MUSEUM OF NEW MEXICO

OFFICE OF ARCHAEOLOGICAL STUDIES

THE TESTING OF LA 86739, NEAR CARRIZOZO, NEW MEXICO

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ADMINISTRATIVE SUMMARY

Between January 22 and January 26, 1996, the Office of Archaeological Studies, Museum of New Mexico, conducted investigations at a historical site, LA 86739, on U.S. 54, north of Carrizozo, Lincoln County, New Mexico. Mapping, in-field analysis, and archival research were conducted at the request of the New Mexico State Highway and Transportation Department to determine the extent, age, integrity, and importance of the cultural material present within the proposed project limits.

LA 86739 dates from 1899 to 1939. This two-component site includes the Carrizozo Civilian Conservation Corp (CCC) camp, east of U.S. 54, and the original Carrizozo city dump. Most of the material present within the proposed project area dates to the earlier component, the Carrizozo city dump. This was confirmed by archival research and interviews. The data potential of the portion of the site within the proposed project area is minimal beyond information that has already been recorded, and no further investigations are recommended.

MNM Project No. 41.610
NMSHTD Project No. NII-054-2(11)124, CN 2777
State Land Permit SP-89

ACKNOWLEDGMENTS

We would like to thank the people of Carrizozo who helped us piece together the story of LA 86739. Special thanks goes to Mrs. Joy Gallacher and Mr. Wayland W. Hill of Carrizozo, and Mr. Joe Phillips of Roswell, who provided us with a great deal of information on the Carrizozo CCC camp. We would also like to thank the staff of the Lincoln County Courthouse for their help and assistance.

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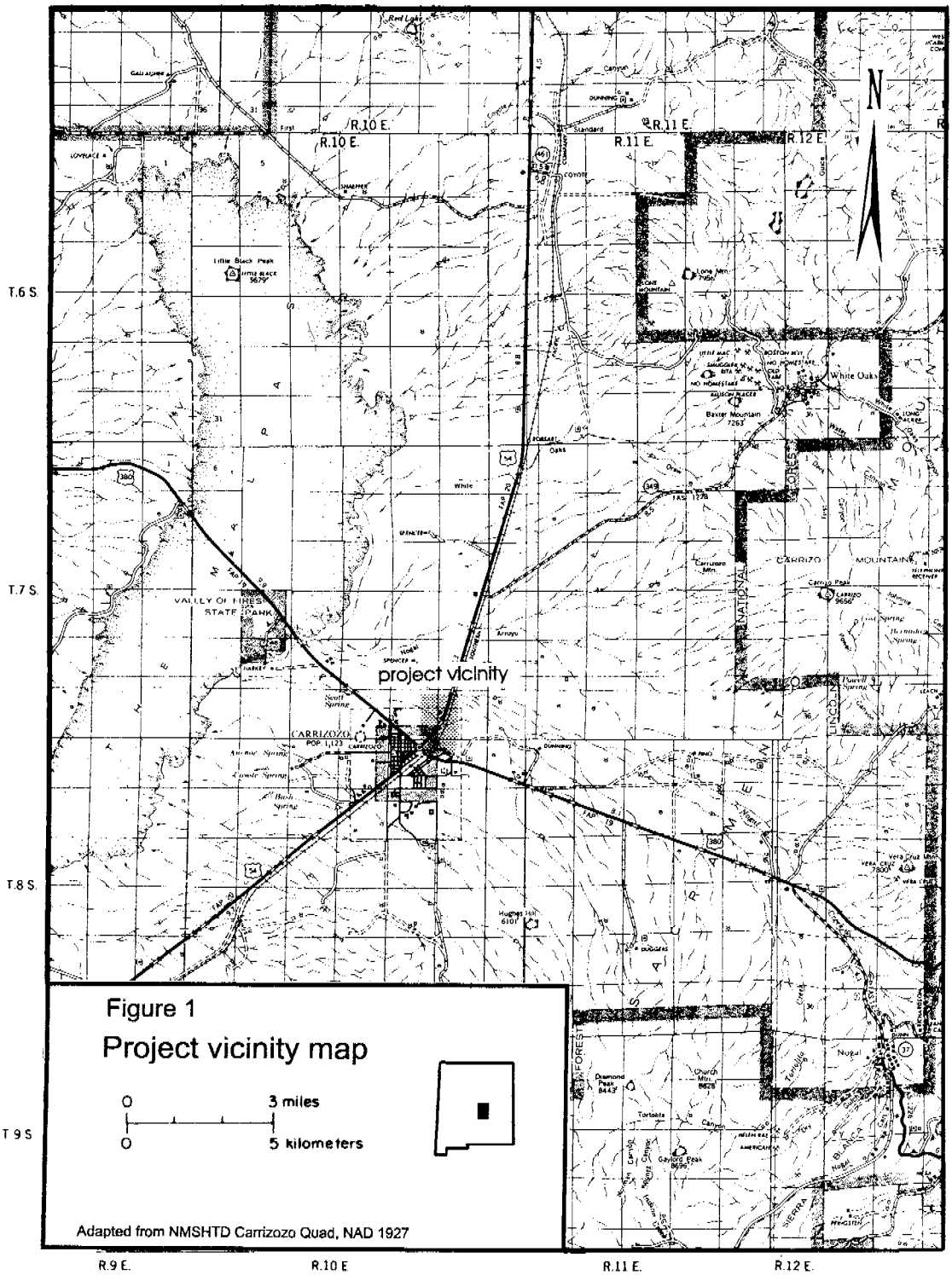
INTRODUCTION

At the request of the New Mexico State Highway and Transportation Department (NMSHTD), archaeological investigations were conducted at LA 86739 on U.S. 54, north of Carrizozo, New Mexico, on private land and state land administrated by NMSHTD (Figs. 1 and 2 and Appendix 1). Mapping, in-field analysis, archival research, and local interviews were conducted by archaeologists from the Office of Archaeological Studies, Museum of New Mexico, under State Land Permit SP-89. Fieldwork was carried out between January 22 and January 26, 1996, by Peter Y. Bullock, assisted by Stephen A. Lakatos, Raul A. Troxler, and Marcy Snow. Yvonne Oakes acted as principal investigator. Figures were drafted by Ann Noble, and the report was edited by Tom Ireland. The photographs were printed by Nancy Warren.

LA 86739 is the site of the Carrizozo CCC camp, which is on top of the slightly earlier Carrizozo city dump. Investigations were conducted at LA 86739 to determine the age, extent, integrity, and importance of the portion of the site within the proposed project area.

Prior to conducting fieldwork, current listings of the *National Register of Historic Places*, the *State Register of Cultural Properties*, and the site files of the New Mexico Cultural Resource Information System (NMCRIS) were consulted. No properties listed on, nominated to, or approved for submission to either inventory are in the vicinity of LA 86739.


R.10 E.
R.11 E.
R.12 E.
T.6 S.
T.7 S.
T.8 S.
T 9 S
project vicinity
CARRIZOZO
POP. 1,123
VALLEY OF FIRES STATE PARK
White Oaks
Baxter Mountain 7267
CARRIZO MOUNTAIN
Hughes Hill 6101
Diamond Peak 8443
Gayford Peak 8650
Nogal
Figure 1
Project vicinity map
0 3 miles
0 5 kilometers
Adapted from NMSHTD Carrizozo Quad, NAD 1927
R.9 E.
R.10 E
R.11 E.
R.12 E.

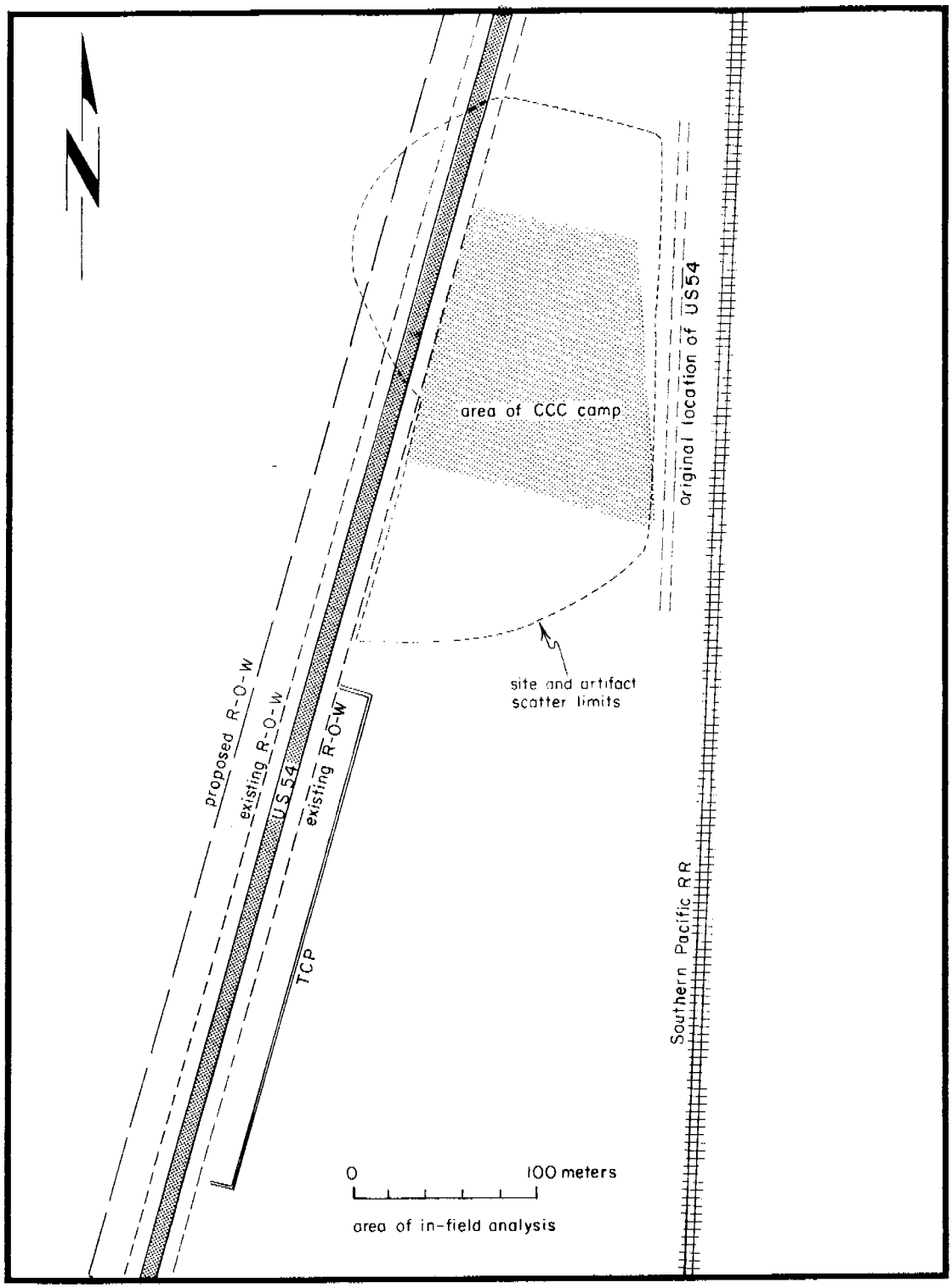


Figure 2. LA 86739 site map.

ENVIRONMENT

Climate

The area of Carrizozo is classified as low desert (Fenneman 1931: Fig. 1). Its position within the Tularosa Basin places it in an area of low precipitation caused by the sheltering affects of the surrounding mountain ranges (Tuan et al. 1973:20). Precipitation averages 13.1 inches a year (Gabin and Lesperance 1977:185; Tuan et al. 1973: Fig. 2), and most moisture occurs as summer rainfall. Some additional moisture occurs in the form of winter snow.

Geology

The site area is in the northern portion of the large intermontane Tularosa Basin, a long depression expending south almost to El Paso, Texas. Bedrock is San Andres limestone, with small hills of Dakota sandstone also present. Low rhyolite ridges, or sills, occur in the northern portion of the Tularosa Basin as part of the Carrizo Mountain intrusive. Most of the basin is composed of alluvial deposits of Triassic age. Northeast of the site area are a number of Laccolith intrusive mountains, including Vera Cruz Mountain, Capitan Mountain, and Carrizo Mountain. Southeast of Carrizozo are the uplift-caused Sacramento Mountains (Allen and Kottlowski 1958; Fenneman 1931:385-386).

West of the project area is the Carrizozo Malpais (badlands) lava flow. Originating from the base of the small cinder cone of Little Black Peak, this is one of the youngest lava flows in the United States, dating to roughly A. D. 900. This lava flow is not a single flow, but is composed of hundreds of small flow units. It covers an area of 70.4 sq km (44 sq mi), with an average thickness of 12.8 m (42 ft) (Allen and Kottlowski 1958).

The project area is in the relatively small area around Carrizozo of Calciorthid-Haplustoll-Gypsiorthid soils. These are moderately deep to deep soils comprised of alluvial deposits of mixed origin. Present as nearly flat to undulating terrain, these soils support fair to moderate stands of native vegetation, primarily grasses (Maker et al. 1974:64).

Flora and Fauna

The Carrizozo area is in the desert grassland vegetation zone. The dominate grass species of this zone are black grama grass and tobosa grass. Continuous overgrazing has reduced large portions of desert grassland to heavy stands of invasive plant species such as creosotebush, mesquite, tarbush, and Mexican tea (Castetter 1956:261-262).

Fauna native to the region includes pronghorn, cottontail rabbit, jackrabbit, and various small birds and rodents (Brown 1984).

CULTURAL OVERVIEW

A complete cultural history of the Carrizozo area is beyond the scope of this report. Little archaeological work has been done in this portion of New Mexico. More detailed regional prehistory of the general project area is available in Stuart and Gauthier (1981).

Paleoindian

The Paleoindian period (10,000-5,500 B.C.) was first recognized in 1926 at the Folsom site in northeastern New Mexico (Wormington 1947:20). A series of Paleoindian traditions have since been defined, beginning with Clovis and continuing through Plano (Stuart and Gauthier 1981:294-300). Originally defined on the plains of eastern New Mexico, the Paleoindian cultural area has since been expanded to include virtually all of North America. Although originally believed to be dependent on big-game hunting, the importance of plant-gathering and small-animal hunting to Paleoindian subsistence is now recognized (McGregor 1965:120; Willey 1966:38; Jennings 1968:78-79; Judge 1973; Wilmsen 1974; Cordell 1979:19-21; LaBlanc and Whalen 1980; Stuart and Gauthier 1981:31-33).

Paleoindian sites of any period are rare. Only one Paleoindian site (the Mockingbird Gap site) has been recorded in the northern Tularosa Basin (Marshall 1976). This is a multicomponent Paleoindian site (Weber 1966), recorded approximately 96 km (60 mi) west of Carrizozo. A number of fragmentary Folsom projectile points have been recorded on the White Sands Missile Range, south of the project area (Laumbach and Kirkpatrick 1985:66). Other Paleoindian sites are probably present but buried under Pleistocene alluvial or eolian deposits (Cordell 1979).

Archaic

The Archaic period (7000 B.C. to A.D. 200) is characterized by mobile, family-based groups of hunters and gatherers. This period is distinguished by distinctive projectile points and lithic artifact scatters, including grinding implements, fire-cracked rock, and a lack of ceramics. Archaic subsistence adaptations are based on a highly mobile, broad-based economy characterized by a combination of seasonally scheduled hunting and gathering activities. Sites generally are small, and artifact assemblages are limited, suggesting small populations and limited site occupation (Laumbach and Kirkpatrick 1985:67).

There is some discussion of the Archaic sequence in this portion of New Mexico. It has been argued that the Cochise Culture is the basis of further cultural development in this area (Beckett 1979). But it has also been suggested that at least two distinct Archaic affiliations underlie later cultural development in the area (Stuart and Gauthier 1981:211). A third Archaic tradition, the Oshara tradition sequence, has been modified by Weber (1963:228) for the southern portion of New Mexico, specifically the Rio Abajo area.

Puebloan

Defining the Pueblo period for the area of LA 86739 is problematic. A number of cultural traditions come into contact in the northern Tularosa Basin, and some cultural hybridization is

believed to have occurred (Peckham 1976). A basic developmental sequence developed by Marshall and Wait (1984) for the Rio Abajo, has been utilized successfully (Oakes 1986; Levine et al. 1993) to the west. A cultural sequence has been developed for the Sacramento Mountains east to Roswell (Kelley 1984). Jornado-Mogollon sites occur south of Carrizozo (Stuart and Gauthier 1981:231).

Historic

Early Spanish settlement in the region was limited to the Socorro area and the Rio Grande Valley. The Spaniards were driven out in the Pueblo Revolt of 1680. Although Spanish settlement resumed along the Rio Grande after 1692, no settlement in the general area of Carrizozo is recorded until the late 1800s. The region was utilized by the Apaches historically (Basehart 1973); however, only a single Apache site has been recorded in the region (Laumbach 1986:17).

Homesteaders moved into the area in the late 1800s, establishing farms and ranches. A number of gold and silver mines operated in the Sacramento Mountains and near the town of White Oaks during this period (Laumbach and Kirkpatrick 1985:71). Coal was also discovered in the Capitan area in the late 1800s (Allen and Kottlowski 1958). Most of the local farms failed during the "dust bowl" days of the 1920s, and the area reverted to rangeland.

Carrizozo

Carrizozo was founded as a new town by the El Paso and Northeastern Railroad in 1899. It served as a water stop for the railroad line built to the Salado coal fields at Capitan and the goldfields at White Oaks (Myrick 1990:84-86). The boiler, repair shops, and roundhouse of the El Paso and Northeastern Railroad were in Carrizozo (Myrick 1990:87).

The town was named for nearby Carrizo Springs (sometimes spelled Carriso) or possibly for Carrizo Mountain, northeast of town. James Allcook, foreman at one of the local cattle ranches, is credited with adding the second "zo" to the name to signify abundance. In this regard, it should be noted that *carrizozo* is the adjectival form of *carrizo*, a type of reed. Later the name of the spring was changed to Carrizozo Spring (Pierce 1965:28).

A post office opened in 1902, and A. H. Harvey served as the first postmaster. However, the town was not platted until 1907 (Pierce 1965:28). Carrizozo became the county seat of Lincoln County in 1907 (Julyan 1996:203).

Carrizozo served as a meal stop for railroad passengers, a place for changing railroad crews, and the location of repair yards (Sterns 1987). The town also served as regional shipping point for cattle and lumber, as well as minerals from the local mining districts (Allen and Kottlowski 1958).

By the 1930s, the railroad began scaling back its operations in Carrizozo. The last railroad-related industries were closed by the middle of the 1950s (pers. comm., T. B. Smoot, 1996). Carrizozo declined in both size and economic importance with the loss of railroad related jobs. The town now functions as both the county seat and a regional service center for the tourist and ranching industries.

North of Carrizozo, U.S. 54 originally ran directly along the western side of the railroad right-

of-way, and the Carrizozo city dump was on the west side of the road. In 1934 U.S. 54 was moved west to intersect with the western end of the new overpass for U.S. 380 that had been built over the railroad tracks. This put U.S. 54 in its present location, west of the Carrizozo city dump. The Carrizozo city dump closed the same year (pers. comm., Wayland Hill, 1996).

The Civilian Conservation Corp (CCC) was established by the United States government in 1935 to provide work for Americans suffering the effects of the Great Depression. Host cities and towns were required to provide site locations for CCC camps (Kammer 1994). The city of Carrizozo offered the old city dump location north of town as a site for a CCC camp. Since some dumping had continued at the dump site (pers. comm., Annabella Burrows, 1996), the city tried to make the area more attractive by grading the surface flat (pers. comm., Annabella Burrows, 1996; and T. B. Smoot, 1996). According to Joe Phillips of Roswell (his father, Joseph Phillips, was Carrizozo CCC camp manager), the closed dump was bladed flat and the material spread around before the CCC camp was constructed.

CCC camps were run by different government agencies. The Carrizozo CCC camp, originally run by the Grazing Service, was officially known as "G-40-N" (Kammer 1994:C-4). In 1936 the camp was transferred to the Soil Conservation Service but kept the same number. The men stationed in Carrizozo worked primarily at poisoning prairie dogs and kangaroo rats. This was accomplished by spreading dry poison across the countryside. They also built fences and dug cattle tanks on the local ranches (pers. comm., Wayland Hill, 1996; and Joe Phillips, 1996).

The Carrizozo CCC camp employed 200 men at a time in six-month stints. Carrizozo resident Wayland Hill was in the first batch of men at the camp when it opened on September 1, 1935. Raised in the Piney Woods of east Texas, Wayland Hill thought Carrizozo was the most exotic place on earth and renewed his enlistment every six months, until the camp was moved to Tokay, New Mexico, in 1939 (pers. comm.,1996).

The location of the Carrizozo CCC camp on the site of the former city dump was common knowledge among the local population and CCC camp enlistees. According to Wayland Hill (pers. comm., 1996), it was impossible to walk around the camp with bare feet due to the broken glass, pottery, and metal sticking out of the ground, even after lawns were planted. After each rain, the camp would smell of decaying refuse.

The Carrizozo CCC camp buildings were moved to Tokay, New Mexico (near San Antonio), in 1939. The camp was in operation until November 1941, when the United States entered World War II. With the advent of World War II, the CCC camps were closed (pers. comm., Wayland Hill, 1996; and Joe Phillips, 1996).

Traces of the Carrizozo CCC camp still exist. Most of the structures were standard wooden barracks buildings (Kammer 1994), which were moved when the camp was moved to Tokay. However, the brick fireplace from the camp recreation hall and the masonry bulletin board still stand (Fig. 3). The camp bell can still be seen in Carrizozo (Fig. 4), displayed in the yard of a private residence (pers. comm., Joy Gallacher, 1996). The Carrizozo CCC camp never extended into the proposed project area west of U.S. 54 (pers. comm., Joe Phillips, 1996).

A large rectangular cement bin south of the camp area was not originally part of the camp facilities. This was a railroad coal bin, already in place when the camp was built. It was used by

Figure 3. Recreation hall fireplace and masonry bulletin board at the Carrizozo CCC camp, looking northeast.

Figure 4. The original camp bell from the Carrizozo CCC camp, now in the yard of a private residence, looking northeast.

the men at the CCC camp for a swimming pool (pers. comm., Wayland Hill, 1996; and Joe Phillips, 1996).

After the camp buildings were removed from Carrizozo, some small-scale, unauthorized dumping resumed at the camp location (pers. comm., Annabella Burrows, 1996; and Joy Gallacher, 1996).

A number of men from other parts of the United States were stationed at the Carrizozo CCC camp (Kammer 1994:70). Some of these men, such as Wayland Hill, returned after World War II and married local women, becoming part of the community (Sterns 1987).

RESEARCH FINDINGS

Archival Information and Interviews

Archival research was conducted at the Lincoln County Courthouse, the New Mexico State Archives, and the Museum of New Mexico History Library. Local informants were also interviewed to obtain information on LA 86739 and the Carrizozo CCC camp.

LA 86739 was originally recorded in 1991 (NMCRIS files). It was rerecorded in 1995 as part of the planned reconstruction of U.S. 54, north of Carrizozo. The site was described as having two components: a diffuse historic artifact scatter dating to the early part of the twentieth century, and the location of the Carrizozo CCC camp. The site was recorded as measuring 300 by 200 m. Although the main site area is east of U.S. 54, it was recorded as also extending west across U.S. 54 (Earkin 1995).

The portion of LA 86739 on the west side of U.S. 54 is a sheet trash deposit measuring 120 m long directly across from the CCC camp location. The site area west of U.S. 54 contains redeposited material from the grading of the old Carrizozo city dump prior to the building of the Carrizozo CCC camp. According to one of the current land owners, T. B. Smoot (pers. comm., 1996), when the old dump area was graded, his father asked the city of Carrizozo to also grade part of his land west of the road (the project area) and fill in some low spots with material from the dump. Redeposited material from the Carrizozo city dump has been repeatedly churned up by bottle hunters (pers. comm., Annabella Burrows, 1996). Mrs. John Hind (pers. comm., 1996) of Carrizozo described digging for bottles there in the 1960s. The site area on both sides of the highway has been further modified by routine highway maintenance, and an underground phone cable is present on the west side of the road. Most surface artifacts have been reduced to small fragments, an occurrence common to sheet trash deposits (Rothchild and Blakwell 1993:76).

No structures, intact cultural features, or deposits were found in the portion of the site within the proposed project area.

Field Methods

Because of the modified and redeposited nature of the portion of LA 86739 within the proposed project area, combined with the shallowness of the redeposited cultural material (less than 5 cm deep), emphasis during limited testing was directed toward in-field analysis.

In-field analysis was limited to the portion of the site within the proposed project area. This was composed of the portion of the site on both sides of U.S. 54 within the current U.S. 54 right-of-way, and the portion of the site within the proposed project area west of the present right-of-way. The main site area was east, outside of the project area. The site did not extend south into the planned TCP.

LA 86739 was first inspected with walked transects spaced at 10 m intervals to determine site limits. A site map was made, and site limits and all site features were plotted with the use of a transit, stadia rod, and 50 m tape. All surface artifacts were pinflagged, analyzed in the field, and left in place.

Artifact Frequencies

A total of 20,272 surface artifacts were recorded and analyzed at LA 86739. Of this total, 13,685 were glass, 4,209 were ceramics, and other items totaled 2,378.

To facilitate in-field analysis, artifacts were divided and analyzed by material type. The data collected in this manner was later divided into functional categories. These categories included domestic, food, household, personal, hardware, transportation, construction, and unknown. Artifacts with different, yet related, uses were grouped within each functional category.

A total of 20,272 artifacts were analyzed and divided into functional categories (Table 1).

Food items are those related to food procurement or consumption. Food related items totaled 436 and comprise 2.1 percent of the total assemblage. Of this total, 425 are food cans, four are mason jar lids related to home canning, and the remaining seven are specialized containers for lard, maple syrup, or coffee.

Domestic items are those used within the home. Domestic items totaled 3,961, or 19.5 percent of the assemblage. Of this total, 3,877 were various types of ceramics such as ironstone, soft-paste porcelain, porcelain, and transfer ware. Glass items (drinking glasses, vases, and other elements of ornamental glass) totaled 79 items. One piece of silver platted flatware was also present in this category.

Household items are those used to maintain the household. Household items made up 2.7 percent of the artifact assemblage, totaling 538 items. The majority of this category was composed of 100 ceramic mixing bowls and crocks and 387 glass artifacts. Glass artifacts included various types of bottles. Ten pieces of seven different stoves were included in this category, as were six different metal pans.

Personal items are those whose use is limited to a specific individual. The personal functional category was one of the smallest in the total assemblage. Personal items totaled 25, or 0.1 percent of the assemblage. Artifacts in this category include five buttons, various types of buckles, one barrette, the stopper to a perfume bottle, and a ceramic marble.

Items used in the structural maintenance of buildings or livestock are included in the hardware category. Hardware-related items totaled 279, or 1.4 percent of the assemblage. This category includes 110 pieces of galvanized steel, 33 barrel straps, 18 pieces of baling wire, and 105 pieces of window glass.

Sixteen items make up the transportation category of artifacts, or 0.07 percent of the total artifact assemblage. There are two horseshoes and 14 items connected with automobile use.

Construction, or building materials, make up 1.4 percent of the assemblage, totaling 284 items. Bricks (256) make up the largest portion of this category, which also includes tile, metal rods, and shaped flagstone.

The largest category of artifacts is comprised of unidentifiable items. This category totals 14,576 items, or 71.9 percent of the total assemblage. Of this total, glass is the largest subcategory, with 13,202 items.

The fragmentary nature of most artifacts, especially glass, makes the unknown category the largest. Food, household, and domestic categories, usually considered necessities, made up 24.3 percent of the total.

Table 1. Artifact frequencies

	Number	Percent
Food		
food cans	425	
mason jar lids	4	
specialized food containers	7	
total	436	2.1
Domestic		
various ceramics	3,877	
drinking and ornamental glass	79	
other items	5	
total	3,961	19.5
Household		
ceramics	100	
bottle glass	387	
stove parts	7	
furniture parts	30	
other items	14	
total	538	2.7
Personal		
buttons	5	
buckles	10	
tobacco cans	4	
other items	6	
total	25	1.0
Hardware		
sheet steel	110	
window glass	105	
barrel straps	33	
baling wire	20	

other items	8	
total	279	1.4
Transportation		
horseshoes	2	
automobile parts	14	
total	16	0.07
Construction		
bricks	257	
metal rods	3	
tile	23	
shaped flagstone	2	
total	285	1.4
Unknown		
glass	13,202	
metal	1,372	
plastic	4	
rubber	1	
total	14,479	71.9
Total	20,272	100.0

Artifact Dating and Interpretation

Historic artifacts are generally easier to date than prehistoric artifacts. The sequence of manufacturing development is generally known, and makers' marks are sometimes present. The documented span of makers marks can give a beginning and ending date of manufacture. This does not however necessarily reflect the end of the artifact's period of use. Functional items tend to be used continuously until their usefulness ends when they break or wear out. Items are also curated within families as heirlooms or collected by individuals as antiques. The second-hand use of functional items also serves to prolong their life spans beyond that indicated from just their makers' marks.

Oakes (1983) devised a technique for dating historic sites based on a mean date for glass. This method utilizes glass, which is separated and assigned dates based on color. A weighted mean and standard deviation were then calculated based on the range of dates for each glass color, as well as dates based on makers' marks. A similar method of dating historic sites, based on ceramics instead of glass, was devised by South (1977) using earthenware, stoneware, and porcelain.

No exact date for the site is available through the use of either of these dating techniques. Artifacts associated with each date could come from any year within the given range of dates.

Either system also tends to skew the calculated dates toward the earlier end of the occupation period. This occurs because of an assumption that artifacts are not used beyond the end of their period of manufacture.

In the case of the Carrizozo city dump, it is possible to qualify the resulting dates through the use of precise dates of operation. From archival sources we know that the town of Carrizozo was founded in 1899, and the city dump opened the following year. The Carrizozo city dump closed in 1934, although some additional limited dumping took place at the site until 1936 and again after 1941.

Dates for the artifact assemblage from LA 86739 range from the 1890s to the 1920s, based on can and glass types (Gillio et al. 1980; Toulouse 1969) and ceramic and glass makers' marks (Florence 1990; Gates and Ormerod 1982; Kovel and Kovel 1985; Spillman 1986).

Artifact dates earlier than the known age of the site are based on older porcelain items brought into Carrizozo, possibly curated by families as heirlooms or antiques. The lack of artifacts dating to the later period of dump use could be a result of the grading of the dump site and the subsequent movement of artifacts this caused. The lack of artifacts associated with the Carrizozo CCC camp reflects the camp location, east of U.S. 54, away from the proposed project area.

ASSESSMENT AND RECOMMENDATIONS

Information derived from the surface mapping and in-field analysis, combined with archival research and local interviews, provides valuable insight into site function and aids in the interpretation of the portion of LA 86739 within the proposed project area.

The historic artifacts west of U.S. 54 are all redeposited material from the original Carrizozo city dump, also the site of the later Carrizozo CCC camp. The occurrence of this material west of U.S. 54 is the direct result of mechanical alterations to the dump and surrounding areas by the city of Carrizozo prior to the construction of the CCC camp in 1935. Further modifications to the redeposited material have resulted from continued highway maintenance, utility construction, and bottle hunting.

No site integrity exists in the portion of LA 86739 west of U.S. 54. No structures or intact features or cultural deposits were found in the portion of the site within the proposed project area. The portion of LA 86739 within the proposed project area is not likely to yield any information beyond that already documented. No further archaeological study is recommended.

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