

**MEMORANDUM
PLACER COUNTY
PLANNING DEPARTMENT**

TO: Lori Lawrence
FROM: Gina Langford
DATE: October 5, 1999
SUBJECT: Bickford Ranch DEIR

The Planning Department has the following comments on the DEIR. These include mostly minor editorial corrections as indicated on the enclosed cut sheets.

1. Page 13-28 and 13-29- Please define the total number of protected trees to be impacted by the project, including project improvements and buildout of residential homesites. Please verify that the proposed mitigation includes compensation for all of these anticipated impacts, and does not defer mitigation for homesite construction to the future homeowner (mm B-A). | C1-1
2. Please review all recommended mitigations to verify if any of them are now proposed mitigations (ie. mm V-E on p. 15-7). | C1-2
3. Is there a 100 year floodplain present on the project site as defined by the County-wide General Plan? | C1-3

c:

3.0 Project Description

- (9) Exception, under California Code of Regulations, Title 14, Chapter 7, Sections 1270.07-.08 to Section 1276.01(a) setback requirements for certain sideyard setbacks in the "RR" category.
- (10) Approval of Development Agreement. *NOT LAFCO for Schools*

- Potential School District Boundary Change (Placer County Local Agency Formation Commission).

The proposed project could require an agreement among the Loomis, Penryn, and Placer Union School District to revise the school district boundaries within the Plan Area.

- 404 Permit (U.S. Army Corps of Engineers and U.S. Environmental Protection Agency [EPA])

The U.S. Army Corps of Engineers regulates the placement of fill or dredged materials that affect waters of the United States, which include stream courses and jurisdictional wetlands. The Corps regulates these activities under the authority of Section 404 of the Clean Water Act and the EPA has commenting and veto authority on Corps decisions. The Corps would regulate development in the study area that affects jurisdictional wetlands. The anticipated permit is expected to be a Nationwide Permit.

- Water Quality Certification (State Water Resources Control Board)

Construction of the proposed project has the potential to directly or indirectly affect "waters and wetlands of the United States." A water quality certification is required by the State Water Resources Control Board. Water or wetland disturbance may result in a discharge to Clover Valley Creek.

- Streambed Alteration Agreement (California Department of Fish and Game [CDFG])

Construction of the proposed project would require a Section 1603 Streambed Alteration Agreement from CDFG to evaluate the potential for impact to aquatic habitat. CDFG has jurisdiction over construction activities affecting streambeds and banks and work within the 100-year floodplain. This is an agreement reached between the Applicant and CDFG regarding methods to avoid or minimize aquatic or wetland losses in accordance with CDFG policies.

- Water and Wastewater Service District Plan Approvals (State Department of Water Resources)

The proposed project is not part of the any water or wastewater service district plan. Therefore, the proposed project would need to be added to the service districts. This would entail revising the service district plans and submitting them to the State Department of Water Resources for review. The state would allow several agencies, including the Regional Water Quality Control Board and the State Public Utilities Commission, to review and comment on the changes to the plans.

- Storm Water Discharge Permit (State Water Resources Control Board)

Construction of the proposed project would involve clearing, grading, and excavation activities that would result in the disturbance of five acres or more of land. As such, the proposed project would require a State Water Resources Control Board permit for storm water discharge. The permit process would include identification of Best management Practices (BMPs) to control pollutants in storm water discharges both during construction and after construction is completed.

C1-4

6.0 Public Services and Utilities

is consistent with Placer County's policy to promote the use of surface water for suburban development (Policy 4.C.2). The impact to surface water supply would therefore be less than significant.

■

IMPACT PS-2: Increased demand for raw water from Caperton and Antelope canals
SIGNIFICANCE: Less Than Significant
MITIGATION: None Warranted

As discussed in Section 6.1.1, the Applicant currently has contracts with PCWA for 100 miner's inches of raw water from the Antelope Canal and 121 miners inches from the Caperton Canal. The proposed project would utilize a portion of the contracted supply for irrigation of the golf course, 15 large residential parcels, common landscaped areas, and open space at the project site. Raw water demand for the proposed project would gradually increase over the three proposed phases of construction, as summarized in Table 6-2.

Table 6-2
Estimated Raw Water Demand from Caperton and Antelope Canals
(Annual Totals)

Phase I (mi)	Phase II (mi)	Phase III (mi)	Total Demand at Buildout (mi)
86	22	55	163

mi = miner's inches

Raw water would be supplied to the project by the Caperton and Antelope Canals. Portions of the Caperton Canal would be abandoned, realigned, encased, or run through a siphon as part of the proposed project (see Figure 3-18). Previous hydraulic capacity improvements to Caperton Canal, which were partially funded by the Applicant, were sufficient to provide the needed hydraulic capacity without reducing flows downstream of the proposed intake point.

As a separate project to be undertaken by PCWA, a new on-site reservoir upstream of the existing Clover Valley Reservoir would be constructed to provide storage for water drawn from the Antelope Canal. PCWA's improvements to the Antelope Canal would also include a new pipeline to feed the proposed reservoir, and replacement of unlined portions of the canal between the new reservoir and Clover Valley Reservoir (see Figure 3-18). The underlying land for the proposed improvements would be conveyed to PCWA by the Applicant.

Because adequate hydraulic capacity currently exists, the demand of the proposed project will not exceed the available supply. The impact to this resource is therefore less than significant.

■

IMPACT PS-3: Increased demand for groundwater
SIGNIFICANCE: Less Than Significant
MITIGATION: None Warranted

The project would include individual wells to serve as domestic supply for 8 Rural Residential parcels located in lots R-19, R-20 and M-1, as shown in Figure 3-4. Landscape irrigation water for these parcels

Should this be 15 parcels? (see Project disk)

Cl.

13.0 Biology

6.E.4 The County shall encourage either private or public ownership and maintenance of open space.

Consistent.

The proposed project contains both public and private open space.

13.4 MITIGATION MEASURES

Mitigation Measure B-A: Implement the Applicant's oak forest conservation and revegetation plan

Mitigation Measure B-A applies to Impacts B-2, B-3, and B-4.

are these all oaks?

The Applicant proposes to include an on-site oak replacement plan in its proposed oak forest conservation and revegetation plan (Ralph Osterling Consultants, 1998). The plan will require replacement of approximately 10,653 oak trees at a ratio of 2:1 using native oak trees grown from acorns collected onsite or in the immediate vicinity. A total of approximately 21,200 trees will be planted at an average density of 100 trees per acre. Plantings will be installed within two years of tree removal. The plan will be developed and implemented in cooperation with the CDFG, U.S. Department of Agriculture Natural Resource Conservation Service, the California Department of Forestry and Fire Protection, and the University of California Cooperative Extension.

| C1-6
| C1-7

Is this the total # of oaks impacted by bulldozing of project, including residences?

Planting sites will be indicated on a project site map and will include areas within all proposed Bio Filter zones, the proposed nature area in the Meadows community park, along selected portions of the project site edges, between natural open space areas and roads, in the Ridges community park, and in additional areas of existing oak woodland where young trees do not currently exist. Site selection criteria will include slope aspect, soil conditions, accessibility for maintenance and monitoring, irrigation water availability, potential for ecosystem enhancement, and potential for prescribed burning to prepare and manage planting sites.

Species to be planted will be native oaks and riparian species, including interior live oak, blue oak, California sycamore, willows, Fremont cottonwood, California buckeye, big-leaf maple, flowering ash, and native shrubs. Revegetation size stock (2- by 2- by 10-inch containers) will be used for plantings.

Plants installed -will be drip irrigated for the first five years of growth. The Applicant's staff will monitor the irrigation systems for damage. Maintenance of all plantings will include biannual fertilization, spring and summer weed control, and replacement of damaged or dead plants.

Plantings will be required to meet a minimum survival rate of 80 percent at the end of a five-year establishment period. If this rate is not met at the end of the five years, replanting and continued monitoring will be conducted. Monitoring of the replacement plantings by the Applicant's staff will be conducted annually for a minimum of five years to collect survival and growth data and provide photographic documentation of tree growth. An annual inventory and inspection of the growth and condition of all plantings may be conducted annually by a qualified arborist hired by Placer County. A meeting to report on research and need for mitigation refinements will be conducted annually for five years following the planting.

Additional habitat conservation programs to be developed with the University of California Cooperative Extension, University of California at Davis, and Sierra College will include an inventory of natural open space areas to assess potential as habitat enhancement sites, an avian habitat improvement program, and a fire-safe fuel management program.

Major components of the analysis include the addition of structural elements into the landscape, vegetation and landform modifications. Landform contrast results from changes in the landform patterns, the exposure of soils and other disturbances noticeable as uncharacteristic in the natural landscape. Vegetation contrast results from clearing trees, shrubs, and grasses, and is primarily related to the density and height of vegetation cleared. Structure contrast results from the introduction of project facilities and is primarily related to scale, shape and color of the object. Structure contrast from presence of the proposed project facilities (buildings, light poles, fences, etc.) in the landscape is the most dominant factor in overall visual contrast.

15.3.2 Visual Impacts

IMPACT V-1:	Alteration of viewsheds within the study area from rural residences, residences in adjacent subdivision, and travel routes
SIGNIFICANCE:	Significant
MITIGATION	
Proposed:	Mitigation Measures V-A (Provide transition areas and buffers between residential development and natural open space); V-B (Implement sensitive grading techniques to blend with natural setting); V-C (Minimize grading within Meadows and Ridges developments); V-D (Apply selected lot restrictions); and G-B (Prepare and implement a grading and erosion control plan)
Significance After Proposed Mitigation:	Significant for views to Zone 1 and Zone 6; Less Than Significant for views to Zones 2 through 5
Recommended:	Mitigation Measure V-E (Retain hill at the intersection of SR 193 and Sierra College Boulevard)
RESIDUAL SIGNIFICANCE:	Significant for views to Zone 1 and Zone 6; Less Than Significant for views to Zones 2 through 5

Views from the northwest portion of the study area

Zone 1

Views are provided to the proposed project from highly sensitive rural residents, as well as from moderately sensitive travel routes. These views are the most open and expansive at the northwest portion of the project, where the rural residential "Meadows" development would occur under the proposed project (see Figure 15-10, Visibility Map 1). Views from SR 193, Sierra College Boulevard, and rural residences located to the north and to the west of the project site would have foreground views to the "Meadows" rural residential development and middleground views to portions of the proposed "Ridge" development (see Figure 15-11, Visibility Map 2). However, local topography provides a visual buffer from the intersection of SR 193 and Sierra College Boulevard. Although the existing terrain in this location provides screening to an isolated location, this intersection is heavily traveled and this terrain should be retained to provided screening of the proposed development. Foreground views of the "Meadows" development would constitute a significant change to the viewsheds at the northwest portion of the project from sensitive viewers.

Applicant has stated this is a proposed mitigation. Review all recommendations for any changes.

C1-8

15.0 Visual Resources

The design utilizes the natural landforms and vegetation to screen ridgetop and ridge development, as shown in the visual simulations, by retaining vegetation on the ridge edges to screen interior lots. Where development would require grading or cuts and fills to a building foundation on lots with slopes of 30 percent or greater, mitigation measures have been identified to limit alteration of existing landforms and vegetation to a specified building envelope.

Missing

- Conclusion?
- 1.K.3 The County shall require that new development in rural areas incorporates landscaping that provides a transition between the vegetation in developed areas and adjacent open space or undeveloped areas.

CI-9

Consistent.

Site Development and Grading Guidelines proposed by the Applicant includes the following language

- 1.K.4 The County shall require that new development incorporates sound soil conservation practices and minimizes land alterations. Land alterations should comply with the following guidelines:

1. Limit cuts and fills;
2. Limit grading to the smallest practical area of land;
3. Limit land exposure to the shortest practical amount of time;
4. Replant graded areas to ensure establishment of plant cover before the next rainy season; and
5. Create grading contours that blend with the natural contours on site or with contours on property immediately adjacent to the area of development.

Consistent.

Proposed land alterations activities within the project site will comply with Placer County Grading Ordinance and approved grading plans.

- 1.K.5 The County shall require that new roads, parking, and utilities be designed to minimize visual impacts. Unless limited by geological or engineering constraints, utilities should be installed underground and roadways and parking areas should be designed to fit the natural terrain.

Consistent.

Utilities will be undergrounded and new roads are planned to conform to the natural terrain to the extent possible. Improvement construction will utilize the conclusions in the geotechnical analysis.

- 1.K.6 The County shall require that new development on hillsides employ design, construction, and maintenance techniques that:

- a. Ensure that development near or on portions of hillsides do not ~~cause~~ or worsen natural hazards such as erosion, sedimentation, fire, or water quality concerns;
- b. Include erosion and sediment control measures including temporary vegetation sufficient to stabilize disturbed areas;

RESPONSE TO COMMENT LETTER C1

Response C1-1: Impact B-2 on page 13-28 incorrectly states that the approximate total number of protected trees to be removed by the project is 11,700. The total should be 10,653 trees estimated to be removed for construction of the project, including residences and other components. Approximately 60 additional trees may be indirectly affected by installation of the off-site water pipeline, and these are not included in the analysis as removed trees. The impact summary statement included an estimate for removal of trees within the proposed trail system, the water supply pipeline, sewer system pipeline, and drainage system. These areas are either already covered in the 10,653 estimate or have trees that will not be removed by the project (i.e., within the trail system and off-site water pipeline) and the summary statement erroneously included the additional trees. The descriptive text in the impact discussion was edited to omit these areas, but inadvertently the total number in the impact summary was not changed.

The first sentence regarding Impact B-2 on page I3-28 of the DEIR is changed to read:

“Approximately 10,653 native trees....”

*Text
Revision*

Mitigation Measure B-A does not defer mitigation to the homeowner, but covers all required tree mitigation based on construction of residences within the building envelopes identified in the development notebook. Mitigation Measure B-A is clarified by modifying the fifth full paragraph under the description of the mitigation measure on page 13-48 of the DEIR:

“...Monitoring of the replacement plantings will be conducted annually for a minimum of five years to collect survival and growth data and provide photographic documentation of tree growth. An annual inventory and inspection of the growth and condition of all plants will be conducted annually by a qualified arborist approved by Placer County...”

*Text
Revision*

It should also be noted that the Applicant’s Oak Woodland Conservation and Revegetation Plan includes a requirement for the Applicant’s registered forester to conduct or directly supervise an annual inventory and inspection of the growth and condition of all replacement plantings.

Additional mitigation via payment into a fund is described under Mitigation Measure B-D and is only required if the homesite is changed from that indicated in the development notebook and, as a result, more trees are removed than those included in the estimate of 10,653.

Response C1-2: All Mitigation Measures have been reviewed. “Recommended” Mitigation Measures T-Q, N-I, V-E, V-I, V-J and V-K have been changed to “Proposed,” and new Mitigation Measure G-D has been added as “Recommended” to Impact G5 (this is discussed in Master Response PR-2). Mitigation Measures V-I, V-J, and V-K have been slightly reworded to conform to what the County now intends to require. Additional mitigation has been added to Impacts V-1 and V-2 in Response to Comments I4-293 and I4-294. These changes are shown in Revised Table 2-2 in the Introduction to this FEIR.

*Text
Revision*

The following revisions to the DEIR are therefore made:

Page 7-34 is changed to read:

“IMPACT T-21:

Safety concerns at two golf cart crossings on Bickford Ranch Road

SIGNIFICANCE:

Significant

*Text
Revision*

MITIGATION

Proposed:

Mitigation Measures T-P (Provide signing and striping on Bickford Ranch Road at the golf cart crossings); and T-Q (Work with Placer County to define an acceptable Golf Cart Crossing Plan)

Recommended:

None

RESIDUAL SIGNIFICANCE:

Less Than Significant

Page 9-11 is changed to read:

*Text
Revision*

“IMPACT N-4:

Introduction of noise-sensitive receptors to a potentially noise-impacted area

SIGNIFICANCE:

Potentially Significant

MITIGATION

Proposed:

Mitigation Measures N-D (Incorporate building setbacks and noise barriers into the proposed project design); N-E (Inform prospective buyers of potential rail noise exposure exceeding 60 dBA L_{dn}); N-F (Implement community park design measures to minimize potential noise impacts); N-G (Inform prospective buyers of potential community noise sources); N-H (Restrict the timing and location of truck deliveries to the Village Commercial Center); N-I (Require 6-foot block or masonry walls along project roadways where residential areas would fall within the 60 dBA L_{dn} contour); and N-J (Restrict business hours of operation within specified areas of the Village Commercial Center)

Recommended:

None

RESIDUAL SIGNIFICANCE:

Less Than Significant”

Page 15-7 is changed to read:

*Text
Revision*

“IMPACT V-1:

Alteration of viewsheds within the study area from rural residences, residences in adjacent subdivision, and travel routes

SIGNIFICANCE:

Significant

MITIGATION

Proposed:

Mitigation Measures V-A (Provide transition areas and buffers between residential development and natural open space); V-B (Implement sensitive grading techniques to blend with natural setting); V-C (Minimize grading within Meadows and Ridges developments); V-D (Apply selected lot restrictions); V-E (Retain hill at the intersection of SR 193 and Sierra College Boulevard); V-I (For all lots containing slopes of 30 percent or greater, record on final map and reflect in the development notebook for such lots a slope easement at the 30 percent slope starting point. No building envelopes or structures shall be permitted on the portion of the lot where slopes are 30 percent or greater); V-J (For all lots containing slopes of 30 percent or greater, structures and building envelopes shall be prohibited on

those portions of the lot where slopes are 30 percent or greater); V-K (For all lots containing slopes of 30 percent or greater, prohibit development on those portions of the lot where slopes are 30 percent or greater); and G-B (Prepare and implement a grading and erosion control plan)

Significance After Proposed Mitigation:

Significant for views to Zone 1 and Zone 6; Less Than Significant for views to Zones 2 through 5”

Recommended:

Mitigation Measure V-H (Apply selected lot restrictions to other areas of concern)

RESIDUAL SIGNIFICANCE:

Significant for views to Zone 1 and Zone 6; Less Than Significant for views to Zones 2 through 5”

Page 15-9 is changed to read:

Text Revision

“IMPACT V-2:

Reduction in visual quality within the study area, resulting in strong project/setting contrast
Significant

**SIGNIFICANCE:
MITIGATION
Proposed:**

Mitigation Measures V-A (Provide transition areas and buffers between residential development and natural open space); V-B (Implement sensitive grading techniques to blend with natural setting); V-C (Minimize grading within Meadows and Ridges developments); V-D (Apply selected lot restrictions); V-I (For all lots containing slopes of 30 percent or greater, record on final map and reflect in the development notebook for such lots a slope easement at the 30 percent slope starting point. No building envelopes or structures shall be permitted on the portion of the lot where slopes are 30 percent or greater); V-J (For all lots containing slopes of 30 percent or greater, structures and building envelopes shall be prohibited on those portions of the lot where slopes are 30 percent or greater); V-K (For all lots containing slopes of 30 percent or greater, prohibit development on those portions of the lot where slopes are 30 percent or greater); and G-B (Prepare and implement a grading and erosion control plan)

**Significance After Proposed Mitigation:
Recommended:**

Significant
Mitigation Measure V-H (Apply selected lot restrictions to other areas of concern)

RESIDUAL SIGNIFICANCE:

Significant”

Page 15-14 is changed to read:

Text Revision

“IMPACT V-5:

Inconsistency with Placer County General Plan policies 1.K.1, 1.K.6.d, and 1.O.3 requiring that new development be designed to be compatible with the scale and character of the area, avoid locating structures along ridgelines and steep slopes, and minimize visibility

SIGNIFICANCE:
MITIGATION
Proposed:

Significant

Mitigation Measures V-A (Provide transition areas and buffers between residential development and natural open space); V-B (Implement sensitive grading techniques to blend with natural setting); V-C (Minimize grading within Meadows and Ridges development); and V-D (Apply selected lot restrictions); V-I (For all lots containing slopes of 30 percent or greater, record on final map and reflect in the development notebook for such lots a slope easement at the 30 percent slope starting point. No building envelopes or structures shall be permitted on the portion of the lot where slopes are 30 percent or greater)); V-J (For all lots containing slopes of 30 percent or greater, structures and building envelopes shall be prohibited on those portions of the lot where slopes are 30 percent or greater)); and V-K (For all lots containing slopes of 30 percent or greater, prohibit development on those portions of the lot where slopes are 30 percent or greater)

Recommended:

V-H (Apply selected lot restrictions to other areas of concern)

RESIDUAL SIGNIFICANCE:

Less Than Significant”

Response C1-3: No 100-year floodplain is present on the site as defined by the County-wide General Plan.

Response C1-4: Page 3-27, third paragraph, is changed to read:

*Text
Revision*

“Potential School District Boundary Change.”

Response C1-5: The proposed project would now include individual wells to serve as domestic supply for 12 Rural Residential Parcels.

Page 6-14, last paragraph, is changed to read:

*Text
Revision*

“The project would include individual wells to serve as domestic supply for 12 rural residential parcels.”

Response C1-6: See Response C1-1.

Response C1-7: The 21,200 trees identified in Mitigation Measure B-A of the DEIR (page 13-48) refers to the oak trees to be planted. This number is approximate, and the final number of oak trees will be based on the 2:1 mitigation ratio identified in the Applicant’s revegetation plan. The conceptual revegetation plan also calls for planting of riparian and other species. These plants would be in addition to the oak tree mitigation..

Response C1-8: The Applicant now agrees to include Mitigation Measure V-E as proposed. This change is reflected on Revised Table 2-2. The Applicant has also now agreed to accept several other mitigation measures as proposed. These are listed in Response C1-2.

Response C1-9: The first paragraph at the top of page 15-12 explains how the proposed project is consistent with General Plan policy 1.K.2. The word “Consistent” was omitted from the first line; it should have been included.

The top of page I15-12 is revised to add the following line:

*Text
Revision*

“Consistent”

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RESPONSE TO COMMENT LETTER C2

Response C2-1: See Master Response SW-1. On-site retention storage would be provided in the constructed lakes, which were evaluated as part of the proposed project. As noted in Master Response SW-1, the detention ponds would also serve to reduce surface run-off and as a result, could serve as additional on-site retention storage in major storm events.

Response C2-2: As noted by the commentor, the existing volumes at the SR 193/Sierra College Boulevard intersection currently meet peak-hour signal warrants for the installation of a traffic signal. The addition of traffic from the proposed project would add additional traffic to this intersection, further justifying the need for a traffic signal. The signal would likely be installed as part of the full list of Sierra College Boulevard improvements, partially funded by the Applicant (fair share). However, on this basis, the timing of the signal relative to its need to avoid LOS violations is not assured.

Response C2-3: The commentor suggests that the level of service for the northbound left-turn movement at the SR 193/Sierra College Boulevard intersection would be worse if a higher speed on SR 193 were used in the analysis. The 1985 Highway Capacity Manual (HCM) (Transportation Research Board, 1985) used different “critical gaps” for higher speed on the “major-street” in the calculation of capacities at stop sign controlled intersections. The 1994 and 1997 HCMs, however, do not adjust critical gaps or capacities for higher speeds on the major street. The 1997 HCM notes that “although some previous studies have shown factors related to major-street speed . . . drivers make their gap acceptance decisions based on distance, and this results in a time gap that is independent of speed.” For this reason, the level of service calculations for this intersection do not require any adjustment.

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PLACER COUNTY
DATE
RECEIVED
NOV 01 1999
PLANNING DEPARTMENT

M E M O R A N D U M
PLACER COUNTY
OFFICE OF EMERGENCY SERVICES

To: Gina Langford, Senior Planner

From: Mike Boyle, Assistant Director, OES
Greg Guyan, CDF/Placer County Fire *MB*

Date: November 1, 1999

Subject: Bickford – Draft EIR Response – Fuel Reduction

Gina, attached please find proposed language for fuel reduction on the Bickford Development. The large open spaces in this project pose a potential significant wildland fire threat. In that regard, the attached outlines a fuel reduction methodology to reduce the hazard to less than significant. At the same time, this methodology will provide unaffected open space areas for natural and wildlife habitat.

C3-1

c: Greg Guyan, CDF/PC Fire

Attachment

PROPOSED LANGUAGE FOR FUEL REDUCTION ON NEW DEVELOPMENT

In addition to the requirements of Public Resources Codes 4290 and 4291, the following are suggested requirements to be implemented on new developments within Placer County to reduce the fire hazards and increase the potential of success of fire suppression activities during initial attack response.

Requirements:

1. Construction of a 150 foot wide modified shaded fuel break adjacent to any lot that borders an open space or common area (Interface Zone) and adjacent to any road used or to be built within the new development.
2. 100 foot wide modified shaded fuel break around the building envelope on slopes equal to or less than 15% slope, even if it extends into an open space or common area.
3. 150 foot wide modified shaded fuel break around the building envelope on slopes greater than 15% slope even if it extends into an open space or common area.
4. All public and private access designed into the open space or common areas of a subdivision, such as equestrian, bike trails, etc., shall be made accessible by 20 foot wide, all weather surface fire roads. The fire roads shall be constructed at a maximum of 1,000 intervals; fire road access shall also be allowed from within each cul-de-sac.
5. Covenants, Codes, and Regulations (CC&R's) of Home Owner's Associations and/or Ordinances of County Service Areas shall require that modified shaded fuel breaks be maintained to the specifications of the modified shaded fuel break prescription.

A modified shaded fuel break is defined as: A defensible location to be used by fire suppression resources to suppress oncoming wildfires. Any fuel break by itself will NOT stop a wildfire. It is a location where the fuel has been modified to increase the probability of success for fire suppression activities. Ground resources can use the location for direct attack or firing out. Air resources can use the location for fire retardant drops. The public and fire resources can use the location for more efficient ingress and egress.

Defensible Landscape: This prescription may also be considered for use in those areas on lots that will be treated for fire safe clearance.

Defensible Space: This prescription may also be considered for use in those areas on lots that will be treated for fire safe clearance within 30 to 100 feet of existing structures. In addition to the prescribed treatments below, all annual grasses are to be maintained to below 6 inches in height. Branches overhanging structures are to be removed along with any portion of vegetation within 10 feet of the outlet of any chimney or stovepipe. Dead wood and branches within the zone are also to be removed.

Prescription

Implementation consists of removing or pruning trees, shrubs, brush, and other vegetative growth on the project area. All work will be accomplished by use of a masticator and/or hand crews supported by chippers and burning. Heavy equipment with blades will not be utilized for the project.

1. Understory fuels

Understory fuels over 1 foot in height are to be removed in order to develop vertical separation and low horizontal continuity of fuels. Individual plants or pairs of plants may be retained provided there is a horizontal separation between plants of 3 to 5 times the height of the residual plants and the residual plants are not within the drip lines of an overstory tree.

For rare and endangered species concerns, elderberry trees shall not be removed or treated within the shaded fuel breaks.

2. Overstory Fuels

Only trees up to the 10 inch diameter class (at breast height (dbh)) may be removed. Exception to this size limit shall be trees that have significant defect and/or which do not have a minimum of a 16 foot sawlog. Live but defective trees larger than the 10 inch diameter class providing cavities or obvious wildlife use will be retained.

Trees shall be removed to create horizontal distances between residual tree drip lines of 8 to 15 feet. Larger overstory trees (> 10 inches dbh) do count as residual trees and, in order to reduce ladder fuels, residual smaller trees shall have 8 to 15 feet between these drip lines. Prune branches off of all residual trees from 8 to 10 feet off the forest floor, not to reduce the live crown ratio below 1/2 of the height of the tree.

For rare and endangered species concerns, elderberry trees shall not be removed or treated within the shaded fuel breaks.

Criteria for residual trees (< 10 inch diameter class (dbh)):

Conifers:

Leave trees that have single leaders and thrifty crowns with at least 1/3 live crown ratio.

Conifer leaf tree species in descending order:

- Ponderosa pine
- Sugar pine
- Douglas-fir
- White fir
- Incense cedar

Intolerant to shade species have a higher preference as leaf trees because their seed will be less likely to germinate in the understory.

Snags

Snags are a conduit of fire during a wildfire. However, they also provide excellent wildlife habitat in their natural state. The following is the criteria of when snags shall be retained:

18 inch diameter class or larger and not more than 30 feet in height which are not capable of reaching a road or structure provided there is a separation of least 100 feet between snags.

Hardwood trees:

Leave trees that have vertical leaders and thrifty crowns with at least 1/3 live crown ratio. Retain all elderberry trees.

Hardwood leaf tree species in descending order:

- Big Leaf Maple- Riparian area, less common
- Blue Oak - least leaf surface area, less volatile when burning
- Black Oak - higher leaf surface area
- Madrone - more volatile when burning
- Live Oaks - most volatile when burning, branches closest to ground.

Brush:

It is desirable to remove as much brush as possible within the shaded fuel break area. However, if individual plants or pairs of plants are desired to be left, leave plants with the following characteristics: young plants less than 5 feet tall and individual or pairs of plants that are no more than 5 feet wide. Retain all elderberry trees.

Brush leave species in descending order:

Dogwood – less common

Lemmon Ceanothus - less common, less volatile

Buck brush (Wedge leaf ceanothus) - smaller brush plant, less volatile

Redbud - less common

Coffeeberry - less common

Whitethorn - lower lying plant

Deer brush - larger plant, high leaf surface area, more volatile when burning

Manzanita - larger plant, high leaf surface area, more volatile when burning

Chamise - foliage contains highest amount of flammable oils, most volatile when burning

3. Wetlands:

Functional wetlands will be avoided for treatment and ground operations.

4. Watercourse and Lake Protection Zone (WLPZ):

To provide mitigation for riparian associated species and to reduce the potential risk of habitat fragmentation, the following will apply:

WLPZ widths shall be in conformance with Title 14, California Code of Regulations, 936.5, Procedures for Determining Watercourse and Lake Protection zone Widths.

**TABLE 1—14 CCR 936.5
PROCEDURES FOR DETERMINING
WATERCOURSE AND LAKE PROTECTION ZONE
WIDTHS AND PROTECTIVE MEASURES¹**

Water Class Characteristics or key indicator Beneficial Use	1) Domestic supplies on site and/or within 100 feet downstream of the operations area and/or	1) Fish always or seasonally present offsite within 1,000 feet downstream and/or	No aquatic life present watercourse shows evidence of being capable of sediment transport downstream to waters Class I or II waters and/or occasional high water flow conditions after completion of timber operations.	Man-made watercourses usually downstream established for domestic, agricultural, hydro-electric supply or other beneficial use.
	2) Fish always or seasonally present on site to include habitat to sustain fish migration and spawning.	2) Aquatic habitat for non-fish aquatic species. 3) Excludes Class III waters that are tributary to Class I waters.		
WATER CLASS	CLASS I	CLASS II	CLASS III	CLASS IV
ST. 0.7% CLASS (%)	WIDTH PROTECTION FEET MEASURE	WIDTH PROTECTION FEET MEASURE	WIDTH PROTECTION FEET MEASURE	WIDTH PROTECTION FEET MEASURE
<30	75 B/DG	50 RFI	See 936.4(c) See CFI	See 936.4(c) See CFI
30-50	100 B/DG	75 B/D	See CFH	See CFI
>50	150 ² A/DG	100 ³ RFI	See CFI	See CFI

¹See Section 916.5(e) for letter designations applicable to this table.

²Subtract 50 feet width for cable yarding operations.

³Subtract 25 feet width for cable yarding operations.

Class I watercourse (Fish bearing):

Exclude from treatment and equipment operations (except on existing roads).

Class II watercourse (Aquatic habitat for non-fish aquatic species):

No treatment of overstory and the treatment of understory will not reduce vegetative cover below 50%. One thousand hour and smaller sized dead fuels (≤ 5 inches in diameter) will be removed. Ground based equipment will not operate within the zone except on existing roads. Prune residual trees.

Class III watercourse (No aquatic life present):

Full shaded fuel break prescription will be implemented but no ground based equipment will operate within the zone except on existing roads.



M E M O R A N D U M

PLACER COUNTY OFFICE OF EMERGENCY SERVICES

To: Gina Langford, Senior Planner

From: Mike Boyle, Assistant Director, OES/County Fire Coordinator
Greg Guyan, Battalion Chief, CDF/Placer County Fire

Date: January 13, 2000

Subject: Bickford – Draft EIR – Amended Fuel Reduction

Gina, attached please find the amended language for fuel reduction on the Bickford Development. Staff has met with the applicants to clarify issues and agree on the attached changes as they relate to the project.

PROPOSED LANGUAGE FOR FUEL REDUCTION ON THE BICKFORD DEVELOPMENT

In addition to the requirements of Public Resources Codes 4290 and 4291, the following is to be implemented on the Bickford Ranch development within Placer County to reduce the fire hazards and increase the potential of success of fire suppression activities during initial attack response.

Requirements:

1. Construction of a 150 foot wide modified shaded fuel break from the center of any building envelope on a lot that borders an open space or common area (Interface Zone). The 150 foot wide shaded fuel break adjacent to roads shall be measured as 75 feet on either side of road centerline.
2. A 100-foot wide defensible landscape shall be provided from the center of a building envelope on lots with slopes equal to or less than 15% slope, even if the defensible landscape extends into an open space or common area.
3. A 150-foot wide defensible landscape shall be provided from the center of the building envelope on lots with slopes greater than 15% slope below the building envelope even if the defensible landscape extends into an open space or common area.
4. All accesses designed into the open space or common areas of a subdivision, shall be made accessible by a 15 foot wide unobstructed fire access lane. The fire access lanes shall be constructed as shown and approved by the California Department of Forestry and Fire Protection (CDF) and the Placer County Office of Emergency Services/Placer County Fire Department on "The Open Space Fire Access" exhibit dated 7/13/99. Utility/Fire access lanes shall be made accessible by a 12 foot wide all weather surface. Emergency vehicle access roads shall be made accessible by 18 foot wide all weather surface roads. Access from each cul-de-sac when adjacent to open space or common area shall be provided as approved by CDF. The "Open Space Fire Access" exhibit dated 7/13/99 and approved by CDF and the Placer County Fire Department meets these requirements.
5. Covenants, Codes, and Regulations (CC&R's) of Home Owner's Associations and/or Ordinances of County Service Areas shall require that modified shaded fuel breaks be maintained to the specifications of the modified shaded fuel break prescription.
6. On site factors which necessitate variances/exceptions to the conditions and requirements included in this document will be allowed on a case by case basis subject to approval by CDF.

Modified Shaded Fuel Break

A modified shaded fuel break is a defensible location to be used by fire suppression resources to suppress oncoming wildfires. Any fuel break by itself will NOT stop a wildfire. It is a location where the fuel has been modified to increase the probability of success for fire suppression activities. Ground resources can use the location for direct attack or firing out. Air resources can use the location for fire retardant drops. The public and fire resources can use the location for more efficient ingress and egress.

Three prescriptions are listed below. They include defensible space, defensible landscape, and modified shaded fuel break. The first two prescriptions include the modified shaded fuel break prescription with a few variations.

Defensible Space Prescription: PRC 4291

Includes all of following:

1. Maintain around and adjacent to a building or structure a firebreak made by removing and clearing away, for a distance of not less than 30 feet on each side thereof or to the property line, whichever is nearer, all flammable vegetation or other combustible growth. This does not apply to single specimens of trees, ornamental shrubbery, or similar plants that are used as ground cover, if they do not form a means of rapidly transmitting fire from the native growth to any building or structure.
2. Remove that portion of any tree that extends within 10 feet of the outlet of any chimney or stovepipe.
3. Maintain any tree adjacent to or overhanging any building free of dead or dying wood.
4. Maintain the roof of any structure free of leaves, needles, or other dead vegetative growth.
5. Provide and maintain at all times a screen over the outlet of every chimney or stovepipe that is attached to any fireplace, stove, or other device that burns any solid or liquid fuel. The screen shall be constructed of nonflammable material with openings of not more than one-half inch in size.
6. Within 100 feet of existing structures all annual grasses are to be maintained to below 6 inches in height.
7. Except as noted in 1 above, the Modified Shaded Fuel Break prescription described below also applies.

Defensible Landscape Prescription:

The following two prescriptions apply:

1. Oak trees with trunks within 3 feet of each other, essentially making one canopy may be considered one tree in the defensible landscape areas. Prune branches off of all residual trees from 8 to 10 feet off the forest floor, not to reduce the live crown ratio below 1/2 of the height of the tree². The provisions of the Modified Shaded Fuel Break Prescription as described below.

Modified Shaded Fuel Break Prescription:

Implementation consists of removing dead fuels or pruning trees, shrubs, brush, and other vegetative growth on the project area. The use of heavy equipment with blades (bulldozers) is not recommended to be utilized for fuel removal.

1. Understory fuels

Understory fuels over 1 foot in height are to be removed in order to develop vertical separation and low horizontal continuity of fuels. Individual plants or groups of plants up to 10 feet in canopy diameter may be retained provided there is a horizontal separation between plants of 3 to 5 times the height of the residual plants and the residual plants are not within the drip lines of an overstory tree.

For rare and endangered species concerns, elderberry trees shall not be removed or treated within the shaded fuel breaks.

2. Midstory Fuels

Prune branches off of all residual trees from 8 to 10 feet off the forest floor, not to reduce the live crown ratio below 1/2 of the height of the tree. All dead wood shall be removed.

For rare and endangered species concerns, elderberry trees shall not be removed or treated within the shaded fuel breaks.

3. Brush

It is desirable to remove as much brush as possible within the shaded fuel break area. However, if individual plants or pairs of plants are desired to be left, leave plants with the following characteristics: young plants less than 5 feet tall and individual or pairs of plants that are no more than 5 feet wide. Retain all elderberry trees.

Leave the following brush species in descending if they occur on the project:

Dogwood – less common

Lemmon Ceanothus - less common, less volatile

Buck brush (Wedge leaf ceanothus) - smaller brush plant, less volatile

Redbud - less common

Coffeeberry - less common

Whitethorn - lower lying plant

Deer brush - larger plant, high leaf surface area, more volatile when burning

Manzanita - larger plant, high leaf surface area, more volatile when burning
Chamise - foliage contains highest amount of flammable oils, most volatile when burning

4. Wetlands:

Wetlands under the jurisdiction of the U.S. Army Corps of Engineers will be avoided for treatment and ground operations. Any work within wetland areas shall be subject to the U.S. Army Corps of Engineers Section 404 permit conditions for the Bickford Ranch project.

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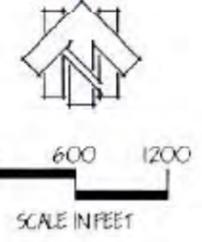
RESPONSE TO COMMENT LETTER C3

Response C3-1: The commentor has worked with the Applicant to revise the proposed language for fuel reduction on the project site. The revised language is attached to the Commentor's later letter of January 13, 2000, attached following the DEIR comment letter. As noted in the letter, Placer County staff and the Applicant agree to the revised language. The open space areas subject to fuel reduction measures are shown on Figure C3-1, and the open space fire access areas are shown on Figure C3-2. The "modified shaded fuel break" prescription described in the fuel reduction measures is shown schematically on Figure C3-3.

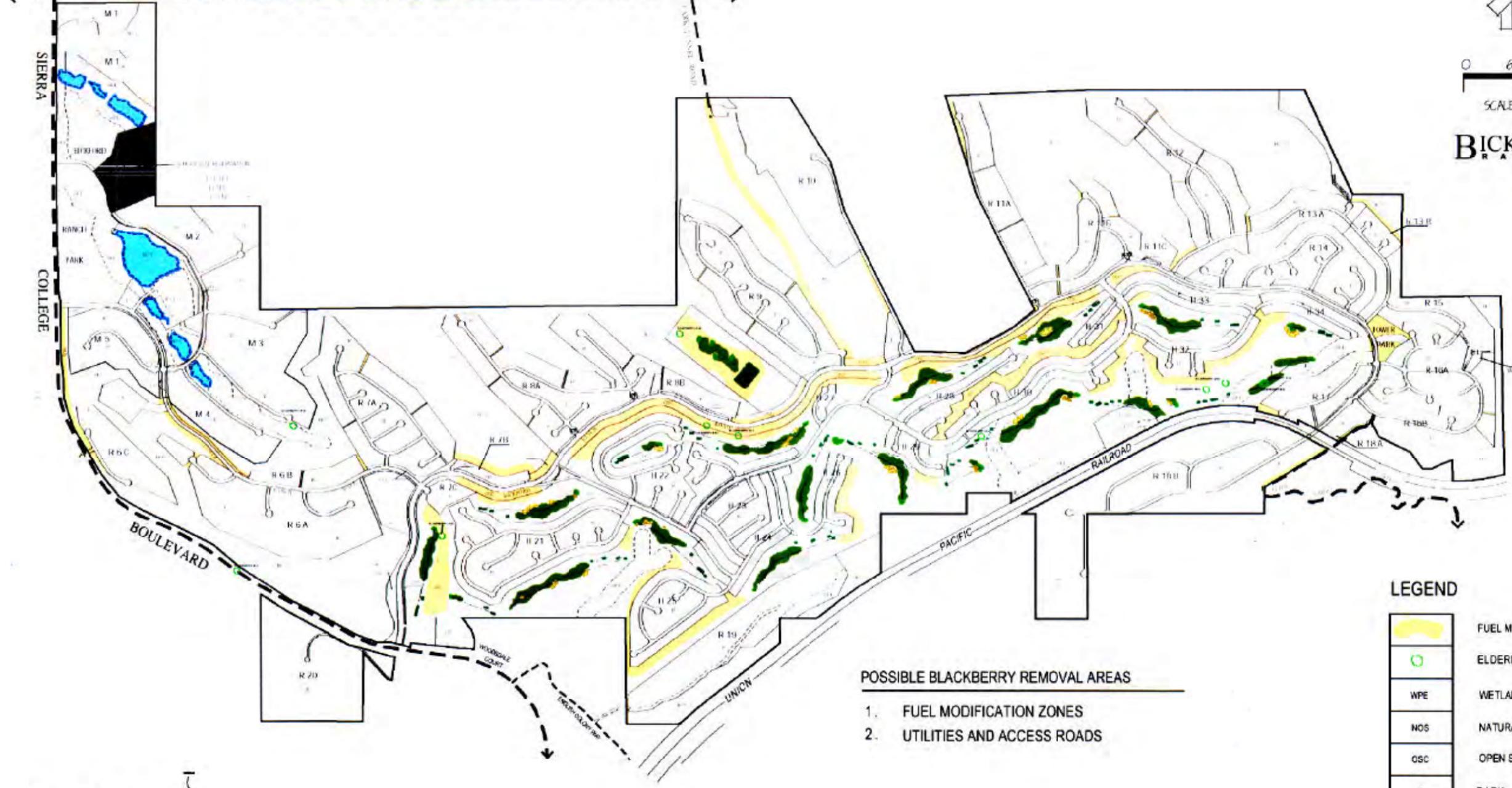
The revised fuel reduction language has been reviewed by the relevant technical specialists proficient in landscape architecture, planning, visual analysis, biology, forestry, water quality, and geology. The revised requirements do not change the analysis presented in the DEIR.

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STATE HIGHWAY 193



BICKFORD RANCH



POSSIBLE BLACKBERRY REMOVAL AREAS

1. FUEL MODIFICATION ZONES
2. UTILITIES AND ACCESS ROADS

LEGEND

	FUEL MODIFICATION ZONE
	ELDERBERRY BUSH
	WETLAND PRESERVE EASEMENT
	NATURAL OPEN SPACE
	OPEN SPACE CORRIDOR
	PARK
	GOLF COURSE
	RESIDENTIAL

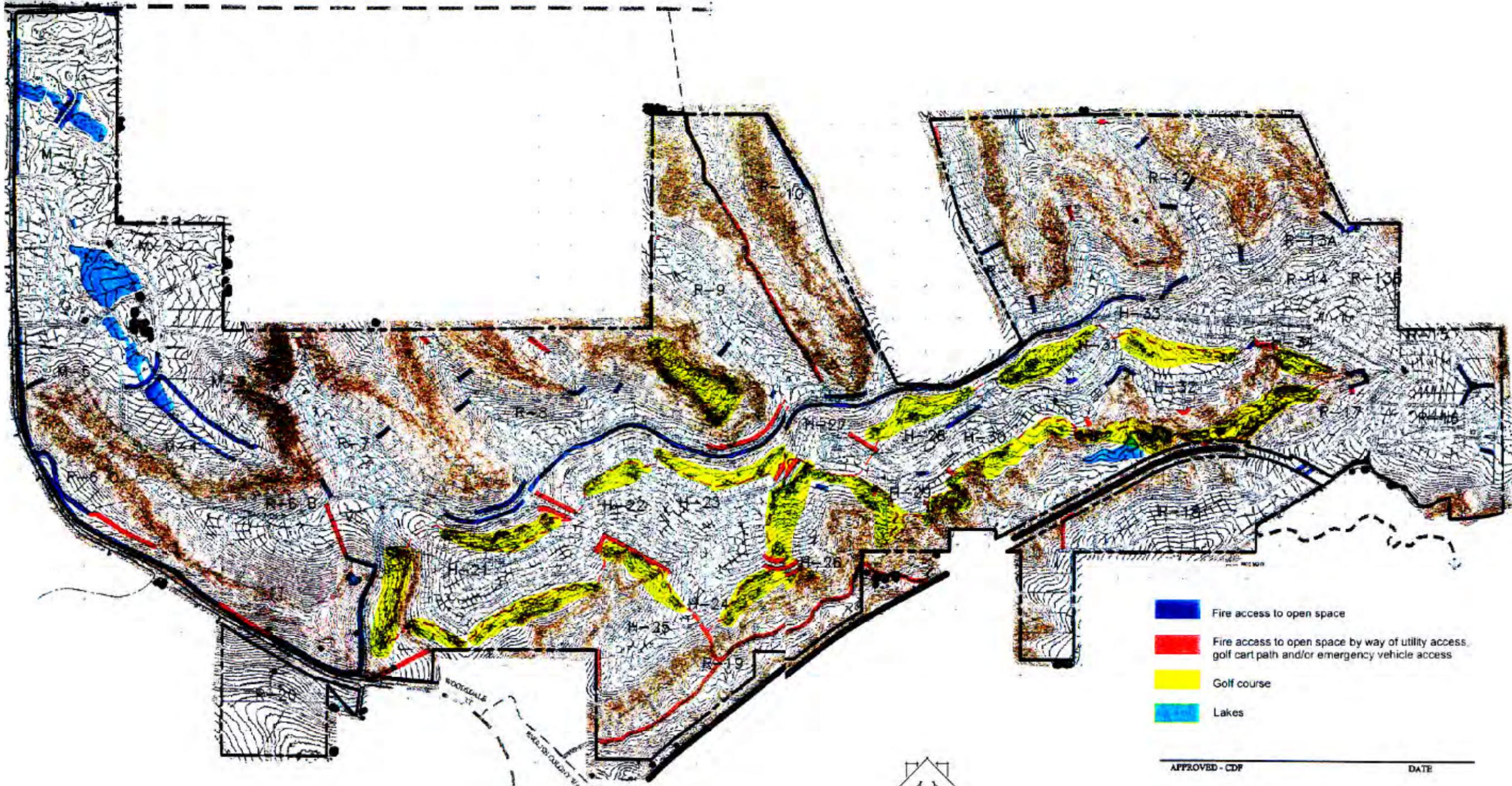
OPEN SPACE AREAS SUBJECT TO FUEL REDUCTION MEASURES

2000 Bickford Ranch Specific Plan EIR
21305-002-043 Placer County, California



FIGURE C3-1

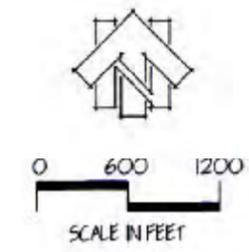




- Fire access to open space
- Fire access to open space by way of utility access, golf cart path and/or emergency vehicle access
- Golf course
- Lakes

APPROVED - CDF _____ DATE _____

APPROVED - PLACER COUNTY _____ DATE _____



BICKFORD
RANCH D

OPEN SPACE FIRE ACCESS

2000 Bickford Ranch Specific Plan EIR
21305-002-043 Placer County, California



FIGURE C3-2

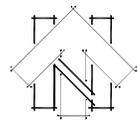
MAXIMUM 100 FEET FROM THE REAR EDGE
OF ANY BUILDING OR STRUCTURE,
BUT NOT LESS THAN 50 FEET WITHOUT
CDF APPROVAL

BACK EDGE OF BLD'G OR
STRUCTURE

FRONT SET-BACK

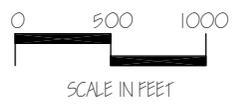


75 FEET IN WIDTH
MEASURED FROM
ROAD CENTERLINE



SOURCES: Hayes Land Planning, Inc., GW Consulting
Engineers and MHM Engineering—Surveying

BICKFORD
RANCH



**MODIFIED SHADED
FUEL BREAK SCHEMATIC**

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FIGURE C3-3