Treadwell Mining Complex

HISTORIC RESOURCES AND SITE SURVEY REPORT



City and Borough of Juneau Wayne Jensen: Jensen Yorba Lott, Inc. August 2010

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Current photos provided by Wayne Jensen. Historical photos provided courtesy of the Alaska State Historical Library and the Juneau Douglas City Museum.

Historical drawings of the Treadwell Mining Complex were provided courtesy of the Alaska State Historical Library, AJT Mining Properties, the Sanborn Library, LLC. and the City and Borough of Juneau.

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Cover Photo Credit: Alaska State Library

INTRODUCTION

Gold was known to exist in Alaska in the creeks tributary to Windham Bay and Sumdum (approximately 60 miles south of Juneau) as early as the late 1860's, but major placer mining did not take place until the 1870's. A string of highly mineralized deposits along the coastline extending from Windham Bay north to Berners Bay became known as the Juneau Gold Belt. Gold Creek and Douglas Island received the most development of the six districts in the Juneau Gold Belt.

The generally recognized Alaskan "gold rush" began in 1897, 27 years after gold was discovered in Southeast Alaska. The stampede of fortune hunters only passed through Alaska on their way to the gold fields of the Yukon. Skagway provided the supply center and the famous Chilkoot Trail was the route to the Yukon. Less publicized Alaskan "gold rushes" in the early 1900's occurred within the Juneau Gold Belt and the Willow Creek district lying approximately 40 air miles north of Anchorage.

Small hard rock gold mines occurred in other parts of Alaska including the Fairbanks district but clearly the Juneau Gold Belt was the leader. And the Treadwell Complex operation was ranked as the world's largest during the period from 1911 to 1917.

In the spring of 1881 the French Canadian prospector, Pierre Joseph Erussard discovered gold on Douglas Island. Later that year he sold his claim to John Treadwell for \$400. Treadwell set up a five stamp test mill in 1882 and organized the Alaska Mill and Mining Company along with John Fry, a banker from San Francisco and James Freeborn, a friend of Fry's. Upon successful demonstration by the five stamp mill a 120 stamp mill was constructed and up and running by 1884. In 1889 the Alaska Mill and Mining Company became the Alaska Treadwell Gold Mining Company which also managed the Alaska Mexican and Alaska United gold mines.

In 1900, F.W. Bradley came to Juneau as president of the Alaska Juneau Gold Mining Company and took over as president of the Alaska Treadwell in 1911. Bradley was a well known and respected mining engineer who specialized in low cost mining and milling processes. Through his perfection of the mining and milling techniques, Bradley was able to increase the profits from the Treadwell operation. During the years from 1911 through 1917 the Treadwell Complex set world records for low cost mining and ranked as the world's largest.

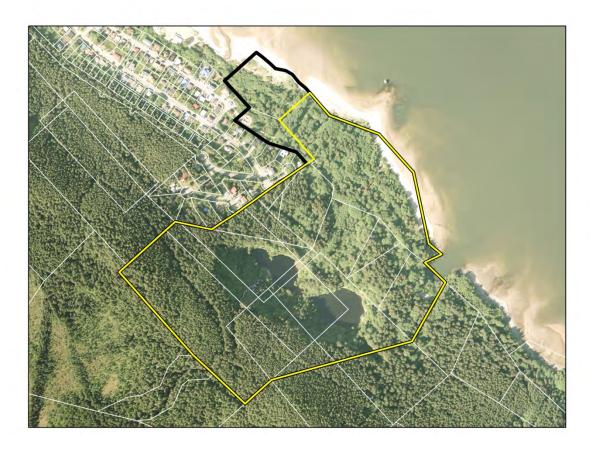
On April 21, 1917 a sea level cave-in occurred and flooded the bulk of the Treadwell mines. The Ready Bullion mine continued until the end of 1922 at which time the entire Treadwell Complex ceased operations except for the foundry. In 1928 the Alaska Juneau Mining Company purchased the entire Treadwell Complex mining properties.

Today there remains extant and collapsed buildings, structures, objects and sites throughout the Treadwell properties which provide evidence of the great mining operations from 1881 to 1922. Most of the Treadwell property is privately owned by AJT Mining Properties, Inc. and a small portion is owned by the City and Borough of Juneau. The portion owned by the City and Borough of Juneau is the focus of this survey.

In 2009, the Treadwell Historic Preservation and Restoration Society was formed as a non profit corporation and a Memorandum of Agreement was made between the Society and the City and borough of Juneau granting the Society the right to manage the Property for public use.

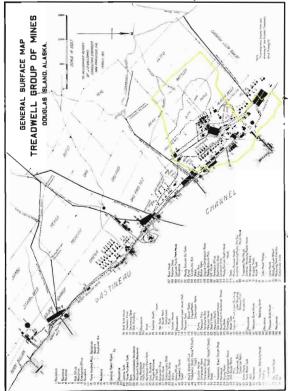
PURPOSE AND CONTEXT

The purpose of the Treadwell Mining Complex and Site Survey Report is to survey the property and structures owned by the City and Borough of Juneau that are part of the Historic Treadwell Mining Complex as outlined by the yellow and black lines on the aerial photo below.



The survey included updating the *Draft Historic Resources Survey, 1991* for the structures located within the study area. It also included researching maps, photos and building drawings from the initial development of the mining area to approximately 1917 when the cave-in ended production of 3 of the 4 mines in the complex. Documenting the current condition of the buildings, structures and sites as well as the historic description is included. The report concludes with Best Management Practices to protect and preserve historical archaeological resources.

The following General Surface Map, Treadwell Group of Mines, 1913, illustrates the extent of the Treadwell Mining Complex and the portion included in this survey.



HISTORICAL SIGNIFICANCE

Seventeen years before the famed Klondike Gold Rush of 1898, John Treadwell arrived on the shores of Gastineau Channel to look over possible mining prospects in Juneau and on Douglas Island.

Treadwell's first claim was for the Paris lode on Douglas Island which was purchased from Pierre Joseph Erussard in 1881. In December of 1881, Treadwell returned to Douglas and purchased two more lode claims. He took samples from the claims to San Francisco where they were tested. The samples proved to be quite rich which enabled Treadwell to secure investors in his claim. The new partnership was known as the Alaska Mill and Mining Company. It was at this time that Treadwell purchased a 5 stamp mill to process the ore. Treadwell soon learned that the vein was much larger than he anticipated. He quickly purchased adjacent claims and expanded his operations. Treadwell soon bought out his partners and formed the Treadwell Gold Mines. The 5 stamp mill was replaced by a 120 stamp mill in 1883 and another 120 stamps were added in 1887.

The Treadwell Mining Complex was ultimately composed of four different mines: Treadwell, Ready Bullion, Mexican and 700'. At the height of their glory, the mines employed over 2000 people.

The communities of Douglas and Treadwell were founded to house the miners and their families. In the Treadwell heydays the communities were among the most populous in Alaska and amenities offered Treadwell employees and their families were abundant.

The Treadwell Complex soon became the largest gold mine in the world and over the course of its lifespan produced approximately \$66 million dollars of gold.

John Treadwell sold his interest in the company for a reported \$1.5 million in 1898. The mines continued to produce until a disastrous cave-in in 1917 which collapsed all but the Ready Bullion Mine which continued to produce until 1922.

Following the cave-in Treadwell slowly died and now all that remains are remnants and artifacts of this once vibrant place that embodies the gold rush era of Alaska.

The remains of the Treadwell Mining Complex offer an insight into the mining history of the Juneau-Douglas area and the magnitude of the industry in the late 19^{th} and early 20^{th} centuries. Today the area is a popular recreation area with a network of trails.

The remains of the buildings and structures provide the CBJ the opportunity to preserve for current and future generations the mine site, and to make available for observation, inspiration and enjoyment, an accurate portrayal of the scale of the operation and the story that unfolded at Treadwell.

HISTORICAL CONTEXT

The great California rush of 1848 brought people from all over the world to America to make their fortunes. As placer gold claims were exhausted prospectors migrated on to the next reported gold strike. In the 1870's these motivated miners made their way to Southeast Alaska.

It was in 1880 that prospectors Richard Harris and Joe Juneau staked their claims on Gold Creek and formed the town of Harrisburgh (later changed to Rockwell and ultimately to Juneau). Their claims sparked the first Alaska gold rush.

Word of the gold rush reached San Francisco and a group of mining investors sent John Treadwell north to investigate in 1881. He soon purchased claims on Douglas Island and returned to San Francisco with samples of ore that showed promise. In 1882, Treadwell returned to Douglas with a 5 stamp mill and purchased adjoining claims, thus sparking the development of the communities of Treadwell and Douglas.

In 1889, the Alaska Treadwell Gold Mining Company bought out all of its investors including John Treadwell.

In the early 1890's two mining companies financed by the Treadwell Company were incorporated, the Alaska Mexican Gold Mining Company and the Alaska United Gold Mining Company. Each company was financially separate but the Treadwell Company managed all of them.

Mining at Treadwell began with open-pit mining of ore in the area of the current Glory Hole. The operation soon evolved into underground mining of the ore contained in the solid rock with some of the workings reaching 2300 feet below sea level.

The Treadwell mines employed highly advanced technologies for their era and pioneered the modern mining industry. The use of hydroelectricity converted steam powered equipment to more economical electric power. World famous mining engineer Frederick Bradley guided the development of the Treadwell mines as the complex grew into the largest gold mine in the world.

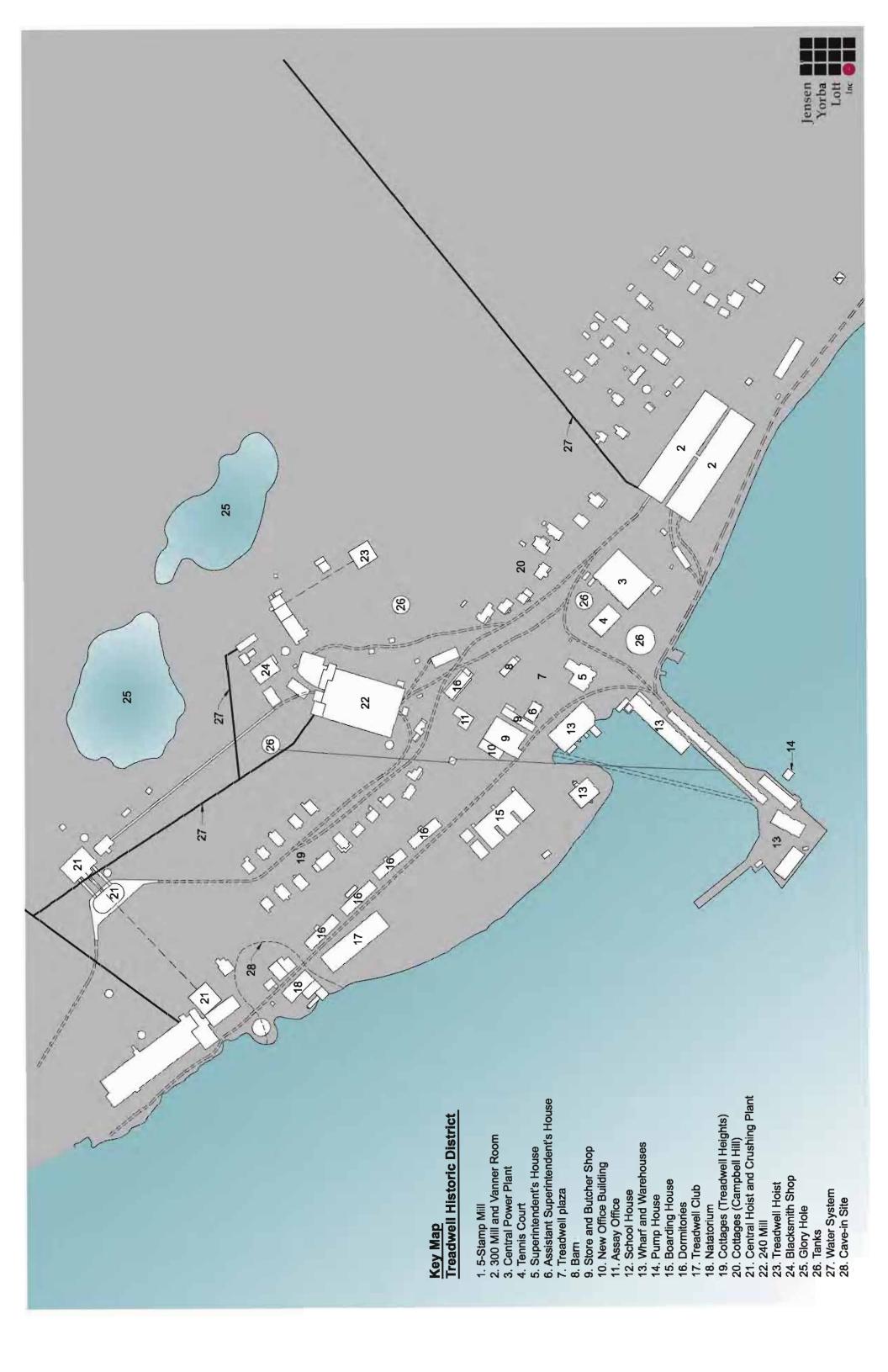
From the efforts of a single man that was John Treadwell, grew a world famous mining and milling operation known as the Treadwell, its legend lives on in the mining community.

Following the 1917 cave-in the population of Treadwell and Douglas slowly dwindled as miners moved across the channel to Juneau seeking work in the AJ Mine or returned to their roots elsewhere. Treadwell was eventually abandoned in its entirety.

Unequivocally, mining was the catalyst for the development and eventual dissolution of the Treadwell Complex, but the story remains an integral part of Alaska history.

Key Plan

The following map is the key to the location of the resources include in this survey.



5 STAMP MILL

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 1882

Historic Name: 5 Stamp Mill **Other Name:**

Location: Treadwell **Legal Description:** N/A

Historic Use: Ore processing **Current Use:**

Architectural Style: N/A

General Description: The 5 stamp mill was used to test the ore at the Paris claim at Treadwell in 1882. The mill was later used in other mills. It was restored and now sits at the beginning of the Treadwell Historic Trail.

Architectural Features:

Historical Information: John Treadwell used the 5 stamp mill that he brought from San Francisco to determine if the lode could be developed profitably, The construction of the first 120 stamps of the 240 mill followed in 1883.

Alterations: Comments:

Entry Date: 07/13/10

Survey By: Wayne Jensen

5 STAMP MILL

Five Stamp Mill prior to restoration

Photo courtesy of Juneau Douglas City Museum



Five Stamp Mill marking beginning of historic Treadwell Trail, June 2010 *Photo courtesy of Wayne Jensen*



300 STAMP MILL

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 1889

Historic Name: 300 Stamp Mill **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Ore Processing **Current Use:**

Architectural Style: Late 19th Century Industrial

General Description: The mill consisted of two heavy timber structures for the mill and the adjacent vanner building. Currently only the deteriorating concrete stamp battery foundations and some vanner rollers are all that exist.

Architectural Features: Both buildings had wood siding and steep pitched roofs with corrugated metal roofing. The stamp batteries were set on concrete foundations.

Historical Information: The 300 Stamp Mill was the largest in the world when it was constructed. It was designed by Fraser and Chalmers of Chicago and the machinery was manufactured by the Risdon Iron Works of San Francisco. The building housing the stamp batteries was constructed of Washington fir with Alaska spruce floors, walls and roof and was 340' x 85'. The adjacent concentrating plant was in an identical building just below the stamps. It housed 120 6' Frue vanners arranged in 4 rows of 30. The stamps or shoes were in batteries of five, each stamp weighing 1,020 pounds. They dropped 8 ½ inches and fell approximately 98 times per minute crushing six tons of ore per day. Power was provided by water from the Treadwell Ditch delivered to two 17'-8" Pelton wheels connected to the line shafts running the stamps with belts. Two directconnected Pelton wheels ran the vanners. The Treadwell Ditch delivered water to the mill under a 485' head through 2,400' of 18" and 22" steel water pipe, manufactured at the firms's foundry, arriving at the mill at 240 psi. The ore entered the mill via a wood viaduct in 6-car ore trains hauled by small locomotives. Ore bins, located along the buildings center line fed into the stamps. The pulverized ore fell onto 4' x 10' copper plates coated with mercury. Free gold, amalgamated with the mercury, was collected and retorted. The rest went to the vanner room. The vanner consisted of an endless rubber belt which both rotated and jogged laterally. The heavy gold-bearing sand, when flooded down the belt, settled to the bottom, adhering to the belt where it was collected. These concentrated were treated in a chlorination plant until 1898. From 1898 -1910 concentrates were barged to Tacoma, Washington for smelting. In 1910 the firm again began treating its own concentrates in a new cyanide plant. The mill closed following the 1917 cave-in and the machinery was sold.

Alterations:

Entry Date: 07/07/10 Survey By: Wayne Jensen



300 Stamp Mill Alaska State Library, Alaska Juneau Gold Mining Company Records, ASL-M999-T7-1



300 Stamp Mill and Concentrater
Photo Courtesy of Juneau Douglas City Museum

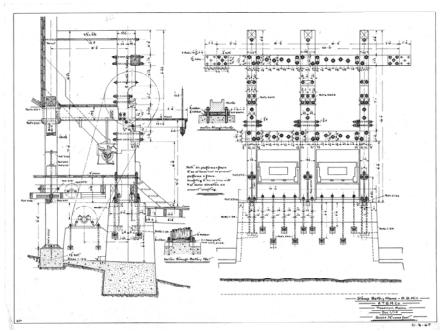


Alaska State Library - Historical Collections

Vanner Room, 300 Stamp Mill Alaska State Library, Case & Draper Collection, ASL-P39-0924



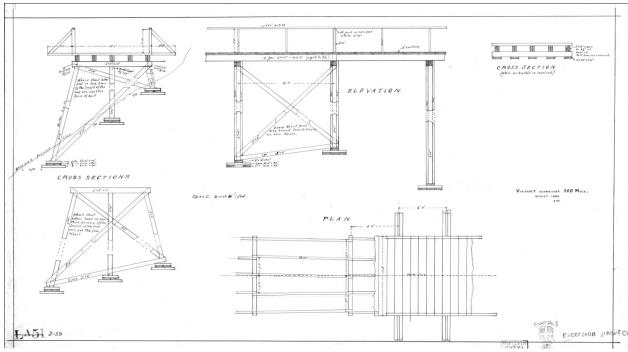
Vanner Roll remains, 300 Stamp Mill - July 2010 Photo Courtesy of Wayne Jensen



Stamp Battery from Ready Bullion Mine, similar to the ones at the 300 Stamp Mill Drawing Courtesy of Alaska State Library Historical Collections, AJT Collection



Foundations from the 300 Stamp Mill, November 2009 *Photo courtesy of Wayne Jensen*



Ore Train Trestle to 300 Stamp Mill Drawing courtey of Alaska State Library Historical Collections, AJT Collection

CENTRAL POWER PLANT

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 1914

Historic Name: Central Power Plant **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Steam and Electrical **Current Use:** N/A

Generation

Architectural Style: Early 20th Century Industrial

General Description: The original building was a steel and concrete structure measuring 100' by 135.' Adjacent to the power plant is the Concrete Transformer Building. The deteriorating concrete foundations and second floor are all that remains of the Power Plant. The Transformer Building is one of the few remaining Treadwell Mine buildings that are still in relatively good condition. The roof is still in place and evidence of the traditional green and red paint that was used through the complex is still present.

Architectural Features:

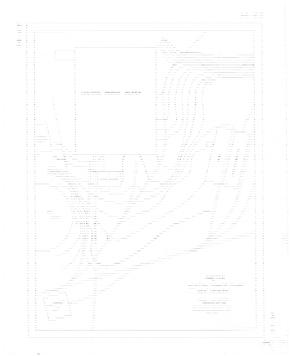
Historical Information: The plant produced steam to heat the surface facilities and up to 6,000 KW of electricity to the mines to provide power to the machinery. The plant burned crude oil to produce the steam and electricity. The outline of the crude oil tank can still be seen to the south of the plant ruins.

Alterations: The original building was enlarged and remodeled in 1914 with the addition of a concrete structure.

Comments:

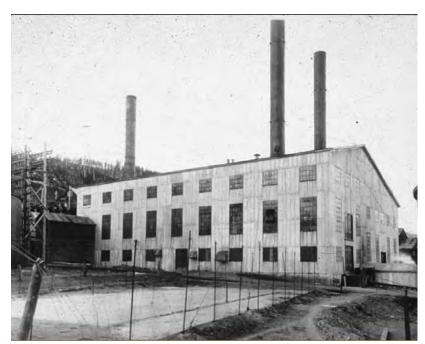
Entry Date: 07/07/10 **Survey By:** Wayne Jensen

CENTRAL POWER PLANT



Sketch of Central Power Plant and Vicinity, September 1915

Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



Central Power Plant, ca. 1900 Photo courtesy of Treadwell Historic Preservation and Restoration Society

CENTRAL POWER PLANT



Remains of Central Power Plant, August 2009 *Photo courtesy of Wayne Jensen*



Remains of Central Power Plant, August 2009 *Photo courtesy of Wayne Jensen*

CENTRAL POWER PLANT



Central Power Plant
Photo courtesy of Juneau Douglas City Museum



Central Power Plant
Photo courtesy of Juneau Douglas City Museum

TENNIS COURT

AHRS#: CBJ#: Parcel#: Year Built:

2D03-0-102-006-1 1914

Historic Name: Tennis Court **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Recreation **Current Use:**

Architectural Style:

General Description: a concrete surfaced tennis court was constructed south of the Central Power Plant. The enclosing fence was made with approximately 8' high steel rods and wire mesh fencing. The net posts were also steel rods. The fence posts and net posts still exist as does a portion of the concrete slab, although trees have grown up through the slab displacing it in some locations.

Architectural Features:

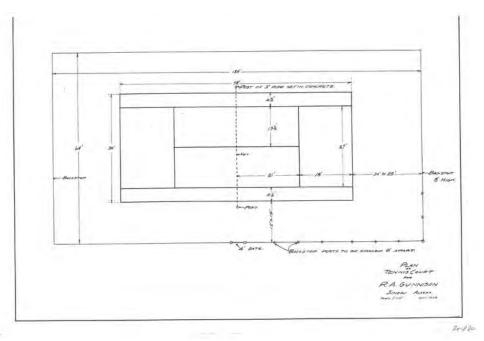
Historical Information: The Tennis Court was one of a variety of recreational amenities for the mine employees and their families.

Alterations: Comments:

Entry Date: 07/13/10

Survey By: Wayne Jensen

TENNIS COURT



Plan of Tennis Court, April 1914 Drawing courtesy of Alaska State Library Historical Collections

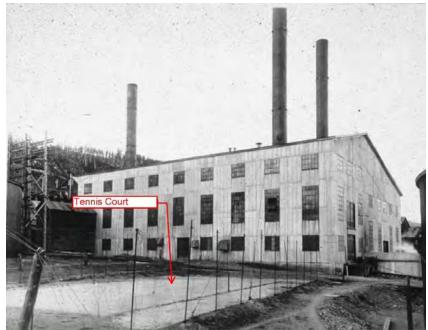


Photo of Tennis Court Photo courtesy of Treadwell Historic Preservation Society

TENNIS COURT



Tennis Court with Central Power Plant in background, July 2010 *Photo Courtesy of Wayne Jensen*

SUPERINTENDENTS HOUSE

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 unknown

Historic Name: Superintendent's House **Other Name:** The Big House

Location: Treadwell **Legal Description:**

Historic Use: Residence **Current Use:** N/A

Architectural Style:

General Description: The wood framed Superintendent's house was located at the east edge of the Plaza. It had a wood picket fence with a lawn and raspberry bushes. The first floor of the house had two living rooms and a playroom at the front plus a big dining room. The second floor contained five bedrooms, sitting room, a bathroom with a clawfoot tub and a sewing room. The top floor was a glassed in cupola that commanded a view up and down Gastineau Channel. Nothing remains of the Superintendent's House.

Architectural Features: Hipped roof, extensive glass cupola, dormers in bedrooms located on the south and east faces of the residence.

Historical Information: The Superintendent's House was grander than the Governor's House in Juneau. Those who lived there called it the "Big House", the Assistant Superintendent's House was known as the "Little House". The House served as a hotel for visiting dignitaries, financiers, politicians and mining engineers from all over the world. The dining room had cream patterned wallpaper, mulberry carpet and a bay window facing the channel. There was a huge oak table with a bell hidden underneath for the host to signal the servants. The Treadwell Superintendents were: John Treadwell (1881-1889), Thomas Mien (1889-1890), Robert Duncan (1890-1898), John P. Corbus (1898-1901), Joseph MacDonald (1901-1904), Robert Kinzie (1904-1914), Philip R. Bradley (1914-1917), Russell Wayland (1917-1918), and Lou Metzgar (1918-1922).

Alterations: An addition on the second floor included a bedroom, bath room and walk-in closet.

Comments:

Entry Date: 07/07/10

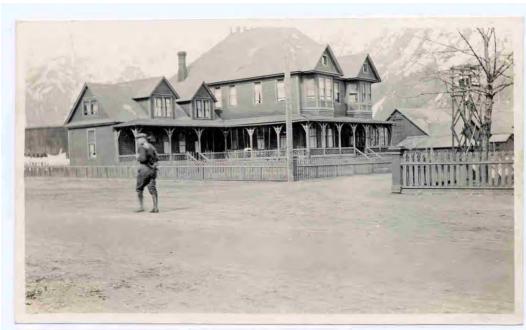
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Survey By: Wayne Jensen

SUPERINTENDENTS HOUSE

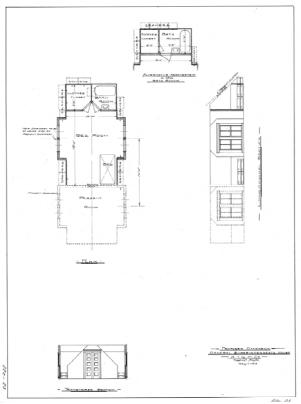


Superintendent's House before bedroom addition. *Photo courtesy of Juneau Douglas City Museum*

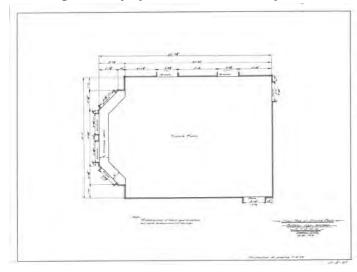


Superintendent's House after second story bedroom addition. *Photo courtesy of Juneau Douglas City Museum*

SUPERINTENDENTS HOUSE

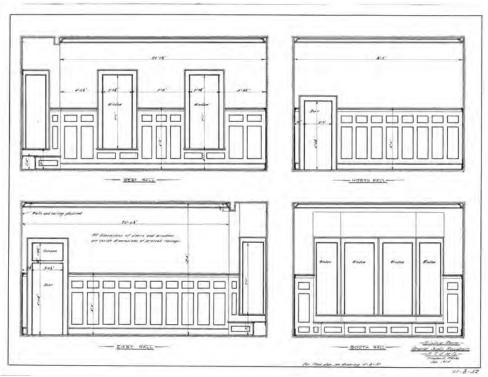


Proposed second floor bedroom addition General Superintendent's House, May 1913 Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



Floor Plan of Dining Room General Superintendent's House December 1914 Drawing Courtesy of Alaska State Library Historical Collections, AJT Collection

SUPERINTENDENTS HOUSE



Dining Room Elevations General Superintendent's House, December 1915

Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

ASSISTANT SUPERINTENDENTS HOUSE

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 N/A

Historic Name: Assistant Superintendent's

House

Other Name: Little House

Location: Treadwell **Legal Description:**

Historic Use: Residence **Current Use:**

Architectural Style:

General Description: Wood frame residence for the Assistant Superintendent located south of the Superintendent's House on the east side of the plaza.

Architectural Features:

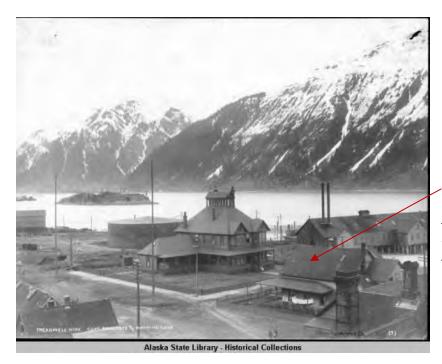
Historical Information: Called the "Little House" by the residents.

Alterations: Comments:

Entry Date: 7/8/10

Survey By: Wayne Jensen

ASSISTANT SUPERINTENDENTS HOUSE



Assistant Superintendent's House Alaska State Library, Juliane Nick Dexter Photo Collection, ASL-P40-16

Assistant
Superintendent's House
July 1908
Alaska State Library,
Case & Draper Collection,
ASL-P39-0864



TREADWELL PLAZA

AHRS#: CBJ#: Parcel#: Year Built:

2D03-0-102-006-1 N/A

Historic Name: Treadwell Plaza **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Parades, Events, Recreation **Current Use:**

Architectural Style:

General Description: A flat open area bounded by the Superintendent's House, the Assistant Superintendent's House, the Store and the railroad tracks leading to the 300 Mill. The area today has trees and brush and trails traverse the site.

Architectural Features:

Historical Information:

Alterations: Comments:

Entry Date: 7/2/2010 Survey By: Wayne Jensen

TREADWELL PLAZA



Fourth of July in Treadwell Plaza, 1908
Alaska State Library, William R. Norton Collection, W.H. Case, ASL-P226-305



Treadwell Plaza, July 1908

Alaska State Library, Case & Draper Collection, ASL-P39-0864

TREADWELL PLAZA



Treadwell Plaza July 2010 Photo by Wayne Jensen

BARN

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 unknown

Historic Name: Barn Other Name: Stables

Location: Treadwell **Legal Description:**

Historic Use: Animal Care **Current Use: N/A**

Architectural Style:

General Description: The barn was located on the east side of the plaza.

Architectural Features:

Historical Information: Horses and mules were used by the mines in the underground workings to pull ore carts. Some of the horses that were too old to work underground became pets and were used for rides by the children.

Alterations:

Comments: Nothing exists of the barn today.

Entry Date: 07/07/10

Survey By: Wayne Jensen

BARN



Barn Barn, adjacent to Treadwell Plaza July 1908 Alaska State Library, William R. Norton Collection, W.H. Case, ASL-P226-305

STORE

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Store **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Merchandising **Current Use:**

Architectural Style:

General Description: A two story wood building, or collection of buildings that housed the General Store and Butcher Shop. On the south side of the store were two concrete vaults and beyond them was the New Office Building that was constructed in 1914. Only the deteriorating vaults and a few concrete foundations remain.

Architectural Features:

Historical Information: The store stocked basic food stuffs and clothing as well as toys, fancy food and clothes. The adjacent butcher shop had refrigerated meat cases. The prices were reportedly lower than stores in the nearby towns of Juneau and Douglas.

Alterations: Comments:

Entry Date: 07/08/10

Survey By: Wayne Jensen

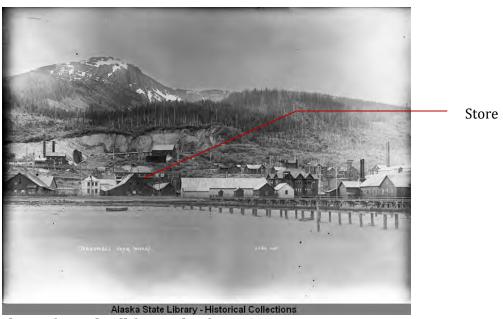
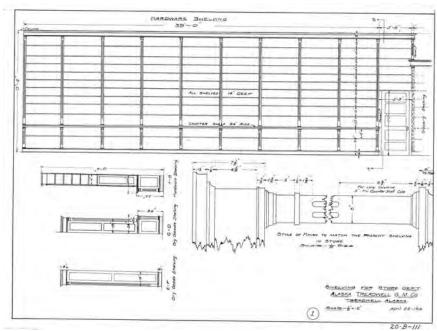


Photo of Treadwell from Wharf, ca. 1900 Alaska State Library, Paul Sincic Collection, Louis H. Pedersen, ASL-P75-417



Shelving for Hardware Department, April 1916
Photo courtesy of Alaska State Library, Historical Collections, AJT Collection



Treadwell Store, 1908
Alaska State Library, William R. Norton Photographs, Case & Draper, ASL-P226-330



Interior photo of Treadwell Store Alaska State Library, Case & Draper Collection, ASL-P39-0902



Interior of Treadwell Store
Alaska State Library, Paul Sincic Collection, Louis H. Pedersen, ASL-P75-409



Interior of Treadwell Store
Alaska State Library, Paul Sincic Collection, Louis H. Pedersen, ASL-P75-410



Interior of Butcher Shop
Alaska State Library, Case & Draper Collection, ASL-P39-0896



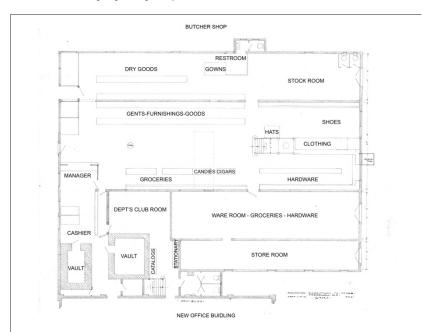
Interior of Treadwell Store
Alaska State Library, Case & Draper Collection, ASL-P39-1142

STORE AND BUTCHER SHOP



Concrete Foundations in foreground possibly from butcher shop at north side of store. New Office Building in the background.

Photo courtesy of Wayne Jensen



Drawing of proposed alterations to Store circa 1914 courtesy of Alaska State Library Historical Collections, text added by Jensen Yorba Lott.

NEW OFFICE BUILDING

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 1914

Historic Name: New Office Building **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Office for Mine **Current Use:**

Superintendent, general offices, drafting

room.

Architectural Style: Early 20th Century Industrial

General Description: Two story 72' x 72' concrete structure with steel roof trusses, steel purlins, wood roof sheathing and corrugated steel roofing. Structurally reinforced foundations, columns, floors and walls. Features included plaster walls and ceilings, double hung wood windows, wood doors, steam heating and electric lights. Abandoned since the 1930's the concrete walls are deteriorating, due to corrosion of the steel reinforcing which is causing the concrete to spall exposing the steel to the elements. Much of the steel roofing is missing and the remainder is deteriorated. The steel roof structure is deteriorated and some of the trusses have deformed due to snow loading and deterioration. Windows and doors are gone and vandalism is evident. Two adjacent vaults are still present although doors have been removed and the concrete walls are deteriorating.

Architectural Features:

Historical Information: Constructed in 1914 at a cost of \$15,560 adjacent to the General Store and two concrete vaults. Initially, the building served as the office of the General Superintendent, the Chief Engineer, general offices and a drafting room. The adjacent wood frame store was destroyed by fire in 1926. The building was used as a temporary hospital by the Sisters of St. Ann's following the 1937 fire that destroyed most of Douglas and Treadwell.

Alterations: Following the 1926 fire the second floor was remodeled as a residence for the manager of the Foundry.

Comments:

Entry Date: 07/02/10

Survey By: Wayne Jensen

NEW OFFICE BUILDING



New Office Building
Alaska State Library, Paul Sincic Collection, Louis H. Pedersen, ASL-P75-411



Treadwell Office Building November 2009; *Photo courtesy of Wayne Jensen*

NEW OFFICE BUILDING

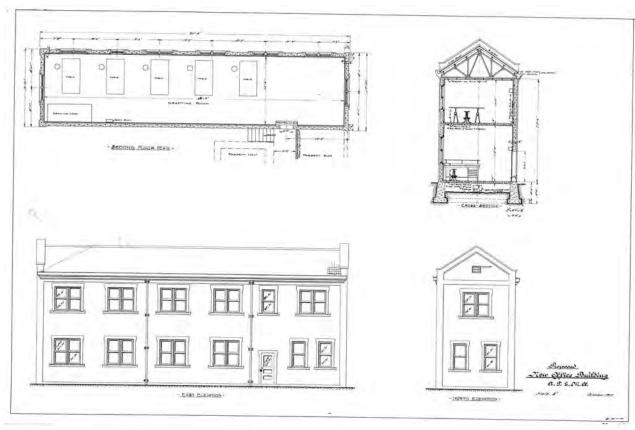


Treadwell Offices
Alaska State Library, Paul Sincic Collection, Louis H. Pedersen, ASL-P75-416



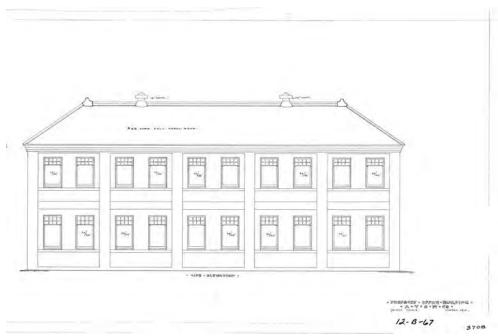
Office building October 2009, Photo courtesy of Wayne Jensen

NEW OFFICE BUILDING



Design as originally proposed with Gable Ends and Tile Roof, October 1912 Drawing courtesy of Alaska State Library Historical Collections

NEW OFFICE BUILDING



Side Elevation, March 1914 Drawing courtesy of Alaska State Library Historical Collections

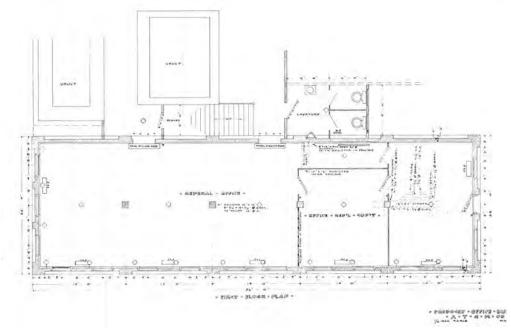


hip metal roof.

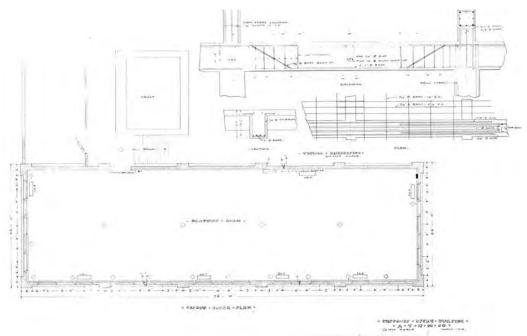
Building as constructed with

North Elevation, March 1914 Drawing courtesy of Alaska State Library Historical Collections

NEW OFFICE BUILDING



First Floor Plan, March 1914 Drawing courtesy of Alaska State Library Historical Collections



Second Floor Plan, March 1914 Drawing courtesy of Alaska State Library Historical Collections

ASSAY OFFICE

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Assay Office **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Ore Processing **Current Use:**

Architectural Style:

General Description: The Assay Office was located uphill of the Store and New Office Building on a sloping site. The only remains of the building are some concrete foundations.

Architectural Features:

Historical Information: The Assay Office produced over 100 samples of ore per day for both the mine and independent prospectors. The free assays provided a way for the company to keep track of any gold discoveries in the area. The main job was daily testing the ore from all of the Treadwell mines, before, during and after milling to track the efficiency of the process and determine the value. The gold bricks were stored in the vaults adjacent to the Assay office after they came from the Refinery and before they were shipped out.

Alterations: The drawing records contain two plans for the Assay Office. A rectangular plan dated 1911 and an L-shaped plan dated 1914. The photograph dated 1908 shows an L-shaped building.

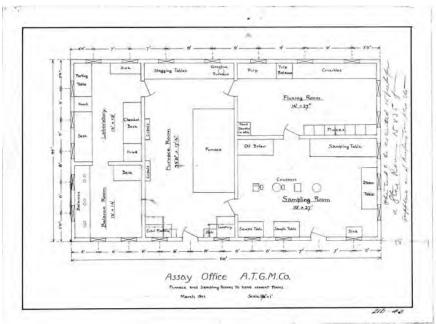
Comments:

Entry Date: 07/08/10

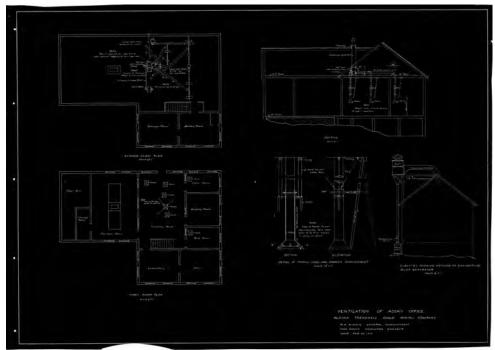
Current Photo Date and Author:

Survey By: Wayne Jensen

ASSAY OFFICE

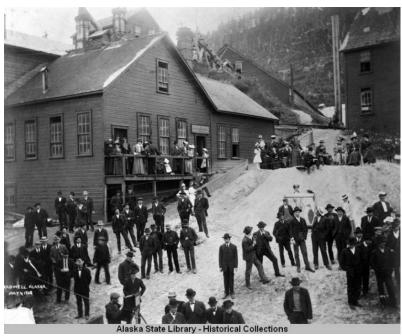


Assay Office Plan 1911, courtesy of Alaska State Library Historical Collections-AJT Collection



Assay Office Plan 1911, courtesy of Alaska State Library Historical Collections, AJT Collection

ASSAY OFFICE



Assay Office 1908, Alaska State Library, Juliane Nick Dexter Collection, W.H. Case, ASL-P40-32



Remains of Assay Office May 2010, photo courtesy of Wayne Jensen

SCHOOL HOUSE

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 1913

Historic Name: School House **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Education **Current Use:** N/A

Architectural Style:

General Description: The two-story 65' x 54' wood frame building was built on filled ground near the beach, east of the Store. The building had two classrooms on the first floor one with 35 desks and the other had 28 desks. Also on the first floor were separate play rooms for girls and boys and lavatories for each sex. The second floor was a two bedroom residence for the teacher(s). Nothing remains of the school house.

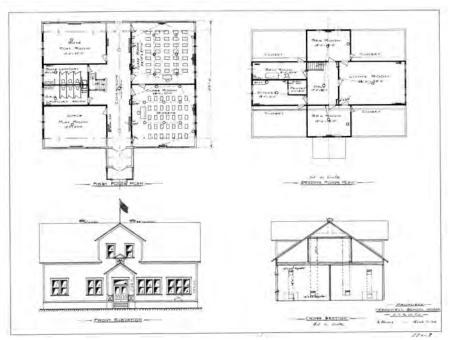
Architectural Features:

Historical Information: In 1916 the attendance averaged 50 students. There were two teachers; one taught grades 1 through 6 and the other taught the upper grades. There was an active parent teacher organization.

Alterations: Comments:

Entry Date: 07/13/10 **Survey By:** Wayne Jensen

SCHOOL HOUSE



Proposed Treadwell School House, June 1913
Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



Students in front of Treadwell School Photo courtesy of Juneau Douglas City Museum

WHARF & WAREHOUSES

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Wharf and Warehouses **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Shipping and Receiving **Current Use:**

Architectural Style: Early 20th Century Industrial

General Description: The wharf and associated warehouses and shop were constructed on piling foundations extending from the beach to deep water in Gastineau Channel. Supplies arriving for the mine and ore and processed gold were transported across the wharf. Railroad tracks across the wharf allowed material to be transported in both directions. Wood pilings protruding from the sandy beach are all that remain of the wharf.

Architectural Features: N/A

Historical Information: Passenger ships and freighters used the wharf. Initially coal bunkers were included on the wharf until the mine was converted to crude oil for fuel. The Machine Shop was located perpendicular to the wharf near the beach and the Mining and Milling Shop was located perpendicular to the wharf on filled ground at the west end of the wharf.

Alterations: Comments:

Entry Date: 07/08/10

Survey By: Wayne Jensen

WHARF & WAREHOUSES

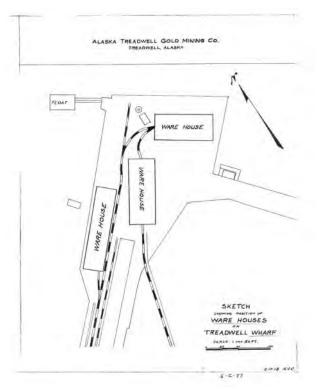


Treadwell Wharf
Alaska State Library, William R. Norton Collection, Case & Draper, ASL-P226-309



Steamship at Treadwell Wharf
Photo courtesy of Juneau Douglas City Museum

WHARF & WAREHOUSES



Sketch showing position of warehouses on Treadwell Wharf, 1918

Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

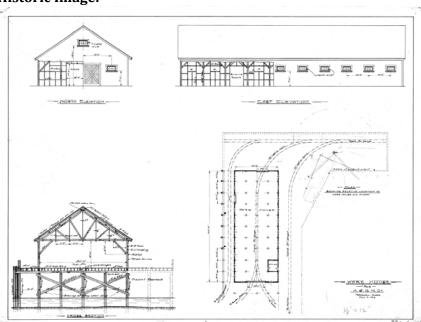


Remains of Treadwell Wharf April 2010

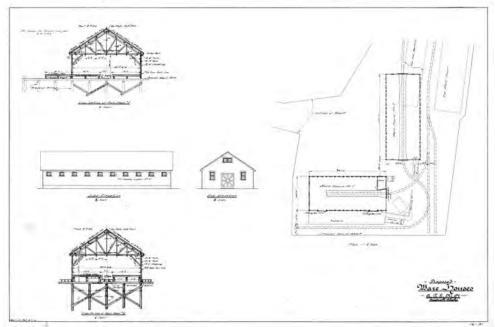
Photo courtesy of Wayne Jensen

WHARF & WAREHOUSES

Historic Image:



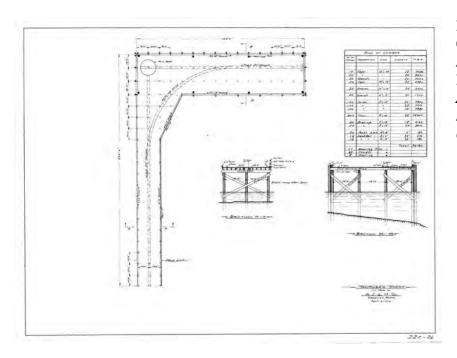
Warehouse plan, 1913
Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



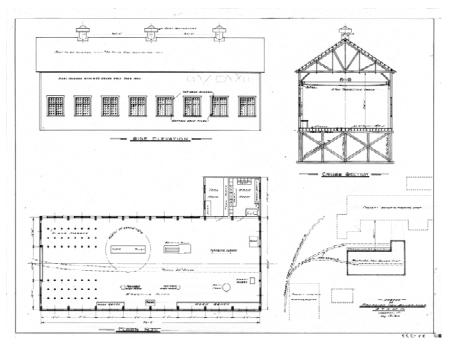
Proposed Warehouses at Treadwell, 1914

Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

WHARF & WAREHOUSES



Proposed Wharf for AJGM Co, Treadwell, Alaska April 1913 Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



Proposed new Boiler Shop, 1913 Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

PUMP HOUSE

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 1914

Historic Name: Pump House **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Salt Water Pump **Current Use:**

Architectural Style:

General Description: Located on the west side of the Wharf the concrete Pump House with steel sheet pile foundation provided salt water for firefighting and processing. The concrete walls still exist. The steel roof structure is deteriorating and the corrugated roofing is loose and some sheets are missing.

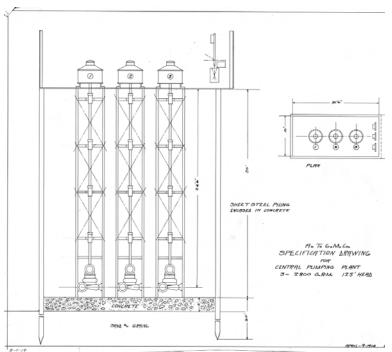
Architectural Features:

Historical Information: The pump house contained three 2,800 gal/min centrifugal pumps that supplied salt water for fire fighting and milling operations.

Alterations: Comments:

Entry Date: 7/13/10 Survey By: Wayne Jensen

PUMP HOUSE



Specification drawing for Central Pumping Plant, April 1914
Drawing courtesy of Alaska State Library Historical Collections



Central Pumping House, June 2010 *Photo courtesy of Wayne Jensen*

TREADWELL BOARDING HOUSE

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Treadwell Boarding House **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Dining **Current Use:** N/A

Architectural Style:

General Description: The Boarding House was located on filled land near the beach at the north end of a row of bunkhouses. There was a kitchen and a bakery that prepared food for the 500 miners who ate either a noon or midnight meal in the hall. Lunches were prepared and packed for the miners to take into the mine to eat during their shift. Four wood dormitories were located along the beach between the Boarding House and the Treadwell Club housing single miners. Some concrete foundations and miscellaneous plumbing fixtures remain.

Architectural Features:

Historical Information: The miners were charged \$25 per month for meals, The meals were served on long wooden tables covered with white oil cloths. The men sat on benches with shelves underneath for hats. A typical menu included salmon, roast beef, baked potatoes, corn, beans, tea and coffee, bread pudding and blueberry pie. The kitchen had all the modern equipment including electric dishwashers, coffee pots, potato peeling machines and ice-cream makers.

Alterations: Comments:

Entry Date: 07/13/10 Survey By: Wayne Jensen

TREADWELL BOARDING HOUSE



Treadwell Boarding House Main Dining Room July 1908

Alaska State Library, Case & Draper Collection, W.H. Case, ASL-P39-0994



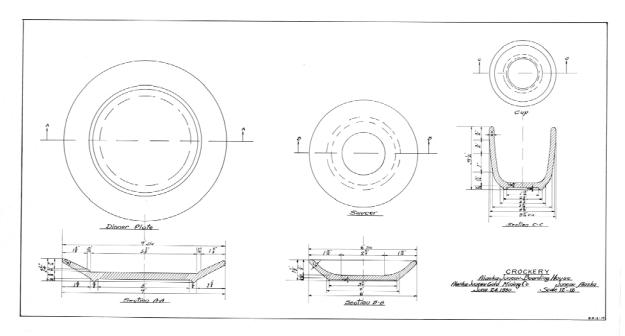
Treadwell Boarding House Main Dining Room

Alaska State Library, William R. Norton Collection, Case & Draper, ASL-P226-325

TREADWELL BOARDING HOUSE



Treadwell Boarding House Kitchen East Side Alaska State Library, William R. Norton, Case & Draper, ASL-P226-329



Crockery for Alaska Juneau Boarding House, June 1930 Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

DORMITORIES

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Bunkhouses **Other Name:** Dormitories

Location: Treadwell **Legal Description:**

Historic Use: Housing **Current Use:** N/A

Architectural Style:

General Description: Four wood frame dormitories were located along the beach between the Boarding House and the Treadwell Club housing single miners. Some concrete foundations and miscellaneous plumbing fixtures remain.

Architectural Features:

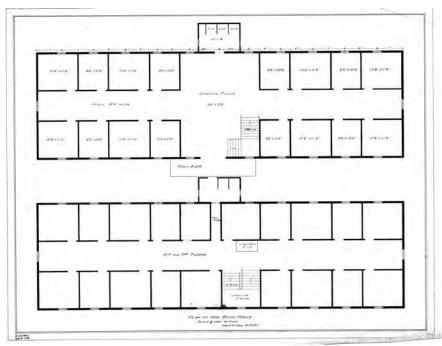
Historical Information: The dormitories were 2 and 3 story buildings with up to 54 bedrooms each shared by 2 miners.

Alterations: Comments:

Entry Date: 07/13/10

Survey By: Wayne Jensen

DORMITORIES



Plan of typical bunkhouse, September 1907 Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



Elevation of typical bunkhouse, September 1907 Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

DORMITORIES



Working men's quarters, Treadwell, Alaska, 1908 Alaska State Library, Paul Sincic Collection, Louis H. Pedersen, ASL-P75-423



Miners pose in front of bunkhouses, 1908 Alaska State Library, William R. Norton Collection, W.H. Case, ASL-P226-339

DORMITORIES



Foundations & Plumbing Fixtures from Bunkhouse April 2010 Photo Courtesy of Wayne Jensen

Foundations from dormitory near cave-in, May 2010

Photo courtesy of Wayne Jensen



TREADWELL CLUB

AHRS#: CBJ#: Parcel#: Year Built: 1904

2-D03-0-102-006-1

Historic Name: Treadwell Club

Location: Treadwell

Historic Use: Recreation

Current Use: N/A

Architectural Style:

General Description: A 56 $\frac{1}{2}$ ' by 202 $\frac{1}{2}$ ' heavy timber framed building with a hip roof with timber roof trusses and purlins, 2 x 6 wood rafters, wood wall and roof sheathing, tar and gravel roofing and wood siding. The foundation was wood piling and the floor was framed with timber beams, 2 x 12 floor joists and oak flooring. The ceiling was 16' high with a balcony suspended from the roof trusses. All that remains are some of the wood pilings on the beach near the cave in site.

Architectural Features:

Historical Information: Originally organized by employees as a Y.M.C.A. in 1903, the building was located about 40 feet south of the boarding house. It was equipped with a reading room, library, gymnasium, bowling alley, bathrooms, auditorium and stage. Members were required to pay \$1.00 per month for dues. This building was a center of interest among the men, especially the single ones who had no family to go home to after work. The original structure was destroyed by fire in 1904.

Within a year a new club was built about 100 feet south of the old location and became known as the Treadwell Club. The construction cost for the new building was approximately \$20,000. The new club boasted a billiard and pool room, reading and correspondence room, library, dark room, Turkish bath, regulation double Brunswick bowling alley, barber shop, cigar stand, a 500 person auditorium and even a motion picture machine. There was even a Treadwell Club Band consisting of 25 experienced musicians who gave a free concert once a month. Friday of each week the building was given over to the women.

Alterations: Comments:

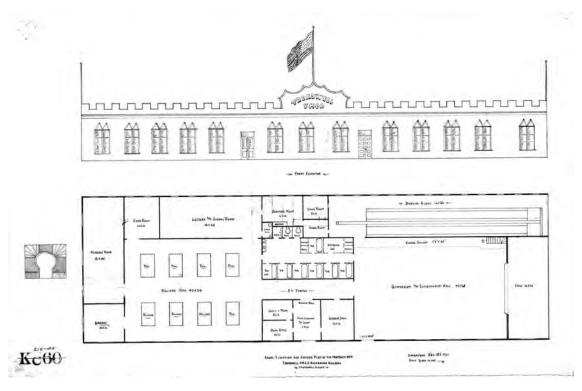
Entry Date: 07/02/10 Survey By: Wayne Jensen



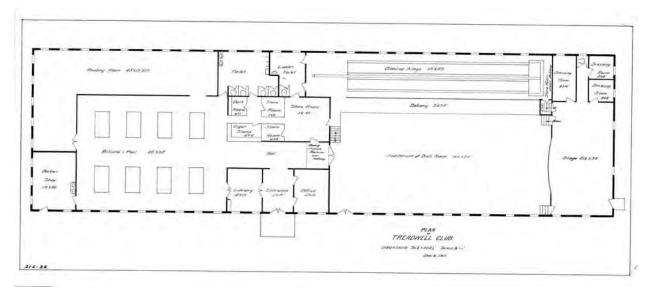
Treadwell Club Alaska State Library, Case & Draper Collection, Case & Draper, ASL-P39-0888



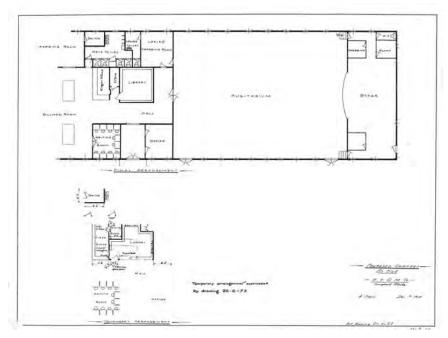
Pilings are all that remain of the Treadwell Club, June 2010 *Photo courtesy of Wayne Jensen*



Y.M.C.A. Building Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



Floor Plan of Treadwell Club as constructed Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



Proposed changes to Treadwell Club, December 1914

Drawing courtesy of Alaska State Library Historical Collection, AJT Collection



Treadwell Club Bowling Alley
Alaska State Library, William R. Norton Collection, W.H. Case, ASL-P226-332



Auditorium Alaska State Library, William R. Norton Collection, W.H. Case, ASL-P226-331



Treadwell Club, 1907

Alaska State Library, Case & Draper Collection, W.H. Case, ASL-P39-075

NATATORIUM

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Natatorium **Other Name:** Swimming Tank

Location: Treadwell **Legal Description:**

Historic Use: Recreation **Current Use:** N/A

Architectural Style:

General Description: Approximately 70' x 30' wood framed building on pilings adjacent the Treadwell Club. Some sources place the size at 40' x 75'. The Natatorium was completely tiled and steam heated. It has been reported that there was a gymnasium in the building also. The building was constructed on new land created by the mine tailings.

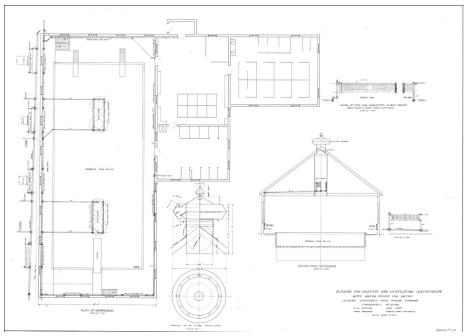
Architectural Features:

Historical Information: The natatorium like many Treadwell facilities boasted top of the line amenities not commonly found elsewhere. The "tank" as it was called offered a scale to weigh oneself and provided towels with the company's logo embroidered in red. The tank hosted water carnivals and races and specific days were reserved for women and children. Signs of structural instability began appearing in 1916 caused by the caving of the stopes and adits of the 700' mine. On the Friday before the cave-in the pool was in use by the ladies when at once the water left the pool "in one big gulp". The building was evacuated at which time large fissures were discovered all around the building and in the street. The building was roped off to access. The next morning people went to see what there was left to see only to discover that nothing was left save for the roped off space. An extreme high tide the night before flooded the mine creating a massive cave-in which swallowed the natatorium whole along with the old fire hall and another small outbuilding.

Alterations: Comments:

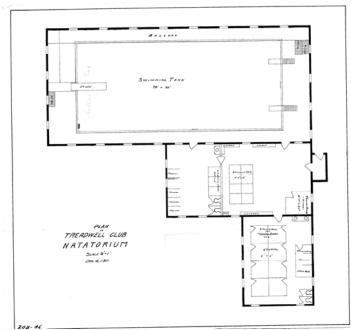
Entry Date: 07/13/10 Survey By: Wayne Jensen

NATATORIUM



Scheme for Heating and Ventilating Natatorium, June 1914

Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



Plan for Treadwell Club Natatorium, December 1911

Drawing courtesy of Alaska State Library Historical Collections

NATATORIUM



Natatorium, Treadwell Alaska, circa 1900 Alaska State Library, Winter & Pond Collection, ASL-P117-118



Treadwell Swimming Tank during time of cave in *Photo courtesy of Juneau Douglas City Museum*

COTTAGES

AHRS#: CBJ#: Parcel#: Year Built: est.

2-D03-0-102-006-1 1900-1910

Historic Name: Cottages **Other Name:** Campbell Hill, Treadwell

Heights

Location: Treadwell **Legal Description:**

Historic Use: Housing **Current Use:** N/A

Architectural Style:

General Description: Over 100 cottages were provided for mine foremen and managers as well as married employees. The cottages were located on the Treadwell, 700' and Mexican mine sites. Those in the Treadwell areas were in two groups "Campbell Hill" northwest of the 240 Mill and above the 300 Mill and "Treadwell Heights" east of the 240 Mill and above the dormitories.

Architectural Features: All cottages were painted red with green trim and featured steam heat provided by the Central Power Plant as well as electric lights. Most had bathrooms although some did not. Most were two story, a few were one and one half stories.

Historical Information: Constructed at the turn of the century the cottages housed mine foremen, managers and married employees. The construction cost for these dwellings is estimated at between \$1500 and \$1750 dependent on size. Rent for the cottages ranged from \$10-\$15 per month, also dependent on size. However, the \$10 per month cottages had outhouses rather than indoor toilets and bathrooms.

Alterations: Comments:

Entry Date: 7/2/2010 Survey By: Wayne Jensen

Historical Photo:



Alaska State Library, Juliane Nick Dexter Collection, W.H. Case, ASL-P40-10

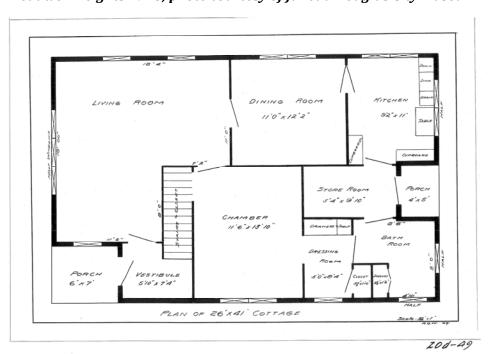
Current Photo:



Bathtub in Campbell Hill Area, Photo Courtesy of Wayne Jensen



Treadwell Heights 1918; photo courtesy of Juneau Douglas City Museum



Plan of typical cottage Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

CENTRAL HOISTING PLANT

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 1912

Historic Name: Central Hoist & Crushing **Other Name:** Coarse Crushing Plant and Ore

Bin

Location: Treadwell **Legal Description:**

Historic Use: Ore Processing **Current Use:**

Architectural Style:

Plant

General Description: The Central Hoisting and Coarse Crushing plant raised the ore from all four mines through a 4-compartment shaft extending to the 2,700 foot level that connected the levels of the mines. The Hoist House was located near the beach adjacent to the 700' Mine; it was powered by crude oil boilers in an adjacent building. The central shaft, crushing equipment and ore bin were located up the hill. The concrete walls of the Central Hoist building still exist on the south side of the cave-in. The concrete walls of the Central Ore Bin still exist and some of the steel and concrete ruins of the Central Crushing equipment and shaft still exist including pieces of the steel skips that were used to raise ore from the mines.

Architectural Features:

Historical Information: Frederick Worthen Bradley became president of the Treadwell Complex in 1911. His contributions included innovative ways to process the low grade ore profitably. He changed the process where each of the four mines crushed its own ore in the stamp mills by introducing the central hoisting and coarse ore crushing plant making the process more efficient. The Central Ore Bin contained 3 separate compartments for the ore from the Treadwell, 700', and Mexican mines. Ore was crushed to $2\frac{1}{2}$ inch size, stored in the ore bins and then transported to the mills on ore car trains pulled by locomotives.

Alterations: Comments:

Entry Date: 07/13/10

Survey By: Wayne Jensen



Central Crushing Plant, May 2010 Photo courtesy of Wayne Jensen

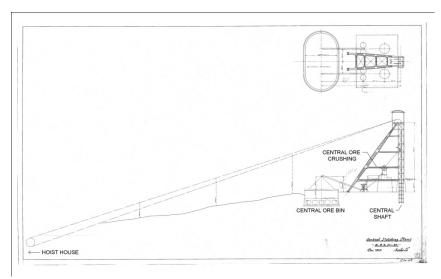


Pulley from Central Hoist, April 2010 Photo courtesy of Wayne Jensen



Foundry mark on pulley indicating it was cast at the Treadwell Foundry in 1908 *Photo: May 2010 courtesy of Wayne Jensen*

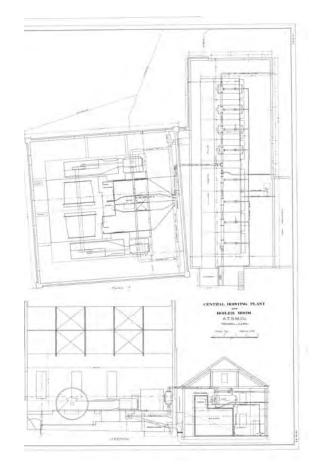
CENTRAL HOISTING PLANT

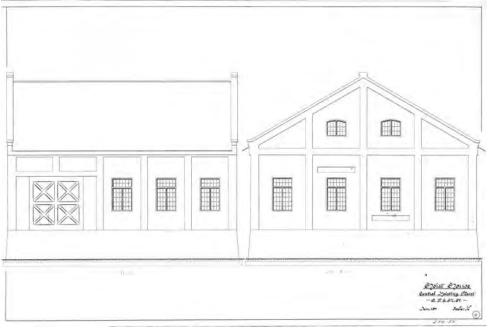


Central Hoisting Plant, December 1910

Drawing Courtesy of Alaska State Library Historical
Collections

Central Hoisting Plant and Boiler Room, March 1914 Drawing courtesy of Alaska State Library Historical Collections

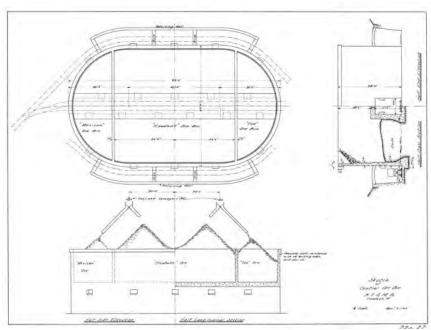




Hoist House, Central Hoisting Plant, December 1911 Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

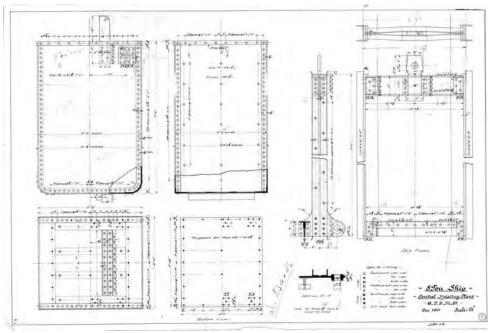


Hoist House, May 2010 Photo courtesy of Wayne Jensen



Central Ore Bin April 1913

Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



8 Ton Skip, Central Hoisting Plant December 1910 Drawing courtesy of Alaska State Library Historical Collections, AJT Collection



Skip at Central Hoist Shaft used to lift ore from Mine to Central Crushing Plant *Photo April 2010 courtesy of Wayne Jensen*

240 STAMP MILL

AHRS#: CBJ#: Parcel#: Year Built: 1883

2-D03-0-102-006-1

Historic Name: 240 Mill **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Ore Processing **Current Use:**

Architectural Style:

General Description: The original mill constructed in 1883 consisted of a 120 stamp heavy timber building with wood stamp battery foundations. The mill was expanded in 1917 with the addition of 120 stamps with concrete foundations. The building also included a power plant generating electricity with water from the Treadwell Ditch. Portions of the wooden stamp battery foundations still exist as does the concrete foundations and some of the electrical generation equipment for the power house portion of the mill.

Architectural Features:

Historical Information: The 240 Mill was the first mill constructed in the Treadwell Mine Complex. The construction of the first 120 stamps replaced an experimental mill in 1883 when it was determined that the mine could be operated profitably. The initial construction was a heavy timber building housing sixty 5-stamp batteries set on heavy timber foundations and a vanner room. The mill was in full production by 1885 milling 300 tons of ore daily. 120 stamps were added to the mill in 1887 making the mill the largest in the world under one roof. Initially it was thought that the concrete foundation would not withstand the constant vibrations of the stamps, which is why the first mill was constructed with wooden stamp battery foundations. The stamp battery foundations for the addition were made of concrete as were the foundations for all succeeding mills.

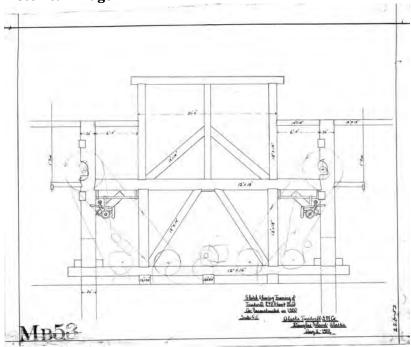
Alterations: 120 stamp addition added in 1887.

Comments: The drawing collection contains two drawings dated June 1915 for roof trusses for the Vanner Room on the south side of the building.

Entry Date: 07/08/10 Survey By: Wayne Jensen

240 STAMP MILL

Historical Image:

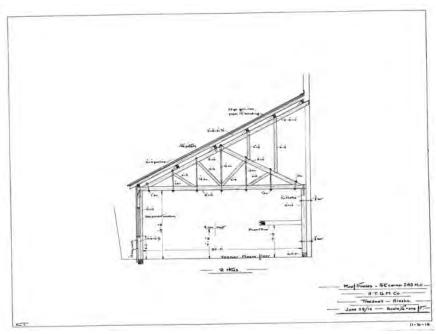


Sketch showing framing of Treadwell 240 Stamp Mill as reconstructed in 1900, dated August 1900; drawing courtesy of Alaska State Library Historical Collection, AJT Collection

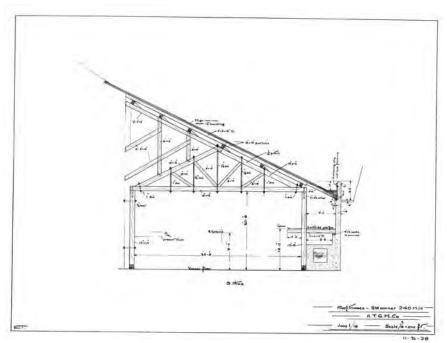


Concrete foundation and electrical generation equipment from 240 Power House, November 2009; photo courtesy of Wayne Jensen.

240 STAMP MILL



Roof Truss Southeast Corner of 240 Mill, 1900; Drawing courtesy of Alaska State Library Historical Collection, AJT Collection



Roof Truss Southwest Corner of 240 Mill, 1900; Drawing courtesy of Alaska State Library Historical Collection, AJT Collection

TREADWELL HOIST

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Treadwell Hoist **Other Name:**

Location: Treadwell Mine **Legal Description:**

Historic Use: Ore Processing **Current Use:** N/A

Architectural Style:

General Description: The hoist raised and lowered men and ore through the vertical shaft located between the 240 mill and the Glory Hole. Today the concrete foundations and pieces of the hoisting equipment and cables exist.

Architectural Features:

Historical Information:

Alterations: Comments:

Entry Date: 7/2/2010 Survey By: Wayne Jensen

TREADWELL HOIST



Foundations from Treadwell Hoist, November 2009 *Photo Courtesy of Wayne Jensen*



Cable from Treadwell Hoist Photo courtesy of Wayne Jensen

BLACKSMITH SHOP

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Blacksmith Shop **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Metal Fabrication and **Current Use:**

Repair

Architectural Style:

General Description: Located south of the 240 Mill. There are several artifacts in the vicinity of the Blacksmith Shop including an Ore Car, metal lathe and large solid steel anvil plate.

Architectural Features: Historical Information:

Alterations: Comments:

Entry Date: 07/08/10

Survey By: Wayne Jensen

BLACKSMITH SHOP



Blacksmith Building Site, April 2010; Metal lathe on right side of photo. *Photo courtesy of Wayne Jensen*



Ore car on track near Blacksmith Shop, April 2010 *Photo courtesy of Wayne Jensen*

BLACKSMITH SHOP



Metal Lathe remains April 2010; Photo courtesy of Wayne Jensen



Part of Metal Lathe with foundry mark indicating it was cast at the Treadwell Foundry. *Photo taken in April 2010, courtesy of Wayne Jensen*

BLACKSMITH SHOP



Anvil table remains, April 2010; Photo courtesy of Wayne Jensen



Ladle Remains, April 2010, Photo courtesy of Wayne Jensen

GLORY HOLE

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Glory Hole **Other Name:**

Location:Treadwell **Legal Description:**

Historic Use: Open Pit Mine **Current Use:**

Architectural Style:

General Description: The "Glory Hole" open pit mine is located south of the 240 Mill. It is approximately 1,700 feet by 420 feet across and 450 feet deep. The hole still exists.

Architectural Features:

Historical Information: The "Glory Hole" an open pit mine was the initial location of the lode mining in the Treadwell area. The pit operated until 1906, when all workings in the pit ceased, when the companies began to excavate the ore by tunneling deep within the ground. Approximately 5 million tons of ore were removed from the pit.

Alterations: Comments:

Entry Date: 07/13/10 Survey By: Wayne Jensen

GLORY HOLE



Glory Hole circa 1910, photographer Winter & Pond Alaska State Library, Winter & Pond Collection, ASL-P87-0350



Glory Hole, November 2009 Photo courtesy of Wayne Jensen

TANKS

AHRS#: CBJ#: Year Built: N/A

2-D03-0-102-006-1

Historic Name: Tanks **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: Water and Fuel Storage **Current Use:**

Architectural Style: N/A

General Description: Riveted steel plate tanks used to store crude oil delivered by ship to the Wharf. One was located near the end of the Wharf, one next to the Central Power Plant and a third on the hill west of the 240 Mill. A fourth tank served the boilers for the Central Hoist and 700 Mill, this tank collapsed in the cave-in in 1917. Steel tanks were also used to store salt water for use in the mills and for fire fighting.

Architectural Features: N/A

Historical Information: The tanks were made of steel segments riveted together. The small ones could hold 10,000 barrels of oil and the large ones approximately 30,000 barrels.

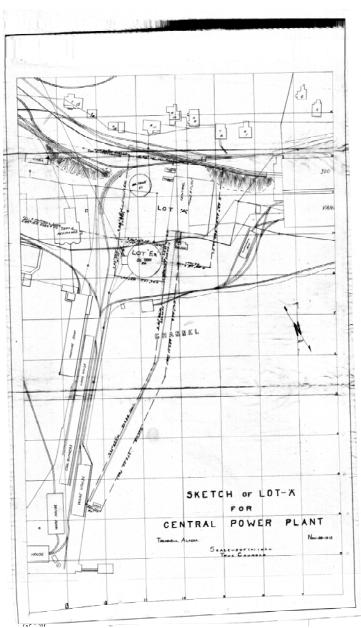
Alterations: Comments:

Entry Date: 07/08/10

Current Photo Date and Author:

Survey By: Wayne Jensen

TANKS



Sketch of Lot A for Central Power Plant showing tank locations

Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

TANKS

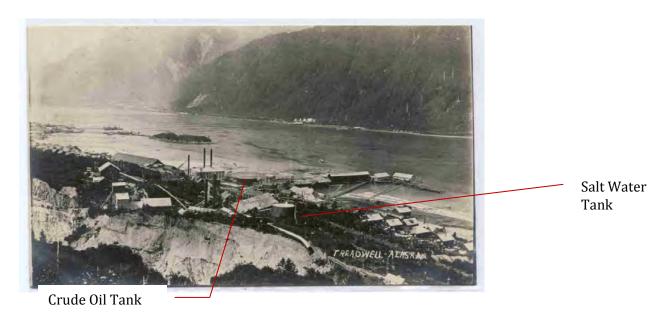
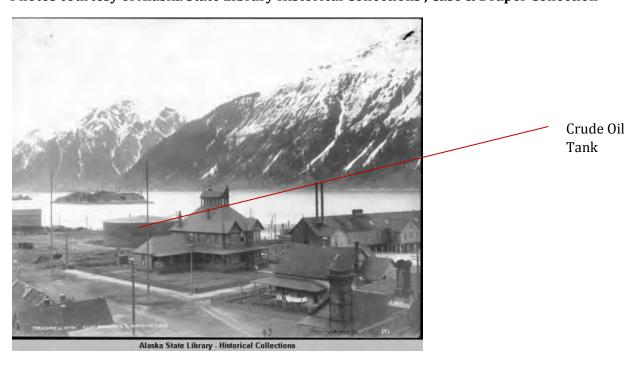


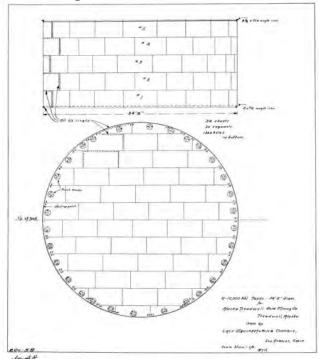
Photo Courtesy of Juneau Douglas City Museum

Photos courtesy of Alaska State Library Historical Collections , Case & Draper Collection



TANKS

Historic Image:



Drawing of 10,000 barrel oil tank

Drawing courtesy of Alaska State Library Historical Collections, AJT Collection

Current Image:



Site of crude oil tank for Central Power Plant. Imprint of tank still existing along with steel perimeter base angle. *Photo courtesy of Wayne Jensen*

TREADWELL DITCH

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1

Historic Name: Treadwell Ditch **Other Name:** Treadwell Pipeline, 300 Pipeline

Location: Treadwell Mine **Legal Description:**

Historic Use: Water for Power Generation **Current Use:** N/A

& Processing

Architectural Style:

General Description: Water was collected from streams from the east side of Douglas Island and delivered to Treadwell by the Treadwell Ditch, an 18 mile ditch. Water power provided energy for electrical generation and processing. When water was not available coal or crude oil was used.

Architectural Features:

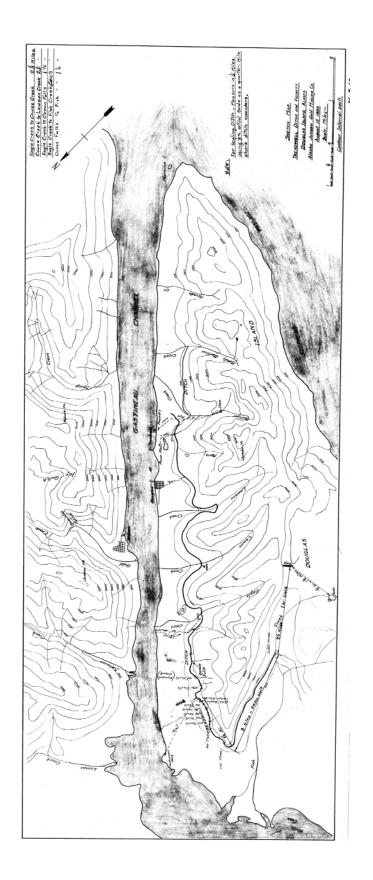
Historical Information:

Alterations: Comments:

Entry Date: 7/2/2010

Current Photo Date and Author:

Survey By: Wayne Jensen





Tailings or wastewater flume from 240 Mill near Treadwell Club *Photo by Wayne Jensen*

Pipeline to 240 Mill from Treadwell Ditch Photo by Wayne Jensen





Pipeline to 240 Mill from Treadwell Ditch *Photo by Wayne Jensen*

Wood Stave Pipe Photo by Wayne Jensen



CAVE IN

AHRS#: CBJ#: Parcel#: Year Built:

2-D03-0-102-006-1 1917

Historic Name: Cave In **Other Name:**

Location: Treadwell **Legal Description:**

Historic Use: N/A/ **Current Use:** N/A

Architectural Style:

General Description: On April 21, 1917 in conjunction with a high tide the ground around the Natatorium collapsed flooding the underground working of the Treadwell, 700' and Mexican mines and leaving a deep salt water filled hole that exists today.

Architectural Features:

Historical Information: The cave-in was preceded by surface subsidence in various locations for up to a year prior to April 21, 1917; including significant activity the day before the event. The cave-in closed the three mines. The fourth mine in the complex, the Ready Bullion mine continued after the cave-in but was not profitable and was closed permanently in 1922.

Alterations: Comments:

Entry Date: 07/13/10

Survey By: Wayne Jensen

CAVE IN

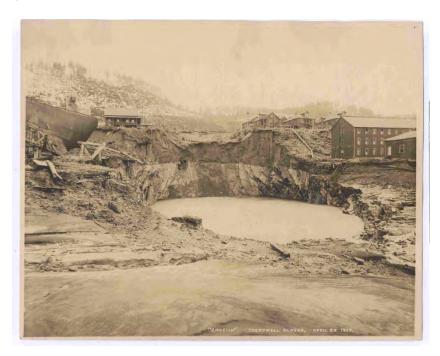


Photo of Cave-in April 22, 1917

Photo courtesy of Juneau Douglas City Museum



Photo of Cave-in at high tide April 22, 1917 Photo courtesy of Juneau Douglas City Museum

CAVE IN



Natatorium, one day after cave-in, April 23, 1917 Photo courtesy of Juneau Douglas City Museum



Swimming tank following cave-in Photo courtesy of Juneau Douglas City Museum

BEST MANAGEMENT PRACTICES

The Treadwell Mining Complex Historic Resources and Site Survey provides information on the existing and former buildings and structures in the portion of the Treadwell Complex on Douglas Island currently owned by the City and Borough of Juneau. This includes observations of the condition of the existing buildings and structures. The purpose of this information will be to assist in the management of this historic property.

Objectives:

- To protect and manage historic resources within the portion of the historic Treadwell Mining Complex owned by the City and Borough of Juneau.
- To provide educational information about the history of mining and the Treadwell Mining Complex.

Context:

Historic resources exist throughout the State of Alaska and the City and Borough of Juneau. The Treadwell Mining Complex represents one of the more significant sites in the CBJ. It was the site of the largest gold mine in the world during its existence in the late 19th and early 20th centuries. It is part of a popular recreation area and is easily accessed via a network of trails. It is rich with artifacts, remnants of buildings and land forms that recall the mining history of the time and area. Best Management Practices can assist in the protection and appreciation of this rich heritage.

BEST MANAGEMENT PRACTICES:

General:

• The Treadwell Historic Preservation and Restoration Society (Treadwell Society), Inc. was established in 2009 to stabilize, preserve and restore the existing structures and buildings of the Treadwell Mine site on Douglas Island for the purpose of public access, education and enjoyment. A Memorandum of Agreement between the City and Borough of Juneau (CBJ), the owner of the property, and the Treadwell Society grants the Treadwell Society the right to manage the property for public use and to assist in the restoration and preservation of historical structures on the property.

Site Improvements:

- Locations of non-existing buildings and structures should be identified to avoid detrimental impacts to historic resources.
- Objects and artifacts discovered during routine maintenance or new construction shall be brought to the attention of the Society for disposition as provided in the Memorandum of Agreement between the Treadwell Society and the CBJ.

Restoration, Rehabilitation and/or Replication of Historic Buildings and Structures:

- Stabilize existing buildings and structures to prevent further deterioration.
- Preserve the original appearance of existing buildings and structures during any restoration.
- Use materials consistent with the original construction.

BEST MANAGEMENT PRACTICES

- Construction shall be consistent with the Secretary of the Interior's Standards and Guidelines.
- Vegetation in and around historic resources should be cleared to protect the resources from detrimental impacts.

Site Use and Events:

- Public use of the CBJ owned portion of the Treadwell Mining Complex should be managed in a manner that assures protection of the historic resources.
- Identify appropriate locations for events and activities that assure protection of the historic resources.

Education:

- The public should be notified through education and signs on the site that damage to the buildings and structures and the removal of objects from the site is illegal.
- The Treadwell Society, in cooperating with the CBJ Parks and Recreation Department, will make its best effort to educate the public of the importance to protect the site from loss of historic resources, and to conserve the property so as to minimize damage to the extant buildings, structures, sites and objects.
- Educate the public about the history of the site and the importance of preserving it.

BIBLIOGRAPHY

The following resources were utilized in the development of this report:

I. Publications

<u>Draft Report of the Treadwell Historic Resources Survey, 1991</u> Gary Gillette and Willette Janes

<u>History of the Mine and Miners in the Juneau Goldbelt, 1988</u> Earl Redman

I Remember Treadwell, 1983 Charlotte L. Mahaffy

<u>History of Gold Mining Sites Juneau, Alaska 1980</u> Heritage Conservation and Recreation Service

Hard Rock Gold, 1980
David and Brenda Stone

<u>Treadwell Gold, 2010</u> Sheila Kelly

II. Data Repositories

Alaska State Historical Library

Alaska's Digital Archives

Juneau Douglas City Museum