TOWN OF PORTOLA VALLEY
ARCHITECTURAL AND SITE CONTROL COMMISSION (ASCC)
Monday, December 10, 2012
Special Field Meeting (time and place as listed herein)
7:30 PM – Regular ASCC Meeting
Historic Schoolhouse
765 Portola Road, Portola Valley, CA 94028

SPECIAL FIELD MEETING*

2:00 p.m.,187 Bolivar Lane Afternoon session for preliminary review of the proposal for new residential redevelopment of a 3.1-acre Westridge Subdivision property. (ASCC review to continue at Regular Meeting)

3:00 p.m.,45 Tagus Court Afternoon session for preliminary review of plans for residential redevelopment of a 1.9-acre Alpine Hills parcel. (ASCC review to continue at Regular Meeting)

4:00 p.m.,10 Sioux Way Afternoon session for preliminary review of plans for new residential development of this 1.09-acre Arrowhead Meadows property. (ASCC review to continue at Regular Meeting)

7:30 PM - REGULAR AGENDA*

1. Call to Order:

2. Roll Call: Breen, Clark, Hughes, Koch, Warr

3. Oral Communications:

   Persons wishing to address the Commission on any subject, not on the agenda, may do so now. Please note, however, the Commission is not able to undertake extended discussion or action tonight on items not on the agenda.

4. Old Business:

   a. Continued Consideration - Architectural Review and Site Development Permit X9H-644, New Residence with Attached Garage and Workshop, 130 Golden Hills Drive, Rubin

5. New Business:

   a. Preliminary Architectural Review for New Residence with Detached Guest House, Tennis Court and Related Site Improvements, and Site Development Permit X9H-646, 187 Bolivar Lane, Goldband

   b. Preliminary Architectural Review for New Residence with Detached Guest House, Swimming Pool and Related Site Improvements, and Site Development Permit X9H-647, 45 Tagus Court, Kawaja

c. Preliminary Architectural Review for New Residence with Detached Guest House, and Related Site Imporvements, and Site Development Permit X9H-645, 10 Sioux Way, Clark

6. Approval of Minutes: November 26, 2012

7. Adjournment:

*****For more information on the projects to be considered by the ASCC at the Special Field and Regular meetings, as well as the scope of reviews and actions tentatively anticipated, please contact Carol Borck in the Planning Department at Portola Valley Town Hall, 650-851-1700 ex. 211. Further, the start times for other than the first Special Field meeting are tentative and dependent on the actual time needed for the preceding Special Field meeting.

PROPERTY OWNER ATTENDANCE. The ASCC strongly encourages a property owner whose application is being heard by the ASCC to attend the ASCC meeting. Often issues arise that only property owners can responsibly address. In such cases, if the property owner is not present it may be necessary to delay action until the property owner can meet with the ASCC.

WRITTEN MATERIALS. Any writing or documents provided to a majority of the Town Council or Commissions regarding any item on this agenda will be made available for public inspection at Town Hall located 765 Portola Road, Portola Valley, CA during normal business hours.

ASSISTANCE FOR PERSONS WITH DISABILITIES

In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the Planning Technician at 650-851-1700, extension 211. Notification 48 hours prior to the meeting will enable the Town to make reasonable arrangements to ensure accessibility to this meeting.

PUBLIC HEARINGS

Public Hearings provide the general public and interested parties an opportunity to provide testimony on these items. If you challenge a proposed action(s) in court, you may be limited to raising only those issues you or someone else raised at the Public Hearing(s) described later in this agenda, or in written correspondence delivered to the Planning Commission at, or prior to, the Public Hearing(s).

This Notice is Posted in Compliance with the Government Code of the State of California.

Date: December 7, 2012

CheyAnne Brown
Planning Technician

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: ASCC

FROM: Tom Vlasic, Town Planner

DATE: December 6, 2012

RE: Agenda for December 10, 2012 ASCC Meeting

NOTICE: A special ASCC field meeting has been scheduled for Monday, December 10, 2012 to consider field conditions associated with three projects for new residential development. The field meeting will begin at *2:00 p.m. at 187 Bolivar Lane* and this session is for preliminary review of the proposal for new residential redevelopment of a 3.1-acre Westridge Subdivision property. This project is discussed under agenda **item 5a., *Goldband***. At approximately *3:00 p.m.*, the special field meeting is scheduled to continue at *45 Tagus Court* for preliminary review of plans for residential redevelopment of a 1.9-acre Alpine Hills parcel. The project is described under agenda **item 5b., *Kawaja***. At approximately *4:00 p.m.*, special meeting is to continue at *10 Sioux Way* for preliminary review of plans for new residential development of this 1.09-acre Arrowhead Meadows property. The proposal is discussed under agenda **item 5c., *Clark***.

The following comments are offered on the items listed on the December 10, 2012 ASCC agenda.

4a. CONTINUED CONSIDERATION -- ARCHITECTURAL REVIEW AND SITE DEVELOPMENT PERMIT X9H-644, NEW RESIDENCE WITH ATTACHED GARAGE AND WORKSHOP, 130 GOLDEN HILLS DRIVE, *RUBIN*

On November 26, 2012 the ASCC conducted a preliminary review of these applications for approval of plans for the residential development of the subject 2.0-acre Oak Hills subdivision property. At the conclusion of the preliminary review, ASCC members were generally supportive of the proposals, but did request clarification of several items prior to completing actions on the applications. The attached November 20, 2012 report to the ASCC and enclosed meeting minutes provide background and identify the clarifications requested with the preliminary review process.

In response to the 11/26 meeting comments, the following revised plans and materials have been provided and, unless otherwise noted, are dated December 5, 2012 and have been prepared by Stoecker and Northway Architects, Incorporated:

Letter explaining project plan changes
Sheet A0, Title Sheet & Proposed Site Plan
Sheet C01, Grading and Drainage Plan, Freyer & Laureta, Inc.
Sheet C02, Erosion Control Plan, Freyer & Laureta, Inc.
Sheet C03, Detail Sheet, Freyer & Laureta, Inc.
Sheet A1, Floor Plans
Sheet A3, Exterior Elevations
Sheet LE1.0, Partial Site Lighting Plan, Juarez Design

Still part of the application plans are the following sheets, but these are not enclosed with this report:

Sheet 1, Topographic Survey, Freyer & Laureta, Inc., 4/3/12
Sheet SRH, Septic System Plan, S.R. Hartsell, REHS
Sheet A2, Roof Plan

In addition to the above listed plans and materials, the applications include the following information considered at the November 26th meeting.

- Color Board, received 10/22/12. This is composed of two sheets with images of the applicant's house at 120 Golden Oak Drive. The color board was found acceptable by the ASCC at the 11/26/12 meeting.
- Cut sheets (attached) for the proposed lighting fixtures identified on plan Sheet LE1.0.
- Kielty Arborist Services arborist report dated July 12, 2012 (attached).
- Completed Build It Green GreenPoint Rated Project Checklist targeting 103 BIG points.

The following comments are offered to assist the ASCC in its continuing review of the applications.

1. **Plan Revisions to address specific preliminary review comments.** The December 5th letter from the project architect addresses most of the 11/26 review comments and following are noted relative to the project responses to the preliminary review comments:

   Clarifications of retaining wall construction relative to oak protection. The 12/5 comments relative to proximity to tree #15 identify a construction approach that would limit cut outboard of the retaining walls to 12 inches.

   Location of utility panel and stair access to panel and drainage swale on the east side of the proposed structure. The utility panel has been relocated and the drainage swale adjusted to "hug" the building wall.

   North side "access" and associated lighting. The plans do not show a path and the three lights in question have been eliminated.

   Control of fluids from car maintenance activities. The 12/5 letter explains how this will be addressed through the development of final building permit plans.

Timing and process for removal of upper lawn and protection of the oaks in the lawn area, removal of invasive materials, and seeding of area where stable and corral are to be removed. At the 11/26 meeting the project architect clarified that the stable and corral area would be seeded with the town's approved native grass mix after the improvements are removed. The other two matters can be handled as approval conditions, but the applicant should clarify the intent relative to timing for removal of the upper lawn area at the December 10, 2012 meeting.

2. **Oak Hills Homeowners Association review and applicant responses**. The AC condenser has been moved to adhere to the HOA requirement for a 50-foot setback from any property boundary and is now on the down hill side of the proposed structure and roughly 68 feet away from the nearest property line.

3. **Site Development Committee review comments**. In addition to the committee member comments provided with the attached November 20, 2012 project report, we have received the attached December 5, 2012 email from the Health Officer stating that the septic plans meet Environmental Health standards. Any action to approve the site development permit should include the provision that all site development committee review requirements be adhered to.

The ASCC should consider the above comments, and any new information presented at the December 10, 2012 meeting prior to completing action on this project.

5a. PRELIMINARY ARCHITECTURAL REVIEW FOR NEW RESIDENCE WITH DETACHED GUEST HOUSE, TENNIS COURT AND RELATED SITE IMPROVEMENTS, AND SITE DEVELOPMENT PERMIT X9H-646, 187 BOLIVAR LANE, *GOLDBAND*

This is a preliminary review of the subject proposal for construction of a new, single-story, 3,178 sf contemporary design flat roof residence with attached garage on the subject 3.1-acre Westridge subdivision parcel (see enclosed vicinity map for parcel location). The project includes a detached, 721 sf single story guest house. Other proposed improvements include minor yard and landscape elements and renovation of a previous tennis court site with a new tennis court.

The project proposes a total volume of grading of 986 cubic yards. This includes 843 cubic yards of cut and 143 cubic yards of fill. Of the cut, 701 cubic yards would be exported from the site. The volume of proposed grading requires the subject site development permit and the ASCC is the approving authority for any such permit where the earthwork totals between 100 and 1,000 cubic yards.

The project is shown on the following enclosed plans, unless otherwise noted, dated 11/7/12, prepared by Field Architecture:

Sheet A000, Cover Sheet

Civil Plans, Lea and Braze Engineering, Inc., 11/8/12:
Sheet C-1, Title Sheet
Sheet C-2, Grading & Drainage Plan
Sheet C-3, Grading Specifications
Sheet C-4, Details

Sheet C-5, Plan Details
Sheet ER-1, Erosion Control Plan
Sheet ER-2, Erosion Control Details
Sheet SU1-SU6, (six sheets), Topographic Survey, 10/25/12 (Sheets SU5 and U6 include tree identification tables for the trees discussed in the project arborist's report

Sheet L-1, Landscape Plan and Lighting Plan, Skyline Design Studio, 11/19/12
Sheet L-2, Landscape Water Use Plan, Skyline Design Studio, 11/19/12

Sheet A050, Site Plan
Sheet A100, Floor Plan
Sheet A200, Building Elevations
Sheet A201, Building Elevations
Sheet A202, Guest Elevations

In support of the plans the applicant has provided the following materials that are attached unless otherwise noted:

- Arborist's report prepared by Ned Patchett Arboricultural Consultant revised through October 16, 2007 March 23, 2007
- Cut sheets for the proposed exterior light fixtures received November 9, 2012 (location for proposed lights is shown on plan Sheet L-1 and A100)
- Colors and materials board, received November 9, 2012 (to be presented at the 12/10 ASCC meeting)
- Outdoor Water Use Efficiency Checklist, 11/9/12
- Build It Green (BIG) Single Family Checklist, received 11/9/12 targeting 154 BIG points.

As noted at the head of this memorandum, the preliminary review is to begin with a site meeting that is scheduled to take place at 2:00 p.m. on Monday, December 10th. Since the project is within the Westridge subdivision area, the Westridge Architectural Supervising Committee (WASC) has been invited to participate in the site meeting. Also, story poles have been installed to facilitate the field evaluation.

At the conclusion of the December 10th review, project consideration should be continued to the regular January 14, 2013 ASCC meeting to permit time for full processing of the site development permit and for the project design team to address any issues that may result from the preliminary review process. Further, project comments have yet to be provided to the town by the WASC.

The following comments are offered to assist the ASCC in preliminary review of the request.

1. **Background, Project Description, Grading and Vegetation Impacts.** In 2007, the ASCC considered and approved plans for residential redevelopment of the subject parcel prepared by Stoecker and Northway for Mr. Tony Fadell. Pursuant to that approval, the property owner received permission from the town to decommission the then existing house and other site improvements and this was accomplished as building permit plans were being processed. The footprint of the original site improvements is shown on the attached vicinity map. The decommissioning of the improvements included recycling as called for in town

codes. Unfortunately, when the new building permit plans were ready to be exercised, the then property owner decided to not proceed with the project and the property was eventually sold. The 2007 project included a main house, detached garage with guest house, swimming pool and other site development elements. The total floor area was over 7,500 sf. (The description of site conditions included in the following comments are partially from the staff report prepared for the 2007 project.)

The subject panhandle parcel is located off of the northeastern end of the Bolivar Lane cul-de-sac bulb. It is at the north end of the Westridge Subdivision, and the parcel's northern boundary is also the town boundary line that is common with the unincorporated Ladera area of San Mateo County. Ladera is within the town's sphere of influence, as defined by the San Mateo County Local Agency Formation Commission (LAFCo), which means if it were ever to pursue incorporation it would have to annex to the town.

As shown on the attached vicinity map, the parcels in Ladera are significantly smaller than the lots in adjoining Portola Valley. Also, as shown on the vicinity map, the majority of the subject parcel's northerly boundary is common with the right of way line of the public street Lerida Court. The site's previously existing improvements were connected to the sanitary sewer line in this street and this sewer will also serve the new project. Thus, there is no on-site sewage disposal system.

A portion of the northern part of the subject property, immediately adjacent to Lerida Court, is designated Pd, i.e., potential for deep landsliding, on the town's map of land movement potential. This Pd area is relatively small and does not impact the any of the areas now proposed for improvements. Except for the small Pd area, the majority of the subject property is designated Sbr on the town's map of land movement potential. This is considered stable bedrock and is the most stable of the mapped land movement potential categories.

The site is oak grassland and the property contains a number of significant oaks. Slopes are gentle to moderate, but most of the topography in the area of previous and proposed improvements is relatively level to gently sloping. Much of the existing level areas are a result of earthwork to accommodate the previous improvements. The proposed 986 cubic yards of grading is for the most part to reconfigure areas that were disturbed by previous site development and to develop the area for the fire truck turnaround as shown on Sheet C-2..

The driveway connection to the existing/proposed building site is within the parcel's panhandle connection to Bolivar Lane. The driveway is roughly 250 to 300 feet in length and passes through existing entry gates along a tree canopied side hill to the building site and we assume the asphalt surface will be repaired and tied into the asphalt surface proposed for guest parking and the fire truck turnaround area. If there are any plans for replacement of the existing driveway gate or other than asphalt driveway surface, these should be clarified to the satisfaction of the ASCC.

The established building site is located on the northwesterly side of the property. At the time of original site development, the western parcel boundary was designated a side property line, with a 20-foot setback required from it. The previous

improvements extended to, or close to, the 20-foot setback and included a detached guest house, swimming pool and a 110 ft. x 56 ft. sports court. The main house and a detached carport were located just to the east of these accessory uses and at a somewhat lower elevation, descending with the slopes of the property as indicated on the attached vicinity map.

The approach to new site development is very much the same as the approach used for the original site plan except that the scope of improvements is significantly less. Further, the new, 3,178 sf house, including attached garage, has been located to avoid all significant trees and minimize grading needed for garage access and house development. Only one tree, i.e., #30 is close to the house, i.e., immediately east of the garage, and this tree is proposed to be removed due to structure concerns identified in the arborist's report.

The new residence is well removed from all property boundaries, i.e., no closer than 95 feet to the nearest neighboring property line. The setbacks, relatively small house size, particularly for Westridge area lots, and low flat roof profile with a maximum downhill height of 22 feet ensure minimum potential for visual impacts to views from surrounding parcels.

The new flat roof, 721 sf guest house would be located along the east side of the driveway just before the driveway curve leading to the garage attached to the main house. This site is located over 46 feet from the nearest parcel boundary. This setback is considerably larger than was the case with the previous guest house and the current plan provides far more separation from the parcel to the west than was the case with original site development or the plans approved by the ASCC in 2007. Further, the maximum height of the guest house would be approximately 17 feet and this also helps to minimize potential for off site visual impacts.

The bulk of the proposed grading is for redevelopment of the original sports court site and improvement of the guest parking/fire truck turnaround area. The grading and landscape plan sheets note that low retaining walls would be used to control the extent of grading for the court, parking and proposed entry improvements. It appears that all the walls would have heights of 2-3 feet or less. Wall material should be specified to the satisfaction of the ASCC. In addition, the tennis court angled walls would extend into the required 20-foot side yard setback areas. Both extensions, i.e., to the west and north, are within 14 to 15 feet of the adjacent property line, but otherwise meet the setback averaging provisions of the zoning ordinance. The court, however, will need to be moved slightly to the east to meet the meet the minimum 16-foot setback that is required when setback averaging is employed.

Overall, we conclude that the approach to site development and scope of proposed improvements is well developed and consistent with the town's basic design guidelines. The scale and mass of structures and the other proposed site improvements maintain the oak grassland character of the site and are substantially less than the original development or the abandoned project approved by the ASCC in 2007. Further, there is ample room on site for construction access and staging, particularly given the size of the proposed improvements.

2. **Site Development Committee Review.** To date, comments have been received from the public works director (attached report dated 12/4/12), town geologist (attached report dated 12/4/12), fire marshal (attached report dated 12/5/12). We have also received the attached 11/27/12 "preliminary" report from the conservation committee with an understanding that a final report will be provided after the 12/10 site meeting. Since the site is served by the existing sanitary sewer system, a health department report is not anticipated at this time.

   Based on the reports received, there appear to be no technical issues with the project plans. The conservation committee has offered some preliminary suggestions for dealing with existing more exotic materials on the site and also noted strong support for the proposed approach to landscaping. The committee has, however, suggested consideration of use of pervious materials to reduce the scope of proposed impervious surface areas.

3. **Compliance with Floor Area (FA), Impervious Surface Area (IS), height and yard setback limits.** The total proposed floor area, including the detached guest house, is 3,899 sf and well under the FA limit for the property of 7,534 sf. The floor area of the main house, including the 563 sf attached garage, is 3,178 sf and far under within the 6,404 sf 85% limit. The floor area in the main house is only 42% of the total allowed floor area.

   The proposed guest house has a floor area of 721 sf and this is below the 750 sf maximum for such an accessory unit. Other aspects of the guest house and its conformity to second unit zoning and policy limitations are discussed below.

   The total proposed impervious surface (IS) area is 12,335 sf and under the 13,265 sf IS limit. The bulk of the IS area is for the replacement of the tennis court and the parking/fire truck turnaround area. Otherwise, there is minimal IS area on the site and, in this case, the applicant has desired to have the tennis court and keep other site improvements to a relative minimum, with the majority of the property maintained in an oak grassland condition.

   House heights range from as low as 10 to 12 feet to approximately 20 feet above adjacent grade and the maximum height is 22 feet. Thus, the house heights fully conform to the 28-foot and 34-foot limits. The guest house has a maximum height of approximately 17 feet and also is well under the single story limit for guest houses (i.e., 18-24 feet maximum) that is required without special ASCC findings.

   Compliance with required yard setbacks is referenced above and demonstrated on site plan sheets. The only issue is with the tennis court encroachments proposed and compliance with setback averaging provisions and this can be addressed with a very small adjustment to the court siting.

4. **Conformance with second unit zoning regulations and accessory structure policy**. The ASCC must make findings pursuant to both the town's accessory unit policy statement and zoning regulations to allow the proposed detached second unit. These matters are evaluated below.

   Second Unit and Accessory Structures Policy Statement, July 29, 1992 (copy attached). The proposed guest house contains 721 sf and is designed to be a

guest unit. It includes living room, full bath, kitchen and bedroom facilities and there is no other second unit proposed on the property.

Zoning Regulations. Second units are permitted on parcels of one acre or larger pursuant to the limitations set forth in Section 18.12.040.B of the zoning ordinance (copy attached). The proposed second unit is served by the same driveway access as the main house, and there would clearly be ample parking on site to meet all parking requirements. The design of the structure matches the architecture proposed for the main house and the location is such that it is well integrated into the proposed house improvements and not separated in any significant way from them. Thus, it appears that the design does conform to the second unit zoning requirements.

5. **Project Design and Exterior Materials**. The proposed architecture for the house and guest house is a very contemporary, low profile design with low profile, boxlike elements and flat roof forms. The approach is more minimalist and intended to result in structures that are subservient to the more native site conditions.

   The proposed exterior material and finishes will further help ensure the project blends into the oak woodland setting of the site. Proposed exterior materials and finishes include:

   - Vertical reclaimed redwood siding
   - Board formed, integral sand color, fly ask concrete siding that has a light reflectivity value (LRV) that appears to be close to the 40% policy maximum.
   - Exposed steel beams with a blackened finish
   - Dark bronze aluminum frame windows and doors
   - Dark bronze frame garage door with frosted glass panels.

   The project includes considerable glazing and these surfaces will likely reflect the oak cover on the site further helping the house and guest house to blend with site conditions.

   Overall, the colors, materials and architectural forms appear appropriate and consistent with town guidelines.

6. **Landscaping/fencing**. Preliminary plans for landscaping layout are shown on Sheets L-1. The plans are minimal and the conservation committee comments fully support the approach to landscaping.

   The plans propose no new fencing and at this time no tennis court fencing is planned. If there are any considerations being given to fencing, these should be shared with the ASCC for review and comment.

7. **Exterior Lighting.** The proposed exterior yard lighting is shown on Sheets L-1, and cut sheets for the proposed fixtures are attached and also included on the plan sheet. The lights are mainly for safe use of stairs and pathways and seem fully consistent with town lighting standards and guidelines.

   Exterior building lighting is shown on Sheet A100. It includes mainly recessed soffit fixtures and very few of these are planned and only at access doors. The lighting

plan appears to fully account for the fact that there is little need for exterior house lighting given the scope of window areas and potential for light spill from within the house.

8. **"Sustainability" aspects of project**. As noted above, the project targets 154 BIG points, whereas under the town's mandatory green building program, the required points total is 75. Compliance with the mandated point total would need to be verified through formal BIG certification.

The ASCC should conduct the preliminary review, including the site visit and offer comments, reactions and directions to assist the applicant and project architect modify plans as may be necessary to allow for eventual final action by the ASCC. Project review should then be continued to the January 14, 2013 regular ASCC meeting.

5b. PRELIMINARY ARCHITECTURAL REVIEW FOR NEW RESIDENCE WITH DETACHED GUEST HOUSE, SWIMMING POOL AND RELATED SITE IMPROVEMENTS, AND SITE DEVELOPMENT PERMIT X9H-647, 45 TAGUS COURT, *KAWAJA*

This is a preliminary review of the subject applications for residential redevelopment of the subject 1.9-acre Alpine Hills subdivision parcel (see enclosed vicinity map for parcel location). The project includes a new, two story, 4,421 sf residence, detached garage with upper level storage space and detached 574 sf single story guest house. Other proposed site changes include a new swimming pool and landscaping improvements.

The project proposes a total volume of grading of 982 cubic yards. This includes 824 cubic yards of cut and 158 cubic yards of fill. The excess cut materials would be exported from the site. The volume of proposed grading requires the subject site development permit and the ASCC is the approving authority for any such permit where the earthwork totals between 100 and 1,000 cubic yards.

The project is shown on the following enclosed plans, unless otherwise noted, dated 11/19/12, and prepared by Backen Gillam Architects:

Sheet A0.00, Title Sheet
Sheet L1.1, (Site and Landscape Plan), Whisler Land Planning, 11/19/12
Sheet A0.1, Cal Green Checklist (GreenPoint Rated Checklist Targeting 160 BIG points)

Civil Plans, Giuliani & Kull, Inc., 11/20/12:
Sheet C-1, Cover Sheet
Sheet C-2, Grading & Drainage Plan
Sheet C-3, Erosion Control Plan

Sheet A1.0, Site Plan-Existing
Sheet A1.1A, Site Plan – Proposed Ground Floor Plan
Sheet A1.1B, Site Plan – Proposed Upper Floor Plan
Sheet A1.2, Site Lighting and Finish Plan
Sheet A2.1, Ground Floor Plan
Sheet A2.2, Upper Floor Plan
Sheet A2.3, Roof Plan

Sheet A3.0, North Elevation East Elevation
Sheet A3.1, South Elevation Section B-B1
Sheet A3.2, West Elevation Section A-A1
Sheet A3.3, Garage Elevations and Sections

In support of the plans the applicant has provided the following materials that are attached unless otherwise noted:

- Cut sheets for the proposed exterior light fixtures received November 19, 2012 (location for proposed lights is shown on plan Sheet A-1.2)
- Colors and materials board, received November 19, 2012 (to be presented at ASCC meeting)
- Outdoor Water Use Efficiency Checklist, 11/19/12

As noted at the head of this memorandum, the preliminary review is to begin with a site meeting that is scheduled to take place at 3:00 p.m. on Monday, December 10th. Story poles have been installed to facilitate the field evaluation.

The applicants have informed staff that they have reached out to a number of neighbors to explain the plans and receive input. One of the neighbors, Mr. Mike Nuttall of 55 Alhambra Court has provided the attached 12/4/12 letter to the ASCC expressing concerns with the project including the height of the main house and the location of the proposed guest house. Mr. Nuttal's letter with two photographs he has provided was distributed by email to ASCC members and he has asked that during the 12/10 site meeting ASCC members view the project site and story poles from his house. During the site meeting it will also be important to consider views from the subject property to Mr. Nuttal's property at the end of Alhambra Court to fully appreciate visual relationships and issues.

At the conclusion of the December 10th review, project consideration should be continued to the regular January 14, 2013 ASCC meeting to permit time for full processing of the site development permit and for the project design team to address any issues that may result from the preliminary review process.

The following comments are offered to assist the ASCC in preliminary review of the request.

1. **Background, Project Description, Grading and Vegetation Impacts.** The subject triangularly shaped parcel fans out from the southern end of Tagus Court. The site contains a house at its south end and this is on the building pad established with original site grading. The building pad is roughly 30 feet lower in elevation than the cul-de-sac bulb of Tagus court and is at the end of a relative long driveway that has a slight serpentine form as it descends from the street to the building site.

   The essentially level building site contains a very low profile Ranch style residence with attached garage. The house is surrounded by a variety of plant materials that include a number of more exotic trees and shrubs including eucalyptus, acacia, and pines. From the building site slopes descend relatively rapidly to the north, east and west resulting in the graded pad building site and surrounding vegetation being more exposed to views from properties along Golden Oak Drive and Alhambra

Court. This is the situation relative to views to and from the Nuttal property and improvements on the hillsides to the west and east of the subject property are also highly visible from it.

The drop in elevation from the building site to the southern property boundary is over 100 feet in a distance of roughly 200 feet and very steep slopes are also present on the east side of the building pad. In any case, due to these steep slopes and additional geologic constraints along the southwestern slopes of the site, the only buildable area is the established building site and this is also the only area were there is level space available for outdoor uses.

As can be seen from the site and grading plans, an old road/driveway remnant extends along the east side of the building site and at one time was in an easement that was for benefit of the parcel to the south. This easement no longer exists. Due to slope constraints, however, there are no plans to grade the site to eliminate the old dirt driveway.

The plans currently anticipate preserving most of the non-native trees for privacy and screening. The only significant oak planned for removal is a triple trunk tree located on the west side of the building pad near the main entry to the existing house that is characterized as being in poor health. It is clear, however, that much of the existing smaller shrubs and non-native plantings would be removed for new site development.

The proposed grading is to improve driveway access, provide for upper driveway area guest parking (see also sewer comments below), cut the new garage slightly into the north, adjacent hillside and lower the existing house pad by roughly 2.4 feet to even the pad and provide for the desired site improvements. The height of the new structures would be taken from the lower pad surface.

The proposed improvements include the detached garage tucked into the northwest hillside. This site is now partially screened on the northwest side by a eucalyptus tree and the intent is to preserve the tree for screening at this time. In addition to the parking in the garage, there would be two guest parking spaces along the driveway and additional parking in the driveway area between the garage and front of the main residence. There is at least space for five cars, but the driveway design needs to be reviewed in detail with the fire marshal to ensure that there is an adequate fire truck turnaround as the driveway is over 150 feet in length. The project architect has advised that the plans do include provisions for a hammerhead turnaround to fire district standards, but this area needs to be away from guest parking spaces. This is to be clarified further at the ASCC meeting.

The new, two-story main house would be located at the northern end of the established building pad. The house would have a relatively narrow wing on the west side with longer elevations exposed to the east and south. The northern elevation would face into the adjacent hillside. The highest ridge at the 706.5-foot elevation would be roughly 6 to 8 feet lower than the elevation at the Tagus Court cul-de-sac bulb.

The two-story design was selected to allow for outdoor space on the south side of the pad, including space for the new swimming pool and to also pull the residential

mass back toward the north hillside. The added height relative to the existing house creates some potential for increased visibility and the potential visual changes should be considered during the course of the site meeting. At the same time, if the site had not been subjected to original "pad" grading, the existing house would be considerably higher in elevation. Further, under current town standards, pad grading is not encouraged. In any case, there is a balance that needs to be considered given site constraints and the need for effective space for outdoor activities. Again, views to and from the site from surrounding properties need to be considered during the course of the site 12/10 meeting.

The proposed guest house is a low profile single story structure. It is to be located at the southern end of the building pad. While is not a large or tall building, the location at the south end of the pad increases the potential for off-site visibility. At the same time, it is sited to serve also as a bath/exercise room associated with the proposed swimming pool.

In response to concerns over potential visual impacts of the guest house, the plans propose to plant three 48" box oaks on the west side of the guest house to supplement the screening provided by two existing oaks that are to remain. Other plantings along the west side of the building pad are also proposed to enhance screening and privacy and this includes the relocation of a 25 foot tall Pistache to help screen views to and from the Alhambra Court area.

The proposed garage includes a upper level that is currently not recognized in the floor area calculations. The lower, parking floor of the garage has an area of 522 sf. While we recognize that the heights in the upper space are mostly under seven feet we have concerns with the outside stair access and have requested a floor plan to determine if any change in the design would be needed to ensure it is not counted as floor area.

Currently the sanitary sewer system is being extended to the site and the new project will be served by the sewer system. The plans include a proposed guest parking area roughly 50 feet from the Tagus Court cul-de-sac bulb. The applicant has advised that this parking area is partially to provide for sanitary district access to sewer facilities on the parcel to the west. Due, however, to the proximity of the improvements on this western parcel, we have asked that the applicant ensure that the neighbor understands the plans and the relationship of the planned guest parking area to their backyard area.

While we believe the proposed site and house plans represent a reasonable approach to site development, particularly given the history of site grading and other site and area conditions, the site meeting will be important in considering the proposal and the concerns that have been offered relative to visibility from off site. At the same time, any change on the site will result in view modifications due to the unique topographic relationships in this Alpine Hills area.

2. **Site Development Committee Review.** To date, comments have been received from the public works director (attached report dated 11/29/12), town geologist (attached report dated 12/4/12), and fire marshal (attached report dated 11/28/12). Also received is the attached 11/27/12 "preliminary" report from the conservation

committee with an understanding that a final report will be provided after the 12/10 site meeting.

Since no septic system is planned, a health department report is not anticipated at this time. Abandonment of the existing septic system would, however, be subject to compliance with health department standards.

Based on the reports received, there appear to be no significant technical issues with the project plans. The report from the town geologist, however, notes that the original project consultant geotechnical report was prepared prior to development of the current plan proposals and that it needs to be updated to reflect the current plans and that this should take place prior to submittal of building permit plans.

The conservation committee has offered some preliminary suggestions for removal of invasive materials, oak protection and maintenance, modifications to the proposed landscape plant list and also that impervious surface materials should be kept to a minimum. The committee has, however, expressed concern over the control of runoff and this is also a matter commented on by the town geologist and would be subject to final plan review of details by the public works director.

The conservation committee encourages removal of eucalyptus, acacia and old overgrown pine trees. The applicant has expressed interest in doing this over time, but is also concerned that early removal would eliminate screening that is now relied on for privacy. This can be judged during the course of the site meeting and, particularly in consideration of views from off site including from the Nuttall property at 55 Alhambra Court.

One additional comment offered by the conservation committee has to do with the proposed garage encroachment into the side yard setback area. The enclosed plans were intended to meet the allowed setback averaging for this encroachment. Unfortunately, the proposed garage siting does not meet the 16-foot minimum set back, it is only 14 feet from the property line. The applicant has been made aware of this and has advised that the plans will be corrected to be consistent with the setback averaging provisions of the zoning ordinance.

3. **Compliance with Floor Area (FA), Impervious Surface Area (IS), height and yard setback limits.** The total proposed floor area, including the detached garage and detached guest house, is 5,611 sf and 83 sf under the 5,694 sf FA limit for the property. The floor area of the proposed main house, including the 400 sf required to be counted in the detached garage, is 4,821 sf and this is 19 feet below the 85% limit of 4,840 sf. While the project appears to conform to the FA limits, a final review will be made after more evaluation is made of the space over the garage.

   The proposed guest house, while designed more as an exercise space and guest bedroom is, by town zoning ordinance definition a guest house. It has a floor area of 574 sf, which is below the 750 sf maximum for such an accessory unit. Other aspects of the guest house and its conformity to second unit zoning and policy limitations are discussed below.

   The total proposed impervious surface (IS) area shown on the plans is 7,927 sf and under the 8,688 sf IS limit. The bulk of the IS area is for the driveway and pool

areas. The IS calculations are being checked by the architect as there was a misunderstanding as to how area under eaves is counted so revised numbers are expected to be provided.

The mostly two story house ridge heights range from 23.5 feet to 24.5 feet and adhere to both the 28 and 34-foot maximum height limits. The guest house has a maximum height of approximately 17.5 feet and also is well under the single story limit for guest houses (i.e., 18-24 feet maximum) that is required without special ASCC findings. The garage has a ridge height of 18.5 feet and this is well below the 28 and 34 foot height limits that apply to this detached accessory structure.

Compliance with required yard setbacks is presented on plan Sheet A1.1A. except for the setback averaging issue discussed above, the proposed improvement maintain setbacks that are significantly greater than the 50 foot front and 20 foot site and rear yard zoning ordinance requirements. The house is no closer than 48 feet to a side property line and the guest house is over 80 feet away from the western property line.

4. **Conformance with second unit zoning regulations and accessory structure policy**. As with the previous application, the ASCC must make findings pursuant to both the town's accessory unit policy statement and zoning regulations to allow the proposed detached second unit. These matters are evaluated below.

   Second Unit and Accessory Structures Policy Statement, July 29, 1992 (copy attached). The proposed guest house contains 574 sf and is designed to be a guest unit. It includes living room, full bath and bedroom facilities and there is no other second unit proposed on the property.

   Zoning Regulations. Second units are permitted on parcels of one acre or larger pursuant to the limitations set forth in Section 18.12.040.B of the zoning ordinance (copy attached). The proposed second unit is served by the same driveway access as the main house, and there appears to be parking on site to meet all parking requirements. This, however, will depend on final driveway design review by the fire marshal as discussed above.

   The guest unit design matches the architecture proposed for the main house and the location is integrated into the proposed house improvements and not separated in any way from them. Thus, it appears that the design does conform to the basic second unit zoning requirements.

5. **Project Design and Exterior Materials**. The proposed architecture for the house and detached accessory structures is of a simple, contemporary Ranch style. The design includes low pitch, gable roof forms design and materials and finishes that are consistent with the more rural tradition of the town and consistent with town design guideline.

   The proposed exterior material and finishes include finishes:

   - Stain grade wood siding in a dark finish with a light reflectivity value (LRV) of under 20% and well under the 40% policy maximum.

- Integral sand color plaster with a LRV appears to be close to the 40% policy maximum.
- Corrugated metal roofing with a dark brown, matte finish and a LRV of under 10%, well under the 40% policy maximum.

All wood trim and trellis elements include window and door trim and garage doors are to be in stain grade wood and, we assume, would be finished to match the siding stain. This however, should be clarified to the satisfaction of the ASCC.

The proposed guest house shower area has exterior walls of frosted glass panes. This material should be defined to the satisfaction of the ASCC.

6. **Landscaping/fencing**. Plans for landscaping are presented on Sheets L1.1. These have been discussed somewhat above and also in the comments from the conservation committee. During the site session, the project design team should discuss these in detail and also respond to the comments from the conservation committee.

   The plans propose no new fencing and we assume that pool security will be with a cover. There is a plan for a new driveway entry gate and this would be located at the required 25-foot setback. The gate is described in a note on the landscape plan, including conformance to the four-foot height limit. Nonetheless, a detailed gate plan should eventually be provided to the satisfaction of the ASCC.

   Relative to the oaks around the building pad that are to be preserved, eventually an arborist should review the proposal and provide recommendations for tree protection and measures to be taken to ensure long term tree health.

7. **Exterior Lighting**. The proposed exterior yard and house lighting is shown on Sheet A1.2 and the cuts sheets for the proposed fixtures are attached. For the most part, recessed eve and low mounted down lights are proposed around the house and at the guest house. A few path lights are proposed at the house entry and at the pool area. Any lighting planned for the pool and spa needs to be explained to the satisfaction of the ASCC.

   While the proposed lighting does not appear excessive, particularly with the low pathway and wall fixtures and recessed lighting, we do have some concerns with the proposed overhead wall and pendent lights. The fixtures and potential for light spill form them should be considered and explained by the design team at the ASCC meeting.

8. **"Sustainability" aspects of project**. As noted above, the project targets 160 BIG points, whereas under the town's mandatory green building program, the required point total is 133. For this project, compliance with the mandated point total would need to be verified through formal BIG certification.

The ASCC should conduct the 12/10 preliminary review, including the site visit and offer comments and reactions to assist the applicant and project design team in preparing any plan revisions that may be found necessary to allow for eventual final action by the ASCC. Project review should then be continued to the January 14, 2013 regular ASCC meeting.

5c. PRELIMINARY ARCHITECTURAL REVIEW FOR NEW RESIDENCE WITH DETACHED GUEST HOUSE, AND RELATED SITE IMPROVEMENTS, AND SITE DEVELOPMENT PERMIT X9H-645, 10 SIOUX WAY, *CLARK*

This is a preliminary review of the subject applications for residential development of the subject 1.09-acre Arrowhead Meadows subdivision property. The preliminary review will begin, as noted at the head of this report, with a 4:00 p.m. site meeting on Monday December 10, 2012. The preliminary review will continue at the regular evening meeting and project consideration should then be continued to the regular January 14, 2013 ASCC meeting. This will provide time for design refinements and also for the development of responses to specific preliminary review comments provided at Monday's ASCC sessions.

A preliminary evaluation of site and area conditions and the applications and proposals is presented in the enclosed December 10, 2012 staff report prepared by interim planning manager Steve Padovan. The report reflects staff review and interaction with the applicant to date on the development of the plans. Mr. Padovan will be presenting the staff report to the ASCC at the December 10, 2012 meeting.

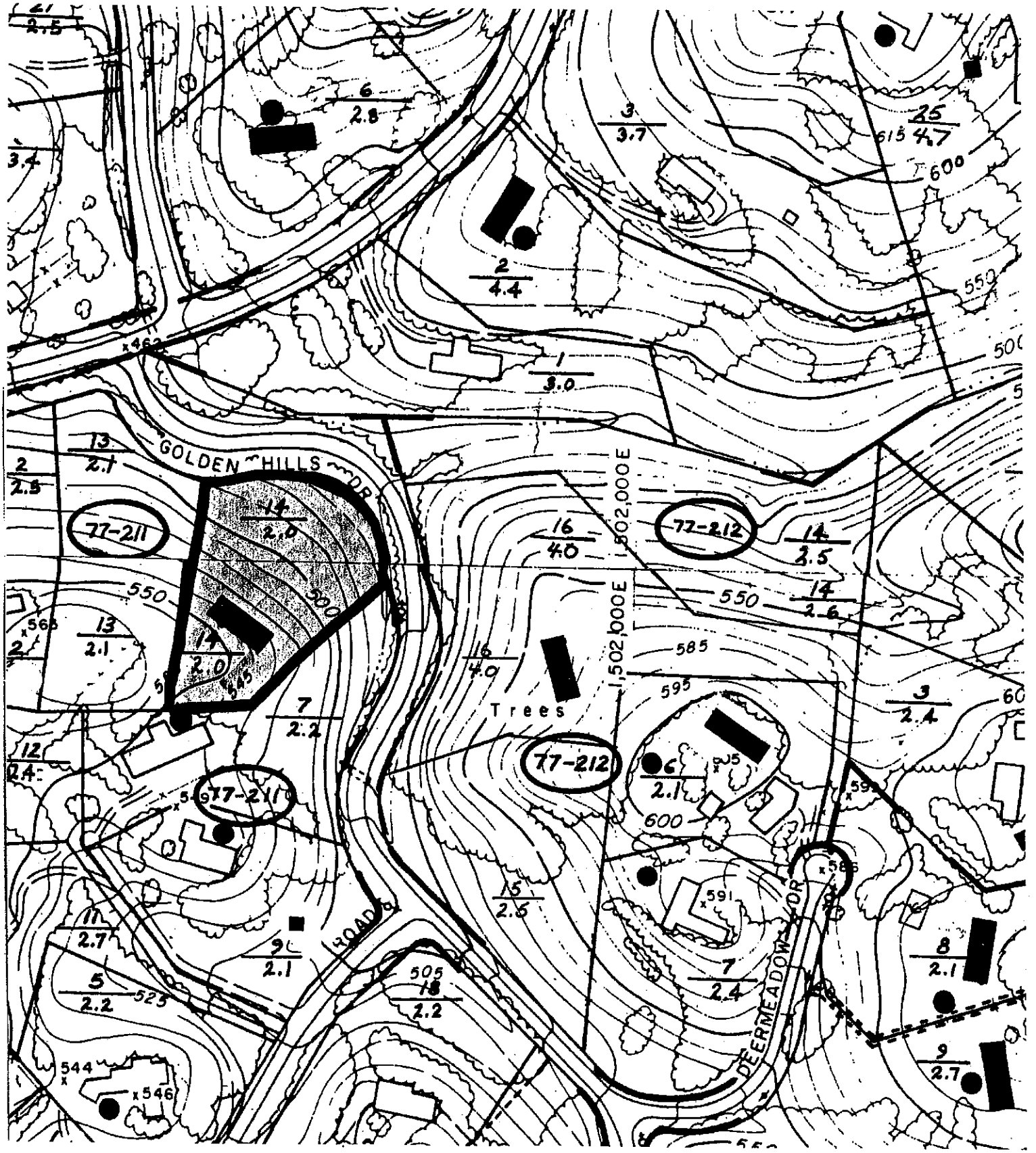
It is noted that story poles are in place at the site to model the proposal. The project applicant and architect is ASCC member Jeff Clark and he is, thus, conflicted in participating in ASCC review of the proposal. Further, in light of State conflict of interest provisions and based on the direction of the town attorney, Mr. Clark may not present the plans to the ASCC or be present during any ASCC considerations of the project. This reflects the standard procedures that other ASCC members have had to comply with when they have had proposals before the ASCC for formal consideration.

TCV

encl.
attach.

cc. Planning Commission Liaison
Town Council Liaison
Town Manager
Mayor
Applicants
Planning Technician
Interim Planning Manager

AR NEW RESIDENCE
130 GOLDEN HILLS DRIVE, RUBIN



Vicinity Map
Scale: 1" = 200 feet

AR New Residence – Rubin
130 Golden Hills Drive, Town of Portola Valley
November 2012

STOECKER AND NORTHWAY ARCHITECTS INCORPORATED

1000 ELWELL COURT SUITE 150 PALO ALTO CA 94303 650 965-3500 / FAX 650 965-1095

December 5, 2012

Portola Valley Planning Department
765 Portola Rd.
Portola Valley, CA 94028

Re: Application for Architectural & Site Plan Review and Site Development Permit Review
Subject: New Residence at 130 Golden Hills Drive – Revision to Initial Submittal

Please find revised drawings for the December 10th Architectural and Site Plan Review and for Site Development Review for the new residence located at 130 Golden Hills Drive. In response to our initial hearing and comments from the Board, the revised drawings show the following changes:

Proximity to Tree #15: We have eliminated the Mechanical Area at the rear of the building and relocated the electrical meter and panels to the front corner of the north elevation. The panels will be recessed into the wall and hidden behind blind doors in the wood siding with only the required hole cutout at the meter itself. The gas meter has also been relocated to that same wall. With the elimination of the Mechanical Area, the drainage swale moves in to hug the building, and we have reduced the width of the landing at the rear door to just the code required minimum depth of 3 feet. Our impervious surface calculation has gone down by 47 sf. We have also researched a tie back shoring and blind side application waterproofing system that will limit the cut beyond our retaining walls to about 12" deep.

Air Conditioning Condenser Units: In response to concerns from the Home Owner's Association, they have been moved to alongside the rear corner of the building. At approximately 68' away from the closest property line, they are now well within the 50' Oak Hills setback.

Path Lighting: The three path lights along the long north wall have been eliminated.

Treatment of car pollutants in trench drain: This issue is pending. Code requires all residential garage floors slope to drain out the garage door with no capture and treatment of water required. Commercial garages are required to have drainage first go to a grease and sand interceptor before being discharged. Drainage of the garage is required but because the proposed garage is over 1000 sf. and a showroom for a car collection and not regularly used vehicles, it is a judgment call for County Environmental Health on whether they will require a grease and sand interceptor. We have not received a judgment from them yet. If required, the trench drain would have three outlets as currently proposed but they would run to a separate pipe which dumps into a grease and sand interceptor on the outside of the building first with cleaned runoff then connecting into the stormwater system.

Thanks for your consideration of this proposal.

Regards,

Bob Stoecker
Stoecker & Northway Architects, Inc.

Subject: FW: 130 Golden Hills Drive.
Date: Wednesday, December 5, 2012 10:48 AM
From: Carol Borck <cborck@portolavalley.net>
To: "Tom Vlasic (vlasic@spangleassociates.com)" <vlasic@spangleassociates.com>, "bob@stoeckerandnorthway.com" <bob@stoeckerandnorthway.com>, "'alena@stoeckerandnorthway.com' (alena@stoeckerandnorthway.com)" <alena@stoeckerandnorthway.com>
Conversation: 130 Golden Hills Drive.

Comments from County Health –

Carol

From: Stanley Low [mailto:slow@smcgov.org]
Sent: Wednesday, December 05, 2012 10:14 AM
To: Carol Borck
Subject: 130 Golden Hills Drive.

Hello Carol:

I have reviewed the septic design plans and find that the plans meet Environmental Health standards to serve up to 3 bedrooms. Please release the hold on this application.

At the building permit stage, the applicant needs to submit a septic application, fees and 3 sets of septic design plans to my office for approval.

Stan Low, REHS IV

Land Use Specialists

San Mateo County Environmental Health

2000 Alameda de las Pulgas, Suite 100

The opacity limit for gates within the front yard (or in side yards along street frontages) is 50%. Sheet G0.01 provides detailed measurements and illustration that the gate meets this requirement. Both the gate and columns have a maximum height of 4 feet, meeting the ordinance height limit.

4. **Call box location and lighting**. Location of the proposed key pad is identified on Sheet SP.01 and no additional lighting is proposed. The specification for the call box design should be submitted at the time of building permit application to the satisfaction of a designated ASCC member.

Prior to acting on this request, the ASCC should visit the project site and consider the above comments and any other information presented at the ASCC meeting.

5c. PRELIMINARY ARCHITECTURAL REVIEW AND SITE DEVELOPMENT PERMIT X9H-644, NEW RESIDENCE WITH ATTACHED GARAGE AND WORKSHOP, 130 GOLDEN HILLS DRIVE, *RUBIN*

This is a preliminary review of this application for approval of plans for the first "phase" of residential development of the subject 2.0-acre Oak Hills subdivision property. Site and area conditions are generally depicted on the attached vicinity map. The proposal is to construct a small residence with attached garage and workshop that would be related to the residential improvements that exist on 120 Golden Hills Drive, also owned and occupied by the applicant. Both parcels share a common access drive within a joint easement that was established with a prior town approved subdivision. The drive crosses 130 Golden Hills Drive and connects to the driveway and parking area on 120 Golden Hills Drive as shown on the enclosed plans and attached excerpt from the assessor's map for the area.

The proposal includes a 508 sf living unit and 3,120 sf of area devoted to garage storage and workshop space. These improvements would become accessory uses, i.e., guest house and garage, to a future residence and other improvements as explained in the attached October 17, 2012 letter from the project architect. The project includes removal of an existing stable and corral with fencing that are located along the Golden Hills Drive frontage and also elimination of an existing irrigated lawn under oaks on the upper portions of the site. This lawn area was of particular concern to ASCC members during review of a recent lighting proposal for Mr. Rubin's residence and yard area at 120 Golden Oak Drive. (*As a reminder, due to ASCC and neighbor concerns, the lighting proposal was withdrawn and the then existing exterior lights installed without approval removed.*)

The project calls for 275 cubic yards of grading to accommodate the proposed building and access to the lower level garage that is to be cut into the site. The ASCC is the approving authority for projects that require grading in the range of 100 to 1,000 cubic yards. A number of site development committee review comments have been received and are discussed later in this report.

In addition to the October 17, 2012 project letter, the proposal is described on the following enclosed plans, unless otherwise noted, dated September 21, 2012 and prepared by Stoecker and Northway Architects, Incorporated:

Sheet A0, Title Sheet & Proposed Site Plan
Sheet 1, Topographic Survey, Freyer & Laureta, Inc., 4/3/12
Sheet SRH, Septic System Plan, S.R. Hartsell, REHS
Sheet C01, Grading and Drainage Plan, Freyer & Laureta, Inc., 7/16/12
Sheet C02, Erosion Control Plan, Freyer & Laureta, Inc., 7/16/12
Sheet C03, Detail Sheet, Freyer & Laureta, Inc., 7/16/12
Sheet A1, Floor Plans
Sheet A2, Roof Plan
Sheet A3, Exterior Elevations
Sheet LE1.0, Partial Site Lighting Plan, Juarez Design

In addition to these plans, the project submittal includes the information listed below.

- Color Board, received 10/22/12. This is composed of two enclosed sheets with images of the applicant's house at 120 Golden Oak Drive. The sheets propose all colors and finishes to match the improvements of the existing Rubin residence also designed by Mr. Stoecker. This includes the stone used for low driveway walls. All of these materials were previously reviewed and fully supported by the ASCC.
- Cut sheets (attached) for the proposed lighting fixtures identified on plan Sheet LE1.0.
- Kielty Arborist Services arborist report dated July 12, 2012 (attached).
- Completed Build It Green GreenPoint Rated Project Checklist targeting 103 BIG points.

As noted at the head of this memorandum, the preliminary review of this project will start with a 4:00 p.m. site meeting on Monday, November 26th. To facilitate the site meeting, story poles have been placed at the site.

The following comments are offered to assist the ASCC conduct the site meeting and preliminary review of the application. Following the November 26th preliminary review, including both the afternoon and evening sessions, project consideration should be continued to the next regular ASCC meeting.

1. **Background, Site and Project description, grading and vegetation impacts.** This 2.0-acre site is located in the Oak Hill subdivision and is under the authority of the Oak Hills Homeowners Association (HOA). HOA project review is discussed below. The site has relatively moderate, oak covered slopes and, as noted above, is crossed by an access easement with existing driveway that was established when the subdivision creating 120 and 130 Golden Hills Drive was approved by the town. The access easement and existing driveway includes an area for fire vehicle turnaround on the subject site that is to be preserved with this project.

   Prior to development of the applicant's house on 120 Golden Hills Drive, 120 Golden Hills contained a residence, the existing driveway and the stable and corral facilities that remain along the parcel's street frontage. After development of 120 Golden Hills Drive, the applicant purchased the new house and eventually acquired 130 Golden Oak Drive. The then existing house was removed and, pursuant to agreements with the town, the stable was allowed to remain pending formulation of plans for a new residence on the property.

Mr. Stoecker had several conversations with town representative relative to the proposals for use of the subject property and eventually developed the enclosed plans as part of the applicant's longer-term objectives for use of the two commonly owned but separate parcels.

Under town ordinances and standards, a parcel must have a primary use on it before accessory uses are permitted. In this case, the necessary primary use is residence, but the town has no minimum standards for a residence, nor does it mandate that an accessory structure must be smaller than the residence. Further, there is precedence in the town for one person, family or entity to own adjacent, but separate, parcels and develop a full size residence on one with a smaller residence and accessory uses on the other. The parcels remain separate and distinct, even though they may only be used by the common owner.

Thus, in this case, even if the proposed small residence and garage remained and the proposed second phase of development were not pursued, the site would still contain a primary use as called for under town standards. It is also emphasized that the town does not mandate minimum size for structures nor has the town encouraged a property owner to pursue full use of permitted floor area, impervious surface area, etc.

The original house on the property was located at the southwestern corner where slopes are flatter and where there is an opening in the tree cover. After removal, the area was seeded for erosion control and, eventually, a large irrigated lawn was installed, mostly above contour line 548. As noted above, during the ASCC lighting review, significant concern was expressed over the lawn area and, as noted in the attached letter from the project architect, the lawn will be removed with the current project. Further, the long-term plan is to locate a new larger, main residence in the area of the original residence and also locate a swimming pool in the area. Both would be in the larger open site of the original house and away from the surrounding significant oaks. These are, however, future proposals that are not part of the current project and no commitment would be made to them until full plan data is available for town consideration. If the current project is approved and implemented, there would only be 3,029 sf available to accommodate a future house.

The main focus of ASCC consideration is the proposed 3,628 sf structure to be located roughly in the center of the site and partially on a topographic bench that appears to be a graded path extension from the existing driveway. This bench is in the area proposed to be graded for access to the lower garage area of the new structure. The stone retaining wall shown on the plans along the driveway containing the north side oaks exists and would be used to partially accommodate the new, short concrete driveway extension from the existing common driveway. The existing common driveway would not change with the project.

The new structure would be cut into the slopes of the site with the structure's walls retaining the uphill cut slopes. The uphill cuts range in depth from 4-6 feet to a maximum height of 14 feet. The approach to development preserves most of the surrounding oaks, but does require the removal of at least 7 oaks within the footprint/cut area.

The approach to siting, placement and construction of the living unit with garage, while requiring some tree removal and trimming, will ensure that the structure has a very low profile and is well screened by the extensive site tree cover that will remain after construction. Further, the proposal, including the septic system plans, have been evaluated by the project arborist and, pursuant to tree protections measures, the arborist in the attached report has concluded that the impact on trees to remain should be within "acceptable limits." The site meeting will provide the opportunity for appreciation of tree conditions and potential impacts.

Overall, the general approach to the project appears appropriate and minimizes impacts associated with access and site construction. Further, the use of materials and finishes that match the existing improvements on 120 Golden Hills Drive will also ensure that the project fits well into the site. The main concerns, beyond removal of the existing lawn area, are to ensure that the arborist's recommendations are implemented to minimize potential tree impacts both in terms of the construction process and ensuring long term tree health.

2. **Oak Hills Homeowners Association review and applicant responses.** The attached string of emails between the HOA, i.e., Dennis DeBroeck and project architect Alena Campagna cover a period between October 19, to November 19, 2012. The communications address concerns and clarifications relative to the ridge skylights and frosted glass elements in the garage doors, elimination of the H1 motion controlled light fixture and location for the AC condenser. It appears that the clarifications address the HOA concerns and ensure that all project elements conform to the HOA requirement for a minimum 50-foot setback from all property boundaries.

3. **Site Development Committee review comments.** The following site development committee reports have been received and are attached:

   Public Works Director, November 19, 2012. The report provides for approval subject to standard conditions.

   Town Geologist, November 14, 2012. The report recommends conditional approval. It references a geotechnical investigation prepared for the applicant by Murray Engineers, identifies certain site constraints, but concludes that with the recommended conditions the site development permit is acceptable. Comments also discuss the presence of non-engineered fill in the "pad" area of the proposed structure.

   Fire Marshal, October 29, 2012. The report finds the plans generally acceptable subject to, more or less, standard fire district conditions. These comments should be reviewed by the design team to specifically identify needed responses re: driveway slope and fire hydrant location.

   Comments from the Conservation Committee would be expected to be provided after the preliminary review site meeting and after the next regular conservation committee meeting scheduled for later this month. Also, comments are still anticipated from the trails committee and health officer.

4. **Floor Area (FA), Impervious Surface (IS) Area, height and setback limit compliance.** Plan Sheet A0 provides detailed FA and IS calculations. The total

proposed floor area is 3,628 sf and this FA is well under the total limit of 6,657 sf. This same area is also subject to the 85% floor area limit for the single largest structure. The 85% FA limit is 5,658 sf and the proposal is well below that limit. Further, the remaining unused floor area is just above 3,000 sf, so any future house would also conform to the 85% limit.

Proposed impervious surface (IS) area is 5,551 sf and most of this is driveway paving. This is well under the 9,995 sf IS limit for the site.

The maximum height of the proposed house above adjacent grade occurs at the transition between the garage level and the upper living area as shown on plan Sheet A3. This height has been kept to 18 feet and the maximum overall height is just over 20 feet. These heights are within the "single-story" limits that allow for capturing the 5% floor area bonus for the property. It is, however, noted that there is not a floor area issue at this time and if the 5% bonus were not desired, then the height limits would increase to 28 feet and 34 feet.

Project compliance with the town's required 50-foot front and 20-foot side and rear yard setbacks is demonstrated on the project site plan. The plan also demonstrates that the project conforms to the HOA requirement for a 50-foot setback from all property boundaries. In fact, the building would be over 100 feet from Golden Hills Drive and no closer than 65 feet to the nearest side property line. And, again, the AC condenser will be located outside of the HOA required setback area.

5. **Architectural design, exterior materials and finishes**. The proposed architecture will match the contemporary Ranch style used on the applicant's residence on 120 Golden Hills Drive. The design makes extensive use of stained wood for siding and trim and also wood shingles assembled to achieve a Class A fire rating. In addition, the site walls will make use of the same stone used on the site walls at 120 Golden Hills Drive. The enclosed "color board" includes images of the existing residence. The design, materials and finishes have all been found by the ASCC to be appropriate for the site and area.

6. **Fencing and landscaping.** No new fencing is proposed and all existing corral fencing will be removed. Further, no landscaping or irrigation system are planned. The only planting would be to apply the town's approved native grass mix on all disturbed surfaces.

7. **Exterior lighting**. Proposed exterior lighting is shown on Sheet L1.3 and cut sheets for the fixtures are attached. As a reminder, the H1 motion controlled spot fixture has been eliminated from the proposal based on the communications with the HOA. The remaining lights including, path, step, recessed and wall mounted fixtures appear appropriate as proposed assuming they are manually controlled.

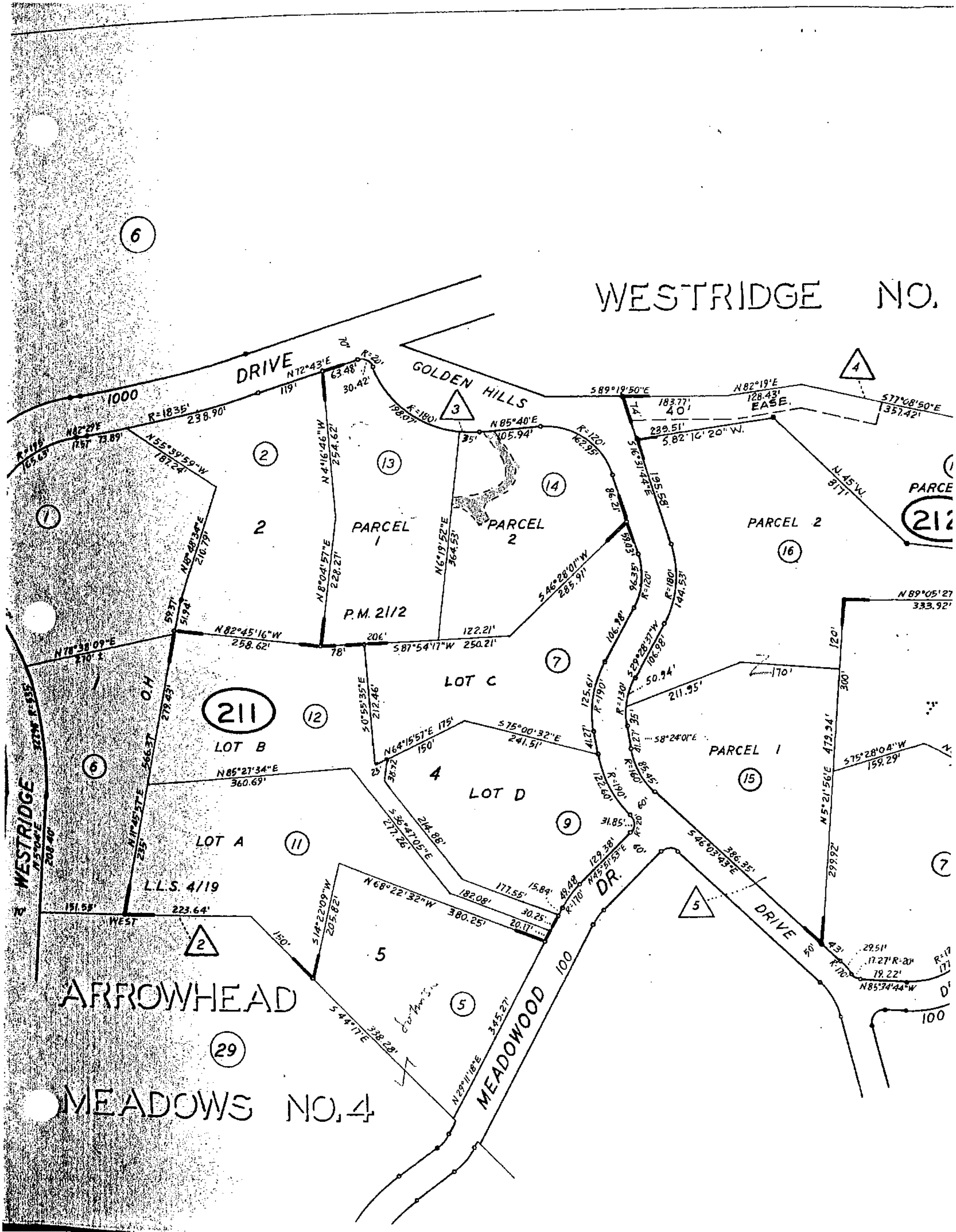
8. **"Sustainability" aspects of project**. The attached BIG checklist completed for the project targets 103 points. Achieving this threshold will require formal BIG certification. Pursuant to the town's mandatory green building program a minimum of 96 BIG points is required, thus the project design would appear to conform to town green building standards.

The ASCC should consider the above comments, conduct the preliminary project review, including the afternoon site meeting, and offer comments to assist the applicant and staff in assembling the application in form for eventual ASCC action. Project review should then be continued to the December 10, 2012 regular ASCC meeting.

TCV

encl.
attach.

cc. Planning Commission Liaison
Town Council Liaison
Town Manager
Mayor
Applicants
Planning Technician
Interim Planning Manager



WESTRIDGE NO.
ARROWHEAD
MEADOWS NO. 4
1000 DRIVE
GOLDEN HILLS
MEADOWOOD 100 DR.
DRIVE
WESTRIDGE
211
212
29
PARCEL 1
PARCEL 2
P.M. 21/2
LOT A
LOT B
LOT C
LOT D
L.L.S. 4/19
40' EASE.
O.H.

STOECKER AND NORTHWAY ARCHITECTS INCORPORATED

1000 ELWELL COURT SUITE 150 PALO ALTO CA 94303 650 965-3500 / FAX 650 965-1095

October 17, 2012

Portola Valley Planning Department
765 Portola Rd.
Portola Valley, CA 94028

Re: Application for Architectural & Site Plan Review and Site Development Permit Review

Subject: New Residence at 130 Golden Hills Drive

Please find the attached application and supporting data for Architectural and Site Plan Review and for Site Development Review for a new residence located at 130 Golden Hills Drive. The site will be developed in two phases, and this application is for Phase 1. There is no established time table for submission of Phase II, but Owner anticipates it will be submitted in the near term. The Owner resides at 120 Golden Hills and utilizes the shared driveway with 130 Golden Hills.

Phase I is comprised of a small one bedroom, one bath living unit on the second floor, and a workshop and five car garage on the ground floor. The structure has been designed to comply with the Town's one story height restrictions. Phase II will be comprised of a swimming pool, main residential living unit and recreational spaces, all complying with one story height restrictions. After construction of Phase II, Phase I will be designated as a detached second dwelling unit attached to the required two covered parking spaces, three other parking spaces and workshop.

In studying the location for Phase I, we looked at three possibilities. First location was at the bottom of the hill adjacent to Golden Hills Drive. This would have required a second driveway access from Golden Hills and would create a location visually open to the street, resulting in cuts into the hill that would have been unacceptably deep with substantial tree loss. Connecting this location to the existing driveway is not feasible from a grading point of view.

Second, we considered integrating the Phase I uses into the Phase II uses at the top of the hill. This would have resulted in a single buildout of both phases, an extension of the existing driveway to the top of the hill with associated fire department hammerhead, parking areas and an increased one story footprint that extended down slope into the trees. Further, the Owner did not want the second unit and garage to influence the Phase II recreational uses which will be open to the surrounding trees and pool area.

The mid-level location for Phase I as submitted was chosen for several reasons. The Owner wants the Phase I structure to match the architecture of the neighboring residence which is further up the shared driveway at 120 Golden Hills. This residence was designed by our office and so it was relatively easy for us to mirror that style and create visual consistency as one drives up the hill, passing Phase I on their way to 120 Golden Hills. The Phase II recreation project will be a much more open and modern structure, and so its location at the top of the hill will allow for this aesthetic difference. The Owner's use of the Phase II recreation facilities will be primarily by walking from his existing neighboring home on paths through landscaping submitted with that project in the future.

Locating Phase I at the mid-level benefits from the use of an existing graded pad. Although seven oak trees are slated for removal, this location is surrounded by numerous oaks affording good screening from offsite views. Septic drain lines are located below the building and sized to accommodate 3 bedrooms for the total of both phases. Although it is unlikely, if expansion lines were needed in the future they would be hand excavated where in close proximity to trees.

Phase I will match the materials used at 120 Golden Hills, namely clear sealed redwood siding, Class A cedar shingle roofing and redwood trim. Similar window and ridge skylight frames will be dark brown with gutters and rainwater leaders to match. A small extension of the existing stone retaining wall will utilize matching stone, and the small driveway extension will match the existing natural concrete color. Exterior lighting is minimal with bronze colored, shielded wall mounted lights, path lights, step lights and a recessed light in the roof overhang. All are LED powered fixtures.

In order to create passive design efficiencies, we have utilized a ridge skylight. This will help minimize the need for daytime electric lighting in what would otherwise be a very dark space. Further it will allow some heat gain in winter months and will utilize internal shades to minimize heat loss and light spill at night. This skylight matches the aesthetic form of the two ridge skylights on the existing neighboring home at 120 Golden Hills.

There is no new landscaping proposed other than native grass seeding for construction related erosion control. Although we do not believe any new tree screening is necessary for offsite view mitigations, the Owner will install new trees if the ASCC feels they are warranted. Please note all trees surveyed in Kielty's Arborist Report (His report covers just the area for Phase I) are only in "poor" to "fair" condition. Generally, it appears the existing oak forest could be thinned for better individual tree health.

Regarding the existing lawn and irrigation system located at the southeast corner of the parcel, Owner agrees to remove lawn as one of the conditions of project approval. The existing stable and corral fencing next to Golden Hills Drive will also be removed.

Thanks for your consideration of this proposal.

Regards,

Bob Stoecker
Stoecker & Northway Architects, Inc.

Mon, Nov 19, 2012 2:28 PM

Subject: FW: 130 Golden Hills Drive - Golden Hill HOA Comments
Date: Monday, November 19, 2012 10:56 AM
From: Carol Borck <cborck@portolavalley.net>
To: "Tom Vlasic (vlasic@spangleassociates.com)" <vlasic@spangleassociates.com>
Conversation: 130 Golden Hills Drive - Golden Hill HOA Comments

Just received.

Carol

From: Dennis DeBroeck [mailto:DDebroeck@fenwick.com]
Sent: Monday, November 19, 2012 10:53 AM
To: 'Alena Campagna'; Carol Borck
Cc: 'William J. Clancey'; 'Alan Bickell'; 'Jennifer Ayer Sandell'; bob@stoeckerandnorthway.com
Subject: RE: 130 Golden Hills Drive - Golden Hill HOA Comments

Alena
Thanks for the clarification. With respect to the location of the air conditioner the Committee appreciates the owner being open to move it closer to the building in order to be 50 feet or more from the property line—the Committee supports the move and believes this will also help address any noise concerns of neighbors.
Dennis DeBroeck

Subject: FW: 130 Golden Hills Drive - Golden Hill HOA Comments
Date: Thursday, November 8, 2012 2:06 PM
From: Carol Borck <cborck@portolavalley.net>
To: "Tom Vlasic (vlasic@spangleassociates.com)" <vlasic@spangleassociates.com>
Conversation: 130 Golden Hills Drive - Golden Hill HOA Comments

From: Alena Campagna [mailto:alena@stoeckerandnorthway.com]
Sent: Thursday, November 08, 2012 1:27 PM
To: 'Dennis DeBroeck'; Carol Borck
Cc: 'William J. Clancey'; 'Alan Bickell'; 'Jennifer Ayer Sandell'; bob@stoeckerandnorthway.com
Subject: RE: 130 Golden Hills Drive - Golden Hill HOA Comments

Dear Carol and the Golden Hills HOA Committee,

I just wanted to take this opportunity to clarify a few of the items before we get to ASCC.

Lighting:

a) Garage doors and skylight: The garage doors and ridge skylight were designed to allow the maximum amount of light in, minimize use of electric lighting during the day, match the design of the Owner's residence and maximize the feeling of being in an oak grove. We originally had glass sliding doors at the rear of the garage but opted, for aesthetic reasons, to balance the look with matching garage doors. The garage doors are glass to balance the large quantity of wood siding but frosted to limit light spillage and views inside. The nature of the garage use means very limited night occupation of that space, but per a note on the roof plan, the skylight has internal electric shades to limit light spill at night.

b) H1 fixture: I actually had removed the motion controlled H1 fixture in the last version of the lighting plan, but unfortunately, I neglected to replace it in the folder of files being sent to the printer. I apologize for that. There should be no H1 fixture but instead another H fixture that is symmetrical with the other one on the other side of the rear garage door. See attached lighting plan.

Air Condenser: We were not aware that the HOA required AC units to comply with the 50' setback. We read it only applied to buildings. We had not intended a full enclosure with a roof, just the wood retaining walls on the three sides. Portola Valley has a noise ordinance which those units will comply with. We are open to moving them within the)' setback if that is preferable. No extra AC is required due to the garage occupancy

(it is the same as a similarly sized residence) and the air compressor is not connected to those condensers in any way.

Please let us know if you need anything else clarified. Thanks!

Alena Campagna
Licensed Architect, LEED Green Associate
Stoecker & Northway Architects Inc.
1000 Elwell Court, Suite 150
Palo Alto, CA 94303
(650)965-3500 ph.
(650)965-1095 fax
www.stoeckerandnorthway.com <www.stoeckerandnorthway.com>

From: Dennis DeBroeck [mailto:DDebroeck@fenwick.com]
Sent: Wednesday, November 07, 2012 2:06 PM
To: 'Alena Campagna'; 'cborck@portolavalley.net'
Cc: 'William J. Clancey'; 'Alan Bickell'; 'Jennifer Ayer Sandell'
Subject: FW: 130 Golden Hills Drive - Golden Hill HOA Comments

Alena and Carol
The Golden Hills HOA Committee reviewed the materials provide by Stoecker &Northway for the construction of a building at 130 Golden Hills Dr. The Committee noted the following:

1. Deferral to Town and ASCC

- The building is primarily a garage and any considerations related to such usage were deferred to the Town and ASCC .

- Considerations of lighting were also deferred to the Town and ASCC, in part due to prior considerations of lighting with respect to the adjacent home and the concerns expressed by neighbors (most outside of the Golden Hills HOA) of the light emitted from that property. The Committee encouraged the ASCC to review the lighting and neighbor considerations generally and specifically:

a) The potential for light that could emit from the two garage doors (the doors have frosted glass panels and one door does not exit to a driveway) and ridge skylight.

) The motion triggered exterior flood lights (Labeled H1)-- for brightness of those

lights and potential for them being triggered by animals and staying on.

2. Air Condenser -Set Back –Potential Noise

The Committee noted there is a "Wood Retaining Wall for AC Condenser Enclosure" located within the 50 foot setback of the HOA and wanted to understand if it could be located outside of the 50 foot setback, closer to the building , and to confirm that the unit would not be noisy to a neighbor. Is the AC unit going to be enclosed? If so what is the nature of the enclosure? Given the garage usage of the building the Committee wanted to confirm that extra air conditioning is not required which would make the unit more noisy than one for a normal home and that it is not part of the air compressor usage (located inside in the metal shop) .

Respectively submitted

Golden Hills HOA

From: Alena Campagna [mailto:alena@stoeckerandnorthway.com]
Sent: Friday, October 19, 2012 3:14 PM
To: Dennis DeBroeck
Subject: 130 Golden Hills Drive - Email 2 of 2

Second and final e-mail. Thanks!

Alena Campagna
Licensed Architect, LEED Green Associate
Stoecker & Northway Architects Inc.
1000 Elwell Court, Suite 150
Palo Alto, CA 94303
(650)965-3500 ph.
(650)965-1095 fax
www.stoeckerandnorthway.com

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

November 14, 2012
V5232

TO: Carol Borck
Planning Technician
TOWN OF PORTOLA VALLEY
765 Portola Road
Portola Valley, California 94028

SUBJECT: **Geologic and Geotechnical Peer Review**
RE: Rubin, New Residence/Garage
130 Golden Hills Drive
Site Development Permit #X9H-644

At your request, we have completed a geologic and geotechnical peer review of the Site Development Permit application for the proposed residential development, using the following documents:

- Preliminary Geotechnical Investigation (report) prepared by Murray Engineers Inc., dated September 25, 2012;
- Architectural Plans (4 sheets, various scales) prepared by Storcker and Northway Architects Incorporated, dated September 21, 2012;
- Topographic Plan (1 sheet, 20-scale) prepared by Freyer and Laureta Inc., dated April 3, 2012;
- Septic Plans (1 sheet, 20-scale) prepared by S.R. Hartsell, REHS dated September 21, 2012; and
- Grading and Drainage Plans (3 sheets, various scales) prepared by Freyer and Laureta Inc., dated September 21, 2012.

In addition, we have reviewed pertinent technical documents from our office files and performed a recent site inspection.

DISCUSSION

We understand that the applicant is proposing to construct a new residence and an accessory building including a garage. According to the referenced plans, the current project permit application includes just the garage and workshop with a living unit above. We understand that the main residence will be addressed in a different permit application. Estimated earthwork quantities include approximately 170 cubic yards of cut and 105 cubic yards of fill.

SITE CONDITIONS

The subject property is generally characterized by moderately steep to steep (approximately 25 to 40 percent inclinations) northeast-facing hillslope topography. Past grading activities have resulted in several cut and fill pads. The largest fill pad is located in the southwestern portion of the property where steep (approximately 50 percent inclination) slopes surround the pad area. In this area an earth lined drainage swale traverses the pad diverting surface water toward the east. Another fill pad is located mid-slope of the property where the proposed garage/workshop will be located. Steep (approximately 50 percent inclination) slopes are associated with the fill located in this area. Other fill slopes are associated with the main driveway. Cuts for the various fill pads contain steep to very steep (approximately 50 to 60 percent inclination) slopes. Drainage at the site is generally characterized by uncontrolled sheetflow to the northeast.

According to the Town Geologic Map, the subject property is underlain, at depth, by bedrock materials of the Whiskey Hill Formation (i.e., sedimentary bedrock consisting of interbedded sandstone, siltstone and potentially expansive claystone). Sandstone bedrock is exposed in cuts located in the upper pad area and within the slope in the northern portion of the property. Siltstone bedrock was encountered at a depth of 6 feet below ground surface in boring B-1 and was not encountered in boring B-2 that reached a depth 8.9 feet. According to the Town Movement Potential Map the site is located primarily within an "Sbr" zone, which is defined as "*level ground to moderately steep slopes underlain by bedrock within approximately three feet of ground surface or less; relatively thin soil mantle may be subject to shallow landsliding, settlement and soil creep.*" The lower portions of the property are located within a "Ps" zone, defined as "*Unstable, unconsolidated material, commonly less than 10 feet in thickness, on gentle to moderately steep slopes subject to shallow landsliding, slumping, settlement and soil creep.*" During our site visit, we noted signs of surficial creep on the slopes above the proposed garage. The active San Andreas fault is located approximately 0.8 mile southwest of the project site.

CONCLUSIONS AND RECOMMENDED ACTION

The proposed residential development is constrained by the presence of potentially non-engineered fill, surficial slope creep, expansive soils and bedrock materials, and very strong to violent seismic ground shaking. Based on our review of the referenced documents, it appears that the Project Geotechnical Consultant has performed a geotechnical investigation of the site and provided preliminary geotechnical design recommendations that are in general conformance with prevailing standards of geotechnical practice. We recommend geotechnical approval of the Site Development Permit. The following Items 1 and 2 should be performed prior to building permit approval.

1. Construction Plans – Detailed residential construction plans should be submitted to the Town for review by the Town Engineer and Town Geotechnical Consultant.

2. Geotechnical Plan Review - The applicant's geotechnical consultant should review and approve all geotechnical aspects of the project construction plans (i.e., site preparation and grading, site drainage improvements and design parameters for the foundations and retaining walls) to ensure that their recommendations have been properly incorporated.

   The Geotechnical Plan Review should be submitted to the Town for review and approval by the Town Staff prior to approval of building permits. The following should be performed prior to final (as-built) project approval:

3. Geotechnical Construction Inspections - The geotechnical consultant should inspect, test and approve all geotechnical aspects of the project construction. The inspections should include, but not necessarily be limited to: site preparation and grading, site surface and subsurface drainage improvements, and excavations for foundations prior to placement of steel and concrete.

   The results of these inspections and the as-built conditions of the project should be described by the geotechnical consultant in a letter and submitted to the Town Engineer for review and approval prior to final (as-built) project approval.

LIMITATIONS

This geologic and geotechnical peer review has been performed to provide technical advice to assist the Town with its discretionary permit decisions. Our services have been limited to review of the documents previously identified, and a visual review of the property. Our opinions and conclusions are made in accordance with generally accepted principles and practices of the geotechnical profession. This warranty is in lieu of all other warranties, either expressed or implied.

Respectfully submitted,

COTTON, SHIRES AND ASSOCIATES, INC.
TOWN GEOTECHNICAL CONSULTANT

Ted Sayre
Principal Engineering Geologist
CEG 1795

David T. Schrier
Principal Geotechnical Engineer
GE 2334

TS:DTS:JN:kd

WOODSIDE FIRE PROTECTION DISTRICT

Prevention Division

4091 Jefferson Ave, Redwood City CA 94062 ~ www.woodsidefire.org ~ Fire Marshal Denise Enea 650-851-6206

ALL CONDITIONS MUST MEET WFPD SPECIFICATIONS – **go to www.woodsidefire.org for more info**

BDLG & SPRINKLER PLAN CHECK AND INSPECTIONS

PROJECT LOCATION:130 Golden Hills Dr	Jurisdiction: PV
Owner/Architect/Project Manager: Rubin	Permit#: x9h-644
PROJECT DESCRIPTION: new house	
Fees Paid: ☒$YES ☐ See *Fee Comments* Date:	
Fee Comments: $60.00 for ASRB pd 9/28/12 ck#3216	

BUILDING PLAN CHECK COMMENTS/CONDITIONS:

1. Must comply to Portola Valley Muni Code 15.04.020E for ignition resistant construction & materials Chapter 7 2010 CBC
2. Address clearly posted and visible from street w/minimum of 4" numbers on contrasting background.
3. Approved spark arrestor on all chimneys including outside fireplace
4. Install Smoke and CO2 detectors per code.
5. NFPA 13D Fire Sprinkler System to be installed.
6. 100' defensible space around proposed new structure prior to start of construction.
7. Upon final inspection 30' permiter defensible space will need to be completed.
8. If driveway is over 15% must have rough brushed surface approved by WFPD. If driveway over 150' must have approved turnaround. Driveway over 350' must have turnout. see www.woodsidefire.org
9. Fire hydrant must be within 500' of structure measured on approved roadway route. Submit building plan showing distance to proposed structure.

Reviewed by:D. Enea	Date: 10/29/12

☐Resubmit ☒Approved with Conditions ☐Approved without conditions

Sprinkler Plans Approved: NO	Date:	Fees Paid: ☐$350 ☐See *Fee Comments*
As Builts Submitted: ----------	Date:	As Builts Approved Date:
Fee Comments:		

Rough/Hydro Sprinkler Inspection By: ---------	Date:
Sprinkler Inspection Comments:	

Final Bldg and/or Sprinkler Insp By: --------	Date:

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: Carol Borck, Planning Tech
FROM: Howard Young, Public Works Director
DATE: 11/19/2012
RE: 130 Golden Hills Drive

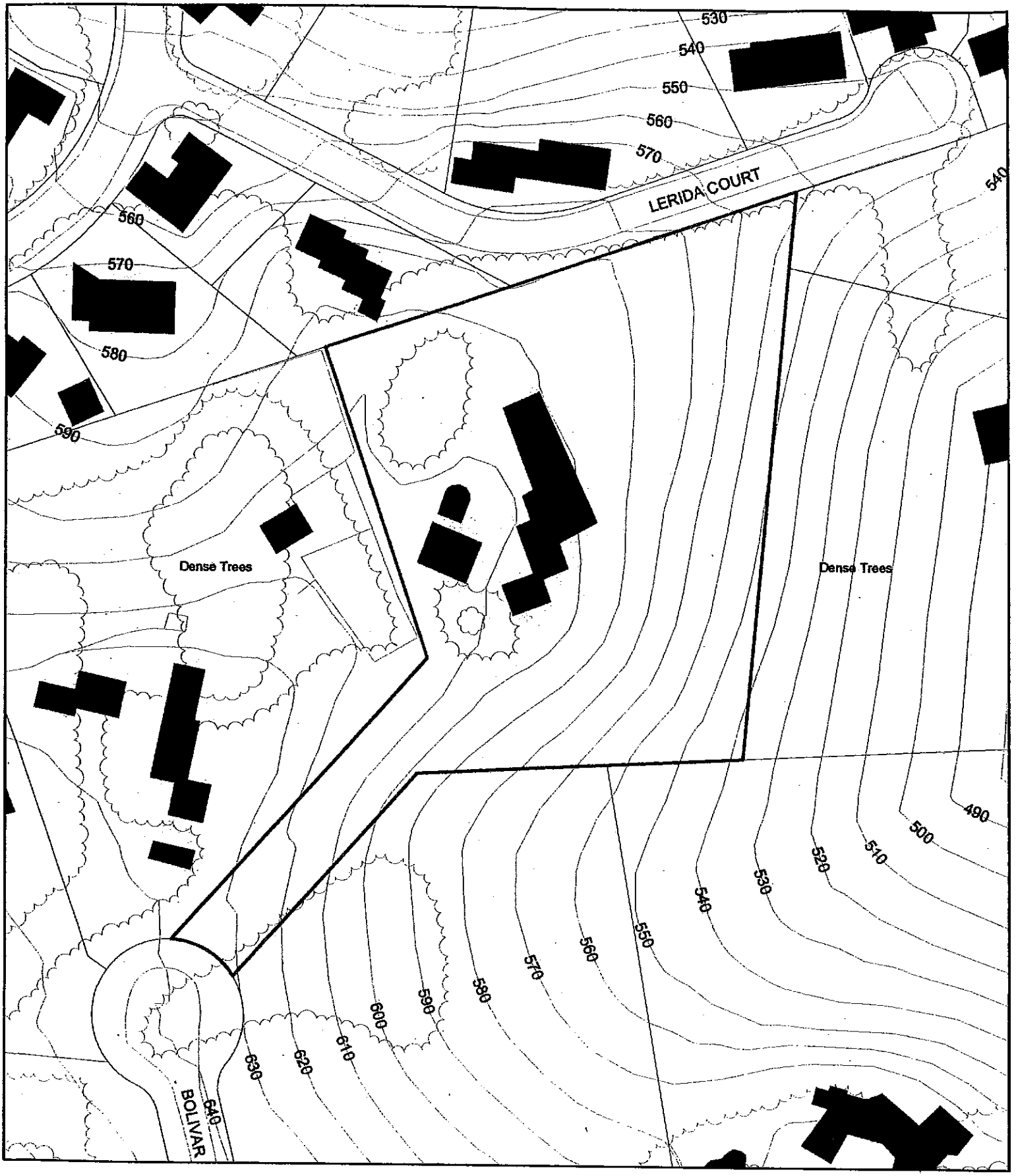
Site Development Grading, Drainage, and erosion Control plan comments:

1. All items listed in the most current "Public Works Site Development Standard Guidelines and Checklist" shall be reviewed and met. Completed checklist shall be submitted with building plans. Document is available on Town website.

2. All items listed in the most current "Public Works Pre-Construction Meeting for Site Development" shall be reviewed and understood. Document is available on Town website.

3. Any revisions to the Site Development permit set shall be highlighted and listed.

AR NEW RESIDENCE & X9H-646
187 BOLIVAR LANE, GOLDBAND



Vicinity Map
Scale: 1" = 200 feet

AR & X9H-646 New Residence – Goldband
187 Bolivar Lane, Town of Portola Valley
December 2012

Vicinity Map

Scale: 1" = 200 feet

AR & X9H-646 New Residence – Goldband

187 Bolivar Lane, Town of Portola Valley

December 2012

Fadell Arborist Report and Construction Mitigation Measures

Ned Patchett Arboricultural Consultant

Certified Arborist WC-4597
1894 Sunshine Valley Road Moss Beach, CA 94038
650 400-0020
ned@arboristconsultant.com

Arborist Report

Prepared For:
Tony Fadell
187 Bolivar
Portola Valley, CA 94028

Prepared by:
Ned Patchett, Certified Arborist WC-4597
Date: September 26, 2006
Revised: March 16-22, 2007

Table of Contents

Regarding: Trees located at 187 Bolivar in Portola Valley, California.

Summary

The site consist of primarily native species i.e. Coast Live Oaks, Blue Oaks, Valley Oaks and Bay Laurel. Coast Redwoods and Japanese Maples where also planted on-site during a landscape project. A large number of the Oaks have had the excess soil at the base of the root crowns removed. However, Root Wells have not been installed and soil and debris is building up again. In addition, it appears that some of the Oaks have been recently pruned and in some cases it appears that they have been overly thinned particularly on the inside of the canopy. In general most of my concerns with these trees are structural. I did find the state of tree 35 concerning and I believe this tree should be watched and tested for Sudden Oak Death to be precautionary. All the remaining Oaks on-site will greatly benefit from installation of Root Wells and regular maintenance.

Assignment

- Assess the health of the trees located in the vicinity of the proposed construction.
- Make recommendation on how to preserve the trees during the proposed construction.

Methodology

For purpose of identification, I have tagged the trees with numbered aluminum markers that correspond to the tree numbers in this report. In total I tagged 54 trees; trees outside of the proposed construction have been omitted from this report.

I did not perform any detailed root crown inspections and I did not climb any of the trees for this report.

In determining the Tree Condition several factors have been considered which include:

1) Rate of growth over several seasons
2) Structural decay or weaknesses
3) Presence of disease or insects
4) Life expectancy

Methodology continued

The following guide for interpretation of Tree Condition as related to Life Expectancy is submitted for you information.

0-5 Years = Poor
5-10 Years = Poor to Fair
10-15 Years = Fair
15-20 Years = Fair to Good
20+ Years = Good

Tree Number

Tree #1: Blue Oak *Quercus douglasii*
Diameter: 11-inches (stem 1) and 14-inches (stem 2)
Condition: Poor to Fair
Observation

- The root crown of this tree has been subjected to broadcast irrigation.
- Lower trunk has moss growing on it.

Recommendations

- Eliminate broadcast irrigation against trunk.
- Selective end weight reduction.
- Installation of a support cable.

Tree #2: Coast Live Oak *Quercus agrifolia*
Diameter: 15-inches
Condition: Poor to Fair
Observation

- Decay at the base of the trunk. (Refer to photo 1).
- Canopy looks sparse.

Recommendations
This tree is in decline and is susceptible to failure and I recommend removal.

Tree #3: Japanese maple *Acer palmatum*
Diameter: This tree has 3 main stems. The diameter at the base of this tree is 4-inches.
Condition: Good
Recommendations
No recommendations at this time.

Tree #4: Japanese maple *Acer palmatum*
Diameter: This tree has 3 main stems. The diameter at the base of this tree is 8-inches.
Condition: Poor to Fair
Observation

- The root crown of this tree has been subjected to broadcast irrigation. (Refer to photo 2)
- This tree has decay in the base of the root crown.

Recommendations
This tree is in decline and I recommend removal or elimination of all broadcast irrigation.

Tree #5: Japanese maple *Acer palmatum*
Diameter: 60-inches measured at 3 feet above grade
Condition: Fair
Observation

- This tree has bleeding/black ooze coming from the base of the root crown.

Recommendations
I recommend elimination of all broadcast irrigation in the vicinity of this tree.

Tree #6: Japanese maple *Acer palmatum*
Diameter: 4-inches at the base of the root crown
Condition: Good
Recommendations
No recommendations at this time.

Tree #7: Japanese maple *Acer palmatum*
Diameter: 2-inches
Condition: Good
Recommendations
No recommendations at this time.

Tree #8: Blue Oak *Quercus douglasii*
Diameter: 21-inches
Condition: Fair to Good
Observation

- Extensive dead branches in the canopy.

Recommendations

- Removal of all major dead branches.
- Selective end weight reduction.
- Removal of lower limbs to provide clearance for vehicles.
- Installation of a Root Well.
- Deep Root Fertilization.

Tree #9: Coast Live Oak *Quercus agrifolia*
Diameter: 26-inches
Condition: Poor to Fair
Observation

- Numerous pockets of decay. (Refer to photo 3)
- A large cavity was filled with concrete in the past. (Refer to photo 4)
- This tree has a major lean and has been cabled back to tree # 10.

Recommendations
Removal of this tree should be considered. However, if client would like to attempt to preserve this tree I recommend bi-annual end weight reduction and inspection of the support cable.

Tree #10: Blue Oak *Quercus douglasii*
Diameter: 30-inches
Condition: Fair
Observation

- Large limbs have been removed from this tree in the past that have resulted in pockets of decay.
- This tree was over thinned in the past.

Recommendations

- Deep root fertilization.
- Selective end-weight reduction as needed.
- Removal of all major dead branches.

Tree #11: Blue Oak *Quercus douglasii*
Diameter: 22-inches
Condition: Fair to Good
Observation

- The canopy of this tree is sparse.

Recommendations
I recommend deep root fertilization and removal of all major dead branches.

Tree #12: Blue Oak *Quercus douglasii*
Diameter: 15-inches
Condition: Fair
Observation

- The tree has a severe lean due to close proximity of tree # 13.

Recommendations

- Deep root fertilization.
- Selective end-weight reductions.
- Restore the existing Root Well.

Tree #13: Blue Oak *Quercus douglasii*
Diameter: 18-inches
Condition: Poor
Observation

- This tree has a sparse canopy.
- This tree has significant decay at the base of the trunk. (Refer to photo 4)

Recommendations
This tree is susceptible to failure and I recommend removal of this tree.

Tree #14: Blue Oak *Quercus douglasii*
Diameter: 20-inches
Condition: Good
Recommendations

- Minor end-weight reduction.
- Deep root fertilization.
- Installation of a root well.

Tree #15: Blue Oak *Quercus douglasii*
Diameter: 13-inches
Condition: Fair to Good
Observation

- A support cable has been installed in the tree.

Recommendations
I recommend deep root fertilization and installation of a Root Well.

Tree #16: Valley Oak *Quercus lobata*
Diameter: 29-inches
Condition: Poor to Fair
Observation

- This tree has shed a major limb in the past.

Recommendations
Removal of this tree should be considered. However if the client would like to preserve this tree I recommend the following:

- Removal of all major broken and dead branches.
- Installation of a Root Well.
- Installation of a support cable.
- Deep root fertilization.

Tree #17: Blue Oak *Quercus douglasii*
Diameter: 15-inches
Condition: Good
Observation

- The canopy of this tree is one-sided.

Recommendations

- I recommend minor end-weight reduction to restore balance to the canopy.
- Deep root fertilization.
- Removal of all major dead branches.
- Installation of a Root Well.

Tree #18: Blue Oak *Quercus douglasii*
Diameter: 18-inches
Condition: Good
Observation

- The canopy of this tree is one-sided.

Recommendations
I recommend minor end-weight reduction to restore balance to the canopy and installation of a Root Well. In addition, I recommend deep root fertilization

Tree #19: Coast Live Oak *Quercus agrifolia*
Diameter: 24-inches
Condition: Poor to Fair
Observation

- This tree has shed limbs in the past and pockets of decay have resulted.
- This tree has been attacked by Sycamore Bark Beetle in the past.

Recommendations

- Installation of a Root Well.
- Removal of broken limbs and major dead branches.
- Selective end-weight reduction.
- Deep root fertilization.

Tree #20: Coast Live Oak *Quercus agrifolia*
Diameter: 17-inches
Condition: Good
Recommendations
I recommend installation of a Root Well.

Tree #21: Blue Oak *Quercus douglasii*
Diameter: 20-inches
Condition: Good
Recommendations

- Removal of all broken limbs and any major dead branches.
- Minor end-weight reduction.
- Deep root fertilization.
- Installation of a Root Well.

Tree #22: Coast Live Oak *Quercus agrifolia*
Diameter: 16-inches
Condition: Fair to Good
Recommendations
I recommend deep root fertilization and installation of a Root Well.

Tree #23: Blue Oak *Quercus douglasii*
Diameter: 24-inches
Condition: Fair to Good
Observation

- The tree has a lean and the canopy is one-sided.

Recommendations

- Installation of a Root Well.
- Minor end-weight reduction
- Removal of all broken limbs and all major dead branches.
- Deep root fertilization.

Tree #24: Coast Live Oak *Quercus agrifolia*
Diameter: 35-inches
Condition: Good
Observation

- The tree has been attacked by Sycamore Bark Beetle in the past.

Recommendations

- Minor end-weight reduction.
- Installation of support cables as needed.
- Installation of a Root Well.
- Removal of all broken limbs and all major dead branches.
- Deep root fertilization.

Tree #25: Coast Live Oak *Quercus agrifolia*
Diameter: 35-inches
Condition: Poor to Fair
Observation

- This tree has a major cavity that was filled with concrete in the past.
- Minor decay in the root crown.
- The canopy of this tree appears to still be healthy.

Recommendations

- Selective end-weight reduction.
- Removal of all broken limbs and any major dead branches.
- Installation of support cables as needed.
- Installation of a Root Well.

Tree #26: Blue Oak *Quercus douglasii*
Diameter: 18-inches
Condition: Fair
Observation

- This tree has bleeding/black ooze from a wound on the lower trunk. (Refer to photo 5)

Recommendations

- Removal of all broken limbs and any major dead branches.
- Installation of a Root Well
- Deep root fertilization.

Tree #27: Coast Live Oak *Quercus agrifolia*
Diameter: 36-inches
Condition: Good
Observation

- This inside of the canopy was over-thinned.

Recommendations

- Deep root fertilization to promote new growth in the inner canopy
- Installation of a Root Well.
- .Selective end-weight reduction and removal of all major dead branches.

Tree #28: Coast Live Oak *Quercus agrifolia*
Diameter: 13-inches
Condition: Fair
Recommendations

- Installation of a Root Well.
- End weight reduction and removal of all major dead branches.
- Deep Root Fertilization.

Tree #29: Coast Live Oak *Quercus agrifolia*
Diameter: 10-inches
Condition: Fair
Observation

- The main trunk of this tree has a severe lean.

Recommendations
Removal of this tree should be considered due to the severe lean of the main trunk. However, if the client would like to save this tree I recommend the following.

- Installation of a pipe support or a support cable to compensate for the severe lean.
- Selective end-weight reduction and removal of all major dead branches.
- Installation of a Root Well.

Tree #30: Coast Live Oak *Quercus agrifolia*
Diameter: This tree has two main stems. 15-inches (stem 1) and 23-inches (stem 2)
Condition: Poor to Fair
Observation

- This tree has an abnormal growth structure.
- This tree has a cavity at the base of the main trunk. (Refer to photo 6)
- I suspect this tree has internal decay in the main stem.
- This tree has a pocket decay originating from removal of a major limb in the past. (Refer to photo 7)

Recommendations
Structurally this tree is susceptible to failure and I feel that removal should be considered. However, if the client would like to save this tree I recommend the following:

- End weight reduction and removal of all major dead branches.
- Installation of support cables to as needed.
- Installation of a Root Well.

Tree #31: Coast Live Oak *Quercus agrifolia*
Diameter: 20-inches
Condition: Poor to Fair
Observation

- This tree has dieback and dead branches in the canopy.
- A major branch shed in the past.
- This tree has cavity on the main trunk that was filled with concrete.

Recommendations
I feel removal of this tree should be considered. However, if the client would like to save this tree I recommend the following:

- End weight reduction and removal of all major dead branches.
- Deep root fertilization.
- Installation of a Root Well.

Tree #32: Blue Oak *Quercus douglasii*
Diameter: 17-inches
Condition: Good
Recommendations

- Removal of broken limbs and major dead branches.
- Installation of a Root Well.
- Deep root fertilization.

Tree #33: Blue Oak *Quercus douglasii*
Diameter: This tree has two main stems. 18-inches (stem 1) 12-inches (stem 2)
Condition: Fair to Good
Observation

- This tree does not have an upright central leader as a result of other trees growing in close proximity.
- This tree has a one-sided canopy.

Recommendations

- Selective end-weight reduction and removal of all major dead branches.
- Installation of a Root Well.
- Installation of a support cable.
- Deep root fertilization.

Tree #34: Blue Oak *Quercus douglasii*
Diameter: 13-inches
Condition: Fair
Observation

- This tree has a sparse canopy.
- This tree has a cavity at the base of the main trunk from a branch that was removed in the past. (Refer to photo 8)

Recommendations

- Removal of all major dead branches and minor end-weight reduction.
- Installation of a Root Well.
- Deep root fertilization.
- Annual root crown inspection to assess extent of decay at the base of the root crown.

Tree #35: Coast Live Oak *Quercus agrifolia*
Diameter: 21-inches
Condition: Fair to Poor
Observation

- This tree has a significant amount of dieback and dead branches.
- The trunk of this tree has been attacked by Sycamore Bark Beetle.
- This tree has a number of small bleeding/black oozing areas on the main trunk. (Refer to photo 9)
- It appears that this tree has an infestation of Ambrosia Beetle. (Refer to photo 10)
- That root crown on this tree has never been cleaned or inspected.
- There are California bay trees in close proximity.

Recommendations
I feel that removal of this tree should be considered. In addition, I think this tree should be tested for Sudden Oak Death.

Tree #36: Coast Live Oak *Quercus agrifolia*
Diameter: 23-inches
Condition: Fair
Observation

- This tree has bleeding/black ooze on the main trunk.
- The root crown has never been cleaned or inspected.
- A major limb was removed from the lower trunk in the past and fungus is currently growing on it.
- This tree has been attacked by Sycamore Bark Beetle.

Recommendations

- Deep root fertilization.
- Root crown inspection and Installation of a Root Well.
- Removal of all broken limbs and any major dead branches.

Tree #37: Coast Live Oak *Quercus agrifolia*
Diameter: 16-inches
Condition: Poor to Fair
Observation

- This tree has a lot of dieback in the canopy.
- This tree is located in a small circular island surrounded by black asphalt.

Recommendations

- Deep root fertilization.
- Remove of all major dead branches.
- Removal of lower limbs to provide clearance for vehicles.

Tree #38: Coast Live Oak *Quercus agrifolia*
Diameter: 13-inches
Condition: Good
Recommendations
No recommendations at this time.

Tree #39: Coastal Redwood *Sequoia sempervirens*
Diameter: 16-inches
Condition: Good
Observation
- This tree exhibits signs of drought stress.

Recommendations
- Deep root fertilization.
- Supplemental irrigation during spring and summer.
- Removal of all major dead branches and broken limbs.

Tree #40: Coastal Redwood *Sequoia sempervirens*
Diameter: 9-inches
Condition: Good
Observation
- This tree exhibits signs of drought stress.

Recommendations
- Deep root fertilization.
- Supplemental irrigation during spring and summer.
- Removal of all major dead branches and broken limbs.

Tree #41: Coastal Redwood *Sequoia sempervirens*
Diameter: 12-inches
Condition: Good
Observation
- This tree exhibits signs of drought stress.

Recommendations
- Deep root fertilization.
- Supplemental irrigation during spring and summer.
- Removal of all major dead branches and broken limbs.

Tree #42: Coast Live Oak *Quercus agrifolia*
Diameter: 9-inches
Condition: Good
Recommendations
- Deep root fertilization.
- Removal of the lower limbs at base of trunk.
- Removal of all major dead branches and broken limbs.

Tree #43: Coastal Redwood *Sequoia sempervirens*
Diameter: 8-inches
Condition: Good
Observation

- This tree exhibits signs of drought stress.

Recommendations

- Deep root fertilization.
- Supplemental irrigation during spring and summer.
- Removal of all major dead branches and broken limbs.

Tree #44: Coastal Redwood *Sequoia sempervirens*
Diameter: 9-inches
Condition: Good
Observation

- This tree exhibits signs of drought stress.

Recommendations

- Deep root fertilization.
- Supplemental irrigation during spring and summer.
- Removal of all major dead branches and broken limbs.

Tree #45: Coastal Redwood *Sequoia sempervirens*
Diameter: 11-inches
Condition: Fair to Good
Observation

- This tree exhibits signs of drought stress.
- This tree has unusual growth patterns on the main trunk.
- The main leader appears to have some dieback at the top of the canopy.

Recommendations

- Deep root fertilization.
- Supplemental irrigation during spring and summer.
- Removal of all major dead branches and broken limbs.

Tree #46: Coastal Redwood *Sequoia sempervirens*
Diameter: 9-inches
Condition: Good
Observation

- This tree exhibits signs of drought stress.

Recommendations

- Deep root fertilization.
- Supplemental irrigation during spring and summer.
- Removal of all major dead branches and broken limbs.

Tree #47: Coastal Redwood *Sequoia sempervirens*
Diameter: 8-inches
Condition: Good
Observation

- This tree exhibits signs of drought stress.

Recommendations

- Deep root fertilization.
- Supplemental irrigation during spring and summer.
- Removal of all major dead branches and broken limbs.

Tree #48: Coast Live Oak *Quercus agrifolia*
Diameter: 37-inches
Condition: Fair to Good
Observation

- This inside of the canopy was over-thinned.
- This tree has a pocket of decay on the main trunk between the two main stems. (Refer to photo 11)

Recommendations

- Deep root fertilization to promote new growth in the inner canopy.
- Root crown inspection and installation of a Root Well.
- Selective end-weight reduction and removal of all major dead branches.
- Installation of a support cable.

Tree #49: Coast Live Oak *Quercus agrifolia*
Diameter: 19-inches
Condition: Good
Observation

- It appears this tree was subject to minor topping in the past.

Recommendations

- Deep root fertilization.
- Root crown inspection and installation of a Root Well.
- Crown restoration and removal of all major dead branches.

Tree #50: Coast Live Oak *Quercus agrifolia*
Diameter: 21-inches
Condition: Good
Recommendations

- Deep root fertilization.
- Root crown inspection and installation of a Root Well.
- Removal of all major dead branches.

Tree #51: Coast Live Oak *Quercus agrifolia*
Diameter: 17-inches
Condition: Good
Recommendations

- Deep root fertilization.
- Root crown inspection and installation of a Root Well.
- Removal of all major dead branches.

Tree #52: Coast Live Oak *Quercus agrifolia*
Diameter: 9-inches
Condition: Good
Recommendations

- Deep root fertilization.
- Root crown inspection and installation of a Root Well.
- Removal of all major dead branches.

Tree #53: Coast Live Oak *Quercus agrifolia*
Diameter: 7-inches
Condition: Good
Recommendations
No recommendations at this time.

Tree #54: Blue Oak *Quercus douglasii*
Diameter: Roughly 35-inches.
Condition: Fair
Observation

- This is the neighbor's tree and it has fallen over the fence line.
- This tree has a major crack in the main trunk.

Recommendations

- Selective end-weight reduction.
- Installation of pipe support and support cables as needed
- Removal of all major dead branches.

Conclusion

The vast majority of the trees located on this property are healthy but lack proper maintenance. I have included Tree Preservation Measures to use as a guideline during the proposed construction. I believe if the Tree Preservation Measures and my recommendations in this report are properly followed these tree will provide years of enjoyment for the residents.

Respectfully Submitted,

Ned Patchett
Certified Arborist WC-4597

Enclosures:

1) Photographs-Appendix A
2) Tree Preservation Guidelines-Appendix B
3) Air-Spade Information-Appendix C

Appendix A-Photographs

Photo 1

Photo 2

Appendix A-Photographs continued

Photo 3

Photo 4

Appendix A-Photographs continued

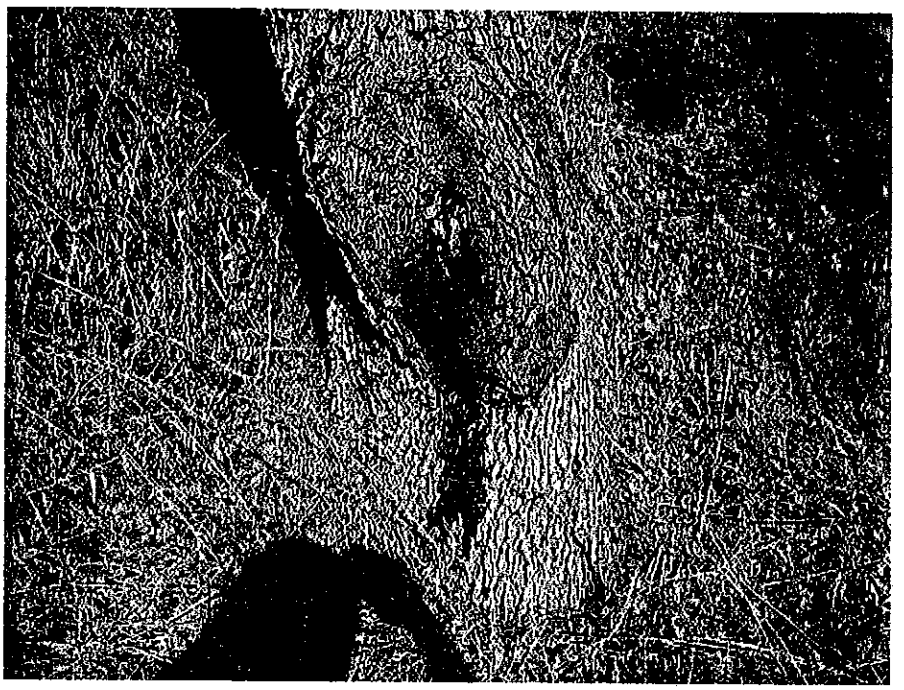


Photo 5

Photo 6

Appendix A-Photographs continued

Photo 7

Photo 8

Appendix A-Photographs continued

Photo 9

Photo 10

Appendix A-Photographs continued

Photo 11

Appendix B-Tree Preservation Guidelines

The following outlines the tree preservation measures to be used to preserve the existing tree(s) during the proposed construction.

Fencing Detail-A 6 foot tall chain link fence should be erected at the drip line of each tree(s) canopy to be preserved. All fencing must be secured to a metal post driven 18 inches into the ground spaced no further than ten feet (10') apart. Orange protective construction fencing is not acceptable. **The site arborist must approve the placement of the Tree Protection Fencing.**

Details for tree trimming and tree root trimming-Any tree pruning required for clearance during demolition or construction must be performed by a qualified tree professional and not by construction personnel. All pruning cuts should be performed in accordance with ISA standards. Any dead wood or broken branches should be removed. These trees should never be topped and pruning should be limited to removal of the lower limbs to provide clearance for construction/vehicular traffic. Any roots that need to be pruned should be cut with a sharp tool and do not slant the cuts. Do not leave crushed roots and do not treat root cuts with wound dressing. In addition, cover any exposed roots with burlap and keep the burlap moist until the roots can be covered again with soil.

Recommendations for mulching and fertilizer- I recommend covering the root zone of all protected trees with a 2-4" inch layer of coarse wood chips prior to construction. In addition, I recommend deep root fertilizing the tree(s) prior to construction to help combat any root loss that the tree(s) may be subjected to during the construction process. Fertilization will bolster the tree's health in order to reduce stress during the construction process as well as promote new root growth. I recommend using a Green Belt 22-14-14 fertilizer at a rate of 5 pound per 100 gallons unless otherwise noted. I recommend evaluating the trees after the proposed construction is complete for future fertilizing recommendations. Deep root fertilization should be performed in spring and summer when trees can take full advantage of nutrient uptake. Supplemental irrigation should be applied to these trees during the hot summer months.

There should be no materials, portable structures, stockpile of soil, etc. stored inside the chain link fence. All utility trenches and water run off should be directed away from the critical root zone (outside the chain link fence). All irrigation plans and lighting plans for the surrounding area should be reviewed by a Certified Arborist. If for any reason any trenching, excavation, grading, or transportation of equipment must be performed inside the critical root zone, a Certified Arborist should be contacted for inspection and approval prior to commencing with the work.

Appendix C- Air-Spade ™ Information

Air-Spade® is a hand held excavation tool that transforms pressurized air from a standard compressor into a "laser like" supersonic air jet. This amazing tool can dig in even the toughest soils and clays but is gentle to trees and plants. Air-Spade® will excavate tree and plant roots safely.

Air-Spade® has been used by arboricultural professionals for:
Root Location & Inspection
Root Collar Excavation
Plant Aeration and Vertical Mulching
Soil Compaction Relief
Transplanting
Rooting Pruning and Structure Analysis
Safely Locating Buried Utilities

The excavation speed and gentleness to plants of the Air-Spade® has seen it become the only choice in excavation hand tools for many Arborists, Landscapers, and Tree Professionals.

Addendum-Construction Mitigation Measures

Addendum Summary

On March 13, 2007 I met with Jim Stoecker of Stoecker and Northway Architects, Inc. to review the proposed construction plans for a new home for Tony Fadell located 187 Bolivar in Portola Valley, CA. During our walkthrough Jim showed my trees that would be impacted by the proposed construction. After our walkthrough Jim asked me to prepare construction mitigation recommendations as an addendum to my initial arborist report dated September 26, 2006.

Addendum Assignment

Based on phone conversations and a site meeting on March 13, 2007 with Jim Stoecker of Stoecker and Northway Architects, Inc. we agreed my assignment was to prepare specific construction mitigation recommendation for trees 10, 11, 23, 30 and 32.

Tree 10-Observations

1. This tree requires removal of a major scaffold branch to provide clearance for the master bedroom (see photo 12). It is my opinion that removal of this limb will significantly alter the appearance of this tree however, I believe the tree can tolerate removal of this limb. Additionally, this tree has a cable attached to tree 9 to support the significant lean of the main trunk of tree 9 (see photo 13).

2. In addition, the foundation for the proposed master bedroom is located eight feet from the trunk and within the critical root zone of this tree.

Tree 10-Recommendations

1. To compensate for the removal of the large scaffold branch needed for clearance of the proposed master bedroom I recommend selective removal of limbs on the adjacent side of the crown to maintain balance in the canopy of this tree. Additionally, the large scaffold branch was acting as a counterbalancing weight to offset the load of the cable attached to tree 9. The removal of this scaffold branch will leave a bulk of the remaining limbs on the same side of crown of this tree as the supporting cable attached to tree 9 making this tree heavy and overloaded to one side. Therefore, I recommend installation of a **pipe support**[1] on tree 9 (see example in photo 13) in order to reduce the load that is currently being placed on tree 10 by the support cable that is attached to tree 9. The removal of limbs and pipe support installation should be performed by a qualified arborist.

2. I recommend using pier and grade beams for the portion of the foundation located within the dripline/critical root zone of this tree. The beams must be laid on the existing grade

[1] **Pipe Support**- A pipe placed under branches or severely leaning stems to limit excessive motion and to reduce the chances of failure. Selective removal of branches is recommended prior to installation in order to reduce the load placed on the pipe support.

without any excavation into the critical root zone. Additionally, I recommend using an **Air-Spade**[2] (see Appendix C.) to excavate the holes for the piers. If during the excavation process significant roots are encountered the holes should be shifted to avoid damaging major roots. This works should be supervised by a certified arborist.

Tree 11-Observations

1. This tree may require selective limb removal for clearance of the proposed master bedroom.

2. A portion of the foundation for the proposed master bedroom is located within the dripline/critical root zone of this tree.

Tree 11-Recommendations

1. It is my opinion the selective limb removal for clearance of the proposed master bedroom will not harm this tree.

2. I recommend using pier and grade beams for the portion of the foundation located within the dripline/critical root zone of this tree. The beams must be laid on the existing grade without any excavation into the critical root zone. Additionally, I recommend using an Air-Spade to excavate the holes for the piers. If during the excavation process significant roots are encountered the holes should be shifted to avoid damaging major roots. This works should be supervised by a certified arborist.

Tree 23-Observations

A portion of the foundation for the proposed master bedroom is located within the dripline/critical root zone of this tree.

Tree 23-Recommendations

I recommend using pier and grade beams for the portion of the foundation located within the dripline/critical root zone of this tree. The beams must be laid on the existing grade without any excavation into the critical root zone. Additionally, I recommend using an Air-Spade to excavate the holes for the piers. If during the excavation process significant roots are encountered the holes should be shifted to avoid damaging major roots. This works should be supervised by a certified arborist.

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[2] **Air-Spade®** is a hand held excavation tool that transforms pressurized air from a standard compressor into a "laser like" supersonic air jet. This amazing tool can dig in even the toughest soils and clays but is gentle to trees and plants. Air-Spade® will excavate tree and plant roots safely.

Tree 30-Observations

This tree has decay in the main stems (see photos 14 & photo 15) and I suspect that it may have decay in the base of the root crown. In addition, the main leaders of this tree have grown in an abnormal manner with significant leans. The location of the proposed construction is located within the critical root zone of this tree.

Tree 30-Recommendations

I recommend performing a root crown inspection and drilling into the pockets of decay in the main trunk to determine the extent of decay. Depending on the extent of decay this tree may need to be removed. However, if the decay in this tree is minimal based upon the results of the root crown inspection and drilling inspections then I recommend the following to preserve this tree and minimize constructions impacts.

1. Installation of a two pipe supports (see example in photo 16) to compensate for the serious lean and over extended condition of the two main stems. Supports cables attached to tree 27 may be an option instead of pipe supports. The decision of which support application to use should be determine by the arborist performing the work. Selective end weight reduction should be performed on each main stem prior to installation of pipe supports or support cables.
2. Installation of a root well to prevent soil building up against the root crown of this tree.
3. Piers for the proposed deck located within the critical root zone should be excavated using an Air-Spade following the same recommendations outline for the foundation piers. In addition, if the foundation of the proposed home is located within the critical root zone of this tree then the recommendation of using pier and grade beams in this report should be followed.

Tree 32-Observations & Recommendations

A proposed retaining wall is located within the critical root zone of this tree. The portion of this wall located within the critical root zone/dripline of this tree should be set on existing grade without any excavation into the root zone.

Addendum Conclusion

All work performed within the critical root zone of trees to be preserved should be supervised and approved by an arborist. Trees that are going to be preserved that are located within the proposed construction zone should have Tree Protection Fencing erected at the edge of the dripline. The placement of the Tree Protection Fencing should be approved by the site arborist prior to demolition of the existing home and construction of the new home. No work should be performed within the Tree Protection Fencing without authorization and supervision of the site arborist. The Tree Preservation Guidelines included in the initial version of this arborist report should be used as reference for general tree preservation measures. I recommend fertilizing these trees in early spring prior to construction with an application rate of 5lbs of Green Belt 22-14-14 fertilizer per 100 gallons of water.

It is my opinion that if the outlined recommendations are properly followed, these trees will survive the proposed construction and provide years of enjoyment to Mr. Fadell and his family.

Respectfully Submitted,

Ned Patchett
Certified Arborist WC-4597

Addendum Photographs

Photo 16

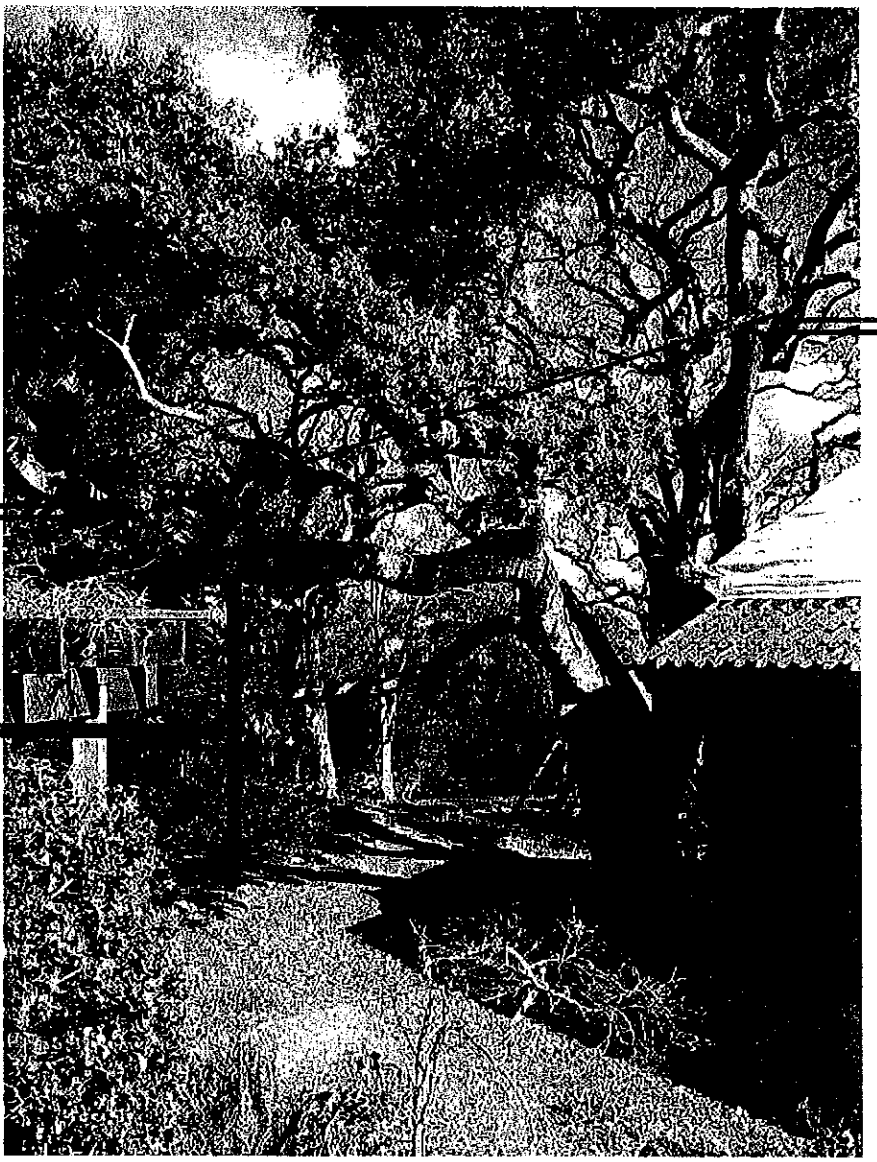
This is an example of the pipe support location on tree 30.

This is an example of the pipe support location on tree 30.

Photo 5 shows an example of a proposed location for the pipe supports for tree 30, the actually placement should be determined by the arborist performing the work. Examples are only for reference and should be considered actually locations!

Addendum Photographs

Photo 13



Cable attachment point on tree 10

Cable attachment point on tree 9

Example of a proposed location for the pipe support for tree 9, the actually placement should be determined by the arborist performing the work.

Addendum Photographs

Photo 14

Photo 3 shows the decay in the main trunk of tree 30.

Photo 15

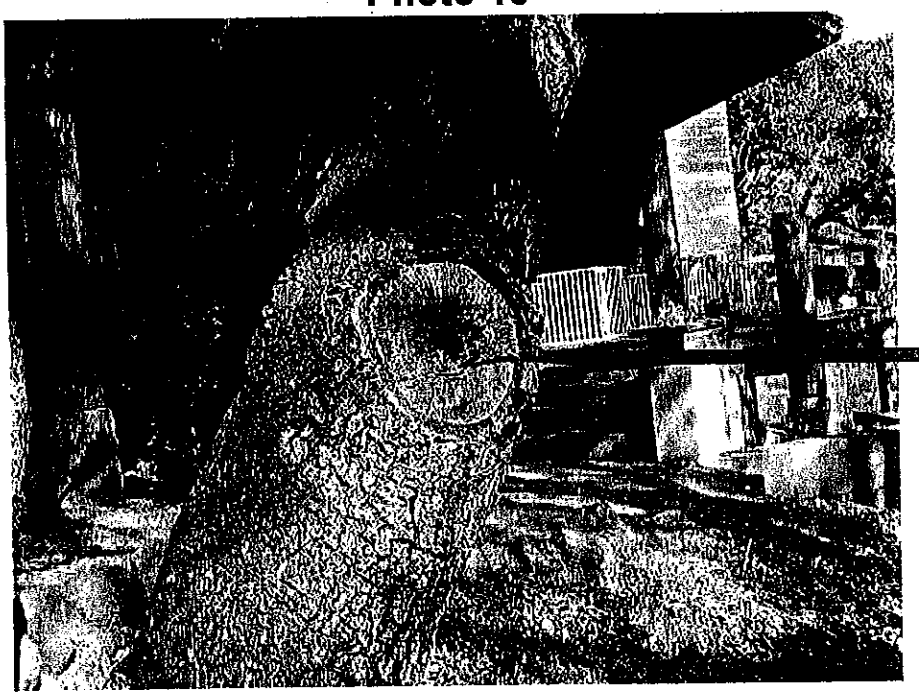
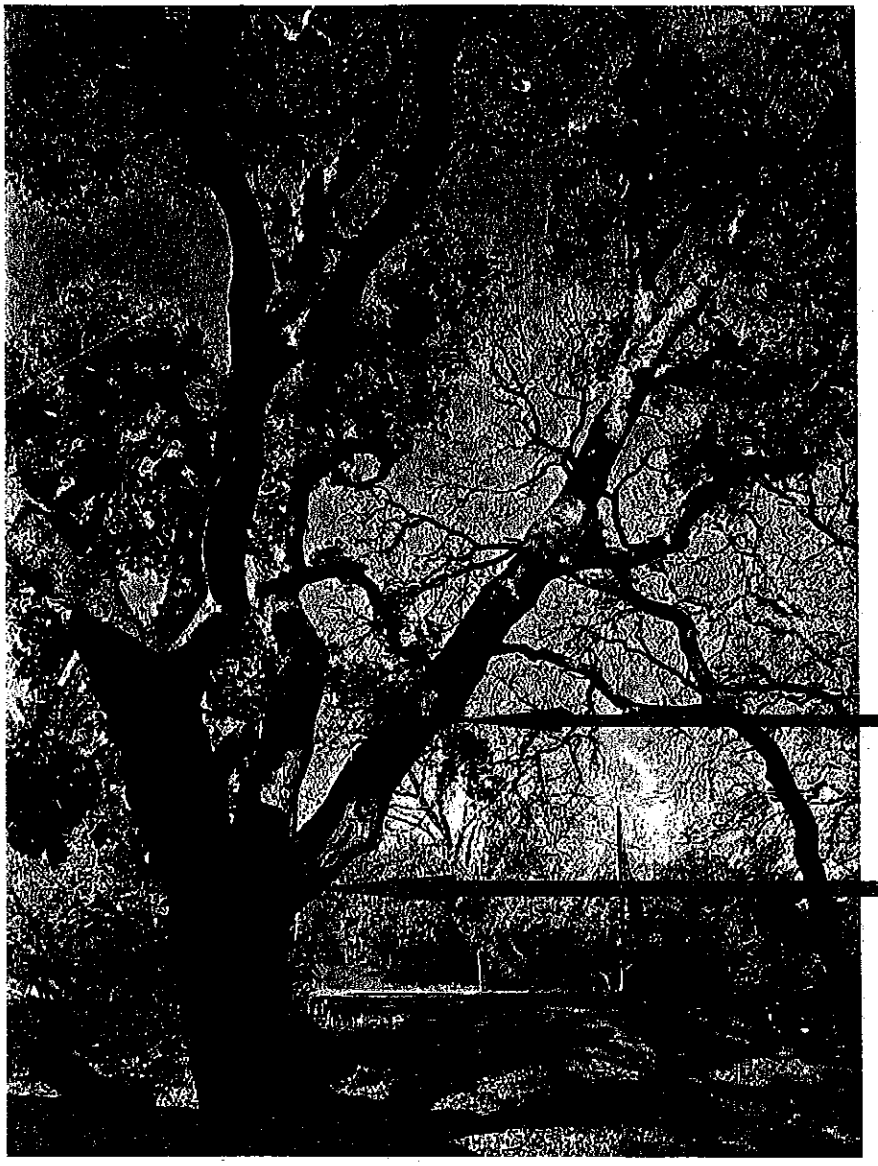


Photo 4 shows the decay in the other main trunk of tree 30.

Addendum Photographs

Photo 12



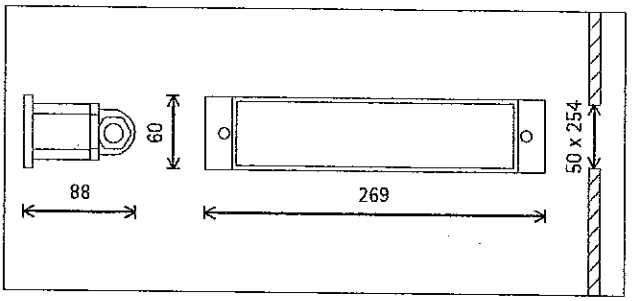
This entire limb requires removal for clearance of the proposed master bedroom.

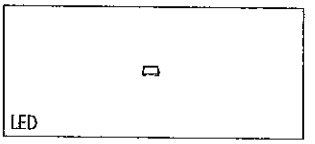
ERCO

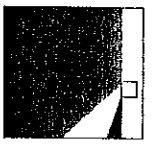
Axis Walklight

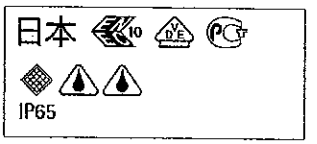
with LED

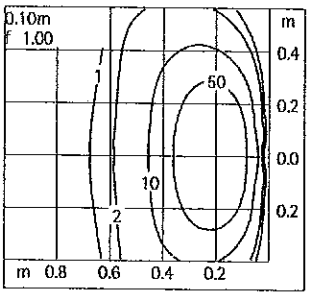
187 Bolivar Lane
Portola Valley











LED 1.7W 230V AC 90lm 4000K neutral white

33750.000 Reflector silver
LED 1.7W 230V AC 90lm 4000K neutral white
Version 2

Product description
Housing: corrosion-resistant cast aluminium, No-Rinse surface treatment. Graphit m, double powder-coated. Fixing element: plastic. Clamp extension 7-20mm.
2 cable entries. Through-wiring possible. 3-pole terminal block.
Asymmetric reflector lens system: aluminium, silver anodised. Optimised screening for the LEDs ensures no direct light emission. LED module.
Cover frame with Softec lens: corrosion-resistant cast aluminium, graphit m double powder-coated.
Protection mode IP65: dust-proof and water jet-proof.
On site protection must be provided using a residual current circuit breaker, FI≤30mA.
Weight 0.85kg

ERCO GmbH
Brockhauser Weg 80-82
58507 Lüdenscheid
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Tel.: +49 2351 551 0
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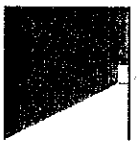
Technical Region: 230V/50Hz
We reserve the right to make technical and design changes.
Edition: 22.10.2011
Current version under
www.erco.com/33750.000

Kubus Façade and bollard luminaires

The outdoor luminaires of the Kubus range feature powerful light sources in an extremely compact form to accentuate façades or illuminate pathways near buildings. The system design of Kubus works universally with square housings using different lighting technologies. The safety glasses fitted within the luminaires produce flush surfaces that are easy to clean. By using recessed housing versions, the Kubus can be integrated into architecture discreetly. The combination of reflectors/lenses for Kubus luminaires results in precise and efficient light emissions without spill light and provides optimum visual comfort.

187 Bolivar Lane
Portola Valley

Washlighting
Wide-beam illumination of pathways and open areas.

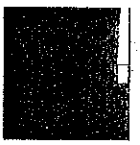


Floor washlights
Asymmetrical washlighting with a wide or deep beam for the illumination of pathways or squares.

LED
3,2W - 6,7W
240lm - 540lm
Wide beam, deep beam

High-pressure discharge lamps
20W
1800lm
Deep beam

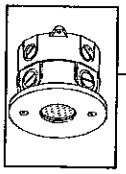
Accentuation
Emphasis of the façade produced by a narrow light beam.



Façade luminaires
Asymmetrical light distribution for accentuated façade lighting.

LED
3,2W - 6,7W
240lm - 540lm
Spot

High-pressure discharge lamps
20W
1800lm



the power of e with adjust-e-lume® TECHNOLOGY

VERSA STAR™

PROJECT:	
TYPE:	
CATALOG NUMBER:	
SOURCE:	
NOTES:	

CATALOG NUMBER LOGIC

Example:	S	- VS	- LED	- e25	- SP	- A6	- MAC	- 13	- 11	

Material
- Blank - Aluminum
- B - Brass
- S - Stainless Steel

Series
- VS - Versa Star™

Source
- LED - 'e' Technology with Integral Driver

LED Type
- e36 - 8WLED/2.7K
- e22 - 8WLED/3K
- e23 - 8WLED/4K
- e24 - 8WLED/Red
- e25 - 8WLED/Green
- e26 - 8WLED/Blue
- e27 - 8WLED/Amber

Optics*
- NSP - Narrow Spot (Red Indicator)
- SP - Spot (Green Indicator)
- MFL - Medium Flood (Yellow Indicator)
- WFL - Wide Flood (Blue Indicator)

Adjust-e-Lume® Output Intensity** *(Choose factory setting)*

A9 (Standard), A8, A7, A6, A5, A4, A3, A2, A1

***Please see Adjust-e-Lume® photometry to determine desired intensity.*

Finish

Aluminum Finish

Powder Coat Color	Satin	Wrinkle
Bronze	BZP	BZW
Black	BLP	BLW
White (Gloss)	WHP	WHW
Aluminum	SAP	—
Verde	—	VER

Brass Finish

Machined	MAC
Polished	POL
Mitique™	MIT

Stainless Finish

Machined	MAC
Polished	POL
Brushed	BRU *Interior use only.*

Premium Finish

ABP Antique Brass Powder	CMG Cascade Mountain Granite	RMG Rocky Mountain Granite
AMG Aleutian Mountain Granite	CRI Cracked Ice	SDS Sonoran Desert Sandstone
AQW Antique White	CRM Cream	SMG Sierra Mountain Granite
BCM Black Chrome	HUG Hunter Green	TXF Textured Forest
BGE Beige	MDS Mojave Desert Sandstone	WCP Weathered Copper
BPP Brown Patina Powder	NBP Natural Brass Powder	WIR Weathered Iron
CAP Clear Anodized Powder	OCP Old Copper	*Also available in RAL Finishes See submittal SUB-1439-00*

Lens Type
- 12 - Soft Focus Lens
- 13 - Rectilinear Lens

Shielding
- 11 - Honeycomb Baffle

LM79 DATA

BK No.	CCT (Typ.)	Input Watts (Typ.)	CRI (Typ.)
e36	2700K	8.4	90
e22	3100K	8.4	90
e23	4100K	8.4	75
e24	Red (627nm)	7.9	~
e25	Green (530nm)	8.4	~
e26	Blue (470nm)	8.4	~
e27	Amber (590nm)	7.9	~

L70 DATA

Minimum Rated Life (hrs.) 70% of Initial lumens (L_{70})
50,000
50,000
50,000
50,000
50,000
50,000
50,000

*OPTICAL DATA

Beam Type	Angle	Visual Indicator
Narrow Spot	14°	Red Dot
Spot	18°	Green Dot
Medium Flood	25°	Yellow Dot
Wide Flood	36°	Blue Dot

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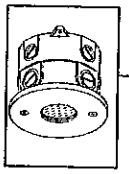
www.bklighting.com • info@bklighting.com

SUBMITTAL DATE: 6-27-12

DRAWING NUMBER: SUB001016



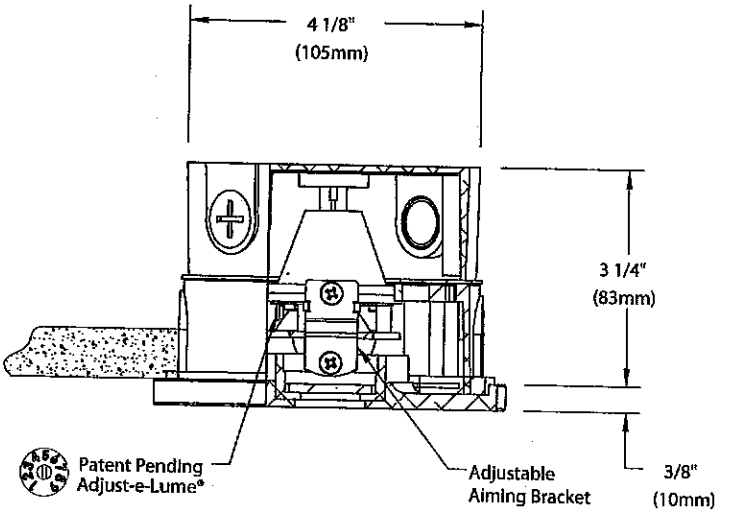
BKSSL SOLID STATE LIGHTING

the power of with adjust-e-lume® TECHNOLOGY

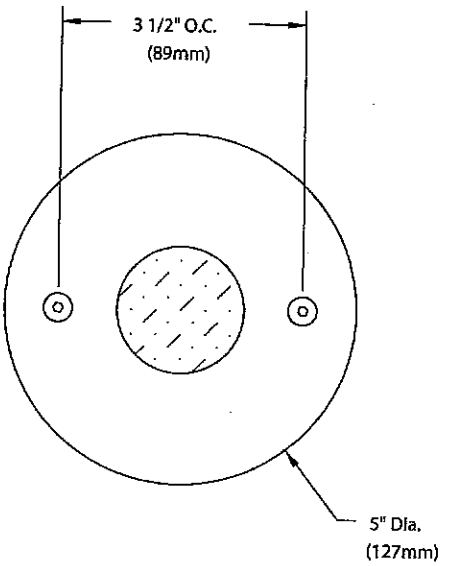
VERSA STAR™

PROJECT:	
TYPE:	

SIDE VIEW

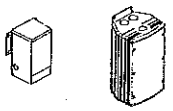


FACEPLATE DETAIL



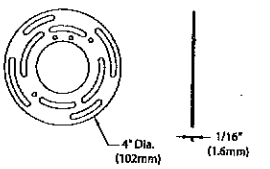
Accessories *(Configure separately)*

Remote options:



TR Series PMRM™

UNIVERSAL RING



All dimensions indicated on this submittal are nominal.
Contact Technical Sales if you require more stringent specifications.

SPECIFICATIONS

GreenSource Initiative™
Metal and packaging components are made from recycled materials. Manufactured using renewable solar energy, produced onsite. Returnable to manufacturer at end of life to ensure cradle-to-cradle handling. Packaging contains no chlorofluorocarbons (CFC's). Use of this product may qualify for GreenSource efficacy and recycling rebate(s). Consult www.bklighting.com/greensource for program requirements.

Materials
Furnished in Copper-Free Aluminum (Type 6061-T6), Brass (Type 360) or Stainless Steel (Type 316).

Backbox
Round, 4-1/4" dia. x 3-1/8" deep construction with [2] mounting tabs. Front access for wire connection and inspection. Provided with [5] 1/2" NPS tapped holes and [4] plugs. Suitable for concrete pour.

Faceplate
Fully machined from solid billet. Countersunk holes provide for flush hardware mounting with [2] tamper-resistant, stainless steel mounting screws. Stainless steel universal mounting ring for faceplate adjustment and 1/8" thick HT-805A silicone foam gasket with acrylic adhesive for water-tight seal. Accommodates [1] lens or louver media.

Lens
Shock resistant, tempered, glass lens is factory adhered to faceplate. Specify soft focus (#12) or rectilinear (#13) lens.

BKSSL™
Integrated solid state system with 'e' technology is scalable for field upgrade. Modular design with electrical quick disconnects permit field maintenance. High power, forward throw source complies with ANSI C78.377 binning requirements. Exceeds ENERGY STAR® lumen maintenance requirements. LM-80 certified components.

Integral non-dimming driver. Minimum 50,000 hour rated life at 70% of initial lumens (L70). BKSSL technology provides long life, significant energy reduction and exceptional thermal management.

Optics
Interchangeable OPTIKIT™ modules permit field changes to optical distribution. Color-coded for easy reference: Narrow Spot (NSP) = Red. Spot (SP) = Green. Medium Flood (MFL) = Yellow. Wide Flood = Blue. Adjustable optical bracket provides up to 24° vertical aiming.

Adjust-e-Lume® (Pat. Pending)
Integral electronics allows dynamic lumen response at the individual fixture. Indexed (100% to 25% nom.) lumen output. Maintains output at desired level or may be changed as conditions require. Specify factory preset output intensity.

Transformer
For use with 12VAC BKSSL remote transformer.

Wiring
Teflon® coated, 18AWG, 600V, 250° C rated and certified to UL 1659 standard.

Hardware
Tamper-resistant, stainless steel hardware. Faceplate screws are additionally black oxide treated for additional corrosion resistance.

Finish
StarGuard®, our exclusive RoHs compliant, 15 stage chromate-free process cleans and conversion coats aluminum components prior to application of Class 'A' TGIC polyester powder coating. Brass components are available in powder coat or handcrafted metal finish. Stainless steel components are available in handcrafted metal finish. (Brushed finish for interior use only).

Warranty
5 year limited warranty.

Certification and Listing
ITL tested to IESNA LM-79. Lighting Facts Registration per USDOE (www.lightingfacts.com). ETL Listed to ANSI/UL Standard 1838 and UL Subject 8750 and Certified to CAN/CSA Standard C22.2 No. 9. RoHs compliant. Suitable for indoor or outdoor use. Suitable for installation in combustible materials (Type Non-IC). Suitable for use in wet locations. Suitable for installation within 4' of the ground. IP65 Rated. Made in USA.

ETL Intertek USA lighting facts RoHS

*Teflon is a registered trademark of DuPont Corporation.
*Energy Star is a registered trademark of the United States Environmental Protection Agency.

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SUBMITTAL DATE	DRAWING NUMBER
6-27-12	SUB001016

adjust-e-lume® TECHNOLOGY

Photometry for use with e36 **2.7K**

Select OptiKit™ for desired distribution

RED	Narrow Spot (NSP)
GREEN	Spot (SP)
YELLOW	Medium Flood (MFL)
BLUE	Wide Flood (WFL)

Set adjust-e-lume™ Dial to desired output

Narrow Spot

Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	2.4	3.1	5.0	6.3	7.6	8.9	9.2	9.3	9.3
16'	3.8	4.9	7.9	9.9	11.9	13.9	14.3	14.6	14.6
12'	6.7	8.6	14.0	17.6	21.2	24.7	25.5	25.9	25.9
8'	15.1	19.4	31.4	39.7	47.6	55.5	57.3	58.3	58.3
4'	60.4	77.7	125.8	158.6	190.4	222.1	229.2	233.0	233.2

4' 2' 0' 2' 4'

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Spot

Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	1.6	2.1	3.3	4.3	5.3	5.9	6.1	6.3	6.3
16'	2.6	3.3	5.2	6.7	8.2	9.3	9.6	9.8	9.9
12'	4.5	5.8	9.3	12.0	14.7	16.5	17.0	17.5	17.5
8'	10.2	13.0	20.9	26.9	33.0	37.0	38.3	39.4	39.4
4'	40.9	52.1	83.4	107.8	131.9	148.1	153.1	157.5	157.8

8' 6' 4' 2' 0' 2' 4' 6' 8'

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Medium Flood

Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	0.9	1.3	2.0	2.5	3.1	3.4	3.6	3.6	3.6
16'	1.5	2.0	3.1	3.9	4.8	5.4	5.6	5.6	5.7
12'	2.6	3.6	5.5	6.9	8.6	9.5	9.9	9.9	10.1
8'	5.9	8.0	12.3	15.5	19.3	21.5	22.2	22.4	22.6
4'	23.6	32.1	49.3	62.2	77.1	85.8	88.9	89.5	90.5

10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10'

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Wide Flood

Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	0.4	0.6	0.9	1.1	1.4	1.6	1.6	1.7	1.7
16'	0.7	0.9	1.4	1.8	2.1	2.5	2.6	2.6	2.6
12'	1.2	1.6	2.5	3.2	3.8	4.4	4.6	4.7	4.7
8'	2.7	3.7	5.6	7.2	8.6	10.0	10.3	10.5	10.6
4'	10.9	14.8	22.3	28.6	34.3	39.9	41.1	42.2	42.3

14' 12' 10' 8' 6' 4' 2' 0' 2' 4' 6' 8' 10' 12' 14'

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

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adjust-e-lume® TECHNOLOGY

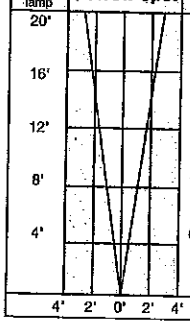
Photometry for use with e22 **3K**

Select OptiKit™ for desired distribution

RED	Narrow Spot (NSP)
GREEN	Spot (SP)
YELLOW	Medium Flood (MFL)
BLUE	Wide Flood (WFL)

Set adjust-e-lume™ Dial to desired output

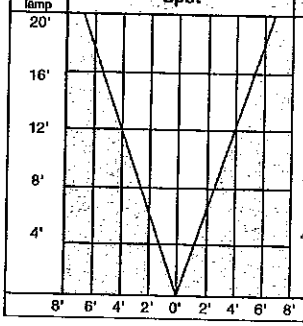
Narrow Spot



Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	2.4	2.9	4.9	6.1	7.3	8.8	9.1	9.3	9.3
16'	3.8	4.6	7.6	9.6	11.4	13.8	14.3	14.5	14.6
12'	6.7	8.2	13.5	17.0	20.3	24.5	25.4	25.7	25.9
8'	15.1	18.4	30.3	38.2	45.8	55.2	57.0	57.9	58.2
4'	60.3	73.6	121.3	152.8	183.1	220.9	228.2	231.6	232.8

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

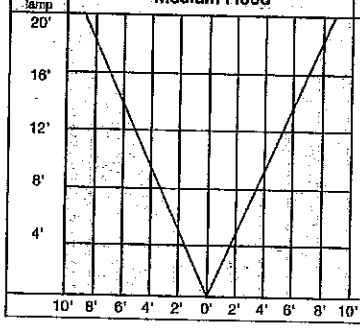
Spot



Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	1.6	2.1	3.1	4.1	4.9	6.0	6.1	6.2	6.3
16'	2.5	3.3	4.9	6.4	7.6	9.3	9.6	9.8	9.9
12'	4.5	5.9	8.7	11.4	13.5	16.6	17.0	17.3	17.5
8'	10.2	13.2	19.5	25.6	30.5	37.3	38.3	39.0	39.4
4'	40.6	52.7	78.1	102.3	121.9	149.1	153.1	156.0	157.8

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

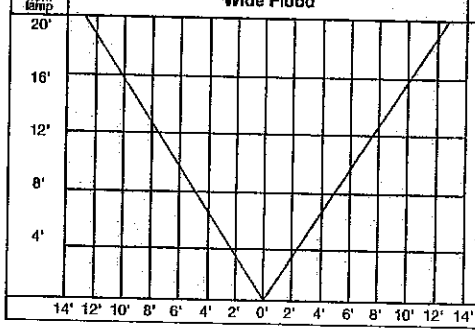
Medium Flood



Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	1.0	1.2	1.9	2.4	2.9	3.4	3.5	3.6	3.7
16'	1.5	1.8	2.9	3.8	4.6	5.3	5.4	5.7	5.8
12'	2.6	3.3	5.2	6.7	8.1	9.5	9.6	10.1	10.2
8'	6.0	7.4	11.8	15.0	18.3	21.3	21.6	22.8	23.0
4'	23.8	29.5	47.0	60.2	73.3	85.1	86.4	91.2	92.2

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Wide Flood



Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	0.4	0.5	0.9	1.1	1.3	1.6	1.7	1.7	1.7
16'	0.7	0.8	1.4	1.7	2.0	2.4	2.6	2.7	2.7
12'	1.2	1.5	2.5	3.0	3.5	4.3	4.7	4.7	4.7
8'	2.8	3.4	5.5	6.7	7.9	9.8	10.5	10.7	10.7
4'	11.1	13.4	22.2	26.8	31.7	39.0	41.9	42.6	42.7

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

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adjust-e-lume® TECHNOLOGY

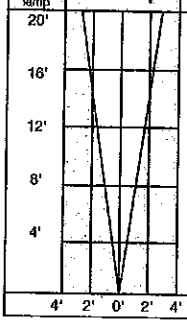
Photometry for use with e23 **4K**

Select OptiKit™ for desired distribution

RED	Narrow Spot (NSP)
GREEN	Spot (SP)
YELLOW	Medium Flood (MFL)
BLUE	Wide Flood (WFL)

Set adjust-e-lume™ Dial to desired output

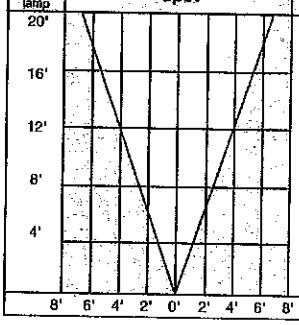
Narrow Spot



Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	2.7	3.7	5.5	6.9	8.5	10.1	10.4	10.6	10.6
16'	4.3	5.7	8.7	10.8	13.3	15.7	16.2	16.5	16.5
12'	7.6	10.2	15.4	19.2	23.6	27.9	28.8	29.3	29.4
8'	17.1	23.0	34.7	43.2	53.0	62.8	64.8	66.0	66.1
4'	68.6	91.9	138.6	172.9	212.1	251.3	259.2	263.8	264.3

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

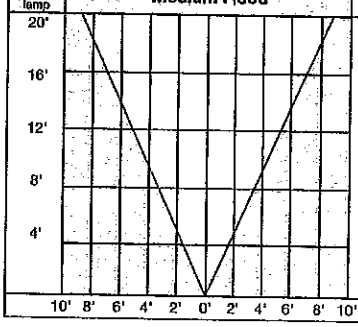
Spot



Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	1.9	2.4	3.7	4.8	6.0	6.8	7.1	7.1	7.1
16'	2.9	3.7	5.9	7.4	9.4	10.6	11.0	11.1	11.2
12'	5.2	6.6	10.4	13.2	16.7	18.9	19.6	19.8	19.8
8'	11.8	14.9	23.4	29.7	37.6	42.5	44.1	44.6	44.6
4'	47.0	59.6	93.6	118.9	150.3	170.1	176.3	178.3	178.6

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

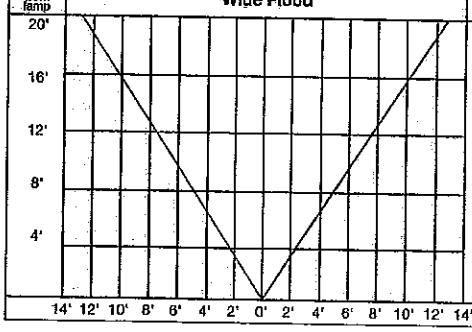
Medium Flood



Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	1.1	1.4	2.2	2.8	3.3	3.8	4.0	4.1	4.1
16'	1.7	2.1	3.4	4.3	5.1	5.9	6.3	6.4	6.4
12'	3.0	3.8	6.1	7.7	9.1	10.5	11.2	11.3	11.4
8'	6.7	8.5	13.8	17.3	20.5	23.7	25.2	25.4	25.6
4'	26.9	34.2	55.0	69.3	81.9	94.7	100.6	101.6	102.4

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

Wide Flood



Distance from lamp	Adjust-e-Lume™ Setting 1	2	3	4	5	6	7	8	9
20'	0.5	0.6	1.0	1.2	1.4	1.7	1.8	1.8	1.8
16'	0.8	1.0	1.5	1.8	2.2	2.7	2.8	2.8	2.9
12'	1.3	1.8	2.7	3.3	3.9	4.7	4.9	5.0	5.1
8'	3.0	4.0	6.0	7.3	8.8	10.7	11.1	11.3	11.4
4'	12.0	15.9	23.9	29.3	35.1	42.6	44.4	45.1	45.7

Note: If using No. 11 honeycomb baffle multiply footcandle values by .80

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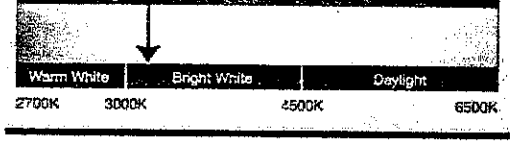
Versa Star™ - Spot

lighting facts℠

A Program of the U.S. DOE

Light Output (Lumens)	**253**
Watts	**8.2**
Lumens per Watt (Efficacy)	**30**
Color Accuracy Color Rendering Index (CRI)	**83**

Light Color Correlated Color Temperature (CCT) **3182 (Bright White)**



All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: GCXV-3AR16G
Model Number: VS-LED-e22-SP-12
Type: Outdoor path/step/rail light

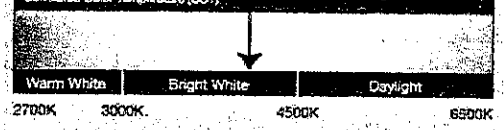
Versa Star™ - Spot

lighting facts℠

A Program of the U.S. DOE

Light Output (Lumens)	**354**
Watts	**8.1**
Lumens per Watt (Efficacy)	**43**
Color Accuracy Color Rendering Index (CRI)	**68**

Light Color Correlated Color Temperature (CCT) **4080 (Bright White)**



All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: GCXV-EH83XB
Model Number: VS-LED-e23-SP-12
Type: Surface-mounted downlight

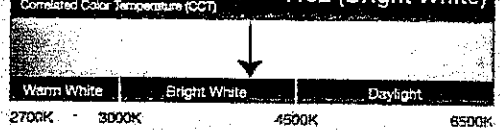
Versa Star™ - Narrow Spot

lighting facts℠

A Program of the U.S. DOE

Light Output (Lumens)	**365**
Watts	**8.2**
Lumens per Watt (Efficacy)	**44**
Color Accuracy Color Rendering Index (CRI)	**68**

Light Color Correlated Color Temperature (CCT) **4102 (Bright White)**



All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: GCXV-R6X37A
Model Number: VS-LED-e23-NSP-12
Type: Surface-mounted downlight

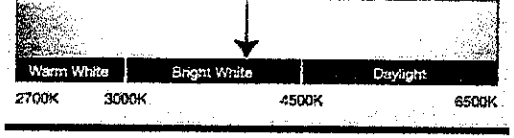
Versa Star™ - Med. Flood - Rectilinear

lighting facts℠

A Program of the U.S. DOE

Light Output (Lumens)	**299**
Watts	**8.5**
Lumens per Watt (Efficacy)	**35**
Color Accuracy Color Rendering Index (CRI)	**66**

Light Color Correlated Color Temperature (CCT) **4022 (Bright White)**



All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: GCXV-LLPF4T
Model Number: VS-LED-e23-MFL-13
Type: Surface-mounted downlight

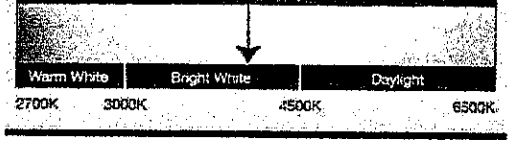
Versa Star™ - Med. Flood

lighting facts℠

A Program of the U.S. DOE

Light Output (Lumens)	**346**
Watts	**8.2**
Lumens per Watt (Efficacy)	**42**
Color Accuracy Color Rendering Index (CRI)	**68**

Light Color Correlated Color Temperature (CCT) **4047 (Bright White)**



All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

Registration Number: GCXV-JMYRVL
Model Number: VS-LED-e23-MFL-12
Type: Surface-mounted downlight

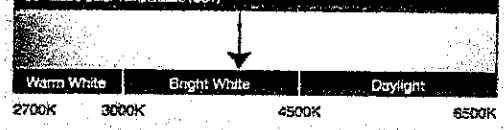
Versa Star™ - W Flood

lighting facts℠

A Program of the U.S. DOE

Light Output (Lumens)	**345**
Watts	**8.3**
Lumens per Watt (Efficacy)	**41**
Color Accuracy Color Rendering Index (CRI)	**67**

Light Color Correlated Color Temperature (CCT) **3981 (Bright White)**

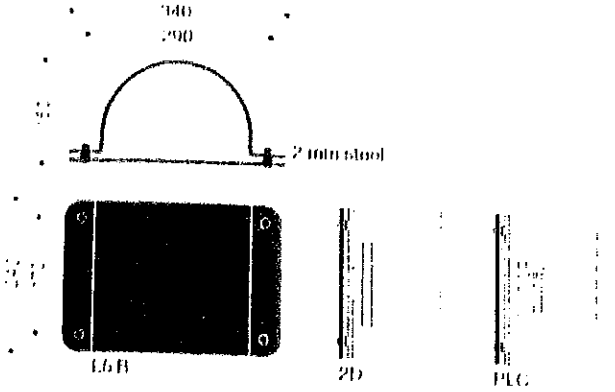


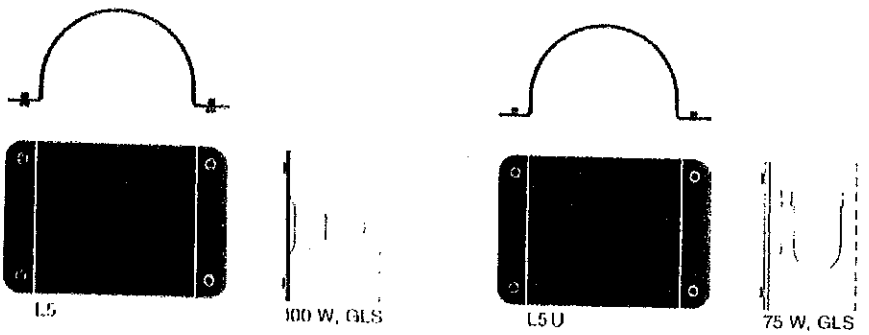
All results are according to IESNA LM-79-2008: *Approved Method for the Electrical and Photometric Testing of Solid-State Lighting.* The U.S. Department of Energy (DOE) verifies product test data and results.

Visit www.lightingfacts.com for the *Label Reference Guide*.

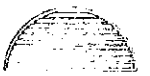
Registration Number: GCXV-AW47P6
Model Number: VS-LED-e23-WFL-12
Type: Surface-mounted downlight

L5B L5/L5U

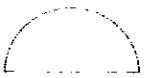




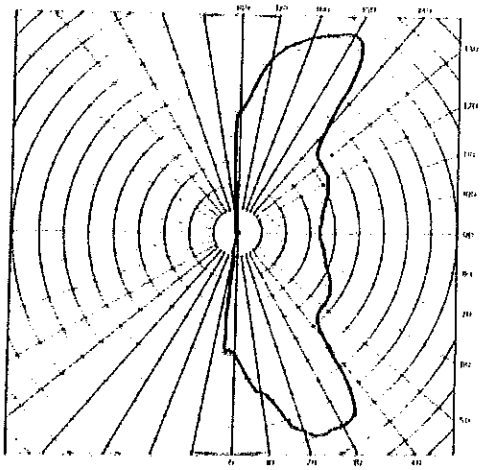
Extra Accessories:
metal grid

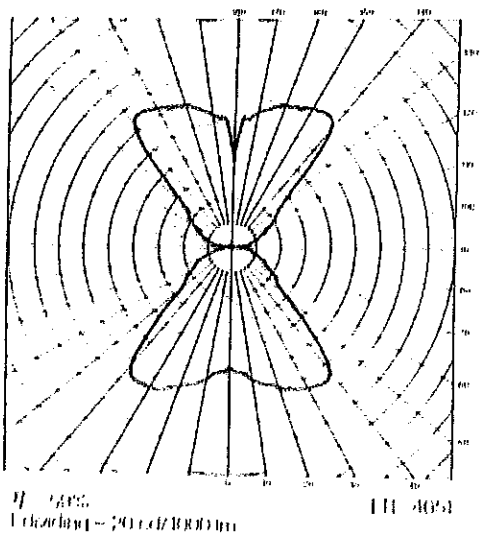


acrylic shade



L5/L5B/GLS





Lampas 5 and 5B Wall Fixture

: 100 W, E27, GLS.

: 16 W, 2D.

: 13 W, G24d-1, PLC.

Classification: IP20.
Insulation Class: I.

Approvals: Ⓓ Ⓝ Ⓢ VDE
Complies with BS4533.

Fitting:
2 mm stove enamelled steel rectangular backplate and shade.

When ordering quote:
L5 – GLS + Colour Number.
L5 – PLC + Colour Number.
L5 – 2D + Colour Number.
L5B – GLS + Colour Number.
L5B – PLC + Colour Number.
L5B – 2D + Colour Number.

Lampas 5U External Wall Fixture

: 75 W, E27, GLS.

Classification: IP44.
Insulation Class: II.

Approvals: Ⓓ Ⓝ Ⓢ VDE
Complies with BS4533.

Fitting:
2 mm stove enamelled galvanised steel.

When ordering quote:
L5U – GLS + Colour Number.

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: Carol Borck, Planning Tech
FROM: Howard Young, Public Works
DATE: 12/5/12
RE: 187 Bolivar

Site Development Grading, Drainage, and erosion Control plan comments:

1. All items listed in the most current "Public Works Site Development Standard Guidelines and Checklist" shall be reviewed and met. Completed checklist shall be submitted with building plans. Document is available on Town website.

2. All items listed in the most current "Public Works Pre-Construction Meeting for Site Development" shall be reviewed and understood. Document is available on Town website.

3. Any revisions to the Site Development permit set shall be highlighted and listed.

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

December 4, 2012
V0137B

TO: Carol Borck
Planning Technician
TOWN OF PORTOLA VALLEY
765 Portola Road
Portola Valley, California 94028

SUBJECT: Geologic and Geotechnical Peer Review
RE: Goldband, New Residence
187 Bolivar Lane
Site Development Permit #X9H-646

At your request, we have completed a geologic and geotechnical peer review of the Site Development Permit application for the proposed residential development, using the following documents:

- Geotechnical Investigation (report) prepared by Murray Engineers Inc., dated November 20, 2012;
- Geotechnical Investigation (report) prepared by Pacific Geotechnical Engineering, dated October 18, 2006;
- Architectural Plans (4 sheets, various scales) prepared by Field Architecture Incorporated, dated November 7, 2012;
- Topographic Survey Plans (6 sheets, 10-scale) prepared by Lea & Braze Inc., dated October 25, 2012; and
- Grading and Drainage Plan and Erosion Control Plan (7 sheets, various scales) prepared by Lea & Braze Inc., dated November 8, 2012.

In addition, we have reviewed pertinent technical documents from our office files and performed a recent site inspection.

DISCUSSION

We understand that the applicant is proposing to construct a new residence, guest house, and tennis court at the subject property. Structures that previously occupied the subject site have been demolished. Access to the site is via an existing driveway from Bolivar Lane.

SITE CONDITIONS

The subject property is generally characterized by gentle to steep (approximately 11 to 45 percent inclinations) east-facing hillslope topography. Past grading activities have resulted in several cut and fill pads. The driveway was also constructed using cuts and fills. The existing fill slopes are moderately steep to very steep (approximately 25 to 55 percent inclinations) and extend across the proposed guest house and tennis court as well as the existing driveway. Drainage at the site is generally characterized by uncontrolled sheetflow to the east.

According to the Town Geologic Map, the subject property is underlain, at depth, by greenstone of the Franciscan Complex. Weathered greenstone bedrock was encountered beneath fill and colluvium/residual soil in borings drilled at the site. According to the Town Movement Potential Map the site is located primarily within an "Sbr" zone, which is defined as "*level ground to moderately steep slopes underlain by bedrock within approximately three feet of ground surface or less; relatively thin soil mantle may be subject to shallow landsliding, settlement and soil creep.*" The northernmost portion of the property is located within a "Pd" zone, defined as "*Unstable, unconsolidated material, commonly more than 10 feet in thickness, on moderate to steep slopes subject to deep landsliding.*" It appears that the proposed development does not extend into the mapped Pd zone. During our site visit, we noted distress within the existing driveway. The active San Andreas fault is located approximately 2.8 kilometers (1.7 miles) southwest of the project site, and the Monta Vista-Shannon fault is located 1.6 kilometers (1.0 mile) southwest of the project site.

CONCLUSIONS AND RECOMMENDED ACTION

The proposed residential development is constrained by the presence of potentially non-engineered fill, surficial slope creep, expansive soils, localized deep-

seated landsliding, and very strong to violent seismic ground shaking. The conclusions in the referenced report by the Project Geotechnical Engineer (Murray Engineers) are based upon subsurface exploration and laboratory testing conducted by a previous consultant. In the event that the subsurface conditions vary from those anticipated based upon the borings and laboratory testing, design changes may be required. Based upon the distress noted along the outboard edge of the driveway, it appears that any improvement to the driveway should include the removal and replacement of creeping/ settling fill, as suggested by the Project Geotechnical Consultant in the referenced report.

We recommend geotechnical approval of the Site Development Permit. The following Item 1 should be completed prior to building permit approval.

1. Geotechnical Plan Review - The applicant's geotechnical consultant should review and approve all geotechnical aspects of the project construction plans (i.e., site preparation and grading, site drainage improvements and design parameters for the foundations and retaining walls) to ensure that their recommendations have been properly incorporated.

   The Geotechnical Plan Review should be submitted to the Town for review and approval by the Town Staff prior to approval of building permits. The following should be performed prior to final (as-built) project approval:

2. Geotechnical Construction Inspections - The geotechnical consultant should inspect, test and approve all geotechnical aspects of the project construction. The inspections should include, but not necessarily be limited to: site preparation and grading, site surface and subsurface drainage improvements, and excavations for foundations prior to placement of steel and concrete.

   The results of these inspections and the as-built conditions of the project should be described by the geotechnical consultant in a letter and submitted to the Town Engineer for review and approval prior to final (as-built) project approval.

LIMITATIONS

This geologic and geotechnical peer review has been performed to provide technical advice to assist the Town with its discretionary permit decisions. Our services have been limited to review of the documents previously identified, and a visual review of the property. Our opinions and conclusions are made in accordance with generally accepted principles and practices of the geotechnical profession. This warranty is in lieu of all other warranties, either expressed or implied.

Respectfully submitted,

COTTON, SHIRES AND ASSOCIATES, INC.
TOWN GEOTECHNICAL CONSULTANT

Ted Sayre
Principal Engineering Geologist
CEG 1795

David T. Schrier
Principal Geotechnical Engineer
GE 2334

TS:DTS:PJ:kd

WOODSIDE FIRE PROTECTION DISTRICT

Prevention Division

4091 Jefferson Ave, Redwood City CA 94062 ~ www.woodsidefire.org ~ Fire Marshal Denise Enea 650-851-6206

ALL CONDITIONS MUST MEET WFPD SPECIFICATIONS – **go to www.woodsidefire.org for more info**

BDLG & SPRINKLER PLAN CHECK AND INSPECTIONS

PROJECT LOCATION:187 Bolivar	Jurisdiction: PV
Owner/Architect/Project Manager: Goldband	Permit#: x9h-646
PROJECT DESCRIPTION: new house & guest house	
Fees Paid: ☐$YES ☒ See *Fee Comments* Date:	
Fee Comments: Pd $60.00 for ASRB ck# 268	

BUILDING PLAN CHECK COMMENTS/CONDITIONS:

1. Must comply to Portola Valley Muni Code 15.04.020E for ignition resistant construction & materials Chapter 7 2010 CBC
2. Address clearly posted and visible from street w/minimum of 4" numbers on contrasting background.
3. Approved spark arrestor on all chimneys including outside fireplace
4. Install Smoke and CO2 detectors per code.
5. NFPA 13D Fire Sprinkler System to be installed in house and guest house.
6. 100' defensible space around proposed new structure prior to start of construction.
7. Upon final inspection 30' permiter defensible space will need to be completed.
8. Fire truck turn around is required (as shown) driveway to maintain min of 12' width. Driveway slopes over 15% must have rough brushed surface (field approved by WFPD)
9. Fire hydrant must be within 500' of structure measured on approved roadway route. ASRB plan show shows hydrant is within 500'

Reviewed by:D. Enea	Date: 12/5/12

☐Resubmit ☒Approved with Conditions ☐Approved without conditions

Sprinkler Plans Approved: NO	Date:	Fees Paid: ☐$350 ☐See *Fee Comments*
As Builts Submitted: ----------	Date:	As Builts Approved Date:
Fee Comments:		

Rough/Hydro Sprinkler Inspection By: ---------	Date:
Sprinkler Inspection Comments:	

Final Bldg and/or Sprinkler Insp By: --------	Date:

187 BOLIVAR LANE

CONSERVATION COMMITTEE - preliminary report. 11/27/12

A subcommittee visited the site, and committee discussed at meeting. The story poles are just beginning to be erected and do not seem to match the plans – a tape is immediately adjacent to 2 oaks that are some distance from the house on the plans. ASCC plans a site visit on 12/10/12 and conservation members would like to attend that meeting.

The landscape plan shows remarkable restraint and is admirably appropriate for this site. It is a model other landscape designers should emulate.

Existing vegetation:

Redwoods along SW boundary show drought stress and the committee would have no objection should the property owner decide to remove these trees. We encourage the removal of several peppers and acacias.

In addition to the landscaped areas detailed in the submitted plan, there is a large area of open, steep and uncultivated hillside. It is currently primarily oak woodland habitat, in undisturbed condition.

The committee strongly recommends that this area remain undisturbed and in its native condition, both to preserve the rural atmosphere of the neighborhood and to provide habitat for local wildlife. Any work done on the property should fully protect this area from the effects of construction debris and runoff. Erosion control should be carefully implemented.

Impermeable Surfaces

Impermeable surfaces should be kept to a minimum. This plan has extensive driveway/patio/pathways/decking and tennis court. Consideration should be given to having some large portion of this laid on a pervious base.

Respectfully submitted,
Judith Murphy, Chair

RECEIVED

NOV 13 2012

OUTDOOR WATER USE EFFICIENCY CHECKLIST

To Be Completed by Applicant

I certify that the subject project meets the specified requirements of the Water Conservation in Landscaping Ordinance.

Signature: Diane Hayford, Skyline design studio — Date: 11-9-12

NOV 09 2012

Project Information

☑ Single Family ☐ Multi-Family ☐ Commercial ☐ Institutional ☐ Irrigation only ☐ Industrial ☐ Other:

Applicant Name (print): Steve Golband — Contact Phone #: 650 387-8765

Project Site Address: 187 Bolivar Ave. Portola Valley CA

Project Area (sq.ft. or acre): 3.1 acr. 135,036 SF — # of Units: 1 — # of Meters: 1

For a single-family project, or a single-family development project, enter this information on an average, per unit basis. For all other projects, input an aggregate value for the entire project.

		Agency Review (Pass) (Fail)
Total Landscape Area (sq.ft.): 1400 ±	☐ Tier 1 (2,000 - 2,500 sq.ft.) ☐ Tier 2 (> 2,500 sq.ft.)	☐ ☐
Turf Irrigated Area (sq.ft.): -0-		☐ ☐
Non-Turf Irrigated Area (sq.ft.): 1400± Temporary Irrigation		☐ ☐
Special Landscape Area (SLA) (sq.ft.): -0-		☐ ☐
Water Feature Surface Area (sq.ft.): 227±		

Landscape Parameter	Requirements	Project Compliance	Agency Review (Pass) (Fail)
Turf	Less than 25% of the landscape area is turf	☑ Yes ☐ No, See Water Budget	☐ ☐
	All turf areas are > 8 feet wide	☐ Yes	☐ ☐
	All turf is planted on slopes < 25%	☐ Yes	☐ ☐
Non-Turf	At least 80% of non-turf area is native or low water use plants	☑ Yes ☐ No, See Water Budget	☐ ☐
Hydrozones	Plants are grouped by Hydrozones	☑ Yes	☐ ☐
Mulch	At least 2-inches of mulch on exposed soil surfaces	☑ Yes	☐ ☐
Irrigation System Efficiency	70% ETo (100% ETo for SLAs)	☑ Yes	☐ ☐
	No overspray or runoff	☑ Yes	☐ ☐
Irrigation System Design	System efficiency > 70%	☑ Yes	☐ ☐
	Automatic, self-adjusting irrigation controllers	☐ No, not required for Tier 1 ☑ Yes	☐ ☐
	Moisture sensor/rain sensor shutoffs	☑ Yes	☐ ☐
	No sprayheads in < 8-ft wide area	☑ Yes	☐ ☐
Irrigation Time	System only operates between 8 PM and 10 AM	☑ Yes	☐ ☐
Metering	Separate irrigation meter	☑ No, not required because < 5,000 sq.ft. ☐ Yes	☐ ☐
Swimming Pools / Spas	Cover highly recommended	☐ Yes ☑ No, not required	☐ ☐
Water Features	Recirculating	☑ Yes	☐ ☐
	Less than 10% of landscape area	☑ Yes	☐ ☐
Documentation	Checklist	☑ Yes	☐ ☐
	Landscape and Irrigation Design Plan	☐ Prepared by applicant ☐ Prepared by certified professional	☐ ☐
	Water Budget (optional)	☐ Prepared by applicant ☐ Prepared by certified professional	☐ ☐
Audit	Post-installation audit completed	☐ Completed by applicant ☐ Completed by certified professional	☐ ☐

187 BOLIVAR

FIELD ARCHITECTURE

GreenPoint Rated Checklist: Single Family

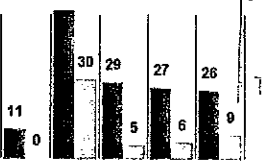
The GreenPoint Rated checklist tracks green features incorporated into the home. **A home is only GreenPoint Rated if all features are verified by a Certified GreenPoint Rater through Build It Green.** GreenPoint Rated is provided as a public service by Build It Green, a professional non-profit whose mission is to promote healthy, energy and resource efficient buildings in California.
The minimum requirements of GreenPoint Rated are: verification of 50 or more points; Earn the following minimum points per category: Energy (30), Indoor Air Quality/Health (5), Resources (6), and Water (9); and meet the prerequisites A.2.a, H10a., J.2., N.1, and Q0.

This checklist accommodates the verification of mandatory CALGreen measures but does not signify compliance unless accepted by enforcing agency. All CALGreen measures within the checklist must be selected as "Yes" or "n/a" for compliance with GreenPoint Rated. Build It Green is not a code enforcement agency.

The criteria for the green building practices listed below are described in the GreenPoint Rated Single Family Rating Manual. For more information please visit www.builditgreen.org/greenpointrated

GreenPointRated
A PROGRAM OF BUILD IT GREEN

Total Points Targeted: 154



NOV 09 2012

TOWN OF [illegible]

Single Family New Home 4.2 / 2008 Title 24

Enter Project Name		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
A. SITE			Possible Points					
	1. Protect Topsoil and Minimize Disruption of Existing Plants & Trees							
Yes	a. Protect Topsoil and Reuse after Construction	2	1				1	
Yes	b. Limit and Delineate Construction Footprint for Maximum Protection	1					1	RECEIVED
	2. Divert/Recycle Job Site Construction Waste (Including Green Waste and Existing Structures)							
Yes	a. Required: Divert 50% (by weight) of All Construction and Demolition Waste (Recycling or Reuse) (CALGreen Code)	Y				R		NOV 13 2012
Yes	b. Divert 100% of Asphalt and Concrete and 65% (by weight) of Remaining Materials	2				2		
Yes	c. Divert 100% of Asphalt and Concrete and 80% (by weight) of Remaining Materials	2				2		
	3. Use Recycled Content Aggregate (Minimum 25%)							SPANGLE ASSOC.
Yes	a. Walkway and Driveway Base	1				1		
Yes	b. Roadway Base	1				1		
TBD	**4. Cool Site: Reduce Heat Island Effect On Site**	0	1					
	5. Construction Environmental Quality Management Plan, Duct Sealing, and Pre-Occupancy Flush-Out [*This credit is a requirement associated with J4: EPA IAP]							
Yes	a. Duct openings and other related air distribution component openings shall be covered during construction. (CALGreen code if applicable)	1			1			
Yes	b. Full environmental quality management plan and pre-occupancy flush out is conducted (Prerequisite is A5a)	1			1			
	Total Points Available in Site = 12	11						
B. FOUNDATION			Possible Points					
≥20%	**1. Replace Portland Cement in Concrete with Recycled Fly Ash and/or Slag (Minimum 20%)**	1				2		
TBD	**2. Use Frost-Protected Shallow Foundation in Cold Areas (CEC Climate Zone 16)**	0				2		
Yes	**3. Use Radon Resistant Construction** [*This credit is a requirement associated with J4: EPA IAP]	2			2			
Yes	**4. Install a Foundation Drainage System** [*This credit is a requirement associated with J4: EPA IAP]	2				2		
TBD	**5. Moisture Controlled Crawlspace** [*This credit is a requirement associated with J4: EPA IAP]	0			2			
	6. Design and Build Structural Pest Controls							
TBD	a. Install Termite Shields & Separate All Exterior Wood-to-Concrete Connections	0				1		
Yes	b. All Plants Have Trunk, Base, or Stem Located At Least 36 Inches from Foundation	1				1		
	Total Points Available in Foundation = 12	6						
C. LANDSCAPE			Possible Points					
0%	*Enter in the % of landscape area. (Projects with less than 15% of the total site area (i.e. total lot size) as landscape area are capped at 6 points for the following measures: C1 through C7 and C9 through C11.*							
Yes	**1. Group Plants by Water Needs (Hydrozoning)**	2					2	
TBD	**2. Mulch All Planting Beds to the Greater of 3 Inches or Local Water Ordinance Requirement**	0					2	
	3. Construct Resource-Efficient Landscapes							
Yes	a. No Invasive Species Listed by Cal-IPC Are Planted	1					1	
Yes	b. No Plant Species Will Require Shearing	1				1		
Yes	c. 75% of Plants Are Drought Tolerant, California Natives or Mediterranean Species or Other Appropriate Species	2					3	
	4. Minimize Turf in Landscape Installed by Builder							
Yes	a. Turf Shall Not Be Installed on Slopes Exceeding 10% and No Overhead Sprinklers Installed In Areas Less than 8 Feet Wide	0					2	
≤10%	b. Turf is Small Percentage of Landscaped Area (2 Points for ≤25%, 4 Points for ≤10%)	0					4	
TBD	**5. Plant Shade Trees**	0	1	1			1	
	6. Install High-Efficiency Irrigation Systems							
Yes	a. System Uses Only Low-Flow Drip, Bubblers, or Sprinklers	0					2	
Yes	b. System Has Smart (Weather-Based) Controller (CALGreen code if applicable)	0					3	
TBD	**7. Incorporate Two Inches of Compost in the Top 6 to 12 Inches of Soil**	0					3	

Enter Project Name		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
	8. Rain Water Harvesting System							
TBD	a. Cistern(s) is Less Than 750 Gallons	0					1	
TBD	b. Cistern(s) is 750 to 2,500 Gallons	0					1	
TBD	c. Cistern(s) is Greater Than 2,500 Gallons	0					1	
TBD	9. Irrigation System Uses Recycled Wastewater	0					1	
TBD	10. Submetering for Landscape Irrigation	0					1	
	11. Design Landscape to Meet Water Budget							
Yes	a. Install Irrigation System That Will Be Operated at ≤70% Reference ET (Prerequisites for Credit are C1. and C2.)	0					1	
Yes	b. Install Irrigation System That Will Be Operated at ≤50% Reference ET (Prerequisites for Credit are C1, C2, and C6a or C6b.)	0					1	
Yes	12. Use Environmentally Preferable Materials for 70% of Non-Plant Landscape Elements and Fencing A) FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content E) Finger-Jointed or F) Local	1				1		
Yes	13. Reduce Light Pollution by Shielding Fixtures and Directing Light Downward	1	1					
	Total Points Available in Landscape = 35	8						
D. STRUCTURAL FRAME & BUILDING ENVELOPE				Possible Points				
	1. Apply Optimal Value Engineering							
TBD	a. Place Joists, Rafters and Studs at 24-Inch On Center	0				3		
Yes	b. Door and Window Headers are Sized for Load	1				1		
Yes	c. Use Only Cripple Studs Required for Load	1				1		
	2. Construction Material Efficiencies							
TBD	a. Wall and Floor Assemblies (Excluding Solid Wall Assemblies) are Delivered Panelized from Supplier (Minimum of 80% Square Feet)	0				2		
TBD	b. Modular Components Are Delivered Assembled to the Project (Minimum 25%)	0				6		
	3. Use Engineered Lumber							
Yes	a. Engineered Beams and Headers	1				1		
Yes	b. Wood I-Joists or Web Trusses for Floors	1				1		
Yes	c. Engineered Lumber for Roof Rafters	1				1		
Yes	d. Engineered or Finger-Jointed Studs for Vertical Applications	1				1		
Yes	e. Oriented Strand Board for Subfloor	1				1		
Yes	f. Oriented Strand Board for Wall and Roof Sheathing	1				1		
Yes	4. Insulated Headers	1		1				
	5. Use FSC-Certified Wood							
TBD	a. Dimensional Lumber, Studs and Timber (Minimum 40%)	0				6		
TBD	b. Panel Products (Minimum 40%)	0				3		
	6. Use Solid Wall Systems (Includes SIPS, ICFs, & Any Non-Stick Frame Assembly)							
TBD	a. Floors	0				2		
TBD	b. Walls	0				2		
TBD	c. Roofs	0				1		
TBD	7. Energy Heels on Roof Trusses (75% of Attic Insulation Height at Outside Edge of Exterior Wall)	0		1				
	8. Install Overhangs and Gutters							
Yes	a. Minimum 16-Inch Overhangs and Gutters	1				1		
Yes	b. Minimum 24-Inch Overhangs and Gutters	1		1				
	9. Reduce Pollution Entering the Home from the Garage [*This credit is a requirement associated with J4: EPA IAP]							
Yes	a. Install Garage Exhaust Fan OR Build a Detached Garage	1			1			
Yes	b. Tightly Seal the Air Barrier between Garage and Living Area (Performance Test Required)	1			1			
	Total Points Available in Structural Frame and Building Envelope = 39	13						
E. EXTERIOR				Possible Points				
TBD	1. Use Environmentally Preferable Decking	0				2		
TBD	2. Flashing Installation Techniques Specified and Third-Party Verified [*This credit is a requirement associated with J4: EPA IAP]	0				1		
TBD	3. Install a Rain Screen Wall System	0				2		
TBD	4. Use Durable and Non-Combustible Siding Materials	0				1		
Yes	5. Use Durable and Fire Resistant Roofing Materials or Assembly	2				2		
	Total Points Available in Exterior = 8	2						
F. INSULATION				Possible Points				
	1. Install Insulation with 75% Recycled Content							
TBD	a. Walls	0				1		
TBD	b. Ceilings	0				1		
TBD	c. Floors	0				1		
	Total Points Available in Insulation = 3	0						
G. PLUMBING				Possible Points				
	1. Distribute Domestic Hot Water Efficiently (Max. 5 points, G1a. is a Prerequisite for G1b-e)							
Yes	a. Insulate All Hot Water Pipes [*This credit is a requirement associated with J4: EPA IAP]	2	1				1	
TBD	b. Use Engineered Parallel Plumbing	0					1	
TBD	c. Use Engineered Parallel Plumbing with Demand Controlled Circulation Loop(s)	0					1	
Yes	d. Use Traditional Trunk, Branch and Twig Plumbing with Demand Controlled Circulation Loop(s)	3	1				2	
TBD	e. Use Central Core Plumbing	0	1		1		1	
	2. Water Efficient Fixtures							

Enter Project Name		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
Yes	a. High Efficiency Showerheads ≤2.0 Gallons Per Minute (gpm) at 80 psi. (Multiple showerheads shall not exceed maximum flow rates) (CALGreen code if applicable)	3					3	
Yes	b. High Efficiency Bathroom Faucets ≤ 1.5 gpm at 60psi (CALGreen code)	1					1	
Yes	c. High Efficiency Kitchen and Utility Faucets ≤1.8 gpm (CALGreen code if applicable)	1					1	
Yes	**3. Install Only High Efficiency Toilets (Dual-Flush or ≤1.28 Gallons Per Flush (gpf)) (CALGreen code if applicable)**	2					2	
	Total Points Available in Plumbing = 12	12						
H. HEATING, VENTILATION & AIR CONDITIONING				Possible Points				
	1. Properly Design HVAC System and Perform Diagnostic Testing							
Yes	a. Design and Install HVAC System to ACCA Manual J, D, and S Recommendations (CALGreen code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	4		4				
Yes	b. Test Total Supply Air Flow Rates [*This credit is a requirement associated with J4: EPA IAP]	1		1				
Yes	c. Third Party Testing of Mechanical Ventilation Rates for IAQ (meet ASHRAE 62.2)	1		1				
	2. Install Sealed Combustion Units [*This credit is a requirement associated with J4: EPA IAP]							
Yes	a. Furnaces	2			2			
Yes	b. Water Heaters	2			2			
TBD	**3. Install High Performing Zoned Hydronic Radiant Heating**	0		1	1			
Yes	**4. Install High Efficiency Air Conditioning with Environmentally Preferable Refrigerants**	1	1					
	5. Design and Install Effective Ductwork							
TBD	a. Install HVAC Unit and Ductwork within Conditioned Space	0		1				
Yes	b. Use Duct Mastic on All Duct Joints and Seams [*This credit is a requirement associated with J4: EPA IAP]	1		1				
Yes	c. Pressure Relieve the Ductwork System [*This credit is a requirement associated with J4: EPA IAP]	1		1				
Yes	**6. Install High Efficiency HVAC Filter (MERV 6+)** [*This credit is a requirement associated with J4: EPA IAP]	1			1			
TBD	**7. No Fireplace OR Install Sealed Gas Fireplace(s) with Efficiency Rating >60% using CSA Standards** [*This credit is a requirement associated with J4: EPA IAP]	0			1			
Yes	**8. Install ENERGY STAR Bathroom Fans on Timer or Humidistat (CALGreen code if applicable)**	1			1			
	9. Install Mechanical Ventilation System for Cooling (Max. 4 Points)							
TBD	a. Install ENERGY STAR Ceiling Fans & Light Kits in Living Areas & All Bedrooms	0		1				
Yes	b. Install Whole House Fan (Credit Not Available if H9c Chosen) (CALGreen code if applicable)	1		1				
TBD	c. Automatically Controlled Integrated System with Variable Speed Control	0		3				
	10. Advanced Mechanical Ventilation for IAQ							
Yes	a. *Required:* Compliance with ASHRAE 62.2 Mechanical Ventilation Standards (as adopted in Title 24 Part 6) [*This credit is a requirement associated with J4: EPA IAP]	Y			R			
Yes	b. Advanced Ventilation Practices (Continuous Operation, Sone Limit, Minimum Efficiency, Minimum Ventilation Rate, Homeowner Instructions)	1			1			
TBD	c. Outdoor Air Ducted to Bedroom and Living Areas of Home	0			2			
Yes	**11. Install Carbon Monoxide Alarm(s) (or No Combustion Appliances in Living Space and No Attached Garage)** [*This credit is a requirement associated with J4: EPA IAP]	1			1			
	Total Points Available in Heating, Ventilation and Air Conditioning = 27	18						
I. RENEWABLE ENERGY				Possible Points				
Yes	**1. Pre-Plumb for Solar Water Heating**	1				1		
Yes	**2. Install Wiring Conduit for Future Photovoltaic Installation & Provide 200 ft² of South-Facing Roof**	1				1		
0.0%	**3. Offset Energy Consumption with Onsite Renewable Generation (Solar PV, Solar Thermal, Wind)** *Enter % total energy consumption offset, 1 point per 4% offset*	0		25				
	Total Available Points in Renewable Energy = 27	2						
J. BUILDING PERFORMANCE				Possible Points				
	1. Building Envelope Diagnostic Evaluations							
Yes	a. Verify Quality of Insulation Installation & Thermal Bypass Checklist before Drywall [*This credit is a requirement associated with J4: EPA IAP]	1		1				
Yes	b. House Passes Blower Door Test [*This credit is a requirement associated with J4: EPA IAP]	1		1				
TBD	c. Blower Door Results are Max 2.5 ACH_{50} for Unbalanced Systems (Supply or Exhaust) or Max 1.0 ACH_{50} for Balanced Systems (2 Total Points for J1b. and J1c.)	0		1				
Yes	d. House Passes Combustion Safety Backdraft Test	1			1			
20%	**2. *Required:* Building Performance Exceeds Title 24 (Minimum 15%)** *(Enter the Percent Better Than Title 24, Points for Every 1% Better Than Title 24)*	40		≥30				
TBD	**3. Design and Build Near Zero Energy Homes** *(Enter number of points, minimum of 2 and maximum of 6 points)*	0		6				
TBD	**4. Obtain EPA Indoor airPlus Certification** *(Total 42 points, not including Title 24 performance; read comment)*	0			2			
Yes	**5. Title 24 Prepared and Signed by a CABEC Certified Energy Plans Examiner (CEPE)**	1		1				
	6. Participation in Utility Program with Third Party Plan Review							

Enter Project Name		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
TBD	a. Energy Efficiency Program [*This credit is a requirement associated with J4: EPA IAP]	0		1				
TBD	b. Renewable Energy Program with Min. 30% Better Than Title 24 (High Performing Home)	0		1				
	Total Available Points in Building Performance = 45+	44						
K. FINISHES				Possible Points				
Yes	**1. Design Entryways to Reduce Tracked-In Contaminants**	1			1			
	2. Use Low-VOC or Zero-VOC Paint (Maximum 3 Points)							
Yes	a. Low-VOC Interior Wall/Ceiling Paints (CALGreen code if applicable) (<50 Grams Per Liter (gpl) VOCs Regardless of Sheen) [*This credit is a requirement associated with J4: EPA IAP]	1			1			
TBD	b. Zero-VOC: Interior Wall/Ceiling Paints (<5 gpl VOCs Regardless of Sheen)	0			2			
Yes	**3. Use Low-VOC Coatings that Meet SCAQMD Rule 1113 (CALGreen code if applicable) [*This credit is a requirement associated with J4: EPA IAP]**	2			2			
Yes	**4. Use Low-VOC Caulks, Construction Adhesives and Sealants that Meet SCAQMD Rule 1168 (CALGreen code if applicable)**	2			2			
TBD	**5. Use Recycled-Content Paint**	0				1		
	6. Use Environmentally Preferable Materials for Interior Finish A) FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content or E) Finger-Jointed F) Local							
TBD	a. Cabinets (50% Minimum)	0				3		
TBD	b. Interior Trim (50% Minimum)	0				2		
TBD	c. Shelving (50% Minimum)	0				2		
TBD	d. Doors (50% Minimum)	0				2		
TBD	e. Countertops (50% Minimum)	0				2		
Yes	**7. Reduce Formaldehyde in Interior Finish – Meet Current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood Formaldehyde Limits by Mandatory Compliance Dates (CALGreen code if applicable)** [*This credit is a requirement associated with J4: EPA IAP]	Y			0			
	8. Reduce Formaldehyde in Interior Finish - Exceed Current CARB ATCM for Composite Wood Formaldehyde Limits Prior to Mandatory Compliance Dates							
Yes	a. Doors (90% Minimum)	1			1			
Yes	b. Cabinets & Countertops (90% Minimum)	2			2			
Yes	c. Interior Trim and Shelving (90% Minimum)	1			1			
TBD	**9. After Installation of Finishes, Test of Indoor Air Shows Formaldehyde Level <27ppb**	0			3			
	Total Available Points in Finishes = 27	10						
L. FLOORING				Possible Points				
TBD	**1. Use Environmentally Preferable Flooring (Minimum 15% Floor Area)** A) FSC-Certified Wood, B) Reclaimed or Refinished, C) Rapidly Renewable, D) Recycled-Content, E) Exposed Concrete, F) Local. *Flooring Adhesives Must Meet SCAQMD Rule 1168 for VOCs.*	0				4		
TBD	**2. Thermal Mass Floors (Minimum 50%)**	0		1				
≥80%	**3. Low Emitting Flooring (Section 01350, CRI Green Label Plus, Floorscore [*This credit is a requirement associated with J4: EPA IAP]**	3			3			
Yes	**4. All carpet and 50% of Resilient Flooring is low emitting. (CALGreen code if applicable)**	Y						
	Total Available Points in Flooring = 8	3						
M. APPLIANCES AND LIGHTING				Possible Points				
Yes	**1. Install ENERGY STAR Dishwasher (Must Meet Current Specifications)**	2		1			1	
	2. Install ENERGY STAR Clothes Washer							
Yes	a. Meets ENERGY STAR and CEE Tier 2 Requirements (Modified Energy Factor 2.0, Water Factor 6.0 or less)	3		1			2	
Yes	b. Meets ENERGY STAR and CEE Tier 3 Requirements (Modified Energy Factor 2.2, Water Factor 4.5 or less)	2					2	
	3. Install ENERGY STAR Refrigerator							
Yes	a. ENERGY STAR Qualified & < 25 Cubic Feet Capacity	1		1				
TBD	b. ENERGY STAR Qualified & < 20 Cubic Feet Capacity	0		1				
	4. Install Built-In Recycling Center or Composting Center							
TBD	a. Built-In Recycling Center	0				1		
TBD	b. Built-In Composting Center	0				1		
	5. Install High-Efficacy Lighting and Design Lighting System							
TBD	a. Install High-Efficacy Lighting	0		1				
TBD	b. Install a Lighting System to IESNA Footcandle Standards or Hire Lighting Consultant	0		1				
	Total Available Points in Appliances and Lighting = 13	8						
N. OTHER				Possible Points				
Yes	**1. *Required:* Incorporate GreenPoint Rated Checklist in Blueprints** [*This credit is a requirement associated with J4: EPA IAP]	Y				R		
Yes	**2. Pre-Construction Kick-Off Meeting with Rater and Subs**	1	1					
TBD	**3. Homebuilder's Management Staff are Certified Green Building Professionals**	0	1					
	4. Develop Homeowner Education							
Yes	a. Develop Homeowner Manual of Green Features/Benefits (CALGreen code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	2		1			1	

Enter Project Name		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
TBD	b. Conduct Educational Walkthroughs (Prerequisite is N4a) [*This credit is a requirement associated with J4: EPA IAP]	0			1			
Yes	5. Install a Home System Monitor OR Participate in a Time-of-Use Pricing Program	1		1				
	Total Available Points in Other = 6	4						
O. COMMUNITY DESIGN & PLANNING			Possible Points					
	1. Develop Infill Sites							
TBD	a. Project is an Urban Infill Development	0	1			1		
TBD	b. Home(s)/Development is Located within 1/2 Mile of a Major Transit Stop	0	2					
TBD	2. Build on Designated Brownfield Site	0	3					
	3. Cluster Homes & Keep Size in Check							
TBD	a. Cluster Homes for Land Preservation	0	1			1		
TBD	b. Conserve Resources by Increasing Density (10 Units per Acre or Greater)	0	2			2		
	c. Home Size Efficiency	0				9		
	i. Enter Average Unit Square Footage							
	ii. Enter Average Number of Bedrooms/Unit							
	4. Design for Walking & Bicycling							
	a. Site Has Pedestrian Access Within 1/2 Mile of Community Services: TIER 1: Enter Number of Services Within 1/2 Mile 1) Day Care 2) Community Center 3) Public Park 4) Drug Store 5) Restaurant 6) School 7) Library 8) Farmer's Market 9) After School Programs 10) Convenience Store Where Meat & Produce are Sold							
	TIER 2: Enter Number of Services Within 1/2 Mile 1) Bank 2) Place of Worship 3) Laundry/Cleaners 4) Hardware 5) Theater/Entertainment 6) Fitness/Gym 7) Post Office 8) Senior Care Facility 9) Medical/Dental 10) Hair Care 11) Commercial Office or Major Employer 12) Full Scale Supermarket							
	i. 5 Services Listed Above (Tier 2 Services Count as 1/2 Service Value)	0	1					
	ii. 10 Services Listed Above (Tier 2 Services Count as 1/2 Service Value)	0	1					
TBD	b. Development is Connected with A Dedicated Pedestrian Pathway to Places of Recreational Interest Within 1/4 mile	0	1					
TBD	c. Install Traffic Calming Strategies (Minimum of Two): - Designated Bicycle Lanes are Present on Roadways; - Ten-Foot Vehicle Travel Lanes; - Street Crossings Closest to Site are Located Less Than 300 Feet Apart; - Streets Have Rumble Strips, Bulbouts, Raised Crosswalks or Refuge Islands	0	2					
	5. Design for Safety & Social Gathering							
TBD	a. All Home Front Entrances Have Views from the Inside to Outside Callers	0	1					
TBD	b. All Home Front Entrances Can be Seen from the Street and/or from Other Front Doors	0	1					
TBD	c. Orient Porches (min. 100sf) to Streets and Public Spaces	0	1					
TBD	d. Development Includes a Social Gathering Space	0	1					
	6. Design for Diverse Households (6a. is a Prerequisite for 6b. and 6c.)							
Yes	a. All Homes Have At Least One Zero-Step Entrance	1	1					
Yes	b. All Main Floor Interior Doors & Passageways Have a Minimum 32-Inch Clear Passage Space	1	1					
Yes	c. Locate Half-Bath on the Ground Floor	1	1					
Yes	d. Provide Full-Function Independent Rental Unit	1	1					
	Total Achievable Points in Community Design & Planning = 35	4						
P. INNOVATION			Possible Points					
	A. Site							
	1. Stormwater Control: Prescriptive Path (Maximum of 3 Points, Mutually Exclusive with PA2.)							
Yes	a. Use Permeable Paving for 25% of Driveways, Patios and Walkways	1	1					
TBD	b. Install Bio-Retention and Filtration Features	0	2					
Yes	c. Route Downspout Through Permeable Landscape	1	1					
Yes	d. Use Non-Leaching Roofing Materials	1	1					
TBD	e. Include Smart Street/Driveway Design	0	1					
TBD	2. Stormwater Control: Performance Path (Mutually Exclusive with PA1): Perform Soil Percolation Test and Capture and Treat 85% of Total Annual Runoff	0	3					
	C. Landscape							
Yes	1. Meet Local Landscape Program Requirement	2					2	
	D. Structural Frame & Building Envelope							
	1. Design, Build and Maintain Structural Pest and Rot Controls							
Yes	a. Locate All Wood (Siding, Trim, Structure) At Least 12" Above Soil	1				1		
TBD	b. All Wood Framing 3 Feet from the Foundation is Treated with Borates (or Use Factory-Impregnated Materials) OR Walls are Not Made of Wood	0				1		
Yes	2. Use Moisture Resistant Materials in Wet Areas: Kitchen, Bathrooms, Utility Rooms, and Basements [*This credit is a requirement associated with J4: EPA IAP]	2			1	1		
	E. Exterior							
TBD	1. Vegetated Roof (Minimum 25%)	0	2	2				
	G. Plumbing							
Yes	1. Greywater Pre-Plumbing (Includes Washing Machine at Minimum)	1					1	
TBD	2. Greywater System Operational (Includes Washing Machine at Minimum)	0					2	
TBD	3. Innovative Wastewater Technology (Constructed Wetland, Sand Filter, Aerobic System)	0					1	
TBD	4. Composting or Waterless Toilet	0					2	
TBD	5. Install Drain Water Heat-Recovery System	0		1				

Enter Project Name		Points Achieved	Community	Energy	IAQ/Health	Resources	Water	Notes
TBD	6. Install a Hot Water Desuperheater	0		2				
	H. Heating, Ventilation, and Air Conditioning							
TBD	1. Humidity Control Systems (Only in California Humid/Marine Climate Zones 1,3,5,6,7) [*This credit is a requirement associated with J4: EPA IAP]	0			1			
TBD	2. Design HVAC System to Manual T for Register Design	0		1				
	K. Finishes							
TBD	1. Materials Meet SMaRT Criteria *(Select the number of points, up to 5 points)*	0				5		
	N. Other							
TBD	1. Detailed Durability Plan and Third-Party Verification of Plan Implementation	0				2		
	2. Educational Signage of Project's Green Features							
TBD	a. Promotion of Green Building Practices	0	1					
TBD	b. Installed Green Building Educational Signage	0	1					
	3. Innovation: List innovative measures that meet green building objectives. Enter in the number of points in each category for a maximum of 4 points for the measure in the blue cells. Points achieved column will be automatically fill in based on the sum of the points in each category. Points and measures will be evaluated by Build It Green.							
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0						
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0						
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0						
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0						
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0						
	Total Achievable Points in Innovation = 33+	9						
Q. CALIFORNIA CALGreen CODE			Possible Points					
Yes	Home meets all applicable CAL Green measures listed in above Sections A - P of the GreenPoint Rated checklist.	Y	R					
	The following measures are mandatory in the CALGreen code and do not earn points in the GreenPoint Rated Checklist, but have been included in the Checklist for the convenience of jurisdictions. *The GreenPoint Rater is not a code enforcement official. The measures in this section may be verified by the GreenPoint Rater at their own discretion and/or discretion of the building official.*							
Yes	1. CALGreen 4.106.2 Storm water management during construction.	Y						
Yes	2. CALGreen 4.106.3 Design for surface water drainage away from buildings.	Y						
TBD	3. CALGreen 4.303.1 As an alternative to perscriptive compliance, a 20% reduction in baseline water use shall be demonstrated through calculation	N						
Yes	4. CALGreen 4.406.1 Joints and openings. Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected	Y						
Yes	5. CALGreen4.503.1 Gas fireplace shall be a direct-vent sealed-combustion type. Woodstove or pellet stove shall comply with US EPA Phase II emission limits	Y						
Yes	6. CALGreen 4.505.2 Vapor retarder and capillary break is installed at slab on grade foundations.	Y						
Yes	7. CALGreen 4.505.3 19% moisture content of building framing materials	Y						
Yes	8. CALGreen 702.1 HVAC system installers are trained and certified in the proper installation of HVAC systems.	Y						
	Total Achievable Points in California Green Code = 0	0						

Summary						
Total Available Points in Specific Categories		35	96+	44	110	56
Minimum Points Required in Specific Categories	50	0	30	5	6	9
Total Points Achieved	154	11	61	29	27	26

Project has met all recommended minimum requirements

TOWN OF PORTOLA VALLEY, SECOND UNIT ZONING PROVISIONS
Amended by ord. 2011-390, January 26, 2011

18.12.040 Accessory uses permitted. Accessory uses permitted in the R-E district shall be as follows:

A. Accessory uses, as permitted by Section 18.36.040 and Chapter 18.40;

B. One second unit on a parcel of one acre or larger subject to the following provisions:

1. All provisions of Title 18 (Zoning) pertaining to this district prevail unless otherwise provided for in this subsection B.

2. A second unit shall comply with all provisions of the site development and tree protection ordinance, set forth in Chapter 15.12.

3. The parcel already contains an existing single-family dwelling or the second unit is being built simultaneously with a new single-family dwelling that will be the principal dwelling.

4. The second unit is attached to the principal dwelling, at the ground floor level or in a basement, and does not exceed a floor area of four hundred square feet. Second unit floor area is inclusive of any basement area, but exclusive of garage or carport area. Second units that are larger than four hundred square feet in floor area, that require a permit under Chapter 15.12, the Site Development and Tree Protection Ordinance, or that are located above the first story are subject to Architectural and Site Control Commission (ASCC) approval per Chapter 18.64.

5. Whether attached or detached from the principal dwelling, the second unit floor area may exceed four hundred square feet subject to ASCC approval per Chapter 18.64. In such cases, however, the second unit floor area may not exceed seven hundred fifty square feet.

6. Second units up to 750 square feet may be created by converting space within an existing home. When created within the first floor of an existing home, or including an addition of 400 square feet or less, such second units may be permitted solely with a zoning permit, and without review of the ASCC. However, staff at their discretion may refer an application to the ASCC if the application includes proposals for doors, windows or other exterior improvements that could potentially have a significant effect on the aesthetics of the structure.

7. The second unit complies with the definition of dwelling unit in Section 18.04.150.

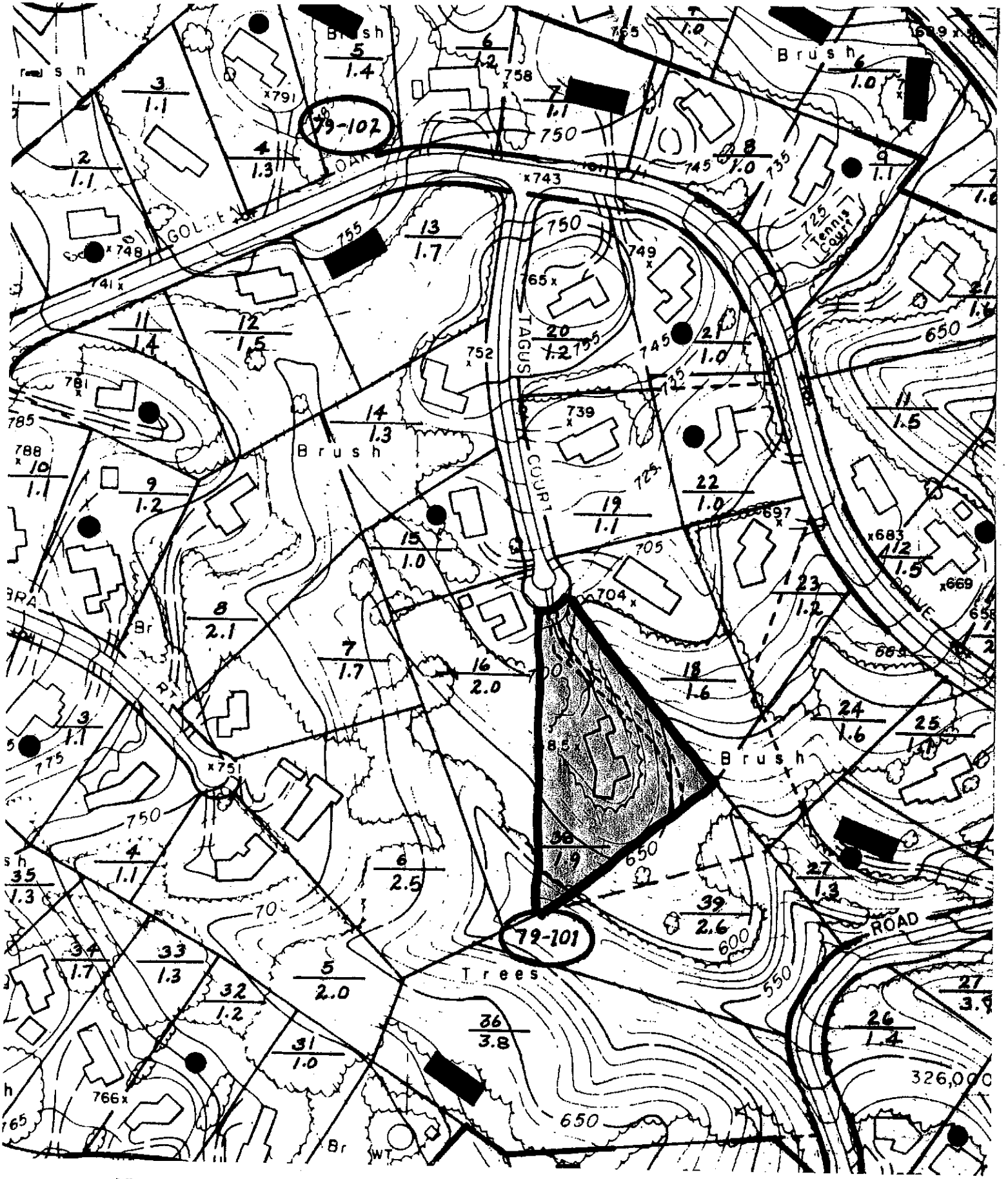
8. The second unit is served by the same vehicular access to the street as the principal dwelling and complies with off-street parking requirements for dwellings set forth in Section 18.60 except that parking spaces do not have to be covered, guest spaces are not required and tandem parking is permitted.

9. The second unit shall have the same address as the principal dwelling.

10. A second unit shall not exceed a height, as defined in Section 18.54.020, of eighteen feet with a maximum height of twenty-four feet. A second unit may be permitted to a height of twenty-eight feet and a maximum of thirty-four feet subject to ASCC approval per Chapter 18.64.

11. The second unit shall have colors, materials and architecture similar to the principal dwelling. Architecture not similar to the architecture of the principal dwelling is subject to ASCC approval per Chapter 18.64.
12. Color reflectivity values shall not exceed forty percent except that trim colors shall not exceed fifty percent. Roofs shall not exceed fifty percent reflectivity.
13. Exterior lighting on the structure shall not exceed one light fixture per entry door. Each fixture shall be fitted with only one bulb and the bulb wattage shall not exceed seventy-five watts incandescent light if frosted or otherwise diffused, or twenty-five watts if clear. Each fixture shall be manually switched and not on a motion sensor or timer. Path lights, if any, shall be the minimum needed for safe access to the second unit and shaded by fixtures that direct light to the path surface and away from the sky.
14. Landscape plantings shall be selected from the town's list of approved native plants and shall adhere to the town's landscaping guidelines.
15. An application for a second unit shall be referred to the town geologist, director of public works, fire chief and, if dependent on a septic tank and drain field, to the county health officer in accordance with town policies.
16. An application for a second unit shall supply all information required by Section 18.64.040 A.1--13.
17. Second units on parcels with frontage on Portola Road or Alpine Road, both of which are identified as local scenic corridors in the general plan, are subject to ASCC approval per Chapter 18.64 to ensure consistency with the general plan.

AR NEW RESIDENCE & X9H-647
45 TAGUS COURT, KAWAJA



Vicinity Map
Scale: 1" = 200 feet

AR & X9H-647 New Residence – Kawaja
45 Tagus Court, Town of Portola Valley
December 2012

Mike Nuttall
55 Alhambra court
Portola Valley

mobile 650 400 9998
home. 650 851 5223

December 4, 2012

ASCC
Town of Portola Valley

Re. 45 Tagus Court

Dear Commission Members,

My wife and I have lived for many years at the end of Alhambra Court cul-de-sac. From our living room, bedrooms and deck we enjoy a view across the valley to the Bay and beyond to Mt Hamilton and, to the south, the Santa Cruz mountains.

After reviewing the plans for the developments at 45 Tagus and discussing these with the owners I have a number of concerns.

The main residence

1. The massing of this building seems out of character with the lower profile generally maintained in the neighborhood and particularly properties in such visible locations.
2. The amount of light spilling from the second story will have a significant impact on the otherwise dark, tranquil and serene nighttime scene.
3. The addition of the second floor will result in a major loss of privacy for my family in our living room, bedrooms and deck.

The guest unit

1. I am concerned that the amount of grading necessary will result in the destruction of many trees and native plants.
2. I understand that Mr Kawaja is planning on using the guest cottage as his home office and I am therefore even more concerned about the light from this building given the prominent positioning of the structure and the large expanses of glass facing the valley.
3. The placing of the unit on the lot is inappropriate for any building, particularly for a secondary unit. The current plan has this unit positioned on the most prominent place on the lot, a spot currently owned by a fabulous oak tree.

4. It's my understanding that this location encroaches on a wildlife corridor which again seems inappropriate for a secondary structure.
5. Similarly to #3 above I am worried about the loss of privacy as the guest unit has direct line of sight into our living room and two of the three bedrooms.

Clearly Mr Kawaja and his family should be able to develop their property to accommodate their requirements, however I am hoping he will consider alternatives.

Reducing the height of the primary residence could potentially reduce its negative impact.

Repositioning the guest unit could be a major improvement. The environmental impact could be reduced by designing the accommodations as an attached wing to the main residence. Alternatively the unit could be reduced in size and moved further back on the lot, placing it within the existing building footprint.

As you would imagine I am also concerned about the negative effect this development will have upon my real estate value. I know my concerns are shared by my neighbors Tina and Patrick at 45 Alhambra and I would expect by other valley facing neighbors south of me along Golden Oak Drive.

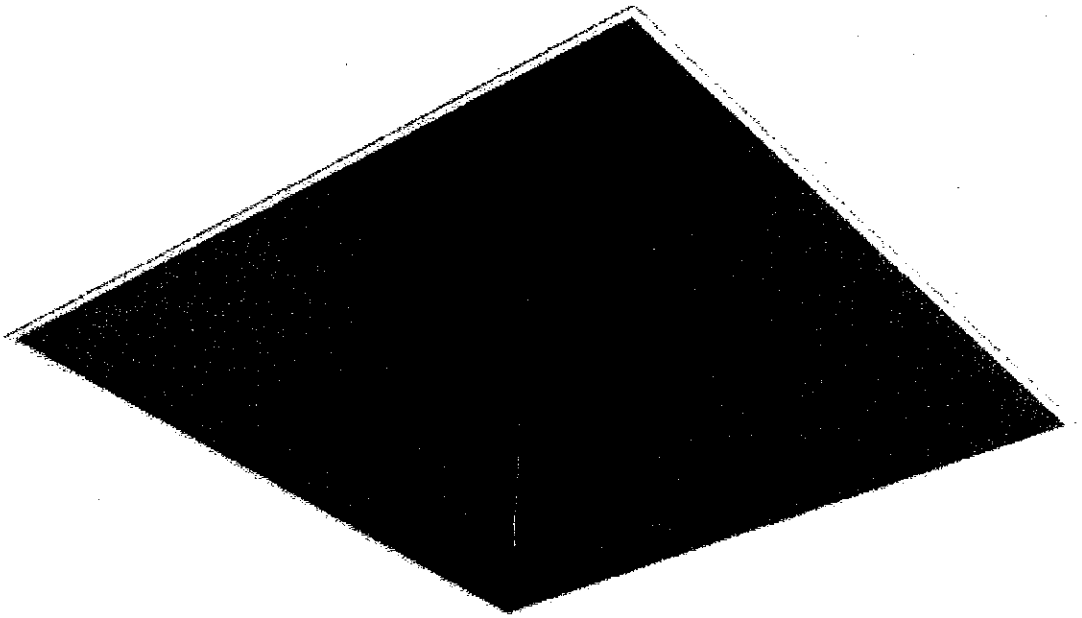
I understand you are planning a site visit on December 10th. If time allows I would appreciate you viewing the site from my property. Jan, my wife, should be around but if not please walk around the left side of the house to our rear deck. As I will be out of the country I will not be able to attend the evening meeting but I am hoping Jan will be able to attend.

Many thanks for taking these concerns into consideration,

Sincerely yours,

Mike Nuttall

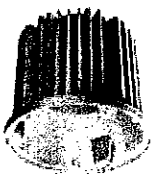
A1



KAP Flos Architectural

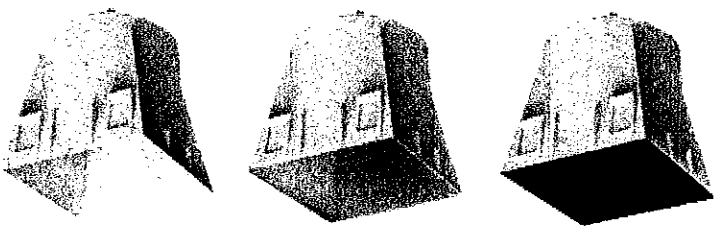
Kap Square 105

Installation Frame



Heat Sink

LED Module



Decorative Recessed Housing

Opal Diffusing Glass

Description

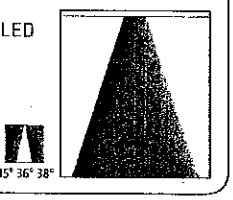
A recessed luminaire with a square body and a 3000K LED light source.
Aluminium body available in three finishes applying liquid paint: black, white and gold. It is fitted with an opal diffuser for uniform light distribution.
Supplied with a heat sink formed by two aluminium bodies to provide optimum LED cooling.
Remote or integral drivers available.

For references see page 78

Light Source

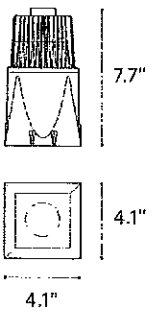
PHOSPHOR LED

18.3W
1000 lm
3000K
CRI 80



General Info

Colours



For More Info See www.flosusa.com

Other colour temperatures available on order

B1

FLOS

BELVEDERE SPOT SINGLE F2 - Specification Sheet

by Antonio Citterio,2007

Mounting	
Lamp (Bulb) Description	1W 350 mA Power LED
Environment	Outdoor
Finish	Dark Brown
Technical and Product Description	Device for exterior lighting with protection degree IP55 thought for situations that require a strongly detailed light with an adjustable projector or with lighting areas of a certain size, such as car parks or external residential areas. Available in stick version or with double or single head. Installation on floor through the choice of specific accessories possible. Discharge lamps G12 35W (excluded). The main components are made of low-copper-content aluminium alloy on which some galvanic treatments to protect against saline aggression have been applied. Other important features are the presence of a watertight box IP 68, with anti-humidity gel to connect to the power supply, apart from the watertight cable gland. Insulation class I. Electronic ballast is included.

Electrical

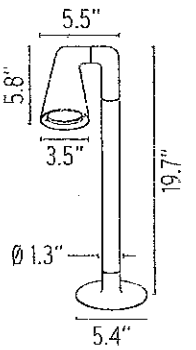
Emergency	Without
Switching	

Physical

Supply	
Cord length (inches)	
Construction material	Aluminum

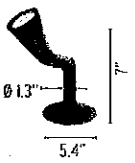
● FU089926 Brown

Dimensions

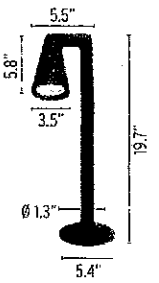


Certifications

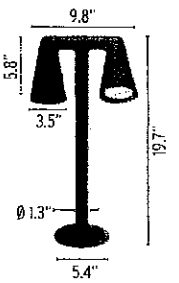
Lamping (Bulbs)
1W 350 mA Power LED



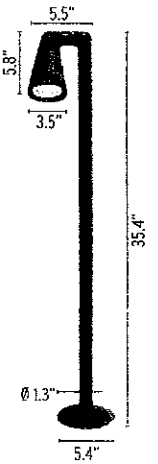
SPOT F1



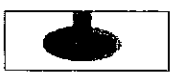
SPOT F2 SINGLE

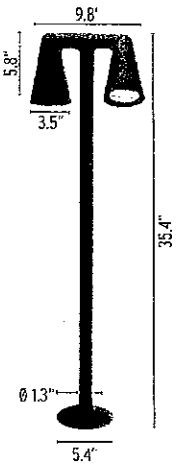


SPOT F2 DOUBLE



SPOT F3 SINGLE





SPOT F3 DOUBLE

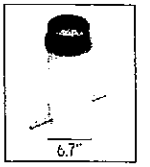
POWER LED
350 mA
6 X 1W

SPOT F1	SPOT F2 SINGLE	SPOT F2 DOUBLE	SPOT F3 SINGLE	SPOT F3 DOUBLE
FU091126 - 6 X 1W 9°	FU089726 - 6 X 1W 9°	FU090426 - 6 X 1W 9°	FU090126 - 6 X 1W 9°	FU090726 - 6 X 1W 9°
FU091226 - 6 X 1W 22°	FU089826 - 6 X 1W 22°	FU090526 - 6 X 1W 22°	FU090226 - 6 X 1W 22°	FU090826 - 6 X 1W 22°
FU091326 - 6 X 1W 36°	FU089926 - 6 X 1W 36°	FU090626 - 6 X 1W 36°	FU090326 - 6 X 1W 36°	FU090926 - 6 X 1W 36°

REMOTE PHOSPHOR LED
11,8W
38°

SPOT F1	SPOT F2 SINGLE	SPOT F2 DOUBLE	SPOT F3 SINGLE	SPOT F3 DOUBLE
FU093026	FU093226	FU093626	FU093426	FU093826

INSTALLATION ACCESSORY



FOBB8026
Remote housing

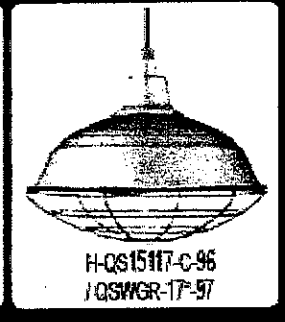
Hi-Lite Mfg. Co.

CENTER PRODUCT SEARCH

HOME ABOUT PRODUCTS SALES CONTACT COLOR CHART

PRODUCTS > QUICK SHIP (QS) Products will ship within 5 busines days*

H-QS15116-C-91

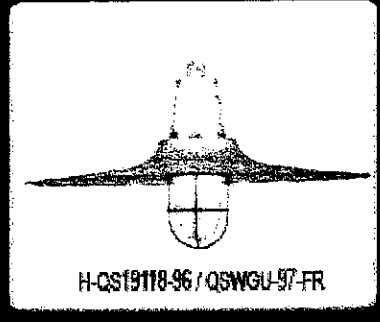


H-QS15117-C-96 / QSWGR-17-97

WAREHOUSE SHADES

DOWNLOAD CHART

ITEM NUMBER	DIMENSIONS	WATTAGE	FINISHES AVAILABLE
H-QS15114	H-9" W-14"	200W INC	91, 93, 95, 96
H-QS15116	H-10" W-16"	200W INC	91, 93, 95, 96
H-QS15117	H-11" W-17"	200W INC	77, 91, 93, 95, 96



H-QS19118-96 / QSWGU-97-FR

RADIAL WAVE SHADES

ITEM NUMBER	DIMENSIONS	WATTAGE	FINISHES AVAILABLE
H-QS19116	H-7" W-16"	200W INC	91, 93, 95, 96
H-QS19118	H-7" W-18"	200W INC	91, 93, 95, 96

H-QS18110-95

ANGLE SHADES

ITEM NUMBER	DIMENSIONS	WATTAGE	FINISHES AVAILABLE

DEEP BOWL SHADES

ITEM NUMBER	DIMENSIONS	WATTAGE	FINISHES AVAILABLE

H-QS16112-91
/ QSWGR-12"-97

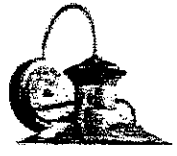
H-QSEM-12-96

EMBLEM SHADES

ITEM NUMBER	DIMENSIONS	WATTAGE	FINISHES AVAILABLE

H-QSCGU-10-1B-77

H-QS15110-B-77



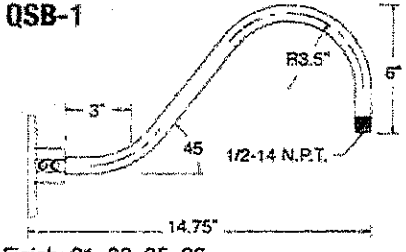
H-QS4111-B-96

FIXTURES

ITEM NUMBER	DIMENSIONS	WATTAGE	FINISHES AVAILABLE	GLASS

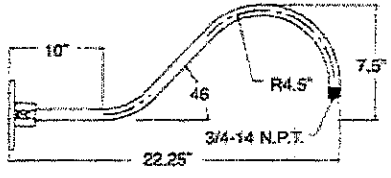
MOUNTING OPTIONS ARMS

QSB-1



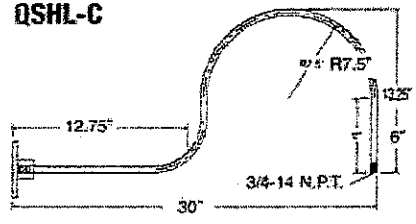
Finish: 91, 93, 95, 96

QSHL-A



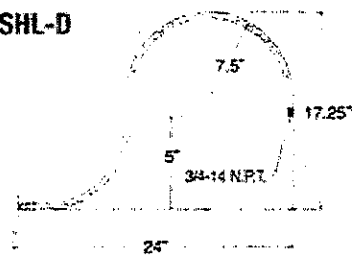
Finish: 91, 93, 95, 96

QSHL-C



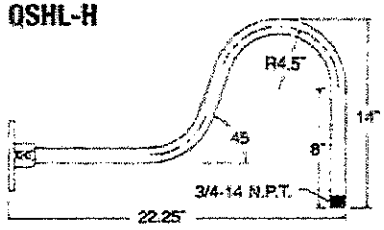
Finish: 91, 93, 95, 96

QSHL-D



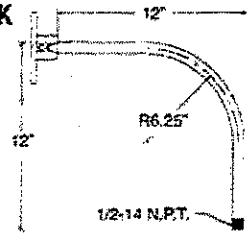
Finish: 91, 93, 95, 96

QSHL-H



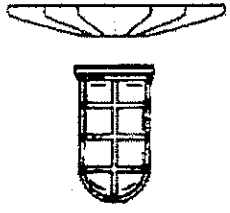
Finish: 91, 93, 95, 96

QSHL-K



Finish: 91, 93, 95, 96

ACCESSORIES



ITEM NUMBER	FINISHES	GLASS

CORD AND CANOPY

ITEM NUMBER	FINISHES

STEMS AND CANOPY

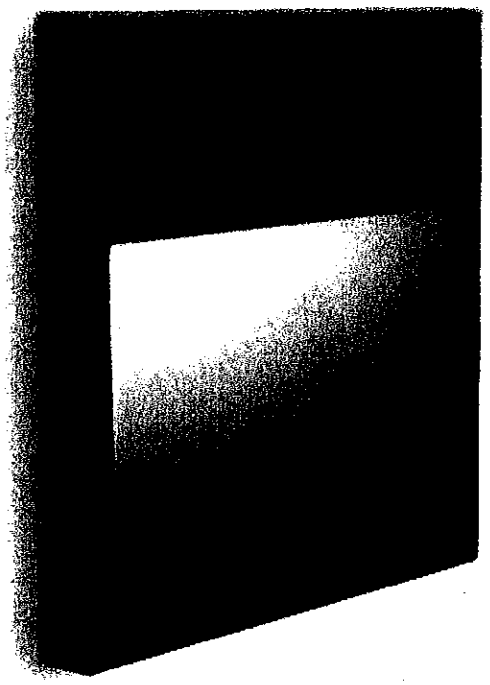
ITEM NUMBER	FINISHES

COLOR CHART

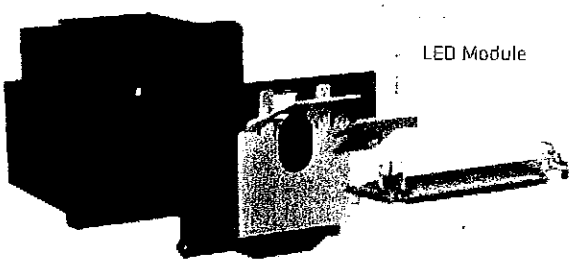
COLOR CHART:

DOWNLOAD CHART

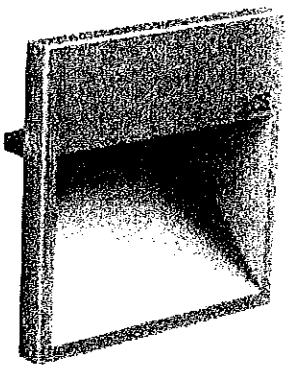
D



BOX / MINI BOX Piero Lissoni



Opal Polycarbonate Diffuser



Front Cover

Description

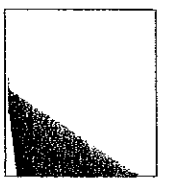
Signalling luminaire for outdoor and indoor application available in two sizes.
In incorporates high chromatic rendering CRI93 Power LED and a diffuser to offer a high quality, even light.
It has non-adjustable, continuous current electronic equipment integrated in the luminaire.

For references see page 78

Light Source

POWER LED

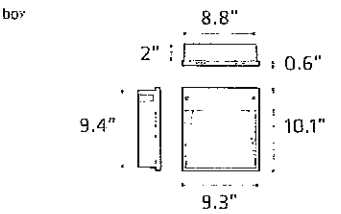
box	mini box
6W	2W
450 lm	110 lm
3000K	3000K
CRI 93	CRI 93



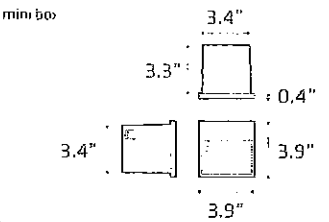
General Info

Colores Colours

box



mini box



For More Info See www.flosusa.com

Other colour temperatures available on order

Box - Specification Sheet

Mounting	Outdoor Wall Recessed
Lamp (Bulb) Description	LED 450 lm 6W 3000K
Voltage (V)	120
Notes	Recessed guide light for indoor and outdoor applications. Electronic transformer for LED integrated

Optical

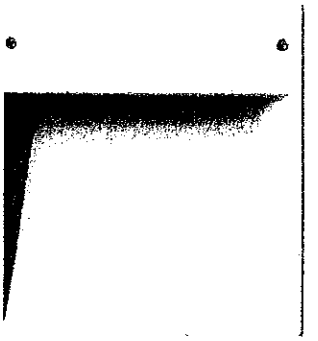
Aiming	Fixed

Electrical

Transformer Mounting	Integral
Insulation Class	Class 2
CRI	93
Lumen Output	450 lm
IP Rating	IP65

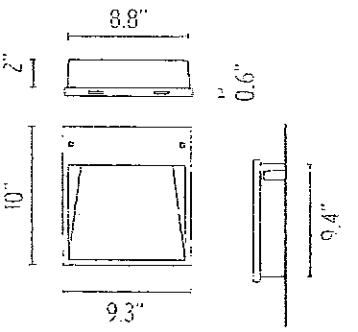
Physical

Weight	3.6lb(s)



- 07.9007.01.90 Dark brown
- 07.9007.04.90 Grey
- 07.9007.72.90 Matte Black
- 07.9007.MM.90 Matte White

Dimensions



Certifications

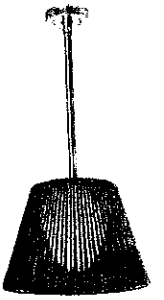
E1 + F1

FLOS

ROMEO OUTDOOR C1 - Specification Sheet

by Philippe Starck,2006

Mounting	Ceiling
Lamp (Bulb) Description	18W PL G24Q-2 Fluorescent
Environment	Outdoor
Finish	
Technical and Product Description	Outer diffuser made from weaves of colored PVC tubes compounds with polyester painted phospho-chromated aluminum tubular internal frame. Inner diffuser in opal-colored, vacuum-formed polycarbonate that is removable without tools for bulb change. Diffuser support in anodized and painted die-cast aluminum alloy Diecast aluminum alloy ceiling fitting with brilliant finish. Injection-molded polycarbonate (PC) cover rose. 31.6" polished stainless steel stem. All painted details have undergone a galvanic phosphochromate treatment for enhanced corrosion and weather resistance.



Electrical

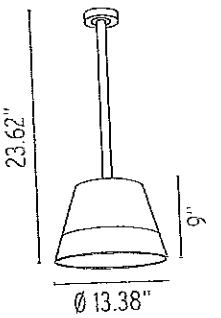
Emergency	Without
Switching	N/S

Physical

Supply	N/S
Cord length (inches)	N/S
Construction material	Die-cast aluminum, Polycarbonate, PVC, Stainless steel

- FU645002 Orange/Grey
- FU645009 White/Grey
- FU645020 Gray

Dimensions



Lamping (Bulbs)

☒ 18W PL G24Q-2 Fluorescent

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NOV 26 2012

SPANGLE ASSOC.

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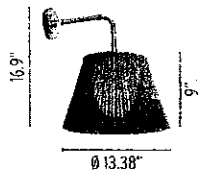
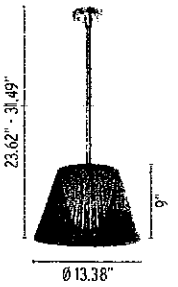
NOV 19 2012

TOWN OF [illegible]



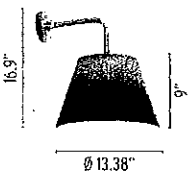
W1 PVC

- FU646002
- FU646009



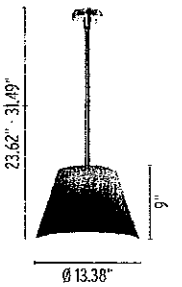
C1 PVC

- FU645002 (H 23.62")
- FU645009 (H 23.62")
- FU645102 (H 31.49")
- FU645109 (H 31.49")



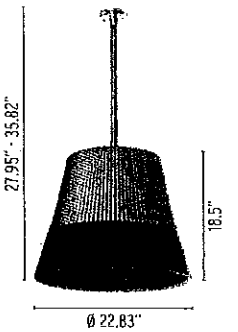
W1 GRI

- FU646020



C1 GRI

- FU645020 (H 23.62")
- FU645120 (H 31.49")



C3 PVC

- FU646822 (H 27.95")
- FU646841 (H 27.95")
- FU646922 (H 27.95")
- FU646941 (H 27.95")

TC-TEL
Gx24q-2
1 X 18W

- FU646002
- FU646009

- FU645002 (H 23.62")
- FU645009 (H 23.62")
- FU645102 (H 31.49")
- FU645109 (H 31.49")

- FU646020

- FU645020 (H 23.62")
- FU645120 (H 31.49")

QT-48
E26
1 X 100W

- FU646102
- FU646109

- FU645202 (H 23.62")
- FU645209 (H 23.62")
- FU645302 (H 31.49")
- FU645309 (H 31.49")

- FU646120

- FU645220 (H 23.62")
- FU645320 (H 31.49")

QT-48
E26
1 X 150W

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OUTDOOR WATER USE EFFICIENCY CHECKLIST

To Be Completed by Applicant

I certify that the subject project meets the specified requirements of the Water Conservation in Landscaping Ordinance.

Patrick Whisler — Signature

11/19/2012 — Date

NOV 19 2012

Project Information

☒ Single Family ☐ Multi-Family ☐ Commercial ☐ Institutional ☐ Irrigation only ☐ Industrial ☐ Other:

Applicant Name (print): Patrick Whisler Landscape Architect — Contact Phone #: 415-472-3600 ext 1

Project Site Address: 45 Tagus Court

Project Area (sq.ft. or acre): 1.942 acres — # of Units: 1 — # of Meters: 1

For a single-family project, or a single-family development project, enter this information on an average, per unit basis. For all other projects, input an aggregate value for the entire project.

		Agency Review (Pass)	Agency Review (Fail)
Total Landscape Area (sq.ft.): 4,312 sq. ft . (not incld temp drip on native estab.) ☐ Tier 1 (2,500 - 5,000 sq.ft.) ☒ Tier 2 (> 5,000 sq.ft.)		☐	☐
Turf Irrigated Area (sq.ft.): 1000 sq. feet		☐	☐
Non-Turf Irrigated Area (sq.ft.): 3,312 sq. ft.		☐	☐
Special Landscape Area (SLA) (sq.ft.): 0		☐	☐
Water Feature Surface Area (sq.ft.): 5 sq. ft. Fountain 1125 sq. ft. Pool & Spa			
Landscape Parameter	**Requirements**	**Project Compliance**	
Turf	Less than 25% of the landscape area is turf	☒ Yes 23% ☐ No, See Water Budget	☐ ☐
	All turf areas are > 8 feet wide	☒ Yes	☐ ☐
	All turf is planted on slopes < 25%	☒ Yes	☐ ☐
Non-Turf	At least 80% of non-turf area is native or low water use plants	☒ Yes ☐ No, See Water Budget	☐ ☐
Hydrozones	Plants are grouped by Hydrozones	☒ Yes	☐ ☐
Mulch	At least 2-inches of mulch on exposed soil surfaces	☒ Yes	☐ ☐
Irrigation System Efficiency	70% ETo (100% ETo for SLAs)	☒ Yes	☐ ☐
	No overspray or runoff	☒ Yes	☐ ☐
Irrigation System Design	System efficiency > 70%	☒ Yes	☐ ☐
	Automatic, self-adjusting irrigation controllers	☐ No, not required for Tier 1 ☒ Yes	☐ ☐
	Moisture sensor/rain sensor shutoffs	☒ Yes	☐ ☐
	No sprayheads in < 8-ft wide area	☒ Yes drip or subsurface drip used in these areas	☐ ☐
Irrigation Time	System only operates between 8 PM and 10 AM	☒ Yes	☐ ☐
Metering	Separate irrigation meter	☒ No, not required because < 5,000 sq.ft. ☐ Yes	☐ ☐
Swimming Pools / Spas	Cover highly recommended	☒ Yes ☐ No, not required	☐ ☐
Water Features	Recirculating	☒ Yes	☐ ☐
	Less than 10% of landscape area	☒ Yes	☐ ☐
Documentation	Checklist	☒ Yes	☐ ☐
	Landscape and Irrigation Design Plan	☐ Prepared by applicant ☒ Prepared by certified professional	☐ ☐
	Water Budget (optional)	☐ Prepared by applicant ☐ Prepared by certified professional	☐ ☐
Audit	Post-installation audit completed	☐ Completed by applicant ☒ Completed by certified professional	☐ ☐

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

December 4, 2012
V5080A

TO: Carol Borck
Planning Manager
TOWN OF PORTOLA VALLEY
765 Portola Road
Portola Valley, California 94028

SUBJECT: **Geotechnical Peer Review**
RE: Kawaja New Residence
Site Development Permit #X91-647
45 Tagus Court

At your request, we have completed a geotechnical peer review of the Site Development Permit application for proposed site construction using:

- Engineering Geologic & Geotechnical Investigation – Residence Addition 45 Tagus Court (report) prepared by Murray Engineers, dated July 14, 2010; and
- Architectural Plans (13 sheet, various scales) prepared by Backen Gillam, dated November 19, 2012;
- Landscape Plan (1 sheet, 16-scale) prepared by Whisler Land Planning, dated November 19, 2012; and
- Grading, Drainage and Erosion Control Plans (2 sheets, 10 scale) prepared by Giuliani & Kull, Inc., dated November 20, 2012

In addition, we have reviewed pertinent technical documents from our office files.

DISCUSSION

We understand that the applicant is proposing to construct a new two-story residence, detached garage, swimming pool, and a studio. Other site improvements include abandoning the existing septic system and connecting the new residence to the sanitary sewer system within Tagus Court. Provided earthwork quantities include

Northern California Office
330 Village Lane
Los Gatos, CA 95030-7218
(408) 354-5542 • Fax (408) 354-1852

Central California Office
6417 Dogtown Road
San Andreas, CA 95249-9640
(209) 736-4252 • Fax (209) 736-1212

Southern California Office
550 St. Charles Drive, Suite 108
Thousand Oaks, CA 91360-3995
(805) 497-7999 • Fax (805) 497-7933

www.cottonshires.com

approximately 824 cubic yards of cut and 158 cubic yards of fill. In our previous geologic peer review letter dated January 11, 2011, we recommended approval of map modifications to the Geologic and Ground Movement Potential Maps recommended by the Project Geotechnical Consultant.

SITE CONDITIONS

The existing residence is located at the crest of a spur ridge with flanking steep east and southwest-facing slopes. Past grading activities have resulted in a relatively level cut and fill building pad. Associated fill prisms have moderately steep to steep (approximately 20 to 40 percent inclination). Existing cut slopes are steep (approximately 50 percent inclination) slopes. Signs of recent slope instability were noted in the southwestern portion of the property. Drainage at the site is characterized by sheet flow toward the east, west and south.

According to the Town Geologic Map (including recent map modifications), the subject property is underlain, at depth, by bedrock materials of the Whiskey Hill Formation (i.e., sedimentary bedrock consisting of interbedded sandstone, siltstone and potentially expansive claystone). Sandstone bedrock is exposed in cuts located in the cut slope in the northern portion of the property. Siltstone bedrock was encountered at a depth of 9 feet below ground surface in boring B-1. According to the Town Movement Potential Map the site is located primarily within an "Sbr" zone, which is defined as *"level ground to moderately steep slopes underlain by bedrock within approximately three feet of ground surface or less; relatively thin soil mantle may be subject to shallow landsliding, settlement and soil creep."* The slopes located below the southwestern portion of the existing residence are located within a "Ps" zone, defined as *"Unstable, unconsolidated material, commonly less than 10 feet in thickness, on gentle to moderately steep slopes subject to shallow landsliding, slumping, settlement and soil creep."* The southwestern corner of the property in a "Pd" zone, defined as *"Unstable, unconsolidated material, commonly more than 10 feet in thickness, on moderate to steep slopes; subject to deep landsliding."* In addition, the southwestern portion of the property is contains two "Pdf" zones, that are defined as *"Debris flows, (shallow, rapidly moving landslides) including recognized source areas, flow paths and depositional runout areas."* The active San Andreas fault is located approximately 0.4 mile southwest of the project site.

CONCLUSIONS AND RECOMMENDATIONS

The proposed site development is constrained by potentially expansive surficial soils, surficial slope creep, existing artificial fill materials not meeting current engineering standards, and strong seismic ground shaking. The referenced report was

prepared for a proposed addition to the southern portion of the existing residence. The project has changed significantly since this initial report, consequently additional updated geotechnical design parameters are warranted. We do not have geotechnical objections to the basic proposed layout of site improvements. However, discharge of concentrated surface drainage should not be directed toward potentially unstable slopes.

We recommend that the following Item 1 be satisfactorily addressed prior to acceptance of documents for building permit application review. We also recommend that grading at the site not be permitted prior to approval of the building permit.

1. Supplemental Geotechnical Evaluations - The Project Geotechnical Consultant should evaluate current site conditions and development plans. The consultant should augment/update geotechnical design recommendations for the updated project. These evaluations should include, but not necessarily be limited to the following:

   a) Supplemental borings should be considered in order to adequately characterize subsurface conditions for all proposed construction areas.

   b) Modified foundation design recommendations should be prepared for the proposed two-story residence.

   c) Geotechnical design recommendations should be prepared for the proposed swimming pool.

   d) Guidance should be provided for placement of drainage discharge structures.

   Appropriate documentation to address the above should be submitted to the Town, for review by the Town Engineer and Town Geotechnical Consultant, prior to acceptance of documents for building permit application review.

LIMITATIONS

This geotechnical peer review has been performed to provide technical advice to assist the Town with its discretionary permit decisions. Our services have been limited to review of the documents previously identified, and a visual review of the property. Our opinions and conclusions are made in accordance with generally accepted

principles and practices of the geotechnical profession. This warranty is in lieu of all other warranties, either expressed or implied.

Respectfully submitted,

COTTON, SHIRES AND ASSOCIATES, INC.
TOWN GEOTECHNICAL CONSULTANT

Ted Sayre
Principal Engineering Geologist
CEG 1795

David T. Schrier
Principal Geotechnical Engineer
GE 2334

TS:DTS:JN:kd

MEMORANDUM

TOWN OF PORTOLA VALLEY

RECEIVED
NOV 29 2012

TO: Carol Borck, Planning Tech
FROM: Howard Young, Public Works Director
DATE: 11/29/12
RE: 45 Tagus Court

Site Development Grading, Drainage, and erosion Control plan comments:

1. All items listed in the most current "Public Works Site Development Standard Guidelines and Checklist" shall be reviewed and met. Completed checklist shall be submitted with building plans. Document is available on Town website.

2. All items listed in the most current "Public Works Pre-Construction Meeting for Site Development" shall be reviewed and understood. Document is available on Town website.

3. Any revisions to the Site Development permit set shall be highlighted and listed.

WOODSIDE FIRE PROTECTION DISTRICT

Prevention Division

4091 Jefferson Ave, Redwood City CA 94062 ~ www.woodsidefire.org ~ Fire Marshal Denise Enea 650-851-6206

ALL CONDITIONS MUST MEET WFPD SPECIFICATIONS – go to www.woodsidefire.org for more info

BDLG & SPRINKLER PLAN CHECK AND INSPECTIONS

PROJECT LOCATION:45 Tagus Ct	Jurisdiction: PV
Owner/Architect/Project Manager: Kawaja	Permit#: x9h-647
PROJECT DESCRIPTION: new house	
Fees Paid: ☐$YES ☒ See *Fee Comments* Date:	
Fee Comments: ASRB fee paid $60.00 ck#1125 11/19/12	

BUILDING PLAN CHECK COMMENTS/CONDITIONS:

1. Must comply to PV Ordinance 15.04.020E for ignition resistant construction & materials
2. Address clearly posted and visible from street w/minimum of 4" numbers on contrasting background.
3. Approved spark arrestor on all chimneys including outside fireplace.
4. Install Smoke and CO2 detectors per code.
5. NFPA 13D Fire Sprinkler System to be installed house and all habitable buildings
6. 100' defensible space around proposed new structure prior to start of construction.
7. Upon final inspection 30' perimeter defensible space will need to be completed.
8. Driveway to be compliant withWFPD standards (www.woodsidefire.org) if over 150' in length a WFPD approved fire truck turna around is required. Portions of driveway that are over 15% slope must have a WFPD approved rough brushed surface. Slopes over 20% not allowed.
9. Show location of nearest fire hydrant (must be within 500' of structure measured on approved roadway)
10. knox switch at gate entry

Reviewed by:D. Enea	Date: 11/28/12
☐Resubmit ☒Approved with Conditions	☐Approved without conditions

Sprinkler Plans Approved: N/A	Date:	Fees Paid: ☐$350 ☐See *Fee Comments*
As Builts Submitted: ----------	Date:	As Builts Approved Date:
Fee Comments:		

Rough/Hydro Sprinkler Inspection By: ---------	Date:
Sprinkler Inspection Comments:	

RECEIVED
NOV 29 2012
TOWN OF PORTOLA VALLEY

Final Bldg and/or Sprinkler Insp By: --------	Date:

45 TAGUS COURT

CONSERVATION COMMITTEE preliminary report 11/27/12

A subcommittee visited the site when no story poles were up and the committee discussed at November meeting. Conservation members would like to attend the ASCC site visit with story poles in place.

Existing vegetation:

In addition to the landscaped areas detailed in the submitted plan, there is a large steep area of open and uncultivated hillside. It is currently primarily oak woodland habitat, in undisturbed condition.

The committee strongly recommends that this area remain undisturbed and the following steps taken to move it even closer to a native condition, both to preserve the rural atmosphere of the neighborhood and to provide habitat for local wildlife:

1. Removal of invasive plants.
2. Careful protection and maintenance of existing oaks.
3. Any additional plantings should be strictly limited to materials on the Town Native Plant List, and appropriate to the existing habitat.
4. Any paths should be of only pervious material.

Any work done on the property should fully protect this area from the effects of construction debris and runoff. Erosion control should be carefully implemented.

We encourage the removal of Eucalyptus, Acacia and the old overgrown Pine.

Impermeable surface area

This plan has extensive patio/pathways/decking all laid on concrete pad base. Impermeable surfaces should be kept to a minimum. Consideration should be given to having some large portion of this laid on a pervious base.

Because this plan covers so much of the flat area of the site, and increased runoff poses an increased risk of erosion on the steep downhill slope and potentially to the neighbors, greater attention than usual should be paid to providing more than adequate drainage.

Setback

There is no compelling reason to have the garage encroach into the setback area.

Respectfully submitted,
Judith Murphy, Chair

TOWN OF PORTOLA VALLEY, SECOND UNIT ZONING PROVISIONS
Amended by ord. 2011-390, January 26, 2011

18.12.040 Accessory uses permitted. Accessory uses permitted in the R-E district shall be as follows:

A. Accessory uses, as permitted by Section 18.36.040 and Chapter 18.40;

B. One second unit on a parcel of one acre or larger subject to the following provisions:

1. All provisions of Title 18 (Zoning) pertaining to this district prevail unless otherwise provided for in this subsection B.

2. A second unit shall comply with all provisions of the site development and tree protection ordinance, set forth in Chapter 15.12.

3. The parcel already contains an existing single-family dwelling or the second unit is being built simultaneously with a new single-family dwelling that will be the principal dwelling.

4. The second unit is attached to the principal dwelling, at the ground floor level or in a basement, and does not exceed a floor area of four hundred square feet. Second unit floor area is inclusive of any basement area, but exclusive of garage or carport area. Second units that are larger than four hundred square feet in floor area, that require a permit under Chapter 15.12, the Site Development and Tree Protection Ordinance, or that are located above the first story are subject to Architectural and Site Control Commission (ASCC) approval per Chapter 18.64.

5. Whether attached or detached from the principal dwelling, the second unit floor area may exceed four hundred square feet subject to ASCC approval per Chapter 18.64. In such cases, however, the second unit floor area may not exceed seven hundred fifty square feet.

6. Second units up to 750 square feet may be created by converting space within an existing home. When created within the first floor of an existing home, or including an addition of 400 square feet or less, such second units may be permitted solely with a zoning permit, and without review of the ASCC. However, staff at their discretion may refer an application to the ASCC if the application includes proposals for doors, windows or other exterior improvements that could potentially have a significant effect on the aesthetics of the structure.

7. The second unit complies with the definition of dwelling unit in Section 18.04.150.

8. The second unit is served by the same vehicular access to the street as the principal dwelling and complies with off-street parking requirements for dwellings set forth in Section 18.60 except that parking spaces do not have to be covered, guest spaces are not required and tandem parking is permitted.

9. The second unit shall have the same address as the principal dwelling.

10. A second unit shall not exceed a height, as defined in Section 18.54.020, of eighteen feet with a maximum height of twenty-four feet. A second unit may be permitted to a height of twenty-eight feet and a maximum of thirty-four feet subject to ASCC approval per Chapter 18.64.

11. The second unit shall have colors, materials and architecture similar to the principal dwelling. Architecture not similar to the architecture of the principal dwelling is subject to ASCC approval per Chapter 18.64.
12. Color reflectivity values shall not exceed forty percent except that trim colors shall not exceed fifty percent. Roofs shall not exceed fifty percent reflectivity.
13. Exterior lighting on the structure shall not exceed one light fixture per entry door. Each fixture shall be fitted with only one bulb and the bulb wattage shall not exceed seventy-five watts incandescent light if frosted or otherwise diffused, or twenty-five watts if clear. Each fixture shall be manually switched and not on a motion sensor or timer. Path lights, if any, shall be the minimum needed for safe access to the second unit and shaded by fixtures that direct light to the path surface and away from the sky.
14. Landscape plantings shall be selected from the town's list of approved native plants and shall adhere to the town's landscaping guidelines.
15. An application for a second unit shall be referred to the town geologist, director of public works, fire chief and, if dependent on a septic tank and drain field, to the county health officer in accordance with town policies.
16. An application for a second unit shall supply all information required by Section 18.64.040 A.1--13.
17. Second units on parcels with frontage on Portola Road or Alpine Road, both of which are identified as local scenic corridors in the general plan, are subject to ASCC approval per Chapter 18.64 to ensure consistency with the general plan.

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: ASCC

FROM: Steve Padovan, Interim Planning Manager

DATE: December 10, 2012

RE: Preliminary Architectural Review and Site Development Permit X9H-645
New Single-Family Dwelling at 10 Sioux Way
Clark Residence

PROPOSAL

This is a request for preliminary review by the ASCC of a new 4,420 square foot (sq.ft.), single-story dwelling and a detached 502 sq.ft. guest house on a 1.09 acre parcel at 10 Sioux Way. The main dwelling consists of four bedrooms, a kitchen, dining room, family room, living room and library with an attached 550 sq.ft., two car garage. The guest house contains a full bath and kitchen area. The dwelling will be located in the rear half of the lot and will encroach up to four feet into the side yard setback on the westerly property line, necessitating an exception to the yard setback standards. The proposed driveway will slope up from the road at a 14% grade and roughly parallels the easterly property line, ending at a fire truck turnaround (hammerhead) between the garage and guest house with 3 open guest parking spaces located at the top of the hammerhead. The proposal calls for the removal of one substantial blue oak and several smaller oaks that are impacted by the building layout and the driveway design. The property will be connected to the public sewer and is not located within a homeowner's association.

The proposal is further described on the following plans dated "Received December 4, 2012" unless otherwise noted:

Sheet A-0: Cover Sheet
Sheet A-1: Impervious Surface and Floor Area Calculations
Sheet A-2: Site Plan
Sheet A-3: Main Dwelling; Floor Plan
Sheet A-4: Main Dwelling; Roof Plan
Sheet A-5: Main Dwelling; East and South Elevations

Sheet A-6: Main Dwelling; West and North Elevations
Sheet A-7: Guest House; Floor Plan and Elevations
Sheet A-8: Exterior Lighting Plan
Sheet L-1: Landscape Plan; Cleaver Design Associates, 11/612
Sheet C-1: Topographic Survey Plan; MacLeod and Assoc., 8/24/12
Sheet C-2: Preliminary Grading and Drainage; MacLeod and Assoc., 11/2/12
Sheet C-3: Erosion and Sedimentation Control; MacLeod and Assoc., 11/2/12

In addition to the plans, the project submittal includes the information listed below:

- Color Board, dated "Received 11/19/12", which includes stucco colors, cedar siding stain colors, window cladding, metal roof color and plaster/hardscape colors. The board will be available at the meeting;
- Exterior Material Specifications and lighting fixture types including "cut sheets" on the light fixtures;
- Completed "Build-It-Green Green Point Rated Project Checklist" with 138 points for the dwelling (target of 113) and 107 for the guest house (target of 25);
- Completed Outdoor Water Use Efficiency Checklist

The proposal will also require the removal and re-compaction of existing non-engineered fill that resulted from the previous grading of the hillside for a building pad and driveway and the re-grading of the existing driveway to achieve fire access standards, which in its current design, will result in the removal of two significant blue oaks. The geotechnical engineer anticipates that the re-compaction will result in a pad elevation that is slightly lower than the existing pad elevation. Excluding the grading related to the re-compacted pad, the engineer has calculated that the total cut for the dwelling and the driveway is estimated at 920 cu.yd. (with 420 cu.yd. related to the foundations for the dwelling and guest house) and fill for the driveway of approximately 60 cu.yd. The engineer has estimated that up to 860 cu.yd. of material could potentially be exported from the site but that would be at the higher end of estimates as the re-compaction of the site may result in less material being excavated for the building foundations.

BACKGROUND/EXISTING SITE CONDITIONS

The subject lot is an undeveloped parcel in the Arrowhead Meadows Subdivision which was recorded at the County in 1959. According to the geotechnical investigation completed by Michelucci & Associates, the previously graded building pad was created at about the same time as the adjacent building pad on 20 Sioux Way and in their 1999 report on that dwelling, the engineer stated that the fill slope underlying 20 Sioux Way suffered from settlement issues due to improperly consolidated fill. This fill was a contributing factor to the settlement issues experienced at the existing dwelling on 20 Sioux. Based on the prior analysis and the current report, the engineer has recommended re-compaction of the fill on the project site.

Site topography consists of a steep slope cut into the sandstone bedrock at the north end of the property, a valley gutter at the base of that slope (with a drain inlet near the east property line, a relatively level rough graded building pad, a rough graded driveway from Sioux Way up to the building pad, and 2 to 1 slopes from the building pad down to the street and the dwelling on Cervantes. The building pad is at approximately the same elevation as the developed portion of the adjoining property at 20 Sioux Way. Existing vegetation includes a mix of blue oaks, live oaks and madrones along the northerly and easterly perimeter of the property, and thick brush and toyon on the slopes below the building pad.

There is a 5 foot public utility easement along the northerly property lines and a 10 foot easement along Sioux Way. In addition, a 10 foot easement bisects the lot between the proposed main dwelling and guest house. The owner is in the process of having the easement that bisects the lot abandoned, even though the current design avoids the easement and does not impact the proposed development.

Surrounding development consists of a water tank to the north on the small hill above the site and single-family dwellings on the remaining sides. The property most directly affected by the proposed development is the dwelling at 20 Sioux Way. That property contains several buildings surrounding an inner courtyard and pool. However, the structures most directly affected are the back side of the dwelling and a detached garage, with minimal windows and views facing the project site.

DEVELOPMENT CRITERIA

The property is zoned R-E (Residential Estate), 1 acre minimum, Slope Density Table 1a with an average slope of 26.6% and is subject to the following development criteria:

Maximum Adjusted Floor Area Permitted	4,946 sq.ft
Proposed Total Floor Area	4,927 sq.ft.
Maximum Single Structure Floor Area (Maximum adjusted floor area x 85%)	4,205 sq.ft.
Proposed Main Dwelling Total Floor Area	4,420 sq.ft. (89%)
Maximum Impervious Surface Area	7,177 sq.ft.
Proposed Impervious Surface Area	4,071 sq.ft.
Setbacks: Front Side Rear	 50 feet 20 feet 20 feet
Maximum Building Heights	28 feet main dwelling 18 feet accessory building
Proposed Building Heights	23 feet main building 17.5 feet guest house
Parking Required	5 total - 2 covered; 3 guest spaces
Proposed Parking	5 total including 2 covered

Based on the above listed criteria, the proposed dwelling meets the maximum floor area and impervious surface area requirements with the exception of the maximum single structure area, which exceeds the requirements by 215 square feet. The Zoning Code allows the ASCC to increase the 85% threshold if the following findings can be made:

A. *Any one of the following:*
   1. *The larger building will result in a superior design for the property in terms of grading, tree removal and use of the property than would be possible without the requested increase.*
   2. *The larger building is appropriate because steep slopes, areas of unstable geology or areas subject to flooding so limit development of the property that in order to develop a reasonable plan for the property it is necessary to concentrate more than eighty-five percent of the floor area in a single building.*
   3. *The larger building is appropriate because the reduction in permitted floor area caused by steep slopes, unstable geology and/or areas subject to flooding so reduces the floor area permitted for any single building that in order to develop a reasonable plan for the property it is necessary to concentrate more than eighty-five percent of the floor area in a single building.*
B. *The building will not impact significant views enjoyed by neighboring properties to any greater extent than would a design for the project without the increased floor area.*
C. *The building will not in any substantial way negatively affect neighboring properties to any greater extent than would a design for the project without the increased floor area.*
D. *The building will be in keeping with the character and quality of the neighborhood.*

Staff believes that the findings can be made due to the steep topography of the site and limited development area resulting from the need to provide an access driveway and fire turnaround. In addition, the concentration of floor area in the one structure will not result in significant impacts to the views from neighboring properties in that the structure will remain single-story and the views from the only dwelling affected, 20 Sioux Way, would essentially be unchanged regardless of whether or not the building occupies 85% of the maximum adjusted floor area or the proposed 89%. Furthermore, the views from the adjacent dwelling are generally above and to the side of the proposed structure, and the scale of the new building would be similar to those on adjacent properties.

Regarding setbacks, the proposal is seeking an exception to the 20 foot side yard setback along the westerly property line as the structure does not maintain a continuous unbroken alignment along that property line. The Zoning Code allows for the average setback of the structure to be 20 feet with no portion of the building encroaching more than 20% into the setback. In this proposal, the closest portion of the building is 16 feet

(20% encroachment) and the average setback is 21.6 feet. Staff is supportive of the reduced setback due to the limited development area on the site and the fact that the structures on the neighboring property most affected by the encroachment include a garage and a portion of the home with no windows.

The guest house as designed qualifies as a second unit and meets the second unit ordinance requirements, including the use of matching exterior materials, structure height, floor area, driveway access, light reflectivity, and parking.

ARCHITECTURAL DESIGN

The building architecture is of a modern contemporary design that incorporates clerestory windows in a central vaulted roof across each structure. This design allows for significant amounts of natural light into the interior of the dwelling and guest house but does result in a building that resembles a two-story structure and presents an elevation with a long continuous roof line. Exterior walls will consist of stucco siding painted in olive tones on the ground level and dark stained cedar siding on the upper clerestory level and on the garage door. The darker olive tone and stained cedar siding meet the Town's Light Reflectivity Guidelines but the lighter wall color exceeds the guidelines by approximately 9 percentage points. The standing seam metal roof will be a dark warm gray and door and window cladding will be chestnut brown which are in the 7 to 11 percent range, well below the maximum 40% reflectivity guidelines. All roof eave edges will incorporate a fascia board painted to match the roof.

Staff's initial concerns were with the massing of the structure at the southwesterly corner of the building (the master bedroom wing) and the long continuous roof line on the upper level of the main dwelling. The architect has since lowered the roof and plate heights in the master bedroom which helps to reduce the visual impacts to the neighboring property and from upper Sioux Way. Also, due to the orientation of the dwelling with respect to the adjacent home, the elevated building pad, and the large cut slope being parallel to the roof form, the long continuous roof line does not appear to present a substantial visual presence to surrounding neighbors or the public street.

Story poles have been installed to depict the envelope of the new structures and these will provide the opportunity for the ASCC and neighbors to consider and react to the proposal. The site meeting will offer the opportunity to view not only site conditions, but views from 20 Sioux Way and from the upper portion of the street that does have views across the site. The project architect has advised that he is considering further adjustments to the height over the master bedroom area at the southwesterly end of the house.

LANDSCAPING

The proposal will result in the removal of four oak trees, two of which are blue oaks that qualify as significant trees due to their circumference. The blue oaks are located near the southerly property line and are being removed to accommodate the new driveway. The Conservation Committee reviewed the plans at their November 27th meeting and

suggested to staff that the owner explore relocating the driveway to avoid the trees. If the driveway is moved, an arborist report will be required to determine if construction of the driveway would significantly impact the trees.

The proposed landscape plan (Sheet L1) retains the remainder of the oaks and madrones on the perimeter of the property and includes the planting of two, 24 inch box blue oaks at the corner of the garage and guest house; three, 15 gallon redbud along the back of the main dwelling; and a 36 inch box marina strawberry tree at the front entry to the house. The remaining landscaping will be primarily drought tolerant landscaping with Toyon and wax myrtle planted along the northwesterly property line to provide softening and screening, manzanita on the slope below the house and grasses and low groundcover planted around the southerly facing portion of the dwelling and around the guest house.

Staff and the applicant have also discussed placing a small berm along the northwesterly property line and planting additional trees and shrubs to increase the screening between the existing home at 20 Sioux Way and the proposed dwelling.

LIGHTING

Proposed exterior lighting is shown on Sheet A-8 with cut sheets for the fixtures included with the colors and materials boards. The proposal includes wall sconces around the perimeters of the two buildings at exit locations with none facing the adjacent property on 20 Sioux Way. There will also be light fixtures under the covered patio. No landscape or walkway lighting is proposed. The sconces incorporate 20 watt bulbs and are dark sky compliant.

SITE DEVELOPMENT COMMITTEE CORRESPONDENCE

The following correspondence was received from the Site Development Committee members:

Public Works Director memo dated November 15, 2012. The memo states that the project shall comply with the most current "Public Works Site Development Standard Guidelines and Checklist" and that all items in the "Public Works Pre-Construction Meeting for Site Development" be reviewed and understood. In addition, the design for storm drainage from the site shall include dissipaters located behind the property line. No direct outflow onto the public right-of-way is allowed.

Fire Marshall Comments dated November 22, 2012. The Fire Marshall finds that the plans as proposed are acceptable and has included several standard conditions related to ignition resistant construction, spark arrestors, sprinklers, alarms and defensible space. The driveway as proposed is compliant and there is a fire hydrant within 500 feet of the structure.

Consulting Engineer report dated November 30, 2012. The Town's consulting engineer peer reviewed the geotechnical report and the Site Development Permit application and

concluded that due to the depth of the fill on the building pad, the pier and grade beam foundation concept is their recommended foundation alternative.

Comments from the Conservation Committee will be provided at the preliminary site review meeting and at the ASCC meeting later that evening. Depending on the outcome of the two blue oaks, the Fire Marshall may be asked to review a redesigned or narrower driveway.

RECOMMENDATION

Staff recommends that the ASCC review and provide comments on the project to staff and the project architect and that the project be continued to the January 14, 2013 ASCC meeting for final review and approval.

ATTACHMENTS

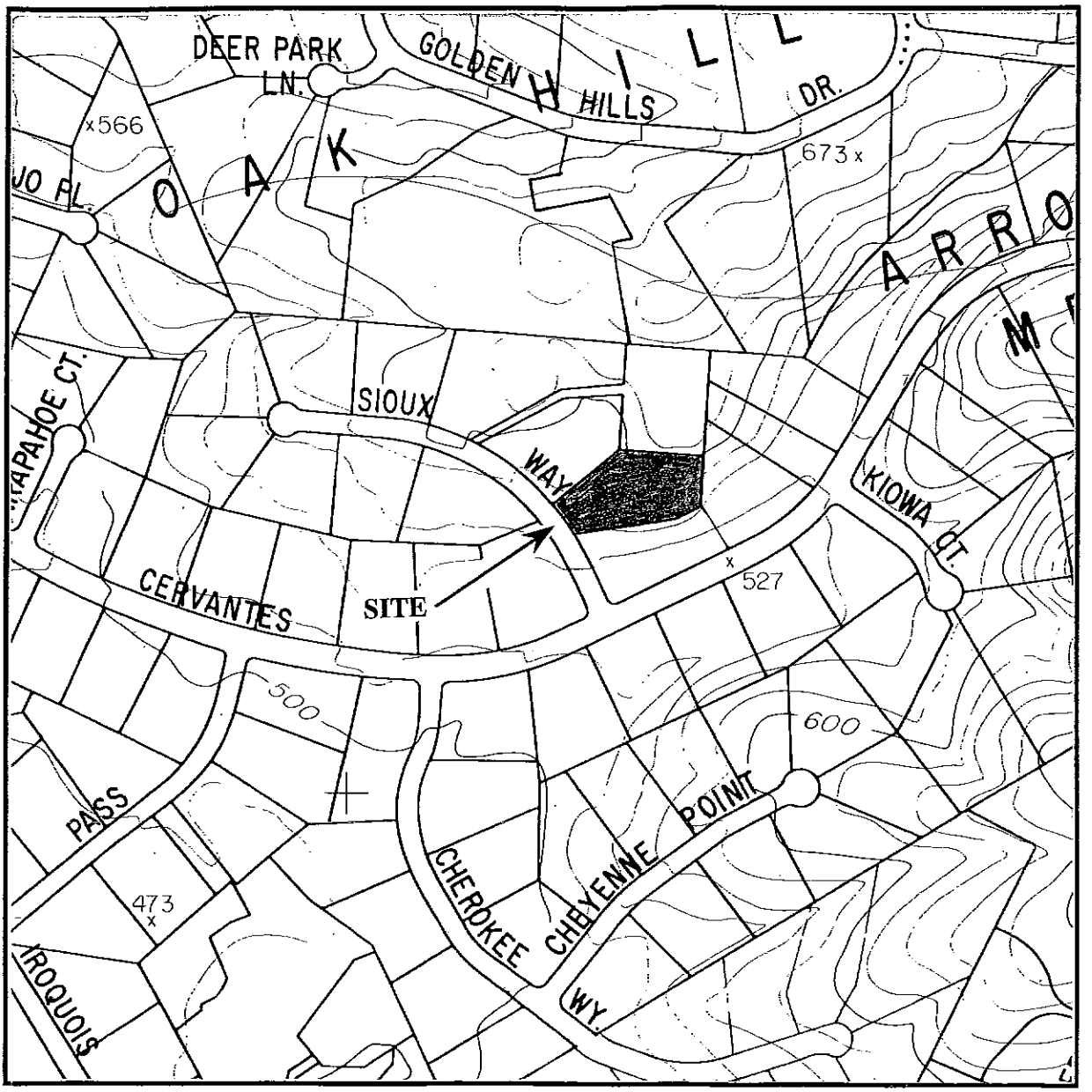
1. Vicinity Map
2. Reduced Plan Set
3. Exterior Materials Specifications and colors and materials types
4. Exterior Lighting cut sheets
5. Public Works Director memo dated November 15, 2012
6. Fire Marshall Comments dated November 22, 2012
7. Consulting Engineer, Cotton, Shires & Assoc. memo dated November 30, 2012
8. Outdoor Water Use Efficiency Checklist
9. GreenPoint Rated Checklist for the Main Dwelling and the Guest House

c: Planning Commission Liason
Town Council Liason
Town Manager
Mayor
Town Planner
Applicant/Owner
Planning Technician

SITE VICINITY MAP*

10 Sioux Way

Portola Valley, California



0 400' 800'

Scale

*BASE MAP FROM COUNTY OF SAN MATEO CADASTRAL TOPOGRAPHIC SERIES, SHEET 16H, 1973, (REVISED 1-1-80).

Job No. **12-4193**	Michelucci & Associates, Inc.	Figure **1**

CONSULTANT CONTACTS

SURVEYOR & CIVIL ENGINEER:
MacLEOD ASSOCIATES
965 CENTER STREET
SAN CARLOS, CA 94070
(650) 593-8580

GEOTECHNICAL ENGINEER:
MICHELUCCI ASSOCIATES
1801 MURCHISON DRIVE SUITE 88
BURLINGAME, CA 94010
(650) 692-0165

LANDSCAPE ARCHITECT:
CLEAVER DESIGN
210 VACATION DRIVE
LAFAYETTE, CA 94549
(925) 934-6044

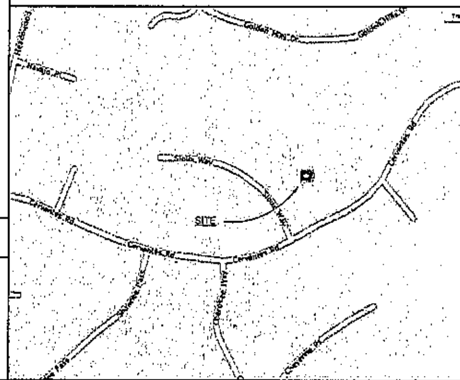
ARCHITECT:
JEFF CLARK
400 SEAPORT CT. #101
REDWOOD CITY, CA
(650) 555-0128

SHEET INDEX

SCOPE

NEW ONE STORY HOME ON VACANT LOT,
INCLUDING ACCESSORY STUDIO / IN LAW UNIT

VICINITY MAP



PROJECT DATA

A.P.N.# :	077 310-210
ZONING DISTRICT :	PE/ 1a/ SD-1a
GEOLOGIC ZONE :	"Sbr" "Psl"
FLOD ZONE :	"C"
PARCEL AREA :	1.09 ACRES 47,494 SF
AVERAGE SLOPE :	26.6 %
SET BACKS :	FRONT 50' SIDE 20' REAR 20'
ADJUSTED MAX. FLOOR AREA :	4,946 SF
85% OF AMFA :	4,205 SF
ADJUSTED MAX. IMPERVIOUS AREA:	7,177 S.F.
PARKING: (5) REQUIRED	(2) COVERED (3) UNCOVERED
BUILDING HEIGHT MAIN RESIDENCE:	25'-0" PROPOSED, 28' MAX.
BUILDING HEIGHT STUDIO:	17'-6" PROPOSED, 18' MAX.
FLOOR AREA HOUSE:	3,875 S.F.
FLOOR AREA GARAGE:	550 S.F.
FLOOR AREA STUDIO:	502 S.F.
TOTAL:	4,927 S.F.
MAIN STRUCTURE TOTAL:	4,420 S.F. 89%
IMPERVIOUS SURFACE:	4,162 S.F.
SEE SHEET C-2 FOR GRADING CALCULATION	CUT & FILL 560 C.Y.

NOTE:
SEE SHEET A-1 FOR AREA CALCULATIONS

BUILD IT GREEN

REQUIRED B.I.G. POINTS:

3,875 SF LIVING AREA
275 SF 50% OF GARAGE (550/2)

75 PTS	FIRST 3,000 SF
PLUS 29 PTS	1/ 30 ABOVE (875/30)
9 PTS	GARAGE (275/30)
113 PTS	TOTAL REQUIRED
135 PTS	ANTICIPATED FOR PROJECT
25	ACCESSORY STRUCTURE ELEMENTS - NOT RATED

CODES

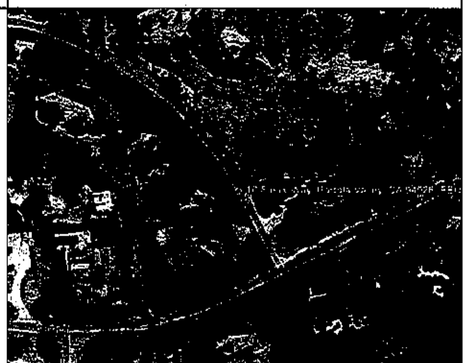
OCCUPANCY GROUP R-3/U
CONSTRUCTION TYPE VB

DESIGN DATA:

2010 CALIFORNIA BUILDING CODE
2010 CALIFORNIA PLUMBING CODE
2010 CALIFORNIA MECHANICAL CODE
2010 CALIFORNIA ELECTRIC CODE
2010 CALIFORNIA ENERGY CODE
2010 CALIFORNIA FIRE CODE
ALONG WITH ALL OTHER LOCAL, STATE & FEDERAL LAWS & REGULATIONS.

FIRE SPRINKLERS YES

AERIAL VIEW



RECEIVED
DEC 04 2012

REVISIONS

DESIGN BY:
JEFF CLARK
ARCHITECT
400 SEAPORT CT. #101
REDWOOD CITY, CA
94063
P: (650) 555-0128

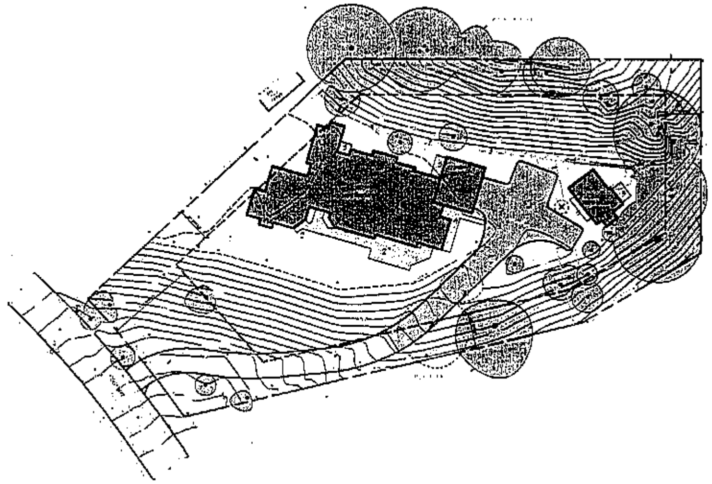
ADDRESS
10 SKYLINE WAY
A.P.N. 077-310-210
PORTOLA VALLEY
CALIFORNIA 94028

CLIENT
CLARK RESIDENCE

SHEET NAME
COVER SHEET

SCALE: NTS

A-0
OF 13

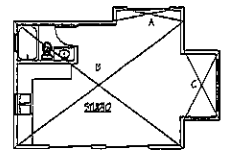


SITE PLAN

IMPERVIOUS SURFACE AREA CALCULATIONS

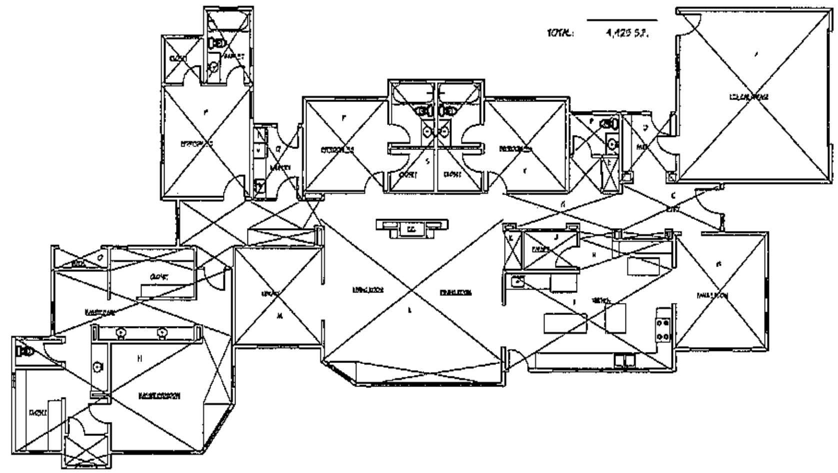
1. DRIVEWAY:	3,022 S.F.
2. SOUTH PATIOS / COVERED PATIO:	702 S.F.
3. NORTH PATIOS	126 S.F.
4. HOUSE PORCH / ENTRY:	206 S.F.
5. STUDIO PATIOS:	106 S.F.
TOTAL:	4,162 S.F.

STUDIO FLOOR PLAN
SCALE: 1/8" = 1'-0"



A-	2 x 10	20 S.F.
B-	24 x 18	432 S.F.
C-	5 x 10	50 S.F.
TOTAL:		502 S.F.

A- GARAGE	22 x 25	550 S.F.
B- FAMILY ROOM	13 x 17	221 S.F.
C- ENTRY	7 x 14.5, 8 x 1	109.5 S.F.
D- MUDROOM	8 x 10	80 S.F.
E- HALL CLOSET	2.5 x 5.5	13.75 S.F.
F- POWDER	7 x 6	42 S.F.
G- HALL	5.5 x 1.5, 16 x 5, 4.5 x 5.5, 26 x 3.5, 7.5 x 4	355 S.F.
H- NOOK	13.5 x 5	67.5 S.F.
I- KITCHEN	24 x 14	336 S.F.
J- PANTRY	8 x 6	48 S.F.
K- WINE BAR	2.5 x 6	15 S.F.
L- LIVING / DINING	26 x 20, 21 x 3.5, 1/2 3 x 3.5	602.25 S.F.
M- LIBRARY	12 x 14.5	174 S.F.
N- MASTER SUITE	1/2 4.5 x 7, 4.5 x 3.5, 7 x 2, 27 x 16.5, 26 x 10, 12.5 x 3	815.5 S.F.
O- MECHANICAL ROOM	8 x 3	24 S.F.
P- BED 2, BATH CLOSET	13 x 16.5, 6 x 7, 7 x 11	333.5 S.F.
Q- LAUNDRY	7 x 11	77 S.F.
R- BED 3	12 x 14	168 S.F.
S- BATH 3,4 / CLOSET 3,4	13.5 x 16.5	222.75 S.F.
T- BED 4	12 x 14	168 S.F.
TOTAL:		4,425 S.F.



HOUSE FLOOR PLAN
SCALE: 1/8" = 1'-0"

REVISIONS

DESIGN BY:
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400 SEAPORT CT. #101
REDWOOD CITY, CA
94063
P: (650) 599-0129

ADDRESS

CLIENT
CLARK RESIDENCE

SHEET NAME
AREA CALCULATIONS

SCALE
AS SHOWN

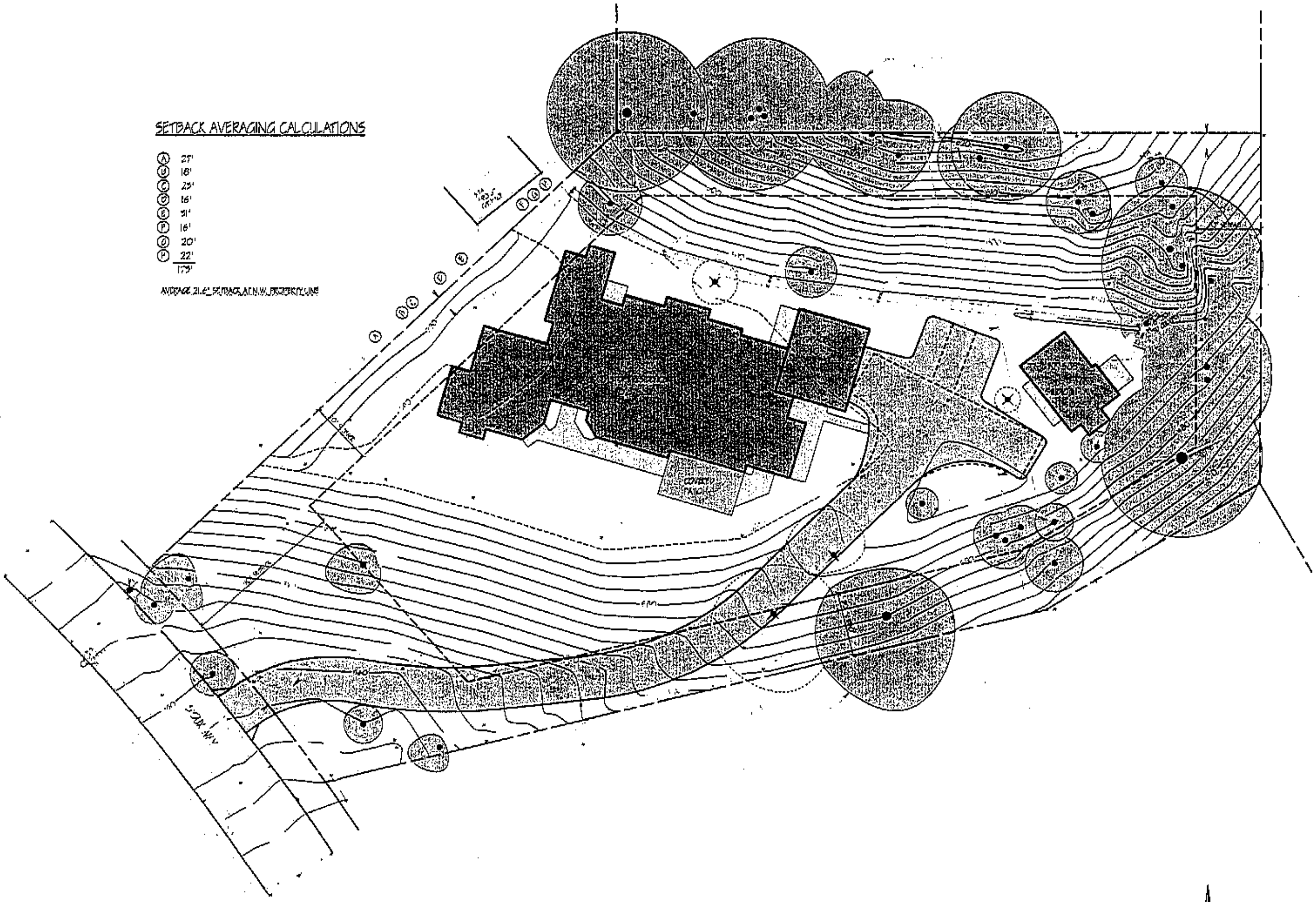
SHEET NO.

A-1
OF 13

SETBACK AVERAGING CALCULATIONS

(A)	27'
(B)	18'
(C)	25'
(D)	16'
(E)	31'
(F)	16'
(G)	20'
(H)	22'
	175'

AVERAGE 21.8' SETBACK AT N.W. PROPERTY LINE



NOTES:

1.- SETBACK AVERAGING USED AT NORTHWEST PROPERTY LINE. SEE CALCULATION THIS SHEET.

2.- PARKING, (2) COVERED AND (3) UNCOVERED.

3.- HAMMER HEAD FIRE TRUCK TURN AROUND PER WOODSIDE FIRE DISTRICT.

4.- SEE CIVIL SHEET C-2 FOR DRIVEWAY GRADING DESIGN LAYOUT TO BE UNDER 15% DRIVEWAY SURFACE TO BE A.C.

5.- REMOVE (2) BLUE OAKS AT RIGHT SIDE OF DRIVEWAY PERMIT FOR REMOVAL OF SIGNIFICANT TREES REQUIRED. REMOVE (2) LIVE OAKS NO PERMIT REQUIRED

SITE PLAN

PROJECT NORTH

TRUE NORTH

REVISIONS

DESIGN BY

JEFF CLARK
ARCHITECT
REDWOOD CITY CA.

ADDRESS

PORTOLA VALLEY
CALIFORNIA 94028

CLIENT

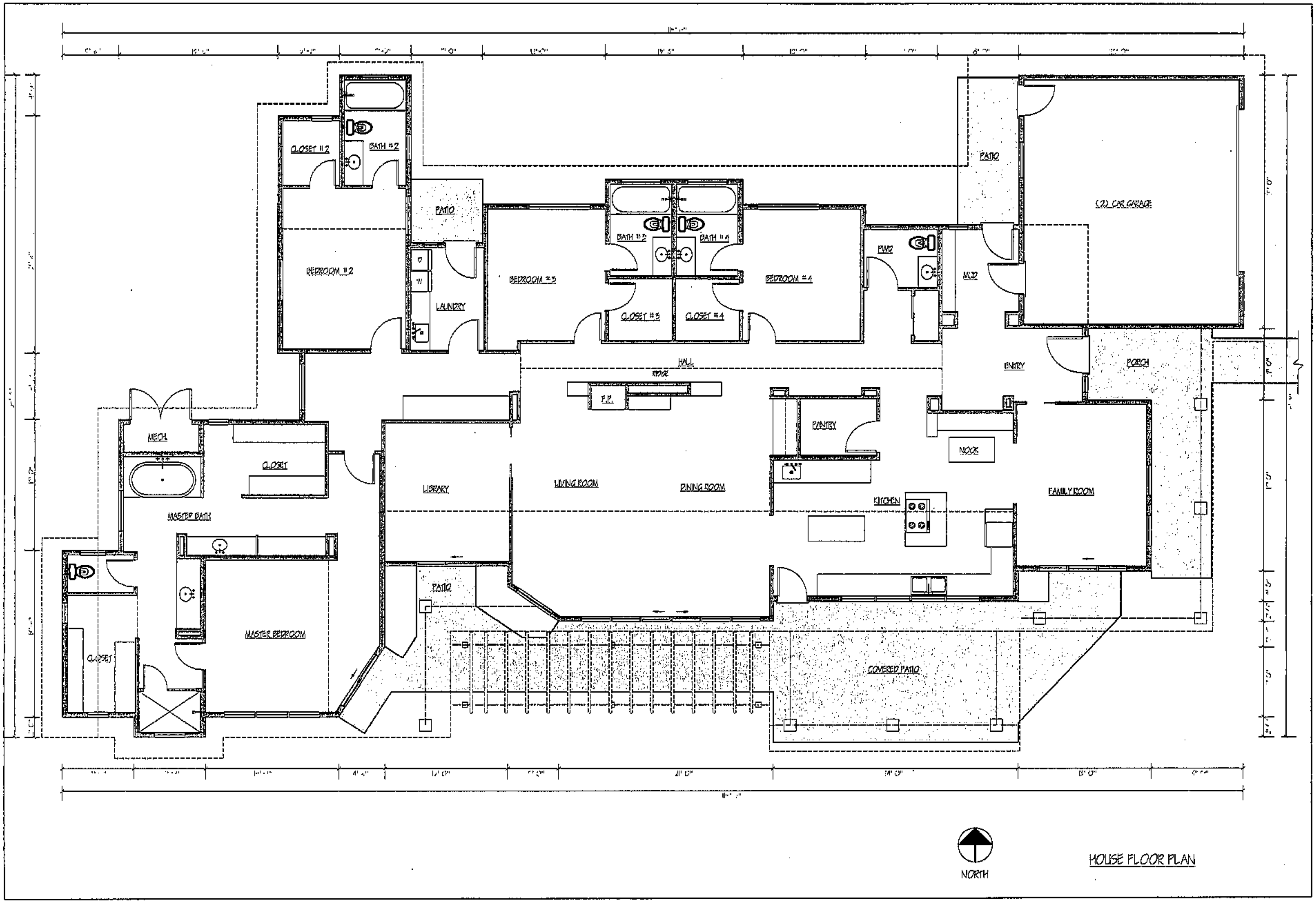
CLARK
RESIDENCE

SHEET NAME

SITE PLAN

A-2

OF 15



REVISIONS

DESIGN BY

JEFF CLARK
ARCHITECT

ADDRESS

CLIENT

CLARK
RESIDENCE

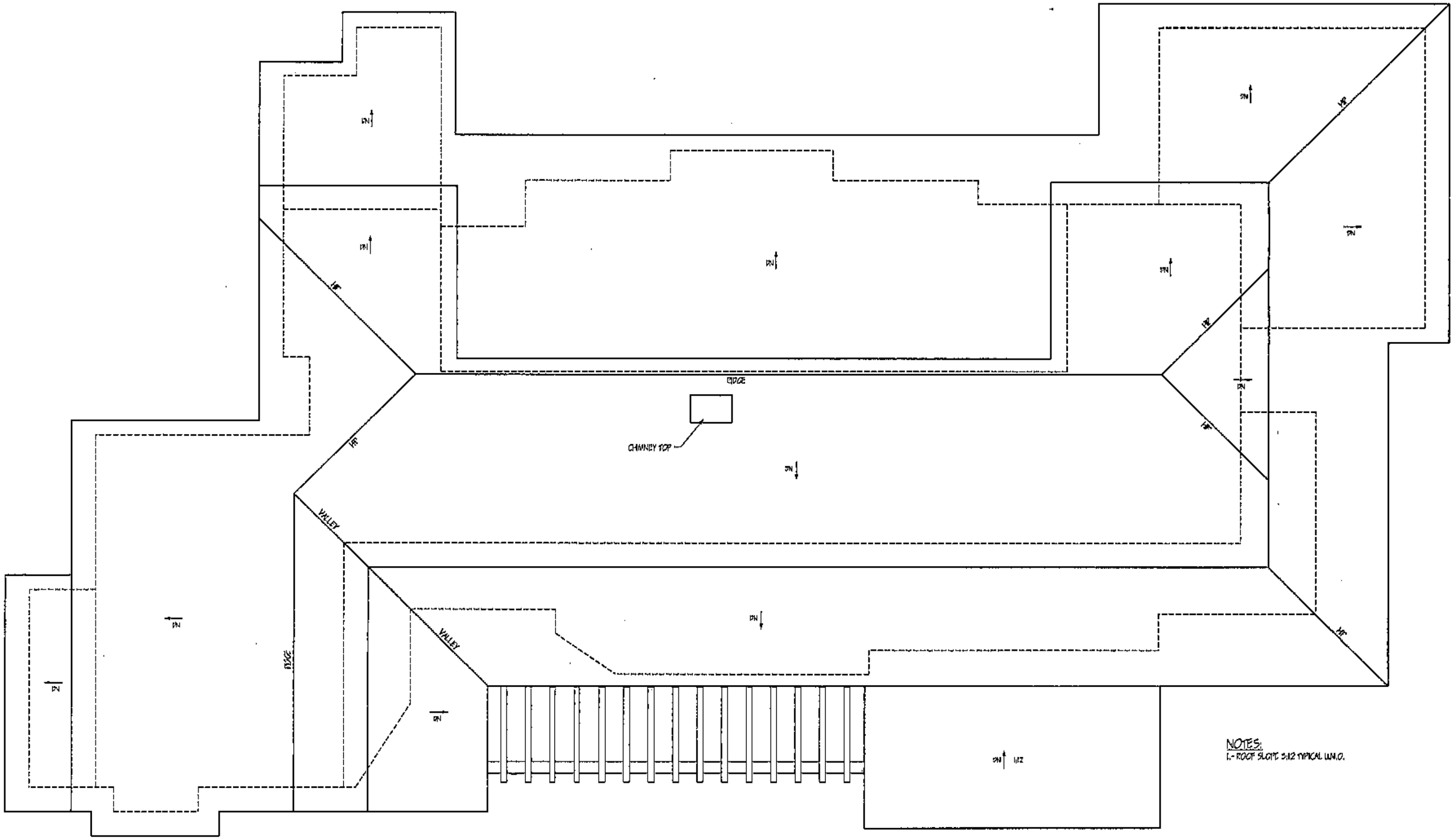
SHEET NAME

ARCHITECTURAL
FLOOR PLAN

SCALE
1/4" = 1'-0"

A-3

OF 13



NOTES:
1.- ROOF SLOPE 5:12 TYPICAL U.N.O.

HOUSE ROOF PLAN

REVISIONS

DESIGN BY
JEFF CLARK
ARCHITECT

ADDRESS

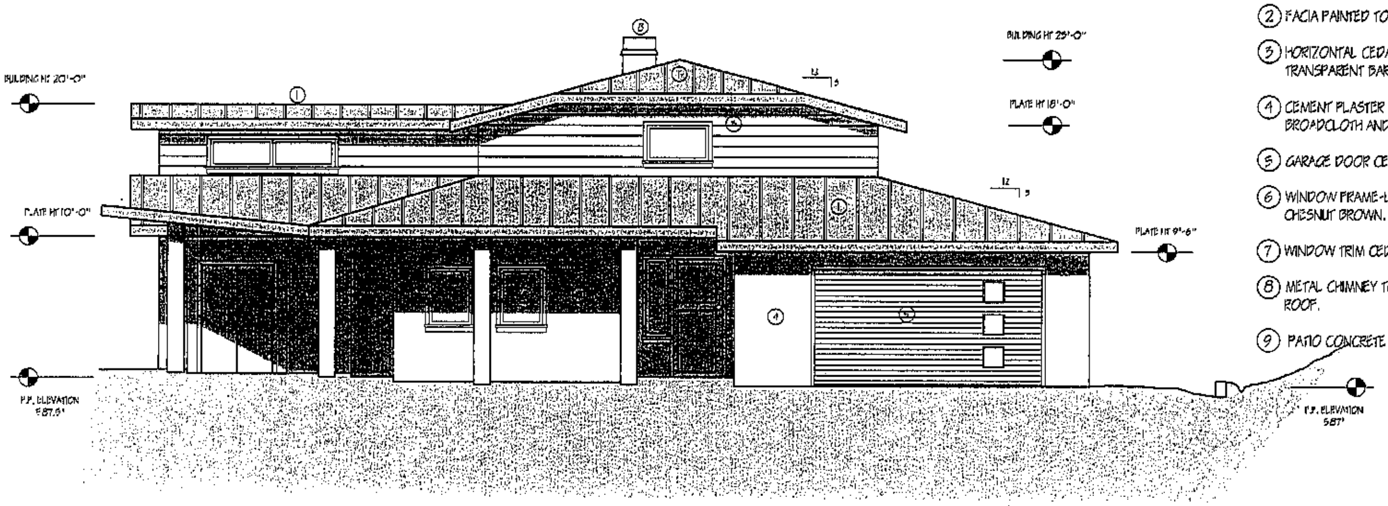
CLIENT
CLARK
RESIDENCE

ARCHITECTURAL
ROOF PLAN

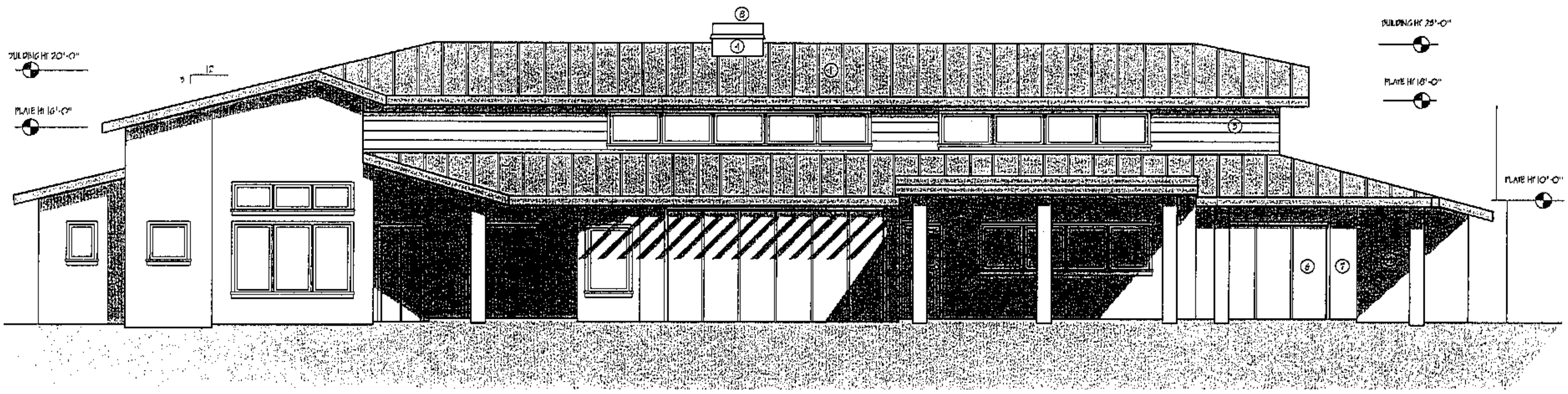
A-4
OF 15

EXTERIOR MATERIALS:

1. STANDING SEAM METER ROOF - GALVILUM, COLOR MEDIUM BRONZE, MATTE.
2. FACIA PAINTED TO MATCH ROOF.
3. HORIZONTAL CEDAR SIDING, PENOFIN STAIN, TRANSPARENT BARK.
4. CEMENT PLASTER COLOR - WESTERN BLEDING, BROADCLOTH AND SPANISH OLIVE.
5. GARAGE DOOR CEDAR, MATCH SIDING.
6. WINDOW FRAME-LOEWEN, COLOR CHESNUT BROWN.
7. WINDOW TRIM CEDAR, MATCH SIDING.
8. METAL CHIMNEY TOP, COLOR TO MATCH ROOF.
9. PATIO CONCRETE - COLOR DAVIES, MESA BUFF



EAST ELEVATION



SOUTH ELEVATION

REVISIONS

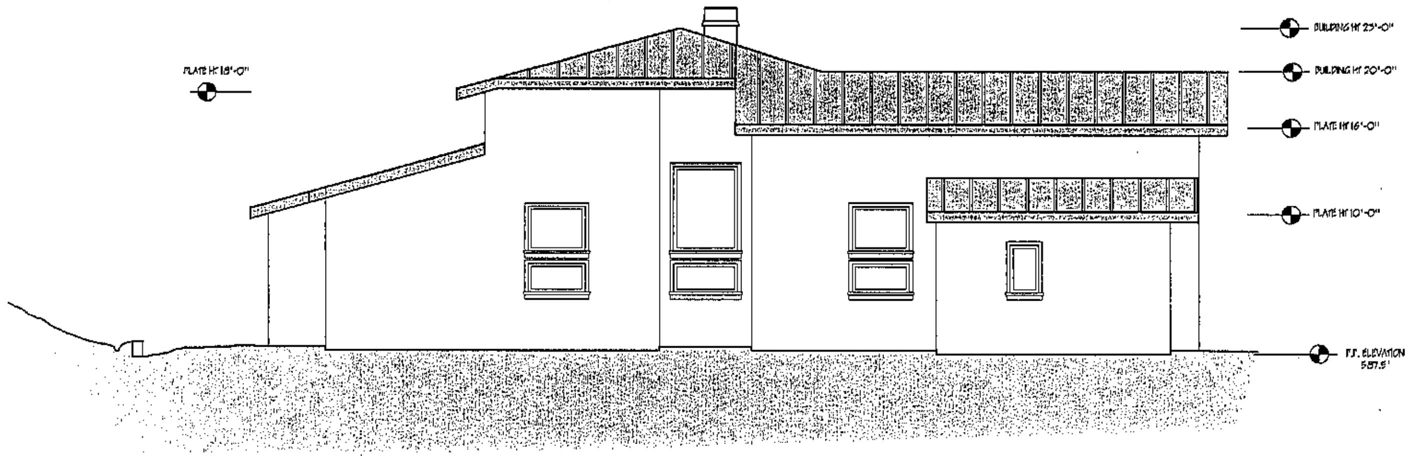
DESIGN BY
JEFF CLARK

ADDRESS

CLIENT
CLARK RESIDENCE

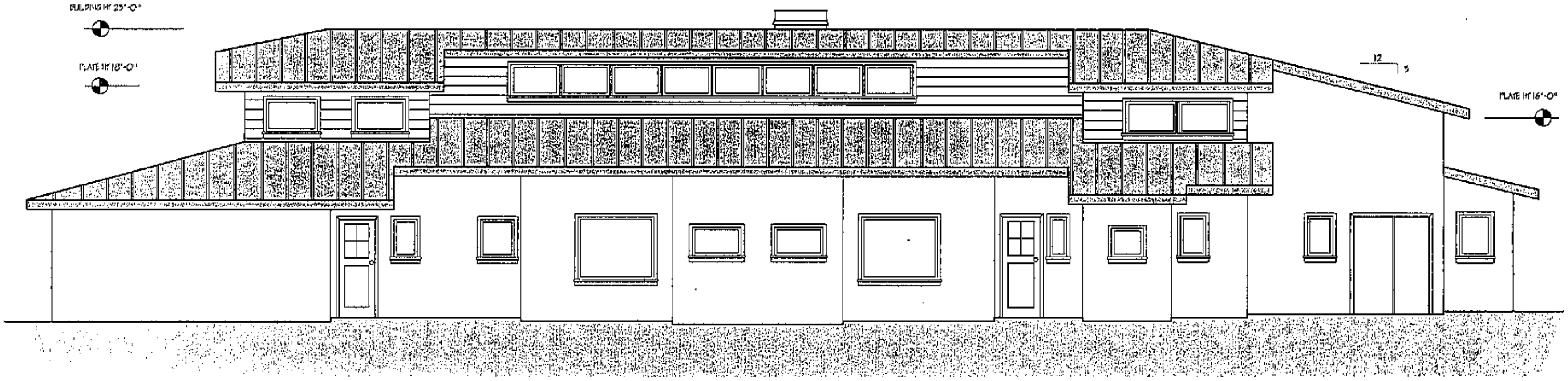
EXTERIOR ELEVATIONS

A-5
OF 13



WEST ELEVATION

NOTE:
SEE SHEET A5 FOR
EXTERIOR MATERIALS



NORTH ELEVATION

REVISIONS

DESIGN BY:

JEFF CLARK
ARCHITECT

ADDRESS

CLIENT

CLARK
RESIDENCE

SHEET NAME

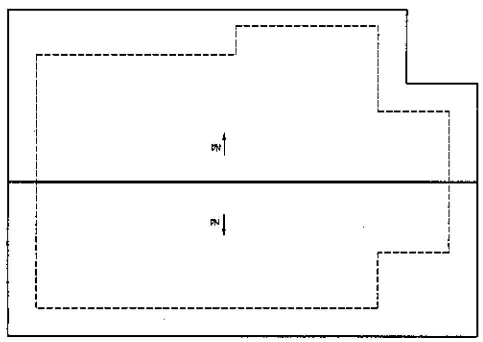
EXTERIOR ELEVATIONS

SCALE

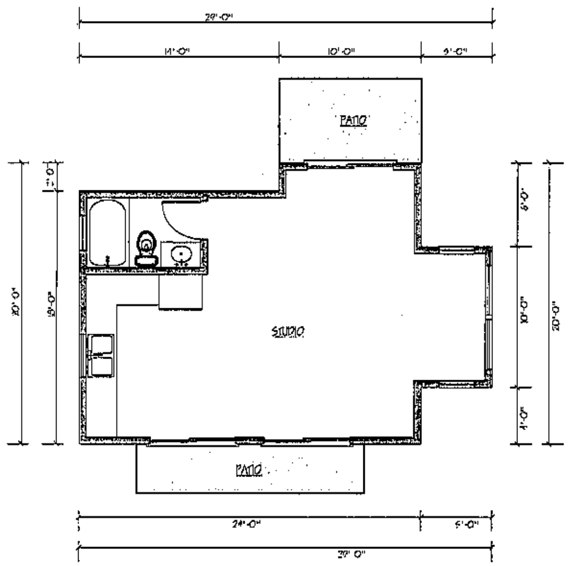
SHEET NO.

A-6

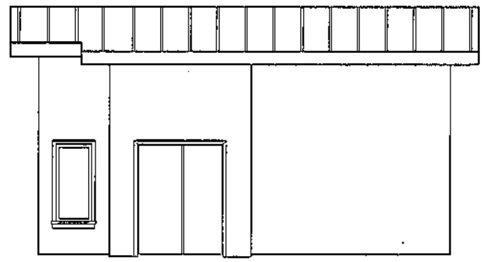
OF 13



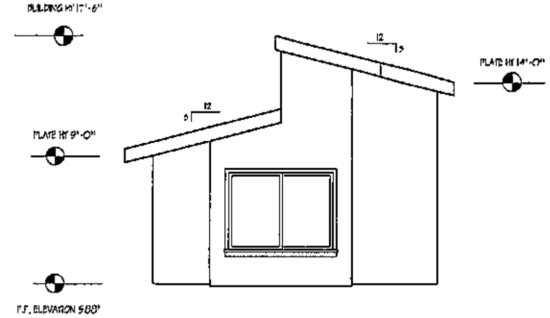
STUDIO ROOF PLAN



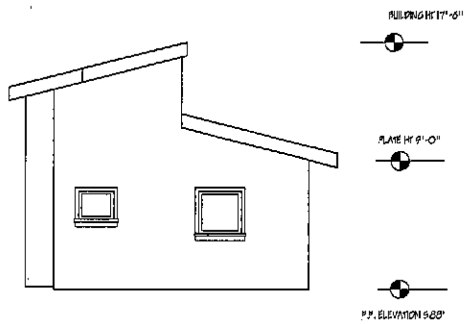
STUDIO FLOOR PLAN



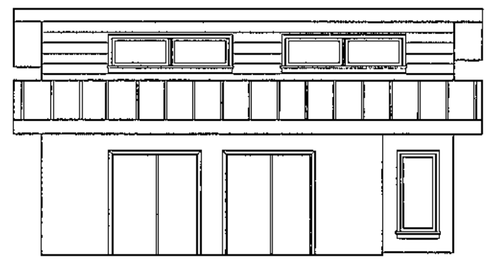
NORTH EAST ELEVATION



SOUTH EAST ELEVATION



NORTH WEST ELEVATION



SOUTH WEST ELEVATION

REVISIONS

DESIGN BY

JEFF CLARK
ARCHITECT

ADDRESS

CLIENT

CLARK
RESIDENCE

SHEET NAME

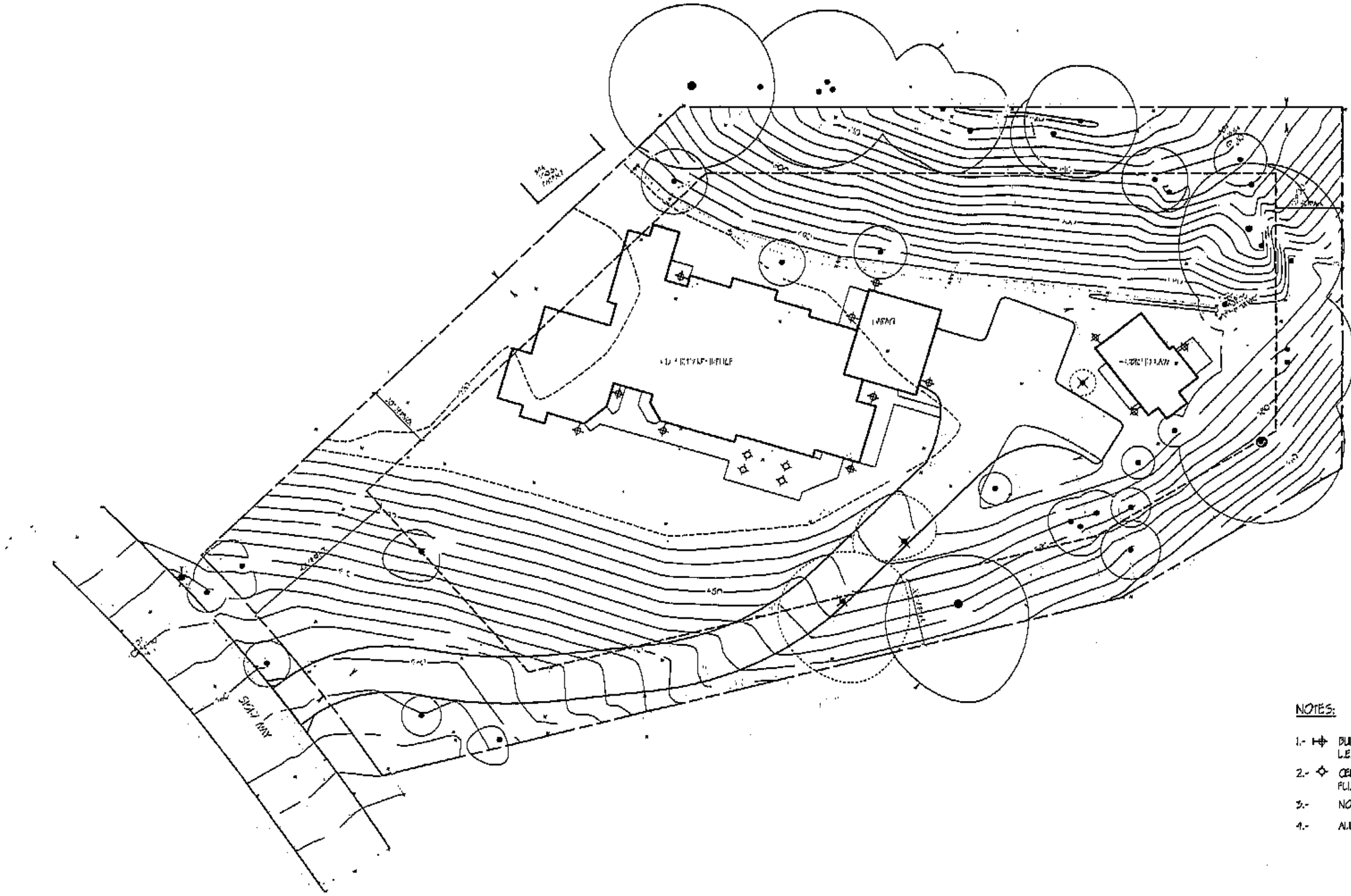
ARCHITECTURAL STUDIO PLAN & ELEVATIONS

SCALE 1/4" = 1'-0"

SHEET No.

A-7

OF 13



NOTES:

1.- BUILDING SCONCE FIXTURE - HINKLEY LUNA 1660 BZ L.E.D. NIGHT SKY COMPLIANT.
2.- CEILING SURFACE FIXTURE - HINKLEY HARBOR 2573 FLUORESCENT, SHIELDED.
3.- NO LANDSCAPE LIGHTING FIXTURES.
4.- ALL SWITCHING TO BE MANUAL.

SITE LIGHTING PLAN

REVISIONS

DESIGN BY:

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T (650) 533-0178

ADDRESS

10 SKID WAY
PORTOLA VALLEY
CALIFORNIA 94028

CLIENT

CLARK
RESIDENCE

SHEET NAME

EXTERIOR LIGHTING PLAN

ASCC SUBMITTAL

DATE: 11-2-17

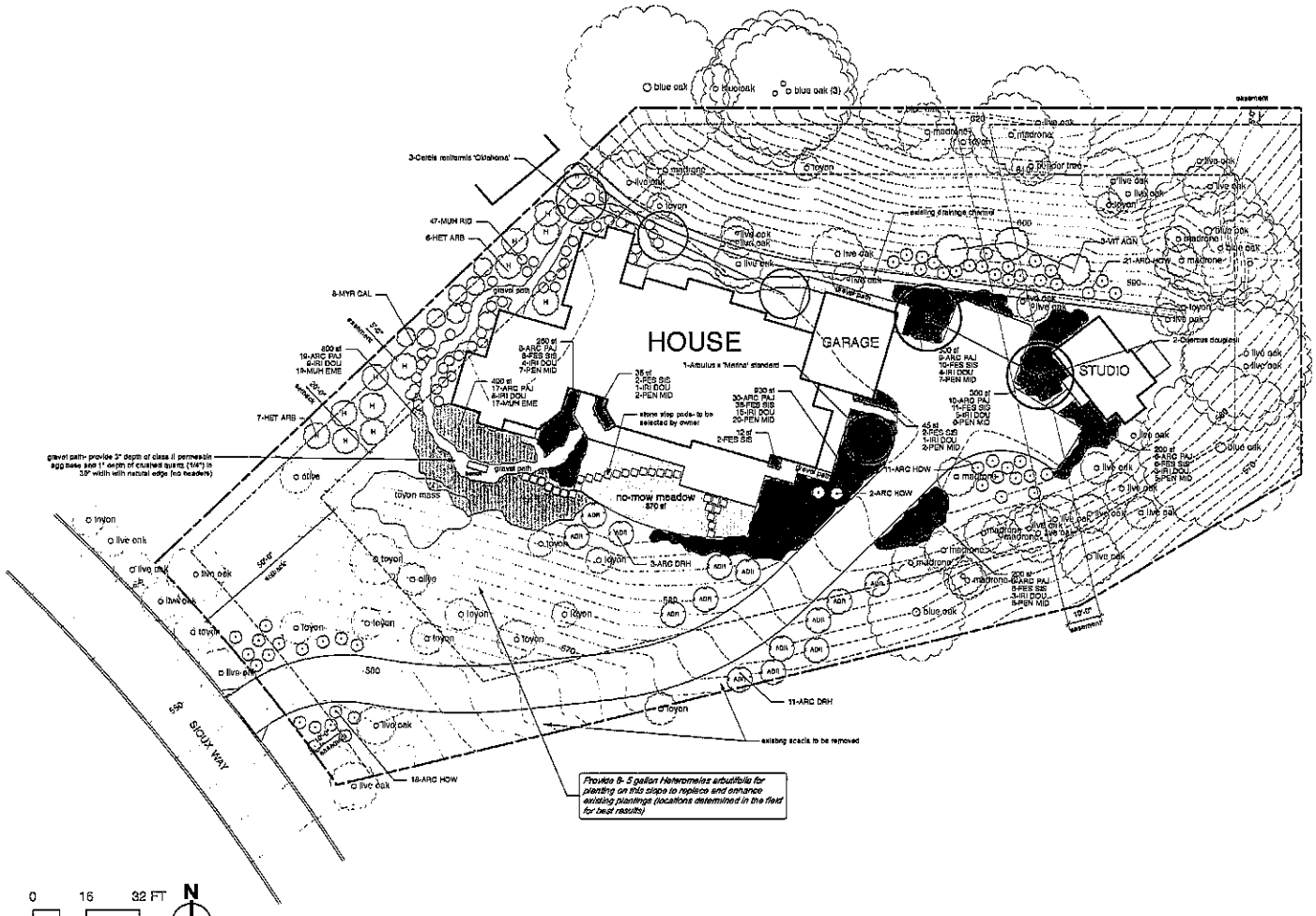
DRAWN BY: JC

SCALE: 1/16" = 1'-0"

SHEET No.

A-8

OF 15



Landscape Plan
Scale: 1/16" = 1'-0"

General Notes

1. All new planting areas shall receive 100% coverage from an automatic, underground irrigation system. The system shall be waived with similar planting and survivable conditions. All new trees shall be watered with bubblers. A smart controller shall be used for best watering practices.
2. All planting area finished grades with a slope of 3:1 or greater shall receive a layer of jute mesh placed under the mulch, secured with metal staples.
3. All work shall be performed by personnel familiar with this type of work and under the supervison of a qualified planting foreman.
4. Do not perform any soil preparation work in areas where soil is contaminated with cement, plaster, paint or other construction debris. Bring such areas to the attention of the landscape architect, and do not proceed until the contaminated soil is removed and replaced.
5. Immediately replace any plant materials that die or are damaged.
6. Planting areas shall receive a 2" layer of 50% soil amendment 50% mini mulch. This should be spread after container planting. The contractor shall provide a sample to the landscape architect prior to shipping to site.
7. The plant count is for the convenience of the landscape contractor. In case of a discrepancy with the plan, the plant count shall govern.
8. These drawings are based on information supplied by Jeff Clark Architect. Existing plant info was determined in the field by Cleaver Design Associates.

Plant List

Category	ID	Latin Name	Common Name	Size	Quantity	Native	Evergreen	Wildlife
tree	ARB MAR	Arbutus x 'Marina' standard	Marina Strawberry Tree	36" box	1	Y	Y	L
	CER OKL	Cercis reniformis 'Oklahoma'	Oklahoma Redbud	15 gallon	3			M
	QUE DOU	Quercus douglasii	Blue Oak	24" box	2	Y		ML
shrub	ARC DRH	Arctostaphylos 'Dr. Hurd'	Dr. Hurd Manzanita	5 gallon	14	Y	Y	L
ADH	ARC HOW	Arctostaphylos densiflora 'Howard McMinn'	Howard McMinn Manzanita	1 gallon	80	Y	Y	L
H	HET ARB	Heteromeles arbutifolia	Toyon	5 gallon	13	Y	Y	ML
	MUH RIG	Muhlenbergia rigens	Deer Grass	1 gallon	47	Y	Y	L
	MYR CAL	Myrica californica	Pacific Wax Myrtle	5 gallon	8	Y	Y	L
	VIT AGN	Vitex agnus-castus	Chaste Tree	5 gallon	3			L
shrub areas	ARC PAJ	Arctostaphylos pajaroensis 'Paradise'	Pajaro Manzanita	1 gallon	106	Y	Y	L
	FES SIS	Festuca idahoensis 'Siskiyou Blue'	Siskiyou Blue Fescue	1 gallon	63	Y	Y	L
	IRI DOU	Iris douglasiana	Pacific Coast Hybrid Iris	1 gallon	53	Y	Y	L
	MUH EME	Muhlenbergia emersleyi	Bull Grass	1 gallon	38			M
	PEN MID	Penstemon x 'Midnight'	Midnight Penstemon	1 gallon	64	Y	Y	M

CLEAVER DESIGN ASSOCIATES
landscape architects
1010 Vacation Drive
Lafayette, CA 94549
P. 925.934.6944
www.cleaverdesign.com
CA reg # 4146

Clark Residence

10 Sioux Way, Portola Valley, CA

Landscape Plan **L-1**

No.	Date	Issue Notes
1	8NOV2012	Issued for ASCC Review

LEGEND

——-—-	PROPERTY LINE
A.C. PAVE	ASPHALT CONCRETE PAVEMENT
CMP	CORRUGATED METAL PIPE
FH	FIRE HYDRANT
FL	FLOWLINE
GA	GUY ANCHOR
INV	INVERT
JP	JOINT UTILITY POLE
P.U.E.	PUBLIC UTILITY EASEMENT
	TREE W/ SIZE & ELEVATION
—X——X—	FENCE
——G——	GAS LINE
——OH——	OVERHEAD LINE
——SD——	STORM DRAIN LINE
——SS——	SANITARY SEWER FORCE MAIN
——W——	WATER LINE

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

PARCEL AREA = 47,494 SQ. FT. ±
= 1.090 ACRES ±

GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

C-1

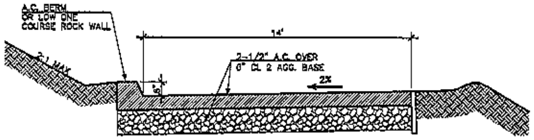
REV.	DESCRIPTION	BY	DATE

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
985 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580

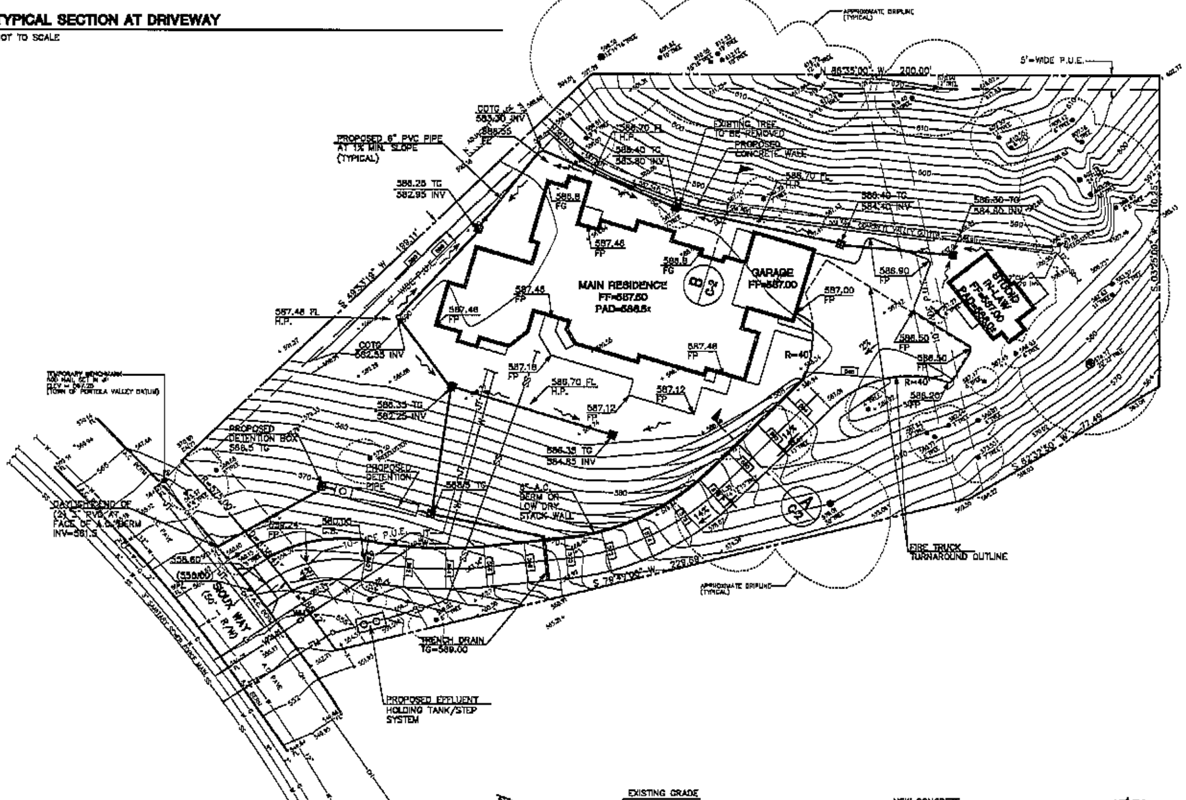
PREPARED FOR:
JEFF CLARK

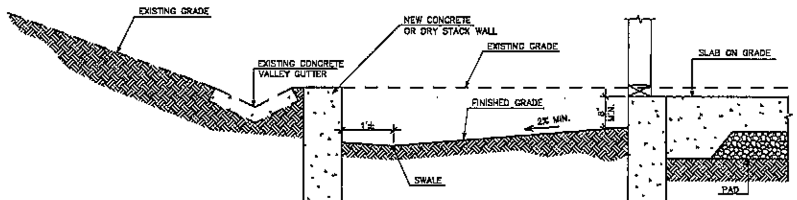
TOPOGRAPHIC SURVEY PLAN
10 SIOUX WAY
A.P.N. 077-310-210
PORTOLA VALLEY SAN MATEO COUNTY CALIFORNIA

DRAWN BY:	DPM
DESIGNED BY:	——
CHECKED BY:	DGM
SCALE:	1"=20'
DATE:	08/24/12
DRAWING NO.	3872-TOPO
SHEET	1 OF 3



(A) TYPICAL SECTION AT DRIVEWAY
NOT TO SCALE





(B) TYPICAL SECTION
NOT TO SCALE

LEGEND

———	PROPERTY LINE
A.C. PAVE	ASPHALT CONCRETE PAVEMENT
CMP	CORRUGATED METAL PIPE
FF	FINISH FLOOR
FG	FINISH GRADE
FH	FIRE HYDRANT
FL	FLOWLINE
FP	FINISH PAVEMENT
GA	GUY ANCHOR
G.B.	GRADE BREAK
H.P.	HIGH POINT
INV	INVERT
JP	JOINT UTILITY POLE
P.U.E.	PUBLIC UTILITY EASEMENT
TG	TOP OF GRATE
	TREE W/ SIZE & ELEVATION
	EXISTING TREE TO BE REMOVED
—X—	FENCE
—G—	GAS LINE
—OH—	OVERHEAD LINE
—SD—	STORM DRAIN LINE
—SS—	SANITARY SEWER FORCE MAIN
—W—	WATER LINE
	PROPOSED CONTOUR
—JT—	JOINT TRENCH

UTILITY NOTE:

THE UTILITIES EXISTING ON THE SURFACE AND SHOWN ON THIS DRAWING HAVE BEEN LOCATED BY FIELD SURVEY. ALL UNDERGROUND UTILITIES SHOWN ON THIS DRAWING ARE FROM RECORDS OF THE VARIOUS UTILITY COMPANIES AND THE SURVEYOR/ENGINEER DOES NOT ASSUME RESPONSIBILITY FOR THEIR COMPLETENESS, INDICATED LOCATION, OR SIZE. RECORD UTILITY LOCATION SHOULD BE CONFIRMED BY EXPOSING THE UTILITY.

PARCEL AREA = 47,494 SQ. FT. ±
= 1.090 ACRES ±

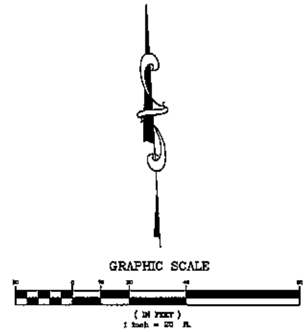
GRADING QUANTITIES CALCULATIONS:

CUT INVENTORY (C.Y.)	ACTUAL CALCULATION	INCLUDED IN CALCULATION
HOUSE PAD	400	0
STUDIO IN-LAW PAD	20	0
DRIVEWAY AND PARKING	200	200
YARD GRADING	300	300
TOTAL CUT	920	500

FILL INVENTORY (C.Y.)	ACTUAL CALCULATION	INCLUDED IN CALCULATION
HOUSE PAD	0	0
DRIVEWAY	60	60
TOTAL FILL	60	60

TOTAL EXPORT= 920 - 60 = 860 C.Y.

TOTAL CALCULATIONS FOR CUT AND FILL PER TOWN GUIDELINES
= 500 + 60
= 560 C.Y. < 990 C.Y. (TO BE REVIEWED BY ASCC)



C-2

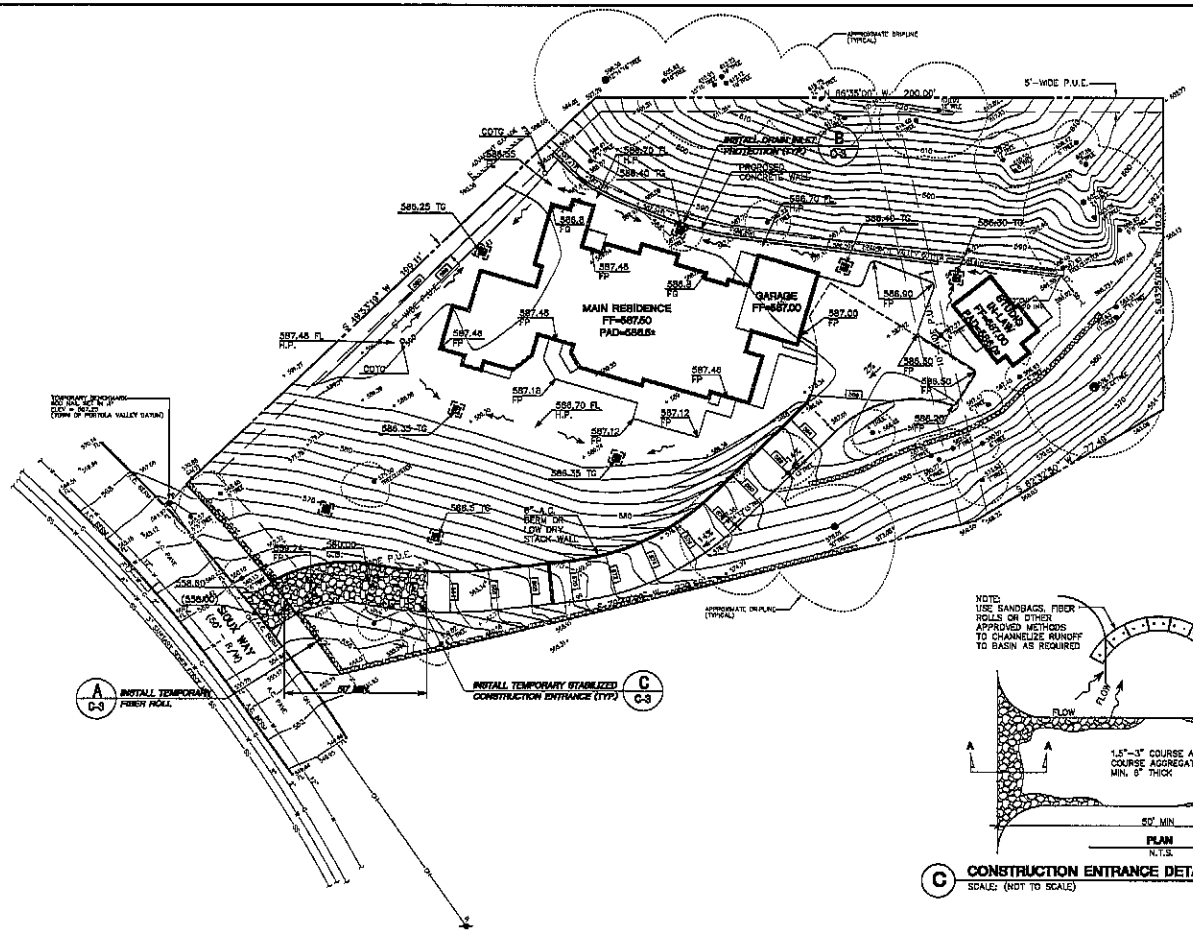
REV.	DESCRIPTION	BY	DATE

MacLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593-8580

PREPARED FOR:
JEFF CLARK

PRELIMINARY GRADING AND DRAINAGE PLAN
10 SIOUX WAY
A.P.N. 077-310-210
PORTOLA VALLEY SAN MATEO COUNTY CALIFORNIA

DRAWN BY:	AAP/DPM
DESIGNED BY:	VPG
CHECKED BY:	DGM
SCALE:	1"=20'
DATE:	11/02/12
DRAWING NO.	3672-GRAD
SHEET	2 OF 3



LEGEND

	PROPERTY LINE
A.C. PAVE	ASPHALT CONCRETE PAVEMENT
CMP	CORRUGATED METAL PIPE
FF	FINISH FLOOR
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FH	FIRE HYDRANT
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FP	FINISH PAVEMENT
GA	GUY ANCHOR
G.B.	GRADE BREAK
H.P.	HIGH POINT
INV	INVERT
JP	JOINT UTILITY POLE
P.U.E.	PUBLIC UTILITY EASEMENT
TG	TOP OF GRATE
	TREE W/ SIZE & ELEVATION
	TREE TO BE REMOVED
	FENCE
	GAS LINE
	OVERHEAD LINE
	STORM DRAIN LINE
	SANITARY SEWER FORCE MAIN
	WATER LINE
	PROPOSED CONTOUR

NOTE: USE SANDBAGS, FIBER ROLLS OR OTHER APPROVED METHODS TO CHANNELIZE RUNOFF TO BASIN AS REQUIRED

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE / EXIT

FLOW

1.5"–3" COURSE AGGREGATE COURSE AGGREGATE MIN. 6" THICK

12' MIN

50' MIN

PLAN
N.T.S.

DIVERSION RIDGE REQUIRED WHERE GRADE EXCEEDS 2%

FILTER FABRIC

ROADWAY

2% OR GREATER

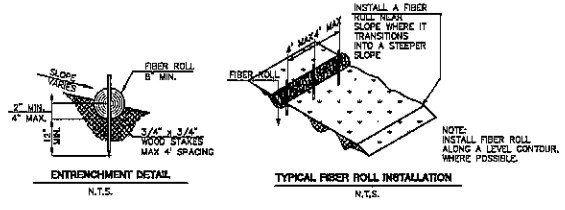
SECTION A-A
N.T.S.

THE ENTRANCE SHALL BE MAINTAINED IN CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC-RIGHT OF WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND /OR CLEANUP OF ANY MEASURES USED TO TRAP SEDIMENT.

WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY.

WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

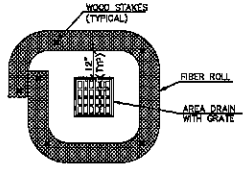
C CONSTRUCTION ENTRANCE DETAIL
SCALE: (NOT TO SCALE)



ENTRENCHMENT DETAIL
N.T.S.

TYPICAL FIBER ROLL INSTALLATION
N.T.S.

A FIBER ROLL DETAIL



B DRAIN INLET PROTECTION DETAIL
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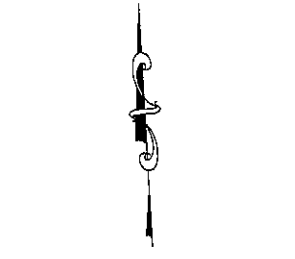


GRAPHIC SCALE

(IN FEET)
1 inch = 20 ft.

C-3

NO.	BY:	DATE:	DESCRIPTION

MACLEOD AND ASSOCIATES
CIVIL ENGINEERING • LAND SURVEYING
965 CENTER STREET • SAN CARLOS • CA 94070 • (650) 593–8580

PREPARED FOR:
JEFF CLARK

EROSION AND SEDIMENTATION CONTROL PLAN
10 SIOUX WAY
A.P.N. 077–310–210
PORTOLA VALLEY SAN MATEO COUNTY CALIFORNIA

DRAWN BY:	AAP/DPM
DESIGNED BY:	VPG
CHECKED BY:	DSM
SCALE:	1"=20'
DATE:	11/02/12
DRAWING NO.	3672–GRAD
SHEET	3 OF 3

10 Sioux Way Exterior Material Specifications

Contacts: Deirdre Clark 650-218-8563, dcdesignz@sbcglobal.net
Jeff Clark 650-533-0128, jmcarch@sbcglobal.net

Windows & Doors: Loewen metal exterior cladding, color chestnut brown, see color sheet & photo

Garage Door: Cedar Species, Penofin Exterior, Ultra Premium Stain, Color Transparent Bark, see sample & photo

Roof: Metal, color medium bronze, see sample

Wood Siding: Cedar Species, Penofin Exterior Ultra Premium Stain, Color Transparent Bark, see sample

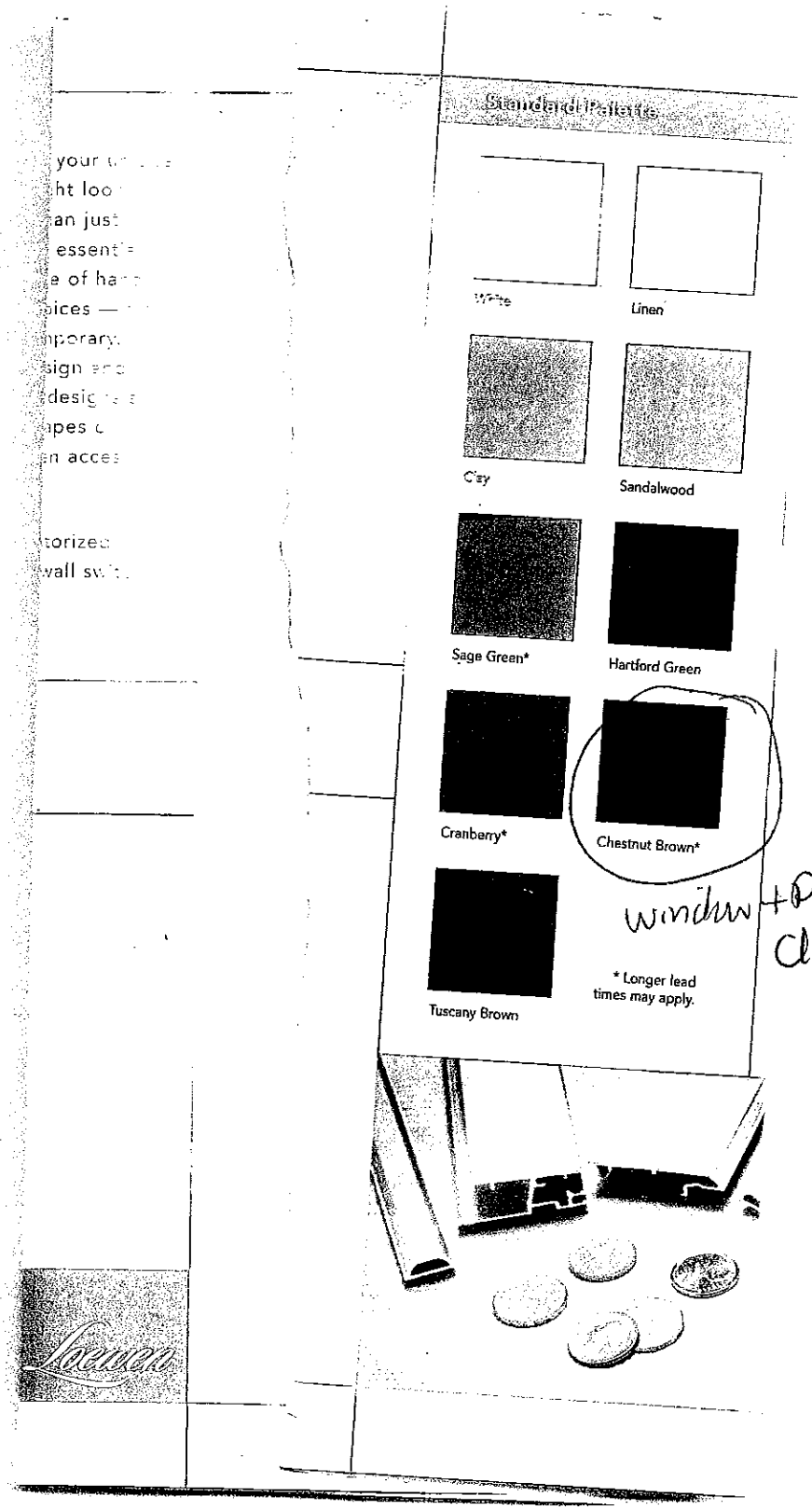
Plaster/Hardscape: Davies Colors, Mesa Buff, 5447, see sample

Stucco Siding: Western blending One-kote, 2 colors Broadcloth & Spanish Olive, see sample & specification sheet

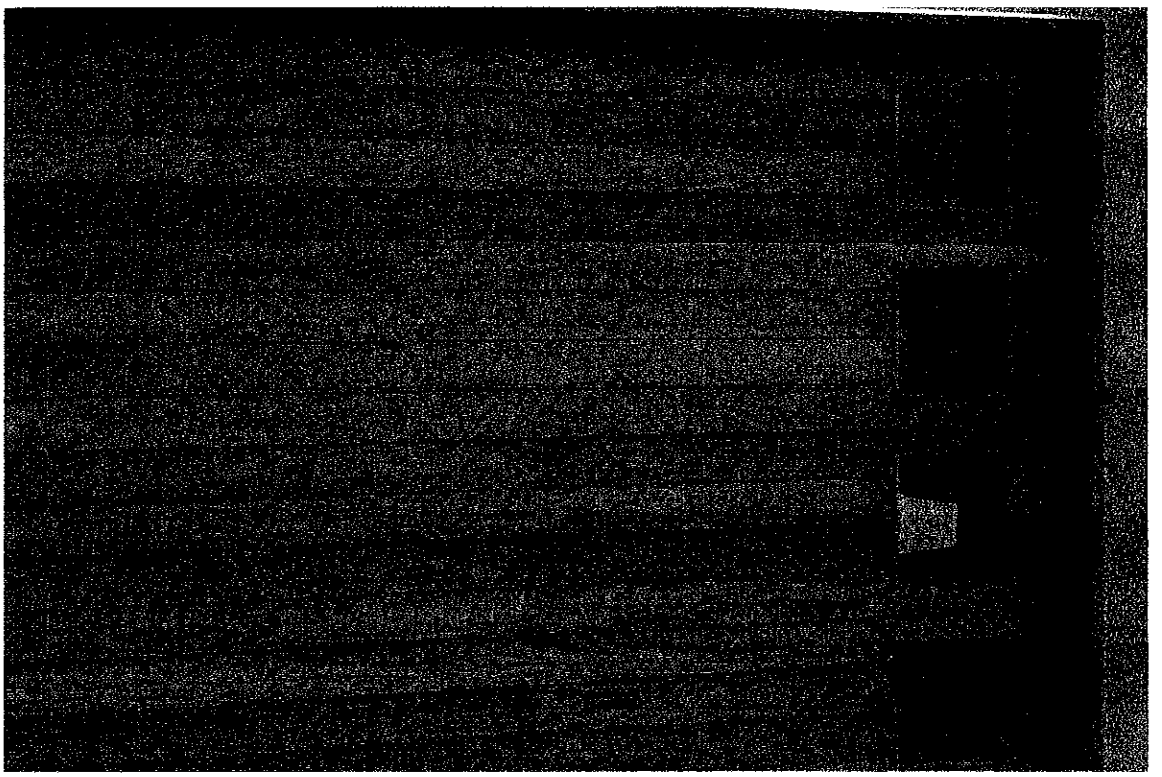
Lighting Sconces: Hinkley Lighting, Dark Sky compliant, LED bulb, Bronze finish, see specification sheet

Lighting Ceiling: Hinkley Lighting, Compact Fluorescent, Anchor Bronze finish, etched amber seedy glass, see specification sheet

Driveway: all asphalt



window + door cladding



garage Door Design

Sustainable Stucco Systems

Western Blended Products will be releasing "Catalyst" by the summer of 2012 for preliminary field applications. This is a versatile exterior coating that uses the process of photo-catalysis to consume and eliminate pollution in a chemical process very similar to photo-synthesis. Initial test show that NOx and VOC reduction caused by the Catalyst coating being applied over a 2000 square foot surface can at minimum, eliminate the pollutant effects equal to that of the average passenger vehicle while providing a surface that will minimize the buildup of airborne pollutants that cover a building over time.

For any questions in regards to sustainable systems and products for exterior stucco systems, please contact:

Shaun Klein
Architectural/Technical Sales Representative, LEED AP
Sacramento Stucco & Western Blended Products
sklein@westernblended.com
(916) 203-4823

Product Sustainability Statement

California

Western Blended Products are packaged in many locations across the US. There are currently no recycled materials in our cementious products, and the volumes of volatile organic compounds are below all of the acceptable levels we have identified in both independent and municipal green building policies.

The following addresses include the locations where the bulk components used to manufacture Western Blended Products are sourced from and the location where our products are blended and packaged for distribution are in your region. Please note that by weight: Cement, Lime and Sand comprise 99% of Western 1 Kote (80 lb sack)*, Top Gun (94 lb sack), Plastic/Common Cement (94 lb sack), Paint Base, Base A and Base B stuccos (90 lb sack)

Blending Location:
Sacramento Stucco Co.
860 Riske Lane, West Sacramento, Ca

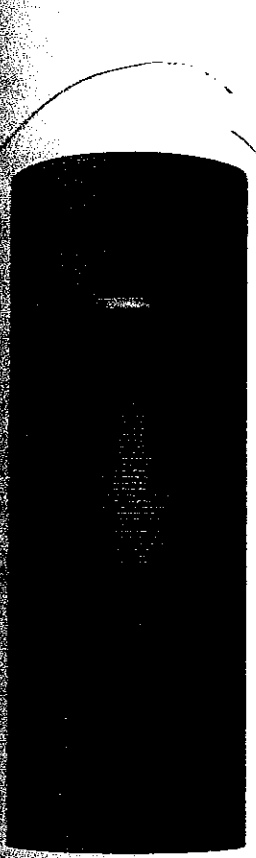
Cement:
TXI Riverside Cement
19409 National Trails Highway
Oro Grande, CA 92368

Lime:
Chemical Lime Co.
1295 Cerro Vista Drive, Applegate, CA

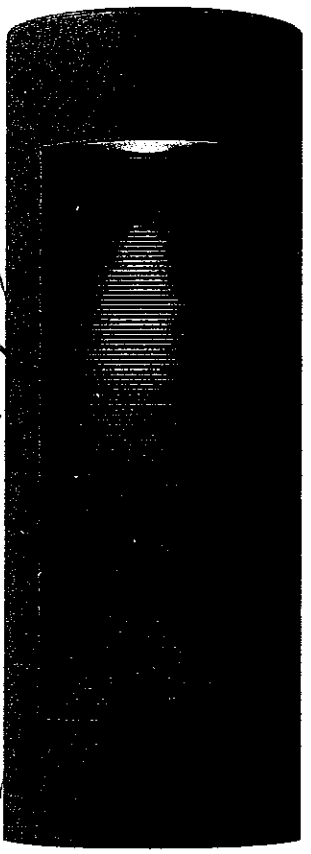
Sand:
Chemical Lime Co.
1295 Cerro Vista Drive, Applegate, CA

If there are any questions in regards to sustainable stucco systems please contact:

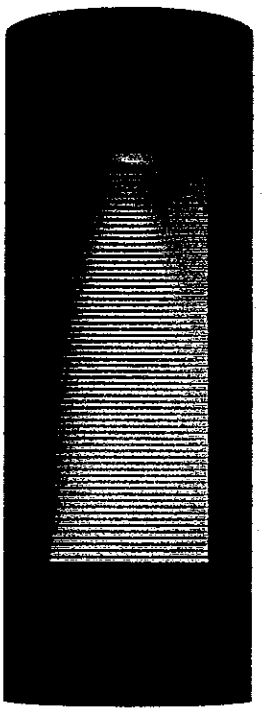
Shaun Klein
Architectural/Technical Sales Representative, LEED AP
Sacramento Stucco & Western Blended Products
sklein@westernblended.com
(916) 203-4823



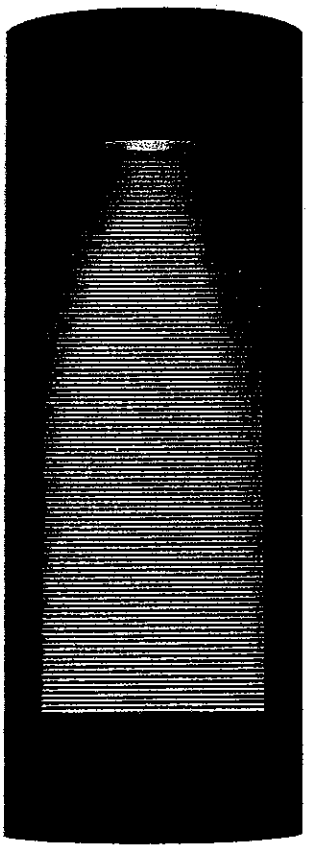
1660 BZ



1664 BZ



1660 SK



1664 SK

Bronze

LUNA

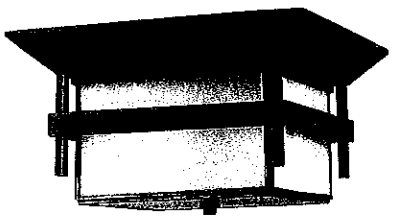
ITEM	WIDTH/DIA.	HEIGHT	EXT.	TOP TO OUTLET	BACK PLATE/CANOPY	BULBS	AVAILABLE FINISHES		
1660 BZ	6" W	16"	3½"	10" to 13½"**	6" W, 16" H Back Plate	~~2-12 volt, 20w MR-16~~***	BZ, SK, TT	*	•
1660 SK	6" W	16"	3½"	10" to 13½"**	6" W, 16" H Back Plate	2-12 volt, 20w MR-16***	BZ, SK, TT	*	•
1660 TT	6" W	16"	3½"	10" to 13½"**	6" W, 16" H Back Plate	2-12 volt, 20w MR-16***	BZ, SK, TT	*	•
1664 BZ	9" W	24"	4"	11½" to 20½"**	9" W, 24" H Back Plate	2-12 volt, 20w MR-16***	BZ, SK, TT	*	•
1664 SK	9" W	24"	4"	11½" to 20½"**	9" W, 24" H Back Plate	2-12 volt, 20w MR-16***	BZ, SK, TT	*	•
1664 TT	9" W	24"	4"	11½" to 20½"**	9" W, 24" H Back Plate	2-12 volt, 20w MR-16***	BZ, SK, TT	*	•

AVAILABLE OPTIONS

*Fixture comes standard Dark Sky compliant **Adjustable mounting hardware. ~~***MR-16 Xenon bulbs included.~~

For an explanation of Icons, see page 4.

Hinkley Lighting Harbor 2 Light Outdoor Flush Lantern in Anchor Bronze 2573AR-ES



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866.344.3875

$229.00 per each

~~List Price $343.50~~
You Save $114.50 (33%)

1. Finish: Anchor Bronze
2. Glass: Etched Amber Seedy Glass

Show Available

Email When Available

Zoom Image

Like 1.5k

Hinkley Lighting Harbor 2 Light Outdoor Flush Lantern in Anchor Bronze 2573AR-ES

General Information | Questions

Hinkley Lighting Harbor 2 Light Outdoor Flush Lantern in Anchor Bronze 2573AR-ES

Flush 2Lt Outdoor

Product Indentification

Manufacturer	Hinkley Lighting
Collection	Harbor
SKU	2573AR-ES
UPC	00640665257311

Design Information

Finish	Anchor Bronze
	Etched Amber Seedy Glass

Dimensions and Weight (inches and pounds)

LENGTH	WIDTH	HEIGHT
0	12.25	7.00

7.00

Bulb Information

PRIMARY	SECONDARY
Compact Fluorescent	
2	
13	

Shipping Information

UPS - FREE SHIPPING

LENGTH	WIDTH	HEIGHT
14.0000	14.0000	9.0000

7.0000 lb.

Product Rating

120

Outdoor Rated

c-UL-us Dry

Related Product

Hinkley Lighting 1560AR
Harbor 1 Light Outdoor Wall Lantern in Anchor Bronze

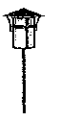
$179.00

Hinkley Lighting 1561AR
Harbor 1 Light Landscape - Path in Anchor Bronze

$89.00

Hinkley Lighting 2574AR
Harbor 1 Light Outdoor Wall Lantern in Anchor Bronze

$249.00



Hinkley Lighting 1562AR
Harbor 1 Light Landscape - Path in Anchor Bronze

$149.00

Hinkley Lighting 2573TT
Harbor 2 Light Outdoor Flush Lantern in Titanium

$199.00

See the entire Harbor Collection

Every Hinkley Lighting Order Includes

No Restocking Fees!

Quick Ship - In stock items ship in approximately 3-5 business days.

FREE SHIPPING on all items able to be sent in the contiguous United States.

International Shipping now available! Call 866.344.3875 for more information.

Free Returns within 30 days of purchase for like new, uninstalled items.

110% Price Match Guarantee find a lower price and we'll beat it by 10% of the difference.

Hinkley Lighting Business Hours

Call For Our Best Price - 866.344.3875

Sales Representatives - 866.344.3875
Mon - Fri 8am to Midnight EST
Sat & Sun 9am to Midnight EST

Customer Service - 866.344.3875
Mon - Fri 9am to 5:30pm EST

XC: planner
padovan
Clark

MEMORANDUM

TOWN OF PORTOLA VALLEY

TO: Carol Borck, Planning Tech
FROM: Howard Young, Public Works Director
DATE: 11/15/12
RE: 10 Sioux Way

Site Development Grading, Drainage, and erosion Control plan comments:

1. All items listed in the most current "Public Works Site Development Standard Guidelines and Checklist" shall be reviewed and met. Completed checklist shall be submitted with building plans. Document is available on Town website.

2. All items listed in the most current "Public Works Pre-Construction Meeting for Site Development" shall be reviewed and understood. Document is available on Town website.

3. Any revisions to the Site Development permit set shall be highlighted and listed.

In addition,

Dissipaters for storm drains should be behind property line.

WOODSIDE FIRE PROTECTION DISTRICT

Prevention Division

4091 Jefferson Ave, Redwood City CA 94062 ~ www.woodsidefire.org ~ Fire Marshal Denise Enea 650-851-6206

ALL CONDITIONS MUST MEET WFPD SPECIFICATIONS – **go to www.woodsidefire.org for more info**

BDLG & SPRINKLER PLAN CHECK AND INSPECTIONS

PROJECT LOCATION:10 Sioux Ct.	Jurisdiction: PV
Owner/Architect/Project Manager: Clark	Permit#: X9H-645
PROJECT DESCRIPTION: New House Site Review	
Fees Paid: ☒$YES ☐ See *Fee Comments* Date:	
Fee Comments: Ch# 2504 $60.00 (ASRB review fee)	

RECEIVED
NOV 27 2012
TOWN OF PORTOLA VALLEY

BUILDING PLAN CHECK COMMENTS/CONDITIONS:

1. Must comply to Portola Valley Muni Code 15.04.020E for ignition resistant construction & materials Chapter 7 2010 CBC
2. Address clearly posted and visible from street w/minimum of 4" numbers on contrasting background.
3. Approved spark arrestor on all chimneys including outside fireplace
4. Install Smoke and CO2 detectors per code.
5. NFPA 13D Fire Sprinkler System to be installed in main house and studio house.
6. 100' defensible space around proposed new structure prior to start of construction.
7. Upon final inspection 30' permiter defensible space will need to be completed.
8. Driveway is in compliance
9. Fire hydrant is within 500' of structure measured on approved roadway route.

*** RESUBMIT*** for final approval once permitted.

Reviewed by:M. Hird	Date: 11/22/12

☒Resubmit ☐Approved with Conditions ☐Approved without conditions

Sprinkler Plans Approved: ----------	Date:	Fees Paid: ☐$350 ☐See *Fee Comments*
As Builts Submitted: ----------	Date:	As Builts Approved Date:
Fee Comments:		

Rough/Hydro Sprinkler Inspection By: ---------	Date:
Sprinkler Inspection Comments:	

Final Bldg and/or Sprinkler Insp By: --------	Date:

RECEIVED
NOV 27 2012
TOWN OF PORTOLA VALLEY

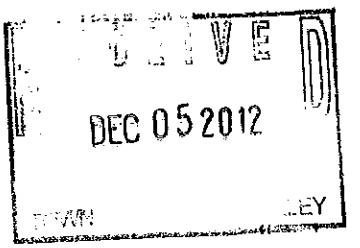
xc: planner clark

COTTON, SHIRES AND ASSOCIATES, INC.
CONSULTING ENGINEERS AND GEOLOGISTS

November 30, 2012
V5262

TO: Carol Borck
Planning Technician
TOWN OF PORTOLA VALLEY
765 Portola Road
Portola Valley, California 94028

SUBJECT: **Geotechnical Peer Review**
RE: Clark, Proposed New Residence and Studio
SDP# X9H-645
10 Sioux Way



At your request, we have completed a geotechnical peer review of the Site Development Permit application for the proposed new residence and studio using:

- Geotechnical Investigation (report) prepared by Michelucci and Associates, Inc., dated November 5, 2012;
- Architectural Plans (9 sheets, various scales) prepared by Jeff Clark, dated November 7, 2012;
- Landscape Plan (1 sheets, 16-scale), prepared by Cleaver Design Associates, dated November 6, 2012;
- Topographic Plan (1 sheet, 20-scale) prepared by MacLeod and Associates, dated August 24, 2012; and
- Grading, Drainage and Erosion Control Plans (3 sheets, various scales) prepared by MacLeod and Associates, dated November 2, 2012.

In addition, we have reviewed pertinent technical documents from our office files and completed a recent site reconnaissance.

DISCUSSION

The applicant proposes to construct a new residence, attached garage, and studio. Estimated earthwork quantities include approximately 920 cubic yards of cut and 500 cubic yards of fill. Sewage will be conveyed to the existing sanitary sewer system within Sioux Way.

SITE CONDITIONS

The subject property is generally characterized by steep to very steep (approximately 30 to 60 percent inclination), southwest-facing hillside topography. However, previous site grading has resulted in a relatively level cut and fill building pad. Steep to very steep (approximately 50 to 68 percent inclination) cut slopes are located along the northern portion of the property. Evidence of small past rockfalls was noted in this northern cut slope area. A large fill prism associated with the existing building pad contains steep (approximately 50 percent inclination) southwest facing slopes. Drainage at the site is generally characterized by uncontrolled sheet flow to the southwest.

The Town Geologic Map indicates that the subject property is underlain by bedrock materials of the Whiskey Hill Formation (i.e., interbedded sandstone, siltstone and potentially expansive claystone). During our recent site reconnaissance we observed an outcrop of sandstone and siltstone bedrock within the property. Exploratory borings performed by the Project Geotechnical Consultant indicate that the bedrock is overlain by clayey sand (colluvium and residual soil). In addition, up to 20 feet of artificial fill is present beneath the southern portion of the site site. The northeastern portion of the property is located within the boundaries of a "Pd" zone. However, the Project Geotechical Consultant has inspected this portion of the property and concluded that earth materials are stable in this vicinity, except for the potential for raveling. The subject property is located approximately 0.7 mile northeast of a mapped trace of the active San Andreas fault.

CONCLUSIONS AND RECOMMENDED ACTION

The proposed new residential development is primarily constrained by a significant thickness of undocumented artificial fill materials and anticipated very

strong seismic ground shaking. The Project Geotechnical Consultant has performed an investigation of the site and has provided grading design recommendations that are in general conformance with prevailing geotechnical standards. Recommendations include removal and replacement of existing fill materials, using engineering, compacted fill. The consultant has also provided recommendations for supporting the new residence on either a pier and grade beam foundation system or a mat slab foundation system. **We do not have geotechnical objections to the pier and grade beam foundation concept. With the utilization of this foundation alternative, we recommend geotechnical approval of the Site Development Permit application.**

If the application desires to utilize a mat slab foundation system, then we do not recommend geotechnical approval of the Site Development Permit because project grading may require significant revisions to limit the amount of differential fill thickness beneath the mat slab. Without grading design revisions, we understand that there could be up to 20 feet of differential fill thickness beneath the proposed residence. This condition could result in adverse differential settlement and is not consistent with prevailing local geotechnical standards of practice.

Prior to geotechnical approval of **Building Permits**, we recommend that the following items should be provided:

1. **Construction Plans** – Detailed construction plans should be submitted that incorporate the recommendations of the Project Geotechnical Consultant. We recommend that plans include measures to prevent rockfall from reaching occupied areas of the property. Appropriate recommendations to address potential rockfall should be provided by the Project Geotechnical Consultant.

2. **Geotechnical Plan Review** – The Project Geotechnical Consultant should review and approve all geotechnical aspects of the development plans (i.e., site preparation and grading, site drainage improvements and design parameters for foundations and retaining walls) to ensure that their recommendations have been properly incorporated. The consultant should verify that foundation design includes minimum pier diameters and minimum pier reinforcement consistent with geotechnical standards.

   The Construction Plans and the Geotechnical Plan Review letter should be submitted for review and approval by the Town Geotechnical Consultant prior to Building Permit approval.

LIMITATIONS

This geotechnical peer review has been performed to provide technical advice to assist the Town with its discretionary permit decisions. Our services have been limited to review of the documents previously identified, and a visual review of the property. Our opinions and conclusions are made in accordance with generally accepted principles and practices of the geotechnical profession. This warranty is in lieu of all other warranties, either expressed or implied.

Respectfully submitted,

COTTON, SHIRES AND ASSOCIATES, INC.
TOWN GEOTECHNICAL CONSULTANT

Ted Sayre
Principal Engineering Geologist
CEG 1795

David T. Schrier
Principal Geotechnical Engineer
GE 2334

TS:DTS:JN:kd

OUTDOOR WATER USE EFFICIENCY CHECKLIST

I certify that the subject project meets the specified requirements of the Water Conservation in Landscaping Ordinance.

Bob Cleaver, landscape architect RLA 4145 — 5 November 2012

Signature — Date

RECEIVED NOV 07 2012

☒ Single Family ☐ Multi-Family ☐ Commercial ☐ Institutional ☐ Irrigation only ☐ Industrial ☐ Other:

Applicant Name (print): Jeff Clark — Contact Phone #: 650 533-0128

Project Site Address: 10 Sioux Way

Project Area (sq.ft. or acre): 46,477 sf — # of Units: 1 — # of Meters: 2

			Agency Review (Pass)	Agency Review (Fail)
	Total Landscape Area (sq.ft.): 8,000 sf	X	☐	☐
	Turf Irrigated Area (sq.ft.): 860 sf		☐	☐
	Non-Turf Irrigated Area (sq.ft.): 7,140 sf		☐	☐
	Special Landscape Area (SLA) (sq.ft.): 0 sf		☐	☐
	Water Feature Surface Area (sq.ft.): 0 sf			
Turf	Less than 25% of the landscape area is turf	☒ Yes ☐ No, See Water Budget	☐	☐
	All turf areas are > 8 feet wide	☒ Yes	☐	☐
	All turf is planted on slopes < 25%	☒ Yes	☐	☐
Non-Turf	At least 80% of non-turf area is native or low water use plants	☒ Yes ☐ No, See Water Budget	☐	☐
Hydrozones	Plants are grouped by Hydrozones	☒ Yes	☐	☐
Mulch	At least 2-inches of mulch on exposed soil surfaces	☒ Yes	☐	☐
Irrigation System Efficiency	70% ETo (100% ETo for SLAs)	☒ Yes	☐	☐
	No overspray or runoff	☒ Yes	☐	☐
Irrigation System Design	System efficiency > 70%	☒ Yes	☐	☐
	Automatic, self-adjusting irrigation controllers	☐ No, not required for Tier 1 ☒ Yes	☐	☐
	Moisture sensor/rain sensor shutoffs	☐ Yes	☐	☐
	No sprayheads in < 8-ft wide area	☐ Yes	☐	☐
Irrigation Time	System only operates between 8 PM and 10 AM	☒ Yes	☐	☐
Metering	Separate irrigation meter	☒ No, not required because < 5,000 sq.ft. ☐ Yes	☐	☐
Swimming Pools / Spas	Cover highly recommended	☐ Yes ☐ No, not required	☐	☐
Water Features	Recirculating	☐ Yes	☐	☐
	Less than 10% of landscape area	☐ Yes	☐	☐
Documentation	Checklist	☒ Yes	☐	☐
	Landscape and Irrigation Design Plan	☐ Prepared by applicant ☒ Prepared by certified professional	☐	☐
	Water Budget (optional)	☐ Prepared by applicant ☐ Prepared by certified professional	☐	☐
Audit	Post-installation audit completed	☐ Completed by applicant ☐ Completed by certified professional	☐	☐

GreenPoint Rated Checklist: Single Family

The GreenPoint Rated checklist tracks green features incorporated into the home. GreenPoint Rated is provided as a public service by Build It Green, a professional non-profit whose mission is to promote healthy, energy and resource efficient buildings in California.
The minimum requirements of GreenPoint Rated are: verification of 50 or more points; Earn the following minimum points per category: Energy (30), Indoor Air Quality/Health (5), Resources (6), and Water (9); and meet the prerequisites A.2.a, H10a., J.2., N.1, and Q0.

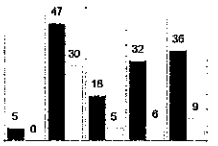
This checklist accommodates the verification of mandatory CALGreen measures but does not signify compliance unless accepted by jurisdictional authority. All CALGreen measures within the checklist must be selected as "Yes" or "n/a" for compliance with GreenPoint Rated. Build It Green is not a code enforcement agency.

The criteria for the green building practices listed below are described in the GreenPoint Rated Single Family Rating Manual. For more information please visit www.builditgreen.org/greenpointrated

A home is only GreenPoint Rated if all features are verified by a Certified GreenPoint Rater through Build It Green.

GreenPoint RATED

Total Points Targeted: 138



Single Family New Home 4.2 / 2008 Title 24

The Clark Residence
Michael Chau
2008-011
Planning Scoresheet

		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	Plan Review	Rough Inspection	Final Inspection	Documentation	Blueprint Page No.	Notes
A. SITE				Possible Points				R=recommended A=alternate					
	1. Protect Topsoil and Minimize Disruption of Existing Plants & Trees												
Yes	a. Protect Topsoil and Reuse after Construction	2	1				1	R	A	A	R		
Yes	b. Limit and Delineate Construction Footprint for Maximum Protection	1					1	R	A	A	R		
	2. Divert/Recycle Job Site Construction Waste (Including Green Waste and Existing Structures)												
Yes	a. Required: Divert 50% (by weight) of All Construction and Demolition Waste (Recycling or Reuse) (CALGreen code)	Y				R					R		
Yes	b. Divert 100% of Asphalt and Concrete and 65% (by weight) of Remaining Materials	2				2					R		
Yes	c. Divert 100% of Asphalt and Concrete and 80% (by weight) of Remaining Materials	2				2					R		
	3. Use Recycled Content Aggregate (Minimum 25%)												
Yes	a. Walkway and Driveway Base	1				1					R		
Yes	b. Roadway Base	1				1					R		
Yes	**4. Cool Site: Reduce Heat Island Effect On Site**	1	1							R	R		
	5. Construction Environmental Quality Management Plan, Duct Sealing, and Pre-Occupancy Flush-Out (*This credit is a requirement associated with J4: EPA IAP)												
N/A	a. Duct openings and other related air distribution component openings shall be covered during construction (CALGreen code if applicable)	0		1					R	R	R		
TBD	b. Full environmental quality management plan and pre-occupancy flush out is conducted (Prerequisite is A5a)	0		1						R	R		
	Total Points Available in Site = 12	10											
B. FOUNDATION				Points Available Per Measure									
≥30%	**1. Replace Portland Cement in Concrete with Recycled Fly Ash and/or Slag (Minimum 20%)**	2				2					R		
TBD	**2. Use Frost-Protected Shallow Foundation in Cold Areas (CEC Climate Zone 16)**	0				2		R	R				
TBD	**3. Use Radon Resistant Construction (*This credit is a requirement associated with J4: EPA IAP)**	0			2			A	A				
Yes	**4. Install a Foundation Drainage System (*This credit is a requirement associated with J4: EPA IAP)**	2				2		A	R		R		
TBD	**5. Moisture Controlled Crawlspace (*This credit is a requirement associated with J4: EPA IAP)**	0			2					R			
	6. Design and Build Structural Pest Controls												
TBD	a. Install Termite Shields & Separate All Exterior Wood-to-Concrete Connections	0				1			R				
Yes	b. All Plants Have Trunk, Base, or Stem Located At Least 36 Inches from Foundation	1				1				R			
	Total Points Available in Foundation = 12	5											
C. LANDSCAPE				Points Available Per Measure									
83.5%	*Percentage of landscape area. (Projects with less than 15% of the total site area (i.e. total lot size) as landscape area are capped at 6 points for the following measures: C1 through C7 and C9 through C11.*												
Yes	**1. Group Plants by Water Needs (Hydrozoning)**	2					2	A		A	R		
Yes	**2. Mulch All Planting Beds to the Greater of 3 Inches or Local Water Ordinance Requirement**	2					2			R			
	3. Construct Resource-Efficient Landscapes												
Yes	a. No Invasive Species Listed by Cal-IPC Are Planted	1					1				R		
Yes	b. No Plant Species Will Require Shearing	1				1					R		
Yes	c. 75% of Plants Are Drought Tolerant, California Natives or Mediterranean Species or Other Appropriate Species	3					3				R		
	4. Minimize Turf in Landscape Installed by Builder												
Yes	a. Turf Shall Not Be Installed on Slopes Exceeding 10% and No Overhead Sprinklers Installed in Areas Less than 8 Feet Wide	2					2	A		A	R		
≤25%	b. Turf is Small Percentage of Landscaped Area (2 Points for ≤25%, 4 Points for ≤10%)	2					4	A		R			
Yes	**5. Plant Shade Trees**	3	1	1			1	A		A	R		
	6. Install High-Efficiency Irrigation Systems												
Yes	a. System Uses Only Low-Flow Drip, Bubblers, or Sprinklers	2					2	A		A	R		
Yes	b. System Has Smart (Weather-Based) Controller (CALGreen code if applicable)	3					3	A		A	R		
TBD	**7. Incorporate Two Inches of Compost in the Top 6 to 12 Inches of Soil**	0					3				R		
	8. Rain Water Harvesting System												
TBD	a. Cistern(s) is Less Than 750 Gallons	0					1			R	R		
TBD	b. Cistern(s) is 750 to 2,500 Gallons	0					1			R	R		
TBD	c. Cistern(s) is Greater Than 2,500 Gallons	0					1			R	R		
TBD	**9. Irrigation System Uses Recycled Wastewater**	0							A		R		
TBD	**10. Submetering for Landscape Irrigation**	0						A		A	R		
	11. Design Landscape to Meet Water Budget												
TBD	a. Install Irrigation System That Will Be Operated at ≤70% Reference ET (Prerequisites for Credit are C1. and C2.)	1					1				R		
Yes	b. Install Irrigation System That Will Be Operated at ≤50% Reference ET (Prerequisites for Credit are C1, C2, and C6a or C6b.)	1					1				R		
TBD	**12. Use Environmentally Preferable Materials for 70% of Non-Plant Landscape Elements and Fencing** A) FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content E) Finger-Jointed or F) Local	0								R	R		
Yes	**13. Reduce Light Pollution by Shielding Fixtures and Directing Light Downward**	1								R	R		
	Total Points Available in Landscape = 35	24											
D. STRUCTURAL FRAME & BUILDING ENVELOPE				Points Available Per Measure									
	1. Apply Optimal Value Engineering												
Yes	a. Place Joists, Rafters and Studs at 24-Inch On Center	3							R				
TBD	b. Door and Window Headers are Sized for Load	0							R				
TBD	c. Use Only Cripple Studs Required for Load	0							R				
	2. Construction Material Efficiencies												
TBD	a. Wall and Floor Assemblies (Excluding Solid Wall Assemblies) are Delivered Panelized from Supplier (Minimum of 80% Square Feet)	0							R		R		
TBD	b. Modular Components Are Delivered Assembled to the Project (Minimum 25%)	0							R		R		
	3. Use Engineered Lumber												
Yes	a. Engineered Beams and Headers	1							R				
TBD	b. Wood I-Joists or Web Trusses for Floors	0							R				
Yes	c. Engineered Lumber for Roof Rafters	1							R				
TBD	d. Engineered or Finger-Jointed Studs for Vertical Applications	0							R				
TBD	e. Oriented Strand Board for Subfloor	0							R				

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Yes	f. Oriented Strand Board for Wall and Roof Sheathing	1				1			R				
TBD	**4. Insulated Headers**	0		1					R				
	5. Use FSC-Certified Wood												
≥40%	a. Dimensional Lumber, Studs and Timber (Minimum 40%)	2				6			A		A		
TBD	b. Panel Products (Minimum 40%)	0				3			A		A		
	6. Use Solid Wall Systems (Includes SIPS, ICFs, & Any Non-Stick Frame Assembly)												
TBD	a. Floors	0				2		A	A				
TBD	b. Walls	0				2		A	A				
TBD	c. Roofs	0				1		A	A				
TBD	**7. Energy Heels on Roof Trusses (75% of Attic Insulation Height at Outside Edge of Exterior Wall)**	0		1				A	A				
	8. Install Overhangs and Gutters												
Yes	a. Minimum 16-Inch Overhangs and Gutters	1				1		A		A			
Yes	b. Minimum 24-Inch Overhangs and Gutters	1		1				A		A			
	9. Reduce Pollution Entering the Home from the Garage (*This credit is a requirement associated with J4: EPA IAP)												
Yes	a. Install Garage Exhaust Fan OR Build a Detached Garage	1			1					R			
TBD	b. Tightly Seal the Air Barrier between Garage and Living Area (Performance Test Required)	0			1				R				
	Total Points Available in Structural Frame and Building Envelope = 39	11											
E. EXTERIOR			Points Available Per Measure										
TBD	**1. Use Environmentally Preferable Decking**	0				2				A	A		
Yes	**2. Flashing Installation Techniques Specified and Third-Party Verified** (*This credit is a requirement associated with J4: EPA IAP)	1				1		R	R				
TBD	**3. Install a Rain Screen Wall System**	0				2		A	A				
TBD	**4. Use Durable and Non-Combustible Siding Materials**	0				1		A		A	A		
Yes	**5. Use Durable and Fire Resistant Roofing Materials or Assembly**	2				2		A		A	A		
	Total Points Available in Exterior = 8	3											
F. INSULATION			Points Available Per Measure										
	1. Install Insulation with 75% Recycled Content												
TBD	a. Walls	0				1			A		A		
TBD	b. Ceilings	0				1			A		A		
TBD	c. Floors	0				1			A		A		
	Total Points Available in Insulation = 3	0											
G. PLUMBING			Points Available Per Measure										
	1. Distribute Domestic Hot Water Efficiently (Max. 5 points, G1a. is a Prerequisite for G1b-e)												
Yes	a. Insulate All Hot Water Pipes (*This credit is a requirement associated with J4: EPA IAP)	2		1			1		R				
TBD	b. Use Engineered Parallel Plumbing	0					1	A	A				
TBD	c. Use Engineered Parallel Plumbing with Demand Controlled Circulation Loop(s)	0					1	A	A				
TBD	d. Use Traditional Trunk, Branch and Twig Plumbing with Demand Controlled Circulation Loop(s)	0		1			2	A	A				
TBD	e. Use Central Core Plumbing	0		1		1	1	A	A				
	2. Water Efficient Fixtures												
Yes	a. High Efficiency Showerheads ≤2.0 Gallons Per Minute (gpm) at 80 psi. (Multiple showerheads shall not exceed maximum flow rates) (CALGreen code if applicable)	3					3			A	R		
Yes	b. High Efficiency Bathroom Faucets ≤ 1.5 gpm at 60psi (CALGreen code)	1					1			A	R		
Yes	c. High Efficiency Kitchen and Utility Faucets ≤1.8 gpm (CALGreen code if applicable)	1					1			A	R		
Yes	**3. Install Only High Efficiency Toilets (Dual-Flush or ≤1.28 Gallons Per Flush (gpf)) (CALGreen code if applicable)**	2					2			R	R		
	Total Points Available in Plumbing = 12	9											
H. HEATING, VENTILATION & AIR CONDITIONING			Points Available Per Measure										
	1. Properly Design HVAC System and Perform Diagnostic Testing												
Yes	a. Design and Install HVAC System to ACCA Manual J, D, and S Recommendations (CALGreen code if applicable) (*This credit is a requirement associated with J4: EPA IAP)	4		4					R		R		
TBD	b. Test Total Supply Air Flow Rates (*This credit is a requirement associated with J4: EPA IAP)	0		1							R		
TBD	c. Third Party Testing of Mechanical Ventilation Rates for IAQ (meet ASHRAE 62.2)	0		1					A	A			
	2. Install Sealed Combustion Units (*This credit is a requirement associated with J4: EPA IAP)												
Yes	a. Furnaces	2			2				R				
Yes	b. Water Heaters	2			2				R				
Yes	**3. Install High Performing Zoned Hydronic Radiant Heating**	2		1	1			A	A				
TBD	**4. Install High Efficiency Air Conditioning with Environmentally Preferable Refrigerants**	0	1								R		
	5. Design and Install Effective Ductwork												
TBD	a. Install HVAC Unit and Ductwork within Conditioned Space	0		1				A	A				
TBD	b. Use Duct Mastic on All Duct Joints and Seams (*This credit is a requirement associated with J4: EPA IAP)	0		1					R				
TBD	c. Pressure Relieve the Ductwork System (*This credit is a requirement associated with J4: EPA IAP)	0		1					R				
TBD	**6. Install High Efficiency HVAC Filter (MERV 6+)** (*This credit is a requirement associated with J4: EPA IAP)	0			1					R			
Yes	**7. No Fireplace OR Install Sealed Gas Fireplace(s) with Efficiency Rating >60% using CSA Standards** (*This credit is a requirement associated with J4: EPA IAP)	1			1				R		R		
Yes	**8. Install ENERGY STAR Bathroom Fans on Timer or Humidistat (CALGreen code if applicable)**	1			1					R			
	9. Install Mechanical Ventilation System for Cooling (Max. 4 Points)												
Yes	a. Install ENERGY STAR Ceiling Fans & Light Kits in Living Areas & All Bedrooms	1		1						A	A		
Yes	b. Install Whole House Fan (Credit Not Available if H9c Chosen) (CALGreen code if applicable)	1		1					R				
TBD	c. Automatically Controlled Integrated System with Variable Speed Control	0		1				R	R				
	10. Advanced Mechanical Ventilation for IAQ												
Yes	a. *Required:* Compliance with ASHRAE 62.2 Mechanical Ventilation Standards (as adopted in Title 24 Part 6) (*This credit is a requirement associated with J4: EPA IAP)	Y			R				A	A	R		
TBD	b. Advanced Ventilation Practices (Continuous Operation, Sone Limit, Minimum Efficiency, Minimum Ventilation Rate, Homeowner Instructions)	0			1				A	A	R		
TBD	c. Outdoor Air Ducted to Bedroom and Living Areas of Home	0			2			R	A	A			
Yes	**11. Install Carbon Monoxide Alarm(s) (or No Combustion Appliances in Living Space and No Attached Garage)** (*This credit is a requirement associated with J4: EPA IAP)	1			1					R			
	Total Points Available in Heating, Ventilation and Air Conditioning = 27	15											
I. RENEWABLE ENERGY			Points Available Per Measure										
Yes	**1. Pre-Plumb for Solar Water Heating**	1			1			A	A				
Yes	**2. Install Wiring Conduit for Future Photovoltaic Installation & Provide 200 ft² of South-Facing Roof**	1				1		A	A				
	3. Offset Energy Consumption with Onsite Renewable Generation (Solar PV, Solar Thermal, Wind) *Enter % total energy consumption offset, 1 point per 4% offset*	0			2					A	R		
	Total Available Points in Renewable Energy = 27	2											
J. BUILDING PERFORMANCE			Points Available Per Measure										
	1. Building Envelope Diagnostic Evaluations												
Yes	a. Verify Quality of Insulation Installation & Thermal Bypass Checklist before Drywall (*This credit is a requirement associated with J4: EPA IAP)	1			1						R		
TBD	b. House Passes Blower Door Test (*This credit is a requirement associated with J4: EPA IAP)	0			1						R		
TBD	c. Blower Door Results are Max 2.5 ACH_{50} for Unbalanced Systems (Supply or Exhaust) or Max 1.0 ACH_{50} for Balanced Systems (2 Total Points for J1b. and J1c.)	0			1						R		
TBD	d. House Passes Combustion Safety Backdraft Test	0			1						R		
15%	**2. *Required:* Building Performance Exceeds Title 24 (Minimum 15%)** *(Enter the Percent Better Than Title 24. Points for Every 1% Better Than Title 24)*	30	≥30					R					

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TBD	3. Design and Build Near Zero Energy Homes *(Enter number of points, minimum of 2 and maximum of 6 points)*	0		6						A	R		
TBD	4. Obtain EPA Indoor airPlus Certification *(Total 42 points, not including Title 24 performance; read comment)*	0			2						R		
Yes	5. Title 24 Prepared and Signed by a CABEC Certified Energy Plans Examiner (CEPE)	1		1				R			A		
	6. Participation in Utility Program with Third Party Plan Review												
TBD	a. Energy Efficiency Program [*This credit is a requirement associated with J4: EPA IAP]	0		1				A			A		
TBD	b. Renewable Energy Program with Min. 30% Better Than Title 24 (High Performing Home)	0		1				A			A		
	Total Available Points in Building Performance = 45+	32											
K. FINISHES				Points Available Per Measure									
TBD	1. Design Entryways to Reduce Tracked-In Contaminants	0		1						R			
	2. Use Low-VOC or Zero-VOC Paint (Maximum 3 Points)												
Yes	a. Low-VOC Interior Wall/Ceiling Paints (CALGreen code if applicable) (<50 Grams Per Liter (gpl) VOCs Regardless of Sheen) [*This credit is a requirement associated with J4: EPA IAP]	1		1							R		
Yes	b. Zero-VOC: Interior Wall/Ceiling Paints (<5 gpl VOCs Regardless of Sheen)	2		2							R		
Yes	3. Use Low-VOC Coatings that Meet SCAQMD Rule 1113 (CALGreen code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	2		2							R		
Yes	4. Use Low-VOC Caulks, Construction Adhesives and Sealants that Meet SCAQMD Rule 1168 (CALGreen code if applicable)	2		2							R		
TBD	5. Use Recycled-Content Paint	0		1							R		
	6. Use Environmentally Preferable Materials for Interior Finish A) FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content or E) Finger-Jointed F) Local												
≥50%	a. Cabinets (50% Minimum)	2			3					A	A		
TBD	b. Interior Trim (50% Minimum)	0			2					A	A		
TBD	c. Shelving (50% Minimum)	0			2					A	A		
TBD	d. Doors (50% Minimum)	0			2					A	A		
TBD	e. Countertops (50% Minimum)	0			2					A	A		
Yes	7. Reduce Formaldehyde in Interior Finish – Meet Current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood Formaldehyde Limits by Mandatory Compliance Dates (CALGreen code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	Y		0				A		A	R		
	8. Reduce Formaldehyde in Interior Finish - Exceed Current CARB ATCM for Composite Wood Formaldehyde Limits Prior to Mandatory Compliance Dates												
Yes	a. Doors (90% Minimum)	1			1				A	A	A		
TBD	b. Cabinets & Countertops (90% Minimum)	0			2					A	A		
TBD	c. Interior Trim and Shelving (80% Minimum)	0			1					A	A		
TBD	9. After Installation of Finishes, Test of Indoor Air Shows Formaldehyde Level <27ppb	0			3						A		
	Total Available Points in Finishes = 27	10											
L. FLOORING				Points Available Per Measure									
≥30%	1. Use Environmentally Preferable Flooring (Minimum 15% Floor Area) A) FSC-Certified Wood, B) Reclaimed or Refinished, C) Rapidly Renewable, D) Recycled-Content, E) Exposed Concrete, F) Local. *Flooring Adhesives Must Meet SCAQMD Rule 1168 for VOCs.*	2			4					A	A		
TBD	2. Thermal Mass Floors (Minimum 50%)	0		1				A		A			
TBD	3. Low Emitting Flooring (Section 01350, CRI Green Label Plus, Floorscore [*This credit is a requirement associated with J4: EPA IAP]	0			1					A	A		
Yes	4. All carpet and 50% of Resilient Flooring is low emitting. (CALGreen code if applicable)	Y								R	R		
	Total Available Points in Flooring = 8	2											
M. APPLIANCES AND LIGHTING				Points Available Per Measure									
Yes	1. Install ENERGY STAR Dishwasher (Must Meet Current Specifications)	2		1			1			A	A		
	2. Install ENERGY STAR Clothes Washer												
Yes	a. Meets ENERGY STAR and CEE Tier 2 Requirements (Modified Energy Factor 2.0, Water Factor 6.0 or less)	3		1			2			A	A		
Yes	b. Meets ENERGY STAR and CEE Tier 3 Requirements (Modified Energy Factor 2.2, Water Factor 4.5 or less)	2					2			A	A		
	3. Install ENERGY STAR Refrigerator												
Yes	a. ENERGY STAR Qualified & < 25 Cubic Feet Capacity	1		1						A	A		
TBD	b. ENERGY STAR Qualified & < 20 Cubic Feet Capacity	0		1						A	A		
	4. Install Built-In Recycling Center or Composting Center												
Yes	a. Built-In Recycling Center	1				1				R			
TBD	b. Built-In Composting Center	0				1				R			
	5. Install High-Efficacy Lighting and Design Lighting System												
Yes	a. Install High-Efficacy Lighting	1		1				A		R	R		
TBD	b. Install a Lighting System to IESNA Footcandle Standards or Hire Lighting Consultant	0		1				A		A	R		
	Total Available Points in Appliances and Lighting = 13	10											
N. OTHER				Points Available Per Measure									
Yes	1. *Required:* Incorporate GreenPoint Rated Checklist in Blueprints [*This credit is a requirement associated with J4: EPA IAP]	Y				R		R					
TBD	2. Pre-Construction Kick-Off Meeting with Rater and Subs	0	1								R		
TBD	3. Homebuilder's Management Staff are Certified Green Building Professionals	0	1								R		
	4. Develop Homeowner Education												
Yes	a. Develop Homeowner Manual of Green Features/Benefits (CALGreen code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	2		1			1				R		
Yes	b. Conduct Educational Walkthroughs (Prerequisite is N4a) [*This credit is a requirement associated with J4: EPA IAP]	1			1						R		
TBD	5. Install a Home System Monitor OR Participate in a Time-of-Use Pricing Program	0			1					A	R		
	Total Available Points in Other = 6	3											
O. COMMUNITY DESIGN & PLANNING													
	1. Develop Infill Sites												
TBD	a. Project is an Urban Infill Development	0	1			1		A	A	A	R		
TBD	b. Home(s)/Development is Located within 1/2 Mile of a Major Transit Stop	0	2					A	A	A	R		
TBD	2. Build on Designated Brownfield Site	0	3								R		
	3. Cluster Homes & Keep Size in Check												
TBD	a. Cluster Homes for Land Preservation	0	1			1		R			R		
TBD	b. Conserve Resources by Increasing Density (10 Units per Acre or Greater)	0	2			2		R			R		
0	c. Home Size Efficiency	0				1		R					
	4. Design for Walking & Bicycling												
	a. Site Has Pedestrian Access Within 1/2 Mile of Community Services: TIER 1: Enter Number of Services Within 1/2 Mile 1) Day Care 2) Community Center 3) Public Park 4) Drug Store 5) Restaurant 6) School 7) Library 8) Farmer's Market 9) After School Programs 10) Convenience Store Where Meat & Produce are Sold TIER 2: Enter Number of Services Within 1/2 Mile 1) Bank 2) Place of Worship 3) Laundry/Cleaners 4) Hardware 5) Theater/Entertainment 6) Fitness/Gym 7) Post Office 8) Senior Care Facility 9) Medical/Dental 10) Hair Care 11) Commercial Office or Major Employer 12) Full Scale Supermarket												
	i. 5 Services Listed Above (Tier 2 Services Count as 1/2 Service Value)	0	1						A	A	R		
	ii.10 Services Listed Above (Tier 2 Services Count as 1/2 Service Value)	0	1						A	A	R		
TBD	b. Development is Connected with A Dedicated Pedestrian Pathway to Places of Recreational Interest Within 1/4 mile	0	1						A	A	R		

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TBD	c. Install Traffic Calming Strategies (Minimum of Two): - Designated Bicycle Lanes are Present on Roadways; - Ten-Foot Vehicle Travel Lanes; - Street Crossings Closest to Site are Located Less Than 300 Feet Apart; - Streets Have Rumble Strips, Bulbouts, Raised Crosswalks or Refuge Islands	0	3						A	R	R		
	5. Design for Safety & Social Gathering												
Yes	a. All Home Front Entrances Have Views from the Inside to Outside Callers	1	1							R			
TBD	b. All Home Front Entrances Can be Seen from the Street and/or from Other Front Doors	0	1						A	A			
TBD	c. Orient Porches (min. 100sf) to Streets and Public Spaces	0	1					A	A	A			
TBD	d. Development Includes a Social Gathering Space	0	1					R		R	A		
	6. Design for Diverse Households (6a. is a Prerequisite for 6b. and 6c.)												
TBD	a. All Homes Have At Least One Zero-Step Entrance	0	1							R			
TBD	b. All Main Floor Interior Doors & Passageways Have a Minimum 32-Inch Clear Passage Space	0	1							R			
TBD	c. Locate Half-Bath on the Ground Floor	0	1						R				
TBD	d. Provide Full-Function Independent Rental Unit	0	1					R		A			
	Total Achievable Points in Community Design & Planning = 35	1											
P. INNOVATION			Possible Points										
	A. Site												
	1. Stormwater Control: Prescriptive Path (Maximum of 3 Points, Mutually Exclusive with PA2.)												
TBD	a. Use Permeable Paving for 25% of Driveways, Patios and Walkways	0	1					A	A	A			
TBD	b. Install Bio-Retention and Filtration Features	0	2					A	A	A			
TBD	c. Route Downspout Through Permeable Landscape	0	1					A	A	A			
TBD	d. Use Non-Leaching Roofing Materials	0	1					A	A	A			
TBD	e. Include Smart Street/Driveway Design	0	1					A	A	A			
TBD	2. Stormwater Control: Performance Path (Mutually Exclusive with PA1): Perform Soil Percolation Test and Capture and Treat 85% of Total Annual Runoff	0	3								R		
	C. Landscape												
TBD	1. Meet Local Landscape Program Requirement	0					2				R		
	D. Structural Frame & Building Envelope												
	1. Design, Build and Maintain Structural Pest and Rot Controls												
TBD	a. Locate All Wood (Siding, Trim, Structure) At Least 12" Above Soil	0				1				R			
Yes	b. All Wood Framing 3 Feet from the Foundation is Treated with Borates (or Use Factory-Impregnated Materials) OR Walls are Not Made of Wood	1				1			R		R		
TBD	2. Use Moisture Resistant Materials in Wet Areas: Kitchen, Bathrooms, Utility Rooms, and Basements [*This credit is a requirement associated with J4: EPA IAP]	0			1	1			R	R			
	E. Exterior												
TBD	1. Vegetated Roof (Minimum 25%)	0	2	2				R		R			
	G. Plumbing												
TBD	1. Greywater Pre-Plumbing (Includes Washing Machine at Minimum)	0					1	R	R				
TBD	2. Greywater System Operational (Includes Washing Machine at Minimum)	0					2	R	R	R			
TBD	3. Innovative Wastewater Technology (Constructed Wetland, Sand Filter, Aerobic System)	0					1		A	A	R		
TBD	4. Composting or Waterless Toilet	0					2			A	R		
TBD	5. Install Drain Water Heat-Recovery System	0		1					R				
TBD	6. Install a Hot Water Desuperheater	0		2				A	R				
	H. Heating, Ventilation, and Air Conditioning												
TBD	1. Humidity Control Systems (Only in California Humid/Marine Climate Zones 1,3,5,6,7) [*This credit is a requirement associated with J4: EPA IAP]	0			1			R		R	R		
TBD	2. Design HVAC System to Manual T for Register Design	0		1					A	A	R		
	K. Finishes												
TBD	1. Materials Meet SMaRT Criteria *(Select the number of points, up to 5 points)*	0				5		A	A	A	R		
	N. Other												
TBD	1. Detailed Durability Plan and Third-Party Verification of Plan Implementation	0				2					R		
	2. Educational Signage of Project's Green Features												
TBD	a. Promotion of Green Building Practices	0	1								R		
TBD	b. Installed Green Building Educational Signage	0	1								R		
	3. Innovation: List innovative measures that meet green building objectives. Enter in the number of points in each category for a maximum of 4 points for the measure in the blue cells. Points achieved column will be automatically fill in based on the sum of the points in each category. Points and measures will be evaluated by Build It Green.												
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	0	0	0	0	A	A	A	R		
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	0	0	0	0	A	A	A	R		
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	0	0	0	0	A	A	A	R		
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	0	0	0	0	A	A	A	R		
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	0	0	0	0	A	A	A	R		
	Total Achievable Points in Innovation = 33+	1											
Q. CALIFORNIA CALGreen CODE			Possible Points										
Yes	**0. Home meets all applicable CALGreen measures listed in above Sections A - P of the GreenPoint Rated checklist.**	Y	R										
	The following measures are mandatory in the CALGreen code and do not earn points in the GreenPoint Rated Checklist, but have been included in the Checklist for the convenience of jurisdictions. *The GreenPoint Rater is not a code enforcement official. The measures in this section may be verified by the GreenPoint Rater at their own discretion and/or discretion of the building official.*												
TBD	1. CALGreen 4.106.2 Storm water management during construction.	N							R	R			
TBD	2. CALGreen 4.106.3 Design for surface water drainage away from buildings.	N								R			
TBD	3. CALGreen 4.303.1 As an alternative to perscriptive compliance, a 20% reduction in baseline water use shall be demonstrated through calculation	N									R		
TBD	4. CALGreen 4.406.1 Joints and openings. Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected	N							R				
TBD	5. CALGreen4.503.1 Gas fireplace shall be a direct-vent sealed-combustion type. Woodstove or pellet stove shall comply with US EPA Phase II emission limits	N								R	R		
TBD	6. CALGreen 4.505.2 Vapor retarder and capillary break is installed at slab on grade foundations.	N						R	R				
TBD	7. CALGreen 4.505.3 19% moisture content of building framing materials	N							R		R		
TBD	8. CALGreen 702.1 HVAC system installers are trained and certified in the proper installation of HVAC systems.	N									R		
	Total Achievable Points in California Green Code = 0	0											
Summary													
	Total Available Points		44	96+	44	109	59						
	Minimum Points Required		0	30	5	6	9						
	Total Points Targeted	**138**	**5**	**47**	**18**	**32**	**36**						

Project has met all minimum requirements

GreenPoint Rated Checklist: Single Family

The GreenPoint Rated checklist tracks green features incorporated into the home. GreenPoint Rated is provided as a public service by Build It Green, a professional non-profit whose mission is to promote healthy, energy and resource efficient buildings in California.
The minimum requirements of GreenPoint Rated are: verification of 50 or more points; Earn the following minimum points per category: Energy (30), Indoor Air Quality/Health (5), Resources (6), and Water (9); and meet the prerequisites A.2.a, H10a., J.2., N.1, and Q0.

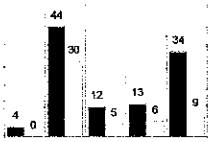
This checklist accommodates the verification of mandatory CALGreen measures but does not signify compliance unless accepted by jurisdictional authority. All CALGreen measures within the checklist must be selected as "Yes" or "n/a" for compliance with GreenPoint Rated. Build It Green is not a code enforcement agency.

The criteria for the green building practices listed below are described in the GreenPoint Rated Single Family Rating Manual. For more information please visit www.builditgreen.org/greenpointrated

A home is only GreenPoint Rated if all features are verified by a Certified GreenPoint Rater through Build It Green.

GreenPointRATED

Total Points Targeted: 107



Single Family New Home 4.2 / 2008 Title 24

The Clark Residence
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		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	Plan Review	Rough Inspection	Final Inspection	Documentation	Blueprint Page No.	Notes
A. SITE			Possible Points					R=recommended A=alternate					
	1. Protect Topsoil and Minimize Disruption of Existing Plants & Trees												
Yes	a. Protect Topsoil and Reuse after Construction	2	1				1	R	A	A	R		
Yes	b. Limit and Delineate Construction Footprint for Maximum Protection	1					1	R	A	A	R		
	2. Divert/Recycle Job Site Construction Waste (Including Green Waste and Existing Structures)												
Yes	a. Required: Divert 50% (by weight) of All Construction and Demolition Waste (Recycling or Reuse) (CALGreen code)	Y				R					R		
Yes	b. Divert 100% of Asphalt and Concrete and 65% (by weight) of Remaining Materials	2				2					R		
Yes	c. Divert 100% of Asphalt and Concrete and 80% (by weight) of Remaining Materials	2				2					R		
	3. Use Recycled Content Aggregate (Minimum 25%)												
Yes	a. Walkway and Driveway Base	1				1					R		
Yes	b. Roadway Base	1				1					R		
Yes	**4. Cool Site: Reduce Heat Island Effect On Site**	1	1							R	R		
	5. Construction Environmental Quality Management Plan, Duct Sealing, and Pre-Occupancy Flush-Out [*This credit is a requirement associated with J4: EPA IAP]												
Yes	a. Duct openings and other related air distribution component openings shall be covered during construction (CALGreen code if applicable)	1			1				R	R	R		
TBD	b. Full environmental quality management plan and pre-occupancy flush out is conducted (Prerequisite is A5a)	0			1					R	R		
	Total Points Available in Site = 12	11											
B. FOUNDATION			Points Available Per Measure										
TBD	**1. Replace Portland Cement in Concrete with Recycled Fly Ash and/or Slag (Minimum 20%)**	0				2					R		
TBD	**2. Use Frost-Protected Shallow Foundation in Cold Areas (CEC Climate Zone 16)**	0				2		R	R				
TBD	**3. Use Radon Resistant Construction** [*This credit is a requirement associated with J4: EPA IAP]	0			2			A	A				
TBD	**4. Install a Foundation Drainage System** [*This credit is a requirement associated with J4: EPA IAP]	0				2		A	R		R		
TBD	**5. Moisture Controlled Crawlspace** [*This credit is a requirement associated with J4: EPA IAP]	0			2					R			
	6. Design and Build Structural Pest Controls												
TBD	a. Install Termite Shields & Separate All Exterior Wood-to-Concrete Connections	0				1			R				
TBD	b. All Plants Have Trunk, Base, or Stem Located At Least 36 Inches from Foundation	0				1				R			
	Total Points Available in Foundation = 12	0											
C. LANDSCAPE			Points Available Per Measure										
83.5%	*Percentage of landscape area. (Projects with less than 15% of the total site area (i.e. total lot size) as landscape area are capped at 6 points for the following measures: C1 through C7 and C9 through C11.*												
Yes	**1. Group Plants by Water Needs (Hydrozoning)**	2					2	A		A	R		
Yes	**2. Mulch All Planting Beds to the Greater of 3 Inches or Local Water Ordinance Requirement**	2					2			R			
	3. Construct Resource-Efficient Landscapes												
Yes	a. No Invasive Species Listed by Cal-IPC Are Planted	1					1				R		
Yes	b. No Plant Species Will Require Shearing	1				1					R		
Yes	c. 75% of Plants Are Drought Tolerant, California Natives or Mediterranean Species or Other Appropriate Species	3					3				R		
	4. Minimize Turf in Landscape Installed by Builder												
Yes	a. Turf Shall Not Be Installed on Slopes Exceeding 10% and No Overhead Sprinklers Installed in Areas Less than 8 Feet Wide	2					2	A		A	R		
≤25%	b. Turf is Small Percentage of Landscaped Area (2 Points for ≤25%, 4 Points for ≤10%)	2					4	A		R			
Yes	**5. Plant Shade Trees**	3	1	1			1	A		A	R		
	6. Install High-Efficiency Irrigation Systems												
Yes	a. System Uses Only Low-Flow Drip, Bubblers, or Sprinklers	2					2	A		A	R		
Yes	b. System Has Smart (Weather-Based) Controller (CALGreen code if applicable)	3					3	A		A	R		
TBD	**7. Incorporate Two Inches of Compost in the Top 6 to 12 Inches of Soil**	0					3				R		
	8. Rain Water Harvesting System												
TBD	a. Cistern(s) is Less Than 750 Gallons	0					1			R	R		
TBD	b. Cistern(s) is 750 to 2,500 Gallons	0					1			R	R		
TBD	c. Cistern(s) is Greater Than 2,500 Gallons	0					2			R	R		
TBD	**9. Irrigation System Uses Recycled Wastewater**	0							A		R		
TBD	**10. Submetering for Landscape Irrigation**	0						A		A	R		
	11. Design Landscape to Meet Water Budget												
TBD	a. Install Irrigation System That Will Be Operated at ≤70% Reference ET (Prerequisites for Credit are C1. and C2.)	1					1				R		
Yes	b. Install Irrigation System That Will Be Operated at ≤50% Reference ET (Prerequisites for Credit are C1, C2, and C6a or C6b.)	1					1				R		
TBD	**12. Use Environmentally Preferable Materials for 70% of Non-Plant Landscape Elements and Fencing** A) FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content E) Finger-Jointed or F) Local	0					1			R	R		
TBD	**13. Reduce Light Pollution by Shielding Fixtures and Directing Light Downward**	0					1			R	R		
	Total Points Available in Landscape = 35	23											
D. STRUCTURAL FRAME & BUILDING ENVELOPE			Points Available Per Measure										
	1. Apply Optimal Value Engineering												
TBD	a. Place Joists, Rafters and Studs at 24-Inch On Center	0					1		R				
TBD	b. Door and Window Headers are Sized for Load	0					1		R				
TBD	c. Use Only Cripple Studs Required for Load	0					1		R				
	2. Construction Material Efficiencies												
TBD	a. Wall and Floor Assemblies (Excluding Solid Wall Assemblies) are Delivered Panelized from Supplier (Minimum of 80% Square Feet)	0					2		R		R		
TBD	b. Modular Components Are Delivered Assembled to the Project (Minimum 25%)	0					2		R		R		
	3. Use Engineered Lumber												
TBD	a. Engineered Beams and Headers	0					1		R				
TBD	b. Wood I-Joists or Web Trusses for Floors	0					1		R				
TBD	c. Engineered Lumber for Roof Rafters	0					1		R				
TBD	d. Engineered or Finger-Jointed Studs for Vertical Applications	0					1		R				
TBD	e. Oriented Strand Board for Subfloor	0					1		R				

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		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	Plan Review	Rough Inspection	Final Inspection	Documentation	Blueprint Page No.	Notes
Yes	f. Oriented Strand Board for Wall and Roof Sheathing	1				1			R				
TBD	**4. Insulated Headers**	0		1					R				
	5. Use FSC-Certified Wood												
TBD	a. Dimensional Lumber, Studs and Timber (Minimum 40%)	0				5			A		A		
TBD	b. Panel Products (Minimum 40%)	0				3			A		A		
	6. Use Solid Wall Systems (Includes SIPS, ICFs, & Any Non-Stick Frame Assembly)												
TBD	a. Floors	0				2		A	A				
TBD	b. Walls	0				2		A	A				
TBD	c. Roofs	0				1		A	A				
TBD	**7. Energy Heels on Roof Trusses (75% of Attic Insulation Height at Outside Edge of Exterior Wall)**	0		1				A	A				
	8. Install Overhangs and Gutters												
Yes	a. Minimum 16-Inch Overhangs and Gutters	1				1		A		A			
TBD	b. Minimum 24-Inch Overhangs and Gutters	0		1				A		A			
	9. Reduce Pollution Entering the Home from the Garage (*This credit is a requirement associated with J4: EPA IAP)												
TBD	a. Install Garage Exhaust Fan OR Build a Detached Garage	0			1					R			
TBD	b. Tightly Seal the Air Barrier between Garage and Living Area (Performance Test Required)	0			1				R				
	Total Points Available in Structural Frame and Building Envelope = 39	2											
E. EXTERIOR			Points Available Per Measure										
TBD	**1. Use Environmentally Preferable Decking**	0				2				A	A		
TBD	**2. Flashing Installation Techniques Specified and Third-Party Verified (*This credit is a requirement associated with J4: EPA IAP)**	0				1		R	R				
TBD	**3. Install a Rain Screen Wall System**	0				2		A	A				
TBD	**4. Use Durable and Non-Combustible Siding Materials**	0				1		A		A	A		
Yes	**5. Use Durable and Fire Resistant Roofing Materials or Assembly**	2				2		A		A	A		
	Total Points Available in Exterior = 8	2											
F. INSULATION			Points Available Per Measure										
	1. Install Insulation with 75% Recycled Content												
TBD	a. Walls	0				1			A		A		
TBD	b. Ceilings	0				1			A		A		
TBD	c. Floors	0				1			A		A		
	Total Points Available in Insulation = 3	0											
G. PLUMBING			Points Available Per Measure										
	1. Distribute Domestic Hot Water Efficiently (Max. 5 points, G1a. is a Prerequisite for G1b-e)												
Yes	a. Insulate All Hot Water Pipes (*This credit is a requirement associated with J4: EPA IAP)	2		1			1		R				
TBD	b. Use Engineered Parallel Plumbing	0					1	A	A				
TBD	c. Use Engineered Parallel Plumbing with Demand Controlled Circulation Loop(s)	0					1	A	A				
TBD	d. Use Traditional Trunk, Branch and Twig Plumbing with Demand Controlled Circulation Loop(s)	0		1			2	A	A				
TBD	e. Use Central Core Plumbing	0		1		1	1	A	A				
	2. Water Efficient Fixtures												
Yes	a. High Efficiency Showerheads ≤2.0 Gallons Per Minute (gpm) at 80 psi. (Multiple showerheads shall not exceed maximum flow rates) (CALGreen code if applicable)	3					3			A	R		
Yes	b. High Efficiency Bathroom Faucets ≤ 1.5 gpm at 60psi (CALGreen code)	1					1			A	R		
Yes	c. High Efficiency Kitchen and Utility Faucets ≤1.8 gpm (CALGreen code if applicable)	1					1			A	R		
Yes	**3. Install Only High Efficiency Toilets (Dual-Flush or ≤1.28 Gallons Per Flush (gpf)) (CALGreen code if applicable)**	2					2			R	R		
	Total Points Available in Plumbing = 12	9											
H. HEATING, VENTILATION & AIR CONDITIONING			Points Available Per Measure										
	1. Properly Design HVAC System and Perform Diagnostic Testing												
Yes	a. Design and Install HVAC System to ACCA Manual J, D, and S Recommendations (CALGreen code if applicable) (*This credit is a requirement associated with J4: EPA IAP)	4		4					R		R		
TBD	b. Test Total Supply Air Flow Rates (*This credit is a requirement associated with J4: EPA IAP)	0		1							R		
TBD	c. Third Party Testing of Mechanical Ventilation Rates for IAQ (meet ASHRAE 62.2)	0		1					A	A			
	2. Install Sealed Combustion Units (*This credit is a requirement associated with J4: EPA IAP)												
TBD	a. Furnaces	0			2				R				
TBD	b. Water Heaters	0			2				R				
TBD	**3. Install High Performing Zoned Hydronic Radiant Heating**	0		1	1			A	A				
TBD	**4. Install High Efficiency Air Conditioning with Environmentally Preferable Refrigerants**	0	1								R		
	5. Design and Install Effective Ductwork												
TBD	a. Install HVAC Unit and Ductwork within Conditioned Space	0		1				A	A				
TBD	b. Use Duct Mastic on All Duct Joints and Seams (*This credit is a requirement associated with J4: EPA IAP)	0		1					R				
TBD	c. Pressure Relieve the Ductwork System (*This credit is a requirement associated with J4: EPA IAP)	0		1					R				
TBD	**6. Install High Efficiency HVAC Filter (MERV 6+) (*This credit is a requirement associated with J4: EPA IAP)**	0			1					R			
TBD	**7. No Fireplace OR Install Sealed Gas Fireplace(s) with Efficiency Rating >80% using CSA Standards (*This credit is a requirement associated with J4: EPA IAP)**	0			1				R		R		
Yes	**8. Install ENERGY STAR Bathroom Fans on Timer or Humidistat (CALGreen code if applicable)**	1			1					R			
	9. Install Mechanical Ventilation System for Cooling (Max. 4 Points)												
Yes	a. Install ENERGY STAR Ceiling Fans & Light Kits in Living Areas & All Bedrooms	1		1						A	A		
Yes	b. Install Whole House Fan (Credit Not Available if H9c Chosen) (CALGreen code if applicable)	1		1					R				
TBD	c. Automatically Controlled Integrated System with Variable Speed Control	0		3				R	R				
	10. Advanced Mechanical Ventilation for IAQ												
Yes	a. *Required:* Compliance with ASHRAE 62.2 Mechanical Ventilation Standards (as adopted in Title 24 Part 6) (*This credit is a requirement associated with J4: EPA IAP)	Y			R				A	A	R		
TBD	b. Advanced Ventilation Practices (Continuous Operation, Sone Limit, Minimum Efficiency, Minimum Ventilation Rate, Homeowner Instructions)	0			1				A	A	R		
TBD	c. Outdoor Air Ducted to Bedroom and Living Areas of Home	0			2			R	A	A			
Yes	**11. Install Carbon Monoxide Alarm(s) (or No Combustion Appliances in Living Space and No Attached Garage) (*This credit is a requirement associated with J4: EPA IAP)**	1			1					R			
	Total Points Available in Heating, Ventilation and Air Conditioning = 27	8											
I. RENEWABLE ENERGY			Points Available Per Measure										
TBD	**1. Pre-Plumb for Solar Water Heating**	0				1		A	A				
TBD	**2. Install Wiring Conduit for Future Photovoltaic Installation & Provide 200 ft² of South-Facing Roof**	0				1		A	A				
	3. Offset Energy Consumption with Onsite Renewable Generation (Solar PV, Solar Thermal, Wind) *Enter % total energy consumption offset, 1 point per 4% offset*	0		25						A	R		
	Total Available Points in Renewable Energy = 27	0											
J. BUILDING PERFORMANCE			Points Available Per Measure										
	1. Building Envelope Diagnostic Evaluations												
TBD	a. Verify Quality of Insulation Installation & Thermal Bypass Checklist before Drywall (*This credit is a requirement associated with J4: EPA IAP)	0		1							R		
TBD	b. House Passes Blower Door Test (*This credit is a requirement associated with J4: EPA IAP)	0		1							R		
TBD	c. Blower Door Results are Max 2.5 ACH_{50} for Unbalanced Systems (Supply or Exhaust) or Max 1.0 ACH_{50} for Balanced Systems (2 Total Points for J1b. and J1c.)	0		1							R		
TBD	d. House Passes Combustion Safety Backdraft Test	0		1							R		
15%	**2. *Required:* Building Performance Exceeds Title 24 (Minimum 15%)** *(Enter the Percent Better Than Title 24, Points for Every 1% Better Than Title 24)*	30		≥30				R					

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		Points Targeted	Community	Energy	IAQ/Health	Resources	Water	Plan Review	Rough Inspection	Final Inspection	Documentation	Blueprint Page No.	Notes
TBD	3. Design and Build Near Zero Energy Homes *(Enter number of points, minimum of 2 and maximum of 6 points)*	0		6						A	R		
TBD	4. Obtain EPA Indoor airPlus Certification *(Total 42 points, not including Title 24 performance; read comment)*	0			2						R		
Yes	5. Title 24 Prepared and Signed by a CABEC Certified Energy Plans Examiner (CEPE)	1		1				R			A		
	6. Participation in Utility Program with Third Party Plan Review												
TBD	a. Energy Efficiency Program [*This credit is a requirement associated with J4: EPA IAP]	0		1				A			A		
TBD	b. Renewable Energy Program with Min. 30% Better Than Title 24 (High Performing Home)	0		1				A			A		
	Total Available Points in Building Performance = 45+	31											
K. FINISHES			Points Available Per Measure										
TBD	1. Design Entryways to Reduce Tracked-In Contaminants	0		1						R			
	2. Use Low-VOC or Zero-VOC Paint (Maximum 3 Points)												
Yes	a. Low-VOC Interior Wall/Ceiling Paints (CALGreen code if applicable) (<50 Grams Per Liter (gpl) VOCs Regardless of Sheen) [*This credit is a requirement associated with J4: EPA IAP]	1		1							R		
Yes	b. Zero-VOC: Interior Wall/Ceiling Paints (<5 gpl VOCs Regardless of Sheen)	2		2							R		
Yes	3. Use Low-VOC Coatings that Meet SCAQMD Rule 1113 (CALGreen code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	2		2							R		
Yes	4. Use Low-VOC Caulks, Construction Adhesives and Sealants that Meet SCAQMD Rule 1168 (CALGreen code if applicable)	2		2							R		
TBD	5. Use Recycled-Content Paint	0			1						R		
	6. Use Environmentally Preferable Materials for Interior Finish A) FSC-Certified Wood, B) Reclaimed, C) Rapidly Renewable, D) Recycled-Content or E) Finger-Jointed F) Local												
TBD	a. Cabinets (50% Minimum)	0			3					A	A		
TBD	b. Interior Trim (50% Minimum)	0			2					A	A		
TBD	c. Shelving (50% Minimum)	0			2					A	A		
TBD	d. Doors (50% Minimum)	0			2					A	A		
TBD	e. Countertops (50% Minimum)	0			2					A	A		
Yes	7. Reduce Formaldehyde in Interior Finish – Meet Current CARB Airborne Toxic Control Measure (ATCM) for Composite Wood Formaldehyde Limits by Mandatory Compliance Dates (CALGreen code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	Y		3				A		A	R		
	8. Reduce Formaldehyde in Interior Finish - Exceed Current CARB ATCM for Composite Wood Formaldehyde Limits Prior to Mandatory Compliance Dates												
Yes	a. Doors (90% Minimum)	1		1					A	A	A		
TBD	b. Cabinets & Countertops (90% Minimum)	0		2						A	A		
TBD	c. Interior Trim and Shelving (90% Minimum)	0		1						A	A		
TBD	9. After Installation of Finishes, Test of Indoor Air Shows Formaldehyde Level <27ppb	0		3							A		
	Total Available Points in Finishes = 27	8											
L. FLOORING			Points Available Per Measure										
TBD	1. Use Environmentally Preferable Flooring (Minimum 15% Floor Area) A) FSC-Certified Wood, B) Reclaimed or Refinished, C) Rapidly Renewable, D) Recycled-Content, E) Exposed Concrete, F) Local. *Flooring Adhesives Must Meet SCAQMD Rule 1168 for VOCs.*	0		4						A	A		
TBD	2. Thermal Mass Floors (Minimum 50%)	0		1				A		A			
TBD	3. Low Emitting Flooring (Section 01350, CRI Green Label Plus, Floorscore [*This credit is a requirement associated with J4: EPA IAP]	0								A	A		
Yes	4. All carpet and 50% of Resilient Flooring is low emitting. (CALGreen code if applicable)	Y								R	R		
	Total Available Points in Flooring = 8	0											
M. APPLIANCES AND LIGHTING			Points Available Per Measure										
Yes	1. Install ENERGY STAR Dishwasher (Must Meet Current Specifications)	2	1			1				A	A		
	2. Install ENERGY STAR Clothes Washer												
Yes	a. Meets ENERGY STAR and CEE Tier 2 Requirements (Modified Energy Factor 2.0, Water Factor 6.0 or less)	3	1			2				A	A		
TBD	b. Meets ENERGY STAR and CEE Tier 3 Requirements (Modified Energy Factor 2.2, Water Factor 4.5 or less)	0				2				A	A		
	3. Install ENERGY STAR Refrigerator												
Yes	a. ENERGY STAR Qualified & < 25 Cubic Feet Capacity	1	1							A	A		
TBD	b. ENERGY STAR Qualified & < 20 Cubic Feet Capacity	0	1							A	A		
	4. Install Built-In Recycling Center or Composting Center												
Yes	a. Built-In Recycling Center	1			1					R			
TBD	b. Built-In Composting Center	0			1					R			
	5. Install High-Efficacy Lighting and Design Lighting System												
Yes	a. Install High-Efficacy Lighting	1	1					A		R	R		
TBD	b. Install a Lighting System to IESNA Footcandle Standards or Hire Lighting Consultant	0	1					A		A	R		
	Total Available Points in Appliances and Lighting = 13	8											
N. OTHER			Points Available Per Measure										
Yes	1. *Required:* Incorporate GreenPoint Rated Checklist in Blueprints [*This credit is a requirement associated with J4: EPA IAP]	Y			R			R					
TBD	2. Pre-Construction Kick-Off Meeting with Rater and Subs	0	1								R		
TBD	3. Homebuilder's Management Staff are Certified Green Building Professionals	0	1								R		
	4. Develop Homeowner Education												
Yes	a. Develop Homeowner Manual of Green Features/Benefits (CALGreen code if applicable) [*This credit is a requirement associated with J4: EPA IAP]	2	1			1					R		
Yes	b. Conduct Educational Walkthroughs (Prerequisite is N4a) [*This credit is a requirement associated with J4: EPA IAP]	1	1								R		
TBD	5. Install a Home System Monitor OR Participate in a Time-of-Use Pricing Program	0	1							A	R		
	Total Available Points in Other = 6	3											
O. COMMUNITY DESIGN & PLANNING													
	1. Develop Infill Sites												
TBD	a. Project is an Urban Infill Development	0	1					A	A	A	R		
TBD	b. Home(s)/Development is Located within 1/2 Mile of a Major Transit Stop	0	2					A	A	A	R		
TBD	2. Build on Designated Brownfield Site	0	3								R		
	3. Cluster Homes & Keep Size in Check												
TBD	a. Cluster Homes for Land Preservation	0	1			1		R			R		
TBD	b. Conserve Resources by Increasing Density (10 Units per Acre or Greater)	0	2			2		R			R		
0	c. Home Size Efficiency	0				6		R					
	4. Design for Walking & Bicycling												
	a. Site Has Pedestrian Access Within 1/2 Mile of Community Services: TIER 1: Enter Number of Services Within 1/2 Mile 1) Day Care 2) Community Center 3) Public Park 4) Drug Store 5) Restaurant 6) School 7) Library 8) Farmer's Market 9) After School Programs 10) Convenience Store Where Meat & Produce are Sold TIER 2: Enter Number of Services Within 1/2 Mile 1) Bank 2) Place of Worship 3) Laundry/Cleaners 4) Hardware 5) Theater/Entertainment 6) Fitness/Gym 7) Post Office 8) Senior Care Facility 9) Medical/Dental 10) Hair Care 11) Commercial Office or Major Employer 12) Full Scale Supermarket												
	i. 5 Services Listed Above (Tier 2 Services Count as 1/2 Service Value)	0	1						A	A	R		
	ii.10 Services Listed Above (Tier 2 Services Count as 1/2 Service Value)	0	1						A	A	R		
TBD	b. Development is Connected with A Dedicated Pedestrian Pathway to Places of Recreational Interest Within 1/4 mile	0	1						A	A	R		

The Clark Residence

Michael Chau

2008-011

Planning Scoresheet

Status	Measure	Points Targeted	Community	Energy	IAQ/Health	Resources	Water	Plan Review	Rough Inspection	Final Inspection	Documentation	Blueprint Page No.	Notes
TBD	c. Install Traffic Calming Strategies (Minimum of Two): - Designated Bicycle Lanes are Present on Roadways; - Ten-Foot Vehicle Travel Lanes; - Street Crossings Closest to Site are Located Less Than 300 Feet Apart; - Streets Have Rumble Strips, Bulbouts, Raised Crosswalks or Refuge Islands	0	2						A	R	R		
	5. Design for Safety & Social Gathering												
Yes	a. All Home Front Entrances Have Views from the Inside to Outside Callers	1	1							R			
TBD	b. All Home Front Entrances Can be Seen from the Street and/or from Other Front Doors	0	1						A	A			
TBD	c. Orient Porches (min. 100sf) to Streets and Public Spaces	0	1					A	A	A			
TBD	d. Development Includes a Social Gathering Space	0	1					R		R	A		
	6. Design for Diverse Households (6a. is a Prerequisite for 6b. and 6c.)												
TBD	a. All Homes Have At Least One Zero-Step Entrance	0	1							R			
TBD	b. All Main Floor Interior Doors & Passageways Have a Minimum 32-Inch Clear Passage Space	0	1							R			
TBD	c. Locate Half-Bath on the Ground Floor	0	1						R				
TBD	d. Provide Full-Function Independent Rental Unit	0	1					R		A			
	Total Achievable Points in Community Design & Planning = 35	1											
P. INNOVATION			Possible Points										
	A. Site												
	1. Stormwater Control: Prescriptive Path (Maximum of 3 Points, Mutually Exclusive with PA2.)												
TBD	a. Use Permeable Paving for 25% of Driveways, Patios and Walkways	0	1					A	A	A			
TBD	b. Install Bio-Retention and Filtration Features	0	2					A	A	A			
TBD	c. Route Downspout Through Permeable Landscape	0	1					A	A	A			
TBD	d. Use Non-Leaching Roofing Materials	0	1					A	A	A			
TBD	e. Include Smart Street/Driveway Design	0	1					A	A	A			
TBD	2. Stormwater Control: Performance Path (Mutually Exclusive with PA1): Perform Soil Percolation Test and Capture and Treat 85% of Total Annual Runoff	0	3								R		
	C. Landscape												
TBD	1. Meet Local Landscape Program Requirement	0					2				R		
	D. Structural Frame & Building Envelope												
	1. Design, Build and Maintain Structural Pest and Rot Controls												
TBD	a. Locate All Wood (Siding, Trim, Structure) At Least 12" Above Soil	0				1				R			
Yes	b. All Wood Framing 3 Feet from the Foundation is Treated with Borates (or Use Factory-Impregnated Materials) OR Walls are Not Made of Wood	1				1			R		R		
TBD	2. Use Moisture Resistant Materials in Wet Areas: Kitchen, Bathrooms, Utility Rooms, and Basements [*This credit is a requirement associated with J4: EPA IAP]	0			1	1			R	R			
	E. Exterior												
TBD	1. Vegetated Roof (Minimum 25%)	0	2	2				R		R			
	G. Plumbing												
TBD	1. Greywater Pre-Plumbing (Includes Washing Machine at Minimum)	0					1	R	R				
TBD	2. Greywater System Operational (Includes Washing Machine at Minimum)	0					2	R	R	R			
TBD	3. Innovative Wastewater Technology (Constructed Wetland, Sand Filter, Aerobic System)	0					1		A	A	R		
TBD	4. Composting or Waterless Toilet	0					2			A	R		
TBD	5. Install Drain Water Heat-Recovery System	0		1					R				
TBD	6. Install a Hot Water Desuperheater	0		2				A	R				
	H. Heating, Ventilation, and Air Conditioning												
TBD	1. Humidity Control Systems (Only in California Humid/Marine Climate Zones 1,3,5,6,7) [*This credit is a requirement associated with J4: EPA IAP]	0			1			R		R	R		
TBD	2. Design HVAC System to Manual T for Register Design	0		1					A	A	R		
	K. Finishes												
TBD	1. Materials Meet SMaRT Criteria *(Select the number of points, up to 5 points)*	0				5		A	A	A	R		
	N. Other												
TBD	1. Detailed Durability Plan and Third-Party Verification of Plan Implementation	0				2					R		
	2. Educational Signage of Project's Green Features												
TBD	a. Promotion of Green Building Practices	0	1								R		
TBD	b. Installed Green Building Educational Signage	0	1								R		
	3. Innovation: List innovative measures that meet green building objectives. Enter in the number of points in each category for a maximum of 4 points for the measure in the blue cells. Points achieved column will be automatically fill in based on the sum of the points in each category. Points and measures will be evaluated by Build It Green.												
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	C	0	0	0	A	A	A	R		
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	0	0	0	0	A	A	A	R		
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	0	0	0	0	A	A	A	R		
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	0	0	0	0	A	A	A	R		
TBD	Innovation: Enter up to 4 Points at right. Enter description here	0	0	0	C	0	B	A	A	A	R		
	Total Achievable Points in Innovation = 33+	1											
Q. CALIFORNIA CALGreen CODE			Possible Points										
Yes	0. Home meets all applicable CALGreen measures listed in above Sections A - P of the GreenPoint Rated checklist.	Y	R										
	The following measures are mandatory in the CALGreen code and do not earn points in the GreenPoint Rated Checklist, but have been included in the Checklist for the convenience of jurisdictions. *The GreenPoint Rater is not a code enforcement official. The measures in this section may be verified by the GreenPoint Rater at their own discretion and/or discretion of the building official.*												
TBD	1. CALGreen 4.106.2 Storm water management during construction.	N							R	R			
TBD	2. CALGreen 4.106.3 Design for surface water drainage away from buildings.	N								R			
TBD	3. CALGreen 4.303.1 As an alternative to perscriptive compliance, a 20% reduction in baseline water use shall be demonstrated through calculation	N									R		
TBD	4. CALGreen 4.406.1 Joints and openings. Annular spaces around pipes, electric cables, conduits, or other openings in plates at exterior walls shall be protected	N							R				
TBD	5. CALGreen4.503.1 Gas fireplace shall be a direct-vent sealed-combustion type. Woodstove or pellet stove shall comply with US EPA Phase II emission limits	N								R	R		
TBD	6. CALGreen 4.505.2 Vapor retarder and capillary break is installed at slab on grade foundations.	N						R	R				
TBD	7. CALGreen 4.505.3 19% moisture content of building framing materials	N							R		R		
TBD	8. CALGreen 702.1 HVAC system installers are trained and certified in the proper installation of HVAC systems.	N									R		
	Total Achievable Points in California Green Code = 0	0											

Summary

		Community	Energy	IAQ/Health	Resources	Water
Total Available Points		44	96+	44	109	59
Minimum Points Required		0	30	5	6	9
Total Points Targeted	**107**	**4**	**44**	**12**	**13**	**34**

Project has met all minimum requirements