CHAPTER 6.0 MITIGATION MONITORING AND REPORTING PROGRAM:

Placer County has adopted a Mitigation Monitoring and Reporting Program (Chapter 18, Environmental Review, Article 18.28 of the Placer County Code). The County's program has two components, the standard mitigation monitoring program (Section 18.28.030) and the mitigation reporting plan (18.28.050). The standard mitigation monitoring program (Section 6.1 below) is utilized when the County's existing permitting process will serve as monitoring. The project specific reporting plan (Section 6.2) requires that each mitigation measure be listed along with an identification of individuals or agencies responsible for monitoring and verifying compliance, identification of when the mitigation measure will be implemented, the frequency of monitoring, performance criteria and identification of the cost, if appropriate. The project specific reporting plan is in a table format below.

Mitigation measures within the Mitigation Monitoring and Reporting Program pertaining to the Forest Ranch Concept Plan component of the FDCP are presented with grey shading behind the text.

6.1 STANDARD MITIGATION MONITORING PROGRAM

This program requires that mitigation measures adopted for discretionary projects, such as the Foresthill Divide Community Plan, be included in the conditions of approval for that project. Compliance with conditions of approval is monitored by the County through a variety of permit processes as listed below.

Development Review Committee Improvements Plan Approval Improvements Construction Inspection Encroachment Permit Final Map Recordation Acceptance of Project as Complete Building Permit Approval Certificate of Occupancy

The issuance of any of the listed permits or County actions which must be preceded by a verification by County staff that certain conditions of approval/mitigation measures have been met shall serve as the required monitoring for those conditions of approval/mitigation measures. Mitigation measures that involve ongoing monitoring require the preparation of a specific Mitigation Reporting Plan. The following listing includes those mitigation measures for the Foresthill Divide Community Plan which will be monitored through County staff verification of required approvals.

POPULATION AND HOUSING

- 3.1-3a Each tentative subdivision map and multi-family housing project within the Forest Ranch Concept Plan area shall comply with the Placer County Inclusionary Housing Ordinance in effect at the time each project is proposed. The Specific Plan submitted for the project site shall specify the mechanism that will be implemented to require that 1,700 of the 2,213 units will be age-restricted.
- 3.1-3b Alternatively, the developer shall submit for County approval as a comprehensive inclusionary housing plan for the entire Forest Ranch Concept Plan area that demonstrates compliance with the Placer County Inclusionary Housing Ordinance in effect at the time it is submitted.

LAND USE

- 3.2-2a Tentative subdivision maps for residential development and multiple family development within the Forest Ranch Specific Plan area shall be designed to reflect and consider natural features, visibility of structures, and the relationship of the project to surrounding uses, and to maintain the character and visual quality of the area.
- 3.2-2b A Specific Plan shall be prepared for the project site that clearly delineates the location of proposed land uses and zoning.

AESTHETICS

3.3-1 A Specific Plan shall be prepared for the Forest Ranch Concept Plan site that incorporates design standards adopted for the Forest Ranch Specific Plan and other measures, as appropriate, to reduce potential adverse aesthetic impacts to a less than significant level.

NATURAL RESOURCES/CONSERVATION/OPEN SPACE

- 3.6-4b Erosion and ground instability mitigation measures shall include conformance to Chapter A 33 of the 1997 edition of the Uniform Building Code and Placer County's Grading Erosion and Sediment Control Ordinance. The required designs shall include methods to control soil erosion and ground instability. Measures to control soil erosion and mitigate potential differential settlement and construction related ground instability impacts include, but are not limited to, the following:
 - 1. A California licensed civil engineer shall prepare an improvement/grading plan for proposed development sites.
 - 2. A Notice of Intent (NOI) and supporting documents shall be submitted to the State Water Resources Control Board (SWRCB). A Storm Water Pollution Prevention Plan (SWPPP) shall be prepared for inclusion with construction

plans and for regulation of construction activities on development project sites. The objectives of the SWPPP are to identify the sources of sediment and other pollutants that affect the quality of storm water discharges and to describe and ensure the implementation of practices to reduce sediment and other pollutants in storm water discharges. The SWPPP must include Best Management Practices (BMPs) which address source reduction and sediment capture and retention.

3. Uncemented silty soils are prone to erosion. According to requirements as set forth in Section 402(p) of the Clean Water Act as amended in 1987, and as administered by the SWRCB as described in (2) above, erosion control measures (appropriate Best Management Practices) shall be implemented during construction which conform to the National Pollutant Discharge Elimination System, Storm Drain Standards, and local standards.

Any cut or fill slopes and their appurtenant drainage facilities shall be designed in accordance with Uniform Building Code guidelines and the Placer County Grading Ordinance. In general, soil slopes shall be no steeper than 2:1 (horizontal to vertical) unless authorized by a qualified professional. Any deviation from the 2:1 slope standard is subject to review and approval by the Department of Engineering and Surveying. Slope angles shall be designed to conform to the competence of the material into which they are excavated.

- 4. Parking facilities, roadway surfaces, and buildings all have impervious surfaces which concentrate runoff and artificially change existing drainage conditions. Collection systems shall be designed where possible to divert natural drainage away from structures, to collect water concentrated by these surfaces, and to convey water away from the project site in accordance with the National Pollutant Discharge Elimination System, Storm Drain Standards, and Placer County standards.
- 5. Where structures are to be constructed between the rock, hardpan or dense soil exposed in a cut slope and engineered fill, a geotechnical study shall be prepared as detailed in Mitigation Measure 3.6-4a, and site specific soil engineering recommendations developed to mitigate this impact.

During construction, trenches greater than 5 feet in depth shall be shored, sloped back at a 2:1 slope angle, or be reviewed for stability by a qualified professional in accordance with the Occupational Safety and Health Administration regulations, if personnel are to enter the excavations.

3.6-4d Erosion and ground instability mitigation measures shall include conformance to the Uniform Building Code and Placer County's Grading, Erosion and Sediment Control Ordinance. The required designs shall include methods to control soil erosion and ground instability. Measures to control soil erosion and mitigate potential

differential settlement and construction related ground instability impacts include, but are not limited to:

- 1. Prohibit the placement of habitable structures or individual sewage disposal systems on or in critically expansive soils.
- 2. In landslide hazard areas, prohibit avoidable alteration of land in a manner that could increase the hazard, including concentration of water through drainage, irrigation, or septic systems; removal of vegetative cover; and steepening of slopes and undercutting the bases of slopes.
- 3. Limit development in areas of steep (in excess of 30%) or unstable slopes, or slope breaks to minimize hazards caused by landslides, liquefaction, construction undercutting or vegetation loss.
- 4. Septic leach fields and drainage plans shall direct runoff and drainage away from steep and/or unstable slopes.
- 5. A California licensed Civil Engineer shall prepare and submit to the Department of Engineering and Surveying a preliminary grading plan and erosion control plan (winterization/ground instability plan) for new development projects prior to any environmental review determination.
- 3.6-5b Development within the Concept Plan area shall comply with the requirements of the Placer County Flood Damage Prevention Regulations (Article 15.52, Placer County Code)
- 3.6-5e On-site sediment basins shall be designed and constructed with new development as determined to be necessary by the Department of Engineering and Surveying. These basins shall be constructed at the commencement of grading, and be maintained throughout the construction period to receive storm water runoff from graded areas to allow capture and settling of sediment prior to discharge to receiving waters.
- 3.6-6c All onsite wastewater treatment and disposal facilities (whether septic tank/leach field or engineered alternative systems) proposed to be installed on individual lots shall comply with Placer County's Ordinance Governing Individual On-Site Sewage Disposal Systems, including compliance with the minimum locational and operational criteria described therein.
- 3.6-6d Prior to approval of tentative maps or improvement plans (whichever comes first) involving lots proposed for onsite wastewater disposal systems, a site evaluation shall be performed for each proposed lot in accordance with Placer County's <u>Ordinance Governing Individual On-Site Sewage Disposal Systems</u>. Proposed lots shall contain sufficient area to ensure compliance with Placer County and Regional Water Quality Control Board standards and criteria for treatment and disposal facilities, including sufficient replacement area in the event of system failure. On-site sewage treatment

and disposal will only be allowed on parcels where all current regulations can be met and where parcels have the area, soils, and other characteristics that permit such disposal facilities without threatening surface or groundwater quality or posing any other health hazards.

- 3.6-7a Prior to approval of improvement plans for projects of 1 acre or greater, the developer shall obtain from the State Water Resources Control Board a General Construction Activity Storm water Permit under the National Pollutant Discharge Elimination System (NPDES) and comply with all requirements of the permit to minimize pollution of storm water discharges during construction activities.
- 3.6-7b Prior to approval of improvement plans for all projects in the Plan area, the project developer shall submit to the Placer County Public Works Department, for review and approval, an erosion control plan consistent with the County's Grading, Erosion and Sediment Control Ordinance during environmental review. The erosion control plan shall indicate that proper control of siltation, sedimentation and other pollutants will be implemented per NPDES permit requirements and County ordinance standards. The plan shall address storm drainage during construction and proposed BMPs (Best Management Practices) to reduce erosion and water quality degradation. All on-site drainage facilities shall be constructed to Placer County specifications. BMPs shall be implemented throughout the construction process.

Best Management Practices for construction shall be developed in accordance with the California Stormwater Quality Association <u>Stormwater Best Management</u> Practice Handbook (January 2003).

- 3.6-7c On-site sediment basins shall be designed and constructed with new development as determined to be necessary by the Department of Engineering and Surveying. These basins shall be constructed at the commencement of grading, and be maintained throughout the construction period to receive storm water runoff from graded areas to allow capture and settling of sediment prior to discharge to receiving waters. Sediment basins located downstream of known development shall be designed to accommodate anticipated sediment deposit that will be transported during subsequent phases of development.
- 3.6-7d Prior to approval of improvement plans for development projects in the Plan area, the developers shall develop a surface water pollution control plan (i.e., parking lot sweeping program and periodic storm drain inlet clearing) to reduce long-term surface water quality impacts. Parking lot sweeping shall occur on a weekly basis, and storm drain inlet clearing shall occur semi-annually. The plan shall also include the installation of oil, gas and grease trap separators in the proposed parking lots. The developers shall develop a financial mechanism, to be approved by Placer County, which ensures the long-term implementation of the program.

Best management practices (BMPs), such as sediment or water quality ponds, wetlands, filters, and vegetated swales, have been shown to reduce urban pollutant

levels in stormwater. A number of studies have been conducted over the past two decades regarding the pollutant removal effectiveness of urban stormwater BMPs. For example, wetland BMPs such as shallow marshes, extended detention wetlands, and ponded wetlands have demonstrated median removal rates of 77% for bacteria, 90% for hydrocarbons, including oil and grease, and 69% for cadmium. Ponds have demonstrated median removal rates of 57% and 73% for copper and lead, respectively. Filters have been shown to be 81% effective in removing hydrocarbons, including oil and grease, 80% effective in removing zinc, 87% effective in removing total suspended solids (TSS), and 66% effective in removing organic carbon, based on the median rates of a number of reported studies. Vegetated dDrainage swales have demonstrated median removal efficiencies of 81% for TSS, 67% for organic carbon, and 71% for zinc (Schueler 1997). All BMPs for water quality protection, source control, and treatment control shall be developed in accordance with the California Stormwater Quality Association Stormwater Best Management Practice Handbook (January 2003) for the applicable type of development and/or improvement. Provisions shall be included for long-term maintenance of BMPsl

- 3.6-7e Projects subject to construction-related storm water permit requirements of the Federal Clean Water Act National Pollutant Discharge Elimination System (NPDES) program shall obtain any required permits through the Regional Water Quality Control Board or Environmental Protection Agency.
- 3.6-7f Developers shall re-vegetate all disturbed areas. Re-vegetation undertaken from April 1 to October 1 shall include regular watering to ensure adequate growth. A winterization plan shall be provided. It is the developer's responsibility to assure proper installation and maintenance of erosion control/winterization during project construction. Where soil stockpiling or borrow areas are to remain for more than one construction season, proper erosion control measures shall be applied. Erosion control shall be provided where roadside drainage is off of the pavement, to the satisfaction of the Department of Engineering and Surveying.
- 3.6-7g Best Management Practices (BMPs) shall be applied during construction to minimize erosion and sedimentation. An erosion control plan shall be submitted prior to ground disturbing activities that reduces erosion and water quality degradation. Environmental review for subsequent development shall identify appropriate BMP's for site specific conditions. BMP's selected shall be in accordance with the California Stormwater Quality Association "Stormwater Best Management Practice Handbook," or other appropriate criteria as determined by the Design Review Committee.

The erosion control plan shall indicate that proper control of erosion, sedimentation, siltation and other pollutants will be implemented per NPDES permit requirements and County standards. The plan shall address storm drainage during construction and propose BMP's to reduce erosion and water quality degradation. All drainage facilities shall be constructed to Placer County specifications. The plan shall indicate whether grading will occur in the winter months. If grading is proposed for the

winter months, mechanisms to avoid sedimentation of creeks and damage to riparian habitat shall be identified. The plan shall also specify restoration measures for graded areas including but not limited to landscaping, revegetation, the use of rice straw or other weed free vegetative material for erosion control measures.

Drainage facilities shall be protected as necessary to prevent erosion of the onsite soils immediately following grading activities. In addition, cut slopes and drainage ways within native material shall be protected from direct exposure to water runoff immediately following grading activities. The design for collected run-off shall dissipate the energy. Cut and fill embankment slopes shall be protected from sheet, rill, and gully erosion.

6.2 PROJECT SPECIFIC MITIGATION REPORTING PLAN

A mitigation reporting plan is required when the standard mitigation monitoring plan (Section 6.1 above) does not address the required mitigation monitoring. This occurs when ongoing monitoring of required mitigation measures extends beyond the County's permitting process. The following table contains the required components of the specific reporting plan and describes those mitigation measures that will require ongoing monitoring to insure implementation.

Mitigation Measures Requiring Ongoing Monitoring

Mitigation No.	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
3.4 Public F	acilities						
3.4-1a	Small wastewater treatment facilities shall not be allowed within the Forest Ranch Concept Plan area unless a responsible entity (community services district or alternative public agency) is formed to manage, operate and maintain the facilities.	Applicants	Planning Department	Prior to recordation of final subdivision maps within the Forest Ranch Concept Plan area of sufficient density to require wastewater treatment facilities	Ongoing subsequent to approval of tentative subdivision maps of sufficient density to require wastewater treatment facilities	Ensure that wastewater treatment facilities have ongoing maintenance capabilities within the Forest Ranch Concept Plan area	Applicant
3.4-1b	A responsible entity for sustainable wastewater treatment facility maintenance and operation shall be formed or completed within the Forest Ranch Concept Plan area prior to recordation of the first final subdivision map for a development project with a density exceeding county criteria for septic system disposal. The responsible entity will assume liability for maintaining compliance with Federal and State requirements,	Applicant	Planning Department	Prior to recordation of final subdivision maps within the Forest Ranch Concept Plan area of sufficient density to require wastewater treatment	Ongoing subsequent to approval of tentative subdivision maps of sufficient density to require wastewater treatment facilities	Ensure that adequate and appropriate wastewater treatment facilities are constructed with an ongoing funding mechanism in place prior to development requiring such	Applicant and Special District assessments

Mitigation No.	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
	maintenance and upgrades, and continued effort funding in the form of user fees to avoid mandatory financial penalties for noncompliance and strict enforcement actions.			facilities		within the Forest Ranch Concept Plan area	
3.4-1c	The Forest Ranch Concept Plan developer shall obtain Waste Discharge Requirements (WDRs) from the Regional Water Quality Control Board for the on-site wastewater treatment facility, which will assure that the size, treatment process, and discharge of treated effluent are adequate and in compliance with local, state and federal standards. If the size or other characteristics of the golf course are inadequate for spray irrigation of treated effluent, adequate area shall be provided on the site in accordance with WDRs.	Applicant	Environmental Health Services	Prior to recordation of final subdivision maps within the Forest Ranch Concept Plan area of sufficient density to require wastewater treatment facilities	Ongoing	Ensure that wastewater treatment plant discharges are in compliance with local, state and federal standards	Applicant and Special District assessments
3.4-1d	The wastewater treatment plant shall be designed to incorporate multiple treatment systems.	Applicant	Central Valley Regional Water Quality Control Board	Prior to recordation of final subdivision maps within the Forest Ranch	Once during review of wastewater treatment plant design plans	Ensure wastewater treatment plant discharges are in compliance with local, state and	Applicant

Mitigation No.	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
				Concept Plan area of sufficient density to require wastewater treatment facilities		federal standards	
3.4-1e	Chlorine gas shall not be used for disinfection. Alternative processes such as use of sodium hypochlorite or ultraviolet radiation shall be used.	Applicant	Environmental Health Services	Prior to recordation of final subdivision maps within the Forest Ranch Concept Plan area of sufficient density to require wastewater treatment facilities	Ongoing	Ensure potential adverse environmental and health effects related to use of chlorine gas are eliminated	Applicant and Special District assessments
3.4-1f	Emergency storage pond(s) shall be incorporated in the wastewater treatment plant design to allow for emergency storage of untreated effluent.	Applicant	Central Valley Regional Water Control Board	Prior to recordation of final subdivision maps within the Forest Ranch Concept Plan	Once during review of wastewater treatment plant design plans	Ensure potential adverse environmental and health effects related to release of untreated effluent is	Applicant and Special District assessments

Mitigation No.	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
				area of sufficient density to require wastewater treatment facilities		eliminated	
3.4-1g	A diesel standby generator shall be provided for use in the event of a power failure.	Applicant	Environmental Health Services	Prior to recordation of final subdivision maps within the Forest Ranch Concept Plan area of sufficient density to require wastewater treatment facilities	Once during review of wastewater treatment plant design plans	Ensure continued operation of wastewater treatment plant in the event of power failure	Applicant and Special District assessments
3.4-1h	Subsequent project level environmental review shall be required for the wastewater conveyance master plan & treatment facility prior to project approvals.	Applicant	Department of Public Works	Prior to recordation of the first final subdivision map, or other county approval, within the	Once prior to recordation of the first final subdivision map, or other county approval, within the Forest Ranch	Ensure that adequate and appropriate wastewater treatment facilities are constructed within the Forest Ranch	Applicant

Mitigation No.	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
				Forest Ranch Concept Plan area	Concept Plan area	Concept Plan area	
3.4-2a	The Specific Plan for the Forest Ranch Concept Plan shall identify the water supply for the project and shall include detailed plans of how that water supply will be developed. Potential water supply sources include raising the level of Sugar Pine Dam or drilling new wells and constructing additional storage facilities.	Applicant	Department of Public Works	Adoption of Specific Plan	Once at the time of Specific Plan adoption for the Forest Ranch Concept Plan area	Ensure long term water supply for the Forest Ranch Concept Plan area	Applicant
3.4-2b	A "will serve" letter shall be obtained from the Foresthill P.U.D. prior to recordation of the first final subdivision map or other County approval.	Applicant	Planning Department	Prior to recordation of the first final subdivision map, or other county approval, within the Forest Ranch Concept Plan area	Once prior to recordation of the first final subdivision map, or other county approval, within the Forest Ranch Concept Plan area	Ensure the ability of the Foresthill PUD to provide long term water supply for the Forest Ranch Concept Plan area	Applicant
3.4-2c	The portion of the Forest Ranch Concept Plan located outside Foresthill P.U.D. boundaries shall be annexed to the District prior to recordation of the first final	Applicant	Planning Department and Foresthill PUD	Prior to recordation of the first final subdivision map within the	Once prior to recordation of the first final subdivision map within the	Ensure the ability of the Foresthill PUD to provide long term water supply for the	Applicant

Mitigation No.	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
	subdivision map. Prior to approval of the annexation, plans shall be approved by the PUD to increase storage and distribution facilities to ensure that an adequate supply of water will be available to serve the Forest Ranch Concept Plan site.			Forest Ranch Concept Plan area	Forest Ranch Concept Plan area	Forest Ranch Concept Plan area	
3.4-2d	The new water storage and distribution system included in the approved plans required by mitigation measure 3.4-2b shall be in place and operational prior to recordation of the first final subdivision map within the PUD annexation area.	Applicant	Planning Department	Prior to recordation of the first final subdivision map within the Forest Ranch Concept Plan area	Once prior to recordation of the first final subdivision map within the Forest Ranch Concept Plan area	Ensure the ability of the Foresthill PUD to provide long term water supply for the Forest Ranch Concept Plan area	Applicant
3.4-2e	An emergency water storage tank(s) shall be constructed onsite by project developers and maintained by Foresthill P.U.D. The location(s) and volume of water to be stored shall be determined by Foresthill P.U.D. and the Foresthill Fire Protection District.	Applicant	Public Works Department, Foresthill PUD and the Foresthill Fire Protection District	Prior to recordation of the first final subdivision map within the Forest Ranch Concept Plan area	Once prior to recordation of the first final subdivision map within the Forest Ranch Concept Plan area	Ensure that adequate water supply is available for fire suppression efforts within the Forest Ranch Concept Plan area	Applicant
3.4-2f	Fire hydrants shall be installed and fire flow shall be provided in accordance with the requirements of the Foresthill P.U.D. and the Foresthill Fire Protection District.	Applicant	Public Works Department, Foresthill PUD and the Foresthill Fire	Prior to recordation of each final subdivision map within the	Once prior to recordation of each final subdivision map within the	Ensure that adequate water pressure and water volume is available for fire	Applicant

Mitigation No.	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
			Protection District	Forest Ranch Concept Plan area	Forest Ranch Concept Plan area	suppression efforts within the Forest Ranch Concept Plan area	
3.4-2g	Construction of water lines and the emergency water storage tank(s) shall be in compliance with Mitigation Measure 3.6 4c d.	Applicant	Public Works Department	Prior to recordation of the first final subdivision map within the Forest Ranch Concept Plan area	Once prior to recordation of the first final subdivision map within the Forest Ranch Concept Plan area	Ensure that adequate water transmission and storage facilities are available for fire suppression efforts within the Forest Ranch Concept Plan area	Applicant
3.4-4	Developments located within the Forest Ranch Concept Plan area shall pay a fair share contribution to provide for facilities and services to maintain fire safety standards in accordance with local, state, and federal requirements.	Applicant	Fire Protection District	Prior to recordation of each final subdivision map within the Forest Ranch Concept Plan area	Prior to recordation of the first final subdivision map within the Forest Ranch Concept Plan area and ongoing thereafter	Ensure that adequate ongoing funding is available for fire suppression efforts within the Forest Ranch Concept Plan area	Applicant and Special District assessments
3.4-5	Forest Ranch Concept Plan developers shall be required to establish a special benefit assessment district or other funding mechanism to assure adequate funding for law	Applicant	Planning Department	Prior to recordation of the first final subdivision map within the Forest Ranch	Once prior to recordation of the first final subdivision map within the Forest Ranch	Ensure that adequate ongoing funding is available for law enforcement and related services	Applicant and Special District assessments

Mitigation No.	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
	enforcement and related services and operational costs, with funding responsibilities imposed on residential, office, commercial and recreational properties within the Forest Ranch Concept Plan, including the costs for services required to satisfy General Plan standards now in existence or later amended. The funding mechanism shall be subject to the prior review and approval of Placer County, and shall be subject to the prior review and approval of Placer County, and shall be approved by the affected landowners prior to recordation of the first final subdivision map.			Concept Plan area	Concept Plan area	within the Forest Ranch Concept Plan area	
3.4-6a	The developer shall submit a master drainage plan for the Forest Ranch Concept Plan site for review and approval by the Placer County Engineering and Surveying Department and the Placer County Flood Control and Water Conservation District with any Specific Plan or entitlement request submitted for property within the Concept Plan site. The master drainage plan shall address design	Applicant	Engineering and Surveying Department and the Placer County Flood Control and Water Conservation District	Adoption of Specific Plan or the first entitlement request submitted for property within the Forest Ranch Concept Plan site.	Once at the time of Specific Plan adoption or at the time of the first entitlement request approval for the Forest Ranch Concept Plan area	Ensure that an adequate and appropriate storm water drainage system is designed prior to development requiring such within the Forest Ranch Concept Plan area	Applicant

Mitigation No.	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
	of any proposed drainage systems as well as drainage flowing into, through, and originating within the Concept Plan area. The plan shall meet the requirements of the Placer County Land Development and Stormwater Management Manuals in force at the time of plan submittal. The plan shall address phasing of drainage system improvements. Subsequent development within the Concept Plan site shall be consistent with the approved master drainage plan and any approved revisions thereto. A preliminary master drainage plan shall be submitted as part of the environmental review process for any Specific Plan or the first entitlement request submitted for property within the Concept Plan site.						
3.4-6b	The Specific Plan shall propose a method to ensure sustainable storm drainage system operation and maintenance and funding. Prior to recordation of any map or acceptance by the County of any improvements within the Concept	Applicant	Planning Department	Adoption of Specific Plan or the first entitlement request submitted for property within	Once at the time of Specific Plan approval for the Forest Ranch Concept Plan area	Ensure that adequate ongoing funding is available for maintenance and operation of the storm drainage	Applicant and Special District assessments

Mitigation No.	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
	Plan area, a County Service Area, Zone of Benefit under CSA #28, community services district, expansion of powers of Foresthill PUD, or other mechanism acceptable to the County to ensure adequate storm drainage operations shall be formed or completed.			the Forest Ranch Concept Plan site		system serving the Forest Ranch Concept Plan area	
3.4-8	Developments located within the Forest Ranch Concept Plan area shall pay a fair share contribution to provide for facilities and services to maintain adequate cemeteries, libraries, health services, and solid waste collection and disposal services for the FDCP.	Applicant	Planning Department	Adoption of Specific Plan or the first entitlement request submitted for property within the Forest Ranch Concept Plan site	Once at the time of Specific Plan approval for the Forest Ranch Concept Plan area	Ensure that adequate ongoing funding is available for facilities, maintenance and operation of cemeteries, libraries, health services and solid waste collection and disposal services serving the Forest Ranch Concept Plan area	Applicant, property taxes and Special District assessments
3.5 Parks ar	nd Recreation						
3.5-1a	The developer of the Forest Ranch Concept Plan area shall be required to develop and maintain private active recreation facilities in conformance with Goal 1.C.3	Applicant	Planning Department	Adoption of Specific Plan	Ongoing during build out of the Forest Ranch Concept Plan area	Ensure that adequate and appropriate private active recreation	Applicant and property owner assessments

Mitigation No.	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
	Standards 1.C.3-1 through 1.C.3-4 of FDCP Appendix "E" (Forest Ranch Specific Plan Area Development Standards).					facilities are constructed with an ongoing funding mechanism in place to maintain the facilities throughout the build out period of the Forest Ranch Concept Plan area	
3.5-1b	Trail classifications shall be shown on all project plans in accordance with the Foresthill Divide Community Plan Trails Plan.	Applicant	Planning Department	Adoption of Specific Plan	Once at the time of Specific Plan approval for the Forest Ranch Concept Plan area	Ensure that the Placer County Trails Master Plan is integrated into the Specific Plan developed for the Forest Ranch Concept Plan area	Applicant
3.5-1c	A County Service Area, Zone of Benefit under CSA #28 (the County-wide County Service Area), community services district, expansion of powers of the Foresthill P.U.D., master homeowners association, parks and recreation district, assessment district, or other entity for	Applicant	Planning Department	Prior to recordation of the first final subdivision map within the Forest Ranch Concept Plan area	Once prior to recordation of the first final subdivision map within the Forest Ranch Concept Plan area	Ensure that adequate and appropriate public recreation facilities are constructed with an ongoing funding mechanism in	Applicant, property taxes and Special District assessments

Mitigation No.	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
	sustainable park maintenance shall be formed or completed for the concept area prior to recordation of the first final subdivision map. A park maintenance tax or assessment or other funding mechanism with a provision for increases indexed to the Consumer Price Index shall be approved by the landowners (voters) of the project site, to be developed prior to recordation of the first final subdivision map.					place to maintain the facilities throughout the build out period of the Forest Ranch Concept Plan area	
3.6-4a	Resources/Conservation/Open Space A geotechnical engineering investigation of proposed development sites shall be prepared by a qualified Californialicensed civil engineer or a qualified California-licensed geotechnical engineer prior to any grading or other ground-disturbing activities. All site grading, trenching, cut and fill, engineered soils, and construction shall be in compliance with the recommendations of the geotechnical engineering	Applicant	Department of Public Works	Prior to recordation of each final subdivision map, or other county approval, within the FDCP area	Ongoing prior to recordation of final subdivision maps or other project approvals	Minimize hazards related to geotechnical factors at development sites	Applicant

Mitigation No.	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
	investigation, including soil index, pH and resistivity testing, fill control, and proper design of cut and fill slopes.						
3.6-4c	A preliminary geotechnical engineering investigation prepared by a licensed civil engineer or a qualified California-licensed geotechnical engineer and consistent with the requirements of the Placer County Grading, Erosion, and Sediment Control Ordinance shall be submitted with the Specific Plan. A more detailed geotechnical engineering investigation prepared by a licensed civil engineer or a qualified California-licensed geotechnical engineer and consistent with the requirements of the Placer County Grading, Erosion and Sediment Control Ordinance shall be submitted with each Tentative Subdivision Map application within the project area. Other entitlement requests may be required to prepare project specific geotechnical investigations if findings in the Specific Plan	Applicant	Department of Public Works	Submittal of Specific Plan	Once at the time of Specific Plan submittal for the Forest Ranch Concept Plan area (preliminary geotechnical engineering investigation) and subsequently with submittal of each tentative subdivision map within the Forest Ranch concept Plan area (detailed geotechnical engineering investigation)	Minimize hazards related to geotechnical factors at development sites	Applicant

Mitigation No.	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
	preliminary engineering investigation indicates a need						
3.6-5a	All drainage-related infrastructure including detention facilities shall be designed in accordance with the standards contained in the Placer County Flood Control and Water Conservation District's Storm water Management Manual and Placer County Land Development Manual. All new development shall be planned and designed so that no damage occurs to structures or improvements during the 100-year event and no inundation of private property utilized for human habitation or wastewater disposal facilities occurs during the 10-year event. The Master Drainage Plan to be provided with the Specific Plan shall identify all 100 year flood plains within the Forest Ranch Concept Plan and designate these areas for open space uses. Plans identifying areas susceptible to 100-year and 10-year events shall be presented to the Placer County Flood Control and Water Conservation District and the	Applicant	Department of Engineering and Surveying	Submittal of Specific Plan	Once at the time of Specific Plan submittal for the Forest Ranch Concept Plan area and subsequently with submittal of each tentative subdivision map, or other county approval, within the Forest Ranch concept Plan area	Ensure that an adequate and appropriate storm water drainage system is designed prior to development requiring such within the Forest Ranch Concept Plan area	Applicant

Mitigation No.	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
	Engineering and Surveying Department prior to consideration by the county of the first tentative map, conditional use permit or minor use permit.						
3.6-5c	Flood control mechanisms shall be designed to utilize natural or non-structural flood control facilities, including off-stream flood control basins, to preserve and enhance creek corridors. Flood control structures, facilities, and improvements shall be designed to conserve resources, incorporate and preserve scenic values, and incorporate opportunities for recreation where appropriate	Applicant	Department of Engineering and Surveying and Planning Department	Submittal of Specific Plan	Once at the time of Specific Plan submittal for the Forest Ranch Concept Plan area and subsequently with submittal of each tentative subdivision map, or other county approval, within the Forest Ranch concept Plan area	Ensure that an adequate and appropriate storm water drainage system is designed in harmony with the natural environment to the extent practicable prior to development requiring such within the Forest Ranch Concept Plan area	Applicant
3.6-5d	The developer shall submit a master drainage plan for the Forest Ranch Concept Plan for review and approval by the Placer County Engineering and Surveying Department and the Placer County Flood Control and Water Conservation District with the	Applicant	Department of Engineering and Surveying and Water Conservation District	Submittal of Specific Plan	Once at the time of Specific Plan submittal for the Forest Ranch Concept Plan area and subsequently with submittal	Ensure no net increase in peak flows from any individual identified watershed within or proximate to the forest Ranch	Applicant

Mitigation No.	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
	Specific Plan or subsequent entitlement request submitted for the Forest Ranch Concept Plan. The master drainage plan shall be designed to create no net increase in peak flows from any individual identified watershed and shall meet all of the requirements of the Placer County Land Development Manual and Stormwater Manual in force at the time of plan submittal. The master drainage plan shall address phasing tied to individual subdivision maps, conditional use permits, and minor use permits, subject to approval by the Engineering and Surveying Department and the District. Subsequent development within the Forest Ranch Concept Plan shall be consistent with the approved master drainage plan. If detention/retention facilities are identified as necessary, these shall be designed in accordance with the Master Drainage Plan and the Placer County Flood Control and Water Conservation District Storm Water Management Manual.				of each tentative subdivision map, or other county approval, within the Forest Ranch concept Plan area	Concept Plan area and to ensure compliance with all of the requirements of the Placer County Land Development Manual and Stormwater Manual in force at the time of plan submittal.	

Mitigation No.	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
3.6-6a	If required by the State of California Water Resources Control Board, The County shall modify its Ordinance Governing Individual On-site Sewage Disposal Systems to meet the Regional Board Guidelines for Waste Disposal From Land Developments and submit the adopted FDCP to the Regional Board for review as required under Resolution No. 82-036 or subsequent resolutions.	Environmental Health Services	Central Valley Regional Water Quality Control Board	To be determined	Once at the time of California Water Resources Control Board direction	Ensure on-site Sewage disposal Systems meet Regional Board Guidelines	Placer County
3.6-6b	When required by State law or local ordinance, add the following policy to the FDCP: On-site sewage systems shall participate in the approved County Operation, Maintenance and Monitoring program.	Environmental Health Services	Central Valley Regional Water Quality Control Board	To be determined	Once at the time of State law or local ordinance adoption	Ensure on-site Sewage disposal Systems are in compliance with a county operation, monitoring and maintenance program	Placer County
3.6-6e	The Specific Plan shall clearly show the location of all watercourses and existing springs. No onsite wastewater disposal system or replacement area shall be located within 100 feet of such features.	Applicant	Planning Department and Environmental Health Services	Submittal of Specific Plan	Once at the time of Specific Plan submittal for the Forest Ranch Concept Plan area	Ensure on-site Sewage disposal Systems will not result in adverse environmental and health effects that could result form	Applicant

Mitigation No.	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
						contamination of natural springs and waterways	
3.6-6f	A preliminary design of all proposed community wastewater treatment and disposal facilities shall be prepared and provided to the Central Valley Regional Water Quality Control Board concurrent with the Specific Plan and shall be approved prior to the first tentative map covering those areas to be served. Tentative maps shall not be approved for the Forest Ranch project unless the proposed facilities are deemed by the regulatory agencies to be adequate to prevent potential water quality degradation from facilities operation at build out of the Concept Plan. Subsequent environmental analysis of proposed facilities shall be undertaken, to evaluate the impact of any proposed treatment and disposal facilities.	Applicant	Central Valley Regional Water Quality Control Board	Prior to submittal of Specific Plan	Once prior to submittal of Specific Plan for the forest Ranch Concept Plan site	Ensure on-site Sewage disposal Systems will not result in adverse environmental and health effects that could result form contamination of natural springs and waterways	Applicant
3.6-6g	The proposed recreational vehicle park shall be connected to the proposed community wastewater	Applicant	Environmental Health Services and Public	At the time of recreational vehicle park	Once at the time of recreational vehicle park	Ensure the recreational vehicle park is	Applicant

Mitigation No.	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
	treatment and disposal facilities.		Works Department	development	building permit approval	served by a community wastewater treatment facility in lieu of on-site septic leach field system	
3.6-9	Focused rare plant surveys shall be conducted in accordance with the Forest Ranch Specific Plan Development Standard 2.C.1-2 prior to approval of tentative maps or ground disturbing activities within the Forest Ranch Concept Plan area. FDCP goals, policies and implementation measures designed to mitigate adverse impact to rare plants that may be discovered shall be followed to reduce potential impacts to less than significant.	Applicant	Planning Department	Prior to approval of tentative subdivision maps within the Forest Ranch concept Plan area	Once prior to approval of each tentative subdivision map or ground disturbing activity within the Forest Ranch Concept Plan area	Ensure potential adverse impact to rare plants are reduced to be less than significant	Applicant
3.6-10a	Focused special-status avian species surveys shall be conducted prior to approval of tentative maps or ground disturbing activities within the FDCP area. If any or all of the special-status avian species	Applicant	Planning Department	Prior to approval of tentative subdivision maps within the FDCP area	Once prior to approval of each tentative subdivision map or ground disturbing	Ensure potential adverse impact to special status avian species are reduced to be less than significant	Applicant

Mitigation No.	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
	listed in Impact Discussion/Conclusion 3.6-10 are found actively nesting within an area proposed for development within the Plan area, no construction activities shall occur within 500 feet of the nest location. Construction activities may resume within this buffer zone after the young have fledged from the nest and the nest is abandoned for that breeding season.				activity within the FDCP area		
3.6-10b	Mitigation Measure 3.6-10a shall be implemented within the boundaries of the Forest Ranch Concept Plan area.	Applicant	Planning Department	Prior to approval of tentative subdivision maps within the Forest Ranch concept Plan area	Once prior to approval of each tentative subdivision map or ground disturbing activity within the Forest Ranch Concept Plan area	Ensure potential adverse impact to special status avian species are reduced to be less than significant	Applicant
3.6-11	Focused surveys for Pacific fisher and pine martin shall be conducted in accordance with the Forest Ranch Specific Plan Development Standard 2.C.1-2 prior to approval of tentative maps or ground	Applicant	Planning Department	Prior to approval of tentative subdivision maps within the Forest Ranch	Once prior to approval of each tentative subdivision map or ground disturbing	Ensure potential adverse impact to the Pacific fisher and pine martin are reduced to be less than	Applicant

Mitigation No.	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
	disturbing activities within the Forest Ranch Concept Plan area. FDCP goals, policies and implementation measures designed to mitigate adverse impact to rare special-status mammals that may be discovered shall be followed to reduce potential impacts to a less than significant level.			concept Plan area	activity within the Forest Ranch Concept Plan area	significant	
3.6-12a	Focused surveys to determine the presence/absence of roosting bats shall be conducted prior to approval of tentative maps or ground disturbing activities within the FDCP area. Maternity roosts are generally occupied by mothers and young between May and August (Zeiner et al., 1990b). Mitigation Measure 3.6-12b is not required if there are no bat species utilizing the project site as roosting habitat.	Applicant	Planning Department	Prior to approval of tentative subdivision maps within the FDCP area	Once prior to approval of each tentative subdivision map or ground disturbing activity within the FDCP area	Ensure potential adverse impact to roosting bats are reduced to be less than significant	Applicant
3.6-12b	If bats are determined to roost onsite, consultation with CDFG and/or USFWS shall be requested to determine measures to avoid disturbance during construction. If an active maternity roost is identified, at a minimum, no	Applicant	Planning Department	Prior to start of construction activities within the FDCP area	Once prior to start of construction activities within the FDCP area	Ensure potential adverse impact to roosting bats are reduced to be less than significant	Applicant

Mitigation No.	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 activities shall occur within 500 feet until the young are able to fly from the roost. If active day or night roosts are found onsite, measures shall be implemented to safely flush bats from the roosts prior to the onset of construction activities. Such measures may include removal of roosting site during the time of day the roost is unoccupied or the installation of one-way doors, allowing the bats to leave the roost but preventing them from reentering.						
3.6-13a	Focused special-status amphibian and reptile species surveys shall be conducted prior to approval of tentative maps or ground disturbing activities within the FDCP area. If any or all of the special-status amphibian or reptile species listed in Impact Discussion/Conclusion 3.6-13 are found within an area proposed for development within the Plan area, FDCP goals, policies and implementation measures designed to mitigate adverse impact to	Applicant	Planning Department	Prior to approval of tentative subdivision maps within the FDCP area	Once prior to approval of each tentative subdivision map or ground disturbing activity within the FDCP area	Ensure potential adverse impact to special status amphibian and reptile species are reduced to be less than significant	Applicant

Mitigation No.	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
	special-status amphibian and reptile species that may be discovered shall be followed to reduce potential impacts to less than significant.						
3.6-15a	A focused survey for elderberry shrubs shall be conducted by a qualified biologist to determine the presence/absence of the valley elderberry longhorn beetle in accordance with the Forest Ranch Specific Plan Development Standard 2.C.1-2 prior to approval of tentative maps or ground disturbing activities within the Forest Ranch Concept Plan area. If no elderberry shrubs are identified onsite, Mitigation Measure 3.6-15b is not required.	Applicant	Planning Department	Prior to approval of tentative subdivision maps within the Forest Ranch concept Plan area	Once prior to approval of each tentative subdivision map or ground disturbing activity within the Forest Ranch Concept Plan area	Ensure potential adverse impact to the valley elderberry longhorn beetle is reduced to be less than significant	Applicant
3.6-15b	If elderberry shrubs are identified within the development area, consultation with USFWS shall be required. Ideally, the project shall avoid removal or indirect impacts to elderberry shrubs. The USFWS typically requires a 25-foot setback from the outer drip line edge of each shrub. If the shrubs cannot be avoided, a mitigation plan shall be	Applicant	Planning Department	Prior to start of construction activities within the Forest Ranch Concept Plan area	Once prior to start of construction activities within the Forest Ranch Concept Plan area	Ensure potential adverse impact to the valley longhorn beetle is reduced to be less than significant	Applicant

Mitigation No.	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
	 implemented which must include one of more of the following: 1. Obtaining credits at an approved mitigation bank; or 2. Implementation of an onsite mitigation and monitoring plan that includes transplantation of the shrub(s) and planting of elderberry seedlings. 						
3.6-16a	Potentially impacted jurisdictional waters of the U.S. shall be delineated according to Corps methodology. The map shall be submitted to the Corps for verification and the appropriate Section 404 permit shall be acquired prior to submittal of improvement plans. Section 401 Water Quality certification or waiver must also be acquired.	Applicant	Planning Department	Prior to start of construction activities within the Forest Ranch Concept Plan area	Once prior to start of construction activities within the Forest Ranch Concept Plan area	Avoid impacts to jurisdictional waters	Applicant
3.6-16b	Any jurisdictional waters that would be lost or disturbed shall be replaced or rehabilitated on a "no net loss" basis in accordance with the Corps' mitigation guidelines. Habitat restoration, rehabilitation, and/or replacement shall be at a	Applicant	Planning Department	Prior to start of construction activities within the Forest Ranch Concept Plan area	Once prior to start of construction activities within the Forest Ranch Concept Plan area	No "net loss" of jurisdictional waters	Applicant

Mitigation No.	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
	location and by methods agreeable to the Corps.						
3.6-16c	Prior to issuance of a grading permit, or approval of the Improvement/Grading Plans, a Streambed Alteration Agreement shall be obtained from CDFG, pursuant to Section 1600 of the California Fish and Game Code, for each stream crossing and any other activities affecting the bed, bank, or associated riparian vegetation of the stream. If required, the project applicant shall coordinate with CDFG in developing appropriate mitigation, and shall abide by the conditions of any executed permits.	Applicant	Building Department Planning Department	Prior issuance of a grading permit or Streambed Alteration Agreement within the Forest Ranch Concept Plan area	Once prior to start of construction activities within the Forest Ranch Concept Plan area	Protection of riparian areas and streams	Applicant
3.6-17a	As provided in Mitigation Measure 3.6-16c, prior to issuance of a grading permit, or approval of the Improvement/Grading plans, a Streambed Alteration Agreement shall be obtained from CDFG, pursuant to Section 1600 of the California Fish and Game Code, for each stream crossing and any	Applicant	Building Department Planning Department	Prior to issuance of a grading permit or Streambed Alteration Agreement within the Forest Ranch Concept Plan	Once prior to start of construction activities within the Forest Ranch Concept Plan area	Protection of riparian areas and streams	Applicant

Mitigation No.	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 activities affecting the bed, bank, or associated riparian vegetation of a stream.			area			
3.6-17b	A Specific Plan prepared for the Forest Ranch Concept Plan area shall specify sensitive habitat buffers that shall be measured as follows: 100 feet from the centerline of perennial streams, 50 feet from centerline of intermittent streams, and 50 feet from the edge of sensitive habitats to be protected. Some exceptions may be made if reasonable use of the property would otherwise be denied, the location is necessary to avoid or mitigate hazards to the public, the location is necessary for repair or construction of infrastructure where there is no feasible alternative. If encroachment into a riparian area is proposed, the following criteria shall be implemented in descending order of desirability: • Avoid the disturbance of riparian vegetation;	Applicant	Planning Department	Prior to approval of the Specific Plan	Once prior to adoption of the Specific Plan	Protection of riparian areas and streams	Applicant

Mitigation No.	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
3.7 Cultura 3.7-1a	 Replace riparian vegetation (on-site, in-kind); Restore another section of creek (in-kind); and/or Pay a mitigation fee for restoration elsewhere in the Plan area. Resources An archaeological field survey shall be conducted by professional archaeologists prior to approval of tentative maps or ground disturbing activities within the Forest Ranch Concept Plan area in accordance with the Forest Ranch Specific Plan Development Standards 2E.1-1 through 2E.1-3 If no archaeological resources are identified onsite, Mitigation Measures 3.7-1b through 3.7-1d 	Applicant	Building Department Planning Department	Prior to the approval of a tentative map or ground disturbing activities	Once, during review of building permit application	Avoid impacts to archaeological resources	Applicant
3.7-1b	shall not be required. Prior to modification or destruction of an identified site, field-related mitigation activities shall be implemented in consultation with appropriate federal, state and local agencies and Native American	Applicant	Planning Department	Prior to the modification or destruction of an identified site	On-going during construction activities	Avoid impacts to archaeological resources or establish a data recovery program	Applicant

Mitigation No.	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
	groups. Mitigation measures can include project modification designed to protect and/or avoid a site. In lieu of project modification, a data recovery program can involve archival research, photo documentation and mapping, removal of a historic feature, collection of artifacts, recordation of features, test excavations, larger scale excavations, or some combination of these tasks, consistent with Section 15126.4 of the CEQA Guidelines. Interpretive development of heritage remains enhances resource protection, public education and enjoyment and may also be used as mitigation.						
3.7-1c	Archaeological investigations shall be conducted in consultation with the Foresthill Divide Historical Society and the Todd's Valley Miwok-Maidu Cultural Foundation.	Applicant	Planning Department	Prior to ground disturbing activities	On-going, prior to ground disturbing activities	Avoid impacts to archaeological resources	Applicant
3.7-1d	To affirm the role of local Maidu and Miwok people as partners in the interpretation of their own	Applicant	Planning Department	Prior to ground disturbing activities	On-going, prior to ground disturbing	Avoid impacts to archaeological resources	Applicant

Mitigation No.	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
	archaeological past, a representative of local Native American interests shall be formally retained as a Native American consultant for future archaeological field surveys.				activities		
3.7-2a	As part of an effort to sustain traditional cultural practices, portions of the Forest Ranch Concept Plan site that could be set aside for the harvest and management of traditional plants by Maidu and Miwok traditionalists and agreement for access shall be investigated. If indicated by the studies, future tentative maps shall include dedicated easements or other mechanism to allow access. Additional work shall involve an ethnobotanical survey, combining the skills of a project ethnobotanist and a Native American plant specialist, to locate and document traditional plant populations and to identify attributes sought and cultured by Maidu and Miwok collectors.	Applicant	Planning Department	Prior to approval of a tentative map	On-going, prior to approval of future tentative maps	Preservation of traditional cultural practices	Applicant

Mitigation No.	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
3.7-2b	To insure the integrity of traditional plant resources and enhance their Native management, issues such as the application of herbicides, controlled burning, and dust abatement	Applicant	Planning Department	Prior to ground disturbing activities	Once prior to approval of a tentative maps	Integrity of plant resources is preserved	Applicant
3.8 Air Qual	ity						
3.8-1	Compliance with Forest Ranch Specific Plan Area Development Standards 2.F.1-1 through 2.F.1-4 will reduce air quality impacts, but not to a less than significant level. Impacts will remain significant, unavoidable and cumulative.	Applicant	Placer County Air Pollution Control District	Prior to approval of improvement plans	Daily during construction, one weekend day each week, submit weekly reports to the Air Pollution Control District	Reduction of PM ₁₀ and ozone emissions	Applicant
3.8-2	Construction activities associated with development under the proposed FDCP will cause emissions of dust and contaminants from construction equipment exhaust that may contribute substantially to existing air quality violations or expose sensitive receptors to substantial pollutant concentrations.	Applicant	Placer County Air Pollution Control District	Prior to approval of improvement plans	Daily during construction, one weekend day each week, submit weekly reports to the Air Pollution Control District	Reduction of dust and contaminants due to construction	Applicant
3.8-3a	The specific design and location of all wastewater collection and treatment facilities, effluent storage ponds and land disposal	Applicant	Building Department/ Air Pollution Control District	Prior to approval of improvement plans	Daily during construction	Odors will not be detected beyond the plan boundary	Applicant

Mitigation No.	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
	areas shall be reviewed and approved by the Central Valley Regional Water Quality Control Board prior to construction. Wastewater collection and treatment facilities shall be constructed with odor containment, ventilation and scrubbing systems so that odors cannot be detected beyond the plan boundary. Emergency storage ponds shall be equipped with aerators and washdown facilities to control odor emissions. The Environmental Health Division may require certain wastewater collection and treatment equipment and facilities to be covered, if determined necessary to assure optimum odor control.						
3.8-3b	The wastewater treatment facility and the equestrian center shall be subject to PCAPCD Nuisance Rule (Rule 205): A person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance or annoyance	Applicant	Building Department/ Air Pollution Control District	Occupancy of facilities	On-going	No release of detrimental air contaminants	Applicant

Mitigation No.	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 any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which have a natural tendency to cause injury or damage to business or property.						
3.8-5	Compliance with Forest Ranch Specific Plan Area Development Standard 2.F.1-4.						
	ortation and Circulation			1			
3.9-1a	Foresthill Road between the Foresthill Bridge and Spring Garden Road (10.8 miles long): Increase the length of passing lanes in the westbound direction from 1.3 miles to 1.5 miles (including tapers). Implementation of this measure will improve conditions to LOS D in both peak hours.	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	• · · · · · · · · · · · · · · · · · · ·	Achieve LOS B in the AM peak hour and LOS C during the PM peak hour Increase the length of passing lanes from 1.3 miles to 6.5 miles	Applicants
3.9-1b	Foresthill Road between Spring Garden Road and Todd Valley Road (West) (1.7 miles long): Construct 0.2 miles of passing lanes (including tapers) in the westbound direction. This	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS C in the AM peak hour and LOS B during the PM peak hour	Applicants

Mitigation No.	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
	improvement results in LOS D in the AM peak hour and LOS C in the PM peak hour.		•			Increase the length of passing lanes by 0.8 miles	
3.9-2a	Foresthill Road between the Foresthill Bridge and Spring Garden Road (10.8 miles long): Increase the length of passing lanes in the westbound direction from existing 1.3 miles to 1.8 miles (including tapers). This improvement would result in LOS D during both peak hours. Forest Ranch would be responsible for 23 percent of the cost of 0.2 miles of passing lanes and 100 percent of the cost of the additional 0.3 miles of passing lanes beyond what would be needed in the "without" scenario.	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS C in the AM peak hour and LOS C during the PM peak hour Increase the length of eastbound passing lanes from 4.6 miles to 7.6 miles and westbound from 1.3 miles to 7.6 miles	Applicants
3.9-2b	Foresthill Road between Spring Garden Road and Todd Valley Road (West) (1.7 miles long): Construct 0.2 miles of passing lanes (including tapers) in the westbound direction. This improvement results in LOS D in the AM peak hour and LOS C in the PM peak hour. Forest Ranch would be responsible for 24	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS C in the AM peak hour and LOS B during the PM peak hour Add 0.8 miles of passing lanes	Applicants

Mitigation No.	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
	percent of the cost of this improvement.						
3.9-3	Modify the westbound approach to provide a dedicated right-turn lane and modify the northbound approach to include dual left-turn lanes. This improvement will result in LOS D in both peak hours.	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS B in the AM peak hour and LOS B during the PM peak hour	Applicants
3.9-4a	Auburn Ravine Road/I-80 Eastbound Ramps intersection – Modify the westbound approach to convert the shared through/right- turn lane to separate through and right-turn lanes. This improvement will provide LOS B in the AM peak hour and LOS D in the PM peak hour. Forest Ranch Responsibility: 100 percent.	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS C in the AM peak hour and LOS C during the PM peak hour	Applicants
3.9-4b	Auburn Ravine Road/Foresthill Road/Lincoln Way intersection – Modify the westbound approach to provide a dedicated right-turn lane; modify the northbound approach to include dual left-turn lanes; and convert the eastbound right-turn lane into a shared through/right- turn lane. The eastbound measure is new to this scenario; the	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Widen Foresthill Road eastbound direction to 2 lanes	Applicants

Mitigation No.	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
	westbound and northbound improvements were also called for in the "Without Forest Ranch" scenario. Forest Ranch Responsibility: 100 percent of the eastbound approach improvements, and 27 percent of the westbound and northbound improvements. This modification will result in LOS D in both peak hours.						
3.9-5	Foresthill Road between the Foresthill Bridge and Owl Hill Court: This entire section (consisting of both directions of three study roadway segments) would need to be widened to two lanes in each direction to meet the LOS D policy. This mitigation measure would result in LOS B in both peak hours in both directions of the three study segments. The widening of Foresthill Road immediately east of the Foresthill Bridge would also require that the bridge be widened to two lanes in each direction. Between Lincoln Way and the Foresthill Bridge, the eastbound direction of Foresthill	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS D in the AM peak hour and LOS D during the PM peak hour	Applicants

Mitigation No.	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
	Road would also need to be widened to two lanes (for a total of two lanes in each direction). However, the widening of the bridge is not feasible and, therefore, the traffic generated in this scenario will result in a significant and unavoidable impact.						
3.9-6a	Foresthill Road between the Foresthill Bridge and Yankee Jim's Road: This portion of Foresthill Road would need to be widened to two lanes in each direction to meet the LOS D policy. The mitigated level of service results would be unchanged from the results presented above. The Forest Ranch "fair share" portion of the cost of improvements is described below: • Foresthill Road between the Foresthill Bridge and Spring Garden Road: Forest Ranch should contribute 8 percent of the cost of the eastbound improvement and 5 percent of	SU	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS B in the AM peak hour and LOS D during the PM peak hour	Applicant

Mitigation No.	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 westbound improvement.	1 8	•				
	• Foresthill Road between Spring Garden Road and Todd Valley Road: Forest Ranch would be responsible for 8 percent of the cost of improvements in the eastbound direction and 6 percent of the cost of the westbound improvements.						
	• Foresthill Road between Todd Valley Road and Owl Hill Court: With respect to improvements in the eastbound direction, Forest Ranch would be responsible for a 14 percent "fair share" contribution. In the westbound direction, Forest Ranch would also be responsible for 14 percent.						
	Foresthill Road between Owl Hill Court and Yankee Jim's Road: Forest Ranch would be accountable for 100 percent of the cost of the improvements because no mitigation						

Mitigation No.	Mitigation Measure measures were needed in the	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
3.9-6b	"without" scenario. Foresthill Road between the Auburn Ravine Road/Foresthill Road/Lincoln Way intersection and the Foresthill Bridge – widen the eastbound direction to two lanes. Forest Ranch Responsibility: 8 percent	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS D in the AM peak hour and LOS D during the PM peak hour	Applicant
3.9-7a	Auburn Ravine Road/I-80 Eastbound Ramps intersection – Modify the westbound approach to convert the shared through/right- turn lane to separate through and right-turn lanes and add an additional northbound-to- eastbound right-turn lane on the off-ramp. This improvement will provide LOS B operations in the AM peak hour and LOS D in the PM peak hour.	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS B in the AM peak hour and LOS D during the PM peak hour	Applicant
3.9-7b	Auburn Ravine Road/Foresthill Road/Lincoln Way intersection – Due to topographic and geometric constraints, modifications to the intersection will not be sufficient to bring the level of service into an acceptable range (i.e., LOS A through LOS D). It would operate	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS D	Applicant

Mitigation No.	Mitigation Measure	Individual Responsible for Monitoring	Individual or Organization Responsible for	Timing of Initial Action	Frequency and Duration of Monitoring	Performance Criteria	Proposed Funding
		and/or Reporting	Verifying Compliance				
	at LOS F, even with the build-out mitigation measures. As such, the impact to this intersection is considered significant and unavoidable. Although not considered feasible, the following mitigation measures would be required at this intersection to bring the level of service to LOS D: • Convert the northbound shared through/right-turn lane to separate through and right-turn lanes; • Provide an additional northbound left-turn lane; • Provide two additional eastbound through lanes; • Provide an additional southbound left-turn lane; and • Convert the westbound shared through/right-turn lane to separate through and right-turn lanes.						

Mitigation No.	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
3.9-8a	Auburn Ravine Road/I-80 Eastbound Ramps intersection – Modify the westbound approach to convert the shared through/right- turn lane to separate through and right-turn lanes and add an additional northbound-to- eastbound right-turn lane on the off-ramp. This improvement will provide LOS B in the AM peak hour and LOS D in the PM peak hour. Forest Ranch Responsibility: 5 percent	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS B in the AM peak hour and LOS D during the PM peak hour	Applicants
3.9-8b	Auburn Ravine Road/Foresthill Road/Lincoln Way intersection – Due to topographic and geometric constraints, modifications to the intersection will not be sufficient to bring the level of service into an acceptable range (i.e., LOS A through LOS D). It would operate at LOS F, even with the Year 2030 mitigation measures. As such, the impact to this intersection is considered significant and unavoidable. Forest Ranch represents 6 percent of the peak hour traffic growth. Although not considered feasible, the following	Applicant	Department of Public Works Planning Department	Prior to buildout of the plan in the year 2030	Annually, after improvements are complete	Achieve LOS D	Applicant

Mitigation No.	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
	mitigation measures would be required at this intersection to bring the level of service to LOS D:						
	Convert the northbound shared through/right-turn lane to separate through and right-turn lanes;						
	Provide an additional northbound left-turn lane;						
	Provide two additional eastbound through lanes;						
	Provide an additional southbound left-turn lane; and						
	Convert the westbound shared through/right-turn lane to separate through and right turn lanes.						
3.10 Noise							
3.10-1a	Use of Setbacks. Noise exposure may be reduced by increasing the distance between the noise source and receiving use. Setback areas can take the form of open space,	Applicant	Building Department Planning Department	Prior to tentative map approval	Once during building inspection	Decrease noise levels by 4 – 6 dB	Applicant

Mitigation No.	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
	frontage roads, recreational areas, storage yards, etc. The available noise attenuation from this technique is limited by the characteristics of the noise source, but is generally about 4 to 6 dB per doubling of distance from the source.						
3.10-1b	Use of Barriers. Shielding by barriers can be obtained by placing walls, berms or other structures, such as buildings, between the noise source and the receiver. The effectiveness of a barrier depends upon blocking line-of-sight between the source and receiver, and is improved with increasing the distance the sound must travel to pass over the barrier as compared to a straight line from source to receiver. The difference between the distance over a barrier and a straight line between source and receiver is called the "path length difference," and is the basis for calculating barrier noise reduction.	Applicant	Building Department Planning Department	Prior to tentative map approval	Once during building inspection	Reduce noise levels	Applicant

Mitigation No.	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
	Barrier effectiveness depends upon the relative heights of the source, barrier and receiver. In general, barriers are most effective when placed close to either the receiver or the source. An intermediate barrier location yields a smaller path-length-difference for a given increase in barrier height than does a location closer to either source or receiver.						
	For maximum effectiveness, barriers must be continuous and relatively airtight along their length and height. To ensure that sound transmission through the barrier is insignificant, barrier mass should be about 4 lbs./square foot, although a lesser mass may be acceptable if the barrier material provides sufficient transmission loss. Satisfaction of the above criteria requires substantial and well-fitted barrier materials, placed to intercept line of sight to all significant noise sources. Earth, in the form of						

Mitigation No.	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
	area, is also an effective barrier material.						
	Transparent noise barriers may be employed, and have the advantage of being aesthetically pleasing in some environments. Transparent barrier materials such as laminated glass and polycarbonate provide adequate transmission loss for most highway noise control applications. Transparent barrier materials may be flammable, and may be easily abraded. Some materials may lose transparency upon extended exposure to sunlight. Maintaining aesthetic values requires that transparent barriers be washed on a regular basis. These properties of transparent barrier materials require that the feasibility of their use be considered on a case-by-case basis.						
	The attenuation provided by a barrier depends upon the frequency content of the source. Generally, higher frequencies are						

Mitigation Measure Individual Individual or Organization Organization Action Duration of Monitoring and/or Reporting Compliance	formance Proposed Criteria Funding
attenuated (reduced) more readily than lower frequencies. This results because a given barrier height is relatively large compared to the shorter wavelengths of high frequency sounds, while relatively small compared to the longer wavelengths of the low frequency sounds. The effective center frequency for traffic noise is usually considered to be 550 Hz. Railroad engines, cars and horns emit noise with differing frequency content, so the effectiveness of a barrier will vary for each of these sources. Frequency analyses are necessary to properly calculate barrier effectiveness for noise from sources other than highway traffic. There are practical limits to the noise combinations. The use of an earth berm in lieu of a solid wall may provide up to 3 dB additional attenuation over that attained by a solid wall alone, due to the absorption provided by the earth.	

Mitigation No.	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
	slightly better acoustical performance than solid walls, and are often preferred for aesthetic reasons.						
3.10-1c	Site Design. Buildings can be placed insensitive to noise. As an example, carports or garages can be used to form or complement a barrier shielding adjacent dwellings or an outdoor activity area. Similarly, one residential unit can be placed to shield another so that noise reduction measures are needed for only the building closest to the noise source. Placement of outdoor activity areas within the shielded portion of a building complex, such as a central courtyard, can be an effective method of providing a quiet retreat in an otherwise noisy environment. Patios or balconies should be placed on the side of a building opposite the noise source, and "wing walls" can be added to buildings or patios to help shield sensitive uses.	Applicant	Building Department Planning Department	Prior to tentative map approval	Once during building inspection	Decrease noise levels	Applicant
3.10-1d	Building Design. When structures have been located to provide	Applicant	Building Department	Prior to tentative map	Once during building	Decrease noise levels	Applicant

Mitigation No.	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
	maximum noise reduction by barriers or site design, noise reduction measures may still be required to achieve an acceptable interior noise environment. The cost of such measures may be reduced by placement of interior dwelling unit features. For example, bedrooms, living rooms, family rooms and other noise-sensitive portions of a dwelling can be located on the side of the unit farthest from the noise source. Bathrooms, closets, stairwells and food preparation areas are relatively insensitive to exterior noise sources, and can be placed on the noisy side of a unit. When such techniques are employed, noise reduction requirements for the building facade can be significantly reduced, although the architect must take care to isolate the noise impacted areas by the use of partitions or doors.		Planning Department	approval	inspection		
	In some cases, external building facades can influence reflected noise levels affecting adjacent						

Mitigation No.	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
	buildings. This is primarily a problem where high-rise buildings are proposed, and the effect is most evident in urban areas, where an "urban canyon" may be created. Bell-shaped or irregular building facades and attention to the orientation of the building can reduce this effect.						
3.10-1e	Noise Reduction by Building Facades. When interior noise levels are of concern in a noisy environment, noise reduction may be obtained through acoustical design of building facades. Standard residential construction practices provide 10-15 dB noise reduction for building facades with open windows, and approximately 20 dB to 25 dB noise reduction when windows are closed. Thus a 20 dB exterior-to-interior noise reduction can be obtained by the requirement that building design include adequate ventilation systems, allowing windows on a noise-impacted facade to remain closed under any weather condition.	Applicant	Building Department Planning Department	Prior to tentative map approval	Once during building inspection	Decrease noise	Applicant

Mitigation No.	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
	Where greater noise reduction is required, acoustical treatment of the building facade is necessary. Reduction of relative window area is the most effective control technique, followed by providing acoustical glazing (thicker glass or increased air space between panes) in low air infiltration rate frames, use of fixed (non-movable) acoustical glazing or the elimination of windows. Noise transmitted through walls can be reduced by increasing wall mass (using stucco or brick in lieu of wood siding), isolating wall members by the use of double- or staggered- stud walls, or mounting interior walls on resilient channels. Noise control for exterior doorways is provided by reducing door area, using solid-core doors, and by acoustically sealing door perimeters with suitable gaskets. Roof treatments may include the use of plywood sheathing under roofing materials.						

Mitigation No.	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
	Whichever noise control techniques are employed, it is essential that attention be given to installation of weather stripping and caulking of joints. Openings for attic or sub-floor ventilation may also require acoustical treatment; tight-fitting fireplace dampers and glass doors may be needed in aircraft noise-impacted areas. Design of acoustical treatment for be octave band analysis is a definitive method of calculating the Aweighted noise reduction of a facade.						
3.10-1f	Use of Vegetation. Trees and other vegetation are often thought to provide significant noise attenuation. However, approximately 100 feet of dense foliage (so that no visual path extends through the foliage) is required to achieve a 5 dB attenuation of traffic noise. Thus the use of vegetation as a noise barrier should not be considered a practical method of noise control	Applicant	Building Department Planning Department	Prior to tentative map approval	Once during building inspection	Decrease noise	Applicant

Mitigation No.	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
	unless large tracts of dense foliage are part of the existing landscape.						
	Vegetation can be used to acoustically "soften" intervening ground between a noise source and receiver, increasing ground absorption of sound and thus increasing the attenuation of sound with distance. Planting of trees and shrubs is also of aesthetic and psychological value, and may reduce adverse public reaction to a noise source by removing the source from view, even though noise levels will be largely unaffected. It should be noted, however, that trees planted on the top of a noise control berm can actually slightly degrade the acoustical performance of the barrier. This effect can occur when high frequency sounds are diffracted (bent) by foliage and directed downward over a barrier.						
	In summary, the effects of vegetation upon noise transmission are minor, and are primarily						

Mitigation No.	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
	limited to increased absorption of high frequency sounds and to reducing adverse public reaction to the noise by providing aesthetic benefits.						
3.10-1g	The extent by which various land uses will be affected by increases in traffic noise levels associated with the development of the region will vary depending on the proximity of those uses to the roadways in question and the individual sensitivities of those uses to noise.	Applicant	Planning Department	Prior to first certificate of occupancy	Once, subsequent to occupancy	Decrease traffic noise levels by 3 to 5%	Applicant
	Because the increase in traffic noise levels along Foresthill Road would affect existing noise sensitive land uses (primarily residences) which are already located adjacent to Foresthill Road, the only way to practically reduce noise levels at those locations would be to construct noise barriers between the roadway and the residences, or to repave the roadways in question with noise-reducing asphalt. The construction						

Mitigation No.	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
	traffic noise levels at the nearest noise sensitive receptors to the roadways. However, barriers may not be feasible, as access to the residences is from the roadway. The use of alternative roadway pavements such as rubberized asphalt or open gap asphalt have been shown to reduce overall traffic noise levels by approximately 3 dB to 5 dB. Payment, of fair share fees towards these road improvements shall be required prior to issuance of any building permit.						
3.10-1h	A detailed analysis of traffic noise levels shall be required for tentative subdivision maps for proposed residences adjacent to Foresthill Road and Yankee Jim's Road. The noise analysis will be required to incorporate mitigation measures which would reduce noise impacts at proposed residences to be in conformance with standards and criteria set forth in the Placer County General Plan.	Applicant	Planning Department	Prior to submittal of tentative map	Once to ensure conformance with Placer County General Plan	Conformance with General Plan standards and criteria	Applicant
3.10-2a	All maintenance equipment shall be kept in good working order and	Applicant	Planning Department	Upon the construction of	On-going during construction and	Future residents adjacent to golf	Applicant

Mitigation No.	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
	fitted with mufflers. In addition, all future residents which purchase property adjacent to the proposed golf course shall sign a disclosure which fully identifies that noise levels associated with golf course maintenance will occur. The golf course operator shall schedule maintenance of those areas abutting residences in a sensitive manner.			the golf course	operation of the golf course	course acknowledge the noise issue	
3.10-2b	To reduce adverse public reaction to nighttime generator noise, no generators shall be allowed to operate between the hours of 9:00 p.m. and 7:00 a.m. In addition, if the RV park is located within 500 feet of any existing or proposed residential uses, a detailed analysis of noise impacts shall be conducted when a detailed site plan for the RV park is available, and additional mitigation measures shall be implemented in accordance with the recommendations of the acoustical analysis	Applicant	Planning Department	Prior to first certificate of occupancy for the R.V. park and operation of the wastewater treatment plant	On-going during operation of the RV park	No generator operation between 9 p.m. and 7 a.m.	Applicant
3.10-2c	Wastewater treatment plant pumping equipment which may	Applicant	Planning Department	Upon operation of the	On-going during operation of the	No exceedance of an hourly noise	Applicant

Mitigation No.	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
	operate during the nighttime hours shall not exceed an hourly average noise level of 40 dBA Leq at the project property line or at adjacent residential property lines. Routine testing of emergency generator(s) shall be conducted during daytime periods. Emergency generators shall not exceed an hourly average noise level of 50 dBA Leq at the project property line or at adjacent residential property lines.			wastewater treatment plant	wastewater treatment plant	level of 40 dBA	
3.10-4	The hours of operation of noise-producing construction equipment shall be restricted to 7:00 a.m. to 7:00 p.m. Mondays through Fridays, and 9:00 a.m. to 6:00 p.m. on Saturdays. Noise from construction activities is prohibited on Sunday and Holidays. Effective mufflers shall be fitted to gas- and diesel-powered equipment to reduce noise levels as much as possible.	Applicant	Planning Department	Prior to ground disturbing activities	On-going during construction activities	Noise producing construction equipment restricted to 7:00 a.m. to 7:00 p.m. Mondays through Fridays, and 9:00 a.m. to 6:00 p.m. on Saturdays	Applicant