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May 16, 2007

Mrs. Nicole Hayes
United States Army Corps of Engineers
Regulatory Branch
2204 3rd St.
Elmendorf AFB, Alsaka
99506

Re: Niblack Exploration Project – Practicable Alternatives Report in Response to Additional Information Request; Marine Facility ACOE Section 404 Permit Application

POA-1982-290-~~M~~ N

Dear Mrs. Hayes:

Please find enclosed a report with information on practicable alternatives as requested in your letter dated January 26, 2007. The letter requested additional information on Niblack's proposal to build a marine facility at the company's project on Prince of Wales Island. This report on practicable alternatives is in addition to a letter previously filed with ACOE (dated February 23, 2007) in response to the additional information request.

If you have any questions regarding this submittal please contact me directly at (604) 484-5045 or Rick Richins at (208) 343-8727.

Sincerely,

Darwin Green, VP Exploration

CC: Paddy Nicol (President)
Bob Tsigonis (LMPT Project Coordinator)
Joe Donahue, (ACMP Supervisor)

PRACTICABILITY ANALYSIS

Niblack Mining Corporation
404 Permit Application

April 24, 2007

1.0 Introduction and Background

The Niblack construction exploration project is located within Sections 33 and 34, T. 78 S., R. 99 E., Copper River Meridian; Latitude 55.0667° N, Longitude 132.1467° W, off Moira sound in Niblack Anchorage, adjacent to Prince of Wales Island, Alaska. The project is assigned number POA-1982-290-M, Moira Sound.

This practicability analysis is prepared in response to a formal request from the Department of Army, U.S. Army Engineer District, Alaska (DA) dated January 26, 2007. The written request for additional information from Ms. Nicole Hayes, Regulatory Specialist describes the need to meet Section 401(a)(1) of the Clean Water Act, Certificate of Reasonable Assurance Certification, and the 404(b)(1) guidelines designed to adopt the least environmentally damaging practicable alternative, as determined by a practicability analysis.

2.0 Overall Project Description

The Niblack construction exploration project would involve developing an underground adit to access areas where the mineralized zone could be drilled. This is a 14.5 ft. wide, 13 ft. in height tunnel with a total length of approximately 6000 ft.

As a result approximately 46,400 yd^3 of non-acid generating/non-metals leaching (NAG/NML) and 14,300 yd^3 of potentially acid-generating material will be produced. The NAG/NML material will be stored above ground in an engineered waste rock storage site. The PAG material will be temporarily stored in geotextile lined, surface storage engineered facility. At cessation of exploration, the PAG material will be hauled back underground. Neither storage site is located in waters of the U.S. Neither waste rock storage site is located in delineated wetlands. Every effort has been made to avoid or minimize impacts to wetlands, including related water management and water treatment facilities located below these sites.

3.0 Corps of Engineers Section 404 Permitting

Presently, there are no facilities at the Niblack Anchorage site that would allow for docking of barges or float planes. Landing craft approaches are also limited by grade and tidal variation.

The Niblack Anchorage barge and landing craft mooring facility (BLCMF) proposed for the 2007 operating season is needed to accommodate the 20+ ft. tidal variation and to allow safe access to the site. Heavy equipment is needed to construct the adit, associated water treatment and water management faculties, and to ensure that the barge camp to house the construction crew is moored securely and safely. Private access to the patented mining claims at the site is also necessary and facilitated by this BLCMF.

The proposed BLCMF is shown in Sheets 1 to 3. It would be constructed at the Niblack Anchorage along the southern shoreline where the main access road starts. The road travels directly west, then follows a series of switchbacks to the 390 elevation portal construction site.

The planned dock facility and barge landing is designed to accommodate a 20 ft. tide variance (see Sheets 4 to 6). No dredging would be required for the BLCMF. No breakwater is necessary. The project is comprised of the following features, facilities and disturbances to be located in or over waters of the U.S.

1) Fill for barge ramp is approximately 500 yds^3 of clean gravel and rock from rock quarry (all non-acid generating, non-metals leaching material).

2) Facility is designed for barge with maximum draft of 10 ft. (typical barge is 180 ft. long by 50 ft. wide).

3) Loading/unloading will be by roll-on, roll-off fork lift system; the craft will be berthed at the pile-anchored dolphins.

4) A floating dock, wooden walkway and landing craft ramp will also be installed.

On April 16, 2007 the Army Corps of Engineers (ACOE) issued a permit modification: file number POA-1982-290-M, Moira Sound. The permit was authorized/modified as follows:

> " Use of three 5-tons anchors to anchor a 33 ft. by 240 ft. barge camp. A 5 ft. by 66 ft. hinged walkway would be connected to the shore. In addition, two 5 ft. by 2 ft. dock sections (for a total of 200 ft^2) would be connected to the side of the barge camp."

The eventual plan is for this floating camp barge to be permanently moored to driven steel piles located beside a proposed barge landing in shallow water. A dock and walkway secured to the pilings will provide access from the camp to shore.

4.0 Practicability Analysis

The Clean Water Act provides for the issuance of permits by the Secretary of the Army for the discharge of "dredged or fill material into navigable waters at specified disposal sites" (33 U.S.C. § 1344 (a)). In its 2002 rulemaking, the ACOE defined "discharge of fill material" to include "the placement of overburden, slurry, tailings or similar mine related materials" into approved disposal sites. The 404(b)(1) guidelines published at 40

C.F.R. Part 230, guide the ACOE in the designation of disposal sites. No discharge of dredge or fill material is to be permitted if there is a practicable alternative to the proposed discharge which would have less adverse impact on the aquatic ecosystem so long as the alternative does not have other significant adverse environmental consequences. In determining the practicability of the potential disposal options, the ACOE should first consider the applicant's overall project purpose. The ACOE should then consider whether any alternatives are practicable in terms of costs, existing technology, and logistics in light of the applicant's overall project purpose.

5.0 Overall Project Purpose

The ACOE should give the applicant's overall project purpose significant deference so long as that purpose is legitimate. An applicant may consider several permissible factors in its purpose including cost-effectiveness, net return on assets, and project location.

Listed below are the purposes for the Niblack construction/exploration BLCMF project. Each of these purposes is appropriate and must be considered in evaluating alternatives.

- Provide safe water-based access to the exploration site such that NMC can evaluate the future potential mining resource at the site;

- Reduce risk associated with safety and logistical concerns related to worker access or liability and shipments of fuel equipment and consumables at the site; and

- Provide an environmentally responsible design, construction and post-closure reclamation plan for these important access needs.

6.0 Cost

The ACOE rejects an alternative if it is one that the applicant would not pursue because the alternative is not economically viable: Guidelines Preamble, "Economic Factors", 45 Fed. Reg. at 85343. Stated differently, an alternative that is so expensive it would render the applicant's endeavor prohibitive is not a practicable alternative.

Cost is particularly relevant where the benefits of the project are purely economical and the costs of the project are entirely environmental. In fact, an applicant may state that cost is a defining factor for determining the practicability of an alternative. The ACOE may reject an alternative that is economically viable where it defeats the overall project purpose. The ACOE may also reject an alternative that substantially increases the costs of the project.

It is demonstrated in the discussion which follows that the only alternative that provides a reasonable cost is NMC's proposal for the BLCMF. The analysis which follows also demonstrates that the alternative is technically feasible, improves the overall logistics of the site, and is an environmentally sound design and operating plan.

7.0 Technologically Feasible

Given that almost anything is technologically feasible for a price, the ACOE should consider this factor closely intertwined with both the cost analysis and logistics. The analysis which follows clearly shows that the proposed BLCMF is technically feasible, and employs sound technology.

8.0 Logistics

The ACOE may consider safety, location, and distance to travel in evaluating the logistics of a project. The ACOE may also consider an alternative's ultimate impact on the overall project design such as the relocation of roads, renegotiation of contracts, and additional project expenses and delays. The impacts are minimal for NMC's proposed option.

It is demonstrated in the discussion that follows that Niblack's proposal greatly improves the logistics of the project, and thereby reduces the technological risks and expenses. It optimizes the distance for transportation of employees, fuel and supplies on site. It makes use of the preexisting road network, thereby reducing new road construction. It reduces safety risks for the employees and lessens the risk of delays in the transport of employees and materials. The potential risk of accidental spills during fuel transfers is also greatly reduced due to the ability to use self-contained isotainers or fuel tracks to transfer fuel to the fuel storage facility.

9.0 Alternatives Considered

The proposed Niblack dock facility and barge landing area (Alternative 1) is described earlier in Section 3.0 of this analysis. All land disturbing activities above the high tide mark would occur on patented (fee) land controlled by NMC. The permanently-moored floating camp and landing area would result in a total disturbance of about 0.14 acres, including subtidal area to be covered with about 500 yds^3 of clean fill.

Site selection for Alternative 1 incorporated wetland delineation survey data to ensure all associated disturbances above the high tide mark (access road, staging areas, etc.) were developed in areas designated as upland. No other potential alternative sites exist on patented land that would NOT disturb areas designated as wetland.

A marine survey conducted at the proposed location of the barge and landing area showed no eelgrass in the underlying substrate. The substrate was shown to consist of larger gravels and rock, not conducive to eelgrass colonization (HDR Alaska, Inc, 2007). The location is not adjacent to any special resources features.

NMC's proposed operation also involves a fuel storage site north of the barge landing area and on uplands away from the site. About 0.25 acres of uplands would be involved for this bermed/lined storage site. All fueling would be conducted at this site according to standard operating procedures and BMPs described in the ACOE 404 application and *Niblack Tideland and Lease Development Plan*, NMC, 2007. Likewise, the equipment

staging area would also be located on uplands and involve a similar 0.25 acres of disturbance.

A second site (Alternative 2) closer to the historic mancamp was also considered for development of a permanent dock facility and barge landing area. This site is north of the NMC proposed location, nearer to the temporary site used by Abacus and NMC earlier in project exploration activities. The location was determined to be in closer proximity to surveyed eelgrass beds. The site also would require construction of new access roads across areas designated as wetland.

Access to fill material for this location was determined to require additional road construction for either clean NAG material or the other primary source of quarry material used in earlier road construction. Access to the location and support staging and fuel storage sites were not direct. Marine transects conducted as part of the eelgrass survey also showed a much more gradual bottom drop-off in this location, which would require a facility extending much further into the foreshore and the need for significantly more fill to facilitate barge landings than is required for Alternative 1.

One other option involving a small breakwater at the proposed barge landing area (Alternative 3) was also considered by NMC. Material suitable for breakwater construction at the Alternative 3 site would need to be blasted and then characterized according to its waste type prior to use. About 11,500 yds^3 would be required with some of the riprap needing to be about 3 to 5 ft. thick. Given the level of use anticipated during 2007-2009 construction plan at the adit and the likelihood that much of the material generated during these activities would be unsuitable, this option was not given further consideration by the company.

10. Practicable Determination

The proposed project was, therefore, determined to be the least damaging practicable alternative. Impacts to the marine environmental were determined to be limited, as no dredging would be required. The dock facilities were designed so as to be closer to the shore and away from underwater vegetative habitat. Costs for the facility were determined to be "practicable" by the operator. No wave barrier would be required. Finally from a logistics standpoint, the barge land/access road alignment for the proposal were determined to be optimum reducing off-loading risks for isotainers and other supplies.

11. Environmental Safeguards and Mitigation

A. Construction Best Management Practices

The Best Management Practices (BMPs) that would be followed during the construction phase of the marine dock/landing area facility include those listed below:

- Hydraulic equipment used on barges will use vegetable oil or another biodegradable fluid rather than petroleum based oils.

- Refueling of construction equipment will be conducted on shore in a designated area with containment (liner and berming).

- Fuel transfers will incorporate level sensors, drip pans, and other precautionary measures, as appropriate.

- Oil spill response equipment will be readily available to respond to and contain any oil spills *(NMC, Revised Plan of Operations, 2007).* Spill response equipment will include absorbent materials, containment booms, and appropriate personal protective equipment. Personnel that are trained in responding to spills will be at the scene during all operations that could result in a spill.

- Spills into coastal waters will be reported to the appropriate agency immediately (ADEC, EPA, Coast Guard). Oil absorbent booms/socks will be placed around the spill sheen to contain it and to absorb as much of the petroleum product as possible.

- Reportable spills on land will be immediately cleaned up and reported to the appropriate agency.

- Upland disposal sites for waste cleanup will have silt curtains placed around the disposal area. Straw bales will be placed in drainage swales at periodic intervals to contain and filter muddy waters.

The following BMPs would be incorporated during the construction and operation of the ancillary facilities:

- Runoff from the laydown areas, any topsoil stockpiles, and other ancillary construction sites and/or facilities will be filtered by silt fences, hay bales, or other appropriate methods. Sediment traps would be regularly inspected, cleaned, and maintained.

- The laydown areas and access roads will be surfaced with crushed gravel to limit erosion.

- Boat or other vehicle maintenance activities would not allowed in the vicinity of the marine dock/landing area.

- Natural vegetation will be left in place along the shoreline wherever possible. Disturbed and exposed soils would be revegetated as soon as practicable. Runoff would be diverted around exposed soils to heavily vegetated areas in the forest.

B. Operational Best Management Practices

The following operational BMPs were taken from a compilation of recommended BMPs for Alaska Harbors by Neil Ross Consultants and Concepts Unlimited, 1995.

<u>Solid Waste</u>

- Trash containers will be provided on shore at the marine terminal.

- Waste receptacles will be placed on docks and secured, to prevent accidental spillage into the water.

Liquid Waste

- Spill absorbent pads and booms would be readily available in the event of a spill.

- Propylene glycol based antifreeze (orange color) will be used in place of ethylene glycol based antifreeze (green color) wherever possible, because it is less toxic.

Petroleum Leaks and Spills

- An oil Spill Response Plan (SRP) would be developed for the marine docking/landing facility.

- Adequate spill response equipment will be easily accessible and located at a clearly marked site. Phone numbers and directions on reporting spills would also be clearly posted at the same location.

- Used spill response equipment will be properly disposed.

- Biological cleaners, which consume and digest petroleum pollutants, will be used to ensure complete remediation of spill waste material, wherever appropriate.

Bilge Water

- Prior to discharging bilge water, the discharge will be inspected to ensure that no oil or fuel has been spilled into the bilge. Bilge water would not be discharged if it has a sheen or if it contains solvents, detergents or other additives.

- An oil/water separator will be installed in the bilge and in the bilge water pump discharge line. The separator will be maintained regularly.

- Niblack will recommend that oil-absorbing materials be used in bilge areas of boats that have inboard engines.

- Non-alkaline, biodegradable bilge cleaners will be used at the constructions site.

C. Monitoring

Baseline Water Quality

Niblack will collect pre-project environmental baseline marine water quality samples, consistent with the site-wide water quality monitoring plan in the vicinity of the dock/barge ramp landing area. These water quality conditions are summarized in a separate document: *Niblack Monitoring and Water Quality Plan, Knight Piesold Consulting, April, 2007.* This would include at least one set of chemical parameters and polycyclic aromatic hydrocarbons (PAH) from one to three sites, which can be indicative of pre-existing diesel fuel spills.

Operational Water Quality

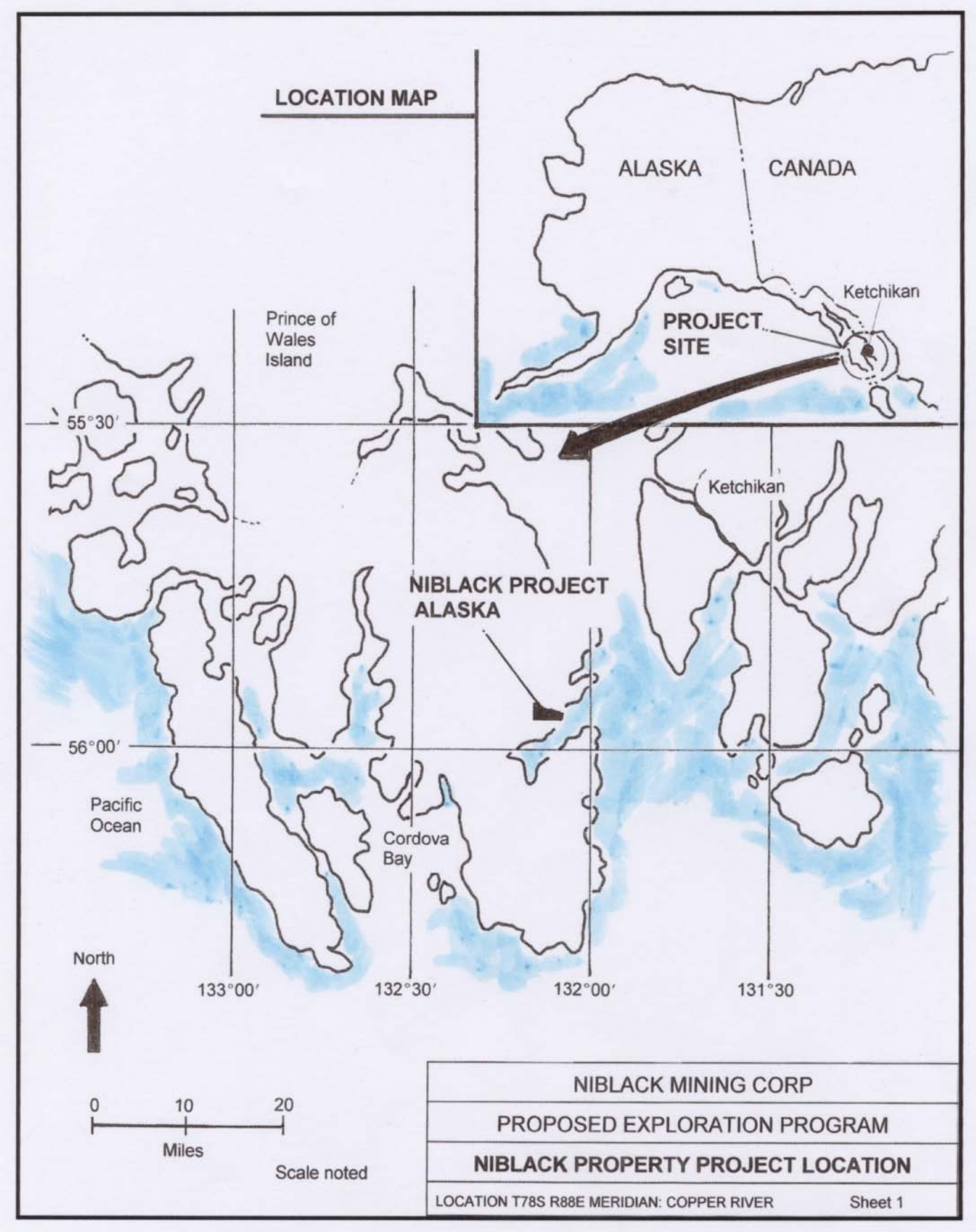
A similar set of samples will be collected and analyzed during the construction period. This will document any impacts related to construction activities and/or fueling.

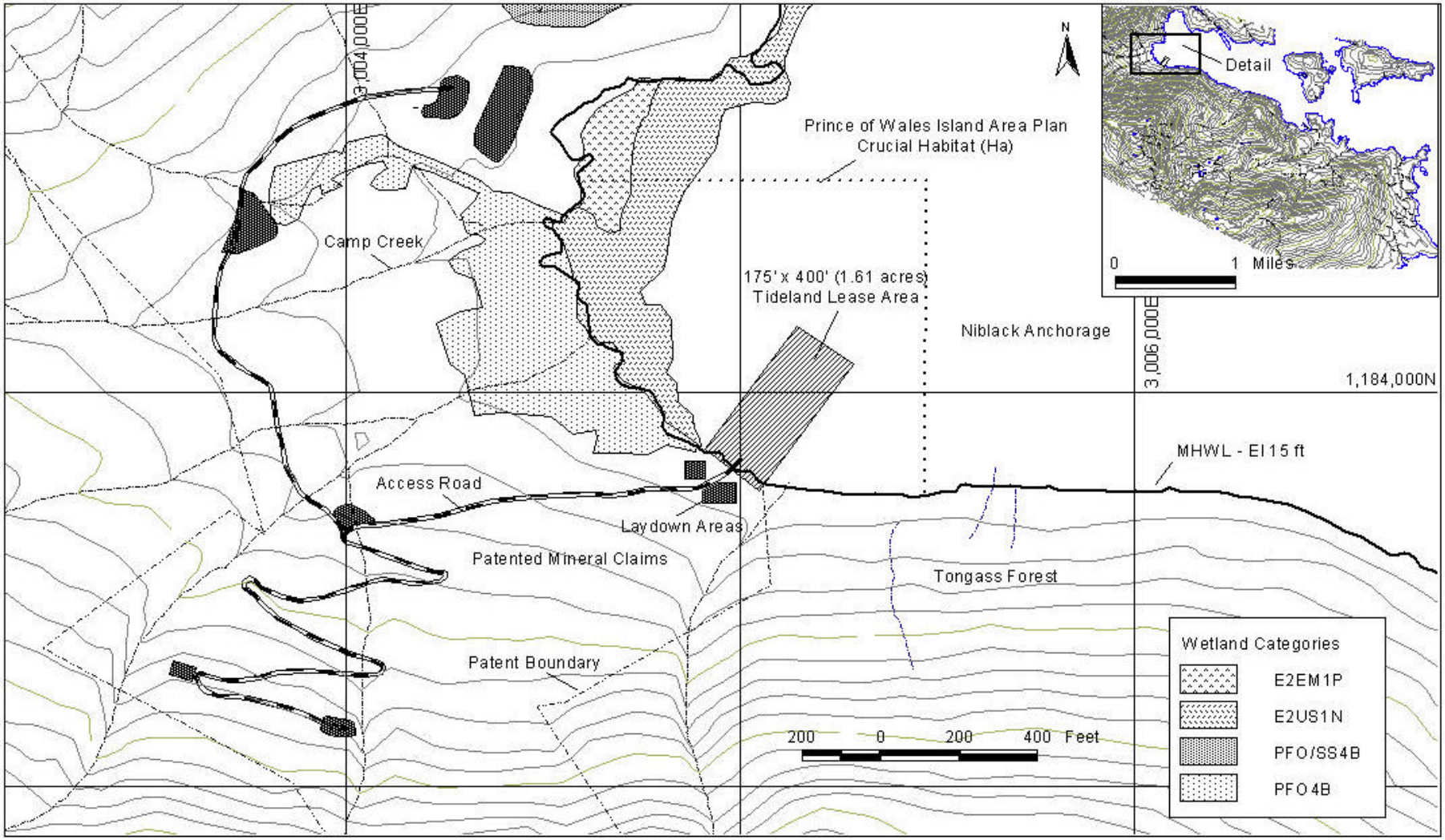
Reporting and Data Review

This information will be submitted to the LMPT as part of the annual monitoring report. The *Niblack Monitoring and Water Quality Plan, Knight Piesold Consulting, April 2007* is presented in a separate document.

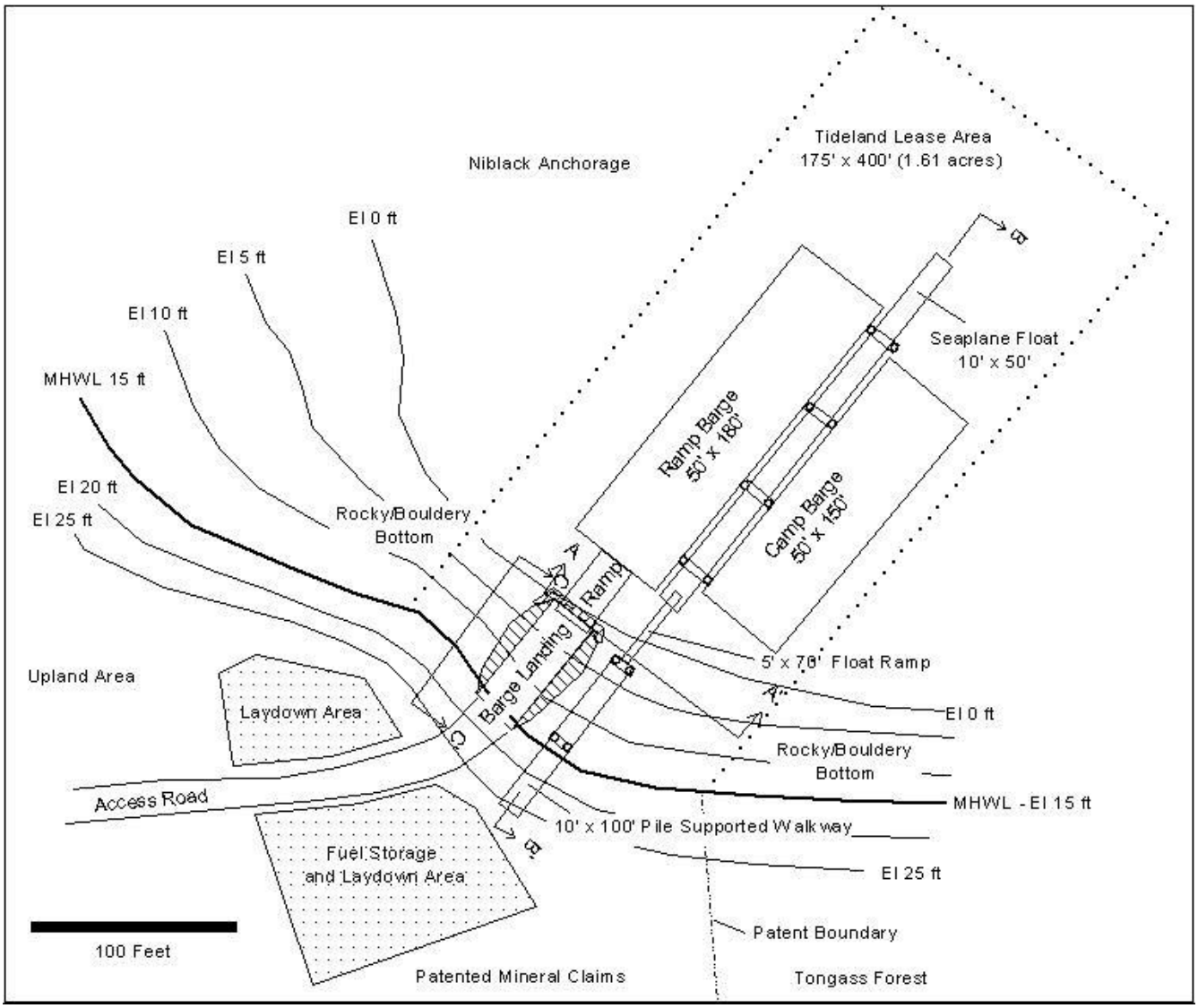
D. Maintenance of the Dock and Barge Landing Facilities

The facilities will be constructed of materials that will require relatively little maintenance. All necessary maintenance will be performed by Niblack personnel or their contractors. Floats and walkways will be cleaned periodically. The galvanized coatings will also be maintained periodically. Cathodic protection systems will be installed and repaired when required. The ramp foundation will be inspected after major storm events, to ensure that the backfill rubble material was not displaced by large waves. Timbers will be inspected once per year. Damaged or rotten timbers will be repaired or replaced as necessary. When treatment is required, tarps and other means will be used as appropriate to prevent any hazardous substances from entering the water.

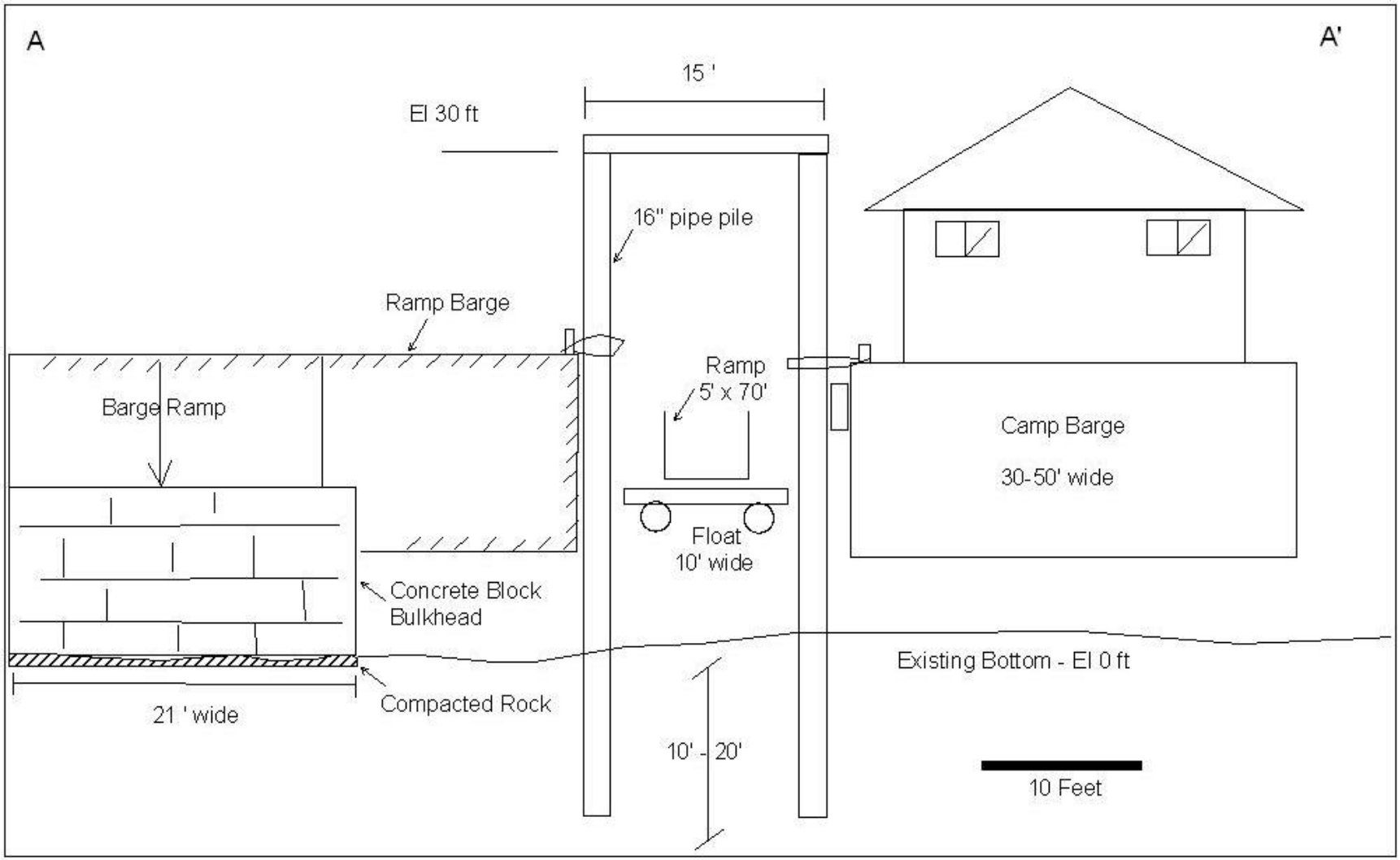

LOCATION MAP
ALASKA
CANADA
Ketchikan
PROJECT SITE
Prince of Wales Island
55°30′
Ketchikan
NIBLACK PROJECT ALASKA
56°00′
Pacific Ocean
Cordova Bay
North
133°00′
132°30′
132°00′
131°30
0
10
20
Miles
Scale noted
NIBLACK MINING CORP
PROPOSED EXPLORATION PROGRAM
NIBLACK PROPERTY PROJECT LOCATION
LOCATION T78S R88E MERIDIAN: COPPER RIVER
Sheet 1



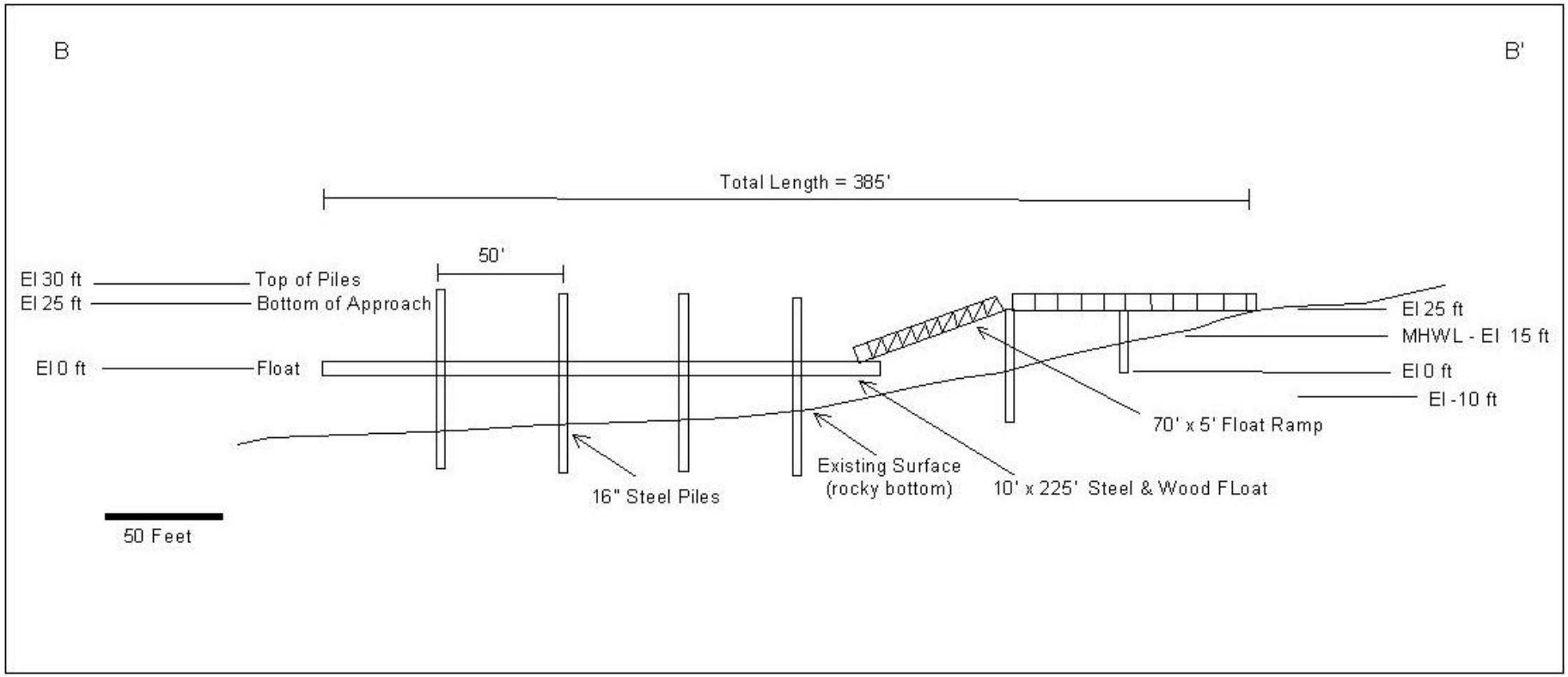
NIBLACK MINING CORPORATION	
Marine Facility Diagram Area Plan - Location Map	
Location T78S R88E Meridian: Copper River	
February 5, 2007	Sheet 2 of 6



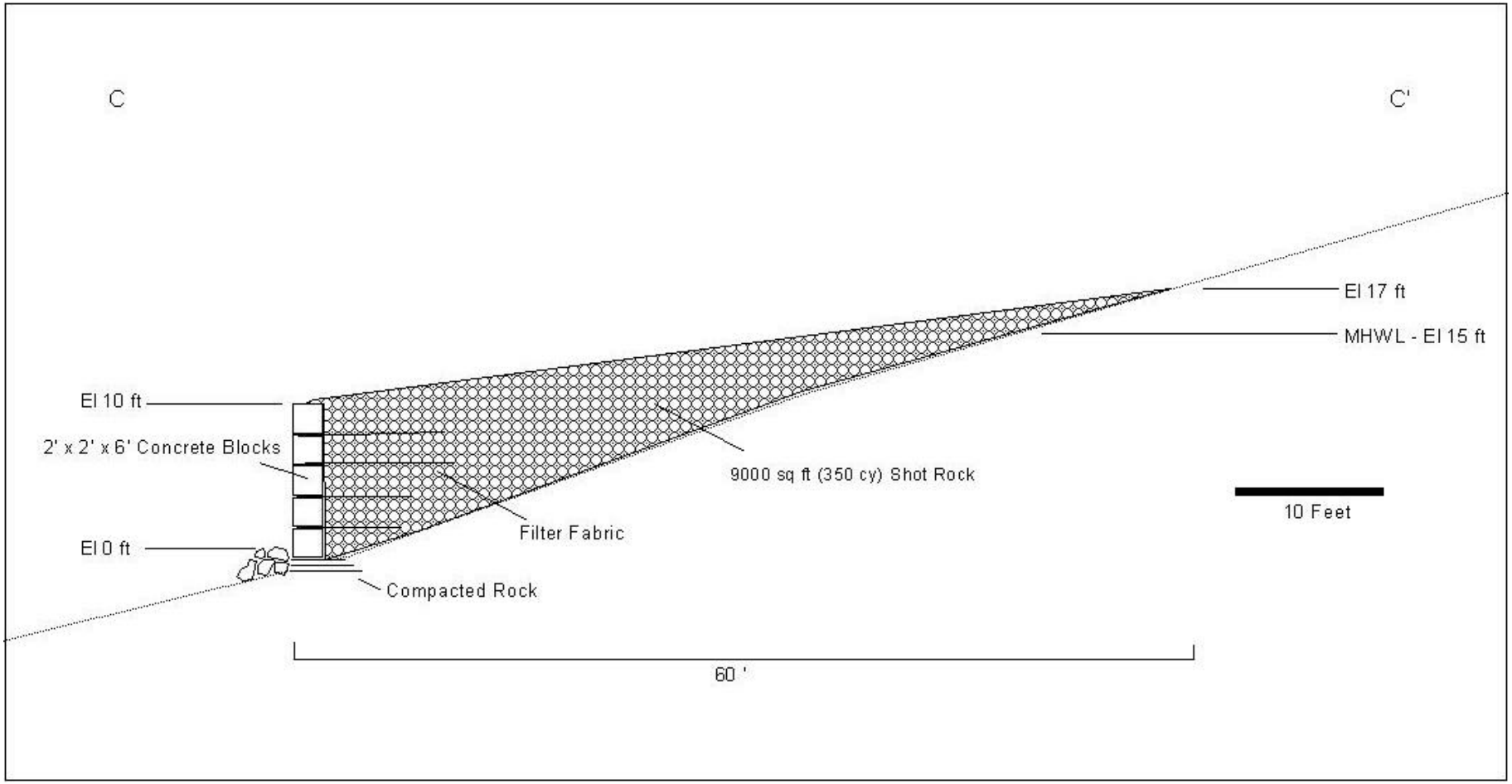
NIBLACK MINING CORPORATION	
Marine Facility Diagram Detailed Plan	
Location T78S R88E Meridian: Copper River	
February 5, 2007	Sheet 3 of 6



NIBLACK MINING CORPORATION	
Marine Facility Diagram Section A - A'	
Location T78S R88E Meridian: Copper River	
February 5, 2007	Sheet 4 of 6



NIBLACK MINING CORPORATION	
Marine Facility Diagram Section B - B'	
Location T78S R88E Meridian: Copper River	
February 5, 2007	Sheet 5 of 6



NIBLACK MINING CORPORATION	
Marine Facility Diagram Section C - C'	
Location T78S R88E Meridian: Copper River	
February 5, 2007	Sheet 6 of 6