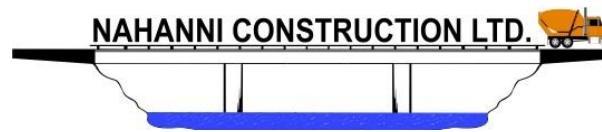


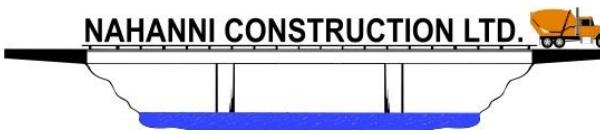
PHYSICAL, BIOLOGICAL AND SOCIO-ECONOMIC EFFECTS ASSESSMENT: LUPIN MINE WINTER ACCESS

Table 1. Potential physical, biological and socio-economic effects and proposed mitigation measures

VALUED COMPONENT	ACTIVITY	EFFECT	PROPOSED MITIGATION MEASURE	RESIDUAL IMPACTS	IMPLEMENTATION SCHEDULE	PROPOSED MONITORING SCHEDULE	REPORTING SCHEDULE
PHYSICAL COMPONENTS							
Air Quality	• Winter road construction, operation and seasonal closure	Negative and Mitigable	Conduct routine preventative maintenance on generators and engines. Implement <i>Environmental and Heritage Resources Protection Plan</i> .	None predicted	Ongoing from the commencement of Construction until Closure.	In accordance with NIRB Screening Decision Report and Land Use Permit.	In accordance with NIRB Screening Decision Report and Land Use Permit.
Ground Stability	• Winter road construction, operation and seasonal closure	Negative and Mitigable	Move equipment overland only when conditions are such that rutting or gouging will not occur. Utilize existing winter road corridor. Implement <i>Environmental and Heritage Resources Protection Plan</i> .	None predicted	Ongoing from the commencement of Construction until Closure.	In accordance with NIRB Screening Decision Report and Land Use Permit.	In accordance with NIRB Screening Decision Report and Land Use Permit.
Hydrology	• Winter road construction	Negative and Mitigable	Water use in accordance with NWB Approval. Implement <i>Environmental and Heritage Resources Protection Plan</i> .	None predicted	Throughout construction, as needed.	In accordance with NWB Approval terms and conditions.	In accordance with NWB Approval terms and conditions.
Noise Levels	• Winter road construction, operation and seasonal closure	Negative and Mitigable	Conduct routine preventative maintenance on engines. Ensure mufflers are in use, as required by manufacturers. Implement <i>Environmental and Heritage Resources Protection Plan</i> .	None predicted	Ongoing from the commencement of Construction until Closure	As required by manufacturer	In accordance with NIRB Screening Decision Report and Land Use Permit.



VALUED COMPONENT	ACTIVITY	EFFECT	PROPOSED MITIGATION MEASURE	RESIDUAL IMPACTS	IMPLEMENTATION SCHEDULE	PROPOSED MONITORING SCHEDULE	REPORTING SCHEDULE
Water Quality	• Winter road construction, operation and seasonal closure	Negative and Mitigable	Activate the <i>Spill Contingency Plan</i> where required. Implement <i>Environmental and Heritage Resources Protection Plan</i> .	None predicted	Ongoing from the commencement of Construction until Closure.	In accordance with NIRB Screening Decision Report and Land Use Permit.	In accordance with NIRB Screening Decision Report, Land Use Permit and NWB Approval terms and conditions.
BIOLOGICAL COMPONENTS							
Aquatic Species	• Winter road construction	Negative and Mitigable	Equip water intake hoses with appropriately sized mesh screens. Avoid water withdrawal from streams and small lakes. Activate the <i>Spill Contingency Plan</i> where required	None predicted	During periods of water withdrawal.	In accordance with NIRB Screening Decision Report and NWB Approval.	In accordance with NIRB Screening Decision Report and NWB Approval terms and conditions.
Birds	• Winter road construction, operation and seasonal closure	Negative and Mitigable	Implement the <i>Wildlife Protection Plan</i> .	None predicted	Ongoing from the commencement of Construction until Closure.	In accordance with the <i>Wildlife Protection Plan</i> .	In accordance with NIRB Screening Decision Report and Land Use Permit.
Vegetation	• Winter road construction, operation and seasonal closure	Negative and Mitigable	Move equipment overland only when conditions are such that rutting or gouging will not occur. Utilize existing winter road corridor. Implement <i>Environmental and Heritage Resources Protection Plan</i> .	None predicted	Ongoing from the commencement of Construction until Closure.	In accordance with NIRB Screening Decision Report and Land Use Permit.	In accordance with NIRB Screening Decision Report and Land Use Permit.
Wildlife	• Winter road construction, operation and seasonal closure	Negative and Mitigable	Implement the <i>Wildlife Protection Plan Program</i> .	None predicted	Ongoing from the commencement of Construction until Closure.	In accordance with the <i>Wildlife Protection Plan</i> .	In accordance with NIRB Screening Decision Report and Land Use Permit.
SOCIO-ECONOMIC COMPONENTS							



VALUED COMPONENT	ACTIVITY	EFFECT	PROPOSED MITIGATION MEASURE	RESIDUAL IMPACTS	IMPLEMENTATION SCHEDULE	PROPOSED MONITORING SCHEDULE	REPORTING SCHEDULE
Archaeological and Historical Sites	<ul style="list-style-type: none"> Winter road construction 	Negative and Mitigable	<p>Utilize existing winter road corridor.</p> <p>Where possible, avoid interaction with known archaeological sites.</p> <p>Where not possible to avoid interaction with known archaeological sites, proceed with direction from the territorial Archaeologist.</p> <p>Implement <i>Environmental and Heritage Resources Protection Plan</i>.</p>	None predicted	During Construction	As required, in consultation with the project archaeologist and the Territorial Archaeologist.	As required, in consultation with the project archaeologist and the Territorial Archaeologist.
Employment	<ul style="list-style-type: none"> Engagement, winter road construction, operation and seasonal closure 	Positive	Utilize local personnel wherever possible.	Positive: economic benefits for Kitikmeot employed, directly or indirectly, by the Project.	Ongoing from pre-construction engagement, through to the commencement of Construction until Closure	In accordance with NIRB Screening Decision Report.	In accordance with NIRB Screening Decision Report.