

# EXHIBIT A



Matthew Reece  
Minerals Program Manager  
United States Forest Service  
8510 Mendenhall Loop Road  
Juneau, Alaska 99801

18 January 2023

### **North Extension Project NEPA Alternatives Compliance with ANILCA Section 503(i)(1)**

Dear Mr. Reece:

In recent communications, you have indicated that the United States Forest Service (Forest Service) believes all three tailing disposal facility (TDF) further expansion alternatives being evaluated in detail in the ongoing National Environmental Policy Act (NEPA) analysis for the North Extension Project (the NEP or Project) comply with applicable provisions set forth in Section 503(i)(1) of the Alaska National Interest Lands Conservation Act (ANILCA). However, we understand that the Forest Service will not complete its review or share their rationale prior to the release of the draft Supplemental Environmental Impact Statement (SEIS).

The purpose of this letter is to summarize Hecla Greens Creek Mining Company's (HGCMC) review and understanding of how the three alternatives being evaluated in detail for the draft SEIS comply with applicable provisions in ANILCA Section 503(i)(1), and to contribute to the draft SEIS evaluation.

### **Background**

#### ANILCA

ANILCA Section 503(i)(1) states that the holders of valid mining claims for the Greens Creek deposit (i.e., HGCMC) are entitled to a lease (and necessary associated permits) within the Admiralty Island National Monument only if the Secretary [or the Forest Service by delegated authority] determines:

- A. That milling activities necessary to develop such claims cannot be feasibly carried out on such claims or on other land owned by such holder;
- B. That the use of the site to be leased will not cause irreparable harm to the Misty Fjords or the Admiralty Island National Monument; and
- C. That the use of such leased area for such purposes will cause less environmental harm than the use of any other reasonably available location.

#### 2013 Tailings Facility Expansion Record of Decision

The 2013 Record of Decision (ROD) for the Greens Creek Mine TDF Expansion included a statement by the Forest Supervisor, Forrest Cole, that:

- The Forest Service should “develop a supplement to the Forest Service Directives to clarify how to apply the complex set of legal requirements that are specific to [the Monument] and Misty Fjords National Monument”, and
- HGCMC “is to provide feasibility analyses regarding the construction and use of alternative tailings disposal facilities. The Tongass National Forest will work with other stakeholders to identify the information that must be incorporated into the feasibility analysis, using the definition of feasibility [defined below].”

*See September 2013 ROD, pages 13-15.*



“Feasible” is defined in the Tongass Forest Plan [consistent with regulations implementing ANILCA Section 503(f)(2)(A) at 36 CFR 228.80(c)(2)] as:

Capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, technical, and safety factors. In evaluating feasibility, the following are considerations: 1) the effectiveness and practicality of the measures being considered; and 2) the long and short-term costs of the measures and the effect of those costs on long- and short-term economic viability of projects or programs.

*See September 2013 ROD, page 13.*

#### 2014 Alaska Regional Forester Letter

Subsequent to the 2013 ROD, the Forest Service issued a letter in December 2014 that determined not to proceed with a supplement to the Forest Service Directives, but still suggested that a feasibility analysis be completed consistent with the recommendation made in the ROD.

#### Background Summary

The following alternatives are being evaluated in detail in the ongoing NEPA:

- Alternative B – B Road East Relocation Alternative
- Alternative C – B Road West Relocation Alternative 1
- Alternative D – B Road West Relocation Alternative 2

All alternatives include the following key components:

- An expansion of the existing tailings stack to provide additional tailings disposal capacity (see Table 1),
- A raise of Pond 7 and Pond 10 (collectively referred to as Pond 7/10) to increase the water management capacity commensurate with the increased catchment area, and
- Realignment of the existing B Road.

The primary differences between the three action alternatives are the alignment of the relocated B Road and the limits to which the tailings stack is expanded eastward.

Under Alternative B, the B Road would be relocated east of its current alignment within the current Forest Service lease boundary and the stack extended eastward to the realigned B Road. Under Alternative C, the B Road would be relocated to the west side of the existing TDF, and the stack would be extended eastward within the current Forest Service lease boundary. Alternative D utilizes the same B Road alignment as Alternative C, but the stack would be extended eastward as far as practicable given geometric and constructability constraints.

Based on the foregoing HGCMC understands that if these three alternatives comply with the criteria in ANILCA Section 503(i)(1)(A)-(C) described above, then the alternatives will also meet the considerations set forth in the 2013 ROD and the 2014 Alaska Regional Forester letter regarding the range of TDF alternatives to consider in detail in the SEIS.



## **Summary of Why the Alternatives Being Evaluated in the SEIS Comply with ANILCA 503(i)(1) Feasibility and other Applicable Criteria**

### ANILCA Section 503(i)(1)(A) – Feasibility

HGCMC owns or has surface rights to eight patented mining claims in the Greens Creek Mine vicinity on Admiralty Island. As described in the feasibility analysis in Attachment A, it is not technically feasible to construct a TDF on these claims that meets the Project purpose and need due to steep topography and/or inadequate acreage.

HGCMC has surface rights to two millsite claim groups: one near the TDF and Hawk Inlet facilities, and one at Young Bay for the associated dock and parking area.

The millsite claim at Young Bay (see Attachment B) is only 0.615 acres, only a fraction of the minimum approximate acreage of 44 acres required for a TDF capable of storing 5 million cubic yards described in Attachment A, page 1. Therefore, it is not technically feasible to construct a TDF meeting the Purpose and Need for the Project on this millsite claim.

The millsite claims near the TDF (see Attachment C) are located adjacent to, and somewhat overlapping with the Hawk Inlet private property and the TDF lease boundary. The area of the claims outside the lease boundary and Hawk Inlet private property (excluding the slivers west of the TDF occupying the beach above Hawk Inlet) is approximately 83 acres. As shown in Attachment C, nearly all of these acres occupy steeply sloping ground above and adjacent to Cannery Creek. The rest are within the TDF lease boundary. Therefore, the same reasons set out in Attachment A apply to demonstrate that it is not technically feasible to construct a TDF meeting the Project Purpose and Need on the millsite claims adjacent to the TDF and Hawk Inlet but outside the lease boundary.

HGCMC does not have surface rights to any other patented or unpatented mining claims. The Fowler Creek drainage alternatives considered in the 2013 EIS do not occupy unpatented mining claims or other lands owned or controlled by HGCMC. Therefore, the condition set forth in ANILCA Section 503(i)(1)(A) regarding lack of feasible alternatives on HGCMC mining claims or other land owned by HGCMC, applying the definition of “feasible” stated in the Tongass Forest Plan, is met by all three of the alternatives being evaluated in the ongoing NEPA process.

### ANILCA Section 503(i)(1)(B) – Irreparable Harm

The alternatives being evaluated in the ongoing NEPA process:

- Would not include substantial, material changes to the tailings disposal operations approved in prior NEPA analyses,
- Would not dispose of tailings in any fish-bearing portion of Tributary Creek,
- Would not impact any additional watersheds, and
- Would impact less than 1/100<sup>th</sup> of a percent of the Monument.

Additionally, as presented in the section below, all three alternatives would add tailings and waste rock storage capacity more efficiently (i.e., with less surface disturbance per unit of extension capacity) than any of the action alternatives evaluated in detail in the 2013 NEPA analysis.

Therefore, the same reasons presented in the 2013 ROD explaining why the alternatives considered in the 2013 analysis do not cause irreparable harm to the Monument applies to the three action alternatives being considered in detail in the present analysis.

*See September 2013 ROD, pages 9-16, 30.*



ANILCA Section 503(i)(1)(C) – Comparable Environmental Impacts

The 2013 ROD and EIS considered four action alternatives that would expand the TDF to provide up to 14.2 million cubic yards (MCY) of additional tailings and waste rock storage capacity. The current NEPA analysis is considering three action alternatives that would provide up to 10.5 MCY of additional capacity. Table 1 summarizes the disturbance and capacity increases associated with each of the current and prior alternatives and shows that all three of the action alternatives considered in the present analysis add capacity to the TDF more efficiently (less surface disturbance per unit of extension capacity) than any of the alternatives considered in the September 2013 ROD.

*Table 1: Comparison of Disturbance and Capacity of the Alternatives in both the 2013 and Current NEPA Processes*

|                       | Alternative             | Extension Capacity (MCY) | New Disturbance (acres) |          |       | New Disturbance to Capacity Ratio (acres to MCY) |
|-----------------------|-------------------------|--------------------------|-------------------------|----------|-------|--|
|                       |                         |                          | JRD                     | Monument | Total |  |
| 2013 NEPA Analysis    | Alternative B           | 14.2                     | 28                      | 100      | 128   | 9.01   |
|                       | Mitigated Alternative B | 14.2                     | 57                      | 69       | 126   | 8.87   |
|                       | Alternative C           | 14.2                     | 171.7                   | 2.3      | 174   | 12.25  |
|                       | Alternative D           | 14.2                     | 161.7                   | 23.3     | 185   | 13.03  |
|                       | Selected                | 2.1                      | 8                       | 18       | 26    | 12.38  |
| Current NEPA Analysis | Alternative B           | 5                        | 11.4                    | 2.3      | 13.7  | 2.74   |
|                       | Alternative C           | 6.8                      | 12                      | 2.9      | 14.9  | 2.19   |
|                       | Alternative D           | 10.5                     | 17.1                    | 6.8      | 23.9  | 2.28   |

**Closing**

In summary, HGCMC believes that all action alternatives considered in the present NEPA analysis comply with all three criteria in ANILCA Section 503(i)(1)(A)-(C), because (A) a tailings facility cannot be feasibly constructed on any other land or property controlled by HGCMC; (B), the alternatives considered would not cause irreparable harm to the Monument; and (C) these alternatives would have substantially less environmental impact than any other alternative.

If you have any questions on this matter, or need additional information, please contact me.

Sincerely,


 Aaron Marsh  
 2023.01.18 08:29:35  
 -09'00'

Aaron K. Marsh, P.E.  
North Extension Project Manager

**Attachments**

- Attachment A: Letter from HGCMC to the Forest Service dated December 1, 2021 Documenting Infeasibility of a New Tailings Storage Facility on Patented Mining Claims
- Attachment B: Young Bay Millsite Claim Survey No. 2514
- Attachment C: Millsite Claims Near TDF Lease Area and Hawk Inlet Private Property



**Attachment A**

**Letter from HGCMC to the Forest Service dated December 1, 2021 Documenting Infeasibility  
of a New Tailings Storage Facility on Patented Mining Claims**



Matthew Reece  
 Minerals Program Manager  
 United States Forest Service  
 8510 Mendenhall Loop Road  
 Juneau, Alaska 99801

1 December 2021

**Infeasibility of a New Tailings Storage Facility on Patented Mining Claims North Extension Project**

Dear Mr. Reece:

The purpose of this letter is to document the infeasibility of constructing a new tailings disposal facility (TDF) on the patented mining claims controlled by Hecla Greens Creek Mining Company (HGCMC).

HGCMC has surface and subsurface rights on the following mining claims: Big Sore #902, Big Sore #903, Big Sore #904, Big Sore #905, Big Sore #906, Big Sore #1006, and Big Sore #1007 lode Mining Claims located within Mineral Survey No. 2402; and Big Sore #1305 lode mining claims located within Mineral Survey No. 2515 (see Figure 1). The 2D surface areas (as opposed to 3D ground surface area) for each claim are shown in Table 1.

Figure 2 shows a blown-up view of Claim Nos. 902-906 with a section view (see Figure 3) cut parallel to the slope down towards the tributary of Greens Creek. This section shows that the existing slope along this section is approximately 1.35H : 1V, which is much steeper than the 3H : 1V slope required for constructing an industrial solid waste landfill in compliance with Alaska Department of Conversation (ADEC) Solid Waste regulations (see 18 AAC 60.485. *Industrial Solid Waste*).

The slope along the ridge that runs north south through claim nos. 1006 and 1007 is approximately 2H : 1V, but is still too steep to construct a new TDF.

In addition to the topography constraints, if one assumes a new TDF with a circular flat base and 3H : 1V slopes per ADEC regulations, the footprint of a facility capable of storing 5 million cubic yards, excluding access, pond(s), and other appearances, would be approximately 44 acres. Steep slopes increase the required surface area. This minimum area requirement eliminates claim nos. 1006, 1007, and 1305 independent of topography because the adjacent combined area is less than 44 acres. The remaining claims (nos. 902 through 906) do have a combined area greater than 44 acres; however, the topography prevents construction of a new TDF.

*Table 1: Claim Surface Area*

| Claim No. | Surface Area (acres) |
|-----------|----------------------|
| 902       | 19.1                 |
| 903       | 19.6                 |
| 904       | 19.1                 |
| 905       | 19.4                 |
| 906       | 19.8                 |
| 1006      | 19.5                 |
| 1007      | 19.4                 |
| 1305      | 19.5                 |

Therefore, HGCMC respectfully submits that it is not feasible to construct a new TDF on the patented mining claims controlled by HGCMC.

Sincerely,

Digitally signed by Aaron K. Marsh  
 Date: 2021.12.01 07:01:34 -09'00'

Aaron Marsh, P.E.  
 North Extension Project Manager

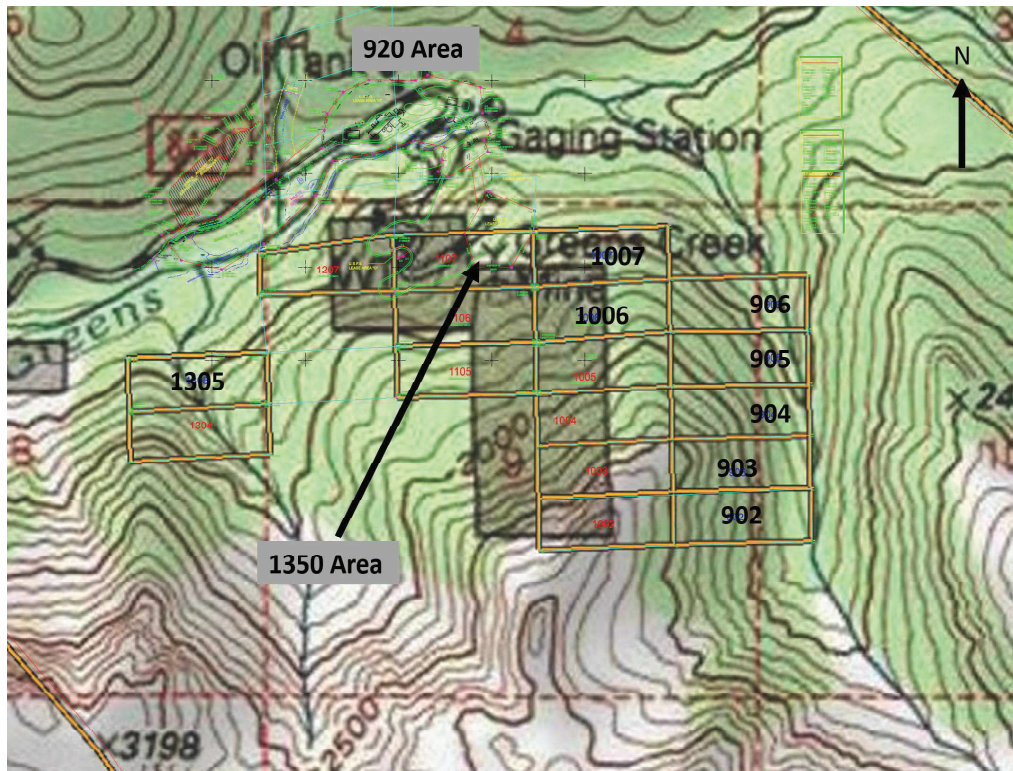


Figure 1: Patented Mining Claims with Surface Rights

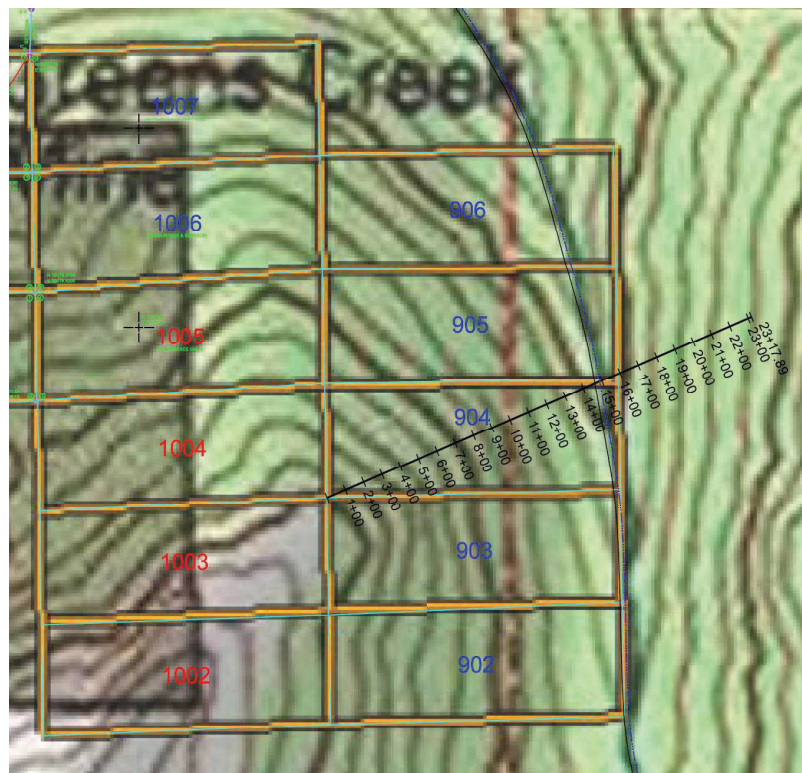


Figure 2: Blow-Up Plan View of Claim Nos. 902-906 with Alignment for Cross Section



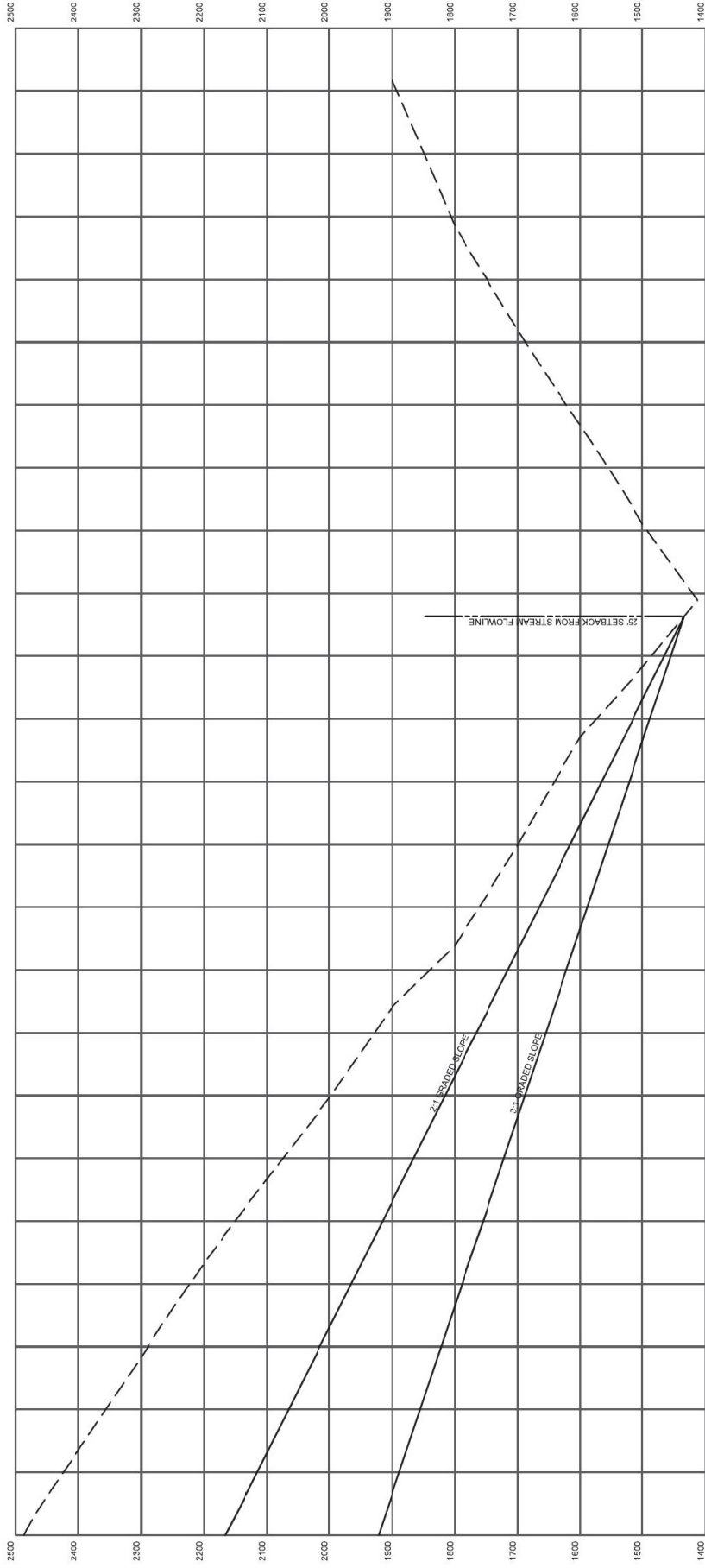


Figure 3: Section View Cut from the Southwest to the North East Parallel to the Slope through Claim Nos. 902-906



**Attachment B**  
**Young Bay Millsite Claim Survey No. 2514**

ORIGINAL

# MINERAL SURVEY NO. 2514 ALASKA

CLAIM OF  
**KENNECOTT GREENS CREEK  
MINING COMPANY**  
KNOWN AS THE  
**YOUNG NO. 1 MILLSITE**

SITUATE IN  
Sec. 1, T. 43S., R. 65E., C. 8M.  
(Un-surveyed)  
JUNEAU MINING DISTRICT  
JUNEAU RECORDING DISTRICT

Latitude 58°10'20.3"N., Longitude 134°41'56.6"W.  
At Cor. 1, Young No. 1 Millsite

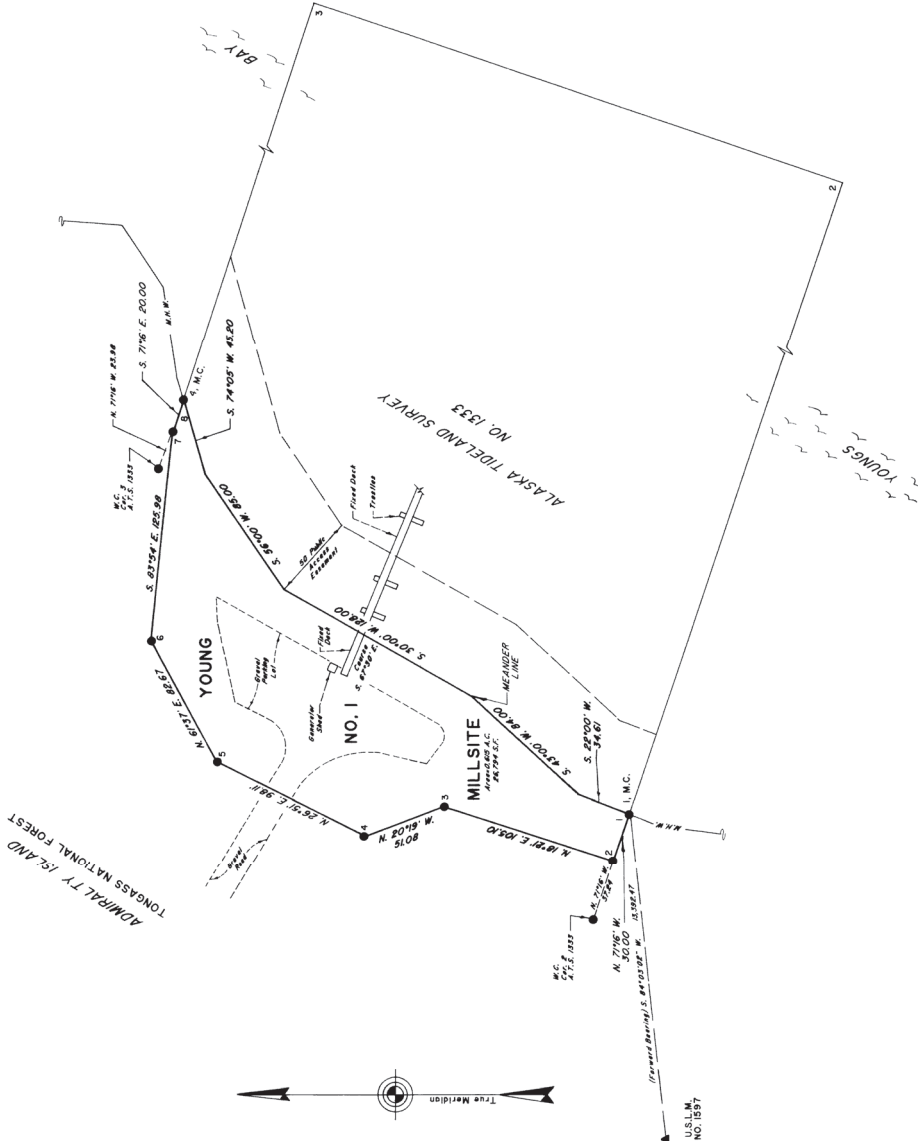


Surveyed October 30 to November 9, 1990  
By Malcolm A. Mentzes, Mineral Surveyor

UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT  
DIVISION OF CADASTRAL SURVEY

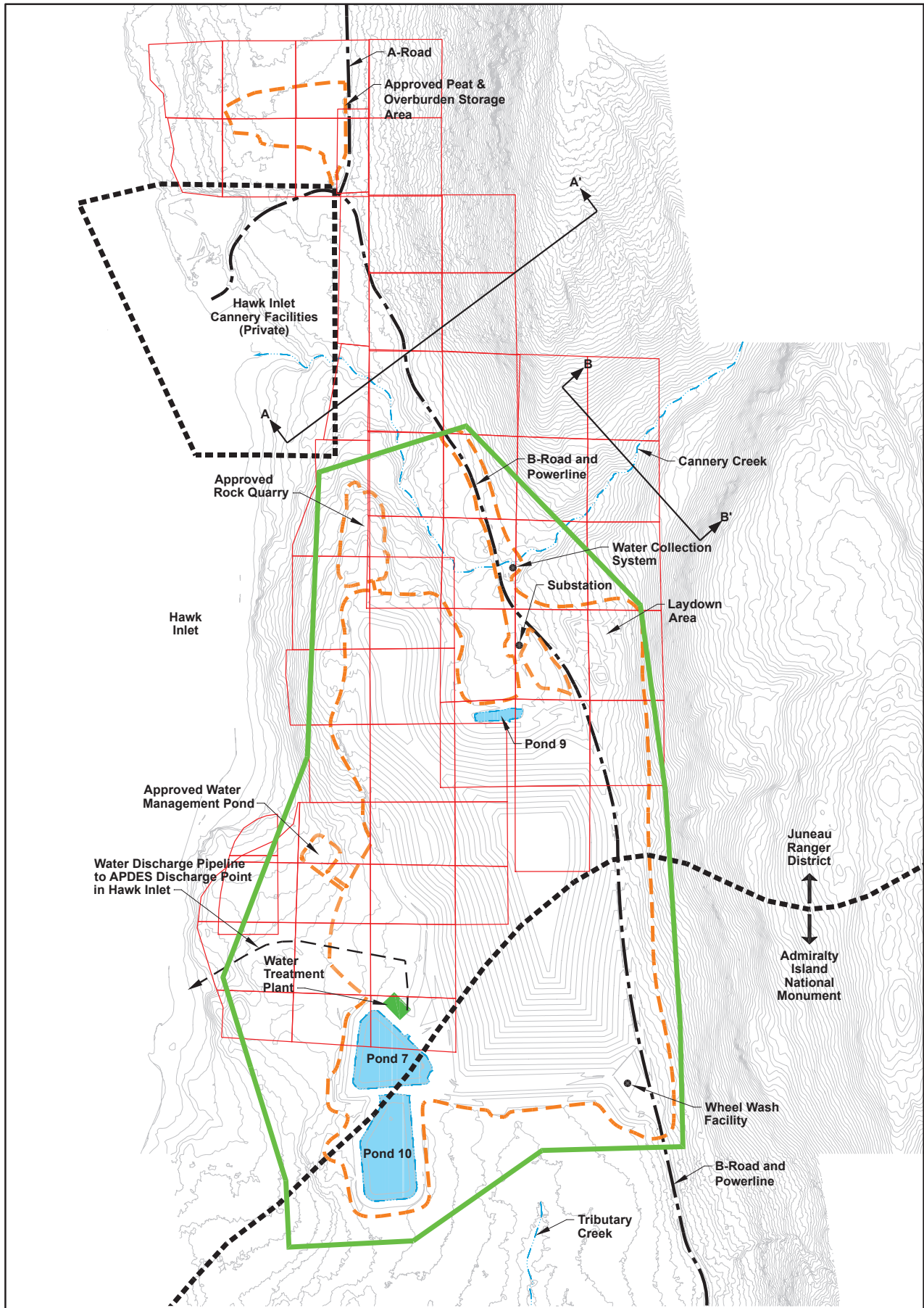
I hereby certify that this plat of Mineral  
Survey No. 2514, Alaska is strictly conformable  
to the field notes of said survey which have been  
examined and approved.  
Sept. 11, 1991  
*Malcolm A. Mentzes*  
Deputy State Director for  
Anchorage, Alaska  
Division of Cadastral Survey

PROT: CR 12-13 T43S R65E CRM  
JUNEAU A-2





**Attachment C**  
**Millsite Claims Near TDF Lease Area and Hawk Inlet Private Property**



**Legend**

- Forest Service Lease Boundary
- - - Approved Disturbance Area Boundary
- - - - - Land Administration or Ownership Boundary
- 10-Foot Contour Interval
- - - Natural Creeks
- Claim Boundary

