Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
GEOLOGY					
3.1-A: Improvements built on the site would be subject to seismic ground shaking, which could cause the failure of those improvements and risk to human health.	3.1-A.1: A final geotechnical report shall be prepared that incorporates the recommendations set forth in the 2005 RGH Report as modified by mitigation measures recommended in this EIR. The project applicant shall design project structures and foundations to withstand expected seismic forces in accordance with the California Building Code as adopted by the County of Mendocino. Since the project site is located within Seismic Zone 4 it is considered potentially seismically active. The County shall not issue building permits until seismic design criteria are reviewed and approved. During construction adherence to design criteria shall be monitored, and a final report issued documenting conformance prior to occupancy.	Project Engineer Project Geotechnical Consultant	Issuance of Building, Grading or Other Permits	Mendocino County Dept. of Planning & Building Services (Planning Dept.)	Planning Dept. Approval of Final Map
3.1-B: Seismically induced ground failure, including liquefaction and densification, would cause improvements to fail and risk to human health.	3.1-B.1: Potentially unstable surface soils shall be remediated by strengthening the soils during site grading. The strengthening will be achieved by excavating the weak soils and replacing them as properly compacted engineered fill. All site grading and foundation construction shall follow the recommendations of the Geotechnical Engineer of record for the project. The process will include excavation of surface soils and placement of all fill soils at a minimum of 90 percent compaction relative to the maximum dry density near the optimum moisture content as determined in accordance with ASTM D 1557.	Project Engineer	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept. Prior to building construction

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	Site soils will be tested during construction by the Geotechnical Engineer-of-Record or by a Special Inspector to confirm that minimum standards are met. A final report documenting results of fill testing will be submitted to the County of Mendocino Department of Planning and Building Services and will be subject to the review of that department.				
3.1-C: Potentially unstable slopes or underlying soils could cause the failure of improvements and risk to human health.	3.1-C.1: Cut and fill slopes should be designed and constructed as slope gradients of 2h:1v or flatter, unless otherwise approved by the Geotechnical Engineer-of-record in specified areas. The interior slopes of the retention basin should be inclined no steeper than 3h:1v. If steeper slopes are required, retaining walls shall be used. Fill slopes steeper than 2h: 1v will require the use of a Geogrid reinforcing material to increase stability. Fill slopes shall be constructed by over-filling and cutting the slope to final grade. Graded slopes shall be planted with fast-growing, deep-rooted groundcover to reduce sloughing and erosion.  Fills placed on terrain sloping at 5h:1v or steeper shall be continually keyed and benched into firm, undisturbed bedrock or firm soil. The benches shall allow space for the placement of select fill of even thickness under settlement sensitive structural elements supported directly on the fill.	Project Engineer Project Geotechnical Consultant	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept. Prior to building construction

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	3.1-C.2 Retaining walls shall be designed to retain planned cut slopes for the hillside lots that exceed 2h:1v in slope steepness. These cuts are planned to be as great as 13 feet in height. The Geotechnical Engineer-of-record shall provide revised recommendations for retaining walls if needed to meet current building code requirements. All retaining walls shall be designed by a State of California Registered Civil Engineer in accordance with requirements of the current edition of the California Building Code including seismic design considerations. Retaining wall design shall be reviewed by the County of Mendocino Department of Planning and Building Services to ensure conformance with state and local building code requirements.	Project Engineer Project Geotechnical Consultant	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  Prior to building construction
	3.1-C.3: Plan Review will be performed by the County of Mendocino Department of Planning and Building Services to ensure conformance with grading and drainage requirements. The Geotechnical Engineer-of-Record shall prepare a geotechnical review letter documenting that plans meet with the intent of geotechnical recommendations.	Project Geotechnical Consultant	During Construction	Planning Dept.	Planning Dept.  Prior to building construction
	<b>3.1-C.4:</b> The Geotechnical Engineer-of-Record and/or Special Inspector shall perform construction observation and testing to ensure conformance with design requirements and geotechnical	Project Geotechnical Consultant	During Construction	Planning Dept.	Planning Dept.  Completion of building construction

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	recommendations. Testing and monitoring shall include:				
	Verification of compaction requirements for engineered fill and subgrade soils. Unless otherwise stated all engineered fill shall be compacted to at least 90 percent of the maximum dry density at moisture contents above the optimum in accordance with ASTM D 1557 test method. Subgrade beneath foundations and pavement sections shall be additionally compacted to at least 95 percent of the maximum dry density at moisture contents near the optimum.				
	<ul> <li>Verification of the installation of subsurface drainage in accordance with project plans and specifications.</li> </ul>				
	Verification that footings are excavated into stable material and footing excavations are of sufficient depth and breadth to adequately support structures with minimal or no settlement.				
	Materials Testing and Special Inspection of concrete, steel, asphalt, wood members and other structural elements to establish conformance with the design standards.				
	Verification of correct installation of erosion control measures and adherence to the requirements of the approved Stormwater Pollution Plan (SWPPP) for the project.				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
3.1-D: Expansive soils on the site could cause the failure of improvements and risk to human health.	3.1-D.1: Where spread footings are chosen for foundation support, weak, porous, compressible and locally expansive surface soil shall be excavated to within 6 inches of their entire depth. Excavation of weak, compressible, and locally expansive soils shall extend a minimum of 12 inches below exterior concrete slabs and/or asphalt concrete pavement subgrade. These soils shall be replaced with select fill material. Additionally, excavation of weak, porous, compressible, expansive, creep-prone surface materials shall extend at least 5 feet beyond the outside edge of exterior footings of the proposed buildings and 3 feet beyond the edge of exterior slabs and or pavements. These soils shall also be replaced with select fill material as described below. Select fill material shall be free of organic matter, have a low expansion potential, and conform in general to the following requirements: 100% passing 6" sieve; 90-100 % passing the 4" sieve; 10-60% passing the No. 200 sieve (all percentages by dry weight); LL - 40 max; PI - 15 max; R-value - 20 min. The Geotechnical Engineer - of - Record shall approve imported material prior to use as compacted fill.	Project Engineer Project Geotechnical Consultant	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  Completion of building construction
HYDROLOGY & WA	TER QUALITY				
3.2-A: Development of the project would create new impervious	3.2-A.1: The project shall not cause flooding downstream of the project site, and post-development peak flows discharged to the 18-inch CMP storm drain beneath South State Street shall	Project Engineer	Final Map approval	Mendocino Water Agency	Mendocino Water Agency and Planning Dept.

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
surfaces, increasing the rate and amount of stormwater runoff. This runoff could contribute to flooding in the vicinity of the project site.	not exceed pre-development peak flows. At final project design, the applicant shall calculate the amount of runoff that will be generated by the developed portions of lots that drain into Cleland Mountain Creek and factor that increase into the analysis performed by Sandine and Associates to determine whether peak flow rates will remain below pre-development levels and the risk of flooding in the project site and off-site downstream will not be increased. If the post-project peak flow rates exceed the pre-development levels, the applicant shall increase the volume of the detention basin capacity to achieve the target peak flow discharge. The 18-inch storm drain facility beneath South State Street shall be located, inspected by video camera or other method, and a report submitted to the County Department of Transportation at the time of the final design of the subdivision storm drainage system, substantiating the adequacy of the existing facility to accommodate the design runoff or recommending improvements necessary to the facility to adequately accommodate project runoff. Those recommendations shall be constructed.			(Water Agency) Mendocino County Department of Transportati on	Mendocino County Department of Transportation Final Map approval
	3.2-A.2: As part of the Development Agreement, establish a Homeowners Association (HOA) maintenance agreement that details the provisions for regular monitoring of the detention pond storage capacities, as well as requirements for detention pond cleanouts, when necessary, to maintain design stormwater storage levels.	Project Engineer	Approval of Development Agreement	Planning Dept.	Planning Dept. Prior to construction

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	Establish a monitoring protocol that is acceptable to the County that monitors implementation of this maintenance, including a bond or other funding agreement that reimburses the County if the County is required to conduct required maintenance due to the HOA not implementing required maintenance.				
3.2-B: Project development would result in the construction of four residential lots in the FEMA- designated 100- year floodplain of Cleland Mountain Creek.	3.2-B.1: The project shall not result in flooding of residences on the project site. To minimize the risk of flooding during the FEMA-designated 100-year base flood, the applicant shall implement one of the following alternatives:  A) Re-design the grading plan for Lots 20-21 and 196-197 in the vicinity of Cleland Mountain Creek so that building finished floor elevations are a minimum of one foot above the land surface elevations inferred by the FIRM Zone A SFHA mapping,  or  B) Prepare a Letter of Map Revision (LOMR), accompanied by the appropriate technical documentation, and submit it to FEMA (or its sponsored contractor), to petition for a change in the FEMA SFHA designation for the project site. Required technical documentation would include an updated flood backwater profile modeling of Cleland. Creek, including the proposed Plant Road bridge crossing, which was excluded from	Project Engineer	Final Map approval	Planning Dept. Water Agency	Planning Dept. Prior to Final Map

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	the original HEC-RAS analysis conducted for the project by Sandine Associates.  If the modeling results verify that the published FEMA mapping is inaccurate and that Lots 20-21 and 196-197 are outside of the redefined SFHA, then the lots could be developed as proposed, subject to possible regulatory restrictions or conditions imposed by the California Department of Fish and Game (CDFG) and the Mendocino County Water Agency (MCWA) for disturbance of the riparian corridor. If the modeling results verify that the published FEMA flood mapping was accurate, then Alternative A would be required for development of the lots.  The same potential regulatory restriction or conditions imposed by CDFG or the MCWA would apply.				
3.2-C: Project development would result in the clearing of land for the proposed site improvements. During and after project construction exposed slopes will be at increased risk of erosion. Site erosion could	3.2-C.1: The project shall not cause significant erosion. The applicant shall submit a detailed Erosion Control Plan as part of the Stormwater Pollution Prevention Plan (SWPPP) to the Mendocino County Water Agency (MCWA) and to the State Water Resources Control Board (SWRCB), in conjunction with the filing of a Notice of Intent (NOI) with the SWRCB. The County shall not issue a Grading Permit until the County Water Agency agrees that the plan contains adequate Best Management Practices for controlling	Project Engineer	Issuance of Building, Grading or Other Permits	Water Agency SWRCB	Water Agency SWRCB Plan verified at approval of Grading Permit Implementation verified at completion of construction

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
prematurely decrease the storage capacity of the vault detention system. The construction of the proposed bridge crossing over Cleland Mountain Creek would also create conditions for the discharge of fill into Waters of the United States.	erosion. At a minimum, the Erosion Control Plan shall include the following restrictions, guidelines, and measures:  (1) grading and earthwork shall be prohibited during the wet season (typically October 15 through April15) and such work shall be stopped before pending storm events during the spring fall construction season; (2) erosion control/soil stabilization techniques such as straw or wood mulching, erosion control matting, and hydroseeding, or their functional equivalents shall be utilized in accordance with applicable manufacturers specifications and erosion control Best Management Practices (BMPs) published in the California Stormwater BMP Handbook - Construction (California Stormwater Quality Association 2005) and/or similar proscriptions outlined in the Erosion and Sediment Control Field Manual (SF Bay RWQCB 2002); (3) bales of hay or accepted equivalent methods shall be installed in the flow path of graded areas receiving concentrated flows, as well as around storm drain inlets; (4) installation of silt fencing and other measures to segregate the active flow zone of Cleland Mountain Creek from the near overbank disturbance associated with bridge abutment construction; and (5) post-construction stormwater treatment measures.  These and other erosion control BMPs shall be monitored for effectiveness and shall be subject to inspection by the County. The applicant shall be				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	responsible for implementing any remedial actions recommended by the County. After construction is completed, all drainage facilities shall be inspected for accumulated sediment, and these drainage structures shall be cleared of debris and sediment. Silt fence shall be left in place until the hydroseed has become established.				
3.2-D: Project implementation would increase the area devoted to both paved (roadway and driveway) surfaces and maintained landscaping. Episodic discharge of stormwater contaminated with heavy metals could detrimentally affect downstream water quality. Residential lot development would be accompanied by increased application of fertilizers and chemicals (such as herbicides and pesticides).	3.2-D.1: The project shall not cause substantial pollution of Cleland Mountain Creek or the Russian River. The applicant shall prepare an NOI and SWPPP for the project, and incorporate the following additional site-appropriate BMPs or their equivalents for short- and long-term implementation by the Homeowners Association (HOA) and/or individual lot owners, in order to comply with the requirements of the NPDES General Permit and provisions of the Mendocino County Storm Water Management Program. The BMPs will result in stormwater leaving the site at least meeting the NCRWQCB water quality objectives for the Russian River. The SWPPP shall be approved by the Mendocino County Water Agency and the State prior to project construction. Impervious surfaces shall be minimized by using such techniques as driveway strips with bordering pervious pavement material (rather than a full paved driveway); using pervious materials for parking areas; directing runoff from rooftops and	Project Engineer	Issuance of Building, Grading or Other Permits	Water Agency Planning Dept. SWRCB	Water Agency SWRCB  Plan verified at approval of Grading Permit Implementation verified at completion of construction

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	streets to landscaping buffers and/or recharge trenches.				
	These and other BMPs shall be monitored for effectiveness and shall be subject to inspection by the County. The Homeowners Association shall be responsible for implementing any remedial actions recommended by the County. The applicant shall establish a monitoring protocol that is acceptable to the County that monitors implementation of these measures, including a bond or other funding agreement that reimburses the County if the County needs to conduct required maintenance due to the HOA not implementing required maintenance. The County can require that monitoring be done by a third party acceptable to the County; costs of all monitoring and any maintenance will be borne by the Homeowners Association.				
	Since the objective of erosion control and water quality treatment measures would be to reduce contaminant loading to the maximum extent practicable with implementation of the best available technologies, the recommended BMPs are not fixed. Other measures can be applied as long as the applicant can demonstrate to the satisfaction of MCWA that those measures can provide equivalent levels of reduction in contaminant loading.  The applicant shall prepare a plan that describes the roles and responsibilities of the HOA, lot				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	owners, and/or the County for implementing the BMPs and monitoring the results. If the County will be responsible for monitoring or implementing any actions, then a funding mechanism will be established. The County will review and approve this plan prior to the onset of construction.				
	3.2-D.2: Per the recommendations of the CDFG, Lots 121, 122, 123, 124 and Lot 4 of Tract 261 shall be removed from the project in order to provide the minimum creekside buffer required to filter contaminants, including sediment, from stormwater runoff. These four lots may be relocated elsewhere in the subdivision in accordance with the Restated Development Agreement.	Project Engineer	Prior to issuance of first Final Map	Planning Dept.	Planning Dept.  Prior to issuance of first Final Map
3.2-E: The project plus other cumulative development could adversely affect the water quality of the Russian River.	Mitigation Measures for Impacts 3.2-C and 3.2-D also apply to this impact.	See the cited measures.			
BIOLOGICAL RESO	JRCES				
<b>3.3-A:</b> Project development could adversely	<b>3.3-A.1:</b> The applicant shall preserve water quality in Cleland Mountain Creek. A Riparian Enhancement Area that includes Lots 21, 22, and	Project Applicant	Final	Planning Dept.	Planning Dept.

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
affect water quality thereby indirectly affecting listed salmonid species.	197 121, 122, 123, 124 shall be established to include all areas within a setback of 20 feet from the top of bank of this creek and deed restricted to prohibit grading, tree cutting, trash deposition, landscaping other than natural habitat restoration, storage of materials, filling, structures, dumping of chemicals, or disruptive activities. The applicant shall replant the Riparian Enhancement Area. The planting and maintenance of the plantings shall be conducted per a plan prepared by a qualified biologist. The replanting shall include riparian species along the creek and oaks, bay, and buckeye further from the creek. The plan shall include the planting of at least three replacement trees (of the same species as the tree removed) for each oak, bay, buckeye, and Oregon ash that is removed. Within the 20-foot riparian habitat setback, appropriate native ground covers and shrubs will also be established to filter runoff from developed portions of nearby lots. All plantings established under this plan shall be irrigated and replaced as needed as well as monitored by the plan preparer for a period of no less than 3 years to ensure successful establishment. The Riparian Enhancement Area shall be maintained by the HOA pursuant to this plan.		Map for Phase in which lots are located		Approval of Final Map for Phase in which lots are located
	<b>3.3-A.2:</b> Construction activities within Cleland Mountain Creek shall be limited to the dry season when no flowing water is present in the channel. Channel disturbance shall be kept to a minimum	Project Applicant	Prior to initiation of construction within	Planning Dept.	Planning Dept.

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	during construction activities within the channel and only occur within designated areas.		Cleland Mountain Creek channel		During construction activities
	3.3-A.3: When water is present within Cleland Mountain Creek, a qualified biologist shall conduct a clearance survey to determine the presence or absence of western pond turtle individuals immediately prior to the start of work. If western pond turtles are observed where they could be potentially impacted by Project activities, then work shall not be conducted within 100 feet of the turtle(s) until a qualified biologist has relocated the turtle(s) outside of the Project boundary. If turtle eggs are uncovered during construction activities, then all work shall stop within a 25-foot radius of the nest and CDFW shall be notified immediately. The 25-foot buffer shall be marked with identifiable markers that do not consist of fencing or materials that may block the migration of young turtles to the water or attract predators to the nest site. No work will be allowed within the 25-foot buffer until CDFW has been consulted.	Project Applicant Project Biologist	Prior to initiation of construction within Cleland Mountain Creek channel	Planning Dept. CDFW	Planning Dept.  Prior to issuance of construction permits
	3.3-A.4: Removal of nesting habitat (for grasshopper sparrows, migratory birds and raptors) from the work area shall only take place between September 1 and January 31 to avoid impacts to nesting birds. If removal of nesting habitat is required during the nesting season, a nesting bird survey shall be conducted by a	Project Applicant Project Biologist	Prior to tree removal and/or grading activities between February 1	Planning Dept. CDFW	Planning Dept.  Prior to removal of nesting habitat during

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	qualified biologist no more than 5 calendar days prior to disturbance. If an active nest is located, the biologist will coordinate with CDFW to establish appropriate buffers and any monitoring requirements. Removal of existing vegetation shall not exceed the minimum necessary to complete operations.		and August 31.		nesting season.
	3.3-A.5: A pre-construction/demolition bat survey shall be conducted by a qualified biologist within 5 days prior to the removal of suitable bat habitat (i.e., existing building). Mature trees and the existing outbuilding present on the project site should only be removed between September 16 and March 15, outside of the bat maternity season. Trees should be removed at dusk to minimize impacts to roosting bats.	Project Applicant Project Biologist	Prior to removal of outbuilding and/or tree removal	Planning Dept.	Planning Dept.  Prior to removal of outbuilding and/or tree removal
	3.3-A.6: Prior to any discharge or fill material into waters of the U.S., authorization under a Nationwide Permit shall be obtained from the U.S. Army Corps of Engineers, if necessary. For fill requiring a Corps permit, a water quality certification from the Regional Water Quality Control Board shall also be obtained	Project Applicant	Prior to activities requiring said permits	Planning Dept. CDFW ACOE RWQCB	Planning Dept.  Prior to approval of any work within Cleland Mountain Creek corridor
	<b>3.3-A.7:</b> Prior to any activities that would obstruct the flow of or alter the bed, channel, or bank of any perennial, intermittent, or ephemeral creeks, notification of streambed alteration shall	Project Applicant	Prior to activities requiring said permits	Planning Dept. CDFW	Planning Dept.

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	be submitted to the CDFW, and, if required, a Lake and Streambed Alteration Agreement shall be obtained.				Prior to approval of any work within Cleland Mountain Creek corridor
3.3-B: Project construction would remove up to 25 oaks.	Mitigation Measure 3.3-A.1 also applies to this impact.	See the cited measure.			
	3.3-B.1: An assessment shall be conducted that determines the area and number of oaks and other native hardwoods that would be removed or adversely impacted as a result of project development on Lots 121, 122, 123, 124 and Lot 4 of Tract 261. Building envelopes on Lots 121, 122, 123, 124 and Lot 4 of Tract 261, as well as driveway and utility connection locations, shall be adjusted if needed to avoid loss or both short-term and long-term adverse effects on native trees. The area outside of these building envelopes shall be deed restricted to require maintenance of existing native trees, and prohibition of lawns and landscaping incompatible with long-term survival of these trees, while allowing pruning and removal of any dead or dying trees, dead limbs and brush, and any clearances required as needed to reduce wildland fire hazard. All removed hardwoods shall be replaced with the same species at a	Project Applicant  Project Construction Manager during construction	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  Completion of construction implementation

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	minimum replacement ratio of 3:1 within the 20- foot riparian setback zone along the top of the bank of Cleland Mountain Creek. A minimum 3- year monitoring plan shall track planted trees and replace all that are dead or dying.				
	3.3-B.2: If any of the 11 oak trees are removed, they shall be replaced at a mitigation ratio of 8:1. Trees shall be staked and screened for rodent protection and shall be irrigated for at least 3 years. The mitigation trees shall be located on properties that will be managed and maintained by the HOA.	Project Applicant  Project Construction Manager during construction	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  Completion of construction implementation
3.3-D: Project construction would restrict wildlife movement and displace nesting sites.	Mitigation Measure 3.3-A.1 also applies to this impact.	See the cited measure.			
3.3-E: The project plus other proposed new development in the area could have a cumulative impact on Russian River water quality and oak woodlands.	Mitigation Measures 3.2-C.1, 3.2-C.2, 3.2-D.1, 3.2-D.2, and 3.3-A.1 also apply to this impact.	See the cited measure.			

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
CULTURAL RESOUR	CES				
3.4-A: Cultural resources could be damaged or destroyed by project construction.	3.4-A.1: If cultural resources are discovered on the site during construction activities, all earthmoving activity in the area of impact shall be halted until the applicant retains the services of a qualified archaeological consultant. These archaeological sites will be documented (by a professional meeting the Secretary of the Interior qualification standards) on DPR forms and evaluated for their eligibility for the California Register. The archaeological consultant shall identify specific measures to mitigate impacts to the resource if it is deemed eligible for the California Register. Mitigation shall include data recovery operations, protection in situ of deposits, and/or archival research, if appropriate. The applicant shall abide by the recommended proposals.	Project Applicant  Project Construction Manager during construction	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  Completion of construction for implementation
	3.4-A.2: In the event that human skeletal remains are discovered, work shall be discontinued in the area of the discovery and the County Coroner shall be contacted. If skeletal remains are found to be prehistoric Native American remains, the Coroner shall call the Native American Heritage Commission within 24 hours. The Commission will identify the person(s) it believes to be the "Most Likely Descendant" of the deceased Native American. The Most Likely Descendant would be	Project Applicant Project Construction Manager during construction	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept. County Coroner Completion of construction for implementation

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	responsible for recommending the disposition and treatment of the remains. The Most Likely Descendant may make recommendations to the landowner or the person responsible for the excavation/grading work for means of treating or disposing of the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.				
3.4-B: Paleontological resources could be damaged or destroyed by project construction.	3.4-B.1: During project grading operations, should any undiscovered evidence of paleontological resources be encountered, work at the place of discovery shall be halted, and a qualified paleontologist shall be consulted to assess the significance of the finds. Prompt evaluations can then be made regarding the finds, and a management plan consistent with CEQA. cultural resources management requirements shall be adopted.	Project Applicant  Project Construction Manager during construction	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  Completion of construction for implementation
TRAFFIC AND CIRCU	JLATION				
3.5-C: The proposed roundabout may not be able to accommodate truck and bus traffic.	3.5-C.1: The project applicant shall design the proposed South State Street/Plant Road roundabout to accommodate all existing and anticipated buses and large trucks.  Turning template diagrams shall be provided to the County Department of Transportation for the largest bus and trucks anticipated to be using the roundabout.	Project Applicant	Final Subdivision Map or Issuance of Building, Grading or Other Permits	Mendocino County Department of Transportati on (DOT)	DOT Approval of Final Subdivision Map

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
3.5-F: The project design does not adequately provide for mass transit access.	3.5-F.1 To provide access for project residents to the existing Mendocino Transit northbound bus stop on Plant Road across from the project site, a pedestrian walkway shall be constructed between the proposed roundabout at South State Street/ Plant Road-Charlie Barra Drive and the bus stop. The applicant shall also work with Mendocino Transit Authority to investigate the feasibility of providing a bus stop for southbound bus service within walking distance of the project site.	Project Applicant	Final Subdivision Map or Issuance of Building, Grading or Other Permits	Mendocino County Department of Transportati on (DOT)	DOT  Approval of Final Subdivision Map
3.5-I: The project plus other new development would generate new traffic that would add congestion to study area intersections.	<b>3.5-I.1:</b> The applicant and/or future site developers shall pay the adopted Ukiah Valley Area Transportation Impact Fee at the time that building permits are issued.	Project Applicant	Building Permits	Planning Dept. Mendocino Council of Governmen ts	Planning Dept.  Issuance of Building Permits
AIR QUALITY					
3.6-A: Construction activities associated with development of the project would generate short-term emissions of criteria	<b>3.6-A.1:</b> The project applicant and construction contractor shall for all construction project phases prepare and implement a dust control program to limit construction emissions of PM <sub>10</sub> The program shall include at least the following provisions from MCAQMD Rule 1-430 Fugitive Dust. Because the site is over one acre in size, a	Project Construction Manager	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  During and at  Completion of  construction

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
pollutants, including fine and respirable particulate matter and equipment exhaust emissions.	Grading Permit must be approved by MCAQMD. and MCAQMD may require additional mitigations.  a. Covering open bodied trucks when used for transporting materials likely to give rise to airborne dust.  b. The use of water or chemicals for control of dust in the demolition of existing buildings or structures.  c. All visibly dry disturbed soil road surfaces shal! be watered to minimize fugitive dust emissions.  d. All unpaved surfaces, unless otherwise treated with suitable chemicals or oils, shall have a posted speed limit of 10 miles per hour.  e. Earth or other material. that has been transported by trucking or earth moving equipment, erosion by water, or other means onto paved streets shall be promptly removed.  f. Asphalt, oil, water or suitable chemicals shall be applied on materials stockpiles, and other surfaces that can give rise to dust emissions.  g.Ali earthmoving activities shall cease when sustained winds exceed 15 miles per hour.  h. The operator shall take reasonable precautions to prevent the entry of unauthorized vehicles onto the site during non-work hours.  i. The operator shall keep a daily log of activities to control fugitive dust.				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	3.6-A.2 The proposed development will require the preparation of a detailed grading and erosion control plan subject to review and approval by the County prior to earth moving activities (Municipal Code section 18.70.060 – Grading Permit Requirements). Grading will be completed incompliance with County standards.	Project Construction Manager	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  During and at  Completion of  construction
	<b>3.6-A.3</b> Dust control rules and regulations as required by the MCAQMD will be adhered to (Rule 1-200, 1-400(a), 1-410, 1-420, 1-430). These regulations minimize fugitive dust particle during construction. Measures imposed by the MCAQMD include, but not limited to:	Project Construction Manager	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  During and at Completion of construction
	<ul> <li>All visibly dry disturbed soil surfaces shall be watered to minimize fugitive dust.</li> <li>Installation of a "stabilized construction entrance/exit" as detailed in the Department of Transportation storm water handbook (TC-1) will be utilized.</li> </ul>				
	Earth or other material tracked on to neighboring paved roads shall be removed promptly.				
	<ul> <li>Dust generating activities will be limited during periods of high winds (over 15 mph).</li> </ul>				
	<ul> <li>Access of unauthorized vehicles onto the construction site during non-working hours shall be prevented.</li> </ul>				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	A weekly log shall be kept of fugitive dust control measures that have been implemented.				
	Restrict idling of diesel engines on the site to less than 5 minutes.				
	All haul trucks transporting soil, sand or other loose materials off-site shall be covered.				
	All vehicle speeds on unpaved roads shall be limited to 15 mph.				
	Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure title 13, Section 2485 of the California Code of Regulations). Clear signage shall be provided for construction workers at access points.				
	All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.				
	Post a publicly visible sign with telephone number for the applicant's representative regarding dust complaints. This person shall respond and take corrective action within 48 hours. The MCAQMD phone number shall				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	also be visible to ensure compliance with applicable regulations.				
	3.6-A.4 All off road construction equipment with engines greater than 50 horsepower (hp) and operating on the site for more than two days or 20 hours shall meet, at a minimum, U.S. EPA particulate matter emission standards for Tier 4 engines or equivalent. In the event that such equipment is not available, the use of Tier 3 construction equipment is sufficient so long as it can be demonstrated to the County that similar Tier 4 construction equipment is not readily available	Project Construction Manager	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  During and at Completion of construction
	3.6-A.5 The applicant shall submit a Construction and Demolition Waste Management Plan (CWMP) to the Mendocino Solid Waste Management Authority prior to the start of construction-related activities in accordance with Mendocino Solid Waste Management Authority requirements (Ordinance 4301). The CWMP will outline measure to capture and recycle materials that would otherwise end up in the waste stream.	Project Construction Manager	Issuance of Building, Grading or Other Permits	Planning Dept. MSWMA	Planning Dept.  During and at Completion of construction
3.6-F: The project will use more energy and thereby generate greenhouse gas emissions that would	<ul> <li>3.6-F.1 The project shall minimize the emission of greenhouse gases by including at least the following:</li> <li>The project shall be constructed to incorporate the 2010 Title 24 building standards (or</li> </ul>	Project Applicant	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  Completion of construction

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
adversely affect the global climate.	<ul> <li>whatever standards have been adopted at the time that building permits are issued).</li> <li>Project residential units shall be oriented for</li> </ul>				
	maximum solar access. Roofs shall be constructed to allow easy and efficient retrofitting with roof-top solar panels.				
	The project applicant shall ensure that the CC&Rs of the Homeowner's Association develops and maintains energy- and water-efficient practices for the common areas of the subdivision and follows a landscaping plan that does not impair the efficient operation of the solar collection facilities.				
	3.6-F.2 All residences would be constructed in accordance with the most recent edition of Title 24 of the California Building Code (CBC). The CBC contains mandatory requirements that apply to residential buildings that will be a part of the project which include: high performance attics insulation and walls, high efficacy lighting, windows, water heating and HVAC systems. Specific energy conservation features include:	Project Applicant	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  Completion of construction
	Structures will incorporate natural cooling by utilizing window overhangs, awnings, front and rear patios, shade from neighboring structures, radiant heat-reflective barriers in the attic and appropriate tree plantings or a combination thereof.				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	Structures will be constructed in compliance with solar requirements found in Title 24 of the California Building Code.				
	Project will incorporate Energy Star Certified Appliances. At a minimum, the following appliances are recommended to be Energy Star rated: dishwasher and water heater.				
	<ul> <li>Natural lighting may be incorporated into the home through solar tubes and sky lights.</li> </ul>				
	Windows, sky lights and other fenestration will meet energy code requirements and will be Energy Star certified. These elements will have low U-factor (U-value) rating. U-factors is a rate of non-solar heat loss or gain through a while window assembling. The lower the U-factor, the greater a window's resistance to heat flow and the better its insulating value.				
	Project will incorporate the use of low flow toilets and faucets that meet the standards as set forth by the California Energy Commission.				
	All landscaping will be installed to AB 1881 (The Water Conservation in Landscaping Act of 2006) standards, which promotes water efficiency and conservation, using mulch, bubblers, and timed sprinkler systems.				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	<ul> <li>3.6-F.3 The following features shall be included in the Modified Project to reduce GHG emissions:</li> <li>No fireplaces;</li> <li>Include solar power for each of the residential lots (not quantified);</li> <li>No natural gas hookups;</li> <li>Include infrastructure to promote electric car charging (i.e., provide 220VAC outlets);</li> <li>Meet latest CalGreen Title 24 standards);</li> <li>Include energy efficient appliances;</li> <li>Include low-flow water fixtures; and</li> <li>Include water-efficient irrigation systems (drip systems).</li> </ul>	Project Applicant	Issuance of Building, Grading or Other Permits	Planning Dept.	Planning Dept.  Completion of construction
NOISE					
3.7-A: The east end of the project could be exposed to excessive noise.	3.7-A.1: Project-specific acoustical analyses shall be required to confirm that outdoor activity areas are provided with Ldn values at or below 60 dBA, and interior Ldn values will not exceed 45 dBA. Sound insulation measures, including any mechanical ventilation systems needed to permit closed windows, should be designed by an experienced acoustical consultant and incorporated into construction documents submitted for permits.	Project Applicant	Prior to approval of final map for Phases 1 and 2 (east end of project site)	Planning Dept.	Planning Dept.  Issuance of Building Permits

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
3.7-C: Construction of project improvements would generate construction noise over a period exceeding one year.	<ul> <li>3.7-C.1: Project construction shall not cause excessive noise. To accomplish this standard, the following measures are required:</li> <li>Noise-generating activities at the construction site or in areas adjacent to the construction site associated with the project in any way should be restricted to the hours of 7:00 a.m. to 6:00 p.m:, Monday through Friday. No construction activities should occur on weekends or holidays.</li> <li>Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.</li> <li>Unnecessary idling of internal combustion engines should be strictly prohibited.</li> <li>Locate stationary noise generating equipment such as air compressors or portable power generators as far as possible from sensitive receptors. Construct temporary noise barriers to screen stationary noise generating equipment when located near adjoining sensitive land uses.</li> <li>Utilize "quiet" air compressors and other stationery noise sources where technology exists.</li> <li>Control noise from construction workers'</li> </ul>	Project Applicant	During construction of all phases of the project.	Planning Dept.	Planning Dept. Completion of construction

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	not audible at existing residences bordering the project site.				
	Designate a "disturbance coordinator" who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include it in the notice sent to neighbors regarding the construction schedule.				
	Notify existing residents when especially noisy operations are scheduled near their property, allowing the residents to plan activities accordingly. Examples of especially noisy sources: heavy earth moving equipment, jack hammers, pile drivers.				
AESTHETICS					
3.8-A: The project would replace views from South State Street and other vantage points east of the site	3.8-A.1: Final project design and landscape plan shall undergo design review by the County Department of Planning and Building Services and/or the County Planning Commission to ensure consistency with the design guidelines adopted for this project. The final project shall be	Project Applicant	Upon submittal of project site and landscaping, park, and	Planning Dept.	Planning Dept.  Prior to issuance of building permits

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
of open space with views of residential development.	revised, if requested, to comply with the County's review recommendations.		initial building plans,		
	3.8-A.2: Landscaping will be mature within 15 years of initial project construction (Phase 1). Mature means that perimeter trees shall be at least 20 feet tall. The final landscape plan shall include tree landscaping along the north and east sides of the site using species that fully screen views from the east and screens at least half of the buildings on the north side. The plan shall include specifications for planting, irrigating, fertilizing, and replacing dead trees so that the landscaping will be mature within 15 years.	Project Applicant	Development Agreement	Planning Dept. Mendocino County Water Agency	Planning Dept.  Mendocino County. Water Agency  15 years after project completion
3.8-C: The project would replace views from Gobalet Lane, residences north of Gobalet Lane, and residences south of Oak Knoll Road of open space with views of residential development.	Mitigation Measures 3.8-A.1 and 3.8-A.2 apply to this impact.	See the cited mitigation measures			
3.8-F: New lighting on the project site will	<b>3.8-F.1:</b> The final design shall include a lighting plan that minimizes light escape from the site. The final plan shall become part of the CC&Rs for the	Project Applicant	Development Agreement	Planning Dept.	Planning Dept.

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
change nighttime views in the area.	Homeowners Association. This plan shall include the following:				Issuance of Building
	1. Light shielding is required. Except as otherwise exempt, all outdoor lighting fixtures shall be constructed with full shielding. Shielding shall prevent the light source from being visible to adjacent residential properties.				Permits
	2. Minimum/Maximum Level of Illumination. The minimum and maximum levels of illumination permitted are listed below. A photometric study listing the number; type, height, and level of illumination of all outdoor lighting fixtures shall be required prior to issuance of a building permit or site improvement plans to ensure compliance with these provisions.				
	a. Minimum security lighting for sidewalks, walkways, parking areas, and similar areas shall be 1.0 foot-candles, measured at ground level, not to exceed 3.0 foot-candles on average.				
	b. In order to minimize light trespass on abutting property, illumination measured on the property line of a subject parcel shall not exceed 0.5 foot-candies, measured on a vertical plane along the property line.				
	c. Building-mounted decorative or security lights shall not exceed 5.0 foot-candles, measured a distance of five feet from the light source. All buildings lighting shall be reviewed and				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	authorized by Mendocino County prior to the initiation of lighting installation.				
	3. Maximum Height of Outdoor Light Fixtures. The maximum height of freestanding outdoor light fixtures for multi-family residential development and non-residential development abutting a single-family residential zoning district or use shall be 20 feet. Otherwise, the maximum height for freestanding outdoor light fixtures shall be 25 feet.				
	4. Type of illumination. Ali outdoor lighting fixtures shall be energy efficient. Energy efficient lights include all high-intensity discharge lamps (mercury vapor, high-pressure sodium, low-pressure sodium, and metal halide). The concentrated and/or exclusive use of either low-pressure sodium or metal halide lighting is prohibited.				
	5. Hours of illumination. Automatic timing devices shall be required for all outdoor light fixtures on multi- family residential and non-residential development (e.g., parks) with off hours (exterior lights turned off) between 11:00 p.m. and 6:00 a.m. Exceptions are that outdoor lights may remain on in conjunction with the hours of operation of the corresponding use, for security purposes, or to illuminate walkways, roadways, equipment yards, and parking lots.				
	6. Prohibited Lighting. The following outdoor light fixtures shall be prohibited as specified below.				

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	a. Lighting of parks for active nighttime recreation.				
	b. Uplighting/back-lit canopies or awnings.				
	c. The concentrated and/or exclusive use of either low- pressure sodium or metal halide lighting				
	d. Neon tubing or band lighting along building structures				
	e. Searchlights.				
	f. Flashing lights.				
	g. Illumination of entire buildings. Building illumination shall be limited to security lighting and lighting of architectural features authorized by the designated Approving Authority in conjunction with the required development permit(s).				
	h. Roof mounted lights except for security purposes with motion detection and full shielding so that the glare of the light source is not visible from any public right- of-way.				
PUBLIC SERVICES A	ND INFRASTRUCTURE				
3.9-C: Development of the project would increase the demand for police response	<b>3.9-C.1:</b> The final project design shall be reviewed by the Sheriff's Office to determine if it provides adequate access, security lighting, and other factors affecting police response. The final map	Project Applicant	Final Subdivision Map	Mendocino County Sheriff's Office	Sheriff's Office Planning Dept.

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
by the Mendocino County Sheriff's Office and by the Ukiah Police Department and would increase demand on other portions of the criminal justice system.	shall incorporate security measures required by the Sheriff's Office.				Issuance of Building Permits
3.9-F: New development resulting from the project and other new development in the area would increase the demands on the Ukiah Valley Fire District and the emergency medical response system possibly require the construction of new facilities.	3.9-F.1: If the County has not adopted additional funding for the EMS system at the time of approval of the Development Agreement, then the applicant shall agree within the Development Agreement to pay any fees that the County adopts for EMS funding prior to and/or within five years of approval of the Development Agreement.	Project Applicant	Development Agreement	Planning Dept.	Planning Dept.  Issuance of Building Permits
3.9-H: The project would contribute to the need for a new water	3.9-H.1: The applicant shall enter into an agreement with the Willow County Water District to pay a capital improvement fee (estimated at	Project Applicant	Development Agreement	Planning Dept.	Planning Dept. Willow CWD

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
storage facility.	\$400,000) to fund the project's share of the replacement and expansion of the Fircrest Drive water storage tank.			Willow CWD	Issuance of Building Permits
3.9-M: The project would increase the plan area population, thereby increasing the demand for parks and recreational facilities. This increased demand could result in significant deterioration of existing facilities and the need for new or expanded facilities.	<b>3.9-M.1:</b> Construct and maintain a "tot lot" with playground equipment on one of the two project parks. The tot lot will be maintained by the Homeowner's Association.	Project Applicant	Development Agreement	Planning Dept.	Planning Dept.  Issuance of Building Permits
	<b>3.9-M.2</b> The Neighborhood Park and the contours of the detention basin shall be modified to establish suitable terrain for a multi-purpose playing field that provides a minimum of 100' x 200' of level playing area.	Project Applicant	Development Agreement	Planning Dept.	Planning Dept.  Issuance of Building Permits
3.9-O: Future development could be placed in locations where people and structures would be exposed to potential wildland fires.	3.9-O.1: The project shall be designed and constructed to minimize risk of wildfire destroying residences. The Ukiah Valley Fire District shall review project plans and determine in writing that adequate access, emergency response, and fire flow are available, and that the project complies with the most current State requirements for development in the wildland/urban interface. Final	Project Applicant	Conditions of Approval	Ukiah Valley Fire District Planning Dept.	Ukiah Valley Fire District  Planning Dept.  Issuance of Building Permits

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	project design shall conform with any changes that the District requires.				
3.9-R: Toxic materials and wastes on the site could pose a risk to human health.	<ul> <li>3.9-R.1: All potential toxic wastes and materials shall be removed and/or remediated prior to site grading. The applicant shall do the following, as recommended in the Phase I Environmental Site Assessment: <ul> <li>Abandon any inoperable water supply wells on the site following all the requirements of the Mendocino County Division of Environmental Health.</li> <li>Collect soil samples in the area of the former underground storage tank and the aboveground fuel storage tank. The soil samples shall be tested for Total Petroleum Hydrocarbons as gasoline and the constituents benzene, toluene, ethylbenzene; xylenes, fuel oxygenates, lead scavengers, and total lead. Results of the testing shall be provided to the Mendocino County Division of Environmental Health. If the Division determines that additional testing or remediation is required, the applicant shall fulfill all County requirements.</li> <li>If volatile organic compounds are discovered on the site, a human health risk</li> </ul> </li> </ul>	Project Applicant	Conditions of Approval	Mendocino County Division of Environmen tal Health	Mendocino County Division of Environmental Health Planning Dept. Prior to issuance of Grading Permit

Impact	Mitigation Measure	Implemented by	Implemented when	Monitored by	Verified by and date
	assessment will be performed per requirements of the County Division of Environmental Health. That assessment will identify measures needed to ensure that workers and future residents are not exposed to County- and State- defined harmful levels of these compounds.				
	<ul> <li>Dispose of any waste oil, lubricants, paints, or other liquids in accordance with all applicable regulatory requirements.</li> </ul>				
	<ul> <li>Investigate the fuel source for the prune dryer that formerly was located on the west side of the site to determine its fuel source. If it was gasoline, then conduct soil tests at that site as described above.</li> </ul>				
	<ul> <li>Assess whether the workshop/storage building has the potential for lead paint or asbestos. If so, then demolition shall follow all requirements established by the Mendocino County Division of Environmental Health.</li> </ul>				