as originally provided by the manufacturer, and no modification to these systems is permitted.
3. Prior to issuance of building permits, the property owners shall file with the Director of Community Development, on forms provided by the City, an acknowledgment that they have read, understand and agree to these conditions of approval.
4. In accordance with the Belmont Zoning Ordinance, the permit(s) granted by this approval shall expire one (1) year from the date of approval, with said approval date indicated on the accompanying Planning Commission resolution. Any request for extension of the expiration date shall be made in accordance with the applicable provisions of the Belmont Zoning Ordinance.
5. In the event that this approval is challenged by a third party, the property owners and all assignees will be responsible for defending against this challenge, and agree to accept responsibility for defense at the request of the City. The property owners and all assignees agree to defend, indemnify and hold harmless the City of Belmont and all

officials, staff, consultants and agents from any costs, claims or liabilities arising from the approval, including without limitation, any award of attorneys fees that might result from the third party challenge.

6. The project is subject to Community Development Department and Consulting City Arborist (CCA) review and approval with the following conditions regarding tree removal, tree retention measures, tree protection fencing and irrigation. The following detailed recommendations must be included as “tree protection notes” in the final stamped building set of plans.

(a) TREE PROTECTION FENCING:

- (i) Fencing material used for all protective fences as per above must be steel chain-link, at least five-feet in height, mounted on two-inch diameter galvanized iron posts 6-feet in length, driven a minimum of 24-inches into the ground or free standing chain link panels mounted on moveable concrete footings secured into place by wiring to steel layout stakes or other steel stakes pounded into the ground. Posts must be mounted no wider than six-feet apart. *This fence must be erected prior to any heavy machinery traffic or construction material arrival on site.*

The exact locations of fence erection shall be determined during the site pre-construction meeting between the CCA the general contractor. The areas between the tree trunk edges and this fence route shall be known as the critical root zones or tree protection zones (“CRZ” or “TPZ”). Rough TPZ routing is shown on the tree map in this report, and is designed to protect the following trees: #2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 21, 22, 26, 28, 31, 32, 34, 35, 36, & 37.

- (ii) Compliance inspections will occur (1) at the time of fence erection (2) approximately once monthly during grading and construction, and (3) after construction is complete. All fencing must remain in place until all construction is completed and the fencing and other protection has been received a final signoff letter from the city arborist. Permit approval will not occur until after the first inspection has been performed and the protection measures are approved by the city arborist.
- (iii) The protective fencing must not be temporarily moved during construction. No materials, tools, excavated soil, liquids, substances, etc. are to be placed or dumped, even temporarily, inside the TPZ/CRZ.
- (iv) The TPZ fencing shall have one sign affixed with UV resistant zip ties to the chain link at eye level for every 15-linear feet of fencing, minimum 8”X11” size each, plastic laminated or otherwise waterproofed, stating:

TREE PROTECTION FENCE DO NOT ALTER OR REMOVE CALL
CITY ARBORIST 48-HRS ADVANCE (650) 697-0990.

(b) TRUNK BUFFER:

- (i) Trees #1, 2, 3, 4, 7, 8, 9, 10, 11, 21, 35, 36, 37, and 38 shall be supplied with trunk buffers covering the exposed lower trunks between grade elevation and approximately 8 feet above grade (or the lowest scaffold limbs). The buffer shall consist of orange plastic wrapped approximately 20 times to create a layer 2 inches thick (a single large tree uses up to 1 or 1.5 rolls of orange plastic fencing material). Place 2X4 wood boards over the buffer, standing up side by side around the entire trunk circumference. Secure with duct tape or rope, or continue wrapping orange plastic over the wood boards and affix with UV resistant zip-ties. Do not use wires. See spec photo at right. Alternatively, landscaper bender board can be used in-lieu of 2X4 wood boards (see photo at lower right).

(c) TREE MAINTENANCE:

- (i) Tree maintenance on trees located on or adjacent to the subject property shall be performed only by or under direct site supervision of an ISA Certified Arborist, and shall conform to the most recent edition of ANSI A300 Part I: Tree, Shrub, and Other Woody Plant Maintenance, Standard Practices, Pruning. Tree Care Companies performing work on the subject property shall contact the CCA prior to commencement of any work.
- (ii) Rail Road Tie Steps: Per the proposed landscape plan, railroad ties are to be set over existing grade near oak #7 (see tree map, this report). All railroad tie step installation work will cut no deeper than a total of 4 to 6 inches below existing soil grade elevations. Contractor need to verify if footings or some type of tie-ins (e.g. rebar, etc.) will be required to be pounded into the ground or otherwise installed in addition to the railroad ties themselves in the area within 10 feet of oak #7. This work should be phase to the very end of the project so that the TPZ tree fence route can remain in place as proposed by the CCA until the end of residence construction work. The TPZ can then be moved or removed to allow for landscape work to occur.
- (iii) Brush Removal: Contractor or owner shall have the existing brush pile located just uphill from oak #26 completely removed from the site prior to initial tree protection signoff.
- (iv) Contractor shall restore original soil grade (sloping down toward residence) by in-filling existing old soil bench cuts with soil (type of soil

be determined by CCA in the field), in two areas below trees #5, 6, 7, and 11 (see tree map in this report).

(d) WOOD CHIP SOIL BUFFER:

- (i) To mitigate site plan work related soil compaction over the root zones of oaks #37 and 38, install a 12 inch thick layer of high quality chipper truck-type wood chips over the open soil root zone area between the existing wood property fence (west side property boundary) and trees #37 and 38 per the hatched area on the tree map in this report. NOTE: Wood chips are solid wood, and are different from bark chips which are solid bark.

(e) TEMPORARY IRRIGATION:

- (i) As directed by the CCA, supply trees #37 and #38 with soaker hose and/or emitter line irrigation on a once or twice monthly deep watering basis throughout the construction project, with water delivery to occur over the entire open soil root zone area encompassed by the tree protection zone (TPZ) fence perimeter. Irrigation can be provided via water truck, water tank, soakers, emitter lines, garden hose trickle, or other means, watering directly over the wood chip soil buffer layer. The CCA will check soil moisture using a Lincoln probe on a once monthly basis to determine if relative soil moisture levels are adequate for survival of the trees. Irrigation may be adjusted in terms of frequency and/or duration depending on these monthly probe readings.

(f) ARBORIST INSPECTION FEES:

- (i) The applicant shall pay a tree inspection fee of \$ 2,730 at the Permit Center, payable to the City of Belmont prior to permit issuance and prior to the initial tree protection inspection meeting on site to cover inspections and signoff letters by the city arborist throughout the life of the project (\$2,100 arborist fee plus 30% City mandated administration fee).

(g) PRE-CONSTRUCTION MEETING:

- (i) Members of the applicant's project team shall make an appointment for a site pre-construction meeting with the Contract City Arborist.

Building Division

1. Prior to any construction, the applicant or a designated representative shall obtain all of the required building permits for the project. The applicant will be required to provide a construction and demolition-recycling plan as a condition of the building permit. The Building Department will inspect for compliance with this plan. The conditions of

approval for this permit also require the applicant to perform all work in conformance with the NPDES requirements.

2. This project is subject to the School Facilities Fee. Proof of payment must be presented to the City of Belmont before the permit will be issued. Contact the Sequoia Union School District directly for further information (Sequoia Union School District, Maintenance & Operation, 480 James, Ave., Redwood City, CA 94062. 650.369.1411 ext. 2290 or 2203 www.seq.org).
3. The City of Belmont is located in a region once inhabited by Native Americans. A significant archaeological site has been formally identified at the Northeast quadrant of the City. Human remains and artifacts have been discovered elsewhere within the city limits. Consequently, please amend the cover sheet of the plans to state in the event human remains are discovered work will be stopped and the County Coroner will be contacted immediately. In addition, it is a violation of Public Resources Code 5097.99 to retain any Native American Artifacts. Health and Safety Code 7050.5.
4. All retaining walls shall be required to be engineered meet the California Building Code Standards.
5. Prior to the issuance of a building permit, the applicant shall submit a record of survey.
6. The contractor/property owner shall be reasonable to post hours of operation and phone numbers for noise complaints.
7. The contractor/property owner shall provide space on the subject property for recycling containers.
8. The contractor shall provide a list of construction and demolition recycling service providers.
9. The applicant/owner shall require all contractors and subcontractors to make a good faith effort to contact a construction and demolition provider.
10. The project manager shall notify contractors and subcontractors of the City's expectation of maximizing diversion of solid waste.
11. The applicant/owner shall be responsible in investigating opportunities for salvaging materials for reuse.
12. The applicant shall specify on the plan that the 2006 IBC, 2006 UPC, 2006 UMC and 2005 NEC as amended by the State of California and all applicable City of Belmont ordinances will be employed during this project.

II. COMPLY WITH THE FOLLOWING CONDITIONS OF THE PUBLIC WORKS DEPARTMENT:

- A. The following conditions shall be shown on plans submitted for a building permit and/or site development permit or otherwise met prior to issuance of the first building permit (i.e., foundation permit) and shall be completed and/or installed prior to occupancy and remain in place at all times that the use occupies the premises except as otherwise specified in the conditions.
1. Streets, sidewalks and curbs in need of repair within and bordering the project shall be repaired and/or removed and replaced in accordance with the Department of Public Works approved standards. Photographs or video of before condition are recommended.
 2. Roof leaders and site drainage shall be directed to the City stormwater drainage system. A dissipator box or other energy reduction method shall be used or landscaped area.
- B. The following conditions shall be met prior to the issuance of the first building permit (i.e., foundation permit) and/or site development permits except as otherwise specified in the conditions.
1. The property owner/applicant shall apply for and obtain a permanent encroachment agreement from the Department of Public Works, with approval by the City Council, for a structure, retaining wall, awning, or other features constructed in the public right-of-way, easement or on property in which the City holds an interest.
 2. The property owner/applicant shall apply for and obtain temporary encroachment permits from the Department of Public Works for work in the City public right-of-way, easements or property in which the City holds an interest, including driveway, sidewalk, sewer connections, sewer clean-outs, curb drains, storm drain connections, placement of a debris box.
 3. Verify location of utility meters, valves, back flow preventers, and hydrants with appropriate utility company. Show relationship of each to site improvements, such as retaining walls.
 4. The owner/applicant shall submit a dust control plan for approval by the Department of Public Works. To reduce dust levels, exposed earth surfaces shall be watered as necessary. The application of water shall be monitored to prevent runoff into the storm drain system. Spillage resulting from hauling operations along or across any public or private property shall be removed immediately. Dust nuisances originating from the contractor's operations, either inside or outside of the right-of-way shall be controlled.

5. The owner/applicant shall perform a video inspection of the sewer lateral from the house/building to the sewer main, submit the inspection to the Department of Public Works for review and make any necessary repairs to the lateral.
 6. No wastewater (including equipment cleaning wash water, vehicle wash water, cooling water, air conditioner condensate, and floor cleaning washwater) shall be discharged to the storm drain system, the street or gutter.
- C. The following conditions shall be met prior to occupancy except as otherwise specified in the conditions.
1. The owner/applicant shall ensure that applicable Best Management Practices (BMPs) from the San Mateo Stormwater Pollution Prevention Program (STOPPP) are followed to prevent discharge of soil or any construction material into the gutter, stormdrain system or creek.
 2. Grading shall be performed in accordance with the City Grading Ordinance, Chapter 9 of the City Code. Soil or other construction materials shall not be stockpiled in the public right-of-way unless an encroachment permit is obtained from the Department of Public Works. Grading shall neither be initiated nor continued between November 15 and April 15. Grading shall be done between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday unless otherwise specifically authorized by the Director of Public Works. The Stormwater Pollution Prevention Program Best Management Practices (BMPs) for construction shall be implemented to protect water quality.
 3. The owner/applicant shall ensure that all construction personnel follow standard BMPs for stormwater quality protection during construction of project. These includes, but are not limited to, the following:
 - a) Store, handle and dispose of construction materials and wastes properly, so as to prevent their contact with stormwater.
 - b) Control and prevent the discharge of all potential pollutants, including solid wastes, paints, concrete, petroleum products, chemicals, washwater or sediment, and non-stormwater discharges to storm drains and watercourses.
 - c) Use sediment controls, filtration, or settling to remove sediment from dewatering effluent.
 - d) Do not clean, fuel, or maintain vehicles on-site, except in a designated area in which runoff is contained and treated.
 - e) Delineate clearing limits, easements, setbacks, sensitive or critical areas, buffer zones, trees, and drainage courses with field markers or fencing.
 - f) Protect adjacent properties and undisturbed areas from construction impacts using vegetative buffer strips, sediment barriers or filters, dikes, mulching or other measures as appropriate.

- g) Perform clearing and earth moving activities only during dry weather (April 15 through November 14).
 - h) Limit and time applications of pesticides and fertilizers to prevent polluted runoff.
 - i) Limit construction access routes and stabilize designated access points.
 - j) Do not track dirt or other materials off-site; clean off-site paved areas and sidewalks using dry sweeping methods.
4. Failure to comply with any permit condition may result in a “Stop Work” order or other penalty.

III. COMPLY WITH THE FOLLOWING CONDITIONS OF THE BELMONT / SAN CARLOS FIRE DEPARTMENT:

- 1. Address numbers shall be illuminated and visible on all new and existing buildings. Rear addressing is/may also be required. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102mm) high with a minimum stroke width of 0.5 inch (12.7mm).

IV. COMPLY WITH THE FOLLOWING CONDITIONS OF THE POLICE DEPARTMENT:

- 1. All activities shall be subject to the requirements of the Belmont Noise Ordinance
- 2. No debris boxes or building materials shall be stored on the street.
- 3. Flag persons shall be positioned at both ends of blocked traffic lanes.
- 4. 24-hour written notice to the Police Department is required before any lane closure.

Certification of Approved Final Conditions:	
_____	_____
Rob D. Gill, Assistant Planner	Date

May 24, 2011

Ethan & Rika Stock
1731 Valley View Ave.
Belmont, CA 94002
estock@gmail.com
(510) 830-5184

Dear Neighbor,

We are in the design review process for an addition to our house at 1731 Valley View Avenue, and the City of Belmont has asked us to contact you and seek your comments on our plans. We are excited to move to Belmont and to our new neighborhood, and we believe we've planned an addition that will benefit the area and be visually appealing.

We have had the pleasure of meeting many of our nearby neighbors on Valley View Ave. at a preliminary "wine and design" event that we held in January, and we invite you to stop by (again or for the first time!) and meet us at an **open house on Saturday, June 4th from 1pm to 4pm**. We look forward to hearing your thoughts about our project as well as learning more about our new neighbors and area.

In brief, we are adding about 600 square feet to the current structure, bringing it to about 2600 square feet; rebuilding some unpermitted previous additions; and remodeling much of the interior of the house. We hope to re-use the current painted redwood siding on the house, which is gorgeous vertical-grain old growth lumber, to create a natural look to the exterior which will complement the oak glade on the north, Valley View Ave. side of the house.

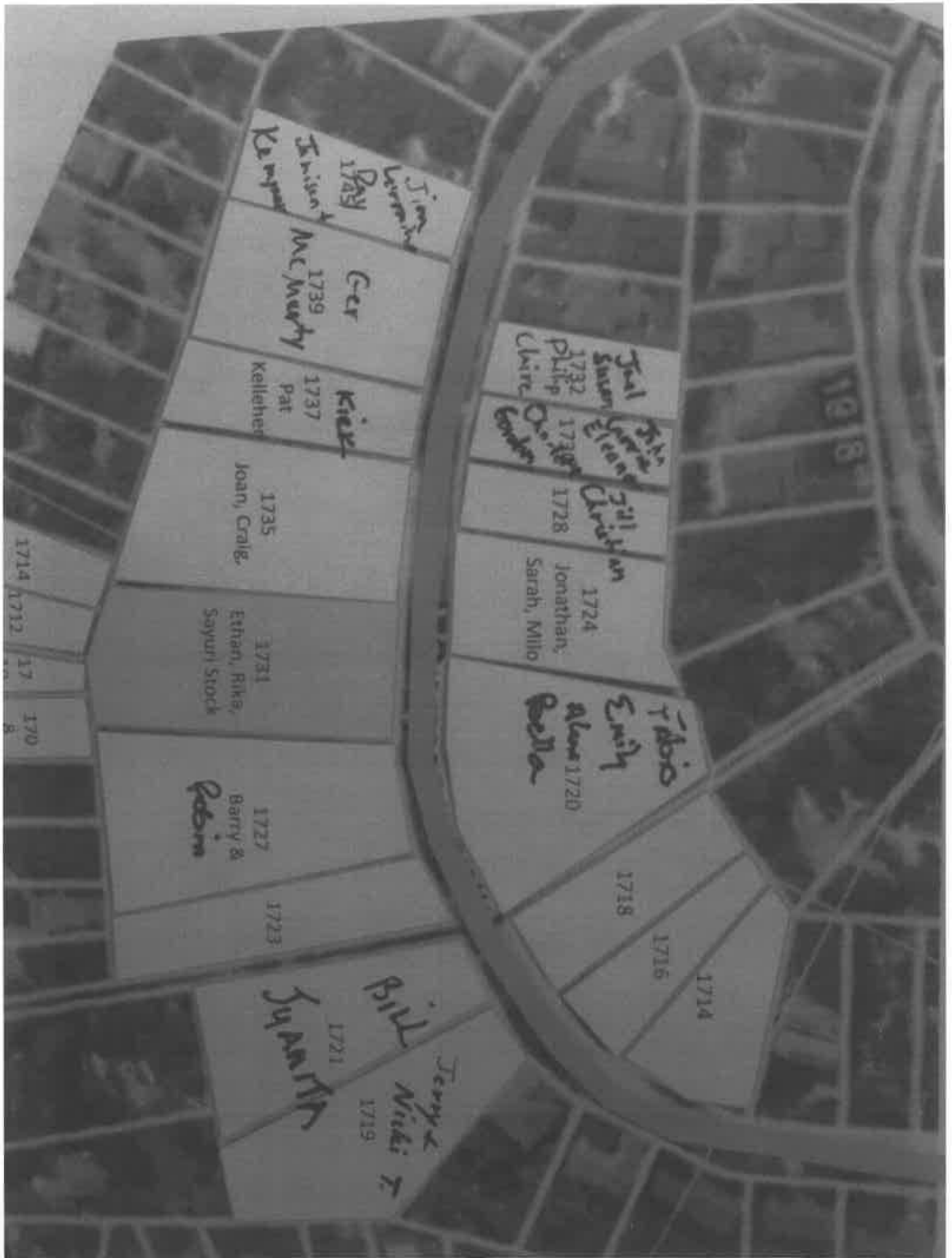
The additions we are planning are in character for the mid-century modern design of the house, and should appear as if they were part of it from when the house was built. We are conforming to all rules regarding setbacks, height, and FAR for our lot.

For more detail, please see the attached plans showing the current and proposed elevations and floor plan for the house.

We are happy to receive your comments via email or phone, at the address and number listed above. We expect to have a public hearing for the project in June, so please return all comments to us by **Tuesday the 7th of June**.

Sincerely,

Ethan and Rika Stock



1918

1732
Philip
Clive

1733
Oscar
Gordon

1728

1724
Jonathan,
Sarah, Millo

1720
Alana
Bella

1718

1716

1714

1721
Bill
Superior

1719
Terry &
Nicki T

1739
Ray
Iris
Keenan

1739
McMurry

1737
Pat
Kelleher

1735
Joan, Craig

1731
Ethan, Rika,
Sayuri Stock

1727
Barry &
Robin

1723

1714
1712

17

170

Ethan & Rika Stock
1731 Valley View Ave.
Belmont, CA 9400

June 6, 2011

Rob D. Gill
Assistant Planner
City of Belmont
One Twin Pines Lane Suite 110
Belmont, CA 94002

Dear Rob:

As requested, this letter is a summary of the community outreach phase of our design review process for our remodeling project.

Our first outreach was an informal 'wine and design' party in January of this year, where we invited our 8 closest neighbors on Valley View Ave. to meet us and to hear about our plans. This event was well-attended, including the residents of 1730, 1728, 1724, 1720, 1737, 1735, and 1727 Valley View Ave. The enclosed 'neighbor map' was drawn and annotated by our neighbors at this event. Feedback on our project, at that time in a preliminary stage, was extremely positive.

Our second outreach was the mailing requested by the City of Belmont, which we mailed to the 58 addresses given to us on the 24th of May. This mailing, a copy of which is enclosed, requested that recipients call or email with comments; and invited recipients to attend an open house at our property from 1pm – 4pm on Saturday, June 4th.

We received zero telephone responses and one email response to our mailing, which was a friendly and positive note from Bill and Juanita Russell, of 1721 Valley View. A copy of Bill's email is enclosed.

At the open house, only one neighbor –Kirk Wheeler and Pat Kelleher of 1737 Valley View – attended. Kirk and Pat are enthusiastic about the project, and signed our comment sheet to that effect. That sheet is enclosed.

We have now completed both formal and informal community outreach, and have received only enthusiastic and positive support for our plans. We are excited to complete our construction and join our neighbors in the community of Belmont.

Best,



Ethan and Rika Stock



Ethan Stock <estock@gmail.com>

Plans for 1731 Valley View Avenue, Belmont, CA

2 messages

William H.Russell <owyhee@comcast.net>

Thu, May 26, 2011 at 4:42 PM

To: Ethan & Rika Stock <estock@gmail.com>

Dear Ethan & Rika:

Thank you very much for sending us a copy of your building plans. Juanita and I think this project will be a nice improvement to your property and will contribute to the neighborhood. We look forward to meeting you soon.

Bill & Juanita Russell
1721 Valley View Avenue
Belmont, CA 94002-1939

Phone 650-592-3699

email: owyhee@comcast.net

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Ethan Stock <estock@gmail.com>

Mon, May 30, 2011 at 8:24 PM

To: "William H.Russell" <owyhee@comcast.net>

Thanks Bill!

Hopefully you and Juanita can make it by our open house on Saturday.

Cheers,
Ethan

[Quoted text hidden]

Name	Address	Comments
Kirk Wheeler	1737 Valley View	Like Plan
Pat Kellner	1737 Valley View	Like Plan



Walter Levison
CONSULTING ARBORIST



PNW-ISA Certified Tree Risk Assessor #593

ASCA Registered Consulting Arborist #401

ISA Certified Arborist #WC-3172

**Tree assessment & recommendations
for twenty four (24) regulated size trees
at
1731 Valley View
Belmont, California**

Prepared at the Request of:

**Rob Gill, Assistant Planner
Permit Center
1 Twin Pines Lane
Belmont, CA 94002**

Site Visit:

Walter Levison, Contract City Arborist (CCA)

4/14/2011 and 4/21/2011

Report:

Walter Levison

4/21/2011



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2 Summary _____ **4**

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2.2 Tree condition: _____ **4**

2.3 Impact mitigation table: _____ **5**

2.4 Table of fees: _____ **7**

3 Protected Trees _____ **8**

4 City of Belmont Master Fee Schedule 2010-11 _____ **9**

5 Mitigation Recommendations _____ **10**

6 Consultant's Qualifications _____ **17**

7 Assumptions and Limiting Conditions _____ **18**

8 Certification _____ **19**

9 Tree Map Scan _____ **20**

Attached: Tree data charts



1 Assignment and Background

The contract city arborist (CCA) was requested by Mr. Rob Gill, Planning Department, to assess and comment in writing on trees to be affected by a proposed residential addition project at 2400 Palmer.

The author visited the site on 4/14/2011 and 4/21/2011, and tagged and assessed 24 regulated size native coast live oak specimens that were potentially vulnerable to site plan project impacts due to their locations. Trees far from proposed work were not included in the study, in the interest of keeping arborist fees as low as possible for the applicant. Study trees are noted in the Excel tree data charts (attached) and tree map. Tags are permanent, aluminum, racetrack shaped tags affixed to the main trunk of each tree at approximately eye level, tagged per the architect's number system. Neighbor trees were not tagged. Note that 21 of the 24 assessed oaks are protected size specimens. The only non-protected size coast live oaks assessed in this study are trees #2, #3, and #21.

The tree map scan is a marked up version of applicant sheet 1.1 dated 2/22/2011 by Jason Kaldis, Architect of Berkeley, California. The architect plotted approximate tree canopy dripline dimensions on this sheet which were fairly accurate. The contract city arborist (CCA) added proposed tree protection zone fencing routes and other notes to this sheet such as "TB" indicating that a trunk buffer will be required.

The attached Excel tree data charts include not only standard arboriculture data, but also removal fees, mitigation fees for removal of or damage to protected trees, and suggested protection and maintenance items to be initiated prior to commencement of site plan work. These charts are therefore a valuable tool for the site general contractor as a reference for all tree care and protection needs.

Recommendations for maintaining and protecting individual trees are found in the mitigation section of this report. These are designed to guide planning department staff and planning commissioners throughout the decision-making process, as well as provide written documentation for contractors involved with tree preservation measures for this site. These mitigation items are considered the planning division conditions of project approval (COA), and will be deemed so if itemized by Staff in the official Staff report for this project and approved by commission vote.

The author met with the owner of the property on 4/14/2011 during which he stated that the landscape plan as shown on sheet 1.1 was basically a future plan and was not expected to be implemented simultaneously with the addition work. However, since proposed plantings, irrigation line trenching (not shown), and path grading and construction are shown on this sheet, the CCA evaluated all impacts to trees in close proximity to those items, and suggested tree protection items and landscape plan adjustments accordingly.

Tree protection inspections will be performed by the CCA before, during, and after initiation of the site plan project (at the discretion of the planning director). The demolition, grading, and building permits will not be issued without prior city arborist inspection and approval of site tree protection measures.

One final note: Table 2.3 is an overview of all expected tree impacts and mitigation measures laid out in matrix form for easy understanding.



2 Summary

2.1 Tree species, size, tag number:

There were 24 coast live oak (*Quercus agrifolia*) specimens assessed in this study.

- 21 oaks are protected size (10 inches or greater, or multiple trunks adding up to more than 10 inches). These are trees #1, 4, 5, 6, 7, 8, 9, 10, 11, 17, 18, 22, 26, 28, 31, 32, 34, 35, 36, 37, 38.
- 3 oaks are non-protected size (trees #2, 3, and 21).
- Two of the protected size oaks are located just off site in the neighbor's rear yard just east of the fenceline (trees #17, 18).

2.2 Tree condition:

Many of the trees in the upper site (front yard) have been top pruned by high voltage overhead powerline clearance pruning contractors, resulting in decline of the trees' health and structure. The only way to mitigate some of this damage is to keep the root zones dry in summer, avoid irrigation in summer/fall within 20 to 30 feet of the trees, and try fertilizing them with Greenbelt 22-14-14 as a soil injection to boost vigor which may or may not have a positive effect in the next growing season.

Many of the trees have been buried under fill soil due likely to previous owners' lack of proper maintenance. Root crown excavations can be performed to mitigate this problem and restore aerobic root crown conditions. The work needs to be performed by or under direct supervision of an ISA Certified Arborist, otherwise damage to the soft root tissues will occur.

Some of the rear yard trees have sunscald issues due to the extreme increase in sunlight penetration that occurred when many oaks were illegally removed by a previous owner.

Much of the past pruning performed on this site was substandard, and front yard trees exhibit spike climbing wounds where pruners used spikes to climb into the trees, permanently damaging the bark and wood tissues. This pruning was basically "lion tailing" which involves cutting out inner and lower live wood and foliage instead of the proper way of managing large trees which is typically "endweight reduction pruning" which removes only the outermost live wood and foliage from selected heavy extended limbs to reduce likelihood of a branch failure. Lion tailing creates trees that are of relatively higher risk of failure due to their inability to create trunk taper in the future due to the lack of those lower limbs which previously fed the tree's lower regions with photosynthate. A lion tailed tree get more and more extended, and is difficult to reduce endweight in since there is often little live wood remaining in the canopy.

Soil cut benches were noted in the east and west sections of the front yard just south of the two front yard groves of oaks. The reason these benches were created is not clear. However, in the interest of managing oak roots in these areas, the bench cuts should either be filled in or buttressed with simple retaining walls. The fill method would be ideal, as it would reestablish the original tapered grade of the slope as it runs down to the existing residence footprint, and encourage growth of new oak roots in areas that are currently airspace.



2.3 Impact mitigation table:

TABLE 2.3 SUGGESTIONS FOR IMPACT MITIGATION

Impact Type	Trees Affected	Suggested Mitigation
Physical damage during construction.	1, 2, 3, 4, 7, 8, 9, 10, 11, 21, 35, 36, 37, 38.	Install trunk buffers per specification in recommendations section.
Soil compaction of root zone caused by foot traffic, tools, materials, work, etc. Root zone contamination from liquids. Physical damage.	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 21, 22, 26, 28, 31, 32, 34, 35, 36, 37.	Install chain link fencing either as chain link roll with hooks, or as stand-alone panels that sit on moveable concrete footings, per the routes shown on the tree map in this report. Block all access to east side of site by connecting the TPZ fencing to the garage. Block all access to the front yard main grove by connecting TPZ fencing to the existing wood fence so that we achieve full perimeter protection until the final portion of the site work when railroad tie stairs can be installed as part of the "landscape phase".
Soil compaction around oak #37 and 38 from addition construction.	37, 38	Install 15 foot radius "soil buffer" consisting of 12 inches thickness of chipper truck type wood chips (available from Lyngso in Redwood City) lain over the soil surface between tree and property line, extending uphill and downhill as far as possible.
Root loss from installation of plantings.	2, 3, 4, 5, 6, 7, 8, 17, 21, 28, 31, 34, 37	Eliminate proposed plantings within 15 to 25 feet of these trees (to be determined during site meeting with CCA if required). Minimum distance shall be 15 feet from trunk edges.
Root loss from pier drilling and other activities (1).	Optional: 1, 2, 3, 4, 5, 6, 7, 8, 10, 11 Required: 36, 37, 38	Fertilize with Greenbelt 22-14-14 injectable tree formula with micronutrients prior to construction (all site trees might benefit from this fertilization).



Impact Type	Trees Affected	Suggested Mitigation
Root loss from pier drilling and other activities (2).	36, 37, 38	Utilize Airspade and/or water jetting tools to air excavate or water excavate around the tree at locations where piers are proposed, or use a non-invasive foundation system for the addition such that the new square footage of the home is cantilevered out over steel and/or wood beams without having to drill in close proximity to tree trunks.
Irrigation trenching for proposed plantings, resulting in root loss.	2, 3, 4, 5, 6, 7, 8, 17, 18, 21, 28, 31, 34, 37	Eliminate all proposed summer and fall irrigation, both in terms of irrigation water application (microspray, overhead spray, drip, bubbler, etc.) and/or irrigation pipe trenching, within 15 feet or more from the trunk edges of these trees.
Irrigation spray and increased soil moisture during summer and fall.	2, 3, 4, 5, 6, 7, 8, 17, 18, 21, 28, 31, 34, 37	Eliminate all proposed summer and fall irrigation, both in terms of irrigation water application (microspray, overhead spray, drip, bubbler, etc.) and/or irrigation pipe trenching, within 15 feet or more from the trunk edges of these trees.
Landscape path grading	17, 18, 21, 28, 31, 34, 35, 36, 37, 38	Discuss rerouting proposed graded walking path with Staff and CCA during an on-site meeting. Extent of grading associated with the proposed path is not known at the time of writing. Extensive grading appears to be necessary near oaks #17 and #18 where the path will meander downhill from the existing pool surround.
Pruning	7, 17, 18, 26, 31, 38	Use a qualified tree care company to perform crown raising pruning, deadwood removal, broken wood removal, stub removal, etc. under <u>direct ISA Certified Arborist supervision throughout the pruning operation</u> . All pruning must be performed per ANSI A300 standards. See vendor list in this report for companies qualified to perform such work. See attached tree data charts for specific pruning needs for each tree.
(EXISTING IMPACT) Possible root crown disease/decay due to fill soil piled over original soil grade at tree trunks.	1, 2, 3, 4, 7, 8, 10, 11, 22, 26, 28, 31, 35, 36, 37	Retain an qualified tree care company to have an ISA Certified Arborist perform a root crown excavation around the trees to reestablish original grade such that the flaring buttress roots become visible at the base of each tree trunk. Carefully inspect the root crown for signs of structural damage, root loss, interior decay, etc.



Impact Type	Trees Affected	Suggested Mitigation
(EXISTING IMPACT) Erosion in the root zone due to previous owner's cutting of soil benches below the front yard oak groves. Possible oak root and soil instability issues, root desiccation issues, etc.	5, 6, 7, 11	Restore normal slope by placing soil into the airspaces of the bench cuts to reestablish original soil grade which slopes downhill toward the residence.
(EXISTING IMPACT) Brush pile causing anaerobic soil conditions.	26	Remove brush pile from site.
(EXISTING IMPACT) Sycamore bark moth larvae feeding at lower trunk	11, 34	Retain a qualified tree care company or pest control company to spray the lower 10 feet of the trunks using Astro or other termiticide per label rate and frequency (wait until after root crown excavation is complete).

2.4 Table of fees:

Action	Tree Tag Number	Fee
Arborist inspections and letter reports during site work	(All)	\$2,500 arborist fee plus 30% Belmont administration fee if required by Staff
Report preparation (this field study and report)	(All)	\$2,100 arborist fee plus 30% Belmont administration fee if required by Staff
Root zone and/or trunk damage to trees in close proximity to proposed work.	(All)	See attached tree data charts for individual tree removal fees. Removal fees and mitigation fees may be levied if trees are damaged due directly to site work per the applicant's proposed scope of renovations. The CCA will evaluate trees at the end of the project to determine if tree damages are significant enough to warrant fines or fees.



3 Protected Trees

Protected trees are defined in the Belmont city ordinance as oaks, redwoods, sequoias, madrones, bays, buckeyes, and Monterey cypress "having at least one trunk (stem) 10" (measured at 4.5 feet above grade) or greater".

Non-native tree species of diameter 18" DBH or greater are also protected, except for acacia species, *Eucalyptus globulus* (blue gum), and Monterey pine, which are considered non-regulated.*

All tree specimens measuring greater than 6-inches in diameter at 4.5-feet above grade other than the species noted above are considered "regulated trees".

*Non-regulated and regulated trees on undeveloped lots cannot be removed without prior approval from planning commission and/or city council action. Non-regulated trees can be removed on developed residential lots without prior consent from the City.

Multi-stem trees are also protected where the sum total of all mainstems measured at 4.5 feet above grade is greater than 10-inches (protected tree species), or greater than 18-inches (non-native species).

Removal of most tree specimens with at least one stem measuring greater than or equal to 6-inches in diameter now requires a removal fee based on the chart in the city's 2010-11 Master Fee Schedule. In addition, "protected trees" may require mitigation at up to a 3:1 ratio using 24" box size native oaks or other approved species, or an in-lieu fee of (\$473X3 plantings=\$1,419) per "protected tree" removed, at the discretion of the planning commission.



4 City of Belmont Master Fee Schedule 2010-11

CITY OF BELMONT MASTER REVENUE SCHEDULE EFFECTIVE JULY 1, 2010		
8. TREE REMOVAL FEES- DEVELOPMENT PROJECTS OR GENERAL PROPERTY MAINTENANCE		
Tree removal fees are assessed for the removal of trees required for the development or general maintenance of property. They are collected to mitigate the loss of trees from the City's tree population. Fees are deposited in the City Tree Planting and Establishment Fund.		
FEE BASIS:		
<u>Tree Size (DBH)</u>	<u>Protected Trees</u>	<u>All Other Species</u>
24" or greater	\$1,731	\$2,366
18" but less than 24"	\$3,548	\$1,182
10" but less than 15"	\$2,366	\$887
6" but less than 10"	\$1,182	\$591
Less than 6"	No Fee	No Fee
NOTES:		
1) Protected Trees as defined in Chapter 25 of the City Code include: Oaks (all species), Bay, California Buckeye, Monterey Cypress, Coast Redwood, Giant Sequoia and Madrone.		
2) All Other Species include all other trees except: Acacia (all species), Eucalyptus globulus, Eucalyptus globulus "Compacta" and Monterey Pine.		
3) Tree size is defined by diameter at breast height (DBH), which means the diameter (at the widest point) of the tree trunk measured at 4.5 feet above natural grade. In the case of multiple stemmed trees, the measurement shall be the sum of the diameter of all stems measured at DBH.		
4) Payment shall be made prior to the issuance of a grading permit. If no grading permit is required, payment shall be made prior to the issuance of a building permit. If no building permit is required, payment shall be made prior to removal of any protected tree.		
9. TREE PLANTING IN-LIEU FEES - DEVELOPMENT OR GENERAL MAINTENANCE PROJECTS		
When a requirement to plant trees on the subject property cannot be met, the applicant shall pay a tree planting in-lieu fee to the City Tree Planting and Establishment Fund.		
FEE BASIS:		
<u>Size of Tree to be Planted</u>	<u>In-lieu Fee</u>	
24" Box	\$473	
10. PUBLIC NOTICE FEE	\$285	



5 Mitigation Recommendations

Directions to Staff or Contract Staff associated with this project:

Please enter the following into the Belmont CRW PermitTrack file for this project to prevent permit issuance prior to the City Arborist's evaluation of initial tree protection measures at the site:

'STATUS' field: 'HOLD'

'REMARKS' field: 'PENDING INITIAL TREE PROTECTION INSPECTION AND SIGNOFF'

Prior to issuing a permit for grubbing, demolition, tree removal, grading, excavation, or construction, the following must occur:

1. **PRE-CONSTRUCTION SITE MEETING BETWEEN PROJECT TEAM AND CONTRACT CITY ARBORIST (CCA):**

Members of the applicant's project team shall make an appointment for a site pre-construction meeting with the Contract City Arborist.

Staff may also need to be present at this meeting to discuss landscape plan elements which are currently "conceptual" per discussion with the owner (e.g. irrigation emitters, irrigation line trenching, pathway grading, etc., including the area just west of neighbor trees #17 and #18.).

Items for discussion and assessment (use Table 2.3 in this report, and the attached tree data charts as a guide and reference for tree protection and maintenance items):

a. **Fees:**

Verify that tree related fees are paid:

- (See table 2.4 in this report for fees).
- Verify that the project team understands that the CCA will determine prior to final occupancy permit issuance if trees were **negatively impacted** by site plan construction activity to the degree that a damage fee would be required to be paid in the amount of partial or full tree removal fees plus in-lieu fees as applicable.

(See the attached tree data charts for individual tree removal fee values).

- b. **Staging/Storage/Ingress/Egress:** Identify all staging, storage, and ingress/egress areas. Note that all access to the rear yard will be through the west side of the front yard only. Tree protection zone fencing will block all access to the rear from the east side of the driveway.



- c. **Landscape and irrigation:** Discuss adjusting locations of all proposed irrigation emitters, irrigation line trenching, and plantings such that we have a minimum distance of 15 to 25 radial feet separation between these items and the trunk edge of any coast live oak on site. Trees that may be affected if we are to approve the current landscape plan as-is include trees #2, 3, 4, 5, 6, 7, 8, 17, 18, 21, 28, 31, 34, 37.
- d. **Path Grading:** Discuss adjusting proposed graded path from the route shown on current landscape plan sheet, such that we attain much greater horizontal separation between existing oaks and the path grading daylight edges (see tree data charts for details). Trees that may be negatively affected by the proposed path work include trees #17, 18, 21, 28, 31, 34, 35, 36, 37, 38.
- e. **Oak #37 and 38 Foundation Work:** Discuss options as noted below in this report.

2. RESIDENCE FOUNDATION WORK:

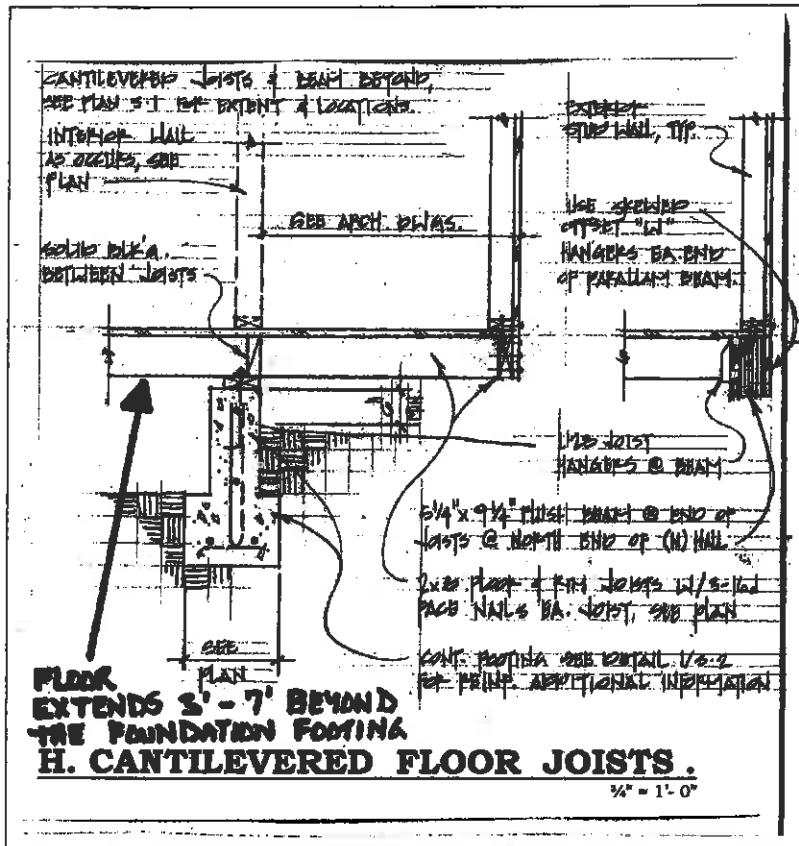
Best Option for oak #38: If possible, avoid all pier drilling work around oak #38 (and #37) by using an alternative "cantilever type" foundation for the residence addition (see sample spec sheet below). It may be possible to extend out laminate beams and/or steel beams from the existing concrete foundation such that the new addition is essentially floating above grade with no drilling or other soil grading required between the existing foundation footing and the oak trunks. If the existing foundation is structurally sound, I highly recommend leaving it as-is, since removal of this footing will cause damage to oak #38 and require a full rebuild of a footing near oak #38, causing further root damage which will likely result in the decline and premature death of the tree.

If the above option is not available, the second best option would be to use piers keeping the following in mind:

- a) Use minimum number of piers allowable per engineer's spec.
- b) Use minimum pier diameter possible per engineer's spec.
- c) Keep piers at max. distance from oak trunks possible.
- d) Keep spacing between piers as far as possible.
- e) Do not finalize location(s) of piers until an Airspade air tool excavation and/or water jetting excavation has been performed by an ISA Certified Arborist to determine the location(s) of woody roots measuring 2 inches diameter or greater. Map the sizes, locations, depths of roots. Move pier locations accordingly to avoid significant woody roots near the oaks.



Right: Cantilever foundation in Palo Alto, set approximately 1 to 2 feet above grade.



Above: Sample spec for a Palo Alto cantilevered foundation near a heritage redwood tree.

3. TREE MAINTENANCE:

Any pre-project or during-project tree maintenance on trees located on or adjacent to the subject property shall be performed only by or under direct site supervision of an ISA Certified Arborist, and shall conform to the most recent edition of ANSI A300 Part I: Tree, Shrub, and Other Woody Plant Maintenance, Standard Practices, Pruning.

Recommended Tree Pruning Vendors (in random order):

- a) Advanced Tree Care, Redwood City. 650-537-0172
- b) Maguire Tree Care, Half Moon Bay. 650-245-2620
- c) The Shady Tree Company, Menlo Park. 650-575-8218

Tree Care Companies performing work on the subject property shall contact the CCA prior to commencement of any work.



The CCA will request a receipt for all tree care related work to verify compliance with this recommendation.

Current tree maintenance recommended to be performed includes:

- a) Pruning: Trees # 7, 17, 18, 26, 31, 38 (per details in the tree data charts).
- b) Root Crown Excavation: Trees #1, 2, 3, 4, 7, 8, 10, 11, 22, 26, 28, 31, 35, 36, 37. Use dull, rounded hand tools to reestablish original grades around trunk base such that the buttress root flares are visible.
- c) Fertilization: Required: Trees #36, 37, 38. Optional: Trees #1, 2, 3, 4, 5, 6, 7, 8, 10, 11. Fertilization will need to be soil injection of Greenbelt 22-14-14 tree formula with micronutrients. Use standard spacing and mix rate per label and per ISA's Best Management Practices: Fertilization (ANSI A300 companion book). Note: Fertilize only if soil is at 90 to 100% field capacity soil moisture.
- d) Airspade air excavation and/or water jetting to map and locate roots prior to finalization of pier locations for the west side addition: Trees #36, 37, 38 (alternative to this would be to use a cantilevered type foundation instead of setting piers near the trees).
- e) Termiticide Spray: Spray trees #11 and 34 using Astro or another approved termiticide using label rate and instructions to cover the lower 8 to 10 feet of the entire trunks of these trees to stop or slow Sycamore bark moth larvae feeding activity. Perform spray AFTER root crown excavation is complete.
- f) Root Pruning:

Prior to performing root pruning, contact the CCA to investigate so that he can take digital images of the root(s) prior to and after root pruning.

If any woody roots measuring 2 inches diameter or greater are encountered during site work, stop site plan work and call a qualified tree care contractor to prune roots at right angles to the root growth direction, using sharp tools such as an A/C powered Sawzall, lopper, professional pruning saw, etc. If roots are required to be left exposed for more than 24 hours, then cover with 6 layers of wet, muddy burlap. If possible, cover the root(s) completely with existing site soil and irrigate thoroughly to saturate. Cover the soil with wood chip mulch.

4. **SOIL BENCH CUTS:**

Restore original soil grade (sloping down toward residence) by in-filling existing old soil bench cuts with soil of a type to be determined, in two areas below trees #5, 6, 7, and 11 (see tree map in this report).

5. **RAILROAD TIE STEPS:**

Per the proposed landscape plan, railroad ties are to be set over existing grade near oak #7 (see tree map, this report).

Verify with owner and contractors that all railroad tie step installation work will cut no deeper than a total of 4 to 6 inches below existing soil grade elevations.



Verify if footings or some type of tie-ins (e.g. deadman, rebar, etc.) will be required to be pounded into the ground or otherwise installed in addition to the railroad ties themselves in the area within 10 feet of oak #7.

Phase this work to the very end of the project so that the TPZ tree fence route can remain in place as proposed by the CCA until the end of residence construction work. The TPZ can then be moved or removed to allow for landscape work to occur.

6. **BRUSH REMOVAL:**

Contractor or owner shall have the existing brush pile located just uphill from oak #26 completely removed from the site prior to initial tree protection signoff.

7. **WOOD CHIP SOIL BUFFER:**

To mitigate site plan work related soil compaction over the root zones of oaks #37 and 38, install a 12 inch thick layer of high quality chipper truck-type wood chips over the open soil root zone area between the existing wood property fence (west side property boundary) and trees #37 and 38 per the hatched area on the tree map in this report.

This type of natural wood chip material is available from Lyngso Garden Supply in Redwood City for self pickup at the rate of \$30/cubic yard. I have found their wood chips to be of very high quality and the chip sizes are nicely graded. Contact them at www.lyngsogarden.com for more information.



NOTE: Wood chips are solid wood, and are different from bark chips which are solid bark.

8. **IRRIGATION TEMPORARY:**

If directed by the CCA, supply trees #37 and 38 with soaker hose and/or emitter line irrigation on a once or twice monthly deep watering basis throughout the construction project, with water delivery to occur over the entire open soil root zone area encompassed by the tree protection zone (TPZ) fence perimeter.

Irrigation can be provided via water truck, water tank, soakers, emitter lines, garden hose trickle, or other means, watering directly over the wood chip soil buffer layer.

The CCA will check soil moisture using a Lincoln probe on a once monthly basis to determine if relative soil moisture levels are adequate for survival of the trees. Irrigation may be adjusted in terms of frequency and/or duration depending on these monthly probe readings.



9. TRUNK BUFFER:

Trees #1, 2, 3, 4, 7, 8, 9, 10, 11, 21, 35, 36, 37, and 38 shall be supplied with trunk buffers covering the exposed lower trunks between grade elevation and approximately 8 feet above grade (or the lowest scaffold limbs). The buffer shall consist of orange plastic wrapped approximately 20 times to create a layer 2 inches thick (a single large tree uses up to 1 or 1.5 rolls of orange plastic fencing material).

Place 2X4 wood boards over the buffer, standing up side by side around the entire trunk circumference. Secure with duct tape or rope, or continue wrapping orange plastic over the wood boards and affix with UV resistant zip-ties. Do not use wires. See spec photo at right.

Alternatively, landscaper bender board can be used in-lieu of 2X4 wood boards (see photo at lower right).



10. TREE PROTECTION FENCING:

CHAIN LINK

Fencing material used for all protective fences as per above must be steel chain-link, at least five-feet in height, mounted on two-inch diameter galvanized iron posts 6-feet in length, driven a minimum of 24-inches into the ground, or free-standing chain link panels mounted on moveable concrete footings secured into place by wiring to steel layout stakes or other steel stakes pounded into the ground. **Posts for post and hook fencing must be mounted no wider than six-feet apart.** *This fence must be erected prior to any heavy machinery traffic or construction material arrival on site.*

- The exact locations of fence erection shall be determined during the site pre-construction meeting between the CCA the general contractor. The areas between the tree trunk edges and this fence route shall be known as the critical root zones or tree protection zones ("CRZ" or "TPZ"). Rough TPZ routing is shown on the tree map in this report, and is designed to protect the following trees: #2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 21, 22, 26, 28, 31, 32, 34, 35, 36, 37.
- The CCA's proposed fence perimeter encompassing trees #35, 36, 37 per the tree map in this report may need to be eliminated to allow for construction of the residential addition to occur in close proximity to that location (to be determined).

Compliance inspections will occur (1) at the time of fence erection (2) approximately once monthly during grading and construction, and (3) after construction is complete. All fencing must remain in place until all construction is completed and the fencing and other protection has received a final signoff letter from the



contract city arborist at the end of project. Permit approval will not occur until after the first inspection has been performed and the protection measures are approved by the city arborist.

The protective fencing must not be temporarily moved during construction except for final landscape development to be phased to the end of project per recommendation #1c(iv) above. No materials, tools, excavated soil, liquids, substances, etc. are to be placed or dumped, even temporarily, inside the TPZ/CRZ. **Fencing required to be moved or removed to allow for any site plan work will require the expressed written (emailed or faxed or oral) permission of the CCA.**

No storage, staging, work, or other activities will be allowed inside the TPZ.

STRAW WATTLES and EROSION CONTROL FENCE

Pin straw wattles and erosion control fencing down along the uphill side of the base of the TPZ chain link fence route which spans from oak #22 to oak #28 to provide a barrier such that construction wastes and spills are less likely to enter the TPZ area (see photo at right).



The entire base of the erosion control fence needs to be buried per package directions, or pin it down using straw wattles and wood pins over the entire base edge of the erosion fence to keep it from flapping up in the wind and becoming functionally useless.

11. SIGNAGE:

The TPZ fencing shall have one sign affixed with UV-stabilized zip ties to the chain link at eye level for every 15-linear feet of fencing, minimum 8"X11" size each, plastic laminated or otherwise waterproofed, stating:

TREE PROTECTION FENCE

**DO NOT MOVE OR REMOVE WITHOUT AUTHORIZATION FROM
WALTER LEVISON, CONTRACT CITY ARBORIST**

CALL OR EMAIL 48-HRS ADVANCE FOR PERMISSION

PHONE/FAX (650) 697-0990 <DRTREE@SBCGLOBAL.NET>



6 Consultant's Qualifications

- PNW-ISA Certified Tree Risk Assessor #593
- PNW-ISA Certified Tree Risk Assessor Course graduate, 2009
- ASCA Registered Consulting Arborist #401
- Millbrae Community Preservation Commission (Tree Board)
2001-2006
- ASCA Arboriculture Consulting Academy graduate, class of 2000
- ISA Certified Arborist #WC-3172
- B.A. Environmental Studies/Soil and Water Resources
UC Santa Cruz, Santa Cruz, California 1990
- Peace Corps Soil and Water Conservation Extension Agent
Chiangmai Province, Thailand 1991-1993
- Associate Consulting Arborist
Barrie D. Coate and Associates
4/99-8/99
- Contract City Arborist to the City of Belmont
5/99-present
- Continued education through attendance of arboriculture lectures and forums sponsored by The American Society of Consulting Arborists, The International Society of Arboriculture (Western Chapter), and various governmental and non-governmental entities.

(My full curriculum vitae is available upon request)



7 Assumptions and Limiting Conditions

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

It is assumed that any property is not in violation of any applicable codes, ordinance, statutes, or other government regulations.

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

The consultant/appraiser shall not be required to give testimony or to attend court by reason of this report unless subsequent contractual arrangements are made, including payment of an additional fee for such services as described in the fee schedule and contract of engagement.

Unless required by law otherwise, the possession of this report or a copy thereof does not imply right of publication or use for any other purpose by any other than the person to whom it is addressed, without the prior expressed written or verbal consent of the consultant/appraiser.

Unless required by law otherwise, neither all nor any part of the contents of this report, nor copy thereof, shall be conveyed by anyone, including the client, to the public through advertising, public relations, news, sales, or other media, without the prior expressed conclusions, identity of the consultant/appraiser, or any reference to any professional society or institute or to any initiated designation conferred upon the consultant/appraiser as stated in his qualifications.

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

Sketches, drawings, and photographs in this report, being intended for visual aids, are not necessarily to scale and should not be construed as engineering or architectural reports or surveys unless expressed otherwise. The reproduction of any information generated by engineers, architects, or other consultants on any sketches, drawings, or photographs is for the express purpose of coordination and ease of reference only. Inclusion of said information on any drawings or other documents does not constitute a representation by Walter Levison to the sufficiency or accuracy of said information.

Unless expressed otherwise:

- a. information contained in this report covers only those items that were examined and reflects the conditions of those items at the time of inspection; and
- b. the inspection is limited to visual examination of accessible items without dissection, excavation, probing, or coring. There is no warranty or guarantee, expressed or implied, that problems or deficiencies of the plants or property in question may not arise in the future.

Loss or alteration of any part of this report invalidates the entire report.

Arborist Disclosure Statement:

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

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

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

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



8 Certification

I hereby certify that all the statements of fact in this report are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.

Signature of Consultant

Attached: Tree Data Charts



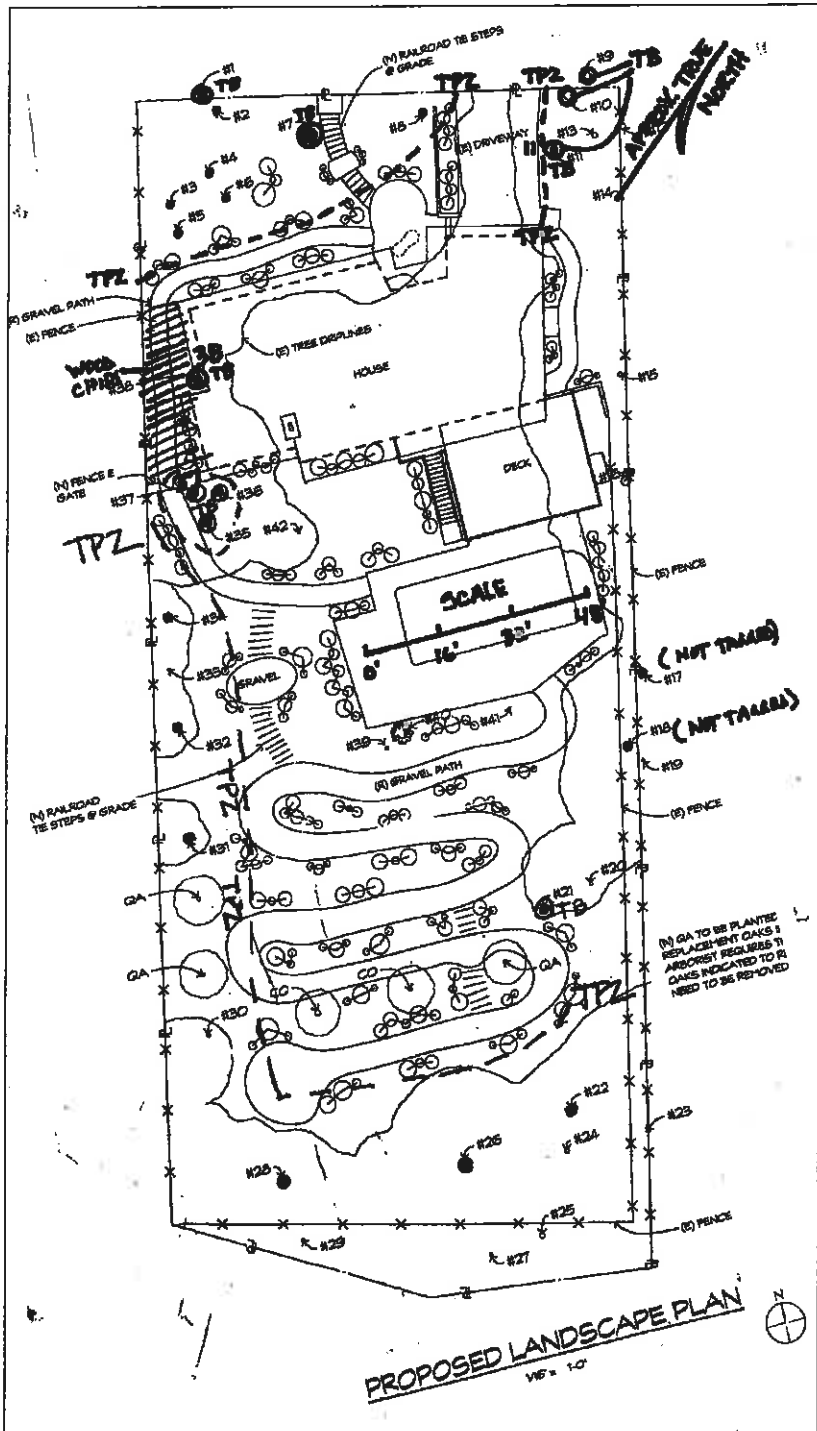
9 Tree Map Scan

Solid Lines = Tree Canopy Driplines

Dashed Lines = Tree Protection Zone (TPZ) Fencing Routes

TB = Trunk Buffer

(Hatching) = Wood Chip "Soil Buffer"



Note that the author's TPZ fence routes essentially force the site plan to be revised such that the walkway is pushed farther away from rear yard trees, access is restricted to only the west side of the site since there is a solid TPZ blocking the east access to rear yard, and the main front yard oak grove is completely fenced off such that there will be no access until the end of the project when the railroad tie stairs can be installed during landscaping.

Tree Tag #	Tree to be removed due to plan conflicts	Expect unmitigable impacts due to construction	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G (1+2+3+4+5)	"Protected Tree" (native species 10", non-native 18")	Fee Per 2010 Master Fee Schedule (if removed or severely damaged)	Additional mitigation required if removed or severely damaged (24" box size plantings and/or in-lieu fees)	COMMON NAME & Scientific Name	Height & Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	FIELD NOTES	Recommend Modify (Utility trench route, (G)rading, (E)xcavation, (D)raining, (F)ootprint of Addition Exterior, (P)lantings, (I)rrigation pipe trench routes	Protection & Maintenance (tpz, db, f, m, w, p, mon, rce)
1			17	11.8	0	0	0	28.8	X	\$ 4,731	\$1,419	Coast live oak (Quercus agrifolia)	30/30	70/50	60% Fair	Streetside oak with canopy lopsided north over street. Two codominant mainstems fork at 2 feet above grade with bark inclusion (structural defect). Moderate TDE. Needs trunk buffer to protect against physical damage. Use buffer between grade and 12 feet above grade. Needs root crown excavation to unbury the root flares. Note tree was topped for powerline clearance. Will eventually need endweight reduction pruning.		tb, rce, f
2			8.6	0	0	0	0	8.6		\$ 1,182		Coast live oak (Quercus agrifolia)	30/15	80/60	62% Fair	tree was topped for powerline clearance. Needs root crown excavation. Moderate TDE. Fence using chain link TPZ per tree map in this report. Keep all landscape plantings and irrigation water and irrigation pipe trenching out at least 25 feet from tree. Note all oaks in the front yard groves were spike climbed by a pruner who did not follow ANSI A300 industry standards. The trees are now permanently scarred with spike wounds.	P, I	tpz, rce, f
3			7.6	0	0	0	0	7.6		\$ 1,182		Coast live oak (Quercus agrifolia)	20/15	35/35	35% Poor	Needs root crown excavation. Tree is suppressed in shade of surrounding larger oak specimens. Trunk leans west. Canopy lopsided west.	P, I	tpz, rce, f
4			13.1	13	0	0	0	26.1	X	\$ 4,731	\$1,419	Coast live oak (Quercus agrifolia)	35/20	70/60	66% Fair	Keep all plantings and irrigation 15 feet south of tree. Two codominant mainstems fork at grade. Moderate TDE. Needs root crown excavation. Canopy lopsided west. Keep all plantings and irrigation 20 feet out.	P, I	tpz, rce, f

Tree Tag #	Tree to be removed due to plan conflicts	Expect unmitigable impacts due to construction	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" (native species 10%, non-native 15%)	Fee Per 2010 Master Fee Schedule (if removed or severely damaged)	Additional mitigation required if removed or severely damaged (24" box size plantings and/or in-lieu fees)	COMMON NAME & Scientific Name	Height & Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	FIELD NOTES	Recommend Modify (U)ility trench route, (G)radig, (E)xcavation, (D)rainage, (F)ootprint of Addition Exterior, (P)lantings, (I)rrigation pipe trench routes	Protection & Maintenance (tpz, lb, f, m, w, p, mon, rce)
5			25					25	X	\$ 4,731	\$1,419	Coast live oak (Quercus agrifolia)	40/30	75/65	70% Good	Moderate TDE. Sycamore bark moth larvae feeding at lower trunk. Canopy lopsided west. Abnormality at 18 feet with black flux on limb—need to monitor this. Tree has been limbed up as have all the trees in the front groves (poor pruning practice). Recommend move proposed plantings and irrigation to 12 feet from trunk.	P, I	tpz, f
6			14.3					14.3	X	\$ 2,366	\$1,419	Coast live oak (Quercus agrifolia)	35/20	60/60	60% Fair	Moderate TDE. Soil bench cut at less than 3 feet south of trunk edge. Needs retaining wall here, or taper soil to original grade. Keep plantings and irrigation 15 feet south from trunk. Canopy lopsided south.	P, I	tpz, f
7			23	18	15	14	12	82	X	\$ 4,731	\$1,419	Coast live oak (Quercus agrifolia)	35/50	75/60	66% Fair	Tree has been limbed up. Needs root crown excavation. Tree has been pruned to clear high voltage powerlines, resulting in dieback of the uppermost portion of the north canopy quadrant. Use trunk buffer to protect against railroad tie construction east of trunk, and phase path construction to end of the project so that TPZ fencing can remain in place until the very end. Fertilize with Greenbelt 22-14-14 soil injection (entire grove). Will need endweight reduction pruning on south side to reduce weight at ends of those limbs near house. Keep all plantings and irrigation 25 feet out from tree.	P, I	tpz, lb, rce, f, p

Tree Tag #	Tree to be removed due to plan conflicts	Expect unmitigable impacts due to construction	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 54" A.C (1+2+3+4+5)	"Protected Tree" (native species "X", non-native "N")	Fee Per 2010 Master Fee Schedule (if removed or severely damaged)	Additional mitigation required if removed or severely damaged (24" box size plantings and/or in-lev fees)	COMMON NAME & Scientific Name	Height & Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	FIELD NOTES	Recommend Modify (Utility trench route, (G)grading, (E)xcavation, (D)rainage, (F)ootprint of Addition Exterior, trench route, (I)rrigation pipe trench routes	Protection & Maintenance (tpz, tb, f, m, w, p, mon, rce)
8			19.8					19.8	X	\$ 3,548	\$1,419	Coast live oak (<i>Quercus agrifolia</i>)	30x45	40/40	40% Poor	Existing block retaining wall adjacent to the driveway is 1 foot east of the trunk edge of this tree. 8 inch diameter limb split out noted at 20 feet above grade. Poor TDE. Use trunk buffer and TPZ fencing. Needs root crown excavation on uphill side of trunk base. Not clear if plantings along the east side of the retaining wall will change the soil moisture regime around the trunk of this tree. It may be better to avoid plantings and irrigation in this area. Fertilization may or may not increase vigor of the tree. Currently has poor TDE.	P, I	tb, tpz, rce, f
9			12.9					12.9	X	\$ 2,366	\$1,419	Coast live oak (<i>Quercus agrifolia</i>)	30x20	70/70	70% Good	Canopy lopsided north over street. Moderate TDE. Note that the tree was topped to clear high voltage wires. Use trunk buffer and TPZ fencing to protect during construction.		tb, tpz
10			15.5					15.5	X	\$ 2,366	\$1,419	Coast live oak (<i>Quercus agrifolia</i>)	30x25	55/55	55% Fair	Appears to have been partially topped during high voltage line clearance pruning. Needs root crown excavation. Moderate TDE. Use trunk buffer and TPZ to protect during construction.		tb, tpz, rce, f

Tree Tag #	Tree to be removed due to plan conflicts	Expect unmitigable impacts due to construction	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G (1+2+3+4+5)	"Protected Tree" (native species 10", non-native 12")	Fee Per 2010 Master Fee Schedule (if removed or severely damaged)	Additional mitigation required if removed or severely damaged (24" box size plantings and/or in-lieu fees)	COMMON NAME & Scientific Name	Height & Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	FIELD NOTES	Recommend Modify (Utility trench route, (G)grading, (E)xcavation, (D)rainage, (F)ootprint of Addition Exterior, (P)lantings, (I)rrigation pipe trench routes	Protection & Maintenance (tpz, tb, f, m, w, p, mon, rce)
11			14.8	11.6				26.4	X	\$ 4,731	\$1,419	Coast live oak (Quercus agrifolia)	25/18	40/30	35% Poor	Tree has been severely pruned in a substandard manner to clear the driveway airspace. Note soil bench cut at 3 feet south of trunk edge. May need to add soil in this area to bulk up the zone south of the trunk to match original grade taper. Use trunk buffer and TPZ during construction. May require extra-height trunk buffer (12 feet?) to protect against physical damage. Needs RCE on uphill side of base. Note Sycamore bark moth larvae feeding at base may be related to root crown being buried in fill soil. Connect TPZ fence to the garage so that there will not be any ingress/egress through this side of the property.	Add soil to match original grade taper downhill from tree.	tb, tpz, rce, f
17			9	8				17	X	\$ 2,366	\$1,419	Coast live oak (Quercus agrifolia)	35/18	75/65	68% Fair	Neighbor oak tree (not tagged) with moderate TDE. Chain link fence is embedded in trunk. Overhangs site to 5 feet above grade, and will require airspace clearance pruning to raise canopy. Possible significant to severe impacts from earth grading and/or landscape irrigation line trenching in close proximity to trunk. Verify with applicant.	G. I. Verify extend of grading and/or irrigation line trenching proposed for this area (may require Stair and Applicant site meeting).	p
18			17	13				30	X	\$ 4,731	\$1,419	Coast live oak (Quercus agrifolia)	30/45	70/60	65% Fair	Neighbor oak tree (not tagged) with moderate TDE. Codominant mainstems fork at 4 feet above grade. Overhangs site at 5 feet above grade. Possible significant to severe impacts from earth grading and/or irrigation pipe trenching and/or path grading down from the existing pool. Verify with applicant.	G. I. Verify extend of grading and/or irrigation line trenching and/or pathway grading proposed for this area (may require Staff and Applicant site meeting).	p

Tree Tag #	Tree to be removed due to plan conflicts	Expect unmitigable impacts due to construction	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" (native species 10", non-native 18")	Fee Per 2010 Master Fee Schedule (if removed or severely damaged)	Additional mitigation required if removed or severely damaged (24" box size plantings and/or in-lieu fees)	COMMON NAME & Scientific Name	Height & Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	FIELD NOTES	Recommend Modify (Utility trench route, (G)grading, (E)xcavation, (D)rainage, (F)ootprint of Addition Exterior, (P)lantings, (I)rrigation pipe trench routes	Protection & Maintenance (tpz, tb, f, m, w, p, mon, rce)
21			8.8					8.8		\$ 1,182		Coast live oak (<i>Quercus agrifolia</i>)	25/18	75/40	58% Fair	Tree located in very close proximity to proposed graded path, plantings, (and irrigation pipes not shown) on the landscape plan sheet 1.1 dated 2/22/2011. Note severe bark damage and decay on upper side of trunk, possibly related to sunscald which would have occurred as a result of nearby forest removal on the site which allowed increased sunlight penetration directly onto the trunk. Severe trunk lean north. Good TDE. Verify extent of path grading. Consider moving path to keep root zone of this tree intact. Eliminate plantings and irrigation within 15 feet of tree. Use trunk buffer for added protection.	G, P, I	tpz
22			12.7					12.7	X	\$ 2,366	\$1,419	Coast live oak (<i>Quercus agrifolia</i>)	30/15	35/45	37% Poor	Poor TDE. Uphill side of root crown has a buried root crown. Recommend root crown excavation. Needs TPZ fencing to prevent path grading spillover onto the root zone. Keep TPZ at 15 feet uphill from trunk edge of this tree.		tpz, rce
26			15.1	14.9	11.5	11.5	10.5	63.5	X	\$ 4,731	\$1,419	Coast live oak (<i>Quercus agrifolia</i>)	30/25	65/50	57% Fair	Moderate TDE. Good sprout growth after sunlight gap was opened following removal of nearby trees in this rear yard area. Canopy lopsided south. Six foot high brush pile located over north side of root zone needs to be removed completely. Root crown not visible and may require root crown excavation. Black flux near base may be a sign of root crown infection related to the buried root crown. Also requires deadwood pruning and an TPZ fence at 15 feet uphill from trunk.	Remove brush pile.	tpz, p, rce

Tree Tag #	Tree to be removed due to plan conflicts	Expect unmitigable impacts due to construction	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" (native species 10", non native 18"+)	Fee Per 2010 Master Fee Schedule (if removed or severely damaged)	Additional mitigation required if removed or severely damaged (24" box size plantings and/or in-lieu fees)	COMMON NAME & Scientific Name	Height & Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	FIELD NOTES	Recommend Modify (Utility), (Excavation), (Drainage), (Plantings), (Irrigation pipe trench routes)	Protection & Maintenance (tpz, lb, f, m, w, p, mon, rce)
28			11.1	10.3	9.6			31	X	\$ 4,731	\$1,419	Coast live oak (Quercus agrifolia)	30/30	80/50	67% Fair	Moderate TDE. Canopy lopsided south. Potential path grading and irrigation/planting conflicts. Recommend relocate path to uphill from proposed, and keep all new plantings and irrigation pipe trenching and water release at least 20 feet from the tree. Root crown not visible on uphill side of base. Recommend root crown excavation.	G, I, P	tpz, rce
31			14	10.5	10			34.5	X	\$ 4,731	\$1,419	Coast live oak (Quercus agrifolia)	30/15	70/60	67% Fair	Tree needs removal of broken and dead wood. Tree needs root crown excavation. Moderate TDE. Potential path grading and irrigation/planting conflicts. Recommend relocate path to east of proposed, and keep all new plantings and irrigation pipe trenching and water release at least 20 feet from the tree.	G, I, P	tpz, rce, p
32			22					22	X	\$ 3,548	\$1,419	Coast live oak (Quercus agrifolia)	15/18	15/15	15% Very Poor	Recommend removal of tree (no fees) due to very poor overall condition, or keep as "landscape oddity". Tree broke apart at 10 feet above grade, and is a remnant trunk with sprouts at this point.		tpz (if to be retained)
34			17	8.2				25.2	X	\$ 4,731	\$1,419	Coast live oak (Quercus agrifolia)	30/30	45/45	45% Poor	Moderate TDE. Canopy lopsided west and south. Need to prune out stubs and deadwood. Possible impacts expected from path grading and landscape irrigation line trenching. Suggest site meeting to discuss final path construction locations, and adjust route to farther from trunk of tree as applicable. Eliminate plantings and irrigation within 20 feet of tree. Note extensive Sycamore bark moth larvae feeding. May need to spray with Astro or other termiticide.	G, I, P	tpz

Tree Tag #	Tree to be removed due to plan conflicts	Expect unmitigable impacts due to construction	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 54" A.G. (1+2+3+4+5)	"Protected Tree" (native species 10", non-native 18")	Fee Per 2010 Master Fee Schedule (if removed or severely damaged)	Additional mitigation required if removed or severely damaged (24" box size plantings and/or in-lieu fees)	COMMON NAME & Scientific Name	Height & Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	FIELD NOTES	Recommend Modify (Utility trench route, (G)grading, (E)xcavation, (D)amage, (F)ootprint or Addition Exterior, (P)lantings, (I)rrigation pipe trench routes	Protection & Maintenance (tpz, tb, f, m, w, p, mon, rce)
35			19					19	X	\$ 3,548	\$1,419	Coast live oak (Quercus agrifolia)	35/35	50/50	50% Fair	Poor to moderate TDE. Tree requires some root crown excavation on uphill side of trunk base. Severe bark damage on south side of trunk at 4 feet above grade, possibly all due to Sycamore bark both larvae feeding which is sometimes related to buried root crowns. Recommend use of a termiticide such as Astro. spray on lower 10 feet of trunk per label directions and rate. Protection for this tree will be trunk buffer and/or TPZ fencing (to be determined). Recent large diameter pruning cut made at a wrong angle should have been done at 45 degrees. Tree requires root crown excavation on uphill side of trunk base. Remove rope from scaffold limb which will soon girdle the limb. Moderate TDE. Existing canopy live wood and foliage may conflict with proposed roof work at the addition. Use Airspade to air excavate and "map" roots prior to finalizing the location of new piers. Use trunk buffer to protect tree along with metal fencing (to be determined). Fertilize to boost vigor prior to construction.	G	tb, tpz, rce, Astro spray.
36			15.5					15.5	X	\$ 2,366	\$1,419	Coast live oak (Quercus agrifolia)	35/25	75/65	67% Fair	Eliminate proposed plantings from plan between residence and trees #35, 36, 37. Fill soil pushed up against trunk will need to be removed during root crown excavation. Poor TDE. Use Airspade to map out roots prior to finalizing pier locations for the addition. Fertilize to boost vigor prior to start of site plan work. May require both trunk buffer and fencing protection.	Airspade to map roots prior to finalizing pier locations. G	tb, tpz, rce, f
37			11.3					11.3	X	\$ 2,366	\$1,419	Coast live oak (Quercus agrifolia)	35/9	40/38	38% Poor		Airspade to map roots prior to finalizing pier locations. G, I, P	tb, tpz, f, rce

Tree Tag #	Tree to be removed due to plan conflicts	Expect unmitigable impacts due to construction	Trunk 1 (in.)	Trunk 2 (in.)	Trunk 3 (in.)	Trunk 4 (in.)	Trunk 5 (in.)	Adjusted Trunk Diameter Inches @ 34" A.G. (1+2+3+4+5)	"Protected Tree" (native species 10", non-native 18")	Fee Per 2010 Master Fee Schedule (if removed or severely damaged)	Additional mitigation required if removed or severely damaged (24" box size plantings and/or in-lieu fees)	COMMON NAME & Scientific Name	Height & Spread (ft.)	Health & Structural Ratings (0-100% each)	Overall Condition Rating (0-100%)	FIELD NOTES	Recommend Modify (Utility trench route, (D)range, (E)xcavation, (F)ooting of Addition Exterior (P)lantings, (I)rrigation pipe trench routes	Protection & Maintenance (tpz, lb, f, m, w, p, mon, rce)
38			18.4					13.4	X	\$ 3,548	\$1,419	Coast live oak (Quercus agrifolia)	30/25	55/55	55% Fair	<p>One 16" and one 10" diameter limb was removed in lower 6 feet of tree. Entire east side of canopy was removed using cascade pruning cuts. Tree should be repaired to clean up stubs. TDE is poor to moderate.</p> <p>Butress roots appear normal from visual inspection. Existing foundation is 3 feet east of the trunk edge, and will need to remain in place to augment new foundation materials. Removal of the existing foundation could damage the root zone of this tree.</p> <p>Use Airspade to excavate out the proposed pier area using air so that we can determine where large woody roots are located and avoid damaging them during pier drilling activity. Maximize pier distance from trunk. Maximize spacing between piers. Avoid cutting piers through roots measuring 2 inches diameter or larger. Minimize pier diameters. Minimize the number of piers used.</p> <p>An alternative to Airspade excavation and pier drilling would be use of a cantilever type foundation floating over grade (see example spec drawing in this report). This would avoid most digging requirements associated with piers, and would preserve a larger portion of the root zone in close proximity to the trunk.</p> <p>Use 15 foot radius 12" thick wood chip "soil buffer" as noted on tree map to prevent excessive root zone soil compaction during site plan work. Fertilize tree prior to site plan work to boost vigor. Irrigate 1x/month per direction of City Arborist.</p>	<p>G</p> <p>Airspade to map roots prior to finalize pier locations, or use a cantilevered foundation with zero digging.</p> <p>Leave (e) foundation in place.</p>	tb, f, w, m, p

Notes:

- Only trees in close proximity to items shown on the applicant's proposed site plan sheet(s) were assessed by the CCA. Trees along Valley View were added due to potential impacts from parking, ingress/egress, staging, storage, etc.
- Some oaks in the grove east of the existing driveway were not included in this study, and will be protected by fencing and trunk buffers placed around the oaks directly adjacent to the driveway and street.
- All the trees in the front yard groves have been limbed up using poor pruning practices such as spike climbing which has left the trunks with permanent climbing spike scars along the trunks. Pruning was excessive, and removed much of the lower live wood and foliage from the trees, and could be regarded as "lion tail" pruning even though it is not as severe as I have seen at other sites.
- All of the front yard trees could benefit from soil injection fertilization using Greenbeak 22-14-14. Tree #38 near the proposed addition may also benefit from this. Fertilization should only be performed during periods when the soil is moist, such as spring.

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<p>Protection and Maintenance Codes per Contract City Arborist (CCA):</p> <p>TPZ: Tree protection fence, chain link, with 2" diameter iron posts driven 24" into the ground, 6 to 8 feet on center max. spacing, with TENAX silt fence installed on uphill side of fence and zip-tied to the chain link.</p> <p>RB: Root buffer consisting of wood chip mulch laid over existing soil as a 12 inch thick layer, overlain with 1 inch or greater plywood strapped together with metal plates. This root buffer or soil buffer should be placed over the entire width of the construction corridor between tree trunks and construction.</p> <p>TB: Trunk buffer constructed as indicated above in the tree charts, consisting of either a straw wattle wrapped around the trunk, or 10-20 wraps of orange plastic snow fencing to create a 2 inch thick buffer over the lowest 6 feet of tree trunk. Secure buffer using duct tape (not wires).</p> <p>F: Fertilization with Greenbark 22-14-14 tree formula.</p> <p>M: 4 inch thick layer of wood chip mulch (Lyngso, self pickup).</p> <p>W: Irrigate using various methods to be determined through discussion between City Arborist and General Contractor. Irrigation frequency and duration to be determined through discussion. Permanent irrigation must be over-grade only, with no pipe trenching deeper than 4 inches below grade. Netalim professional grade emitter line is the preferred alternative "trenchless" drip irrigation product.</p> <p>P: Pruning per specifications noted elsewhere. All pruning must be performed only under direct site supervision of an ISA Certified Arborist, or performed directly by an ISA Certified Arborist.</p> <p>MON: Requires that Contract City Arborist (CCA) be present to monitor trenching/excavation within 20 feet of tree.</p> <p>RCE: Root crown excavation by an ISA Certified Arborist, using dull rounded hand tools to reestablish original soil grade elevations around the trunk base such that buttress root "flares" are visible.</p>																		

