



B.H. MARTIN CONSULTANTS LTD.
CONSULTING ENGINEERS AND ARCHITECT

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December 9, 2007

Derek Chubb
Vice President- Sustainable Development
Baffinland Iron Mines Corporation
Suite 1016, 120 Adelaide Street West
Toronto, Ontario M5H 1T1

Dear Derek,

RE:

**MARY RIVER PROJECT- FUEL STORAGE FACILITY
MILNE INLET
OUR REFERENCE NO. 06-090**

B. H. Martin Consultants Ltd. was retained by Baffinland Iron Mines Corporation (BIMC) to design containments for their fuel storage at their Milne Inlet site in Nunavut and subsequently compile all as-built conditions of the fuel storage facility.

BACKGROUND

A total of 8,289,000 Litres of fuel will be used during the bulk sampling program. Of this approximately 8 ML is diesel fuel and the remainder is Jet "A" fuel for aviation. All fuel for the project arrives at the Milne Inlet port initially. A temporary fuel storage facility has been built to contain all the required fuel at this location. Approximately 1.6ML of this fuel will be transported by approved fuel trucks to the Mary River Camp (approximately 94 km from Milne Inlet). This fuel will be stored in another temporary storage facility at that site.

PROPOSED DESIGN OF THE FACILITIES

Figure C101 (appendix 1) show the site plan at the Milne Inlet port.

Fuel was shipped via tankers from the port of Montreal. All fuel at Milne inlet is stored in the temporary bulk storage facility consisting of fuel bladders within a lined and bermed containment. Figures C201R1 to C203R1 included in Appendix 1 show the construction details of the fuel facility at Milne Inlet. The fuel bladders are identified in NIRB's Northern Remote Site Protocols document (Dillon, 1998) and have been used by both private and the federal government in Nunavut, Yukon and other arctic regions of the world. The fuel bladders are supplied by Raymac Industries and engineered by SEI Industries. Detailed arrangement of

the fuel bladders in the containment as well as piping arrangement is included in Appendix 2.

As shown in the related drawings in Appendix 1, each fuel storage facility consists of an earthen berm lined with a petroleum-resistant geomembrane liner (Hazard HZ-500) that meets ULC/ORD-C58.9-1997 specifications for Underground and Aboveground flammable and combustible liquid storage tanks. The liner is then covered with approximately 300mm of granular material to protect it from damage.

The containments are designed to hold 110% of total aggregate capacity of the fuel facility as per the CCME's "Environmental Code of Practice for Aboveground and Underground Storage Tank Systems containing Petroleum and Allied Petroleum Products" and "National Fire Code of Canada" standards. As well, the containments consist of a sump for collection of precipitation. The containments floors are graded towards the sump. A mobile oil/water separator & pump arrangement (on a trailer) will be brought in to empty the sump periodically to ensure adequate space in the sump. The oil water separator is equipped with filters to separate the oil from the water. The clean water from the oil/water separator is discharged to the outside of the container (a ditch is constructed around the perimeter of the containment to divert water away from the slopes) while the oil which is collected in drums and subsequently shipped offsite for recycling.

The Milne Inlet fuel facility consists of 74 bladders, each containing 113,560 litres. Approximately 71 of the bladders are used for storage of diesel fuel while 3 bladders are used for aviation fuel.

The fuel facility is equipped with dispensers consisting of electric pumps and shut-off valves, and fuelling procedures require full time attendance at all times. Fuel stations also consist of a lined pad backfilled with granular material. The precipitation within this area will be collected in a sump and will be pumped by oil/water separator and pump and discharged in the same fashion as described above. Any fuel spills will be contained within the lined areas which can be excavated, tested and treated if necessary at the end of the bulk sampling program.

AS-CONSTRUCTED CONDITIONS

Containment construction

The containment for the fuel farm was constructed in general conformance with the design. For details on the plans and sections of the containment construction, please refer to as-constructed drawings C201 to C202 (appendix 2). The material used for the containment berms and base was brought from nearby borrow sources. The material was free of any deleterious substances and was approved

by the liner construction staff. A certificate of acceptance is included in Appendix 2 by Raymac/Layfield who is the suppliers and contractor for the lining of the containment.

The liner was installed and welded as per the design criteria as well as liner manufacturer's recommendations. The liner was a nominal 40-mil impermeable material (commercially known as Hazgard 50). Quality Assurance and Quality Control was provided by Layfield (the liner material supplier) and a QA/QC report is included in Appendix 2.

Mechanical (bladders, pipes, valves...)

All mechanical components of the fuel farm including the bladders (fuel tanks), the piping network within the containment, valves, the sump, oil/water separator, and the piping from the shore to the fuel farm was designed by SEI Industries and constructed by Raymac Inc.

As-constructed drawings of the mechanical components of the fuel farm are included in Appendix 2.

It is our understanding that the fuel farm facility was designed and built in general conformance with CCME's "Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products" as well as "National Fire Code of Canada".

The following requirements have either been followed or shall be followed by Baffinland Iron Mines Corporation in order to ensure compliance with CCME and NFC guidelines prior to the operation of the facility:

Tank Registration

Each storage tank will be registered with the Fire Marshal in December, 2007. The registration document will include the name of owner, address of owner, type of facility, location of the tanks, storage capacity of the tank, type of product stored, year of installation, ULC standard of tank (bladder), type of storage material, type of piping material, type of corrosion protection (if any), type of pumps, description of leak detection system, type of secondary containment, name of operator, name of land owner, name of installer, manufacturer of storage tanks as per CCME, item 2.4.2.

Visual Leak Detection

Baffinland conducts a daily visual leak inspection of each fuel farm tank. An inventory reconciliation plan will be devised during the bladder operation as part of the leak detection system.

Spill Contingency plan

The fuel farm operation shall comply with the guidelines set forth by the Spill Contingency Planning and Reporting Regulations. This spill Contingency Plan has been provided by BIMC to the Nunavut Water Board and a copy is available at each site.

Bladder and Product Identification

Each tank/bladder should be identified in conformance with CPPI "using the CPPI Colour-symbol system to mark equipment and vehicles for product identification".

Fire Protection

At least 2 fire extinguishers, each having a rating of not less than 80-B:C, has been provided at the truck loading pad and at the fuel intake to the fuel farm.

Please note that in all cases, the authority having jurisdiction is as follows:

Fire Marshall
Department of Community Government & Transportation
Government of Nunavut
P.O. Box 1000, Station 700
Iqaluit, Nunavut X0A 0H0
Tel. 879-975-5310
Fax. 867-979-4221

We trust this report is satisfactory and meets your requirements. However, should you have any questions, please do not hesitate to contact the undersigned for further discussion.

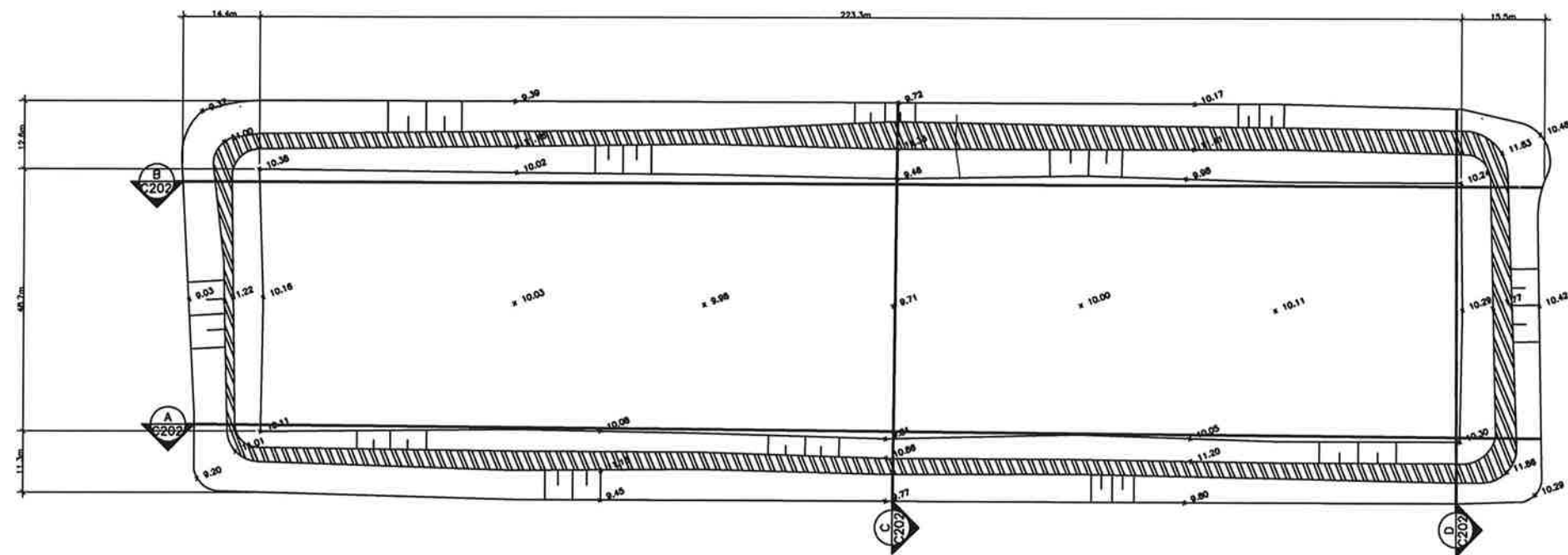
Yours truly,

B.H. Martin Consultants Ltd.

F. G. Kord

Marz G. Kord, P. Eng., M.Sc., MBA
Manager of Engineering

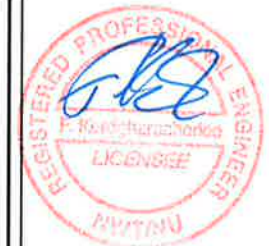




This Drawing is an instrument of service and shall remain the property of B.H. Martin Consultants Ltd. It may not be reproduced or copied in any form. It shall not be used for the construction, enlargement or alteration of a building other than the said project without the authorization of the ARCHITECT and/or ENGINEER.

Contractors shall verify and be responsible for all dimensions and conditions on the job and report any discrepancies to the Architect and/or Engineer before proceeding with the work.

Drawings shall not be scaled.



Description _____ Date _____ No. _____
Revisions and Issues



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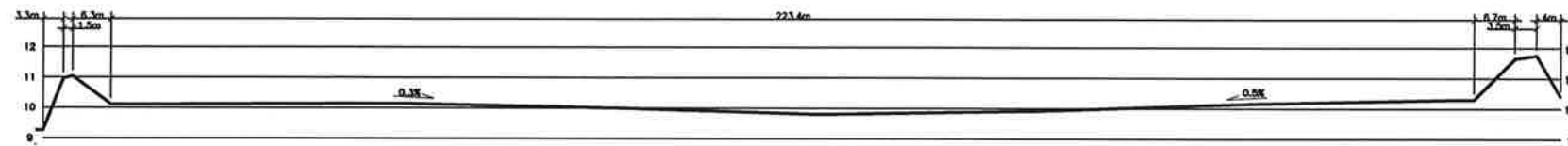
ARCHITECT STRUCTURAL/CIVIL

MECHANICAL ELECTRICAL

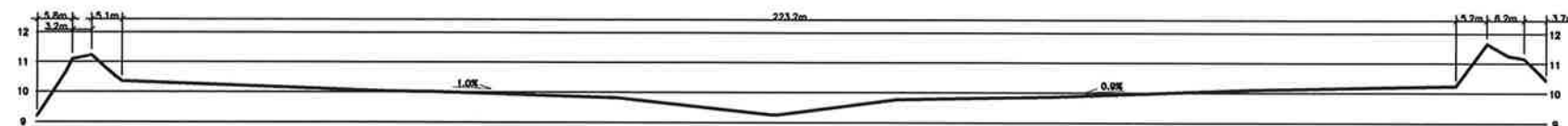
Project
Milne Inlet Project
Baffinland Iron
Mines Corp
Baffin Island Nunavut
Drawing
Milne Inlet
Fuel Farm Layout
As Built

Date	Dec 2007	CADD File Number	survey\Milne\dwg\C201
Scale	1:500	Job Number	
Drawn	AB		07-039
Checked		Drawing Number	
Approved			C201

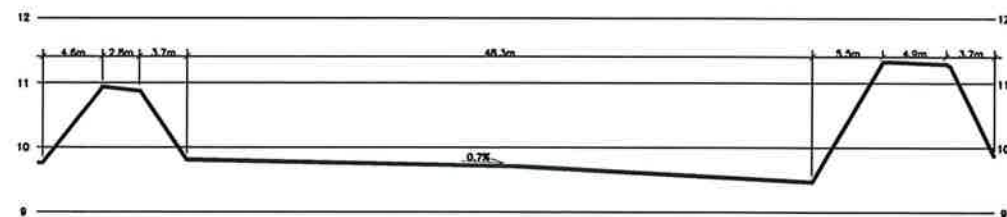
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SCALE 1:500

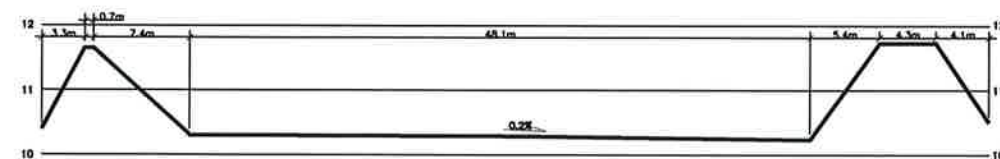


SCALE 1:250



SCALE 1:250

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C201



Contractors shall verify and be responsible for all dimensions and conditions on the job and report any discrepancies to the Architect and/ or Engineer before proceeding with the work.

Drawings shall not be scaled.



Description	Date	No.
Revisions and Issues		



NORTH

Date Printed



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ARCHITECT	STRUCTURAL/CIVIL
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Abstract

MECHANICAL	ELECTRICAL
<p>1. Design</p> <p>2. Manufacturing</p> <p>3. Assembly</p> <p>4. Testing</p> <p>5. Operation</p> <p>6. Maintenance</p> <p>7. Repair</p> <p>8. Disassembly</p> <p>9. Recycling</p>	<p>1. Design</p> <p>2. Manufacturing</p> <p>3. Assembly</p> <p>4. Testing</p> <p>5. Operation</p> <p>6. Maintenance</p> <p>7. Repair</p> <p>8. Disassembly</p> <p>9. Recycling</p>

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11. *Journal of the American Medical Association*, 273:1225-1226, 1995

Project

**MILNE INLET PROJECT
BAFFINLAND IRON
MINES CORP**

BAFFIN ISLAND	NUNAVUT
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Drawing

**MILNE INLET
FUEL FARM
AS BUILT SECTIONS**

Date	CADD File Number
DEC 2007	survey/Mine/dwg/C202

Scale	Job Number
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AS NOTED

Drawn

AB

Checked	Drawing Number
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Checked

Approved	G202
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