

APPENDIX D

Weekly Reports

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVER INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEKS 1 & 2 - February 14 to February 24, 2024

CLIENT:	Baffinland Iron Mines Corporation	PROJECT NO.:	NB102-00181/93
TO:	Rudy Dietrich, Frank Hynes, Michael Burns, Dale Tulloch, Abid Najey, Jim Patterson (Baffinland), Michael Johnson (NSC)	FILE NO.:	.F08
CC:	Richard Cook, Toby Perkins, Andy Phillips, Darren Kocken, Matthew Trask (KP)	REF. NO.:	1
FROM:	Greg Johnstone, Mackenzie Aiken, Michael Bourdignon	PAGES:	16

1 – GENERAL

1.1 RESPONSIBILITIES

- **Baffinland Iron Mines Corporation (Baffinland)** - Owner, drilling and blasting, traffic management plans, and overall project management.
- **Nuna** – Surveying, excavation, culvert installation, and backfill.
- **Knight Piésold Ltd. (KP)** - QA/QC for the excavation, culvert installation, and backfill.
- **ALS Laboratory (ALS)** - Laboratory testing of collected samples.

1.2 KNIGHT PIÉSOLD LTD. (KP) SITE STAFF

Greg Johnstone (DS), Mackenzie Aiken (NS), and Michael Bourdignon (DS)

- Greg Johnstone and Mackenzie Aiken from KP arrived at site on February 14.
- Mackenzie Aiken
 - Completed orientation and mine driving on February 15
 - OHT ride along on February 16
 - Tote Road driving on February 17
 - Started nightshift on the night of February 22.
- Michael Bourdignon
 - Arrived at site and February 21.
 - Completed his orientation training and mine driving on February 22
 - OHT ride along on February 23
 - Tote Road driving on February 24.
 - He will be on dayshift for the next 3 weeks.

1.3 HEALTH AND SAFETY

- KP attended Projects daily meetings at 7 am.
- KP completed vehicle safety inspection forms for each day.
- An incident occurred when a truck backed up into a jersey barrier. No property damage occurred. This incident was reported to both Baffinland and KP.

1.4 WEATHER

- The weather for the past two weeks has been sunny with temperature between -34°C and - 24°C.

1.5 MEETINGS AND CORRESPONDENCE

- KP attended Projects daily meetings at 7 am.
- KP attended the Tote Road Culvert Remediation Program Daily Coordination Meetings at 7:30 am every morning.

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- KP attended the Environmental Protection Plan Meeting on February 18.
- KP attended a discussion on aggregates and crushing volumes with Rudy Detrich, Frank Hynes, Serge from Sana, and Abid Najey. Serge was informed that daily samples should be collected of the mixed 32 mm minus material for the first few days of mixing.
- KP attended the Tote Road Update Meeting on February 20.

2 – CONSTRUCTION ACTIVITIES

2.1 GENERAL

Drilling and blasting of CV-057 and CV-059 were completed early last week. Excavation of the blasted material commenced February 22 and the excavation was completed on February 24. Additional blasted material remains within the excavation. The excavated blasted material has been stockpiled at km 60 laydown.

Nuna begun stockpiling 32 mm minus material at the km 60 laydown. No more 32 mm minus material is currently being stockpiled.

Construction at CV-057 and CV-059 has been paused until the slopes of the excavation have been secured so that compaction within the excavation can be completed.

2.2 BAFFINLAND

- Drilling of blasting holes at CV-057 and CV-059 were completed on February 19.
- Culverts CV-057 and CV-059 were blasted at 4 pm on February 21.

2.3 NUNA

- Nuna excavated blast material from CV-057 and CV-059 through the dayshift and nightshift from February 22 through February 24. The blasted material was hauled and stockpiled at the km 60 laydown.
- Nuna began stockpiling the 32 mm (culvert backfill) material at the km 60 laydown on February 23.
- Nuna completed the excavation using a 1H:1V slope at CV-057 during dayshift and the excavation at CV-059 continued throughout the nightshift of February 24. Additional blasted material currently remains within the excavation.
- Nuna continued to stockpile 32 mm minus (culvert backfill) material at the km 60 laydown throughout the dayshift of February 24. No 32 mm minus (culvert backfill) was stockpiled at the km 60 laydown throughout the nightshift.
- Nuna is expected to start barricading the excavations at CV-057 and CV-059 with safety berms starting February 25.

2.4 KP

- KP visited CV-059 on February 18 to inspect the construction site.
- KP completed an inspection of the CV-059 area on the morning of February 20.
- KP discussed with culvert manufacturer (Armtec) regarding the culvert bedding material (under the culvert). Armtec informed KP the maximum particle size to be used as bedding material is 1/4 inch. Baffinland informed KP they have a 3/16 inch material to serve this purpose. KP approved the use of this material as bedding below the culverts.
- KP inspected excavation of blasting material at CV-057 and CV-059 on February 22, 23, and 24.

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3 – CONSTRUCTION QUALITY ASSURANCE (CQA) ACTIVITIES

3.1 QUALITY ASSURANCE

- On February 22 and 23 KP inspected the blast result at CV-057 and CV-059. The material was frozen and full of large chunks.

3.2 QUALITY CONTROL

- Sana collected a sample of the mixed 32 mm minus material on February 19 (BLEND-CBF-01) and another on February 20 (BLEND-CBF-02). The samples were submitted to ALS for full grain size analysis and meet the required material specifications.
- KP informed Baffinland that Sana can reduce sample frequency of the mixed 32 mm minus material to every second day going forward.
- Sana collected a sample of the mixed 32 mm minus material on February 22 (BLEND-CBF-03). ALS lab testing shows that the material meets specifications.
- KP collected a control sample from the 32 mm minus stockpile at the km 60 laydown for grain size analysis on February 23 (C-CBF-01). The laboratory results indicated that this sample met material specifications.

Table 1: Laboratory Results

SAMPLE ID	NAME DESCRIPTION	MATERIAL DESCRIPTION	SAMPLE COLLECTION DATE	SAMPLE TESTING DATE	LABORATORY RESULTS					
					Particle Size Distribution (ASTM D422)					
					31.5	25	16	10	6.3	1
					%	%	%	%	%	%
CONTROL SAMPLES										
BLEND-CBF-01	Culvert Backfill Blend Sample 01	32mm minus culvert backfill	2024-02-19	2024-02-19	98.3	86.2	55.5	33.1	21.6	6.9
BLEND-CBF-02	Culvert Backfill Blend Sample 02	32mm minus culvert backfill	2024-02-20	2024-02-20	98.9	87.7	54.2	31.3	20.1	7.0
BLEND-CBF-03	Culvert Backfill Blend Sample 03	32mm minus culvert backfill	2024-02-22	2024-02-22	98.5	87.5	62.9	39.9	27.7	10.9
C-CBF-01	Culvert Backfill 01	32mm minus culvert backfill	2024-02-23	2024-02-24	98.3	88.8	58.0	32.2	19.3	4.1

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3.3 LABORATORY TESTING

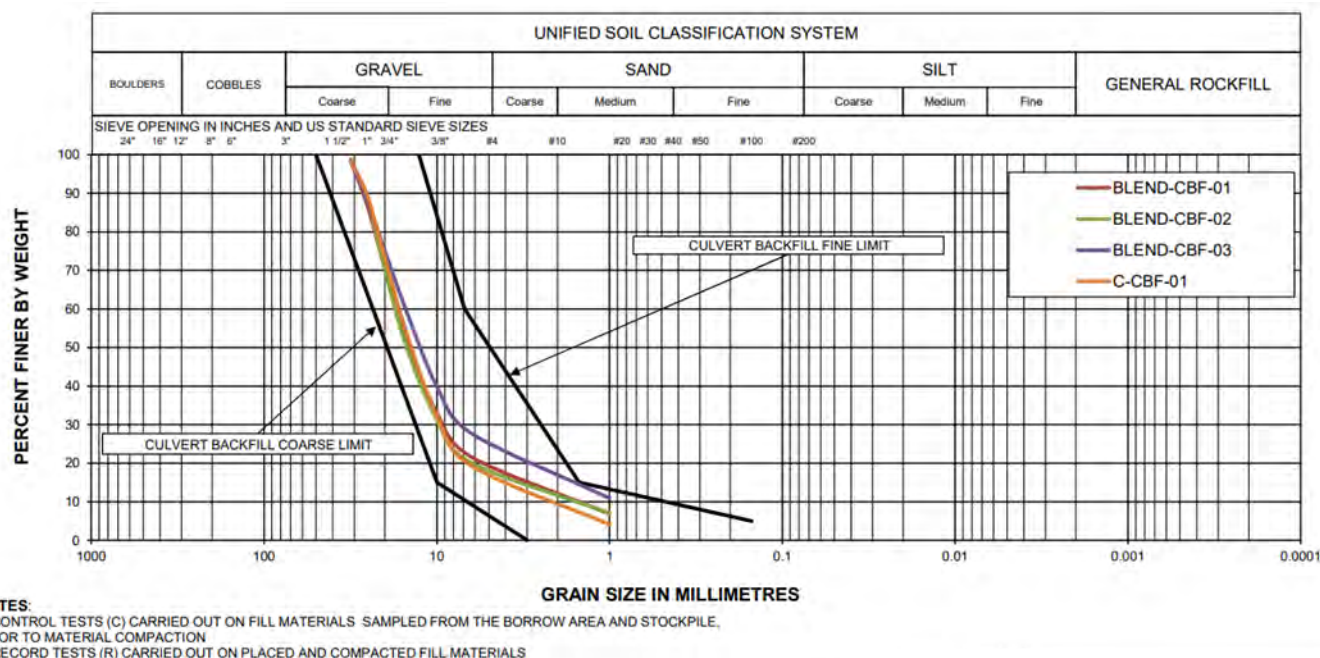


Figure 1: Grain Size Distribution - Culvert Backfill

4 – ENGINEERING ITEMS

- February 22** – On February 22 the following items were discussed:
 - Greg Johnstone of KP and Abid Najey of Baffinland discussed compaction requirements of the 32 mm minus below the culvert (due to the over blast) and of the local borrow area fill. It was discussed that if a vibrating roller is used, 6 passes will be completed. If a vibrating roller is unable to fit in the excavation (near the culverts), 8 passes will be completed with the approved plate compacter.
 - The 3/16 inch minus material to be used for bedding below the culvert has been approved by KP for this purpose.
 - The blasted material is full of frozen chunks ranging in size from 0.1 m to greater than 1 m and will not be suitable for use as natural stream substrate material to be mixed with riprap in its current condition.
- February 23** - on February 23 the following items were discussed:
 - It was discussed to alter the blasting plan to reduce the potential for over excavation requiring additional fill and excavation volumes.
 - It was also discussed that as-builts are required within the culvert to properly identify the placement of protruding rocks, boulder clusters and step pools. It was discussed this would be completed using a measuring tape.

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WEEKS 1 & 2 - February 14 to February 24, 2024

- It was discussed to investigate potential borrow pit sources to haul the excavated material from CV-057 and CV-059 to.
- Nuna stated during the meeting that the frozen clumps could not be broken up with an excavator and a hammer is likely needed.
- It was discussed with Rudy from Baffinland that as-built surveys will be completed between materials, the base of excavation, final grade, culvert elevations and within the culvert.
- Chris from Nuna asked Greg Johnstone from KP if the blasted material in the aprons should be removed. It was discussed with Rudy from Baffinland, and he stated that it should be removed due to the potential for settlement in the future.
- Chris from Nuna informed Greg Johnstone from KP his safety concerns due to the steep slope at the blast. The KP IFC drawings specify a 1H:1V excavation side slope and it is recommended that this is followed for future excavations. Greg discussed with Rudy and Jim from Baffinland the slope safety issue. Baffinland will be looking into alternative methods to ensure safety and compaction are met.
- It was discussed with Todd and Rudy from Baffinland that the air track drill is putting sediments around the culvert area.
- Michael and Greg from KP, Mike Burns and Rudy Dietrich from Projects (Baffinland), and Jhon, Ingrid and Jacob from Technical Services (Baffinland) met to discuss future blasting plans as a result of lessons learned from CV-057 and CV-059 (steep slopes and over excavation). As a result of the meeting, it was discussed that BG-04 would be the next crossing to be completed since it has the largest thickness of overburden material. The drill currently being used must drill holes to a minimum depth of 3.8 m, where the drill to be provided soon will have a shallower drill depth helping with over excavation at future locations.
- **February 24** – on February 24 the following items were discussed:
 - It was discussed that Nuna has completed the excavation using a 1H:1V slope as deep as they could. Additional material (approximately 1 to 2 m) is still in the bottom of the excavation.
 - Discussions of how to ensure safe slopes, while ensuring compaction are ongoing.
 - Baffinland discussed that no natural material is available for the mixture of riprap within the culvert and riprap aprons. They will be investigating a crushed material source.
 - During the inspections of the blast excavation at CV-057 and CV-059 with KP, Rudy Dietrich, Frank Hynes, and Michael Burns from Baffinland and Chris Chase and Don Webber from Nuna the following was discussed:
 - The excavations are much deeper than the design elevation with steep side slopes. It is unsafe to work in the current excavations.
 - Baffinland is looking at the possibility of clearing the work area, making it safe and moving equipment to work at BG--04 in the meantime before a safe compaction procedure can be developed.
 - Baffinland is looking into the possibility of using rock bolts and mesh to stabilize the slope.

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WEEKS 1 & 2 - February 14 to February 24, 2024

5 – PHOTOS

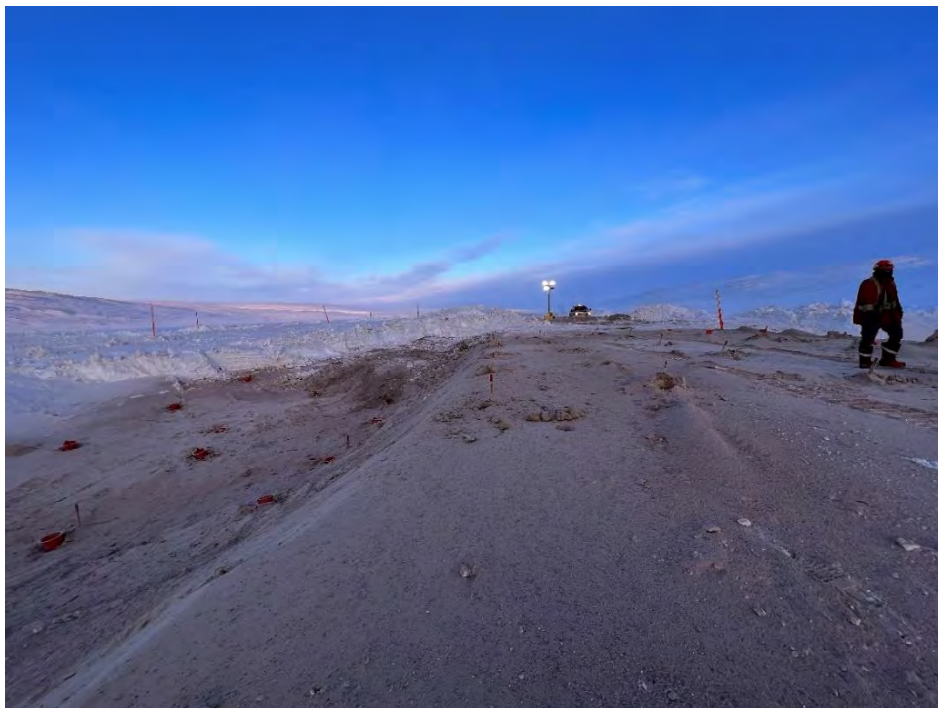


Photo 1: CV-059 drillholes facing North on the Tote Road (February 20, 2024)



Photo 2: CV-059 drillholes on the downstream side of the existing culvert (February 20, 2024)

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WEEKLY PROGRESS REPORT

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Photo 3: CV-059 drillholes on the upstream side of the existing culvert (February 20, 2024)

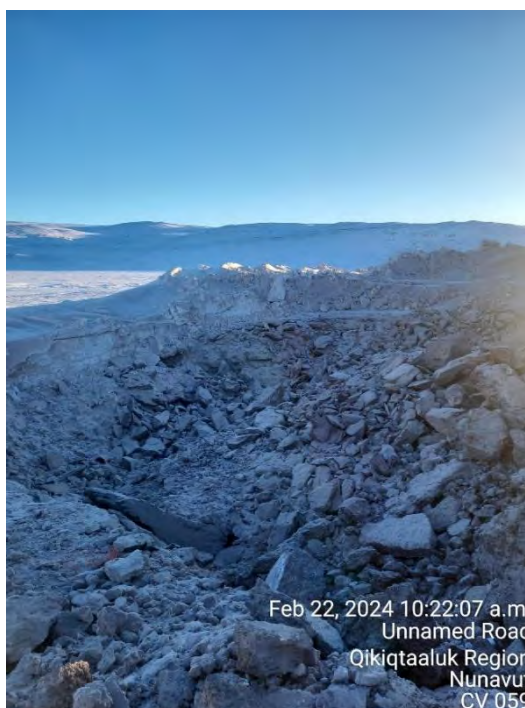


Photo 4: CV-059 looking southeast at the blasting excavation in the area of the culvert inlet (February 22, 2024)

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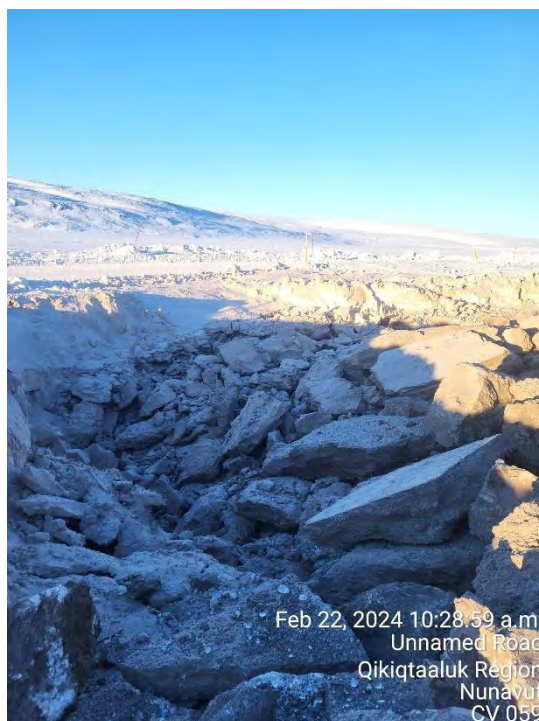


Photo 5: CV-059 looking northwest at the blasting excavation in the area of the culvert outlet (February 22, 2024)



Photo 6: CV-057 looking west at the blasting excavation in the area of the culvert inlet (February 22, 2024)

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Photo 7: CV-057 looking south at the blasting excavation in the area of the culvert outlet (February 22, 2024)

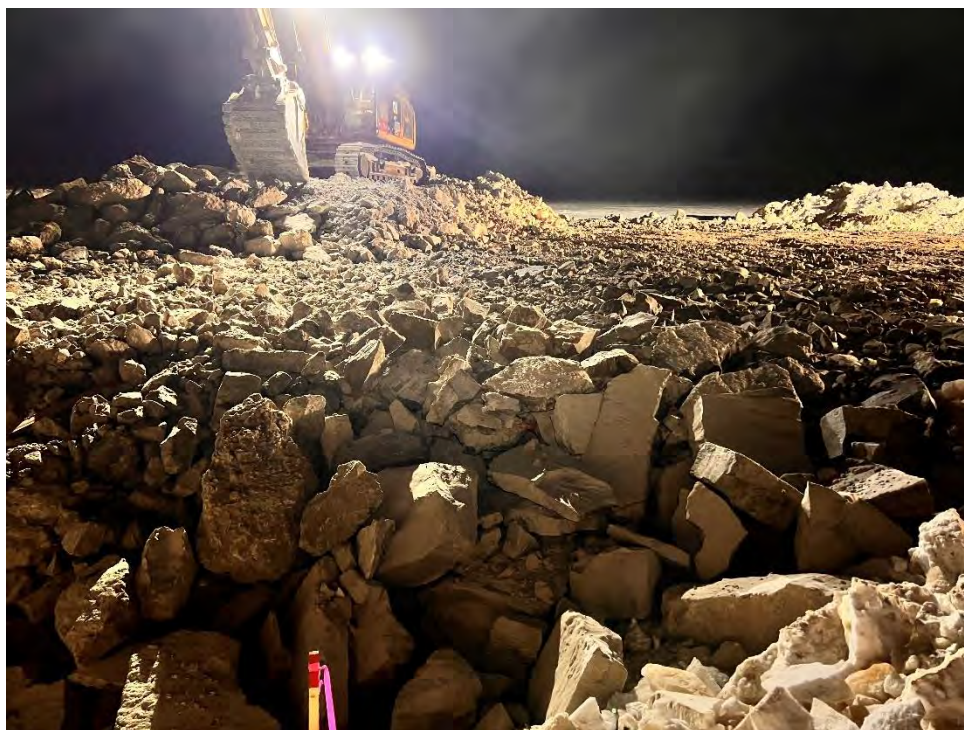


Photo 8: CV-057 looking west at the blasting excavation in the area of the culvert inlet (February 23, 2024)

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Photo 9: CV-059 looking northeast at the blasting excavation in the area of the culvert inlet (February 23, 2024)

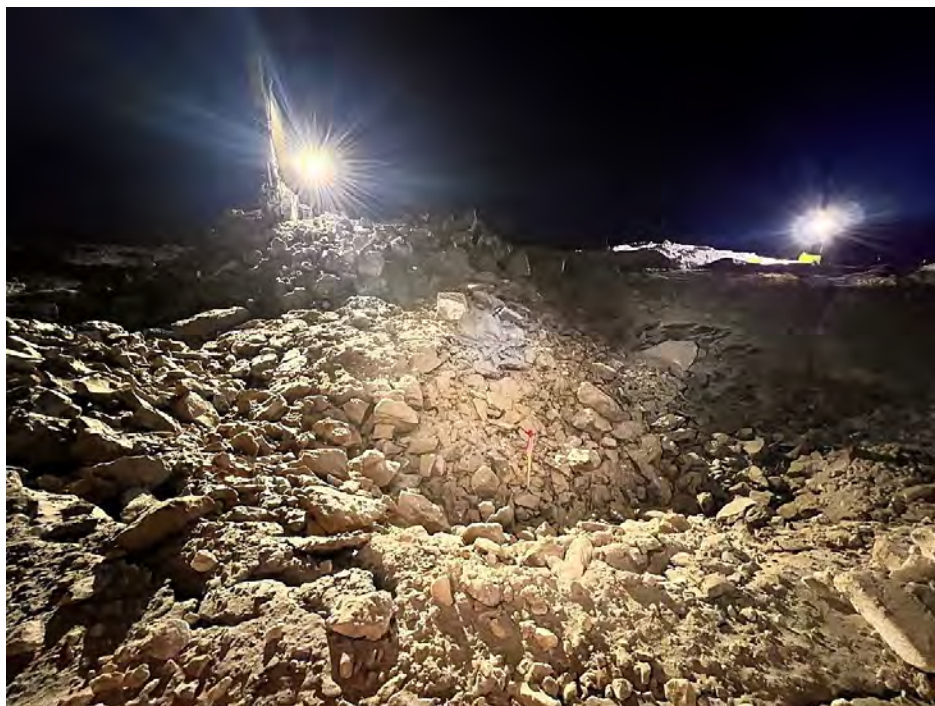


Photo 10: CV-059 looking northwest at the blasting excavation in the area of the culvert inlet (February 23, 2024)

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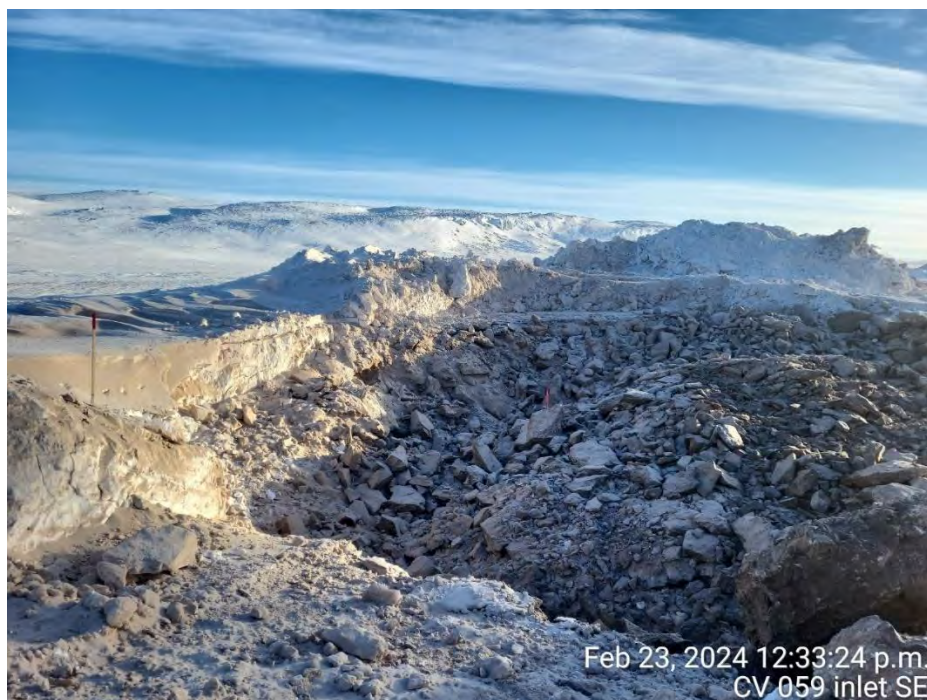


Photo 11: CV-059 looking southeast at the blasting excavation in the area of the culvert inlet (February 23, 2024)

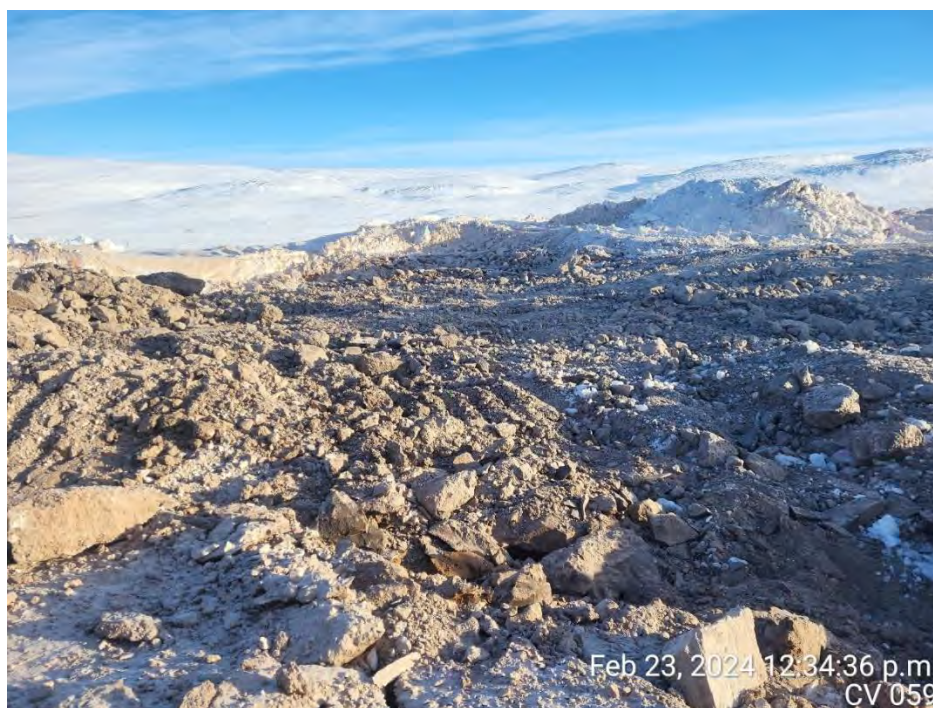


Photo 12: CV-059 looking east at the blasting excavation in the area of the culvert (February 23, 2024)

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WEEKLY PROGRESS REPORT

WEEKS 1 & 2 - February 14 to February 24, 2024



Photo 13: CV-057 looking west at the blasting excavation in the area of the culvert outlet (February 23, 2024)

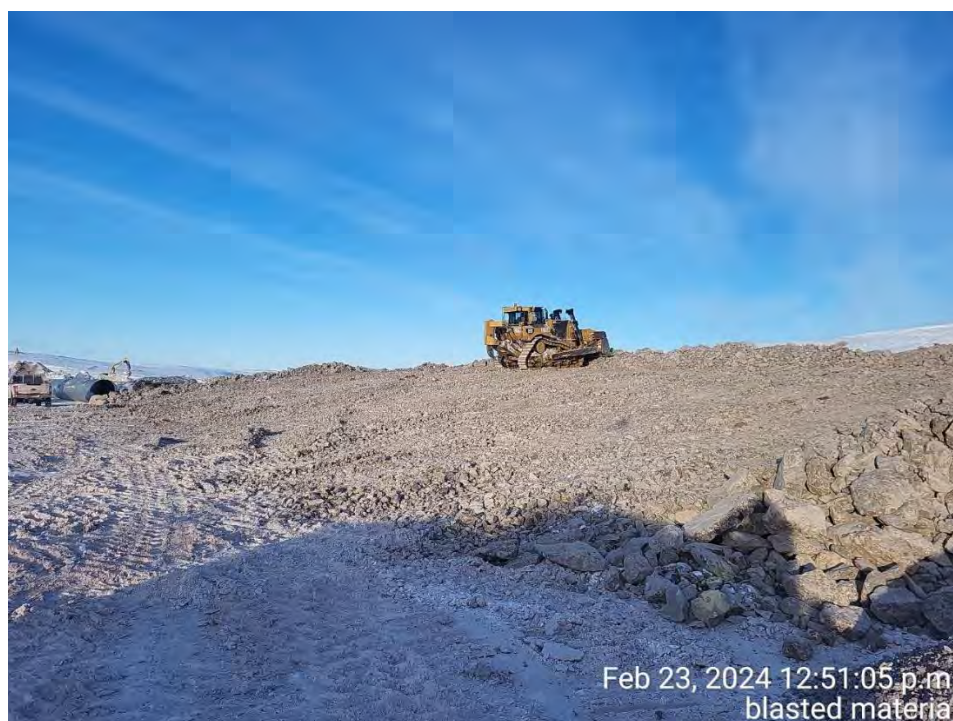


Photo 14: Looking northeast at the blasted material stockpile at km 60 (February 23, 2024)

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WEEKS 1 & 2 - February 14 to February 24, 2024



Photo 15: Looking at the 32 mm minus stockpile at km 60 (February 23, 2024)



Photo 16: Control sample collected from 32 mm minus stockpile at km 60 (February 23, 2024)

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WEEKS 1 & 2 - February 14 to February 24, 2024



Photo 17: CV-057 looking west at the blasting excavation from the area of the culvert inlet (February 23, 2024)

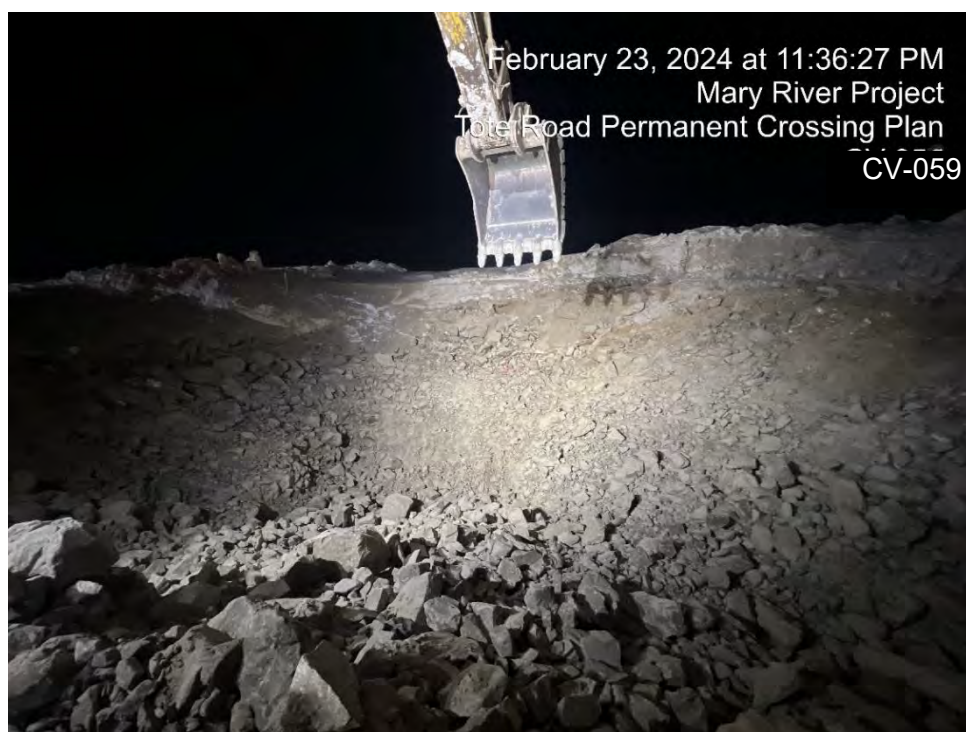


Photo 18: CV-059 looking east at the blasting excavation from the centre of the culvert (February 23, 2024)

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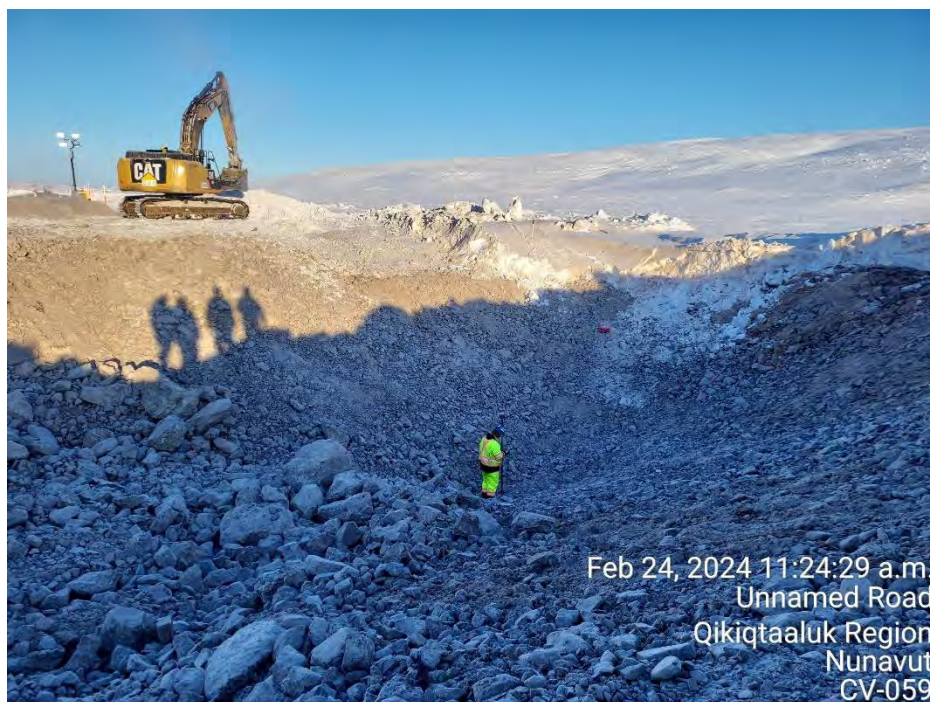


Photo 19: CV-059 looking northeast at the blasting excavation in the area of the culvert inlet (February 24, 2024)



Photo 20: CV-059 looking northwest at the blasting excavation in the area of the culvert inlet (February 24, 2024)

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Photo 21: CV-057 looking east at the blasting excavation in the area of the culvert (February 24, 2024)

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WEEKS 3 - February 25 to March 2, 2024

CLIENT:	Baffinland Iron Mines Corporation	PROJECT NO.:	NB102-00181/93
TO:	Baruck Wile, Rudy Dietrich, Frank Hynes, Michael Burns, Dale Tulloch, Abid Najey, Jim Patterson, Shannon Mulhall, David Bruce (Baffinland), Michael Johnson (NSC)	FILE NO.:	.F08
CC:	Richard Cook, Toby Perkins, Andy Phillips, Greg Johnstone, Darren Kocken, Matthew Trask (KP)	REF. NO.:	18
FROM:	Mackenzie Aiken, Michael Bourdignon	PAGES:	7

1 – GENERAL

1.1 RESPONSIBILITIES

- **Baffinland Iron Mines Corporation (Baffinland)** - Owner, drilling and blasting, traffic management plans, and overall project management.
- **Nuna** - Surveying, excavation, culvert installation, and backfill.
- **Knight Piésold Ltd. (KP)** - QA/QC for the excavation, culvert installation, and backfill.
- **ALS Laboratory (ALS)** - Laboratory testing of collected samples.

1.2 KNIGHT PIÉSOLD LTD. (KP) SITE STAFF

Greg Johnstone (DS), Mackenzie Aiken (NS), and Michael Bourdignon (DS)

- Greg Johnstone left site on February 27

1.3 HEALTH AND SAFETY

- KP attended Projects daily meetings at 7 am
- KP completed vehicle safety inspection forms for each day
- KP attended safety stand down on February 25

1.4 WEATHER

- The weather was sunny with some snow and wind and temperatures between -36°C and - 24°C.

1.5 MEETINGS AND CORRESPONDENCE

- KP attended Projects daily meetings at 7 am.
- KP attended the Tote Road Culvert Remediation Program Daily Coordination Meetings at 7:30 am every morning.
- Michael Bourdignon of KP met with BIM Technical Services to discuss the overlay of the blasting plan at BG-04.

2 – CONSTRUCTION ACTIVITIES

2.1 GENERAL

Construction at CV-057 and CV-059 has been paused until the slopes of the excavation have been secured so that compaction within the excavation can be completed.

Nuna started construction preparation at BG-04. Nuna prepared safety berms, snow removal, prepared a laydown area for the construction, and established an ice road around the construction zone.

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WEEKS 3 - February 25 to March 2, 2024

2.2 BAFFINLAND

- Currently preparing and reviewing drilling and blasting plan for BG-04.

2.3 NUNA

Transported Fine Riprap from km 104 to km 60 laydown.

Prepared ice road, laydown and safety berms for drilling and construction activities at BG-04.

2.4 KP

- Monitored excavation activities at CV-057 and CV-059.

3 – CONSTRUCTION QUALITY ASSURANCE (CQA) ACTIVITIES

3.1 QUALITY ASSURANCE

- Inspected preparation activities at BG-04

3.2 QUALITY CONTROL

- KP collected two control samples (SSM-01 and SSM-02) from the potential stream bed material to be mixed with coarse riprap for the culvert infill and aprons on February 28.
- Inspected Fine Riprap from stockpile at km 104.
- Inspected, with BIM and Nuna, sources for fine riprap, coarse riprap, and extra coarse riprap
- Visited two potential locations (km 97 and km 100) for stream bed material to be mixed with coarse riprap for the culvert infill and culvert aprons

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WEEKLY PROGRESS REPORT

WEEKS 3 - February 25 to March 2, 2024

3.3 LABORATORY TESTING

Table 1: Laboratory Results

SAMPLE ID	NAME DESCRIPTION	MATERIAL DESCRIPTION	SAMPLE COLLECTION DATE	SAMPLE TESTING DATE	LABORATORY RESULTS					
					Particle Size Distribution (ASTM D422)					
					31.5	25	16	10	6.3	1
					%	%	%	%	%	%
CONTROL SAMPLES										
SSM-01	Stream Substrate Material 01	Sandy Aggregate	2024-02-28	2024-02-29	84.7	79.2	73.4	67.6	64.1	47.9
SSM-02	Stream Substrate Material 02	Sandy Aggregate	2024-02-28	2024-02-29	100.0	100.0	97.5	79.8	64.0	31.9

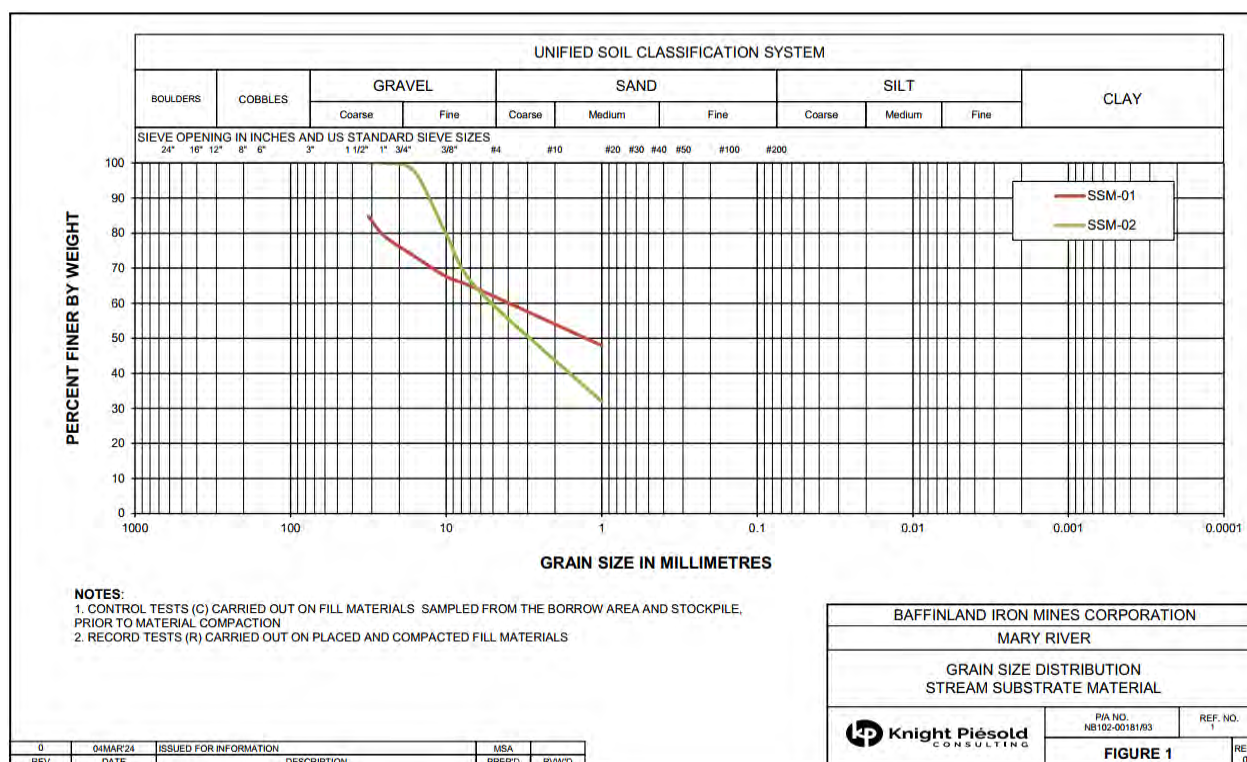


Figure 1: Grain Size Distribution – Stream Substrate Material

4 – ENGINEERING ITEMS

- February 25** – the following items were discussed:
 - It was discussed using an engineered mesh system to stabilize the excavations slopes at CV-057 and CV-059.
- February 27** – the following items were discussed:
 - The drilling and blasting plan for BG-04 was reviewed and additional holes were added for honeycombing the outlet apron. These holes cannot be loaded with explosives without damaging the bypass road. Nuna's recommendation is in place of blasting to instead honeycomb the area with drillholes and excavate the material by using a ripper attachment on a dozer or excavator.

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- **February 28** – the following items were discussed:
 - The mesh design to stabilize the slopes at CV-057 and CV-059 has been stamped and approved. Material for the mesh stabilization is currently being gathered.
- **February 29** – the following items were discussed:
 - Possible sources of stream substrate material were discussed, and it was clarified that any frozen chunks of material would have to be broken up or removed prior to placement.
 - The sorting of coarse riprap is to begin as soon as possible. The Grizzly will have to be modified prior to sorting.
 - It was discussed that the OHTs may not be able to use ice-road bypasses as early as the end of March. Possible alternatives are being investigated.
 - A culvert backfill test was discussed and will be scheduled as soon as possible. Two possible methods included dragging material in on geomembrane/geogrid or using electric wheelbarrows.
 - The possibility of varying the depths of the blasting holes along the length of the culvert excavation was discussed. Blasting holes will match as closely as possible the minimum required depth of excavation for BG-04.
- **March 1** – the following items were discussed:
 - Mesh for the slope stabilization at CV-057 and CV-059 has been located. Transportation to km 60 is being organized.
 - Surveyed blasting holes at BG-04 ran up onto the slope of the bypass ice road. These holes cannot be loaded with explosives without damaging the bypass road. Nuna's recommendation is to instead honeycomb the area with drillholes and excavate the material without a blast on that end of the excavation.
 - Drilling of BG-04 will be put on hold until the drilling and blasting plan is reviewed and approved.
- **March 2** – the following items were discussed:
 - Nuna excavated the remaining blasted material from CV-057 and continued excavating CV-059 to be able to start installing a mesh on the walls of the excavation for safety purposes.

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WEEKS 3 - February 25 to March 2, 2024

5 – PHOTOS



Photo 1: Fine Riprap from stockpile at km 104



Photo 2: Fine Riprap stockpile at km 104

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Photo 3: Potential Stream Substrate Material at km 100



Photo 4: Potential Stream Substrate Material at km 97

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Photo 5: Grizzly Stream to be modified for sorting of the Coarse Riprap



Photo 6: Grizzly screen with bars to be removed painted orange

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Photo 7: Inspection of blast layout markers for BG-04

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WEEK 4 – March 3 to March 9, 2024

CLIENT:	Baffinland Iron Mines Corporation	PROJECT NO.:	NB102-00181/93
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1 – GENERAL

1.1 RESPONSIBILITIES

- **Baffinland Iron Mines Corporation (Baffinland)** - Owner, drilling and blasting, traffic management plans, and overall project management.
- **Nuna** - Surveying, excavation, culvert installation, and backfill.
- **Knight Piésold Ltd. (KP)** - QA/QC for the excavation, culvert installation, and backfill.
- **ALS Laboratory (ALS)** - Laboratory testing of collected samples.

1.2 KNIGHT PIÉSOLD LTD. (KP) SITE STAFF

Darren Kocken (NS), Mackenzie Aiken (NS), and Michael Bourdignon (DS)

- Darren Kocken arrived on site on March 5
- Mackenzie Aiken left site on March 6

1.3 HEALTH AND SAFETY

- KP attended Tote Road Project daily meetings at 7:30 am.
- KP completed vehicle safety inspection forms for each day.
- KP attended Nuna morning/evening toolbox meetings at 6:00 am/pm.

1.4 WEATHER

- The weather was sunny with some snow and wind and temperatures between -41°C and - 26°C.

1.5 MEETINGS AND CORRESPONDENCE

- KP attended the Tote Road Culvert Remediation Program Daily Coordination Meetings at 7:30 am.
- KP attended the Environmental Protection Plan Meeting on March 9, 2024.

2 – CONSTRUCTION ACTIVITIES

2.1 GENERAL

- KP visited CV-057 and CV-059 throughout the week on dayshift and nightshift.
- KP visited BG-04 to inspect the fine riprap stockpile.
- KP monitored the placement and compaction of Culvert Backfill at CV-059.
- Tote road was closed on March 6 and the night of March 8 due to windy conditions.

2.2 BAFFINLAND

- Reviewed and approved the drilling and blast plan for BG-04.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 4 – March 3 to March 9, 2024

2.3 NUNA

- Cleared snow from CV-059 prior to resuming backfill and compaction.
- Shortened geomembrane slope stabilization at CV-059 prior to further backfill.

2.4 KP

- Monitored backfilling activities at CV-059.
- Inspected preparation activities at BG-04.

3 – CONSTRUCTION QUALITY ASSURANCE (CQA) ACTIVITIES

3.1 QUALITY ASSURANCE

- KP inspected the prepared foundations at CV-057 and CV-059.
- KP monitored the backfill and compaction of Culvert Backfill at CV-059.
- KP monitored the removal of snow from CV-059.

3.2 QUALITY CONTROL

- KP inspected Fine Riprap stockpile at BG-04.

WEEKLY PROGRESS REPORT

WEEK 4 – March 3 to March 9, 2024

3.3 LABORATORY TESTING

N/A

4 – ENGINEERING ITEMS

- **March 3** – the following items were discussed:
 - Geomembrane for the slope stabilization at CV-057 and CV-059 has been located.
 - The sorting of coarse riprap is to begin as soon as possible. The Grizzly will have to be modified prior to sorting.
 - A culvert backfill test was discussed and will be scheduled as soon as possible. Preparations for storing the wheelbarrows at km 60 is underway.
 - Drilling and blasting plan for BG-04 is under review.
- **March 4** – the following items were discussed:
 - It was discussed that any accumulation of snow greater than a few centimeters in the excavations are to be removed prior to backfill placement and compaction.
- **March 5** – the following items were discussed:
 - It was discussed that any accumulation of snow greater than a few centimeters in the excavations are to be removed prior to backfill placement and compaction.
- **March 6** – the following items were discussed:
 - It was discussed that Darren Kocken (KP) would miss a nightshift on March 6. Michael Bourdignon will prepare a BIM employee to take over Darren's nightshift for March 6. Darren will receive rides to and from km 60 during the nightshifts starting March 7 until he is able to complete his driving training.
 - Mike Burns (BIM) requested that KP provide updated materials and quantities for the CV-057 and CV-059 excavations.
- **March 7** – the following items were discussed:
 - Mike Burns discussed providing an RFI for culvert backfill methodology to KP.
 - Dale Tulloch discussed for KP to provide a length tolerance for the culverts and the distance from the culvert pipe to the edge of the culvert backfill.
 - The honeycomb method at the BG-04 aprons will be excavated using a ripper attachment on a 374 excavator.
 - Sampling of the 32 mm with fines material to be collected as soon as possible.
- **March 8** – the following items were discussed:
 - Baffinland will be surveying the 1H:1V slopes of the culvert backfill extended to the base of the over blasted excavation. Outside of the culvert backfill area, Baffinland will be using blasted material as fill. This is in accordance with Baffinland's RFI 1.
 - Baffinland stated that they would like to increase lifts of culvert backfill to either 300 mm or 400 mm using a CAT CS56B. Baffinland will be submitting an RFI for this.
- **March 9** – the following items were discussed:
 - Drilling and blasting plan for BG-04 was approved. Drilling planned to take place on March 10.
 - Blasting of BG-04 tentatively planned for March 11.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 4 – March 3 to March 9, 2024

5 – PHOTOS



Photo 1 Fine Riprap from stockpile at km 104. Photo taken March 03, 2024.



Photo 2 Prepared foundation at CV-059. Photo taken March 04, 2024, looking northeast.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 4 – March 3 to March 9, 2024



Photo 3 Smooth Drum Roller Compactor being used for the 32 mm minus Culvert Backfill at CV-059.
Photo taken March 05, 2024.



Photo 4 Snow removal at CV-059. Photo taken March 07, 2024, looking southwest.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 4 – March 3 to March 9, 2024



Photo 5 Shortening of geomembrane at CV-059. Photo Taken March 08, 2024, looking north.



Photo 6 Snow removal at CV-059. Photo taken March 09, 2024, looking southwest.

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TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 4 – March 3 to March 9, 2024



Photo 7 **Compacting the base of the excavation at CV-059. Photo taken March 09, 2024, looking north.**

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024

CLIENT:	Baffinland Iron Mines Corporation	PROJECT NO.:	NB102-00181/93
TO:	Baruck Wile, Rudy Dietrich, Frank Hynes, Michael Burns, Dale Tulloch, Abid Najey, Jim Patterson, Shannon Mulhall, David Bruce, Katie Babin, Todd Swenson (Baffinland), Michael Johnson (NSC)	FILE NO.:	.F08
CC:	Richard Cook, Toby Perkins, Andy Phillips, Greg Johnstone, Mackenzie Aiken, Michael Bourdignon (KP)	REF. NO.:	36
FROM:	Darren Kocken, Matthew Trask	PAGES:	11

1 – GENERAL

1.1 RESPONSIBILITIES

- **Baffinland Iron Mines Corporation (Baffinland)** - Owner, drilling and blasting, traffic management plans, and overall project management.
- **Nuna** - Surveying, excavation, culvert installation, and backfill.
- **Knight Piésold Ltd. (KP)** - QA/QC for the excavation, culvert installation, and backfill.
- **ALS Laboratory (ALS)** - Laboratory testing of collected samples.

1.2 KNIGHT PIÉSOLD LTD. (KP) SITE STAFF

- Darren Kocken (NS) - March 10, 2024, to March 16, 2024
- Michael Bourdignon (DS) - March 10, 2024, to March 13, 2024
- Matthew Trask (DS) - March 12, 2024, to March 16, 2024

1.3 HEALTH AND SAFETY

- No health and safety incidents occurred during the reporting period.
- Completed KP safety meeting minutes daily.
- Completed Baffinland field level risk assessments (FLRA's) daily.
- KP attended Nuna's daily toolbox meetings and 6:00 am/pm.

1.4 WEATHER

- The weather ranged between sunny and clear to overcast and light snow, with temperatures highs between -25°C and - 16°C.

1.5 MEETINGS AND CORRESPONDENCE

- KP attended the Tote Road Culvert Remediation Program Daily Coordination Meetings at 7:30 am.
- Greg Johnstone of KP and Baruck Wile and Dale Tulloch of Baffinland discussed culvert infilling and step pool concerns on March 12, 2024.
- Greg Johnstone and Andy Phillips of KP and Baruck Wile and Dale Tulloch of Baffinland met to discuss culvert infilling, step pool construction, and culvert backfill thickness on March 15, 2024.
- KP issued daily progress reports for March 10 to March 16, 2024 (Reference numbers 25, 26, 28 - 32, 34).

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024

2 – CONSTRUCTION ACTIVITIES

2.1 GENERAL

- Construction continued at CV-057 and CV-059. Construction activities included foundation preparation, backfilling the excavation with 32 mm minus material, and surveying.
- Nuna surveyed the base of both CV-059 and CV-057 at the end of the reporting period. There is 1.4 m of backfill material remaining to be placed in CV-057 before the culvert invert elevation is reached. The culvert invert elevation has been reached at CV-059. Grading, surveying, and the placement of one (1) x 50 mm lift of uncompacted 3/16" culvert bedding material are pending to be completed at CV-059 before culvert can be moved into position.
- Preparation activities continued at BG-04. Preparation activities included the construction of the ice road bypass and drilling.

2.2 BAFFINLAND

- Currently preparing and reviewing traffic management plans for CV-102 and CV-106.

2.3 NUNA

- Continued clearing snow and unsuitable materials from the excavations at CV-059 and CV-057 prior to resuming backfilling as required.
- Continued backfilling the excavation at CV-059 and began backfilling at CV-057 using 32 mm minus material.
- Nuna continued stockpiling 32 mm minus (culvert backfill) material and 3/16" minus material at the km 60 laydown during the dayshift and nightshift.
- Nuna measured and cut segments of the corrugated steel pipe (CSP) culvert in preparation for the culvert installations at CV-057 and CV-059.

2.4 KP

- KP visited CV-057 and CV-059 throughout the week on dayshift and nightshift.
- KP monitored the placement and compaction of Culvert Backfill at CV-057 and CV-059.
- Inspected preparation activities at BG-04.

3 – CONSTRUCTION QUALITY ASSURANCE (CQA) ACTIVITIES

3.1 QUALITY ASSURANCE

- KP inspected the foundation conditions for the removed access ramp at CV-059. Approval was granted to commence backfilling the excavation in this area. All unsuitable material has now been removed from the excavation at CV-059, and the entire foundation area at CV-059 has now been approved.
- KP inspected the foundation conditions for the main excavation as well as the removed access ramp at CV-057. Approval was granted to commence backfilling the excavation in this area. All unsuitable material has now been removed from the excavation at CV-057, and the entire foundation area at CV-057 has now been approved.
- KP monitored the backfill and compaction of Culvert Backfill at CV-057 and CV-059.
- KP monitored the removal of snow from CV-057 and CV-059.

3.2 QUALITY CONTROL

- KP collected a sample of potential stream substrate material from the stockpile at km 97 and submitted it to ALS for grain size analysis on March 10th, 2024 (sample ID: SSM-03).

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024

- After reviewing grain size analysis results for sample SSM-03 (potential Stream Substrate material), the stockpile at km 97 is okay to use as Stream Substrate material in the aprons and culvert.
- KP collected a sample of 32 mm minus culvert backfill material from the stockpile at km 60 and submitted it to ALS for grain size analysis on March 14th, 2024 (sample ID: C-CBF-02). This is the first of two control samples required for the construction of culvert CV-057. Results are pending to be received.
- KP collected a sample of 3/16" culvert bedding material from the stockpile at km 60 for grain size analysis on March 16th, 2024 (sample ID: C-CBM-01). This is a preliminary control sample to verify the grain size of the material before placement at culvert CV-059. Results are pending to be received.
- KP collected a control sample of 32 mm minus culvert backfill material from the stockpile at km 60 and submitted it to ALS for grain size analysis on March 16th, 2024 (sample ID: C-CBF-03). This is the second of two control samples required for the construction of culvert CV-057. Results are pending to be received.
- KP collected a record sample of 32 mm minus culvert backfill material from CV-059 and submitted it to ALS for grain size analysis on March 16th, 2024 (sample ID: R-CBF-01). This is the only record sample required for the construction of culvert CV-059. Results are pending to be received.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024

3.3 LABORATORY TESTING

Table 1: Laboratory Results

SAMPLE ID	NAME DESCRIPTION	MATERIAL DESCRIPTION	SAMPLE COLLECTION DATE	SAMPLE TESTING DATE	LABORATORY RESULTS						
					Particle Size Distribution (ASTM D422)						
					31.5	25	16	10	6.3	1	0.1
					%	%	%	%	%	%	%
CONTROL SAMPLES											
SSM-03	Stream Substrate Material 03	Sandy Aggregate	2024-03-10	2024-03-11		95.3	90.7	86.0	82.3	44.1	0.7

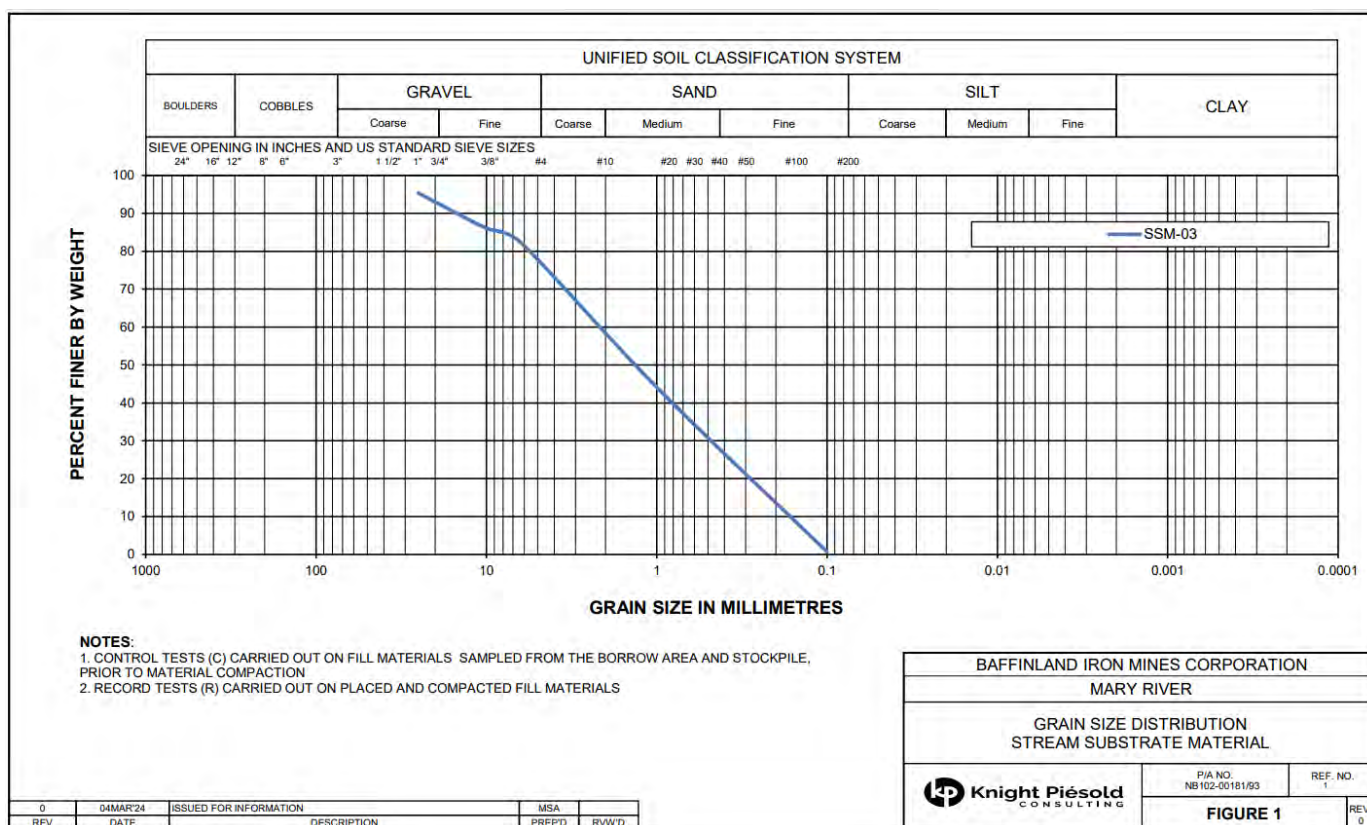


Figure 1: Grain Size Distribution – Stream Substrate Material

4 – ENGINEERING ITEMS

- March 12** – the following items were discussed:
 - Baffinland was undergoing drill issues and are now currently drilling; it is unknown when the blasting of BG-04 will take place.
 - CV-057 final excavation as-built has been collected.
 - KP and Baffinland discussed the use of excavated blast material. KP does not recommend using this material.
 - KP and Baffinland discussed lift thickness. Greg Johnstone of KP informed Baffinland the maximum lift thickness should be 300 mm.

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024

- KP and Baffinland discussed alternative filling plans for the culvert aprons. Baffinland is currently using 32 mm minus material for this purpose.
- **March 13** – the following items were discussed:
 - The blast design for CV-001 is currently in progress.
 - KP and Baffinland discussed cutting of culverts and coupling methodology. KP re-stated that Armtex has informed KP that the cut culverts should be installed beneath the road embankment. The culvert should be wrapped in geotextile and the coupling should be attached over the geotextile.
 - Dale Tulloch of Baffinland expressed concern of subsurface flow as a result of fine migration. Dale stated that he would be less concerned if the pipe was flatter with the step pools upstream. Greg Johnstone stated that this was unlikely, as the riprap is sized for the 1 in 100 year storm, and will be mixed to ensure all interstitial voids are filled with borrow area material. Some natural sediment migration and deposition will occur, and a monitoring plan will be put in place to monitor fish passage at the culvert locations.
 - Greg Johnstone informed Baffinland that step pools outside of the culvert had previously been reviewed. A figure will be created and a meeting will be set to discuss the risks associated with upstream step pool construction.
- **March 14** – the following items were discussed:
 - Nuna asked KP for a response to RFI 8,9 and 10, Greg Johnstone from KP informed Nuna that KP has only received up to RFI 7. Nuna subsequently provided RFI 8,9 and 10 to KP following the meeting and KP has been added to the RFI distribution list.
 - KP will provide approximate quantities at CV-057.
- **March 15** – the following items were discussed:
 - Traffic management plans are to be developed for CV-102 and CV-106.
 - KP will provide a response to RFI's 8, 9, 10 and 11 with the coming days.
 - KP and Baffinland discussed the step pool construction, as well as baffles. KP will provide a baffle design example to Baffinland.
 - KP and Baffinland discussed the backfill lift thickness. KP will accept a maximum lift thickness of 300 mm.
 - KP and Baffinland discussed the use of the smooth drum vibratory roller around the culvert. It was determined that the smooth drum vibratory roller could be used 1.5 m away from the culvert to the excavation wall for compaction of material.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024

5 – PHOTOS



Photo 1 **Snow removal from top of the excavation at CV-059. Photo taken March 10, 2024.**



Photo 2 **Placement of a 200 mm thick Culvert Backfill material lift at CV-057. Photo taken March 11, 2024.**

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024



Photo 3 **Compaction of a 200 mm thick Culvert Backfill material lift at CV-057 using the hand guided plate compactors. Photo taken March 11, 2024.**



Photo 4 **Compaction of a 200 mm lift of 32 mm minus material at CV-057. Photo taken March 12, 2024.**

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024



Photo 5 **Excavation of blast material from access ramp for foundation preparation at CV-059. Photo taken March 13, 2024.**



Photo 6 **Labourers manually spreading 32 mm minus material for a 200 mm lift at CV-057. Photo taken March 13, 2024.**

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024



Photo 7 Placing of 200 mm lift of 32 mm minus material at CV-59. Photo taken March 14, 2024.



Photo 8 Compaction of 200 mm lift of 32 mm minus material at CV-057 ramp area. Photo taken March 15, 2024.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024



Photo 9 Placement of 300 mm lift of 32 mm minus material at CV-059. Photo taken March 15, 2024.



Photo 10 Ore hauling truck (OHT) transporting 32 mm minus material from Milne Port to the 60 km laydown stockpile. Photo taken March 16, 2024.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 5 – March 10 to March 16, 2024



Photo 11 **Placement of 300 mm lift of 32 mm minus material at CV-057. Photo taken March 16, 2024.**

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 6 - March 17 to March 23, 2024

CLIENT:	Baffinland Iron Mines Corporation	PROJECT NO.:	NB102-00181/93
TO:	Baruck Wile, Rudy Dietrich, Frank Hynes, Michael Burns, Dale Tulloch, Abid Najey, Jim Patterson, Shannon Mulhall, David Bruce, Katie Babin, Todd Swenson (Baffinland), Michael Johnson (NSC)	FILE NO.:	.F08
CC:	Richard Cook, Toby Perkins, Andy Phillips, Greg Johnstone, Mackenzie Aiken, Michael Bourdignon (KP)	REF. NO.:	45
FROM:	Darren Kocken, Matthew Trask	PAGES:	10

1 – GENERAL

1.1 RESPONSIBILITIES

- **Baffinland Iron Mines Corporation (Baffinland)** - Owner, drilling and blasting, traffic management plans, and overall project management.
- **Nuna** - Surveying, excavation, culvert installation, and backfill.
- **Knight Piésold Ltd. (KP)** - QA/QC for the excavation, culvert installation, and backfill.
- **ALS Laboratory (ALS)** - Laboratory testing of collected samples.

1.2 KNIGHT PIÉSOLD LTD. (KP) SITE STAFF

- Darren Kocken (NS) - March 17, 2024, to March 23, 2024
- Matthew Trask (DS) - March 17, 2024, to March 23, 2024

1.3 HEALTH AND SAFETY

- No health and safety incidents occurred during the reporting period.
- Completed KP safety meeting minutes daily.
- Completed Baffinland field level risk assessments (FLRA's) daily.
- KP attended Nuna's daily toolbox meetings and 6:00 am/pm.

1.4 WEATHER

- The weather ranged between sunny and clear to overcast and light snow, with daily temperature highs between - 25°C and - 19°C.

1.5 MEETINGS AND CORRESPONDENCE

- KP attended the Tote Road Culvert Remediation Program Daily Coordination Meetings at 7:30 am.
- KP issued daily progress reports for March 17 to March 23, 2024 (Reference numbers 35, 37, 39 - 43).

2 – CONSTRUCTION ACTIVITIES

2.1 GENERAL

- Construction continued at CV-057 and CV-059. Construction activities included backfilling the excavation with 32 mm minus material, placement of blast material, installation of 1.0 m diameter high flow CSP culverts, installation of 1.8 m diameter low flow CSP culverts, and surveying.
- Preparation activities continued at BG-04. Preparation activities included the construction of the ice road bypass, drilling, blasting, and excavation.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 6 - March 17 to March 23, 2024

2.2 BAFFINLAND

- Baffinland oversaw the drilling and blasting of the existing culvert at BG-04.
- Baffinland oversaw the commencing of drilling at CV-001

2.3 NUNA

- Nuna continued backfilling the excavations at CV-059 and CV-057 using 32 mm minus material.
- Nuna continued stockpiling 32 mm minus (culvert backfill) material and 3/16" minus material at the km 60 laydown during the dayshift and nightshift.
- Nuna commenced hauling excess local blast material from the km 60 laydown area to the km 56.9 former borrow pit.
- Nuna commenced hauling fine riprap material from the Mary River mine km 110 waste dump to the km 60 laydown.
- Nuna completed the installations of the low and high flow round CSP culverts at both CV-057 and CV-059.
- Nuna commenced the excavation of the blast material from BG-04.
- Nuna completed the placement of local fill and road topping material at CV-059.

2.4 KP

- KP visited CV-057 and CV-059 throughout the week on dayshift and nightshift.
- KP monitored the placement and compaction of 32 mm minus material at CV-057 and CV-059.
- KP monitored the placement of culvert bedding material at CV-057 and CV-059.
- KP monitored the installation of CSP culverts at CV-057 and CV-059.
- Inspected preparation and blasting activities at BG-04.

3 – CONSTRUCTION QUALITY ASSURANCE (CQA) ACTIVITIES

3.1 QUALITY ASSURANCE

- KP issued Foundation Acceptance Form CV-059-FND-02 on March 17, 2024.
- KP issued Foundation Acceptance Form CV-057-FND-01 on March 19, 2024.
- KP monitored the backfill and compaction of culvert backfill at CV-057 and CV-059.
- KP monitored the installation of the 1.8 m diameter low flow and 1.0 m diameter high flow culverts at CV-059.
- KP monitored the installation of the 1.8 m diameter low flow and 1.0 m diameter high flow culverts at CV-057.

3.2 QUALITY CONTROL

- KP collected a record sample of 3/16" culvert bedding material from the 50 mm low flow culvert bedding lift at CV-059 for grain size analysis on March 17th, 2024 (sample ID: R-CBM-01).
- KP collected a control sample of 32 mm minus backfill material from the stockpile at the 60 km laydown for grain size analysis on March 18th, 2024 (sample ID: C-CBF-04). This is the second of two control samples required for the construction of culvert CV-059.
- KP collected a record sample of 3/16" culvert bedding material from the placement of the low flow culvert at CV-057 for grain size analysis on March 19th, 2024 (sample ID: R-CBM-02).
- KP collected a record sample of 3/16" culvert bedding material from the placement at the high flow culvert at CV-059 for grain size analysis on March 19th, 2024 (sample ID: R-CBM-03).
- KP collected a record sample of 32 mm minus culvert backfill material below the high flow culvert at CV-057 for grain size analysis on March 21, 2024 (sample ID: R-CBF-02).

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 6 - March 17 to March 23, 2024

- KP received grain size analysis results for the following samples: C-CBF-02, SMM-03, R-CBF-01, C-CBF-03, R-CBM-01, C-CBM-01.

3.3 LABORATORY TESTING

Table 1: Laboratory Results

KP SAMPLE ID	Culvert ID	NAME DESCRIPTION	MATERIAL DESCRIPTION	SAMPLE COLLECTION DATE	SAMPLE TESTING DATE	LABORATORY RESULTS						
						Moisture Content (ASTM D2216)	Particle Size Distribution (ASTM D422)					
							25	16	10	6.3	1	0.1
						%	%	%	%	%	%	
CONTROL SAMPLES												
C-CBF-02	CV-057	Control Sample No. 2 - Culvert backfill material	32mm minus culvert backfill	2024-03-14	2024-03-16	0.79	83.3	39.7	14.5	6.2	1.9	0.7
SMM-03	N/A	Stream Substrate Material Sample No. 03	Sandy Aggregate	2024-03-10	2024-03-16	6.02	97.0	73.2	49.8	37.8	17.0	6.8
C-CBF-03	CV-057	Control Sample No. 3 Culvert backfill material	32mm minus culvert backfill	2024-03-16	2024-03-17	0.67	82.1	38.0	14.3	6.2	2.0	1.2
C-CBM-01	CV-059	Control Sample No. 1- 3/16" Culvert Bedding Material	Crushed granite, 5 mm minus sized	2024-03-16	2024-03-18	3.46	100.0	100.0	99.6	99.2	49.6	8.0
RECORD SAMPLES												
R-CBM-01	CV-059	Record Sample No. 1- 3/16" Culvert Bedding Material	Crushed granite, 5 mm minus sized	2024-03-17	2024-03-18	3.46	100.0	100.0	100.0	100.0	56.7	8.3
R-CBF-01	CV-059	Record Sample No. 1 - Culvert backfill material	32mm minus culvert backfill	2024-03-17	2024-03-17	1.2	86.3	58.4	32.5	19.0	4.5	1.5

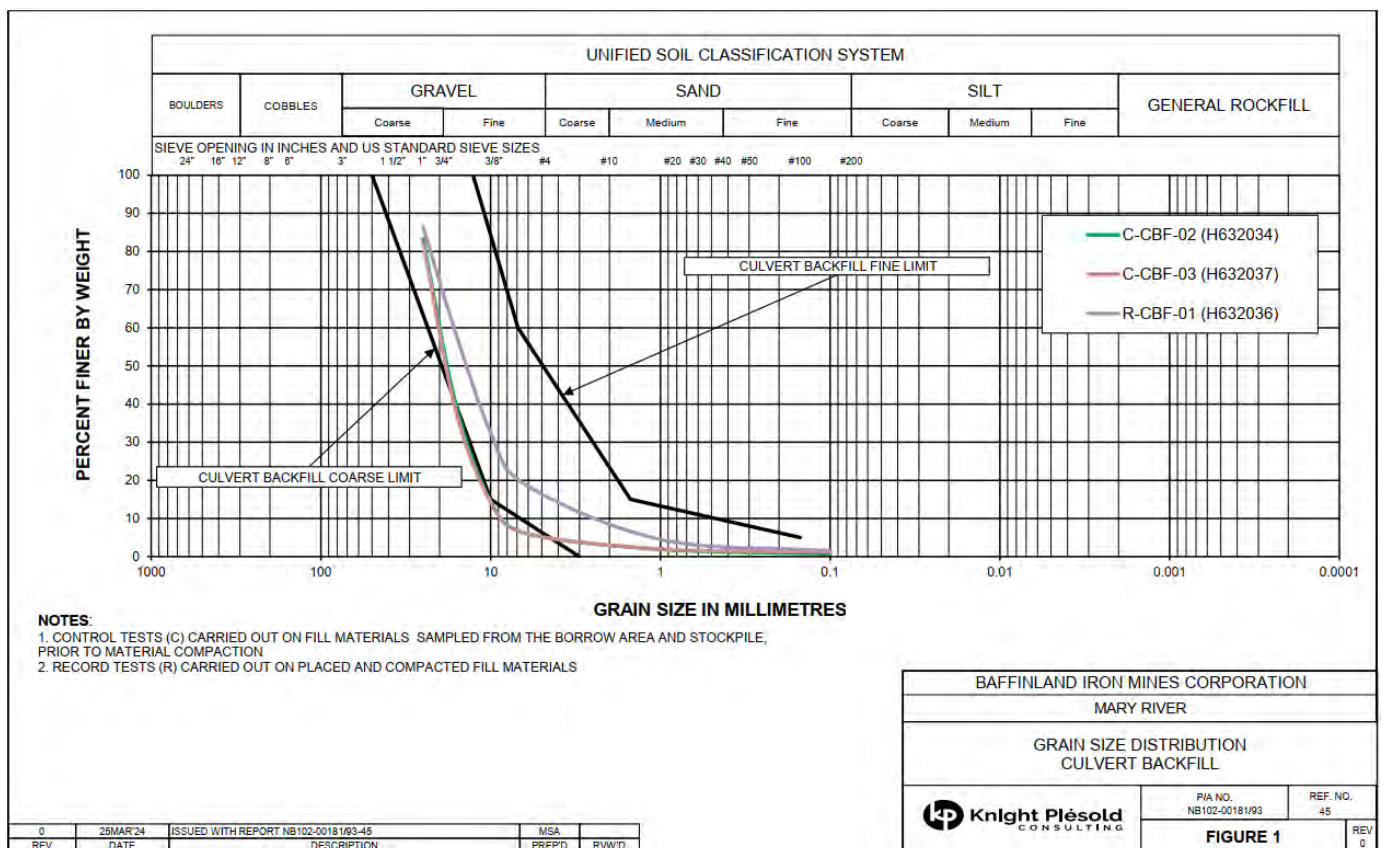


Figure 1: Grain Size Distribution - Culvert Backfill Material

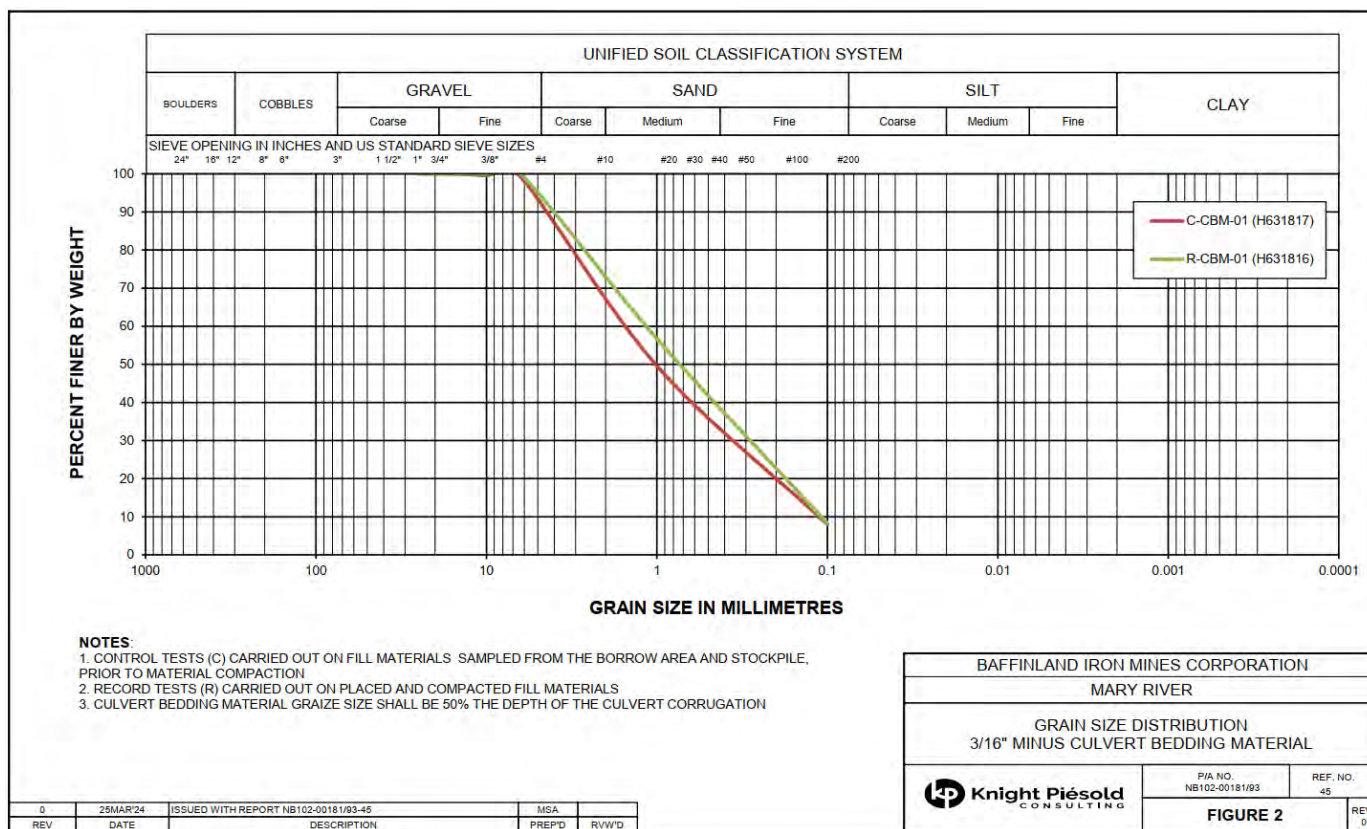


Figure 2: Grain Size Distribution - Culvert Bedding Material

4 – ENGINEERING ITEMS

- March 18** - the following items were discussed:
 - The preliminary blast design for CV-001 is currently being completed by Baffinland.
 - The low flow 1.8 m diameter CSP culvert was installed at CV-059 yesterday (March 17, 2024). Approximately 0.5 m of fill material is remaining to be placed before the culvert invert elevation is reached at CV-057 (as of end of nightshift on March 17, 2024).
 - KP, Nuna and Baffinland discussed the insulation placement. The 2" insulation is to be placed in two layers, with the joints offset.
 - Nuna asked Baffinland to ensure that they have the latest drawings.
 - KP, Nuna and Baffinland discussed the current schedule, and the possibility of building an ice road at BG-27.
 - KP will provide a baffle design example today to Baffinland for review and comment.
- March 19** - the following items were discussed:
 - Drilling and blasting at BG-04 was discussed.
 - Blast design for CV-001 to be completed soon. Drilling at CV-001 is anticipated to begin Wednesday (March 20, 2024) or Thursday (March 21, 2024).
 - Hauling of 32 mm minus to CV-057 and CV-059 to continue today (March 19, 2024).
 - One excavator is currently broken down and is undergoing maintenance.
 - The future culvert installation schedule will be BG-04, CV-001, and then BG-27 and CV-216 together.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 6 - March 17 to March 23, 2024

- **March 20** - the following items were discussed:
 - Excess frozen blast material from CV-057 and CV-059 is being hauled to former borrow pits.
 - Blasting at BG-04 is scheduled for 5:00 pm today (March 20, 2024).
 - Dale Tulloch and Greg Johnstone discussed laboratory sampling frequency. KP field staff has requested for the laboratory to label the samples with KP's identifier.
- **March 21** - the following items were discussed:
 - Blasting at BG-04 was successfully carried out yesterday (March 20, 2024).
 - The ice road bypass design at BG-27 is pending to be completed.
 - Baffinland asked KP to provide additional survey information.
 - Baffinland asked KP to evaluate 3/16" minus as culvert infilling material.
 - Dale asked Greg from KP about the purpose of the insulation at CV-102 and CV-106. Greg informed Dale that this is due to reduce permafrost thaw risks as a result of aligning the culvert inlet out of the original stream to reduce culvert length.
- **March 22** - the following items were discussed:
 - BG-04 blast appeared to have been successful.
 - Drilling at CV-001 will occur shortly.
 - The mixing of coarse riprap and borrow pit material was discussed. This will be monitored by on-site KP staff.
 - Greg Johnstone of KP informed Baffinland that he will be on vacation next week and to contact Andy Phillips of KP.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 6 - March 17 to March 23, 2024

5 – PHOTOS



Photo 1 Full length (25.66 m) of the low flow culvert in place at CV-059. Photo taken March 17, 2024.

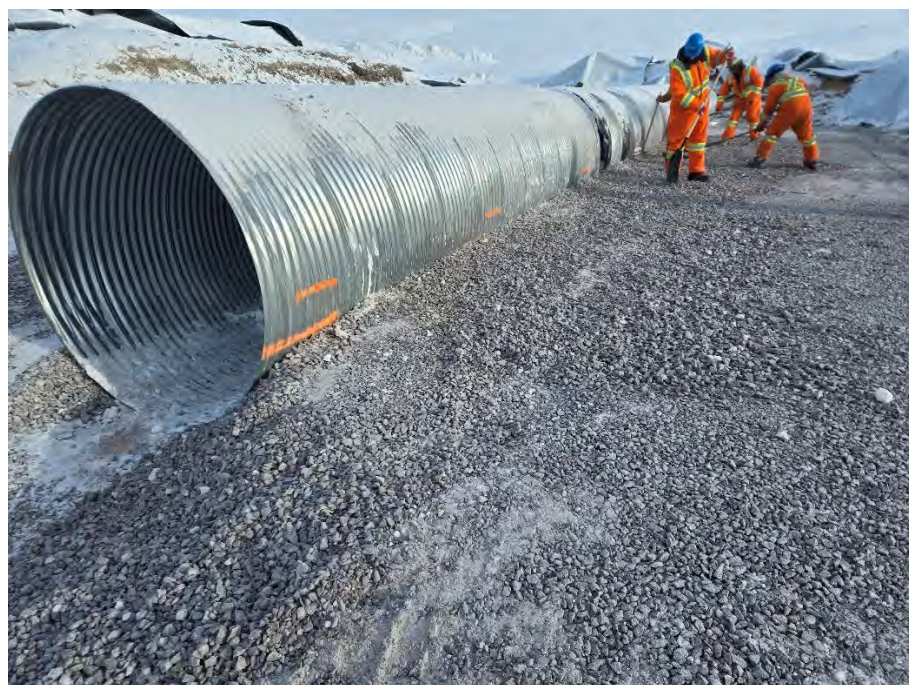


Photo 2 Hand packing and leveling the 32 mm minus material against low flow culvert at CV-059.
Photo taken March 18, 2024.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 6 - March 17 to March 23, 2024

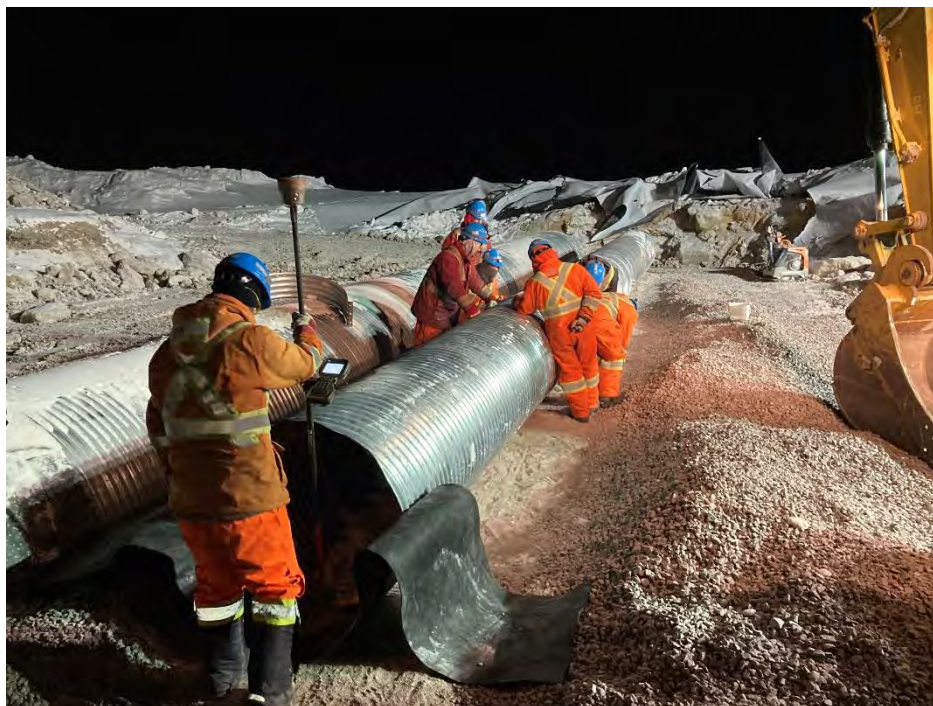


Photo 3

Placement of the cut 6 m section of the 1.0 m diameter high flow CSP culvert at CV-059.
Photo taken March 19, 2024.



Photo 4

1.8 m diameter low flow CSP culvert installed at CV-057. Photo taken March 20, 2024.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 6 - March 17 to March 23, 2024



Photo 5 **Compaction of 32 mm minus material around the culverts at CV-059. Photo taken March 20, 2024.**



Photo 6 **Placement of second 6 m segment of 1.0 m diameter high flow CSP culvert at CV-057. Photo taken March 21, 2024, looking northeast.**

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 6 - March 17 to March 23, 2024



Photo 7 Blast material being hauled from BG-04 to the stockpile at km 97. Photo taken March 22, 2024.



Photo 8 Compaction of 32 mm minus material adjacent to the installed culverts at CV-057. Photo taken March 23, 2024.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 6 - March 17 to March 23, 2024



Photo 9 Placement of blast material overtop of 32 mm minus 1H:1V slope trapezoid at CV-059. Photo taken March 23, 2024.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024

CLIENT:	Baffinland Iron Mines Corporation	PROJECT NO.:	NB102-00181/93
TO:	Baruck Wile, Rudy Dietrich, Frank Hynes, Michael Burns, Dale Tulloch, Abid Najey, Jim Patterson, Shannon Mulhall, David Bruce, Katie Babin, Todd Swenson (Baffinland), Michael Johnson (NSC)	FILE NO.:	.F08
CC:	Richard Cook, Toby Perkins, Andy Phillips, Greg Johnstone, Michael Bourdignon (KP)	REF. NO.:	54
FROM:	Darren Kocken, Matthew Trask, Mackenzie Aiken	PAGES:	12

1 – GENERAL

1.1 RESPONSIBILITIES

- **Baffinland Iron Mines Corporation (Baffinland)** - Owner, drilling and blasting, traffic management plans, and overall project management.
- **Nuna** - Surveying, excavation, culvert installation, and backfill.
- **Knight Piésold Ltd. (KP)** - QA/QC for the excavation, culvert installation, and backfill.
- **ALS Laboratory (ALS)** - Laboratory testing of collected samples.

1.2 KNIGHT PIÉSOLD LTD. (KP) SITE STAFF

- Matthew Trask (DS) - March 24, 2024, to March 30, 2024
- Darren Kocken (NS) - March 24, 2024, to March 27, 2024
- Mackenzie Aiken (NS) - March 27, 2024, to March 30, 2024

1.3 HEALTH AND SAFETY

- No health and safety incidents occurred during the reporting period.
- Completed KP safety meeting minutes daily.
- Completed Baffinland field level risk assessments (FLRA's) daily.
- KP attended Nuna's daily toolbox meetings and 6:00 am/pm.

1.4 WEATHER

- The weather ranged between sunny and clear to overcast and light snow with moderate wind, with daily temperature highs between -25°C and -5 °C.

1.5 MEETINGS AND CORRESPONDENCE

- KP issued daily progress reports for March 24 to March 30, 2024 (Reference numbers 44, 46 - 48, 50 - 52).

2 – CONSTRUCTION ACTIVITIES

2.1 GENERAL

- Construction activities continued at CV-057 and CV-059. Construction activities included placement of blasted local material at CV-057, side slope stabilization, infilling of low flow culverts, culvert apron area backfilling, and surveying at both CV-057 and CV-059.
- Blasting, excavation, culvert installation and backfilling with 32 mm minus material commenced and has been completed at CV-001.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024

- Foundation preparation activities were completed at BG-04. Low flow culvert installation and backfilling activities commenced at BG-04.
- Ice road by-pass construction commenced at BG-27.

2.2 BAFFINLAND

- Baffinland oversaw the drilling and blasting of the existing culvert at CV-001.
- Baffinland oversaw the additional “honeycomb” drilling required at BG-04 to reach design depth.

2.3 NUNA

- Nuna continued the placement of local fill and road topping material at CV-057.
- Nuna commenced and completed the culvert infilling of CV-059 and CV-057
- Nuna commenced and completed the construction of the side slopes with non-woven geotextile overlayed with Fine Riprap and apron areas of CV-059
- Nuna commenced the construction of the side slopes with non-woven geotextile overlayed with fine riprap and the construction of the culvert apron areas of CV-057
- Nuna continued stockpiling 32 mm minus culvert backfill material and 3/16” minus material at the km 94 laydown during the dayshift and nightshift.
- Nuna continued hauling excess local blast material from the km 60 laydown area to the km 56.9 former borrow pit.
- Nuna commenced hauling fine and coarse riprap material from the Mary River Mine site to both km 60 and km 94 laydown areas.
- Nuna completed the excavation of the blast material from BG-04.
- Nuna commenced and completed the excavation of the blast material from CV-001.
- Nuna installed the low and high flow culverts and completed the backfill of 32 mm minus culvert backfill material around and above the culverts at CV-001.
- Nuna commenced backfill of 32 mm minus culvert backfill material at BG-04 and installed 75% of the low flow CSP Culverts on top of uncompacted 3/16” minus culvert bedding material.
- Nuna continued to survey key linework and elevations at CV-059, CV-057, and commenced surveying at CV-001, and BG-04

2.4 KP

- KP Visited CV-057, CV-059, CV-001, and BG-04 throughout the week on dayshift and nightshift.
- KP inspected foundation preparation activities at BG-04 and CV-001.
- KP monitored placement and compaction of 32 mm minus backfill material, 3/16” minus culvert bedding placement, low flow CSP culvert installation and high flow CSP culvert installation at CV-001.
- KP monitored placement and compaction of 32 mm minus backfill material, 3/16” minus culvert bedding placement, and partial low flow CSP culvert installation at BG-04.
- KP monitored culvert infilling activities at CV-059 and CV-057.
- KP monitored side slope and culvert apron area preparation and construction works at CV-059 and CV-057.

3 – CONSTRUCTION QUALITY ASSURANCE (CQA) ACTIVITIES

3.1 QUALITY ASSURANCE

KP issued Foundation Acceptance Form CV-001-FDN-01 on March 28, 2024.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024

KP provided verbal foundation approval for BG-04 on March 28, 2024.

KP monitored the completion of infilling the interior of the low flow culvert at CV-059 and CV-057 with coarse riprap and stream substrate material during the dayshift. The level of infilling was verified to be at 40% (0.7 m) infilled using a measuring tape. In-culvert boulders are verified to be placed in a staggered arrangement with spacing of approximately 1 m from adjacent boulders.

KP monitored the placement of the 1.8 m diameter low flow and 1.0 m diameter high flow CSP culverts at CV-001. GPS survey was utilized to verify installation elevations and horizontal offsets; the elevations are within tolerances specified by KP.

KP monitored the partial placement of the 2.0 m diameter low flow CSP culvert sections at BG-04. GPS survey was utilized to verify installation elevations and horizontal offsets. The final inlet and outlet elevations are to be confirmed once all sections of the low flow CSP culvert at BG-04 are installed.

KP monitored the backfill and compaction of 200 mm lifts of 32 mm minus material at CV-001 and at BG-04.

3.2 QUALITY CONTROL

Control sample of 32 mm minus Culvert Backfill Material was collected from CV-001 on March 27, 2024 (Sample ID: C-CBF-05)

Record sample of 3/16" minus Culvert Bedding Material for the low flow culvert was collected from CV-001 on March 27, 2024 (Sample ID: R-CBM-04)

Record sample of 3/16" minus Culvert Bedding Material for the high flow culvert was collected from CV-001 on March 29, 2024 (Sample ID: R-CBM-05)

A second control sample of 32 mm minus Culvert Backfill Material was collected from CV-001 on March 29, 2024 (Sample ID: C-CBF-06)

Record sample of 3/16" minus Culvert Bedding Material for the low flow culvert was collected from BG-04 on March 30, 2024 (Sample ID: R-CBM-06)

Record sample of 32 mm minus Culvert Backfill Material was collected from CV-001 on March 30, 2024 (Sample ID: R-CBF-03)

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024

3.3 LABORATORY TESTING

Table 1: Laboratory Results

KP SAMPLE ID	Culvert ID	NAME DESCRIPTION	MATERIAL DESCRIPTION	SAMPLE COLLECTION DATE	SAMPLE TESTING DATE	SAMPLE WEIGHT(Kg)	LABORATORY RESULTS							
							Moisture Content (ASTM D2216)	Particle Size Distribution (ASTM D422)						
								25	16	10	6.3	1	0.1	
							%	%	%	%	%	%	%	
CONTROL SAMPLES														
C-CBF-05	CV-001	Control sample - Culvert Backfill Material	32mm minus culvert backfill	2024-03-27	2024-03-28	9.18	2.44	99.2	79.5	39.3	18.9	8.4	2.2	
RECORD SAMPLES														
R-CBM-05	CV-001	Record Sample Culvert Bedding Material	Crushed granite, 5 mm minus sized	2024-03-29	2024-03-30	4.94	4.7	100.0	99.1	97.5	96.2	49.2	0.0	
R-CBM-04	CV-001	Record Sample Culvert Bedding Material	Crushed granite, 5 mm minus sized	2024-03-27	2023-03-29	6.70	4.42	100.0	99.9	99.1	98.0	53.9	0.0	

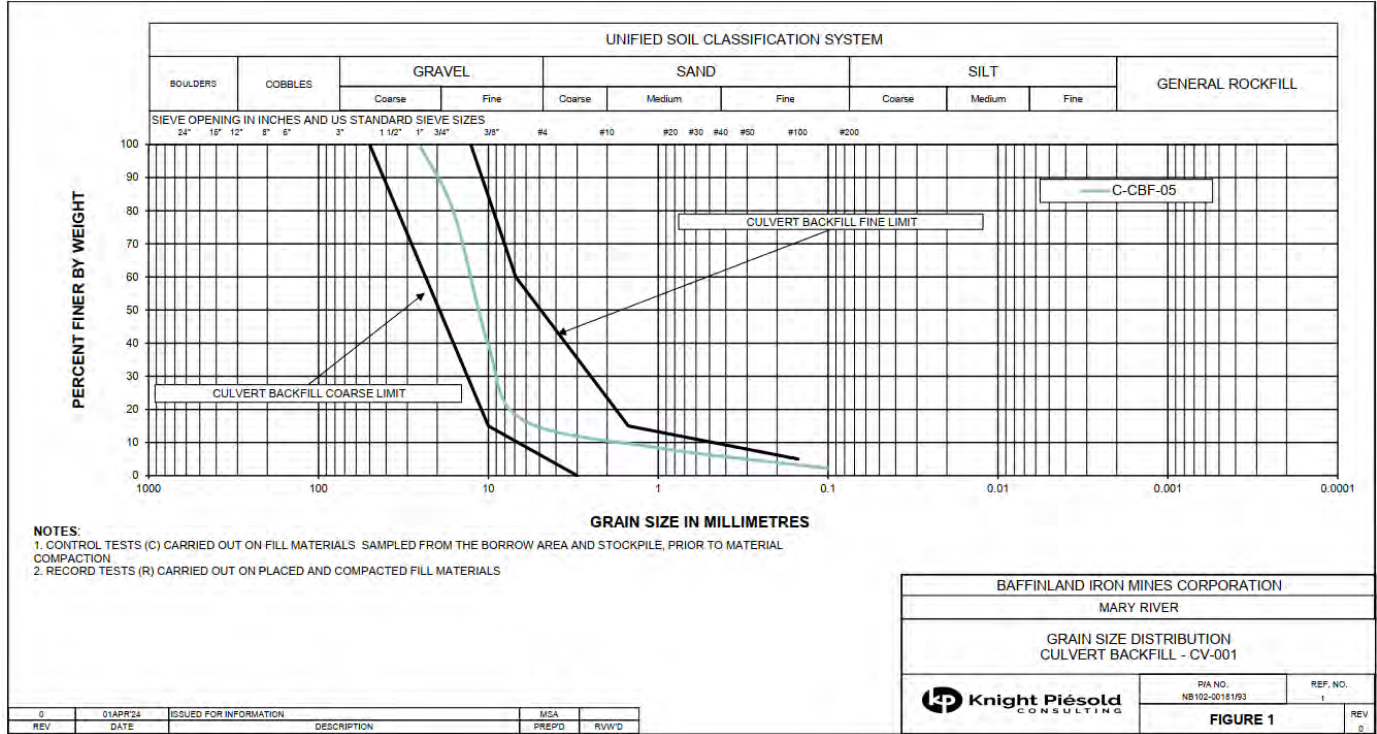


Figure 1: Grain Size Distribution - Culvert Backfill Material

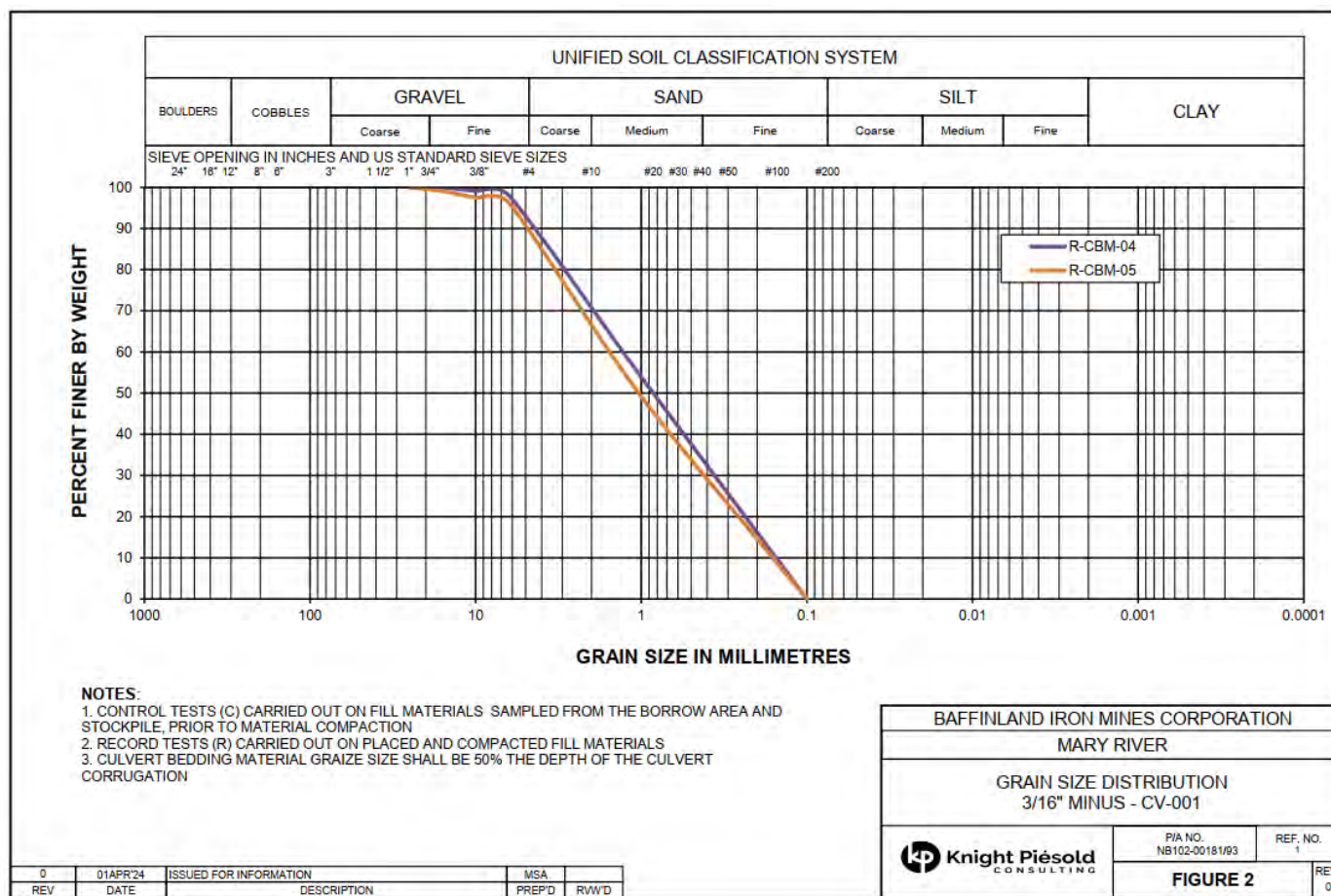


Figure 2: Grain Size Distribution - Culvert Bedding Material

4 – ENGINEERING ITEMS

- **March 25** - the following items were discussed:
 - No Engineering items were discussed on this day.
- **March 26** - the following items were discussed:
 - No Engineering items were discussed on this day.
- **March 27** - the following items were discussed:
 - No Engineering items were discussed on this day.
- **March 28** - the following items were discussed:
 - No Engineering items were discussed on this day.
- **March 29** - the following items were discussed:
 - No Engineering items were discussed on this day.
- **March 30** - the following items were discussed:
 - KP was informed of and inspected the dented section of the 2.0 m Round CSP culvert planned to be used to complete the low flow installation at BG-04. KP recommended not using the damaged section of the 2.0 m diameter CSP culvert at BG-04. KP recommended using a section of Round CSP culvert without damage.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024

5 – PHOTOS



Photo 1 Grading 2H:1V west side slope at CV-059. Photo taken March 24, 2024.



Photo 2 Excavating the western apron (outlet) area at CV-059. Photo taken March 25, 2024.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024



Photo 3 Ripping the excavation surface for foundation preparation at CV-001. Photo taken March 25 2024.

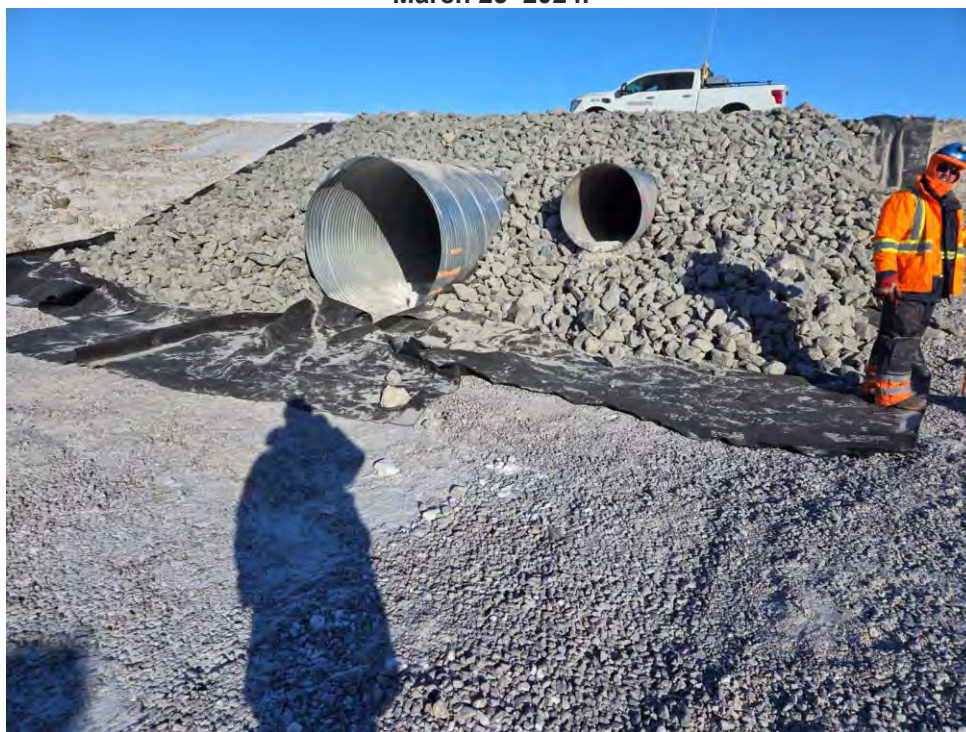


Photo 4 Placing geotextile and riprap on west side slope at CV-059. Photo taken March 25, 2024.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024



Photo 5 Placed local fill material above the low and high flow CSP culverts at CV-057. Photo taken March 26, 2024.



Photo 6 Additional "honeycomb" drilling at base of BG-04 to assist with further ripping and excavation. Photo taken March 26, 2024, facing southwest.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024



Photo 7 Prepared and approved foundation surface at CV-001. Photo taken March 26, 2024, facing southwest.



Photo 8 Compacted 32 mm minus material at CV-001. Photo taken March 27, 2024, facing southwest.

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024



Photo 9 **Compacted 32 mm minus material above low and high flow culverts at CV-001. Photo taken March 30, 2024, facing northeast.**



Photo 10 **Prepared and approved foundation area at BG-04. Photo taken March 30, 2024, facing north.**

MARY RIVER MINE

TOTE ROAD PERMANENT CROSSING PLAN - ROUND CSP CULVERT INSTALLATIONS

WEEKLY PROGRESS REPORT

WEEK 7 - March 24 to March 30, 2024



Photo 11 **Compacted 32 mm minus material and uncompacted 3/16" culvert bedding material below the placed low flow culverts at BG-04. Photo taken March 30, 2024, facing north.**

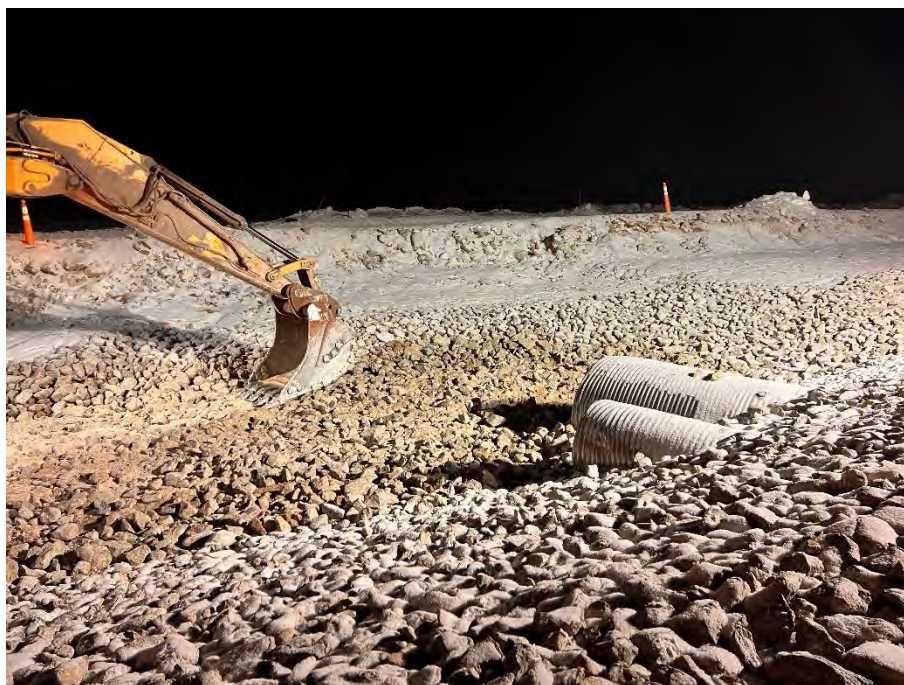


Photo 12 **Completed CV-059 west (outlet) apron with Coarse Riprap and Stream Substrate Material. Photo taken March 29, 2024, facing northwest.**



Photo 13 In progress low flow culvert infilling with coarse riprap and stream substrate material at CV-057. Photo taken March 29, 2024.



Photo 14 Placing geotextile and fine riprap on 2H:1V east side slope at CV-057. Photo taken March 30, 2024, facing west.