

# **Pogo Mine Project**

## Final Decision To Issue Millsite Lease

ADL No. 416949

DEPARTMENT OF NATURAL RESOURCES  
Division of Mining, Land and Water

December 18, 2003

## I. Action Requested

Teck-Pogo, Inc. (Teck-Pogo) has requested a Millsite Lease under AS 38.05.255 for the Pogo Mine Project.

The Department of Natural Resources, Division of Mining, Land and Water (DNR) is issuing a Millsite Lease to Teck-Pogo as operator of the Pogo Project. This Final Decision is limited to surface use of land authorized by AS 38.05.255(a) within the Pogo Project area. This land is under the management authority of DNR. A Millsite Lease issued under AS 38.05.255(a) is exempt from the provisions of AS 38.05.075. Under AS 38.05.035(e)(6)(h) a written finding is not required for a surface lease under AS 38.05.255. The requirements of AS 38.05.945 are not applicable.

This Final Decision for a millsite lease is part of the suite of authorizations requested for the Pogo Mine Project by Teck-Pogo. Because the Pogo Mine Project will require a federal National Pollution Discharge Elimination System (NPDES) permit, and a federal wetlands fill permit, a federal Environmental Impact Statement process has been initiated by the Environmental Protection Agency. A draft of this Final Decision (Proposed Decision) was included as an appendix to the Pogo Project Draft Environmental Impact Statement (DEIS).

## II. Discussion

**General location:** The proposed Pogo Gold Mine Project is located about 38 miles northeast of Delta Junction, and about 85 miles east of Fairbanks. The proposed mine is located on the Goodpaster River, a clearwater tributary to the Tanana River. The mine is about 45 miles upriver from the confluence of the Goodpaster and Tanana rivers. Currently the minesite is accessible only by air, boat, or winter trail. A general vicinity map is show in Attachment 1.

**Area to be developed:** Teck-Pogo has applied for authorizations to develop an underground mine at the Pogo site. The estimated geologic resource is approximately 5.6 million ounces of gold, and the

project would employ up to 700 workers during construction and up to 360 workers during operation. The proposed mine would use crushing, grinding, gravity concentration, floatation, and cyanide leaching processes to extract the gold, and the tailings would be placed both back underground, and in an engineered disposal area in the Liese Creek valley.

**Operating period:** The Pogo mine will operate 24 hours a day, 365 days a year. Development of the mine is projected to start in the winter of 2003/2004, and the mine construction will take approximately two years. The mine is anticipated to have a life of at least 11 years. At the end of mine life, Teck-Pogo proposes to seal and reclaim the mine, and reclaim the access road. Exploration activities are anticipated to continue during the mine life to locate possible areas for expansion and associated mine development.

**Mine Access:** Teck-Pogo proposes to build a 49-mile access road from the Richardson Highway to the mine site (the Shaw Creek Hillside All-Season Road). The access road would be maintained and operated on a year-round basis. The road as proposed by Teck-Pogo would be built to a width of either 24 feet, or 18 feet with a safety berm in steeper sections. All bridges would be single lane. Grades would be limited to 7%. Mine-related traffic on the road would consist of approximately 10 to 20 vehicle trips per day during normal operations (mine trucks, service vehicles, employee buses, government vehicles, etc.). Additional traffic would be expected during construction of the mine. Approximately 30,000 to 40,000 tons of freight would be hauled into the mine each year. Teck-Pogo has applied for exclusive use of the road, and proposes that it reclaim the entire length of the road upon cessation of mining. In its Final Decision on the right-of-way for the Pogo road (ADL #416809), DNR has determined that the first half of road will be closed to public use during mine life, will be open to the public after the mine's life, and will not be reclaimed. The second half of the road will be closed to the public and will be reclaimed.

**Consistency with Plans:** The proposed Pogo Mine and the access road are located on state lands primarily within the Tanana Basin Area Plan's (TBAP) Subregion 7, management units 7A (Shaw Creek) and

7D (Goodpaster River). The subunits are: 7A1, 7A2, 7D2, and 7D3. Subunits 7A1 and 7D2 both have designated primary uses as public recreation and wildlife habitat. Subunits 7A2 and 7D3 have primary uses of public recreation, wildlife habitat, and forestry. Management units 7A and 7D, including all subunits, are open to mineral entry.

The Pogo Millsite Lease and the second portion of the road are both in Management Unit 7D, which is recognized for having moderate to high mineral potential, and is to be managed for multiple use with an emphasis on recreation and fish and wildlife. The first portion of the road would cross Management Unit 7A, which is to be managed for its forest resources and the protection of water quality, wildlife habitat, and public recreation values. TBAP also states that a variety of resources in these management units will require access construction prior to development or extraction of the resource. The plan specifies forest areas, recreation lands, and mineralized terrane areas as examples of such resources. The construction of the road to allow permanent access to the forest and recreation resources for the first half, and access for the life of the mine on the second half of the road is consistent with the plan.

Both Management Units 7A and 7D are subject to the Areawide Land Management Guidelines for Subsurface Resources in the Tanana Basin Area Plan, which include goals for the management of mineral resources in the planning area. These goals include contributing to Alaska's economy by making subsurface resources available for development, protecting integrity of the environment and affected cultures, and to aid in development of infrastructure, including roads, to support the mining industry.

Management Unit 7D has a specific guideline for public notice for activities in this management unit. The plan requires consultation with the Goodpaster Review Working Group in reviewing proposed timber sales, access plans, and other activities requiring public notice. This working group consists of 11 organizations that participated in the 1991 review of the Goodpaster River/Quartz Lake management units of TBAP (these organizations are listed in Appendix G of TBAP). DNR has consulted with these organizations in developing

this proposed decision, and will continue to consult with them for the duration of this process.

The first portion of the mine access road also crosses parts of Management Unit 8 of the Tanana Valley State Forest, and generally coincides with a preexisting alignment for a proposed road to provide access for timber harvest and public use of this subunit of the state forest. Management Unit 8 (Shaw Creek), is to be managed for commercial timber production and mineral exploration and production. The management guidelines for this management unit specify that primary all-season access to this management unit is planned from the existing Shaw Creek Road.

**Discussion:** Teck-Pogo, a wholly owned subsidiary of Teck-Resources Inc., itself a wholly-owned subsidiary of Teck Cominco Ltd. of Vancouver, Canada, is the operator of the proposed Pogo Mine Project. The Pogo Mine Project will be an underground mine designed to mill between 2,500 and 3,500 tons per day, producing 350,000 to 550,000 ounces of gold annually. The operation will be underground cut and fill mining with conveyor access for transfer of ore to the surface. Gold will be recovered using gravity concentration, floatation, and cyanide leaching. Tailings from the cyanide destruct circuit will be placed back in the mine as paste backfill, and the remaining tailings (not exposed to cyanide) will be de-watered and placed in an engineered drystack facility on the surface.

Facilities for the project include a mill facility to process the ore, a backfill plant to mix and pump the paste backfill, a mine camp to house up to 250 workers with recreation and catering facilities, a mine/office/truckshop complex, a drystack tailings storage facility that will hold about 5.3 million tons of tailings, a recycle tailings pond and dam with a capacity of 40 million gallons, a 3,000' airstrip, and associated fuel and materials storage facilities, roads, and other facilities necessary for the mine's operation.

The Millsite Lease is conditioned upon Teck-Pogo receiving authorization under the Solid Waste Disposal Permit issued by DEC

for the Pogo Mine drystack tailings facility. The draft of this permit was included as an appendix in the Pogo Project DEIS.

The Millsite Lease Boundary is shown in Attachment 2 of this decision, and the legal description is shown in Attachment 3. Attachment 4 depicts the Pogo Mine Project Overall Site Plan.

Surface uses of state land included within the Millsite Lease are limited to those necessary for the prospecting for and extraction of minerals and are subject to reasonable concurrent uses. For purposes of the Pogo Mine Project Millsite Lease the uses shall be limited to those surface uses described in the Plan of Operations and Reclamation Plan as approved by DNR or as specifically authorized or required by the Millsite Lease (see Attachment 5: Millsite Lease). Public access may be restricted to the Millsite Lease area, including the airstrip, for public safety reasons, or to prevent unreasonable interference with millsite operations.

Teck-Pogo shall be required to pay a reasonable annual rent for the Millsite Lease and shall be restricted to uses as required under AS 38.05.255 and as provided in the Millsite Lease.

### III. Authority / Administrative Record

The authority to issue this Millsite Lease resides in AS 38.05.255.

The Millsite Lease application file (ADL 416949), the Tanana Basin Area Plan (TBAP), and the Pogo Project files comprise the administrative record for this request. DNR's Proposed Decision to issue a millsite lease for the Pogo Project is based upon a complete review of this record including the Reclamation and Closure Plan for the Pogo Project (December 2002, updated October 2003), Pogo Project Plan of Operations (February 2002, updated November 2002 and October 2003), Pogo Project Environmental Baseline Characterization Documents (December 2000, as updated) and the Final Environmental Impact Statement for the Pogo Gold Mine Project (September 2003) and all the associated public comment and other supporting documents.

## IV. Access

Access to the Pogo Mine Project was reviewed concurrently with processing Teck-Pogo's request for a Millsite Lease (see Right-of-Way file ADL 416809).

## V. Environmental Risk

Teck-Pogo proposes to develop the Pogo Mine Project. This activity involves the construction of facilities at the Pogo Mine Project as described in the Plan of Operations. The processing of ore, operation and maintenance of mining equipment, and storage of mining reagents, equipment fuels and vehicle maintenance related lubricants and fluids, ammonia nitrate, and heating oil will occur on the project site. Teck-Pogo will be required to have an emergency response plan for hazardous material for the Millsite Lease. The Plan of Operations identifies the bulk storage facilities at the Pogo Mine site. Environmental risk for the Millsite Lease area is considered minimal.

Results of ore and development rock characterizations are being evaluated by DNR and by a third-party consultant during the Environmental Impact Statement process. The evaluation has shown minimum potential for any adverse impacts on any surface or ground waters of the state. Teck-Pogo will be required to monitor both groundwater and surface waters during and after mine closure to ensure that there will be no adverse impacts.

## VI. Public Comment

A Millsite Lease under AS 38.05.255 is exempt from the requirements for a written finding under AS 38.05.035(e) and is therefore exempt from the department's public notice statute, AS 38.05.945. AS 38.05.255 itself does not provide for public notice. However, because issuance of a millsite lease is a disposal of an interest in state land,

DNR recognizes that some form of public notice is constitutionally required even though there is no statutory guidance for that notice.

The Proposed Decision for the Pogo Millsite Lease was included as an appendix in the DEIS for the Pogo Mine Project, and received the same public review as the DEIS. This review consisted of a 60-day public review period, a mailing of the notice of availability of the DEIS to over 400 people and organizations, newspaper advertising in the Fairbanks Daily News Miner and the Delta Wind, and publication of the notice of availability and the DEIS documents on the world wide web. Two public hearings were held during the 60-day review period.

In addition, the Environmental Protection Agency and DNR have consulted with affected Indian Tribes and other affected organizations and agencies about the Pogo Mine Project throughout the development of the DEIS. Also, in September of 2000, two public meetings were conducted as part of the scoping process for the EIS development. A more detailed discussion of public and agency participation in this process is included in Chapter 1 of the DEIS.

The Final Environmental Impact Statement for the Pogo Gold Mine Project (FEIS) was also noticed in the Federal Register on September 19, 2003 for a 30-day public review period, and advertisements were run in the Fairbanks Daily News Miner and the Delta Wind newspapers. Notice was also sent of the FEIS availability to over 400 people and organizations on the project's mailing list.

Throughout this process, DNR staff have consulted with the agencies and organizations in the Goodpaster Review Working Group, as required by the Tanana Basin Area Plan (see Tanana Basin Area Plan above).

184 comments were submitted to the EPA, DNR, and DEC on the Draft EIS and related agency authorizations. 55 of these were submitted at the public meetings, and the rest were submitted in writing or by e-mail. Most of the comments supported the Agency Preferred Alternative in the DEIS, which included the mine plan as proposed by the applicant.

Only one comment was received which was specific to the Millsite Lease. This commentor pointed out an error in the Proposed Decision where it was mistakenly stated that the second half of the access road would not be reclaimed. In DNR's Final Finding and Decision on the Pogo Project Road, the second half of the road will be reclaimed after the mine's life.

## VII. Final Decision

This is a Final Decision that DNR will issue Millsite Lease ADL 416949. This decision is based on AS 38.05.255 and evaluation of information applicable to the Pogo Mine Project and consideration of public comments and agency input. Additional conditions may be added as a result of public and agency input. The Millsite Lease document itself is included as Attachment 5.

The Millsite Area shall be managed in a manner that, to the extent feasible and prudent and using accepted industry practices, mitigates adverse effects of Millsite Operations, especially to residents, recreation uses adjacent to the Millsite Area, and in the disturbance or damage to the environment. The Millsite Lease and approved Plan of Operations shall reflect this requirement.

Before termination of the Millsite Lease, and every fifth year of mine operation, Teck-Pogo shall conduct an environmental audit of the Millsite operations, including the mine access systems. The scope of the audit shall, at a minimum, determine if both the environmental and project management systems of Teck-Pogo are being met, and that the systems and controls are functioning as intended.

The Reclamation Plan, as approved by the Director, specifies the measures necessary to return the land to a useful condition and requires the necessary performance bonding to accomplish reclamation of the Millsite Area.

I make this Final Decision that the Millsite Lease is appropriate for the Pogo Mine Project and will be issued to Teck-Pogo, Inc. The Millsite Lease will be issued under the conditions and limitations imposed by law and those additional conditions and limitations set out in the Millsite Lease.

This Decision incorporates by reference the Pogo Project Reclamation and Closure Plan, and the Pogo Project Plan of Operations.



Tom Irwin, Commissioner  
Department of Natural Resources



Date

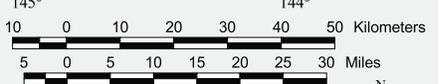
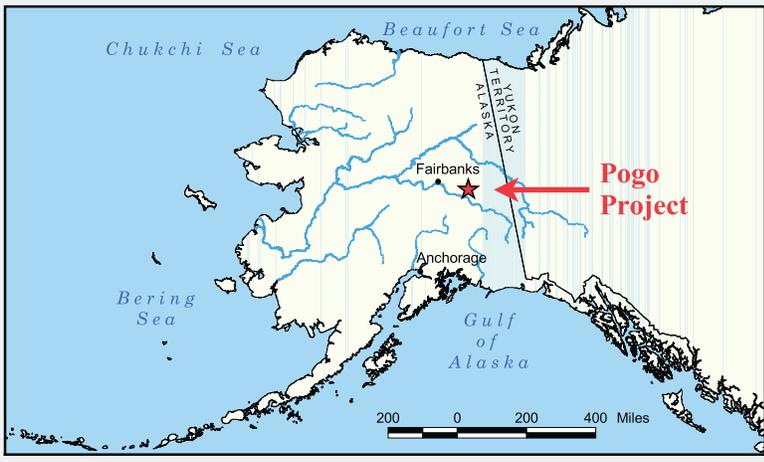
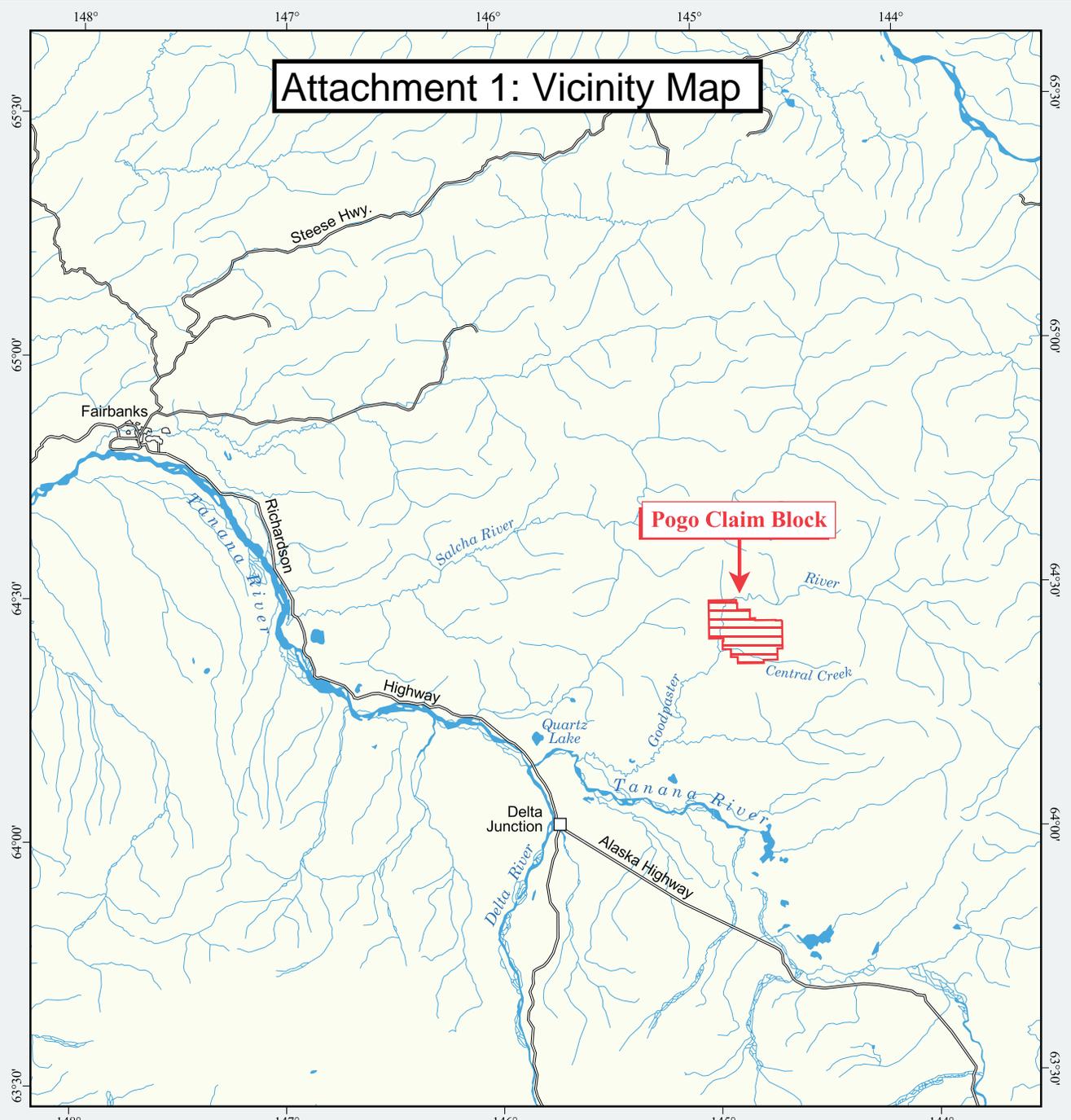
### **Appeal Right and Procedure**

This is a final administrative order and decision of the department for purposes of an appeal to Superior Court. A person adversely affected by this final order and decision may (1) appeal to Superior Court within 30 days in accordance with the rules of the court, and to the extent permitted by applicable law, or (2) first request reconsideration of this decision, in accordance with AS 44.37.011 and 11 AAC 02.020, to Tom Irwin, Commissioner, Department of Natural Resources, 550 W. 7th Avenue, Suite 1400, Anchorage, Alaska 99501. Any such request for reconsideration must be received at that address, or received by being faxed to 1-907-269-8918, by January 7, 2004. Failure of the commissioner to act on a request for reconsideration by January 17, 2004 is a denial of reconsideration and is also a final administrative order and decision for purposes of an appeal to Superior Court. It may then be appealed to Superior Court within a further 30 days in accordance with the rules of the court, and to the extent permitted by applicable law. A copy of 11 AAC 02 may be obtained from any regional information office of the Department of Natural Resources. This decision goes into effect January 18, 2004 unless the commissioner first orders reconsideration.

At the time a request for reconsideration is filed, an appellant may submit additional written material to support it, including evidence or legal argument. If the Commissioner orders reconsideration and if the Commissioner in his discretion under 11 AAC 02.050(a) further determines that there are questions of fact to be resolved that require a hearing, the hearing will be held in Fairbanks on January 12, 2004 at the Department of Natural Resources Offices, 3700 Airport Way. The hearing procedures under 11 AAC 02.050(b) will be announced at the time of his determination, if any. If a hearing is held, an appellant may submit additional written material at the hearing.

- Attachment 1** Vicinity Map
- Attachment 2** Pogo Millsite Lease Boundary
- Attachment 3** Pogo Millsite Lease Legal Description
- Attachment 4** Pogo Project Site Plan Maps
- Attachment 5** Millsite Lease

# Attachment 1: Vicinity Map

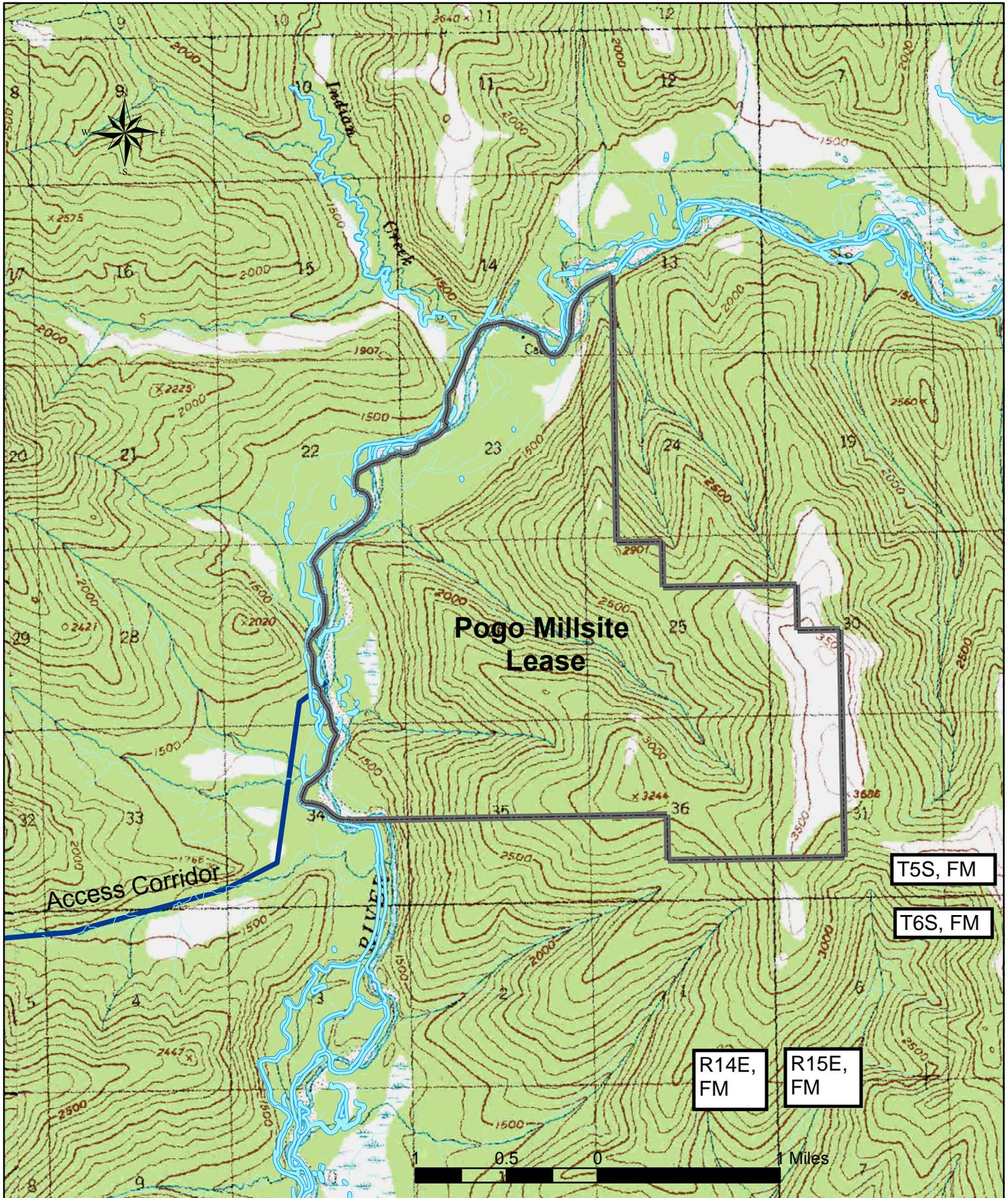


Map base: US DMA DCW  
 Projection: UTM Zone 6;  
 Datum: NAD 27



<b>Pogo Mine EIS</b>	
Figure 1.3-1 Pogo Project General Location Map	
map prepared by: <b>ABR</b> environmental research & services	
19 Aug 2002	ABR File: Pogo_PDEIS_Chapter1.apr

# Attachment 2: Pogo Millsite Lease Boundary



## **Attachment 3: Pogo Mine Millsite Lease Legal Description**

The Pogo Mine Millsite Lease is described as those lands within the following townships, ranges, and sections up to, and generally to the south east of, the ordinary high water mark on the eastern bank of the Goodpaster River.

### **T5S, R14E, Fairbanks Meridian**

Section 13

W<sup>1</sup>/<sub>2</sub>SW<sup>1</sup>/<sub>4</sub>

Section 14

S<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>; SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>

Section 22

S<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>; NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>

Section 23

S<sup>1</sup>/<sub>2</sub>; NE<sup>1</sup>/<sub>4</sub>; S<sup>1</sup>/<sub>2</sub>NW<sup>1</sup>/<sub>4</sub>; NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>

Section 24

W<sup>1</sup>/<sub>2</sub>W<sup>1</sup>/<sub>2</sub>

Section 25

S<sup>1</sup>/<sub>2</sub>; S<sup>1</sup>/<sub>2</sub>NE<sup>1</sup>/<sub>4</sub>; NW<sup>1</sup>/<sub>4</sub>

Section 26 (All)

Section 27

E<sup>1</sup>/<sub>2</sub>

Section 34

NE<sup>1</sup>/<sub>4</sub>; SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>

Section 35

N<sup>1</sup>/<sub>2</sub>

Section 36

N<sup>1</sup>/<sub>2</sub>; N<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>

### **T5S, R15E, Fairbanks Meridian**

Section 30

SW<sup>1</sup>/<sub>4</sub>; SW<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>

Section 31

NW<sup>1</sup>/<sub>4</sub>; N<sup>1</sup>/<sub>2</sub>SW<sup>1</sup>/<sub>4</sub>

## **Attachment 4: Pogo Project Site Plan Maps**

The following maps are extracted from the Pogo Project Draft Environmental Impact Statement:

Figure 2.3-1. General Site Plan

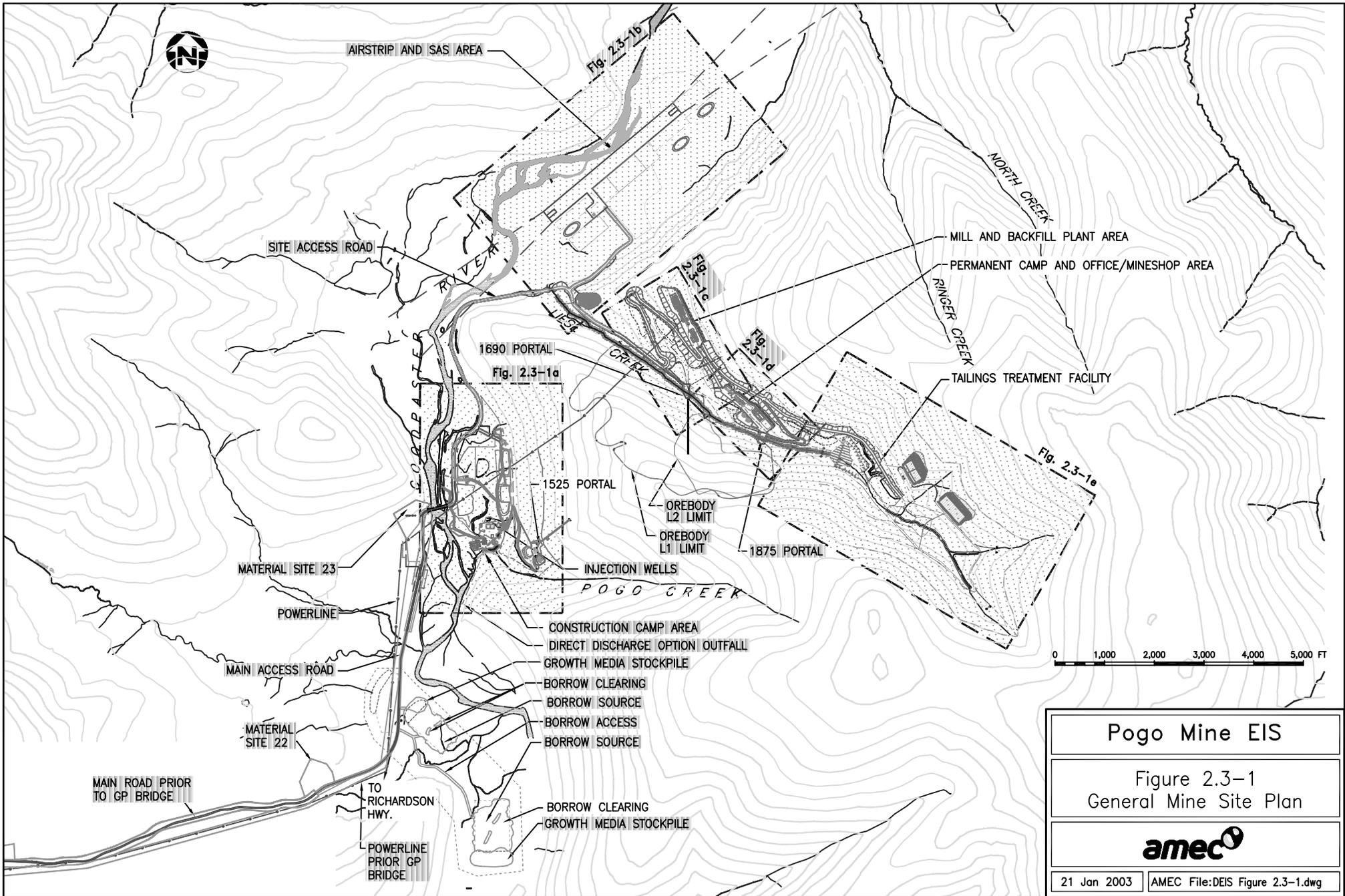
Figure 2.3-1a. Existing Mine Portal Site Plan

Figure 2.3-1b. Airstrip and Mine Area Access Road Plan

Figure 2.3-1c. Liese Creek Valley Mill Site Plan

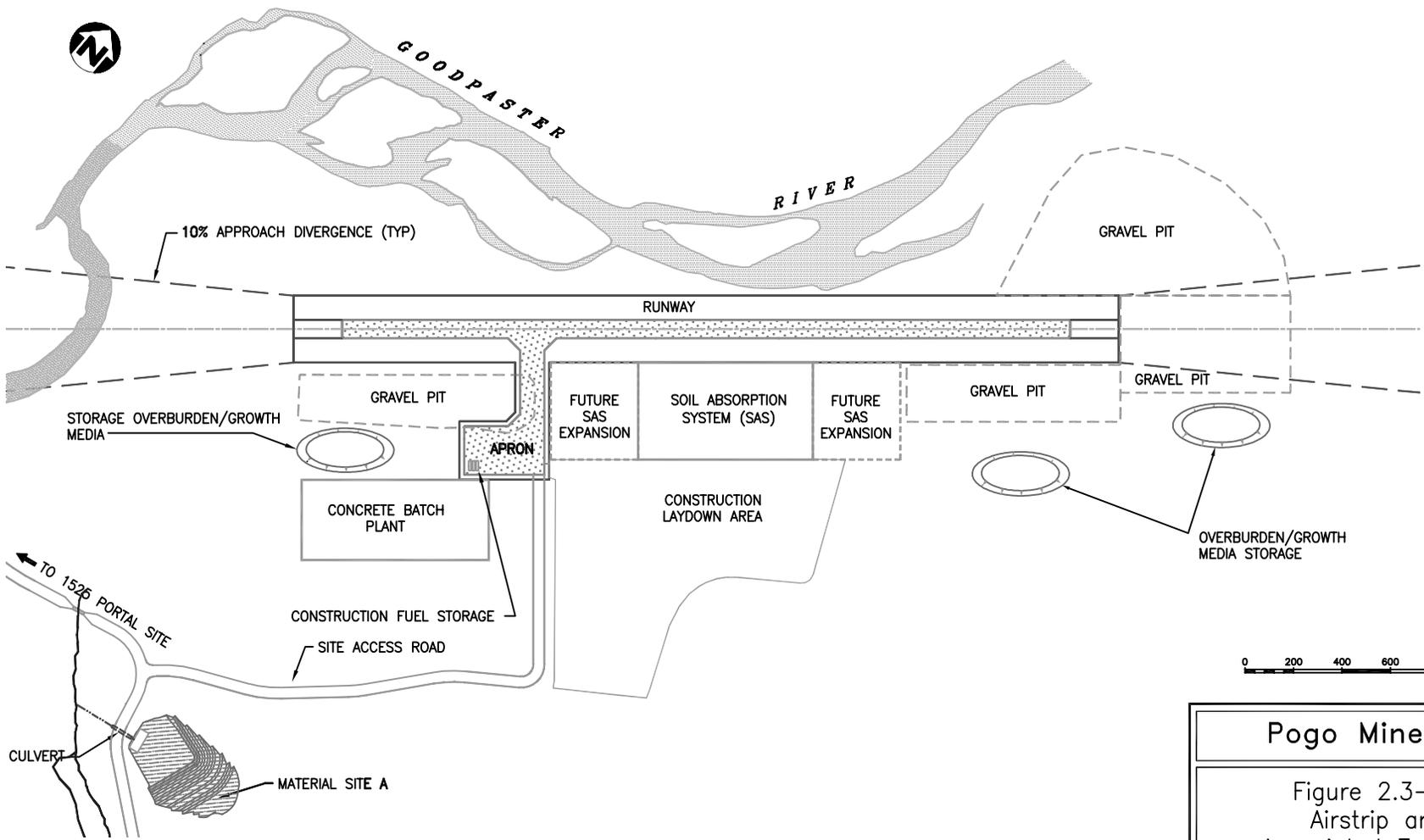
Figure 2.3-1d. Liese Creek Valley Camp and Shop Plan

Figure 2.3-1e. Liese Creek Valley RTP and Tailings Treatment Facility



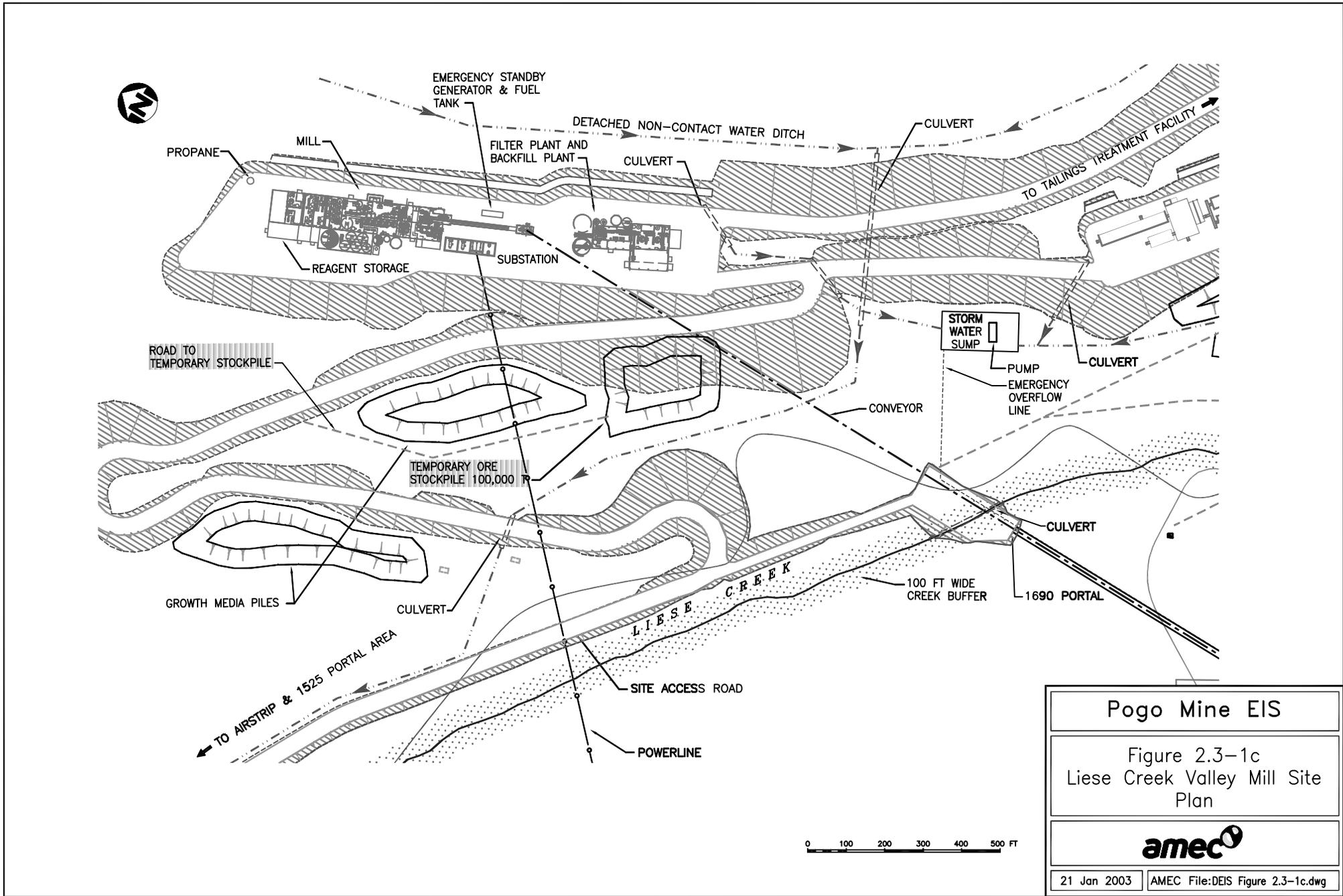
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<b>Pogo Mine EIS</b>	
Figure 2.3-1b Airstrip and Associated Facilities	
<b>amec</b>	
21 Jan 2003	AMEC File:PDEIS Figure 2.3-1b.dwg

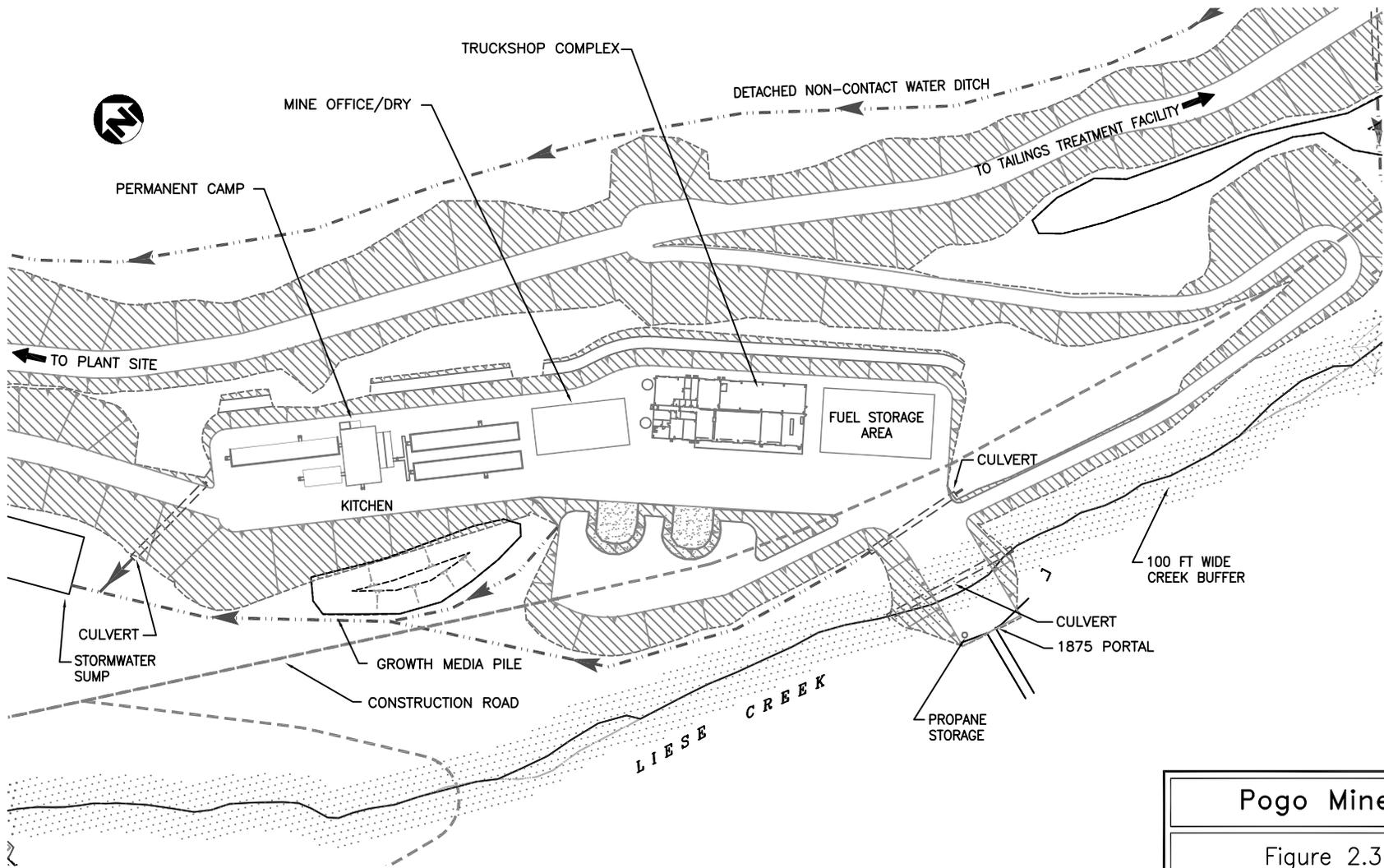
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<b>Pogo Mine EIS</b>	
Figure 2.3-1c Liese Creek Valley Mill Site Plan	
<b>amec</b>	
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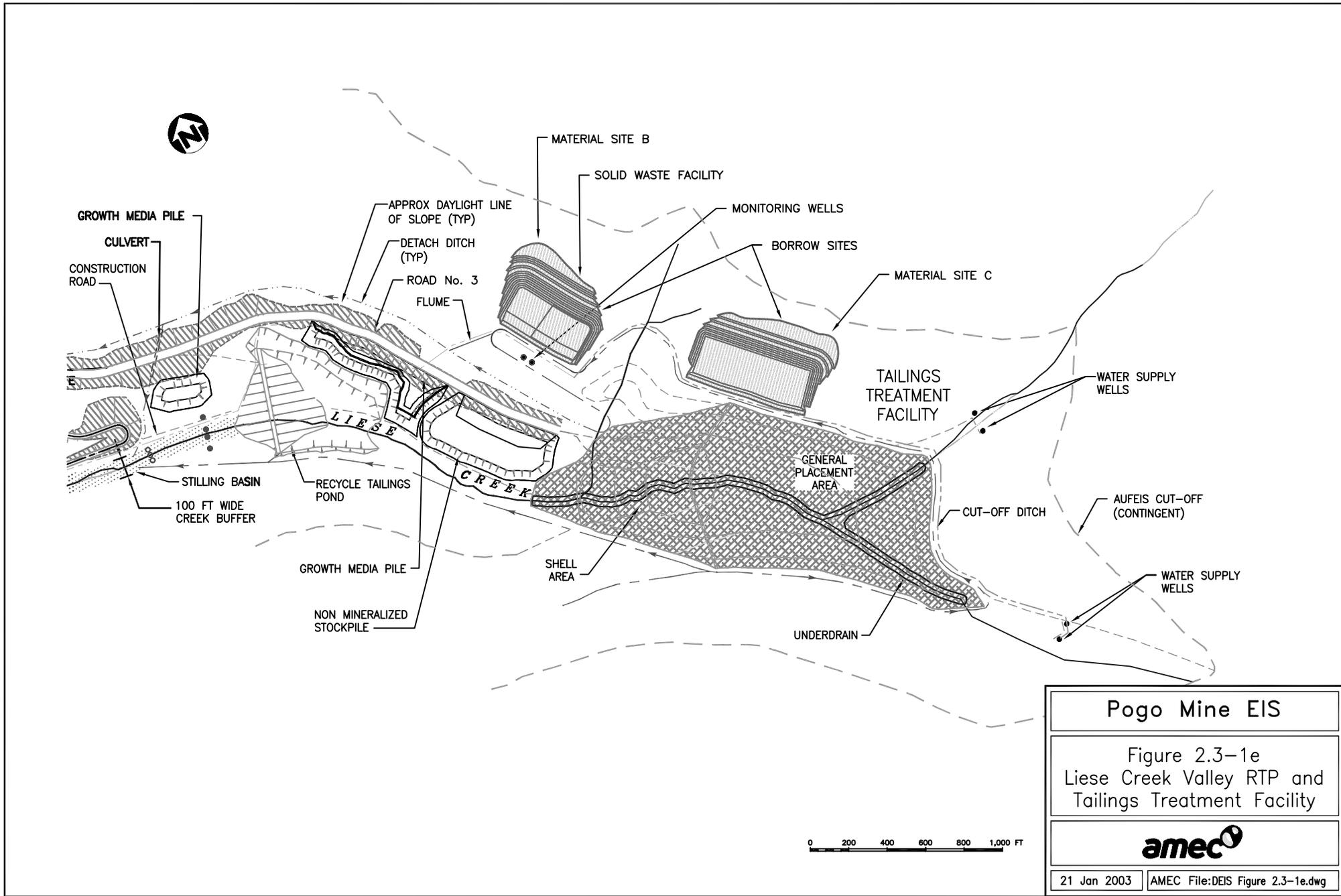


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LAST UPDATE: 03/07/25 3:30pm



<b>Pogo Mine EIS</b>	
Figure 2.3-1d Liese Creek Valley Camp and Shop Plan	
21 Jan 2003	AMEC File:DEIS Figure 2.3-1d.dwg

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 LAST UPDATE: 03/07/03 3:30pm



<b>Pogo Mine EIS</b>	
Figure 2.3-1e Liese Creek Valley RTP and Tailings Treatment Facility	
<b>amec</b>	
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## **Attachment 5 – Millsite Lease**

## **Exhibit A: Millsite Area Land Description**

The Pogo Mine Millsite Lease is described as those lands within the following townships, ranges, and sections up to, and generally to the south east of, the ordinary high water mark on the eastern bank of the Goodpaster River.

### **T5S, R14E, Fairbanks Meridian**

Section 13

W<sup>1</sup>/<sub>2</sub>SW<sup>1</sup>/<sub>4</sub>

Section 14

S<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>; SE<sup>1</sup>/<sub>4</sub>SW<sup>1</sup>/<sub>4</sub>

Section 22

S<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>; NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub>

Section 23

S<sup>1</sup>/<sub>2</sub>; NE<sup>1</sup>/<sub>4</sub>; S<sup>1</sup>/<sub>2</sub>NW<sup>1</sup>/<sub>4</sub>; NE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>

Section 24

W<sup>1</sup>/<sub>2</sub>W<sup>1</sup>/<sub>2</sub>

Section 25

S<sup>1</sup>/<sub>2</sub>; S<sup>1</sup>/<sub>2</sub>NE<sup>1</sup>/<sub>4</sub>; NW<sup>1</sup>/<sub>4</sub>

Section 26 (All)

Section 27

E<sup>1</sup>/<sub>2</sub>

Section 34

NE<sup>1</sup>/<sub>4</sub>; SE<sup>1</sup>/<sub>4</sub>NW<sup>1</sup>/<sub>4</sub>

Section 35

N<sup>1</sup>/<sub>2</sub>

Section 36

N<sup>1</sup>/<sub>2</sub>; N<sup>1</sup>/<sub>2</sub>SE<sup>1</sup>/<sub>4</sub>

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Section 30

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NW<sup>1</sup>/<sub>4</sub>; N<sup>1</sup>/<sub>2</sub>SW<sup>1</sup>/<sub>4</sub>