Cordillera Valley Club
Design Review Board
Meeting Agenda
Date: June 24, 2015
Time: 11:00 am

Project Reviews (11:00 am)

F9 L22 / 113 Legacy Trail - Krueger Residence
Architect: Karl Krueger
Owner: K2 CVC LLC
Sketch Review of a New Single Family Residence
Deviation for roof overhang and retaining walls outside the building envelope
Building Envelope Amendment - WITHDRAWN
Cordillera Valley Club
Design Review Board
Staff Memorandum

Owner: K2 CVC LLC
Address: 113 Legacy Trail
Legal Address: F9 L22
Representative: Karl Krueger, Architect
Staff Contact: Allison Kent, AICP
DRB Hearing #1: June 24, 2015

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**Project Description**

- Applicant is requesting a Sketch Review. The request for a Building Envelope Amendment was withdrawn on June 17th.
- The design will require a deviation for a roof overhang and retaining walls outside of the building envelope.
- New single-family residence located at 113 Legacy Trail
- Total floor area is 3,106 sq. ft. with a 917 sq. ft. garage
- There are a total of 3 enclosed parking spaces and an additional 3 surface parking spaces.
- Wildfire Hazard Rating is MODERATE

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**SKETCH REVIEW - June 24, 2015**

**Project Review**

**A. Architecture Comments**

1. The architecture of this proposed home is unique in comparison to many homes in CVC, though the DRB has approved more modern and/or contemporary homes recently. The shed roofs, low roof pitches, use of materials, hierarchy of windows and doors lean towards a more modern or contemporary mountain vernacular than is common in CVC, though there is nothing in the guidelines that specifically precludes this style. There are several examples of trend including recent approvals for the McKeever, Downey, Blue, and Young residences.

2. The roof is designed with very low pitches, as shed roofs. The roof forms are 2.5:12. The Design Guidelines state (pg. 17): "Roof forms shall be limited to low-pitched gable, shed, or double-pitch roofs in the range of 4:12 to 8:12. 3:12 roofs may be allowed, as well as other roof forms, such as curved roofs or flat roofs, at the discretion of the DRB." The DRB has been allowing roof forms less than 3:12
on secondary roof forms only and has been requesting applicants to design 3:12 roof pitches on primary roof forms. The overall architectural forms, location, and siting of the homes should be considered on a site by site basis to determine appropriateness of the lower roof pitches.

3. The massing of the building complies with the Design Guidelines which encourage horizontal scale and form, varied building heights, a mix of 1- and 2-stories, and composition of additive forms.

4. The applicant is not proposing chimney caps. If no chimney cap is required, a detailed drawing or photo of the chimney finish should be required. While the Design Guidelines do not specifically require chimney caps, it does provide the following language (pg. 17):

   The design of ancillary elements such as flues, vents, solar panels and related equipment, mechanical equipment, snow fences and clips, heat tapes and lightning rods is very important in order to minimize roof clutter. Ancillary elements should be designed to be compatible with the primary roof and to not create a visual distraction. All flues and vents will be consolidated and enclosed in stone and/or metal. In the event that the consolidation and enclosure of all flues and vents is not feasible, the DRB may approve unenclosed flues and vents provided they are small in size and painted to match the roof color.

5. At final review, the applicant will need to provide a height analysis indicating compliance with the 35 ft. height limitation. As currently proposed, the home appears to comply.

6. Due to the proposed roof slopes, the roofing material is proposed as standing seam metal. The Design Guidelines recommend shakes (both cedar and synthetic) for primary roof forms, and metal only for secondary roof forms. Recently, the DRB has approved roofs of a single material, generally metal on homes with lower roof pitches.

7. For Final Review, the Applicant will need to provide samples of all materials and stone calculations indicating that no less than 35% of the exterior walls are stone.

B. Site Plan and Landscape Plan Comments

1. With the revisions to the site plan as a result of eliminating the request for the building envelope amendment, the applicant did not submit a revised landscape plan and the revised site plan (submitted June 18th) is less detailed than generally reviewed by the DRB. Prior to final approval, the applicant shall submit a landscape plan and site plan in compliance with the requirements of the Section 6.2.3 of the Design Guidelines.

2. The approximately 5 ft. tall retaining wall adjacent to the road and driveway is on the property line, allowing for minimal plantings and landscaping to screen the wall. It is indicated as a concrete or boulder retaining walls. If concrete, additional information on how the wall will be faced needed. The Guidelines require retaining was to be faced with stone similar to the stone proposed on the home. A boulder wall, because it requires additional lay-back, may need to be taller than proposed. No walls can exceed 6 ft. The driveway could potentially be modified to allow for more room for plantings are area for lay-back of a boulder wall.
3. The Design Guidelines require a minimum of 3 ft. between retaining walls and the edge of driveway for planting beds. As currently design, the driveway does not meet this requirement.

4. The applicant is indicating with this design a deviation from the Design Guidelines to allow for roof overhang, retaining walls, and lawn area outside of the building envelope, though has not yet applied for a deviation due to the withdrawal of the building envelope amendment. The Design Guidelines allow the DRB to approve non-habitable space outside of the building envelope. The Design Guidelines state: *At their discretion, the DRB may approve non-habitable space such as roof overhangs, balconies, porches, patios, garages, and service areas that are located outside the building envelope provided such proposals are found by the DRB to be in accordance with the process for minor encroachments outside the building envelope.* (pg. 8)

   The DRB can approve the minor encroachment if the DRB finds that the applicant has clearly demonstrated the following:
   a. The encroachment does not affect views from surrounding homesites
   b. The encroachment does not substantially reduce the distance between homesites on lots
   c. The encroachment allows for a more sensitive design solution by minimizing site grading, the loss of mature vegetation, and/or other considerations
   d. The encroachment will allow for a design that is consistent with the overall design philosophy and design style for the CVC (pg 9).

   Prior to Final Review, the applicant shall submit for the deviation from the Design Guidelines and appropriate notice shall be provided to neighbors, indicating the areas of encroachment beyond the building envelope.

C. Public Comment

   Public notice to adjacent properties was provided on June 8, 2015. This notice included the building envelope amendment. Comments were received based on the amendment and neighbors were generally opposed to building envelope amendment. Because the building envelope amendment was withdrawn, these comments have not been included with this memo. Upon withdrawal on June 17, 2015, staff did send out an email to the adjacent property owners, informing of the withdrawal but that the house would still be reviewed by the DRB. As of June 18, 2015, no additional comments have been received.

D. Staff Recommendation

   Staff recommends approval of the Sketch Review for the K2 CVC LLC Spec Residence, subject to the following conditions:
   1. The applicant shall submit an application for a deviation for the improvements located outside the building envelope prior to final review. If no application is submitted, all improvements shall be located within the building envelope.
   2. The applicant shall submit plans for final review by the DRB in compliance with the requirements of Section 6.2.3 of the Design Guidelines.
3. The applicant shall address the comments provided in this staff memorandum and any DRB comments prior to final plan review.

E. **DRB Deliberation**

Motion:
Second:
Vote:
Conditions:
Panoramic view looking south from middle of Lot 22

Panoramic view looking north at proposed driveway access for Lot 22 and adjacent building on Lot 21

Residence at 113 Legacy Trail
(Lot 22, Filing 9, Cordillera Valley Club)
Sketch Plan Submittal 6-3-15

Karl Krueger / Architect
PO Box 8332, Avon, Colorado 81620
Ph: 970-748-1504  Cel:970-390-9756
www.kruegerarchitecture.com
Eagle County Wildfire Hazard Rating

Property Information:
Parcel ID: 1943-323-10-004
Address: 113 Legacy Trail, CVC
Owner Name: Krueger
Date Completed: 6/3/15

OVERALL WILDFIRE HAZARD RATING: Moderate
Defensible Space Assessment: (Pass / Action Needed)

Completed by: Eric Lovgren, Wildfire Mitigation Specialist
Eagle County Wildfire Hazard Rating

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Eagle County Wildfire Hazard Rating

Predominant Vegetation Type
(within 200 foot radius of proposed structure)

Low Density Fuels or Low Combustion Potential
(Points)

<table>
<thead>
<tr>
<th>Points</th>
<th>Predominant Vegetation Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0 L1 no vegetative cover</td>
</tr>
<tr>
<td>0</td>
<td>0 L2 irrigated pasture, manicured lawn, golf course</td>
</tr>
<tr>
<td>5</td>
<td>5 L3 riparian zone/wetland grasses, shrubs, trees (willow, alder, dogwood, aspen cottonwood, etc), no coniferous trees</td>
</tr>
<tr>
<td>10</td>
<td>10 L4 dryland native grasses and forbs &lt; 2 feet, no shrubs or trees</td>
</tr>
<tr>
<td>15</td>
<td>15 L5 dryland native grasses, forbs &lt; 2 feet + dispersed shrubs &lt; 4 feet w/ crown spacing &gt;2x ht., no trees</td>
</tr>
<tr>
<td>20</td>
<td>20 L6 dryland native grasses, forbs &lt;2 feet + dispersed shrubs &lt;4 feet and isolated coniferous trees, crown spacing &gt; 3x ht.</td>
</tr>
<tr>
<td>10</td>
<td>10 L7 native grasses, forbs &lt;2 feet + isolated healthy aspen, little dead wood, no shrubs or widely dispersed deciduous shrubs.</td>
</tr>
<tr>
<td>15</td>
<td>15 L8 native grasses, forbs &lt;2 feet + clustered or dispersed healthy aspen, little dead wood, no shrubs or widely dispersed deciduous shrubs.</td>
</tr>
<tr>
<td>20</td>
<td>20 L9 native grasses, forbs &lt;2 feet + continuous healthy aspen, little dead wood, no shrubs or widely dispersed deciduous shrubs</td>
</tr>
<tr>
<td>25</td>
<td>25 L10 native grasses, forbs &lt;2 feet under continuous healthy aspen stand, little dead wood, no shrubs or widely dispersed understory deciduous shrubs, with widely dispersed single coniferous trees, crowns spaced &gt; 3x ht.</td>
</tr>
</tbody>
</table>

Medium Density Fuels

<table>
<thead>
<tr>
<th>Points</th>
<th>Predominant Vegetation Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>30 M1 sage / desert shrub, &lt; 4 feet, dispersed or clustered with native grasses.</td>
</tr>
<tr>
<td>35</td>
<td>35 M2 sage / desert shrub, &lt; 4 feet, discontinuous with native grasses.</td>
</tr>
<tr>
<td>40</td>
<td>40 M3 sage / desert shrub, &lt; 4 feet, uniform/continuous (many branches touching).</td>
</tr>
<tr>
<td>40</td>
<td>40 M4 continuous sage / desert shrub, &lt; 4 feet, with isolated tall shrub (&gt;4 feet).</td>
</tr>
<tr>
<td>45</td>
<td>45 M5 continuous sage / desert shrub with isolated tall shrub + isolated coniferous.</td>
</tr>
<tr>
<td>30</td>
<td>30 M6 isolated tall shrub, crown spacing &gt; 3x ht, with native grass/forb understory.</td>
</tr>
<tr>
<td>35</td>
<td>35 M7 mixed tall shrub / aspen, with native grass.</td>
</tr>
<tr>
<td>35</td>
<td>35 M8 continuous aspen stand, dense, poor condition, dead branches, dead fall, few shrubs.</td>
</tr>
<tr>
<td>35</td>
<td>35 M9 continuous healthy aspen stand with spreading juniper understory.</td>
</tr>
<tr>
<td>45</td>
<td>45 M10 mixed coniferous / deciduous stand.</td>
</tr>
<tr>
<td>45</td>
<td>45 M11 uniformly dispersed pinion/juniper.</td>
</tr>
<tr>
<td>45</td>
<td>45 M12 uniformly dispersed spruce/fir.</td>
</tr>
</tbody>
</table>

Completed by: Eric Lovgren, Wildfire Mitigation Specialist
Eagle County Wildfire Hazard Rating

Heavy Fuels
- **50 H1**: mixed desert/tall shrub, continuous.
- **50 H2**: mixed desert/tall shrub, continuous, with isolated coniferous.
- **60 H3**: continuous dense tall shrub.
- **60 H4**: continuous dense tall shrub with isolated coniferous.
- **70 H5**: mixed tall shrub / coniferous.
- **70 H6**: pinion/juniper, continuous.
- **70 H7**: spruce/fir/mixed conifer, continuous.
- **60 H8**: lodgepole with deadfall, little or no ladder fuels.
- **70 H9**: lodgepole with significant ladder fuels.

Average Slope
(of lot, 1 acre or less in size or, on larger lots, slope of area defined as within 200 foot radius of proposed structure)
- **5**: less than 8%.
- **15**: 8% to 20%.
- **20**: 21% to 30%.
- **30**: 31% or greater.

Additional Hazards
(pre-determined by GIS and/or site visit, add points to above)
- **10**: Lot/home-site is within 50 feet of chimney feature, v-canyon or ridge top.
- **10**: Home-site/structure within 200 feet of heavy density fuel zone.
- **10**: Poor access to home-site/structure (no emergency ingress/egress).
- **10**: Home-site/structure within 50ft of adjacent structures, vacant lot or open space parcel with heavy fuel loading.

Total Points - Wildfire Hazards (Vegetation+Slope) **60**

Completed by: Eric Lovgren, Wildfire Mitigation Specialist
### Eagle County Wildfire Hazard Rating

**IMPROVEMENTS (Existing Structures)**

<table>
<thead>
<tr>
<th>D. Access</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 A1</td>
<td>two or more primary roads, in and out, 20 foot + width.</td>
</tr>
<tr>
<td>3 A2</td>
<td>two or more primary roads, in and out, &lt;20 foot width.</td>
</tr>
<tr>
<td>2 A3</td>
<td>one primary road, one emergency access (limited capacity).</td>
</tr>
<tr>
<td>1 A4</td>
<td>one primary road, 20 foot + width.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>E. Access Surface</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 AS1</td>
<td>paved.</td>
</tr>
<tr>
<td>3 AS2</td>
<td>maintained road base, gravel.</td>
</tr>
<tr>
<td>2 AS3</td>
<td>poorly maintained, weathered surface.</td>
</tr>
<tr>
<td>0 AS4</td>
<td>primitive, 4 wheel drive.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>F. Access Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 AG1</td>
<td>0% to 5%</td>
</tr>
<tr>
<td>4 AG2</td>
<td>6% to 8%</td>
</tr>
<tr>
<td>2 AG3</td>
<td>9% to 12%</td>
</tr>
<tr>
<td>0 AG4</td>
<td>over 12%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>G. Electric Service Lines</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 ES1</td>
<td>all underground.</td>
</tr>
<tr>
<td>2 ES2</td>
<td>mixed above/below (may be below within subdivision, but above along primary access).</td>
</tr>
<tr>
<td>0 ES3</td>
<td>all above ground.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>H. Water supply</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 WS1</td>
<td>250 gpm - 31 + minutes.</td>
</tr>
<tr>
<td>4 WS2</td>
<td>250 gpm - 21 to 30 minutes.</td>
</tr>
<tr>
<td>3 WS3</td>
<td>250 gpm - 10 to 20 minutes.</td>
</tr>
<tr>
<td>0 WS4</td>
<td>&lt; 250 gpm or 250 gpm for less than 10 minutes.</td>
</tr>
</tbody>
</table>

**Total Points – Improvements** 20
Eagle County Wildfire Hazard Rating

Overall Hazard Rating Points: \( (\text{subtract IMPROVEMENTS from WILDFIRE HAZARDS} ) = 40 \)

Hazard Rating

< 20 points LOW
21 to 45 points MODERATE
46 to 65 points HIGH
> 65 points EXTREME

Completed by: Eric Lovgren, Wildfire Mitigation Specialist
Eagle County Wildfire Hazard Rating

Defensible Space Requirements: A pre-construction meeting may be required, contact EC Wildfire Mitigation upon issuance of building permit

**Zone 1:** Is the area of maximum modification and treatment. The intent of Zone 1 is to reduce fuels that are immediately adjacent to flammable elements of the structure and to provide a clear access area for firefighting operations. Zone 1 is an area measured 30 feet from the edges of the structure. Ideally, all trees within Zone 1 should be removed to reduce the fire hazard. If a tree or cluster of trees must remain, it will be considered as an integral part of the structure and **Defensible Space** pursuant to Table A will be measured from the drip line of the tree or tree cluster. Decorative rock or irrigated, mowed grass creates an attractive, easily maintained nonflammable ground cover. If the house has noncombustible siding, widely spaced foundation plantings of low growing shrubs or other fire resistant plants are acceptable. All branches that interfere with the structure’s roof or chimney must be removed. All ladder fuels (small shrubs, trees, tree limbs and other materials that allow fire to climb into the tree crown) must be removed from beneath the tree or tree cluster.

**Zone 2:** Is an area of fuel reduction. The size of Zone 2 depends on the slope of the ground where the structure is built (Reference Table A). Within this zone, the continuity and arrangement of vegetation is modified to reduce the intensity of any fire approaching the structure. Trees and shrubs must be thinned so that there is a minimum of 10 feet between crowns. Crown separation is measured from the furthest branch of one tree to the nearest branch on the next tree. All ladder fuels from under these trees must be removed. All trees must be pruned to at least 10 feet above the ground, but no more than 1/3 the overall height of the tree (Aspen trees, individual spruce, fir and pine specimens are exempt). The inner portions of Zone 2 must be more heavily thinned than the outer portions. Isolated shrubs may remain provided they are not under tree crowns. These shrubs must be pruned and maintained for vigorous growth. Dead stems and shrubs must be removed. Dead trees, which can fall onto a structure or block an access, must be removed.

Completed by: Eric Lovgren, Wildfire Mitigation Specialist
Eagle County Wildfire Hazard Rating

Construction Guidelines for Wildfire Hazard Areas

Low Hazard - No limitations, any material allowed by the Building Code.

Moderate Hazard

Roofing
- Roof assembly - must have a Class B fire rating at minimum.
- Roof venting – any roof venting in the soffit shall be in the outer 1/3, with non-combustible vent covers and metal screening with openings less than ¼”.

Decking
- Decks > 30” above finished grade shall use fire-resistive construction for beams, posts, joists, and decking (trim, fascia, guards and handrails are exempt). Materials shall be rated Class B or better (ASTM E-84 flame spread ratio of 26-70) and listed for exterior use.

Soffits/Eaves
- Any soffit, eave, or roof-extension projecting over 48” from the structure shall be of fire resistive construction.

Siding
- No limitations, any material allowed by the Building Code.

High Hazard

Roofing
- Roof assembly - must have a Class A fire rating at minimum.
- Roof venting – any roof venting in the soffit shall be in the outer 1/3, with non-combustible vent covers and metal screening with openings less than ¼”.

Decking
- Decks > 30” above finished grade shall use fire-resistive construction for beams, posts, joists, and decking (trim, fascia, guards and handrails are exempt). Materials shall be rated Class A or better (ASTM E-84 flame spread ratio of 0-25) and listed for exterior use.

Soffits/Eaves
- Any soffit, eave, or roof-extension projecting from the structure shall be of fire resistive construction.

Siding
- The exterior of the structure is to be of non-combustible or fire resistive material (excluding trim).

Completed by: Eric Lovgren, Wildfire Mitigation Specialist
Eagle County Wildfire Hazard Rating

Building Inspection Process - New Building Construction / Exterior Modification / Additions – for all properties in unincorporated Eagle County

✔ Initial Site Inspection (Wildfire 1) – In areas of moderate, high, and extreme wildfire hazard you will need to have defensible space established around the new or existing structure. An initial site inspection by the Eagle County wildfire mitigation specialist will determine the parameters for the creation of defensible space on your property. This must be completed prior to footing or foundation inspections. You will need the following prior to this site-visit:

  • Approved field set of site plans available.
  • Building corners marked with stakes outlining the approximate footprint of any new structures, drive-way, septic, etc.

✔ Second Site Inspection (Wildfire 2) – A second visit to your construction site by the wildfire mitigation specialist may be required during the building process. This visit is to confirm that defensible space around the structure is in place prior to adding combustible material to the site. All vegetation marked for removal during the initial site visit must be gone in order to move on to the next step in the mitigation process.

✔ Final wildfire inspection (Wildfire Final) – Prior to issuance of Temporary Certificate of Occupancy (TCO) or Certificate of Occupancy (CO), you must be approved by the wildfire mitigation specialist during your final wildfire inspection. The following will be examined to ensure:

  • That any new landscaping complies with requirements for defensible space (must have approved landscaping plans on site if not complete)
  • That construction meets requirements for site’s hazard rating.
  • That information about the building, location of water for fire suppression, access, and defensible space boundaries are captured and entered into countywide database of wildland-interface properties with mitigation completed.
  • That no new factors contribute to the overall wildfire hazard of the site

Completed by: Eric Lovgren, Wildfire Mitigation Specialist
Eagle County Wildfire Hazard Rating

Definitions

FireShed - Product of GIS wildfire hazard model - mapping polygons that display several data fields relating to hazard and risk associated with wildfire that provide an overall hazard/risk rating with adjective descriptions of the hazard/risk rating.

WUI Buffer - Product of GIS wildfire hazard model –mapping polygons give an indication of the type of fire impacts an area close to (but not “in”) wildland fuel might experience in the event of a fire.

Tier 1 - WUI Buffer indicating an area close to (but not “in”) wildland fuel that might experience direct flame impingement, ember exposure and smoke impacts in the event of a fire.

Tier 2 - WUI Buffer indicating an area close to (but not “in”) wildland fuel that might experience direct ember exposure and smoke impacts in the event of a fire.

Tier 3 - WUI Buffer indicating an area close to (but not “in”) wildland fuel that might experience some negative impacts in the event of a fire.

Forbs - Herbaceous perennial plants other than grasses (wildflowers).

Crown - The edge of a tree or shrub=s outer most growth, a tree or shrub=s "drip line."

"x ht" - Indicates a spacing between shrubs and trees based on the average anticipated mature height of the specific plant. "3x ht" for a shrub with average anticipated mature height of 4 feet indicates a crown spacing of 3 x 4 = 12 feet.

Ladder Fuel - Live or dead plant material that facilitates or supports the movement of fire from the surface of the ground into the canopy or crown of larger shrubs or trees.

Isolated - A single plant with significant spacing (> 4x ht) from other similar plants. Very low density.

Dispersed - Widely spaced individual shrub or trees (crowns spaced > 2x ht) or widely spaced small clusters of plants, evenly distributed across the site. Low to medium density.

Completed by: Eric Lovgren, Wildfire Mitigation Specialist
Clumped - Two or more plants (maximum number allowed per cluster would be relative to the size of the site) growing in close proximity to one another, but significantly spaced from other similar plants or clusters of plants. Low to medium density.

Discontinuous - Plants touching but in "bands" separated by significant spaces, resulting in a "patterned" rather than uniform coverage on the site. Medium density.

Continuous - Plants touching or in very close proximity to one another, resulting in uniform coverage of the site. High density.

Understory - Plants or mix of plants growing below a stand of taller plant species.

Desert shrub - Rabbit brush and other woody xeric species commonly found with sage, < 4 feet tall.

Tall shrubs - Sage (>4 feet), oak, service berry, choke cherry, mountain mahogany, skunk bush (sumac), bitter brush, etc.

Mixed shrub - Sage, desert shrubs within and beneath tall shrub species, 50/50.

Mixed coniferous stand - Lodgepole pine mixed with spruce and sub alpine fir, or Douglas fir (often in understory).

Contact Information
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