

**Kennecott Mines NHL**  
Graphic Layout Record Document – Rev1

**ALDRICHPEARS ASSOCIATES**

SEPTEMBER 14, 2016

# Blackburn School

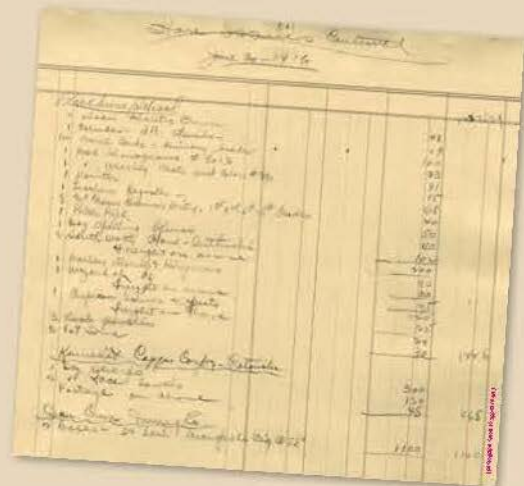
Built in 1913, moved to Kennecott circa 1915,  
restored between 2002 and 2005

## Moving with the boom and bust of mining towns

In 1913, the Kennecott Corporation supplied materials to construct this building in the tiny community of Blackburn. Located along the railway between Kennecott and the future town of McCarthy, Blackburn had grown up as prospectors moved into the valley.

By 1915, however, Blackburn was mostly empty—its spring dried up and everyone moved to McCarthy, which was booming as a stop-over on the way to the Chisana gold fields. Kennecott was also booming, so the Corporation moved this building up to its present location on a flatcar. It served as a school for workers' children until the end of the 1921-1922 school year, when the student population had grown again and school was set up in the new and larger Two Room School. This building was then used for storage.

**Photo: Last day of school May 16, 1919.**



A handwritten ledger or account book with columns and rows of text and numbers. The title at the top is "Blackburn School" and the date is "May 16, 1919". The ledger contains several columns of entries, including names and amounts. The rightmost column shows a total of 1100.00. The ledger is written on aged, yellowed paper.

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# Forged in the earth, found at the contact zone

**Kennecott's copper was a long time in the making, but local prospectors quickly learned to look for it near the “contact zone” where greenstone meets limestone.**

Lava outflows originating in the Middle Triassic (230 million years ago) sank and were covered by a warm, shallow Pacific sea. In the Late Triassic (225–215 million years ago), the sea deposited sediment, plant material, and the calcium-rich remains of mollusks, snails, and algae. For millions of years, these two layers were buried by younger sediment, compressed, and heated. The lava morphed into greenstone and the sea sediment became limestone.

Between 150 and 125 million years ago, as Earth's tectonic plates shifted and collided, the greenstone and limestone layers were forced up and tilted into the mountain ranges in front of you.

Circulating fluids deposited some of the copper from the original lava into voids in the limestone, making the contact between the two layers a good clue when searching for copper. In both layers, chemical reactions created ore—a blend of metal and rock. Glacial activity and erosion exposed these deposits, making them available to the Ahtna, the local Alaska Native tribe, and visible to the prospectors who first surveyed this area.

**[Above]** You can see the contact zone—the geological feature that excited early prospectors—in the hills across the valley. Although those hills contain no copper, the contact zone on this side of the valley, is associated with rich copper deposits.



- T** Tree Line
- G** Greenstone
- C** Contact Zone
- L** Limestone



# West Bunkhouse

Built in 1917

## Home is where you hang your hat.

This bunkhouse housed up to 60 mill workers at any one time—the mine workers stayed in camps high up on the mountain, near the entrances to the mines. The mess hall and kitchen are on this floor. Downstairs are the wash room, toilets, and kitchen staff quarters. Upstairs are two floors of dorm rooms and a small common area.



Although accommodations here may seem rustic to us, the bunkhouse offered luxuries that not everyone had at home, even in the 1930s: electricity, hot water, and steam heat to warm workers through the long winters. Room and board included three hot meals a day and a hospital fee, and cost \$1 to \$1.50 per day—about 25% of a worker's daily earnings, which ranged from \$3.50 to \$5.50 depending on the year and the job.

[Top Photo] The starting rink at Kennecott in the 1920s, lit up in the dark of winter.

[Photo at left] A hallway on the dormitory floor upstairs.

[In the kitchen doorway] Japanese cook with workers at Junbo Mine camp, around 1914.

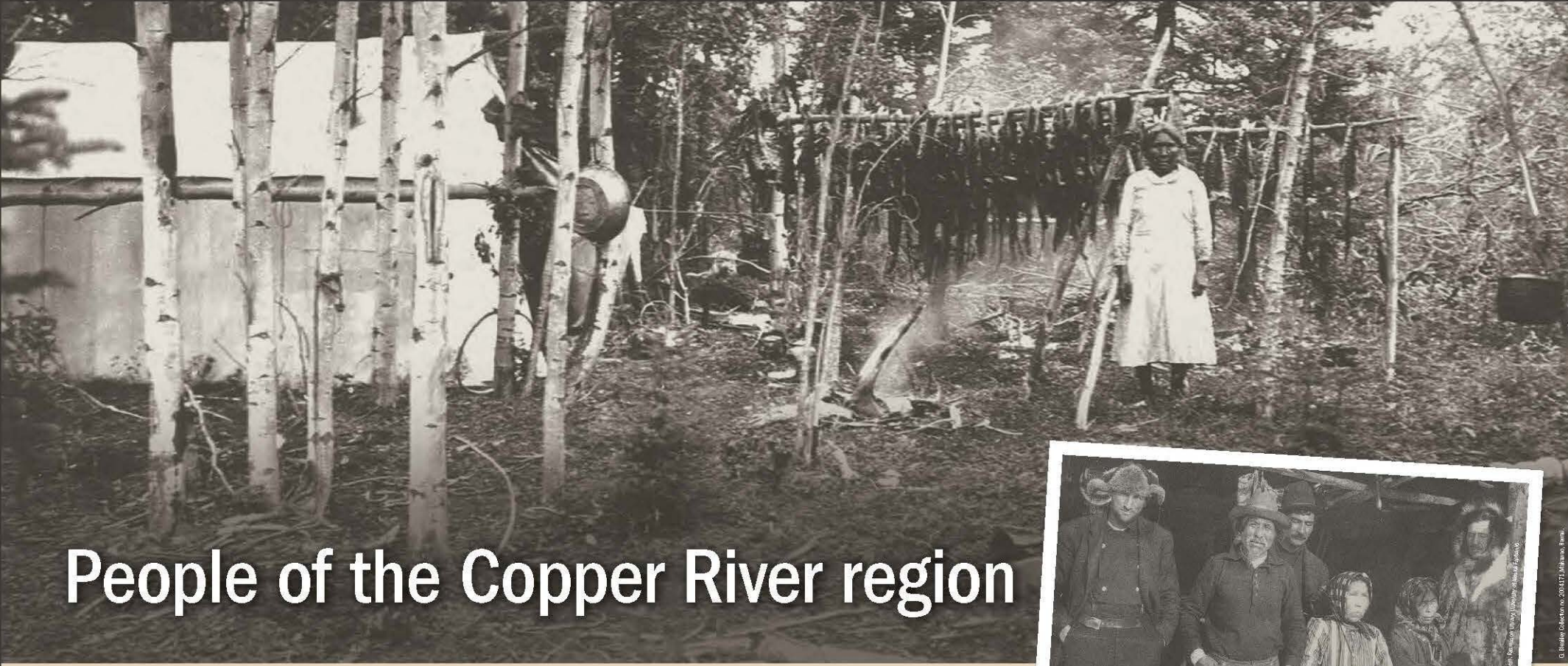


# Rescue and Remediation

Rich Kirkwood, owner of the Kennicott Glacier Lodge, saved this building from fire in 1995. Rich saw smoke billowing out of the bottom windows of the Bunkhouse, raised the alarm, and rushed to put it out. Thanks to Rich's quick thinking, only the basement was damaged.

The National Park Service is currently working to restore this building and open it to the public. Because of the fire damage, the basement needs repair. Elsewhere, lead paint is being removed, and the mess hall is being restored. Both the Park and the McCarthy-Kennicott community are interested in adaptive re-use of this building, that is, rehabilitating and adapting it to meet future needs, rather than building new structures.





# People of the Copper River region



**Ahtna people are deeply connected with this landscape and its resources, including copper. The Kennecott story begins with them.**

Ahtna have lived in Alaska for thousands of years. Archeological records provide evidence of human habitation dating back 8,000 years in the Copper River basin, and about 1,000 years in this particular area—as soon as retreating glaciers made it possible. To this day, Ahtna people live along the Copper River in many of the communities through which you passed to arrive here. As they moved into the area, Ahtna began gathering copper metal nuggets from streambeds and working them to create blades, points, needles, and beads that they

traded across vast distances. Although the livelihoods of all Ahtna depended on the bounty of the land and rivers—moose, berries, plants, and especially salmon—copper made some Ahtna families rich and powerful. Russians were aware of the area's copper possibilities by the late 1700s, but their violent relationship with the Ahtna blocked their access to the resource. A century later, Ahtna Chief Nicolai sold information to a group of American explorers and prospectors, confirming the existence of copper near here.

**[Top Photo]** Smoking fish in an Ahtna camp, around 1898.

**[Photo Above]** Without assistance from Chief Nicolai and his people, early American expeditions through the region would likely not have survived, let alone found copper. The hand-written caption on this 1899 photo reads, from left to right: Frank Jackson, Chief Nicolai, Mrs. Chief No. 1, Mrs. Chief No. 2, "Woodland." The man standing behind Nicolai is unnamed.



# Two Room School

Built circa 1915-1918, used as a school beginning in 1923, restoration completed in 2004

## Education—a community affair

This school was a busy place, day and night. As many as 20 employees' children attended classes during the day. In the evenings, more than 100 workers filled the school to study for their citizenship exams and improve their English language skills. For many, a job here was a step towards American citizenship.

The grounds around the school were in constant use for ice skating, baseball, field hockey, and handball. Sometimes, the building was used for church service and Sunday school by traveling ministers.



Sir:  
This acknowledges your regard to Miss Brotha Kennedy who has been one of the most successful teachers we have ever had in Kennebec and I doubt if you will be able to do any better. She is not only an excellent teacher, but has a pleasant personality, which means so much to a small community. We shall be glad to have her back next year and I am sure you will be glad to engage her.



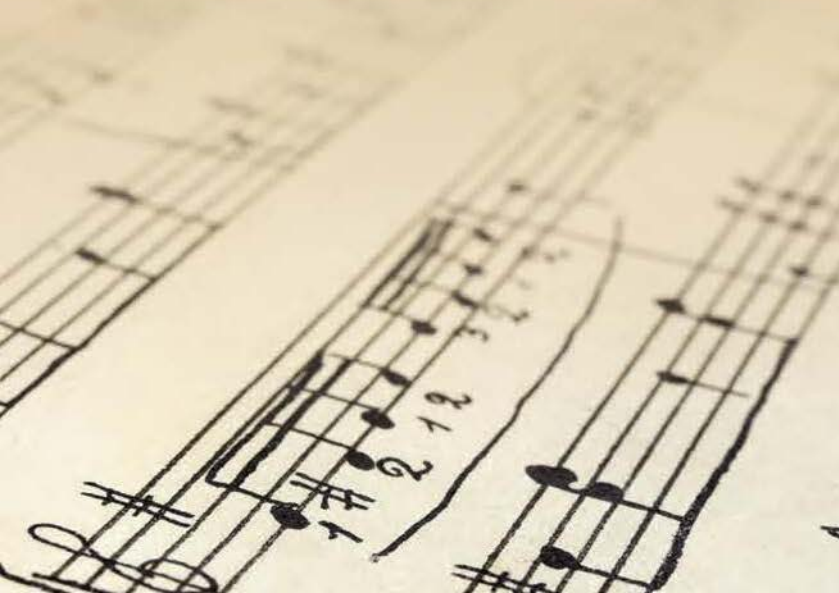
# Recreation Hall

Built in 1916, restored between 2002 and 2004

## A place to socialize and celebrate

The twinkle of lights and sound of music enticed managers, their families, and workers to fill the Recreation Hall for dances, symphonies, school plays, Christmas pageants, movies, the occasional church service, and indoor sports like basketball, shuffleboard, roller skating, wrestling, and boxing matches. Organizing and enjoying these activities together helped create a sense of community among employees.

The Kennebec Copper Corporation provided the Recreation Hall and other comforts to attract and keep workers. In exchange, the Corporation expected them to work hard and stay out of trouble.





# Post Office

Built in 1917, restoration completed in 2006

## Keeping in touch with home

The vast majority of Kennecott workers were far from home and family, so the Post Office was an important link to their loved ones. Workers sent letters and money orders—after all, they were here to make and save money. They also received news and mail-order goods. Mail traveled by train and, in later years, by air. Some long-term staff had brass mailboxes here, but most letters were sent to their recipients via general delivery.

To send news or to wire money home more quickly—and at greater expense—workers went to the Wells Fargo telegraph service in the Railway Depot.

**[Photo Below]** “Snowbird at the post office, 1937.”



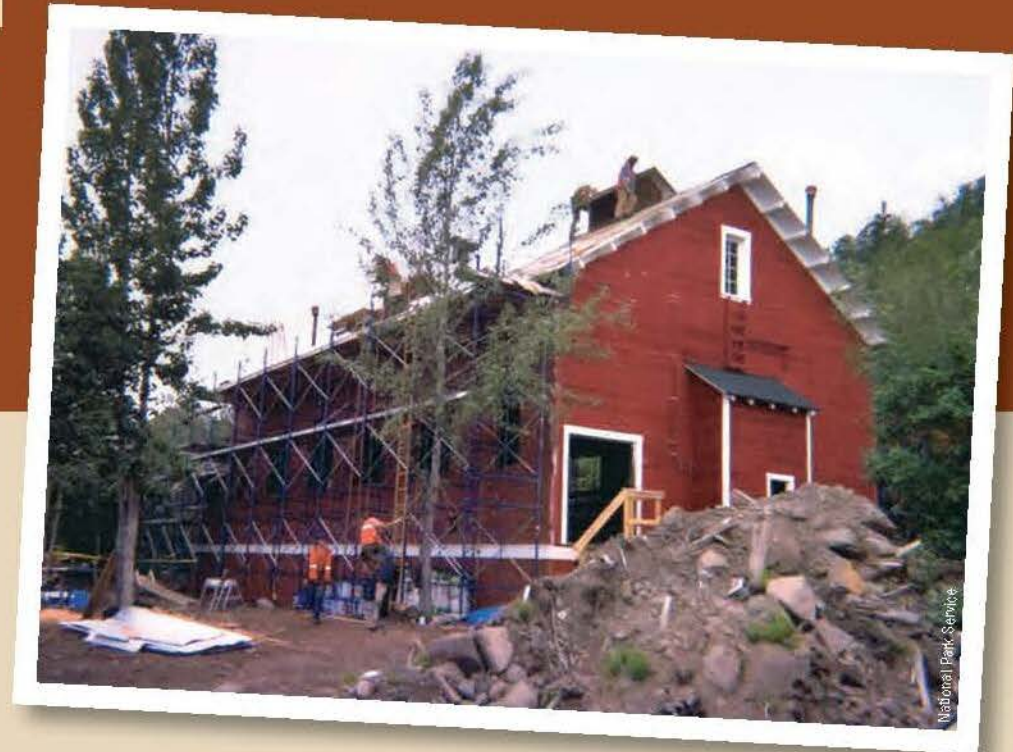
# A community restoration effort

Even without much maintenance since the mines closed, the Recreation Hall was still used by residents of McCarthy-Kennicott as a gym, performance, and exhibition space through the 1980s and 1990s. However, by 1999, the structure was suffering. Friends of Kennicott, a community organization formed to protect the site's history, raised funds and supplied materials. The National Park Service maintenance team, composed mostly of locals, lovingly restored the Hall in 2002-2003.

Today, the Recreation Hall is owned by the National Park Service and managed by Wrangell Mountains Center in McCarthy. Available for use by the community, the National Park Service, and for private functions, it is an example of how everyone in the valley can pull together.

*“The growing partnership between Friends of Kennicott and the National Park Service has allowed us to do more than either of us could have accomplished alone.”*

—Friends of Kennicott



# Rise, Fall, and Resurrection of an Icon

## Kennecott's Concentration Mill through time

### Before the railway

1906 to 1911

The camp is established and construction of the Mill and aerial tramways begin. The most powerful machine available is a small steam-powered sawmill hauled up by pack train. The Mill is not empty for long as the train brings in power generators and concentrating equipment, beginning in 1911.



1909 The Bonanza train terminal and an aerial tram tower are erected on the hill. Below the train are the log portions of the office building and log structure which had several functions over time. The path for the railway has not yet been graded.



1911 The railway tracks have been laid, and a sucking shed at the bottom of the tracks to facilitate loading. The Mill's two main opposing fronts are erected and the train brings in equipment to fill them. A chute allows high-grade ore to bypass processing in the Mill and go straight to the bottom for sacking.

### The height of operations

1912 to 1925

As miners pull increasing amounts of ore from newly opened mines, the Mill must keep up. Output more than doubles thanks to increased manpower and machine capacity. Meanwhile, profits soar as World War I fuels demand for copper. Kennecott re-invests in technology, making the Mill ever more efficient. Production peaks in 1925 at 300,000 tons of ore and 30,000 tons of copper.



1915 The trunk train terminal is complete at the top of the Mill. Below it, a collection point for Mill tailings from sacking onto the tracks. A chute down the south side brings limestone tailings containing low-grade ore across the tracks, to be treated at the new Leaching Plant (the building with the smokestack).



1917 A new Hancock jig addition emerges from the Mill's south face, built up the hill. Across the tracks, the Leaching Plant has been expanded and a series of conveyor belts built to deliver tailings.



1924 Mill equipment is continuously added to and improved, and other additions are built to accommodate it. The Hancock jig addition built up the hill is expanded. Across the tracks, a Leaching Plant has been added to the Leaching Plant for wet Mill tailings, and both are in full swing.

### Slowing down

1926 to 1938

New ore discoveries slow down. Mill equipment is improved but there are no major additions. Kennecott closes in 1938.



1938 The last year of operation, 36 new additions closed from 1929 to 1938 as the Great Depression affects the copper market, and is opened with a smaller workforce. Ore hauling is done more out.

### Decline

1938 to 1989

The site is abandoned in 1952. Surface rights are sold in 1957 and change hands multiple times. Kennecott is subdivided for sale in 1977.



1976 Time and weather rattle the work begun by people. In 1977, Day Proctor was contracted to clean up the steel buildings, salvaged machinery and equipment, haul it off the Mill roof, essentially resulting in the damage seen in the photo. Through the 1980s, other buildings were also demolished.

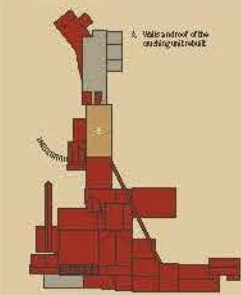
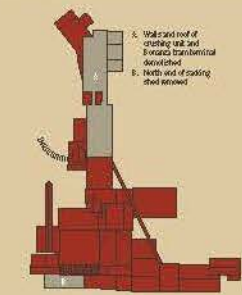
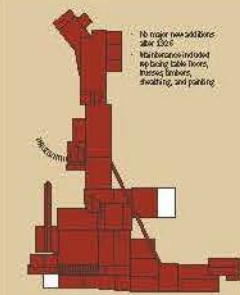
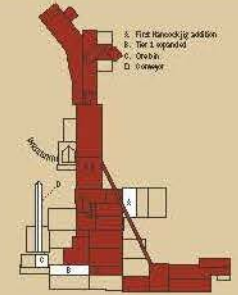
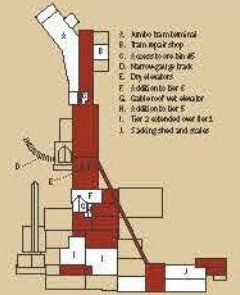
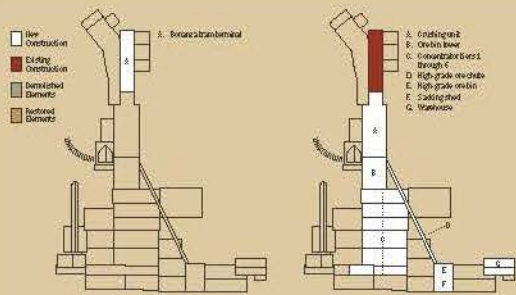
### Restoration

1990 to present

Friends of Kennecott launches emergency stabilization of key buildings, followed by National Park Service acquisition of the site in 1998. Restoration work continues throughout the site today.



2004 The National Park Service acquires the Kennecott in 1998 and also oversees stabilization of the Mill and restoration efforts thereafter, in partnership with Friends of the Kennecott. Stabilization and restoration work continues throughout the site today.



# Refrigeration Plant

Built circa 1917, restoration completed in 2006

## A high-tech solution for keeping meat cold

Refrigerated train cars delivered huge sides of beef and other meats to Kennecott. Staff transferred the meat onto hooks that hung on a track outside, and then ran the hooks along the track into this freezer room. The track is still visible overhead. The meat went to the mill camp's mess hall kitchens, to the mine camps via aerial tram, and to family cottages.

Despite having a glacier out the back door, Kennecott froze meat using cutting-edge technology: ammonia refrigeration. Food freighting costs were enormous, trains were not reliable in poor weather, and the workers absolutely depended on the food stored here—no chances could be taken.





About 50 people are buried in the Kennecott cemetery. Many died on the job. The Corporation was unable to contact some workers' families, especially during the war. Other families could not afford to have their loved ones returned.



# Store

Built in 1917, restoration completed in 2006

## A monopoly, but a fair price

This store served everyone in the mill camp and mines. Worker's clothing and household items were displayed along one long wall, and dry goods and food along the other. Families living in the cottages could get their standing orders delivered to them via horse-drawn cart. Mine workers sent down their orders and goods were shipped up via aerial tram. Most workers had their purchases subtracted directly from their paychecks, or used company scrip, like a company currency.

Despite its absolute monopoly, the store charged fair prices, and in the 1930s it operated at a very slight loss. The expense of the goods was due to shipping costs, like today. The store was an important service. Without it, the Corporation could not have retained a workforce.





# Warehouse

Built in 1917

## A repository of supplies for the mines and Mill



All hardware was sent up on the train, entered the Warehouse through the south doors (to your left), and exited through the north doors (to your right). Some supplies were kept upstairs near the accounting offices. Raw materials such as lumber and pipes were stacked in covered sheds outside. To request materials for a job, workers came to the desk at the north end of the building with a requisition signed by their supervisor. Everything was meticulously accounted for in the ledger.

Shipping expenses exaggerated the value of every bolt and screw, so nothing was wasted and items were often reused. However, when the mines closed in 1938, it was not economical to take hardware out by train, and there was some hope the mines would reopen one day. Much was left behind.

William Hoberg	270	135	3713
Ira Linnell	34	150	15100
Joseph Carro	20	122	2440
E. A. Casary	19 1/2	135	2666
William Brennan	28 1/2	122	3477
Henry Carro	22	122	2684
James Mc Hugh	24	135	3240
E. H. Herry	30	140	4200
Geo. Kimball	29 1/2	122	3599
Owen Lynch	32	150	4800
Howard Furrow	24	140	4092
J. Sall. Carro	30	122	3660
Paul Skibodian	30	100	3000
Charles Mitton	6	140	840
Raymond Subay	30	135	4050
Freeman Hedds	13	122	1586
Joseph Stevens	34	135	4590
Lizzie Foster		1007 3¢	3021
Ira Dunifer		1060 3¢	3180
Edw. Dishox		615 3¢	1845
J. J. Pratt		1041 3¢	3123
Ho. H. Salvin		1041 3¢	3123
Cassell Nelson	24	135	4290
		1253 3¢	





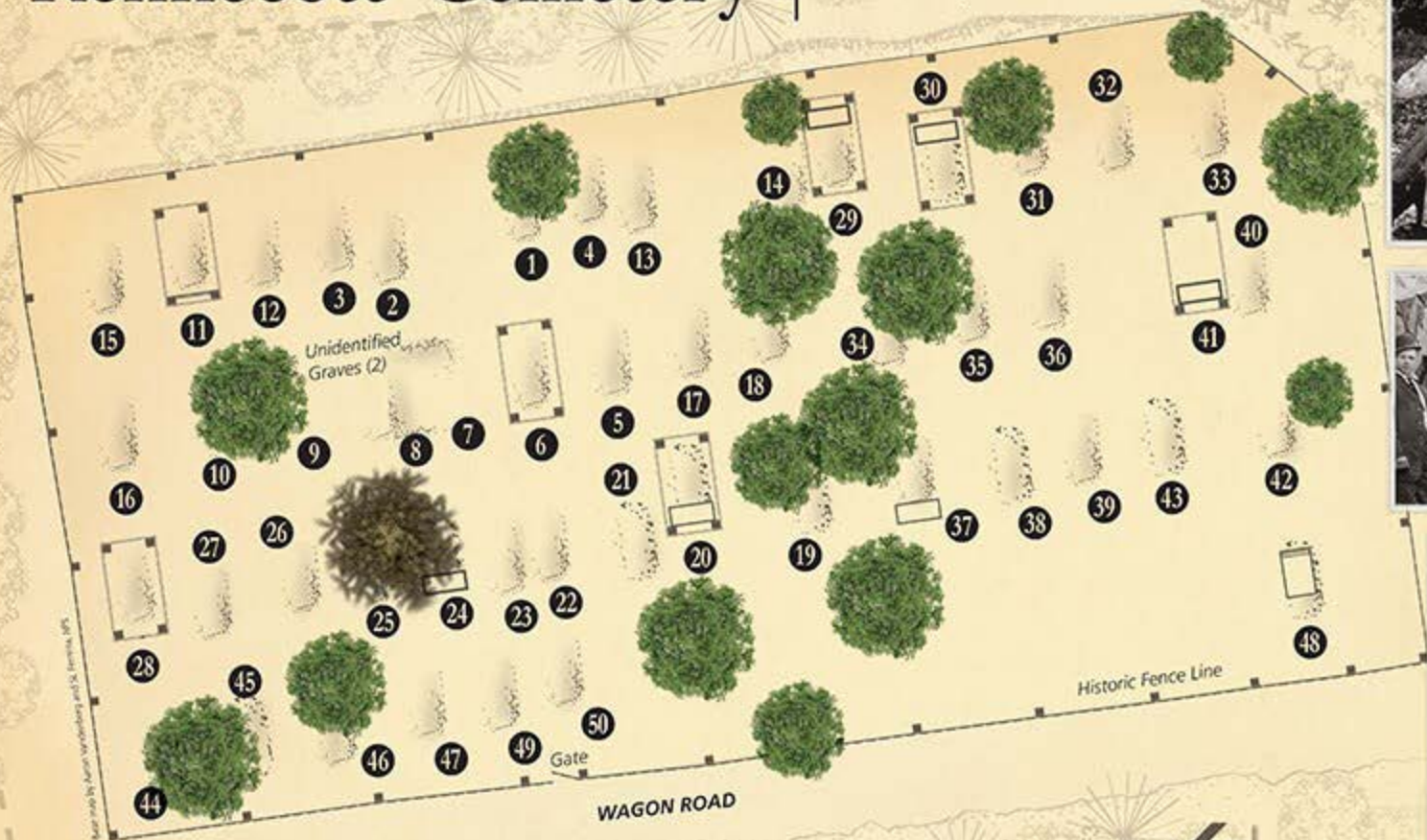




# Kennecott Cemetery

## Site Map

*In silence, we remember*



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