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MULTIPLE PROPERTY DOCUMENTATION FORM

This form is for use in documenting multiple property groups relating to one or several historic contexts. See instructions in "Guidelines for Completing National Register Forms" (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. For additional space use continuation sheets (Form 10-900A). Type all entries.

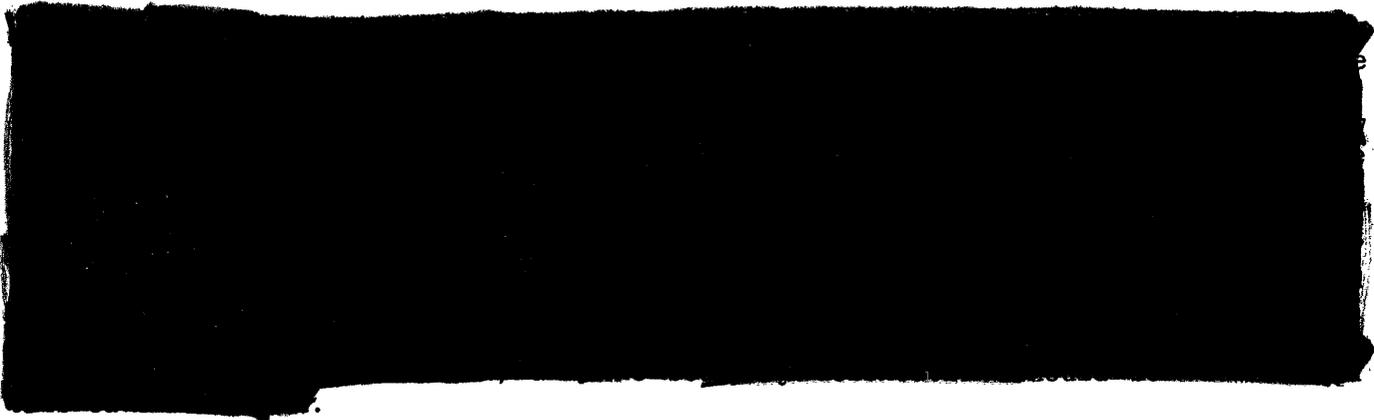
A. Name of Multiple Property Listing

Railroad Logging Sites in the Sacramento Mountains, New Mexico

B. Associated Historic Contexts

The railroad logging era in the Sacramento Mountains of southcentral New Mexico (1898 to 1947).

C. Geographical Data



X See continuation sheet

D. Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this documentation form meets the National Register documentation standards and sets forth requirements for the listing of related properties consistent with the National Register criteria. This submission meets the procedural and professional requirements set forth in 36 CFR Part 60 and the Secretary of the Interior's Standards for Planning and Evaluation.

Alan J. Robinson  
Signature of certifying official

1-13-92  
Date

USDA - Forest Service

I, hereby, certify that this multiple property documentation form has been approved by the National Register as a basis for evaluating related properties for listing in the National Register.

Beth Boland  
Signature of the Keeper of the National Register

4/30/92  
Date

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## **E. Statement of Historic Contexts**

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Discuss each historic context listed in Section B.

### **SUMMARY**

The railroad logging era contributed significantly to the growth and development of the Sacramento Mountain region. Although brief -- barely 50 years -- the life span of the "Cloud-Climbing Railroad" was a period of great and rapid change. It marked the first era of extensive mechanized logging in the district, and laid the foundations for commercial and tourist industries. Railroad towns such as Alamogordo and Cloudcroft were created, routes to the greater United States were opened, and the Sacramento region grew as more visitors and settlers entered the region. Seemingly overnight, the local economy was transformed from one of frontier farming and ranching to one with a capital-intensive industrial base (Glover 1984:1).

The construction of little more than 30 miles of railway from Alamogordo to Russia Canyon in the Sacramento Mountains that began in 1898 also symbolized the emerging commercial-industrial emphasis of the country at this time, tying local interests to those of the region and nation. Railroad logging in the Sacramento mountains was inextricably linked to the spread of main line railroads in southern New Mexico and east Texas because the construction and maintenance of railroads required vast amounts of timber for crossties, trestles and buildings. Mining activities in the region called for continual supplies of wood to erect and maintain underground support systems and material-handling structures. An influx of settlers to the area contributed to a growing need for wood, and the demand for lumber in nearby towns (e.g. El Paso, Texas) was rapidly increasing. Finally, Eastern capitalists were eager to invest in and benefit from development of the newly opened western territory. These financiers supported the railroad and its related industries because it provided access to new markets and resources (Glover 1984:1-2, Neal 1966:1-2).

### **THE RAILROAD LOGGING ERA IN THE SACRAMENTO MOUNTAINS: 1898-1947**

#### **The Birth of the Cloud-Climbing Railroad**

Plans to build a railroad to the Sacramento Mountains began as early as 1881, when the Santa Fe and Southern Pacific main lines reached El Paso. The El Paso and White Oaks (EP&WO), a line designed to pass by the Sacramentos in its approach to the rich gold mines of White Oaks from El Paso, was incorporated in New Mexico a year later but little came of the enterprise. A more ambitious effort to extend rail service north from El Paso was attempted in 1888 with the incorporation of the Kansas City, El Paso, and Mexican Railroad (KCEP&M). The promoter of this line, Morris R. Locke, noted the potential value of timber traffic to be drawn from the Sacramentos in his prospectus, but the development of coal and metal mines in the vicinity of White Oaks remained the primary objective. The KCEP&M, however, was barely more successful than the EP&WO had been. Only ten miles of track had been laid northward from El Paso, to a point known as Lanoria, Texas, when interest in the project waned and construction of the line was halted barely six months after it had begun (Glover 1984:1-2).

About five years after the KCEP&M venture failed, Charles Bishop Eddy began planning a railroad northeast from El Paso. A native of New York, Eddy had spent several years as a developer in the Pecos Valley working to implement Pat Garret's plan for the Pecos Irrigation and Improvement Company. Eddy abandoned the project after management disputes erupted in 1894 and shifted his attention to the Sacramento Mountains and railroads. This same year, accompanied by a rancher from Weed known as William "Bud" Woods, he made his initial horseback trip to the eastern flanks of the Sacramento Mountains. The terminal point of the journey was a spring at the mouth of Alamo Canyon. Three huge cottonwood trees formed a triangle around the

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clear flowing spring, and axle grease letters on a pine board nailed to one of the trees declared it "Ojo de Alamo Gordo" -- or Spring of the Big Cottonwood. It was after this spring that Eddy would name the railroad town established near the site four years later (Neal 1966:4).

In the two years following his journey, Eddy spent a good deal of his time investigating mineral, livestock, farming, and lumber prospects in the Sacramentos, and laying plans for a railroad into northeastern New Mexico. By 1897, Eddy and his partner William A. Hawkins, a lawyer, had convinced eastern capitalists to back their railroad venture, and the El Paso and Northeastern Railroad (EP&NE) was incorporated on October 28. Eddy then bought the ten miles of abandoned railway left by Locke's failed KCEP&M venture, and construction [REDACTED] began immediately. The initial all-male working crew consisted of at least 50 Chinese, 20 Blacks, many Mexicans, and several Irishmen and Texans (Neal 1966:4).

While the crew extended the railway northward, Eddy was busy planning a railroad town at the eastern base of the mountains. He bought the Alamo Ranch and Spring for \$5000, and by the time the railroad reached [REDACTED], construction of the village had begun. Mule teams were used to haul building supplies from railroad to townsite, and the first house lots went on sale in 1898. One week later, on June 15, 1898, the first train arrived in [REDACTED] arrived via the EP&NE (Neal 1966:6-7).

Although developing a railway line into the mountains to haul timber was a part of Eddy's original railroad development plan, the need to do so increased as the project unfolded. Barely a month after construction of the EP&NE began, it became evident that there was a shortage of available timber for cross-ties. The scarcity provided the final impetus necessary to convince Eddy and his supporters that a railroad leading into the rich timber stands of the Sacramento Mountains would be a practical venture, and organization of the Alamogordo and Sacramento Mountain Railroad was finally begun. C.D. Simpson was appointed president of the line and on March 24, 1898, the A&SM was incorporated with \$75,000 capital stock. Having accomplished this, Eddy split construction crews and camp equipment between the lines, and work on the mountain line began within a few weeks of the main line's arrival in Alamogordo. The EP&NE continued northward to Carrizozo while the A&SM headed east into the mountains (Neal 1966:8-10).

Drillers and powder men blasted a trail for the A&SM through the mountains. The first section of the line, extending [REDACTED], was opened in November 1898. The line made a climb of more than 3,000 feet (from an elevation of 4,372 feet at [REDACTED] to 7,580 feet at [REDACTED], and "the engineering of the route was a classic example of mountain railroad design" (Glover 1984:3). The line was characterized by sharp curves (with a "normal curve" of 30 degrees, and a maximum curve of 36 degrees) and steep grades (up to 6.5 percent). A vast amount of bridges and trestles were also required, and the completed line would contain a total of 58 pile or frame trestles averaging 120 feet in length (Neal 1966:11). Neal's description of the trestles provides a good indication of the complexities related to their design and maintenance:

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Length and height of each trestle depended on the width and depth of the canyon to be crossed. The rails were on cross-ties with a wooden guard rail on the outside to keep the ties from bunching. Under the ties were 8" x 16" x 28" stringers put in three runs called cords under each rail. Cast iron packers that resembled large spools spaced the stringers from two to six inches apart. Three-quarter inch bolts held the packers and stringers together.

Bolts were 12" x 12" upright timber posts 14 feet long set about 14 feet apart. The stringers joined and rested on their caps. The high panels were sway braced and set on intermediate caps about every 14 feet. Twelve by twelve inch sills of necessary length held them. These sills were on footing blocks set underground from four to eight feet to resist danger of water.

Longitudinal braces ran through at each intermediate cap. Hog jaw braces extended diagonally from each intermediate cap to the next top cap at a forty-five degree angle. They eliminated shifting endways or sideways. Sash braces ran across and sway braces, bolted on the side of the bents, ran down one side and reversed on the other. These braces helped keep lateral sway out of the trestle.

At the end of the trestle was a bulkhead which prevented dirt from sliding in on it. Made of 3" x 12" timber, the bulkhead was placed directly against the first bent on the dirt side.

Fire-proofing protected the trestles from danger of fire caused by sparks as long as coal or wood was used for fuel. Gravel covered two-by-fours which ran between the ties blocking the gaps. Another precautionary measure was the use of guard rails on all trestles from La Luz to Cloudcroft ... these extra rails kept a derailed train from jumping off a trestle.

Since all the lumber used was untreated, some of it needed replacement as often as every three years. A crew of at least thirty men was constantly busy changing ties and stringers and making other repairs. In replacing timber on a trestle, the men used a push cart to haul it to the location on the track above, then lowered it with a heavy rope to the place where it was needed (Neal 1966:11-12).

A Dedication Day ceremony was thrown in Toboggan on November 18, 1898 to celebrate the opening of this first portion of the A&SM, and two trains ran: one carrying passengers, another carrying logs (Glover 1984:3). This combination of business and tourism characterized the daily round of the A&SM for the next thirty years.

Because of the expense and difficulty associated with extending the railroad across the canyon at Toboggan and beyond, construction of the AS&M was delayed for almost a year while preparations were made. Work on the line resumed again in October 1899. A switchback -- one of the most famous feats of engineering on the line -- was used to solve the problem of crossing the canyon at Toboggan. Switches enabled trains heading up or down the mountain to pull back onto the switchback which connected a

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parallel set of lines. Then, "for more than a mile northwest, over two trestles, of 108 and 200 feet respectively, and a curve of 22 degrees, the train backed [over the length of the switchback] to the end of the [opposite switch]" (Neal 1966:18). From this point, having successfully crossed the canyon, trains would travel forwards again towards their final destination at the top or the bottom of the mountain.

The 7.5 mile extension of the A&SM from [REDACTED], required a rise of 2,000 feet, and the construction of 27 major trestles, the largest of which included the [REDACTED]. Of these, only [REDACTED], remains standing today (Photo 1). The 323 foot long trestle standing 52 feet above the canyon floor was completed in November 1899, just one month after work on the A&SM resumed (Glover 1984:4, Neal 1966:19). The Forest Service recently initiated a stabilization program to help preserve [REDACTED], a property which is on the State Register of Cultural Properties and the National Register of Historic Places. An engineering evaluation of the structure was completed (Smith and Scheuch 1990), and undergrowth beneath the trestle was removed. The S-Trestle, located just beyond the Mexican Trestle, was famous for its double 30 degree curve. The 338 foot long, 60 foot high structure collapsed sometime before the 1970s.

Construction of the line from [REDACTED] also required a vast amount of manpower. Up to 500 men were kept busy grading, building trestles, and laying track for the A&SM throughout the winter of 1899. Finding and retaining such a large labor pool was problematic, however. In the Alamogordo News (January 18, 1900) Eddy was quoted as saying:

We had difficulty in getting the right sort of laborers, and the problem has not yet been satisfactorily resolved. We tried Mexicans and they went away and left the contractors in the lurch as soon as they had a little ahead. Then we tried the Pueblo Indians, and they proved to be good workers, but cold weather knocked them out. After this some Americans were sent up. The other laborers had been in the habit of furnishing their own blankets. To the white men we had to give three or four blankets each. When they had acquired a stock to their liking, they also left. Cold weather, I supposed (Wuersching 1988:5).

Despite these problems, the line reached Cloudcroft in the spring of 1899. The first trains operated on April 11, and the dedication ceremony included two locomotive runs and a brass band (Neal 1966:36, Robertson 1986:187).

The line was extended to [REDACTED] by July 1, 1903, and this remained the terminal of common carrier operations for the line, and other extensions from here were built, operated, and maintained by lumber companies (Glover 1984:4,

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Robertson 1986:187). The 31.13 mile, 56.5" gauge A&SM line, the steepest climbing standard gauge railway of its time, was complete.

This new railroad required special steam-powered locomotives with good brakes, and log cars with dual brake systems quickly became the norm. Seven of the nine engines owned by the A&SM were built by the Baldwin Locomotive Company, and both A&SM 4-truck (#99 & #105) Shays were made by the Lima Locomotive Company (Neal 1966:36-38, Robertson 1986:187). The Shays were geared steam engines with three cylinder banks near their boilers which drove a crankshaft, and although they were slow (maximum speed of 15 mph), they had tremendous pulling power. The largest of these, the #99 Shay, weighed 357,300 pounds and had a pulling power of 59,116 pounds. Baldwin locomotive #102 was the smallest A&SM owned engine, with a weight of 72,130 pounds and a pulling power of 12,722 pounds. Most of the other locomotives fell in the middle of these extremes, with weights ranging from 100,000 to 160,000 pounds and pulling powers between 20,740 and 38,830 pounds (Neal 1966:38, Robertson 1986:187).

Despite the attention given to special design and safety precautions, wet and icy weather posed constant, and sometimes fatal, threats to normal railway operations. Minor derailments were an everyday occurrence and runaways were common on sharp grades. The worst A&SM wreck occurred on October 19, 1903, when seven Mexican laborers perished after a train carrying steel rails left the track at the head of Cox Canyon and telescoped. Less than four years later, in August 1907, an engineer was killed on a runaway train below Tobaggan. To its credit, however, the line never had any passenger fatalities (Glover 1984:3,7).

#### The Railroad Logging Companies

The impetus for the organization and development of the A&SM depended on logging, first to provide wood for the main line ties of the EP&NE, and then as a profitable industry (Neal 1966:53). Although the La Luz Saw Mill and the Penasco Lumber Company harvested wood from the Sacramentos as early as 1881 and 1890, respectively, the absence of transportation limited sales to local markets and lumbering remained a small scale business. The completion of the A&SM provided access to outside markets and stimulated an expansion of the lumber industry (Myrick 1970:215-16). Before the EP&NE reached Alamogordo, the Alamogordo Lumber Company (ALCo) was organized to purchase land, build sawmills, and log in the mountains (Glover 1984:3). On May 19, 1898, the company obtained a charter with \$200,000 capital stock. That summer the company erected the largest lumber manufacturing plant to be built in the Rocky Mountain region up to that time [REDACTED] (Myrick 1970:216-7). The mill went into operation on October 5 (Glover 1984:11). Inevitably, the relationship between ALCo and the railroad was a close one. Together they "put into operation every appliance available [at the time] for cutting and hauling timber to the mills in Alamogordo" (Neal 1966:53).

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Although railroad logging remained a popular industry in the Sacramentos for the next four decades, management and ownership of the business were in constant flux. In addition to worrying about the chronic legal and monetary concerns affecting railroad logging, owners also had to contend with the technical crises of mountain railroading. Roadbeds softened during the summer rains, causing land slides and derailments to occur. Occasionally whole lengths of track would slide downslope, and camps as well as equipment were lost to canyon floods. Train and log loading accidents were common, runaways caused serious damage to engines and cars, and engines occasionally blew up. These and other catastrophes delayed log shipments, and the resultant log shortages periodically forced mills to close down (Glover 1984:15-16, Neal 1966:17).

Logging beyond [REDACTED] followed the pace of the A&SM's advance up the mountain, and loggers spent a good deal of their time building standard gauge lines in canyon bottoms to enable cut logs to be transported to the main line by rail. As soon as the A&SM reached [REDACTED]

[REDACTED], which included a four-track engine house and an elevated water tank, was built. Additional spurs were then constructed [REDACTED]

[REDACTED] (Glover 1984:11, Neal 1966:55).

The A&SM reached the [REDACTED] in May 1903, and [REDACTED], one of the larger logging camps to be founded in the mountains was established. [REDACTED] consisted of about a hundred wooden cabins, a New Mexico Tie & Timber Company commissary, an engine roundhouse, a railroad shop, a post office, a school, and two cook shacks/mess halls (Glover 1984:15).

The branch lines or spurs, combined with logging company owned engines and cars, provided the means by which timber cut in canyons miles off the main line could be efficiently transported to the A&SM. The hand sawed timbers would be chained together in "trains" and skidded one to two miles down the mountainside. Horses, mules, and log chutes (greased V-shaped troughs) were used to skid timber down the slopes until aerial tramways, steam skidders, and bulldozers were introduced in the late 1920s (Photo 2). Once the logs had been skidded down to landings in the canyon bottoms, steam loaders were used to load them onto log cars. Filled log cars were moved by train to the main line for transport down the mountain to the mill (Photo 3). After all desirable wood had been removed from an area, the spur's tracks and reusable cross-ties were pulled up and laid down in another canyon bottom where the cycle would begin again (Glover 1984:11, Neal 1966:57).

In early 1907, a lawsuit was filed against ALCo by the United States government. The suit alleged that the lumber company had purchased lands fraudulently from the Territory of New Mexico, and an injunction prohibited them from logging on the lands

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in question (Glover 1984:18). Due to diminished supplies of timber and capital, ALCo was forced to close its [REDACTED] mill late in 1907. All logging operations ceased, and in April 1909 the tracks [REDACTED] were taken up and salvaged as scrap steel.

Although the suit was dropped after New Mexico became a state in 1912, ALCo could not recover fully. During the lawsuit years, the business had become disorganized, company properties had deteriorated, and customers had been lost. As a result, the company sold the [REDACTED] and part of their timber holdings to the newly created Sacramento Mountain Lumber Company (SMLCo) in 1916. New spur lines and logging camps were constructed near [REDACTED]. Although SMLCo replaced the horse and mule method of skidding logs with heavy machinery (steam skidders and aerial trams), rail operations continued much the same as before (Glover 1984:18-19).

The SMLCo was plagued with troubles and setbacks from the start, and except for a brief spurt of prosperity during WW I never achieved sustained operations. Fires in 1917 destroyed valuable timber and railroad equipment, the Alamogordo mill burned down in February 1919, and the market for timber declined after the close of the war. Prospects for the company's future were dim, and SMLCo sold its holdings to the Southwest Lumber Company (SWLCo) in July 1920 (Glover 1984:18-19).

The SWLCo was a New Mexico Corporation. Its organizer, Louis Carr, was a native North Carolina lumberman who brought both experience and capital -- \$600,000 by mid-1922 -- to the new Sacramento lumbering enterprise. The company rebuilt the mills, repaired railroads, and extended logging operations [REDACTED]. In October 1921, SWLCo produced one million board feet of lumber, and expected to increase this figure in the upcoming months (Glover 1984:19-29).

During 1922, SWLCo established a permanent camp [REDACTED], and it "became the terminal point for logging railroad operations with the woods engines bringing in loaded cars from the outlying areas to be consolidated into longer trains to be taken [REDACTED] (Glover 1984:21). The site, [REDACTED] was chosen as a terminal camp because of its plentiful water supply. Although homesteaders from Pennsylvania had inhabited the area since the early 1900s, the boom years [REDACTED] did not come about until SWLCo established a base camp there. Between 1922 and 1947, the village had an average population of 75 people consisting primarily of railroaders, loggers, and their families. The camp [REDACTED] included 28 homes, three barns, two company water tanks, a round house, a commissary, a mess hall, a root cellar, a school house, a powder house, and a cemetery. A post-office operated from 1923 until 1942 when the village, along with the railroad logging industry, collapsed (Glover 1984:23).

The SWLCo continued to prosper throughout the 1920s, operating 16-24 miles of track and providing Otero County with 300 jobs. It was SMLCo that disposed of cumbersome

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steam skidders in 1927, and introduced the use of Caterpillar tractors for hauling logs (though horses continued to be used in steep canyons). In May 1928, SWLCo converted their engines from coal to oil fuel as oil-run locomotives were less likely to start fires. The fuel conversion was also economically motivated since the price of oil was rapidly dropping. It was not until the national Depression struck in the 1930s that the SWLCo's business began to decline. Although they continued to operate during the depths of the depression, the work force was decreased by half, and work was undertaken on an order-to-order basis. Western mines remained the best customers for SWLCo, but between 1933 and 1934 the construction of Civilian Conservation Corps camps contributed significantly to the lumber market (Glover 1984:19-29, Myrick 1970:220).

Around the same time SWLCo coalesced, Ben Longwell and C.M. Pate formed the Cloudcroft Lumber and Land Company (1920). The company was under contract with the BIA to purchase and cut about 160 million board feet of pine from the southern [REDACTED]. To retrieve the timber, Longwell built a logging railroad [REDACTED] a distance of about eight miles. The company's logging operations began in the summer of 1924 after the line had been completed. Soon the company's property included maintenance buildings [REDACTED] and a contract with the Southwest Lumber Company to process logs at [REDACTED]. Unavoidable delays in lumbering operations put a strain on CL&LCO's meager finances, and they were forced to sell their considerable holdings to the better-financed George E. Breece Lumber Company in 1926 (Glover 1984:29-31).

Breece added a new mill, planing mill, and box factory [REDACTED] to the operation between 1926 and 1927, and extended rail lines [REDACTED]. In its peak years before the depression, the Breece operation included a logging camp with a machine shop, engine house, water tanks, and dwellings [REDACTED], and employed 350 to 400 men. The Depression caused the operation to shut down in 1930, and logging activities resumed in 1935 at a considerably diminished pace (Glover 1984:36).

In 1940 Breece sold the Mescalero timber contracts to Prestridge and Seligman, who established a truck logging industry in the mountains. The Southwest Lumber Company was still in operation at this time, but the depression had caused irreparable damage to their assets. The sawmill was old and inefficient, and it required a long expensive rail haul to feed it. The rail system was deteriorating, and vulnerable to mountain weather and high maintenance costs. And by the end of the Second World War, logging trains were being replaced with the logging trucks which were safer and less expensive to operate and maintain. Inevitably, the SWLCo shut down its steam logging operations in 1942, and sold its remaining assets to Prestridge and Seligman three years later (Glover 1984:28-29).

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The Growth of Railroad Towns and Tourism

Hauling logs remained the primary business of the A&SM during its almost 50 year life span, but passengers, produce, fruit, livestock, mail, coal, supplies, and machinery were also transported up and down the mountain by train. The dangerous climb of the line offered spectacular views, and tourists came by the thousands. During the summer, up to one passenger and four logging round trips were made daily, and one to two round trips were the norm for winter months. One of each of the daily round trips usually carried mail, express, and passengers in a single car at the end of the train (Glover 1984:6-7). Thus, in addition to linking local economic and industrial interests to those of the region and nation, the railroad logging era of the Sacramento Mountains contributed significantly to the growth and development of local settlements. [REDACTED] were in fact products of the railroad industry, while the existing towns of High Rolls, Mountain Park, and La Luz benefited from the business and tourism brought to them by the passing line.

The planning for a railroad depot town at the base of the Sacramentos coincided with the initial construction of the EP&NE in 1897. The Alamogordo Improvement Company, with H.S. Church as its engineer and Bud Woods as its head surveyor, was created to assume the responsibility of planning and constructing the town. Jim Blakely, driving a 16 mule freighter team, hauled building materials from the railroad to the town site, and the construction of [REDACTED] was underway by the time the EP&NE reached Orogrande. Compasses, pace scales, and stakes were used to parcel the land. Lots went on sale on June 9, 1898, and a village of tents quickly emerged. Even the train depot and Alamogordo Improvement Company were housed in tents, and the only structure was Tom Frazier's wooden house that had been moved to the village from La Luz (Neal 1966:5-6).

A temporary water supply, consisting of an irrigation ditch from [REDACTED] to the new village, was built by John Walker. The water was too alkaline for domestic use, however, and drinking water had to be hauled from Alamo Spring. Eddy acquired water rights to Cabellero Spring in December 1897, and in January 1898, W.J. Ward sold Eddy all water rights to the head springs of Alamo Canyon for \$1,250.00. Eddy received permission from county commissioners to develop the springs and marshes, and wooden pipelines combined with open ditches were used to transport domestic water to the village. By 1900, the town boasted a water system valued at \$25,760, and water rights were sold to the newly formed Alamogordo Waterworks Company for nominal fees (\$1.00 each). The Alamogordo Waterworks Company, with Woods as its superintendent, received its charter in May 1903 and Woods continued to develop the water system, extending it from the Sacramento Mountains and throughout Alamogordo. In 1912, both the Alamogordo Waterworks and the Improvement companies were sold to Texas Capitalists for \$250,000 (Friesen 1990:14-18). On July 3 of the same year, Alamogordo was incorporated as a town and quickly became the hub of railroad and lumber related businesses in the Sacramento Mountain region.

The first stop of the A&SM on its way up the mountain from Alamogordo was the small adobe village [REDACTED]. The community, homesteaded in the 1860s by natives of towns along the Rio Grande, supported itself through homesteading and ranching. When

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construction of the railroad began, however, some farmers sold their land and water rights to the railroad company or became company employees. Others, such as a Mr. Smith who became notorious for delicious fruits and vegetables, were able to capitalize on the expanded market provided by the railroad. The railroad also attracted additional settlement into [REDACTED] (e.g., W.A. Hawkins, Eddy's lawyer, built his home in La Luz), and increased the capital value of homestead land and water property (Neal 1966:22-24).

Further up the track, fourteen and a half miles [REDACTED] the A&SM line passed through the communities of High Rolls and Mountain Park, the fruit growing region promoted by Eddy to further entice prospective railroad investors. The communities' orchards produced some of the finest apples, cherries, pears, and peaches. "Residents often brought fruit and flowers to sell or give to passengers at the depot" (Neal 1966:13). The increase of tourists and workers passing through the communities because of the train, and the expanded market for fresh produce, enabled fruit growers to prosper. By 1907, S.F. Cadwallader and Sons in Mountain Park had 30,000 fruit trees, a nursery with shrubs and plants, and a large warehouse. Together, the High Rolls/Mountain Park communities would export more than 120 cars of apples in 1925 (Neal 1966:13-16).

The arrival of the railroad allowed other economic opportunities to flourish as well. Mining in the Wornock Copper Mine, and shipment of the ore from High Rolls to El Paso via the A&SM and main lines, became an important source of employment in High Rolls. In 1904, the Standard Lithograph Stone Company was organized in High Rolls by H.W. Fleming. A railroad spur was built to the company, and stone could be delivered virtually anywhere in the country via the railroad (Neal 1966:14-15).

It was the sight of fluffy clouds lying near the ground at the mountain summit which inspired surveyors for the train line in 1898 to dub the area [REDACTED] and they determined that it would be the most suitable area for the company's summer resort development. And so in the spring of 1899, with the arrival of the line at the summit, construction of the village resort was begun on a 2700 acre tract of land. A 170 x 50' pavilion, containing dining facilities, bathrooms, a parlor, reception rooms, and porches on all sides, was constructed near the passenger train depot to serve the needs of visitors and settlers until other accommodations could be provided. The resort's first advertisement, declaring [REDACTED] to be "The breathing spot of the Southwest", was published in the White Oaks Eagle on June 15, 1899 (Neal 1966:27).

The next priority was installing a water supply system, which pumped water through six-inch standard cast iron water mains [REDACTED] at a cost of \$30,000. "Water service assisted the construction of residences and other buildings" so that streets, stores, and houses began to spring up (Neal 1966:27). The railroad company planned for a large resort and divided the reservation into three sections: [REDACTED]

[REDACTED] a residential district on the outskirts of the resort that offered

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larger lots and more privacy. "By April 1900 ... North Cloudcroft had livery stables, stores, butcher shops and all the advantages of a country town" (Neal 1966:29).

The focus of the Cloudcroft resort was to be the company operated Lodge, and construction of it began in the spring of 1900. The completed 212 x 80' structure stood two stories high, had a slab log finish, and a stained shingle roof. The main structure was completely surround by porches, and there were balconies for second story guest rooms: "Rustic in appearance, yet comfortable in furnishings, it attracted guests desiring respite from the desert heat in the healthful and balmy mountain air" (Neal 1966:30). The Cloudcroft Lodge opened for business on June 1, 1901 (Wuersching 1988:6).

The round trip rate for a "Cloudcroft Excursion" in 1907 was \$3.00, and weekend excursions were sell-outs throughout the entire season. Texas and New Mexico families migrated to Cloudcroft to escape the summer basin heat, and the Lodge became a center of tourist activity. It was improved in 1907 by the addition of 40 x 80' dining room with a servant's quarters below, but the entire structure burned down just two years later on July 13, 1909. The destruction of the Lodge was a significant loss for Cloudcroft, but plans began almost immediately for a "bigger and better" hotel and resort. Construction of the new lodge began in April 1910, and it opened for business in 1911 (Neal 1966:35, Wuersching 1988:11).

For the next twenty years [Cloudcroft] summer seasons reflected the prosperity of the country and established a precedent for resort living in the Southwest. Many guests, bringing children and servants, stayed for three months. They dined sumptuously at their assigned tables set with sterling silver and Haviland china while listening to music provided by a string orchestra. Oriental rugs and oil paintings enhanced the luxuriousness of the inviting lobby with its huge fireplace (Neal 1966:31).

Although it has undergone dramatic changes over the last 80 years, the Lodge remains in operation today and has been on the New Mexico State Register of Cultural Properties since October 2, 1987 (Wuersching 1988:12).

### Pulling Up Tracks

The late 1920s marked the peak years for the railroad logging industry. Business deteriorated after this as a result of the Depression, the deteriorating rail system, and increasing costs of maintenance. In addition, Louis Carr, the magnate of the Southwest Lumber Company that bought out Sacramento Mountain railroad logging operations in 1920, was less interested in tourism than timber. While there are no reports of serious accidents involving passengers on the line, suits developing out of slight or imaginary injuries may have contributed to Carr's decision to phase out passenger services. Weekend excursions were terminated in September 1930, and regular passenger services had been reduced from three times a day to three times a

X See continuation sheet

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week by 1934. After February 13, 1938, passenger and mail services were terminated and the line transported only freight (Glover 1984:28-29, Neal 1966:67).

Prestridge and Seligman established a truck logging industry in the mountains in 1940, and the deteriorating, accident prone rail system could not compete with the efficiency of automobile transport. Railroad logging south of Russia ended in 1941. Abandoned portions of track were pulled up from 1942 until 1945, and ancient locomotives were cut up for scrap in Cloudcroft. Southwest Lumber Company sold its holdings to Prestridge and Seligman in 1945, and the Interstate Commerce Commission issued an order of abandonment for the mountain railway on May 7, 1947. The last train, operated by Ernest Clack, descended from the mountains on September 12, 1947, and two days later scrappers began pulling up rail from Russia to Alamogordo (Glover 1984:9, Neal 1966:67-68).

The task of dismantling the railway was contracted to the Commercial Construction Company, Inc., of Dallas, and a crew of about 25 Mexican laborers was used. The tracks were removed from Russia to Alamogordo in the reverse order that they had been laid. Some rails were sold to Mexico but most, too bent to be reused, were shipped to smelters in El Paso. Ties were collected and sold locally, and a few of the trestles were dismantled and sold for timber. Within six weeks, the Cloud-Climbing railroad became a part of history (Glover 1984:9, Neal 1966:68,70).

Property Types: The railroad logging industry left logging camps, trestles, log chutes, railroad grades, timber landings, and switchbacks in the Sacramento Mountains. To date, 33 railroad logging related sites have been documented in the Cloudcroft District of the Lincoln National Forest, and three have been identified in the Mayhill District. This includes 18 trestle sites, seven logging camps, six log chutes, three timber landings, two switchbacks, and one railroad grade.

Research Themes: Railroad logging related sites in the Sacramento Mountains have the potential to provide information on a variety of questions concerning this historic period. Important categories of information available or likely to be available within the nomination area include information on: historic logging practices; the areal extent of historic logging activities; structural and engineering trends and accomplishments associated with the logging railroad or logging practices; and the cultural, ethnic, and socioeconomic characteristics of construction and logging crews. Because of the diversity in site types covered by this nomination, it is not expected that any given site will provide the data necessary to address all of these themes, and the research questions most applicable to specific site types are addressed in the descriptions which follow. All of the site types associated with this nomination date between 1898 and 1947.

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## F. Associated Property Types

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### I. Name of Property Type: Historic Logging Camps

II. Description: Historic logging camps are characterized by a variety of features which may include all or a combination of the following: cabins, foundations, tent platforms, dugouts, reservoirs, railroad water tanks, firepits, dumps, outhouses, and railroad spur grades (Photo 4). The number and types of features at a given camp may be expected to correspond with the population size and length of occupation. Associated artifact scatters will range from sparse to dense in relation to these variables as well, and may include all or a combination of the following artifact types: railroad and logging equipment or hardware; amber, clear, milk, purple, and aquamarine glass; whiteware ceramics; and tin cans. These lists are not considered to be exhaustive, and additional feature and artifact types will be present at some locales. Most logging camp sites will be located in relatively flat canyon bottoms with access to the main railroad line or railroad spurs, and to springs or other dependable water sources.

III. Significance: Historic logging camps are significant examples of relatively short-term habitation sites for loggers. They may potentially provide a vast array of information relating to such settlements including: group size, living conditions, ethnic and socioeconomic characteristics of the work force, diet, and subsistence patterns. Archival research may uncover historic records and/or photographs of specific camps, and there is a potential for ethnographic interviews to be conducted with individuals who worked in the camps, or their surviving relatives. Such research can contribute to data already collected on the historic railroad logging period and be related to overall trends in historic settlement, subsistence, and utilization of the Sacramento Mountains.

IV. Registration Requirements: As a measure of the historic identity of a property, and the degree to which it retains those qualities which make it significant, integrity is a key component of the evaluation. However, an individual property need not, and probably will not, possess all of the aspects of integrity (location, design, setting, workmanship, materials, associations, and feeling). Since much of the railroad was dismantled in 1947, and nearly all structures associated with railroad logging were made of untreated timbers that have collapsed or decomposed, most logging camps covered by this nomination will be nominated under Criterion D with associative and locational integrity as the primary components of consideration.

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I. Name of Property Type: Railroad Trestles

II. Description: Railroad trestles are wooden bridges spanning canyons or other formidable drainages. Most trestles will be constructed of sturdy milled lumber (4 x 6s) fastened together with large iron bolts, but some structures also will contain unmilled logs. Most trestles have a wooden guard rail outside the cross-ties, and 8" x 16" x 28" stringers beneath the ties where the rails once were. Cast iron packers separate the stringers from two to six inches apart, and three-quarter inch bolts hold the packers and stringers together. Upright timber posts, 14 foot long 12" x 12" lumbers set approximately 14 feet apart, serve as bolts, and stringers resting on their caps join them. High panels are sway braced and set on intermediate caps about every 14 feet. These are held by 12" x 12" sills of necessary length which rest on footing blocks set four to eight feet underground. Longitudinal braces run through intermediate caps, and hog jaw braces extend diagonally from each intermediate cap to the next top cap at 45 degree angles. Bulkheads, made of 3" x 12" timbers placed directly against the first bent on the dirt side, are found on both ends of trestles. The length and height of trestles varies in accordance to the width and depth of the canyon to be crossed.

III. Significance: Railroad trestles in the Sacramento Mountains are significant examples of the engineering and technical accomplishments associated with the construction of railroads through these mountains in the late nineteenth and early twentieth centuries. They are critical components of the engineering scheme because no other practical method then was available for spanning the many deep canyons along the line. Existing documentation on the logging railroads may allow relatively precise construction dates to be established for individual trestles, and eventually it may be possible to establish a chronology of trestle construction methods.

IV. Registration Requirements: As a measure of the historic identity of a property, and the degree to which it retains those qualities which make it significant, integrity is a key component of the evaluation. However, an individual property need not, and probably will not, possess all of the aspects of integrity (location, design, setting, workmanship, materials, associations, and feeling). Since much of the railroad was dismantled in 1947, and nearly all structures associated with railroad logging were made of untreated timbers that have collapsed or decomposed, most trestles covered by this nomination will be nominated under Criterion D with associative and locational integrity as the primary components of consideration. A trestle eligible under Criterion C for distinctive architectural design qualities should minimally retain architectural integrity, structural integrity, and those elements which distinguish it.

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**I. Name of Property Type:** Log Chutes

**II. Description:** Log chutes are linear "tracks" formed by parallel sets of logs. Most often the chute logs are set on top of log cross ties, but in some cases the chutes are set directly on the ground. Typically, the diameter of the logs used for cross ties is greater than the diameter of the chute stick logs, but there is no apparant standardization of log size. The chute sticks are usually set between 10 and 20 centimeters apart, and a channel is hewn between them in the shape of a "V". In some cases, the channel appears to have resulted from use rather than intentional hewing. Spikes are used to fasten the runners to the cross ties, and sometimes notches for the runners are cut in the cross ties. Most log chutes are located in high elevation drainage bottoms or steep side canyons. The length of individual log chutes varies with respect to the length of the drainage they are set in, the location of railroad spurs, and access to timber.

Log chutes were used from about 1898 to 1920 to move felled timber from ridge tops to landings near railroad spurs in canyon bottoms. The log chute would be greased and a log "train" (chained cut trees) would be pulled down the chute by horses or mules (Photo 5).

**III. Significance:** Log chutes are significant examples of logging practices in the Sacramento Mountains from about 1898 to 1920. They have the potential to provide information concerning logging technology and the areal extent of logging activities during this period.

**IV. Registration Requirements:** As a measure of the historic identity of a property, and the degree to which it retains those qualities which make it significant, integrity is a key component of the evaluation. However, an individual property need not, and probably will not, possess all of the aspects of integrity (location, design, setting, workmanship, materials, associations, and feeling). Log chutes will be nominated under Criterion A, with structural, associative, and locational integrity as the primary components of consideration.

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I. Name of Property Type: Railroad Grades

II. Description: Railroad grades are leveled beds cut along the contour of high elevation slopes on which railroad tracks were laid. Some grades contain remnants of cross ties and spikes used to support the rails, and sparse to moderate scatters of historic glass, tin cans, barrels, and construction materials may be found in association. Most grades will be located in high elevation canyons or side drainages. The length of individual grades varies with respect to the length of the drainage they are set in and access to timber.

III. Significance: Railroad grades are significant examples of railroad logging practices in the Sacramento Mountains between 1898 and 1947. They have the potential to provide information concerning logging technology and the areal extent of logging activities during this period.

IV. Registration Requirements: As a measure of the historic identity of a property, and the degree to which it retains those qualities which make it significant, integrity is a key component of the evaluation. However, an individual property need not, and probably will not, possess all of the aspects of integrity (location, design, setting, workmanship, materials, associations, and feeling). Since much of the railroad was dismantled in 1947, and nearly all structures associated with railroad logging were made of untreated timbers that have collapsed or decomposed, most railroad grades covered by this nomination will be nominated under Criterion D with associative and locational integrity as the primary components of consideration.

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I. Name of Property Type: Timber Landings

II. Description: Timber landings are low, leveled areas on which cut logs were stacked with no apparant standarization of size or shape (Photo 6). Artifacts associated with landings may include all or a combination of: logs, milled lumber, railroad ties, and historic construction materials. Most landings will be set in high elevation canyon bottoms or saddles, and will be located with respect to railroad spurs, log chutes, and timber access.

III. Significance: Timber landings are significant examples of railroad logging practices in the Sacramento Mountains between 1898 and 1947. They have the potential to provide information concerning logging technology and the areal extent of logging activities during this period.

IV. Registration Requirements: As a measure of the historic identity of a property, and the degree to which it retains those qualities which make it significant, integrity is a key component of the evaluation. However, an individual property need not, and probably will not, possess all of the aspects of integrity (location, design, setting, workmanship, materials, associations, and feeling). Since much of the railroad was dismantled in 1947, and nearly all structures associated with railroad logging were made of untreated timbers that have collapsed or decomposed, most timber landings covered by this nomination will be nominated under Criterion D with associative and locational integrity as the primary components of consideration.

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I. Name of Property Type: Switchbacks

II. Description: Switchbacks are railroad grades engineered to allow trains to climb steep grades using relatively little track. They consist of short sections of track forming a zig zag pattern up steep slopes. The grade of individual short track sections is generally less than six percent, and they commonly range between 100 and 145 meters in length. Trains would alternate between moving forwards and backwards from one short section to the next. Artifacts associated with switchbacks may include all or a combination of: cross ties, spikes, construction materials, glass, and tin cans. Some switchbacks will have associated logging camps. Switchbacks are commonly located on steep canyon slopes in high elevation areas with access to railroad spurs and timber.

III. Significance: Switchbacks are significant examples of railroad logging practices in the Sacramento Mountains between 1898 and 1947, and they have the potential to provide information concerning the engineering and technological accomplishments of this period.

IV. Registration Requirements: As a measure of the historic identity of a property, and the degree to which it retains those qualities which make it significant, integrity is a key component of the evaluation. However, an individual property need not, and probably will not, possess all of the aspects of integrity (location, design, setting, workmanship, materials, associations, and feeling). Since much of the railroad was dismantled in 1947, and nearly all structures associated with railroad logging were made of untreated timbers that have collapsed or decomposed, most switchbacks covered by this nomination will be nominated under Criterion D with associative and locational integrity as the primary components of consideration.

#### G. Summary of Identification and Evaluation Methods

Discuss the methods used in developing the multiple property listing.

This multiple property nomination of sites associated with the railroad logging era in the Lincoln National Forest has been selected from the set of all sites known to relate to this period that have been identified on the forest to date. The majority of these sites were located during archeological reconnaissance of planned timber sales. The sites being nominated at this time are [REDACTED]

[REDACTED] were located during the White/Rio and Greasy Timber Sale surveys conducted in 1990 by David A. Gregory, an archeologist under contract to the Lincoln National Forest. [REDACTED] was located after a employee of the [REDACTED], Tim Myer, notified forest archeologists of its existence. Forest Service site forms were filled out for each site, and survey reports were completed (Gregory 1990a, Gregory 1990b, Hawthorne 1990).

Since most of the railroad was dismantled in 1947, few sites covered by this nomination will retain all components of integrity. Trestles, railroad grades, and switchbacks no longer contain rails, and in most cases cross ties are gone as well. Additionally, since the logs used in the construction of trestles and log chutes were untreated, weathering has resulted in the collapse and decomposition of many of these features. As such, most sites covered by this nomination will be nominated under Criterion D with associative and locational integrity as the primary components of consideration. Trestles which are eligible under Criterion C for distinctive architectural design qualities should minimally retain architectural integrity, structural integrity, and those elements which distinguish it.

The historic context for the nomination was determined by the known areal extent of railroad logging activities on Forest lands in the Sacramento Mountains as defined through archival research by Vernon J. Glover (1984). This era is considered significant because of its vast contributions to the settlement and development of the Sacramento Mountain region, and because it is a symbol of the capital intensive, commercial-industrial emphasis which swept the country during the late nineteenth and early twentieth centuries. Only one type of historic railroad logging site has been nominated to the Register thus far [REDACTED], and it is felt that a nomination inclusive of the several site types relating to this period will provide more holistic documentation of this era.

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**H. Major Bibliographical References**

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- Friesen, Renetta  
1990 Alamo Canyon, Otero County, New Mexico. Manuscript on file at Lincoln National Forest, Alamogordo.
- Glover, Vernon J.  
1984 Logging Railroads of the Lincoln National Forest, New Mexico. United States Department of Agriculture, Southwestern Region, Cultural Resources Management Report No. 4.
- Gregory, David A.  
1990a White/Rio Timber Sale. USDA, Lincoln National Forest Cultural Resources Survey Report #1990-08-121. Alamogordo, New Mexico.
- Gregory, David A.  
1990b Greasy Timber Sale. USDA, Lincoln National Forest Cultural Resources Survey Report #1990-08-143. Alamogordo, New Mexico.
- Hawthorne, Lori  
1990 Hubbell Canyon Log Skidway Documentation. USDA, Lincoln National Forest Cultural Resources Survey Report #1990-08-125. Alamogordo, New Mexico.
- Myrick, David F.  
1990 New Mexico's Railroads: A Historical Survey. University of New Mexico Press, Albuquerque.
- Neal, Dorothy Jensen  
1966 The Cloud-Climbing Railroad: A Story of Timber, Trestles and Trains. Alamogordo Printing Company, Alamogordo.
- Robertson, Donald B.  
1986 Encyclopedia of Western Railroad History: The Desert States. Caxton Printers, Ltd., Caldwell.
- Wuersching, Marie  
1988 Railroad to Cloudcroft. A brochure prepared by the Sacramento Mountains Historical Society, Inc., Cloudcroft.

Primary location of additional documentation:

<input type="checkbox"/>	State historic preservation office	<input type="checkbox"/>	Local government
<input type="checkbox"/>	Other State agency	<input type="checkbox"/>	University
<input type="checkbox"/>	Federal agency	<input type="checkbox"/>	Other

Specify repository: \_\_\_\_\_

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