Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
AESTHETICS / VISUAL RESOURCES						
V-A: Provide transition areas and buffers between residential development and natural open space The Applicant proposes to create transition and buffer areas between proposed residence and natural open space areas. Transition areas include those situations where the grading activities will create a transition slope between residential areas or between development and natural open space. Sloped transition areas between rear residential areas will be used as a landscaped extension of the natural landscape.	Applicant	Planning Services Division	Prior to approval of improvement plans	Prior to grading during construction	Transition and buffer areas between proposed residence and natural open space areas are created	Applicant
V-B: Implement sensitive grading techniques to blend with natural setting The Applicant proposes to implement sensitive grading techniques. These techniques include limiting grading areas, performing sensitive grading around existing oak trees (including the construction of retaining walls where necessary); blending cut and fill slopes into the natural terrain; rounding and feathering graded slopes into existing terrain to avoid an artificially contoured appearance; planting or otherwise protecting re-contoured slopes from the effects of water runoff and wind erosion within 90 days of completion of grading; setting street elevations as close to the exiting natural grade as possible; constructing raised stepped or pier and grade foundations for dwellings located on steep slopes; and contour-grading with variable slopes in transition areas between residences and natural open space.	Applicant	Planning Services Division	During grading activities	During grading activities	Implementation of sensitive grading techniques during construction	Applicant
V-C: Minimize grading within Meadows and Ridges development The Applicant proposes to limit grading to create flat useable open space within the Meadows and Ridges areas. Contouring for non-graded lots may be by means of pads or partial pads created within a predominantly non-graded area. Padding will be accomplished to have minimal impact on natural vegetation.	Applicant	Planning Services Division	During grading activities within the Meadows and Ridges areas	During grading activities within the Meadows and Ridges areas	Grading within the Meadows and Ridges areas is limited to create flat useable open space	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
V-D: Apply selected lot restrictions The Applicant proposes to restrict the height of structures on select lots, based on Effective Height Analysis. In addition, in these selected locations the Applicant proposes to restrict the colors of roofing and exterior trim and walls, exterior lighting height, tree removal, structure profile, and the height of accessory structures. In these locations, all glass above 20 feet in height shall be low reflectivity, and where insufficient tree cover exists native vegetation will be planted for screening in time to reach the "effective height" prior to construction.	Applicant	Planning Services Division	Prior to approval of residential grading permits and building permits	Once during review of building permits	Structures on select lots are restricted per the Effective Height Analysis	Applicant
V-E: Retain hill at the intersection of SR 193 and Sierra College Boulevard Retention of local topography in this area will provide a visual buffer to much of the meadows development from this intersection. Although this topography provides a visual buffer in only an isolated location, it screens views from the intersection of two heavily traveled roads.	Applicant	Planning Services Division	Prior to approval of grading permits	During construction	The hill at the intersection of SR 193 and Sierra College Boulevard is retained	Applicant
V-F: Implement lighting standards outlined in Design Guidelines The Applicant proposes a variety of measures to reduce the effect of night lighting. These measures include the following: ▪ Site and building lighting will be implemented in such a way as to minimize glare on public right-of-ways and to adjacent residences. Additionally, lighting will be installed in such a manner so as to reduce the effect of ambient lighting and "light pollution" ▪ Exterior lighting shall be shielded or recessed to minimize direct glare and reflections. Lighting that represents movement, flashed, blinks, or is of unusually high intensity or brightness shall be prohibited. ▪ Nighttime light sources will be extensively landscaped and trees that have large canopies will be planted around them to reduce long-range visibility of night lighting, to serve as a visual buffer between streets and light sources, and to reduce light and glare exchange between these two areas. ▪ All lighting fixtures will be of appropriate scale and intensity for the use intended as determined by the design review committee created	Applicant	Planning Services Division and Department of Public Works and Facilities	Prior to approval of improvement plans and prior to approval of CC&Rs	Prior to and during construction	Appropriate measures to reduce the effect of night lighting are implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
by the Specific Plan and approved by the Placer County ~~Planning Department~~ Planning Services Division. ▪ Bright colored or flashing lights shall not be allowed. ▪ Street lighting shall conform to the standards and design criteria established by the Placer County Department of Public Works and Facilities ~~Department~~ to minimize nuisance ambient light, while meeting safety requirements. ▪ All streetlights will use high or low-pressure sodium lamp bulbs and conform the County standards. ▪ Street lighting will be directionally shaded to reduce off-site light and glare. ▪ Within residential areas, lighting will occur only at intersections, cul-de-sacs or significant curves in the streets.						
V-G: Implement architectural standards resulting in reduction in glare The Applicant proposes a variety of measures to reduce glare. These measures include the following: ▪ Architecturally incompatible materials and finishes, such as vinyl or aluminum siding or T-111 plywood siding, will not be approved. ▪ Exterior exposed metals such as aluminum or steel doors, windows, screens, rooftop and other metal will be anodized in a color or provided with a factory-approved color. ▪ Highly reflective glass is prohibited for use in windows, glazed doors, skylights, or other exterior applications. ▪ Bickford Ranch's residential streets will be designed as narrow as possible in order to retain a rural character and will generally conform to Placer County's Road Standards. Residential streets will be constructed within rights-of-way ranging from 40-122 feet in width, with pavement sections varying from 22-56 feet in width	Applicant	Planning Services Division and Department of Public Works and Facilities	Prior to approval of improvement plans and prior to approval of CC&Rs	Prior to and during construction	Appropriate measures to reduce glare are implemented	Applicant
V-H: Apply selected lot restrictions to other areas of concern The Applicant's proposed Mitigation Measure V-D provides for structure height restrictions, color restrictions, and tree removal restrictions within certain portions of the Plan Area. However, select other locations may	Applicant	Planning Services Division	Prior to approval of residential grading permits and	Prior to and during construction	Lot restrictions required by the County are implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
also require that this mitigation be applied, in order to reduce the visual impacts of hillside development. The County may, at its discretion, require lot restrictions to other areas of concern that it may identify.			building permits			
V-I: No building envelopes or structures shall be permitted on the portion of the lot where slopes are 30 percent or greater. ~~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.~~ ~~The Applicant will record construction envelopes (developable portions of the lot with slopes less than 30 percent) on the Tentative Map.~~	Applicant	Planning Services Division Services Division and Engineering and Surveying Division	Prior to approval of residential grading permits and building permits	Prior to grading during construction	No building envelopes or structures are permitted on the portion of the lot where slopes are 30 percent or greater.	Applicant
~~**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.~~ ~~On lots with recorded construction envelopes, the Applicant will prohibit structures outside of the recorded building envelope.~~	N/A	N/A	N/A	N/A	N/A	N/A
~~**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.~~ ~~The Applicant will prohibit development on all lots with a 30 percent slope or greater that have no recorded construction envelope.~~	N/A	N/A	N/A	N/A	N/A	N/A
~~**V-L:** Revise lighting design guidelines.~~	N/A	N/A	N/A	N/A	N/A	N/A
AIR QUALITY						
A-A: Provide dust controls The Applicant will require construction contractors for the proposed project to submit a construction emission/dust control plan to the PCAPCD prior to ground breaking. At a minimum, this plan shall include the following measures: ▪ Water exposed earth surfaces as necessary to eliminate visible dust emissions (at least one water truck will be available for every three pieces of earthmoving equipment);	Applicant	Engineering and Surveying Division ~~Department of Public Works~~	Prior to approval of Improvement plans and prior to approval of CC&Rs	Daily during construction; one weekend day each week during construction periods; submit weekly reports to the Engineering	Ensure that all dust control measures are implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
▪ Suspend grading operations when wind is sufficient to generate visible dust clouds. ▪ Pave, use gravel cover or spray a dust control agent on all haul roads; ▪ Reduce speeds on unpaved roads to 15 mph or lower (this speed must be posted); ▪ Clean earthmoving construction equipment with water once daily, and clean all haul trucks leaving the site; ▪ Use tarpaulins for haul trucks which travel on public streets; ▪ Institute measures to reduce wind erosion when site preparation is completed; and ▪ Provide paved or grass-covered areas for construction employee vehicle parking. Dust controls will ensure that all roadways, driveways, sidewalks, etc. be paved as soon as possible in the construction phase. For project components that would not be constructed / developed immediately following the mass grading phase, the following dust control measures are also recommended: ▪ Apply chemical soil stabilizers or commence reestablishing ground cover to construction areas within 96 hours of completing grading activities. ▪ Develop and implement a wind erosion monitoring program for areas which will remain inactive for extended periods; this program should at a minimum provide for weekly monitoring of inactive sites to assess the effectiveness of wind erosion controls. These measures will be incorporated into the CC&Rs.				and Surveying Division		
A-B: Maintain construction equipment and vehicles Well-maintained equipment generates less pollutant emissions than poorly-maintained equipment. All construction vehicles and equipment will be maintained according to manufacturer's specifications. Construction contractors must be required to show written evidence of appropriate maintenance prior to bringing equipment on site.	Applicant	Engineering and Surveying Division	Prior to grading and construction activities	Prior to grading and during construction	Construction contractors show written evidence of appropriate maintenance prior to bringing	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
					equipment on site and continue to maintain construction equipment and vehicles	
A-C: Implement a construction worker trip reduction program Construction contractors will be required to develop and implement a construction worker trip reduction plan aimed at achieving an average vehicle ridership of 1.5. This would reduce vehicular pollutant emissions associated with construction employee travel.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to grading and construction activities	Prior to grading and during construction	A construction worker trip reduction program is developed and implemented	Applicant
A-D: Require use of low-emission construction materials and equipment where feasible Construction contractors will be required to use low-VOC architectural coatings and asphalt in compliance with District Rules and Regulations. Use of low-VOC architectural coatings and asphalt would substantially reduce project-generated ROG emissions. Use of low-emission mobile and stationary construction equipment would reduce combustion emissions of all criteria air pollutants. Contractors will also be required to fuel stationary construction equipment with low-sulfur fuels, and use existing power sources (e.g., power poles) or clean fuel generators in place of temporary power generators whenever feasible.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to grading and construction activities	Prior to grading and during construction	Low-VOC architectural coatings and asphalt in compliance with District Rules and Regulations and use of low-emission construction equipment during construction	Applicant
A-E: Incorporate pedestrian, bicycle, and ~~golf cart~~ neighborhood electric vehicle (NEV) oriented design. The Applicant proposes to include provisions for pedestrian walkways and sidewalks to most internal destinations and other pedestrian-oriented facilities, including pedestrian paths and sidewalks to most destinations, moderate shade coverage on streets, visually interesting land uses within walking distance, and a high degree of pedestrian safety. The proposed project also includes paved bicycle lanes and paths, interconnected bikeways, and mixed land uses within bicycling distance. The Circulation Element of the project also complies with this mitigation measure by	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to approval of improvement plans	Prior to and during construction	Incorporation of pedestrian, bicycle, and neighborhood electric vehicle (NEV) lanes and paths into the project design	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
encouraging ~~golf cart~~ neighborhood electric vehicle (NEV) use for internal trips.						
~~**A-F:** Incorporate mixed land uses into the project design to reduce external vehicle trips~~ ~~The Applicant proposes to design the Village Commercial Center to accommodate day-to-day needs of proposed project residents, to minimize the need for external vehicle trips.~~	N/A	N/A	N/A	N/A	N/A	N/A
A-G: Accommodate and encourage low-emission energy use ~~A number of residential design features can accommodate and encourage use of alternative energy sources.~~ The Bickford Ranch Specific Plan project ~~Air Quality Design Guidelines will be amended to~~ includes the following measures: ▪ Install natural gas hookups in all new fireplaces; ▪ Install a natural gas outlet in the backyard of all new residences for gas-burning barbecues; ▪ Install electrical outlets at the front and back of new residences for electrical yard equipment; ▪ Install low-NO_x hot water heaters per PCAPCD Rule 246; ▪ Install electric vehicle recharging circuits in all residential garages in age restricted units ~~Heritage Ridge~~, and recharging raceways in all other residential garages; ▪ ~~Incorporate into project CC&Rs the restriction to electric-powered golf carts on the project site~~; ▪ Encourage landscape maintenance companies to use battery-powered or electric equipment for non-residential maintenance activities, where feasible; and ▪ ~~Construction contracts shall stipulate that at least 20% of the heavy-duty off-road equipment included in the inventory be powered by CARB-certified off-road engines, as follows:~~ ~~175 hp – 750 hp 1996 and newer engines~~ ~~100 hp – 174 hp 1997 and newer engines~~	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to approval of Improvement plans and prior to approval of CC&Rs	Prior to and during construction	Appropriate measures that result in low-emission energy use are implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~50 hp – 99 hp 1998 and newer engines~~ ~~The prime contractor shall submit to the PCAPCD a comprehensive inventory (i.e., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower or greater) that will be used an aggregate of 40 or more hours for the construction project. PCAPCD personnel, with assistance from the California Air Resources Board (if available), will conduct initial Visible Emission Evaluations of all heavy-duty equipment on the inventory list.~~ • ~~An enforcement plan shall be established to evaluate on a weekly basis project-related on- and off-road heavy-duty vehicle engine emission opacities, using standards as defined in California Code of Regulations, Title 13, Sections 2180-2194. An Environmental Coordinator, who is CARB-certified to perform Visible Emissions Evaluations, shall routinely evaluate project-related off-road and heavy-duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified, and the equipment must be repaired within 72 hours.~~ ▪ ~~Minimize idling time to 10 minutes~~. • ~~Schedule operations affecting traffic for off-peak hours whenever possible.~~ • ~~Use air conditioning units with an Ozone Destruction Catalyst. Provide natural gas lines or electrical outlets to all backyards to encourage use of natural gas or electric barbecues, as well as electric lawn equipment.~~ ▪ Prohibit (through CC&Rs) the use of gasoline-powered lawn mowers on homes with lot sizes under 0.5 acres. ▪ Prohibit (through CC&Rs) use of gasoline-powered golf carts and/or gasoline-powered neighborhood vehicles. ▪ Install Class I bicycle lockers along with bike racks in recreation centers. ~~commercial site.~~ ▪ ~~Build unmanned informational kiosk in central location in Village Center~~.						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
The above measures will be included as part of the proposed project design and included in the Bickford Ranch ~~residential~~ CC&Rs. In addition, the project ~~Air Quality Design Guidelines will be amended to encourage implementation of~~ is subject to the following measures: ▪ Incorporate passive solar building design and landscaping conducive to passive solar energy use (i.e., building orientation in a south to southeast direction where feasible, encouraging planting of deciduous trees on western sides of structures, landscaping with drought-resistant species, and including groundcovers rather than pavement to reduce heat reflection); ▪ Incorporate solar heaters in proposed project residences as feasible; ▪ Include high-efficiency heating and other appliances, such as water heaters, cooking equipment, refrigerators, furnaces, and boiler units; and ▪ Include energy-efficient window glazings, wall insulation, and efficient ventilation methods on all new residential units.						
A-H: Install only natural gas CNG fireplaces. Prohibit wood-burning fireplaces in all residential units.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to approval of CC&Rs and prior to approval of building permits	Prior to and during construction	Only natural gas fireplaces are installed	
A-I: Provide public awareness materials The CC&Rs will require that educational materials regarding air quality be included in homeowners/renters packages for all occupants. Information contained in these packages will, at a minimum, provide information in the following areas: ▪ Commute options: Inform project occupants of the amenities provided by the proposed project in terms of alternative travel modes, including ridesharing and mass transit availability/schedules; and,	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to approval of CC&Rs	Prior to distribution of homeowners/ renters packages	Public is provided with educational materials regarding air/quality	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
▪ Alternative transportation options: Provide maps showing pedestrian, bicycle, and golf-cart paths to community centers, shopping areas, and recreational areas.						
A-J: Incorporate into project CC&Rs the prohibition of open burning of any kind Open burning creates substantial pollutant emissions of ozone precursors, CO, and PM. The company employed to maintain landscapes for the proposed project will be prohibited from open burning of vegetative refuse anywhere in the SVAB. No open burning will be allowed on any of the residential, commercial, or recreational parcels.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to approval of CC&Rs	Whenever an open burning is reported	No open burning occurs anytime	Applicant
A-K: Implement an off-site mitigation program to reduce 105 percent of long-term air pollutant emissions To reduce the identified impact to a less-than-significant level, the Applicant shall implement an off-site mitigation program that is equal to reducing ~~40~~105 percent of the proposed project's long-term air pollutant emissions. The Applicant shall develop the mitigation program which shall be approved by the PCAPCD. Alternatively, the Applicant could pay air quality mitigation fees to the Placer County Air Pollution Control District (PCAPCD) for the PCAPCD's Offsite Mitigation Program. Air quality mitigation fees would be used to fund measures aimed at improving air quality in Placer County, such as public transportation funding, financing of commuter rideshare programs, heavy duty NO_x reduction programs, and the woodstove replacement program. To reduce the identified impact to a less-than-significant level, PCAPCD will require a reduction of summertime NO_x emissions by ~~40~~105 percent. Air quality mitigation fees will be based on the current CARB Carl Moyer Effective Rate (currently at $18,030 in 2015) ~~a cost of $10,000~~ per ton of NO_x emission reduction for a single season. ~~This measure has been implemented for a number of projects in Placer County to reduce a project's long-term air quality impacts.~~	Applicant	Planning Services Division and PCAPCD	Prior to construction	Prior to and during construction	Development and implementation of a mitigation program that is approved by PCAPCD or payment of air quality mitigation fees to PCAPCD	Applicant
A-L: Enhance (repave, stripe) ~~Provide dedicated parking spaces at~~ the park-and-ride lot on Sierra College Boulevard north of Sage Avenue to provide additional parking spaces. ~~with electrical outlets for electric vehicles~~ ~~Additional residential design features can accommodate use of alternative energy sources. Amend the Bickford Ranch Specific Plan Air~~	Applicant	Planning Services Division and Engineering and Surveying Division	During construction	Prior to completion of construction	Additional parking spaces are provided at the park-and-ride lot on Sierra College	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~Quality Design Guidelines to include dedicated parking spaces at the park-and-ride lot with electrical outlets for electric vehicles.~~					Boulevard north of Sage Avenue	
A-M: Plant trees in all parking lots so that the design results in 50 percent shading of parking lot surface areas within 15 years of planting	Applicant	Planning Services Division	During construction	Prior to completion of construction	Trees are planted in all parking lots within the BRSP	Applicant
A-N: Implement construction measures to reduce emissions a. The prime contractor shall submit to the County and PCAPCD a comprehensive inventory (e.g., make, model, year, emission rating) of all the heavy-duty off-road equipment (50 horsepower of greater) that will be used in aggregate of 40 or more hours for the construction project. If any new equipment is added after submission of the inventory, the prime contractor shall contact the County and PCAPCD prior to the new equipment being utilized. At least three business days prior to the use of subject heavy-duty off-road equipment, the project representative shall provide the County and Placer County APCD with the anticipated construction timeline including start date, name, and phone number of the property owner, project manager, and on-site foreman. b. Prior to approval of Grading or Improvement Plans, whichever occurs first, the Applicant shall provide a written calculation to the PCAPCD for approval demonstrating that the heavy-duty (> 50 horsepower) off-road vehicles to be used in the construction project, including owned, leased and subcontractor vehicles, will achieve a project wide fleet-average of 20% of NOx and 45% of diesel particulate matter reduction as compared to CARB statewide fleet average emissions. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. c. Include the following standard notes on the improvement plans and grading plans: 1. During construction the contractor shall utilize existing power sources (e.g., power poles) or clean fuel (e.g., gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators.	Applicant	Planning Services Division and PCAPCD	Prior to approval of Grading or Improvement Plans, whichever occurs first	Weekly during construction	Appropriate measures are implemented to reduce emissions during construction in accordance with the PCAPCD	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
2. During construction, the contractor shall minimize idling time to a maximum of 5 minutes for all diesel powered equipment. 3. Signs shall be posted in the designated queuing areas of the construction site to limit idling of construction equipment to a maximum of 5 minutes. 4. Idling of construction related equipment and construction related vehicles should not occur within 1,000 feet of any sensitive receptor. 5. Schedule operations affecting traffic for off-peak hours whenever possible. d. An enforcement plan shall be established to evaluate on a weekly basis project-related on- and off-road heavy-duty vehicle engine emission opacities, using standards as defined in California Code of Regulations, Title 13, Sections 2180-2194. An Environmental Coordinator, who is CARB-certified to perform Visible Emissions Evaluations, shall routinely evaluate project-related off-road and heavy-duty on-road equipment emissions for compliance with this requirement. Operators of vehicles and equipment found to exceed opacity limits will be notified, and the equipment must be repaired within 72 hours. The PCAPCD Rules and Regulations shall be included as standard notes on grading and improvement plans.						
BIOLOGICAL RESOURCES						
~~**B-A:** Implement the Applicant's oak forest conservation and revegetation plan~~ ~~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 CDFW, U.S. Department of Agriculture Natural Resource Conservation Service, the California Department of Forestry and Fire Protection, and the University of California Cooperative Extension.~~ ~~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 Bickford Ranch Park, along selected portions of the project site edges,~~	~~Applicant~~	~~Planning Services Division~~	~~Within 2 years of tree removal~~	~~Annually for 5 years~~	~~Minimum 80 percent survival rate after 5 years~~	~~Applicant~~

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~between natural open space areas and roads, in Tower 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.~~ ~~Tree spacing will be as follows:~~ ~~Trees Per Acre (approximate) / Spacing Between Trees (feet)~~ ~~10 / 66~~ ~~20 / 46~~ ~~40 / 33~~ ~~80 / 23~~ ~~100 / 21~~ ~~200 / 15~~ ~~400 / 10~~ ~~Irrigation will occur from May through September for the three years after planting, unless post irrigation monitoring determines that tree survival requires additional irrigation – see Response I4-217 in the FEIR. This timing can be modified as necessary for extremely wet or dry years.~~ ~~Maintenance will occur according to the following schedule:~~ ~~Year Following Planting / Irrigation Schedule / Weed Removal / Replanting~~						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding

~~1~~	~~Weekly~~	~~4 times per year~~	~~Once per year in fall~~
~~2~~	~~Every other week~~	~~4 times per year~~	~~Once per year in fall~~
~~3~~	~~Every other week~~	~~4 times per year~~	~~Once per year in fall~~
~~4~~	~~Every fourth week~~	~~4 times per year~~	~~Once per year in fall~~
~~5~~	~~Every fourth week~~	~~4 times per year~~	~~Once per year in fall~~

~~The 80 percent survival rate applies to each planting area. Survival will be measured in late summer of each year to allow for assessment of replacement needs in fall. Minimum survival rate will be as follows for each year:~~

~~Year Following Initial Planting~~	~~Percent Survival~~
~~1~~	~~95~~
~~2~~	~~90~~
~~3~~	~~90~~
~~4~~	~~90~~
~~5~~	~~80~~

~~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.~~

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~Only plants installed during the dry season (between mid-March and mid-November) will be irrigated for the first three 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 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 will be conducted annually by a qualified arborist approved 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.~~						
B-B: Hire a project biologist for construction monitoring The Applicant will retain a County-approved biologist to monitor all construction in areas of sensitive biological resources, including oaks and other protected trees to be retained, red-legged frog habitat, and wetlands and other waters of the United States. The monitor will be responsible for the following: ▪ scheduling and/or conducting pre-construction surveys identified in other mitigation measures (e.g., special-status plant and wildlife surveys, raptor nest surveys); ▪ approving placement of the orange barrier fencing and performing weekly monitoring to ensure the fencing remains in good condition for the duration of construction activity in the area affected by the particular phase of development; ▪ monitoring construction activities occurring near sensitive biological resources, as defined above, and delaying construction activities	Applicant	Planning Services Division	Prior to construction	During construction in areas of sensitive biological resources	Monitoring of all construction in areas of sensitive biological resources, including oaks and other protected trees to be retained, red-legged frog habitat, and wetlands and other waters of the United States.	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
that threaten these resources until appropriate mitigation measures can be implemented; and ▪ identifying any impacts occurring within areas protected by the orange barrier fencing and reporting to Placer County for additional compensatory mitigation.						
~~**B-C:** Implement Off-Site Tree Mitigation~~ ~~Inadequate open space is likely available for implementation of on-site compensation of approximately 21,200 oak trees and riparian tree species. The proposed density of approximately 100 trees per acre is likely too high to support the trees at maturity. The Applicant, therefore, partially mitigates loss of trees with off-site plantings and contribution of in-lieu fees to the Placer County Tree Preservation Fund. Suitable off-site plantings areas will be established in coordination with Placer County and may include a site along SR 193 in the vicinity of the proposed Caltrans improvements.~~	N/A	N/A	N/A	N/A	N/A	N/A
B-D: Unless stated otherwise, all measures will be the sole responsibility of the Applicant. The Applicant will develop and implement ~~a~~ Ttree Pprotection ~~Plan~~measures to minimize direct and indirect impacts on oaks and other native trees that are to be retained on the project site. The elements of ~~this plan~~ these measures will be included as standards in the tentative map conditions and, where applicable, in the CC&Rs for homeowners on the project site. At a minimum, the ~~plan~~measures will include the following ~~measures~~: ▪ Guidelines contained in Appendix E of Placer County Guidelines for Evaluating Development Impacts on Oak Woodland and the conservation goals and policies contained in the Placer County Oak Woodland Management Plan. ▪ ~~If the proposed construction area for an individual lot matches that shown in the development notebook on file with Placer County, the Applicant's proposed mitigation will be sufficient, and no further tree mitigation will be required. If the proposed construction area for an individual lot differs from the development notebook, a final tree count within the new construction area will be prepared to identify all trees with a DBH of 6 inches or more. For mitigation of removing any trees in excess of those identified in the Applicant's tree removal plan, the home builder will pay into either the Placer County Tree~~	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to approval of improvement plans	Prior to grading during construction	All elements of the tree protection plan are implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~Preservation Fund or into a mitigation fund to be established by the Applicant and used to plant additional native trees onsite. Home builders owning a cluster of lots may remove the net total of trees for the lots as identified in the Applicant's tree removal plan. Any additional trees removed will be mitigated by payment into either the County's Tree Preservation Fund or a mitigation fund for on-site plantings.~~ ▪ During construction on the project site, measures will be taken to protect trees, including erecting orange construction barrier fencing, that will remain for the duration of construction activity, located at least one foot outside the drip line of each tree or groves of trees to be retained. Tree protection measures also include minimizing trenching for installation of utility lines by conducting ~~by~~ hand ~~any~~ work, as needed, within drip lines of trees to be retained. ▪ Construction activities ~~A contractor seeking a variance to machine excavate~~ within tree drip lines ~~will be required to~~ shall minimize damage to roots over two inches in diameter. The project biological monitor (see Mitigation Measure B-B) will report root damage to Placer County and have a certified arborist inspect the tree damage prior to backfilling. The arborist will determine if the damage is likely to be fatal to the tree. ~~Any fatally damaged tree will be mitigated by payment into either the Placer County Tree Preservation Fund or into a mitigation fund to be established by the Applicant and used to plant additional native trees on site.~~ ▪ Tree preservation notes and specifications will be included on all plans and in contractor contracts. ▪ Irrigation and other potential sources of runoff associated with the constructed project will be diverted away from the drip lines of oak trees to be retained. ~~within all areas outside of the designated natural open space.~~ To protect oaks from fungal root infection, drainage features will be constructed to intercept runoff from development upslope of the retained trees. ▪ ~~Before any tree removal following home construction, homeowners will be required to obtain approval from the Homeowners Association and a permit from Placer County for any protected trees.~~ ▪ The Bickford Ranch Development Standards identify certain areas (ungraded lots and partially-graded lots) within the BRSP where an						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
additional Tree Permit will be required to remove trees outside of the building envelope. Ungraded lots and partially-graded lots are located along the ridges on the north and south of Bickford Ranch Road. The process for obtaining a tree permit and mitigation requirements will be consistent with the Placer County Tree Preservation Ordinance (Chapter 12, Article 12.16 PCC). ▪ Homeowners will be provided with information regarding the care of native trees and landscaping measures to use beneath oak trees. An example of such literature includes Living Among the Oaks, a publication of the University of California Cooperative Extension, Natural Resources Program. ▪ Construction of all equestrian, bicycle, and pedestrian trails, in particular the trails to be constructed within the natural open space, will avoid removal of protected trees, except where infeasible.						
B-E: Implement the Applicant's wetland preservation and impact plan All wetland mitigation, with the exception of vernal pool mitigation, will occur on-site within the natural open space in the Meadows community area. Creation of 12.29 acres of wetland mitigation is proposed, including 8.49 acres of seasonal wetland/emergent marsh/riparian habitats and 3.80 acres of emergent marsh wetland along the fringe of the proposed lakes. An additional 15.07 acres of open water will be created within the seven constructed lakes. Upon construction of the wetland habitat, an as-built map will be created and submitted to the Corps. Annual monitoring will commence after the first growing season and continue for five years. Annual monitoring reports will be submitted to the Corps. In addition, the Applicant's wetland preservation plan will include the following components: ▪ Establishment of vegetated wetland preservation easements of at least 50 feet and up to 100 feet around wetlands within 5-acre rural estate lots, equestrian, park, and golf course areas; ▪ Construction of Bio Filters (shallow depressions) between upland areas and wetlands within the Meadows community areas to protect water quality;	Applicant	Planning Services Division	Prior to Approval of small lot tentative maps	Annually for 5 years	All elements of the wetland preservation and impact plan are implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
▪ Construction of wildlife travel corridors (in culverts) beneath roadways where wetlands are located near roads; ▪ Placement of fencing around wetlands during construction; ▪ Placement of public awareness signs with information on wetlands throughout Bickford Ranch; and ▪ Dedication of some open space areas to Placer County, and maintenance of the other common open space areas by the Homeowners Association.						
B-F: Protect riparian buffer zones Riparian buffer zones are necessary for the protection of stream water quality and habitat quality for red-legged frog and anadromous fish, including steelhead. The Applicant will implement the following measures during construction to ensure adequate protection for riparian buffer zones on the project site: ▪ Erect orange construction barrier fencing at the outside edge of the dripline of riparian vegetation adjacent to project construction areas. No construction activity or vegetation removal will be allowed past the barrier. The barriers will be maintained by a biological monitor and will remain in place until all adjacent construction activity is completed. ▪ Construct all equestrian and pedestrian trails within the designated natural open space at least 25 feet from the outer edge of riparian vegetation. ▪ Bore and jack pipeline crossings of any drainages. Keep all pipeline construction activity at least 50 feet from the outside edge of riparian vegetation. ▪ Increase the buffer area to 100 feet from outermost edge of riparian vegetation along Clover Valley Creek and along the stream in the ~~Meadows community natural~~ open space adjacent to Sierra College Boulevard in the northwest portion of the site. The Project ~~Homeowners Association~~ will be responsible for implementing the following measures to ensure adequate protection of riparian buffer zones after construction during the operation phase of the project:	Applicant	Planning Services Division and CDFW	Prior to grading and construction	Prior to grading and during construction and prior to removal of blackberry or other riparian vegetation for proposed fire prevention or other maintenance activities within the riparian buffer zone	Riparian buffer zones are protected during grading, construction, and operation	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
▪ Develop additional protection for the wetland protection easement along Clover Valley Creek, which is part of the rural estate lot ~~R-19~~ R-06. No structures may be erected or landscaping placed within this easement. ▪ No removal of vegetation may occur within the riparian buffer zone, except for essential maintenance (e.g., fire prevention activities and managed grazing). Prior to removal of blackberry or other riparian vegetation for proposed fire prevention or other maintenance activities within the riparian buffer zone, the Applicant must notify CDFW of the activity. If CDFW determines that the activity "may substantially adversely affect existing fish or wildlife resources," the Applicant will be required to obtain a 1603 Streambed Alteration Agreement. CDFW has jurisdiction within the entire riparian corridor and regulates removal of riparian vegetation, even if the streambed is not directly affected (Hobgood, 2000). Removal of any riparian vegetation, whether or not the streambed or bank is altered, must be coordinated with CDFW through a Section 1603 Streambed Alteration Agreement.						
B-G: Conduct pre-construction surveys for special-status plants Before construction, the Applicant will hire a County-approved botanist to survey oak woodlands within all proposed construction areas for big-scale balsamroot, Layne's ragwort (*Packera layneae*), oval-leaved viburnum (*Viburnum ellipticum*), and Red Hills soaproot (*Chlorogalum grandiflorum*). In all areas of oak woodland that will be graded, a survey should be conducted between March and May for big-scale balsamroot, April and August for Layne's ragwort, May and June for oval-leaved viburnum, and May and June for Red Hills soaproot. If no special-status plants are identified within construction areas, no further mitigation is required. However, if one or more populations are found within proposed construction areas, the Applicant will implement measures to be developed in coordination with the CDFW (and USFWS for layne's ragwort) to avoid the population, minimize impacts on the population, and/or compensate for removal of the population. Potential compensation measures may include avoidance of populations, where feasible; minimization of impacts on populations; purchase and preservation of another known population of the affected species; or attempts to transplant the species to an undisturbed area within the project site.	Applicant	Planning Services Division	Prior to Construction	Once per construction work package	Special-status plants are avoided, or compensation approved by CDFW is implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
Before construction and/or approval of improvement plans, the Applicant will hire a County-approved botanist to survey oak woodlands within all proposed construction areas for big-scale balsamroot ~~and vernal pools within all proposed construction areas for Bogg's Lake hedge-hyssop, Hoover's spurge, dwarf downingia, Ahart's rush, Red Bluff dwarf rush, legenere, pincushion navarretia, slender orcutt grass, and Greene's tuctoria~~. In all areas of oak woodland that will be graded, a survey should be conducted between March and May for big-scale balsamroot. ~~All vernal pools that will be graded should be surveyed in late April/early May and July for the special-status vernal pool species listed above.~~ If no special-status plants are identified within construction areas, no further mitigation is required. However, if any special-status plant populations are found within proposed construction areas, the project biological monitor will evaluate the significance of the population(s). If any special-status plant population is too small and isolated to be sustainable, the impact will be considered less than significant. If any special status plant population is large enough to be potentially sustainable, the loss of the population will be considered significant and the Applicant will implement mitigation. Potential mitigation measures for the loss of a special-status plant population include complete avoidance of the population, if feasible; minimization of the impact, i.e., partial avoidance; purchase and preservation of another known population of the affected species; transplantation of the plants or collection and sowing of the seeds to another on-site location; collection and sowing of seeds to an off-site location. The most feasible of these potential mitigation measures for any California balsamroot population that could not be avoided would be to transplant or seed the population to an undisturbed area of open canopied oak woodland or grassy slope on the site. A recommended location is within the open space preserve.~~natural open space area off the northwestern corner of the proposed driving range.Avoidance or on-site transplantation is not feasible for the vernal pool plants, due to the proposed removal of all vernal pool habitat. The most feasible mitigation for special-status vernal pool species would be to scrape the topsoil (approximately two inches deep) from any vernal pool that supports a special-status plant population and place the soil within vernal pool habitat in a mitigation bank. The project site supports Mehrten formation vernal pools, which are not currently available at a mitigation bank. However, the special-status plants with potential to occur in the project area are not endemic to Mehrten pools and should survive in pools on~~						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~other substrates. The Wildlands, Inc., is willing to accept a seed bank from the project site to transplant within vernal pool habitat at one of their wetland mitigation banks in Placer County (Berry, 2000).~~ If a state or federal listed plant species population is identified within the proposed construction area, ~~i.e., Bogg's Lake hedge-hyssop, Hoover's spurge, slender orcutt grass, or Greene's tuctoria,~~ the Applicant will notify CDFW (for state-listed species) and/or the USFWS (for federally listed species). CDFW and/or the USFWS may impose alternative or additional mitigation requirements to the soil transplantation for impacts to listed species. If alternative mitigation requirements are imposed, the Applicant will implement the alternatives in lieu of the proposed soil transplantation. If additional mitigation requirements are imposed, the Applicant will implement both the soil transplantation mitigation and the agency mitigation						
B-H: Compensate for loss of vernal pool fairy shrimp habitat The Applicant will compensate for direct effects on vernal pool fairy shrimp habitat associated with the project. This compensation will be achieved by implementation of one or a combination of the following measures, as described in the programmatic agreement between USFWS and the Corps (USFWS, 1995): ▪ Create suitable habitat for vernal pool fairy shrimp at a 1:1 ratio, for a total of 0.23 acre of vernal pool habitat. ▪ Preserve suitable vernal pool fairy shrimp habitat at a 2:1 ratio, for a total of 0.46 acre of vernal pool habitat. The Applicant will purchase suitable vernal pool habitat credits at an off-site wetlands mitigation bank approved by Placer County. ▪ Obtain authorization from USFWS to take listed fairy shrimp species that would be affected by the project. A biological opinion under the federal ESA is required from the USFWS before construction begins. The mitigation credits purchased for the fairy shrimp impacts will apply to the vernal pool impacts, and no additional wetland credits will need to be purchased for the vernal pool impacts.	Applicant	Planning Services Division	Prior to Approval of grading permit	Once (for verification of purchase of credits); annually for 5 years (for created habitat)	Compensation is provided for loss of vernal pool fairy shrimp habitat	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
B-I: Protect VELB habitat (elderberry shrubs) during construction For elderberry shrubs that will not be removed or damaged by the project, the Applicant will protect elderberry shrubs from inadvertent harm during construction as described in the USFWS's VELB mitigation guidelines. The Applicant will: ▪ Fence and flag all areas to be avoided with a minimum setback of at least 20 feet from the dripline of each elderberry plant. ▪ Brief contractors on the need to avoid damaging elderberry plants and the possible penalties for not complying with these requirements. ▪ Install signs every 50 feet along the edge of the avoidance areas with the following information, "This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment." The signs should be clearly readable from a distance of 20 feet and must be maintained for the duration of construction. ▪ Restore the disturbed area to its original condition. Provide erosion control and revegetate with appropriate plant species, if needed. ▪ The Applicant will provide a written description of how the core and buffer avoidance areas are to be restored, protected, and maintained after construction is completed.	Applicant	Planning Services Division	Prior to approval of grading permit	Weekly during construction; quarterly after restoration for 1 year	VELB habitat is protected, and disturbed area is restored	Applicant
B-J: Compensate for loss of VELB habitat (elderberry shrubs) The Applicant will compensate for direct effects on VELB habitat associated with the project. This compensation will be achieved by implementation of the following measures, as described in the programmatic agreement between USFWS and the Corps (USFWS, 1996): ▪ Confirm the number of elderberry stems one inch or greater at ground level that would be affected by the project development. Any elderberry shrub that has stems of at least one inch at ground level, and the project will permanently encroach within 100 feet of the shrub dripline, will be considered a removed shrub and will need to	Applicant	Planning Services Division	Prior to approval of grading permit	Once (for verification of purchase of credits and establishment of conservation easement, if applicable)	Adherence to all conditions of the Biological Opinion, including purchase of 23 VELB credits from a USFWS approved mitigation bank	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
be compensated for, except for shrubs located along existing ranch roads where the multi-purpose trail will be aligned. ▪ Determine the VELB units that would need to be mitigated for the project pursuant to the programmatic agreement between USFWS and the Corps. ~~▪ Compensate for the loss of VELB habitat determined above at an off-site location approved by the USFWS and the Corps.~~ ▪ Obtain authorization from USFWS to take VELB that would be affected by the project. ~~A biological opinion under the federal ESA is required from the USFWS before construction begins.~~ The Project shall adhere to all conditions of the Biological Opinion, as revised. At a minimum, this shall include purchase of 22.2 beetle conservation credits from a USFWS-approved beetle conservation bank. ~~▪ All elderberry shrubs removed for construction will be transplanted to a suitable mitigation area on-site according to the protocol set forth in the programmatic agreement between USFWS and the Corps (1996). The mitigation area will provides at least 1,800 square feet for each transplanted shrub. The mitigation area will not be disturbed by future development or maintenance other than that needed to sustain the transplanted shrubs. The shrubs will be transplanted between November and February, when the plants are dormant and have lost their leaves. A biological monitor will oversee the transplanting process to ensure no unauthorized take of VELB occurs. Monitoring will be required for five years.~~ ~~▪ A minimum survival rate of 60 percent is normally required when transplanted shrubs are moved to a mitigation site that also contains new plantings of elderberry and associated species. An individual survival requirement for a mitigation site containing only transplanted shrubs may need to be developed with the County.~~ ~~▪ Provide additional on-site compensation by planting elderberry plants at a ratio of 2:1 for affected elderberry stems. Elderberry plants will be placed within proposed oak tree planting areas. Plantings should be located in areas that will not be disturbed by future development or maintenance.~~						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
B-K: [Mitigation Measure B-K was skipped in the lettering of measures in the 2004 EIR]	N/A	N/A	N/A	N/A	N/A	N/A
B-L: Conduct preconstruction surveys for nesting raptors and migratory birds in affected areas Before construction of any phase of the project between March and August in oak woodlands or riparian habitats, the project proponent will conduct preconstruction surveys to determine if nesting raptors, special status birds or other migratory birds protected under the MBTA are present on or near (within 500 feet) construction areas. Night-time surveys will be performed to determine the presence of nesting owls. If no nesting raptors are found, no additional mitigation will be need for that portion of the project. If these surveys detect nesting raptors on or near construction areas, a buffer zone will need to be established (see Mitigation Measure B-M). If construction will occur outside of the nesting season (August through February), no preconstruction raptor nesting surveys are necessary.	Applicant	Planning Services Division	Prior to construction	Once per construction work package for construction occurring between March and August	Impacts to nesting raptors and migratory birds are avoided	Applicant
B-M: Develop buffer zones around nesting raptors and migratory birds during construction If nesting raptors, special status birds or other migratory birds are found on or near active construction areas, a no-disturbance buffer zone will be established until nesting activity or construction activity is completed. The distance and placement of the buffer area will be determined in consultation with CDFW. Typically, buffer zones consist of a 500-foot radius area around the nest tree. If construction will occur outside of the raptor nesting season (September – February), no raptor surveys are required.	Applicant	Planning Services Division	Prior to construction	Weekly during construction	Impacts to nesting raptors and migratory birds are avoided	Applicant
B-N: Install bat gates at tunnel entrances The Applicant will coordinate with Bat Conservation International (BCI) to prepare designs for bat gates designed to prevent human entry and provide free access to tunnels and shafts for bats. Final designs will depend on the mine opening configuration. Bat gates will be placed over all tunnel and shaft entrances that have been identified on the project site. To avoid or minimize impacts on special-status bats, the Applicant will retain a qualified bat specialist to conduct surveys in the oak woodlands	Applicant	Planning Services Division and CDFW	Prior to construction	Prior to and during construction	Bat gates are installed where appropriate and a bat management plan and habitat improvement program is implemented, if appropriate	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
and human-made structures to determine if special-status bats are present within areas of the project site proposed for development. If no special-status bats are present, no additional mitigation is required. If special-status bats are present within development areas, the Applicant will incorporate into Mitigation Measure B-A a bat management and habitat improvement program. This program may include the installation of bat roost boxes in the open space areas or vegetation management in the open spaces areas to enhance and manage bat habitat. The Applicant will consult with ~~CDFG~~CDFW regarding appropriate bat management.						
B-O: Obtain and implement conditions of state and federal permits for impacts on waters of the United States The Applicant will obtain and implement all conditions in the following permits: ▪ Section 404 permit from the Corps for fill of waters of the United States, including wetlands (the project would likely qualify for approval under the Nationwide Permit Program). Compliance with Section 106 of the National Historic Preservation Act and with the federal ESA. To comply with Section 106, the Corps will obtain concurrence from the State Historic Preservation Officer that the project will have no effect on any historic property. Compliance with the federal ESA may require consultation with the USFWS under Section 7 of the act, which will result in completion of a biological opinion for all listed species affected by the project. ▪ Section 401 water quality waiver or certification from the Regional Water Quality Control Board. ▪ Section 1603 Streambed Alteration Agreement from ~~CDFG~~CDFW.	Applicant	Planning Services Division, CDFW, USFWS, USACE	Prior to approval of grading permit	Per federal and state permits	Compliance with conditions of state and federal permits	Applicant
B-P: Protect wetlands during construction To minimize indirect impacts on jurisdictional waters of the United States that are connected to, but outside of, the project area, the Applicant will implement the following: ▪ Identify waters of the United States in the project area by fencing before construction activity. Fencing of wetlands within the Meadows community area will be placed to keep all construction	Applicant	Planning Services Division	Prior to construction	Weekly during construction (to ensure fencing stays up); daily during activity	Wetlands are protected	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
equipment out of the wetlands during excavation of the lakes and grading of the Bio Filters. ▪ Avoid sidecasting material into or near the stream channels and wetlands adjacent to project construction. ▪ Grade drainage beds and banks of waters of the United States that are temporarily disturbed during construction to the preconstruction contours and replace the top 12 inches of soil and plant material.				adjacent to fencing		
B-Q: Develop and implement an open space management plan The Applicant will develop and implement an open space management plan pertaining to the designated natural open space and open space easement areas on the project site. A management plan will be established to protect the habitat quality of wetlands, oak woodlands, and riparian habitat in the open space areas. The natural open space designation will be designed to preclude future development activities other than the proposed trail construction. The open space management plan will also be coordinated with the Applicant's oak woodland conservation and revegetation plan discussed under Mitigation Measure B-A, the Applicant's Wetlands Preservation and Impact Plan, and the proposed fuel modification zones. At a minimum, the plan will include the following information regarding designated natural open space and the open space easements: ▪ land use activities compatible with preservation of existing habitats, such as construction of linear infrastructure projects that minimize impacts on sensitive resources and trail construction designed to avoid or minimize impacts on wetlands and protected trees; ▪ land uses and practices that would be incompatible with habitat preservation, such as road or building construction, grazing, and use of pesticides or herbicides; ▪ establishment of adequate buffers between natural open space and planned development, which could include guidelines for placement of equestrian and pedestrian trails within the buffer zone to keep the remaining open space area intact and specific landscaping guidelines to design a transition zone between ornamentally landscaped development and natural open space;	Applicant	Planning Services Division	Prior to recordation of final Large Lot Tentative Map	Prior to approval of Large Lot Tentative Map	An open space management plan is developed and implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
▪ placement of interpretive signage at the beginning of, and along, trails to provide information about the on-site habitats and sensitive biological resources, including special-status species and wetlands; ▪ locations and methods for fuel modification in open space areas, such as vegetation removal methods; ▪ design methods for wetland easements to minimize mosquito nuisance conditions while retaining wetland habitat value; ▪ performance standards, such as the extent of vegetative cover and native species diversity, and a five-year interval monitoring program to evaluate responses of habitat in the open space according to the performance standards; ▪ potential remedial actions if habitat conditions show downward trends that are not related to natural factors such as extended drought; and ▪ fences that are placed along the perimeter of the Specific Plan area, especially near open space areas, shall be designed to allow small mammals as well as deer and other wildlife to pass through them without harming or trapping them. Where fencing is installed along the perimeter of the Specific Plan area, it shall be open wire rather than screen, net, or woven wire.						
B-R: Avoid removal of blackberry riparian vegetation The Applicant will avoid removal of blackberry shrubs in creeks and other drainages in the Bickford Ranch Plan Area. Avoiding removal of blackberry shrubs is necessary for the protection of riparian wildlife habitat, stream water quality, and potential California red-legged frog habitat.	Applicant	Planning Services Division	Prior to approval of grading plans and approval of fuel modification plans	Annually	Blackberry shrubs in creeks and other drainages are protected	Applicant
~~**B-S:** Preserve and enhance annual grassland vegetation adjacent to golf course~~ ~~The Applicant will incorporate into the golf course design the preservation of annual grassland vegetation within undeveloped areas adjacent to the fairways. Vegetation in these areas will be enhanced by seeding with a locally collected native annual wildflower seed mix that includes species already present on site.~~	N/A	N/A	N/A	N/A	N/A	N/A

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
B-T: Replace oak woodland acreage/canopy To mitigate impacts to oak woodland within the development footprint, the project shall provide mitigation of 2:1 ratio by any of the following methods: 1. Preserve in perpetuity 433.4 acres of oak woodland in Placer County (on-site or off-site). The oak woodland acreage preserved shall be in perpetuity and the project shall fund an endowment for the long-term management of the oak woodland. Or 2. Make an in-lieu fee payment to the Placer County Tree Preservation Fund equivalent to the fair market value of a conservation easement on 433.4 acres of oak woodland property in Placer County, with such fair market value established via an appraisal within 150 days of the Board of Supervisors' action on the project. Any in lieu payment shall be paid at the time of recordation of the first final subdivision map on the property. Such in-lieu funds shall include both a conservation component and an in-perpetuity management component. These funds will be used by the County to purchase conservation easements for other oak woodland in the County. If changes to the project are required during the Grading Plan process that result in modifications to the development footprint and impact area, the amount of such oak woodland acreage to be mitigated shall be revised accordingly consistent with this mitigation measure.	Applicant	Planning Services Division	Prior to or at the time of recordation of the first final subdivision map on the property	Once (for verification of preservation of oak woodland or payment of in-lieu fee) and anytime changes to the project are required during the Grading Plan process.	433.4 acres of oak woodlands are preserved or payment of in-lieu fee has been made	Applicant
B-U: Provide Funding for Impacts to significant trees To address impacts to Significant Trees within the development footprint, the project shall provide funding for restoration and compensation of impacts to Significant Trees by paying a total amount of $2,491,500 in two components: 1) A lump sum payment of $491,500 shall be paid prior to issuance of first grading permit for backbone infrastructure in Phase 1 in the BRSP; and 2) payment of Bickford Ranch Tree Fee of $1,058.21 per residential unit at time of building permit. The mitigation funds shall be used by the County to acquire and conserve open space, restore existing open space, or for the restoration and/or conservation of oak woodlands in priority locations.	Applicant	Planning Services Division	Prior to issuance of grading permit and at the time of issuance each residential building permit	Once (for verification of lump sum payment) and whenever a building permit is issued for each residential unit	Bickford Ranch Tree Fee is paid for residential unit	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
CULTURAL RESOURCES						
C-A: Incorporate important cultural resources into open space The Applicant proposes to incorporate important cultural resources into open space to the extent possible. Easement restrictions would then be incorporated in CC&Rs as necessary. CEQA stipulates that in-situ preservation is the preferred manner of avoiding damage to archaeological resources. By incorporating important cultural resources into open spaces or greenbelt, impacts to these resources would be avoided.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to approval of final Large Lot Tentative Map and prior to approval of CC&Rs	Prior to approval of final Large Lot Tentative Map	Easement restrictions for cultural resources are incorporated in CC&R	Applicant
C-B: Cap resource area with layer of soil prior to construction The Applicant proposes to cap important and potentially important archeological resources where feasible prior to construction in the area. An acceptable process of "capping" archaeological resources with soil must include the following elements: ▪ the soils to be covered must not suffer serious compaction; ▪ the covering materials must not be chemically active; ▪ the site must be one in which the natural process of deterioration have been arrested; and, ▪ the site must have been recorded, including the areal extent of subsurface deposits.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to grading during construction	Prior to construction near important and potentially important archeological resources	Important and potentially important archeological resources are capped if feasible	Applicant
C-C: Conduct data recovery excavation if capping is infeasible Require the project Applicant to retain a qualified professional archeologist to conduct data recovery excavation. This mitigation measure would be implemented as an alternative to Mitigation Measures C-A or C-B at identified important or potentially important cultural resource sites. In compliance with CEQA, implementation of this mitigation measure would entail preparation and adoption of a data recovery plan that makes provisions for adequately recovering the scientifically consequential information from and about the resource. The data recovery plan must be prepared and adopted prior to commencing any excavation activities.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to grading during construction, if capping is infeasible	Prior to construction near important and potentially important archeological resources	Data recovery excavation is conducted if capping is infeasible	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
C-D: Conduct subsurface testing Require the project Applicant to retain a qualified professional archeologist to conduct subsurface testing at potentially important cultural resource sites. As it has not been definitively determined that the 17 sites comprised of "isolated" milling stations do not contain subsurface deposits, subsurface testing procedures should be initiated for sites when construction is to occur within 100 feet and where Mitigation Measures C-A and C-B prove infeasible. Subsurface testing procedures could involve shovel testing, augering, or other such techniques designed to identify and/or characterize subsurface cultural deposits. If a resource is determined to be important under CEQA, then Mitigation Measure C-C (Conduct data recovery excavation) must also be implemented.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to grading during construction, if Mitigation Measures C-A and C-B are infeasible	Prior to construction near important and potentially important archeological resources	Subsurface testing is conducted at potentially important cultural resource sites	Applicant
C-E: Immediately stop ground disturbing activities in vicinity and consult qualified professional archaeologist, the Placer County ~~Planning Department~~ Planning Services Division, the Department of Museums, and the County Coroner, if buried cultural deposits are discovered during construction. The County Coroner will notify the Native American Heritage Commission if it is determined that the remains are Native American Indian. In the event of the discovery of buried archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone it is recommended that project activities in the vicinity of the find be immediately stopped and a qualified professional archaeologist consulted to assess the resource and provide proper management recommendations. In addition the Placer County ~~Planning Department~~ Planning Services Division and Department of Museums must also be contacted. Such recommendations for important resources could include resource avoidance (Mitigation Measure C-A), capping (Mitigation Measure C-B), or data recovery excavations (Mitigation Measure C-C). Work in the area may only proceed after authorization is granted by the Placer County ~~Planning Department~~ Planning Services Division. Construction crews will be trained in the identification of archaeological resources prior to commencing ground-disturbing activities. This training will include: (1) proper identification of archaeological deposits; (2) the procedures to be followed in the event of such a discovery; (3) an understanding of the importance of protecting cultural resources; and (4)	Applicant	Planning Services Division	During construction	At least weekly during construction; submit weekly reports to Planning Services Division	Cultural and archaeological resources are protected, or loss is compensated	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
an overview of applicable laws, statutes and ordinances. Training will be conducted by a qualified archaeologist in person, and written materials will be provided to each trained crew member, who will be required to sign that he or she has received the training, understands it, and agrees to abide by it.						
C-F: Retain a qualified professional paleontologist to conduct weekly inspections during grading activities and salvage fossils as necessary Placer County requires that the Applicant retain a professional paleontologist to implement a plan for managing paleontological resources, monitor grading activities, and salvage fossils as necessary. A paleontological report produced for the Proposed Project (Noble 1997) recommends that given the low probability of encountering paleontological resources on the Bickford ranch, weekly inspections by a qualified professional paleontologist during grading activities shall be sufficient to manage these unique resources. The Applicant shall, however, provide written evidence to the Placer County ~~Planning Department~~ Planning Services Division that a qualified paleontologist has been retained to provide the required services.	Applicant	Planning Services Division	During grading activities	At least weekly during construction; submit weekly reports to Planning Services Division	Paleontological resources are protected and/or salvaged	Applicant
GEOLOGY AND SOILS						
G-A: Comply with Placer County ordinances for all grading, drainage and construction of improvements The Applicant proposes that all grading, drainage and construction of improvements will be in accordance with the Placer County Grading Ordinance, Chapter 29, Sections 29.1 through 29.10 of the Ordinance Code of Placer County. Specific sections applicable to this project include, but are not limited to: ▪ Sections 29.510 and 29.520 covering the content of preliminary and final grading plans to be submitted to the County for review and determination of grading permit requirements. ▪ Section 29.550 regarding implementation of erosion and sediment control plans to take into consideration time of year in terms of potential for rainfall and heavy storms. ▪ Sections 29.610, 29.615, 29.620, 29.625 and 29.630 regarding geotechnical, geologic and final reporting requirements.	Applicant	Engineering and Surveying Division	Prior to approval of grading plan	Daily during grading activities; weekly during construction; submit weekly reports to Engineering and Surveying Division	Compliance with Placer County ordinances for all grading, drainage and construction of improvements Placer County ordinances for all grading, drainage and construction of improvements	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
▪ Section 29.780 regarding submission of erosion and sediment control plans for timely implementation of measures to prevent increased discharge of sediment during all stages of construction and effective revegetation to stabilize disturbed areas. Plans required under this ordinance will be submitted to and approved by the County prior to commencement of construction activities. These measures would reduce the impacts of these activities to less than significant.						
G-B: Prepare and implement a grading and erosion control plan The Master Grading Plans will show all proposed grading, drainage improvement, vegetation and tree removal. Revegetation of disturbed areas and vegetation maintenance will be provided for in the Master Grading Plan. The Master Grading Plan should include: ▪ General grading concepts, including reduction of impacts on sensitive habitat and open space, maintenance of natural character and aesthetic values, incorporation of existing drainageways and landforms, minimal disturbance of vegetation, including oak trees and soil stabilization. ▪ General guidelines for grading of hillside lots, including placement of retaining walls, consistency with geotechnical recommendations, consistency of lot drainage with the Master Drainage Plan and construction of unobtrusive interceptor ditches where necessary to reduce erosion potential. ▪ Specific grading guidelines for Meadows, Ridges and Heritage Ridge portions of the project. ▪ Guidelines for developing grading transitions, including terraces where necessary for stability and access to sloped areas. An erosion control plan will be provided with the Master Grading Plan. The erosion control plan will contain Best Management Practices, including timing of grading activities to minimize soil exposure during the wet season. By October, all areas that have been graded and that will remain undeveloped during the rainy season will be revegetated with compatible native vegetation and secured from the possibility of erosion. Employment of measures during construction to prevent eroded soil from entering site drainageways, including: placement of hay bales or other	Applicant	Engineering and Surveying Division ~~Department of Public Works~~	Prior to approval of grading plan	Daily during grading activities; weekly during construction; submit weekly reports to Engineering and Surveying Division ~~Department of Public Works~~	All elements of the grading and erosion control plan are implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
acceptable materials such as sediment barriers, the installation of temporary earth berms and/or sediment traps, use of fabric silt fences, spreading hay or straw on exposed areas, development of temporary settling areas and use of other means for slowing runoff and reducing sediment loads.						
G-C: Comply with the conclusions of a site-specific geotechnical investigation The Applicant proposes that, prior to the commencement of any earthwork on the project site or study area infrastructure improvement corridor, a full-scale, detailed geotechnical investigation will be completed. A specific geotechnical evaluation performed after specific plans have been developed for the proposed project will include: ▪ Soil borings; ▪ Laboratory testing; and ▪ Grading and design recommendations. The grading and design recommendations will, at a minimum, address the following issues: ▪ Fill control plan; ▪ Expansive soils; ▪ Differential settlement; ▪ Slope instability; ▪ Foundation instability; ▪ Stream bank protection; ▪ Evaluation of inactive mine sites and tunnels; and ▪ Other significant geological characteristics pertinent to proper development of the project site and off-site infrastructure improvement corridor. The geotechnical investigation will consist of soil borings to collect samples and laboratory testing to determine the appropriate design parameters for use in determination of the structural fill, roadbed fill, and landscaping fill requirements, along with the fill placement requirements.	Applicant	Engineering and Surveying Division	Prior to approval of grading plans	Prior to and during construction	Compliance with site-specific geotechnical investigation	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
The various soils will also be tested for corrosivity, to allow for proper foundation design. Design of engineered fills will require that the geotechnical investigation assess the structural properties of each of the different soils types throughout the project site. Such an investigation will address specific areas of the project site to be developed in order to account for the various structures and roadways proposed for that particular area. The geotechnical investigation will provide recommendations for monitoring of grading and fill placement and compaction testing to be performed to ensure proper placement of all fill types (structural, non-structural, and roadbed). In addition to the measures mentioned above, soils will be tested for their shrink-swell potential. Soils with low strength and/or high shrink-swell potential will be controlled by over-excavation, or covering these soils with a sufficient amount of granular soils (as determined by the geotechnical investigation). Potentially expansive soils will only be placed in areas determined not to consist of structural fill. In addition to evaluation for engineered fills, specific geotechnical evaluation of engineered slopes will also be included in the geotechnical evaluation. All proposed cut and/or fill slopes will be evaluated for proper design in order to reduce the hazard of over-steepening and/or removing of their lateral support, both of which could lead to slope instability, structural failure, and landsliding. If necessary, slopes will be designed with additional lateral support, such as buttressing, and fill slopes will be properly keyed into competent formational materials. Slopes (banks) along the creek channels will be designed with proper slope protection to prevent soil erosion and channel-bank undercutting. The geotechnical evaluation will include specific recommendations for inactive mine sites where potential collapse of tunnels, shafts, or air shafts could affect the stability of improvements or otherwise create a safety hazard. These measures would reduce the impacts for differential settlement, foundation instability, expansive soils, and slope instability to levels which are less than significant.						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
G-D: Implement appropriate trail design, construction and maintenance standards to minimize erosion Wilderness trails will be constructed and maintained based on appropriate and standard trail construction guidelines, such as U.S. Forest Service Trail Handbook 2309.18 (USFS, 1991). Soil type and trail grade should be considered with reference to cross drain frequency, and grades should be minimized on highly erosive soil types. Since cross drains are maintenance intensive, particularly under equestrian use, trails should be designed to eliminate them where possible by rolling the grades, i.e., providing dips on graded sections to eliminate long sloped trail sections. Design, construction and maintenance of wilderness trails based on standardized trail construction guidelines would reduce the potential impact of erosion to less than significant.	Applicant	Planning Services Division and Department of Public Works and Facilities, Parks Division, and Engineering and Surveying Division	Prior to approval of improvement plans	Prior to and during construction	Compliance with appropriate and standard trail construction guidelines	Applicant
HAZARDS AND HAZARDOUS MATERIALS						
HW-A: Report possible contamination to EHS-HMS Prior to initiating construction, all abandoned vehicle bodies and other casual refuse on the site shall be removed and disposed of appropriately. Construction contract specifications will require that, if during site grading and construction activities, any unearthed areas of apparent or suspected environmental impacts shall be immediately reported to the County's Environmental Health Services – Hazardous Materials Section. Resolution of the problem shall be to the satisfaction of Environmental Health Services and the Central Valley Regional Water Quality Control Board.	Applicant	Engineering and Surveying Division and ~~Division~~ Department of Environmental Health Services	Prior to grading permits	Weekly during construction or more frequently if required by County	Possible contamination is reported, and problem resolved	Applicant
HW-B: Comply with CALFIRE ~~CDF and Penryn Fire Department~~ requirements for temporary storage of combustible/flammable liquids at construction sites The Applicant proposes procedures to comply with the requirements of the CALFIRE ~~CDF and the Penryn Fire Department~~. ~~The~~ CALFIRE ~~CDF and the Penryn Fire Department~~ has~~ve~~ specific requirements for the temporary storage of combustible/flammable liquids at construction sites which must be followed. These requirements include inspection to verify maintenance of a vegetation break and identification of emergency shutoff valves and switches. If electrical connections are provided to these facilities, the County will additionally require permitting through the	Applicant	California Department of Forestry and Fire Protection ~~Division of Forestry, Penryn Fire Department, Placer County Fire Department~~	Prior to construction	Weekly during construction	Compliance with requirements for temporary storage of combustible/ flammable liquids at construction site	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
County Building Department. The Applicant shall also participate in the Community Right-to-Know program administered by the County.						
HW-C: Comply with the County and CALFIRE ~~CDF~~ requirements for reporting releases of hazardous materials The Applicant proposes to comply with County and CDF requirements for reporting releases of hazardous materials. If a release of hazardous materials should occur, it will be contained and reported to the CDF and County Environmental Health Department immediately. Impacted soil will be excavated and disposed of as may be required by the County. ~~Implementation of these measures would reduce the potential impact to less than significant.~~	Applicant	California Department of Forestry and Fire Protection ~~Division of Forestry, Penryn Fire Department, Placer County Fire Department~~	During Construction	Weekly during construction	Compliance with requirements for reporting releases of hazardous materials	Applicant
HW-D: Comply with recommendations of a limited groundwater investigation A limited groundwater investigation, planned and conducted by qualified environmental engineering consultants, will be conducted to assess whether contaminated groundwater exists downgradient of the former ranch headquarters area. Such an investigation will include installation and sampling of one or more borings to shallow groundwater located on the project site immediately downgradient of the headquarters area. If the analytical results are other than non-detect, follow up investigation will be required to assess appropriate remedial action. The Applicant will comply with the recommendations of the groundwater investigation.	Applicant	Department of Environmental Health	Prior to construction	Prior to construction	Compliance with the recommendations of the groundwater investigation	Applicant
HW-E: Comply with Placer County Department of Environmental Health requirements for preparation and filing of Emergency Response Plans and Hazardous Materials Storage and Containment Plans The Applicant proposes to comply with Placer County Department of Environmental Health requirements for preparation and filing of Emergency Response Plans and Hazardous Materials Storage and Containment Plans. These requirements apply to any commercial business which stores an acutely hazardous substance or 55 gallons and/or 50 pounds of a hazardous substance or 200 cubic feet of combustible gas. These plans would be prepared under Article 80 of the Uniform Fire Code. Copies of these documents must be provided to the	Applicant	Department of Environmental Health Services	Prior to operation of any commercial business which stores an acutely hazardous substance or 55 gallons and/or 50 pounds of a hazardous	Once (to verify filing of applicable plans)	Compliance with Placer County Department of Environmental Health requirements for preparation and filing of Emergency Response Plans and Hazardous	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
CDF and the Penryn Fire Department. These measures would reduce the impacts to a level which is less than significant.			substance or 200 cubic feet of combustible gas.		Materials Storage and Containment Plans.	
~~**HW-F:** Finalize and implement the Applicant's Golf Course Chemical Application Management Plan~~ ~~The Applicant shall prepare a draft Golf Course Chemical Application and Management Plan (CHAMP) and Water Quality Monitoring Plan. The purpose of the CHAMP is to document turf/landscape maintenance policies and procedures to be employed at the golf course and associated facilities. The specific objectives of the policies and procedures are to:~~ ~~• Prevent and minimize potential impacts to soil, surface water (runoff), and groundwater from use of pesticides, fertilizers, and other potentially hazardous materials;~~ ~~• Provide for appropriate management and storage of potentially hazardous chemicals used at the golf course; and~~ ~~• Provide for monitoring to provide data for management feedback and to demonstrate these objectives have been achieved.~~ ~~Locations for water monitoring shall be based on the management information objectives of the CHAMP and shall have a sound hydrogeologic basis. Monitoring points shall be located generally as indicated on Figure GW1-1. Two types of groundwater monitoring wells shall be provided. Type 1 monitoring wells shall be located in the shallow groundwater zone within the zone of decomposed granitic bedrock adjacent to selected fairways to provide early feedback for management purposes. Type 2 wells shall be sited to provide more general coverage within the shallow groundwater zone of portions of the golf course and associated detention basins.~~ ~~• Type 1 Monitoring Wells – A minimum of four groundwater monitoring locations shall be sited, as shown in Figure GW1-1, directly adjacent to selected fairways and the driving range to provide early identification of potential water quality problems and implementation of corrective actions within a short time frame. The wells shall be sited in proximity to the flowlines of existing natural~~	N/A	N/A	N/A	N/A	N/A	N/A

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~drainageways. Siting of the wells shall be directed by a professional geologist or hydrogeologist to monitor shallow, laterally migrating groundwater within the zone of decomposed granitic bedrock, and shall be completed and screened to the base of the zone of decomposition. These wells are identified as:~~ ~~o Monitoring Well (MW)1-1, to be located adjacent to the lower end of the driving range;~~ ~~o MW1-2, to be located adjacent to the fairway and green of the 12th hole;~~ ~~o MW1-3, to be located in proximity to a drainage way below the fairway of the 14th hole; and~~ ~~o MW1-4, to be located in proximity to a drainage way adjacent to the fairway and green of the 6th hole.~~ ~~• Type 2 Monitoring Wells – Four groundwater monitoring locations shall be sited on the golf course perimeter to provide overall coverage of the majority of the golf course area. The wells shall be sited in proximity to the flowlines of existing natural drainageways, and shall be designed to monitor shallow, laterally migrating groundwater within the zone of decomposed granitic bedrock. Installation of these wells shall be supervised by a geologist or hydrogeologist, and they shall be completed and screened to the base of the zone of decomposition.~~ ~~o MW2-1 shall be located in Clover Valley approximately ¼ mile northeast and upgradient from Clover Valley Reservoir. This location provides coverage of shallow groundwater draining managed turf areas associated with golf course holes 12 through 16 and a portion of the 17th fairway. MW2-1 is also downgradient of three detention ponds and a PCWA storage pond.~~ ~~o MW2-2 shall be located at the confluence of the Clover Valley Creek drainage and a drainage which includes the 10th hole and a portion of the 1st hole. This location is also downgradient of the portion of the golf course monitored by MW2-1.~~ ~~o Monitoring well MW2-3 is to be located downgradient of a detention pond within a drainage to the north of Boulder~~						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~Ridge. The fairway and green of the 7th hole is located in the upper end of the drainage.~~ ~~o Monitoring well MW2-4 is located downgradient of a detention pond in the drainage that includes the 3rd and 4th holes.~~ ~~• Surface Water Monitoring – The PCWA pond that will be constructed adjacent to the 13th hole will become part of the canal operating system. This pond would intercept surface water runoff from several fairways on the eastern portion of the golf course and shall be incorporated into the monitoring program as surface water monitoring location SW-1.~~ ~~Details of the plan cover the specific sampling parameters to be used, the frequency of sampling, and the reporting of results. This is described in more detail in Master Response GW-5. The draft CHAMP is generally adequate for the current status of the project. When a golf course owner/operator prepares operational plans, it will then be appropriate to amend the CHAMP with details of the following:~~ ~~• Golf course layout.~~ ~~• Drainage facilities.~~ ~~• A minimum 25-foot natural area buffer zone between managed turf and water bodies.~~ ~~• A map delineating the relationship between managed turf, natural areas, and surface water bodies.~~ ~~• Selection of plant and turf material to minimize need for pesticide use.~~ ~~• A specific list of chemicals to be used.~~ ~~• Procedures for the use of each chemical.~~ ~~• Schedule for soil nutrient testing that provides for testing once per year, after one year of testing that demonstrates that nutrient requirements remain relatively constant.~~ ~~The County must accept the final CHAMP prior to issuance of grading permits or approval of improvement plans, whichever is issued first.~~						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
HW-G: Comply with underground storage tank regulations through the Placer County Environmental Health Department Any commercial businesses that have underground storage tanks and/or aboveground storage tanks must comply with underground storage tank regulations through Placer County.	Applicant	Department of Environmental Health Services	Prior to installation of underground and/or aboveground storage tanks at a commercial business within the BRSP	As required by the underground storage take regulations	Compliance with underground storage tank regulations through the Placer County Environmental Health Department	
HYDROLOGY AND WATER QUALITY						
H-A: Prepare and implement a post-construction~~development~~ stormwater management program The Applicant shall ~~obtain coverage under~~ meet the requirements of the National Pollutant Discharge Elimination System (NPDES) Phase II General Permit for Waste Discharge Requirements (WDRs) for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4s). The Applicant shall prepare and implement a post-~~development~~ construction storm water management program ~~compatible~~ in accordance with the requirements of the Phase II MS4 Permit, by implementing the West Placer Storm Water Quality Design Manual during project design, including the implementation of LID measures. The Applicant shall implement one or more of the following site design measures to reduce project site runoff (Order No. 2013-0001-DWQ (CAS000004), Section E.12.b.ii): ▪ Stream Setbacks and Buffers - a vegetated area including trees, shrubs, and herbaceous vegetation, that exists or is established to protect a stream system, lake reservoir, or coastal estuarine area; ▪ Soil Quality Improvement and Maintenance - improvement and maintenance soil through soil amendments and creation of microbial community; ▪ Tree Planting and Preservation - planting and preservation of healthy, established trees that include both evergreens and deciduous, as applicable;	Applicant	Planning Services Division, Engineering and Surveying Division, and Department of Public Works	Prior to operation	Per the requirements of the NPDES Phase II General Permit	A post-construction Stormwater management program is prepared and implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
▪ Rooftop and Impervious Area Disconnection - rerouting of rooftop drainage pipes to drain rainwater to rain barrels, cisterns, or permeable areas instead of the storm sewer; ▪ Vegetated Swales - a vegetated, open-channel management practice designed specifically to treat and attenuate storm water runoff. The Applicant ~~proposes to~~ will develop a Stormwater Quality Management Program in accordance with the West Placer Storm Water Quality Design Manual and ~~under the guidelines set up by~~ the Placer County Flood Control and Water Conservation District's Stormwater Management Manual. The components of the program include reducing storm water runoff from impervious surfaces using source control, site design, and LID measures, protection from flooding, baseline hydromodification management, protection and enhancement of the stream environment, prevention of erosion and adverse water quality, and incorporation of regional stormwater management goals. ~~creation of multiple resource use, and assurance of the growth of the project to minimize its adverse impacts.~~ The purpose of this mitigation measure is to provide a plan for ensuring that the project is designed to reduce impacts to surface water both during and after construction, incorporate site design and LID features, and manage increased flows from impervious surfaces accordingly. Where necessary, structural BMPs constructed as part of the proposed project ~~are~~ will be maintained ~~appropriately~~properly such that they continue to perform their intended function as long as the project site is occupied. ~~Placer County does not have an NPDES permit covering storm water discharges in the county; however, the Placer County General Plan sets forth several policies which function to bring the County into compliance with the substantive requirements of the NPDES program.~~ The Storm Water Management Plan will address site-specific drainage characteristics, site assessment, site design measures, source control, LID design, storm water conveyance systems, discharge points, potential sources of runoff water quality impacts, specific structural BMPs that have been constructed as part of the project after runoff from impervious surfaces has been effectively reduced, recommended operational BMPs, a maintenance program for structural BMPs, a monitoring program designed to evaluate the need for BMP modifications						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
or additional BMPs, and identification of specific parties responsible for implementing each part of the plan.						
H-B: Provide runoff rate control The Applicant proposes runoff rate control for detaining peak stormwater flows. The proposed project includes detention structures (ravine detention ponds and outfall swale treatment features~~, excavated detention ponds and lakes~~) to reduce the flow rate during peak storm events to less than the existing flow. This is based on the Placer County Stormwater Management Manual requirements. The structures will be constructed with low flow outlets and high flow spillways in order to catch and detain the peak of the storm and regulate the rate of discharge to the receiving body of water. The structures will be designed to meet the County requirements, consistent with the Project Drainage Study. ~~Figure 3-21 shows the location of the detention structures for the proposed project.~~	Applicant	Engineering and Surveying Division	Prior to approval of grading plans and improvement plans	Prior to grading plans and during construction	Stormwater structures are design and constructed to meet the County requirements, consistent with the Project Drainage Study	Applicant
H-C: Provide or purchase retention storage The Applicant will construct or cause to be constructed ~~108~~ 52 acre-feet of retention storage within the Auburn Ravine watershed portion of the project site, or will purchase storage volume from the City of Lincoln in its Lakeview Farms Mitigation project. The retention storage will be provided either entirely off-site or through a combination of on-site and off-site storage. ~~The Applicant is formally communicating with the City of Lincoln to increase the volume of the City's Master Drainage Plan retention basin to accommodate the increase in runoff volume emanating from the proposed project site. However, additional technical analysis would be required to demonstrate the feasibility of increasing the storage volume of the City's retention basin such that it would accommodate the proposed project runoff volume. In addition, the current schedule for design and construction of the basin extends over a period of several years. Therefore, until off-site retention storage is constructed and available for mitigation of increased runoff volumes emanating from the proposed project site, the Applicant shall, prior to commencement of construction of any phase of the project that discharges runoff into Auburn Ravine, provide technical analysis demonstrating that on-site retention storage is being provided in compliance with the requirements of Sutter and Placer counties.~~	Applicant	Engineering and Surveying Division	Prior to approval of improvement plans	Prior to and during construction	52-acre-feet of retention storage will be provided or purchased	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
H-D: Prepare and implement a Storm Water Pollution Prevention Plan for construction activities The Applicant ~~proposes to~~ shall prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). Construction activities involving the disturbance of ~~five~~ one or more acres are required to apply for coverage under the SWRCB's NPDES General Permit for Storm Water Discharges Associated with Construction Activities. To obtain coverage under the permit, the Applicant must submit a Notice of Intent with the required permit fee and prepare a SWPPP. The contents of the SWPPP are set forth in detail in the permit application package and include development of site-specific structural and operational BMPs to prevent and control impacts to runoff quality, measures to be implemented before each storm event, inspection and maintenance of BMPs, and monitoring of runoff quality by visual and/or analytical means. The RWQCB will issue Waste Discharge Requirements (WDRs) which set forth conditions, discharge limitations, and monitoring and inspection requirements. Development and implementation of the SWPPP is the responsibility of the Applicant and its assignees. ▪ A spill prevention and countermeasure plan shall be developed which would identify proper storage, collection, and disposal measures for potential pollutants (such as fuel, fertilizers, pesticides, etc.) used on-site. The plan would also require the proper storage, handling, use, and disposal of petroleum products. ▪ Construction activities shall be scheduled to minimize land disturbance during peak runoff periods and to the immediate area required for construction. Soil conservation practices shall be completed during the fall or late winter to reduce erosion during spring runoff. Existing vegetation will be retained where possible. To the extent feasible, grading activities shall be limited to the immediate area required for construction. ▪ Surface water runoff shall be controlled by directing flowing water away from critical areas and by reducing runoff velocity. Diversion structures such as terraces, dikes, and ditches shall collect and direct runoff water around vulnerable areas to prepared drainage outlets. Surface roughening, berms, check dams, hay bales, or similar devices shall be used to reduce runoff velocity and erosion.	Applicant	Department of Public Works and Engineering and Surveying Division ~~and Environmental Health~~	Prior to approval of grading plans and improvement plans	Weekly during construction	All aspects of the Storm Water Pollution Prevention Plan are implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
▪ Sediment shall be contained when conditions are too extreme for treatment by surface protection. Temporary sediment traps, filter fabric fences, inlet protectors, vegetative filters and buffers, or settling basins shall be used to detain runoff water long enough for sediment particles to settle out. Store, cover, and isolate construction materials, including topsoil and chemicals, to prevent runoff losses and contamination of groundwater. ▪ Topsoil removed during construction shall be carefully stored and treated as an important resource. Berms shall be placed around topsoil stockpiles to prevent runoff during storm events. ▪ Establish fuel and vehicle maintenance areas away from all drainage courses and design these areas to control runoff. ▪ Disturbed areas shall be revegetated after completion of construction activities. ▪ Provide sanitary facilities for construction workers.						
H-E: Monitor erosion and sediment control measures during construction The purpose of this mitigation measure is to provide a means of evaluating the effectiveness of erosion control measures and other storm water BMPs. The monitoring will be developed for, and included in, the SWPPP in accordance with the requirements of the NPDES General Permit. The monitoring program will be developed based on anticipated construction methods, sequencing, and schedule, and will be revised as appropriate for each phase of construction and when construction methods or schedule vary significantly from the proposed plan. Monitoring points may change over time as the buildout progresses, but will be selected to be representative of the project site and implemented BMPs as well as areas not protected by BMPs. Emphasis will be placed on monitoring vulnerable areas. All BMPs will be inspected before and after each rainfall and repaired and/or modified as required to control site erosion and trap sediments. Runoff sampling shall be performed during several storm events each year. Sampling should be timed to coincide with storms that generate noticeable runoff and samples shall be quantitatively tested for total suspended sediments. If the measured TSS exceeds the water quality goals or other limits imposed by the NPDES permit, immediate steps shall be taken to identify and remedy the problem.	Applicant	Department of Public Works and Engineering and Surveying Division ~~Environmental Health~~	Prior to approval of Improvement plans	Weekly during construction, or as required by ~~DPW~~ public works ESD	Water Quality does not exceed goals or other limits of NPDES permit	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
H-F: Monitor site erosion and sediment control measures for two years after implementation of final erosion control measures A long-term monitoring program will be developed in accordance with NPDES guidelines and incorporated into the Storm Water Management Plan. The program will be developed based on actual site drainage characteristics. Monitoring points will include all storm drain outfall pipes and pond and lake outlets and spillways. In addition, natural drainageways will be examined before and after each rainy season and measures implemented to repair and control identified areas of erosion, incising or head cutting. Emphasis should be placed on vulnerable areas (i.e., those exhibiting steep slopes and/or relatively erodible soil types).	Applicant	Department of Public Works and Facilities ~~and Environmental Health~~	Prior to approval of SWMP	As identified in SWMP	Long-term effectiveness of erosion and sediment control measures is verified	Applicant
H-G: Design runoff detention basins to promote solids settling and provide capacity for accumulated sediment The Applicant proposes several runoff detention basins to mitigate potential hydrologic impacts cause by increased runoff volume. These basins will also be designed as structural BMPs to control potential sediment discharges to receiving surface water bodies. The design will consider peak flows and provide for excess capacity to accommodate accumulated sediment. The Applicant will provide for long-term operation and maintenance of the basins by the Homeowners Association through incorporation of provisions in the CC&Rs.	Applicant	Engineering and Surveying Division	Prior to approval of Improvement plans and prior to approval of CC&Rs	Prior to and during construction	Runoff detention basins are constructed and maintained	Applicant
~~**H-H:** Finalize and implement the Applicant's Lake Management Plan for constructed lakes and wetlands areas~~ ~~The Applicant proposes to construct several man-made lakes in the Meadows area of the proposed project. These lakes are planned to function as natural ecosystems with vegetation appropriate to lake and/or wetlands habitat and will receive stormwater runoff from a portion of the project site. The lake systems will likely be attractive to wild waterfowl, and residents might potentially introduce fish and/or birds. Based on the results of the preliminary geotechnical investigation, the local groundwater table in this area is relatively shallow, and groundwater may therefore be encountered during construction of the lakes. If the system is designed properly, including consideration of lake depth, surface area, types of vegetation, and vegetation densities, the system would tend to provide for natural degradation of organic waste products which would otherwise tend to infiltrate and impact groundwater quality. Additionally, such a design will also promote biological treatment of organic pollutants~~	N/A	N/A	N/A	N/A	N/A	N/A

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~introduced into runoff in catchment areas draining into the lake system, thereby allowing the lakes to function as a storm water structural BMP. A draft Lake Management Plan has been developed in concert with appropriately trained specialists in the field of aquatic ecosystems, and includes specific plans for vegetation types and densities that will support and promote long-term health of the system while minimizing the need for maintenance. The plan also addresses maintenance requirements, present a monitoring program to ensure that the system continues to function as designed following project buildout, and identify parties responsible for maintaining the system. Because the lakes are part of the natural open space areas dedicated to the County, the County will be responsible for the long-term operation and maintenance of the lakes.~~ ~~The Final Lake Management Plan shall include (but not be limited to) the following items:~~ ~~1. Section 1 – Project Description of Lakes: Characterize water quality from Caperton Canal; identify expected volume of make-up water; monitor total dissolved solids in make-up water to ensure that it will not adversely affect existing water quality coming from Caperton Canal.~~ ~~2. Section 2 – Lake Construction: Calculate the estimated seepage rate for the method chosen for sealing lake bottoms, and choose a method (among the alternatives presented in the draft plan) that does not allow high seepage rates. Provide a complete description of lake maintenance infrastructure that will achieve the objectives of the plan.~~ ~~3. Section 3 – Lake Management: Identify the parties responsible for maintaining the lake management systems. In Section 3.1, describe the nutrient input control and turnover rates necessary to ensure proper maintenance. Finalize the description of the revegetation plan (include additional mid- and low-level species to ensure sufficient habitat during the natural revegetation period; specify recommended flora densities). In Section 3.6, identify soil erosion techniques and implementation procedures to control soil erosion. In Section 3.8, identify management techniques to control aquatic invertebrates and fish species that might become established in the lakes.~~						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~4. Section 4 – Recreation: Identify provisions for non-destructive access to the lakes for nonmotorized boats.~~ ~~5. Section 5 – Lake Monitoring: Monitor Lakes Six and Seven for total petroleum as oil, total petroleum as gasoline, and semivolatile organic compounds to ensure that contamination from the road intersecting the two lakes and the associated traffic does not adversely affect water quality, using RWQCB standards. For the first year, collect and analyze one sample per quarter. If no contamination is detected, monitoring activity could be decreased to an annual or semiannual schedule.~~ ~~For all lakes, include monitoring for pesticides and herbicides used on the golf course, using RWQCB standards, monthly for the first two years and quarterly for the subsequent three years unless contamination is present at levels indicating that continued monitoring is appropriate.~~ ~~For Lakes One, Two, and Three, monitor for contamination that might result from activities on this property, such as leakage from the septic tank and sediment accumulations due to erosion.~~ ~~6. Section 6 – Water Quality Corrective Actions: Develop a corrective action threshold above 5 mg/L for dissolved oxygen in order to ensure that the health of lake biota is not jeopardized by a sudden decrease in dissolved oxygen levels. Identify corrective action for contamination resulting from runoff from the road, from chemical usage, and from activities on the NAPOTS property affecting lake water (if any).~~ ~~7. Section 7 – Corrective Action Management Alternatives to Common Problems: Delete full draw down or the use of dyes as two alternative methods for managing nuisance aquatic vegetation. Revise Section 7.2 regarding muddy water to identify the cause(s) of the turbidity and implement a management strategy to ensure its reduction, rather than treating the effects. Identify appropriate fishing seasons for each species of game fish identified in Section 7.3.~~ ~~Implementation of a Lake Management Plan approved by the County would adequately address impacts associated with the constructed lakes and wetland areas.~~						

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
H-I: Design and construct improvements to protect water quality in canals in accordance with PCWA standards and County requirements for a 100-foot setback from structures The proposed project provides for improvements to Antelope and Caperton canals that include realignment, canal lining and pipe encasement. However, portions of open canal will remain within open space and other common areas. These open segments could receive potentially contaminated runoff unless specific measures are implemented.	Applicant	Engineering and Surveying Division and PCWA	Prior to approval of improvement plans	Prior to and during construction	Construction of improvements to Antelope and Caperton canals in accordance with PCWA standards and County requirements for a 100-foot setback from structures	Applicant
H-J: Implement Placer County policies and ordinances related to permitting, design, construction, and maintenance of septic systems Placer County has developed standards for design, construction, and maintenance of septic systems, including requirements for maximum and minimum allowable percolation rates, minimum distance from leach fields to the groundwater table, minimum offsets from streams and water supply pipelines, and system design standards based on site-specific conditions. The Applicant has completed studies which concluded that each of the affected parcels is capable of supporting a domestic septic system. Each septic system will be permitted individually by Placer County upon demonstration that site conditions and the proposed site-specific septic system design do not pose a threat to groundwater or surface water quality. Parcels that do not meet Placer County's minimum standards (if any) will be connected to the sanitary sewer. Appropriate operation and maintenance of septic systems will be the responsibility of the individual property owner. The CC&Rs will include provisions to ensure that purchasers are aware of the applicable regulatory requirements and agree to comply.	Applicant and individual property owner	Environmental Health Services	Prior to approval of CC&Rs	At approval of permits for each septic system	Implementation Placer County policies and ordinances related to permitting, design, construction, and maintenance of septic systems	Applicant
H-K: Notify Placer County Department of Environmental Health Services and affected property owners if off-site sewer pipeline breaks For any existing wells within 50 feet of the proposed sewer alignment (or in cases where the DWR's standards for underlying soil type are not satisfied), the Applicant will provide for annual sampling and quantitative testing to determine levels of fecal coliform and nitrates present in those	Owner of Sanitary Sewer	Department of Environmental Health Services	Break in off-site sewer pipeline	Whenever a break occurs	Notifications are promptly made	Owner of Sanitary Sewer

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
wells. Provision will be made for notifying the property owner of the results by the Placer County Department of Environmental Health Services ~~Department~~. Each potentially affected well will be tested prior to construction of the sewer to establish baseline conditions. Upon conveyance of the sewer to the JPA or other local agency, the responsibility for annual monitoring will revert to that agency.						
LAND USE AND PLANNING						
L-A: Design project elements to buffer the project from adjacent uses The Applicant's proposed Specific Plan includes a variety of design elements to reduce incompatibility of the proposed project with surrounding residential and agricultural land uses. These elements include concentration of higher density development within the plan's interior, placement of rural residential densities along land that abuts buffer zones or open space, provision of buffer zones, common open space, natural open space easements, and wetland preservation easements to provide separation from nearby residences.	Applicant	Planning Services Division	Prior to approval of small lot tentative maps	Once (to verify that design elements are included on tentative maps	Inclusion of design elements that buffer the project from adjacent uses	Applicant
L-B: Deleted in the 2000 FEIR	N/A	N/A	N/A	N/A	N/A	N/A
L-C: Limit construction of gates To promote a sense of community and be consistent with General Plan policy 1.B.9, the Applicant will limit the construction of walls, fences, and vehicular access gates. The final plan for walls, fences within the Heritage Ridge area and along roadways and other features constructed by the Applicant, and gates will be approved by the Placer County ~~Planning Department~~ Planning Services Division. Locations where walls, fences, and gates will be prohibited will be identified on the Tentative Map and incorporated into the proposed project's CC&Rs. Access control gates (or any entry feature that has the appearance of a gated entry) are not appropriate on property zoned for one acre or larger lots, located in rural residential/agricultural areas, and that limit through access between neighborhoods.	Applicant	Planning Services Division	Prior to approval of small lot tentative maps and CC&Rs	Once (to verify that appropriate prohibitions are included on the tentative maps) and during review of individual building permits.	Consistency with the General Plan Policy 1.B.9	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
NOISE						
N-A: Restrict hours of construction activity Construction noise emanating from any construction activities for which a Building Permit is required is prohibited on Sundays and Federal holidays, and should only occur: a. Monday through Friday, between 6:00 a.m. and 8:00 p.m. b. Saturdays, between 8:00 a.m. and 6:00 p.m. This condition shall be noted in the Improvement Plans and in the Project Development Notebook.	Applicant	Planning Services Division, Division of Environmental Health, and Engineering and Surveying Division ~~Department of Public Works~~	Prior to approval of Improvement plans	Weekly during construction; submit weekly reports to ~~Planning Department~~ Planning Services Division	Construction activity is restricted to specified hours	Applicant
N-B: Prior to grading or improvement plan approval, develop and implement a construction equipment noise abatement program Construction equipment noise will be reduced by implementing the following measures: • Construction activities shall comply with the Placer County Noise Ordinance; • Install intake and exhaust mufflers recommended by the equipment manufacturer; • Locate fixed construction equipment such as compressors and generators as far as possible from sensitive receptors. Shroud or shield all impact tools and muffle or shield all intake and exhaust ports on power construction equipment; • Equip pavement breakers and jack hammers with manufacturer-recommended acoustically alternating shrouds or shields; ~~and~~ • Equip all internal combustion engines with a manufacturer-recommended muffler~~.~~; and • Designate a disturbance coordinator and conspicuously post this person's number around the project site and in adjacent public spaces. The disturbance coordinator will visit the project site periodically during each phase of construction to determine whether there are any noise compliance issues. Additionally, the disturbance coordinator will receive all public complaints about construction	Applicant	Planning Services Division, Division of Environmental Health, and Engineering and Surveying Division	Prior to approval of grading or improvement plans	Weekly during construction	Construction noise is in compliance with standards.	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
noise disturbances and will be responsible for determining the cause of the complaint, and implement any feasible measures to be taken to alleviate the problem.						
N-C: Develop and implement a construction traffic noise abatement program to include restriction of construction truck traffic on non-major roads Require the construction contractor to develop a construction traffic plan that restricts construction vehicle traffic on non-major roadways through residential neighborhoods in the study area. Local residents will be informed of proposed construction routes as part of the community relations program identified in Mitigation Measure T-B.	Applicant	Planning Services Division, Division of Environmental Health, and Department of Public Works and Facilities	Prior to construction	Weekly during construction	Development and implementation of a construction traffic noise abatement program	Applicant
N-D: Incorporate building setbacks and noise barriers into the proposed project design The Applicant has proposed building setbacks throughout the proposed project site. In the vicinity of the UPRR line, the minimum building pad setback is 210 feet from the track centerline. Steep and complicated topography in this area would render noise barriers impractical and would limit noise barrier effectiveness. ~~At the minimum setback of 210 feet, however, all residences in the area would be within the 65 dBA Ldn allowable for new residential construction (following an acoustical analysis and implementation of feasible mitigation measures) under the Placer County General Plan, and most residences would be within the 60 dBA Ldn contour.~~ The proposed project design also entails residential property line setbacks and construction of community fences (masonry walls or enhance wood fence) along roadways in the project area. ~~Community fences would border Lower Ranch Road wherever residential property lines abut the roadway; where no community fences are planned, residential sites are set back at least 70 feet from the roadway centerline~~. Community fences are also planned in many areas along Bickford Ranch Road and adjacent to residential areas facing Sierra College Boulevard; in areas along Bickford Ranch Road where community fences are not proposed, residential building setbacks range from ~~50~~ 60 to 135 feet from the roadway centerline.	Applicant	Planning Services Division	Prior to approval of small lot tentative maps	Once (to ensure inclusion of setbacks on tentative maps)	Establishment of building setbacks and construction of noise barriers	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
N-E: Inform prospective buyers of potential rail noise exposure exceeding 60 dBA L_d The Applicant will inform prospective buyers of Lots ~~12-18 and 21 on Parcel 7~~ RR-05, RR-06, and LDR-14, -16, -17, -18A and B, -22, and -24 through -27 of the potential exterior noise exposure from railroad operations exceeding the 60 dBA Ldn threshold considered normally acceptable for residential development.	Applicant	Planning Services Division	Prior to selling residential lots within RR-05, RR-06, and LDR-14, -16, -17, -18A and B, -22, and -24 through -27	Prior to final tentative subdivision map creating lots RR-05, RR-06, and LDR-14, -16, -17, -18A and B, -22, and -24 through -27	Buyers of lots RR-05, RR-06, and LDR-14, -16, -17, -18A and B, -22, and -24 through -27 have information about rail noise exposure	Applicant
N-F: Implement community park design measures to minimize potential noise impacts The Applicant has proposed a number of design measures at project parks to minimize potential noise impacts. These measures include the following: ▪ No lighting is proposed within ~~either~~ Bickford Ranch Park. ~~or Tower Park~~. This minimizes the potential for noise impacts by precluding nighttime equestrian or athletic events. ▪ Park activity areas are located away from residential land uses. ~~property borders. At the~~The Bickford Ranch Community Park, is adjacent to open space preserves ~~a natural open space area, a wetland preservation easement,~~ and ~~other planned~~ setbacks would result in a 150-to 400-foot buffer between residential sites and park activity areas. The equestrian staging area in Bickford Ranch Community Park would be separated from residential land uses. ~~Bickford Ranch Park's equestrian area, which would host larger park events, would be at least 400 feet from the nearest residential outdoor activity area. At Tower Park, activity areas and residential areas would be separated by an approximate 100-foot buffer the school site~~. ~~▪ Recreational facilities at Tower Park would limit the park use to small-scale active and passive recreation, including one sport court, a tot lot, and swings.~~	Applicant	Planning Services Division	Prior to approval of Phase 1 small lot tentative map	Once (to verify inclusion of measures on tentative maps)	Park design measures that minimize noise are implemented	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
Should the park design plan change substantially or should distances between residential sites and park features be reduced, subsequent analysis of potential noise impacts would be required.						
N-G: Inform potential buyers of potential community noise sources The Applicant proposes to inform prospective buyers of residential properties of potential community noise sources. Similar requirements will be included in the CC&Rs. ▪ Prospective buyers of lots adjacent to ~~the northeastern~~ Bickford Ranch ~~p~~Park boundary ~~and south of the park~~ will be informed regarding the approximate frequency and content of noise-generating community events at the park including athletic events and any events which would include the use of a public address system. ▪ Prospective buyers of lots (in LDR-01) adjacent to the proposed school site reservation and along school access roadways will be informed regarding the potential presence of the school site, and the likely frequency and content of noise-generating activities at the site. The Applicant will work with the applicable school district to prepare this information. ~~▪ Prospective buyers of lots bordering Tower Park will be informed regarding potential park uses and hours of operation~~ ~~▪ Prospective buyers of lots sharing a border with the Village Commercial Center will be informed regarding potential land uses and use restrictions at the Center.~~ ▪ Prospective buyers of lots adjacent to the ~~Village~~ r~~R~~ecreation ~~C~~centers would be informed regarding potential outdoor activity area uses and hours of operation. ▪ Prospective buyers of lots within 1,000 feet of the fire station site will be informed of the potential noise disturbance associated with emergency events.	Applicant	Planning Services Division	Prior to approval CC&Rs	Prior to distribution of homeowner/renter packages	Potential buyers are notified of potential community noise sources	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~**N-H:** Restrict the timing and location of truck deliveries to the Village Commercial Center~~ ~~The Applicant proposes to include restrictions on the timing and location of truck deliveries to facilities at the Village Commercial Center. Heavy truck deliveries would be prohibited along the eastern edge of the commercial center where there is a shared border with residential lots. All deliveries to businesses in this area would be restricted to daytime hours (7:00 a.m. to 6:00 p.m.).~~	N/A	N/A	N/A	N/A	N/A	N/A
N-I: Require minimum six-foot block or masonry walls along project roadways where residential areas would fall within the 60 dBA L_{dn} contour As described in Mitigation Measure N-D, the Applicant has proposed ~~to provide~~ residential lot setbacks and ~~to construct~~ community fences along most project roadways. ~~The Applicant will amend the Specific Plan to specify that in areas w~~Where residential lot lines would fall within the 60 dBA Ldn contour ~~as identified in Figure 9-1 and Table 9-8~~, which includes residential parcels RR-07 and LDR-03 along Sierra College Boulevard, a community fence (minimum six-feet) shall be constructed. This ~~community~~ fence~~s~~ shall~~will~~ be constructed of concrete block, masonry, or other materials having a minimum density of 4.0 pounds per square foot	Applicant	Planning Services Division	Prior to approval of small lot tentative maps	Once (to verify that walls are included on small lot tentative maps where required) along project roadways where residential areas would fall within the 60 dBA L_{dn} contour	Minimum six-foot block or masonry walls are constructed	Applicant
~~**N-J:** Restrict business hours of operation within specified areas of the Village Commercial Center.~~ ~~Amend the Specific Plan to require that minor use permits issued for the Village Commercial Center restrict business hours to between 7:00 a.m. and 10:00 p.m. at those commercial sites facing proposed residential lots west of the Village Commercial Center.~~	N/A	N/A	N/A	N/A	N/A	N/A
N-K: Mechanical ventilation shall be installed in all residential uses to allow residents to keep doors and windows closed, as desired for acoustical isolation	Applicant	Planning Services Division	Prior to approval of building plans	Once (to verify that mechanical ventilation is included in the building	All residential uses include mechanical ventilation	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
				plans of residences)		
POPULATION AND HOUSING						
PH-A: Pay unspecified in-lieu fees The Applicant proposes to pay an unspecified amount toward the County's purchase of land to be developed as affordable housing.	Applicant	Planning Services Division	Prior to issuance of residential building permit	Once (to verify payment of in-lieu fees) with each residential building permit	In-lieu affordable housing fees are paid	Applicant
PH-B: Construct on-site affordable residential units The Applicant shall construct 10% of the residential units (~~195~~189 units) on-site as affordable to low-income households. The Applicant shall implement Mitigation Measure PH-B or Mitigation Measure PH-C, or a combination of both.	Applicant	Planning Services Division	Prior to approval of tentative maps	Once (to verify that at least 189 residential units are low-income households)	Affordable residential units are constructed on-site (see PH-B) and/or an in-lieu affordable housing fee is paid (see PH-C)	Applicant
PH-C: Pay a per unit in-lieu affordable housing fee, such fee to be calculated based on unit cost, affordable rent, and interest rate current as of the time payment is made, and calculated in a manner similar to that identified in the ~~DEIR~~ 2001 EIR If the Applicant cannot implement Mitigation Measure PH-B, then the Applicant shall, instead, pay a per unit in-lieu affordable housing fee, such fee to be calculated based on unit cost, affordable rent, and interest rate current as of the time payment is made, and calculated in a manner similar to that identified in the 2001 EIR. The County intends ~~intents~~ to use the fees generated towards subsidizing the development fee for new low or very low income housing projects in the County.	Applicant	Planning Services Division	Prior to issuance of residential building permits	Once (to verify payment of in-lieu fees) with each residential building permit	Affordable residential units are constructed on-site (see PH-B) and/or an in-lieu affordable housing fee is paid (see PH-C)	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
PUBLIC SERVICES						
PS-I: Pay statutory fees to existing school district(s) The Applicant will pay its pro-rata share of statutory school fees to support upgrade of existing facilities or new facilities to serve the proposed project.	Applicant	Planning Services Division	Prior to issuance of each residential building permit	Once (to verify payment of statutory fees)	Statutory fees are paid to existing school district(s)	Applicant
PS-J: Donate a site, construct, and partially equip a fire station on-site or serve the site with an off-site fire station The Applicant shall dedicate ~~proposes to donate~~ a site for a fire station on-site or serve the site with an off-site fire station and ~~to~~ fund the construction of the station through the proposed Community Facilities District or other private future bond sales. ~~Fire protection for the site is currently divided into three agencies.~~ Estimates of the response time (to the site entrance at Sierra College Boulevard) from the existing agencies are near or slightly greater than the Placer County recommendation of six minutes. Demography of project residents warrants that emergency response and fire response times should be less than the current standards in the surrounding area. An increased standard and decreased response time would be achieved with an on-site station or with an off-site fire station.	Applicant	Planning Services Division and Placer County Fire District	In accordance with the Development Agreement	Once (to verify that a fire station site is included within the BRSP or that the site will be served by an off-site fire station)	A minimum six-minute response time (to the site entrance at Sierra College Boulevard) is achieved via an on-site or off-site fire station	Applicant
PS-K: Establish Fire District jurisdiction and emergency response standards for the project (responsibility of fire districts) There are three fire districts involved with this project: the Penryn Fire District, the Placer County Fire District which contracts with the California Department of Forestry (CDF) for the western portion of the site, and the CDF which is also responsible for wildland fire management. At this time the open spaces and wildlands of the project are the jurisdiction of CDF. The jurisdiction of the proposed development has not yet been resolved. CDF has a contract with Placer County to provide emergency fire and emergency medical service to the non-wildland portions of the County (Guyan, 1998). The Penryn Fire Department is a separate and independent fire protection entity governed by their own board of directors with responsibility for structural and emergency medical services to the eastern portion of this project. It is up to the individual	Applicant	Planning Services Division and Placer County Fire District	Prior to recordation of first small tentative map	Once (to verify that a Fire District jurisdiction for the BRSP is established)	Establishment of a Fire District jurisdiction and emergency response standards for the project	Placer County and Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
districts to determine the type and level of fire and emergency service to the project. Since there are no standards established for this project yet, there are no standards for response times, although CDF considers a five-minute response to be desirable. Response times will be affected by the proposed closing of Clark Tunnel Road. From the existing Placer County Fire District (contracted CDF) fire station to the entrance of Bickford Ranch at Sierra College Boulevard, the travel is approximately 3.5 to 4.0 miles with a response time of 4 minutes 30 seconds. Additional time would be required to arrive at any particular residence or facility within the development. This additional time would be as much as four minutes to the far eastern portions of the site. It is estimated that the Penryn Fire District has approximately the same response time. The Penryn Fire District might have a shorter but more difficult travel route along English Colony Way. This issue should be settled before final design of the project is complete so that the fire issue may be addressed in a timely and efficient manner. A boundary adjustment for fire district service through LAFCO will be required. The impact would be less than significant if the proposed fire station site were utilized by a fire district that has full jurisdiction of the structural (non-wildland/open space) areas within the project site. Funding for the additional crew and engine would be provide by the revenues generated by the County and the development.						
~~**PS-L:** Pursue single jurisdiction fire service.~~ ~~The Placer County Office of Emergency Services prefers that a single local fire protection provider be identified to serve the proposed project, rather than have the jurisdiction split between two entities. If the County Fire Department serves the project, the eastern portions of the project will be recommended for detachment from the Penryn Fire Protection District. If the Penryn Fire Protection Department serves the project, the northern and southern portions of the project are recommended to be annexed into Penryn Fire Protection District (see Figure C7-1)~~	N/A	N/A	N/A	N/A	N/A	N/A
PS-M: Grade driveways to slopes of 15 percent or less at the time of home construction; a Grading Permit will be required for those identified lots prior to the issuance of a Building Permit	Applicant	Planning Services Division and Engineering	Prior to issuance of grading permit and at the time of	Once (to verify condition is included on grading	Driveways are graded to slopes of 15 percent or less in compliance	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
To prevent deviation from the State Fire Safety Standard, as adopted in the County's Land Development Ordinance (PRC 4290, Title 14 CCR), prohibiting unpaved driveways on slopes greater than 15 percent, the Applicant will provide graded driveway access to all lots at slopes of 15 percent or less, where feasible.		and Surveying Division	issuance each residential building permit	plans) and whenever a building permit is issued for each residential unit	with the State Fire Safety Standard	
PS-N: Pave driveways with asphaltic concrete or concrete at the time of home construction on driveways with slopes of 16 to 20 percent; a Grading Permit will be required for those identified lots prior to issuance of a Building Permit Where it is infeasible to provide graded driveway access to all lots at slopes of 15 percent or less, the Applicant will provide asphalt concrete or concrete driveways on slopes of greater than 15 percent and less than 20 percent.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to issuance of grading permit and at the time of issuance each residential building permit	Once (to verify condition is included on grading plans) and whenever a building permit is issued for each residential unit	Asphalt concrete or concrete driveways are provided on slopes of greater than 15 percent and less than 20 percent, if grading driveway access to 15 percent or less is infeasible	Applicant
PS-O: Prohibit development on lots with driveway access on slopes in excess of 20 percent The Applicant will prohibit development on all lots with driveway access on slopes greater than 20 percent.	Applicant	Planning Services Division and Engineering and Surveying Division	Prior to issuance of grading permit and at the time of issuance each residential building permit	Once (to verify condition is included on grading plans) and whenever a building permit is issued for each residential unit	No development occurs on lots with driveway access in excess of 20 percent slopes	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
TRANSPORTATION AND TRAFFIC						
T-A: Prepare and implement construction traffic management plans for on-site construction activities for Bickford Ranch Road and Sierra College Boulevard, and coordinate with appropriate agencies in the preparation and implementation of construction traffic management plans for required off-site improvements Prior to the beginning of each portion of the project construction, including Bickford Ranch Road, Sierra College Boulevard and off-site water and sewer lines, a construction traffic management plan should be prepared by the Applicant to the satisfaction of the Placer County Department of Public Works and Facilities ~~Department~~. An exception would be individual residence construction in the Meadows and Ridges areas. These plans should involve an analysis of traffic volumes on roadways where one-way traffic control would be required to determine if the hours of such control should be limited. Traffic management plans should consider providing flag persons as necessary to facilitate traffic flow through construction areas, and arranging construction schedules to begin and end during off-peak hours.	Applicant	Engineering and Surveying Division and Department of Public Works and Facilities	Prior to construction	Prior to and during construction	Preparation and implementation of a construction traffic management plan	Applicant
T-B: Implement a community relations program during on-site construction, and coordinate with appropriate agencies in the implementation of a community relations program during construction of required on-site and off-site improvements Residents near the proposed project site, near areas of off-site improvements, and in proposed project residences which would be occupied during Phases 2 and 3 of proposed project construction should be notified of construction schedules in advance through postings and mailings. By notifying potentially affected community members in advance of construction activities and providing a mechanism for complaints, affected residents could avoid the construction areas during periods of intense activity. Community residents could also develop a more tolerant attitude toward construction activities if they are informed of them in advance, and are apprised of the length of construction activities in their area.	Applicant	Planning Services Division	Prior to construction	Prior to and during construction	Preparation and implementation of a construction traffic management plan	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
This mitigation measure would also minimize the disruption and annoyance caused by construction noise, although it would not reduce noise levels generated by construction activities.						
T-C: Pay pro-rata fair share on reconstruction of the I-80/Sierra College Boulevard Interchange The unacceptable levels of service at the intersections of Sierra College Boulevard with the eastbound and westbound ramps to I-80 would require a widening of Sierra College Boulevard to four lanes. Both of these intersections are immediately adjacent to the Sierra College Boulevard overpass to I-80. This overpass is narrow, has a short vertical curve, and does not meet current standards for vertical clearance between the bottom of the structure and I-80. For these reasons, the improvement that would be needed to mitigate unacceptable levels of service at the Sierra College Boulevard intersections with the I-80 eastbound and westbound ramps would require a reconstruction of the Sierra College Boulevard interchanges at I-80, including the overpass structure. The Applicant proposed to pay a pro-rata fair share of the cost to reconstruct the I-80/Sierra College Boulevard interchange. The City of Rocklin has been working with Caltrans on a Project Study Report to identify the appropriate design of this interchange. The new interchange should be designed to accommodate cumulative traffic conditions on Sierra College Boulevard (i.e., with buildout of the proposed project, the Twelve Bridges Specific Plan, and the Clover Valley Lakes development). This mitigation measure was assumed to be implemented under the 2010 General Plan and Buildout of Project Vicinity conditions.	Applicant	Department of Public Works and Facilities	Prior to recordation of small lot tentative maps	Once (to verify payment of pro-rata fair share)	Payment of pro-rata fair share	Applicant
T-D: Pay pro-rata fair share (SPRTA Fee) to widen Sierra College Boulevard from two to four lanes from Taylor Road to I-80 Under Existing Plus Project traffic conditions, this section of roadway should be widened to four lanes	Applicant	Department of Public Works and Facilities	Prior to recordation of small lot tentative maps	Once (to verify payment of pro-rata fair share)	Payment of pro-rata fair share	Applicant
T-E: Deleted in 2004 Final Addendum	N/A	N/A	N/A	N/A	N/A	N/A

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
T-F: Pay pro-rata fair share of adding a second westbound left-turn lane on Taylor Road at the Sierra College Boulevard intersection Under the No Project Alternative for the 2010 General Plan scenario, it was assumed that this intersection would have two through lanes and a separate left-turn lane on all four approaches. The unacceptable level of service with the proposed project could be mitigated by the addition of a second westbound left-turn lane on Taylor Road.	Applicant	Department of Public Works and Facilities	Prior to recordation of small lot tentative maps	Once (to verify payment of pro-rata fair share)	Payment of pro-rata fair share	Applicant
T-G: Pay pro-rata fair share of widening Sierra College Boulevard from four to six lanes from Taylor Road to Granite Drive Under 2010 General Plan and Buildout of Project Vicinity conditions, this section of Sierra College Boulevard would require six lanes to provide an acceptable level of service. (Under Existing Plus Project traffic conditions, this section of roadway should be widened to four lanes; see Mitigation Measure T-A)	Applicant	Department of Public Works and Facilities	Prior to recordation of small lot tentative maps	Once (to verify payment of pro-rata fair share)	Payment of pro-rata fair share	Applicant
T-H: Pay pro-rata fair share of the cost to add shoulders and improve vertical and horizontal curves along English Colony Way Traffic volumes would exceed the recommended threshold where safety improvements should be considered on a roadway like English Colony Way. The recommended mitigation calls for the addition of shoulders plus improvements to sharp vertical and horizontal curves on some sections of English Colony Way between Sierra College Boulevard and Clark Tunnel Road.	Applicant	Department of Public Works and Facilities	Prior to recordation of small lot tentative maps	Once (to verify payment of pro-rata fair share)	Payment of pro-rata fair share	Applicant
T-I: Participate in any development-based funding of solutions to I-80 congestion if adopted by Placer County Placer County policy does not require the County or local development to finance the upgrading of I-80 to provide additional capacity for through traffic. However, if the County adopts a development-based funding mechanism for solutions to the I-80 corridor, the proposed project will participate in that funding.	Applicant	Department of Public Works and Facilities	At the time of adoption of development-based funding solution to I-80 congestion by Placer County	Once (to verify participation)	Participation by the Applicant in any development-based funding of solutions to I-80 congestion adopted by Placer County	Applicant
T-J: Deleted in 2004 Final Addendum	N/A	N/A	N/A	N/A	N/A	N/A

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
T-K: Pay pro-rata fair share of adding a westbound right-turn lane on King Road at Sierra College Boulevard intersection The most cost-effective mitigation measure is the addition of a westbound right turn lane on King Road at the intersection with Sierra College Boulevard.	Applicant	Department of Public Works and Facilities	Prior to approval of tentative maps	Once (to verify payment of pro-rata fair share)	Payment of pro-rata fair share	Applicant
T-L: Deleted in 2004 Final Addendum	N/A	N/A	N/A	N/A	N/A	N/A
T-M: ~~Provide~~ Enhance park-and-ride lot and provide two bus stops The Applicant shall ~~proposes to~~ enhance (striping, repaving) the existing park and ride lot located on the west side of Sierra College Boulevard near SR 193~~provide a park-and-ride lot at the Village Commercial Center~~, and provide two bus stops adjacent to the park and ride lot and/or within the project area. Bus stops shall consist of paved area for bench and future bus stop improvements. These project features would contribute to reducing the unmet transit needs generated by the proposed project, but would not reduce them to a less-than-significant level.	Applicant	Engineering and Surveying Division and Department of Public Works and Facilities	During construction of BRSP	Once (to verify enhancement of park-and ride lot)	The existing park-and-ride lot located on the west side of Sierra College Boulevard near SR 193 is enhanced and two bus stops near the lot are provided.	Applicant
T-N: Participate in fair share cost of limited transit service If an unmet transit need is identified by PCTPA, the proposed project should share the cost of providing limited transit services. These potential services would likely focus on meeting basic medical and shopping needs for elderly residents of the Heritage Ridge Community.	Applicant	Department of Public Works and Facilities	Prior to approval of improvement plans	Ongoing	Fair share payment has been made	Applicant
T-O: Provide Class II bike lanes on Bickford Ranch Road, School Ranch Road, and Grand Ridge Drive. ~~and Lower Ranch Road~~ The Applicant shall ~~proposes to~~ construct Class II bike lanes on Bickford Ranch Road, School Ranch Road and Grand Ridge Drive. ~~and Lower Ranch Road.~~ These roadways would connect with existing and planned adjacent roadways outside the project area, and contribute to meeting the demand for recreational and transportation-related bicycle trips generated by proposed project residents and others.	Applicant	Department of Public Works and Facilities	Prior to approval of improvement plans for backbone infrastructure	Prior to and during construction	Class II bike lanes have been constructed	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
~~**T-P:** Provide signage and striping on Bickford Ranch Road at the golf cart crossing~~ ~~The Applicant has proposed some signing and striping at two crossings of Bickford Ranch Road, a public street. The proposed design raises safety issues due to the location of the crossings, the potential speed on Bickford Ranch Road and the lack of traffic control. The Applicant shall work with Placer County to define an acceptable plan for these crossings that address safety concerns.~~	N/A	N/A	N/A	N/A	N/A	N/A
~~**T-Q:** Work with Placer County to define an acceptable Golf Cart Crossing Plan~~ ~~Similar to Mitigation Measure T-P, above, the Applicant shall work with Placer County to define a plan for golf cart crossings at Bickford Ranch Road. This plan must be approved by the Placer County Board of Supervisors.~~	N/A	N/A	N/A	N/A	N/A	N/A
T-R: Construct ~~a third lane on~~ required frontage improvements on Sierra College Boulevard, including widening. ~~opposite the project boundaries~~ In order to comply with the provisions of General Plan Policy 3.A.2, the Applicant will construct required frontage improvements on Sierra College Boulevard, including roadway widening. ~~These improvements shall consist of a third through lane on the west side of the roadway for the length of the project boundary.~~	Applicant	Engineering and Surveying Division and Planning Services Division	In accordance with the Development Agreement	Prior to and during construction	Frontage improvements have been constructed	Applicant
~~**T-S:** Install a traffic signal at the intersection of Sierra College Boulevard and the unnamed road north of Lower Ranch Road, south of SR 193.~~	N/A	N/A	N/A	N/A	N/A	N/A
T-T: Pay pro-rata fair share (SPRTA Fee) for widening Sierra College Boulevard between King Road and Taylor Road from two to four lanes	Applicant	Department of Public Works and Facilities	Prior to issuance of building permits	Once, prior to construction	SPRTA fee has been paid	Applicant
T-U: Pay pro-rata fair share of a second additional southbound left-turn lane on southbound Sierra College Boulevard at the intersection with King Road In order to reduce the impacts to an acceptable LOS (LOS C), a second additional southbound left-turn lane should be constructed on	Applicant	Department of Public Works and Facilities	Prior to approval of improvement plans for	Once, prior to construction	Pro-rata fair share has been paid	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
southbound Sierra College Boulevard at the intersection with King Road. This new left-turn lane would require a receiving lane on King Road, tapering back into the eastbound through lane on King Road. The Applicant should pay a pro-rata fair share of adding this additional turning lane. This is a new mitigation measure identified in this Addendum, required because of the projected additional traffic associated with the 2025 No Project condition and with project condition. Along with implementation of the mitigation measure identified in the Bickford EIR, this new mitigation measure would reduce impacts at the intersection of Sierra College Boulevard and King Road to a less than significant level.			backbone infrastructure			
T-V: Pay pro-rata fair share (SPRTA Fee) for construction of a traffic signal at the Sierra College Boulevard/Twelve Bridges Drive intersection. This signal shall be installed prior to issuance of the 750th building permit within the project	Applicant	Department of Public Works and Facilities	Prior to issuance of residential building permit	Once, prior to construction	SPRTA fee has been paid	Applicant
UTILITIES AND SERVICE SYSTEMS						
PS-A: Deleted in the 2004 Final Addendum	N/A	N/A	N/A	N/A	N/A	N/A
PS-B: Provide water pipeline improvements The Applicant proposes to design and construct a 16-inch off-site water supply pipeline in accordance with PCWA standards. These standards specify acceptable pipe materials and joint types and require that all treated water pipelines are pressure tested for leakage and breakage at 150 PSI or 150 percent of line pressure, whichever is higher, assuring that there can be no "loose joints" in these lines. Air Vacuum Release Valves are required to be installed at high points in pipelines to automatically expel air from the pipeline and should a loss of pressure occur to automatically let air back into the pipeline so that negative pressures do not occur.	Applicant	Engineering and Surveying Division and Department of Public Works and Facilities, Environmental Engineering Division	Prior to approval of improvement plans	Prior to and during construction	Off-site water pipeline improvements have been designed and constructed	Applicant
PS-C: Provide for increased hydraulic loading, maintenance, or special design to prevent odor and blockages in off-site sewer pipelines until flows from other sources are sufficient to ensure adequate velocity, if and when such conditions arise	Applicant	Engineering and Surveying Division and Department of Public Works	Prior to approval of improvement plans	Prior to and during construction	Off-site sewer improvements have been	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
The purpose of this mitigation measure is to prevent solids accumulation in the 48-inch sewer pipeline along SR 193 and associated odors should a 48-inch pipeline be constructed rather than a 12-inch pipeline, to satisfy future regional needs as well as those of the proposed project. Depending on economic feasibility, and Placer County design standards, this may be accomplished by: ▪ hydraulic dosing at proposed pump stations to increase flows, ▪ maintenance and periodic flushing to remove accumulated solids, or ▪ other design features approved by Placer County. Design and construction of the necessary improvements would be the responsibility of the Applicant. However, upon conveyance of the system to either the JPA or Placer County, the new owner would be responsible for operation and maintenance of the facilities to control potential odor impacts. The residual impact would be less than significant.		and Facilities, Environmental Engineering Division			designed and constructed	
PS-D: Prepare and implement traffic and safety plan for maintenance of off-site sewer line Sewer maintenance will be the responsibility of either the JPA or Placer County, as would implementation of this mitigation measure. To protect public safety during maintenance activities, a traffic and safety plan will be prepared to cover maintenance activities by the agency or jurisdiction responsible for such maintenance. Maintenance crews must follow all applicable Department of Public Works and Facilities ~~Department~~ procedures for cordoning off work areas and providing signage and traffic diversions to alert motor vehicles. Whenever practical, maintenance within rights of way should be performed during off-commute daylight hours. The residual impact would be less than significant.	Applicant	Department of Public Works and Facilities, Environmental Engineering Division	Prior to approval of improvement plans	Design and operation phase	Traffic and safety plan has been prepared and implemented	Applicant
PS-E: Design off-site sewer pipeline per Placer County requirements The Applicant is responsible for designing and constructing portions of the off-site sewer in accordance with design standards set forth by Placer County. This mitigation measure would reduce potential impacts to surface water to less than significant.	Applicant	Engineering and Surveying Division and Department of Public Works and Facilities	Prior to approval of improvement plans	Prior to and during construction	Off-site sewer has been designed and constructed	Applicant

Mitigation Measure	Individual Responsible for Monitoring and/or Reporting	Individual or Organization Responsible for Verifying Compliance	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
PS-F: Design off-site sewer pipeline with watertight joints The Applicant is responsible for designing and constructing portions of the off-site sewer in accordance with design standards set forth by Placer County. This mitigation measure would reduce potential impacts to surface water to less than significant.	Applicant	Engineering and Surveying Division and Department of Public Works and Facilities	Prior to approval of improvement plans	Prior to and during construction	Off-site sewer has been designed and constructed	Applicant
PS-G: Deleted in the 2004 Final Addendum	N/A	N/A	N/A	N/A	N/A	N/A
~~**PS-H:** Issue building permits only when sufficient wastewater treatment capacity exists or will exist at time of sewer connection~~ ~~Placer County and other local agencies served by the LWWTP should carefully track the progress of WWTP construction for both plants, and coordinate with the City of Lincoln and the JPA to track actual flows to the WWTP(s) over the next four years. Building permits for previously approved projects and the proposed project should only be issued to the extent that sewage treatment capacity is available at the time the permits are issued, or to the extent that adequate treatment capacity can be assured at the time of actual sewer connection. If unforeseen delays in design, permitting, or construction of the WWTP improvements are encountered, then portions of the proposed project may need to be delayed. Preventing construction of facilities that would cause the capacity of the treatment system to be exceeded would fully mitigate this potentially significant impact, and the residual impact would be less than significant. Assurance of adequate wastewater treatment capacity will be provided in writing by the City of Lincoln to Placer County, and will include a statement that current (as of the date of the statement) capacity exists, or that construction is under way (as of the date of the statement) that will provide such capacity.~~	N/A	N/A	N/A	N/A	N/A	N/A