

Public

**NATIVE CULTURAL SERVICES**

**A CULTURAL RESOURCE INVENTORY**

**OF**

**THE SILVER LAKE PIPELINE**

**AND**

**PORTIONS OF THE CARIBOU RANCH**

**BOULDER COUNTY, COLORADO**

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## MANAGEMENT SUMMARY

Native Cultural Services conducted a cultural resource inventory of the existing Silver Lake Pipeline alignment and potential alternative alignments for a replacement pipeline, at the request of the City of Boulder. This inventory included areas owned by the City of Boulder and a portion of the Caribou Ranch, Boulder County. The City of Boulder is replacing and upgrading the existing raw-water pipeline.

The intent of the inventory was to locate and document all visible prehistoric and historic cultural resources within the study area, and to assess their significance so that appropriate management decisions may be made regarding their protection.

The original study area consisted of a portion of the City of Boulder watershed and a portion of the Caribou Ranch, bounded by the existing Silver Lake Pipeline, North Boulder Creek, and Lakewood Reservoir. This area, comprising about 860 acres, was to be inventoried for cultural resources so that the effects of potential alternative alignments for the pipeline could be assessed. The NCS cultural resource inventory commenced in June 1966. The inventory was suspended prior to completion when Caribou Ranch denied further access to the study area.

The City of Boulder, in conjunction with Boulder County, has subsequently purchased portions of the Caribou Ranch, and has selected the final replacement-pipeline alignment. Inventory of the final pipeline alignment, which includes the west part of the existing, original pipeline alignment and an existing road west from Lakewood Reservoir, was completed in June 1997.

The extent of the study area has thus been reduced to portions of Sections 1 and 2, T1S, R73W, and Sections 34, 35 and 36, T1N, R73W. Also included in the study area is 50 feet linearly along the north side of the Silver Lake Pipeline, and the access road west from Lakewood Reservoir to Caribou Ranch. A total of approximately 717 acres have been inventoried.

One previously recorded site, the Denver, Boulder, & Western Railroad, aka the Switzerland Trail (5BL358), crosses the study area. During the course of the survey, ten new sites, 14 new isolated finds, and a new element to 5BL358 were located and documented. The sites include three prehistoric lithic scatters (5BL6857-5BL6859), a cairn alignment (5BL6860), two multi-component sites with both prehistoric and historic components (5BL6861 & 5BL6863), an historic structure (5BL6862), the Silver Lake Pipeline (5BL6864), Como Ditch #2 (5BL6918), Como Ditches #3 & #4 (5BL6865), and dugout structures from a railroad construction camp (5BL358.1).

Of the 14 isolated finds, 13 are prehistoric lithics and one consists of historic debris.

The Switzerland Trail is listed on the National Register of Historic Places (NRHP) as an Historic District, of which 5BL358.1 can be considered a contributing element. Sites 5BL358.1, 5BL6857-5BL6859, 5BL6863, and 5BL6865 all need further data to determine whether they are eligible for individual NRHP nomination. More data is needed to determine sub-surface archaeological potential of sites 5BL358.1, 5BL6857-5BL6859 & 5BL6863; and to determine the extent of contribution to local agricultural history for 5BL6865. All other recorded cultural properties are considered ineligible for listing on the NRHP.

None of the sites in the study area will be impacted by the replacement of the Silver Lake Pipeline. The route of the pipeline will avoid all sites, except the Switzerland Trail, 5BL358. The pipeline crosses 5BL358 at the point where the Switzerland Trail crossed Como Creek, apparently via a trestle, which no longer exists. The railroad bed is thus already breached in this location, and no disturbance to the railroad bed will take place.

It is noteworthy that a significant number of prehistoric stone artifacts were encountered, both as isolated finds and as clusters of artifacts representing loci of cultural activity (sites). The lithics were exposed in disturbed areas in the meadows and forest between Como Creek and North Boulder Creek, southeast of the Switzerland Trail. This area is outside of the area to be impacted by the planned pipeline construction.

The quantity of visible prehistoric manifestations, and the fact that their visibility is from exposure due to erosion or other disturbance, indicates the probability that undetected, buried prehistoric sites are contained within this portion of the study area.

If any future ground-disturbing activity is planned for this area, a comprehensive test excavation program should be initiated and conducted prior to any such disturbance, in order to determine the extent and distribution of prehistoric cultural material.

Since no significant cultural resources will be impacted by the replacement of the Silver Lake Pipeline, it is recommended that the project be allowed to proceed as planned.

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## INTRODUCTION

Native Cultural Services (NCS) conducted an intensive cultural resource inventory of the existing Silver Lake Pipeline alignment and potential alternative alignments on land owned by the City of Boulder and on a portion of the Caribou Ranch, Boulder County. As discussed below, the field survey and research were reduced in scope from the full area originally intended for inventory. The project area is on private and municipal land. The City of Boulder is replacing and upgrading the existing raw water pipeline.

The cultural resource inventory was performed at the request of the City of Boulder. The intent of the inventory was to locate and document all visible prehistoric and historic cultural resources within the study area, and to assess their significance so that appropriate management decisions may be made regarding their protection. Significance of cultural properties is defined in terms of meeting specific criteria of eligibility for nomination to the National Register of Historic Places or the State Register of Historic Properties. These criteria are listed in the Recommendations chapter, below.

The original study area consisted of a portion of the City of Boulder watershed and a portion of the Caribou Ranch, bounded by the existing Silver Lake Pipeline, North Boulder Creek, and Lakewood Reservoir. This area, comprising about 860 acres, was to be inventoried for cultural resources so that the affects of potential alternative alignments for the pipeline could be assessed. The NCS cultural resource inventory commenced in June 1996. The inventory was suspended when NCS was notified that James Guercio of Caribou Ranch was denying further property access for the City of Boulder's pipeline project. At that time NCS had inventoried approximately 80% of the original effective project area, -- or about 685 acres.

The City of Boulder, in conjunction with Boulder County, has subsequently purchased portions of the Caribou Ranch, and has selected the final replacement-pipeline alignment. Inventory of the final pipeline alignment, which includes the west part of the existing, original pipeline alignment and an existing road west from Lakewood Reservoir, was completed in June 1997.

The extent of the study area has thus been reduced to portions of Sections 1 and 2, T1S, R73W, and Sections 34, 35 and 36, T1N, R73W. Also included in the study area is 50 feet linearly along the north side of the Silver Lake Pipeline, and an existing road west from Lakewood Reservoir to Caribou Ranch. A total of approximately 717 acres have been inventoried. The study area is depicted in Figure 1.

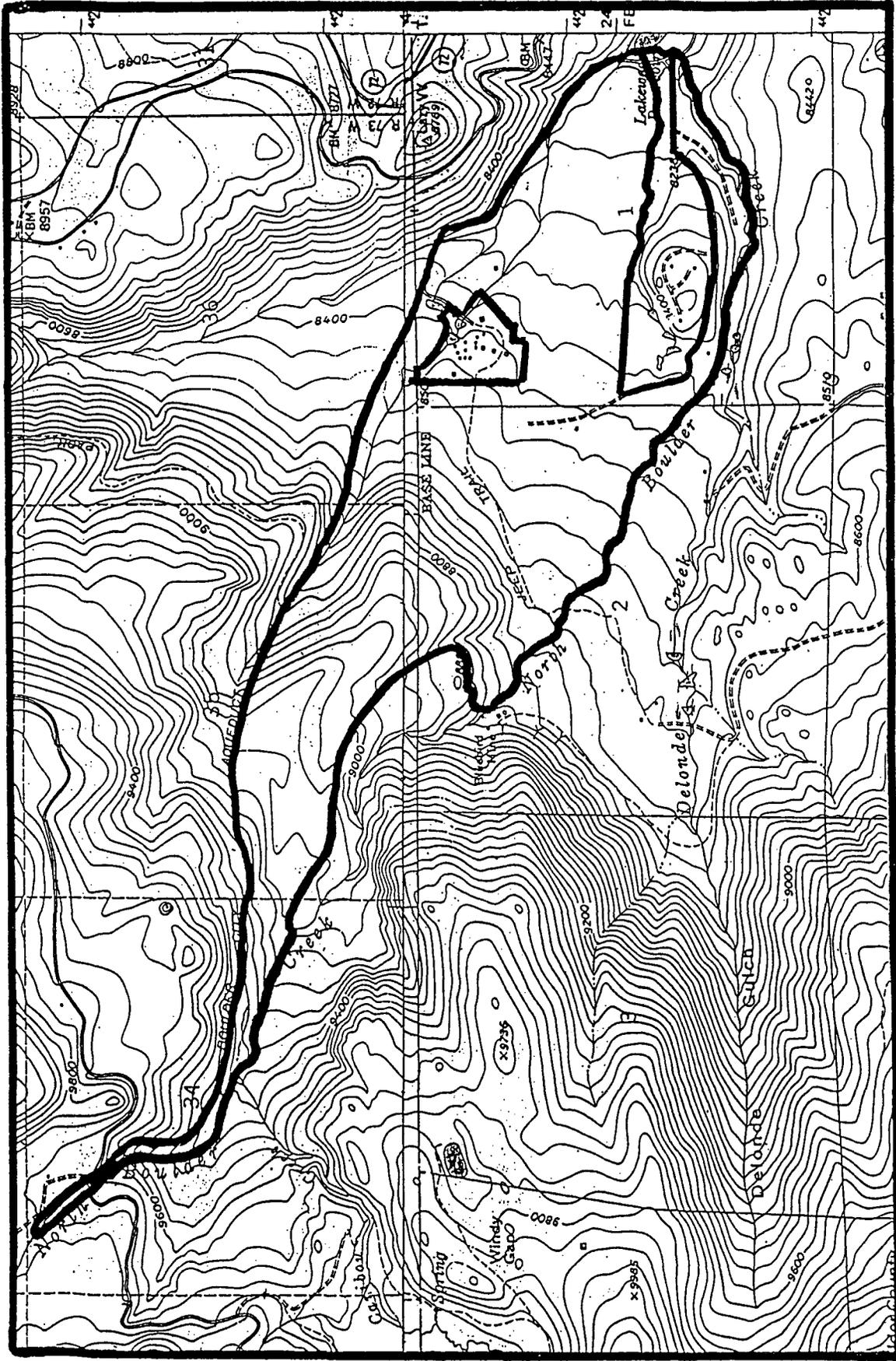


FIGURE 1 - Project Area  
 USGS 7.5' Quadrangles Nederland, CO. 1977 (T1S, R73W)  
 Ward, CO. 1957 pr '78 (T1N, R73W)

In addition to the field work and archival research, NCS has conducted consultation with Native American tribal representatives regarding this project. None of the 13 tribes contacted have any concerns about the project. The consultation is documented in Appendix A. Also, Glen Porzak, an attorney serving as counsel to Caribou Ranch, informed NCS, city staff, and other city consultants on May 24, 1996, that Native Americans had visited Caribou Ranch in relation to the pipeline project. Caribou Ranch has not, however, provided a report of this investigation to either the city or NCS.

This report describes the cultural properties which have been documented in the study area. Precise locational information on the properties is excluded. Because of issues of looting and vandalism to cultural resources, the location of sites is restricted information. The authority to restrict locational information is granted under both Federal and State laws and is extended to Certified Local Governments.

The fieldwork was performed on June 10-14 & 17-20, 1996, and on June 4, 16 & 30, and July 1, 1997, by, variously, Kristin Aslan, Peter Gleichman, Cheryl Harrison, Scott Phillips, Hillary Burton-Reynolds, and Tracy Sweely. Cheryl Harrison and Scott Phillips served as field supervisors. Peter Gleichman is the Principal Investigator. All field notes and photographic negatives are currently on file at the offices of Native Cultural Services.

## ENVIRONMENT

The project area's effective environment is being or has been examined elsewhere, in other studies, and it would serve little purpose to extensively reiterate that effort here.

In short synopsis, the project area lies in the Front Range of the Southern Rocky Mountain physiographic province. Climatically it is affected by orographic precipitation. Drainage is to the Boulder Creek system. Specifically, the project area is in the meadow parks of North Boulder Creek and the mountainous slopes rising up to the southeast end of the Arapaho Moraine. Como Creek and Fish Creek are within the project area, eventually draining to North Boulder Creek. Also within the project area is a waterfall on North Boulder Creek, called variously North Boulder Falls, Arapaho Falls, or Blue Bird Falls. The Boulder Creek system itself is part of the larger South Platte River system.

The project is high enough in altitude, ranging from 8200' to 9700' in elevation, to have been affected by glaciation episodes that ranged around the nearby Continental Divide. The upper drainage valleys tended to experience Bull Lake (30,000-70,000 BP) and Pinedale (7,000-25,000 BP) glaciations (Razum 1979). The older Bull Lake glaciation's till field now appears as a spread of "hummocks," while the Pinedale glaciation demonstrates less extensive spread, but still exhibits steep moraines and less weathered boulders (Gilbert 1968). Within the western slopes of the current project area, evidence of these steeper Pinedale moraines are still apparent on the small forested bench steeply overlooking the North Boulder Creek drainage. The lower, forested park area along North Boulder Creek itself demonstrates low boulder ridges and mountain till colluvium. The soils throughout most of the project area are mountain till colluvium. The Bull Lake and Pinedale tills are composed of boulders of biotite schist and diorite (Gilbert 1968).

The North Boulder Creek drainage, beginning at its Caribou Creek confluence, was flooded (ca. 13,000 BP) when a Pinedale glacier and moraine created a 60' deep lake in Devlin's Park, then receded, allowing the lake to break free (Gilbert 1968). The area flooded again circa 1905: Devlin's Park had been dammed to create Park Reservoir, but the dam failed. Deposits from flooding are still visible near Lakewood where they still affect streamflow (Parsons Engineering Science 1994). Thus, the entire meadow area within the project area may have been washed by floods. Other periodic flooding also occurred in the drainage, for example, Crossen (1992:266,276) shows the railroad trestle at the Bluebird station damaged by a flood in 1911 or 1912.

The railroad, as well as mining and homesteading, had an effect on the environment in turn. Holder (1985) describes how 3' to 4' of

vegetation on either side of the Switzerland Trail railway grade was "cleared and burned to eliminate overhang and reduce fire hazard from locomotive ignition." He also states that trees cut along the right-of-way were often used to fashion ties.

Ore mills in the region also caused many trees to be cut for firing of the smelters before the railroad was available to import coal (Holder 1985). Timber cutting for sale to smelters may have been a source of income for some local homesteaders. A sawmill operated at Hill station, toward Ward, and a small sawmill may even have operated at one time adjacent to the project area. There is evidence of a tree cutting event on the slopes above the Switzerland Trail near Como Creek, and of an episode of a fire there at one time as well. However, no standing tree, deadfall or stump shows burning, there is only charcoal debris.

Historic clearing of the area is not overly evident today. There is no swath cut remaining along the Switzerland Trail; it is substantially reforested except where it is still being used for vehicular travel. The project area's Batesville mill site is also overgrown in conifer and aspen stands, where a historic photograph (in Cobb 1988) shows the site to have been cleared.

It is presently unknown what plant communities may have dominated the immediate project area during prehistory. However, based on the distribution of prehistoric artifacts along the leveler topographic areas beside North Boulder Creek, it is safe to say that this major watercourse constituted a significant resource.

Modern vegetation in the project area is montane, primarily conifer forested slopes blending with the grassy meadows in the flatter park along the north side of North Boulder Creek. The forest provides fir, pine and aspen canopies, under which grow some low shrubs and tufts of grass. In addition to grass communities, the meadow areas support some alder stands along drainage areas, and also exhibit marshiness in low areas. There is even peat formation.

The project area still supports large and small game animals. The transition from meadow to forest provides a slight ecotone of which animals such as elk take advantage. In modern and historic times the opportunity for native animal habitation has been limited by the ranging of cattle and horse stock, as well as disturbances associated with mining.

## CULTURAL BACKGROUND

The known culture history of the general area is summarized in Guthrie, et al. (1984), and Mehls (1984). A summary most germane to the project area is provided below.

### Aboriginal Prehistory

Prehistoric groups are known to have occupied northeastern Colorado since at least 11,500 years ago. The **Paleo-Indian Stage** (Clovis, Folsom & Plano periods) existed from ca. 11,500-7500 BP, during a cooler, moister climatic period. Subsistence practices at this time included both hunting and gathering of wild resources. Most known Paleo-Indian sites are big game kill sites where large and occasionally fluted lanceolate projectile points are associated with the animal remains (Gleichman and Gleichman 1989). Occupation of the Front Range during the Plano (ca. 10,000-8000 or 7500 BP) has been demonstrated, but earlier occupation is evidenced only by an isolated Clovis projectile point and an isolated Folsom projectile point (Benedict 1992a).

The period from ca. 7500 BP to 2000 BP in northeastern Colorado is known as the **Plains Archaic Period** and coincides with a significant change in subsistence to a more generalized broad-spectrum hunting-gathering strategy (Frison 1978). The Early Archaic, from ca. 7500-5000 BP, coincides with the Altithermal, a severe warming and drying climatic episode on the plains (Antevs 1955). Large triangular to ovate dart points with wide, shallow side/corner notches are commonly associated with dated Early Archaic sites. In both Colorado and Wyoming, the Early Archaic is known essentially from sites in the mountains and foothills (Frison 1978, Gunnerson 1987). It has been hypothesized that the open plains were abandoned, and the foothills and mountains of Colorado were occupied during the Early Archaic as a refugium from the Altithermal (Benedict and Olson 1978, Benedict 1979, 1981). The Mount Albion Complex is a distinct complex that was well established by approximately 5800-5600 BP, without local antecedents and is essentially limited to an area of the Front Range.

Middle Archaic (ca. 5000-3000 BP) sites with McKean Complex tool assemblages are known for the region, as are some Late Archaic (ca. 3000-2000 BP) manifestations.

The Archaic is followed by the **Ceramic Period** (ca. 2000-400 BP), also known as the **Late Prehistoric Period**. In this area a hunting-gathering lifestyle was retained, with seasonal movements of people into the Front Range. Late Prehistoric game drives and campsites are present in the Front Range (Benedict 1975a, 1975b). Within the Late Prehistoric Period, the Hog Back Complex (ca. 1430-650 BP) has

been defined as a manifestation oriented to the Front Range and the plains/foothills transition zone. The Hog Back Complex artifact assemblage includes tools made from lithic sources in Middle Park as well as plains sources. Groundstone from Lyons sandstone is present, and Boulder Creek granodiorite was used for groundstone and for temper for locally produced ceramics.

The **Protohistoric Period** refers to the era after European contact, and before widespread Euro-American settlement, ca. A.D. 1600-1800. European trade items began to be used by indigenous peoples, and horses became available. The Comanche and Ute occupied Colorado during the 18th century, with the Comanche controlling the plains, and the Ute in the foothills and mountains.

By the early 19th century the Cheyenne and Arapaho began to occupy most of the plains of eastern Colorado (Buckles 1968). Both of these tribes were semi-nomadic, depending primarily on the hunting of bison and other large game animals. The Arapaho also utilized the Front Range. In the Treaty of Fort Laramie (1851) a vast area of land was assigned to the Cheyenne and Arapaho as a reservation, including all of Colorado east of the Continental Divide and north of the Arkansas River. Ten years later, however, the Treaty of Fort Wise was signed, requiring their removal from all lands in the earlier treaty except for a small reservation in east-central Colorado (Berthrong 1963). This left Boulder County open for European settlement.

#### Prehistoric Adaptive Models

Based on archaeological research he has conducted in the Colorado Front Range over the past 30 years, James Benedict (1992b) has developed two models of prehistoric hunter-gatherer seasonal movement, or transhumance, for the region. The two models are used by Benedict to explain and interpret prehistoric use of the large number of game drive systems and associated sites found at high altitude in the Colorado Front Range in western Boulder County. These game drive systems, such as the Hungry-Whistler Site (5BL67) (Benedict and Olsen 1978) date variously from the Paleo-Indian period to the Late Prehistoric, and were used for communal hunting of large game such as elk and bighorn sheep. Lithic material types and projectile point distribution data from these high altitude sites have lead Benedict to suggest that at least two seasonal transhumance systems were followed, both operating out of winter base camps in the eastern Front Range foothills (Benedict 1992b).

The "Up-Down System," represented by the Early Archaic Mt. Albion Complex, was followed by bands of hunter-gatherers who moved up into the high mountains and engaged in communal big game hunting near the Continental Divide during late summer and fall. The groups then moved down to winter base camps along the eastern margins of the Front Range when snow cover made big game hunting prohibitive.

A second system, identified as the "Rotary System", consisted of a counter-clockwise "grand circuit" with a longer, more circular route to the Continental Divide. In this system, bands of hunter-gatherers traveled a distance of 300 to 400 km during the annual round. Small bands headed north along the flanks of the Front Range from their winter base camps in the spring time; crossed the Front Range to North Park near the present Colorado-Wyoming border; and summered in North Park, then Middle Park, both of which were rich in game and wild plant foods.

By late August or early September, bands which had gathered into larger groups during the summer, forged eastward for communal game-drive hunting along the Continental Divide. When weather made high altitude hunting unproductive, the groups split up again and headed to their base-camps in the foothills. Benedict suggests that sites associated with the Late Prehistoric period (Early Ceramic period) were part of this Rotary System (1992b).

#### Mining and Historic Settlement

After the discovery of gold in California, a party that included a few Cherokee Indians traveled down the Santa Fe Trail along the Arkansas River, then turned north parallel to the Front Range, past the modern site of Denver, on their way west in 1850. The route they followed became known as the Cherokee Trail. On Ralston Creek, northwest of Denver, they found a little gold, but did not stop long enough to evaluate their finds.

William Green Russell, who had heard of the party's Colorado finds, led a party of Georgians in 1858 to the confluence of Cherry Creek with the South Platte River. News of their gold strike in the "Pike's Peak" region quickly spread, and the rush began (Hafen 1941; Tate et al. 1989). The following spring an endless stream of immigrants flowed into the area.

Numerous earlier explorations, from Spanish and French colonial exploits through U.S. pioneer, fur, railroad, and military scouting (including the Pike expedition) had done little to encourage permanent Euro-American settlement. The lure of gold, though, was significant enough to establish more permanent Colorado settlements. The area gained enough people to justify creation of the Territory of Colorado in 1861 (Tate et al. 1989).

The 1859 Colorado gold rush attracted people to the area, but only a few actually struck it rich. Those who did not find their fortune in gold or silver sought it elsewhere or through other means. The mining boom established a base around which collected other industry. Many who could not afford agricultural land elsewhere, especially following a national economic bust in 1857, would take advantage of the passage of the Homestead Act of 1862 and later, the Timber Culture Law of 1873.

The lands of the Caribou Ranch were primarily homesteaded lands. They were in proximity to mined areas and may have generated goods in support of the mining camps and communities. Homesteading was already firmly rooted by the time mining interests began using that land. The Bluebird (aka Santa La Saria) Mine, for instance, was not established until 1871. (The Bluebird Mine is adjacent to the final project area and was initially included in the original project area.) By this time, 1871, the DeLonde families and others were apparently already settled.

It is unknown whether the homesteaders partook in placer mining on their lands, though some -- Thomas J. Hill, for example -- prospected (Kemp 1960). Placer operations in the region were mostly played out by the end of the 1860s.

Homesteaders may have been lured to the area by the open meadows and waterways of this North Boulder Creek park, and by the nearness of major wagon roads and the booming mining communities those roads served. At the east end of the park, Thomas J. Hill's land was crossed by both the Niwot-Blackhawk road and by the Gordon-McHenry road through Sugarloaf to Boulder; the latter was replaced in 1871 by the Boulder Canyon road (Kemp 1960).

Goldhill (now Gold Hill) was established in the drive of the initial rush, as was Ward, the latter inspired by the Niwot diggings. Caribou was started by Samuel Conger, et al, in 1869. Area landowner Charles Wannamaker was to become the first president of the local Grand Island Mining District.

Many French and Irish settled the North Boulder Creek park, including DeLondes, Giroux, Boiseneaux, Langlais, LeDue, Carolls, Harrigans, Leahy, et al (Kemp 1960). The DeLondes are especially notable; Delonde Creek is named after them, and "the Frenchman's ranch" was historically a common locational indicator for the Bluebird Mine. Como Creek is named after the Como family, who homesteaded the northwest side of the park.

Tom Hill's ranch provides some indication of early land use: at one time, it produced eighty-five tons of wild hay at ninety dollars a ton. He also harvested wood to feed the mill boilers in Dayton (Kemp 1960). Homesteaders could possibly have supplied the North Boulder Mill at "Batesville," also. The North Boulder Mill was built in 1875 on the north bank of North Boulder Creek by L.M. Bates, Martin A. Smith acquiring the mill lands at the same time. By 1881 a mill was built at Bluebird too. Charcoal was another fuel for mill boilers that may have been produced at times, though coal eventually became the fuel of choice as it became practical to import it with the arrival of mountain railroads.

## The Railroad

Though the idea of railroad lines to traverse the Rockies and access mining communities had long been conceived, establishing practical and cost-effective mountain routes was difficult to achieve. Eventually, though, in four separate advances, the "Switzerland Trail" route was constructed and served the mountain areas well.

The first railways reached the city of Boulder in 1873. The first railway from Boulder into the mountains was constructed by the Union Pacific, and was called the Greeley, Salt Lake & Pacific Railroad. It ran through Four Mile Canyon to reach the townsite of Sunset in 1883. This first mountain advance was literally washed out in 1894 by flooding. In 1895, Boulder Inter-mountain Railway was incorporated to build a new line, but nothing came of this until a one-time engineer, L.M. Leach, took over and had a new Four Mile Canyon route surveyed (Crossen 1992).

Leach's success came in selling the idea to investors in New York and Pennsylvania. With new investors, the Denver, Boulder & Western Railroad company was formed, and by 1898 a new, narrow-gauge railway was constructed to Ward, via Four Mile Canyon and Sunset.

The railway was built on the premise that the mines could provide enough ore for shipment to make the line profitable. The railroad company also intended to take advantage of tourist and passenger trade opportunities provided by their scenic mountain route: hence the evocative moniker of "Switzerland Trail."

In 1904, the planned advance from Ward to Eldora was finally built. The railway turned south from Ward, crossed North Boulder Creek at the Bluebird Mine, and continued to Eldora. This gave access to this productive mining area and opened the possibility of connecting with the Moffat road (Crossen 1992).

However, the quantity of ore shipped did not live up to hopes, nor was the tourist trade brisk enough to offset the costs of maintaining a mountain road through snowy winters. The only years the railroad showed a profit (Holder 1981) were 1909 and 1910, hauling freight for the construction of Barker Reservoir at Nederland; and finally in 1916 with the tungsten boom (described below).

## Developments After the Turn of the Century

The railroad crossed the western edge of the North Boulder Creek park. On what is now Caribou Ranch property were two railroad sidings and possibly a third. The Bluebird Mine had one siding and, half a mile south, the mining community of Anson had another.

In 1906 the Bluebird siding was located in the meadow east of the mine, on the west side of the line opposite a mill building (Drumm 1906). No longer a continuously operating mine, the Bluebird whistle-stop was used as a jumping off point to North Boulder Falls. This is possibly why the Boulder Daily Camera (1933) called them "Blue Bird falls."

Between Bluebird and the Hill siding to the north was reputed to be the "unofficial" Silver Lake siding, where, according to Crossen (1992), materials were off-loaded for the construction of Silver Lake dam as well as supplies for Camp Albion. The Silver Lake siding was in place by 1910 (see Boulder Daily Camera, March 5, 1910). There are structural remnants at the junction of Como Creek and the railroad which may, but don't necessarily, represent this siding (recorded and described below as 5BL358.1).

Also during this period a phone line ran between Bluebird and Silver Lake dam after the original Silver Lake to Boulder phone line proved too difficult to maintain.

To the south of the North Boulder Creek park of concern, a wealthy tungsten belt was discovered around 1900 causing a mining boom. The boom peaked around the years of World War I then went bust with the rise of competitive tungsten sources elsewhere (Mehls 1984).

Circa 1909 Como Creek was diverted from confluencing with North Boulder Creek to keep the Boulder water supply purer. At first, in 1909, the City of Boulder's Lakewood Pipeline only extended westward as far as their Lakewood Reservoir, tapping North Boulder Creek waters there. In 1917 a chlorination station was also built at Lakewood. In 1919, out of augmented concerns for water quality caused by the booming Tungsten industry, previous plans to extend the pipeline to the North Boulder Falls area were finally completed in the form of the Silver Lake Pipeline (Smith 1986).

The first Lakewood Pipeline, superseding the city's, was designed due to the booming tungsten industry also. In 1910 C.F. Lake, tungsten magnate and owner of the Primos Mining & Milling Company, had his Cardinal Pipeline redesignated and redesigned as the "Lakewood" pipeline for feeding water to a power station at his town of Lakewood.

This was his third incarnation of the Cardinal pipeline. In 1902, the first ran water presumably from Coon Track Creek to Cardinal's Boulder County Mill. In 1906 the second Cardinal pipeline was to run North Boulder Creek water, partially along that creek, to a power station near Lakewood. The 1910 Cardinal Pipeline, renamed Lakewood, was to have the same headgate as the 1906 line, just downstream of the Caribou Creek/North Boulder Creek confluence, and run on the north of the creek to a power station yet closer to Lakewood.

In these years C.F. Lake's Primos Mining & Milling Company owned tracts of what is currently the Caribou Ranch. The Caribou Mining & Milling Company, once associated with Batesville, also still owned western tracts of what was to become the Caribou Ranch. In 1906, the Caribou Mining & Milling Co. lands were demarcated as part of the Dun estate. R.G. Dun, William Fullerton and Martin Smith had bought the No-Name Lode from L.M. Bates. As the Boulder Daily Camera (Watts 1943) notes, "The Bates property, both mine and mill... formed the nucleus of the mountain tract long held by the Dun estate."

In 1905, railroader Colonel Samuel Dick tried to persuade the Dun heirs to reopen the Caribou mines (Crossen 1992), evidently without success. Even the mines at Bluebird opened only occasionally, probably with the rise and fall of the market. By 1919 the Bluebird Mine was owned and operated sporadically, until 1921, by the North Boulder Creek Mining Company of Nederland (Bureau of Mines 1919 Annual Report). During the years of World War II the Bluebird mine was operated, in association with a mill, by the Great Western Silver Mines Corporation of W.A. Moore.

### Ranching

As early as 1906 the western lands of the North Boulder Creek park, including the modern ranch complex site, were owned and occupied by Hector Urquhart. Under Urquhart the Como Ditches, dating from 1866 to 1875, were officially surveyed. By 1915 Thomas F. Tucker would own other tracts. During that period, as early as the 1920s, a peat bog in the park meadows may have been mined for "Caribou Peat", according to James Guercio, the current Caribou Ranch landowner. Peat mining occurred in the general region at least until 1963 (see Gilbert 1968).

Though Hector Urquhart had a house and two outbuildings on the northeast side of Como Creek near the site of the modern ranch complex, it is Thomas F. Tucker who is the acknowledged predecessor to the large ranchers. The Tucker Ranch formed the base from which arose the modern Caribou Ranch. The name "Caribou," as all uses of the word "Caribou" in the region, harkens to the naming of the Caribou Mine after the Cariboo (sic) Range of British Columbia.

In Tucker's time the ranch was named the Boulder County Ranch. The ranch was also known both as the Tucker Ranch and the Bar Rump Ranch, apparently Tucker's brand. References to past tract owners were also associated with area properties; e.g., "Frenchman's Ranch" for the Delonde place. Other names shown on historic maps are Moore's and Urquhart Ranches (Drumm 1925), and Oppen Ranch (Bailey 1982).

In 1936, Lynn W. Van Vleet purchased the 300-odd-acre Tucker Ranch, starting the "Lazy VV" Ranch, a.k.a "Van Vleet Arabian Horse

Ranch." A hill at the northeast portion of the ranch is in fact named "Lazy VV." Van Vleet's income derived from ownership of the successful Trinidad Bean & Elevator Co. Van Vleet expanded the ranch through purchases of property from J.C. Clark and from the Vanadium Corporation, the successor of Primos Mining.

With Forest Service range land, the Van Vleet Ranch covered 13,000 acres. The ranch was focused around its Arabian horse stock, but also ranged 200 to 500 cattle. The Lazy VV employed about 30 people. The historic ranch complex served to support these people and the Arabian breeding operations -- not to mention horse shows and other entertaining (Van Vleet 1946). The Van Vleet Arabian Horse Ranch itself is featured in two films, Warner Brothers' "Arabians of the Rockies" (1946) and 20th Century Fox's "Sons of Courage" (1947).

The entire ranch, though platted for development of individual lots, was sold in 1971 to James Guercio. With Guercio the ranch again became primarily known as Caribou Ranch. Guercio, a music producer from Chicago, converted the barn into a recording studio, attracting many popular musicians of the day to the ranch. The studio interior was destroyed in a major fire, but the outer barn structure is still standing.

Buildings on the property range in age from the Urquhart/Tucker era, to the Van Vleet, to post-Van Vleet in construction, according to County Assessor records.

In 1996-97, the City of Boulder completed negotiations to purchase the bulk of the Caribou Ranch property; Guercio retains a block of land that includes the core ranch complex. The city's holdings may be purchased by Boulder County for open space usage after the turn of the century.

## EXISTING DATA

A file search of the project area was conducted by the Colorado Office of Archaeology & Historic Preservation on June 12, 1996. No formal cultural resource inventories have been conducted within the project area.

The Switzerland Trail historic district (5BL358) is listed on the National Register of Historic Places. As described above, the railroad crosses the Caribou Ranch. Additionally Kris Kranzush recorded the point of the Switzerland Trail (5BL358) where it intersects the Silver Lake Pipeline route coincident to a botanical survey of the pipeline alignment (Busse 1995).

In the surrounding area, Centennial Archaeology, Inc. (Jepson 1989), did a seven-acre tract survey adjacent to the project area, encompassing one of the main shafts at the Bluebird Mine (5BL415). The Bluebird Mine complex had been recorded in part by Manuel Weiss in 1980, but he was denied access to the site by James Guercio of Caribou Ranch. The Jepson survey did not document the Bluebird Mine complex. In October 1996, Native Cultural Services also completed a survey of approximately 2 acres on the south side of Lakewood Reservoir, locating an isolated find composed of lithic flakes (Phillips 1996).

In the surrounding region, James Benedict (various), and Benedict & Olson (1973, 1978), have excavated high altitude prehistoric sites near the Continental Divide around Arapaho Pass, Mount Albion, and in the Fourth of July Valley. A variety of site types have been investigated, including game drive systems, butchering stations, camps, and sacred sites. Their research has provided the data for the definition of two prehistoric complexes, the Mount Albion Complex from the Early Archaic period, and the Hog Back Complex from the Ceramic Period, as described briefly above in the Aboriginal Prehistory section of the Cultural Background chapter.

## OBJECTIVES

The intent of the current cultural resource survey was to provide the City of Boulder with an inventory of archaeological and historic sites, to assess the significance of any sites located, and to provide recommendations on how to avoid adverse impacts to significant resources.

All cultural resources will be evaluated for their significance in terms of eligibility for inclusion on both the State Register of Historic Properties and the National Register of Historic Places. Cultural resources which do not meet the criteria for inclusion on the State or National Register may still be locally significant and eligible for County Landmarking. A principal objective is to produce recommendations on how to protect the cultural resources from adverse impacts, as from any potential pipeline replacement or upgrade endeavor. Additionally, the inventory is oriented toward furthering our understanding of the prehistory and history of the area through the development of a set of expectations based on findings during previous investigations in the vicinity.

It was expected that if prehistoric cultural resources were located within the project area, information obtained from these resources would be applicable to a number of research concerns such as regional chronology, settlement patterns, resource utilization, site function, and cultural affiliation. Many of these issues are outlined in Guthrie et al (1984), "Colorado Mountains Prehistoric Context". Data concerning historic sites could provide information regarding mid to late 19th and early 20th century railroading, mining activities, homesteads, and ranching in Boulder County (see Mehls 1984).

Prehistoric archaeological site density was expected to be of relatively low representation because ground visibility can be very limited in the mountain region, whether due to forest cover or the moist, grassy mountain meadows.

Prehistoric sites in the area were expected to be found near significant perennial water sources, such as North Boulder Creek, and in other topographically beneficent areas such as low slope areas and areas with higher potential resource access. However, the repeated flooding episodes known to have occurred on North Boulder Creek were expected to have adversely affected surface site visibility there. Based on other mountain region sites, sites in the project area lowlands are expected to consist of flaked lithic artifacts and debris, possibly with groundstone. Hearth features (firepits) may be present. The project area lacks the open ridgetops where structural elements of game drive systems might be expected. The work of James Benedict (various) has shown that the passes in the region, and the valleys below them, may have been used for access northeast to Middle Park resources. Additionally,

ethnohistoric data indicates that an aboriginal trail existed over Arapaho Pass, connecting the eastern foothills to Middle Park (Ives 1942, Toll 1962). The presence of lithic materials such as Kremmling chert, from sources in Middle Park, supports the supposition of trade or visitation to that area.

Historic Euro-American remains were known to be present in the project area, and exhibit much higher visibility than prehistoric sites. Because of the history of homesteading, ranching, mining activities, railroading, and public water projects within and adjacent to the project area, resources related to these activities were expected, such as building foundations, fencing, irrigation ditches, access roads, mine shafts, pipeline materials, and trash deposits. Mining and milling operations were known to be based around the Bluebird Mine, and the Switzerland Trail railroad and the Silver Lake Pipeline were known to transect the area.

## METHODS

The study area, as finally defined, was inventoried on June 10-14 & 17-20, 1996, and on June 4, 16 & 30, 1997. An intensive (100%) inventory was completed, generally by a crew of three archaeologists walking a series of parallel, adjacent transects at intervals of 30 meters or less. The meadow areas, those areas with low ground visibility due to vegetation but good line-of-sight distance, were surveyed by adjacent pedestrian transects spaced 20-30 meters apart. Forested areas were similarly surveyed by adjacent pedestrian transects spaced 10 meters apart. Evidence of cultural resources was sought in the form of material debris, structural remains, or any unusual surface anomaly.

Isolated Finds were defined as areas with fewer than five artifacts associated in a discrete space of 100 square meters or as a single feature without artifacts. Sites were minimally defined by the presence of five artifacts or at least one building or a feature with artifacts. The appropriate Colorado OAHF forms were completed for each manifestation. Black-and-White photographs were taken and a sketch map drawn of each site. Artifacts were analyzed and described in the field. Sites and isolates were assigned a permanent state number using the Smithsonian Trinomial System (5BL...).

Ground visibility within the project area was generally poor, given grass growth in the meadows and duff cover in forested areas. The exceptions were isolated patches disturbed by sheet-wash erosion or livestock, or both. Ground visibility was 0% in the marshy areas of the meadows and reached up to 20% in the non-marshy areas. Visibility was 0% in the duff and deadfall of the forested slopes and bench above North Boulder Creek. It was 0% to a patchy, sheet-washed 60% ground visibility in the forested area in the boulder bedecked "flat" along North Boulder Creek.

## RESULTS

This survey, in its final form, resulted in the recording of ten new sites, 14 new isolated finds, and one new element of the previously recorded Switzerland Trail. Other historic sites were noted: the main Caribou Ranch complex, the Bluebird Mine & Mill complex (5BL415), a peat mine, and a possible sawmill remnant. With the selection of the final pipeline alignment, these sites are excluded from the project area and were not recorded. In any case, they will not be directly affected by the pipeline replacement project.

Three of the newly recorded sites are prehistoric, two are multi-component, and five are historic. Of the isolated finds, 13 are prehistoric and one is historic debris. These cultural properties are summarized below. Additional detailed information is present on the Colorado Cultural Resource Survey Forms, a detached appendix to this report. For protection of these cultural resources the forms are not available to the general public and will not be included in any of the city's public documents pertaining to this project.

### PREVIOUSLY RECORDED SITES

The previously recorded site found within the project area is the Denver, Boulder & Western's Switzerland Trail railroad grade (5BL358). The segment of the Switzerland Trail within the project area is part of the line from Sunset to Eldora; it was adequately recorded and is much the same as in its last documentation. Along this route there were 17 trestles, the longest near the Blue Bird and Cardinal stations.

As the rest of the railroad, the right of way was around 12 feet wide and timber was clearcut on both sides of the tracks. It is assumed, that, like the Ward line, the Eldora route's right of way was burned to clear underbrush. The grade itself was surveyed by Robert Sumner in June of 1904... railroad officials wanted the new line graded in such a way as to minimize snow blockages... Large cuts, common on the Ward route, were not made... [and] the smaller cuts were fewer in number... From Hill to Blue Bird, the grade is a 6 foot wide footpath. Between Cardinal and Blue Bird, the grade is a dirt road that is utilized mostly by the Caribou Ranch as an access road. (Holder 1985).

The Colorado & Northwestern Railroad, later reorganized as the Denver, Boulder & Western, constructed the Switzerland Trail rail route from Sunset to Eldora in 1904, though this route was originally planned consecutive to the railroad reaching Ward via

Sunset in 1898. Between Sunset and Eldora stations (20.1 miles), were the Sugar Loaf station, the Tungsten siding, the Glacier Lake station, Pinnacle (ascent/descent), Hill station (10 miles from Sunset), Silver Lake siding, Blue Bird flag stop station (13.4 miles from Sunset), Anson (14 miles from Sunset), Lakewood station, Wolfram siding, Cardinal station (for Nederland & Caribou), Sulphide station, and Lake Eldora flag stop (Crossen 1992).

The Anson and Blue Bird stops are on the modern Caribou Ranch, as might be the unconfirmed Silver Lake siding. Anson had a 584' long siding and a water tower. Only structural remnants remain of Anson currently (Holder 1985). Anson and Bluebird are outside of the current project area. The railway was a primary means of freight and transport to the mountain mining camps and communities. Though the railroad provided invaluable service and an economical means of getting ores to smelters, the mines in turn were not able to produce enough to support the railroad.

After 1918 flooding destroyed much of its trestle work, the railroad decided it was not worth the effort to reopen. The railroad and all of its equipment and materials were sold for salvage to Morse Brothers Machinery & Supply Company of Denver. Apparently everything went, even the rails, but not the ties (Holder 1985), "the Morse Brothers' crews began tearing up track at Eldora... by May 1st [1920] they were at Bluebird station... The right-of-way reverted to former owners of the land" (Crossen 1992). A complete history of the Switzerland Trail is provided by Forest Crossen (1992), and a historical geography by Kevin Holder (1985).

### NEWLY RECORDED SITES

Site 5BL358.1 is a group of historic dugout foundations along the Switzerland Trail (5BL358), or Denver, Boulder & Western Railroad (Figure 2). This may be the Silver Lake siding. There are twelve dugout foundations below, east of, the Switzerland Trail railroad grade near its junction with Como Creek (and the Silver Lake Pipeline). They are distributed over an area of 1.2 acres, which includes a scatter of cans marked "American Powder Mills". The dugouts are all similar in structure, some are stone-lined, and most contain a stone fireplace cairn at a corner near the "entryway" (Figures 3 & 4). One also has a separate "oven" or hearth in proximity outside of the structure. The fireplace cairns are stacked local granite with a small opening to the dugout interior. The dugouts range in size from 12 x 20 feet to 7 x 12 feet. There are also a couple of pits proximate to a few of the dugouts that may represent sources of fill dirt for dugout berms.

These dugout structures' construction materials and style, and their close proximity to the railroad grade indicate that this was a community or camp tied to the railroad. Stone-lined dugouts are

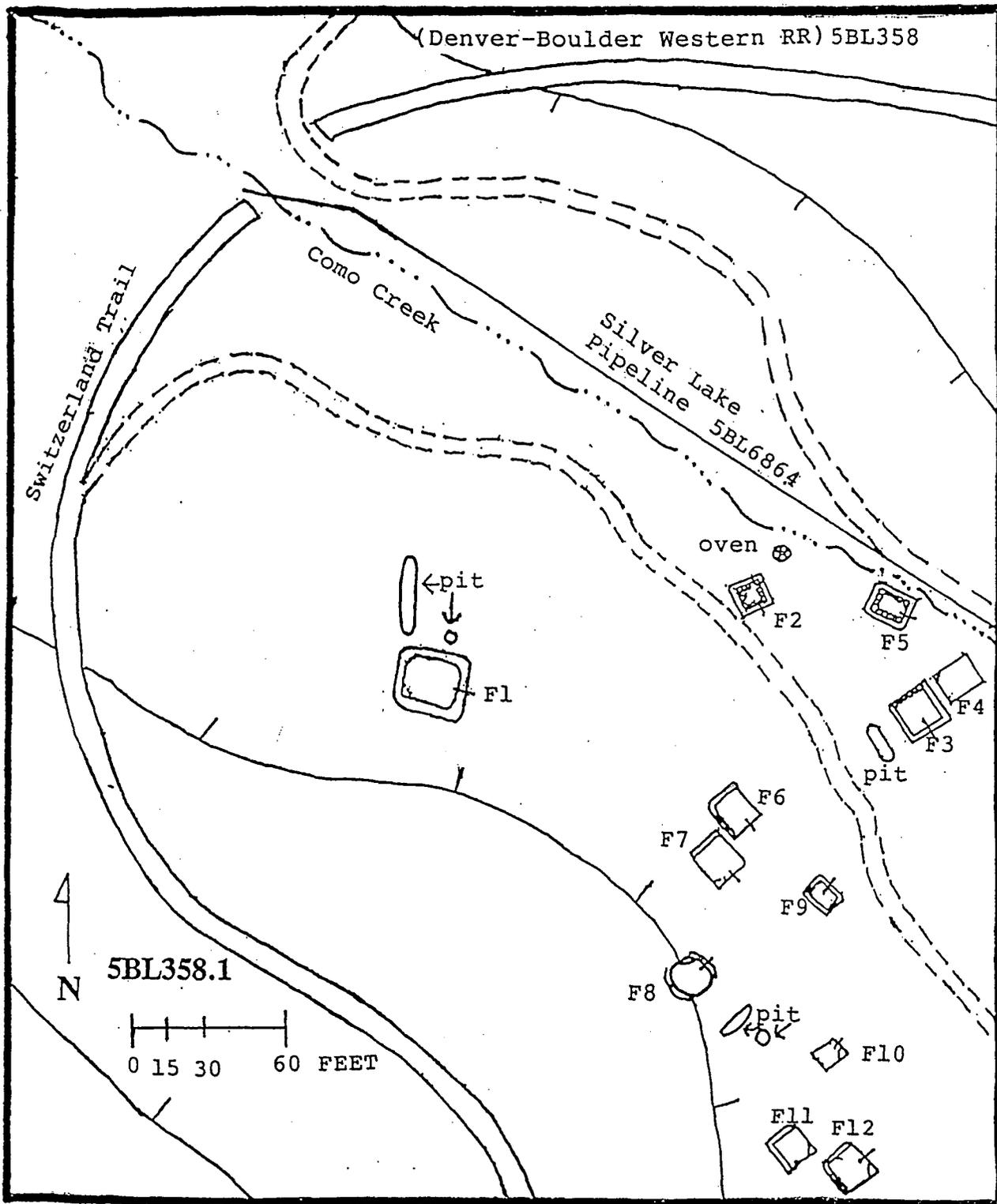


FIGURE 2 - Planview of site 5BL358.1, dugout structures at the Switzerland Trail (Denver, Boulder, & Western RR).



FIGURE 3 - 5BL358.1 - View northeast at the remains of Feature 3, a dugout structure featuring the hearth cairn of its fireplace. This hearth cairn is demonstrative of the fireplaces used in many dugouts of the site.



FIGURE 4 - 5BL358.1 - View northeast at Feature 4, a dugout structure utilizing dry-laid field granite masonry. It also still displays some structural timber.

a feature of railroad construction camps. Diagnostic materials utilized in the structures include wire nails, true-cut lumber and solder-seam powder cans of the American Powder Mills of Boston (ca. 1881-1931). The wire nails date the camp to post-1890, putting its occupation roughly contemporaneous with the 1904 railroad grade. The powder cans may have simply been imported from other mining areas along the railroad. There were no mine lode claims on record in the immediate vicinity of this camp. They may also have been from powder used in blasting for railroad construction.

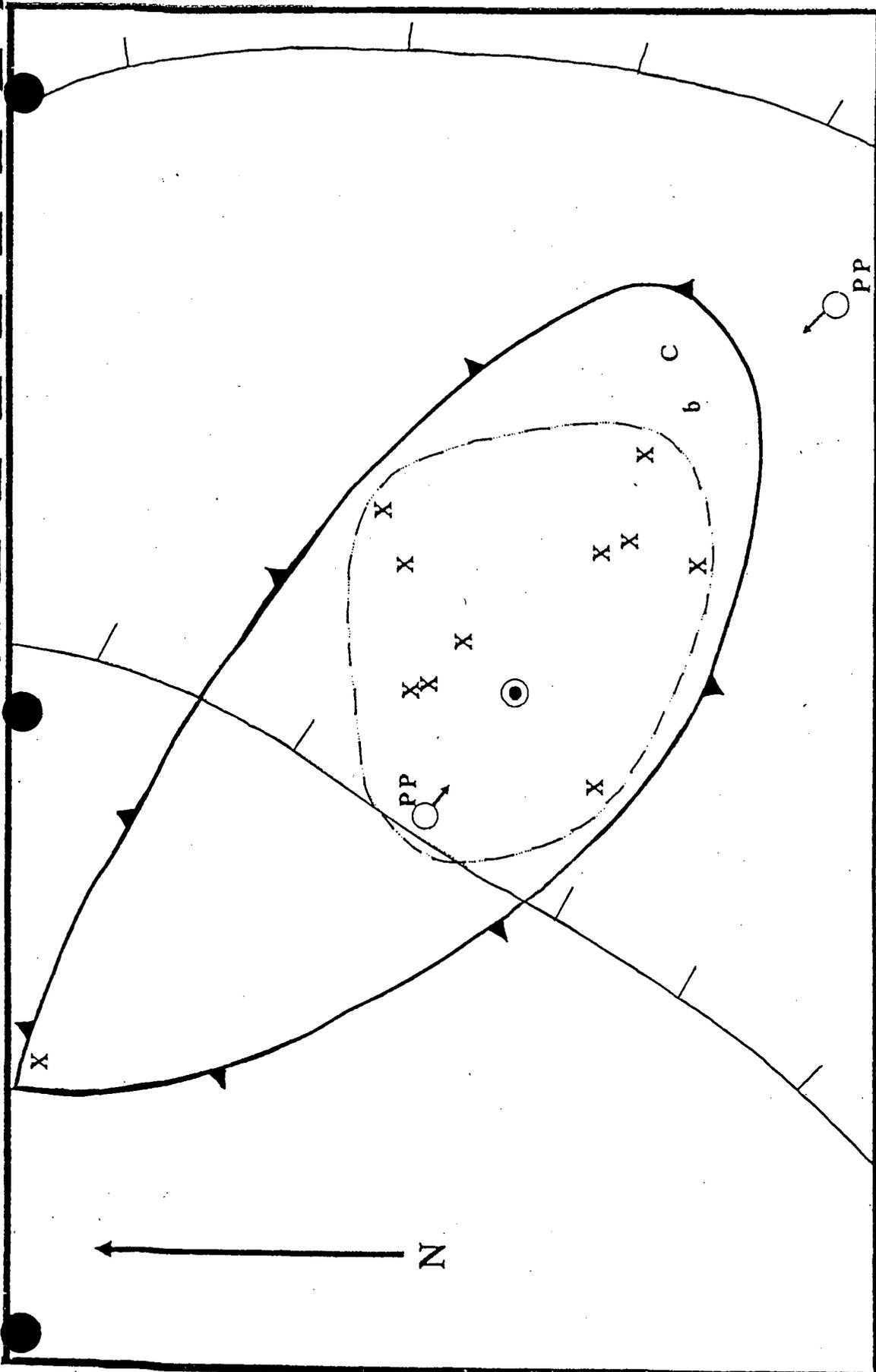
Crossen (1992) indicates that in the 3.4 mile stretch between Hill and Blue Bird stations was once the Silver Lake siding, used to unload supplies and materials for Camp Albion and for the work on the Silver Lake dam. Because no map or account has been found exactly placing the Silver Lake siding, the 5BL358.1 camp is by no means confirmed to be that siding.

Additionally, an account in the Boulder Daily Camera (March 5, 1910) states forest fires were burning at Silver Lake dam and Silver Lake siding, confirming the presence of the siding as early as 1910. Though there are burnt structural elements in some camp dugouts and evidence of an old forest fire (i.e. charcoal, but no standing trees showing burns) on the hillside above the camp, on the other, west, side of the railroad grade, these burnt materials cannot currently be connected to 1910 forest fires either.

Although Mark Guercio of Caribou Ranch stated the structures were "coolie" shacks, as to ethnic affiliation associated with the dugouts, no artifacts yet point to Asian occupation. The few artifacts found were all, seemingly, standard Euro-American items. The brief arrival of Chinese laborers in 1874 at Caribou, due to problems with Italian labor, quickly ended with the Chinese being driven out of town (Crossen 1992 & Bailey 1982). There were, however, Chinese placer miners in Four Mile Canyon from the 1870s through circa 1910. No available historical account mentions any Chinese working on the railroad.

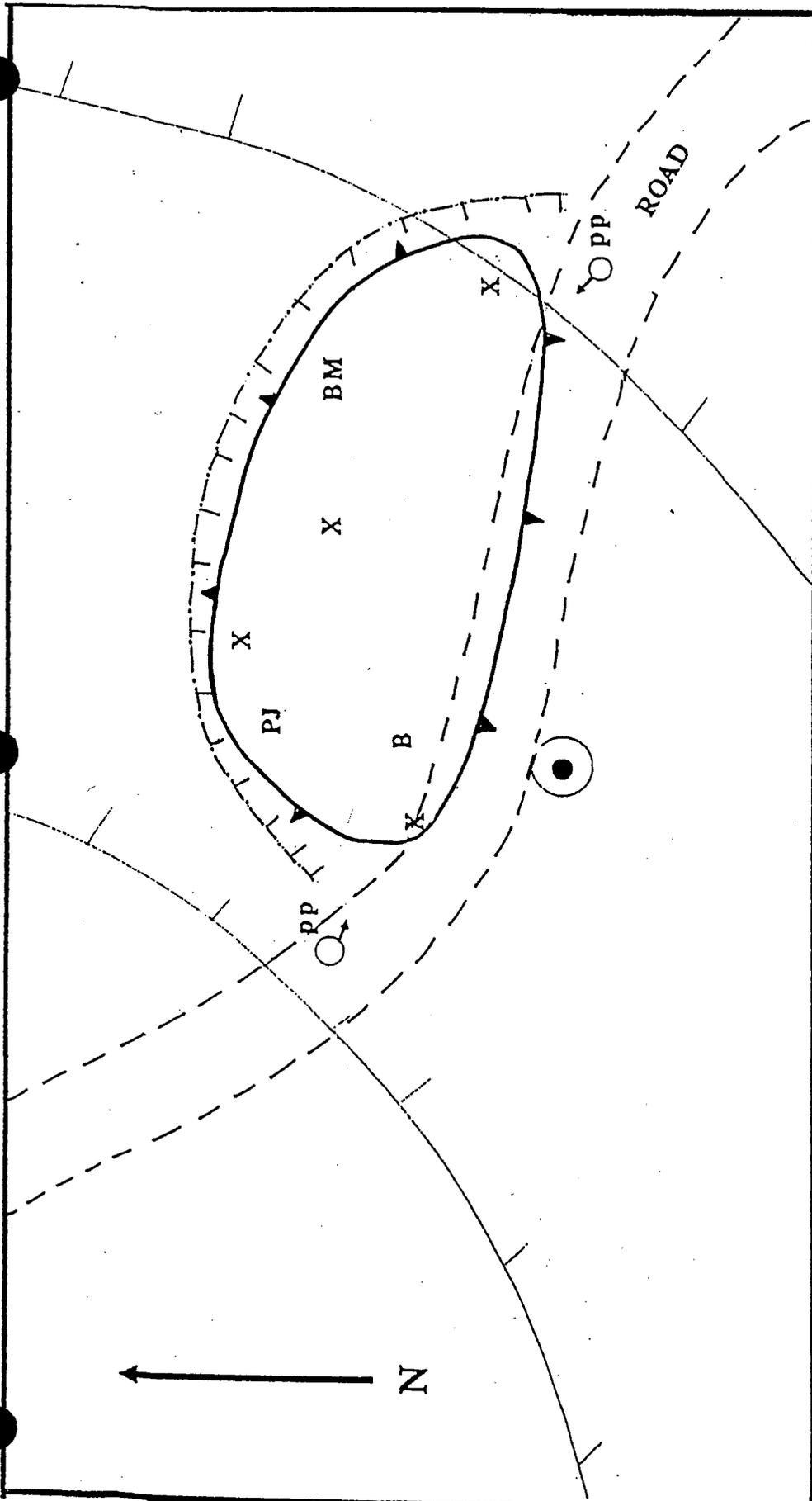
Site 5BL6857 is an open lithic scatter, 16 x 3 meters in area (Figure 5). The site consists of thirteen flakes: one chert primary flake; two secondary flakes, one of chalcedony and one of chert; six tertiary flakes, five of chalcedony and one of chert; three chert tertiary flake fragments; and one bifacial chert thinning flake. The scatter is located in a small area of soil exposed by sheet wash, between two low boulder ridges in an area forested by aspen and pine. A faunal bone fragment and a modern can lie at the edge of the concentration of lithics. No diagnostic materials were found, thus temporal and cultural affiliation of the site is unknown. Some of the lithic materials appear to be from sources in Middle Park.

Site 5BL6858 is an open lithic scatter (Figure 6). The site consists of a total of eight artifacts, five flakes and three tools



SITE BOUNDARY X FLAKE 5BL6857 SHEET WASH AREA  
 MAPPING STATION b BONE C CAN PHOTO POINT  
 0 5 METERS

FIGURE 5 - Planview of site 5BL6857, open lithic scatter.



5BL6858

- ▲— SITE BOUNDARY
  - ⊖ CUT BANK
  - ⊙ MAPPING STATION
  - ⊙ PHOTO POINT
  - BM BIFACE MIDSECTION
  - X FLAKE
  - PJ PROJECTILE POINT
  - B BIFACE
- 0 \_\_\_\_\_ 1 METER

FIGURE 6 - Planview of site 5BL6858, open lithic scatter.

eroding from a 3 x 9 meter area of road bank. The flakes consist of one Table Mountain jasper secondary flake, two Table Mountain jasper tertiary flakes and two white opaque chert tertiary flakes. The tools consisted of one biface, one projectile point mid-section and one Archaic period projectile-point with a broken base; all are red Table Mountain jasper, from Middle Park. The latter projectile point appears to be from the Late Archaic period (1500-3000 BP). (The tools are illustrated in Figure 17, below).

Site 5BL6859 is also an open lithic scatter (Figure 7). The site consists of five flakes and four tools in a 30 x 50 meter area. There is one opaque brown chert secondary flake, two opaque brown tertiary chert flakes, one white opaque tertiary chert flake, and one whitish brown quartzite tertiary flake. The tools consist of one projectile point base of tan/grey chert (Figure 17), one retouched flake of reddish quartzite and one retouched flake of whitish brown quartzite, and a biface fragment of white opaque Kremmling chert. The projectile point base is a corner-notched piece from the Hog Back complex of the Ceramic period (1430-650 BP). The site is in a meadow, centered around an area disturbed by sheet wash and livestock.

Site 5BL6860 is an alignment of stone cairns (Figure 8). The site consists of a linear succession of ten stacked stone cairns, each being one to three rocks atop a boulder. There is lichen growth atop, but not on the undersides of the stacked stones. The lichen growth on the stones is similar to that of a pile of bricks in the vicinity associated with site 5BL6861. This similarity of lichen growth indicates that the cairns may too be of historic construction. The function of the alignment is presently unknown.

Site 5BL6861 is a multi-component site consisting of a historic foundation complex and two lithic flakes (Figure 9). The flakes are a semitranslucent white chert tertiary flake and an opaque white secondary flake proximate to a platform foundation. The historic component consists of five foundation remnants, a developed spring or well, five rock piles, a sparse historic trash scatter, and a brick pile. The complex covers an area of approximately 8 acres. One foundation is a platform with a trough abutted (Figure 10), one is a notched log cabin remnant, two are dugouts (Figure 11) and one is a leveled area aligned with stones. The spring is currently concrete lined and capped with a pipe feeding a modern galvanized steel stock tank. The trash scatter consists of hole-in-cap or solder seam cans and fragments extending sparsely in the tree line southward and westward toward site 5BL6863. The brick pile, at the site's south edge, is apparently bricks from what was the North Boulder Mill at Batesville, site 5BL6863.

The lands upon which this site is situated were originally homesteaded by Antoin Boiseneaux on May 15, 1876, later to become part of the Urquhart Ranch properties. The dugout structures, with



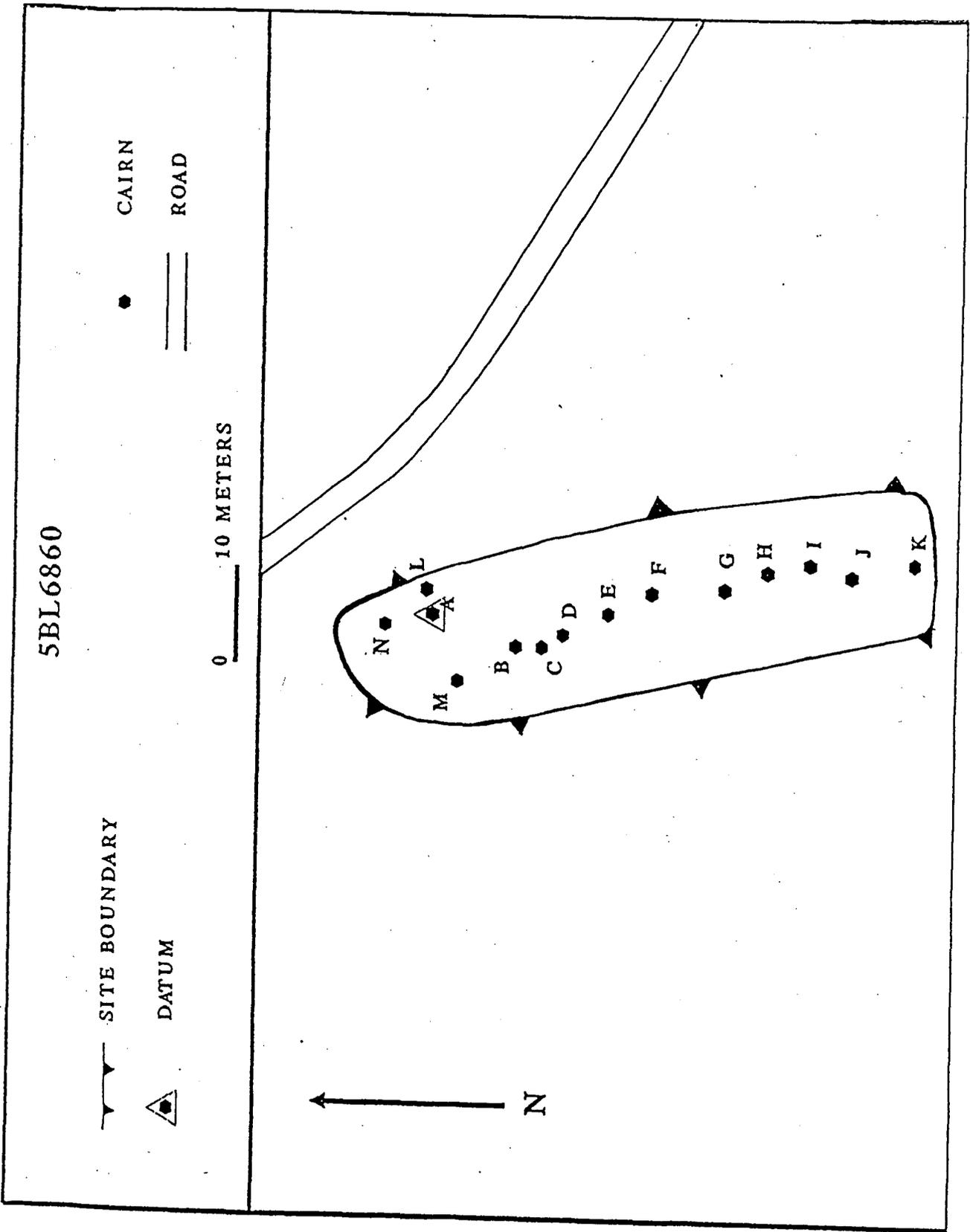


FIGURE 8 - Planview of site 5BL6860, cairn alignment.

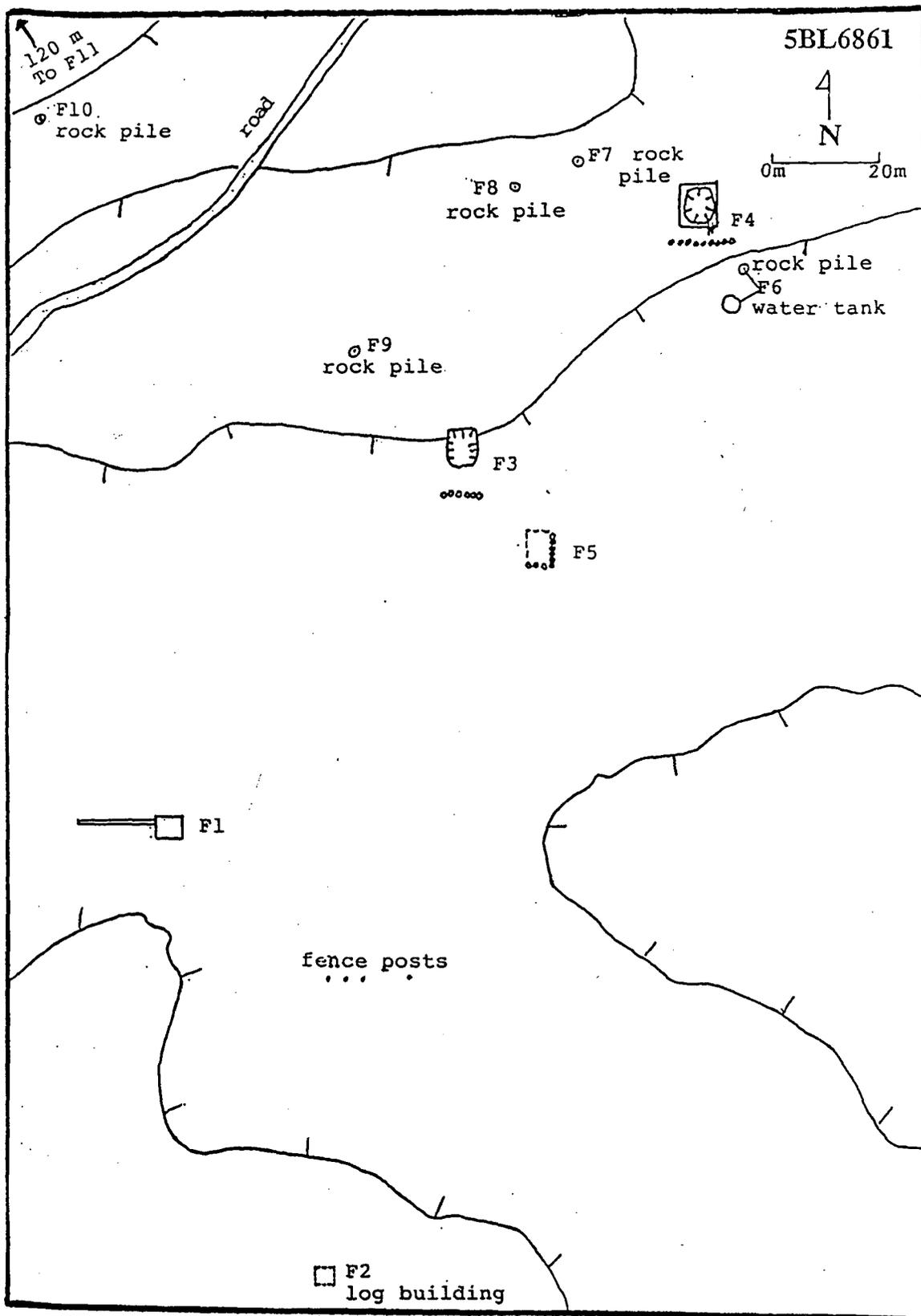


FIGURE 9 - Planview of site 5BL6861, multicomponent with lithics and historic foundation complex.



FIGURE 10 - 5BL6861 - View east at the platform structure (in the pines) with a concrete trough (in foreground) going up to it. Platform and trough are Feature 1.



FIGURE 11 - 5BL6861 - View south-southeast at Feature 4, a dugout structure with oil-drum stove at center and collapsed entryway timbers in a the background.

their square cut nails, are most likely from the 1890s or earlier, while the platform structure is most likely associated with later ranching operations. A 1908 map located five structures at this site (George 1909). It is possible, but not certain, that some of these structures may also have been associated with operation of the nearby North Boulder Mill, which was said to have a small settlement of mine operatives, "Batesville," near it (Kemp 1960). Aside from the mill foundation, there is currently only evidence of two non-mill structures and a dugout at the North Boulder Mill site itself, no demonstration of a "settlement."

Site 5BL6862 is a historic structure remnant (Figure 12). The site consists of the remnants of a notched log structure, a notched log pile, and an iron metal implement. The site is in an 10m x 15m area between the Silver Lake Pipeline and a two-track road. The structural remnant is an approximately right angle corner of overlapping axe-hewn, notched logs. There is no evidence of a foundation and the fact that a mature pine grows in the corner leads to the speculation that this may have been a corral or some such structure other than a building. The pile of notched logs 60' northeast of the structure remnant may represent materials from the structure or those of a second structure.

Site 5BL6863 is a multi-component site consisting of the historic Batesville and an open lithic scatter (Figure 13). The lithics consist of a jasper scraper (Figure 17, below), two Table Mountain jasper tertiary flakes, and three semi-translucent white Kremmling chert flakes. The historic component is Batesville, the site of the North Boulder Mill and its support community which operated primarily in the 1870s. The site consists of the terraced foundation remnants of the North Boulder Mill (Figure 14), the stone foundation remnants of two smaller structures (Figure 15), one with a possible outhouse depression, a dugout foundation, a developed spring or cistern, and a scatter of historic trash. The site covers an area of approximately 4 acres with its historic trash scatter extending eastward for some distance. The historic trash includes a number of hole-in-cap cans and can fragments, fragments of powder cans, lard-style buckets, stoneware crockery fragments, and purple and aqua glass fragments, cut nails, and brick fragments. The terraced foundation displays the bulk of the brick, some stacked and some piled, and also retains a boiler, a circular wood ring, a cross-beam frame and some lesser framing and protruding bolts.

The North Boulder Mill was built by L.M. Bates circa 1875, and the settlement of workers that sprung up around it was subsequently deemed "Batesville." Cobb (1988:127) surmised that because the mill had a 10-ton capacity, it must have been about a 10-stamp operation. It employed a 25-30 man crew, and ran day and night. It utilized a chlorination process (Cobb 1988) or chloridizing-roasting and amalgamation (Kemp 1960), or according to assayer Hugh Watts (1943), "lixiviation instead of pan amalgamation," which all

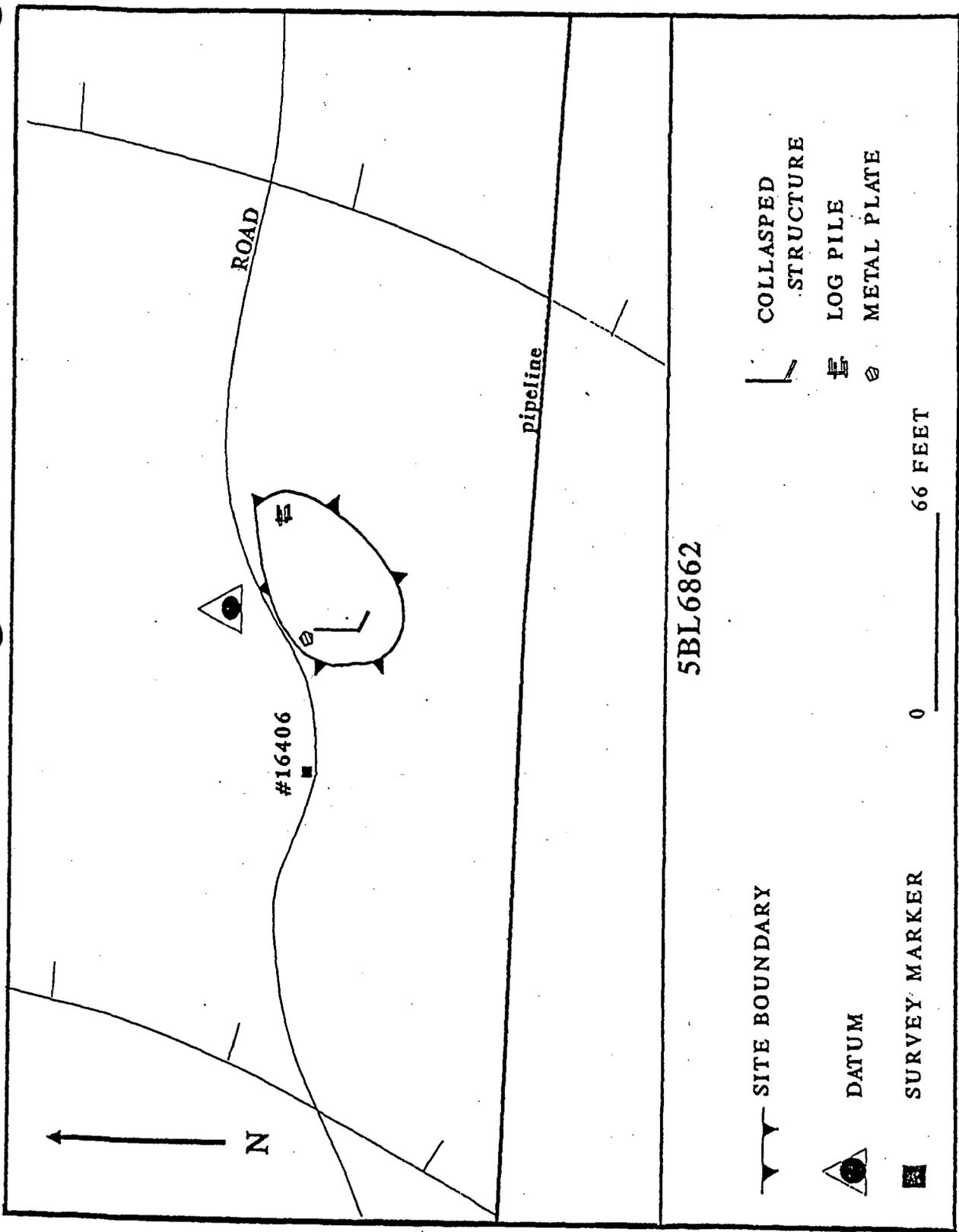


FIGURE 12 - Planview of site 5BL6862, historic structure remnant.

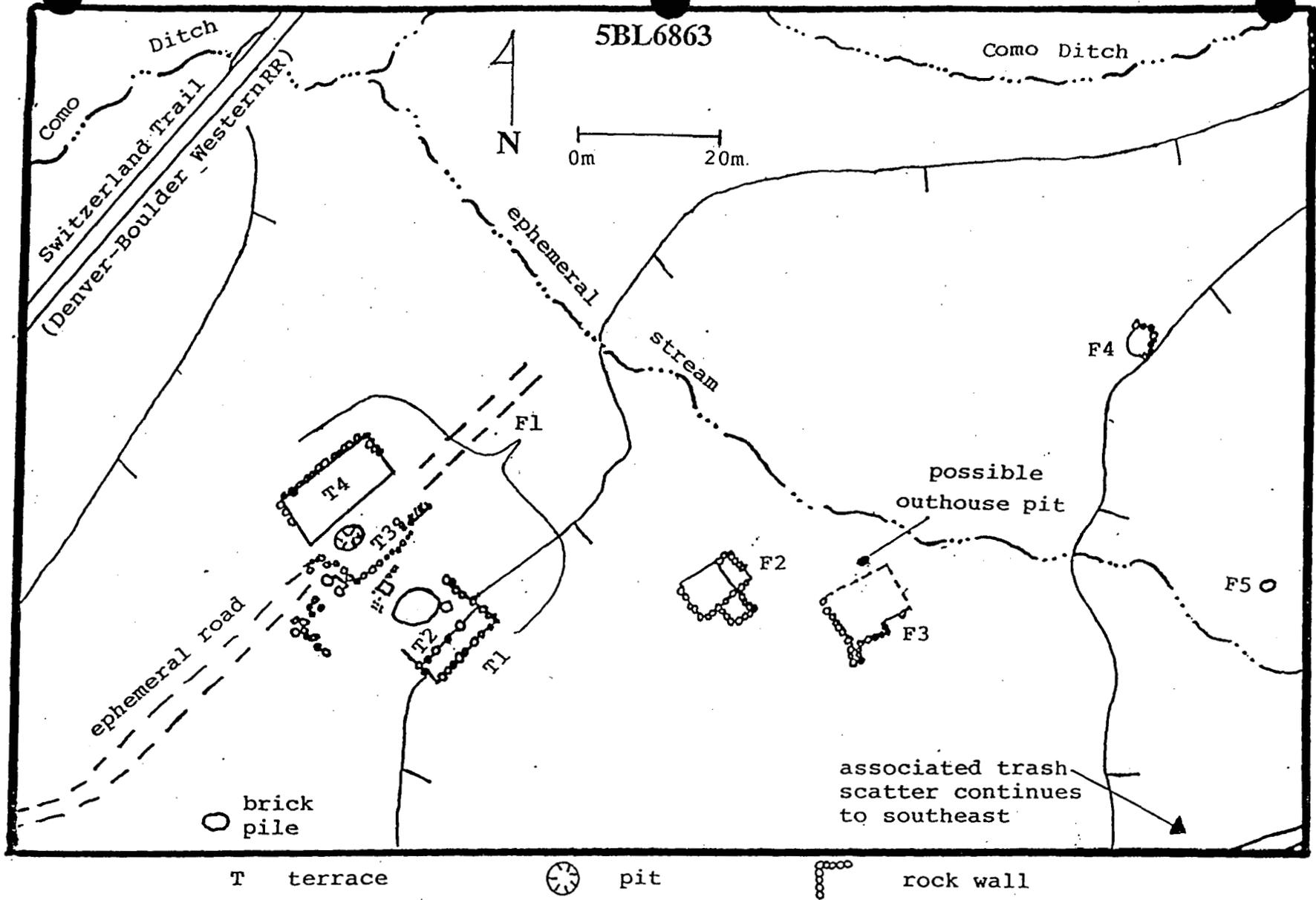


FIGURE 13 - Planview of site 5BL6863, multi-component with lithics and Batesville, the North Boulder Mill.



FIGURE 14 - 5BL6863 - View north-northeast at the dry-laid stone masonry corner of the North Boulder Mill foundation (Feature 1), Batesville. This masonry wall is at the northeast corner of Terrace #2.

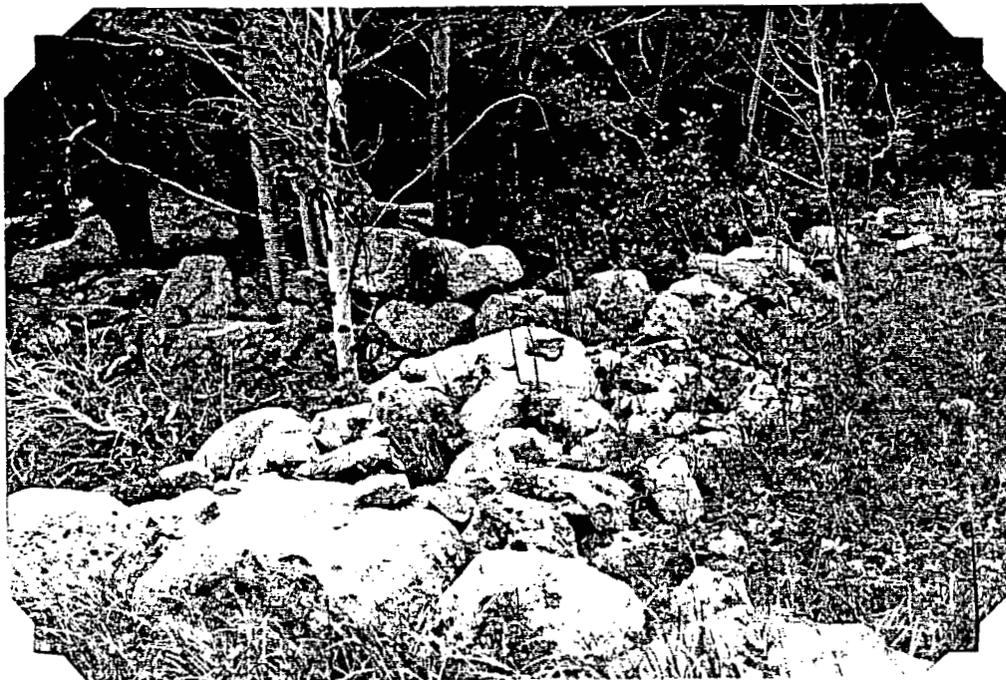


FIGURE 15 - 5BL6863 - View southeast at Feature 3, a T-shaped stone foundation, fairly representative of the non-mill structures on site.

approximate to the same thing. M.S. Smith was superintendent and R. Cash next in command. In 1908 two structures were indicated to be on site (George 1909). The mill was apparently demolished in historic times, "This mill never operated satisfactorily, notwithstanding several attempts to remodel it. After a couple of years the owners quit; eventually the machinery was removed and the structure razed" (Kemp 1960).

L.M. Bates constructed the mill to process silver ore from his No Name Mine near Caribou, and apparently also processed Sherman and Bluebird ores. The original No Name owners were Donald, Shaw & Co. who sold to Bates, who in turn sold to R.G. Dun, William Fullerton, and M.A. Smith (Kemp 1960). The latter group was said to have operated the mines at least from 1874-1876, the same years Bates constructed and ran the mill. Martin A. Smith in 1875 was listed as the owner of the land upon which the mill sat. Later both the mine and mill would be owned by R.G. Dun and form "the nucleus of the mountain tract long held by the Dun estate" (Watts 1943). The lands were at one time, circa 1916, held by the Caribou Mines & Milling Company (Clason 1916).

Site 5BL6864 is the historic **Silver Lake Pipeline**. The original Silver Lake Pipeline was built for the City of Boulder raw water supply system in 1919, and replaced in 1947.

The original pipeline, constructed in 1919, was an 18" clay tile conduit extending from Lakewood Reservoir, westward across what is now the Caribou Ranch, to a diversion and intake at the base of Upper Boulder Falls. This pipeline was replaced circa 1947 with used 18" steel piping. Fragments of the original ceramic piping are still scattered all along the pipeline route and several concrete "tank" structures housing pressure relief valves still also exist there (Figure 16). Also, "During the Great Depression... men from the WPA, the Work Progress Administration, and the CCC, the Civilian Conservation Corps... [worked] to improve dams from lake to lake and piping to the upper intake" (Smith 1986). The pipeline was only a portion in the regularly maintained, upgraded, and expanded raw waterworks system of the North Boulder watershed. The intake for the Silver Lake Pipeline is now above the Upper Boulder Falls.

The Silver Lake Pipeline was the last segment in the aqueduct system to the North Boulder watershed. With the "muddying" of Middle Boulder Creek waters due to the booming upstream mining industry, the City of Boulder began to consider tapping North Boulder Creek waters by the end of the 1880s. It was in 1902 that the city began acquiring North Boulder Creek water rights in earnest, beginning with the watershed's lakes and reservoirs. Most of the lakes had previous claimants, most significantly James P. Maxwell. Beginning circa 1903, the city began negotiating with Maxwell for Silver Lake itself. It finally bought a portion of Silver Lake water rights in 1906 for \$34,000. During the

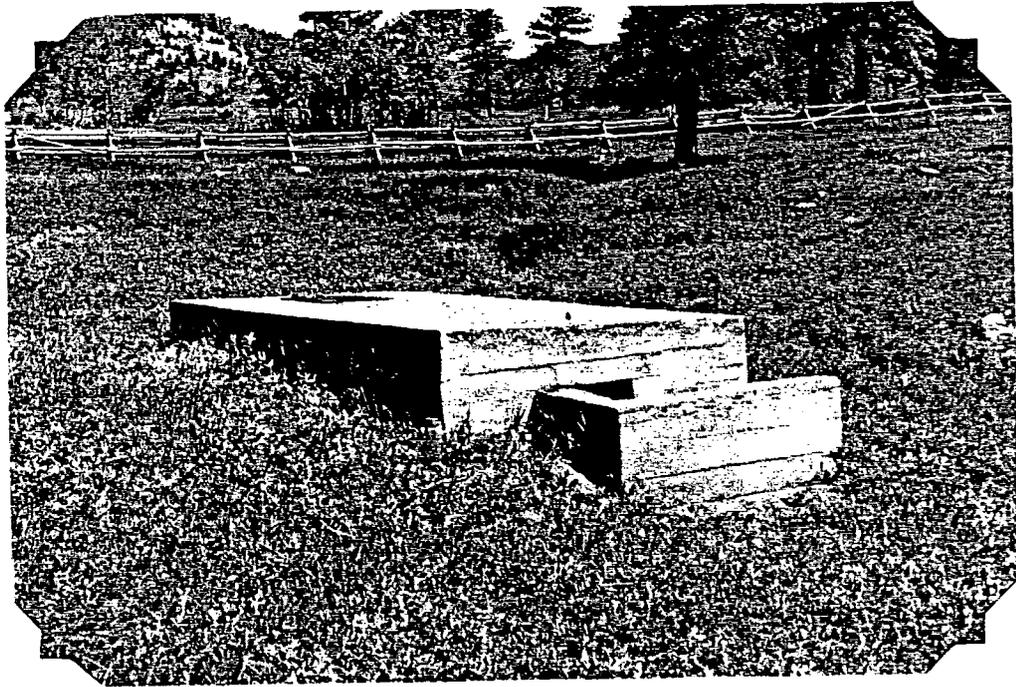


FIGURE 16 - 5BL6864 - View northwest at the eastern-most concrete tank structure of the original, 1919, Silver Lake Pipeline. This particular structure has a shard of amethyst glass cemented in its top.

negotiations James Cowie and partners suggested that the city should rather buy their Park Reservoir, which then succeeded to breach (though the city did finally buy this "reservoir" in 1961).

A pipeline route was next surveyed from the Boulder Canyon through to Upper Boulder Falls. Nonetheless, by 1909, the city constructed the steel pipeline only from Orodell to Lakewood, hence the "Lakewood Pipeline." With continued threats of pollution from the Primos Mill at Lakewood and from ranching around North Boulder Creek, the Silver Lake Pipeline construction was finally completed 10 years later. Also, the city's watershed was effectively fenced. (Information above, except concerning Park Reservoir, is condensed from Phyllis Smith [1986] who provides a complete "History of the Waterworks of Boulder").

It should be noted that the city's Silver Lake Pipeline was not the first slated for the project area between Upper Boulder Falls and Lakewood, and the city's Lakewood Pipeline was not the first called the "Lakewood Pipeline" (see Boulder County Clerk Book D:plat 168). The original "Lakewood Pipeline" was claimed by C.F. Lake of Primos Mining & Milling circa 1910 to run a power station near Lakewood, at the SE 1/4 of the NE 1/4 of Sec. 1 (T1S, R73W). While the pipeline name and route were claimed by Lake, we do not know if it was ever actually constructed.

This pipeline, if it was ever built, roughly traversed the same route as the current Silver Lake Pipeline's route, except that its intake was just downstream of Caribou Creek's confluence with North Boulder Creek. From there the pipeline was to go almost due east, intersecting the Denver, Boulder & Western railroad approximately at Como Creek and cutting approximately 135 degrees southeast to the power station site (SE 1/4 NE 1/4 of Sec. 1, T1S, R73W). This was supposed to be a 24" pipe with work commencing mid-1910. C.F. Lake's Lakewood Pipeline was previously called the "Cardinal", due to its 1906 predecessor, the Cardinal Pipeline that was supposed to have followed a route closer to the north side of North Boulder Creek, following the canyon until it spread into the meadow of the park. The pipeline's were originally called "Cardinal", ostensibly because Lake's first pipeline in 1902 was a 5" pipeline meant to feed a mill at Cardinal, though not from North Boulder Creek (see Boulder County Clerk Box 1:#32). No evidence of Lake's pipelines were observed in the project area.

Site 5BL6865 is the Como Ditches #3 & #4. Though originally separate, the Como Ditch #3 & #4 now meet at Como Creek. Como #4, feeding from North Boulder Creek, originally stopped short of Como Creek. It now empties North Boulder Creek Waters into Como Creek at Como Ditch #3's head. Como Ditch #3 has Como Creek as a source. Como Ditch #4 represents about 1700m (5580') of the two ditches' combined length of 2100m (6890').

The ditches have modern gates and chutes. Como #3 was built in 1870; when it was surveyed in 1906 it had 1'6" width at bottom, a 3' width at top, a depth of 1'6" and a carrying capacity of 38.4 cfs of water (Drumm 1906). The Como #4 was built in 1875; when it was surveyed in 1906 it had a 2' width at bottom, a 4' width at top, a 1'6" depth and a 26.2 cfs carrying capacity (Drumm 1906). The given dimensions remain fairly accurate.

In contrast to the Como Ditch #2, the Como Ditches #3 & #4 still present significant berming and ditch trenching on the slope where they were constructed. The Como Ditch #1 is also on the ranch historically, but it is outside of the current project area.

Site SBL6918 is the Como Ditch #2. The ditch still maintains a concrete headgate at Como Creek for diverting water into its channel. This headgate was installed recently, with an inscribed date of 1991. The channel extends from the gate to the northeast; it does not appear to be maintained, meandering like a marsh tributary to Como Creek.

Historically, the Como Ditch #2 was described as 2 feet wide at the top, 1.5 feet wide at the bottom, 1.5 feet deep, and 1,000 feet long. It included a gradational drop of 37 feet per 1,000 feet (that is, 37 feet total drop), for a carry capacity of 22.5 cfs of water for agricultural irrigation. Despite the historical records indicating a 1,000 foot length, the channel does not now appear to exit a marsh area adjacent to the headgate; it was apparently allowed to fill with sediment over the last several decades.

The Como Ditches #1, #2, and #3 all have a fee date of 1871, while the Como #4 has 1873 (Dyner 1989). Both Como #1 and #2 were built in 1866. Como #1 has a Boulder Creek priority number of 43 and was appropriated 105 acre feet of water from Fisher Creek; Como #2 has a priority number of 44 and was appropriated 120 acre feet/annum from Como Creek to irrigate 40 acres; Como #3 has a priority number of 45 and was also appropriated 120 acre feet/annum from Como Creek to irrigate 40 acres; finally, Como #4 has a priority number of 47 and was appropriated 240 acre feet/annum from North Boulder Creek to irrigate 80 acres. In 1906, the combined ditches irrigated 448 acres of the Urquhart ranch (Drumm 1906).

### ISOLATED FINDS

The 14 isolated finds (IF) consist of 13 examples of prehistoric lithic flakes and tools and one find of historic debris. All of the isolated finds were found in areas of sheet wash, some in road beds, or areas of livestock disturbance. The tools documented in the isolated finds and sites are illustrated in Figure 17.

IF 5BL6866 is a secondary flake with apparent heat treatment. Its material is a translucent tan/orange chert. There is evidence of use and wear on the sides.

IF 5BL6867 is a biface of reddish tan chert material with white inclusions, demonstrating fracturing at the base and on one edge. It is possibly of Table Mountain jasper.

IF 5BL6868 is a reddish-brown chert secondary flake with white inclusions, a whitish pink and orange chert tertiary flake, and a grey-green quartzite biface. A piece of a steel file was present at this isolated find.

IF 5BL6869 is a secondary flake of opaque white chert, and a tertiary flake of heat altered gray/white chert. Several pieces of modern rusted metal cans were present as well as a railroad spike.

IF 5BL6870 is a semi-translucent white Kremmling chert secondary thinning flake, demonstrating a lip-platform.

IF 5BL6871 is a white, semi-translucent Kremmling chert secondary flake.

IF 5BL6872 is a olive-tan chert secondary flake with a white inclusion, and a white semi-translucent chert tertiary flake. The tabular sandstone in the area are not groundstone but rather imported to support fence posts.

IF 5BL6873 is a brown algalitic chert flake, a red jasper biface base, and a white semi-translucent chert biface edge.

IF 5BL6874 is a stemmed, indented-base projectile point from the Middle Archaic period (3000-5000 BP). The point is serrated, of tan & white chert. There are also two semi-translucent white Kremmling chert secondary flakes and an opaque white chert tertiary chip, the latter probably from the projectile point.

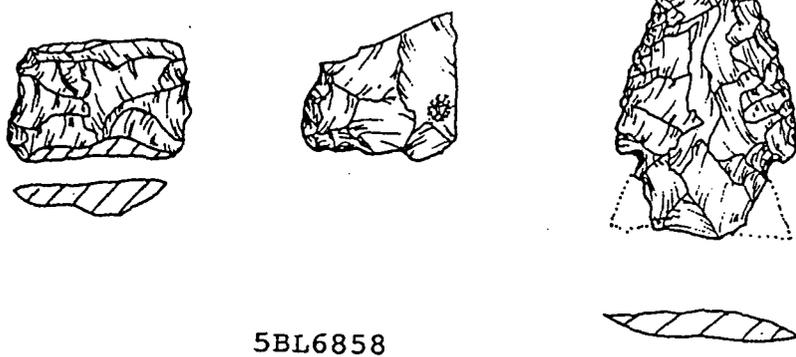
IF 5BL6875 is a jasper secondary flake with an inclusion.

IF 5BL6876 is a retouched, unifacial, white Kremmling chert secondary flake with numerous white inclusions.

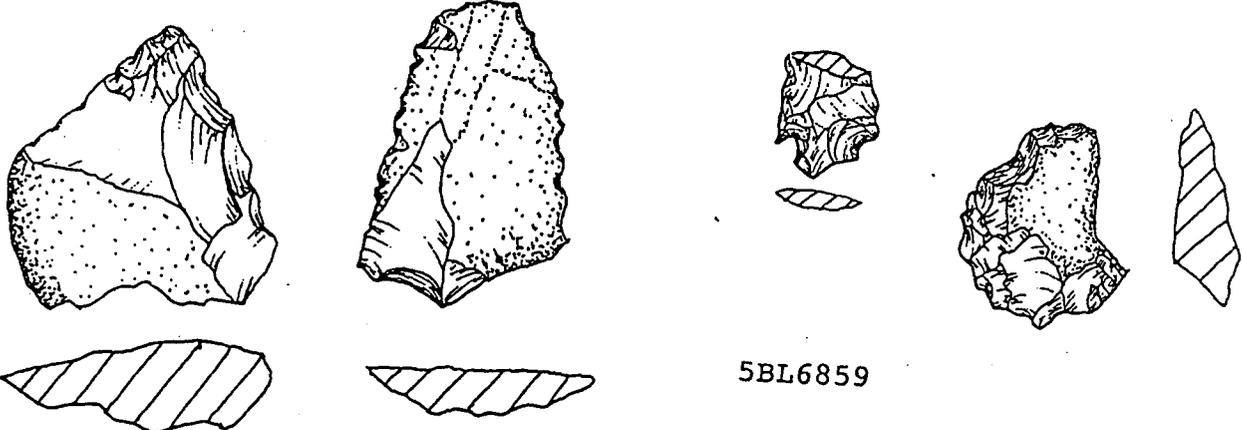
IF 5BL6877 is a reddish-brown chert secondary flake with white inclusions.

IF 5BL7031 is a refuse pile consisting of three historic items: a stove part aggregation labeled "Ram Pilot No. 70; a pile of ten hole-in-top cans; and an enameled coffee pot.

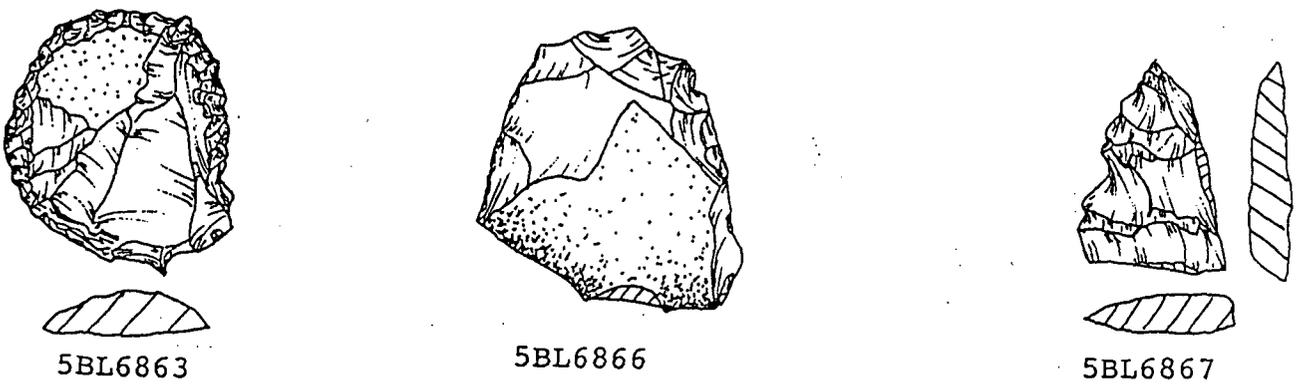
IF 5BL7032 is a gray chert tertiary flake.



5BL6858



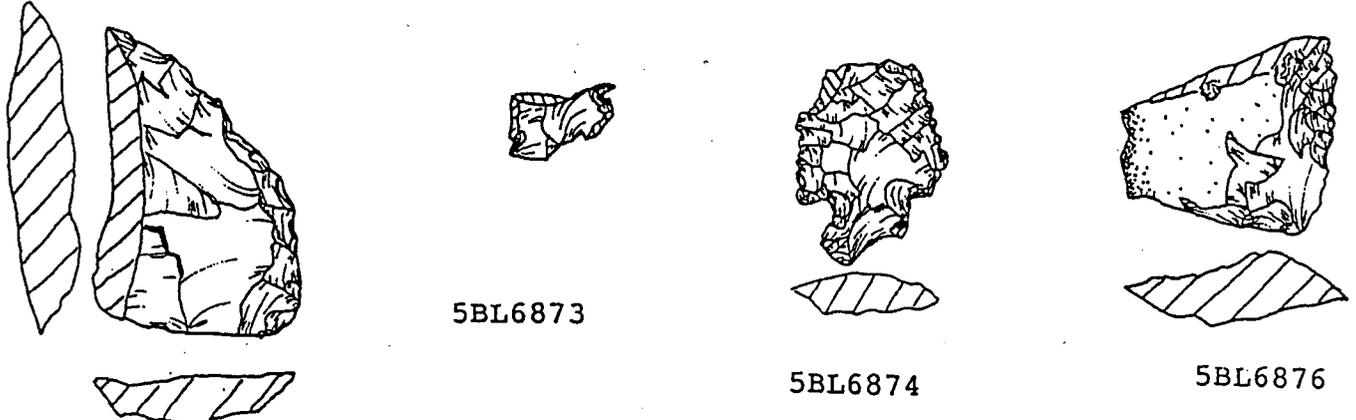
5BL6859



5BL6863

5BL6866

5BL6867

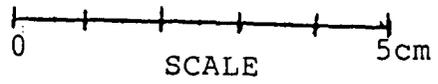


5BL6868

5BL6873

5BL6874

5BL6876



SCALE

FIGURE 17 - Lithic tools located at sites and isolated finds.

## DISCUSSION

The representation of cultural properties in the project area was consistent with the expected range of property types. The majority of the sites were associated with historic mining activities, railroading, and ranching or homesteading. These sites tended to contain structural remains that are more readily visible than are materials such as prehistoric properties tend to present.

Prehistoric properties in the project area were slightly denser in number than anticipated. Though visibility was generally low, there was significant enough sheet-wash disturbance to expose prehistoric lithics with some frequency. This, however, occurred in the expected locale, along North Boulder Creek at the more planar forest groves and adjacent meadows. Only one isolate flake was found near Como Creek. At the low boulder ridges on the north bank of North Boulder creek and in the meadows that expand out from them, there is in fact a consistent scattering of isolated lithic finds and several sites, or loci of activity, suggesting at least repeated short term occupation of that entire vicinity. Given that all of the prehistoric materials were exposed due to some form of disturbance, the area has high potential to contain subsurface prehistoric cultural materials.

Most of the prehistoric lithic materials within the project area are similar to those having source areas in Middle Park. Conspicuous are Kremmling chert and Table Mountain jasper. It is likely that these materials were imported over the Continental Divide to the project area; Middle Park lies to the northeast. As mentioned previously, James Benedict (1985) has documented the apparent traversing of the Continental Divide as at the nearby Arapaho Pass, where Middle Park lithic material was again represented. Both Ives (1942) and Toll (1962) report that an aboriginal trail existed connecting the eastern foothills to Middle Park via Arapaho Pass. Toll's information was based in part on ethnohistoric data provided by Arapaho Indians in 1914.

North Boulder Creek, as a substantial drainage, could have offered consequential resources during transhumance and, ergo, may have acted variously to route travel. Within the project area, diagnostic artifacts have thus far indicated occupation of the area during the Middle Archaic (5000-3000 BP), the Late Archaic (3000-1500 BP) and in association with the Hog Back Complex (ca 650-1430 BP). Any Native American populations remaining to historic times were likely eliminated during the gold rush period, Native Americans officially being sanctioned as *personas non grata* in the area by 1861.

Though Euro-Americans settled the region due to the attraction of mineral wealth, the project area itself was initially subject to homesteading in the 1860s-1870s. Only with the discovery of the

Bluebird Mine lode in the 1870s and the construction of the Batesville mill did mining leave an enduring impact on the landscape, which is still visible today. By the 1890s the heyday of this mining presence was past, though mining continued sporadically.

After the turn of the century, the railroad left its mark in the form of the Switzerland Trail, incorporating Bluebird as a station. The Switzerland Trail was significant enough in linking the mining communities in the area to be listed as a NRHP historic district.

By the turn of the century, the project area lands were also in a trend of consolidation into larger ranches. Notably, one of the first ranches consolidated, that of the Dun estate, was incorporated in connection to Dun's ownership of the Batesville area. When the tungsten boom hit, around 1900, Primos Mining of Lakewood also snapped up project area lands contiguous, at north, to their tungsten belt holdings.

Also by the turn of the century, the City of Boulder was also actively interested in securing the North Boulder Creek raw water supply. In 1919, about the time the Switzerland Trail became defunct, the City's Silver Lake Pipeline was constructed. In 1936, Van Vleet completed the last major consolidation of what is currently known as the Caribou Ranch, and is seemingly responsible for construction of the majority of the current ranch complex.

## RECOMMENDATIONS

The ten new sites and one new element of a previously recorded site documented within the study area were evaluated for their significance and for eligibility for listing on the National Register of Historic Places (NRHP) and the State Register of Historic Properties (SRHP). Eligibility of the previously recorded site is also discussed below. The isolated finds are not eligible to the NRHP or SRHP. The cultural properties and their NRHP eligibility status are listed in Table 1.

### Significance and Eligibility Assessments

NRHP eligibility is judged according the criteria set forth in 36CFR 60.4 below:

"National Register Criteria" means the following criteria established by the Secretary of the Interior for the use in evaluating and determining the eligibility of properties for listing in the National Register: The quality of significance in American history, architecture, archaeology, engineering and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling and association and:

- (A) That are associated with events that have made a significant contribution to the broad patterns of our history; or
- (B) That are associated with the lives of persons significant in our past; or
- (C) That embody the distinctive characteristics of a type, period or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- (D) That have yielded, or may be likely to yield, information important in prehistory or history.

The State Register of Historic Properties uses essentially the same criteria as above, with the addition of a fifth criterion, that being "geographical importance". All properties eligible to the NRHP are eligible to the SRHP.

The previously recorded Switzerland Trail route (5BL358) of the Denver, Boulder & Western Railroad is a historic district listed on the National Register. Though lacking in track and trestle structures, the railroad bed remains a passably visible and contiguous grade. Its route then still links many historic mining camps and towns, many of which served as stations.

Table 1: Description & Eligibility of Cultural Properties			
Site Number	Field No.	Site Type	Eligibility
5BL358.1	6	Dugout foundations at railroad	Eligible
5BL6857	1	Open lithic scatter	Need data
5BL6858	2	Open lithic scatter	Need data
5BL6859	3	Open lithic scatter	Need data
5BL6860	8	Historic cairn alignment	Not eligible
5BL6861	4	Lithics / historic foundations	Not eligible
5BL6862	7	Historic structure remnant	Not eligible
5BL6863	5	Multi-component: open lithic & Batesville mill / community	Need data
5BL6864		Silver Lake Pipeline	Not eligible
5BL6865		Como Ditches #3 & #4	Need data
5BL6918		Como Ditch #2	Not eligible
IF No.		Isolated Find Type	
5BL6866	1	Utilized 2° flake	Not eligible
5BL6867	2	Biface fragment	Not eligible
5BL6868	3	Biface fragment, 2 flakes	Not eligible
5BL6869	4	2° flake & 3° flake	Not eligible
5BL6870	5	2° flake	Not eligible
5BL6871	7	2° flake	Not eligible
5BL6872	8	2° flake & 3° flake	Not eligible
5BL6873	9	Biface frags, 2° flake	Not eligible
5BL6874	10	Middle Archaic point, 3 flakes	Not eligible
5BL6875	11	2° flake	Not eligible
5BL6876	12	Retouched 2° flake	Not eligible
5BL6877	13	2° flake	Not eligible
5BL7031	14	Historic refuse pile	Not eligible
5BL7032	15	3° flake	Not eligible
Previously Recorded Site			
5BL358		The Switzerland Trail Railway	Eligible

Site 5BL358.1, the group of dugout foundations adjacent to the Switzerland Trail grade, is eligible to be listed on the National Register as a contributing element to the historic district. It was one such camp or community at the railway, whose historic connections need to be further investigated. Given heavy duff cover, subsurface archaeological potential is unknown and would need to be tested. The hearth structures at the site would need to be compared to other such structures, if possible, to determine their uniqueness and potential contribution to history. 5BL358.1 is eligible under criterion "A," given its association with the historic district of the Switzerland Trail, and possibly under criterions "D" and/or "C."

The open lithic scatter sites, 5BL6857, 5BL6858, and 5BL6859 are all potentially eligible for listing on the NRHP under criterion "D." For final determination of this eligibility further data is needed; the sites will need to be subjected to test excavations to ascertain their potential for buried cultural material. The sites are all eroding out of sheet washed areas, with one additionally in an area of livestock disturbance and another in a road bank. Given the cause of their surface exposure and given the distribution of prehistoric isolated finds throughout the vicinity, exposed due to similar disturbances, in similar topography, the area seems to present a potentially significant prehistoric occupation that should be investigated.

Site 5BL6860, the stone cairn alignment, is not eligible to the NRHP under any of the above criteria. The cairns are not unique in structure or design, nor known to be associated with significant past events or personage, nor do they demonstrate any archaeological potential. The site is not eligible to the SRHP.

Site 5BL6861 is the multi-component site consisting of historic foundations and two isolated lithic flakes. Neither the historic nor the prehistoric components of this site are eligible to the NRHP or SRHP. The foundations maintain no structural integrity nor are there significant artifacts present to indicate archaeological potential. The prehistoric component does not appear substantive.

Site 5BL6862, an historic structure remnant, is not eligible to the NRHP or SRHP. The structural elements retain no integrity and the site does not present archaeological potential.

The multicomponent site (5BL6863) which includes Batesville, the North Boulder Mill site, is potentially eligible for listing on the NRHP under criterion "D;" further data is needed. Its historic structures lack integrity of design, workmanship, and materials, presenting only a few foundations, however the artifact scatter and possible outhouse depression indicate some archaeological potential. The site's prehistoric component is an open lithic scatter comprised of five flakes and a scraper. As with the three previous open lithic scatters, given the concentration of lithic

materials throughout the vicinity and the fact that they are eroding out of the soil, testing for subsurface potential is again necessary to determine eligibility for NRHP nomination as a prehistoric site.

The Silver Lake Pipeline, site 5BL6864, is not eligible to the NRHP or SRHP. It lacks historical integrity due to reconstruction of the alignment in 1947. Though it has a scatter of ceramic piping along the alignment, this artifactual material has no archaeological potential.

The Como Ditches #3 & #4, site 5BL6865, are potentially eligible to the NRHP under criterion "A;" further historical data is needed to determine the site's contribution to the development of agriculture in the area. Otherwise, though this ditch system maintains structural integrity, it is neither unique in structure or purpose.

The Como Ditch #2, site 5BL6918, is not eligible to the NRHP or SRHP. The headgate structure is recent, and the ditch appears to be inactive, with most of the ditch seeming to be silted in. The ditch thus lacks historic integrity.

None of the sites in the study area will be impacted by the replacement of the Silver Lake Pipeline. The route of the pipeline will avoid all sites, except the Switzerland Trail, 5BL358. The pipeline crosses 5BL358 at the point where the Switzerland Trail crosses Como Creek. The railroad bed here is a high earthen berm on either side of the creek, and the creek was apparently crossed via a trestle, which no longer exists. The railroad bed is thus already breached in this location, and no disturbance to the railroad will take place.

It is noteworthy that a significant number of prehistoric stone artifacts were encountered. These lithics, occurring both as isolated finds and as clusters of artifacts representing loci of cultural activity (sites), were exposed in disturbed areas in the meadows and forest between Como Creek and North Boulder Creek, southeast of the Switzerland Trail. This area is outside of the area to be impacted by the planned pipeline construction.

The quantity of visible prehistoric manifestations, and the fact that their visibility is from exposure due to erosion or other disturbance, indicates the probability that undetected, buried prehistoric sites are contained within this portion of the study area.

In this specific area, it is not unlikely that a "Discovery" situation could occur, with prehistoric material being unearthed by ground-disturbing operations in the area. If any future ground-disturbing activity is planned for this area, a comprehensive test

excavation program should be initiated and conducted prior to any such disturbance, to assist in determining the extent and distribution of prehistoric cultural material.

Since no significant cultural resources will be impacted by the replacement of the Silver Lake Pipeline, it is recommended that the project be allowed to proceed as planned.

Peter N. Corbett                      9.25.97  
Principal Investigator                      Date

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## APPENDIX A

### *NATIVE AMERICAN CONCERNS*

Native American Tribes with historical connections to the study area were consulted about the pipeline replacement. A Native American organization that does not represent tribal government, the Medicine Wheel Coalition, was also consulted.

Some 13 tribes were contacted and invited to share any information they may have about the study area, make comments about the area and the project, and to relate any concerns they may have about the project. The tribes were contacted via letter, an example of which is included below. The tribes and persons contacted are listed on the letter. Included with the letter was a map of the City of Boulder's Boulder Creek Water System, depicting the Silver Lake Pipeline in relation to the surrounding terrain. Violet Catches, a traditional, native-speaking Lakota, coordinated the consultation.

The tribes with the most direct and recent historical connections to the study area were also contacted by telephone. Conversations were held with the designated tribal representatives of the Southern Ute, Northern Ute, Ute Mountain Ute, Southern Cheyenne & Arapaho, Northern Arapaho, and Northern Cheyenne.

The NCS cultural resource inventory demonstrates that the alignment for the Silver Lake Pipeline restoration does not impact any known Native American cultural sites. The entire alignment and the area around Lakewood Reservoir was also walked and inspected by Violet Catches. Ms. Catches did not find any locales or areas along the pipeline right-of-way which would be considered as sacred or special, or cause for concern. She did note several medicinal /ceremonial plants grow in areas on the Caribou Ranch and around the Lakewood Reservoir. The plants, which are used in various ways in ceremonies, grow in profusion in the area, and the plant populations will not be threatened by construction associated with the pipeline replacement.

Ms. Catches also inspected the North Boulder Falls (aka Arapaho Falls, Blue Bird Falls), a waterfall in the study area that is on land that is part of the City of Boulder Watershed, owned by the city. Ms. Catches stated that the water going over the falls is sacred, from the top of the falls to the bottom. The water is not sacred above the falls, nor is it sacred below the falls. Ms. Catches thought that areas directly adjacent to the waterfall would have been used as prayer stations in the past. The waterfall will not be impacted in any way by the pipeline replacement, nor will

the flow of water in North Boulder Creek and over the falls be halted by the diversion of water above the falls into the pipeline.

None of the tribes have any information to share about the study area, nor did they have any comments or concerns about the pipeline. The only concern stated was from Alden Naranjo of the Southern Ute. Mr. Naranjo stated he thought there may be a couple of trails near the Lakewood Reservoir. He was not concerned that the pipeline replacement would impact any trails.

During a tour of the Caribou Ranch on May 24, 1996, Glen Porzak, an attorney serving as counsel to Caribou Ranch, informed City of Boulder staff, NCS, and other consultants that Native Americans had been brought to the ranch in relation to the pipeline project. Mr. Porzak stated that we would receive a report of their visit and investigation. James Guercio, owner of the Caribou Ranch, then stated we would "be denied access" (to the report). The City of Boulder Public Works Department subsequently received a letter dated April 2, 1996, from Jack Trope, attorney for the Medicine Wheel Coalition. Mr. Trope asked that the Coalition have the opportunity to consult with the City of Boulder regarding the pipeline.

The Medicine Wheel Coalition for Sacred Sites of North America is a group of Native Americans from various plains tribes whose stated purpose is to protect sacred sites. Unlike the Medicine Wheel Alliance, the members are not representatives of the tribes involved, and do not speak for the tribal governments. They have the same status as any interested party.

NCS contacted both Francis Brown, a Northern Arapaho who is president of the Coalition, and Mr. Trope, the attorney, by mail and by telephone. Neither person was able to say who from the coalition had been to Caribou Ranch. Neither person knew if a report existed about the Coalition's inspection of the study area. Neither Mr. Brown nor Mr. Trope raised any specific project concerns.

Following is an example of the letter sent to the various tribes regarding the project.

NATIVE CULTURAL SERVICES

4484 HAMILTON COURT  
BOULDER, COLORADO 80303  
(303) 494-5267

July 17, 1997

Haman Wise  
Shoshone Tribal Elder  
PO Box 766  
Ft. Washakie, Wyoming 82514

Dear Mr. Wise:

This letter is to notify you and the Shoshone about a Cultural Resource study we are conducting on the City of Boulder - Silver Lake Pipeline, and to inquire whether the Shoshone have any information, comments, or concerns to share with us.

This cultural resource study is being done by Native Cultural Services for the City of Boulder so that the City of Boulder staff will know what types of cultural sites are in the area and how to manage the cultural properties. The City of Boulder is having the study done out of a sense of responsibility to deal with the cultural properties. There are no legal requirements for the City of Boulder to do this. There is no federal involvement. The City of Boulder Staff are sincere in their desire to properly manage the resources in the area. They would be most happy to hear any comments or concerns the Shoshone have.

The City of Boulder's watershed is from the area of high mountains just east of the Continental Divide called the "Indian Peaks", adjacent to the Indian Peaks Wilderness Area. This is the headwaters of North Boulder Creek. The Silver Lake Pipeline takes water from North Boulder Creek and carries it 3.6 miles to the Lakewood Reservoir. The pipeline crosses the Caribou Ranch, which is a private ranch. Large portions of the ranch have recently been acquired by the City.

This was ancestral Ute territory, and by treaty was land of the Southern Arapaho and Southern Cheyenne. Other tribes also used and occupied this area of the Rocky Mountains. Beginning in the 1860s, (white) Euro-Americans began using this area of the mountains for ranching and precious metal mining.

The Silver Lake Pipeline was originally constructed in 1919 to protect the water supply from contamination by tungsten, gold, and silver mining, and from pollution from ranching and recreational

camping. The pipeline was replaced in the 1940s, and needs to be replaced now due to leaks.

Our surface survey of the Silver Lake Pipeline has located archaeological sites only from the period of Euro-American use. A railroad went through the area to serve the mines, and a construction camp from the railroad is present near the pipeline.

Native American sites, such as camps, have been found by our survey on the Caribou Ranch. The Native American sites and artifacts are not near the pipeline and will not be affected by the pipeline replacement project. There may have been sacred sites or traditional cultural properties in the area.

NO KNOWN CULTURAL SITES WILL BE IMPACTED BY THE PIPELINE RESTORATION.

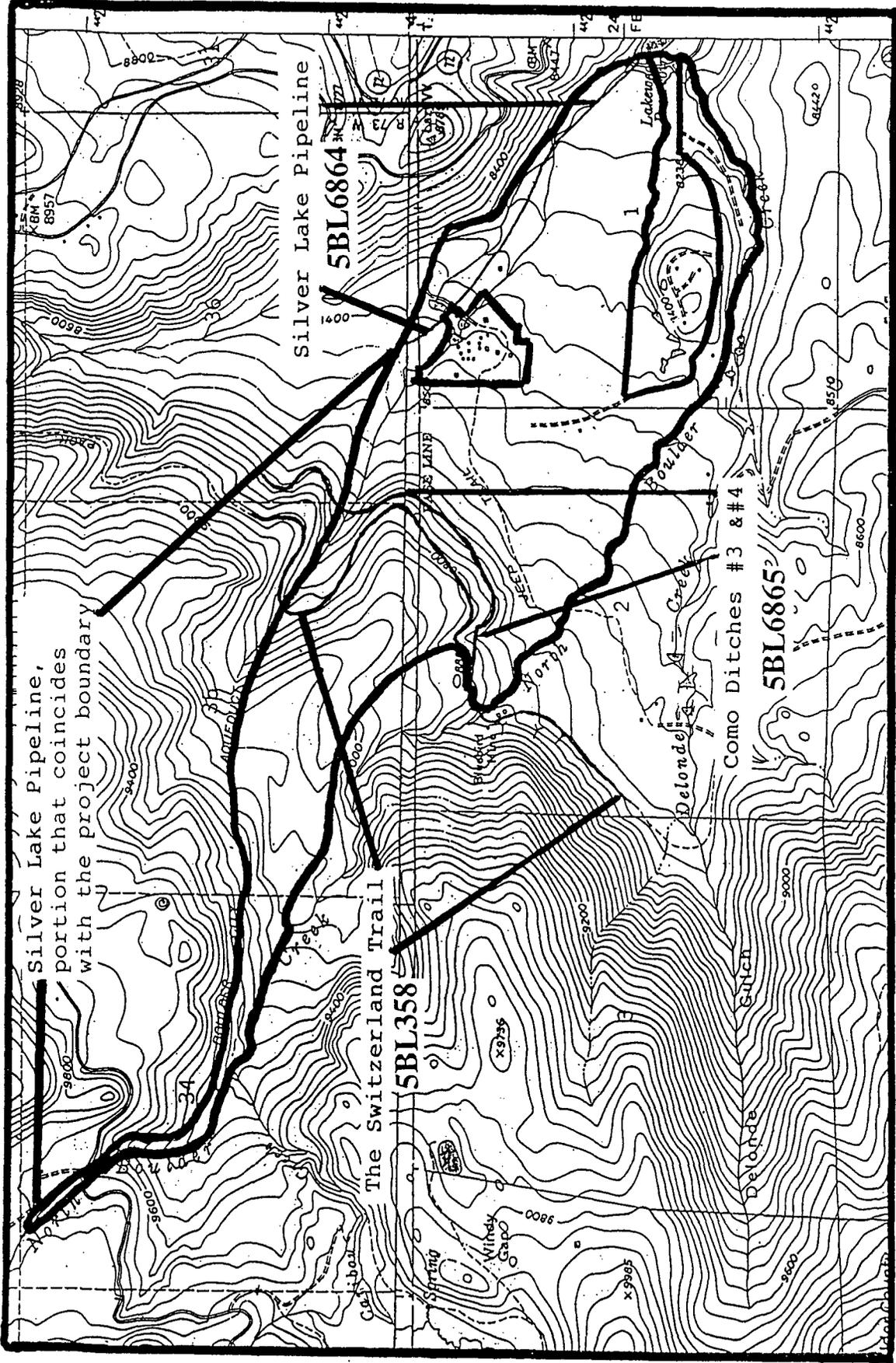
If the Shoshone have any comments, concerns, or information to share with us, please feel free to do so. Violet Catches (Lakota) is coordinating Native American consultation on this project. Please don't hesitate to contact her, either in writing or by telephone. If there is any information that is sensitive and should not be made public, you can discuss it with Ms. Catches, and she will come up with a way to make the City of Boulder staff aware of the issue without revealing confidential information.

Thank you,

Pete Gleichman  
Director

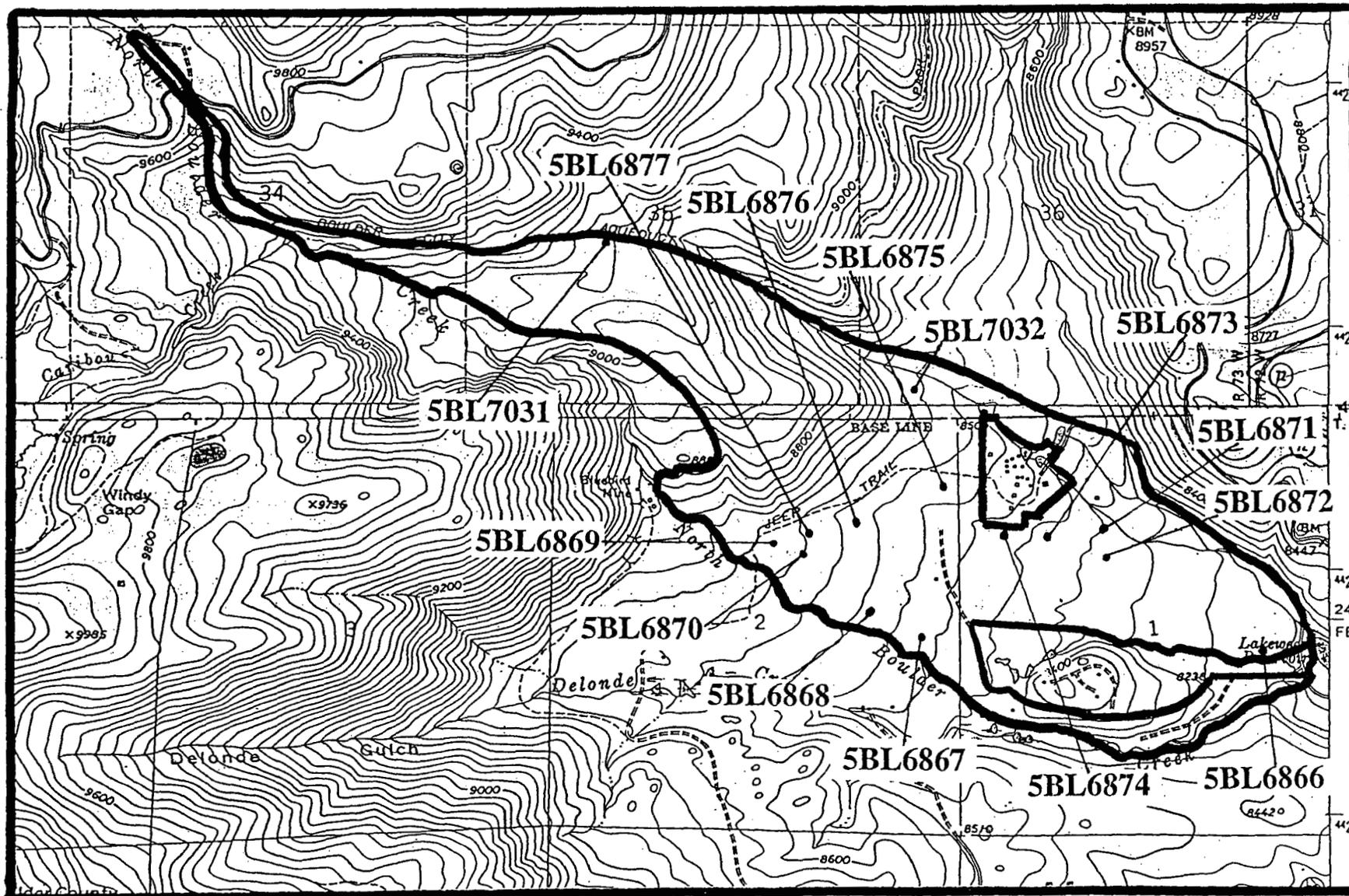
Violet Catches  
Coordinator

cc: Ute Mountain Utes - Mr. Terry Knight  
Southern Ute - Mr. Alden Naranjo  
Northern Utes - Ms. Betsy Choospooch  
Northern Arapaho - Mr. Richard Brannon  
Southern Arapaho - Mr. Gordon Yellowman  
Cheyenne-Arapaho Tribes - Mr. Archy Hoffman  
Northern Cheyenne - Mr. Butch Sooktis  
Rosebud Sioux - Mr. Terry Grey  
Oglala Sioux - Mr. John Steele  
Pawnee - Ms. Elizabeth Blackowl  
Kiowa - Mr. Billy Evans Horse  
Apache - Mr. Henry Kostzuta  
Comanche - Mr. Wallace Coffey  
Shoshone - Mr. Haman Wise  
Medicine Wheel Coalition - Mr. Francis Brown, Mr. Jack Trope



**RESOURCE LOCATION MAP: LINEAR & PREVIOUSLY RECORDED SITES**

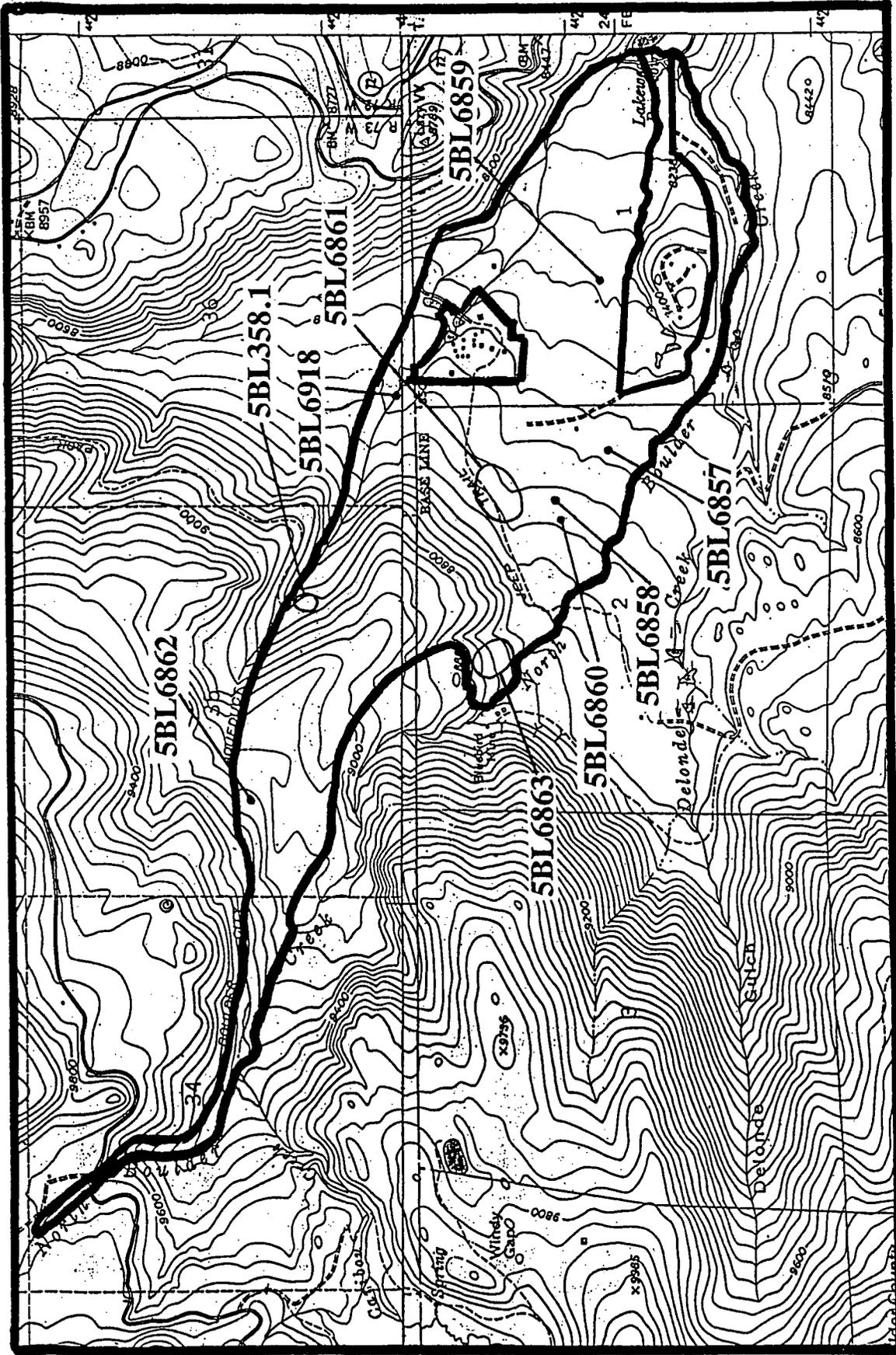
USGS 7.5' Quadrangles Nederland, CO. 1977 (T1S, R73W)  
 Ward, CO. 1957 pr '78 (T1N, R73W)



**RESOURCE LOCATION MAP: ISOLATED FINDS**

USGS 7.5' Quadrangles Nederland, CO. 1977 (T1S, R73W)

Ward, CO. 1957 pr '78 (T1N, R73W)



RESOURCE LOCATION MAP: SITES  
 USGS 7.5' Quadrangles Nederland, CO. 1977 (T1S, R73W)  
 Ward, CO. 1957 pr '78 (T1N, R73W)