I. AESTHETICS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect on a scenic vista? (PLN)			X	
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings, within a state scenic highway? (PLN)			X	
3. Substantially degrade the existing visual character or quality of the site and its surroundings? (PLN)			X	
4. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area? (PLN)			X	

Discussion - All Items:
The proposed project includes the construction of a caretaker's residence on the subject property in one of two identified locations. The subject property is located off of Yankee Jim's Road and Gillis Hill Road, east of Yankee Jims Road and between Yankee Jims and the North Fork of the American River. The property consists of approximately 600 acres and contains steep hills and valleys. On the portions of the property that were affected by the Ponderosa Fire in 2001, the landscape consists of re-sprouting hardwoods, brush, grasslands and stumps. Other areas of the property that were not damaged or partially damaged by the fire contain heavier tree coverage, including native oak woodlands and conifers. To the east of the subject property lies the North Fork of the American River, and surrounding properties to the north, east, south and west are mostly undeveloped agriculture and timberland, with similar topography and vegetation as the subject parcel.

The North Fork of the American River is considered a scenic resource and is an area of concern for adverse visual impacts. However, sites identified as possible construction areas for the caretaker's residence have a low possibility of adversely affecting the viewshed of the North Fork of the American River because these sites are located between 5,550 feet and 11,000 feet from the North Fork American River canyon. Additionally, there are slopes located between the potential building sites and the North Fork American River canyon, that act to screen the project site from the American River Canyon. A visibility exhibit prepared by Placer County Geographic Information Systems staff illustrates the areas on the project site that have the potential to visually impact areas of the North Fork American River Canyon. The exhibit was created by plotting on an aerial map points of visibility on the project site as would be seen from the North Fork of the American River. The visibility map contains a legend that includes a yellow to red gradation, where yellow represents the least intensive visual impact and red represents the most intensive areas of potential viewshed impact. The gradients in between yellow and red illustrate the levels of intensity between the least intensive and the most intensive. This map is included with this document and can be viewed in color on the Placer County website at this link: http://www.placer.ca.gov/departments/communitydevelopment/envcoordsvcs/negdec. As shown on this exhibit, there is no possibility that a caretaker's residence constructed on the proposed building sites can be seen from the North Fork of the American River.

Finally, construction of a 4,000 square foot residence on the project site will result in minimal site disturbance and tree removal because of the moderate size of the structure and because the proposed locations for the residence largely consist of brush and grass areas. For these reasons, and because of the small scale of the proposed caretaker's residence, impacts to scenic resources as a result of the proposed project are considered less than significant and no mitigation measures are required.

II. AGRICULTURAL & FOREST RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? (PLN)			X	
2. Conflict with General Plan or other policies regarding land use buffers for agricultural operations? (PLN)				X
3. Conflict with existing zoning for agricultural use, a Williamson Act contract or a Right-to-Farm Policy? (PLN)				X
4. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))? (PLN)				X
5. Involve other changes in the existing environment which, due to their location or nature, could result in the loss or conversion of Farmland (including livestock grazing) or forest land to non-agricultural or non-forest use? (PLN)			X	

Discussion - Items II-1, 5:
The subject property is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide or Local Importance. The proposed project includes the construction of a caretaker's residence on property designated by the Placer County General Plan as timberland. The applicants have selected two possible sites for the construction of the caretaker's residence, each consisting of one to two acres. Construction of the caretaker's residence on either area would result in conversion of one to two acres of timber farmland to a residential use. However, the selected project sites are located in areas of the property that are not heavily vegetated and are not utilized as active timberland. The purpose of the proposed caretaker's residence is to provide support of the restoration of the subject property for timberland production by allowing the fulltime oversight of a property manager. Additionally, the construction of a caretaker's residence would have minimal effects to the timberland use considering the size of the proposed areas of construction and the size of the subject property. For these reasons, impacts resulting from the construction of a caretaker's residence by converting farmland are considered less than significant and no mitigation measures are required.

Discussion - Item II-2:
The proposed caretaker's residence would not conflict with the general plan or other policies regarding land use buffers because the property is zoned Timberland Production and the purpose of the caretaker's residence on the project site is to operate and enhance the agricultural use of the property.

Discussion - Item II-3:
The proposed caretaker's residence is consistent with uses allowed under the Timberland Production Zoning. The property is not within a Williamson Act Contract and the proposed use will not conflict with a right-to-farm policy because the proposed use involves the farming of timberland.

Discussion - Item II-4:
The proposed project will not conflict with the existing zoning for, or cause rezoning of, forest land, timberland, or property zoned timberland production because the proposed project is consistent with the timberland zoning of the property.

III. AIR QUALITY – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Conflict with or obstruct implementation of the applicable air quality plan? (PLN, Air Quality)			X	
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation? (PLN, Air Quality)		X		
3. Result in a cumulatively considerable net increase of any criteria for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? (PLN, Air Quality)		X		
4. Expose sensitive receptors to substantial pollutant concentrations? (PLN, Air Quality)				X
5. Create objectionable odors affecting a substantial number of people? (PLN, Air Quality)				X

Discussion - Item III-1:
The project site is located within the Mountain Counties Air Basin (MCAB) and is under the jurisdiction of the Placer County APCD. The MCAB is designated as nonattainment for federal and state ozone (O_3) standards, nonattainment for the state particulate matter standard (PM_{10}) and partially designated nonattainment for the federal particulate matter standard ($PM_{2.5}$).

The project proposes the construction of a caretakers residence on 597-acre forested parcel. The increase in density resulting from one new residence would not contribute a significant air quality impact to to the region, as the resultant emissions would be below the significant level. No mitigation measures are required.

Discussion - Items III-2, 3:
Development of the project site will include removal of vegetation, grading and construction of septic systems, utilities and the caretaker's residence. These activities may result in short-term diesel exhaust emissions from on-site heavy-duty equipment and would generate diesel PM emissions from the use of off-road diesel equipment required for site grading. In order to reduce construction related air emissions, associated grading plans shall list applicable Air District Rules and State Regulations.

Operational related emissions will result from traffic to and from the site. However, the anticipated traffic generated by the proposed project will not result in significant air quality impacts, will not violate air quality standards and will not substantially contribute to existing air quality violations.

With the implementation of the following mitigation measures and notes on the grading improvement plans, construction and operational related emissions will not result in a cumulatively considerable net increase of any non-attainment criteria.

Mitigation Measures - Items III-2, 3:
MM III.1 Prior to approval of Grading or Improvement Plans, on project sites greater than one acre, the applicant shall submit a Construction Emission / Dust Control Plan to the Placer County APCD. The applicant shall not break ground prior to receiving APCD approval, if required.

MM III.2 Prior to building permit approval, the applicant shall show on the plans submitted to the Building Department, that electrical outlets shall be installed on the exterior walls of both the front and back of all residences or all commercial buildings to promote the use of electric landscape maintenance equipment.

MM III.3 Prior to building permit approval, the building plans shall indicate that only U.S. EPA Phase II certified wood burning devices shall be allowed in single-family residences. The emission potential from each residence shall not exceed a cumulative total of 7.5 grams per hour for all devices. Masonry fireplaces shall have either a

SP

EPA certified Phase II wood burning device or shall be a U.L. Listed Decorative Gas Appliance.

MM III.4 Include the following standard notes on the Grading/Improvement Plan:

- The prime contractor shall be responsible for keeping adjacent public thoroughfares clean of silt, dirt, mud, and debris, and shall "wet broom" the streets (or use another method to control dust as approved by the individual jurisdiction) if silt, dirt, mud or debris is carried over to adjacent public thoroughfares.
- The contractor shall apply water or use other method to control dust impacts offsite. Construction vehicles leaving the site shall be cleaned to prevent dust, silt, mud, and dirt from being released or tracked off-site.
- During construction, traffic speeds on all unpaved surfaces shall be limited to 15 miles per hour or less.
- The prime contractor shall suspend all grading operations when wind speeds (including instantaneous gusts) are excessive and dust is impacting adjacent properties.
- In order to minimize wind driven dust during construction, the prime contractor shall apply methods such as surface stabilization, establishment of a vegetative cover, paving, (or use another method to control dust as approved by the individual jurisdiction).
- The contractor shall suspend all grading operations when fugitive dust exceeds Placer County APCD Rule 228 (Fugitive Dust) limitations. The prime contractor shall be responsible for having an individual who is CARB-certified to perform Visible Emissions Evaluations (VEE). This individual shall evaluate compliance with Rule 228 on a weekly basis. It is to be noted that fugitive dust is not to exceed 40% opacity and not go beyond the property boundary at any time. Lime or other drying agents utilized to dry out wet grading areas shall not exceed Placer County APCD Rule 228 Fugitive Dust limitations. Operators of vehicles and equipment found to exceed opacity limits will be notified by APCD and the equipment must be repaired within 72 hours.
- Construction equipment exhaust emissions shall not exceed Placer County APCD Rule 202 Visible Emission limitations. Operators of vehicles and equipment found to exceed opacity limits are to be immediately notified by APCD to cease operations and the equipment must be repaired within 72 hours.
- A person shall not discharge into the atmosphere volatile organic compounds (VOC's) caused by the use or manufacture of Cutback or Emulsified asphalts for paving, road construction or road maintenance, unless such manufacture or use complies with the provisions of Rule 217.
- During construction the contractor shall utilize existing power sources (e.g., power poles) or clean fuel (i.e. gasoline, biodiesel, natural gas) generators rather than temporary diesel power generators.
- During construction, the contractor shall minimize idling time to a maximum of 5 minutes for all diesel powered equipment.
- During construction, no open burning of removed vegetation shall be allowed unless permitted by the PCAPCD. All removed vegetative material shall be either chipped on site or taken to an appropriate recycling site, or if a site is not available, a licensed disposal site.

Discussion - Items III-4, 5:
Construction of the project includes minor grading operations which would result in short-term diesel exhaust emissions from on-site heavy-duty equipment and would generate diesel PM emissions from the use of off-road diesel equipment required for site grading. However, with the implementation of the mitigation measures listed above, short-term construction-generated TAC emissions would not expose sensitive receptors to substantial pollutant concentrations and therefore would have a less than significant effect, and no additional mitigation measures are required.

Operational activities associated with the project would result in only minor Toxic Air Contaminant (TAC) emissions or odors. On account of these minor emissions, the lack of any immediately adjacent sensitive receptors, air quality and odor impacts to individuals in the vicinity resulting from operational activities will be less than significant, and no mitigation is necessary.

IV. BIOLOGICAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans,			X	

policies or regulations, or by the California Department of Fish & Game, U.S. Fish & Wildlife Service or National Oceanic and Atmospheric Administration Fisheries? (PLN)				
2. Substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number of restrict the range of an endangered, rare, or threatened species? (PLN)				X
3. Have a substantial adverse effect on the environment by converting oak woodlands? (PLN)				X
4. Have a substantial adverse effect on any riparian habitat or other sensitive natural community, including oak woodlands, identified in local or regional plans, policies or regulations, or by the California Department of Fish & Game, U.S. Fish & Wildlife Service, U.S. Army Corps of Engineers or National Oceanic and Atmospheric Administration Fisheries? (PLN)			X	
5. Have a substantial adverse effect on federal or state protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) or as defined by state statute, through direct removal, filling, hydrological interruption, or other means? (PLN)			X	
6. Interfere substantially with the movement of any native resident or migratory wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nesting or breeding sites? (PLN)				X
7. Conflict with any local policies or ordinances that protect biological resources, including oak woodland resources? (PLN)			X	
8. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (PLN)				X

Discussion - Item IV-1:
The proposed project includes the construction of a caretaker's residence on one of two proposed 1-2 acre building sites. In 2008, a biological resources assessment was conducted by Miriam Green Environmental Consultants. The study concluded that the subject property contains potential habitat for two special-status plant species: Brandegee's clarkia and oval-leaved viburnum. However, the study was conducted during October when these plants are not in bloom, and because of this, the biological study could not confirm that the special-status plants were absent from the property. Therefore, a second field survey was conducted in May of 2013 during the blooming period of both plants that was focused on the proposed areas of disturbance on the property, including proposed building sites and access roads. The results of the second survey determined that there was no evidence of the existence of the special status species on the project site. As such, the proposed project will not have a substantial adverse effect on special status species. No mitigation measures are required.

Discussion - Items IV- 2, 3, 6:
The project includes the construction of a caretaker's residence on one of two 1-2 acre building sites. The biological resources study prepared by Miriam Green Environmental Consultants in 2008 states that the majority of the site consists of chaparral and foothill woodland intermixed with isolated stands of canyon live oak, blue oak, Ponderosa pine and Douglas fir. Other portions of the site consist of non-native annual grassland that is intermixed with the chaparral woodland. The habitat on site may support special status species and wildlife. However, the proposed caretaker's residence is not expected to result in adverse impacts to special status species and wildlife due to the large amount of acreage of the three contiguous parcels and because road cuts to the potential building sites already exist. Further, the proposed building sites are located in areas that are generally clear of special species habitat. Therefore, no mitigation measures are required.

Discussion - Item IV-4:
The biological resources study prepared for the project site by Miriam Green Environmental Consultants in 2008 states that the property contains three north-to-south flowing tributaries to Bunch Creek. Riparian forest is present along the Bunch Creek and Smuthers Ravine drainages and dominant vegetation in these areas include white alder, arroyo willow, red willow and Oregon ash. The woody understory consists of wild grape, Himilaya blackberry and poison oak. The biological study concluded that the riparian habitats along Bunch Creek and Smuther's Ravine would remain undisturbed by the proposed project. Based on the County's General Plan Policy 6.A.1, the County requires the implementation of sensitive habitat buffers, which include a requirement that all structures be setback 100 feet from the centerline of perennial streams, 50 feet from intermittent streams, and 50 feet from the edge of sensitive habitats to be protected, including riparian zones. The proposed caretaker's residence would be constructed in adherence to these policies and would not disturb these sensitive biological resources. Therefore, no mitigation measures are required.

Discussion - Items IV-5:
The biological resources study prepared for the project site by Miriam Green Environmental Consultants in 2008 states that the property contains three north-to-south flowing tributaries to Bunch Creek. The study reported findings that no regulated waters or wetlands were identified on the project site. The areas proposed for project construction are outside the areas of these tributaries and for this reason would not have an adverse impact on federally protected wetlands. In addition, based on the County's General Plan Policy 6.A.1, the County requires the implementation of sensitive habitat buffers, which include a requirement that all structures be setback 100 feet from the centerline of perennial streams, 50 feet from intermittent streams, and 50 feet from the edge of sensitive habitats to be protected, including riparian zones Therefore, there would be no impact to these biological resources and no mitigation measures are required.

Discussion - Item IV-7:
The proposed project includes the development of a caretaker's residence on one of two building sites on the subject property. A biological study was prepared for the proposed project by Miriam Green Environmental Consultants in 2008. The biological study determined that plant communities on the subject property consist mostly of chaparral and foothill woodland, which include foothill pine, blue oak, black oak and canyon live oak. The study notes that building sites designated for the caretaker's residence are relatively free of vegetation, and that roads that access the building areas already exist. However, road widening and construction of the residence may result in impacts to trees located on the property, which are considered protected trees and impacts resulting from the proposed project may conflict with the Placer County Tree Preservation Ordinance. The study further notes that up to seven acres of the 597.5 acre property could be impacted by development, with an extra two acres of disturbance resulting from road improvements (approximately 1.5 percent of the sites total acreage). This level of disturbance on the subject property is considered less than significant and therefore, no mitigation measures are required.

Discussion - Item IV-8:
At the present time, Placer County has not adopted a Habitat Conservation Plan or a Natural Communities Conservation Plan. As such, there would be no impact to such plans.

V. CULTURAL RESOURCES – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Substantially cause adverse change in the significance of a historical resource as defined in CEQA Guidelines, Section 15064.5? (PLN)			X	
2. Substantially cause adverse change in the significance of a unique archaeological resource pursuant to CEQA Guidelines, Section 15064.5? (PLN)			X	
3. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? (PLN)				X
4. Have the potential to cause a physical change, which would affect unique ethnic cultural values? (PLN)				X

5. Restrict existing religious or sacred uses within the potential impact area? (PLN)				X
6. Disturb any human remains, including these interred outside of formal cemeteries? (PLN)				X

Discussion - Items V-1, 2:
The project involves the proposed construction of a caretaker's residence on one of two 1-2 acre building sites. A cultural resource assessment was conducted for the subject parcels by Peak and Associates, Inc. in December of 2008. The study reports that the subject parcels contain four previously recorded cultural resources sites and two newly recorded sites. However, none of the recorded sites contain artifacts. The study concluded that the proposed project would not result in impacts to cultural resources. No mitigation measures are required.

To ensure the protection of any resources that are inadvertently discovered during the implementation of the caretaker's residence, the project will be conditioned as follows:

"If any archaeological artifacts, exotic rock (non-native), or unusual amounts of shell or bone are uncovered during any on-site construction activities, all work must stop immediately in the area and a SOPA-certified (Society of Professional Archaeologists) archaeologist retained to evaluate the deposit. The Placer County Planning Department and Department of Museums must also be contacted for review of the archaeological find(s). If the discovery consists of human remains, the Placer County Coroner and Native American Heritage Commission must also be contacted. Work in the area may only proceed after authorization is granted by the Placer County Planning Department. A note to this effect shall be provided on the Improvement Plans for the project. Following a review of the new find and consultation with appropriate experts, if necessary, the authority to proceed may be accompanied by the addition of development requirements which provide protection of the site and/or additional mitigation measures necessary to address the unique or sensitive nature of the site."

Discussion - Items V- 3, 4, 5:
There are no paleontological or geologic features known to be located on the project site, and the construction of the caretaker's residence on the project site will not affect ethnic cultural values or religious or sacred uses.

VI. GEOLOGY & SOILS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Expose people or structures to unstable earth conditions or changes in geologic substructures? (ESD)		X		
2. Result in significant disruptions, displacements, compaction or overcrowding of the soil? (ESD)		X		
3. Result in substantial change in topography or ground surface relief features? (ESD)			X	
4. Result in the destruction, covering or modification of any unique geologic or physical features? (ESD)			X	
5. Result in any significant increase in wind or water erosion of soils, either on or off the site? (ESD)		X		
6. Result in changes in deposition or erosion or changes in siltation which may modify the channel of a river, stream, or lake? (ESD)		X		
7. Result in exposure of people or property to geologic and geomorphological (i.e. Avalanches) hazards such as earthquakes, landslides, mudslides, ground failure, or similar hazards? (ESD)			X	

8. Be located on a geological unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? (ESD)			X	
9. Be located on expansive soils, as defined in Chapter 18 of the California Building Code, creating substantial risks to life or property? (ESD)		X		

Discussion - Item VI-1:
This project is located in the Colfax area and proposes a single caretaker's residence to be constructed in one of two potential locations identified as Building Site #1 and Building Site #2 on the site plan in order to provide 24 hour security to oversee timber production on the approximately 600 acre property. A review of soil types as identified in the 1980 U.S. Department of Agriculture Soil Conservation Service Soil Maps of Western Placer County indicates that the soil types predominantly range from Mariposa-Rock Outcrop Complex, Maymen-Rock Outcrop Complex, and Mariposa-Josephine Complex soils. These soil types are generally characterized as shallow to moderate in depth, moderate to well drained, slow to moderate permeability, and with only fair effective rooting depths. Hazard of erosion is high to very high. Some soil types present across this large acreage exhibit building limitations such as soil expansion potential and low soil strength. If not constructed according to the specifications of a registered civil engineer, the roadway and structural improvements could potentially expose people or structures to unstable earth conditions. The proposed project's impacts associated with unstable earth conditions will be mitigated to a less than significant level by implementing the following mitigation measures:

Mitigation Measures - Item VI-1:
MM VI.1 Prior to Building Permit issuance and/or commencement of use, whichever occurs first, the applicant shall obtain approved Grading Plans, prepared by the applicant's Registered Civil Engineer, from the ESD for the construction of the required improvements which include the reconstruction and widening of the Gillis Hill Road private access road to a minimum 18 foot width plus shoulders, an LDM standard Plate R-17 roadway connection at the Yankee Jims Road and Gillis Hill Road, an LDM standard Plate R-18 connection at Gillis Hill Road and the private driveway, widening of the private driveway to a minimum 10 foot width including turnouts, and a fire apparatus vehicle turnaround.

MM VI.2 All proposed grading, road and drainage improvements, staging areas, and vegetation shall be shown on the Grading Plans and all work shall conform to provisions of the County Grading Ordinance (Ref. Article 15.48, Placer County Code) and the Placer County Flood Control District's Stormwater Management Manual. No grading or clearing shall occur prior to Grading Permit issuance. The applicant shall revegetate all disturbed areas. A winterization plan shall be provided with project Grading Plans. It is the applicant's responsibility to assure proper installation and maintenance of erosion control/winterization during project construction.

Discussion - Item VI-2:
This project has identified two potential building sites for a proposed caretaker's residence on the approximately 600 acre property. Unimproved access roads and driveways to both of these potential building sites exist; however, some minor grading will be required to widen both Gillis Hill Road and the private driveway and include fire turnouts in some locations. The impact related to significant disruptions, displacements, compaction, or overcrowding of the soil is not considered to be significant; however, if not handled properly, the grading could result in negative effects on the environment. Therefore, even though Gillis Hill Road and the private access driveways currently exist in an unimproved condition and only minor grading is proposed, the following mitigation measures identified elsewhere in this document will reduce this grading impact to a less than significant level:

Mitigation Measures- Item VI-2:
Refer to text in MM VI.1 and MM VI.2

Discussion - Item VI-3:
This project proposes a single caretaker's residence to be constructed in one of two potential locations identified on the site plan in order to provide 24 hour security to oversee timber production on the approximately 600 acre property. Unimproved access roads and driveways for both potential building sites are already in place, as these have been used for many years as fire and private access roads. Both potential building sites have fairly level cleared surfaces, with minor grading expected for cuts and fills to level building pads and grade and improve existing driveways. There will not be a substantial change in topography or ground surface relief features in order to improve one of the existing access roads and building sites. No mitigation measures are required.

Discussion - Item VI-4:
This approximately 600 acre project site may contain some areas of past mining activities and bedrock artifacts of interest; however, both potential caretaker residential sites do not propose to disturb any of these areas. It is not anticipated that any unique geologic or physical features will be destroyed, covered, or modified as part of this project. No mitigation measures are required.

Discussion - Items VI-5, 6:
This project proposal would result in the construction of one caretaker residence, with standard all-weather fire access road/driveway, turnouts, and turnaround as required by the Engineering and Surveying Division and serving fire district. This project has within its boundaries the Gillis Hill Ridge, as well as a creek crossing of Bunch Creek. A minimum length of 100 feet of Placer County Land Development Manual standard 20-foot wide roadway shall be constructed from the existing Bunch Creek crossing towards the project site. From that point forward to the chosen caretaker residence site, the access road shall be constructed with an all-weather surface driveway standard that provides a width of no less than 12 feet and provides roadway turnouts no more than 400 feet apart, unless otherwise approved by the serving fire district.

The disruption of soils on this previously developed property to improve the access to the building site and create turnout areas and a turnaround increases the risk of erosion and creates a potential for contamination of stormwater runoff towards natural waterways with disturbed soils or other pollutants introduced through typical grading practices. The construction phase will create significant potential for erosion as disturbed soil may come in contact with wind or precipitation that could transport sediment to the air and/or adjacent waterways. Discharge of concentrated runoff in the post-development condition could also contribute to the erosion potential impact in the long-term, although the likelihood of this impact is very low since only one residence is being constructed on the 597.5-acre site. The potential for soil erosion and water quality impacts are always present and occur when protective vegetative cover is removed and soils are disturbed. It is primarily the shaping of building pads, grading for access roads, driveways, and hardscape areas, and septic system installation that are responsible for accelerating erosion and degrading water quality during construction activities. This disruption of soils on the site has the potential to result in significant increases in erosion of soils both on- and off-site. The proposed project's impacts associated with soil erosion can be mitigated to a less than significant level by implementing the following mitigation measures:

Mitigation Measures - Items VI-5, 6:
Refer to text in MM VI.1, MM VI.2 as well as the following:

MM VI.3 The Grading Plans shall show that water quality treatment facilities/Best Management Practices (BMPs) shall be designed according to the guidance of the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development / Redevelopment, and for Industrial and Commercial, the Erosion and Sediment Control Guidelines for Developing Areas of the Sierra Foothills and Mountains (High Sierra RC&D Council), the TRPA Handbook of Best Management Practices, or other similar source as approved by the Engineering and Surveying Division (ESD).

Construction (temporary) BMPs for the project include, but are not limited to: Hydroseeding, Stabilized Construction Entrance (LDM Plate C-4), Silt Fence (SE-1), Fiber Rolls (SE-5), revegetation techniques, tree protective fencing, gravel bags, diversion swales, check dams, sweeping, dust control measures, construction fence, limiting the soil disturbance, and concrete washout areas.

Discussion - Items VI-7, 8:
According to the Forest Management Plan prepared by Douglas Ferrier, dated March 27, 2006, the area has been mapped by the State as having soils derived from Upper Jurassic marine sedimentary rocks, such as slates and shales. An earthquake fault is mapped trending northwesterly/southeasterly down the ridgeline of Gillis Hill, the main ridge between the North Fork American River and Bunch Creek/Smuthers Creek drainages. Gillis Hill crosses the property in its southeastern corner, in the vicinity of the Camels Hump. The project does not propose a building site at the Camels Hump at this time. No mitigation measures are required.

Discussion - Item VI-9:
This project proposes a single caretaker's residence to be constructed in one of two potential locations identified on the site plan in order to provide 24 hour security to oversee timber production on the approximately 600 acre property. A review of soil types as identified in the 1980 U.S. Department of Agriculture Soil Conservation Service Soil Maps for Western Placer County indicates that the soil types are characterized by undulating to steep, well drained soils that are shallow to deep over metamorphic rock. Some soil types present across this large acreage

exhibit building limitations such as soil expansion potential and low soil strength. If not constructed according to the specifications of a registered civil engineer, the roadway and structural improvements could potentially expose people or structures to unstable earth conditions. The proposed project's impacts associated with expansive soils can be mitigated to a less than significant level by implementing the following mitigation measures:

Mitigation Measures - Item VI-9:
Refer to text in MM VI.1, MM VI.2

VII. GREENHOUSE GAS EMISSIONS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant and/or cumulative impact on the environment? (PLN, Air Quality)			X	
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? (PLN, Air Quality)			X	

Discussion - All Items:
Greenhouse gas (GHG) emissions of primary concern from land use projects include carbon dioxide (CO_2), methane (CH_4), and nitrous oxide (N_2O). Construction related activities resulting in exhaust emissions may come from fuel combustion for heavy-duty diesel and gasoline-powered equipment, portable auxiliary equipment, material delivery trucks, and worker commuter trips. Operational GHG emissions would result from motor vehicle trips generated by the new residents, on-site fuel combustion for space and water heating, landscape maintenance equipment, and fireplaces/stoves; and off site emissions at utility providers associated with the project's electricity and water demands.

The project would result in minor grading and additional dwelling units. The construction and operational related GHG emissions resulting from the project would not substantially hinder the State's ability to attain the goals identified in AB 32 (i.e., reduction of statewide GHG emissions to 1990 levels by 2020; approximately a 30 percent reduction from projected 2020 emissions). Thus, the construction and operation of the project would not generate substantial greenhouse gas emissions, either directly or indirectly, which may be considered to have a significant impact on the environment, nor conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases and is therefore considered to have a less than significant impact, and no mitigation measures are required.

VIII. HAZARDS & HAZARDOUS MATERIALS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Create a significant hazard to the public or the environment through the routine handling, transport, use, or disposal of hazardous or acutely hazardous materials? (EHS)				X
2. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? (EHS)			X	
3. Emit hazardous emissions, substances, or waste within one-quarter mile of an existing or proposed school? (PLN, Air Quality)				X
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section		X		

65962.5 and, as a result, would it create a significant hazard to the public or the environment? (EHS)				
5. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? (PLN)				X
6. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing in the project area? (PLN)				X
7. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? (PLN)		X		
8. Create any health hazard or potential health hazard? (EHS)				X
9. Expose people to existing sources of potential health hazards? (EHS)		X		

Discussion - Items VIII-1, 2:
Construction of the proposed project would involve the short-term use and storage of hazardous materials typically associated with grading, such as fuel and other substances. All materials would be used, stored, and disposed of in accordance with applicable federal, state, and local laws including Cal-OSHA requirements and manufacturer's instructions. Therefore, the proposed project does not pose a risk of accident or upset conditions involving the release of hazardous materials. No mitigation measures are required.

Discussion - Item VIII-3:
There are no school sites located within a quarter mile of the project location. Further, the project does not propose a use that typically would involve any activities that would emit hazardous substances or waste that would affect a substantial number of people and is therefore considered to have a less than significant impact.

Discussion - Items VIII-4, 9:
A Phase I Environmental Results Report (Phase I) dated March 30, 2009 and a Phase II (Phase II) Environmental Results Report dated July 16, 2009 were prepared by GeoSolutions for the project site. The project is located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. It is listed on the Department of Toxic Substances Control's Envirostor list as a voluntary cleanup site.

According to the Phase I, several abandoned mining features are located at the site, including three tunnels and a former rock crusher area located within a ravine in the central area of the site. To assess the potential for elevated levels of metals related to the historic mining operations conducted at the site, Geo Solutions collected 15 soil samples and one surface water sample to be analyzed for CAM 17 metals. Soil samples were collected from the following locations: at the openings of the two tunnels, from a mine tailings pile near the rock crusher, from the area in/around the rock crusher, from stream sediment located in the ravine below the rock crusher. One surface water sample was collected from the ravine below the rock crusher. Arsenic and chromium were reported above the residential California Human Health Screening Levels (CHHSLs) for each of the soil samples collected with the highest arsenic concentrations reported for the samples collected from the opening of the middle tunnel, mine tailing pile and near the rock crusher. The proposed construction of a caretakers residence could potentially expose people to elevated levels of arsenic and chromium in the soil at the project site. The open tunnel to the hard rock mine located on the project site is a potential safety hazard. These are potentially significant impacts that will be reduced to less than significant by the following mitigation measures:

Discussion - Items VIII-4, 9:
A Phase I Environmental Results Report (Phase I) dated March 30, 2009 and a Phase II (Phase II) Environmental Results Report dated July 16, 2009 were prepared by GeoSolutions for the project site. The project is located on a site included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. It is listed on the Department of Toxic Substances Control's Envirostor list as a voluntary cleanup site.

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Mitigation Measures - Items VIII-4,9:
MM VIII.1 Prior to issuance of a building permit, the project applicant shall complete any remedial action required by the California Department of Toxic Substances Control and provide Placer County Environmental Health Services with a "No Further Action" or equivalent letter from DTSC with regard to residual contamination from past mining activities.

MM VIII.2 Prior to issuance of a building permit, the project applicant shall secure the opening of any mine tunnels to prevent unauthorized access.

Discussion - Items VIII-5, 6:
The project site is not located within an airport land use plan, nor within the vicinity of a private airstrip. No hazardous impacts related to air traffic would result from the construction of a caretaker's residence on the project site. No mitigation measures are required.

Discussion - Item VIII-7:
The project includes the construction of a caretaker's residence on the project site. The subject property is located in an area highly susceptible to wildland fires and was the subject of a wildland fire when the Ponderosa fire occurred in 2001. Construction of the caretaker's residence would result in exposing the inhabitants of the residence to a risk of loss, injury or death as a result of wildland fires. However, the following mitigation measures will reduce these impacts to a less than significant level.

Mitigation Measures - Item VIII-7:
MM VIII.3

- In order to reduce the threat of damage as a result of wildland fires, the applicant shall provide for shaded fuel breaks on the ridge tops on the project site, shall maintain passable roads, and shall maintain pruned and thinned vegetation adjacent to roadways.
- Fuel reductions meeting PCFD/CDF "shaded fuel break" standards shall be provided along roadways within the project.
- Roadside fuel reductions shall be on both side of roadways and shall be 50 feet from centerline in areas with side slopes under 15% and 100 feet from centerline in areas with side slopes greater than 15%.
- Roadway width, grade and surfacing shall comply with Placer County Department of Public Works requirements and shall be approved by PCFD/CDF.
- Vertical clearances shall be at least 15 feet on all roads and driveways.
- Provide 100 feet of defensible space around all structures in areas with under 15% grade, 200 feet in areas under 30% grade and 300 feet in areas exceeding 30% grade. Fire-safe construction may be used to reduce the defensible space requirements with PCFD/CDF approval.
- On-site water storage for fire department sue shall be provided at approved locations (8,000 gallons total).
- A residential address shall be visible from the access street or road fronting the property, clearly visible from both directions of travel on the road/street.

Discussion - Item VIII-8:
The proposed project will not create any health hazards or potential hazards. The proposed project is to construct a caretakers residence.

IX. HYDROLOGY & WATER QUALITY – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Violate any federal, state or county potable water quality standards? (EHS)			X	
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lessening of local groundwater supplies (i.e. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? (EHS)				X
3. Substantially alter the existing drainage pattern of the site or area? (ESD)			X	
4. Increase the rate or amount of surface runoff? (ESD)			X	
5. Create or contribute runoff water which would include substantial additional sources of polluted water? (ESD)		X		
6. Otherwise substantially degrade surface water quality?(ESD)		X		
7. Otherwise substantially degrade ground water quality? (EHS)			X	
8. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard boundary or Flood Insurance Rate Map or other flood hazard delineation map? (ESD)				X
9. Place within a 100-year flood hazard area improvements which would impede or redirect flood flows? (ESD)		X		
10. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam? (ESD)		X		
11. Alter the direction or rate of flow of groundwater? (EHS)				X
12. Impact the watershed of important surface water resources, including but not limited to Lake Tahoe, Folsom Lake, Hell Hole Reservoir, Rock Creek Reservoir, Sugar Pine Reservoir, French Meadows Reservoir, Combie Lake, and Rollins Lake? (EHS, ESD)			X	

Discussion - Item IX-1:
The project will utilize one of two existing onsite water wells for the proposed caretakers residence, and a proposed onsite sewage disposal system which will be installed in accordance with Placer County Code through permits obtained from Placer County Environmental Health Services (PCEHS). The location of the water wells are beyond the required 100-feet from the proposed onsite sewage disposal system. The water wells here are drilled in excess of 100-feet below ground surface and are protected from contaminants at the ground surface by sanitary seals and annular seals. Both existing water wells have had 4 hour well yields, passing bacteriological testing, and testing for primary and secondary drinking water standards submitted to PCEHS. With the setback distances required by County Ordinances and California State Law and that the septic systems and water wells must be placed in locations approved by PCEHS, the likelihood of this project to violate any potable water quality standards is considered to be less than significant. No mitigation measures are required.

Discussion - Item IX-2:
Both existing wells meet the County standard for providing adequate water supply for the proposed project. The project lies in a hardrock fractured water supply. It is impossible to quantify how much water will be yielded from a fractured water supply or how long any water well will be sustained. A single family dwelling is a low use as compared to an industrial use or an agricultural use. Thus, the potential to deplete the groundwater supply is considered to be less than significant in this case. No mitigation measures are required.

Discussion - Items IX-3, 4:
The project site consists of approximately 600 acres. Ground slopes range from 2% to 75%. Native vegetation consists mainly of dense conifer trees, low grasses, and brush. The entire site is tributary to Bunch Creek which flows through the western portion of the property. Bunch Creek is tributary to the North Fork of the American River. The other major drainage course located on the site is Smuthers Ravine which also flows through the western portion of the site before joining Bunch Creek. Several minor drainage courses cross Gillis Hill Road and the on-site access roadway. Due to the large project acreage, site topography, and size of the watershed, the construction of improved access roadways, driveways, and impervious surfaces for a caretaker structure has relatively little impact on the existing drainage patterns of the area. The relatively minor standard road improvements required as conditions of the Minor Use Permit for the caretaker's residence will not significantly increase the rate and amount of surface runoff of the site. No mitigation measures are required.

Discussion - Items IX-5, 6:
The project site is located within the Central Valley Regional Water Quality Control Board jurisdictional area. The site is accessed from Gillis Hill Road off of Yankee Jims Road. The entire site is tributary to Bunch Creek which flows through the western portion of the property. The other major drainage course located on the site is Smuthers Ravine which also flows through the western portion of the site before joining Bunch Creek. Both culverts under the road crossings at Bunch Creek and Smuthers Ravine are undersized, and overflow during larger storm events.

Potential water quality impacts are present both during project construction and post-project development. Construction activities will disturb soils and cause potential introduction of sediment into stormwater during rain events. The water quality of all natural waterways is important to maintain for the health of the ecosystem. Potential water quality impacts are present both during project construction and post-project development. Construction activities will disturb soils and cause potential introduction of sediment into stormwater during rain events. Through the implementation of Best Management Practices (BMPs) for minimizing contact with potential stormwater pollutants at the source and erosion control methods, this potentially significant impact will be reduced to less than significant levels. In the post-development condition, the project could potentially introduce contaminants such as oil and grease, sediment, nutrients, metals, organics, pesticides, and trash from activities such as roadway runoff, landscape fertilizing and maintenance, and refuse collection. Drainage from the project roadways will be treated via inlets, culverts, grassed swales, and rock-lined ditches. Individual home builders should provide permanent BMPs such as the use of flow spreaders, landscape buffer areas, gravel landscape paths, and infiltration trenches and other similar measures to spread out, infiltrate, and treat runoff from roofs and impervious driveways. The proposed project's impacts associated with water quality degradation will be mitigated to a less than significant level by implementing the following mitigation measures:

Mitigation Measures - Items IX-5, 6:
Refer to text in MM VI.1, MM VI.2, MM VI.3 as well as the following:

MM IX.1 A limited drainage report shall be submitted with the Grading Plans in conformance with the requirements of Section 5 of the LDM and the Placer County Storm Water Management Manual that are in effect at the time of submittal, to the Engineering and Surveying Division for review and approval. The report shall be prepared by a Registered Civil Engineer and shall, at a minimum, include: A written text addressing existing and proposed conditions, the downstream effects of the proposed improvements, culvert sizing and replacement for drainage crossings, and a Best Management Practices (BMP) Plan to provide temporary and permanent water quality protection.

MM IX.2 Water quality Best Management Practices (BMPs) shall be designed according to the California Stormwater Quality Association Stormwater Best Management Practice Handbooks for Construction, for New Development / Redevelopment, and/or for Industrial and Commercial, (and/or other similar source as approved by the Engineering and Surveying Division (ESD)).

Post-development (permanent) BMPs for the project include, but are not limited to: infiltration trenches (TC-10), grassed swales, rock-lined ditches, rock outfall protection, and three-dimensional grids on fill slopes for stabilization

and erosion prevention. No water quality facility construction shall be permitted within any identified wetlands area, floodplain, or right-of-way, except as authorized by project approvals.

All BMPs shall be maintained as required to insure effectiveness. Maintenance of these facilities shall be provided by the project owners/permittees.

Discussion - Item IX-7:
This project is not likely to otherwise degrade groundwater quality.

Discussion - Item IX-8:
Both proposed caretaker residence sites are located at the top of ridges, and not within a 100-year flood hazard area as defined and mapped by the Federal Emergency Management Agency (FEMA). There is no impact.

Discussion - Items IX-9, 10:
Some road improvements will occur within the 100-year flood plain of Bunch Creek and Smuthers Ravine in order to improve access from Yankee Jims Road and Gillis Hill Road to the chosen caretaker residence site. The entire site is tributary to Bunch Creek which flows through the western portion of the property. The other major drainage course located on the site is Smuthers Ravine which also flows through the western portion of the site before joining Bunch Creek. Both culverts under the road crossings at Bunch Creek and Smuthers Ravine are undersized, and overflow when trying to handle large storm events. The project's impacts related to placing improvements within a 100-year flood hazard area that could impede or redirect flood flows and exposing people or structures to a significant risk of loss, injury, or death, including flooding will be mitigated to a less than significant level by implementing the following mitigation measures:

Mitigation Measures - Items IX-9, 10:
Refer to text in MM VI.1, MM VI.2, MM IX.1 as well as the following:

MM IX.3 In order to protect site resources, no grading activities of any kind may take place within the 100-year flood plain of the stream/drainage ways unless otherwise approved as a part of this project. All work shall conform to provisions of the County Flood Damage Prevention Regulations (Section 15.52, Placer County Code). The location of the 100-year flood plain shall be shown on the Grading Plans.

MM IX.4 Prior to Grading Plan approval, the drainage report shall evaluate the following drainage facilities for condition and capacity and shall be upgraded, replaced, or mitigated as specified by the Engineering and Surveying Division per the Placer County Stormwater Management Manual (SWMM): culvert crossings at Bunch Creek and Smuthers Ravine.

Discussion - Item IX-11:
The project will not alter the direction or rate of flow of groundwater.

Discussion - Item IX-12:
The project site drains to the Bunch Creek watershed. The additional impervious areas of the improved roadways, driveways, and the caretaker residence created by the project are small compared to the overall watershed. Water quality Best Management Practices will be required during the construction of road and drainage crossing improvements. Impacts to the Bunch Creek watershed as a result of this project will be less than significant. No mitigation measures are required.

X. LAND USE & PLANNING – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Physically divide an established community? (PLN)				X
2. Conflict with General Plan/Community Plan/Specific Plan designations or zoning, or Plan policies adopted for the purpose of avoiding or mitigating an environmental effect?			X	

(EHS, ESD, PLN)				
3. Conflict with any applicable habitat conservation plan or natural community conservation plan or other County policies, plans, or regulations adopted for purposes of avoiding or mitigating environmental effects? (PLN)				X
4. Result in the development of incompatible uses and/or the creation of land use conflicts? (PLN)				X
5. Affect agricultural and timber resources or operations (i.e. impacts to soils or farmlands and timber harvest plans, or impacts from incompatible land uses)? (PLN)				X
6. Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)? (PLN)				X
7. Result in a substantial alteration of the present or planned land use of an area? (PLN)				X
8. Cause economic or social changes that would result in significant adverse physical changes to the environment such as urban decay or deterioration? (PLN)				X

Discussion - Items X-1, 3, 4, 5, 6, 7, 8:
The proposed project would result in the construction of a caretaker's residence on the subject property. The purpose of the caretaker's residence is to allow for a 24-hour caretaker to live on-site in order to manage timber operations occurring on the subject parcels. The timber operations are in conformance with the property zoning and General Plan designations of Agriculture/Timberland, and are also compatible with surrounding properties in that those properties are similarly zoned and are either undeveloped or developed in conformance with the zoning. The subject property consists of approximately 600 acres and the selected building sites for the construction of the caretaker's residence are relatively distant from neighboring properties lines and/or other residences in the vicinity. The proposed caretaker's residence would support and enhance the timber operations in that an on-site caretaker would have the ability to manage these operations and reduce possible threats that could hinder the success of the timber management plan. For these reasons, the proposed use is in substantial conformance with the zoning and general plan designations of the property, would not result in the creation of incompatible uses with surrounding properties, would not conflict with existing habitat management or conservation plans, and would enhance the planned land use for the property. Because of this, no impacts to land use would result from the implementation of the caretaker's residence.

Discussion - Item X-2:
The proposed caretaker residence project does not conflict with plan policies. The Timberland Production zone district allows for a caretaker's residence with the approval of a Minor Use Permit when the hearing body determines that the residence is incidental to the primary use of the property and is necessary to facilitate the management of the property by a 24-hour caretaker. No mitigation measures are required.

XI. MINERAL RESOURCES – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. The loss of availability of a known mineral resource that would be of value to the region and the residents of the state? (PLN)				X
2. The loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? (PLN)				X

Discussion - Item XI-1:
The Mineral Land Classification of Placer County (California Department of Conservation-Division of Mines and Geology, 1995) was prepared for the purpose of identifying and documenting the various mineral deposits found in the soils of Placer County. The Classification is comprised of three primary mineral deposit types: those mineral deposits formed by mechanical concentration (Placer gold); those mineral deposits formed by hydrothermal processes (lode gold, silver, copper, zinc and tungsten); and construction aggregate resources, industrial mineral deposits and other deposits formed by magmatic segregation processes (sand, gravel, crushed stone, decomposed granite, clay, shale, quartz and chromite).

With respect to those deposits formed by mechanical concentration, the site and immediate vicinity are classified as Mineral Resource Zone MRZ-1, meaning, this is an area where available geologic information indicates there is little likelihood for the presence of significant mineral resources.

With respect to those mineral deposits formed by hydrothermal processes, as well as aggregates and industrial minerals, the site and vicinity have been classified as Mineral Resource Zone MRZ-3a$^{(h\text{-}10)}$. This area is the Weimar/Gillis Hill Fault Zones area that contains cavity-filling, locally gold-bearing quartz veins that occupy fractured and sheared rock along and between the northerly trending Weimar and Gillis Hill fault zones.

Discussion - Item XI-2:
No recovery site has been delineated on the subject property or vicinity. Therefore, no impacts to the availability of locally-important mineral resources would occur as a result of the development of this site.

XII. NOISE – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan, Community Plan or noise ordinance, or applicable standards of other agencies? (PLN)				X
2. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? (PLN)				X
3. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? (PLN)			X	
4. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? (PLN)				X
5. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? (PLN)				X

Discussion - Item XI-1, 2, 4, 5:
The proposed project involves the construction of a caretaker's residence on one of two 1-2 acre building sites on the subject property. Noise associated with the proposed project would include construction noise with the development of the proposed residence and road improvements. The project would also result in the type of noise usually associated with a single-family residence and the project would not involve the creation of noise in excess of the standards of the Placer County General Plan. Noise occurring on the subject property would not affect parcels in the immediate vicinity due to the large size of the parcels, the location of the proposed residence on the parcel, and the large size of the adjacent properties. Additionally, the project is not located within the vicinity of a private airstrip. For these reasons, the project would not result in impacts relating to noise.

Discussion - Item XI-3:
The construction of the caretaker's residence may result in an increase of temporary ambient noise levels. However, the construction noise resulting from development of the proposed project would be temporary and is considered less than significant. No mitigation measures are required.

XIII. POPULATION & HOUSING – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Induce substantial population growth in an area, either directly (i.e. by proposing new homes and businesses) or indirectly (i.e. through extension of roads or other infrastructure)? (PLN)				X
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? (PLN)				X

Discussion - All Items:
The proposed project involves the construction of a caretaker's residence. The project site is in an area that is not heavily developed and is a significant distance away from other residences in the project vicinity. The project would not induce substantial population growth as the project would result in the development of one caretaker's residence to allow for a 24-hour caretaker to manage all of the three contiguous parcels. For these reasons, the proposed project would not result in impacts to population and housing.

XIV. PUBLIC SERVICES – Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental services and/or facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services?

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Fire protection? (ESD, PLN)			X	
2. Sheriff protection? (ESD, PLN)				X
3. Schools? (ESD, PLN)				X
4. Maintenance of public facilities, including roads? (ESD, PLN)				X
5. Other governmental services? (ESD, PLN)				X

Discussion - Item XIV-1:
No new fire protection facilities are proposed as part of this project. As conditions of approval, the project is required to construct fire turnouts at a minimum spacing of 400 feet, a fire apparatus vehicle turnaround, and road standards for fire equipment access in accordance with PRC Code 4290. A letter from the Department of Forestry and Fire Protection, Cal Fire, dated August 4, 2012, recognized the project applicant as cooperative in property fuels management. The Gillis Hill ridge has been identified by Cal Fire as a high priority for protecting the community of Colfax and the surrounding area, Interstate 80, and the Union Pacific Railroad lines. It is an important fuel break project for the Placer Sierra Fire Safe Council Community Wildfire Protection Plan. The applicant's

project for an on-site caretaker will provide an annual presence for maintaining access roads and reducing fuel loading on the property. No mitigation measures are required.

Discussion - Item XIV-2:
No new sheriff protection facilities are proposed as part of this project. There is no impact.

Discussion - Item XIV-3:
No new school facilities are proposed as part of this project. There is no impact.

Discussion - Item XIV-4:
There will be no change to current County maintenance activities on Yankee Jims Road as a result of this caretaker residence being constructed on the approximately 600 acre property. Gillis Hill Road and the access road to the chosen caretaker residence site are privately maintained. There is no impact.

Discussion - Item XIV-5:
No other governmental services are proposed as part of this project. There is no impact.

XV. RECREATION – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? (PLN)			X	
2. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? (PLN)				X

Discussion - Item XV-1:
The proposed project includes the construction of a caretaker's residence on the project site. In keeping with the expected use of a residence, the caretaker's residence may increase the use of recreational facilities in the area. However, the use of these facilities resulting from the creation of a caretaker's residence on site would be considered negligible and, as such, no mitigation measures are required.

Discussion - Item XV-2:
The construction of a caretaker's residence on the subject property does not include a proposal for the construction of recreational facilities nor would it require the construction or expansion of recreational facilities. This is due to the small scale of the project and its negligible effects on such facilities.

XVI. TRANSPORTATION & TRAFFIC – Would the project result in:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. An increase in traffic which may be substantial in relation to the existing and/or planned future year traffic load and capacity of the roadway system (i.e. result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)? (ESD)		X		
2. Exceeding, either individually or cumulatively, a level of service standard established by the County General Plan and/or Community Plan for roads affected by project traffic? (ESD)				X

3. Increased impacts to vehicle safety due to roadway design features (i.e. sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? (ESD)			X	
4. Inadequate emergency access or access to nearby uses? (ESD)			X	
5. Insufficient parking capacity on-site or off-site? (ESD, PLN)				X
6. Hazards or barriers for pedestrians or bicyclists? (ESD)				X
7. Conflicts with adopted policies, plans, or programs supporting alternative transportation (i.e. bus turnouts, bicycle lanes, bicycle racks, public transit, pedestrian facilities, etc.) or otherwise decrease the performance or safety of such facilities? (ESD)				X
8. Change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? (PLN)				X

Discussion - Item XVI-1:
The proposed project creates site-specific impacts on local transportation systems that are considered less than significant when analyzed against the existing baseline traffic conditions and roadway segment / intersection existing LOS, however, the cumulative effect of an increase in traffic has the potential to create significant impacts to the area's transportation system. Article 15.28.010 of the Placer County Code establishes a road network Capital Improvement Program (CIP). This project is subject to this code and, therefore, required to pay traffic impact fees to fund the CIP for area roadway improvements. With the payment of traffic mitigation fees for the ultimate construction of the CIP improvements, the project's traffic impacts are less than significant.

Mitigation Measures - Item XVI-1:
MM XVI.1 This project will be subject to the payment of traffic impact fees that are in effect in this area (Placer East Fee District), pursuant to applicable Ordinances and Resolutions. The applicant is notified that the following traffic mitigation fee(s) will be required and shall be paid to Placer County DPW prior to issuance of any Building Permits for the project:

A) County Wide Traffic Limitation Zone: Article 15.28.010, Placer County Code

The current estimated fee is $3,227 per single family residence. The fees were calculated using the information supplied. If either the use or the square footage changes, then the fees will change. The actual fees paid will be those in effect at the time the payment occurs.

Discussion - Item XVI-2:
The addition of one caretaker residence will add project traffic associated with one single family residence. This will not exceed, either individually or cumulatively, the level of service standard established by the General Plan and/or Community Plan for roads affected by project traffic. There is no impact.

Discussion - Item XVI-3:
The site access is from Yankee Jims Road, a public road, to Gillis Hill Road, a private road, to an unnamed private access driveway. Gillis Hill Road is an existing private roadway serving a number of properties including those that practice Timber Production. Periodic timber harvests result in large trucks hauling logs to market along the existing private roadways to Yankee Jims Road. Both residential passenger vehicles and commercial hauling vehicles share the roadways. The development of a caretaker's residence on the property would require the on-site private roadway, Gillis Hill Road, to be improved per the Minor Use Permit conditions of approval. These widening improvements and turnouts will allow for vehicles to safely share the roadway. No mitigation measures are required.

Discussion - Item XVI-4:
As conditions of approval, the project is required to construct fire turnouts at a minimum spacing of 400 feet, a fire apparatus vehicle turnaround, and road standards for fire equipment access in addition to minimum private water supply reserves for emergency fire use in accordance with PRC Code 4290. No additional mitigation measures are required.

Discussion - Items XVI-5, 8:
The proposed project includes the construction of a caretaker's residence on the project site, and the construction of a residence on the site would require providing a sufficient area for parking. The proposed project would not result in a change in air traffic patterns.

Discussion - Item XVI-6:
The project would not cause hazards or barriers for pedestrians or bicyclists. There is no impact.

Discussion - Item XVI-7:
The proposed project will not conflict with any existing, or preclude anticipated future policies, plans, or programs supporting alternative transportation. There is no impact.

XVII. UTILITIES & SERVICE SYSTEMS – Would the project:

Environmental Issue	Potentially Significant Impact	Less Than Significant with Mitigation Measures	Less Than Significant Impact	No Impact
1. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board? (ESD)				X
2. Require or result in the construction of new water or wastewater delivery, collection or treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (EHS, ESD)				X
3. Require or result in the construction of new on-site sewage systems? (EHS)			X	
4. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects? (ESD)			X	
5. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? (EHS)			X	
6. Require sewer service that may not be available by the area's waste water treatment provider? (EHS, ESD)				X
7. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs in compliance with all applicable laws? (EHS)			X	

Discussion - Items XVII-1, 2, 6:
Public water and public sewer service are not available in this area. New water service and wastewater conveyance or treatment facilities construction are not applicable, as the caretaker's residence will be on a private well water and septic system. There is no impact.

Discussion - Item XVII-3:
The project will result in the construction of a new on-site sewage disposal system. Soils testing has been conducted by a qualified consultant and reports submitted showing the type of septic system required for the proposed caretakers residence that will adequately treat the sewage effluent generated by the project. One sewage disposal system will be located on a total parcel area of 597.5 acres in size and thus the impacts from these septic systems is considered to be less than significant. No mitigation measures are required.

Discussion - Item XVII-4:
Stormwater drainage provisions will be constructed with the roadway improvements and construction of these facilities has been analyzed under the Hydrology and Water Quality section of this document. No additional mitigation measures are required.

Discussion - Item XVII-5:
The project currently has two existing water wells. The yield on both of the existing wells (16 and 20+ gallons per minute) is high enough that no storage tank is required. There is sufficient water available to serve this project as the two existing wells meet the minimum standards set forth by PCEHS for water supply to serve each proposed parcel, and only one well is proposed to be used for the project. Thus, the concern about whether this parcel has sufficient water available for this project is considered to be less than significant. No mitigation measures are required.

Discussion - Item XVII-7:
The project lies in an area of the County that is served by the local franchised refuse hauler and is served by a landfill with sufficient permitted capacity. The concern whether this project is served by a landfill with sufficient capacity is considered to be less than significant. No mitigation measures are required.

E. MANDATORY FINDINGS OF SIGNIFICANCE:

Environmental Issue	Yes	No
1. Does the project have the potential to degrade the quality of the environment, substantially impact biological resources, or eliminate important examples of the major periods of California history or prehistory?		X
2. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)		X
3. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		X

F. OTHER RESPONSIBLE AND TRUSTEE AGENCIES whose approval is required:

☒ California Department of Fish and Wildlife	☐ Local Agency Formation Commission (LAFCO)
☒ California Department of Forestry	☐ National Marine Fisheries Service
☐ California Department of Health Services	☐ Tahoe Regional Planning Agency
☒ California Department of Toxic Substances	☒ U.S. Army Corp of Engineers
☐ California Department of Transportation	☒ U.S. Fish and Wildlife Service
☐ California Integrated Waste Management Board	☐ _____
☒ California Regional Water Quality Control Board	☐ _____

G. DETERMINATION – The Environmental Review Committee finds that:

Although the proposed project **COULD** have a significant effect on the environment, there **WILL NOT** be a significant effect in this case because the mitigation measures described herein have been added to the project. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

H. ENVIRONMENTAL REVIEW COMMITTEE (Persons/Departments consulted):

Planning Services Division, Melanie Jackson, Chairperson
Planning Services Division, Air Quality, Lisa Carnahan
Engineering and Surveying Division, Rebecca Taber
Department of Public Works, Transportation

Environmental Health Services, Laura Rath
Flood Control Districts, Andrew Darrow
Facility Services, Parks, Andy Fisher
Placer County Fire/CDF, Brad Albertazzi

Signature_____ Date August 26, 2013
E. J. Ivaldi, Environmental Coordinator

I. SUPPORTING INFORMATION SOURCES: The following public documents were utilized and site-specific studies prepared to evaluate in detail the effects or impacts associated with the project. This information is available for public review, Monday through Friday, 8am to 5pm, at the Placer County Community Development Resource Agency, Environmental Coordination Services, 3091 County Center Drive, Suite 190, Auburn, CA 95603. For Tahoe projects, the document will also be available in our Tahoe Division office, 565 West Lake Blvd., Tahoe City, CA 96145.

County Documents	☒ Air Pollution Control District Rules & Regulations	
	☒ Environmental Review Ordinance	
	☒ General Plan	
	☒ Grading Ordinance	
	☒ Land Development Manual	
	☒ Stormwater Management Manual	
Site-Specific Studies	Planning Services Division	☒ Biological Resources
		☒ Cultural Resources Assessment
		☒ Cultural Resources Records Search
	Engineering & Surveying Department, Flood Control District	☐ Phasing Plan
		☒ Preliminary Grading Plan
		☐ Preliminary Geotechnical Report
		☒ Preliminary Drainage Report
		☒ Forest Management Plan dated March 27, 2006
	Environmental Health Services	☒ Groundwater Contamination Report
		☐ Hydro-Geological Study
		☒ Phase I Environmental Site Assessment
		☒ Phase II Environmental Site Assessment

Mitigation Monitoring Program
Mitigated Negative Declaration PLUS # PMPC 20110109
for Camel's Hump Caretaker's Residence Minor Use Permit

Section 21081.6 of the Public Resources Code requires all public agencies to establish monitoring or reporting procedures for mitigation measures adopted as a condition of project approval in order to mitigate or avoid significant effects on the environment. Monitoring of such mitigation measures may extend through project permitting, construction, and project operations, as necessary.

Said monitoring shall be accomplished by the county's standard mitigation monitoring program and/or a project specific mitigation reporting program as defined in Placer County Code Chapter 18.28, Mitigation Monitoring and Reporting Program.

Standard Mitigation Monitoring Program (pre project implementation):
The following mitigation monitoring program (and following project specific reporting plan, when required) shall be utilized by Placer County to implement Public Resources Code Section 21081.6. Mitigation measures adopted for discretionary projects must be included as conditions of approval for that project. Compliance with conditions of approval is monitored by the county through a variety of permit processes as described below. The issuance of any of these permits or county actions which must be preceded by a verification that certain conditions of approval/mitigation measures have been met, shall serve as the required monitoring of those condition of approval/mitigation measures. These actions include design review approval, improvement plan approval, improvement construction inspection, encroachment permit, recordation of a final map, acceptance of subdivision improvements as complete, building permit approval, and/or certification of occupancy.

The following mitigation measures, identified in the Mitigated Negative Declaration, have been adopted as conditions of approval on the project's discretionary permit and will be monitored according to the above Standard Mitigation Monitoring Program verification process:

Mitigation Measures #'s: MM III.1; MM III.2; MM III.3; MM III.4; MM VIII.3; MM XVI.1; MM VI.1; MM VI.2; MM VI.3; MM IX.2; MM IX.1; MM IX.3; MM IX.4; MM VIII.1; MM VIII.2

BASQUIN/PARKER PROPERTY
Portions Sections 13,14 & 24, T14N R9E, MDM & BM

FOREST MANAGEMENT PLAN
by
Douglas Ferrier, RPF #1672

March 27, 2006

SUBJECT PROPERTY

Physical Setting:

Property is made up of four contiguous Placer County Assessor's parcels totaling 597.50 acres. They are:

APN 071-270-003	157.5 acres
071-310-001	320 acres
071-320-001	80 acres
071-330-008	40 acres
Total	597.5 acres

Elevations range from approximately 1600' above sea level, to just over 2600'. Aspects are generally flat (ridge tops) to west facing, although east, north and south aspects are also present, as property is bisected by three generally north to south flowing watercourses. The vast majority of the property falls within the drainages of three tributaries of Bunch Creek, which flows through a western corner of the property. Bunch Creek is itself a tributary of the North Fork American River, flowing into it about 2.3 miles southeast of the property. Within the property, Smuthers Ravine, Quall Trap Ravine, and an unnamed tributary flow southerly towards Bunch Creek. Except for Smuthers Ravine and Bunch Creek, all other watercourses on the property only flow water seasonally, and dry up during at least a portion of the summer and fall months.

In general, the area receives about 40 inches of precipitation a year, almost entirely as rain. Snow is very rarely seen at these elevations. Precipitation occurs almost exclusively from October/November to April/May, although other months of the year may receive small amounts of rain. The average number of frost free days in a season is between 150 and 250 days. Wintertime temperatures rarely go below 20° F and summertime temperatures can easily exceed 100° F for a number of days.

Geologically, the area has been mapped by the State as having soils derived from Upper Jurassic marine sedimentary rocks, such as slates and shales. An earthquake fault is mapped trending northwesterly/southeasterly down the ridgeline of Gillis Hill, the main ridge between the North Fork American River and Bunch Creek/Smuthers Creek drainages. Gillis Hill crosses the subject property in its southeastern corner (see property maps in Appendix at end of this report).

In 1980, the Federal Soil Conservation Service published the Soils of Western Placer County. The maps found in this publication show the property as having predominately Mariposa-Rock Outcrop Complex, Maymen-Rock Outcrop Complex and Mariposa-Josephine Complex soils. All of these soils are generally shallow to moderate in depth, moderate to well drained, slow to moderate permeability and only fair effective rooting depths (20-35"). Hazard of erosion is high to very high. The soils found on the property can typically support mixed forests of hardwoods and conifers, mainly California Black oak and Interior Live oak hardwoods, and Ponderosa pine, Douglas-fir and Foothill pine for conifers. Only at the very highest elevations of the property is found a few Sugar pines. Intermixed with the forests may be open annual grasslands (mainly on ridge lines) and scrub oak and brushfields (mainly at lower elevations, but

ATTACHMENT I

found on some steeper sites). Overall site quality is poor, with conifers only estimated to reach 95' in 100 years of growth.

All parcels are currently zoned Timberland Production (TPZ) by Placer County, with a 160 acre minimum parcel size. To the north, the property is bordered by a similar size ownership also zoned TPZ, but with slightly better soils and growing conditions. To the east and south are large government owned parcels located on steep slopes with shallow soils. On the west side of the property, the southern portion is bordered by a 78 acre parcel straddling the steep inner slopes of the Bunch Creek drainage, while in the northern portion of the adjacent western boundary, the area has been subdivided into 3-5 acre parcels.

Past History of Property

Little is known of the early history of the property area. At one time, the property was combined in common ownership with the Edwards Property, immediately north of the subject property. From the mid 1940s until the mid 1970s, when the larger ownership was split into two ownerships with separate family ownerships, the area was managed as a tree farm, with associated tree improvement practices and small harvests likely to have occurred. Prior to the mid 1940s, it appears that livestock grazing occurred on the property. 1938 aerial photographs of the area (at the Placer County Archives in Auburn) show ranch buildings in the large meadow just north of the subject property, and the gently sloped to flat bottom lands and the flatter ridge line of Gillis Hill being relative open with grass dominating underneath the scattered trees.

The USGS topographic map of the area shows several mining tunnels in the unnamed drainage in the center of the subject property. This mining activity probably dates back to the early 1900s or during the depression era. The area was not known for being a part of the pre-1900 gold mining era in California. Impacts of any mining appears to be small, as there are only very limited tailing piles seen around tunnels. Because of its proximity to the town of Colfax and the Central Pacific/Southern Pacific Railroad, it is possible that parts of the property were used to harvest cordwood to be burned in the steam locomotives of the railroad between 1865 and 1900.

In the mid-1970s, the larger ownership was split into two separate ownerships, with the Edwards family taking ownership of the northern portion and the Barnes family taking ownership of the southern portion of the original property. The Barnes family, absentee owners, would own the property until 2004, when the current landowners bought the property.

In 1994, the Barnes family obtained an approved Timber Harvest Plan from the State of California (2-94-29-PLA(3)). In it, they proposed to commercially harvest conifer trees on 235 acres within Sections 13,14 & 24 of T14N R9E, MDM & BM. They proposed to use clearcutting, shelterwood-removal step, rehabilitation, and alternative prescription silvicultural methods to harvest the timber. The main limiting condition of the harvest was having enough existing conifer reproduction to support removal of the existing larger overstory conifer canopy, or the ground having the ability to support removal of all vegetation and being able to sustain a planting of new conifer seedlings. Within three years of obtaining the approved plan, the property was logged.

In 2001, in August, the most significant event to impact the subject property occurred, in the form of the Ponderosa Wildfire.

Impacts of the Ponderosa Wildfire

Starting near the Ponderosa Bridge on the Yankee Jim's road across the North Fork American River, the fire would burn northwestern up Gillis Hill and across the majority of the subject property. Using 2005

8/

aerial photographs of the property, approximately 379 acres of the property were totally burned, with only very scattered trees remaining alive, but generally heavily damaged. Another 21 acres was only partially burned, with a majority of the pre-fire tree vegetation remaining alive, but with some damage to their boles and foliage. The remaining 198 acres of the property was unburned (33%). A map showing the various burn areas can be found in the appendix of this report.

As a result of the fire, the Barnes family obtained an Emergency Notice from the California Department of Forestry to salvage harvest any remaining commercial size trees that were either killed or substantially damaged by the fire. So for many of areas of the property that were just starting to heal over from the commercial timber operations carried out in the mid 1990s, the fire removed what remained of the seed trees and canopy cover in these harvested areas, as well as burning up what reproduction had either been planted or naturally occurred since harvest. No attempts were made to reforest the subject property by the Barnes family after the fire. Nature was left to take its course.

Today's Vegetation

The unburned portion of the subject property is concentrated in the northwestern portion of the ownership. It can be characterized as a young Douglas-fir/Oak forest on north facing slopes, an Oak woodland on ridgetops and south facing slopes, and scrub oak brushland on low elevation canyon slopes. Only the Douglas-fir/Oak forested areas meet the current definitions of stocking found in the State Forest Practices Act. Along Bunch Creek and Smuthers Ravine, a riparian forest of willow and alder trees border the watercourses in a narrow belt.

In the burned area, although no efforts were made to reforest the property, nature has reoccupied almost the entire burn area with new vegetation, dominated by resprouting of hardwoods (mainly oak) and brush (mainly ceanothus, manzanita, etc.) stumps, as well as grasses and forbs. New vegetation in some places is now almost ten feet tall. With the density of new vegetation, combined with falling over of decaying boles of standing dead trees, walking through some areas of the property can be extremely difficult. Add in localized steep slopes and you have potentially significant safety issues. As currently vegetated, little if any of the burn area meets the minimum tree stocking levels of the State Forest Practice Act, and will not for many years, unless active reforestation occurs.

FOREST MANAGEMENT CONSIDERATIONS

Unburned Areas

Only two of today's existing parcels (071-270-003 and 071-330-008), totaling 197.5 gross acres have significant acreage not damaged by the Ponderosa fire. However, even this gross acreage cannot be considered fully stocked with existing conifers, or even predominantly by conifers.

Parcel 003 has 53 acres of land dominated by conifer timber, but with some hardwoods present. The other 105 acres of the parcel are dominated by hardwoods, with only an occasional conifer. For parcel 008, it is 13 acres of conifer dominated land, and 16 of hardwood dominated acres.

Why this is important is because only conifers are considered having significant economic value. Given the specific site characteristics and species involved on the subject property, a one-hundred year old Ponderosa pine, growing at it's maximum rate for the entire 100 year period, would expect to be about 22" DBH (diameter at breast height) and 95 feet tall. At full stocking, approximately 75 of these size trees would occupy an acre of ground. Each tree would have 450 board feet in it, to an 8" top diameter, inside bark, for a total of 33,750 board feet per acre, gross volume. For a Black oak growing on the property for 100 years

P2

at it's maximum rate, it's size would be about 15" in DBH and possibly 60' tall. A tree this size has about 33.8 cubic feet of wood in it, to a 4" top, inside bark. If a field cord of wood has 95cubic feet in it, then each tree has about one-third of a cord of wood it, and if there are about 60 oak trees per acre in a fully stocked stand on this kind of land, then there is 20 cords of wood per acre. In today's commodity market, pine stumpage values are around $350 per thousand board feet, so our one acre is worth $11,812.50, while our one acre of hardwoods, with a stumpage value in today's market of $30 per cord, has a value of $600 per acre. This theoretical exercise is only to give the reader a comparison of the relative value of different kinds of wood in today's market, and why the discussion of forest management is weighted towards the growing of conifer timber.

Currently unburned conifer dominated acreage on the subject property is not fully stocked with conifers. Locally significant numbers of hardwood trees can be found mixed in with the conifers. For wildlife, aesthetics, water quality, and ground disturbance purposes, this isn't necessarily bad. However, for planning purposes, one must then use a lower conifer stocking percent to calculate volume. Instead of 100% stocking with 75 trees per acre, one might use 65% or 70% stocking, with 48-52 trees per acre and volumes of 22,000 board feet per acre. Of interest is that on the adjacent Edwards property, whose commercial timber management and harvesting is governed by a Non-industrial Timber Management Plan (NTMP) approved by the California Department of Forestry and Fire Protection, the goal for full management is about 65% of full stocking, with a 20,000 board foot per acre conifer goal.

Burned Areas

Because there is essentially no conifer volume left in these areas, only a very scattered population of damaged individual trees, the primary goal for management is to return the acreage to be dominated by live trees, preferably conifers. If the Ponderosa Fire had just happened this past year, the procedure would be fairly straight forward: plant bare root Ponderosa pine and Douglas-fir seedlings grown and bought from an area nursery, control competing sprouting and germinating vegetation until conifer growth is well above surrounding vegetation, and then wait 75 years until the trees are large enough to support a commercial operation (about 16" DBH or larger). No heavy equipment would have had to operate on steep ground (over 50% slopes) and if appropriate and advised by a licensed Pest Control Advisor, specific herbicides could possibly be either hand sprayed or aerial sprayed on land. An alternative might also have been grazing livestock to keep competing vegetation down. Costs for the project might have been seedling planting at $0.50 per tree, 150 trees per acre to be planted, or $75.00 per acre, and planting to occur on probably 350 acres, or $26,250 total cost for planting. Seedling would cost $150 per thousand or $22.50 per acre, for a total of $7,875. Total cost so far of $34,125. One follow-up herbicide treatment might be $200 per acre, for a cost of $70,000. Project cost is now $104,125. Add to that 25% overhead and administrative costs, and you have a potential cost of about $130,000. However, this was never done.

Today, the project is vastly more complicated and expensive. Because significant revegetation has occurred, it must be removed or re-engineered so that significant amounts of bare ground are exposed to allow planting of bare root conifer seedlings. Traditionally, heavy equipment such as large tractors have plowed up existing vegetation into windrows on elevation contours, and then burned. Debris left in piles from burning help reduce the potential for soil erosion, and cleared land is then planted. Tractor costs can run $300 to $400 per acre, and if done on 300 acres, would total $105,000. This acreage must then have at least one follow up treatment to inhibit competing resprouting of non-conifer vegetation. However, large tractors generally should only be considered on slopes less than 50%, and in areas away from watercourses. Some acreage on the subject property is over 50% in slope (only 24% of the subject property is estimated to be 30% or less in slope, and 63% being between 30% and 50%. That leaves 13% over 50% in slope). In the burn area, it is estimated that there is about 60 acres of over 50% sloped ground. To revegetate this, some other method, such as prescribed burning would have to be used to remove the competing vegetation. Issues of liability, air and water quality and maintaining control of burns are significant issues. Fire specialists

would have to be brought in and an analysis of whether there is enough fuel on site to have a complete enough burn to reduce existing vegetation to levels open enough to allow planting would all have to be done. Logical fire units might also include some slopes less than 50%. Costs would include a Fire Plan, Air Quality Control Board fees, cost of standby equipment, and personnel to do the burning. Total cost of CDF initiated control burns runs can be around $5,000 to $10,000 for 50 acres. Private industry costs may be significantly higher, due to potential liability insurance costs..

The bottom line is that now that almost six years have gone by since the Ponderosa Fire, the costs of returning the burned acreage into a working forest have gone up significantly, due to the regrowth of vegetation on site. Not only do you have the $130,00 base reforestation costs, but you also have current vegetation treatment costs of possibly $115,000.

Cost Share Programs

Both the State of California through the California Department of Forestry and Fire Protection, and the Federal Government, through the Natural Resources Conservation Service, have various cost share programs that may be able to be used to address some of the costs of reforesting the property. The Federal program, EQIP, generally pays up to 50% of the cost of certain land management practices, while the State's CFIP program pays up to 75% of some pre-determined costs for certain practices. The State also has a VMP (Vegetation Management Program) that includes prescribed burning on private lands, long with cost sharing of up to 50% of treatment costs. All programs should be investigated throughly prior to initiating any on the ground reforestation projects on the subject property.

FOREST MANAGEMENT PLAN

Unburned Conifer Dominated Timberland

Because this portion of the property was most recently logged in the mid 1990s, it will be at least 20-30 years until there will be significant amounts of merchantable timber that can sustain a low volume harvest. Where possible, subject property areas adjacent to development should be considered for thinning existing vegetation into shaded fuel breaks of at least 150' wide, along property boundaries. This would be an non-commercial operation, as trees to be removed are generally too small to have commercial value. Vegetation could be masticated with resulting chipped material left in place, for erosion control. Tree canopy would be opened up so that aerial fire fighting equipment could effectively reach both the crown of trees and the ground, should a forest fire become established and burn towards the property. **Target areas:** The western and northern boundary of the property in Section 14, T14N R9E, MDM. Costs would be somewhere around $1,000 per acre, with about 9 acres of land needing treatment, for a cost of $9-10,000.

Modified fuel breaks, or shaded fuel breaks are also effective tools along ridge lines. It was such a shaded fuel break on the adjacent Edwards Property on Gillis Hill that allowed fire fighting personnel to get in safely and stop the Ponderosa Fire before it reached the outskirts of Colfax. These areas have reduced vegetation densities so that there is some open ground between trees or brush. **Target Areas:** Side ridges within the unburned portions of the property. There is about 24 acres of this type of ground in Sections 13 & 14, and if a 200' wide swath of ground was masticated at a cost of $800/acre (less vegetation density today than along boundary line described above), a total project cost would be $19,200.

Unburned Hardwood Dominated Timberland

Only after reforesting burn areas and manipulating vegetation for shaded fuel breaks on ridge tops, should consideration be given to trying to partial restock hardwood areas with a conifer component. Select only

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those areas supporting California Black oak growing towards merchantable size. By hand, can remove in small openings up to two acres in size, all vegetation by cutting, piling and burning. Then plant in openings either Ponderosa pine seedlings in open sun light areas, or Douglas-fir in partial shade. Keep areas small as do not want to dry out the site. Treat at least once with first five years for competing vegetation. Possible methods include hand clearing, herbicides, or grazing animals. By using Black oak as an indicator species, you are picking areas that have enough soil to support conifer growth. Plant at a 12' x 12' spacing, then thin out to a 15' x 15' spacing after 5 years. Depending on growth, will eventually need to thin out to a 20' x 20' spacing.

Riparian Forest

To prevent impacts to water quality in area watercourses, no projects should be done within these forests except to replace undersize road culverts and maintenance of roads. Because of density of culverts on main watercourses on property, should removed concentrations of potential culvert clogging large debris by hand on a periodic basis, before and during winter months. This usually requires removal in a zone 50' to 100' above culverts of large debris only, such as extensive limbs and concentrated deadfall.

Burned Areas

Given the pattern of burn over the property, and the physical characteristics of the subject property, the entire burn area should be broken into smaller treatment areas. Areas over 50% in slope should generally be written off as inoperable, due to steepness of slope, thin soils, aspect, and existing revegetation already starting to occur. This means that there will be no treatments of the property east of Gillis Hill, as well as localized areas within the unnamed tributary flowing southerly through the middle of the property and into Bunch Creek. The remaining burn acreage could be broken down into roughly 80 acre units, with each unit staying on either the west or east side of the major drainages that run through the property in a north/south direction. This is done so that if prescribed fire is to be used to pre-treat the existing vegetation before replanting of trees, each set fire will plan to stay on one side of the watercourse, thus not burning across watercourses and exposing watercourse banks to increased erosion. More than one treatment area could be burned at a time, should the developed Fire Plan be in agreement. Burns could be done during winter months and tree planting to occur in the next February or March after the burn. Purchase of seedlings would need to be done in the fall, preceding the burn, and be ready for planting when appropriate after the burn. Douglas-fir can be planting in protected bottom lands and on north facing slopes, while Ponderosa pine would be appropriate for all other areas. Initial planting spacing should be no closer than 12' x 12', given the low elevation and thin soils. Followup treatment of competing vegetation should occur with 1-3 years of planting. A second treatment would need to be evaluated for after 6-8 years.

Economic Timber Management

From an economic management standpoint, it is unrealistic to think that any for profit timber management company would invest funds in the growing of commercial forests on the subject property, given the thin soils, lack of existing growing stock, and the significant costs of reforestation after the Ponderosa Fire. Because of the fire, there will be no income to offset expenses for many years (at least 75 in the burned areas). The inability to achieve 100% conifer stocking, given soil and growing condition restraints, further reduces the likelihood that someone would be willing to invest scarce dollars into such an operation. Significant harvests off the unburned portions are at least 20-30 years away, and will be of low volume/value. If regulatory costs keep escalating like they have in the past 10 years, it will be even harder to meet any kind of positive economic goal. Even with the use of cost sharing programs picking up 50-60% of actual costs of reforestation, significant amounts of money would have to be spent now to generate some economic value sometime in the distant future. There is also the continued risk of another future wildfire in the area.

ROAD MANAGEMENT PLAN

In the Appendix of this report is a series of maps, one of which shows the major roads on the subject property, as well as a number of roads that have been left unused and allowed to become overgrown with adjacent area vegetation. Most existing roads are native soil surface, which includes some rock in them. They are generally passible, even in damp conditions, due to the amount of native rock in them. None of these roads however where observed to have any waterbars or rolling dips in them. Because of this, minor sheet erosion and some gulling was observed, particularly on inclined roads, and where roads were used during wet weather. It is important to preserve the surface material in roads, and to prevent soil movement off roads and potentially towards watercourses. At a minimum, rolling dips need to be installed on all roads where roads have inclines over 3%. Rolling dips, as opposed to waterbars, allows motor vehicle traffic over them, even in damp conditions, while at the same time preventing precipitation drainage from running down roads significant distances before draining off to the sides. Waterbars are abrupt mounds of dirt directly across roads, while rolling dips are gradual declines into a shallow dip and back out in a gradual incline. Water flows into the dip, and out of the open throat of the dip, into existing vegetation and slash, where it can then seep into the ground.

Where roads are immediately adjacent to watercourses, such as along the north line of Section 24, base rock or crushed asphalt should be brought in and spread out over road surface, to lower potential road surface flows of water.

During summer months, erosion control features can be removed, although if installed correctly, rolling dips should withstand any season of the year use. However, if they are removed, they should be put back no later than October 15th of any year.

ROAD CROSSINGS OF WATERCOURSES

It is evident from field inspection that both the culverts under the road crossings at Bunch Creek and Smuthers Ravine are undersized, and overflow when trying to handle large storm systems. Both crossing have had water flow over the top of the roads this past winter. Both crossings need to be replaced, with either culverts sized for 100 year storms, or possibly be bridges. All the landowners who use the road crossings should get together and discuss what is economically feasible replacing the crossing, so that potential adverse impacts to watercourses does not occur from future flood events.

Other road crossings of intermediate watercourses also have undersized culverts on them, most being no larger than 12" in diameter. The only time one should use culverts this small are for temporary culverts to be removed prior to any winter period. Most of these culverts should be at least 18" in not larger.

VEGETATION AND FIRE MANAGEMENT PLAN

As stated previously, a system of modified fuels located on tops of ridges, called a shaded fuel break system, would go a long way towards reducing potential wildland fire damage to the property. It would allow firefighting personnel to safely get into the area to fight a potential fire, and it would allow aerial fire fighting resources, such as helicopters and airplanes, to drop fire retardant or water on a fire that would not only get on the surface of the vegetation, but would be able to drop down through the vegetation and onto any fuels burning on the ground. Vegetation immediately adjacent to roads needs to be kept pruned back and thinned, so the equipment can safely move in and out, as well as being used as a potential fire line. Major roads need to be kept passable at all times.

TENTATIVE MAP PROPOSAL

A proposal has been made to reconfigure the four parcels that make up the subject property into three parcels, two being 160 acres and one parcel being the remaining 273.5 acres. What impacts to potential forest management of the ownership might occur with this reconfiguration? None if the ownership retains all three parcels. However, if the reconfiguration occurs, parcel A (the 273.5 acre one) will have all of the unburned areas in it, and other two will be totally within the burned area. What needs to be done in each area will not change, but issues of deeded access to each parcel will need to be addressed, should any parcel be sold off.

It would actually make some logical sense to split the two 160 acre parcels into four 80 acre parcels. Three of them would then have logical burn units that could be the basis for removing the existing vegetation by prescribed fire and then replanting areas. Issues of potential impacts to watercourses and water quality would not be an issue, as each of the four parcels would have only one aspect adjacent to any watercourse, and therefore could be burned without potential to crossing a watercourse. Each of the four parcels would have a ridge line to break off any prescribed fire (the same ridgelines that are proposed to be permanent shaded fuel breaks). However, splitting into these smaller parcel sizes may not be possible, depending on Placer County zoning ordinances.

APPENDIX

Map showing Current Placer County Assessor's Parcels comprising Property

Property Map showing Soil Conservation Service Soil Types

Property Map Showing Road Access

Property Map Showing Watercourse Drainages

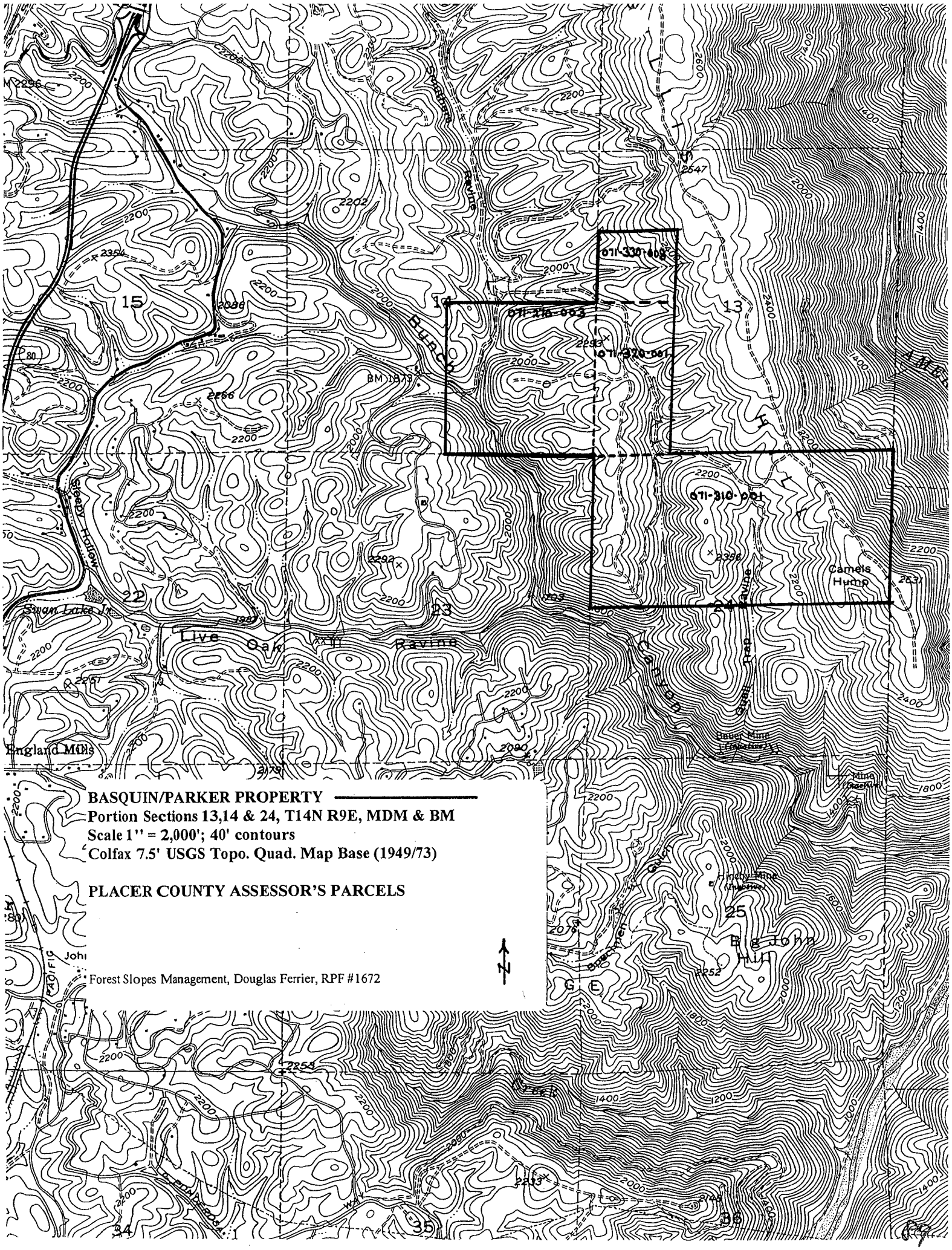
Property Map Showing 2001 Ponderosa Fire Impacts

Property Map Showing Road/Watercourse Crossings

Property Map Showing Riparian Forest Areas

Property Map Showing 30% and Less Slopes

Property Map Showing Tentative Map Parcels



BASQUIN/PARKER PROPERTY

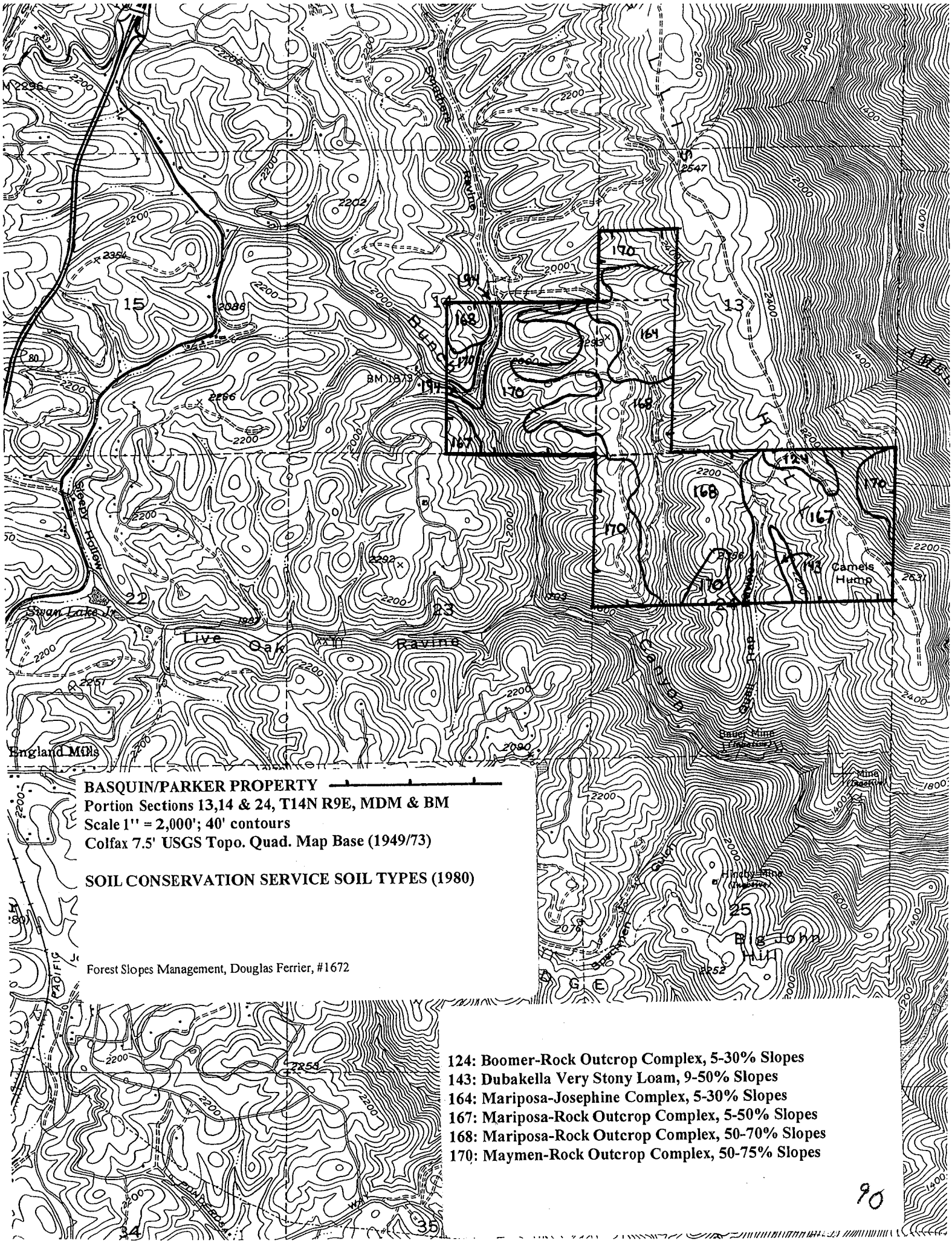
Portion Sections 13,14 & 24, T14N R9E, MDM & BM

Scale 1" = 2,000'; 40' contours

Colfax 7.5' USGS Topo. Quad. Map Base (1949/73)

PLACER COUNTY ASSESSOR'S PARCELS

Forest Slopes Management, Douglas Ferrier, RPF #1672

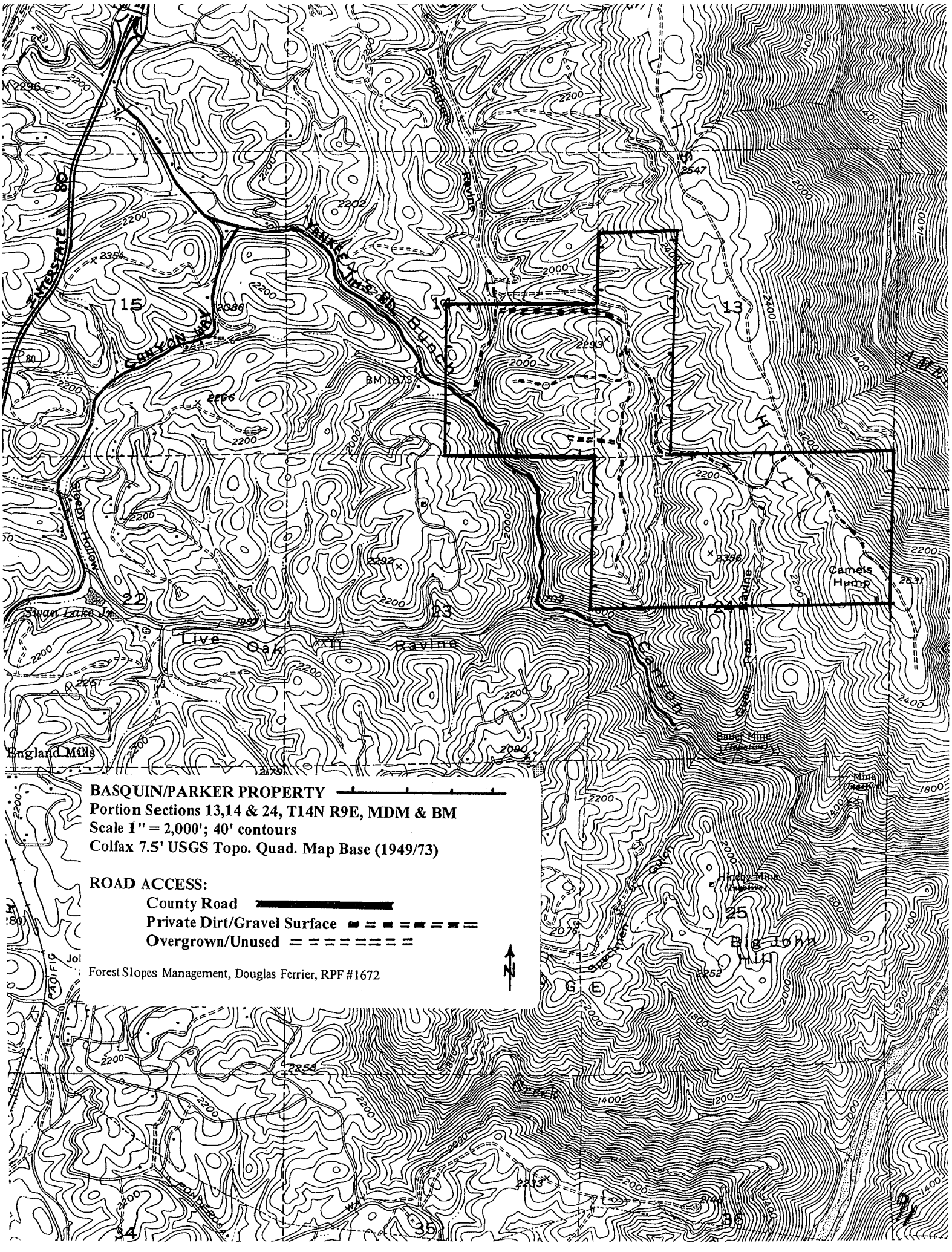


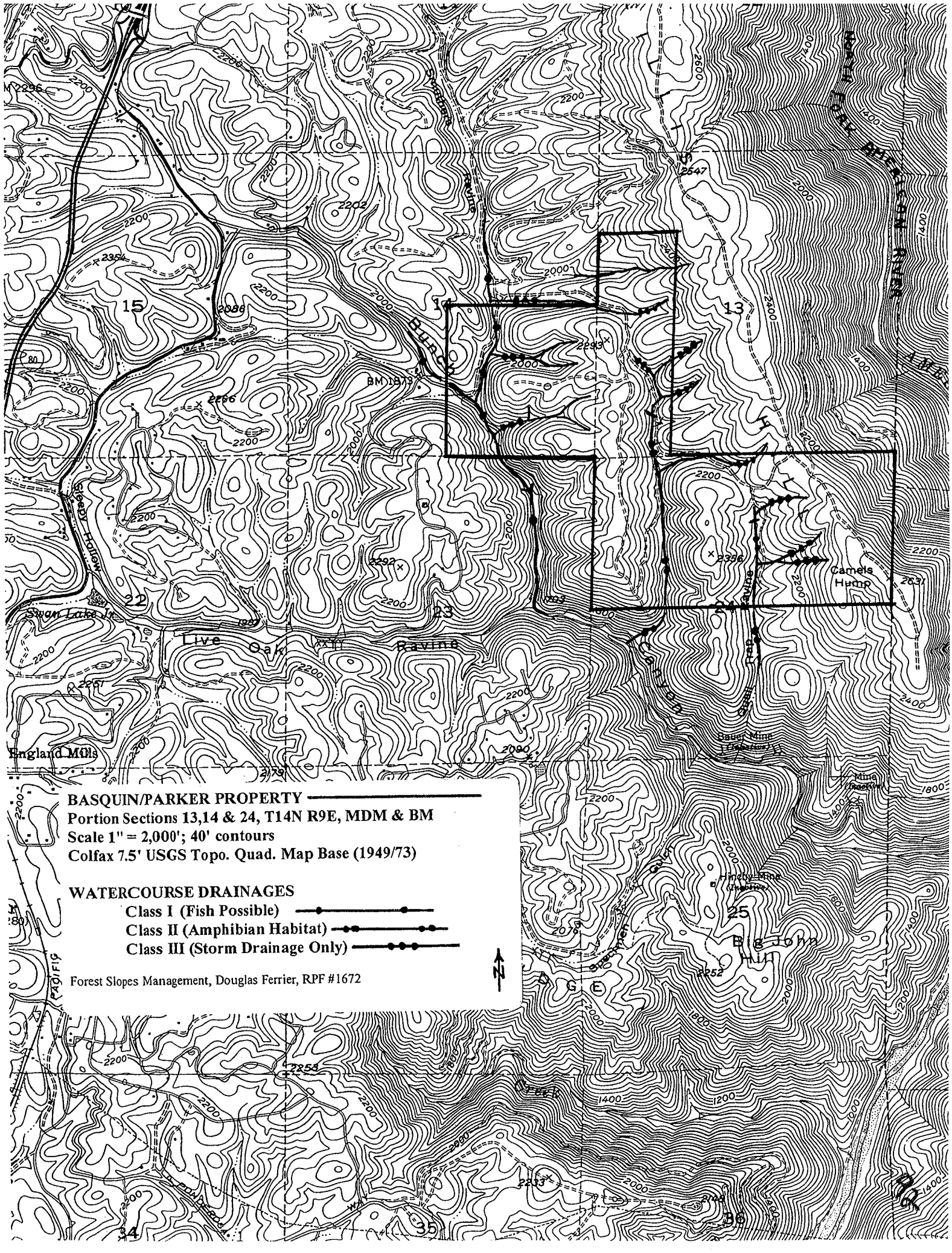
BASQUIN/PARKER PROPERTY
Portion Sections 13,14 & 24, T14N R9E, MDM & BM
Scale 1" = 2,000'; 40' contours
Colfax 7.5' USGS Topo. Quad. Map Base (1949/73)

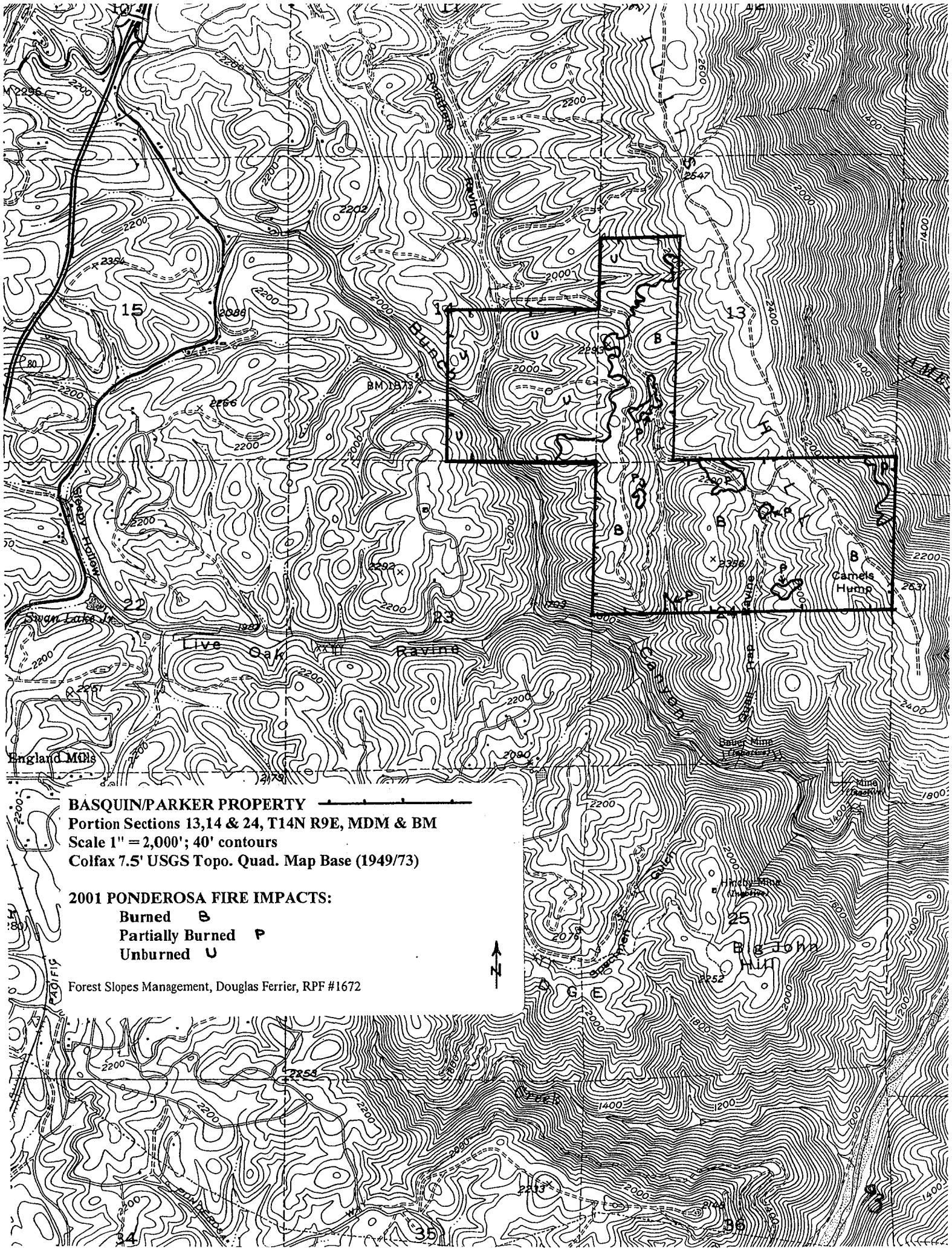
SOIL CONSERVATION SERVICE SOIL TYPES (1980)

Forest Slopes Management, Douglas Ferrier, #1672

124: Boomer-Rock Outcrop Complex, 5-30% Slopes
143: Dubakella Very Stony Loam, 9-50% Slopes
164: Mariposa-Josephine Complex, 5-30% Slopes
167: Mariposa-Rock Outcrop Complex, 5-50% Slopes
168: Mariposa-Rock Outcrop Complex, 50-70% Slopes
170: Maymen-Rock Outcrop Complex, 50-75% Slopes


BASQUIN/PARKER PROPERTY
Portion Sections 13,14 & 24, T14N R9E, MDM & BM
Scale 1" = 2,000'; 40' contours
Colfax 7.5' USGS Topo. Quad. Map Base (1949/73)
ROAD ACCESS:
County Road
Private Dirt/Gravel Surface
Overgrown/Unused
Forest Slopes Management, Douglas Ferrier, RPF #1672
N
Live Oak Ravine
Canyon
Camels Hump
Big John Hill
England Mills
Sleepy Hollow
Swan Lake Jr.
Bauer Mine
Hinchy Mine
Creek
Gulch
Ravine
Quail Trap
Swathers
Bunch
Canyon Way
Interstate 80
Yankee Jims Rd.
BM 1873
15
14
13
22
23
24
25
34
35
36


BASQUIN/PARKER PROPERTY
Portion Sections 13,14 & 24, T14N R9E, MDM & BM
Scale 1" = 2,000'; 40' contours
Colfax 7.5' USGS Topo. Quad. Map Base (1949/73)
WATERCOURSE DRAINAGES
Class I (Fish Possible)
Class II (Amphibian Habitat)
Class III (Storm Drainage Only)
Forest Slopes Management, Douglas Ferrier, RPF #1672
Live Oak Ravine
Canyon
Camels Hump
Big John Hill
England Mills
Swan Lake Jr.
Sleepy Hollow
Bunch
Creek
15
14
13
22
23
24
25
34
35
36


BASQUIN/PARKER PROPERTY
Portion Sections 13,14 & 24, T14N R9E, MDM & BM
Scale 1" = 2,000'; 40' contours
Colfax 7.5' USGS Topo. Quad. Map Base (1949/73)
2001 PONDEROSA FIRE IMPACTS:
Burned B
Partially Burned P
Unburned U
Forest Slopes Management, Douglas Ferrier, RPF #1672
N
Live Oak Ravine
Canyon
Camels Hump
Big John Hill
England Mills
Swan Lake Jr
Sleepy Hollow
Bauer Mine
Hinchy Mine
Creek
15
14
13
22
23
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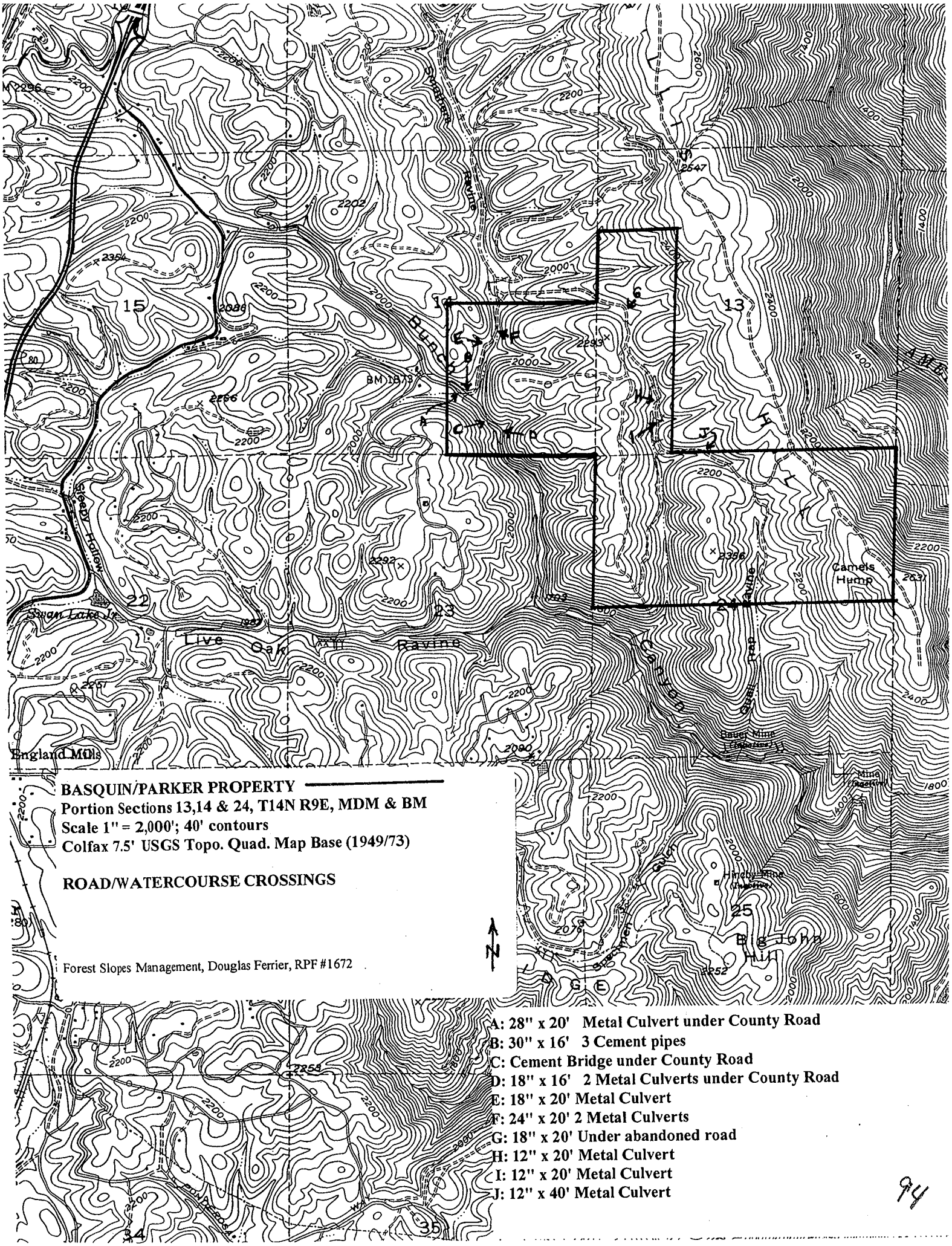
36

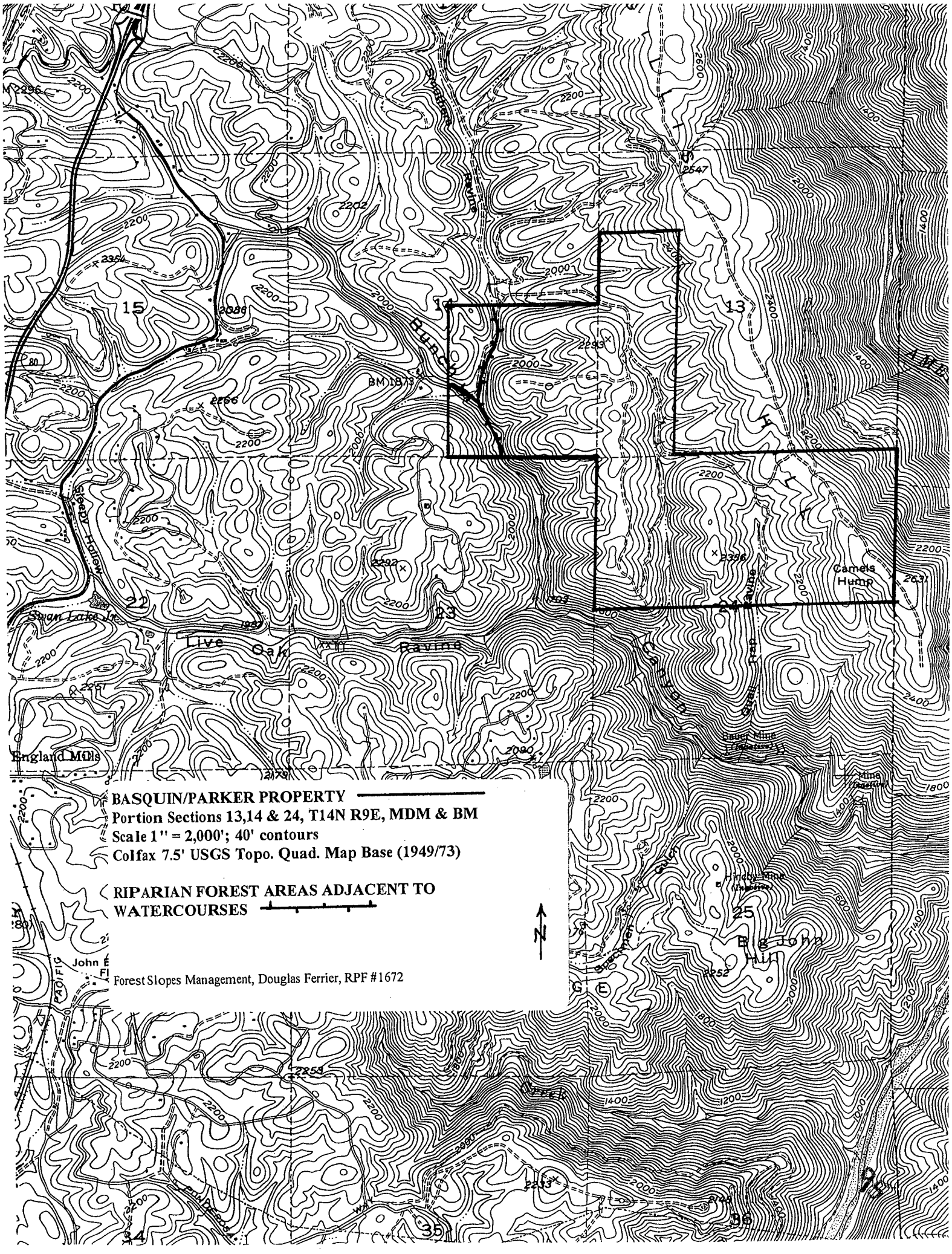


BASQUIN/PARKER PROPERTY
Portion Sections 13,14 & 24, T14N R9E, MDM & BM
Scale 1" = 2,000'; 40' contours
Colfax 7.5' USGS Topo. Quad. Map Base (1949/73)

ROAD/WATERCOURSE CROSSINGS

Forest Slopes Management, Douglas Ferrier, RPF #1672

A: 28" x 20' Metal Culvert under County Road
B: 30" x 16' 3 Cement pipes
C: Cement Bridge under County Road
D: 18" x 16' 2 Metal Culverts under County Road
E: 18" x 20' Metal Culvert
F: 24" x 20' 2 Metal Culverts
G: 18" x 20' Under abandoned road
H: 12" x 20' Metal Culvert
I: 12" x 20' Metal Culvert
J: 12" x 40' Metal Culvert


BASQUIN/PARKER PROPERTY
Portion Sections 13,14 & 24, T14N R9E, MDM & BM
Scale 1" = 2,000'; 40' contours
Colfax 7.5' USGS Topo. Quad. Map Base (1949/73)
RIPARIAN FOREST AREAS ADJACENT TO WATERCOURSES
Forest Slopes Management, Douglas Ferrier, RPF #1672
N
Live Oak Ravine
Canyon
Camels Hump
Big John Hill
England Mills
Swan Lake Jr.
Sleepy Hollow
Bunch
Creek
15
14
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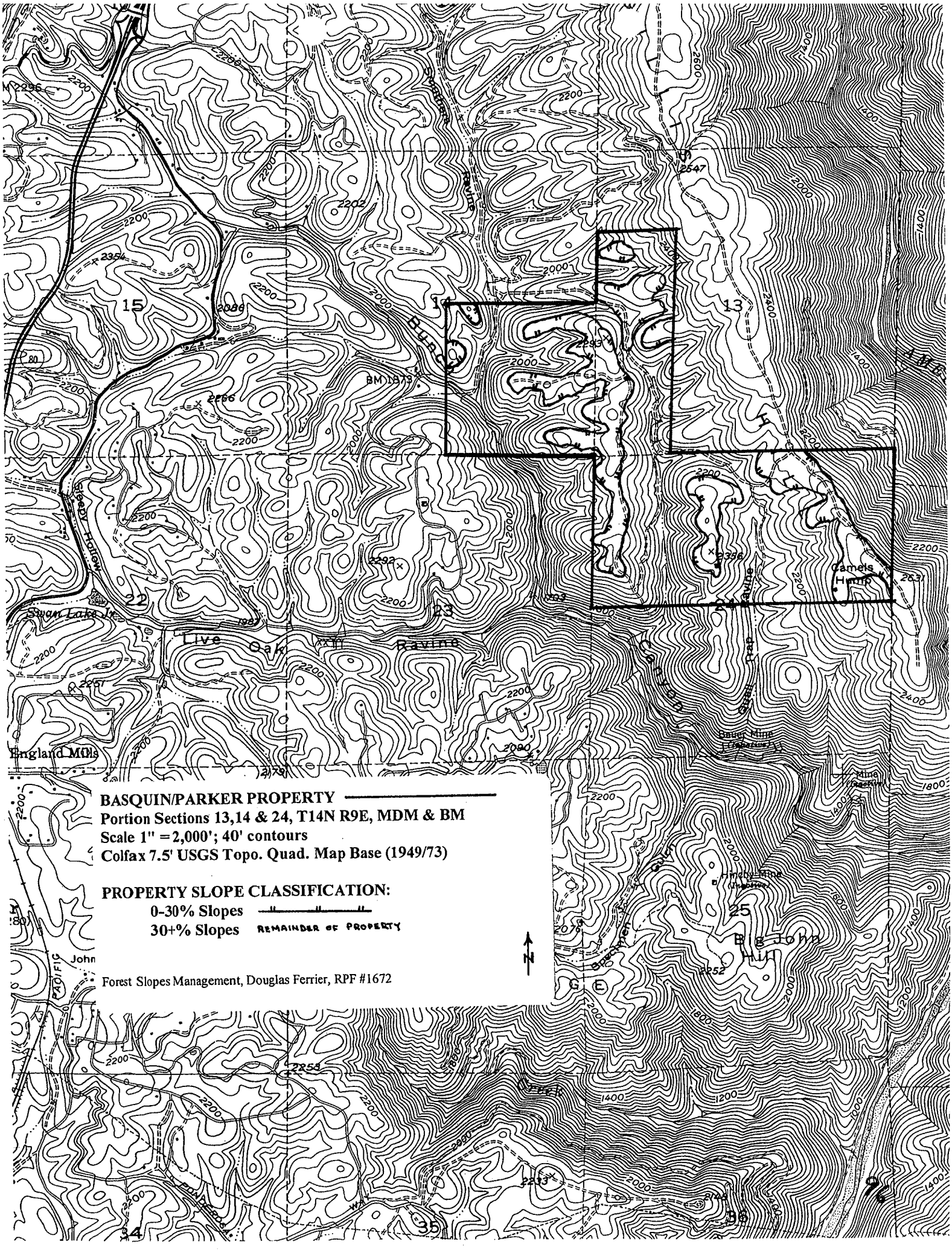
BASQUIN/PARKER PROPERTY
Portion Sections 13,14 & 24, T14N R9E, MDM & BM
Scale 1" =2,000'; 40' contours
Colfax 7.5' USGS Topo. Quad. Map Base (1949/73)
PROPERTY SLOPE CLASSIFICATION:
0-30% Slopes
30+% Slopes REMAINDER OF PROPERTY
Forest Slopes Management, Douglas Ferrier, RPF #1672
N
Live Oak Ravine
Canyon
Big John Hill
Camels Hump
Swan Lake Jr.
England Mills
Sleepy Hollow
Bauer Mine
Hinchy Mine
Creek
15
14
13
22
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24
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34
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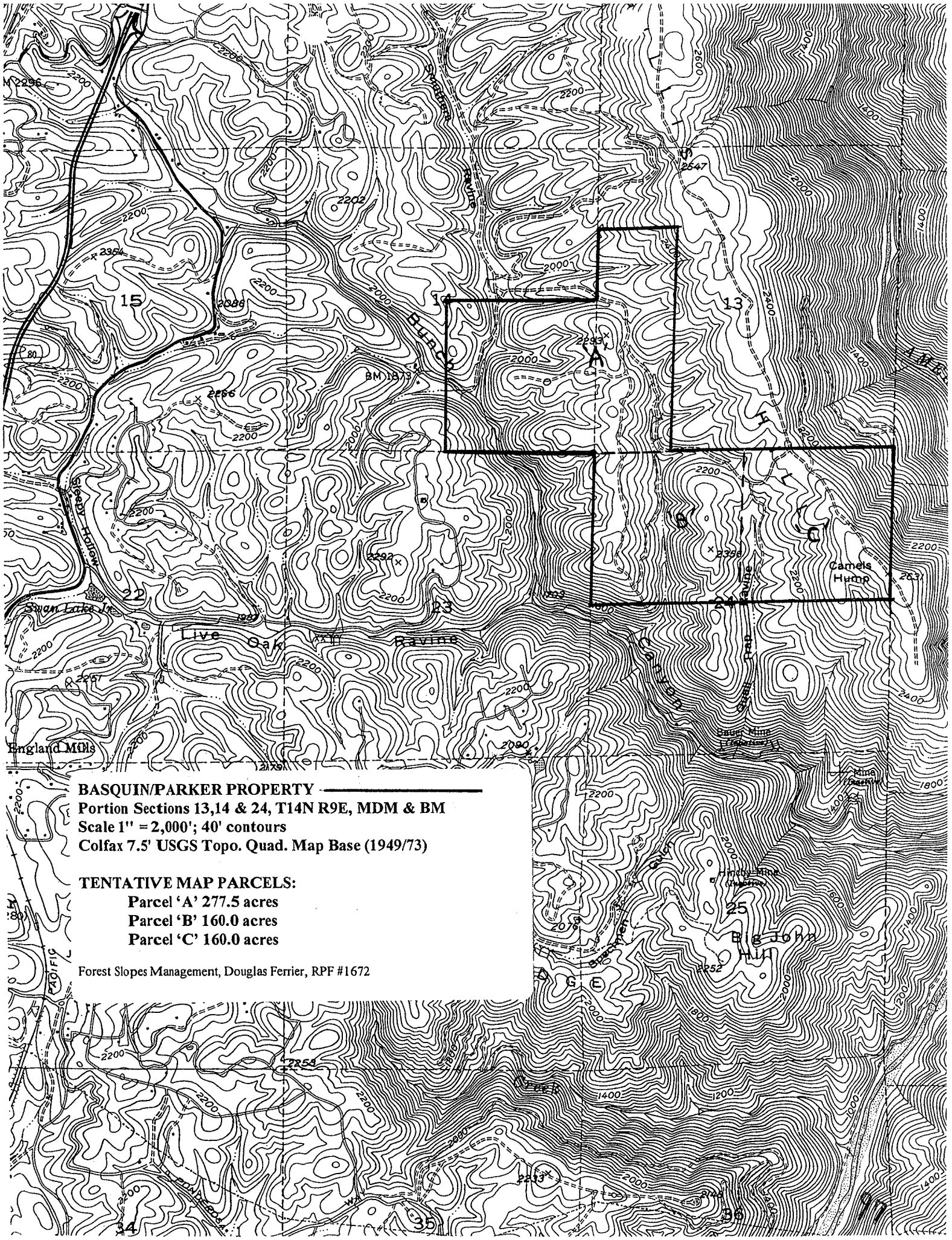
36



BASQUIN/PARKER PROPERTY

Portion Sections 13,14 & 24, T14N R9E, MDM & BM

Scale 1" = 2,000'; 40' contours

Colfax 7.5' USGS Topo. Quad. Map Base (1949/73)

TENTATIVE MAP PARCELS:

Parcel 'A' 277.5 acres

Parcel 'B' 160.0 acres

Parcel 'C' 160.0 acres

Forest Slopes Management, Douglas Ferrier, RPF #1672