

# **Reclamation Plan**

Johnson Tract Project CIRI Lands



March 2024

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### 1 Introduction

### 1.1 Purpose

JT Mining Inc. (JT Mining), a wholly owned subsidiary of HighGold Mining Inc., is the operator of the mineral exploration program on lands referred to as the Johnson Tract. JT Mining is exploring the Johnson Tract under an exploration lease agreement with Cook Inlet Region Incorporated (CIRI), who own both the surface and subsurface estates. The lease lands are illustrated in Figure 1. JT Mining is in the process of permitting new infrastructure on the CIRI lease lands to support advanced exploration of the JT mineral deposit. The proposed new infrastructure includes a new airstrip and an access road and laydown pads. Up to five material sites will be developed to provide construction fill for these new facilities as illustrated in Figure 2. The Alaska Department of Natural Resources (ADNR) has reclamation authority under 11AAC 97 for mining projects (including advanced exploration) across all land ownership types. As a result, JT Mining is required to receive approval from ADNR for a Reclamation Plan that will return disturbed lands to a configuration that minimizes erosion and encourages natural revegetation as outlined by the reclamation performance standards (11 AAC 97.200) and is consistent with CIRI's long-term land use plans.

This document presents a Reclamation Plan (Plan) designed to meet the requirements of ADNR under 11 AAC 97. The Plan is accompanied by a cost estimate to complete the reclamation by a third-party contractor and includes direct and indirect costs consistent with ADNR policies and regulations.

CIRI has elected to leave the proposed access road (including culverts and bridges) and the airstrip inplace for the long-term. As a result, this Plan is limited to regrading and reseeding the five material sites that are likely to be developed to provide fill for the road and airstrip construction. The total potential surface disturbance that may require reclamation at these five material sites is approximately 101.4 acres. However, at the time of this writing none of the proposed infrastructure has been constructed and detailed material site development plans have not been prepared. As a result, the idealized polygons in Figure 2 represent the maximum potential disturbance acreage at each material site. Actual disturbance is likely to be less as described in more detail below.

JT Mining intends to perform concurrent reclamation at each material site as early as practical while the fleet of construction equipment is still on location while completing the new airstrip, access road and laydowns. However, as described elsewhere the reclamation cost estimate for the purpose of meeting financial assurance obligations is based on a scenario where the reclamation is performed by a third-party contractor and that none of the equipment or camp at site is available to perform the reclamation, necessitating mobilization of equipment, camp, and personnel to and from the site.

### **1.2** Operator and Owner Information

### 1.2.1 Operator Corporate Information

Business Name:	JT Mining Inc.		
Address:	375 Water Street, Suite 405, Vancouver, BC, Canada V6B 5C6		
Phone:	+1 604.629.1165		
President:	Darwin Green		
Vice President-Operations: Devin den Boer			

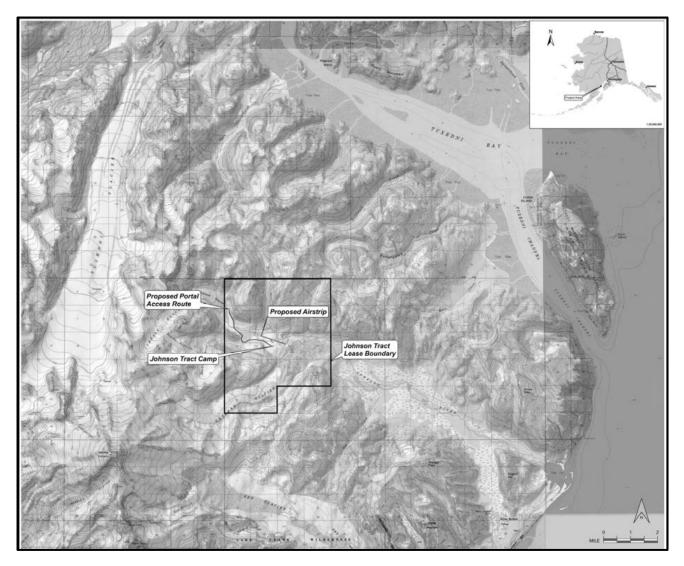


Figure 1: Johnson Tract Location Map

### 1.2.2 Operator Corporate Officer

Name:	Darwin Green
Title:	President and CEO
Telephone:	+1 604.629.1165
Email:	dgreen@highgoldmining.com

### 1.2.3 Operator Contact Person

Name:	Allegra Cairns
Title:	Director, Environment and Permitting
Telephone:	+1 604.629.1165
Email:	acairns@highgoldmining.com

#### 1.2.4 Operator Alaska Registered Agent

Name:	Shields Resource Corp
Address:	11986 Wilderness Drive, Anchorage, AK 99516
Phone:	907-348-0883

#### 1.2.5 Owner Corporate Information

Name:	Cook Inlet Region Inc.
Address:	725 E. Fireweed Lane #800, Anchorage, AK 99503
Phone:	907-274-8638
Contact:	Mike Schroeder, General Counsel, mschroeder@ciri.com

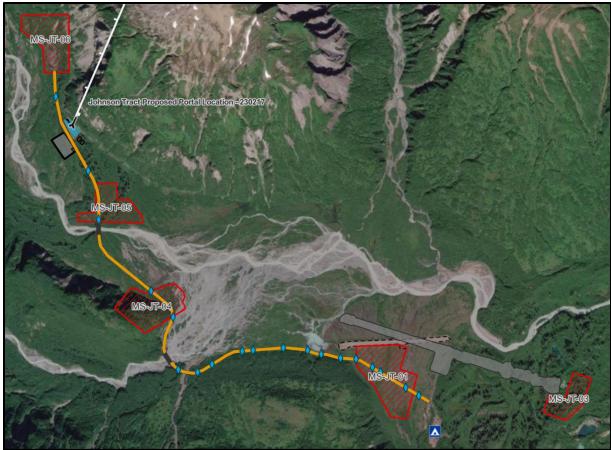
### 2 Reclamation Methods

This Plan describes the activities required to reclaim five material sites that will be developed to provide fill material for construction of the proposed portal access road and airstrip on the Johnson Tract. It is noted here that the entire project area is covered with relatively young glaciofluvial material consisting of sand and gravel and lesser glacial till. As a result, there has not been sufficient time for soil to develop in-place and there is extremely limited organic material. Vegetation consists of sparse herbaceous plants, alder, and willow. As a result, there is very little opportunity to segregate topsoil or organic material for future reclamation. In those limited areas where there is measurable willow or alder cover, that material will be segregated into piles adjacent to the road/material sites for potential use later. The road will remain in-place for the long term. There is no "overburden" per se considered in the development or reclamation plans for the material sites. Except for some bedrock in MS-JT-04, the material sites all consist of glaciofluvial sand and gravel. This material may be screened, and any unusable material will be stockpiled at the respective material site and used during reclamation. Reclamation activities are described in more detail for each material site below.

JT Mining is obtaining an individual permit from the US Army Corp of Engineers (USACE) (permit# POA-2023-00115) and will be obligated to complete permittee-responsible mitigation for loss of Waters of the US (WOTUS) resulting from the proposed construction activities. The compensatory mitigation plan (CMP) commits JT Mining to creating open water pond(s) with acreage equivalent to the lost WOTUS acreage. This reclamation plan incorporates the civil earthworks required to create that open water pond(s) sufficient to meet the permit obligation to the USACE. The reclamation cost estimate also incorporates costs sufficient to meet the monitoring requirements described in the CMP. Tentatively this mitigation obligation will be accomplished at JT-MS-01, where the groundwater table is shallow.

#### Material Site MS-JT-01

This material site is illustrated in Figure 2. The site is located adjacent to the existing Johnson airstrip on the Johnson River valley floor. Initial access to this site will be from the existing airstrip. This material site will be developed to provide fill for the new airstrip and the first portion of the new access road. The material extracted from the site will consist of alluvial gravels. This material site has maximum potential surface disturbance of 28.8 acres corresponding to the size of the polygon on Figure 2, although it is anticipated that actual disturbance will be less.



Reclamation will depend to a large extent on the scale of development of the site. Gravel extraction is expected to extend to a depth below the static water table. Where it does, that portion of the

#### Figure 2: Johnson Tract Proposed Site Layout including Material Sites

material site will flood naturally and create a pond. The emergent portion of the site that is developed above the water table will be recontoured with the goal of eliminating any steep embankments to facilitate gradual ingress and egress to the pond and avoid posing a risk to wildlife. The shallow edges of the pond could provide habitat for waterfowl and shore birds. The emergent portion of the site will also be reseeded with a seed mixture approved by the Alaska Plant Materials Center. For the purposes of estimating the reclamation cost we assume that 75% of the 28.8 acres will be disturbed and that 50% of that will require reshaping and reseeding for a total of 10.8 acres.

#### Material Site MS-JT-03

This material site is illustrated in Figure 2. The site is located adjacent to the proposed new Johnson airstrip and will provide fill for the new airstrip. Initial access to this site will be from a temporary access trail that falls within the ultimate footprint of the new airstrip. The material extracted from the site will consist of glaciofluvial material including gravel sand and glacial till.

This material site has maximum potential surface disturbance of 12.3 acres corresponding to the size of the polygon on Figure 2, although it is anticipated that actual disturbance will be less.

Reclamation will depend to a large extent on the scale of development of the site. Any portion of the excavation that extends below the water table will flood naturally and create a pond. The emergent portion of the site that is developed above the water table will be recontoured with the goal of eliminating any steep embankments and facilitating gradual ingress and egress to the pond to avoid posing a risk to wildlife. The shallow edges of the pond could provide habitat for waterfowl or shorebirds. The emergent portion of the site will also be reseeded with a seed mixture approved by the Alaska Plant Materials Center. For the purposes of estimating the reclamation cost we assume that 75% of the 12.3 acres will be disturbed and that 50% of that will require reshaping and reseeding for a total of 4.6 acres.

#### Material Site MS-JT-04

This material site is illustrated in Figure 2. The site is located adjacent to the proposed access road. The site will be accessible after the access road is constructed this far. This material site will provide access to crystalline bedrock (dacite) that will be good surface material and fill for the road construction. It is unlikely that this site will be developed at all because sufficient rip-rap and coarse material appears to be available from MS-JT-6. If required, blasting and crushing might occur at this site. Rock samples collected of this geologic unit to date indicate no potential to generate acid or leach metals. This material site has maximum potential surface disturbance of 22.5 acres corresponding to the size of the polygon on Figure 2, although it is anticipated that actual disturbance will be less, and it may not be developed at all. As a result, we have not defined development details about the site, including the potential height of any highwall. However, we do include reclamation costs in the reclamation cost estimate for this material site.

If the site is developed at all, reclamation of the site will consist of stabilizing the highwall by removing loose rock. Rip rap will be placed at the base of the slope between the highwall and the access road to prevent any rockfall from impacting the road. The lower, flatter portions of the material site will be contoured to minimize erosion and reseeded with a seed mix approved by the Alaska Plant Material Center. For the purposes of estimating the reclamation cost we assume that 75% of the 22.5 acres will be disturbed and that 50% of that will require reshaping and reseeding for a total of 8.4 acres.

#### Material Site MS-JT-05

This material site is illustrated in Figure 2. The site is located adjacent to the proposed access road. Initial access to this site will be from the new access road. This material site will be developed to provide fill for the remainder of the proposed access road. The material extracted from the site will consist of alluvial gravels and glacial till. This material site has maximum potential surface disturbance of 15.6 acres corresponding to the size of the polygon on Figure 2, although it is anticipated that actual disturbance will be less.

Reclamation will depend to a large extent on the scale of development of the site. Gravel extraction may extend to a depth below the static water table. Where it does, that portion of the material site

will refill naturally and create a pond. The emergent portion of the site that is developed above the water table will be recontoured with the goal of eliminating any steep embankments to facilitate gradual ingress and egress to the pond to avoid posing a risk to wildlife. The shallow edges of the pond could provide habitat for waterfowl and shorebirds. The emergent portion of the site will also be reseeded with a seed mixture approved by the Alaska Plant Center. For the purposes of estimating the reclamation cost we assume that 75% of the 15.6 acres will be disturbed and that 50% of that will require reshaping and reseeding for a total of 5.8 acres.

#### Material Site MS-JT-06

This material site is illustrated in Figure 2. The site is located at the northern end of the proposed access road. This site consists of coarse colluvium consisting of up to boulder-size blocks of granitic material (dacite) that will be useful for rip-rap and armoring stream crossings. Initial access to this site will be from the portal access road after extending it approximately 0.2 miles passed the proposed portal site. existing airstrip. Geotechnical drilling will provide additional information about the quantity and quality of the material from this site in summer 2023. This material site has maximum potential surface disturbance of 22.2 acres corresponding to the size of the polygon on Figure 2, although it is anticipated that actual disturbance will be less.

Reclamation of the site will consist of placing rip rap at the entrance to the site to prevent future vehicular access. The undisturbed site consists of coarse colluvium that has accumulated at the base of the slope due to mass wasting of the dacite intrusive that underlies the entire hillside and dome immediately east of the material site. Owing to the coarse nature of the material it is unlikely to support reseeding but will support natural recruitment of willows and alders over the long-term. To be conservative and for the purposes of estimating the reclamation cost we assume that 75% of the 22.2 acres will be disturbed and that 50% of that will require reshaping and reseeding for a total of 8.3 acres.

### **3** Post-Reclamation Requirements

Over time, slopes will stabilize with natural recruitment of native plant species including willow and alder. Depressions will fill with water to the static water table level, forming shallow ponds and potentially providing additional wildlife habitat for invertebrates, waterfowl and shorebirds. The airport and access road will remain in-place. JT Mining included the aircraft charter costs and observer costs for an annual overflight of the site for visual inspection of the material sites for 5 years.

### 4 Reclamation Schedule, Cost Estimate and Financial Assurance

### 4.1 Reclamation Schedule

Concurrent reclamation of the material sites could begin as the access road and airstrip construction starts to taper off. Some material would be stockpiled for future incidental use including

road maintenance. JT Mining estimates that the construction of the road and airstrip will take up to 2 years. Under this concurrent reclamation scenario, the material sites would all be reclaimed before the road/airstrip construction equipment fleet was demobilized from the site. If reclamation is postponed and done later, which is the basis for the cost estimate, it is anticipated that the reclamation of all five sites can be done in a 30-day period during the frost-free season with equipment flown to site for that purpose.

### 4.2 Financial Assurance

ADNR has financial assurance requirements for reclamation of the site if JT Mining fails to perform the reclamation described in this Plan. JT Mining will ensure that the financial assurance will be inplace in accordance with ADNR financial assurance requirements prior to initiating construction of the road, material sites and airstrip described in this Plan. Table 1 includes the major cost categories comprising the current reclamation cost estimate calculated by JT Mining for the purpose of establishing the financial assurance. The cost estimate reflects reasonable and probable costs and includes indirect costs in accordance with ADNR guidance and regulations. Owing to the scale and simple nature of the reclamation requirements, JT Mining assumed the lowest indirect cost, from the recommended range of indirect costs, for each indirect cost category. The details of the cost estimate are included in a separate Excel spreadsheet and additional explanation for the cost derivation is included in the Basis of Estimate report in Appendix B.

2024 Reclamation Estimate - Johnson Tract Project - CIRI Land			
Direct Costs			
Reseeding		\$43,548	
Personnel Mobilization		\$9,000	
Equipment Mobilization		\$132,600	
Camp Rental and Support		\$179,870	
Labor Costs		\$144,296	
Equipment Rental & Fuel		\$42,030	
Post Reclamation Monitoring		\$20,800	
SUBTOTAL DIRECT RECLAMATION COSTS		\$572,144	
Indirect Costs			
Engineering Redesign	3% of Direct Costs	17,164	
Liability Insurance	1.5% of Labor Cost	2,164	
Performance and Payment Bonds	2.5% of Direct Costs	14,304	
Contractor Profit	6% of Direct Costs	34,329	
Contractor Overhead	4% of Direct Cost	22,886	
Contract Admin.	5% of Rec. Costs	28,607	
Scope and Bid Contingency	6% of Direct Costs \$34,329		
SUBTOTAL INDIRECT COSTS		\$153,783	
TOTAL ESTIMATED RECLAMATION COSTS		\$725,927	

**Table 1: Summary of Estimated Reclamation Costs** 

Appendix A – Legal Description of CIRI Lease Lands

1

CIRI Lease Lands Legal Description

Sections 3 – 10, 15 – 22 and 29 – 30, T. 1 S., R. 21 W. Seward Meridian

Kenai A-8, Alaska USGS Map

Appendix B Basis of Estimate Report for the Reclamation and Post-Reclamation Costs

1

Basis of Estimate for JT Mining Reclamation Cost Estimate for CIRI Lands

### Introduction

This Basis of Estimate document provides a basis for the reclamation cost estimate on CIRI lands described in the Reclamation Plan (Plan). The basis provides an overview of the assumptions incorporated into the cost estimate and provides more details associated with each of the tabs in the Reclamation Cost Estimate Workbook (Excel).

The Plan for CIRI lands is limited to reclaiming up to five material sites that are proposed for development to provide construction material for the new portal access road and the new airstrip. CIR has elected to leave the road, portal pad, laydowns, and airstrip in-place for the long-term, so the reclamation and associated costs for these facilities are not part of the Plan.

The reclamation cost estimate acknowledges current ADNR policy and regulations and incorporates the following assumptions into the cost estimate.

- No camp, equipment or fuel will be available on-site to perform the reclamation; equipment, operators and fuel must be mobilized to and from site to perform the reclamation.
- No salvage values were assigned to any of the equipment on site.

The Plan addresses reclamation of up to five material sites. Preliminary designs for these material sites indicate there could be, but not likely to be, up to 101.4 acres of cumulative disturbance. The rest of this document provides the cost estimate basis with reference to individual tabs within the Reclamation Cost Estimate Workbook (Excel).

The fundamental assumption for the Plan is that a backhoe and caterpillar tractor will be mobilized to site from Anchorage via Hercules aircraft. The equipment will be on site for approximately 30 days reshaping up to five material sites and reseeding them. Operators will be accommodated at a rental camp flown to site and constructed near the airstrip. Camp will be supported by a cook and camp manager for the reclamation effort including three days before and after the work to open and close camp. Weekly flights are included to provide groceries and staff rotation. At the end of the reclamation work the equipment and operators will be flown back to Anchorage and the camp will be closed. Annual overflights are included to inspect reclamation progress for a 5-year period.

### **Reclamation Cost Summary Tab**

This tab provides a summary of all Direct reclamation costs by category (for a total estimated Reclamation Cost of \$725,927. It also includes the Indirect Costs required by ADNR guidance. Owing to the low potential project risk and simplicity of the reclamation plan the lowest percentage value for Indirect Costs, allowable under ADNR Guidance, was applied for each of the seven categories of Indirect Costs.

### Maps Tab

This tab provides a site drawing that illustrates the proposed surface disturbance for the project site including roads, material sites, laydowns, and airstrip.

### **Disturbance Summary Tab**

This tab provides a table listing the potential maximum acreage disturbance subject to reclamation, for each of the five material sites. It also includes language about assumptions of disturbance acreage used for the cost calculations. Although the total potential maximum disturbance as shown is 101.4 acres, these polygons are simplified, and project engineers are confident that the actual surface disturbance will fall inside these polygons therefore being less than the total of 101.4 acres. For the cost estimate we assume that total surface disturbance will be 75% of the possible maximum disturbance. This equates to 76.1 acres. Owing to the location of the material sites it is anticipated that the water table will be intersected in the material sites. This will result in the formation of small ponds. As a result, the reclamation activities will be limited to reshaping and reseeding the areas around the ponds. For the cost estimate we assume that 50% of the 76.1 acres of surface disturbance will require reshaping and reseeding. This equates to 38.0 acres.

### **Mobilization-Staff-Equipment Tab**

The assumption is the reclamation will require a small caterpillar (dozer) and a backhoe. For the cost estimate these have been appropriately sized to allow mobilization in a single airlift using a Hercules aircraft from Anchorage. Rental rates for equipment were provided by NC Machinery as posted on their Anchorage web page and.

Equipment mobilization costs include charges to mobilize the equipment from the rental facility to Anchorage airport and then to move the equipment back from the airport to the rental facility. Each of these moves will cost \$300 according to NC Machinery. Hercules costs include two flights to site; one to mobilize and one to demobe the heavy equipment.

This tab also includes a total of 6 small aircraft flights between Anchorage and Johnson camp to bring camp staff and equipment operators to/from the site. The flights also accommodate a crew change in the middle of a 30-day program.

# **Equipment Rental and Fuel Tab**

This tab includes costs for heavy equipment rental and equipment fuel. Fuel price is \$10/gallon landed at Johnson camp based on prevailing 2023 actual costs.

Heavy Equipment rental rates are from NC Machinery Rental-Anchorage – as quoted on March 12, 2024. The quote is attached to this document.

Equipment fuel consumption rates are interpolated from published fuel consumption for similar equipment.

Rental duration is 30 days based on an estimate of 30 days to complete the reclamation at the five material sites.

# Labor Tab

The labor tab includes hourly and total labor costs for equipment operators and camp support staff. The estimate assumes two operators, a camp cook, and a camp manager. All hourly rates are sourced from the Alaska Department of Labor Pamphlet 600 issued April 2023. Labor cost estimates assume 12-hour workdays for all personnel and include overtime at a rate of 1.5x hourly rate for hours in excess of 8 hours in each day and 40 hours in a week. This equates to 40 hours/week at the regular hourly pay rate and 44 hours/week at overtime hourly pay rates. There is also a contingency of \$9,600 to pay the cost of a mechanic should one be needed for heavy equipment repairs. Flight costs for the mechanic are included in the Mobilization – Staff – Equipment Tab.

# Camp Tab

The reclamation work will be supported from a temporary tent camp flown to site for the reclamation project. Alaska Minerals provided the estimated cost for a 6-person soft camp for 30 day project including the cost to mobilize the camp to and from the site and the manpower to construct and deconstruct the camp. The cost estimate assumes there will be a full-time cook and camp manager and they are scheduled to be at site 3 days before and after the 30-day reclamation program to help open, then close, camp. Camp costs included in this tab are for food, weekly flights to resupply camp and camp generator fuel and cost for camp mobe/demobe construction and 30 days rental. Costs are based on actual costs provided by JT Mining or Alaska Minerals. Their cost estimate is attached to this document.

# **Reseeding Tab**

Reseeding costs are estimated on an acreage basis using a modified unit cost from the Bureau of Land Management incorporating labor costs from the BLM and seed costs from a local supplier. The cost estimate assumes that 38 acres will require reseeding. The estimate assumes that the seeds will be a commercial seed mix recommended by the Alaska Plant Materials Center. These seed mixes are typically available from suppliers in Anchorage and actual costs and seed consumption/acre values from Alaska Mill & Feed were used for this estimate. Owing to the anticipated narrow configuration of the ground requiring reseeding around the material sites, hand-casting might be the most practical means of applying seed. The seed is intended to stabilize the soils while willow and/or alder can establish through natural recruitment.

# **Post-Reclamation Monitoring Tab**

This tab includes the cost for an annual overflight, using fixed-wing aircraft and a paid observer, to visually inspect the progress of natural recruitment of vegetation and the overall stability of the sites. Two hours at site are included for photography or on-the-ground- inspection. We have also included cost to generate a report for each site visit. While not necessarily required by ADNR this allows the annual monitoring to also meet the monitoring requirements under Us Army Corp. of Engineers Permit POA 2023-00115. Owing to the low topographic relief of the sites, erosion is expected to be minimal and overall reclamation is anticipated to be successful. It is very unlikely that any additional physical work will be required to maintain the sites in the future. As landowner CIRI will become responsible for maintaining their airstrip and road, including bridges and culverts.







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### Prepared for:

JACK DIMARCHI - HIGHGOLD MINING 206-790-0227 JDIMARCHI@HIGHGOLDMINING.COM 299 AND 308 QUOTE 3.12.2024

Date Prepared

# Quotation

Description	DAY	WEEK	MONTH	Notes		
308 EX	\$640	\$1,855	\$5,415	INCLUDES BUCKETS		
299 CTL	\$600	\$1,855	\$5,415	INCLUDES BUCKET		
<u>TO APPLY</u> :						
14% LIMITED DAMAGE WAIVER (CAN BE WAIVED WITH PROOF OF APPLICABLE INSURANCE)						
1% ENVIRONMENTAL FEE						

Machines subject to availability. Quote valid for 30 days.

THANK YOU FOR YOUR BUSINESS!