APPENDIX 4

Km 63.5 As-built Drawing

Baffinland

PROJECT:	KM 63.5 CULVERT REPAIRS
DATE:	2024-10-05

PRINT:

LEGEND

- PROJECT AREA
- LEASE BOUNDARIES
- OHWM

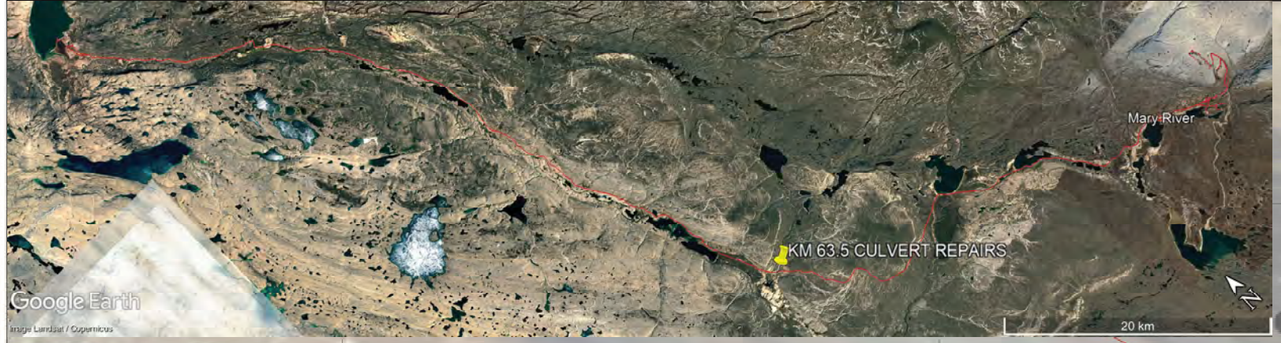
N

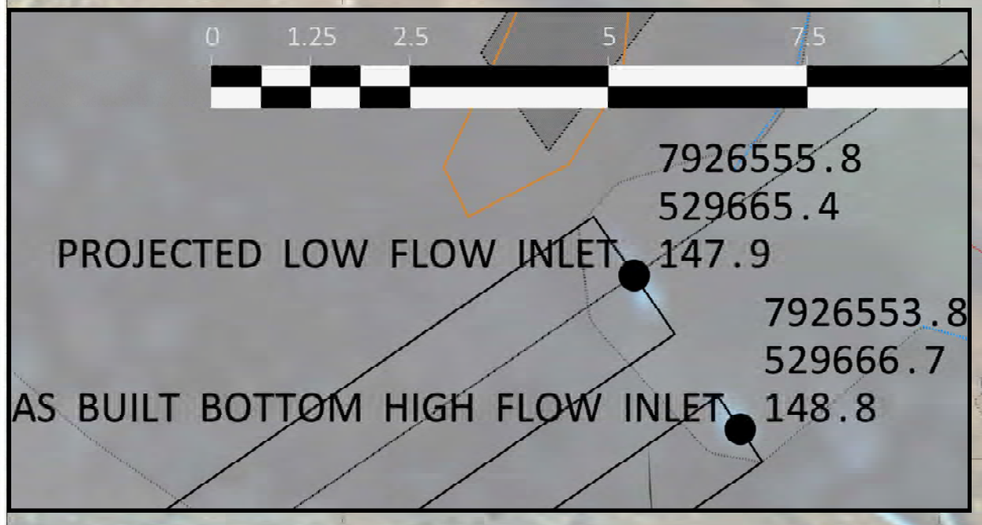
E

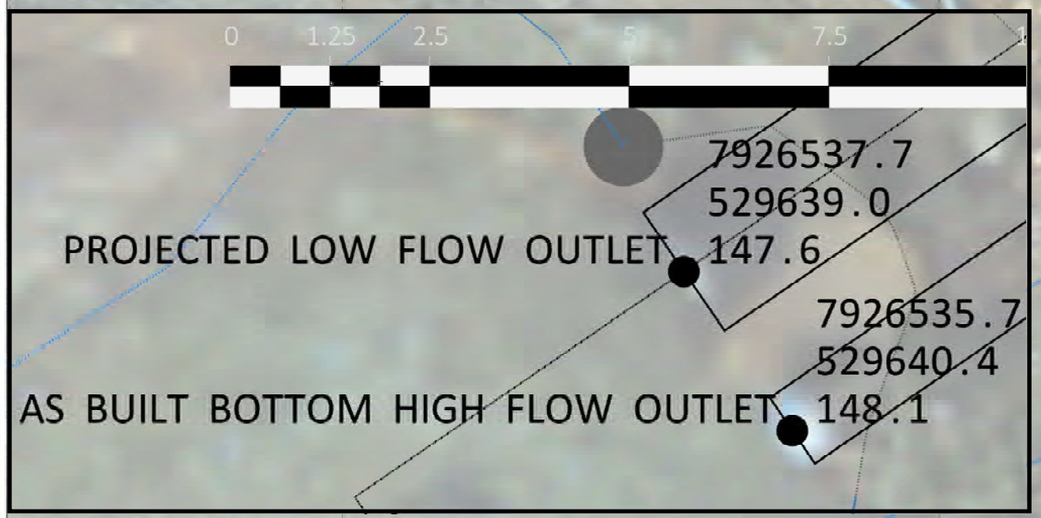
NOTES: PROJECT EXTENTS

1 : 5250

0 100 200 300 400 500 600 700







NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. COORDINATE SYSTEM UTM ZONE 17.
3. TOP OF LOW FLOW CSP SURVEYED, INLET & OUTLET POINTS ARE PROJECTIONS
4. TOP OF BEDDING MATERIAL SURVEYED BELOW HIGH FLOW CSP, TOP OF CSP ARE PROJECTIONS.

529650 E
7926575.6
529645.6
7926570.0
529639.6
RIPRAP LINING CHANNEL
CHECK DAMS
APPROXIMATE LOCATION OF FRENCH DRAIN
7926562.1
529668.0
FLOW
LOW FLOW CSP
1
HIGH FLOW CSP
RIPRAP SLOPE STABILISATION
7926553.1
529627.3
11.4m
2
7926550 N
7926547.8
529681.9
7926543.9
529672.7
7926539.2
529638.2
2
FLOW
1
7926531.1
529643.4
7926530.1
529659.2
RIPRAP SLOPE STABILISATION
529650 E
529675 E

Baffinland

PROJECT:	KM 63.5 CULVERT REPAIRS
DATE:	2024-10-05

PRINT:

LEGEND
- CHECK DAMS
- RIPRAP
- FRENCH DRAIN
- ROUND CSP CULVERTS
- CURRENT WATER MARK
- ROAD

N
E

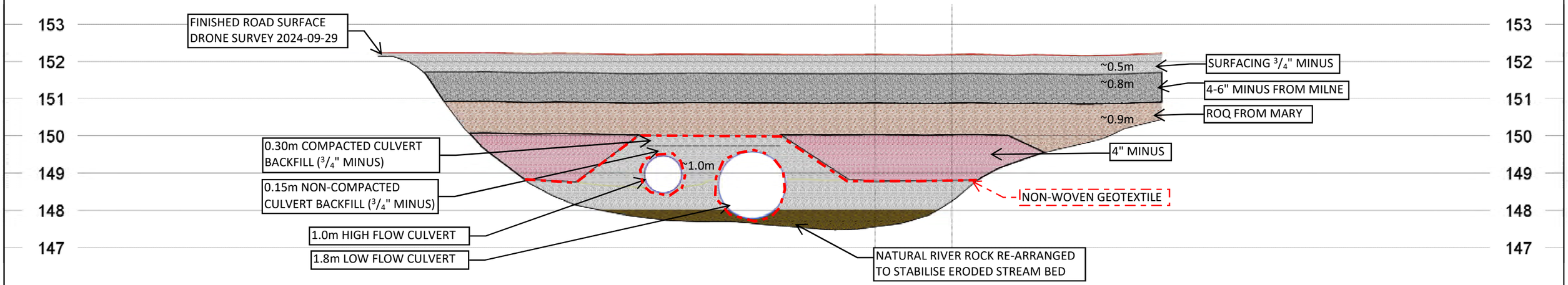
NOTES: AS BUILT DRONE SURVEY 2024-09-29

1 : 250

MARY RIVER

SECTION 2 SCALE 1 : 100

MILNE



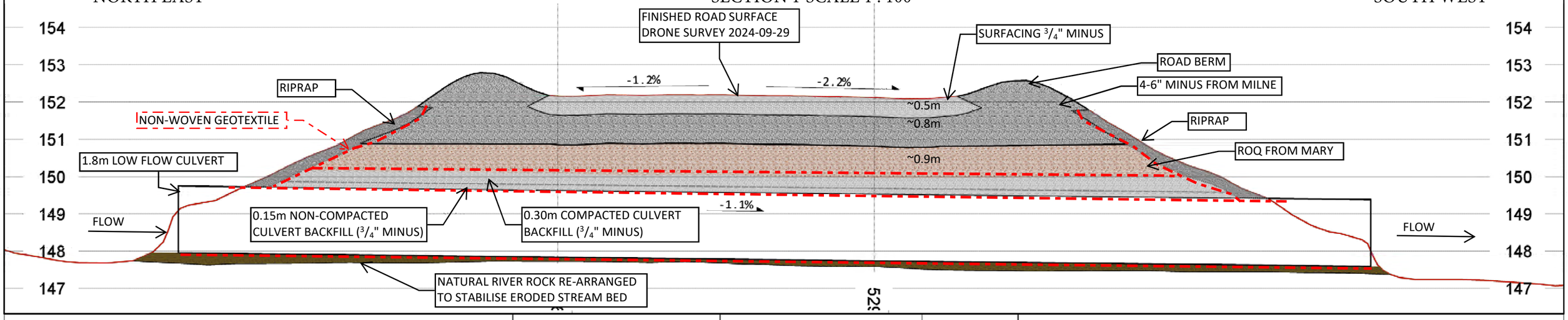
NOTES

1. ALL DIMENSIONS AND ELEVATIONS ARE IN METRES UNLESS OTHERWISE NOTED.
2. COORDINATE SYSTEM UTM ZONE 17.
3. TOP OF LOW FLOW CSP SURVEYED, INLET & OUTLET POINTS ARE PROJECTIONS
4. TOP OF BEDDING MATERIAL SURVEYED BELOW HIGH FLOW CSP, TOP OF CSP ARE PROJECTIONS.
5. LIFT THICKNESSES ARE ESTIMATIONS FROM DRONE SURVEYS AND FIELD NOTES.
6. CULVERT BACKFILL COMPACTED IN ~300mm LIFTS.

NORTH EAST

SECTION 1 SCALE 1 : 100

SOUTH WEST



Baffinland

PROJECT:	KM 63.5 CULVERT REPAIRS
DATE:	2024-10-05

PRINT:

LEGEND

- 3/4" MINUS
- 4" MINUS
- 4-6" FROM MILNE
- ROQ FROM MARY
- FRENCH DRAIN
- FINISHED SURFACE DRONE
- IN PROGRESS SURFACE DRONE
- WASHED OUT SURFACE DRONE

ELEVATIONS & ORIENTATION PROVIDED ON SECTIONS

NOTES: AS BUILT DRONE SURVEY 2024-09-29

1 : 100

APPENDIX 5

Environmental Monitoring

Baffinland

WATER CROSSING MONITORING FORM
PART 1 - GENERAL INFORMATION

WATER CROSSING ID:	CV-049 Km 63.5		
Construction Duration:		Start (YY/MM/DD XX:XX HRS): 10:30 24/09/26 09:0	Finish (YY/MM/DD XX:XX HRS): 24/09/27 05:00
During Frozen Conditions?	Yes / (No)		
During Periods of Flow?	(Yes) / No		

IF CONSTRUCTION OCCURS DURING PERIODS OF FLOW, COMPLETE ENTIRE FORM (PART 1 & PART 2A, B & C) (PRE, DURING AND POST CONSTRUCTION WATER QUALITY MONITORING)

IF CONSTRUCTION OCCURS DURING FROZEN CONDITIONS, COMPLETE PART 1 & PART 2C OF THIS FORM (POST CONSTRUCTION WATER QUALITY MONITORING)

CROSSING MODIFICATION / REPAIR DETAILS

Change in existing design?	(Yes) / No	If Yes, details of change:	EMERGENCY RECONSTRUCTION
Final Design (e.g. number of culverts, length, etc.):	1.8m Low flow, 1.0m High flow.		
Applicable Approvals			
TRAN	EMERGENCY WORK		
DFO Approvals	EMERGENCY WORK.		
Notes:			

LOCATION

Datum:	UTM	Zone:	17		
Easting (m):	529654	Northing (m):	7926546	Elevation (from mapping):	163 m
Notes:					

FISH ASSESSMENT PRIOR TO CONSTRUCTION

Date (YY/MM/DD):	24/09/26			
Fish Present?	Yes / (No)	If Yes, distance from crossing:		US / DS
Spawning Arctic charr present at crossing?		Yes / (No)	If Yes, contact a biologist	
Spawning site present 20 m upstream or downstream of crossing?		Yes / (No)		
Notes:	NO FISH SPOTTED BEFORE OR DURING CONSTRUCTION			

SEDIMENT AND EROSION CONTROL MEASURES

Measures Installed:	SILT FENCING / COIR LOGS.	Date installed:	24/09/25
		Date removed:	24/09/27
Measures taken to stabilize disturbed areas:	SILT FENCING INSTALLED AT TOE OF SLOPE		
Notes:	COIR LOGS INSTALLED TO LIMIT BACK-EDDY EROSION OF CULVERT		

PHOTOS

View across water crossing, view from upstream, view from downstream and view of sediment controls employed.

	Photo #	Date (YY/MM/DD)	Direction	Vantage Point		Photo #	Date (YY/MM/DD)	Direction	Vantage Point
Before					**After**				
Across					Across				
From US					From US				
From DS					From DS				
During					**Sed. Cont.**				
Across					Across				
From US					From US				
From DS					From DS				

Notes: SEE ATTACHED PHOTO JOURNAL

Baffinland

WATER CROSSING MONITORING FORM

PART 2A - PRE-CONSTRUCTION WATER QUALITY MONITORING

WATER CROSSING ID: CU-049 KM ~~35~~ 63.5 Pg. (X/X): 1/1

Location (e.g. 100 m downstream)	Date (YY/MM/DD)	Time (XX:XX HRS)	Field Monitoring						Water Sample Collected (Yes / No)	Lab Water Sample ID	Notes
			Turbidity (NTU)	pH (pH Units)	Sp. Cond. (µS/cm)	Water Temp. (°C)	DO (mg/L)	DO (% Sat.)			
50m US	24/09/26	09:06	0.14	8.00	249.1	3.1	~~96.8~~ 12.2	96.8	NO		J.J. / T.W.
100m DS	24/09/26	09:01	0.52	8.02	250.2	2.9	13.27	100.2	NO		

Monitoring Frequency:

Water Sampling - At least one (1) sampling event at locations 100 m downstream and 50 m upstream of the affected water crossing, prior to construction.

Field Monitoring - At least one (1) monitoring event (alongside water sampling event listed above) at locations 100 m and 50 m downstream and 50 m upstream of the affected water crossing, prior to construction.

Baffinland

WATER CROSSING MONITORING FORM
PART 2B - DURING CONSTRUCTION WATER QUALITY MONITORING

WATER CROSSING ID: CV-049 KM 63.5 Pg. (X/X): 1/2

Location (e.g. 100 m downstream)	Date (YY/MM/DD)	Time (XX:XX HRS)	Field Monitoring						Water Sample Collected (Yes / No)	Lab Water Sample ID	Notes J.J / T.W.
			Turbidity (NTU)	pH (pH Units)	Sp. Cond. (µS/cm)	Water Temp. (°C)	DO (mg/L)	DO (% Sat.)			
50m US	24/09/26	10:45	0.55	8.01	249.5	3.3	13.24	101	NO		EARTHWORKS BEGAN BEHIND SILT CURTAIN 10:30
100m DS	"	10:40	0.73	8.02	250.4	3.0	13.28	100.7	NO		
100m DS	"	11:10	0.39	8.01	250.4	3.1	13.23	100.5	NO		
50m US	"	11:40	0.12	7.98	249.2	3.2	13.37	102.2	NO		IN-WATER WORK, GRADING STREAM BED - STARTED 11:30 - STOPPED 11:45
100m DS		11:35	29.77	7.96	250.0	3.1	13.46	102.3	NO		
100m DS	"	12:03	1.20	7.94	250.2	3.1	13.38	101.6	NO		
50m US	"	12:33	1.49	8.01	249.0	3.3	13.15	100.6	NO		
100m D.S.		12:28	0.22	8.00	250.0	3.1	13.26	100.8	NO		ASSEMBLING CULVERTS 12:00-16:00 (NOT IN WATER).
100m D.S.	"	13:00	2.17	8.00	249.8	3.1	13.30	101.2	NO		
50m U.S		13:35	0.12	8.03	248.4	3.3	13.01	99.7	NO		
100m D.S	"	13:30	0.54	8.00	249.7	3.1	13.22	100.7	NO		
100m D.S.	"	14:00	0.76	8.01	249.8	3.1	13.23	100.8	NO		
50m U.S.		14:35	0.14	8.09	248.3	3.3	12.99	99.6	NO		
100m D.S.		14:30	1.32	8.00	249.6	3.1	13.25	101.0	NO		
100m D.S.	"	14:58	1.21	8.07	249.3	3.2	13.00	99.1	NO		

Monitoring Frequency:

Water Sampling - Every eight (8) hours at locations 100 m downstream and 50 m upstream of the affected water crossing, during construction.

Field Monitoring - Every four (4) hours at locations 100 m and 50 m downstream and 50 m upstream of the affected water crossing, during construction.

Note: Field monitoring and water sampling shall be conducted concurrently where frequency and locations overlap.

Adaptive water sampling events will also be conducted when downstream flows are suspected of encroaching on TSS and turbidity criteria limits.

Baffinland

WATER CROSSING MONITORING FORM

PART 2B - DURING CONSTRUCTION WATER QUALITY MONITORING

WATER CROSSING ID: CV-049 Km 63.5 Pg. (X/X): 2/2.

Location (e.g. 100 m downstream)	Date (YY/MM/DD)	Time (XX:XX HRS)	Field Monitoring						Water Sample Collected (Yes / No)	Lab Water Sample ID	Notes
			Turbidity (NTU)	pH (pH Units)	Sp. Cond. (µS/cm)	Water Temp. (°C)	DO (mg/L)	DO (% Sat.)			J.J. S.M.
50m US	24/09/27	00:50	0.76	8.09	254.4	3.0	13.43	102	No		MOVED CULVERT INTO STREAM, STARTED BACKFILLING 6"
100m DS	"	00:45	8.99	8.07	254.8	2.8	13.30	100.6	No		
100m D.S.	"	01:15	34.48	7.99	254.3	2.8	13.49	101.8	No		
50m US	"	01:50	0.79	8.00	254.9	2.9	13.46	102.1	No		
100m DS	"	01:45	14.16	7.97	254.2	2.7	13.49	101.9	No		
100m DS	"	02:10	3.18	7.98	254.4	2.7	13.47	101.7	No		
50m US	"	02:50	0.43	8.00	254.9	2.8	13.40	101.4	No		
100m DS	"	02:45	2.23	8.01	254.4	2.7	13.48	101.6	No		
100m DS	"	03:15	5.20	7.99	254.7	2.7	13.51	101.7	No		
100m DS	"	03:35	3.92	8.00	254.9	2.7	13.35	100.4	No		
100m DS	"	04:10	9.5	8.01	255	2.6	13.60	101.4	No		COIR LOGS ADDED TO D.S. SIDE OF BACKFILL TO STOP EROSION
50m US	"	04:50	0.5	8.05	255.3	2.7	13.60	102.3	No		
100m DS	"	04:40	35.49	8.09	255.5	2.6	13.56	101.7	No		N.S. CONSTRUCTION STOPS. 05:00

Monitoring Frequency:

Water Sampling - Every eight (8) hours at locations 100 m downstream and 50 m upstream of the affected water crossing, during construction.

Field Monitoring - Every four (4) hours at locations 100 m and 50 m downstream and 50 m upstream of the affected water crossing, during construction.

Note: Field monitoring and water sampling shall be conducted concurrently where frequency and locations overlap.

Adaptive water sampling events will also be conducted when downstream flows are suspected of encroaching on TSS and turbidity criteria limits.

Baffinland

WATER CROSSING MONITORING FORM
PART 2C - POST CONSTRUCTION WATER QUALITY MONITORING

WATER CROSSING ID: Pg. (X/X):

Location (e.g. 100 m downstream)	Date (YY/MM/DD)	Time (XX:XX HRS)	Field Monitoring						Water Sample Collected (Yes / No)	Lab Water Sample ID	Notes
			Turbidity (NTU)	pH (pH Units)	Sp. Cond. (µS/cm)	Water Temp. (°C)	DO (mg/L)	DO (% Sat.)			

Monitoring Frequency:

Water Sampling - Three sampling events: once in June, July and August at locations 100 m downstream and 50 m upstream of the affected water crossing. Sampling events will occur at least 10 days apart.

Field Monitoring - Field monitoring will be conducted concurrently with water sampling events listed above.


KM 63.5 Photo Key
1, 2
N
7
10
3, 4, 8
11
6, 9
12
5

Photo 1. KM 63.5, looking south at crossing, 2024-09-24

Photo 2. KM 63.5, looking southwest downstream of crossing, 2024-09-24

Photo 3. KM 63.5, upstream, looking west at crossing, 2024-09-24

Photo 3. KM 63.5, upstream, looking west at crossing, 2024-09-24

Photo 5. KM 63.5, downstream, looking northwest at crossing, 2024-09-24

Photo 6. KM 63.5, downstream, looking northeast at crossing, 2024-09-24

Photo 7. KM 63.5, looking south at crossing, 2024-09-25 ESC Installed.

Photo 8. KM 63.5, east of crossing, 2024-09-26, 1800mm culvert staged for assembly.

Photo 9. KM 63.5, looking west at crossing, 2024-09-27 1800mm culvert and ESC Installed.

Photo 10. KM 63.5, north of crossing, 2024-09-25, 1800mm installed, compaction ongoing.

Photo 11. KM 63.5, looking northwest at crossing, 2024-09-27, high flow culvert installed.

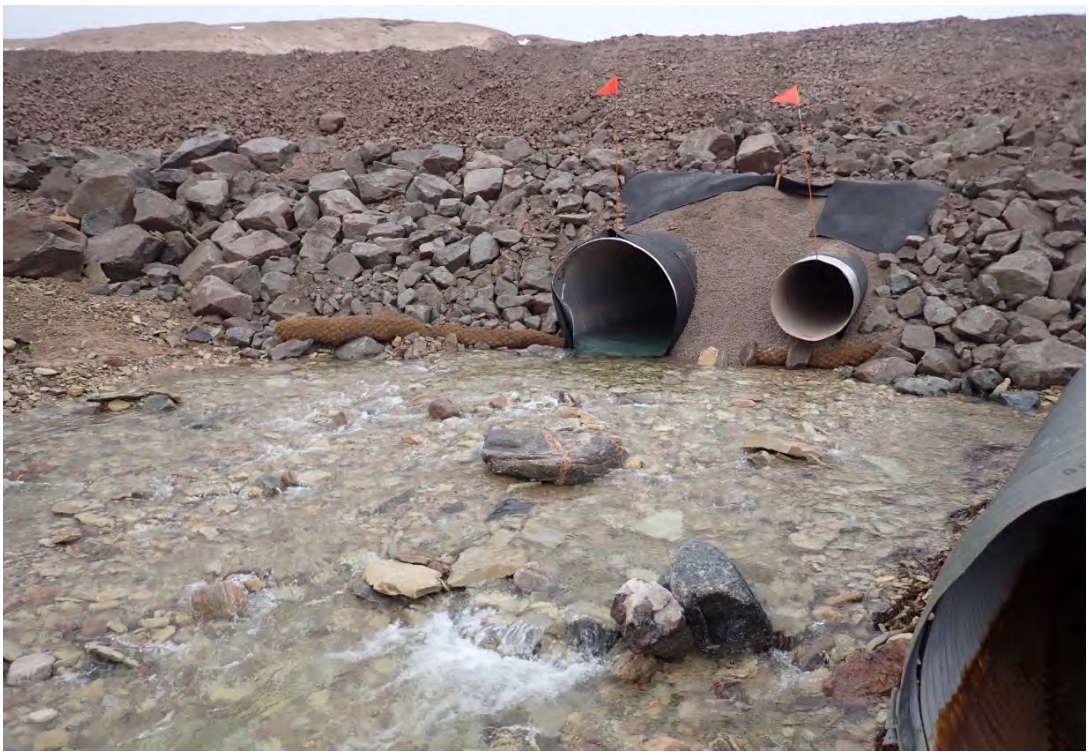


Photo 12. KM 63.5, west of crossing, 2024-10-02, construction completed.

APPENDIX 6

CSR Concordance Table

NWB Water Licence No 2AM MRY1325 Amendment No.1 (Schedule D)

Component	Minimum Information Requirements	Corresponding Section of Report Outline
1 a.	description of all infrastructure and facilities designed and constructed to contain, withhold, divert or retain Water and/or Waste	N/A
b.	a summary of construction activities including photographic records before, during and after construction of the facilities and infrastructure designed to contain, withhold, divert or retain Water and/or Waste	Section 2, Appendix 2 and 5
c.	as-built drawings and design for facilities and infrastructure, in Item 1(a) of this schedule, designed and constructed to contain, withhold, divert or retain Water and/or Waste	Supplied As-Built Drawing – Appendix 4
d.	documentation of field decisions that deviate from the original plans and any data used to support or developed facilities and infrastructure to withhold, divert or retain Water and/or Waste	N/A
e.	a comparison of measured versus predicted performance of infrastructure and facilities	2025 Annual Report
f.	any blast vibration monitoring and control for quarrying activity carried out in close proximity to fish bearing waters	N/A
g.	monitoring conducted for sediment and explosives residue release from construction areas	2025 Annual Report under TRMP
h.	monitoring undertaken in accordance with Part D of the Licence during the Construction Phase of the Project.	Section 3, Appendix 5
i.	details confirming that the requirements of the CCME guidance document entitled “Aboveground Storage Tank Systems for Petroleum and Allied Petroleum Products (2003)” have been met by the Licensee	N/A
j.	data collected from instrumentation used to monitor earthworks and the interpretation of that data	N/A
k.	a discussion of any unanticipated observations including changes in risk and mitigation measures implemented to reduce risk during construction	N/A
l.	an overview of any method including frequency used to monitor deformations, seepage and geothermal responses;	N/A
m.	a summary of maintenance work undertaken as a result of settlement or deformation of dikes and dams	N/A
n.	a summary of adaptive management principles and practices applied during the relevant phases of the Project and their overall effectiveness	N/A

Qikiqtani Inuit Association - Commercial Lease No.: Q13C301

Component	Minimum Information Requirements	Corresponding Section of Report Outline
1	The name and contact information of the person and company responsible for completing the construction, construction monitoring and preparing the As-Built Report.	Cover page and Signature page
2	The name and contact information of the Baffinland representative(s) that QIA can contact should it have any questions or comments regarding the As-Built Report.	Cover Page
3	An introduction to the infrastructure or facilities including but not limited to the construction background, concept and construction history.	Section 2.2
4	Construction records including As-Built drawings signed and stamped by a professional engineer detailing surveys, planar and cross sections that illustrate all designed components. This should be provided in PDF format, and if requested in native file (e,g. CAD, .dxf, etc.).	Provided As-Built Drawing, Appendix 4
5	Detailed description of any deviations from the For-Construction Design. Deviations that should be noted include, but are not limited to; changes in design and construction materials, construction methodology or monitoring.	N/A
6	Observed performance of the construction including a comparison to predicted performance. Recommendations for performance monitoring based on observations during construction if applicable.	2025 Annual Report
7	A description and list of instrumentation installed, if applicable, and results of construction monitoring and post construction monitoring, including all environmental data. Recommendations for additional performance or environmental monitoring based on observations and monitoring results, if applicable.	N/A
8	A summary of quality assurance testing results, if applicable, and comparison of these results to construction/design requirements to ensure performance of the infrastructure or facilities.	Section 2.2
9	A summary of adaptive management principles and practices related to environmental management and monitoring applied during the relevant phases of the Project and their overall effectiveness.	N/A
10	Photographic records before, during and after construction of the facilities or infrastructure	Appendix 2, Appendix 5
11	Map(s) to illustrate the completed construction in relation to Lease boundaries, and water bodies. The minimum distance from completed or modified facilities and infrastructure to the surveyed boundary of the Property, surveyed boundary of the Impact Area, and the ordinary high water mark should be provided.	Appendix 4