



# Construction Tender

Project No: 15-3010

Name of Project: Williamson Lake Water Storage Tank Interior  
Recoating

Project Location: Rankin Inlet

Tender Issue Date: May 19<sup>th</sup>, 2017

Tender Reference: 15320-00241

**Form No. GN6215-25-Major Works Revision 10 Oct 31-16**

**This Form replaces Form GN6215-25-MW – Revision 9 – February 25<sup>th</sup>, 2016**

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# GOVERNMENT TENDER

## Williamson Lake Water Storage Tank Interior Recoating

Work under this contract consists of but not necessarily limited to Williamson Lake Water Storage tank in Rankin Inlet is to have the interior blast cleaned and recoated with an epoxy paint application. Additional work on this tank during the shutdown will include installation for a cathodic protection system, repairs to internal piping, repairs to the tank external insulation and the installation of a new ground level manway hatch and as noted in drawings and specifications.

### - Rankin Inlet, Nunavut -

***For the purposes of this two (2) phase tender call the provisions of the Nunavummi Nangminiaqtunik Ikajuuti (NNI Policy) apply.***

Tender documents are available electronically for download at <http://www.nunavuttenders.ca>.

The Inuit Labour requirement for this project is 20%. Comments on this percentage level should be submitted to the Contracts Coordinator prior to the Phase 1 Tender Close time and date set out below.

Tender forms together with all required appendices (Phase I Tender Close) in a sealed envelope addressed to the Regional Director's Office, Department of Community & Government Services, Government of Nunavut, P.O. Box 490, Rankin Inlet, NU X0C 0G0 (Hand Delivered to the Projects/O&M Building, Rankin Inlet) IN CARE OF: Charmaine Mercer, Contracts Coordinator, must be received on or before:

**Phase I Tender Close: 4 P.M. Local Time, Rankin Inlet, NU, June 6<sup>th</sup>, 2017**  
**See Instructions to Tenderers for Phase II Tender Close requirements**

~~A \$50.00 non-refundable charge (includes GST) is levied for hard copies of the tender documents. To be considered each tender must be submitted on the forms provided and must be accompanied by the security stated in the tender documents.~~

All Enquiries to: **Charmaine Mercer, Contracts Coordinator**  
Department of Community & Government Services  
Projects/O&M Building P: (867) 645-8184  
P. O. Box 490 F: (867) 645-8196  
Rankin Inlet, NU X0C 0G0 E: [CMercer@gov.nu.ca](mailto:CMercer@gov.nu.ca)

A response to any enquiry received later than seven (7) business days prior to the proposal closing deadline cannot be guaranteed. Any amendments made by the GN to the tender documents will be issued in writing by way of addenda made available via automatic e-mail notification for download from the Nunavut Tenders website (<http://www.nunavuttenders.ca>). Planholders are solely responsible for retrieving addenda when notified. Planholders who have not registered and downloaded the original documents from this website assume the risk of not receiving addenda.



GOVERNMENT OF NUNAVUT  
DEPARTMENT OF COMMUNITY AND GOVERNMENT SERVICES  
PROJECTS/O&M BUILDING  
**P. O. BOX 490**  
**RANKIN INLET, NUNAVUT X0C 0G0**

HAND DELIVERED TO THE PROJECTS/O&M BUILDING  
IN CARE OF: CHARMAINE MERCER, CONTRACTS COORDINATOR

**TENDER DO NOT OPEN**

Project Number: \_\_\_\_\_

Tender For: \_\_\_\_\_

Closing Date: \_\_\_\_\_

Submitted by: \_\_\_\_\_

Firm's Address: \_\_\_\_\_

<b>TENDER RECEIVED</b>	
<b>DATE</b>	_____
<b>TIME</b>	_____
<b>RECIEVED BY</b>	_____

**1. RECEIPT OF TENDERS**

1. The NNI Policy applies to this Tender and any resulting Contract.
2. Tenders must be submitted on the forms provided.
3. Failure by the Bidder to comply with these Instructions to Bidders may result in the Tender submitted being disqualified. Disqualification shall be at the sole discretion of the Owner.
4. **NUNAVUT TENDERS BID BOX:** The GN is offering vendors the option of submitting bids electronically for some, but not all, tenders and requests for proposals, using the Nunavut Tenders website (<http://www.nunavuttenders.ca>). If this RFT is eligible for the Nunavut Tenders Bid Box, a "Submit" button will appear on the webpage. By using the Bid Box, bidders are agreeing to the Terms of Use, which are linked to the Nunavut Tenders webpage.
5. **If submitting online via the Nunavut Tenders "Bid Box" site (<http://www.nunavuttenders.ca>), online submission of bids is subject to the terms and conditions of the Nunavut Tenders website in addition to the conditions provided herein.**
6. **The GN shall not be held liable for any claim, demand or other actions for any reason should an online submission be illegible, garbled, incomplete, interrupted, not received in its entirety, uploaded after stated closing time and date, uploaded to a Reference Number other than the one indicated herein, or for any other reasons or risks associated with online tenders.**
7. **For greater clarity, bids submitted online must be properly Signed. Failure to comply with the correct signature requirements will render the bid non-compliant.**
8. Tenders received by facsimile, except as permitted elsewhere in these Tender Documents, will not be accepted and if received shall be disqualified.
9. Tenders, with the exception of Appendix B-2 forms, must be received at the Tender Address by the Owner on or before the exact time and date fixed for the Phase I Tender Close. Any Tender received after the Phase I Tender Close shall be deemed late and rejected. Such bids will not be returned to the Bidder unless bid security has been furnished in accordance with clause 2.1(b)(ii) herein.
10. A response to any enquiry received later than seven (7) business days prior to the proposal closing deadline cannot be guaranteed.
11. Any amendments made by the GN to the tender documents will be issued in writing by way of addenda made available via automatic e-mail notification for download from the Nunavut Tenders website (<http://www.nunavuttenders.ca>). Planholders are solely responsible for retrieving addenda when notified. Planholders who have not registered and downloaded the original documents from this website assume the risk of not receiving addenda.
12. When only one Tender is received and that Tender is not compliant, that Tender may be evaluated and accepted at the sole discretion of the Owner.

**13. This Tender will close in two phases as follows:****Phase I Tender Close:**

- (i) The Bidder shall complete the Tender Form and all required appendices except Appendix B-2, and shall submit them no later than the time identified for the Phase I Tender Close.
- (ii) For the Phase 1 Close, Tenders must be signed and submitted in a sealed envelope clearly marked with the Project Name, Closing Date and Time, Name and Address of the Bidder on the exterior of the envelope. A sample envelope cover is provided herewith and may be affixed to any envelope. Note that this labelling requirement applies to the outside packaging used by First Air First Pacs, Canadian North Air Cargo Express Envelopes, Canada Post, Fedex, or any other postal or courier packaging, envelopes, parcels, etc. Bidders who do not comply with this instruction assume the risk that their bid will not be delivered on time.
- (iii) For greater clarity, the Tender Form does not require a Corporate Seal.
- (iv) The Bidder shall indicate on the Appendix "B-1" "General Contractors & Subcontractors Dollar Amount" the bid value and names of all major businesses which will be providing goods and services to the Bidder in order to complete the Work.
- (v) At the time established for the Phase I Tender Close, the Owner shall receive Tenders and shall record the names of those who have submitted Tenders. Those Tenders shall remain unopened and held in a secure place by the Owner for a period of 24 hours.

**Phase II Tender Close:**

- (i) Within 24 hours following the Phase I Tender Close, excluding holidays and weekends, the Bidder shall supply to the Owner a detailed Appendix "B-2" "Substantiation of Bid Adjustments" showing the actual amounts of Local, Nunavut, Inuit and Other content in respect to Payroll, Material, Equipment, Transportation, Accommodation and Other Costs.
- (ii) **This detailed Appendix "B-2" "Substantiation of Bid Adjustments" shall be submitted in a sealed envelope or by facsimile.** Tender envelopes must show the Project Name, Closing Date and Time, Name and Address of the Bidder on the exterior of the envelope. Phase 2 tenders must be received prior to the Phase II Tender Close which shall be 24 hours, excluding holidays and weekends, after the Phase I Tender Close. Bidders who do not comply with this instruction assume the risk that their Phase II bid will not be delivered on time.
- (iii) **Bids shall be opened after the Phase II Tender Close.**
- (iv) The Bidder shall only receive a bid adjustment when completed Appendix "B-1" "General Contractors & Subcontractors Dollar Amount" and Appendix "B-2" "Substantiation of Bid Adjustments" have been submitted in accordance with the above. Tenders submitted without such a submission or upon Appendix B-2 being received late shall receive no bid adjustment at all.

**2. Tenders will not be opened until 10AM on the morning after the Tender Close for Phase II.**

### 3. BID SECURITY REQUIREMENTS

#### .1 When Tendering

- a) For a Tender Less than \$250,000.00, no bid security is required.
- b) For a Tender \$250,000 and Over: The Tenderer shall enclose bid security in the form of either:
  - (i) a Bid Bond, in a form approved by the Federal Treasury Board, or a CCDC Bid Bond, and from a company whose bonds are acceptable to the Owner, payable to the Owner in an amount of at least 10% of the Tender Price; or
  - (ii) a bid security deposit payable to the Owner in an amount of at least 5% of the Tender Price. The deposit must be a certified cheque, Bank Draft, a bank Irrevocable Letter of Guarantee, or such other bid security as the Owner considers acceptable.

c) Where the Tenderer chooses to submit its bid using the Nunavut Tenders Bid Box, the Owner will accept a scanned copy of a Bid Bond described in sub-clause b) (i) for the purposes of this Tender, provided that the Bid Bond is signed and sealed by both parties and that the corporate seals are clearly visible. For greater certainty, **signed means, for the purposes of a scanned Bid Bond, that the signatures have been written by the hands of those persons authorized to sign and bind the parties and not by digital stamp or other means of signatures used in creating Adobe pdf files. Visible means that the seals can be seen, and are recognizable as seals.** The Owner reserves the right to obtain the original sealed Bid Bond upon request.

d) Where the Tenderer chooses to provide a certified cheque or Bank Draft as bid security in accordance with sub-clause b) (ii) above, the original tender and bid security documents shall be provided to the Owner in a sealed envelope in accordance with the Instructions to Bidders, and the Tenderer shall not be permitted to submit its bid using the Nunavut Tenders Bid Box. For clarity, a bid security deposit in any other form permitted by sub-clause b) (ii) above may be scanned and submitted, so long as it is properly signed; however, certified cheques and bank drafts must be originals. Tenders submitted via the Nunavut Tenders Bid Box accompanied by a Bank Draft or certified cheque will be deemed non-responsive and immediately disqualified.

e) **Due to technical restrictions, for the purposes of submitting a tender via the Nunavut Tenders Bid Box, the Owner will not accept any form of Bid Bond other than as described in sub-clause b) (i) so long as it meets the requirements of sub-clause c). Where the Tenderer submits an unacceptable bid bond, its bid will be deemed non-responsive and will not be considered.**

- f) The Tenderer understands that if the bid security furnished is not in the approved form, as described herein, the Tender is subject to disqualification, at the sole discretion of the Owner.
- g) Bid security may be forfeited, at the discretion of the Owner, if the Tenderer refuses to enter into a contract when called upon to do so.

h) **Bid Bonds, whether hand delivered or submitted online, shall be signed and sealed. Signed means that the signatures have been written by the hands of those persons authorized to sign them and bind the parties, and sealed means the seals can be seen and are recognizable as seals. The seal need not be a corporate seal.**

**4. AMENDMENTS TO TENDERS**

1. Amendments to an original Tender duly submitted, are acceptable provided that the amendment:
  - (i) Is received in its entirety on or before the exact time and date fixed, for the Phase I Tender Close (except for amendments to Appendix B-2 Substantiation of Bid Adjustment) and;
  - (ii) Is in writing and contains the Tender reference, the Phase I Tender Close date and time, name and address and the signature of the Tenderer
2. Amendments to Tenders may be submitted in person or by facsimile provided that the conditions included in Clause 3.1 are met and in addition:
  - (i) Amendments to Tenders delivered by facsimile are transmitted via the Owner's facsimile number:

(867) 645-8196 in Rankin Inlet, NU
  - (ii) The Owner shall not be held liable for any claim, demand or other action should a facsimile transmission be interrupted, not received in its entirety, received after the stated Phase I Tender Close time and date, received by another facsimile unit other than stated herein, or for any other reason over which the Owner does not have control. For greater certainty, 'received in its entirety' means the facsimile transmission is complete and all pages of the transmission are printed by the Owner's facsimile machine.
  - (iii) The amendment should indicate only the applicable changes in such a manner that the total bid is not revealed.
3. Verbal or electronic mail instructions will not be considered as a valid instruction or amendment for Tender purposes, nor shall they be considered as having any bearing upon the Tender submission.

**5. TENDER DOCUMENTS - Appendix "A"**

1. Tenders shall be based on the documents listed in Appendix "A" "List of Tender Documents".
2. Tenderers should confirm with the Owner prior to completing Tender calculations that each and every Addenda issued prior to Phase I Tender Close has been considered to establish the prices to be Tendered.

**6. ADDENDA**

1. Addenda issued prior to the Phase I Tender Closing shall be incorporated into the Tender and shall become part of this Tender. Receipt of addenda should be acknowledged on the Tender Form by the Tenderer.

**7. INUIT, NUNAVUT AND LOCAL INCENTIVES and Appendices "B-1" and "B-2" and "J"**

1. The NNI Policy applies to this tender and any resulting contract. A copy of this policy is available at the following website: <http://www.gov.nu.ca/Nunavut/policies/>. This policy can be downloaded in English, Inuktitut, Inuinnaqtun and French.
2. Consistent with the NNI Policy, one of the priorities of the Owner is to ensure that materials, equipment, labour and other goods and services of Local, Nunavut and Inuit businesses are used to the fullest extent practical on this Project. Accordingly, Tenderers are required to invite Inuit, Nunavut and Local companies to bid on subcontracts for the purposes of this Work.
3. Appendix "B-1" must be completed and submitted in accordance with the Phase I Tender Close requirements below.



4. Appendix "B-2" must be completed and submitted in accordance with the Phase 2 Tender Close requirements below. For greater clarity, an Appendix "B-2" that is received late or not received at all will result in denial of any NNI Bid Adjustments the Tenderer would otherwise be entitled to had Appendix "B-2" been received on time.
5. The Tenderer shall show intention to not only meet the Minimum Inuit Labor Requirement prescribed in Appendix J of these Tender Documents, but shall also maximize Inuit, Nunavut and Local Content by using as many Inuit, Nunavut and Local subcontractors and suppliers as possible.
6. If the dollar value of Total Inuit Labor identified by the Tenderer on Appendix "B-2" is less than the Minimum Inuit Labor Requirement set out in Clause 7 of Appendix J, the GN **MAY** accept the Tender, so long as the qualification is removed and the Tenderer is found to be the lowest responsive and responsible Tenderer after application of the Bid Adjustments. The Tenderer will be required to increase the Inuit Labor value identified on the General Contractor Appendix "B-2" with a corresponding decrease in the value identified for "Other" Payroll. This commitment shall be made in writing and the amended B-2 shall be incorporated into the Contract.
7. A Tenderer, who on previous Contracts with a similar Minimum Inuit Labor Requirement failed to meet the Minimum Inuit Labor Requirement, MAY be deemed "not responsible" (as defined in the Government Contract Regulations) for purposes of the present Tender.
8. Failure by a Contractor to expend the proposed dollar values identified on Appendix "B-2" as Inuit, Nunavut and Local Content, including estimates for Inuit, Nunavut and Local Labour, for which the Owner applied NNI Policy Bid Adjustments, will result in application of 'incentive recovery' damages in accordance with GC55 of the Contract at the sole discretion of the Owner and as further described in Appendix J of these Tender Documents..
9. For purposes of this Tender, 'Local' shall be considered to be the community in which the Work is undertaken unless noted otherwise in these Tender Documents.
10. **Joint Ventures:** If a Tender is submitted by more than one party identified as a joint venture, (but not a partnership), for the purposes of the application of the NNI adjustments, each party to the joint venture will be treated as a separate contractor, and the value of their respective Nunavut, Inuit, and Local Content will be treated in the same manner as for separate contractors.
11. If and when requested by the GN, the Tenderer shall, prior to award, provide the GN with any and all clarifications, substantiations or further explanation about the proposals made by the Tenderer in respect to Local, Nunavut, Inuit and other content contained in their bid and reflected on Appendices "B-1" and "B-2".

## **8. SCHEDULE OF UNIT PRICES — Appendix C**

1. ~~The Tenderer shall submit a schedule of unit prices on Appendix "C". Unit prices shall include the cost to supply and install as appropriate, and shall include all statutory charges, overhead, profit and the Tenderer's contingency allowance.~~

## **9. OPTIONS & SUBSTITUTIONS SPECIFIED BY THE OWNER — Appendix "E"**

1. ~~Tenders shall be based on the materials, methods, firms and equipment named in the Specifications and this shall constitute the base bid. Where more than one material or manufacturer is specified, any one of those specified may be selected and included in base bid.~~
2. ~~The Owner may wish to consider options or substitutions to the base bid. When the Owner lists items in Appendix "E" Contractors should indicate the effect on the stipulated price that each item makes to the base bid. The lowest acceptable Tender may be determined by adding or deducting any or all of these items to the base bid. Failure to complete this Appendix "E" when requested may result in the Tender being disqualified as non responsive, at the sole discretion of the Owner.~~

**10. OPTIONS PROPOSED BY THE TENDERER – Appendix "F"**

1. ~~Tenderers may propose their own options in Appendix "F". To be considered the following requirements shall be met:~~
  - (i) ~~Total Tender amount quoted must be based on products specified and not on options.~~
  - (ii) ~~Options proposed shall be listed and any difference in price shown in the appropriate place on Appendix "F".~~
  - (iii) ~~Options proposed must allow for all changes and adjustments in other work as may be necessary to form a complete and finished Project. No additional claims will be considered at a later date.~~
  - (iv) ~~Submissions must contain sufficient information to enable the Owner to determine the acceptability of such proposed options. Include such information as reasons for submission, manufacturing details, performance data, dimensions and clearances, effects on other work and other pertinent facts.~~
  - (v) ~~The Owner reserves the right to accept or reject any option proposed by the Tenderer.~~
  - (vi) ~~By submitting an option on Appendix "F" the Tenderer relinquishes any proprietary right to such option. The Owner reserves the right to release the Option to other Tenderers in order to obtain competitive prices.~~

**11. PLANT AND EQUIPMENT LIST – Appendix "G"**

1. NOT USED

**12. TRANSPORTATION OF MATERIALS – APPENDIX "H"**

1. Modes of transportation of materials and carriers may be determined by the Tenderer except for marine transport in which case Clause 2 of Appendix H shall apply.
2. The successful Tenderer shall comply with requirements of Appendix "H" titled "Transportation of Materials".

**13. INSURANCE REQUIREMENTS – Appendix "I"**

1. Upon receipt of an Advice to Low Bidder Letter, the successful Tenderer shall furnish within 14 days of the date of the notification of eligibility for a contract award:
  - (i) The Insurance specified in GC55 to GC59 of the attached form of contract, on a Certificate of Insurance in a form substantially similar to the one provided in Appendix I.

**14. CONTRACT SECURITY**

1. Upon receipt of an Advice to Low Bidder Letter, the successful Tenderer shall furnish within 14 days of the date of the notification of eligibility for a contract award:
  - (i) The security specified in GC53 to GC54 of the attached form of contract.

**15. REQUIREMENT FOR USING HOTELS OR BED AND BREAKFAST FACILITIES**

1. Upon receipt of an Advice to Low Bidder Letter, the successful Tenderer shall furnish within 14 days of the date of the notification of eligibility for a contract award:
  - (i) Evidence of compliance with GC60 of the attached form of contract.

**16. GOODS AND SERVICES TAX**

1. The Tenderer shall exclude the Goods and Services Tax from bid price(s) shown on bid forms and appendices.
2. The Government of Nunavut will pay the Goods and Services Tax (GST) over and above the Tender Price accepted.

**17. SIGNATURES**

1. Tenders are to be signed by the person(s) duly authorized in that behalf, and all such signatures shall be sealed by the appropriate corporate or, where there is no such seal affixed, each signature shall be duly witnessed.
2. The Tenderer, or the person or persons duly authorized to sign on their behalf, must initial and date each and every correction, change, erasure or alteration contained in the completed Tender document.
3. At the sole discretion of the Owner, the failure by the Tenderer to properly sign and execute the Tender may result in the disqualification of the Tender.

**18. AVAILABILITY OF OWNER STOCKPILED GRANULAR MATERIAL**

1. Granular materials are not available from Owner's stockpiles. Tenderers are advised to make enquiries regarding the availability and cost of granular material in the Project community.
  - (i) In many communities, purchase of granular materials including delivery and placement, is available from either the local hamlet office or from a local contractor.
  - (ii) If the successful Tenderer obtains granular material directly from the local borrow pit/quarry, it must have all required borrow pit/quarry permit(s) in place, and shall submit a copy to the Engineer prior to obtaining the granular materials, and shall pay applicable fees.
    - (a) Contact Community & Government Services Regional Office, Planning and Lands Division, to apply for borrow pit/quarry permits; certain Hamlets may be able to grant these permits.
    - (b) Tenderers are advised that:
      - the successful Tenderer will be legally bound by the permit to adhere to conditions and requirements stipulated in the borrow pit/quarry permit, and
      - the granting of a borrow pit/quarry permit is subject to a Nunavut Impact Review Board (NIRB) screening process, which can take a number of months for approval."

**19. STORAGE OF PROPANE CYLINDERS**

1. The successful Tenderer will be responsible for the proper care and storage of propane cylinders on the job site in accordance with the Nunavut Fire Prevention Act. The penalty for non-compliance is up to \$10,000 fine and/or 1 year jail term.
2. A copy of the Nunavut Fire Prevention Act is available by contacting:

The Fire Marshall's Office  
Department of Community & Government Services  
Government of Nunavut  
Tel: (867) 975-5310 Fax: (867) 975-5453

**20. ACCEPTANCE**

1. Tenders containing qualifications other than in the manner prescribed may be disqualified at the sole discretion of the Owner.
2. The submission of the lowest or any tender will not necessarily result in the award of a contract. The Owner reserves the right to cancel this Tender, in whole or in part at any time and to re-tender the same for any reason whatsoever without incurring any liability, and no bidder will have any claim against the Owner as a consequence.
3. The Owner reserves the right to negotiate the tendered price solely with the low bidder (after adjustments in accordance with the Nunavummi Nangminiqatunik Ikajuuti (NNI Policy), in order to achieve a reduced scope of work and price saving of up to 15%. The Owner further reserves the right to re-invite tenders from the low bidders without going to public tender in order to achieve a reduced scope of work greater than 15%, so long as the fundamental nature of the Project has not changed.
4. Tenderers are hereby notified that the Owner will check with the appropriate agencies prior to award of a Contract to ensure that the successful Tenderer is in compliance with the Workers Compensation Act, the Companies Act and the Labour Standards Act.
5. The successful Tenderer shall be required to comply, and shall require its subcontractors to comply, with all applicable laws, orders, rules and regulations; and, without limiting the generality of the foregoing, shall at its sole expense comply with all unemployment insurance, Worker's Compensation, Labour Standards including requirements of the Labour Standards Board, income tax, payroll tax, Canada Pension Plan, occupational health and safety and environmental protection legislation.
6. **Advice to Low Bidder Letter**
  1. Upon receipt of an Advice to Low Bidder Letter, the successful Tenderer shall furnish within 14 days of the date of the notification of eligibility for a contract award
    - (a) The security specified in GC53 to GC54 of the attached form of contract;
    - (b) The Insurance specified in GC55 to GC59 of the attached form of contract, on a certificate of Insurance in a form substantially similar to the one provided in Appendix I;
    - (c) Evidence of compliance with GC60 Commercial Accommodations;
    - (d) Signed Articles of Agreement; and
    - (e) Any other requirement set out in the notification.
7. **Upon Receipt of Insurance, Contract Security and other Award Requirements**
  1. Upon receipt of the Insurance, Contract Security, Evidence of Compliance with Commercial Accommodations, and other requirements furnished in accordance with 6.1 above:
    - (a) the Owner will review the Insurance, Contract Security and other submissions to the satisfaction of the GN; and
    - (b) if all submissions are satisfactory, the Owner will formally award the contract and return a signed Contract to the successful Tenderer, who will be thereafter referred to as the Contractor.

**1. PROJECT INFORMATION**

Project Title: Williamson Lake Water Storage Tank Interior Recoating

Project Location: Rankin Inlet, NU Project Number: 15320-00241

Project Owner: The Government of Nunavut, herein the "Owner", represented by the Minister of the  
Department of Community and Government Services

**2. OFFER  
(Information to be completed by Tenderer)**

\_\_\_\_\_  
Company Name(s)

\_\_\_\_\_  
Identify Nature of Multi-party Tenderer (ie: Partnership, Joint Venture, etc)

(herein the "Tenderer") offers to the Owner to furnish all necessary tools, plant, services, materials and labor to execute and complete in a careful and workmanlike manner the Work described in the Plans and Specifications for the prices as set out in Clause 4 or 5 of this Tender Form.

**The Tenderer hereby acknowledges receipt of Addenda No. \_\_\_\_\_ to No. \_\_\_\_\_ inclusive and hereby agrees they form part of this Tender.**

**3. GENERAL AGREEMENT (Information to be completed by Tenderer)**

The Tenderer agrees:

.1 To substantially perform the Work in compliance with the required completion schedule stated in the Tender Documents by **September 30<sup>th</sup>, 2017**

.2 That the Project site has been carefully examined, the Work described herein is understood, and the Tenderer has become familiar with local conditions and the character and extent of the Work; has carefully examined every part of the proposed Contract and thoroughly understands its terms and conditions; has determined the sources of supply for the materials required; has investigated labor conditions and has arranged for the continuous performance of the Work described in the Tender Documents;

.3 That the list of Tender Documents included in Appendix "A" shall be and is the complete Tender and the Tenderer's offer is made subject to all provisions contained therein;

.4 That the Tender submitted supersedes and cancels all communications, negotiations, and agreements relating to the Work other than contained in the completed Tender.

**4. FOR A CONTRACT BASED ON A LUMP SUM (Information to be completed by Tenderer)**

The Tenderer agrees that the following is the lump sum referred to in Clause 2 of this Tender Form and that this is the Tenderer's total Tender Price:

\_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_)

An illegible submission may be disqualified at the sole discretion of the Owner. When there is a discrepancy between the written and numerical amount, the lowest version will govern.

5. ~~FOR A CONTRACT PRICE BASED ON UNIT PRICES (Information on Appendix "D" to be completed by Tenderer)~~

- (a) ~~For a Unit Price Contract, the Tenderer shall complete Appendix "D".~~
- (b) ~~For a Unit Price Contract, the Contract Value shall be the Total Estimated Contract Price shown on Appendix "D".~~
- (c) ~~When an arithmetic error is identified on Appendix "D", the tendered Unit Price shall take precedence over the Total Estimated Contract Price and the Owner shall correct the arithmetic error as explained below.~~
- (d) ~~The Total Estimated Contract Price shall equal the sum of all Extensions (Column 6) for all items listed on Appendix "D". In the event that an arithmetic error is made in adding the individual Extensions listed in Column 6, the Owner shall correct the arithmetic error.~~
- (e) ~~Each Extension shall be equal to the Estimated Quantity (Column 3) multiplied by the tendered Unit Price (Column 5). In the event that an arithmetic error is made in multiplying the Estimated Quantity (Column 3) by the tendered Unit Price (Column 5) the Owner shall correct the arithmetic error including the Extension and the Total Estimated Contract Price.~~
- (f) ~~The Total Estimated Contract Price is based on estimated quantities; the final Contract amount owing to the Contractor shall be determined by taking the actual quantities that are incorporated in, or made necessary by the Work, as confirmed by count and measurement, and multiplying by the appropriate tendered Unit Price adjusted by any changes that are made in accordance with the provisions of the Contract Documents.~~

6. **DECLARATIONS (Information to be completed by Tenderer)**

The Tenderer hereby declares that:

- .1 No person, firm or corporation other than the undersigned has any interest in this Tender or in the proposed Contract for which the Tender is made, except as revealed by the Tender or as may be required by the terms of this Contract for which the Tender is made;
- .2 This Tender is irrevocable for a period of thirty (30) calendar days from the date of Phase I Tender Close, as described in Instructions to Tenderers 4.6;
- .3 The Tenderer acknowledges that the Owner may extend the above thirty (30) day period to sixty (60) days provided that notification of extension is made within fifteen (15) calendar days of the date of Phase I Tender Close and that this extension shall result in an increase or decrease to the Stipulated Price of:

\$ \_\_\_\_\_ addition to Stipulated Price  
 or  
 \$ \_\_\_\_\_ reduction to Stipulated Price

*(Any increase and decrease to the Stipulated Price, shall not be subject to an adjustment under the Nunavummi Nangminiaqtunik Ikajuuti Policy.)*

**7. SIGNATURES (Information to be completed by Tenderer)**

Signed, sealed and submitted for and on behalf of:

Company \_\_\_\_\_  
(Full Legal Business Name)

\_\_\_\_\_  
(Street Address)

\_\_\_\_\_  
(Mailing Address)

\_\_\_\_\_  
(Community, Territory/Province and Postal Code)

Signature \_\_\_\_\_  
(Affix Seal or Witness(es) Needed)

Name & Title \_\_\_\_\_

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

Witness \_\_\_\_\_

Name & Title \_\_\_\_\_

Witness \_\_\_\_\_

Name & Title \_\_\_\_\_

Dated at \_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_

**LIST OF TENDER DOCUMENTS - APPENDIX A**

*(Information to be completed by OWNER)*

Project Number: 15-3010

The following is the list or description of the tender documents referred to in the Tender for this Project.

**Tender**

1. Tender Advertisement
2. Instructions to Tenderers
3. Tender Form
4. Appendices to Tender: A, B, B-1, B-2, ~~C, D, E, F~~, H, I, and J
5. Addenda (issued during Tender period): Addendum# \_\_\_\_ to \_\_\_\_

**Contract**

1. Articles of Agreement
2. Terms of Payment (**includes Statutory Declaration and Schedule of Values**)
3. General Conditions
4. Special Provisions: \_\_\_\_\_
5. Technical or General Specifications and Drawings: Refer to Index of included Specifications



**NUNAVUMMI NANGMINIQAQTUNIK IKAJUUTI (NNI POLICY) FORMS -  
APPENDIX B**

**LOCAL/NUNAVUT/INUIT EMPLOYMENT AND TRAINING**

Local/Nunavut/Inuit employment and training are high priorities with the Government of Nunavut (GN). General Contractors and Sub-contractors contracted for work on Government of Nunavut projects are required to hire Local and Nunavut and Inuit residents to the maximum extent possible. Information regarding available Local and Nunavut and Inuit workers can be obtained from a Federal Government Employment Centre, a Federal Government Outreach Centre, or Hamlet Office, and Education Department Career Centres of the Government of Nunavut.

Federal Government Employment Centres:

<u>Location</u>	<u>Phone Number</u>	<u>Facsimile Number</u>
Rankin Inlet	(867) 645-2853	(867) 645-2148
Iqaluit	(867) 979-6271	(867) 979-6070

Federal Government Outreach Centres or Hamlet Offices:

<u>Location</u>	<u>Phone Number</u>	<u>Facsimile Number</u>
Arviat	(867) 857-2678	(867) 857-2502
Qikiqtarjuaq (Broughton Island)	(867) 927-8832	(867) 927-8120
Cape Dorset	(867) 897-8943	(867) 897-8030
Clyde River	(867) 924-6220	(867) 924-6293
Pond Inlet	(867) 899-8935	(867) 899-8940
Cambridge Bay	(867) 983-2120	(867) 983-2570
Baker Lake	(867) 793-2517	(867) 793-2509
Taloyoak	(867) 561-6341	(867) 561-5057
Kuugaruk (Pelly Bay)	(867) 769-6281	(867) 769-6069
Kugluktuk (Coppermine)	(867) 982-4471	(867) 982-3060
Gjoa Haven	(867) 360-7141	(867) 360-6049
Igloolik	(867) 934-8830	(867) 934-8757
Pangnirtung	(867) 473-8953	(867) 473-8832

Training is encouraged on all construction projects and, in some tenders, will be made a contract requirement. Funding to offset training costs is provided through the Building and Learning strategy, the Apprenticeship Program, the Training On The Job Program and Women in Trades and Technology, and as a contract bonus pursuant to the Nunavummi Nangminiqatunuk Ikajuuti Policy, Government of Nunavut. Contractors can obtain further information from the Education Department Career Centres, Government of Nunavut.

Education Department Career Centres, Government of Nunavut:

<u>Location</u>	<u>Phone Number</u>	<u>Facsimile Number</u>
Cambridge Bay	(867) 983-7214	(867) 983-2004
Iqaluit	(867) 975-5653	(867) 975-5670
Rankin Inlet	(867) 645-5039	(867) 645-2148
Igloolik	(867) 934-8192	(867) 934-8808

**NUNAVUMMI NANGMINIQAQTUNIK IKAJUUTI (NNI POLICY) FORMS -  
APPENDIX B**

**EMPLOYMENT REPORT**

The successful General Contractor will be required to complete an Employment Report for ALL site employees that have worked on this project. The Contractor is required to complete a standard GN employment report.

A SAMPLE of the required Employment Report is attached on the following page. This form is available from the Owner.

This information **must** be submitted with each Progress Claim on contracts over \$100,000.00 as well as with the Substantial Certificate of Completion, updated with the Final Certificate of Completion.

For projects under or equal to \$100,000.00 the Employment Report must be submitted with the substantial Certificate of Completion, updated with the Final certificate of Completion. At the sole discretion of the owner, the information may be required with each Progress Claim.

It is the General Contractor's responsibility to obtain the required information from the sub-trades and sub-sub-trades.

The successful General Contractor shall comply with the requirements of Clauses GC52, GC53, GC54 and GC55. Specifically in respect to Clause GC54, if requested to do so by the Owner, the successful General Contractor shall be responsible to obtain an "Employee Verification and Consent Form" included as Appendix "B", page 4.

**NUNAVUMMI NANGMINIQAQTUNIK IKAJUUTI (NNI POLICY) FORMS - APPENDIX B**

**EMPLOYMENT REPORT**

Project Name:	Project Location:
General Contractor:	Project No:                      Contract No:
Report Submitted by (General/Subcontractor):	Reporting Period From:                      To:

**This Employment Report is Submitted With: (CHECK ONE)**

<input type="checkbox"/> Progress Claim No. _____ Date: _____	<input type="checkbox"/> Substantial Certificate of Completion    Date: _____	<input type="checkbox"/> Final Certificate of Completion    Date: _____
---	---	---

Status*	Employee's Name	Job Class**	Date Hired	Date Terminated	Regular Hours	OT Hours	Hours this Claim	Hours to Date	Rate of Pay	Direct Payroll Costs	Other Payroll Costs	Dollars spent this period	Total Dollars spent to date

** Job Classification Categories to be utilized with this form:		* Employee Status and Summary of Employment	Total this Period	Total to Date
1. Superintendent	2. Carpenter	(1) Local Nunavut Residents		
3. Electrician	4. Mechanical	(2) Non-Local Nunavut Residents		
5. Drywaller/Painter	6. Carpenter Apprentice	(3) Local Inuit Beneficiaries		
7. Electrical Apprentice	8. Mechanical Apprentice	(4) Non-Local Inuit Beneficiaries		
9. Drywaller/Painter Apprentice	10. Labourer	(5) Other (Non-Nunavut, Non-Inuit) Non-Residents		
	11. Other (specify)	Total Payroll		
		Total Inuit Payroll		
		% Inuit Payroll		

<b>Contractors / Subcontractors Name &amp; Title (Print)</b>	<b>Contractors / Subcontractors Signature:</b>	<b>Date:</b>
_____	_____	_____

**NUNAVUMMI NANGMINIOAQTUNIK IKAJUUTI (NNI POLICY) FORMS -  
APPENDIX B**

**EMPLOYEE VERIFICATION AND CONSENT FORM**

**TO: GOVERNMENT OF NUNAVUT (GN)**

My full name is \_\_\_\_\_  
(Print or Type)

My permanent home address is \_\_\_\_\_  
(mailing and physical address)

I am employed by \_\_\_\_\_  
(name of Company you are working for)

working on \_\_\_\_\_  
(Name or Description of Project)

in \_\_\_\_\_, Nunavut Territory  
(Name of Community)

I have lived in Nunavut in \_\_\_\_\_ for \_\_\_\_\_ Months  
(Name of Community) (Number)

Please provide a minimum of two of the following applicable numbers:

My Nunavut Health Care Card # is \_\_\_\_\_

My Nunavut Drivers License # is \_\_\_\_\_

My Nunavut Hunting License # is \_\_\_\_\_

My NTI Beneficiary # is \_\_\_\_\_

**AND TO WHOM IT MAY CONCERN**

I hereby authorize my current employer or any Federal, Provincial or Territorial government department or agency to release particulars of my employment terms or compensation and/or a copy of my Nunavut Health Care Card, Nunavut Driver's License, Nunavut Motor Vehicle Registration, Nunavut General Hunting License, and Nunavut Tunngavik Inc. (NTI) to release my Beneficiary number or card, or any other documentation which the GN may deem helpful or necessary in verifying my place of residence, employment term and compensation or Beneficiary status.

Signed \_\_\_\_\_  
Employee Name

\_\_\_\_\_  
Employee Signature

\_\_\_\_\_  
Witness Name

\_\_\_\_\_  
Witness Signature

\_\_\_\_\_  
Date (Day, Month, Year)

**NUNAVUMMI NANGMINIQAOQTUNIK IKAJUUTI (NNI POLICY) FORMS -  
APPENDIX B**

**BID ADJUSTMENT INFORMATION**

1. This contract shall be awarded to the Tenderer who is responsive and responsible (as defined in the Government Contract Regulations) and who has submitted a tender that, after the application of any tender adjustment permitted under the Nunavummi Nangminiqaoqtunik Ikajuuti (NNI Policy), is lower than that submitted by any other responsive and responsible Tenderer. Bid and contract requirements have been developed to comply with the letter and the spirit and intent of the NNI Policy.
2. Tenderers are required to identify the dollar value of Own Forces as well as to name ALL subcontractors/suppliers and to identify their dollar value.
3. Dollar value of Own Forces/Subcontractors noted in Appendix "B-1" shall include all amounts listed in Appendix "B-2" (i.e. payroll, transportation, equipment, etc.) for the Tenderer and all subcontractors. B-2 amounts that exceed the B-1 amounts will not be considered for bid adjustment.
4. Dollar value(s) for payroll on Appendix "B-2" shall include all payroll costs for all divisions of work identified as Own Forces.
5. Amendments affecting the tendered price shall require the Tenderer to also amend Appendix "B-1" to reflect the change, prior to the Phase I tender closing.
6. An approved Nunavut Business or Inuit Firm will only receive bid adjustments for subcontractors, suppliers, payroll, and other bid components for those parts of bid that are Own Forces, or that are subcontracted to approved Nunavut businesses and/or Inuit firms, or for payroll to Inuit or Nunavut Residents. Bid adjustments will not be given for those portions of the bid that are not Nunavut or Inuit Content. The definition of "Nunavut Business", "Inuit Firm", "Inuit" and "Nunavut Resident" are to be those definitions in the NNI Policy Definitions Appendix.
7. Any business that is not an approved Nunavut Business, or is not an approved Inuit Firm prior to tender close, will not receive a bid adjustment for their portion of the bid, with the exception of the Inuit and/or Nunavut Payroll components, and amounts listed on Appendix B-1 as subcontracted to Nunavut and/or Inuit firms approved by the foregoing deadlines. Payroll to Inuit and Payroll to Nunavut Residents, need not be supplied by an Inuit Firm or a Nunavut Business to receive a bid adjustment.
8. A Tenderer (General Contractor) that is not a Nunavut Business or an Inuit Firm will only receive bid adjustments for Inuit and/or Nunavut Payroll amounts, and for Inuit and Nunavut amounts identified on Appendix B-1 as going to approved Nunavut Businesses and/or Inuit Firms. A completed Appendix B-2 for each named Nunavut Business and/or Inuit firm listed on Appendix B-1 must be submitted by the General Contractor in order for the Nunavut and/or Inuit subcontractor or supplier amounts to be eligible for bid adjustment.
9. It is important that you include the name of your sub-contractors and suppliers on the B2 forms. The NNI information that is submitted with the Tender (on the B2 forms) is used to determine the lowest NNI Adjusted price. The person doing the NNI review looks for the name of the sub/supplier you have listed in your bid on the NNI and NTI lists of approved businesses (NNI and NTI Registries). If there are no names provided in the B2 forms, there are no adjustments given. If there is not enough room on to list all suppliers, photocopy the B2 form and list the additional suppliers on the copy.
10. To be eligible for an extra adjustment for "Local", the bid amount must first be eligible for an adjustment as a Nunavut business, or an Inuit firm.
11. If there are 2 suppliers with different NNI/NTI status, you put the amount applicable to each supplier in the appropriate column. For example, search the NTI and NNI websites for suppliers of accommodations. If a hotel is not listed in either registry, then put their amount in "Other". If you are using two hotels and only one is on a registry, then put that amount in the appropriate status column, and put the other hotel's amount in the "Other" column. However, include both hotel supplier's names on the 'Accommodation' line item.
12. For "Own Forces" you include only your own expenses. You need to put the amounts for costs to you. Any of your costs to another supplier or sub-contractor must be identified on a separate line item with the company receiving the money identified. The service and company name must be provided. Do not include any materials you are supplying in your General Expenses line item. Put them in the materials section of the B2 form.

**GENERAL CONTRACTOR'S & SUB-CONTRACTORS' DOLLAR AMOUNTS  
APPENDIX B-1**

Project Title: Williamson Lake Water Storage Tank Interior Recoating

Project Location: Rankin Inlet, NU

Project Number: 15-3010

Tenderers are required to identify the dollar value of their Own Forces (the work the Bidder will do by itself) as well as ALL of their Sub-Contractors that will be involved in the completion of this Work. **This Appendix MUST be submitted no later than the time and date set for the Phase I Tender Close.** If this Appendix is not submitted or is incomplete the Tenderer may be disqualified. By signing this Tender, the Tenderer is certifying that the information on this Appendix is correct. Changes to this information will not be accepted after the time and date set for the Phase I Tender Close. The Owner reserves the right to ask the Tenderer for substantiation of information provided.

<b>General Contractor: (Full Business Name)</b>	<b>Own Forces Amount: (\$)</b>
	\$
<b>Sub-Contractors: (Full Business Name)</b>	<b>Sub-Contract Amount: (\$)</b>
1.	\$
2.	\$
3.	\$
4.	\$
5.	\$
6.	\$
7.	\$
8.	\$
9.	\$
10.	\$
<b>Other(s)</b>	<b>Amount: (\$)</b>
1.	\$
2.	\$
3.	\$
4.	\$
5.	\$
<b>TOTAL</b>	\$

**SUBSTANTIATION OF BID ADJUSTMENT - APPENDIX B-2**

<b>Project Name:</b>	<b>TO RECEIVE BID ADJUSTMENTS UNDER THE NNI POLICY</b> , the Tenderer <b>MUST</b> complete and submit this form. This Appendix may be submitted at the Phase I or Phase II Tender Close in accordance with the Instructions to Tenderers. <b>Indicate the company name as it appears on the GN or NTI list of approved companies, and list materials.</b> The Nunavut, Local and Inuit status, as defined by the NNI Policy, of named companies will be verified by the Owner. The Owner reserves the right to request substantiation of information provided and make any corrections necessary in accordance with the GN and NTI lists. The dollar value for payroll shall include all divisions of work identified as Own Forces.
<b>Project Location:</b>	
<b>Project Number:</b>	
<b>General Contractor:</b>	

<b>General Contractor:</b>								
Labour/Payroll (Nunavut, Inuit & Other Labour)	Nunavut Residents		Inuit Residents		\$ Inuit Labour Bid	% Inuit Labour Bid	Other Non-Residents	Total Payroll
	Local	Non-Local	Local	Non-Local				
	\$	\$	\$	\$	\$	%	\$	\$

Cost Components (Excluding Payroll) (Identify Source of Good/Service)	Nunavut Content (GN Approved)		Nunavut & Inuit Content (GN & NTI Approved)		Inuit Content (NTI Approved)		Other (Not Approved)	Total Cost Components (Excluding Payroll)
	Local	Non-Local	Local	Non-Local	Local	Non-Local		
General Expenses:	\$	\$	\$	\$	\$	\$	\$	\$
Accommodation:	\$	\$	\$	\$	\$	\$	\$	\$
Sealift:	\$	\$	\$	\$	\$	\$	\$	\$
Other Transportation:	\$	\$	\$	\$	\$	\$	\$	\$
Sitework:	\$	\$	\$	\$	\$	\$	\$	\$
Framing/Structural:	\$	\$	\$	\$	\$	\$	\$	\$

<b>List Materials &amp; Supplier</b>	<b>Note: The name of the applicable company or an indication of "Own Forces" must be given, to be considered for bid adjustment.</b>							
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$

<b>List Miscellaneous Expenses &amp; Supplier</b>	<b>Note: The name of the applicable company or an indication of "Own Forces" must be given, to be considered for bid adjustment.</b>							
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$

<b>TOTAL Payroll &amp; Cost Components</b>	\$	\$	\$	\$	\$	\$	\$	\$
--	----	----	----	----	----	----	----	----

<b>Nunavut, Inuit &amp; Local Content</b>	\$	\$	\$	\$	\$	\$	\$	\$
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<b>NNI Bid Adjustments</b>	<b>For GN Use Only</b>							<b>Totals</b>
<b>Qualifying Value</b>	\$	\$	\$	\$	\$	\$	\$	\$
<b>Applicable Adjustment</b>								\$
<b>NNI Adjusted Value</b>	\$	\$	\$	\$	\$	\$	\$	\$

**SUBSTANTIATION OF BID ADJUSTMENT - APPENDIX B-2**

<b>Project Name:</b>	<b>TO RECEIVE BID ADJUSTMENTS UNDER THE NNI POLICY</b> , the Tenderer <b>MUST</b> complete and submit this form. This Appendix may be submitted at the Phase I or Phase II Tender Close in accordance with the Instructions to Tenderers. <b>Indicate the company name as it appears on the GN or NTI list of approved companies, and list materials.</b> The Nunavut, Local and Inuit status, as defined by the NNI Policy, of named companies will be verified by the Owner. The Owner reserves the right to request substantiation of information provided and make any corrections necessary in accordance with the GN and NTI lists. The dollar value for payroll shall include all divisions of work identified as Own Forces.
<b>Project Location:</b>	
<b>Project Number:</b>	
<b>General Contractor:</b>	

<b>Mechanical Sub-Contractor:</b>								
<b>Labour/Payroll</b> (Nunavut, Inuit & Other Labour)	<b>Nunavut Residents</b>		<b>Inuit Residents</b>		<b>\$ Inuit Labour Bid</b>	<b>% Inuit Labour Bid</b>	<b>Other Non-Residents</b>	<b>Total Payroll</b>
	<b>Local</b>	<b>Non-Local</b>	<b>Local</b>	<b>Non-Local</b>				
	\$	\$	\$	\$	\$	%	\$	\$

<b>Cost Components</b> (Excluding Payroll) (Identify Source of Good/Service)	<b>Nunavut Content (GN Approved)</b>		<b>Nunavut &amp; Inuit Content (GN &amp; NTI Approved)</b>		<b>Inuit Content (NTI Approved)</b>		<b>Other (Not Approved)</b>	<b>Total Cost Components (Excluding Payroll)</b>
	<b>Local</b>	<b>Non-Local</b>	<b>Local</b>	<b>Non-Local</b>	<b>Local</b>	<b>Non-Local</b>		
General Expenses:	\$	\$	\$	\$	\$	\$	\$	\$
Accommodation:	\$	\$	\$	\$	\$	\$	\$	\$
Sealift:	\$	\$	\$	\$	\$	\$	\$	\$
Other Transportation:	\$	\$	\$	\$	\$	\$	\$	\$
General Plumbing:	\$	\$	\$	\$	\$	\$	\$	\$
Sprinklers:	\$	\$	\$	\$	\$	\$	\$	\$
Insulation:	\$	\$	\$	\$	\$	\$	\$	\$
Sheet Metal:	\$	\$	\$	\$	\$	\$	\$	\$
Controls:	\$	\$	\$	\$	\$	\$	\$	\$

<b>List Materials &amp; Supplier</b>	<b>Note: The name of the applicable company or an indication of "Own Forces" must be given, to be considered for bid adjustment.</b>							
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$

<b>List Miscellaneous Expenses &amp; Supplier</b>	<b>Note: The name of the applicable company or an indication of "Own Forces" must be given, to be considered for bid adjustment.</b>							
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$

<b>TOTAL Payroll &amp; Cost Components</b>	\$	\$	\$	\$	\$	\$	\$	\$
--	----	----	----	----	----	----	----	----

<b>Nunavut, Inuit &amp; Local Content</b>	\$	\$	\$	\$	\$	\$	\$	\$
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<b>NNI Bid Adjustments</b>	<b>For GN Projects Division Use Only</b>							<b>Totals</b>
<b>Qualifying Value</b>	\$	\$	\$	\$	\$	\$	\$	\$
<b>Applicable Adjustment</b>								\$
<b>NNI Adjusted Value</b>	\$	\$	\$	\$	\$	\$	\$	\$



**SUBSTANTIATION OF BID ADJUSTMENT - APPENDIX B-2**

<b>Project Name:</b>	<b>TO RECEIVE BID ADJUSTMENTS UNDER THE NNI POLICY</b> , the Tenderer <b>MUST</b> complete and submit this form. This Appendix may be submitted at the Phase I or Phase II Tender Close in accordance with the Instructions to Tenderers. <b>Indicate the company name as it appears on the GN or NTI list of approved companies, and list materials.</b> The Nunavut, Local and Inuit status, as defined by the NNI Policy, of named companies will be verified by the Owner. The Owner reserves the right to request substantiation of information provided and make any corrections necessary in accordance with the GN and NTI lists. The dollar value for payroll shall include all divisions of work identified as Own Forces.
<b>Project Location:</b>	
<b>Project Number:</b>	
<b>General Contractor:</b>	

<b>Electrical Sub-Contractor:</b>								
<b>Labour/Payroll</b> (Nunavut, Inuit & Other Labour)	<b>Nunavut Residents</b>		<b>Inuit Residents</b>		<b>\$ Inuit Labour Bid</b>	<b>% Inuit Labour Bid</b>	<b>Other Non-Residents</b>	<b>Total Payroll</b>
	<b>Local</b>	<b>Non-Local</b>	<b>Local</b>	<b>Non-Local</b>				
	\$	\$	\$	\$	\$	%	\$	\$

<b>Cost Components</b> (Excluding Payroll) (Identify Source of Good/Service)	<b>Nunavut Content (GN Approved)</b>		<b>Nunavut &amp; Inuit Content (GN &amp; NTI Approved)</b>		<b>Inuit Content (NTI Approved)</b>		<b>Other (Not Approved)</b>	<b>Total Cost Components (Excluding Payroll)</b>
	<b>Local</b>	<b>Non-Local</b>	<b>Local</b>	<b>Non-Local</b>	<b>Local</b>	<b>Non-Local</b>		
General Expenses:	\$	\$	\$	\$	\$	\$	\$	\$
Accommodation:	\$	\$	\$	\$	\$	\$	\$	\$
Sealift:	\$	\$	\$	\$	\$	\$	\$	\$
Other Transportation:	\$	\$	\$	\$	\$	\$	\$	\$
General Electrical:	\$	\$	\$	\$	\$	\$	\$	\$
Fire Alarm Systems:	\$	\$	\$	\$	\$	\$	\$	\$
Lighting Control Equip:	\$	\$	\$	\$	\$	\$	\$	\$
Security System:	\$	\$	\$	\$	\$	\$	\$	\$
Controls:	\$	\$	\$	\$	\$	\$	\$	\$
<b>List Materials &amp; Supplier</b>	<b>Note: The name of the applicable company or an indication of "Own Forces" must be given, to be considered for bid adjustment.</b>							
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
<b>List Miscellaneous Expenses &amp; Supplier</b>	<b>Note: The name of the applicable company or an indication of "Own Forces" must be given, to be considered for bid adjustment.</b>							
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
<b>TOTAL Payroll &amp; Cost Components</b>	\$	\$	\$	\$	\$	\$	\$	\$

<b>GC55 Nunavut, Inuit &amp; Local Content</b>	\$	\$	\$	\$	\$	\$	\$	\$
--	----	----	----	----	----	----	----	----

<b>NNI Bid Adjustments</b>	<b>For GN Projects Division Use Only</b>							<b>Totals</b>
<b>Qualifying Value</b>	\$	\$	\$	\$	\$	\$	\$	\$
<b>Applicable Adjustment</b>								\$
<b>NNI Adjusted Value</b>	\$	\$	\$	\$	\$	\$	\$	\$

**SUBSTANTIATION OF BID ADJUSTMENT - APPENDIX B-2**

<b>Project Name:</b>	<b>TO RECEIVE BID ADJUSTMENTS UNDER THE NNI POLICY</b> , the Tenderer <b>MUST</b> complete and submit this form. This Appendix may be submitted at the Phase I or Phase II Tender Close in accordance with the Instructions to Tenderers. <b>Indicate the company name as it appears on the GN or NTI list of approved companies, and list materials.</b> The Nunavut, Local and Inuit status, as defined by the NNI Policy, of named companies will be verified by the Owner. The Owner reserves the right to request substantiation of information provided and make any corrections necessary in accordance with the GN and NTI lists. The dollar value for payroll shall include all divisions of work identified as Own Forces.
<b>Project Location:</b>	
<b>Project Number:</b>	
<b>General Contractor:</b>	

<b>Other Sub-Contractor:</b>								
Labour/Payroll (Nunavut, Inuit & Other Labour)	Nunavut Residents		Inuit Residents		\$ Inuit Labour Bid	% Inuit Labour Bid	Other Non-Residents	Total Payroll
	Local	Non-Local	Local	Non-Local				
	\$	\$	\$	\$	\$	%	\$	\$

Cost Components (Excluding Payroll) (Identify Source of Good/Service)	Nunavut Content (GN Approved)		Nunavut & Inuit Content (GN & NTI Approved)		Inuit Content (NTI Approved)		Other (Not Approved)	Total Cost Components (Excluding Payroll)
	Local	Non-Local	Local	Non-Local	Local	Non-Local		
General Expenses:	\$	\$	\$	\$	\$	\$	\$	\$
Accommodation:	\$	\$	\$	\$	\$	\$	\$	\$
Sealift:	\$	\$	\$	\$	\$	\$	\$	\$
Other Transportation:	\$	\$	\$	\$	\$	\$	\$	\$
Sitework:	\$	\$	\$	\$	\$	\$	\$	\$
Framing/Structural:	\$	\$	\$	\$	\$	\$	\$	\$
<b>List Materials &amp; Supplier</b>	<b>Note: The name of the applicable company, or an indication of "Own Forces" must be given, to be considered for bid adjustment.</b>							
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
<b>List Miscellaneous Expenses &amp; Supplier</b>	<b>Note: The name of the applicable company, or an indication of "Own Forces" must be given, to be considered for bid adjustment.</b>							
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$	\$	\$
<b>TOTAL Payroll &amp; Cost Components</b>	\$	\$	\$	\$	\$	\$	\$	\$

<b>Nunavut, Inuit &amp; Local Content</b>	\$	\$	\$	\$	\$	\$	\$	\$
---	----	----	----	----	----	----	----	----

NNI Bid Adjustments	For GN Projects Division Use Only							Totals
Qualifying Value	\$	\$	\$	\$	\$	\$	\$	\$
Applicable Adjustment								\$
NNI Adjusted Value	\$	\$	\$	\$	\$	\$	\$	\$

**LIST OF UNIT PRICES FOR  
STIPULATED PRICE CONTRACT ADJUSTMENTS ONLY - APPENDIX C**  
(Information to be Completed by Tenderer and Submitted with Tender)

The following are our unit prices for the units of work listed hereunder. The base price for the work is included in our tender; these unit prices apply only for credits or extras to the Stipulated Price agreed.

TO BE COMPLETED BY THE GN			TO BE COMPLETED BY THE TENDERER	
Unit of Work			Unit Price (\$)	
Item	Description	Unit	Addition	Deletion
	N/A		\$	\$

**LIST OF UNIT PRICES FOR UNIT PRICE CONTRACTS ONLY - APPENDIX D**

(Information to be Completed by Tenderer and Submitted with Tender)

- (a) The conditions in Tender Form apply to the completion of this Appendix.
- (b) Type or print tendered values clearly. An illegible submission may be disqualified at the sole discretion of the Owner.

TO BE COMPLETED BY THE GN				TO BE COMPLETED BY THE TENDERER	
Item	Description	Estimated Quantity	Unit	Unit Price	Estimated Total Price
	N/A				
<b>Total Estimated Contract Price</b>					

**LIST OF OPTIONS & SUBSTITUTIONS SPECIFIED BY THE OWNER - APPENDIX E**  
 (To be Completed by Tenderer and Submitted with Tender)

In accordance with Clause 6 of the Instructions to Tenderers, indicate the effect on the stipulated price for the following options and substitutions listed by the Owner. The Tenderer further agrees that the following prices may be used in the evaluation of the submitted Tender.

All Options, Substitutions and Separate Prices shall include all work necessary for and incidental to the work described.

Description of Options & Substitutions (To be Completed by the GN)	Effect on Stipulated Price (\$) (To be Completed by Tenderer and Submitted with Tender)	
	\$ Addition to Stipulated Sum Price	\$ Reduction to Stipulated Sum Price
N/A		

**LIST OF OPTIONS PROPOSED BY THE TENDERER - APPENDIX F**  
 (Information to be Completed by Tenderer and Submitted with Tender)

In accordance with the Instructions to Tenderers, the Tenderer may propose options or substitutions below. The cost of such options and substitutions are NOT included in the Stipulated Price.

If this form is not used, the Tenderer should draw a line through the form and initial.

Description of Options & Substitutions proposed by Tenderer	Effect on Stipulated Price (\$)	
	\$ Addition to Stipulated Price	\$ Reduction to Stipulated Price
N/A		

## TRANSPORTATION OF MATERIALS - APPENDIX H

1. Transportation/shipping and handling of materials and all associated costs thereof are the responsibility of the Contractor unless otherwise noted. **Modes of transporting materials shall be decided by the Contractor unless by marine transport in which case Clause 2 of this Appendix shall apply.**
2. Whenever marine (water) transport is to be utilized, the Contractor shall use the Government of Nunavut specified carriers, and space shall be booked directly with the carriers, as follows:

### 2.1 For the following communities in the following regions:

**(Area A) High Arctic including North Baffin:** Arctic Bay, Clyde River, Grise Fiord, Nanisivik, Pond Inlet, Qikiqtarjuaq, Resolute Bay, and Kugaaruk as far as Nanisivik

and

**(Area B) Foxe Basin:** Hall Beach, Igloolik, and Repulse Bay

and

**(Area D) South Baffin:** Cape Dorset, Kimmirut, and Pangnirtung

THE CARRIER IS:

**Nunavut Sealink and Supply Inc. (NSSI)**

By ships loading at the Port of Ste-Catherine, Quebec

Contact: Daniel Desgagnés

Phone: (450) 635-0833 or Toll Free (866) 732-5438

Fax: (450) 635-5126

[daniel.desgagnes@transarctik.desgagnes.com](mailto:daniel.desgagnes@transarctik.desgagnes.com)

and

**(Area F) Kugaaruk from Nanisivik:**

THE CARRIER IS:

**Nunavut Sealink and Supply Inc. (NSSI)**

By ships loading at the Port of Ste-Catherine, Quebec

Contact: Daniel Desgagnés

Phone: (450) 635-0833 or Toll Free (866) 732-5438

Fax: (450) 635-5126

[daniel.desgagnes@transarctik.desgagnes.com](mailto:daniel.desgagnes@transarctik.desgagnes.com)

### 2.2 For (Area C) Iqaluit:

THE CARRIER IS:

**Nunavut Eastern Arctic Shipping (NEAS)**

by ships loading at the Port of Valleyfield, Quebec

Contact: Mark Bray

Phone: (877) 225-6327 (Toll Free)

Fax: (514) 523-7875

[mbray@neas.ca](mailto:mbray@neas.ca)

### 2.3 For (Area E) the Kivalliq Region: Arviat, Baker Lake, Chesterfield Inlet, Coral Harbour, Rankin Inlet, Sanikiluaq, and Whale Cove

THE CARRIER IS:

**Nunavut Sealink and Supply Inc. (NSSI)**  
by ships loading at the Port of Ste-Catherine, Quebec  
Contact: Daniel Desgagnés  
Phone: (450) 635-0833 or Toll free (866) 732-5438  
Fax: (450) 635-5126  
[daniel.desgagnes@transarctik.desgagnes.com](mailto:daniel.desgagnes@transarctik.desgagnes.com)

OR

**Nunavut Sealink and Supply Inc. (NSSI)**  
by ships loading at the Port of Churchill, Manitoba  
Contact: Francois Gaudreua  
Phone: (450) 635-0833 or Toll free (866) 732-5438  
Fax: (204) 943-5458  
[francois.gaudreau@transarctik.desgagnes.com](mailto:francois.gaudreau@transarctik.desgagnes.com)

**NOTE: For transport to Sanikiluaq, services are from Port of St. Catherine only.**

2.4 For (Area G) the following communities in the Kitikmeot Region: Bathurst Inlet, Cambridge Bay, Gjoa Haven, Kugluktuk, Taloyoak and Umingmaktok (Bay Chimo):

THE CARRIER IS:

**Nunavut Sealink and Supply Inc. (NSSI)**  
By ships loading at the Port of Ste-Catherine, Quebec  
Contact: Daniel Desgagnés  
Phone: (450) 635-0833 or Toll free (866) 732-5438  
Fax: (450) 635-5126  
[daniel.desgagnes@transarctik.desgagnes.com](mailto:daniel.desgagnes@transarctik.desgagnes.com)

3. The annual shipping rates offered by marine carriers are dependent upon anticipated cargo quantities including the materials for construction projects; therefore, Contractors are to bid using the published sailing schedules and rates available from the above marine carriers. These schedules and rates are also available from the Department of Community & Government Services, Purchasing, Logistics & Contract Support Division, Contact: John Paton, Manager Logistics at (867) 975-5437.
4. If a Contractor uses a marine carrier other than the marine carrier specified by the GN under this Appendix without having obtained the GN's prior written authorization to do so, the Contractor shall be solely responsible for any extra freight costs, administrative costs or any other costs incurred by the GN which result either directly or indirectly from the Contractor's failure to use the GN specified marine carrier as set out in this Appendix. The Contractor shall issue a credit in favour of the GN for any monies saved by the Contractor obtained from using a marine carrier other than the specified marine carriers identified in this Appendix.
5. In exceptional or extraordinary circumstances, where a specified marine carrier's sailing schedule is in substantial conflict with the project schedule, the GN will review the circumstances, taking into account the potential adverse impact on the project and the specified marine carrier's interests, and, at its sole discretion, the GN may provide authorization to allow the relevant cargo to be shipped with a marine carrier other than a specified marine carrier; such authorization must be in writing and must be obtained prior to contracting for the marine transport.



## CONTRACTOR'S CERTIFICATE OF INSURANCE - APPENDIX I

INSURED: \_\_\_\_\_

<b>SCHEDULE OF MANDATORY INSURANCE</b>			
<b>Type of Insurance</b>	<b>Insurer, Policy #</b>	<b>Policy Period</b>	<b>Limit of Liability/Amount</b>
COMPREHENSIVE GENERAL LIABILITY INCLUDING NON-OWNED AUTOMOBILE LIABILITY		From:  To:	BODILY INJURY \$ _____ Each Person \$ _____ Each Accident \$ _____ Aggregate Products PROPERTY DAMAGE \$ _____ Each Accident \$ _____ Aggregate Products <b>Or,</b> BODILY INJURY & PROPERTY DAMAGE \$ _____ Inclusive \$ _____ Aggregate Products
AUTOMOBILE LIABILITY (OWNED/LEASED VEHICLES)		From:  To:	BODILY INJURY \$ _____ Each Person \$ _____ Each Accident PROPERTY DAMAGE \$ _____ Each Accident <b>Or,</b> BODILY INJURY & PROPERTY DAMAGE \$ _____ Inclusive
<b>ADDITIONAL COVERAGES REQUIRED MARKED BY [ ]</b>			
[ ] UMBRELLA LIABILITY		From: To:	\$ _____ Limits \$ _____ S.I.R.
[ ] COURSE OF CONSTRUCTION		From: To:	\$ _____ Limits (Value of Contract)
[ ] ENVIRONMENTAL IMPAIRMENT LIABILITY INSURANCE		From: To:	\$ _____ Limits
[ ] PROFESSIONAL LAIBILITY INSURANCE		From: To:	\$ _____ Per Claim
[ ] OTHER			

This is to certify that policies as described above have been issued through the undersigned to the Insured named above and are in force at this time. If cancelled or changed in any manner, for any reason, during the period of coverage as stated herein so as to affect this certificate, immediate written notice will be given by the undersigned to the Department.

**(Be sure to also complete and sign the 2<sup>nd</sup> page of this form.)**

**CONTRACTOR'S CERTIFICATE OF INSURANCE - APPENDIX I – PAGE 2**

<b>PARTICULARS OF INSURANCE</b>	
<p><b>GENERAL LIABILITY</b></p> <p><input type="checkbox"/> Premises Property and Operations</p> <p><input type="checkbox"/> Products and Completed Operations</p> <p><input type="checkbox"/> Blanket Contractual - All Written Agreements</p> <p><input type="checkbox"/> Occurrence Property Damage</p> <p><input type="checkbox"/> Broad Form Property Damage</p> <p><input type="checkbox"/> Contingent Employers Liability</p> <p><input type="checkbox"/> Personal Injury</p> <p><input type="checkbox"/> Employees as Additional Insureds</p> <p><input type="checkbox"/> Cross Liability - Severability Of Interests</p> <p><input type="checkbox"/> Blasting, Collapse, Underpinning</p> <p><input type="checkbox"/> Exclusions deleted as follows:</p> <p><input type="checkbox"/> Owners' &amp; Contractors' Protective Liability</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p><b>AUTOMOBILE LIABILITY</b></p> <p><input type="checkbox"/> S.E.F. No. 4a Explosive Endorsement</p> <p><input type="checkbox"/> S.E.F. No. 21b Blanket Fleet Endorsement</p> <p><input type="checkbox"/> S.E.F. No. 6b School Bus Endorsement</p> <hr/> <p><input type="checkbox"/> <b>AIRCRAFT LIABILITY</b></p> <p><input type="checkbox"/></p> <hr/> <p><input type="checkbox"/> <b>WATERCRAFT LIABILITY</b></p> <p><input type="checkbox"/></p> <hr/>
<p><b>REMARKS (STATE DEDUCTIBLES) IF ANY</b></p>   	

**THIS IS TO CERTIFY THAT INSURANCE AS DESCRIBED AS ABOVE IS IN FORCE AT THIS TIME.**

Name and Address of Insurance Agent, Broker or Insurance Company

Written notice of any changes or cancellation of this policy shall be sent to the Owner at the following address:

Date \_\_\_\_\_

By \_\_\_\_\_  
(Authorized Representative)

**CONTRACTOR'S OBLIGATIONS TO PROVIDE INUIT CONTENT - APPENDIX J****1.0 GENERAL**

- .1 This contract pertains to work in Nunavut and contains provisions regarding minimum prescribed levels of Inuit Labour that must be met or exceeded in the performance of the work. The requirements set out in this Appendix J to meet minimum prescribed levels of Inuit Labour is a fundamental term of the contract. The minimum prescribed level of Inuit Labour shall be complied with.
- .2 If the amount of Inuit Labour identified by the bidder on Appendix "B-2" of the tender is less than with the tender requirements, this would result in an obvious qualification to the tender submission by the bidder that would ordinarily cause the tender to be considered non-responsive.
- .3 For an Inuit Labour level achieved which differs from the level prescribed, a bonus or penalty will be assessed in accordance with the NNI Policy, specifically Articles 12.3 and 12.4 of the Policy. A bonus would be for exceeding the minimum prescribed Inuit Labour level, and a penalty would be for not meeting the minimum prescribed Inuit Labour level.
- .4 "Inuit Labour" and "Inuit Goods and Services" identified on the tender forms shall receive a bid adjustment in accordance with the NNI Policy and the adjustment percentages indicated on Appendix B-2 forms. "Inuit Goods and Services" means "Inuit Content" as defined in the Nunavummi Nangminiqatunik Ikajuuti (NNI) Policy definition appendix; the NNI Policy is attached as tender Appendix "J"
- .5 Damages as described in contract General Condition GC 55 may apply if the Inuit Labour and/or Inuit Goods and Services proposed by the Contractor on the tender Appendix B-2 forms are not met. In addition, if the minimum prescribed levels of Inuit Labour identified on page 4 of this Appendix is not met, then for future tenders where there are similar prescribed minimum levels for Inuit Labour, the Contractor may be deemed "not responsible" (as defined in the Government Contract Regulations.)

**2.0 DEFINITIONS**

- .1 "Inuit (singular Inuk)" means a person described in Article 1.1.1 of the Nunavut Land Claims Agreement (NLCA) and who has enrolled himself or herself on the Inuit Enrolment List under Article 35 of the NLCA.
- .2 "Inuit firm" means an entity which complies with the legal requirements to carry on business in the Nunavut Settlement Area, and which is,
  - .1 a limited company with at least 51% of the company's voting shares beneficially owned by Inuit, or
  - .2 a cooperative controlled by Inuit, or
  - .3 an Inuk sole proprietorship or partnership; and
  - .4 is included on Nunavut Tunngavik Inc. (NTI)'s Inuit Firms Registry

.3 “Labour”

For the purpose of this contract and specifically Appendix J, “Labour” means the Labour (including Inuit labour) used on the job in any capacity and including, for example, tradespeople, administrative staff and professional staff whether in a head office or in a site office and attributable to this project. “Inuit Labour” refers to the status of employees and may be directly provided by the general contractor or indirectly through a sub contractor, and is not necessarily through an Inuit Firm.

.4 “Goods and Services”

For the purpose of this contract and specifically Appendix J, “Goods and Services” means the entire dollar value of the Work including Labour. For further clarification "Inuit Goods and Services" includes all labour of Inuit firms attributable to and paid from the Contract. "Inuit Goods and Services" are to have the same meaning as the term "Inuit Content" used in the General Conditions of the Construction Contract.

.5 "Inuit Content"

"Inuit Content" is defined as the dollar value of the goods and services required by the Contract supplied by any Inuit Firm or Inuit sole proprietorship and Inuit Labour. Inuit Content may include:

- i. goods and services supplied by an Inuit Firm or Inuit supplier acting as the General Contractor. These are referred to as "own forces";
- ii. goods and services supplied by an Inuit Firm or Inuit supplier so long as these goods and services are required for the completion of the Contract and are paid for by the Contract.
- iii. Inuit labour by an Inuit Firm or a non-Inuit Firm.

### **3.0 REQUIREMENTS**

.1 The Contractor shall maximize the value of Inuit Labour and Inuit Goods and Services and shall meet or exceed the Inuit Labour minimum level identified in this appendix when bidding. In the performance of the work, the Contractor shall meet or exceed the amounts tendered on Appendix B-2.

.2 The Contractors shall submit records on a monthly basis, or as specified, indicating the amount of Inuit Labour and Inuit Goods and Services used. No payment shall be due or payable to the Contractor if the Contractor fails to supply these reports to the Owner.

#### **4.0 FAILURE TO ACHIEVE INUIT CONTENT REQUIREMENTS**

In addition to the bonus or penalty prescribed by the Nunavummi Nangminiaqtunik Ikajuuti (NNI) Policy for exceeding or not meeting the minimum prescribed Inuit Labour level set out on page 4 of this Appendix J; the following damages may apply for not meeting Inuit Labour and /or Inuit Goods and Services requirements:

- .1 There is a requirement to provide no less than the levels of Inuit Labour and Inuit Goods and Services tendered by the Contractor on Appendix B-2 of the tender. Failure to meet this requirement by achieving the levels tendered may result in the Owner applying damages described in the contract General Condition GC 55.
- .2 Additionally, if the contractor fails to meet the prescribed minimum Inuit Labour set out on page 4 of this Appendix J, then for future tenders where there are similar prescribed minimum levels for Inuit Labour the Owner may deem the Contractor to be "not responsible" (as defined in the Government Contract Regulations).
- .3 The Owner may terminate this contract prior to Final Completion if the Contractor has not demonstrated compliance with the requirement to attain the prescribed minimum levels of Inuit Labour set out on page 4 of this Appendix J.

#### **5.0 INDEMNIFICATION**

- .1 The Contractor shall indemnify the Owner against any claim brought by any person because of any failure by the Contractor to achieve the prescribed levels of Inuit Labour prescribed by this contract.

#### **6.0 WAIVER OF INUIT CONTENT REQUIREMENTS**

- .1 The prescribed level of Inuit Labour shall only be reduced when sufficient Inuit Labour is not available and the Contractor has requested and received prior approval by the Owner in writing to reduce the prescribed levels.

### Inuit Labour

It is a fundamental term of this contract that the contractor shall maximize the value of Inuit labour used to perform the Work. Therefore the GN has set a minimum percent by dollar value for the use of Inuit labour. The Inuit labour content may be provided by the general contractor or any subcontractor and may include professional or administrative staff or skilled or unskilled trades people, and not necessarily through an Inuit Firm. The minimum may only be reduced where sufficient Inuit labour is not available and the approval of the Owner has been obtained in writing.

For the purposes of this contract the GN has prescribed that the following minimum percent of the total labour for this job by dollar value shall be provided by Inuit workers.

**20** %  
**Prescribed** minimum level of Inuit labour as a percent of total labour by dollar value.

### Substantiation

In order to substantiate the amount of Inuit Labour the general contractor shall be responsible for providing an amalgamated employment report that shall reflect the Inuit labour used by the general contractor and any other sub-contractor or supplier. The general contractor shall submit this employment report with every Progress Claim. Receipt of an employment report shall be a condition precedent to the release of a progress payment, an interim payment and/or a final payment.

If requested, the general contractor shall also provide a completed "Employee Verification and Consent Form" for an Inuit worker.



# Construction Contract

**Project No:** 15-3010

**Name of Project:** Williamson Lake Water Storage Tank Interior Recoating

**Project Location:** Rankin Inlet, NU

**Contract Number:** 15320-00241

**Government of Nunavut**  
**Form No. 6215-25-MW – Revision 5 – February 2015**  
**This Form replaces Form No. 6215-25-MW – Revision 4 – April 2008**

***FIXED PRICE CONTRACT***

Contract Number: \_\_\_\_\_

This Agreement is awarded as a result of RFT: \_\_\_\_\_

**ARTICLES OF AGREEMENT**

These Articles of Agreement, effective on the date this Contract is executed by both Parties (the “**Effective Date**”).

**BETWEEN:**

**THE GOVERNMENT OF NUNAVUT**  
(hereinafter, the “**Owner**”)

-and-

\_\_\_\_\_  
(hereinafter, the “**Contractor**”)

Witness that in consideration for the mutual promises and obligations contained in the Contract, the Owner and the Contractor covenant and agree as follows:

**A1 CONTRACT DOCUMENTS**

- 1.1 The documents forming the Contract between the Owner and the Contractor, referred to herein as the Contract Documents are all of those documents referred to on Appendix A of the Tender and:
  - 1.1.1 Any addenda issued during the Tender period and identified in Clause 2 of the Tender; and
  - 1.1.2 Any amendment or variation of the Contract Documents that is made in accordance with the General Conditions.
- 1.2 The Owner hereby designates \_\_\_\_\_ or his designate as the Owner’s Representative for the Department of \_\_\_\_\_ of the Government of Nunavut.
- 1.3 The Contractor hereby designates \_\_\_\_\_ as the Contractor’s Representative.

**A2 DATE OF COMPLETION OF WORK AND DESCRIPTION OF WORK**

- 2.1 The Contractor shall, between the Effective Date of the Contract and the 30<sup>th</sup> day of September, 2017, in a careful and workmanlike manner, diligently perform and complete the following work:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*insert above a description of the work.*

(collectively, the “**Work**”)

which Work is more particularly described in the plans and Specifications.



**A3 CONTRACT AMOUNT**

- 3.1 Subject to A3.2, the total sum of \$\_\_\_\_\_ shall be paid by the Owner to the Contractor in consideration of the performance of the Work (the “**Contract Price**”).
- 3.2 The Contract Price is subject to increases, decreases, deductions, reductions, and set-off, as permitted under the terms of the Contract. The Owner shall pay the Contractor at the times and in the manner that is set out or referred to in the Contract

**A4 FINANCIAL ADMINISTRATION ACT (NUNAVUT)**

- 4.1 The attention of the Contractor is drawn to the following statutory provision. It is a condition of this Contract that payment hereunder is subject to Section 46 of the *Financial Administration Act*, RSNWT (Nu) 1988, c F-4, as amended or re-enacted in successor legislation during the term of this Contract. Section 46 currently provides as follows:

*“It is a condition of every contract made by or on behalf of the Government requiring an expenditure that an expenditure pursuant to the contract will be incurred only if there is a sufficient uncommitted balance in the appropriated item for the fiscal year in which the expenditure is required under the contract.”*

**A5 JOINT AND SEVERAL LIABILITY**

- 5.1 If the Contractor is comprised of more than one party, as in the case of a joint venture or a partnership, then all of the parties shall declare themselves to be bound jointly and severally with one another with respect to the fulfilment of all the terms and conditions of this Contract and hereby renounce their benefits of division and discussion and the obligations of such parties shall be joint and several, and each party shall execute this Contract.

**A6 COUNTERPARTS**

- 6.1 This Agreement may be executed in one or more counterparts, each of which shall be deemed to be an original, but all of which shall constitute one and the same instrument. The parties agree that in accordance with the *Electronic Commerce Act*, SNu 2004, c7, signatures transmitted electronically, whether via facsimile or via email as attached files, shall be acceptable to bind the parties and shall not in any way affect the validity of this Contract.

Contract Number: \_\_\_\_\_

This Agreement is awarded as a result of RFT: \_\_\_\_\_

**SIGNED, SEALED AND DELIVERED** in the presence of:

**Contractor:** Contractor's Full Legal Business Name and Address:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Seal

Facsimile No.

**Contractor Authorized Signatory**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

**Contractor Authorized Signatory**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

**Owner:** Owner's Full Legal Business Name and Address:

Department of Community & Government Services  
P.O. Box 1000 – Station 700  
Iqaluit, NU X0A 0H0

Facsimile No.: (867) \_\_\_\_\_

**Owner Authorized Signatory**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

**END OF ARTICLES OF AGREEMENT**

Contract Number: \_\_\_\_\_

This Agreement is awarded as a result of RFT: \_\_\_\_\_

## **TERMS OF PAYMENT**

### **TP1 AMOUNT PAYABLE - GENERAL**

- 1.1 Subject to any other provisions of the Contract, the Owner shall pay the Contractor, at the times and in the manner hereinafter set out, the amount by which the aggregate of the amounts described in TP2 exceed the aggregate of the amounts described in TP3 (the “**Aggregate Sum**”).
- 1.2 The Contractor shall accept the Aggregate Sum as payment in full satisfaction for everything furnished and done by the Contractor in respect of the Work to which the payment relates.

### **TP2 AMOUNT PAYABLE TO THE CONTRACTOR**

- 2.1 The amount payable to the Contractor is the aggregate of:
  - 2.1.1 The amount referred to in the Articles of Agreement at A3.1;
  - 2.1.2 The amounts, if any, that are payable to the Contractor pursuant to the General Conditions;
  - 2.1.3 The amounts, if any, that are a bonus for Inuit labour achieved in accordance with the *Nunavummi Nangminiqaqtunik Ikajuuti* (the “**NNI Policy**”) as described at GC50; and
  - 2.1.4 The applicable Goods and Services Tax (“**GST**”).

### **TP3 AMOUNT PAYABLE TO THE OWNER**

- 3.1 The amount payable to the Owner is the aggregate of the amounts, if any, that the Contractor is liable to pay to the Owner pursuant to the Contract; including, without limitation, any penalties assessed for Inuit labour shortfalls in the Work, as described in the NNI Policy.
- 3.2 When making any payment to the Contractor in accordance with TP1, the failure of the Owner to deduct amounts owed under TP3.1 shall not constitute a waiver of the right to do so, or an admission of lack of entitlement to do so in any subsequent payment to the Contractor.

### **TP4 TIME OF PAYMENT**

- 4.1 The payment periods shall be every thirty (30) consecutive days or such other time interval as is agreed between the Contractor and the Owner (the “**Payment Period**”).
- 4.2 The Contractor shall, on the expiration of a Payment Period, deliver to the Owner’s Representative a written invoice for the portion of the Work that has been completed as of that date (the “**Invoice**”). The Contractor shall include with the Invoice the required associated backup documentation and a list of the materials that were delivered to the work site but not incorporated into the Work during that Payment Period. The Contractor’s official Invoice shall include, as a minimum, the following information:

Contract Number: \_\_\_\_\_

This Agreement is awarded as a result of RFT: \_\_\_\_\_

- 4.2.1 A full description of the Work completed, the Materials used, the contract number, the Contractor's GST registration number, and the dollar values as follows:
- Sub-total #1 (invoice amount without GST);
  - Holdback amount;
  - Sub-total #2 (which is Sub-total #1 less the Holdback amount); and
  - Grand Total (which is Sub-total #2 plus GST)
- 4.3 The Owner's Representative, will, not later than ten (10) days after receipt of the Invoice:
- 4.3.1 Inspect or otherwise satisfy itself that the part of the Work and the Materials described in the invoice have been completed and provided in a satisfactory manner (an inspection may be carried out by either the Owner's Representative or its' consultant);
- 4.3.2 Coordinate with the Contractor to resolve any disagreements on the content and amount of the Invoice (obtaining a corrected invoice from the Contractor if changes are required);
- 4.3.3 Complete a request for contact payment ("RCP"), indicating on it the date that the Contractor's Invoice was approved;
- 4.3.4 Send to the Government of Nunavut, Community & Government Services ("CGS") finance section the original Invoice that has been agreed upon, along with the RCP signed by the Owner's Representative (and CGS Regional Project Manager or the Regional Director depending on the signing authority of these persons) and a copy of the *CGS Major Works Contract Payment Check List*, with the appropriate sections filled out; and
- 4.3.5 Send a copy of the agreed upon Invoice and the RCP to the Contractor.
- 4.4 Subject to TP1, the Owner will pay the Contractor in accordance with the amounts stipulated hereunder:
- 4.4.1 An amount that is equal to 90% of the value that is indicated in the Invoice, if a performance bond and a labour and material payment bond has been furnished by the Contractor in accordance with GC54; or
- 4.4.2 An amount that is equal to 90% of the value that is indicated in the Invoice if a security deposit has been furnished by the Contractor in accordance with GC54.
- 4.5 Payments to Nunavut businesses or Inuit firms, as defined by the NNI Policy, will become due and payable twenty (20) days after receipt of the Invoice, provided the Invoice is approved by the Owner's Representative as specified in TP4.3. Payments to other Contractors will become due and payable thirty (30) days after approval of the Invoice by the Owner's Representative as specified in TP4.3.
- 4.6 Subject to TP1, TP3 and TP4.3, the Owner will, within twenty (20) days for Nunavut businesses or Inuit firms and within thirty (30) days for other Contractors following the date of issue of a Certificate of Substantial Completion, pay the Contractor the amount referred to in TP1 less the following deductions:
- 4.6.1 The sum of all payments that were made pursuant to TP4.4;

Contract Number: \_\_\_\_\_

This Agreement is awarded as a result of RFT: \_\_\_\_\_

- 4.6.2 An amount that is equal to the Owner's estimate of the cost of rectifying defects described in the Substantial Certificate of Completion; and
- 4.6.3 An amount that is equal to the Owner's Representative's estimate of the cost the Owner would incur to complete the outstanding Work described in the Substantial Certificate of Completion, other than the defects referred to in TP4.6.2.
- 4.7 It is a condition precedent to the Owner's payment obligation under TP4.6 that:
- 4.7.1 The Contractor has made and delivered to the Owner's Representative a statutory declaration described in TP4.10 in respect of the Substantial Certificate of Completion referred to in GC42.2, and
- 4.7.2 The Contractor has complied with the various requirements to provide Inuit, Nunavut and local employment and involvement reports as set out in this Contract.
- 4.8 Subject to TP1, TP3 and TP4.9, the Owner will, not later than twenty (20) days for Nunavut businesses or Inuit firms or thirty (30) days for other Contractors after the date of issue of a Certificate of Completion, pay the Contractor the amount referred to in TP1 less the following deductions:
- 4.8.1 The sum of all payments that were made pursuant to TP4.4, and;
- 4.8.2 The sum of all payments that were made pursuant to TP4.6.
- 4.9 It is a condition precedent to the Owner's payment obligation under TP4.8 that the Contractor has made and delivered, to the Owner's Representative, a statutory declaration as described in TP4.10 in respect of the Certificate of Completion referred to in GC42.1.
- 4.10 The statutory declaration referred to in TP4.7 and TP4.9 shall be in the form of the "Certificate of Completion Statutory Declaration", attached hereto.

**TP5 PROGRESS REPORT AND PAYMENT NOT BINDING ON THE OWNER**

- 5.1 Neither a RCP nor any payment made by the Owner, pursuant to these Terms of Payment shall be construed as an admission by the Owner that the Work, Materials, or any part thereof is complete, satisfactory or is in accordance with the Contract.

**TP6 RIGHT OF SET-OFF**

- 6.1 Without limiting any right of set-off or deduction given or implied by law or elsewhere in the Contract, the Owner may set-off any amount owed to the Owner by the Contractor under this Contract or any other current contract, against any amount payable to the Contractor under this Contract or any other current contract.
- 6.2 For the purposes of these Terms of Payment, "current contract", means a contract between the Owner and the Contractor where:
- 6.2.1 The Contractor has an undischarged obligation to perform or supply work, labour or material; or
- 6.2.2 The Owner has, since the date on which the Articles of Agreement were made, exercised any right to take work that is subject to the Contract out of the Contractor's hands.

Contract Number: \_\_\_\_\_

*This Agreement is awarded as a result of RFT:* \_\_\_\_\_

**TP7 PAYMENT IN EVENT OF TERMINATION**

- 7.1 If the Contract is terminated pursuant to GC39, the Owner will pay the Contractor any amount that is lawfully due and payable to the Contractor as soon as is practicable under the circumstances.

**Certificate of Completion**  
**STATUTORY DECLARATION**

**THE MATTER OF** the Contract bearing

# \_\_\_\_\_

**BETWEEN:**

The Government of Nunavut

-and-

\_\_\_\_\_  
*Insert full name of Contractor*  
(herein the “**Contractor**”)

for

\_\_\_\_\_  
*Briefly describe the work to be performed*

dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

and

**IN THE MATTER OF** the Certificate of Completion relating to Contract # \_\_\_\_\_ :

I, \_\_\_\_\_ of \_\_\_\_\_  
*Full name of declarant* *Declarant's city of residence*

**DO SOLEMNLY DECLARE:**

1. That I am \_\_\_\_\_  
*Declarant's position or title with the Contractor or that the declarant is the Contractor*  
And as such have a personal knowledge of the said Contract and of the facts and matters stated herein.
2. That all assessments and levies under the *Unemployment Insurance Benefit Entitlement Adjustments (Pension Payments) Act, SC 1987, c17, The Workers' Compensation Act, SNu 2007, c.15* or any other social or labour legislation in respect of the said Contract have been paid in full.
3. That all Subcontractors, labourers and suppliers of materials and equipment whatsoever who have entered into agreements to supply goods or services which have been incorporated into the construction of this project have been paid in full except for

contractual holdbacks and the further amounts, if any, which are listed below and are being withheld from the Subcontractor(s) listed herein, due to legitimate disputes arising out of the performance, or lack of performance, of the work by the listed Subcontractor(s).

Amounts in Dispute

<u>Subcontractor</u>	<u>Amount Being Withheld</u>
_____	_____
_____	_____
_____	_____

And the following amounts, if any, which are being withheld pending payment to the Contractor by the Government of Nunavut.

<u>Subcontractor</u>	<u>Amount Being Withheld</u>
_____	_____
_____	_____
_____	_____

I make this SOLEMN DECLARATION conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath and by virtue of the LAWS OF CANADA and NUNAVUT.

**DECLARED** before me in the City of \_\_\_\_\_ this \_\_\_\_ day of \_\_\_\_\_, 20\_\_

\_\_\_\_\_  
*Signature of Declarant*

\_\_\_\_\_  
*Print name*

\_\_\_\_\_  
*Signature of person before whom  
declaration is made*

\_\_\_\_\_  
*Print name*

\_\_\_\_\_  
*Signature of a Notary Public,  
Commissioner, etc. and Notary seal*

\_\_\_\_\_  
*Print name*



NOTES:

1. Where the Contractor is a corporation or a partnership, the Declarant's position in the corporation or partnership, and the corporation or partnership name should be clearly shown in #1.
2. Where the Contractor is an incorporated company, the declaration must be made by the President, Vice-President, Secretary Treasurer or a Director. If any other person makes the declaration, two copies of the by-law issued under the corporate seal, authorizing the individual to execute documents must be submitted with the first declaration of each contract.
3. Where the Contractor is an individual, that person must make the declaration. Where the Contractor is a partnership the declaration must be made by one of the partners.
4. If this declaration is not complete in every detail, it will be returned for completion and payment will be delayed.
5. The following sections of the *Criminal Code*, RSC 1985, c C-46 are hereby brought to the attention of the Declarant:

Section 122: Everyone who, not being a witness in a judicial proceeding but being permitted, authorized or required by law to make a statement by affidavit, by solemn declaration or orally under oath, makes in such statement, before a person who is authorized by law to permit it to be made before him, an assertion with respect to a matter of fact, opinion, belief or knowledge, knowing that the assertion is false, is guilty of an offense and is liable to imprisonment for fourteen years.

Section 122.1 (1): Everyone who, not being specially permitted, authorized or required by law to make a statement by affidavit, by solemn declaration or orally under oath, makes in such a statement, before a person who is authorized by law to permit it to be made before him, an assertion with respect to a matter of fact, opinion, belief or knowledge, knowing that the assertion is false, is guilty of an offense punishable on summary conviction.



**Schedule of Local, Inuit and Nunavut Values**  
**(As per General Condition 52.2)**

Community & Government Services

Name of Contractor/SubContractor/Supplier:	Project Title:	Location:
Start Up Date:		

	April			May			June			July			August			September		
	Local	Inuit	Nunavut	Local	Inuit	Nunavut	Local	Inuit	Nunavut	Local	Inuit	Nunavut	Local	Inuit	Nunavut	Local	Inuit	Nunavut
Labour																		
Other																		
Total																		

	October			November			December			January			February			March		
	Local	Inuit	Nunavut	Local	Inuit	Nunavut	Local	Inuit	Nunavut	Local	Inuit	Nunavut	Local	Inuit	Nunavut	Local	Inuit	Nunavut
Labour																		
Other																		
Total																		

Construction Year _____ / _____				<p><b>Notes:</b> This form will be given to the Contractor at the Pre-Construction meeting.</p> <p>The Owner requires the anticipated total monthly value of all Local, Inuit and Nunavut labour and Other content to provide a benchmark for compliance. This information is to be submitted prior to release of the first payment. "Other" means Goods &amp; Services excluding Labour.</p> <p>The total of all monthly estimates should equal the total value shown on the submitted Appendix B-2 forms. Failure to meet Appendix B-2 Local, Inuit and Nunavut expenditures may result in penalties as stated in General Condition 55. Also refer to GC55 for allowable revisions to Inuit, Nunavut, Local and Other Content.</p>
Totals	Local	Inuit	Nunavut	
Labour				
Other				
Total				

## GENERAL CONDITIONS

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## GENERAL CONDITIONS

### GC1 INTERPRETATION

- 1.1 The following Definitions shall apply to all Contract Documents
- 1.1.1 “**Certificate of Completion**” means the certificate issued in accordance with GC42.1;
  - 1.1.2 “**Certificate of Substantial Completion**” means the certificate issued in accordance with GC42.2;
  - 1.1.3 “**Contract**” is the undertaking by the parties to this agreement to perform their respective duties, responsibilities and obligations as prescribed in the Contract Documents and represents the entire agreement between the parties;
  - 1.1.4 “**Contract Documents**” means all of those documents listed in Appendix A of the Tender and Article A1.1 of the Articles of Agreement;
  - 1.1.5 “**Contract Price**” is the amount stipulated in A3 of the Articles of the Agreement;
  - 1.1.6 “**Contract Security**” means any security given by the Contractor to the Owner in accordance with the Contract;
  - 1.1.7 “**Contractor**” is the person or entity identified as such in the Contract. The term Contractor may also include the Contractor’s Representative;
  - 1.1.8 “**Contractor’s Representative**” means the Person designated at A1.3 of the Articles of Agreement;
  - 1.1.9 “**Effective Date**” means the date specified in the Articles of Agreement;
  - 1.1.10 “**Engineer**” means the person designated by the Owner as the Owner’s Representative pursuant to the Articles of Agreement and includes his or her designate;
  - 1.1.11 “**Material**” includes all commodities, articles and things required to be furnished by or for the Contractor under the Contract for incorporation into the work;
  - 1.1.12 “**NNI Policy**” means *Nangminiqagtunik Ikajuuti* which came into effect for the territory of Nunavut on April 1, 2000;
  - 1.1.13 “**Owner**” means the Government of Nunavut;
  - 1.1.14 “**Owner’s Representative**” means the Person designated at A1.2 of the Articles of Agreement;
  - 1.1.15 “**Person**” includes, unless the context otherwise requires, an individual, a partnership, sole proprietorship, firm, joint venture, consortium and a corporation;
  - 1.1.16 “**Plant**” includes all animals, tools, implements, machinery, vehicles, buildings, structures, equipment and commodities, articles and things other than Material, that are necessary for the due performance of the Contract;
  - 1.1.17 “**Project**” means the total undertaking contemplated by the Owner of which the Work may be the whole or a part;
  - 1.1.18 “**Specifications**” are that portion of the Contract Document, wherever located and whenever issued, consisting of the written requirements and standards for products, systems, workmanship, quality, and the services necessary for the performance of the Work;
  - 1.1.19 “**Subcontractor**” means a person to whom the Contractor has, subject to GC4, subcontracted the whole or any part of the Work.

- 1.1.20 “**Substantial Completion**” as defined in the lien legislation applicable to the place of work. If such legislation is not in force, is not applicable or does not contain such definition, Substantial Completion shall have been reached when Work is ready for use or is being used for the purpose intended and is so certified by the Consultant pursuant to GC 42.2.
- 1.1.21 “**Substantial Performance**” as defined in the lien legislation applicable to the place of work. If such legislation is not in force, is not applicable or does not contain such definition, substantial performance shall have been reached when Work is ready for use or is being used for the purpose intended and is so certified by the Engineer;
- 1.1.22 “**Superintendent**” means the employee of the Contractor who is designated by the Contractor to act pursuant to GC17;
- 1.1.23 “**Tender**” means the Contractor’s bid in response to the Owners request for tenders, wherein the Contractor offered its services to complete the Work; and
- 1.1.24 “**Work**” includes, subject only to any express stipulation in the Contract to the contrary, everything that is necessary to be done, furnished or delivered by the Contractor to perform the Contract.
- 1.2 The division into sections, the table of contents, and the headings in the Contract Documents, other than in the plans and Specifications, form no part of the Contract but are inserted for convenience of reference only.
- 1.3 In interpreting the Contract, in the event of discrepancies or conflicts between anything in the plans and Specifications and the General Conditions, the General Conditions govern.
- 1.4 In interpreting the plans and Specifications, in the event of discrepancies or conflicts between:
- 1.4.1 The plans and Specifications, the Specifications govern;
- 1.4.2 The various plans, the plans drawn with the largest scale govern, and
- 1.4.3 Figured dimensions and scaled dimensions, the figured dimensions govern.
- 1.5 Where reference is made to a part of the Contract by means of numbers preceded by letters, the reference shall be construed to be a reference to the particular part of the Contract that is identified by that combination of letters and numbers and to any other part of the Contract referred to therein.
- 1.6 Any reference to a statutory provision shall include any subordinate legislation made and from time-to-time amended, extended or re-enacted.
- 1.7 This Contract shall be governed by and construed in accordance with the laws of Nunavut and the laws of Canada as applicable therein.
- 1.8 Unless otherwise indicated, all dollar amounts referred to in the Contract are in lawful money of Canada.
- 1.9 If any provision of this Contract is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision and everything else in this Contract shall continue in full force and effect. In the event any provision of this Contract, as amended from time to time, shall be deemed invalid or void, in whole or in part, by any court of competent jurisdiction, the remaining terms and provisions of this Contract shall remain in full force and effect.

- 1.10 Failure by either party to exercise any of its rights, powers or remedies hereunder or its delay to do so shall not constitute a waiver of those rights, powers or remedies. The single or partial exercise of a right, power or remedy shall not prevent its subsequent exercise or the exercise of any other right, power or remedy.
- 1.11 The Contractor shall comply, and shall require its Subcontractors to comply, with all applicable laws, orders, rules and regulations; and, without limiting the generality of the foregoing, the Contractor shall at its sole expense comply with all unemployment insurance, Worker's Safety and Compensation, income tax, payroll tax, Canada Pension Plan, Nunavut Safety Acts, Asbestos Safety Regulations, WSCC Asbestos Abatement Codes of Practice, WSCC Hazardous Assessment Codes of Practice, and occupational health and safety legislation/regulations applicable to Nunavut.

## **GC2 SUCCESSORS AND ASSIGNS**

- 2.1 The Contract shall inure to the benefit of and be binding upon the parties hereto and their lawful heirs, executors, administrators, successors and assigns.

## **GC3 ASSIGNMENT OF CONTRACT**

- 3.1 The Contract may not be assigned by the Contractor, either in whole or in part without the prior written consent of the Owner.

## **GC4 SUBCONTRACTING BY CONTRACTOR**

- 4.1 Subject to this General Condition, the Contractor may subcontract any part of the Work so long as such subcontracting is consistent with the information provided on Appendix B-1 and B-2 of the Tender.
- 4.2 The Contractor shall notify the Engineer of its intention to subcontract.
- 4.3 A notification referred to in GC4.2 shall identify the part of the Work, and the Subcontractor with whom it is intended to subcontract. The Contractor shall invite Nunavut, Inuit and/or local companies to bid on subcontracts where the Contractor is not already using Nunavut, Inuit and/or local companies as subcontractors.
- 4.4 The Engineer may, within six (6) days of receipt of a notification referred to in GC4.2, object to the proposed subcontracting.
- 4.5 If the Engineer objects to a subcontracting pursuant to GC4.4, the Contractor shall not enter into the proposed subcontract.
- 4.6 The Contractor shall not, without the written consent of the Owner, change a Subcontractor who has been engaged by him in accordance with this Contract and the Tender. If any changes are made without the Engineer's consent, the Contract may be terminated at the sole option of the Owner.
- 4.7 Every subcontract entered into by the Contractor shall incorporate by reference all of the terms and conditions contained in the Contract Documents that are of general application.
- 4.8 In the event of subcontracting, despite the Engineer's consent being obtained, the Contractor shall not be relieved of any of its obligations under the Contract, nor shall the subcontracting impose any liability upon the Owner.

## **GC5 AMENDMENTS**

- 5.1 No amendment or change in any of the provisions of the Contract shall have any force or effect unless it is reduced to writing and signed by the parties.

## **GC6 NO IMPLIED OBLIGATIONS**

- 6.1 No implied terms or obligations of any kind by or on behalf of the Owner shall arise from anything in the Contract and the express covenants and agreements therein contained and made by the Owner are the only covenants and agreements upon which any rights against the Owner are to be founded.
- 6.2 The Contract supersedes all communications, negotiations and agreements, either written or oral, relating to the Work that was made prior to the date of the Contract.

## **GC7 TIME OF ESSENCE**

- 7.1 Time is of the essence in this Contract.

## **GC8 INDEMNIFICATION BY CONTRACTOR**

- 8.1 The Contractor shall indemnify and save the Owner harmless from and against all claims, demands, losses, damages, actions, suits or proceedings by whomever made, brought or prosecuted and in any manner based upon, arising out of, related to, occasioned by or attributable to the activities of the Contractor, his servants, agents, and Subcontractors in performing the Work including an infringement or an alleged infringement of patent of invention or any kind of intellectual property.
- 8.2 For the purposes of GC8.1, “activities” includes, but is not limited to, any act improperly carried out, any omission to carry out an act and any delay in carrying out an act.

## **GC9 NOTICES TO CONTRACTOR**

- 9.1 Notices for the purposes of GC35, GC37 and GC38 shall be in writing and shall be given as follows:
- 9.1.1 By delivering the notice to the Contractor in person or, if the Contractor is a partnership, firm, joint venture consortium or corporation, to a senior administrative or executive officer thereof; or
- 9.1.2 By mailing the notice to the Contractor at his address as set out in the Articles of Agreement.
- 9.2 A notice referred to in GC9.1 shall be deemed to have been received by the Contractor:
- 9.2.1 On the day that it was delivered, if it was delivered pursuant to the requirements of GC9.1.1; or
- 9.2.2 On the earlier of either the day that it was received by the Contractor or the fifteenth day after it was mailed, if it was sent by mail pursuant to GC9.1.2,
- 9.3 Any notice, consent, order, direction, decision, or other communication, other than a notice referred to in GC9.1, that may be given to the Contractor pursuant to the Contract may be given in any manner, but if it is in writing it shall be deemed to have been received by the Contractor



on:

- 9.3.1 The day that it was delivered to the Superintendent; or
  - 9.3.2 The fifteenth (15<sup>th</sup>) day after it was mailed to the Contractor at its address set out in the Articles of Agreement.
- 9.4 Where the postal service is disrupted by a strike, a notice, consent, order, direction, decision or other communication may be given to the Contractor by facsimile and shall be deemed to have been received by the Contractor twenty-four (24) hours after it was transmitted.

#### **GC10 MATERIAL, PLANT AND REAL PROPERTY SUPPLIED BY THE OWNER**

- 10.1 Subject to GC10.2, the Contractor is liable to the Owner for any loss or damage to Material, Plant or real property that is supplied or placed in the care, custody and control of the Contractor by the Owner for use in connection with the Contract, whether or not that loss or damage is attributable to causes beyond the Contractor's control.
- 10.2 The Contractor is not liable to the Owner for any loss or damage to Material, Plant or real property referred to in GC10.1, if the loss or damage results from and is directly attributable to reasonable wear and tear.
- 10.3 The Contractor shall not use any Material, Plant or real property referred to in GC10.1 except for the purpose of performing this Contract.
- 10.4 When the Contractor fails to make good any loss or damage for which he is liable under GC10.1 within a reasonable time after being required to so by the Engineer, the Engineer may cause the loss or damage to be made good at the Contractor's expense, and the Contractor shall thereupon be liable to the Owner for the cost thereof and shall, on demand, pay to the Owner an amount equal to that cost.
- 10.5 The Contractor shall keep such records of all Material, Plant and real property referred to in GC10.1 as the Engineer from time to time requires, and shall satisfy the Engineer, when requested, that such Material, Plant and real property are at the place and in the condition, which they ought to be.

#### **GC11 MATERIAL, PLANT AND REAL PROPERTY BECOME THE PROPERTY OF THE OWNER**

- 11.1 All Material and Plant and the interest of the Contractor in all real property, licenses, powers and privileges acquired, used or provided by him for the Contract shall, from the time of their acquisition, use or provision, be the property of the Owner for the purposes of the Work and shall continue to be the property of the Owner until:
  - 11.1.1 In the case of Material, the Engineer indicates that he is satisfied that the Material will not be required for the Work; and
  - 11.1.2 In the case of Plant, real property, licenses, powers and privileges, the Engineer indicates that he is satisfied that the interest vested in the Owner therein is no longer required for the purposes of the Work.
- 11.2 Without the written consent of the Engineer, Material or Plant that is the property of the Owner by virtue of GC11.1 shall not be taken away from the work site or used or disposed of except for the purposes of the Work.

- 11.3 The Owner is not liable for loss of or damage from any cause to the Material or Plant referred to in GC11.1. The Contractor is liable for such loss or damage, notwithstanding that the Material or Plant is the property of the Owner

## **GC12 MUNICIPAL PERMITS**

- 12.1 The Contractor shall, within thirty (30) days after the Effective Date, tender to the municipal authority an amount equal to all fees and charges that would be lawfully payable to that municipal authority in respect of all building permits (the “**Building Permit Tender Amount**”), as if the Work were being performed for a person other than the Owner.
- 12.2 Within ten (10) days of tendering the Building Permit Tender Amount pursuant to GC12.1, the Contractor shall notify the Engineer of his action and of the amount tendered and whether or not the municipal authority has accepted that amount.
- 12.3 If the municipal authority does not accept the Building Permit Tender Amount, the Contractor shall pay the Building Permit Tender Amount to the Owner within six (6) days after the date stipulated in GC12.2.
- 12.4 For the purposes of GC12.1, to GC12.3, “municipal authority” means any authority that would have jurisdiction respecting permission to perform the Work if the owner were not the Owner.

## **GC13 PERFORMANCE OF WORK UNDER DIRECTION OF ENGINEER**

- 13.1 The Contractor shall:
- 13.1.1 Permit the Engineer to have access to the Work and the work site at all times during the performance of the Contract;
  - 13.1.2 Furnish the Engineer with such information respecting the performance of the Contract as he may require; and
  - 13.1.3 Give the Engineer every possible assistance to enable the Engineer to carry out his duty to see that the Work is performed in accordance with the Contract, and to carry out any other duties and exercise any powers specially imposed or conferred on the Engineer under the Contract.

## **GC14 COOPERATION WITH OTHER CONTRACTORS**

- 14.1 Where, in the opinion of the Engineer, it is necessary that other contractors or workers with or without Plant and Material, be sent onto the Work or its site, the Contractor shall, to the satisfaction of the Engineer, allow the other contractors or workers to access the site and the Contractor shall cooperate with them in the carrying out of their duties and obligations.
- 14.2 The Owner shall pay the Contractor the cost calculated in accordance with GC46 and GC47, for the extra labour, Plant and Material that was necessarily incurred by the other contractors or workers if:
- 14.2.1 The work of the other contractors or workers pursuant to GC14.1 could not have been reasonably foreseen or anticipated by the Contractor when submitting its Tender;
  - 14.2.2 The Contractor incurs, in the opinion of the Engineer, extra expense in complying with GC14.1; and

- 14.2.3 The Contractor has given the Engineer written notice of his claim for the extra expense referred to in GC14.2.2 within ten (10) days of the date that the other contractors or workers were sent onto the Work or its site.

## **GC15 EXAMINATION OF WORK**

- 15.1 If, at any time after the commencement of the Work but prior to the expiry of the warranty period, the Engineer has reason to believe that the Work or any part thereof has not been performed in accordance with the Contract, the Engineer may have that Work examined by an expert of his choice.
- 15.2 If, as a result of an examination of the Work referred to in GC15.1, it is established that the Work was not performed in accordance with the Contract, then, in addition to and without limiting or otherwise affecting any of the Owner's rights and remedies under the Contract either at law or in equity, the Contractor shall pay the Owner, on demand, all reasonable costs and expenses that were incurred by the Owner for the examination.

## **GC16 CLEARING OF SITE**

- 16.1 The Contractor shall maintain the Work and its site in a tidy condition and free from the accumulation of waste material and debris, and in accordance with any directions of the Engineer.
- 16.2 Before the issue of a Certificate of Substantial Completion referred to in GC42.2, the Contractor shall remove all the Plant and Material not required for the performance of the remaining Work, and all waste material and other debris, and shall cause the Work and its site to be clean and suitable for occupancy or use by the Owner's servants, unless otherwise stipulated in the Contract. The Contractor shall, as directed by the Owner, take down all signs erected during construction.
- 16.3 Before the issue of a Certificate of Completion referred to in GC42.1, the Contractor shall remove from the Work and its site all surplus Plant and Material, and any waste material and other debris.
- 16.4 The Contractor's obligations described in GC16.1 to GC16.3 do not extend to waste material and other debris caused by the Owner's servants or contractors and other contractors or workers referred to in GC14.1.

## **GC17 CONTRACTOR'S SUPERINTENDENT**

- 17.1 The Contractor shall, forthwith upon the award of the Contract, designate a Superintendent.
- 17.2 The Contractor shall forthwith notify the Engineer of the name, address and telephone number of a Superintendent designated pursuant to GC17.1.
- 17.3 A Superintendent designated pursuant to GC17.1 shall be in full charge of the Work site and the operations of the Contractor, his servants, agents, and Subcontractors in the performance of the Work and is authorized to accept any notice, consent, order, direction, decision or other communication on behalf of the Contractor that may be given to the Superintendent under the Contract.
- 17.4 The Contractor shall, until the Work has been completed, keep a competent Superintendent at the Work site at all times during working hours.

- 17.5 The Contractor shall, upon the request of the Engineer, remove any Superintendent who, in the opinion of the Engineer, is incompetent or has been conducting himself improperly and shall forthwith designate another Superintendent who is acceptable to the Engineer.
- 17.6 Subject to GC17.5, the Contractor shall not substitute a Superintendent without the written consent of the Engineer.
- 17.7 A breach by the Contractor of GC17.6 entitles the Engineer to refuse to issue any certificate referred to in GC42 until the Superintendent has returned to the Work site or another Superintendent who is acceptable to the Engineer has been substituted.

#### **GC18 NATIONAL SECURITY**

- 18.1 If the Owner is of the opinion that the Work is of a class or kind that involves the national security, he may order the Contractor to:
- 18.1.1 Provide the Owner with any information concerning Persons employed or to be employed by the Contractor for purposes of the Contract; and
- 18.1.2 Remove any Person from the Work and its site if, in the opinion of the Owner, that Person may be a risk to the national security.
- 18.2 The Contractor shall, in all contracts with Persons who are to be employed in the performance of the Contract, include provisions in said contracts to ensure that the Contractor performs any and all of the obligations that may be imposed upon him under GC17 to GC19.
- 18.3 The Contractor shall comply with an order of the Owner under GC18.1.

#### **GC19 UNSUITABLE WORKERS**

- 19.1 The Contractor shall, upon the request of the Engineer, remove any Person employed by him for purposes of the Contract who, in the opinion of the Engineer, is incompetent or has conducted himself improperly, and the Contractor shall not permit a Person who has been removed to return to the Work site.

#### **GC20 INCREASED OR DECREASED COSTS**

- 20.1 The Contract Price shall not be increased or decreased by reason of any increase or decrease in the cost of the Work that is caused by an increase or decrease in the cost of labour, Plant or Material or the wage rates set out in or prescribed pursuant to the labour conditions.
- 20.2 Notwithstanding GC20.1 and GC33, the Contract Price shall be adjusted in the manner provided in GC20.3, if any change in the cost of Materials is due to:
- 20.2.1 A change in the taxes imposed under the *Excise Act*, RSC 1985, c E-14, the *Excise Tax Act*, RSC 1985, c E-15, the *Old Age Security Act*, RSC 1985, c O-9, the *Customs Act*, RSC 1985, c1(2nd Supp) or the *Customs Tariff Act*; SC 1997, c36;
- 20.2.2 Occurs after the date of the submission by the Contractor of his Tender for the Contract; and
- 20.2.3 Affects the cost to the Contractor of Materials.

- 20.3 If a change referred to in GC20.2 occurs, the appropriate amount set out in the Articles of Agreement shall be increased or decreased by an amount equal to the amount that is established by an examination of the relevant records of the Contractor referred to in GC46 to be the increase or decrease in the cost incurred that is directly attributable to that change.
- 20.4 For the purpose of GC20.2, where a tax is changed after the date of submission of the Tender but public notice of the change has been given before that date of submission, the change shall be deemed to have occurred before the date of submission of the Tender.

## **GC21 PROTECTION OF WORK AND DOCUMENTS**

- 21.1 The Contractor shall guard or otherwise protect the Work and its site, and protect the Contract, Specifications, plans, information, Material, Plant and real property, whether or not they are supplied by the Owner to the Contractor, against loss or damage from any cause, and he shall not use, issue, disclose or dispose of them without the written consent of the Owner, except as may be essential for the performance of the Work.
- 21.2 If any document or information given or disclosed to the Contractor is assigned a security rating by the Person who gave or disclosed it, the Contractor shall take all measures directed by the Engineer to be taken to ensure the maintenance of the degree of security that is ascribed to that rating.
- 21.3 The Contractor shall provide all facilities necessary for the purpose of maintaining security, and shall assist any Person authorized by the Owner to inspect or to take security measures in respect of the Work and its site.
- 21.4 The Engineer may direct the Contractor to do such things and to perform such additional Work, at no additional cost to the Owner, as the Engineer considers reasonable and necessary to ensure compliance with or to remedy a breach of GC21.1 to GC21.3.

## **GC22 PUBLIC CEREMONIES AND SIGNS**

- 22.1 The Contractor shall not permit any public ceremony in connection with the Work without the prior consent of the Owner.
- 22.2 The Contractor shall not erect or permit the erection of any sign or advertising of the Work on its site without the prior written consent of the Engineer.

## **GC23 PRECAUTIONS AGAINST DAMAGE, INFRINGEMENT OF RIGHTS, FIRE AND OTHER HAZARDS**

- 23.1 The Contractor shall, at his own expense, do whatever is necessary to ensure that:
- 23.1.1 No person, property, right, easement or privilege is injured, damaged or infringed by reason of the Contractor's activities in performing the Contract;
- 23.1.2 Pedestrian and other traffic on any public or private road or waterway is not unduly impeded, interrupted or endangered by the performance or existence of the Work or Plant;
- 23.1.3 Fire hazards in or about the Work or its site are eliminated and, subject to any direction that may be given by the Engineer, any fire is promptly extinguished;
- 23.1.4 The health and safety of all Persons employed in the performance of the Work is not endangered by the method or means of its performance;

- 23.1.5 Adequate medical services are available to all persons employed on the Work or its site at all times during the performance of the Work;
- 23.1.6 Adequate sanitation measures are taken in respect of the Work and its site; and
- 23.1.7 All stakes, buoys and marks placed on the Work or its site by or under the authority of the Engineer are protected and are not removed, defaced, altered or destroyed.

Without limiting any of the foregoing, the Contractor shall take all actions required or necessary to ensure compliance by all Persons employed in the performance of the Work or at the site of the Work, including the employees of the Contractor and Subcontractors and their employees, with the *Consolidation of Safety Act*, R.S.N.W.T. 1988, c.S-1 and any regulations thereunder.

- 23.2 The Engineer may direct the Contractor to do such things and to perform such additional Work as the Engineer considers reasonable and necessary to ensure compliance with or to remedy a breach of GC23.1.
- 23.3 The Contractor shall, at his own expense, comply with a direction of the Engineer made under GC23.2.

#### **GC24 TOXIC AND HAZARDOUS SUBSTANCES**

- 24.1 For the purposes of applicable legislation related to toxic and hazardous substances, the Owner shall be deemed to have control and management of the Work site with respect to existing conditions.
- 24.2 If the Contractor:
  - 24.2.1 Encounters toxic or hazardous substances at the Work site, or
  - 24.2.2 Has reasonable grounds, including disclosure by the Owner, to believe that toxic or hazardous substances are present at the Work site, which were not brought to the Work site by the Contractor or anyone for whom the Contractor is responsible

The Contractor shall:

- 24.2.3 Comply with all applicable safety and hazardous material legislation including but not limited to Nunavut Safety Acts, Asbestos Safety Regulations, WSCC Asbestos Abatement Codes of Practice, WSCC Hazardous Assessment Codes of Practice, and occupational health and safety legislation/regulations applicable to Nunavut;
  - 24.2.4 Make all reports required by those legislations, regulations, rules and guidelines;
  - 24.2.5 Take all reasonable steps, including stopping the Work, to ensure that no Person's exposure to any toxic or hazardous substances exceeds any applicable time weighted levels prescribed by applicable legislation at the Work site; and
  - 24.2.6 Shall immediately report the circumstances to the Consultant and the Owner, in writing.
- 24.3 If the Owner and Contractor do not agree on the existence, significance of, or whether the toxic or hazardous substances were brought onto the Work site by the Contractor or anyone for whom the Contractor is responsible, the Owner shall retain and pay for an independent qualified expert to investigate and assess and recommend such matters (the "**Expert**"). The Expert's report shall be delivered to the Owner and the Contractor.

- 24.4 If the Owner and Contractor agree or if the Expert assess and recommends that the toxic or hazardous substances were not brought onto the Work site by the Contractor or anyone for whom the Contractor is responsible, the Owner shall, at the Owner's own expense, promptly:
- 24.4.1 Take all necessary steps, in accordance with applicable legislation in force at the Work site, to safely remove and dispose the toxic or hazardous substances;
  - 24.4.2 Reimburse the Contractor for the costs of all steps taken pursuant to hiring the Expert; and
  - 24.4.3 Extend the Contract time for such reasonable time as the Consultant may recommend in consultation with the Contractor and the Expert and reimburse the Contractor for reasonable costs incurred as a result of the delay.
- 24.5 If the Owner and Contractor agree or if the Expert assess and recommends that the toxic or hazardous substances were brought onto the Work site by the Contractor or anyone for whom the Contractor is responsible, the Contractor shall, at the Contractor's own expense, promptly:
- 24.5.1 Take all necessary steps, in accordance with applicable legislation in force at the Work site, to safely remove and dispose the toxic or hazardous substances;
  - 24.5.2 Make good any damage to the Work, the Owner's property or property adjacent to the place of the Work;
  - 24.5.3 Reimburse the Owner for reasonable costs incurred pursuant to hiring the Expert; and
  - 24.5.4 Indemnify the Owner as required by GC 24.4.2.
- 24.6 If either party does not accept the Expert's findings, the disagreement shall be settled in accordance with GC62. If such disagreement is not resolved promptly, the parties shall act immediately in accordance with the Expert's determination and take the steps required in this GC24.4, it being understood that by so doing, neither party will jeopardize any claim that party may have to be reimbursed as provided herein.

## **GC25 INSURANCE**

- 25.1 The Contractor shall, at his own expense, maintain insurance contracts in respect of the Work that are:
- 25.1.1 With insurance companies approved by the Owner. The insurance companies must comply with the *Insurance Act*, RSNWT (Nu) 1988, c I-4; and
  - 25.1.2 In a form, of the nature, in the amounts, for the periods and containing the terms and conditions, if any, specified in GC55, GC56, GC57, GC58 and GC59.

## **GC26 INSURANCE PROCEEDS**

- 26.1 If the Work or any part thereof is lost, damaged or destroyed and monies are paid to the Owner in respect of that loss, damage or destruction under an insurance contract maintained by the Contractor pursuant to GC25, the monies shall be held by the Owner for the purposes of the Contract.
- 26.2 The Owner may elect to retain the monies referred to in GC26.1 and in that event the monies belong to the Owner absolutely.

- 26.3 If an election is made pursuant to GC26.2, the Owner may cause an audit to be made of the accounts of the Contractor and of the Owner in respect of the part of the Work that was lost, damaged or destroyed for the purpose of establishing the difference, if any, between the aggregate of:
- 26.3.1 The amount of the loss or damage suffered or sustained by the Owner, including any costs incurred in respect of the clearing and cleaning of the Work and its site and any other amount that is payable by the Contractor to the Owner under the Contract, minus any monies retained pursuant to GC26.2; and
  - 26.3.2 The amounts payable by the Owner to the Contractor pursuant to the Contract up to the date of the loss or damage.
- 26.4 The difference that is established pursuant to GC26.3 shall be paid forthwith by the party who is determined by the audit to be the debtor to the party who is determined by the audit to be the creditor.
- 26.5 When payment of a deficiency has been made pursuant to GC26.4, all rights and obligations of the Owner and the Contractor under the Contract shall, with respect only to the part of the Work that was the subject of the audit referred to in GC26.3, be deemed to have been expended and discharged.
- 26.6 If an election is not made pursuant to GC26.2, the Contractor shall, subject to GC26.7, clear and clean the Work and its site and restore and replace the part of the Work that was lost, damaged or destroyed at his own expense as if that part of the Work had not yet been performed.
- 26.7 When the Contractor clears and cleans the work and its site and restores and replaces the Work referred to in GC26.6, the Owner shall pay him out of the monies referred to in GC26.1 so far as they will thereunto extend.
- 26.8 Subject to GC26.7, payment to the Owner pursuant to GC26.7 shall be made in accordance with the Contract but the amount of each payment shall be 100% of the amount claimed notwithstanding TP4.4.1 and TP4.4.2.

## **GC27 CONTRACT SECURITY**

- 27.1 The Contractor shall obtain and deliver Contract Security to the Engineer in accordance with the provisions of GC53 and GC54.
- 27.2 If the whole or a part of the Contract Security referred to in GC27.1 is in the form of a security deposit, it shall be held and disposed of in accordance with GC41 and GC43.
- 27.3 If a part of the Contract Security referred to in GC27.1 is in the form of a labour and material payment bond, the Contractor shall post a copy of that bond on the work site.

## **GC28 CHANGES IN THE WORK**

- 28.1 Subject to GC5, the Engineer may, at any time before he issues the Certificate of Completion:
- 28.1.1 Order work or Material in addition to that provided for in the plans and Specifications; and
  - 28.1.2 Dispense with or change the dimensions, character, quantity, quality, description, location or position of the whole or any part of the Work or Material provided for in the plans and



Specifications or in any order made pursuant to GC28.1.1, if that additional work or material dispensation, or change is, in his opinion, consistent with the general intent of the original Contract.

- 28.2 The Contractor shall perform the Work in accordance with such order, dispensations and changes that are made by the Engineer pursuant to GC28.1 from time to time, as if they had appeared in and been part of the original plans and Specifications.
- 28.3 The Engineer shall determine whether or not anything done or omitted by the Contractor pursuant to an order, dispensation or change referred to in GC28.1 increased or decreased the cost of the Work to the Contractor.
- 28.4 If the Engineer determines pursuant to GC28.3 that the cost of the Work to the Contractor has been increased, the Owner shall pay the Contractor the increased cost of the labour, Plant and Material that he necessarily incurred, calculated in accordance with GC46 and GC47.
- 28.5 If the Engineer determines pursuant to GC28.3 that the cost of the Work to the Contractor has been decreased, the Owner may reduce the amount payable to the Contractor under the Contract by an amount equal to the decrease in the cost of the labour, Plant and Material that was incurred calculated in accordance with GC46 and GC47.
- 28.6 An order, dispensation or change referred to in GC28.1 shall be in writing, signed by the Engineer and given to the Contractor in accordance with GC9.

## **GC29 INTERPRETATION OF CONTRACT BY ENGINEER**

29.1 If, at any time before the Engineer has issued a Certificate of Completion referred to in GC42.1, any question arises between the parties about whether anything has been done as required by the Contract or about what the Contractor is required by the Contract to do, and, in particular but without limiting the generality of the foregoing, about:

- 29.1.1 The meaning of anything in the plans and Specifications;
- 29.1.2 The meaning to be given to the plans and Specifications in case of any error therein, omission therefrom, or obscurity or discrepancy in their wording or intention;
- 29.1.3 Whether or not the quality or quantity of any Material or workmanship supplied or proposed to be supplied by the Contractor meets the requirements of the Contract;
- 29.1.4 Whether or not the labour, Plant or Material provided by the Contractor for performing the Work and carrying out the Contract are adequate to ensure that the Work will be performed in accordance with the Contract and that the Contract will be carried out in accordance with its terms;
- 29.1.5 What quantity of any kind of Work has been completed by the Contractor; or
- 29.1.6 The timing and scheduling of the various phases of the performance of the Work;

The question shall be decided by the Engineer whose decision shall be final and conclusive in respect of the Work.

29.2 The Contractor shall perform the Work in accordance with any decisions of the Engineer that are made under GC29.1 and in accordance with any consequential directions given by the Engineer.

### **GC30 WARRANTY AND RECTIFICATION OF DEFECTS IN WORK**

- 30.1 Without restricting any warranty or guarantee implied or imposed by law or contained in the Contract Documents, the Contractor shall, at his own expense, rectify and make good any defect or fault that appears in the Work or comes to the attention of the Owner within twelve (12) months from the date of the Certificate of Substantial Completion referred to in GC42.2.
- 30.2 The Engineer may direct the Contractor to rectify and make good any defect or fault referred to in GC30.1 or covered by any other expressed or implied warranty or guarantee.
- 30.3 A direction referred to in GC30.2 shall be in writing, may include a stipulation in respect of the time within which a defect or fault is required to be rectified and made good by the Contractor, and shall be given to the Contractor in accordance with GC9.
- 30.4 The Contractor shall rectify and make good any defect or fault described in a direction given pursuant to GC30.2 within the time stipulated therein.

### **GC31 NON-COMPLIANCE BY CONTRACTOR**

- 31.1 If the Contractor fails to comply with any decision or direction given by the Engineer pursuant to GC16, GC21, GC23, GC29 or GC30, the Engineer may employ such methods as he deems advisable to do that which the Contractor failed to do.
- 31.2 The Contractor shall, on demand, pay the Owner an amount that is equal to the aggregate of all costs, expenses and damage incurred or sustained by the Owner by reason of the Contractor's failure to comply with any decision or direction referred to in GC31.1, including the cost of any methods employed by the Engineer pursuant to GC31.1.

### **GC32 PROTESTING ENGINEER'S DECISIONS**

- 32.1 The Contractor may, within ten (10) days after the communication to him of any decision or direction referred to in GC31.1, protest that decision or direction. After the ten (10) days has elapsed, the Contractor has no right of protest, unless by agreement of the Owner.
- 32.2 A protest referred to in GC32.1 shall be in writing, contain full reasons for the protest, be signed by the Contractor and be given to the Owner by delivery to the Engineer.
- 32.3 If the Contractor gives a protest pursuant to GC32.2, any compliance by the Contractor with the decision or direction that was protested shall not be construed as an admission by the Contractor of the correctness of that decision or direction, or prevent the Contractor from taking whatever lawful action he considers appropriate in the circumstances.
- 32.4 The giving of a protest by the Contractor pursuant to GC32.2 shall not relieve him from complying with the decision or direction that is the subject of the protest.
- 32.5 Subject to GC32.6, the Contractor shall take any action referred to in GC32.3 within three (3) months after the date that the Certificate of Completion is issued under GC42.1 and not afterwards.
- 32.6 The Contractor shall take any action referred to in GC32.3, resulting from a direction under GC31 within three (3) months after the expiry of a warranty or guarantee period and not afterwards.
- 32.7 Subject to GC32.8, if the Owner determines that the Contractor's protest is justified, the Owner

shall pay the Contractor the cost of the additional labour, Plant and Material necessarily incurred by the Contractor in carrying out the protested decision or direction.

32.8 Costs referred to in GC32.7 shall be calculated in accordance with GC46 and GC47.

### **GC33 CHANGES IN SOIL CONDITIONS AND NEGLECT OR DELAY BY THE OWNER**

33.1 Subject to GC33.2 no payment, other than a payment that is expressly stipulated in the Contract, shall be made by the Owner to the Contractor for any extra expense or any loss or damage incurred or sustained by the Contractor.

33.2 If the Contractor incurs or sustains any extra expense or any loss or damage that is directly attributable to:

33.2.1 A substantial difference between the information relating to soil conditions at the Work site that is contained in the plans and Specifications or other documents supplied to the Contractor for his use in preparing his Tender, or a reasonable assumption of fact based thereon made by the Contractor, and the actual soil conditions encountered by the Contractor at the work site during the performance of the Contract; or

33.2.2 Any neglect or delay that occurs after the Effective Date on the part of the Owner in providing any information or in doing any act that the Contract either expressly requires the Owner to do or that would ordinarily be done by an owner in accordance with the usage of the trade.

The Contractor shall, within ten (10) days of the date that an event described in GC33.2.1 or GC33.2.2 occurred, give the Engineer written notice of the event and of his intention to claim for that extra expense or that loss or damage.

33.3 When the Contractor has given a notice referred to in GC33.2, he shall give the Engineer a written claim for extra expense or loss or damage within thirty (30) days of the date that the Certificate of Completion is issued and not afterwards.

33.4 A written claim referred to in GC33.3 shall contain a sufficient description of the facts and circumstances of the occurrence that is the subject of the claim to enable the Engineer to determine whether or not the claim is justified and the Contractor shall supply such further and other information for that purpose as the Engineer requires from time to time.

33.5 If the Engineer determines that a claim referred to in GC33.3 is justified, the Owner may make an extra payment to the Contractor in an amount that is calculated in accordance with GC46 and GC47.

33.6 If, in the opinion of the Engineer, an occurrence described in GC33.2 results in a saving of expenditure by the Contractor in performing the Contract, the Contract Price shall, subject to the GC33.7, be reduced by an amount that is equal to the saving.

33.7 The amount of the saving referred to GC33.6 shall be determined in accordance with GC46 and GC47.

33.8 If the Contractor fails to give a notice referred to in GC33.2 and a claim referred to in GC33.3 within the times stipulated, an extra payment will not be made to him in respect of the occurrence.

### **GC34 EXTENSION OF TIME**

- 34.1 Subject to GC34.2, the Engineer may, on the application of the Contractor made before the day fixed by the Articles of Agreement for completion of the Work or before any other date previously fixed under this General Condition, extend the time for completion of the Work by fixing a new date, if in his opinion, causes beyond the control of the Contractor have delayed its completion.
- 34.2 An application referred to in GC34.1 shall be accompanied by the written consent of the bonding company whose bond forms part of the Contract Security.

### **GC35 ASSESSMENTS AND DAMAGES FOR LATE COMPLETION**

- 35.1 For the purposes of this General Condition:
- 35.1.1 The Work shall be deemed to be completed on the date that the Substantial Certificate of Completion referred to in GC42.1 is issued; and
- 35.1.2 The phrase “period of delay” means the number of days commencing on the day fixed by the Articles of Agreement for completion of the Work and ending on the day immediately preceding the day on which the Work is completed, but does not include any day within a period of extension granted pursuant to GC34.1, and any other day on which, in the opinion of the Engineer, completion of the Work was delayed for reasons beyond the control of the Contractor.
- 35.2 If the Contractor does not complete the Work by the day fixed for its completion by the Articles of Agreement but completes it thereafter, the Contractor shall pay the Owner an amount equal to the aggregate of:
- 35.2.1 All salaries, wages, and travelling expenses incurred by the Owner in respect of Persons overseeing the performance of the Work during the period of delay;
- 35.2.2 The cost incurred by the Owner as a result of the inability to use the completed Work for the period of delay; and
- 35.2.3 All other expenses and damages incurred or sustained by the Owner during the period of delay as a result of the Work not being completed by the day fixed for its completion.
- 35.3 The Owner may waive its right to the whole or any part of the amount payable by the Contractor pursuant to GC35.2 if, in the opinion of the Owner, it is in the public interest to do so.

### **GC36 TAKING THE WORK OUT OF THE CONTRACTOR’S HANDS**

- 36.1 The Owner may, at its sole discretion, take all or any part of the Work out of the Contractor’s hands, and may employ such means as he sees fit to have the Work completed if the Contractor has:
- 36.1.1 Failed to, within six (6) days after receiving notice given by the Owner or the Engineer in accordance with GC9, remedied any delay in the commencement or any default in the diligent performance of the Work to the satisfaction of the Engineer;
- 36.1.2 Defaulted in the completion of any part of the Work within the time fixed for its completion by the Contract;
- 36.1.3 Become insolvent;

- 36.1.4 Committed an act of bankruptcy;
  - 36.1.5 Advised that it will abandon or will not complete the Work, or has advised that it has abandoned the Work, or has abandoned the Work;
  - 36.1.6 Made an assignment of the Contract without the consent required by GC3.1; or
  - 36.1.7 Otherwise failed to observe or perform any of the provisions of the Contract.
- 36.2 If the whole or any part of the Work is taken out of the Contractor's hands pursuant to GC36.1:
- 36.2.1 The Contractor's right to any further payment that is due or accruing due under the Contract is, subject only to GC36.4, extinguished; and
  - 36.2.2 The Contractor is liable to pay the Owner, upon demand, an amount that is equal to the amount of all loss and damage incurred or sustained by the Owner in respect of the Contractor's failure to complete the Work.
- 36.3 If the whole or any part of the Work that is taken out of the Contractor's hands pursuant to GC36.1 is completed by the Owner, the Engineer shall determine the amount, if any, of a holdback or a progress claim that had accrued and was due prior to the date on which the Work was taken out of the Contractor's hands and that is not required for the purposes of having the Work performed or of compensating the Owner for any other loss or damage incurred or sustained by reason of the Contractor's default.
- 36.4 The Owner may pay the Contractor the amount determined not to be required pursuant to GC36.3.

### **GC37 EFFECT OF TAKING THE WORK OUT OF THE CONTRACTOR'S HANDS**

- 37.1 The taking of the Work or any part thereof out of the Contractor's hands pursuant to GC36 does not operate so as to relieve or discharge the Contractor from any obligation under the Contract or imposed upon him by law, except the obligation to complete the performance of that part of the Work that was taken out of his hands.
- 37.2 If the Work or any part thereof is taken out of the Contractor's hands pursuant to GC36, all Plant and Material and the interest of the Contractor in all real property, licenses, powers and privileges acquired, used or provided by the Contractor under the Contract shall continue to be the property of the Owner without compensation.
- 37.3 When the Engineer certifies that any Plant, Material, or any interest of the Contractor referred to in GC37.2 is no longer required for the purposes of the Work, or that it is not in the interests of the Owner to retain that Plant, Material, or interest, it shall revert to the Contractor.

### **GC38 SUSPENSION OF WORK**

- 38.1 The Owner may, when in its opinion it is advisable to do so, require the Contractor to suspend performance of the Work either for a specified or an unspecified period by giving a notice of suspension to the Contractor in accordance with GC9.
- 38.2 When a notice referred to in GC38.1 is received by the Contractor in accordance with GC9, he shall immediately suspend all operations in respect of the Work except those that, in the opinion of the Engineer, are necessary for the care and preservation of the Work, Plant and Material.
- 38.3 The Contractor shall not, during a period of suspension, remove any part of the Work, Plant or

Material from the work site without the consent of the Engineer.

- 38.4 If a period of suspension is thirty (30) days or less, the Contractor shall, upon the expiration of that period resume the performance of the Work. The Contractor is entitled to be paid by the Owner any extra accrued costs, calculated in accordance with GC46 and GC47, of any labour, Plant and Material necessarily incurred by him as a result of the suspension.
- 38.5 If, upon the expiration of a period of suspension of more than thirty (30) days, the Owner and the Contractor agree that the performance of the Work will be continued by the Contractor, the Contractor shall resume performance of the Work subject to any terms and conditions agreed upon by the Owner and the Contractor. The Contractor is entitled to be paid by the Owner any extra accrued costs, calculated in accordance with GC46 and GC47, of any labour, Plant and Material necessarily incurred by him as a result of the suspension.
- 38.6 If, upon the expiration of a period of suspension of more than thirty (30) days, the Owner and the Contractor do not agree that performance of the Work will be continued by the Contractor or upon the terms and conditions under which the Contractor will continue the Work, the notice of suspension shall be deemed to be a notice of termination pursuant to GC39.

### **GC39 TERMINATION OF CONTRACT**

- 39.1 The Owner may terminate the Contract for convenience at any time by giving a notice of termination to the Contractor in accordance with GC9.
- 39.2 When a notice referred to in GC39.1 is received by the Contractor, he shall, subject to any conditions stipulated in the notice, forthwith cease all operations in performance of the Contract.
- 39.3 If the Contract is terminated pursuant to GC39.1, the Owner shall pay the Contractor, subject to GC39.4, an amount equal to the lesser of:
- 39.3.1 An amount, calculated in accordance with the Terms of Payment, that would have been payable to the Contractor had he completed the Work; and
- 39.3.2 An amount that is determined to be due to the Contractor pursuant to GC46,
- 39.3.3 Less the aggregate of all amounts that were paid to the Contractor by the Owner and all amounts that are due to the Owner from the Contractor pursuant to the Contract.
- 39.4 If the Owner and the Contractor are unable to agree about an amount referred to in GC39.3 that amount shall be determined by the method referred to in GC47.

### **GC40 CLAIMS AGAINST AND OBLIGATIONS OF THE CONTRACTOR OR SUBCONTRACTOR**

- 40.1 The Owner may, in order to discharge lawful obligations of and satisfy lawful claims against the Contractor or a Subcontractor arising out of the performance of the Contract, pay any amount that is due and payable to the Contractor pursuant to the Contract directly to the obligees of and the claimants against the Contractor or Subcontractor.
- 40.2 A payment made pursuant to GC40.1, is to the extent of the payment, a discharge of the Owner's liability to the Contractor under the Contract and may be deducted from an amount payable to the Contractor under the Contract.

- 40.3 To the extent that the circumstances of the Work being performed for the Owner permit, the Contractor shall comply with all laws in force in Nunavut relating to payment periods, mandatory holdbacks, and creation and enforcement of mechanics' liens.
- 40.4 The Contractor shall discharge all his lawful obligations and shall satisfy all lawful claims against him arising out of the performance of the Work at least as often as the Contract requires the Owner to pay the Contractor.
- 40.5 The Contractor shall, whenever requested to do so by the Engineer, make a statutory declaration deposing to the existence and condition of any obligations and claims referred to in GC40.4.
- 40.6 GC40.1 shall only apply to claims and obligations that have been received by the Engineer in writing before payment to the Contractor pursuant to TP4.8 and within one hundred and twenty (120) days after a claimant:
- 40.6.1 Should have been paid in full under his contract with the Contractor or Subcontractor, where the claim is for money that was lawfully required to be held back from the claimant; or
- 41.6.2 Performed the last of the service, work or labour, or furnished the last of the Material pursuant to his contract with the Contractor or Subcontractor, where the claim is not for money referred to in GC40.6.1.
- 40.7 No interest will be paid to the Contractor on any monies withheld pursuant to GC40 due to a Contractor or Subcontractor's claim for non-payment.

#### **GC41 SECURITY DEPOSIT - FORFEITURE OR RETURN**

- 41.1 The Owner may convert the security deposit, if any, to its own use, if:
- 41.1.1 The Work is taken out of the Contractor's hands pursuant to GC36;
- 41.1.2 The Contract is terminated pursuant to GC39; or
- 41.1.3 The Contractor is in breach of or in default under the Contract.
- 41.2 If the Owner converts the security deposit pursuant to GC41.1, the amount realized shall be deemed to be an amount due from the Owner to the Contractor under the Contract.
- 41.3 Any balance of an amount referred to in GC41.2 that remains after payment of all losses, damage and claims of the Owner and others shall be paid by the Owner to the Contractor, if in the opinion of the Engineer, it is not required for the purposes of the Contract.

#### **GC42 ENGINEER'S CERTIFICATES**

- 42.1 On the date that, to the satisfaction of the Engineer, the Work has been completed and the Contractor has complied with the Contract and all orders and directions made pursuant thereto, the Engineer shall issue a Certificate of Completion to the Contractor.
- 42.2 If the Engineer is satisfied that the Work is sufficiently complete to be acceptable for use by the Owner, he may, at any time before he issues a Certificate of Completion, issue a Certificate of Substantial Completion to the Contractor.
- 42.3 A Certificate of Substantial Completion referred to in GC42.2 shall describe the parts of the Work not completed to the satisfaction of the Engineer and all things that must be done by the

Contractor before a Certificate of Completion will be issued.

- 42.4 The Engineer may, in addition to the parts of the Work described in a Certificate of Substantial Completion, require the Contractor to rectify any other parts of the Work not completed to his satisfaction and to do any other things that are necessary for the completion of the Work.

#### **GC43 RETURN OF SECURITY DEPOSIT**

- 43.1 After a Certificate of Substantial Completion has been issued, the Owner shall, if the Contractor is not in breach of or in default under the Contract, return to the Contractor all or any part of the security deposit that, in the opinion of the Engineer, is not required for the purposes of the Contract.
- 43.2 After a Certificate of Completion has been issued, the Owner shall return to the Contractor the remainder of any security deposit, unless the Contract stipulates otherwise.
- 43.3 Interest shall not be paid on security deposits.

#### **GC44 *INTENTIONALLY DELETED***

#### **GC45 *INTENTIONALLY DELETED***

#### **GC46 DETERMINATION OF COST - NEGOTIATION**

- 46.1 The cost of the labour, Plant or Material for the purposes of the Contract shall be the amount agreed upon from time to time by the Contractor and the Engineer.
- 46.2 For the purpose of GC46.1, the Contractor, when requested by the Engineer, shall submit a detailed statement of the cost to him of the labour, Plant and Material referred to in GC46.1 to the Engineer.

#### **GC47 DETERMINATION OF COST - FAILING NEGOTIATION**

- 47.1 If the parties fail for any reason to achieve a determination of the cost of labour, Plant and Material, that cost shall be equal to the aggregate of:
- 47.1.1 All reasonable and proper amounts actually expended or legally payable by the Contractor in respect of the labour, Plant or Material that falls within one of the classes of expenditure described in GC47.2 that are directly attributable to the performance of the Contract, and
- 47.1.2 An allowance for profit and all other expenditures or costs, including overhead, general administration costs, financing and interest charges, and every other cost, charge and expense but not including those referred to in GC47.1.1 or of a class referred to in GC47.2, in an amount that is equal to:
- (a) 10% of the sum of the expenses referred to in GC47.2.1;
- (b) 20% of the sum of the expenses referred to in GC47.2.2 through GC47.2.8
- 47.2 For purposes of GC47.1.1 the classes of expenditure that may be taken into account in determining the cost of labour, Plant and Material are:
- 47.2.1 Payments to Subcontractors;



- 47.2.2 Wages, salaries and travelling expenses of employees of the Contractor while they are actually and properly engaged on the Work, other than wages, salaries, bonuses, living and travelling expenses of personnel of the Contractor generally employed at the head office or at a general office of the Contractor unless they are engaged at the Work site with the approval of the Engineer;
- 47.2.3 Assessments payable under any statutory authority relating to worker's compensation, unemployment insurance, pension plan or holidays with pay;
- 47.2.4 Rent that is paid for Plant or an allowance for depreciation of Plant owned by the Contractor that is necessary for and used in the performance of the Work, if that rent or allowance is reasonable and use of that Plant has been approved by the Engineer;
- 47.2.5 Payments for maintaining and operating Plant that is necessary for and used in the performance of the Work, and payments for effecting such repairs thereto as, in the opinion of the Engineer, are necessary for the proper performance of the Contract other than payments for any repairs to the Plant arising out of defects existing before its allocation to the Work;
- 47.2.6 Payments for Material that is necessary for and incorporated in the Work, or that is necessary for and consumed in the performance of the Contract;
- 47.2.7 Payments for preparation, delivery, handling, erection, installation, inspection, protection and removal of the Plant and Material necessary for and used in the performance of the Contract; and
- 47.2.8 Any other payments made by the Contractor with the approval of the Engineer that are necessary for the performance of the Contract.

#### **GC48 RECORDS TO BE KEPT BY CONTRACTOR**

48.1 The Contractor shall:

48.1.1 Maintain full records of the expenditures of the Work together with all tender calls, quotations, contracts, correspondence, invoices, receipts and vouchers relating thereto; and

48.1.2 If relevant to a determination of cost under the Contract:

48.1.2.1 Make all records and Material referred to in GC48.1.1 available to audit and inspection by the Owner and the Comptroller General of the Government of the Nunavut or by Persons acting on behalf of either or both of them when requested;

48.1.2.2 Allow any of the Persons referred to in GC48.1.2 to make copies of and to take extracts from any of the records and Material referred to in GC48.1.1; and

48.1.2.3 Furnish any Person referred to in GC48.1.2 with information he may require from time to time in connection with such records and Material.

48.2 The records maintained by the Contractor pursuant to GC48.1.1 shall be kept intact by the Contractor until the expiration of two (2) years after the date that a Certificate of Completion was issued or until the expiration of such other period of time as the Owner may direct.

48.3 The Contractor shall cause all Subcontractors and all other Persons directly or indirectly having control of the Contractor to comply with GC48.1 and GC48.2 as if they were the Contractor.

## **GC49 LITIGATION**

- 49.1 This Contract shall be deemed to have been made in Nunavut and shall be governed by the laws of Nunavut as far as applicable.
- 49.2 In the event of any legal action arising out of this Contract, the Contractor, if originating such action, may sue the Government of Nunavut in the name and style of “The Government of Nunavut” and the Government of Nunavut, if originating such action, may commence the action against the Contractor in his own behalf in the name and style of “The Government of Nunavut”.

## **GC50 REQUIREMENTS FOR INUIT, LOCAL AND NUNAVUT CONTENT**

- 50.1 The Contractor shall, in the performance of the Work, employ Inuit, Nunavut and local workers and use Inuit, Nunavut and local content to the greatest extent possible and at a minimum, no less than the amounts tendered by the Contractor in Appendix B-2 of the Tender. Workers shall meet all levels of proficiency, qualification and expertise as dictated by the authorities having jurisdiction and/or as defined in the Contract Documents.
- 50.2 The Contractor shall provide a schedule indicating the anticipated total monthly value of all Inuit, Nunavut and local content and labour to be expended in the execution of the Work. This schedule shall provide the benchmark for ensuring compliance by the Contractor with the requirements for the use of Inuit, Local and Nunavut content during the Project.
- 50.3 For the Inuit labour bonus or penalty, as set out in the NNI Policy, the benchmark shall be the minimum prescribed level for Inuit labour identified on page 4 of Appendix J of the Tender.

## **GC51 MONITORING THE LEVEL OF INUIT, NUNAVUT AND LOCAL LABOUR**

- 51.1 The Contractor is responsible to insure that every worker identified as Local or Nunavut meets the qualifying requirements of being ordinarily resident in Nunavut for the past twelve (12) months, and for local being a Nunavut resident ordinarily residing in the subject community for the past four (4) months. The Contractor may be required to provide proof of residency at any time throughout the Project.
- 51.2 Reasonable proof of Nunavut and local residency shall be any of the following:
- 51.2.1 The worker is listed on the Nunavut Tunggavik Inc. (“NTI”) enrolment list and provides a physical address where he is residing; or
- 51.2.2 The worker has:
- (a) Spent the last twelve (12) months ordinarily resident in Nunavut; and
  - (b) Has a valid Nunavut Health Care Card effective at least nine (9) months prior to start date of employment on the Project; and/or
  - (c) Has any other accepted proof of residency such as: a Nunavut General Hunting License, a Nunavut Driver’s Licence, a lease or rental receipt, or a certified Schedule T222 Income Tax return from the previous year or proof that Income Tax was paid in the Nunavut during the previous tax year; and
  - (d) Provides a physical address where residing; or

- 51.2.3 The worker is included on a list of approved Local or Nunavut residents verified by the municipality of their residence.
- 51.3 The Contractor is responsible for ensuring that every worker identified as Inuit is on the NTI Inuit enrolment list, or would qualify to be on the list.
- 51.4 If requested by the Owner to do so, the Contractor shall obtain a signed consent form from a worker which verifies their residency and permits the Owner to obtain any and all information required to support the worker's claim of residency and/or Inuit status. A standard consent form is attached as page 4 of Appendix B of the Tender. A worker does not need to comply with the requirements of this clause 51.4 if the worker meets one of the requirements of GC51.2.

**GC52 FAILURE TO COMPLY WITH PROPOSED INUIT, LOCAL AND NUNAVUT CONTENT**

- 52.1 The parties to this Contract recognize the high cost of living in Nunavut, and the need to build the capacity of Inuit firms and labour in Nunavut, which is compensated for by the Owner through the provision of bid adjustments for the use of Inuit, Nunavut and local labour and other Inuit, Nunavut and local content, and the provision of bonuses under the NNI Policy. It is a priority of the Owner to maximize the opportunities for Inuit, Nunavut and local workers and businesses to benefit from government contracts and the Owner may pay a premium in awarding its contracts to support this important objective.
- 52.2 It is a fundamental requirement of this Contract that the Contractor shall achieve, by the completion of the Contract, at least the amounts tendered on Appendix B-2 of the Tender, with the exception of decreasing the total amount of "other content" with corresponding equal or larger increases in the total amounts for local and non-local Inuit and Nunavut Content; specifically by:
- 52.2.1 Decreasing the total amount of "other payroll" and increasing the amount of Nunavut labour and the amount of local Nunavut labour, or the amount of Inuit labour and the amount of local Inuit labour; which the Contractor has identified in Appendix B-2 of the Tender; and
- 52.2.2 Decreasing the amount of "other content", excluding the amount of "other payroll" and increasing the amount of local Nunavut content (excluding local Nunavut labour) and the amount of Nunavut content (excluding Nunavut labour), or the amount of local Inuit content (excluding local Inuit labour) and the amount of Inuit content (excluding Inuit labour), which the Contractor has identified in Appendix B-2 of the Tender.
- 52.3 In the event that the amounts of Inuit, Nunavut and local expenditures actually achieved by the Contractor are less than the amounts identified in Appendix B-2, or as subsequently revised pursuant to clauses GC52.2 then the Owner may adopt one or more of the following remedies:
- 52.3.1 Withhold from any progress payment an amount equal to the difference between:
- (a) The amounts identified in Appendix B-2 and the amount identified in the schedule of values referred to in GC50.2; or
  - (b) Any revised amounts pursuant to clause GC52.2 .1 and GC52.2.2 and the amount identified in the schedule of values referred to in GC50.2.

This amount may be released to the Contractor if at the date of a subsequent request the difference has been eliminated.

52.3.2 Deduct from any RCP or the request for substantial or final completion an amount equal to:

- (a) 25% of the difference between the amounts identified in the schedule of values referred to in GC50.2 and the employment report and the amounts identified in Appendix B-2 of the Tender; and
- (b) 25% of the difference between the amounts identified in clause GC52.2.1 and GC52.2.2 and the amount identified in Appendix B-2 or the schedule of values referred to in GC50.2 and the employment report.

52.3.3 Take the Contract out of the Contractor's hands, in accordance with GC36 and GC37; or

52.3.4 Any other remedy deemed reasonable by the Owner.

52.4 In the event that the amount of difference identified in GC52.2 is 15% or less of the amount proposed in Appendix B-2 of the Tender, the Owner, at its sole discretion, may waive the provisions of clause 52.3.

52.5 In the event that the minimum prescribed level of Inuit labour set out in Appendix J of the Tender is not met, then for future tenders where there are similar minimum prescribed levels for Inuit labour, the Contractor may be deemed "not responsible" as defined in the Government Contract Regulations.

### **GC53 OBLIGATION TO PROVIDE CONTRACT SECURITY**

53.1 Where the Contract Price is:

53.1.1 Less than \$250,000.00, the Engineer may require at the expense of the Owner the Contractor to provide Contract Security prescribed in GC54.

53.1.2 \$250,000.00 or more, the Contractor shall, at his own expense, provide one or more of the forms of Contract Security prescribed in GC54.

53.2 If the Contractor is required to provide Contract Security pursuant to GC54, the security shall be delivered to the Engineer within fourteen (14) days after the date that the Contractor receives notice that his Tender or offer was accepted by the Owner.

### **GC54 PRESCRIPTION OF ACCEPTABLE CONTRACT SECURITY**

54.1 If the Contractor is required to provide Contract Security pursuant to GC53, the Owner shall accept from the Contractor and the Contractor shall deliver one or more of the following forms of security:

54.1.1 A performance bond and a labour and material payment bond each in an amount that is equal to not less than fifty (50%) percent of the Contract Price;

54.1.2 A security deposit in an amount that is equal to 10% of the Contract Price; or

54.1.3 A form of security in an amount that is equal to 10% of the Contract Price from Nunavut Business Credit Corporation, subject to review and acceptance by the Owner, and any such security must at a minimum refer to the Project by name, contract number and the Contract Price.

54.2 A performance bond and a labour and material payment bond referred to in GC54.1.1 shall be in a form as approved by the Federal Treasury Board (Federal Contracts) and be issued by a bonding

or surety company that is approved by the Owner.

54.3 A security deposit referred to in GC54.1.2, shall be in the form of:

54.3.1 “A letter of irrevocable guarantee” in the form authorized by the Contract authority payable to the Owner that is drawn on a bank to which the *Bank Act*, SC 1991, c 46 or *An Act Respecting Financial Services Cooperatives*, CQLR c C-67.3 applies; or

54.3.2 A certified cheque or bank draft from a bank acceptable to the Owner and made payable to the Owner.

54.4 The “letter(s) of irrevocable guarantee” referred to in GC54.3.1 shall be held uncashed until fourteen (14) days prior to their expiry date, unless the expiry date is extended for a further term, beyond the Contract completion date stated in the Articles of Agreement.

54.5 The certified cheque as referred to in GC54.3.2 shall be deposited by the Owner into the Owner’s bank account.

## **GC55 COMPREHENSIVE GENERAL LIABILITY INSURANCE REQUIRMENTS**

55.1 Comprehensive General Liability Insurance with limits of not less than five million dollars (\$5,000,000.00) inclusive per occurrence for bodily injury, death, and damage to property including loss of use thereof. This insurance shall be maintained continuously from commencement of the Work until not less than twelve (12) months from the date of the Certification of Completion. The Owner is to be added as an insured under this policy. Such insurance shall include but is not limited to:

55.1.1 Premises, Property and Operations Liability;

55.1.2 Products and Completed Operations Liability;

55.1.3 Owners’ and Contractors’ Protective Liability;

55.1.4 Blanket Written Contractual Liability;

55.1.5 Non-Owned Automobile Liability;

55.1.6 Broad Form Property Damage Extension;

55.1.7 Use of explosives for blasting, shoring, excavating, underpinning, demolition, removal, pile driving and caisson work, work below ground surface, tunnelling and grading, as applicable;

55.1.8 Contingent Employer’s Liability;

55.1.9 Person Injury Liability;

55.1.10 Employees as Additional Insureds;

55.1.11 Cross Liability With Respect To Additional Insureds;

55.1.12 Asbestos Abatement Liability, as applicable.

## **GC56 AUTOMOBILE LIABILITY INSURANCE AND AIRCRAFT AND WATER CRAFT LIABILITY REQUIREMENTS**

56.1 Automobile liability insurance in respect of Contractor’s owned and leased vehicles shall have limits of not less than two million dollars (\$2,000,000.00) inclusive per occurrence for bodily injury, death, and damage to property, and when applicable:

56.1.1 S.E.F. No. 4a Explosives Endorsement;

56.1.2 S.E.F. No. 21b Blanket Fleet Endorsement.

56.2 Aircraft and watercraft liability insurance with respect to owned or non-owned aircraft and watercraft if used directly in or indirectly in the performance of the Work, including use of airport premises, with limits of not less than one million dollars (\$1,000,000.00) inclusive per occurrence for bodily injury, death and damage to property including loss of use thereof and limits of not less than one million dollars (\$1,000,000.00) for aircraft passenger hazard. Such insurance shall be in a form acceptable to the Owner.

#### **GC57 POLLUTION LIABILITY INSURANCE**

57.1 The Contractor shall obtain and maintain at its own expense contractor's pollution liability insurance with limits of not less than two million dollars (\$2,000,000.00) per occurrence to cover claims that the Contractor may have to pay as a result of any claims caused by pollution (including for any clean-up costs). This policy must cover damages sustained by the Owner and any third parties. This policy must also cover claims arising out of the rendering, or failure to render, any professional services under this Contract (in relation with pollution claims).

57.2 This policy shall provide third party coverages for pollution damages caused by the Contractor performing insured services at a third-party site. The Owner is to be added as an additional insured without its ability to claim against the policy being affected.

#### **GC58 PROPERTY INSURANCE (All "Risks" Course of Construction Insurance)**

58.1 The Contractor shall obtain and pay for course of construction insurance for this Project as described in the following paragraphs:

58.1.1 All risks course of construction insurance on a very broad basis, to protect as insureds, all those who have direct participation in the construction of the Project, for claims which may arise as a result of loss or damage during course of construction;

58.1.2 Coverage for all risks of physical loss or damage or destruction while the Project is in course of construction, site preparation, reconstruction, repair, erection, fabrication, testing, and including all Materials, equipment machinery, structures, property, fitting, fixtures, betterment, and supplies of any nature whatsoever to enter into and form part of the finished Project while at the site of operations or elsewhere, all the property of the insureds or the property of others for which the insureds have assumed responsibility, or for whom the insured are required to carry insurance, including while on a river or lake crossing ferry in connection with land transportation, and including goods in transit to the site.

58.1.3 The term shall be from the earlier of the creation of any insurable interest (including but not limited to supply, storage or purchase of Material, supplies, Plant or equipment) or the commencement of work, to the date of the Certificate of Substantial Completion as certified by the Owner.

58.1.4 The limit of liability at the Project site is the estimated full completed value of the Project including, but not limited to, owner-supplied labour or Materials, reasonable profit, insurance costs, overhead, taxes, labour, administrative fees and all other expenses which are incurred as additional costs as a result of a partial or total loss.

58.1.5 The Contractor shall be responsible for a deductible to a maximum of fifty thousand dollars (\$50,000.00).

## **GC59 GENERAL INSURANCE CONDITIONS**

- 59.1 The amount of deductible on any insurance provided by Contractor shall be borne in its entirety by Contractor.
- 59.2 The Contractor waives all rights of recourse against the Owner for damages to Contractor's property or property of others for which Contractor is responsible and Contractor's insurers have no right of subrogation against the Owner.
- 59.3 All required insurance shall be endorsed to provide the Owner with thirty (30) days advance written notice of material change, cancellation or termination. Such notices shall be addressed to: the Owner (as noted on the Contractor's certificate of insurance), and sent in accordance with GC9.
- 59.4 Contractor shall provide, maintain and pay for any additional insurance which is required to be provided by the Contract Documents, or by law, or which he considers necessary to cover risks not otherwise covered by insurance specified in these conditions.
- 59.5 The Contractor shall complete the attached form Contractor's Certificate of Insurance, and shall within fourteen (14) days after the acceptance of the Tender deliver this completed certificate to the Owner. Substitute certificates will not be accepted; the Contractor must use this certificate.

## **GC60 ACCOMMODATION AND TRANSPORTATION**

- 60.1 On contracts where a Commercial Room and Board Facility exists within the Community, the Contractor will be required to use a Commercial Room and Board Facility to house and feed all of its directly employed workers and workers employed by any Subcontractor or agent or any other business working on the Project. The Contractor, Subcontractors and agents shall not be required to use Commercial Room and Board Facilities for any workers who are local residents as defined in the NNI Policy, regardless of who they are employed by.
- 60.2 The following definitions shall apply to this section:
- 60.2.1 "Commercial Room and Board Facility" means a hotel or a bed and breakfast (tourist home) that holds a tourist establishment licence issued by the Owner under the *Travel and Tourism Act*, RSNWT (Nu) 1988, c T-7;
- 60.2.2 "Community" means the community in which the Project is located as defined in the Contract and includes the entire area within a twenty kilometre (20km) radius of the community.
- 60.3 The Commercial Room and Board Facility must meet the applicable requirements under the *Public Health Act*, RSNWT (Nu) 1988, c P-12, and regulations made thereunder, and the *Fire Prevention Act*, RSNWT (Nu) 1988, c F-6 and applicable regulations thereunder, and any other applicable Government of Nunavut or Federal legislation.
- 60.4 The Contractor may be permitted, in writing by the Owner, to house or feed employees in a camp or other alternative accommodation only if there are insufficient or inadequate Commercial Room and Board Facilities available in the subject Community, and the Contractor has provided documentation showing its unsuccessful attempts to house and feed workers due to unavailability of Commercial Room and Board Facilities in the Community (such as letters of regret or no vacancy from all available local facilities), or if a facility fails to maintain the standards set out in 60.2 and 60.3 above.
- 60.5 The Contractor will comply with Appendix "H" of the *Instructions to Bidders*.

## **GC61 FORCE MAJEURE**

- 61.1 Neither party shall be responsible for any delay or failure to perform its obligations under this Contract where such failure or delay is due to fire, flood, explosion, war, embargo, governmental action, terrorism, act of a public authority, act of God or any other cause beyond its control, except labour disruption, without additional notice.
- 61.2 The Consultant acknowledges that Nunavut frequently experiences severe weather, shortages in supplies and fuel, and interruptions of power service and communications that might constitute force majeure elsewhere, but shall not constitute a force majeure under this Contract. The Consultant will plan for those eventualities as much as possible.
- 61.3 In the event a force majeure event occurs which delays or threatens to delay performance of its obligations by a party, that party shall give prompt notice to the other party and shall take all reasonable steps to eliminate the cause or ameliorate the potential disruption and consequent losses.
- 61.4 Should the force majeure event last for longer than thirty (30) days, the Owner may terminate this Contract, in whole or in part, without further liability, expense or cost of any kind.

## **GC62 ALTERNATIVE DISPUTE RESOLUTION**

- 62.1 The parties agree that, both during and after the performance of the terms of this Contract, each of them shall make bona fide efforts to resolve by good faith negotiations any dispute between them, which negotiations shall not terminate until the designate authorities of the Contractor and the Owner shall have considered the dispute. The parties shall, on a without prejudice basis, provide frank, candid and timely disclosure of all relevant facts, information and documents to facilitate such negotiation.
- 62.2 If the dispute is not resolved in the foregoing manner, then the dispute shall be finally settled by arbitration. This Contract specifically excludes the power of the Court to refuse to stay judicial proceedings. The arbitration shall take place in Iqaluit, Nunavut unless otherwise agreed.
- 62.3 Within twenty (20) days after the party requesting arbitration has given written notice of such request to the other party, the parties (acting reasonably) shall jointly appoint a single arbitrator. If the parties are unable to appoint a single arbitrator within the said twenty (20) day period, then the Contractor shall appoint one arbitrator and the Owner shall appoint one arbitrator, both such arbitrators to be appointed within ten (10) days after the end of the aforementioned twenty (20) day period, with a third arbitrator then being selected by those two arbitrators within five (5) days following their appointment. The third arbitrator shall alone conduct the arbitration. The arbitration will be final and binding and not subject to appeal and the procedures and substance of the arbitration will be governed by the *Arbitration Act*, RSNWT (Nu) 1988, c A-5.
- 62.4 Notwithstanding the foregoing, the Owner may at its sole option refer a particular dispute regarding confidential information, frustration or fundamental breach of the Contract to the Nunavut Court of Justice and not to arbitration.

## **GC63 SUPPLEMENTARY TERMS AND CONDITIONS**

- 63.1 The Contractor and the Owner have mutually agreed upon the following supplemental terms, and nothing in the Tender will supersede the terms listed in this part:



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*Insert in this section, or if more space is required attached a corresponding schedule hereto, any negotiated items or terms that differ from the Tender or Specifications (e.g. if alternatives are being accepted, or if a scope change was made pursuant to the acceptance provisions of the instructions to Tenderers.)*

*NOTE: This section of the Contract requires more than simply attaching/appendix schedules/e-mails/letters; CGS Contract Support must be consulted (legal assistance will be coordinated through this office).* **END OF GENERAL CONDITIONS**

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**END OF SECTION**

**1 General**

**1.1 PROJECT TITLE**

GOVERNMENT OF NUNAVUT  
WILLIAMSON LAKE WATER STORAGE TANK INTERIOR RECOATING  
PROJECT NO. #AE1530103  
GN Tender # 15320-00241

**2 Consultants – Professional Seals**

<u>Trade</u>	<u>Address</u>	<u>Professional Seal</u>
<b>2.1 SPECIAL CONSTRUCTION</b>	exp Services Inc. 1133 Regent Street, Suite 300 Fredericton, NB E3B 3Z2	

**3 Consultants – Permit of Practice**

<u>Trade</u>	<u>Address</u>	<u>Permit of Practice</u>
<b>3.1 CIVIL</b>	exp Services Inc. 100-2650 Queensview Drive Ottawa, ON K2B 8H6	

END OF SECTION

**Part 1 General**

**1.1 CONTRACT DOCUMENTS**

- .1 The Contract Documents are complementary and what is called for on one shall be as binding as if called for by all. The intention of the Contract Documents is to include all labour and material, equipment, superintendence and transportation necessary for the proper performance of the work. Materials or work described in words which so applied have a well-known technical or trade meaning, shall be held to refer to such recognized standards.

Should there be any conflicts in the drawings with the Contract Documents, the Contractor shall notify the Engineer. The Engineer's decision on questions arising under the Contract Documents or the interpretation of the Specifications and Drawings shall govern.

- .2 Contract documents are diagrammatic only. They are intended to establish scope, materials and quality; they are not detailed installation drawings. Minor details and incidental accessories required for the proper installation which are not shown or specified are to be included in the work.

**1.2 WORK COVERED BY CONTRACT DOCUMENTS**

- .1 The Contractor shall supply all materials, labour and equipment for construction of the work indicated within these Contract Documents. The following description is intended to provide a general overview and is not to be considered a "scope of work".
- .2 Williamson Lake Tank interior recoating
  - .1 The general work description for the Williamson Tank includes;
    - .1 Removal of existing interior coating and surface preparation.
    - .2 Epoxy coating the tank interior and all fixed appurtenance (ladder, brackets, flanges, etc)
    - .3 Installation of second ground level manway.
    - .4 Supply and installation of Cathodic protection system.
    - .5 Grout and insulation repair to the tank exterior as needed.
    - .6 Internal piping repair / pipe support repair
      - .1 Pipe support for inlet piping to be replaced
      - .2 New uniflange connections on inlet piping.
      - .3 Air vent/overflow tank wall anchor/support replacement
    - .7 Mobilization of equipment and personnel to Site and Demobilization.

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**1.3 QUALITY ASSURANCE**

- .1 Only tradesmen properly licensed in Nunavut for work requiring special skills shall be employed on such work, and under no circumstances shall any workman or tradesman carry out work for which he has insufficient ability or training.

All materials, fabrication and equipment shall be of reputable manufacturer, and where a product by a manufacturer is noted in the Plans or Specifications, it is to indicate a standard of acceptance for the particular application or approved equal.

**1.4 MINIMUM STANDARDS**

- .1 In the absence of other standards being required by the Contract Documents, all work shall conform to or exceed the minimum standard of the Canadian Government Specification Board, the Canadian Standards Association, or the National Building Code of Canada (latest edition with all current addenda), whichever is applicable.

**1.5 DETAIL DRAWINGS AND INSTRUCTIONS**

- .1 The Engineer shall furnish, as necessary for the performance of the work, additional instructions by means of drawings or other media, which shall be consistent with the Contract Documents and the Contractor shall perform the work in accordance with such instructions.

If either the Contractor or the Engineer so requests, they shall jointly prepare a schedule, fixing the dates at which the various detail drawings will be required, and the Engineer shall furnish them in accordance with this schedule.

**1.6 JOB CONFERENCES**

- .1 Job conferences will be jointly arranged weekly between the Contractor, the Engineer and Government of Nunavut during the progress of the job and when called upon to do so, the job conference shall be attended by an authorized representative of the trade concerned. Notes shall be typed up afterwards by the Engineer and then circulated to all parties concerned.
- .2 The Engineer shall prepare the agenda for the progress meetings and shall be responsible for minuting and circulating the minutes of the meetings to all parties concerned. The agenda for the progress meetings shall include, as a minimum, the following:
- .1 Review and acceptance of minutes from previous meeting.
  - .2 Review of work progress.
  - .3 Review of planned work prior to next progress meeting.
  - .4 Construction issues, such as field observations, problems, conflicts which may result in changes to the contract price or construction schedule.
  - .5 Review of the construction schedule versus actual progress schedules.
  - .6 Review of contemplated changes notices / contract change orders / field orders and field instructions.
  - .7 Review of outstanding items from previous meeting.

- .8 Date and location of next progress meeting.
- .9 Other business.

## 1.7 PRE-CONSTRUCTION MEETING

- .1 Within fifteen (15) days of notification of award of the contract, the engineer shall request a pre-construction meeting. The pre-construction meeting shall be attended by representatives of the Owner/Engineer/Contractor/Major Subcontractors/Project Superintendent (if available) and Engineering Inspector (if available). Upon setting a time and location for the pre-construction meeting the Engineer shall provide all parties seven (7) days notice and shall be responsible for preparing and distributing a pre-construction meeting agenda. The Engineer shall be responsible for the minutes and circulation of these to all parties concerned. The pre-construction meeting agenda shall, as a minimum, include the following:
  - .1 Introduction of personnel, including roles and contact information.
  - .2 Contract document status in point form, documents for signing, bonding certificates, certificate of insurance, workers' compensation board clearance certificates and any municipal and government approval certificates required.
  - .3 Correspondence in point form, reference numbers for the Engineer/Owner and Contractor, personnel for which correspondence is to be addressed.
  - .4 Notifications:
    - Ministry of Labour
    - Occupational Health and Safety
  - .5 Site Supervision Staff, Contractor, Superintendent, Consultants, Site Inspector, Municipal Inspector.
  - .6 A list of subcontractors.
  - .7 Documents to be provided by Owner/Engineer.
  - .8 Materials suppliers.
  - .9 Material testing requirements, including identification of any laboratory agencies.
  - .10 Site office.
  - .11 Projects signed.
  - .12 Work site diary.
  - .13 Work Procedures:
    - .1 Benchmarks.
    - .2 Service locations and record sheets.
    - .3 Project closeout.
  - .15 Public relations.
  - .16 Photographs.
  - .17 Payment Certificates.
  - .18 Extra work / change orders.
  - .19 Weekly site meeting.
  - .20 Other issues.

**1.8 INSPECTOR AND INSPECTION**

- .1 All work covered under this Contract shall be done to the satisfaction of the Engineer or his Inspector.
- .2 The Engineer's Inspector is to ensure that the provisions of the Contract are adhered to. The Inspector shall ensure that the quality of workmanship and materials are to the standards specified in the Contract. The Engineer or his Inspector may stop the work entirely if there is not a sufficient quantity of approved materials on site, or for any reason he deems will adversely affect the quality of work.
- .3 All materials and equipment, and their processes of preparation or manufacture, shall be subject to inspection, and testing at all times. If an inspection or a test is failed, the Engineer may reject the affected material or equipment.

The Engineer shall give the Contractor reasonable notice of any inspection or testing he wishes to carry out, except for any inspection or testing specifically stated in the Contract which requires the presence of the Engineer. The Contractor shall be responsible to provide the Engineer at least seven (7) days notice, in writing, to the commencement of the manufacturing or preparation of any materials or equipment which the Contract requires inspection or testing. The Contractor shall make all the necessary provisions and provide any assistance required, so that the Engineer can carry out the specified inspection or testing.

If, for any reason, any inspection or testing has not been carried out, the Contractor shall notify the Engineer and any affected material or equipment shall not be delivered to the site of work until authorized by the Engineer, in writing, to do so.

- .4 In any event, no materials or equipment required by the Contract or by the Engineer to be inspected or tested by or in the presence of the Engineer shall be incorporated into the work until the required inspection or testing has been carried out to the satisfaction of the Engineer.
- .5 The Contractor shall provide, and shall ensure that all Subcontractors and those carrying out the process of preparation or manufacture shall provide, every reasonable facility and cooperation to assist the Engineer or Inspector or others designated by the Contract or by the Engineer in carrying out inspection and testing.
- .6 The Contractor shall not apply coating or otherwise cover up any work without either having it inspected and passed by the Inspector, or first notifying the Inspector in a manner approved or as directed by the Engineer, that the work is ready to be covered up and allowing the inspector reasonable notice and opportunity for carrying out an inspection.

Any works covered up, other than in accordance to the foregoing, shall be uncovered or opened up as ordered by the Engineer or the Inspector. All subsequent work, either through the inspection and testing or the opening and reinstatement shall be carried out by the Contractor at his expense.

- .7 No approval by an Inspector or by the Engineer or failure of an Inspector or the Engineer to carry out an inspection shall relieve the Contractor of his obligations under the Contract or shall be interpreted as being an acceptance of defective or improper work or material.
- .8 If, in addition to the inspection provided for above, the Contractor is required by the Contract, by law, by local bylaw or by the Engineer to have any part of the work inspected by others, the Contractor shall give the Engineer and the others concerned reasonable notice of the time and date proposed for the additional inspection.

### **1.9 CUTTING AND PATCHING**

- .1 Coordinate all work with other trades.
- .2 Coordinate locations and installation of sleeves, inserts and supports with other trades.
- .3 Provide sleeves and openings required for mechanical work.
- .4 Submit and proposed methods to Engineer and obtain permission prior to any cutting or drilling. This includes drilling for the placement of hanger support rods.

### **1.10 PROTECTION**

- .1 Protect equipment and systems openings from dirt, dust, and other foreign materials with materials appropriate to system.

### **1.11 CONTEMPLATED CHANGE NOTICE (CCN)**

- .1 A Contemplated Change Notice does not constitute a direction to perform the change of works described within. It is solely a notice of a proposed change. Upon receipt of a contemplated change notice, the Contractor shall submit to the Engineer, within the timeframe reference within the document a cost adjustment to the contract associated with the proposed change, as well as any impact that the proposed change will have on the construction schedule. The cost adjustment and scheduled adjustments shall be itemized as required within the Contemplated Change Notice.

### **1.12 CONTRACT CHANGE ORDER (CCO)**

- .1 Acceptance of a Contract Change Order by the Owner and the Contractor will constitute a change in the terms, cost and/or schedule of the contract as set forth in the Contract Change Order. The Contract Change Order will be based on a Contemplated Change Order submitted by the Contractor. Contract Change Orders, signed by the Owner and Contractor shall authorize the Contractor to proceed with the change in the scope of work as described with the Contract Change Order.

### **1.13 FIELD INSTRUCTIONS**

- .1 Field instructions may be issued during the course of construction as a mechanism to provide clarification to specific items within the Contract or to give additional



instructions to the Contractor. Issuance of a field instruction shall not result in any changes to the contract price or the contract schedule.

#### **1.14 FIELD ORDER**

- .1 Field order may be issued by the Engineer during the course of construction to authorize a change or authorize additional work in an emergency situation where following the process of issuance of a Contemplated Change Notice and Contract Change Notice may result in a delay which could result in damage or injury to life or property or would have an adverse effect on the total cost of the Contract. The field order shall either set a firm cost adjustment for the work or shall include a method for determining the cost of the work (i.e., unit price or cost of labour or material) set forth in the field order.

#### **1.15 AIR AND WATER POLLUTION**

- .1 The attention of the Contractor is called to the Ordinances of Nunavut relating to the pollution of water and air. The Contractor shall carry out his operations in conformity with the applicable sections of the Territorial Ordinances and regulations that are adopted thereto.

#### **1.16 NIGHT WORK**

- .1 Night work will only be allowed if written permission is given beforehand by the Engineer. When any work is carried out at night, the Contractor shall supply at his own cost a sufficient number of electric or other approved and efficient lights to enable the work to be done in an efficient and satisfactory manner. Permission of the Engineer does not relieve the Contractor of the responsibility for obtaining necessary permission from local governing agencies.

#### **1.17 SUBMITTALS**

- .1 General:
  - .1 In accordance with Section 01 33 00 - Submittal Procedures.
  - .2 Provide shop drawings and product data for all materials stipulated in the specifications or drawings.
  - .3 Submit four (4) prints of submittals for each requirement requested in specification Sections and as the Engineer may reasonably request.
  - .4 Submit to Engineer submittals listed for review. Submit with reasonable promptness and in orderly sequence so as to not cause delay in work.
  - .5 Work affected by the submittal shall not proceed until review is complete.
  - .6 Review submittals prior to submission to the Engineer. Submittals not stamped, signed, dated, and identified by the Contractor will be returned without being examined and shall be considered rejected.
  - .7 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Engineer review.
- .2 Shop Drawings and Product Data:

- .1 The term “Shop Drawings” means drawings, diagrams, illustrations, schedules, performance charts, brochures, and other data which are to be provided by the Contractor to illustrate details of a portion of work.
  - .2 Adjustments made on shop drawings by the Engineer are not intended to change the Contract Price. If adjustments affect the value of work, state in writing to the Engineer prior to proceeding with the work.
  - .3 Make changes in shop drawings as the Engineer may require, consistent with Contract Drawings. When resubmitting, notify the Engineer in writing of any revisions other than those requested.
  - .4 Submit four (4) prints of shop drawings for each requirement requested in specification Sections and as the Engineer may reasonably request.
  - .5 Submit four (4) copies of product data sheets or brochures for requirements requested in specification Sections and as the Engineer may reasonably request where shop drawings will not be prepared due to standardized manufacture of product.
- .3 Closeout Submittals:
- .1 Operation and Maintenance Manual approved by, and final copies deposited with Engineer before final inspection.
  - .2 Operation data to include:
    - .1 Control schematics for systems including environmental controls.
    - .2 Description of systems and their controls.
    - .3 Description of operation of systems at various loads together with reset schedules and seasonal variances.
    - .4 Operation instruction for systems and component.
    - .5 Description of actions to be taken in event of equipment failure.
  - .3 Maintenance data to include:
    - .1 Servicing, maintenance, operation and trouble-shooting instructions for each item of equipment.
    - .2 Data to include schedules of tasks, frequency, tools required and task time.
  - .4 Approvals:
    - .1 Submit two (2) copies of draft Operation and Maintenance Manual to Engineer for approval. Submission of individual data will not be accepted unless directed by Engineer.
    - .2 Make changes as required and re-submit.
  - .5 Additional data:

- .1 Prepare and insert into operation and maintenance manual additional data when need for it becomes apparent during specified demonstrations and instructions.
- .6 Site records:
  - .1 Engineer will provide set of reproducible mechanical drawings and electronic copy of mechanical drawing. Maintain white prints. Mark changes as work progresses and as changes occur.
  - .2 Transfer information weekly to reproducible and electronic drawings to show work as actually installed.
  - .3 Make available for reference purposes and inspection.
- .7 As-built drawings:
  - .1 Prior to start of testing finalize production of as-built drawings.
  - .2 Identify each drawing in lower right hand corner in letters at least 12 mm high as follows: - "AS BUILT DRAWINGS: THIS DRAWING HAS BEEN REVISED TO SHOW MECHANICAL SYSTEMS AS INSTALLED" (Signature of Contractor) (Date).
  - .3 Submit to Engineer for approval and make corrections as directed.
  - .4 Submit completed reproducible and electronic as-built drawings with Operating and Maintenance Manuals.

#### **1.18 SAMPLES**

- .1 The Contractor shall furnish for the Engineer's approval all samples required by the Contract or as requested by the Engineer. The work shall be in accordance with the approved samples.

#### **1.19 "OR EQUAL" MATERIALS**

- .1 Any place in the Drawings or Specifications where "or equal" is specified, the "or equal" shall be submitted to, and be approved by the Engineer in writing. Detailed plans and specifications of the alternate materials shall be submitted to the office of the Engineer, and unless written permission is given for their use, they will not be considered for this Contract.

In the submission of alternatives or equals to items of material mentioned in the Specifications, the Contractor shall in his Tender make consideration for any changes required in the works to accommodate such alternatives or equals. A claim by the Contractor for an addition to the contract sum because of changes in work necessitated by the use of alternatives or equals will not be considered.

#### **1.20 ALTERNATIVE MATERIALS**

- .1 The contract price shall be based on the materials specified within the contract documents.

- .2 Approval of alternate materials submitted by the Contractor or his Subcontractor as equal to that specified does not relieve the Contractor of any responsibility.
- .3 Revisions required to allow the use of accepted alternates shall be at the Contractor's expense. No increase in the contract price will be considered to accommodate the use of materials or products other than those specified.

#### **1.21 CLEANING AND DISINFECTION**

- .1 Flush and disinfect all tank and piping prior to placing into service.
- .2 Disinfect tank and piping to current AWWA C651 and C652.
- .3 Flush piping to remove disinfection solution following disinfection.
- .4 Test chlorine concentration during disinfection. Conduct bacteriological testing following disinfection and flushing. Provide test results to Engineer. Provide additional flushing and disinfection of test results unsatisfactory. GN to assist with sample submission.
- .5 Engineer to witness disinfection and flushing. Provide four (4) days notice in advance of disinfection.

#### **1.22 RECORD DRAWINGS**

- .1 A set of drawings and specifications recording the changes and deviations are to be maintained on site, and updated daily.
- .2 A set of final record drawings is to be submitted to the Engineer within two (2) weeks of completion and acceptance of the work. Failure to maintain and submit the record drawing, requiring the work to be carried out by other will be at the contractor's expense.
- .3 A copy of the drawings and specifications for the purpose of maintain the record drawings, will be provided by the Engineer.

#### **1.23 SUBSTANTIAL COMPLETION INSPECTION**

- .1 The Engineer is to be advised a minimum of five (5) day in advance of the desired date for the Substantial Completion Inspection.
- .2 It is the Contractor's responsibility to ensure all systems are operational prior to the inspection, and that the work is substantially complete. The Contractor shall be responsible for any expenses resulting for the work not being functional or substantially complete resulting in the requirement for a subsequent Substantial Completion Inspection, including the Engineer's and Owner's time and expenses.
- .3 All deficiencies noted in the Substantial Completion Inspection shall be addressed in a timely manner, normally within two (2) weeks unless otherwise specified within the Certificate of Substantial Completion.

**1.24 SANITARY REGULATIONS**

- .1 The Contractor shall prohibit and prevent the committing of nuisance on the site of the work or on adjoining property, and shall discharge any employee who commits a nuisance.

**1.25 ABBREVIATION REFERENCES**

- .1 Reference to technical society, organization or body is made in the Specifications in accordance with the following abbreviations:

ACI	American Concrete Institute
AISC	American Institute of Steel Construction
ARCA	Alberta Roofing Contractors Association
ASA	American Standards Association
ASTM	American Society for Testing Materials
AWI	Architectural Woodwork Institute
AWSC	American Welding Society Code
BCLMA	British Columbia Lumber Manufacturer's Association
CBURA	Calgary Built-Up Roofers Association
CCA	Canadian Construction Association
CISC	Canadian Institute of Steel Construction
CITC	Canadian Institute of Timber Construction
CGSB	Canadian Government Specifications Bureau
CLA	Canadian Lumberman's Association
CRCA	Canadian Roofing Contractor's Association
CRSI	Concrete Reinforcing Steel Institute
CSA	Canadian Standards Association
CWB	Canadian Welding Bureau
CUA	Canadian Underwriters Association
API	American Petroleum Association
AWWA	American Water Works Association
ASME	American Society of Mechanical Engineers
MTTAC	Marble, Tile and Terrazzo Association
NBC	National Building Code (Canada) 1980
NRC	National Research Council (Canadian)
RAIC	Royal Architectural Institute of Canada
UL	Underwriter's Laboratories, Inc. (Canada)
CEC	Canadian Electrical Code

**END OF SECTION**

**Part 1            General**

**1.1                RELATED SECTIONS**

- .1        This refers to all related sections.

**1.2                SECTION INCLUDES**

- .1        Shop drawings and product data.
- .2        Samples.
- .3        Certificates and transcripts.

**1.3                ADMINISTRATIVE**

- .1        Submit to Engineer submittals listed for review. Submit with reasonable promptness and in orderly sequence so as to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2        Work affected by submittal shall not proceed until review is complete.
- .3        Present shop drawings, product data, samples and mock-ups in SI Metric units.
- .4        Where items or information is not produced in SI Metric units converted values are acceptable.
- .5        Review submittals prior to submission to Engineer. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
- .6        Notify Engineer, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .7        Verify field measurements and affected adjacent Work are coordinated.
- .8        Contractor's responsibility for errors and omissions in submission is not relieved by Engineer's review of submittals.
- .9        Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Engineer review.
- .10      Keep one reviewed copy of each submission on site.

#### **1.4 SHOP DRAWINGS AND PRODUCT DATA**

- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.
- .2 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- .3 Allow ten (10) days for Engineer's review of each submission.
- .4 Adjustments made on shop drawings by Engineer are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Engineer prior to proceeding with Work.
- .5 Make changes in shop drawings as Engineer may require, consistent with Contract Documents. When resubmitting, notify Engineer in writing of any revisions other than those requested.
- .6 Accompany submissions with transmittal letter, in duplicate, containing:
  - .1 Date
  - .2 Project title and number
  - .3 Contractor's name and address
  - .4 Identification and quantity of each shop drawing, product data and sample
  - .5 Other pertinent data
- .7 Submissions shall include:
  - .1 Date and revision dates
  - .2 Project title and number
  - .3 Name and address of:
    - .1 Subcontractor
    - .2 Supplier
    - .3 Manufacturer
  - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
  - .5 Details of appropriate portions of Work as applicable:
    - .1 Fabrication
    - .2 Layout, showing dimensions, including identified field dimensions, and clearances
    - .3 Setting or erection details
    - .4 Capacities

- .5 Performance characteristics
  - .6 Standards
  - .7 Operating weight
  - .8 Wiring diagrams
  - .9 Single line and schematic diagrams
  - .10 Relationship to adjacent work
- .8 After Engineer's review, distribute copies.
- .9 Submit digital prints of shop drawings for each requirement requested in specification Sections and as Engineer may reasonably request.
- .10 Submit digital copies of product data sheets or brochures for requirements requested in specification Sections and as requested by Engineer where shop drawings will not be prepared due to standardized manufacture of product.
- .11 Delete information not applicable to project.
- .12 Supplement standard information to provide details applicable to project.
- .13 If upon review by Engineer, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of Work may proceed.
- .14 The review of shop drawings by the Engineer is for sole purpose of ascertaining conformance with general concept. This review shall not mean that the Engineer approves detail design inherent in shop drawings, responsibility for which shall remain with Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting all requirements of construction and Contract Documents. Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for coordination of Work of all subtrades.

## **1.5 SAMPLES**

- .1 Submit for review samples in duplicate as requested in respective specification Sections. Label samples with origin and intended use.
- .2 Deliver samples prepaid to client business address in Rankin Inlet.
- .3 Notify Engineer in writing, at time of submission of deviations in samples from requirements of Contract Documents.
- .4 Where colour, pattern or texture is criterion, submit full range of samples.



- .5 Adjustments made on samples by Engineer are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Engineer prior to proceeding with Work.
- .6 Make changes in samples which Engineer may require, consistent with Contract Documents.
- .7 Reviewed and accepted samples will become standard of workmanship and material against which installed Work will be verified.

**1.6 PROGRESS PHOTOGRAPHS**

- .1 Submit progress photographs.

**1.7 CERTIFICATES AND TRANSCRIPTS**

- .1 Immediately after award of Contract, submit Workers' Compensation Board status.

**Part 2 Products**

Not Used

**Part 3 Execution**

Not Used

**END OF SECTION**

**Part 1            General**

**1.1                RELATED SECTIONS**

- .1            Section 05 50 00 - Metal Fabrications

**1.2                REFERENCES**

- .1            Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations.
- .2            Health Canada/Workplace Hazardous Materials Information System (WHMIS):
  - .1            Material Safety Data Sheets (MSDS).
- .3            Northwest Territories and Nunavut:
  - .1            Safety Act, R.S.N.W.T. 1998, or latest edition.

**1.3                SUBMITTALS**

- .1            Submit site-specific Health and Safety Plan: Within seven (7) days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
  - .1            Results of site specific safety hazard assessment.
  - .2            Results of safety and health risk or hazard analysis for site tasks and operations found in work plan.
- .2            Submit three (3) copies of Contractor's authorized representative's work site health and safety inspection reports to Engineer weekly.
- .3            Submit copies of reports or directions issued by Federal and Territorial health and safety inspectors.
- .4            Submit copies of incident and accident reports.
- .5            Submit WHMIS Material Safety Data Sheets (MSDS) to Engineer.
- .6            Engineer will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within seven (7) days after receipt of plan. Revise plan as appropriate and resubmit plan to Engineer within seven (7) days after receipt of comments from Engineer.
- .7            Engineer's review of Contractor's final Health and Safety Plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .8            Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Engineer.
- .9            On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.

#### **1.4 FILING OF NOTICE**

- .1 File Notice of Project with Territorial authorities prior to beginning of Work.

#### **1.5 SAFETY ASSESSMENT**

- .1 Perform site specific safety hazard assessment related to project.

#### **1.6 MEETINGS**

- .1 Schedule and administer Health and Safety meeting with Engineer prior to commencement of Work.

#### **1.7 GENERAL REQUIREMENTS**

- .1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site work and continue to implement, maintain, and enforce Plan until final demobilization from site. Health and Safety Plan must address project specifications.
- .2 Engineer may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

#### **1.8 RESPONSIBILITY**

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.

#### **1.9 COMPLIANCE REQUIREMENTS**

- .1 Comply with Safety Act, General Safety Regulations, R.R.N.W.T. 1998.
- .2 Comply with Canada Labour Code, Canada Occupational Safety and Health Regulations.

#### **1.10 UNFORESEEN HAZARDS**

- .1 When an unforeseen or peculiar safety-related factor, hazard, or condition occurs during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Territory having jurisdiction and advise Engineer verbally and in writing.

#### **1.11 HEALTH AND SAFETY COORDINATOR**

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Coordinator. Health and Safety Coordinator must:
  - .1 Have minimum two (2) years' site related working experience specific to activities associated with similar work.
  - .2 Have working knowledge of Occupational Safety and Health Regulations.

- .3 Be responsible for completing Contractor's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter site to perform Work.
- .4 Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.
- .5 Be on site during execution of Work.

**1.12 POSTING OF DOCUMENTS**

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of the Territory having jurisdiction, and in consultation with the Engineer.

**1.13 CORRECTION OF NON-COMPLIANCE**

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by the Engineer.
- .2 Provide Engineer with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Engineer may stop Work if non-compliance of health and safety regulations is not corrected.

**1.14 BLASTING**

- .1 Blasting or other use of explosives is not permitted without prior receipt of written instruction by Engineer.

**1.15 POWDER ACTUATED DEVICES**

- .1 Use powder actuated devices only after receipt of written permission from Engineer.

**1.16 WORK STOPPAGE**

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

**Part 2 Products**

Not used

**Part 3 Execution**

Not used

**END OF SECTION**

**Part 1            General**

**1.1                GENERAL**

- .1        Carry out work so that adverse effects on natural environment are minimized.
- .2        Ensure personnel are suitably instructed regarding environmental protection requirements applicable to this work.

**1.2                FIRES**

- .1        Fires and burning of rubbish on site are not permitted.

**1.3                DRAINAGE**

- .1        Provide temporary drainage and pumping required to keep excavations and site free from water.
- .2        Ensure pumped water into waterways, sewer or drainage systems is free of suspended materials.
- .3        Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

**1.4                WORK ADJACENT TO WATERWAYS**

- .1        Do not operate construction equipment in waterways. Construction equipment is to be operated on land only.
- .2        Do not use waterway beds for borrow material
- .3        Waterways are to be free of excavated fill, waste material and debris.
- .4        Design and construct temporary crossings to minimize erosion to waterways.

**1.5                POLLUTION CONTROL**

- .1        Maintain temporary erosion and pollution control features installed under this Contract.
- .2        Control emissions from equipment and plant to local authorities' emission requirements.
- .3        Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

**1.6                INSPECTIONS**

- .1        The project site(s), from time to time, may be inspected to ensure compliance with Federal, Territorial, and Local environmental requirements.

**Part 2            Products**

Not Used.

**Part 3            Execution**

Not Used.

**END OF SECTION**

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**Part 1            General**

**1.1                PERMITS/INSPECTIONS**

- .1        The Contractor shall obtain and pay for all permits, licences, certificates and government inspections required for the performance of the Work in force at the Tender closing date. Renew all permits, licences, certificates and inspections required for each phase of the work, as required for each construction year. Submit copies of all permits, licences, certificates and inspection reports to the Engineer, prior to the beginning of work each year.
- .2        Give all required notices and comply with all local, territorial and federal laws, ordinances, rules, regulations, codes and orders relating to the Work, which are or become in force during the performance of the work.

**1.2                APPLICABLE CODES/STANDARDS**

- .1        Where specified codes/standards are not dated, conform to latest issue of specified codes/standards as amended and revised to the Tender closing date.
- .2        Confine apparatus, the storage of products and the operations of workers to limits indicted by laws, ordinances, permits and by directions of the Engineer. Do not unreasonably encumber the premises with products.

**1.3                SAFETY**

- .1        Observe and enforce all construction safety measures required by code, Workers' Compensation Board, the Territorial Safety Act and all applicable statutes. Appoint a suitably qualified employee who has sole responsibility on site on behalf of the Contractor, for compliance with the requirements and so advise the Owner in writing with a copy to the Engineer.
- .2        In the event of discrepancy between such provisions, the most stringent provision shall apply.
- .3        Employ a qualified specialty Engineer, registered in Nunavut, for the design of all shoring and falsework for the temporary supports of all structural elements, earth banks, road, etc.
- .4        Make available two (2) "Visitor Safety Helmets" for authorized workers.
- .5        Burning of refuse will not be permitted.
- .6        If "NO SMOKING" regulations are in effect in area of the Work, ensure that all workers comply with the regulations.
- .7        Ensure that all workers comply with the Owner's safety regulations where such regulations are in effect.

**1.4                CLEANING OF STREETS**

- .1        Conform to local ordinances and by-laws relating to littering of streets.

- .2 Take precautions to prevent depositing mud or debris on public or private roadways adjacent to the Work. Clean up immediately; otherwise the Engineer will direct necessary cleanup with all costs back-charged to the Contractor.

## **1.5 WORKING LIMITS/TEMPORARY EASEMENTS**

- .1 Confine all operations within the Owner's property limits.
- .2 Arrange for encroachment on areas beyond property lines separately with the property owners.
- .3 Obtain consent of adjoining property owners regarding need for any temporary easements or any other encroachments. Upon completion of contract, make good any damage to adjacent property.

## **1.6 TAXES/DUTIES/PATENTS**

- .1 Provincial/Territorial Sales Tax
  - .1 Exclude applicable sales taxes from the Tender Price.
- .2 Goods and Services Tax
  - .1 This project is not GST exempt. The GST paid to the Contractor will show on the payment certificates as a separate item.
- .3 Customs Duties
  - .1 Include custom duties in the Tender Price.
  - .2 Exemption Certificates, or such other documents which would permit purchase of goods exempt of customs duties, will be considered by the Owner if they apply, only after award of Contract.
- .4 Exemptions
  - .1 Where an exemption or refund of GST, PST, customs duty or excise tax is applicable to the Contract, cooperate fully with the Owner and the authorities to obtain such exemption or refund.
  - .2 Where government regulations permit, during the performance of the Contract, the Owner will make applications for refunds of tax on items of equipment and materials for which a tax exemption is allowed.
  - .3 Provide the Owner with copies of invoices for all such equipment and materials which are incorporated into the Work. Submit copies of such invoices with progress claims at the earliest opportunity. Submit invoice copies serially numbered; maintain a list of the goods covered by each invoice as they become incorporated in the Work. The list is to be updated and submitted with each progress claim.
- .5 Patent Fees
  - .1 Pay all royalties and patent licence fees required for the performance of the Contract. Hold the Owner harmless from and against all claims, demands, losses,



costs, damages, actions, suits or proceedings arising out of the performance of the Contract which are attributable to an infringement or an alleged infringement of any patent or invention by the Contractor or anyone for whose act the Contractor may be liable.

- .2 The Owner shall hold the Contractor harmless against all claims, demands, losses, costs, damages, actions, suits or proceedings arising out of the performance of the Contract which are attributable to an infringement or an alleged infringement of any patent or invention in executing anything for the purpose of the Contract, the model, plan or design of which was supplied by the Owner.

## **1.7**

### **EXISTING UTILITIES**

- .1 Notify the Hamlet a minimum of one (1) week in advance of commencing the work.
- .2 Indemnify and save harmless the Owner or existing utilities for any loss or damage which may be suffered by reason of the operations of the Contractor in the performance of the Contract.

**END OF SECTION**

**Part 1            General**

**1.1                INSPECTION**

- .1        Allow the Owner and the Engineer access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2        Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by Engineer's instructions, or law of Place of Work.
- .3        If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .4        The Engineer may order part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction. If such Work is found in accordance with Contract Documents, the Owner shall pay cost of examination and replacement.

**1.2                INDEPENDENT INSPECTION AGENCIES**

- .1        Independent Inspection/Testing Agencies will be engaged by Owner for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by Owner.
- .2        Provide equipment required for executing inspection and testing by appointed agencies.
- .3        Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
- .4        If defects are revealed during inspection and/or testing, appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and irregularities as advised by Engineer at no cost to the Owner. Pay costs for retesting and re-inspection.

**1.3                ACCESS TO WORK**

- .1        Allow inspection/testing agencies access to Work, as well as offsite manufacturing and fabrication plants.
- .2        Cooperate to provide reasonable facilities for such access.

**1.4                PROCEDURES**

- .1        Notify appropriate agency and Engineer in advance of requirement for tests, in order that attendance arrangements can be made.

- .2 Submit samples and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in orderly sequence to not cause delays in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

### **1.5 REJECTED WORK**

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Engineer as failing to conform to the Contract Documents. Replace or re-execute in accordance with Contract Documents at no extra cost to the Owner.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If, in the opinion of the Engineer, it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, the Owner may deduct from Contract Price the difference in value between Work performed and that called for by the Contract Documents, the amount of which shall be determined by the Engineer.

### **1.6 TESTS AND MIX DESIGNS**

- .1 Furnish test results and mix designs as may be requested or specified.
- .2 The cost of tests and mix designs beyond those called for in Contract Documents or beyond those required by law of Place of Work will be appraised by the Engineer and may be authorized as recoverable.

### **1.7 EQUIPMENT AND SYSTEMS**

- .1 Submit adjustment and balancing reports for mechanical, electrical and building equipment systems.

### **Part 2 Products**

Not Used

### **Part 3 Execution**

Not Used

**END OF SECTION**

**Part 1            General**

**1.1                SECTION INCLUDES**

- .1        Reference standards.
- .2        Product quality, availability, storage, handling, protection, transportation.
- .3        Manufacturer's instructions.
- .4        Workmanship, coordination and fastenings.
- .5        Existing facilities.

**1.2                REFERENCE STANDARDS**

- .1        Within the text of the specifications, reference may be made to the following standards:  
ACI - American Concrete Institute  
AISC - American Institute of Steel Construction  
ANSI - American National Standards Institute  
ASTM - American Society of Testing and Materials  
CEC - Canadian Electrical Code (published by CSA)  
CEMA - Canadian Electrical Manufacturer's Association  
CGSB - Canadian General Standards Board  
CISC - Canadian Institute of Steel Construction  
CLA - Canadian Lumberman's Association  
CPCA - Canadian Painting Contractors' Association, or alternatively the Canadian  
          Portland Cement Association  
CPCI - Canadian Prestressed Concrete Institute  
CRCA - Canadian Roofing Construction Association  
CSA - Canadian Standards Association  
CSSBI - Canadian Sheet Steel Building Institute  
FM - Factory Mutual Engineering Corporation  
IEEE - Institute of Electrical and Electronic Engineers  
IPCEA - Insulated Power Cable Engineers Association  
NAAMM - National Association of Architectural Metal Manufacturers  
NBC - National Building Code  
NEMA - National Electrical Manufacturers' Association

NFPA - National Fire Protection Association

TTMAC - Terrazzo, Tile and Marble Association of Canada

ULC - Underwriters' Laboratories of Canada

NACE – National Association of Corrosion Engineers

- .2 Conform to these standards, in whole or in part as specifically requested in the specifications.
- .3 If there is question as to whether any product or system is in conformance with applicable standards, the Engineer reserves the right to have such products or systems tested to prove or disprove conformance.
- .4 The cost for such testing will be borne by the Owner in the event of conformance with contract documents or by the Contractor in the event of non-conformance.
- .5 Conform to latest date of issue of referenced standards in effect on date of submission of bids, except where a specific date or issue is specifically noted.

### **1.3 QUALITY**

- .1 Products, materials, equipment and articles (referred to as products throughout the specifications) incorporated in the work shall be new, not damaged or defective, and of the best quality (compatible with specifications) for the purpose intended. If requested, furnish evidence as to type, source and quality of products provided.
- .2 Defective products, whenever identified prior to the completion of work, will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but it is a precaution against oversight or error. Remove and replace defective products at own expense and be responsible for delays and expenses caused by rejection.
- .3 Should any dispute arise as to the quality or fitness of products, the decision rests strictly with the Engineer based upon the requirements of the contract documents.
- .4 Unless otherwise indicated in the specifications, maintain uniformity of manufacture for any particular or like item throughout the building.
- .5 Permanent labels, trademarks and nameplates on products are not acceptable in prominent locations, except where required for operating instructions, or when located in mechanical or electrical rooms.

### **1.4 AVAILABILITY**

- .1 Immediately upon signing contract, review product delivery requirements and anticipate foreseeable supply delays for any items. If delays in supply of products are foreseeable, notify the Engineer of such, in order that substitutions or other remedial action may be authorized in ample time to prevent delay in performance of work.
- .2 In the event of failure to notify the Engineer at commencement of work and should it subsequently appear that work may be delayed for such reason, the Engineer reserves the right to substitute more readily available products of similar character, at no increase in

contract price.

## **1.5 STORAGE, HANDLING AND PROTECTION**

- .1 Handle and store products in a manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions when applicable.
- .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove from packaging or bundling until required in the work.
- .3 Store products subject to damage from weather in weatherproof enclosures.
- .4 Store cementitious products clear of earth or concrete floors, and away from walls.
- .5 Keep sand, when used for grout or mortar materials, clean and dry. Store sand on wooden platforms and cover with waterproof tarpaulins during inclement weather.
- .6 Store sheet materials, lumber on flat, solid supports and keep clear of ground. Slope to shed moisture.
- .7 Store and mix paints in a heated and ventilated room. Remove oily rags and other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.
- .8 Remove and replace damaged products at own expense and to the satisfaction of the Engineer.

## **1.6 TRANSPORTATION**

- .1 Pay costs of transportation of products required in the performance of work.
- .2 Transportation cost of products supplied by the Owner will be paid for by the Owner. Unload, handle and store such products.

## **1.7 MANUFACTURER'S INSTRUCTIONS**

- .1 Unless otherwise indicated in the specifications, install or erect products in accordance with manufacturer's instructions. Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.
- .2 Notify the Engineer in writing, of conflicts between the specifications and manufacturer's instructions, so that the Engineer may establish the course of action.
- .3 Improper installation or erection of products, due to failure in complying with these requirements, authorizes the Engineer to require removal and reinstallation at no increase in contract price.

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**1.8 WORKMANSHIP**

- .1 Workmanship shall be the best quality, executed by workers experienced and skilled in the respective duties for which they are employed. Immediately notify the Engineer if required work is such as to make it impractical to produce required results.
- .2 Do not employ any unfit person or anyone unskilled in their required duties. The Engineer reserves the right to require the dismissal from the site, workers deemed incompetent, careless, insubordinate or otherwise objectionable.
- .3 Decisions as to the quality or fitness of workmanship in cases of dispute rest solely with the Engineer, whose decision is final.

**1.9 COORDINATION**

- .1 Insure cooperation of workers in laying out work. Maintain efficient and continuous supervision.
- .2 Be responsible for coordination and placement of openings, sleeves and accessories.

**1.10 CONCEALMENT**

- .1 In finished areas, conceal pipes, ducts and wiring in floors, walls and ceilings, except where indicated otherwise.
- .2 Before installation, inform the Engineer if there is a contradictory situation. Install as directed by Engineer.

**1.11 REMEDIAL WORK**

- .1 Perform remedial work required to repair or replace the parts or portions of the work identified as defective or unacceptable. Coordinate adjacent affected work as required.
- .2 Perform remedial work by specialists familiar with the materials affected. Perform in a manner to neither damage nor endanger any portion of work.

**1.12 LOCATION OF FIXTURES**

- .1 Consider the location of fixtures, outlets, and mechanical and electrical items indicated as approximate.
- .2 Inform the Engineer of a conflicting installation. Install as directed.

**1.13 FASTENINGS**

- .1 Provide metal fastenings and accessories in same texture, colour and finish as adjacent materials, unless indicated otherwise.
- .2 Prevent electrolytic action between dissimilar metals and materials.

- .3 Use noncorrosive hot dip galvanized steel fasteners and anchors for securing exterior work, unless stainless steel or other material is specifically requested in the affected specification section.
- .4 Space anchors within their load limit or shear capacity and ensure they provide positive permanent anchorage. Wood, or any other organic material plugs are not acceptable.
- .5 Keep exposed fastenings to a minimum, space evenly and install neatly.
- .6 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.

**1.14 PROTECTION OF WORK IN PROGRESS**

- .1 Adequately protect work completed or in progress. Work damaged or defaced due to failure in providing such protection is to be removed and replaced, or repaired, as directed by the Engineer, at no increase in contract price.
- .2 Prevent overloading of any part of the building. Do not cut, drill or sleeve any load bearing structural member, unless specifically indicated without written approval of Engineer.

**1.15 EXISTING UTILITIES**

- .1 When breaking into or connecting to existing services or utilities, execute work at times directed by local governing authorities, with a minimum of disturbance to work, and/or building occupants.
- .2 Protect, relocate or maintain existing active services. When services are encountered, cap off in a manner approved by authority having jurisdiction, stake and record location of capped service.

**Part 2 Products**

Not Used

**Part 3 Execution**

Not Used

**END OF SECTION**



**Part 1            General**

**1.1                SUBMITTALS**

- .1        Submittals: in accordance with Section 01 33 00 - Submittal Procedures.
- .2        Prepare instructions and data using personnel experienced in maintenance and operation of described products.
- .3        Copy will be returned after final inspection with Engineer's comments.
- .4        Revise content of documents as required prior to final submittal.
- .5        Two weeks prior to Substantial Performance of the Work, submit to the Engineer, four final copies of operating and maintenance manuals in English.
- .6        Ensure spare parts, maintenance materials and special tools provided are new, undamaged or defective, and of same quality and manufacture as products provided in Work.
- .7        Furnish evidence, if requested, for type, source and quality of products provided.
- .8        Defective products will be rejected, regardless of previous inspections. Replace products at own expense.
- .9        Pay costs of transportation.

**1.2                FORMAT**

- .1        Organize data as instructional manual.
- .2        Binders: vinyl, hard covered, Heavy-duty Piano-style hinges.
- .3        When multiple binders are used correlate data into related consistent groupings. Identify contents of each binder on spine.
- .4        Cover: identify each binder with type or printed title 'Project Record Documents'; list title of project and identify subject matter of contents.
- .5        Arrange content by systems, under Section numbers and sequence of Table of Contents.
- .6        Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- .7        Text: manufacturer's printed data, or typewritten data.
- .8        Drawings: provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

### **1.3 CONTENTS - EACH VOLUME**

- .1 Table of Contents: provide title of project; Date of submission; names.
  - .1 Addresses, and telephone numbers of Consultant and Contractor with name of responsible parties.
  - .2 Schedule of products and systems, indexed to content of volume.
- .2 For each product or system:
  - .1 List names, addresses and telephone numbers of subcontractors and suppliers, including local source of supplies and replacement parts.
- .3 Product Data: mark each sheet to identify specific products and component parts, and data applicable to installation; delete inapplicable information.
- .4 Drawings: supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams.
- .5 Typewritten Text: as required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

### **1.4 AS-BUILTS AND SAMPLES**

- .1 Maintain, in addition to requirements in General Conditions, at site for Engineer, one record copy of:
  - .1 Contract Drawings.
  - .2 Specifications.
  - .3 Addenda.
  - .4 Change Orders and other modifications to Contract.
  - .5 Reviewed shop drawings, product data, and samples. Field test records.
  - .6 Inspection certificates.
  - .7 Manufacturer's certificates.
- .2 Store record documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage.
- .3 Label record documents and file in accordance with Section number listings in List of Contents of this Project Manual. Label each document "PROJECT RECORD" in neat, large, printed letters.
- .4 Maintain record documents in clean, dry and legible condition. Do not use record documents for construction purposes.
- .5 Keep record documents and samples available for inspection by Engineer.

### **1.5 RECORDING ACTUAL SITE CONDITIONS**

- .1 Record information on set of black line opaque drawings, and in copy of Project Manual, provided by Engineer.

- .2 Provide felt tip marking pens, maintaining separate colours for each major system, for recording information.
- .3 Record information concurrently with construction progress. Do not conceal Work until required information is recorded.
- .4 Contract Drawings and shop drawings: mark each item to record actual construction, including:
  - .1 Measured depths of elements of foundation in relation to finish first floor datum.
  - .2 Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - .3 Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
  - .4 Field changes of dimension and detail.
  - .5 Changes made by change orders.
  - .6 Details not on original Contract Drawings.
  - .7 References to related shop drawings and modifications.
- .5 Specifications: mark each item to record actual construction, including:
  - .1 Manufacturer, trade name, and catalogue number of each product actually installed, particularly optional items and substitute items.
  - .2 Changes made by Addenda and change orders.
- .6 Other Documents: maintain are manufacturer's certifications, inspection certifications, field test records, required by individual specifications sections.

## **1.6 EQUIPMENT AND SYSTEMS**

- .1 Each Item of Equipment and Each System: include description of unit or system, and component parts. Give function, normal operation characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and commercial number of replaceable parts.
- .2 Operating Procedures: include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- .3 Maintenance Requirements: include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- .4 Provide servicing and lubrication schedule, and list of lubricants required.
- .5 Include manufacturer's printed operation and maintenance instructions.
- .6 Include sequence of operation by controls manufacturer.

- .7 Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- .8 Provide installed control diagrams by controls manufacturer.
- .9 Provide Contractor's co-ordination drawings, with installed colour coded piping diagrams.
- .10 Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- .11 Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- .12 Include test and balancing reports.
- .13 Additional requirements: as specified in individual specification sections.

#### **1.7 MATERIALS AND FINISHES**

- .1 Building Products, Applied Materials, and Finishes: include product data, with catalogue number, size, composition, and colour and texture designations. Provide information for re-ordering custom manufactured products.
- .2 Instructions for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- .3 Moisture-Protection and Weather-Exposed Products: include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- .4 Additional Requirements: as specified in individual specifications sections.

#### **1.8 MAINTENANCE MATERIALS**

- .1 Provide maintenance and extra materials, in quantities specified in individual specification sections.
- .2 Provide items of same manufacture and quality as items in Work.
- .3 Deliver to location as directed; place and store.
- .4 Receive and catalogue items. Submit inventory listing to Engineer. Include approved listings in Maintenance Manual.
- .5 Obtain receipt for delivered products and submit prior to final payment.

#### **1.9 STORAGE, HANDLING AND PROTECTION**

- .1 Store spare parts, maintenance materials, and special tools in manner to prevent damage or deterioration.

- .2 Store in original and undamaged condition with manufacturer's seal and labels intact.
- .3 Store components subject to damage from weather in weatherproof enclosures.
- .4 Store paints and freezable materials in a heated and ventilated room.
- .5 Remove and replace damaged products at own expense and to satisfaction of Engineer.

#### **1.10 WARRANTIES AND BONDS**

- .1 Develop warranty management plan to contain information relevant to Warranties.
- .2 Submit warranty management plan, 30 days before planned pre-warranty conference, to Engineer approval.
- .3 Warranty management plan to include required actions and documents to assure that Owner receives warranties to which it is entitled.
- .4 Provide plan in narrative form and contain sufficient detail to make it suitable for use by future maintenance and repair personnel.
- .5 Submit, warranty information made available during construction phase, to Engineer for approval prior to each monthly pay estimate.
- .6 Assemble approved information in binder and submit upon acceptance of work. Organize binder as follows:
  - .1 Separate each warranty or bond with index tab sheets keyed to Table of Contents listing.
  - .2 List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
  - .3 Obtain warranties and bonds, executed in duplicate by subcontractors, suppliers, and manufacturers, within ten days after completion of applicable item of work.
  - .4 Verify that documents are in proper form, contain full information, and are notarized.
  - .5 Co-execute submittals when required.
  - .6 Retain warranties and bonds until time specified for submittal.
- .7 Except for items put into use with Owner's permission, leave date of beginning of time of warranty until Date of Substantial Performance is determined.
- .8 Conduct joint 9 month warranty inspection, measured from time of acceptance, by Engineer.
- .9 Include information contained in warranty management plan as follows:
  - .1 Roles and responsibilities of personnel associated with warranty process, including points of contact and telephone numbers within the organizations of Contractors, subcontractors, manufacturers or suppliers involved.

- .2 Listing and status of delivery of Certificates of Warranty for extended warranty items.
- .3 Provide list for each warranted equipment, item, feature of construction or system indicating:
  - .1 Name of item.
  - .2 Model and serial numbers.
  - .3 Location where installed.
  - .4 Name and phone numbers of manufacturers or suppliers.
  - .5 Names, addresses and telephone numbers of sources of spare parts.
  - .6 Warranties and terms of warranty: include one-year overall warranty of construction. Indicate items that have extended warranties and show separate warranty expiration dates.
  - .7 Cross-reference to warranty certificates as applicable.
  - .8 Starting point and duration of warranty period.
  - .9 Summary of maintenance procedures required to continue warranty in force.
  - .10 Cross-Reference to specific pertinent Operation and Maintenance manuals.
  - .11 Organization, names and phone numbers of persons to call for warranty service.
  - .12 Typical response time and repair time expected for various warranted equipment.
- .4 Procedure and status of tagging of equipment covered by extended warranties.
- .5 Post copies of instructions near selected pieces of equipment where operation is critical for warranty and/or safety reasons.
- .10 Respond in a timely manner to oral or written notification of required construction warranty repair work.
- .11 Written verification will follow oral instructions. Failure to respond will be cause for the Engineer to proceed with action against Contractor.

#### **1.11 PRE-WARRANTY CONFERENCE**

- .1 Meet with Engineer, to develop understanding of requirements of this section. Schedule meeting prior to contract completion, and at time designated by Engineer.
- .2 Engineer will establish communication procedures for:
  - .1 Notification of construction warranty defects.
  - .2 Determine priorities for type of defect.
  - .3 Determine reasonable time for response.
- .3 Provide name, telephone number and address of licensed and bonded company that is authorized to initiate and pursue construction warranty work action.

- .4 Ensure contact is located within local service area of warranted construction, is continuously available, and is responsive to inquiries for warranty work action.

**1.12 WARRANTY TAGS**

- .1 Tag, at time of installation, each warranted item. Provide durable, oil and water resistant tag approved by Engineer.
- .2 Attach tags with copper wire and spray with waterproof silicone coating.
- .3 Leave date of acceptance until project is accepted for occupancy.
- .4 Indicate following information on tag:
  - .1 Type of product/material.
  - .2 Model number.
  - .3 Serial number.
  - .4 Contract number.
  - .5 Warranty period.
  - .6 Inspector's signature.
  - .7 Construction Contractor.

**Part 2 Products**  
Not Used

**Part 3 Execution**  
Not Used

**END OF SECTION**

**Part 1      General**

**1.1          SCOPE**

- .1      This specification covers the surface preparation, materials, application, welding repairs for the interior lining of the welded tank.

**1.2          STANDARDS AND CODES**

- .1      These specifications are as detailed in the Steel Structures Painting Manual, Volumes 1 and 2, Systems and Specifications, published by the Steel Structures Painting Council, 4400 Fifth Avenue, Pittsburgh, PA, 15213. These specifications are a part of this specification and in case of conflict, the decision of the Consultant shall prevail.
- .2      Dry film thicknesses are stated in mils rather than microns. 1 mil equals 25 microns.
- .3      Unless otherwise specified all codes and standards shall be of the latest revisions, editions, or publications and shall govern this work.
- .4      The coating manufacturer's latest published instructions are a part of this specification and shall be acquired by the Contractor. In case of conflict, the decision of the Consultant shall prevail. The contractor shall also have in his possession and at the work site the latest copies of the manufacturer's Material Safety Data Sheets.
- .5      The Contractor shall have copies and be knowledgeable of all Territorial and Federal Safety Codes. This shall also include both the Federal and Territorial Department of the Environments laws, directives, WSCC procedures and guidelines.
- .6      The Contractor, and the Contractor's employees, shall be required to provide their own security arrangements at the job site.

**1.3          SUBMITTALS**

- .1      Provide submittals to Consultant in an orderly sequence.
- .2      Stamp, sign, date, and identify submittals to this particular project.
- .3      Comply with all Bid documents.
- .4      A copy of Bid Submission is to accompany the Bid Form. Bid Submissions are to include, but not be limited to, the following items:
  - .1      Include with bid documents a list outlining at least three similar contracts of the like as being tendered. Outline a brief description of the time frame, and the size of equipment, staging, and containment enclosures necessary to conclude this contract.
  - .2      Provide Coatings Data Sheets.



- .3 Include a letter from the Coatings Manufacturer including test data outlining coatings compliance with Impressed Current Cathodic Protection systems as per ASTM G-8.

#### **1.4 QUALITY**

- .1 Test Reports: Provide certified test reports showing compliance with specified performance characteristics and physical properties.
- .2 Certificates: Provide product certificates signed by manufacturer certifying materials comply with specified performance characteristics and criteria and physical requirements.
- .3 Pre-Installation Meetings: Conduct pre-installation meeting to verify project requirements, manufacturer's installation instructions and manufacturer's warranty requirements and to revise the Contractor operations.
- .4 All work performed by the Contractor shall be of the quality specified by the requirements of SSPC-PA1, unless otherwise stated. Any dispute or difference of opinion as to the interpretation of these specifications, or regarding the quality of material or workmanship, shall be left to the decision of the Consultant or his appointed representative, whose decision shall be final and binding on both parties.
- .5 Any defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause resulting from the Contractor's actions or omissions, found to exist prior to final acceptance of the work, shall be repaired or removed immediately when ordered by the Consultant.

#### **1.5 WORK**

- .1 The work intended by this specification is the re-lining of the interior surfaces.
- .2 Only Subcontractors approved by the Owner and recommended by the Consultant shall be employed.
- .3 This outline of the intended work described here is given only for the guidance of the Contractor, who will be held responsible for securing all the necessary details. The intent of these specifications is to effect a quality coating system.

#### **1.6 SUPPLIERS**

- .1 Any deviation from the named suppliers must be with the prior written approval of the Consultant. Such a request for approval must be made in writing one week prior to the closing of the bid.

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**Part 2      Products**

**2.1          GENERAL**

.1      Not used.

**2.2          INTERIOR SURFACE COATING**

.1      Surface Preparations Required

.1      Tank and Structural steel shall be abrasive blast cleaned to the requirements of SSPC-SP5 / NACE No. 1, White Blast Cleaning providing a surface profile ranging between 3-4 mil or as required by the coating system manufacturer and to the Engineer's complete satisfaction.

.2      Definition: The removal of all visible rust, mill scale, paint and contaminants, leaving the metal uniformly white or gray in appearance. This is the ultimate in blast cleaning. Use where maximum performance of protective coatings is necessary due to exceptionally severe conditions such as constant immersion in water or liquid chemicals.

.2      Single coat system:

**Single Coat:** Elastomeric Polyurethane Off-White NSF (25-35 mils DFT)

.3      Standard of Acceptance:

.1      The use of a manufacturer's name is in no way intended to limit competition. Coating by other manufacturers may be considered, provided that there is compliance with these specifications and that sufficient technical data is provided to enable the Consultant to properly evaluate the equipment.

.1      Single Coat: AMERTHANE 490(NSF), POLLIBRID705 (NSF), POLYCOTE 115.

.2      Approved equal.

.4      Apply by spray in one coat.

.5      After curing, the tank shall be decontaminated. This decontamination of the tank pertains only to the work by the Coatings Contractor.

**2.3          COLOURS**

.1      Colour:

.1      The colour of the interior is to be base white.

.2      The final colour to be confirmed by Owner after project award. Samples are to be provided by the Contractor prior to project start.

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**Part 3 Execution**

**3.1 MANUFACTURER'S INSTRUCTIONS**

- .1 Compliance: Comply with manufacturer's written data, including product technical bulletins, product catalogue installation instructions, product carton installation instructions, and data sheets.
- .2 Coating Supplier Technical Service Requirements:
  - .1 The Coating Supplier is required to provide onsite evaluations of the work being done, at the Owner's request. The Coating Supplier may be required to provide the following technical assistance:
    - .1 Be on site for surface preparations evaluation.
    - .2 Be on site when the coating application begins, and evaluate application and recoat criteria.
    - .3 Be on site when there is a major coating system change.
    - .4 Respond to any material or application problems.
    - .5 Visit the site periodically during material application.
    - .6 Provide a written report to the Owner's Representative after each onsite visit if requested by Owner.

**3.2 APPLICATION**

- .1 The Contractor shall supply a list of skilled personnel, foremen, equipment etc. to the Consultant if requested.
- .2 All coatings proposed should be applied with plural component spray. The contractor must have minimum of five (5) years' experience with a minimum of three (3) relevant projects, with plural component spray. Experience to be demonstrated on the forms at the end of this section and submitted prior to award.
- .3 Blast cleaning equipment shall be of a quality and size to be sufficiently adequate to perform the work in the time allowed. All spray and blasting equipment must be adequately grounded to avoid build-up of static electricity.
- .4 Coating spraying equipment shall be clean and in good condition with sufficient selection of air caps and tips, etc., to meet the requirements of the coating manufacturer's suggested application guides. Suitable working regulators and gauges, etc. shall be utilized to ensure that safety regulations are followed.
- .5 All coating materials shall be delivered to the work site in the Supplier's original containers with labels and seals unbroken. They shall be kept in a locked, well ventilated storage place assigned for this purpose.
- .6 All coating material for the system selected shall be supplied by the same manufacturer. Different lots of material shall be kept to a minimum, consistent with the manufacturer's production facilities for the products involved.

- .7 When requested, the Contractor shall provide the Consultant with a one litre minimum size, four litre maximum size, sample of each different lot of material proposed for the work. When requested, the Contractor shall supply the Consultant with certified copies of the manufacturer's quality control records.
- .8 Any scaffolding, either fixed or mobile, shall meet the latest safety standards applicable. All operators shall furnish training and/or operating permits to the Consultant when requested.
- .9 The Contractor shall be responsible for the protection of all structures and equipment, including private lands, housing, vehicles etc., and shall ensure that any damage is repaired or replaced at the discretion of the Consultant.
- .10 Where environmental protection is required, i.e., to protect the work piece or work place from the environment, or the environment from the work being performed, it shall be the responsibility of the Contractor. This shall include tents, heating or ventilating, enclosures, etc. These shall be provided at no additional cost to the Owner.
- .11 Unless prior written arrangements are agreed upon, the disposal of excess materials, empty coatings containers, etc.; containment or disposal of hazardous goods; and/or residue from blasting operations and coating's application, shall be the responsibility of the Contractor. These methods must meet with applicable guidelines and regulations.
- .12 The Contractor may indicate a supplier preference; however, the Owner reserves the right to make the final selection. Once a Coating Supplier has been chosen for a specific project, that Coating Supplier shall remain the supplier throughout the project. Paint systems of one Coating Supplier shall not be mixed with systems or products of another unless this is part of the specification or unless approved in writing by Owner.
- .13 Substitution of materials by the Contractor is not permitted. All thinners, catalyzing/ curing agents, and other additives shall be as specified by the Coating Supplier for use with the specified coating system.
- .14 Colors are indicated where appropriate. In most cases, each coat must be contrasting to preceding and succeeding coats. The color of the finish coat is project specific and will be provided by Owner.
- .15 The Contractor shall supply all coating materials, catalysts, and thinners unless other arrangements have been made and approved in writing by Owner.
- .16 Store coating materials in their original containers with their original labels visible and readable. Storage conditions shall be as specified by the manufacturer's data sheet. Use each material within its shelf life as defined by the manufacturer.
- .17 Do not use coatings which have exceeded their shelf life or which have deteriorated in storage. Deterioration is indicated by formation of a surface skin, by gelling, color change, or by settling of solids which cannot be mixed into a smooth consistency. If any doubt of acceptable coatings, contact Coating Supplier to inspect coating prior to application.

- .18 All surfaces to be coated shall be free from contamination prior to any application.
- .19 No coating work shall be done when the surface is less than 7°F above the dew point, nor when it is likely that there will be a change in the weather within two (2) hours of application that would be detrimental to the coating system. Any work done at 7°C or less should have heating provided to avoid ice formation.
- .20 All coatings shall be uniformly applied without sags, foreign materials, dust, contamination, or other blemishes. Such defects shall be removed and repaired before proceeding with another coat, at the discretion of the Consultant.
- .21 All coatings shall be applied as per the specified minimum and maximum film thicknesses. Uniform 'hiding', application, film building, colour etc. shall be kept to minimum tolerances.
- .22 All coating work and systems for the purpose of this specification shall be considered a fully cured system prior to being accepted by the Consultant. No accelerators for the purpose of force curing the coating system will be accepted. Information from the coating manufacturer's product data sheets shall be used to ensure proper curing of the material.
- .23 Welding and grinding repairs may be required on the interior of the tank. The lump sum bid shall include all the necessary costs for welding rods, gas, grinders, grinding discs, cutting equipment, welding machines and staging etc.
- .24 Contractor shall employ the use of the following equipment:
- Negative pressure air handling unit with dust collector with bag house appropriate for volume of tank
  - Dehumidifier and heaters capable of maintaining adequate temperature and humidity of the interior of the reservoir
  - Self contained Steel Grit recycler unit to clean and recycle the abrasive
- .25 Any degaussing of the steel from the effect of electrostatic charge that is required is the sole responsibility of the contractor and is at their discretion to undertake this work.
- .26 The recommended curing time and conditions (temperature and humidity) as detailed from the coatings supplier.

### **3.3 TANK INTERIOR SURFACE PREPARATION AND COATING APPLICATION**

- .1 All oil and grease and any other surface contamination shall be removed according to the requirements of SSPC-SP1-89 Solvent Cleaning, before any other surface preparation is started.
- .2 All bolt holes, bolts, etc. shall be solvent wiped prior to abrasive blasting.
- .3 No inhibitive washes, acid washes, or solvents shall be used on any surface after the abrasive blast has been completed.

- .4 Solvent wash solutions are not recommended and any solvent wash solutions desired for use must have prior written approval prior to being transported to site.
- .5 Any sharp edges not acceptable to Good Painting Practices shall be ground to produce a minimum radius of 3 mm. All unacceptable welds, welding slag, weld splatter, burrs, slivers, sharp radius edges etc. shall be repaired in a good workmanship manner compatible to the coatings selected. This work shall have Consultant's approval prior to commencement.
- .6 All edges and flanges, including difficult to spray areas, welds, etc. shall be hand striped using an acceptable brush or roller according to the coatings manufacturer's data sheets.
- .7 All abrasive material must have prior Consultant's approval.
- .8 Dry Abrasive Blast Clean in accordance with SSPC-SP-5 White Blast Cleaned.
- .9 The Contractor shall dry abrasive blast in accordance to the Steel Structures Painting Council's surface preparation specified. This surface specification shall exist at the time of the coating application.
- .10 No inhibitors are permitted.
- .11 Suitable precautions shall be utilized to protect any adjacent equipment, vehicles, etc., prior to commencement of work. This shall also include all galvanized or other ferrous and non-ferrous metal surfaces, and previously coated surfaces.
- .12 Prior to coating, surface must be cleaned, dry, undamaged and free of all loose rust, dirt, grease or other contaminants, including salt deposits.
- .13 Apply coating as soon as possible to prevent surface from rusting
- .14 Round off all rough welds, and sharp edges. Remove all weld spatters from areas to be coated.
- .15 **Total Coating for Interior System: 25.0-35.0 mils DFT.**
- .16 All grit, dust, debris or any other contaminant is to be removed from all interior surfaces of the reservoir prior to placing it back in service.

### 3.4 ENVIRONMENTAL CONTROLS

- .1 Under the Guidelines of the Government of Nunavut, testing will be done on the residue from the abrasive blasting. The contractor is advised that it is his responsibility to remove this from the work site to a safe disposal landfill site.
- .2 It is the responsibility of the Coatings Contractor to ensure that the site is kept clean from any excess paint cans, debris etc. The site shall be kept in a presentable and professional manner at all times.

### **3.5 REPAIR OF DEFECTS**

- .1 Before application of any further coat of material, all damage and/or contamination to previous coats shall be repaired to the satisfaction of the Owner.
- .2 In the case of repair, the procedures shall be in an acceptable manner as authorized by the Consultant. In the case of removal, the work shall be replaced by work and materials which shall conform to the specification. This clause shall have full effect regardless of the fact that the defective work may have been previously overlooked by the Consultant.

### **3.6 REVIEW**

- .1 All material and equipment furnished, and work done, shall be subject to review by the Consultant.
- .2 Such review shall not relieve the Contractor of the responsibility for furnishing the qualified labour, equipment, staging etc. necessary to meet the requirements of this specification, or the safe accessibility to the work piece for the purposes of review.
- .3 The Contractor shall ask for the Consultant's approval only after conducting his own thorough inspection, and after he is satisfied he has met all the requirements of the specification. If requested, the Contractor will keep accurate records containing details such as weather, temperatures, dew points and times for the various coating applications.
- .4 All work shall be subject to review by the Consultant or appointed representative, who shall be given at least 48 hours notice prior to work commencing.
- .5 Review may be required for various work stages. Review may be waived only by written notice to the Contractor. The Contractor shall provide the Consultant with a schedule detailing each stage and at least 24 hours notice during the course of the project when delays are expected.
- .6 Any condemned coating application, defective work not conforming to this specification, or equipment, shall be replaced at no additional cost to the Owner. Any additional inspection cost as the result of defective work will be credited back to the owner.
- .7 Methods of Review and Review Procedures shall be as directed by the Consultant or his Representative, who shall govern both methods and standards. All findings will be recorded and will become part of the Project's Quality Assurance Records.
- .8 Film Thickness measurements shall be made using a Positest or magnetic thickness gauge, or equal, approved by the Consultant and shall conform to SSPC-PA2.
- .9 Holiday testing will be the responsibility of the Contractor, witnessed by the engineer. A written report is to be provided.

### **3.7 WARRANTY INSPECTION**

- .1 The interior surfaces of the tank shall be inspected by the Owner's representatives and

the Contractor at approximately 9 to 14 months after the coating work has been completed to determine whether any repair work is necessary.

- .2 The Owner shall establish a date for inspection and shall notify the Contractor at least 30 days in advance. If an inspection date is not established within 13 months after completion of painting work, the warranty inspection shall be waived.
- .3 The Owner shall partially or fully drain the tank. The Contractor shall provide safety equipment, suitable interior lighting, pumps and ventilation for the tank inspection.
- .4 Locations where coating has peeled, bubbled, or cracked or where corrosion is evident shall be considered as failure of the coating system. The Contractor shall make repairs at all points where failures are observed by removing the deteriorated coating, cleaning the surface, and recoating with the same coating system. If the area of failures exceeds 2% of the area of a portion of the tank surface, then for that portion, the entire coating system shall be removed and recoated. For the purposes of determining the need for complete recoating, the inside roof and shell and the outside roof and shell shall each be considered separately. The Owner may, at any point during or after the work under this Specification, use non-destructive test instruments to analyse coating failures observed. The Owner will establish a starting date and a reasonable time of completion for remedial work.
- .5 All work performed shall be guaranteed for five (5) years from completion for defects of materials and workmanship. The Owner may conduct a warranty inspection of remedial work and require repair of failures pursuant to this Specification.

**END OF SECTION**



**CONTRACTOR'S QUALIFICATIONS**

**References**

List three projects of similar construction completed in the last two years.

1	Project Description	
	Owner & Owner Contact	
	Year Completed	
	Project Superintendent/Foreman	
	Consultant & Contact	
2	Project Description	
	Owner & Owner Contact	
	Year Completed	
	Project Superintendent/Foreman	
	Consultant & Contact	
3	Project Description	
	Owner & Owner Contact	
	Year Completed	
	Project Superintendent/Foreman	
	Consultant & Contact	

**Subcontractors**

	Trade	Subcontractor
1		
2		
3		
4		
5		
6		
7		
8		

**Project Superintendent/Foreman**

Name			
Years of Construction Experience			
Last Three Projects Worked On (list below)			
Project Description		Reference	
1		Name	
		Tel.	
2		Name	
		Tel.	
3		Name	
		Tel.	

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**Part 1      General**

**1.1          SUMMARY**

- .1      Included in this section:
  - .1      New 918 mm (36”) diameter shell manway.
  - .2      Corrosion Control System Upgrade
  - .3      Grout Repair
  - .4      Internal Pipe Supports
  - .5      Inlet piping flange replacement
  
- .2      Bid evaluation may include factors other than initial purchase price. After verification that the minimum specifications have been attained, the bid may be evaluated on qualitative, quantitative and subjective criteria. Bids may also be evaluated based on life cycle cost analysis.

**1.2          RELATED SECTIONS**

- .1      Section 13204 – Coatings for Welded Steel Tanks.
- .2      Section 13345 – Cathodic Protection

**1.3          REFERENCES**

- .1      American Society for Testing and Materials International (ASTM):
  - .1      ASTM A307-03, Standard Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength.
  - .2      ASTM A325M-04, Standard Specification for Structural Bolts, Steel, Heat Treated 830 Mpa Minimum Tensile Strength (Metric).
  
- .2      AWWA D100 / ASME SEC. IX and ANSI/AWS B2.1 - Standard for Welded Carbon Steel Tanks for Water Storage.
  
- .3      AWWA D102- AWWA Standard for Coating Steel Water-Storage Tanks.
  
- .4      AWWA D104- AWWA Standard for Automatically Controlled, Impressed-Current Cathodic Protection for the Interior of Steel Water Tanks.
  
- .5      AWWA C652 - AWWA Standard for Disinfection of Water-Storage Facilities.
  
- .6      NBCC - National Building Code of Canada.
  
- .7      NSF Standard 61 - National Sanitation Foundation International - Drinking Water System Components.

- .8 CAN/CSA-W47.1-03, Certification of Companies for Fusion Welding of Steel Structures.

#### **1.4 SYSTEM DESCRIPTION**

- .1 Design Requirements: Tank upgrades to include the following as a minimum requirement:
- .1 New 918 mm (36") diameter shell manway.
  - .2 Interior Pipe Support Upgrade
  - .3 Corrosion Control System Upgrade.
- .2 Existing Tank Conditions:
- .1 Contents: potable water.
  - .2 Diameter: 18.2 m.
  - .3 Height: 12.8 m.
  - .4 Original construction date: 1991.
  - .5 Existing 600 mm (24") diameter shell manway
- .3 Design Standards: conform to the applicable AWWA Standards. Where exception is taken to the above, clearly describe the exception, the reason and the consequences in the Bid Submission. The following items are to clarify, supplement and amend the Design Standards.
- .1 AWWA D100 Section 14 may be used for tank structural design. If using Section 14, utilize a DMT of minus forty degrees Celsius (-40°C). A certified welding inspector who shall be responsible for all weld inspections will be employed by the Contractor.
  - .4 All bottom and side shell welds must be full penetration butt welds. Full penetration butt welds are preferred for all joints. However, if used, all roof plate lap joints and roof plate to structural member lapped seams on a coated steel tank are to have continuous fillet or seal welds on both edges of the joint in order to reduce the potential for coating failure and corrosion.
  - .5 Prepare all surfaces to be coated to the coating manufacturer's instructions and AWWA D102 Sections B6.1 and B6.2.
  - .6 For butt-joint welds subject to secondary stress provide complete joint penetration welds at joints in materials of thickness greater than 9.5 mm.
  - .7 Design loads - use applicable climate design data as the basis for upgrade.

#### **1.5 SUBMITTALS**

- .1 Provide submittals to Consultant in an orderly sequence in accordance with Section 00800 – Supplementary Conditions.
- .2 Stamp, sign, date, and identify submittals to this particular project.

- .3 Comply with all Bid documents.
- .4 Submit three (3) copies of the following:
  - .1 Schedule.
  - .2 Copies of required certifications.
  - .3 Shop drawings bearing and engineers stamp for the Nunavut Territory for tank and accessories including details of all welded joints.
  - .4 Shop and field quality procedures and test results.
  - .5 Hydrostatic and disinfection test results.
  - .6 Close-out reports and certifications.

**1.6 DELIVERY, STORAGE AND HANDLING**

- .1 All aspects associated with delivery, storage, and handling, including protection and waste management, are the responsibility and at the expense of the Contractor.

**1.7 PROJECT/SITE CONDITIONS**

- .1 Existing tank site was originally constructed in 1991.
- .2 Tank was drained, cleaned and the interior inspected in summer of 2016.

**1.8 QUALITY ASSURANCE**

- .1 Provide certification that all repair and welding contractors are qualified to weld steel tanks. The welder must be certified 'B' pressure, and must be registered with CGS- Safety Division.
- .2 Site Meetings: as part of Manufacturer's Services described in PART 3, Article 3.6 - FIELD QUALITY CONTROL, schedule site visits, to review Work, at stages listed.
  - .1 Prior to starting work to confirm the site conditions.
  - .2 As required.
- .3 Health and Safety:
  - .1 Carry out work in accordance to occupational health and safety and in accordance with Section 00800 – Supplementary Conditions.

**Part 2 Products**

- .1 Not used

**2.1 GENERAL**

- .2 The tank repair and any other steel or other repairs are to conform to the requirements of AWWA D100, 102 and 104.

**2.2 TANK STRUCTURE, ACCESSORIES AND INCIDENTALS**

- .1 All internal components of the tank, whether in contact with the potable water contents or not, must be certified to meet NSF Standard No. 61.
- .2 All accessories and incidentals must also be in full conformity to local codes, current applicable safety regulations, other applicable sections of the specifications and the operational requirements of the structure.
  - .1 One (1) grade level shell manways. Opening to be circular with 918 mm diameter.
  - .2 Upgrade tank inlet, outlet, vent and overflow brackets. Pipe is to remain, new wall mounted brackets to be provided for all 3 pipes.
  - .3 Replacement of internal tank inlet piping flanges (uniflange or equivalent) 200mm size, 5 flanges to be replaced. Confirm location and size on site.
  - .3 Tank grout base protection:
    - .1 Repair grouting / foundation along the bottom ring of standpipe.
    - .2 Trowel fill any voids with a concrete patching mortar (Gemite Fibre-Pathc OV or approved equal)
    - .3 Cover all exposed bottom ring concrete with water proofing material (Cem-Kote Flex ST or approved equal)
    - .4 Remove any loose grout between the steel ring and concrete and replace with injection filler material (StopAQ FN 4200 Injection filler or approved equal)
    - .5 The gap repair will then be covered with a sealant to prevent future water ingress. The sealing of the filled gap with a waterproof fibrous material (StopAQ Wrappingband EZ or approved equal).

### **Part 3 Execution**

#### **3.1 GENERAL**

- .1 Install all products and execute all Work to the requirements of the listed references, as applicable, unless noted otherwise.
- .2 For products not covered by the above, install in strict accordance to manufacturer's printed instructions or as indicated in other applicable sections of the specification.
- .3 Companies doing welding must be certified to the requirements of CAN/CSA-W47.1-03.

#### **3.2 WELDING INSPECTION AND TESTING**

- .1 The Contractor will retain the services of an independent certified welding inspector to perform all welding inspections.
- .2 Submit the shop weld joint inspection reports, if applicable.

- .3 All complete joint penetration welded-shell butt-joints will be inspected by the radiographic method in accordance with AWWA D100 Section 11.6.
- .4 All weld seams will be inspected.
- .5 Inspection by removal of sectional specimens will not be done.
- .6 The welding inspector shall submit a complete inspection report directly to the Owner.

### **3.3 HYDROSTATIC TESTING**

- .1 Test the completed tank for liquid tightness by filling it with clean water to its overflow elevation. Allow water to stand in the completed tank for 24 hours prior to the start of the leak test. Measure and record the water level over the next 24 hours (leak test).
- .2 Correct all leaks. Repair and retest until there is zero visible leakage.
- .3 Water for testing will be made available at an on-site hydrant by the Owner at no charge. Labour and equipment necessary to fill, test and make repairs is to be included in the Bid Price.
- .4 The availability of water is limited. The estimated delivery rate is approximately 100 m<sup>3</sup>/d. Most or all of this water will be available during the night.
- .5 Dispose of test water through the tank drain piping at a controlled rate so as not to adversely affect the environment. The drainage must be done per the direction by the authorities having jurisdiction.
- .6 All tests must be conducted in the presence of the Consultant.
- .7 Subsurface inlet and outlet piping is to be tested separately prior to tank erection.

### **3.4 DISINFECTION**

- .1 Disinfect the tank interior and piping to the requirements of AWWA-C652.
- .2 Method of disinfection is at the Contractor's discretion.
- .3 Comply with all environmental and health regulatory requirements.
- .4 The Contractor is responsible for disposal of chlorinated water in an environmentally sound manner acceptable to the local regulatory authorities. If required, apply reducing agents to maintain chlorine concentration within acceptable limits.

### **3.5 FIELD QUALITY CONTROL**

- .1 The Contractor's representative is to submit written confirmation that the tank has been repaired correctly, successfully tested, disinfected and is ready for continuous operation.

**END OF SECTION**



**Part 1 General**

**1.1 SUMMARY**

- .1 The full supply and installation of a cathodic protection system including all anodes, rectifiers, additional tank penetrations, wiring and conduit.

**1.2 RELATED SECTIONS**

- .1 Section 13204 – Coatings for Welded Steel Tanks.

**1.3 REFERENCES**

- .1 General requirements and protective criteria in accordance with National Association of Corrosion Engineers (NACE) Standard SP-0388-2014.
- .2 American Society for Testing and Materials International (ASTM):
  - .1 ASTM A307-14, Standard Specification for Carbon Steel Bolts and Studs, 60,000 psi Tensile Strength.
  - .2 ASTM A325M-14, Standard Specification for Structural Bolts, Steel, Heat Treated 830 Mpa Minimum Tensile Strength (Metric).
- .3 American Water Works Association (AWWA):
  - .1 AWWA C652- AWWA Standard for Disinfection of Water-Storage Facilities.
  - .2 AWWA D100- AWWA Standard for Welded Carbon Steel Tanks for Water Storage.
  - .3 AWWA D102 - AWWA Standard for Coating Steel Water-Storage Tanks.
  - .4 AWWA D10 - AWWA Standard for Automatically Controlled, Impressed-Current Cathodic Protection for the Interior Submerged Surfaces of Steel Water Storage Tanks.
- .4 CAN/CSA W47.1-09 (R2014), Certification of Companies for Fusion Welding of Steel Structures.
- .5 National Building Code of Canada (NBCC).
- .6 National Sanitation Foundation International (NSF):
  - .1 NSF Standard 61 (2016) - Drinking Water System Components – Health Effects.

**1.4 SYSTEM DESCRIPTION**

- .1 The reservoir(s) shall be equipped with a ‘Floatinode’ cathodic protection system to be designed, supplied and installed by Corrosion Service or approved equal. The system shall be of the impressed current type with floating anodes, one (1) permanent reference electrode and an air-cooled, automatic controlled output rectifier.
- .2 System shall be suitable for continuous service with a minimum 15-year design life and be capable of protecting 10% of the interior submerged tank area.
- .3 All wiring, exterior tank connection, underground wiring and conduit shall be provided and installed as part of the complete cathodic protection package.

- .4 The rectifier mounting shall be mounted inside the treatment plant and shall be site determined.

## **1.5 DESIGN AND DRAWINGS**

- .1 The cathodic protection system shall be designed by or under the supervision of a NACE certified corrosion specialist (licensed to practice engineering in the Territory of Nunavut) to the requirements specified herein.
- .2 Drawings shall be prepared and submitted to the Engineer for approval at least four weeks prior to installation.
- .3 Drawings shall clearly show details, arrangements, and attachment of various components as required.

## **1.6 SUBMITTALS**

- .1 Provide submittals to Consultant in an orderly sequence in accordance with tender contract.
- .2 Stamp, sign, date, and identify submittals to this particular project.
- .3 Comply with all Bid documents.
- .4 Submit three (3) copies of the following:
  - .1 Schedule.
  - .2 Copies of required certifications.
  - .3 Shop drawings bearing and engineers stamp for the Nunavut Territory for tank and accessories including details of all welded joints.
  - .4 Shop and field quality procedures and test results.
  - .5 Hydrostatic and disinfection test results.
  - .6 Close-out reports and certifications.

## **1.7 DELIVERY, STORAGE AND HANDLING**

- .1 All aspects associated with delivery, storage, and handling, including protection and waste management, are the responsibility and at the expense of the Contractor.

## **1.8 PROJECT/SITE CONDITIONS**

- .1 Existing tank site was originally constructed in 1971.

## **Part 2 Products**

### **2.1 GENERAL**

- .1 Cathodic Protection System

### **2.2 MATERIALS**

- .1 The anode material shall be platinum clad niobium with copper core as manufactured by Anomet products protected with perforated PVC conduit attached to floats, strain relieved and connected to floor anchors using AWG#12 & STR RWU-90 cable.

- .2 The rectifier shall be air cooled, 115 VAC input, 15 Amps AC type UCC as manufactured by Corrosion Service with independent voltage, current and potential control limit adjustment. The rectifier enclosure shall be conforming to NEMA 4.
  - .1 Rectifier shall be Model UCCI 48-6 and feature:
    - .1 Thermal limiting for safety
    - .2 Soft starting
    - .3 Full digital metering
    - .4 Alarm indicator
    - .5 Built-in interrupter
    - .6 Optional uptime counter
  - .3 Reference electrode suitable for immersion service in potable water and permanently installed inside water tank.
  - .4 Other materials as recommended by the supplier of the cathodic protection system.

### **Part 3 Execution**

#### **3.1 GENERAL**

- .1 Install all products and execute all Work to the requirements of the listed references, as applicable, unless noted otherwise.
- .2 For products not covered by the above, install in strict accordance to manufacturer's printed instructions or as indicated in other applicable sections of the specification.
- .3 Companies doing welding must be certified to the requirements of CAN/CSA-W47.1-03.

#### **3.2 SCHEDULING OF WORK**

- .1 Do not allow sandblasting or painting to occur until necessary attachments that are to be welded to the tank are in place.

#### **3.3 INSTALLATION**

- .1 The work of this section shall be installed to the requirements of the approved design drawings.
- .2 The rectifier shall be installed at an interior location as indicated by the Engineer on site.
- .3 The AC power to the rectifier is to be installed by others. A dedicated 115VAC 15 Amp circuit is required.
- .4 Underground wiring between the tank and the rectifier shall be installed in conduit. All electrical work shall be according to the Canadian electrical code. Sealing of wall penetrations shall be by others and be watertight using an appropriate sealant.

#### **3.4 COMMISSIONING**

- .1 After the tank has been filled with water, as intended for use, and all other work has been completed, the system shall be energized and adjusted for optimum operation by a NACE Corrosion Specialist or his authorized representative.

- .2 After the system has been energized and adjusted, the Corrosion Specialist or his representative shall prepare and submit a written report with survey results and maintenance instructions.
- .3 A detailed system operation and maintenance manual complete with “as-built” drawings shall also be provided.

### **3.5 GUARANTEE**

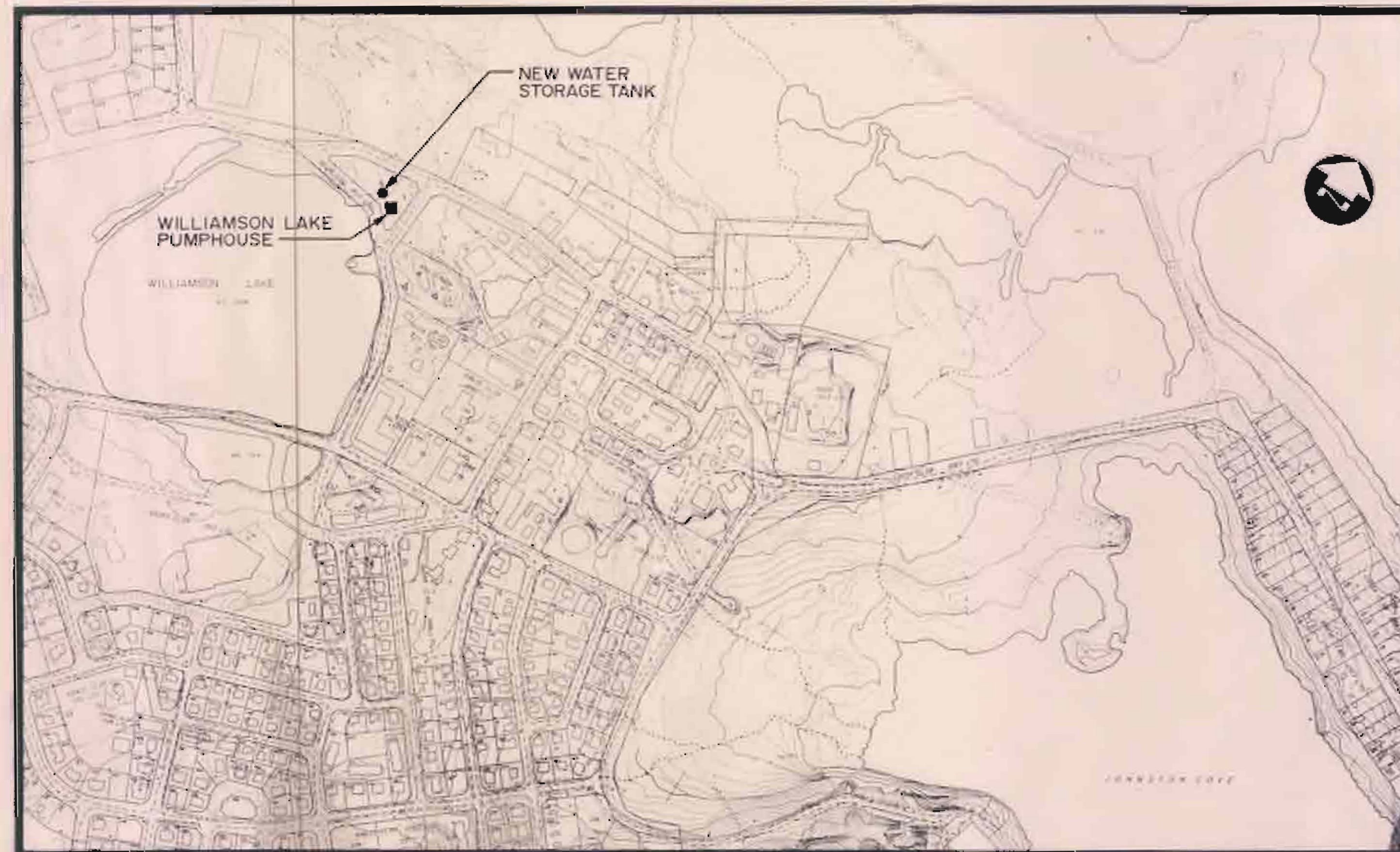
- .1 All workmanship, materials and equipment as specified herein shall be guaranteed for a period of one year from the date of final acceptance of the cathodic protection system by the Owner.

**END OF SECTION**



# THE GOVERNMENT OF THE NORTHWEST TERRITORIES DEPARTMENT OF PUBLIC WORKS

PROJECT : WILLIAMSON LAKE RESERVOIR REPLACEMENT  
CONTRACT #1: WATER STORAGE TANK



LOCATION PLAN

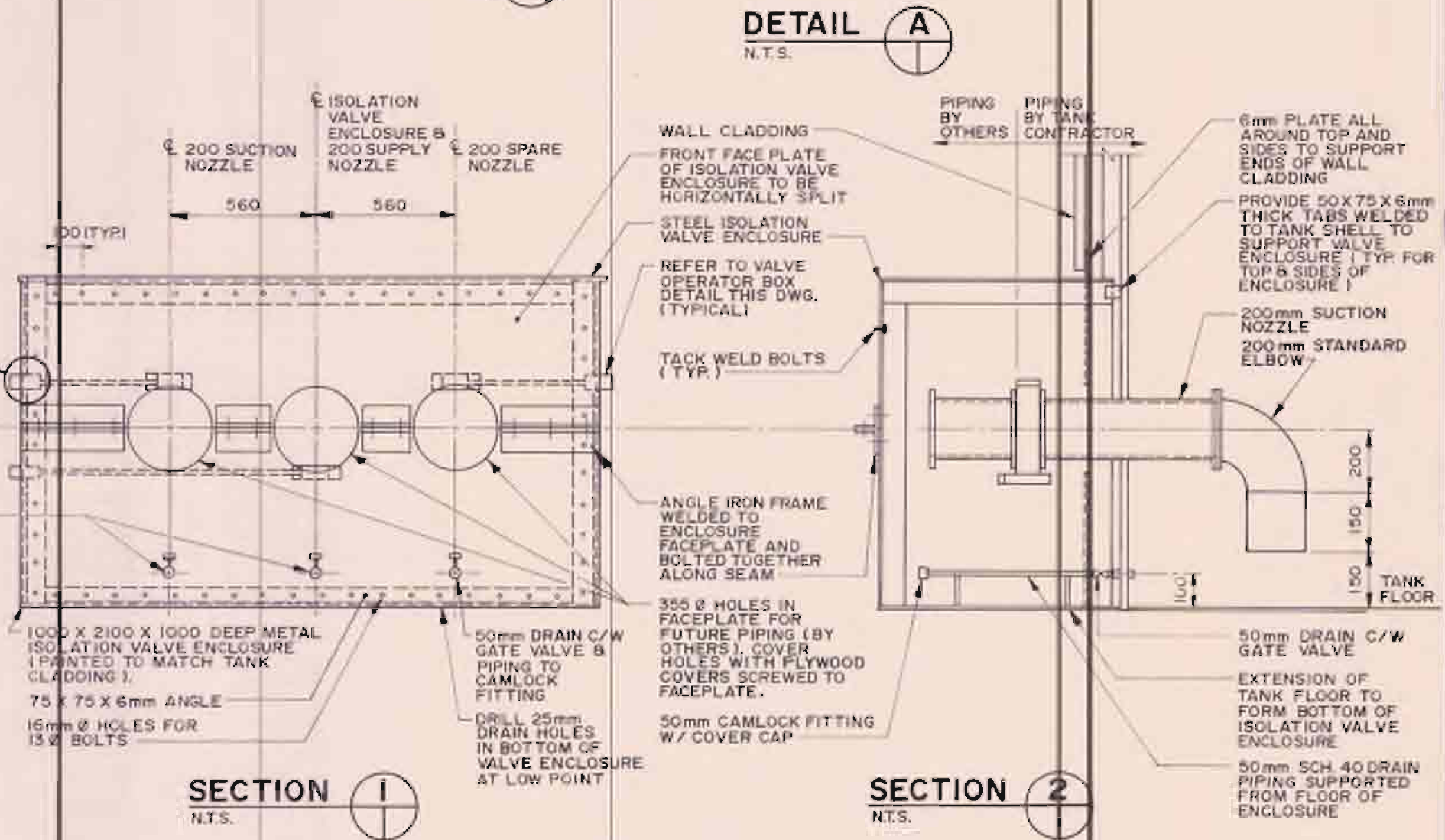
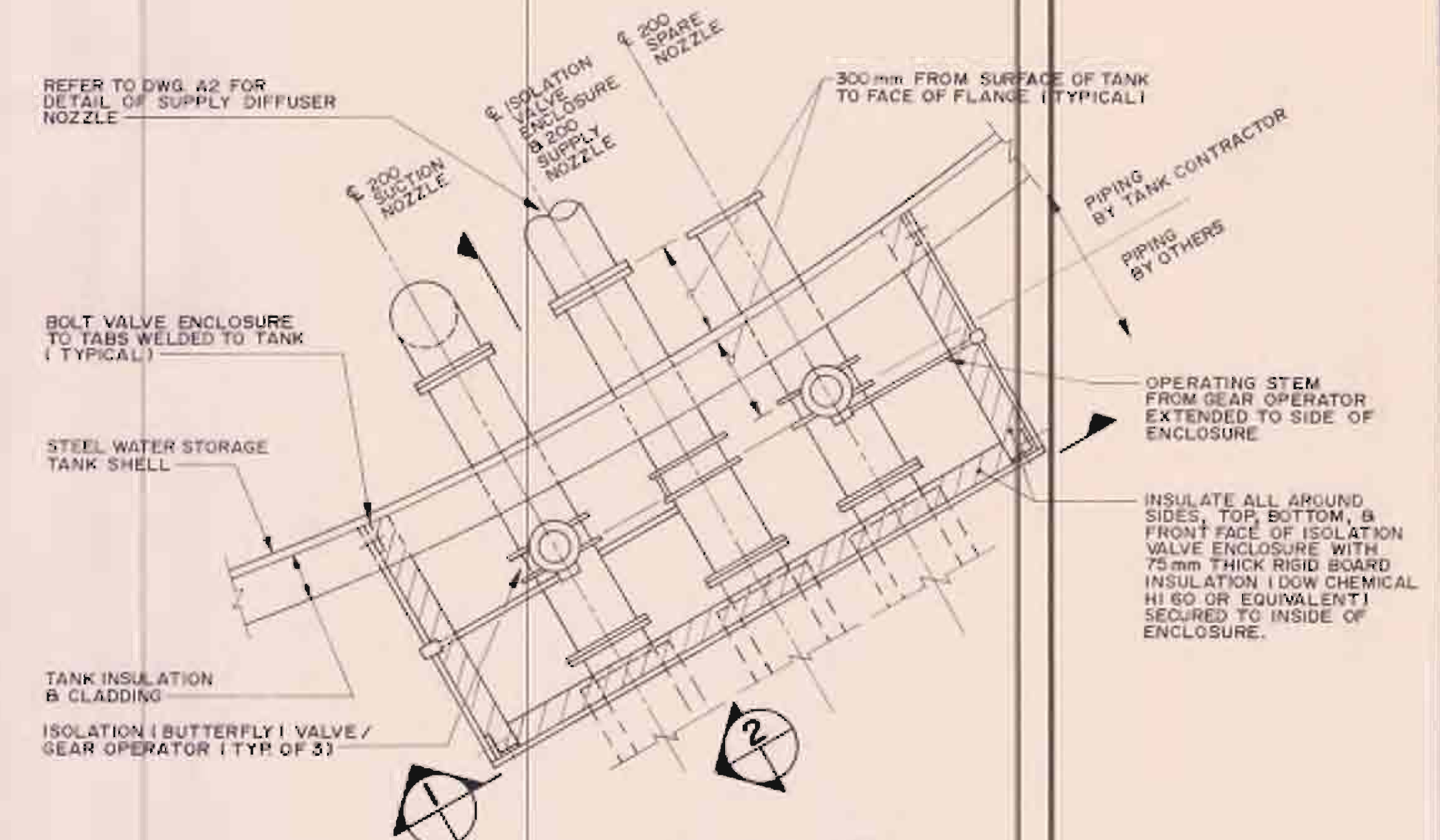
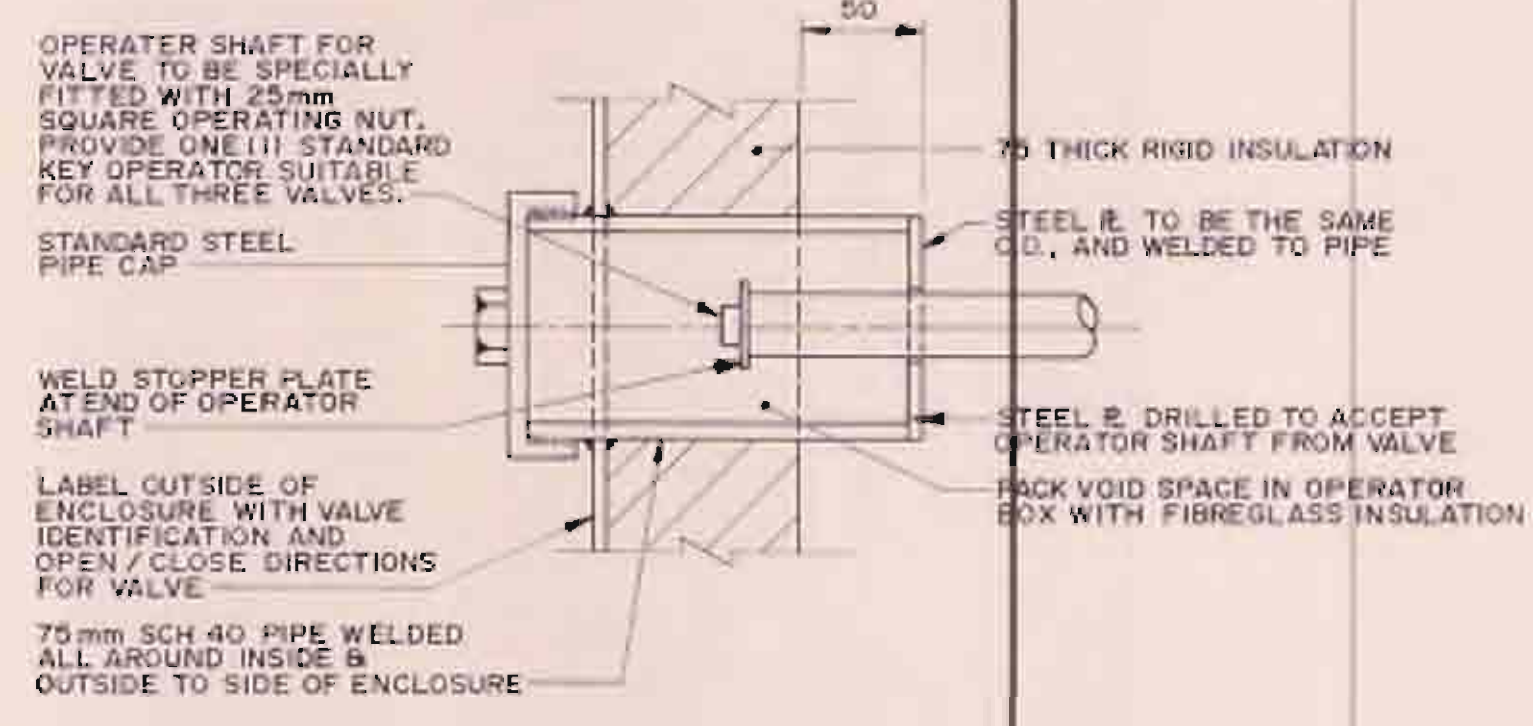
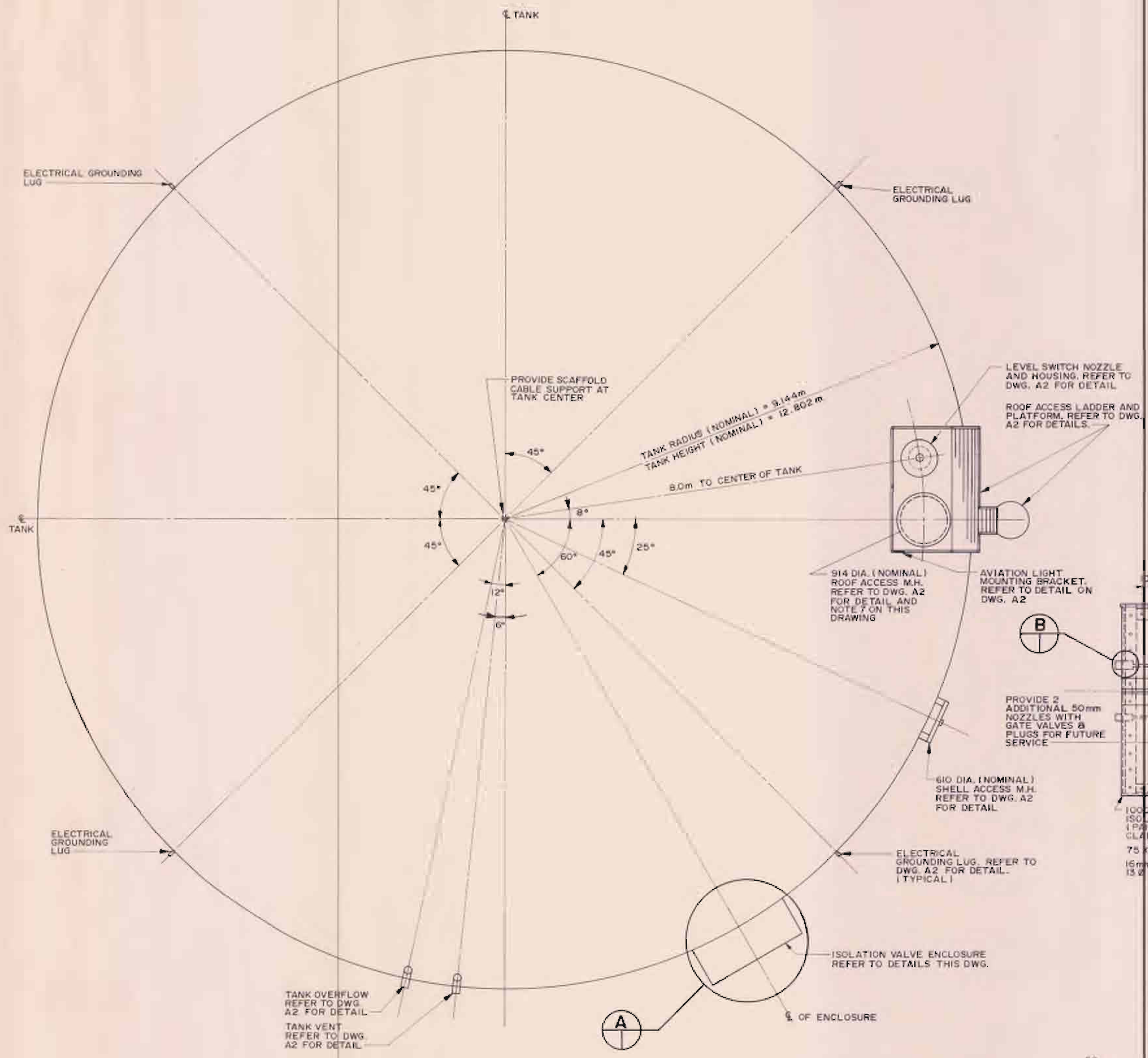
## LIST OF DRAWINGS

	COVER SHEET
M-91-A1	WATER STORAGE TANK GENERAL ARRANGEMENTS (SHEET 1 OF 2)
M-91-A2	WATER STORAGE TANK GENERAL ARRANGEMENTS (SHEET 2 OF 2)

**DILLON**  
Consulting Engineers - Planners  
Environmental Scientists

D. P. W. PROJECT NO. 88-5613  
M. M. DILLON PROJECT NO. 3140-02-1

WILLIAMSON LAKE WATER RESERVOIR REPLACEMENT



- NOTES:
- THIS DRAWING IS **NOT FOR CONSTRUCTION** BUT IS PROVIDED TO ILLUSTRATE GENERAL LOCATIONS AND ARRANGEMENTS OF TANK APPURTENANCES AND DETAILS.
  - TANK CONTRACTOR SHALL SUPPLY FULL SET(S) OF SHOP DRAWINGS DETAILING TANK CONSTRUCTION AS OUTLINED IN THE SPECIFICATIONS.
  - INTENT OF ISOLATION VALVE ENCLOSURE IS TO PROVIDE FULLY WEATHER-TIGHT AND INSULATED PROTECTION FOR VALVE ARRANGEMENTS. ENCLOSURE TO BE OF WELDED CONSTRUCTION AND BOLTED TO TABS WELDED TO TANK TO PERMIT COMPLETE REMOVAL.
  - PROVIDE PLYWOOD FLANGES ON ALL ISOLATION VALVES NOT IMMEDIATELY CONNECTED TO PIPING.
  - ALL COVERS FOR STEEL MANHOLES AND NOZZLES TO BE COMPLETE WITH BLIND FLANGES, OR COVERS WITH GASKETS, AS ILLUSTRATED.
  - REFER TO DRAWINGS B1 TO B4 FOR DETAILS OF WATER STORAGE TANK FOUNDATION CONSTRUCTED BY OTHERS.
  - PROVIDE STEEL LADDER INSIDE TANK (FULL HEIGHT - FLOOR TO ROOF) ACCESSIBLE FROM ROOF MANHOLE. SUPPORT INTERIOR LADDER FROM WALL OF TANK.

THIS RECORD DOCUMENT HAS BEEN PREPARED BASED IN PART UPON INFORMATION FURNISHED BY OTHERS. M. A. DILLON CANNOT ASSURE THE ACCURACY OF OTHERS' INFORMATION AND THERE IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS RECORD DOCUMENT OR FOR ANY ERROR OR OMISSION THAT MAY HAVE BEEN INCORPORATED INTO IT AS A RESULT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE APPLYING IT FOR ANY PURPOSE.

RECORD DRAWING  
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APPROVED BY: [Signature] DATE: 5/10/99

CONSULTANT

**DILLON**  
Consulting Engineers • Planners  
Environmental Scientists

PERMIT & PROFESSIONAL STAMPS

Change	Date	Description	Chkd

REVISIONS

Northwest Territories Public Works

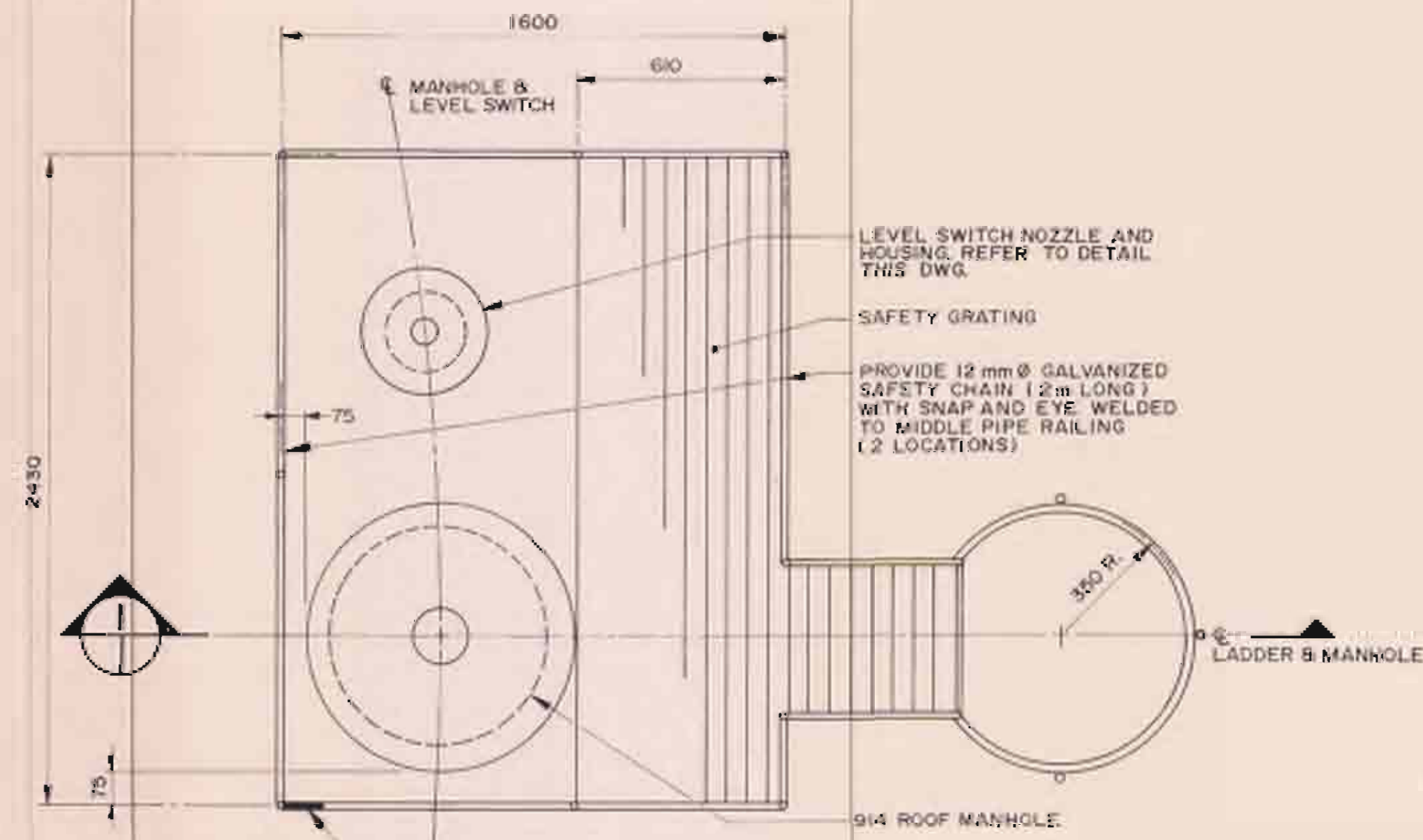
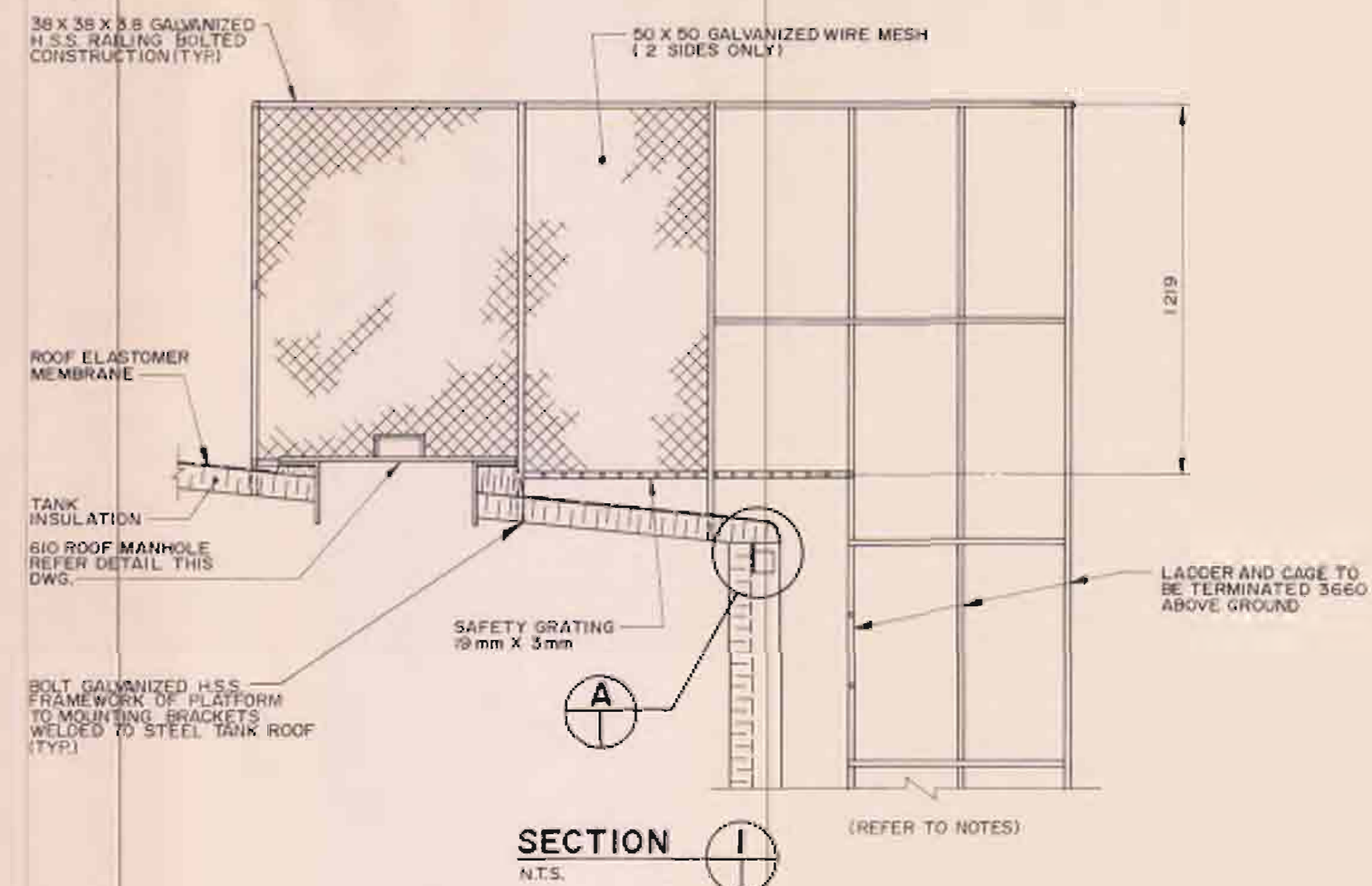
Design: G.S. / B.H.  
Drawn: B.A.S.  
Approved: [Signature]  
Director

Project Title  
**WILLIAMSON LAKE RESERVOIR REPLACEMENT**  
CONTRACT NO. 1  
WATER STORAGE TANK

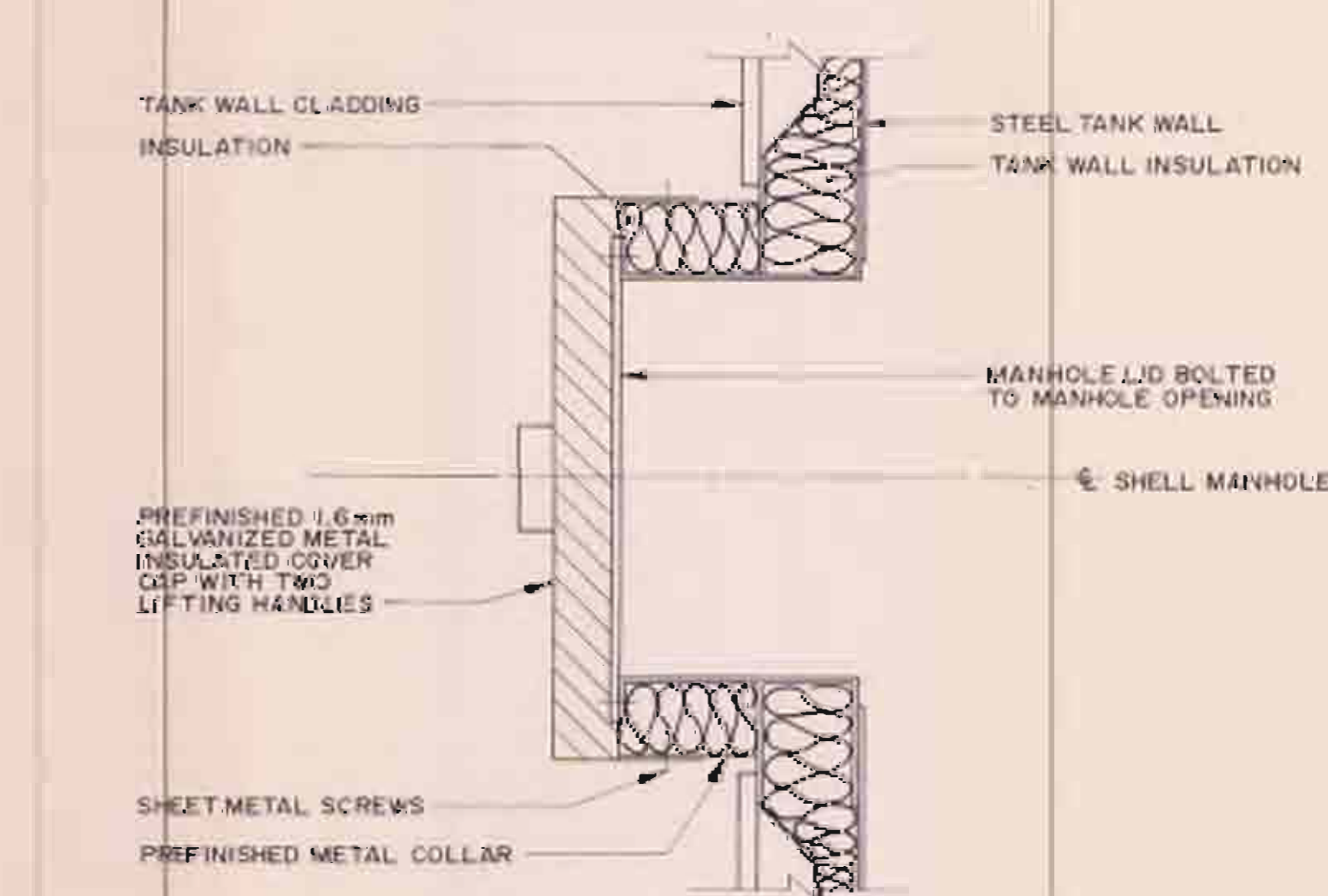
Drawing Title  
**WATER STORAGE TANK GENERAL ARRANGEMENTS (SHEET 1 OF 2)**

Scale: O.P.W. Project No. 88-5513 Date: APRIL 1991  
Drawing No. M-91-A1 Revision: 0

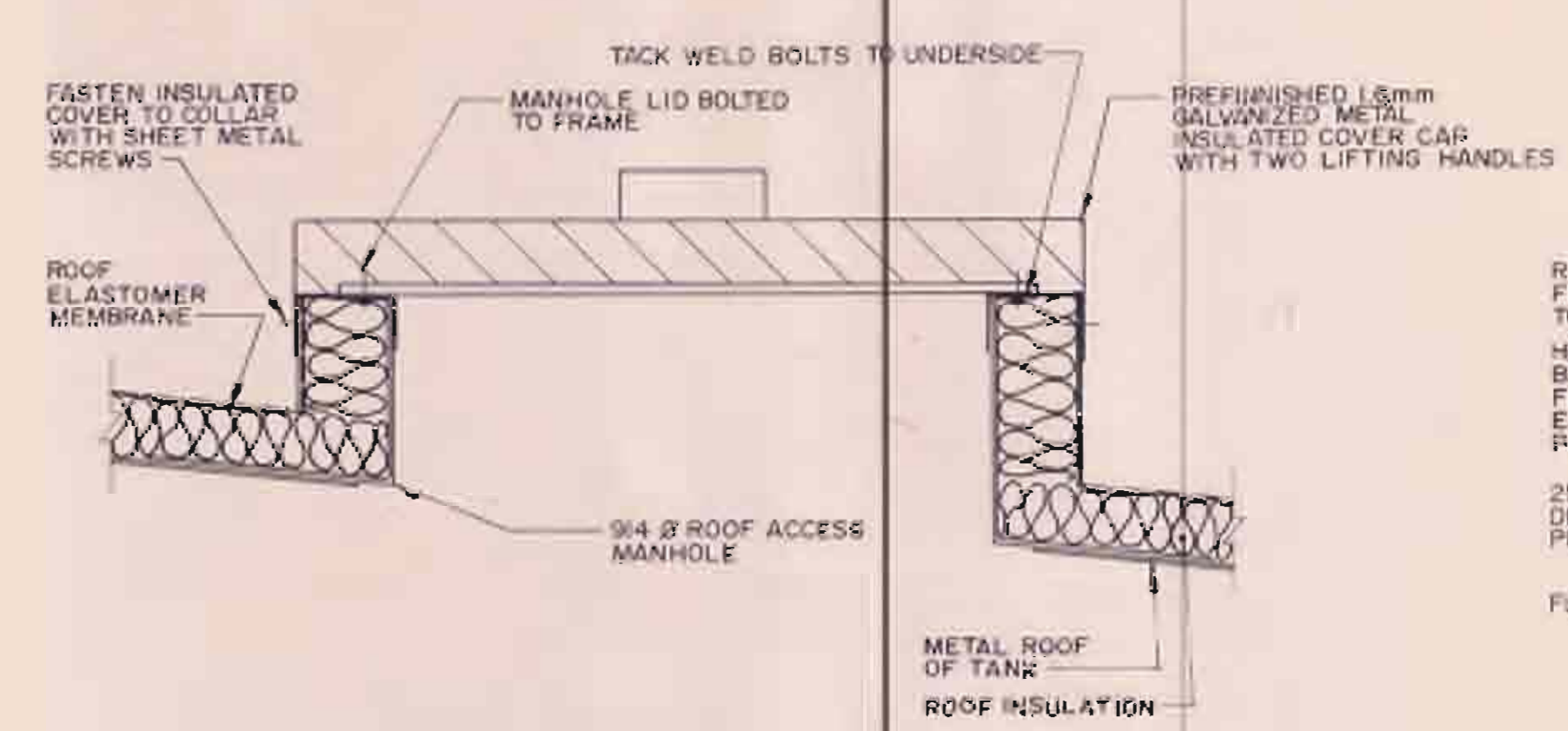
N 3140 - 02 1



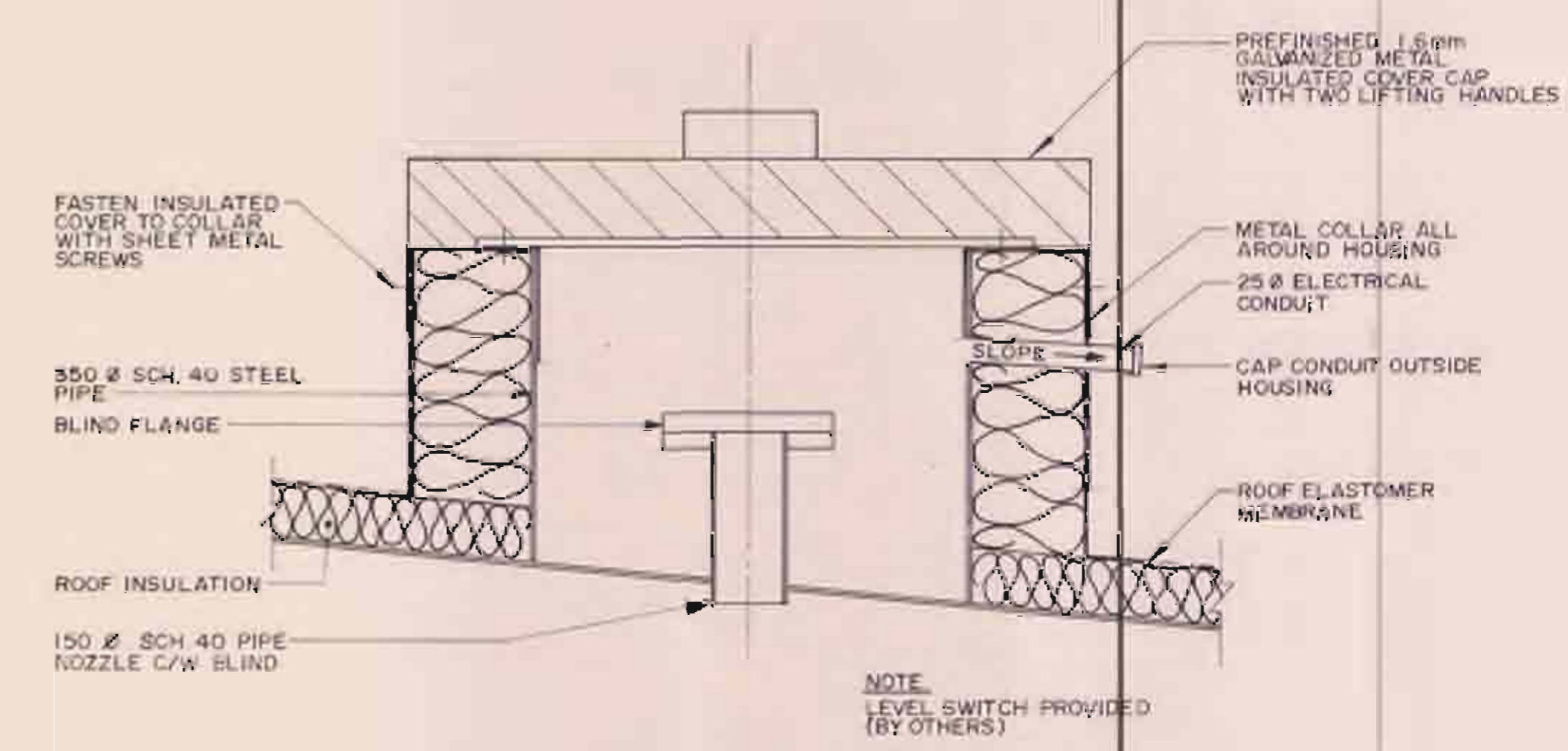
**ACCESS LADDER DETAIL**  
N.T.S.



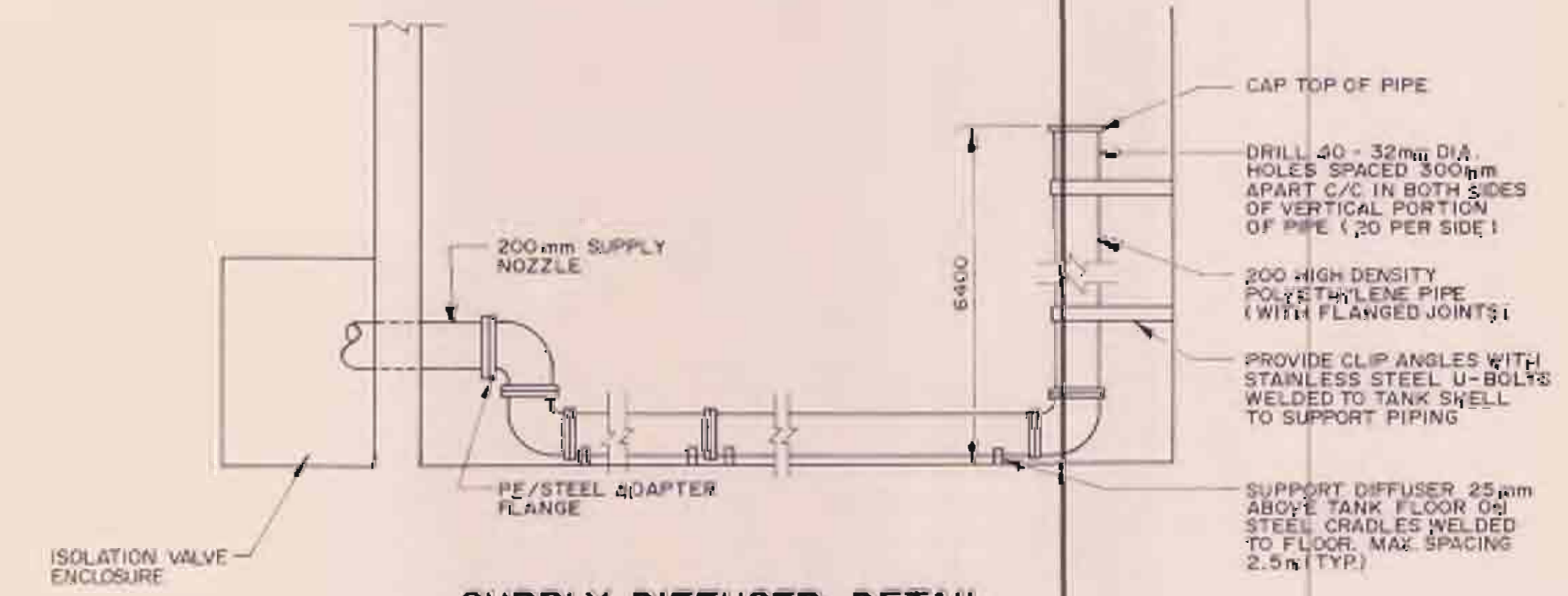
**SHELL MANHOLE DETAIL**  
SCALE 1:10



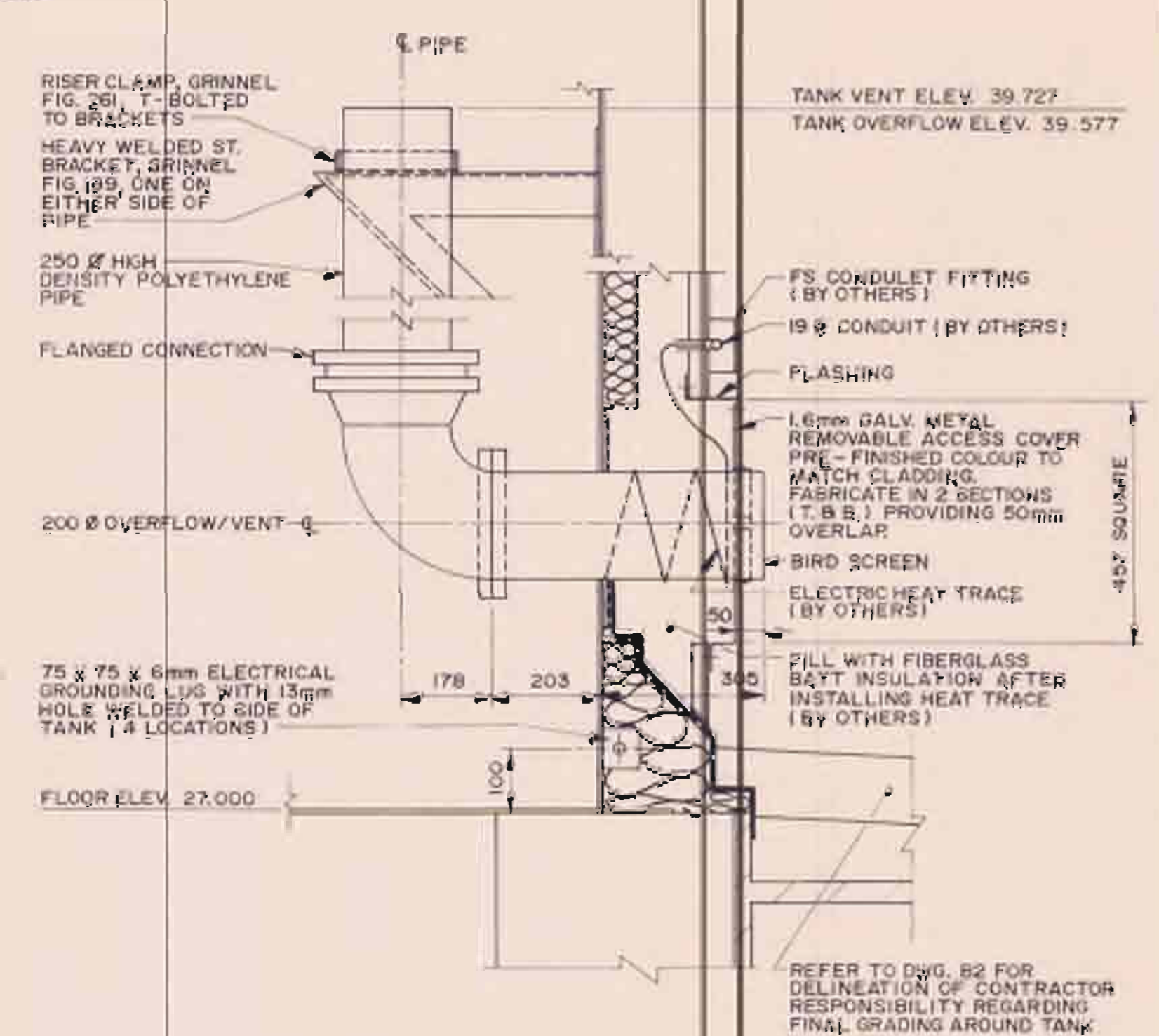
**ROOF ACCESS MANHOLE**  
SCALE 1:10



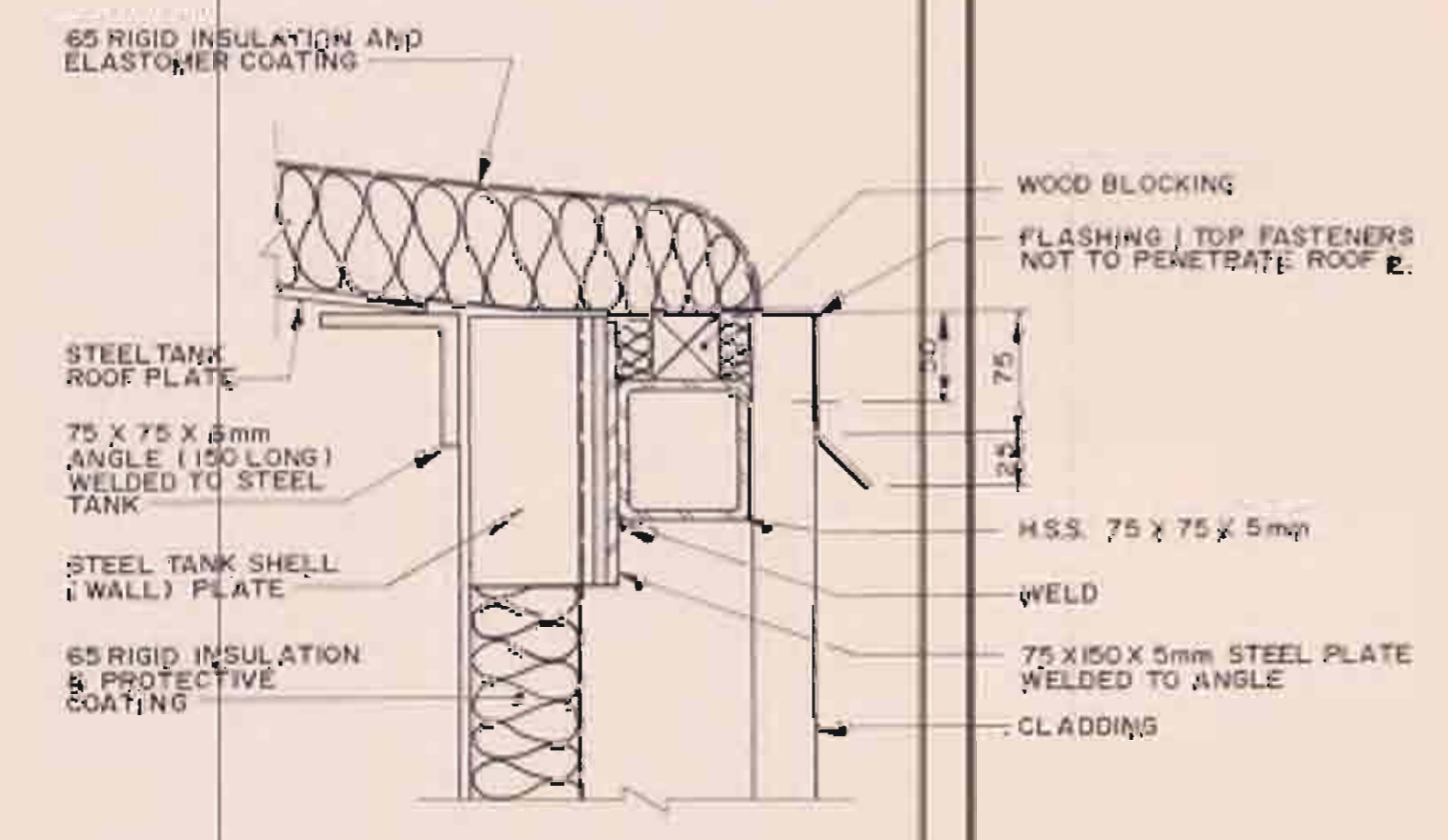
**LEVEL SWITCH NOZZLE & HOUSING DETAIL**  
SCALE 1:4



**SUPPLY DIFFUSER DETAIL**  
SCALE 1:20



**VENT/OVERFLOW AND ELECTRICAL GROUNDING LUG DETAIL**  
SCALE 1:10



**ROOF DETAIL A**  
SCALE 1:4

- NOTES:
1. THIS DRAWING IS NOT FOR CONSTRUCTION BUT IS PROVIDED TO ILLUSTRATE GENERAL LOCATIONS AND ARRANGEMENTS OF TANK APPURTENANCES AND DETAILS.
  2. EXTERNAL VERTICAL LADDER WITH SAFETY CAGE TO EXTEND 3219 ABOVE TANK ROOF.
  3. LADDER TO BE ATTACHED TO TANK AT 2043 MAX. INTERVALS.
  4. INSTALL GRATING SUPPORTS 25 mm (1 IN.) CLEAR ABOVE FINISHED ROOF ELASTOMER MEMBRANE.
  5. SUPPLY SEPARATE (NON-FIXED) LADDER WITH HOOKS TO ACCESS VERTICAL LADDER ATTACHED TO TANK.

THIS RECORD DOCUMENT HAS BEEN PREPARED AS PART OF INFORMATION FURNISHED BY OTHERS. DILLON CONSULTING ENGINEERS AND ARCHITECTS DOES NOT WARRANT THE ACCURACY OF OTHERS' INFORMATION AND THERE IS NOT RESPONSIBLE FOR THE ACCURACY OF THIS RECORD DOCUMENT OR FOR ANY ERRORS OR OMISSIONS THAT MAY HAVE BEEN INCORPORATED HEREIN AS A RESULT. IT IS THE USER'S RESPONSIBILITY TO VERIFY THE ACCURACY OF THIS RECORD DOCUMENT AND TO OBTAIN NECESSARY PERMISSIONS FROM THE ORIGINAL SOURCE FOR ANY PURPOSE.

**RECORD DRAWING**  
5/10/99

CONSULTANT

**DILLON**  
Consulting Engineers - Planners  
Environmental Scientists

PERMIT & PROFESSIONAL STAMPS

Change	Date	Description	Chgd

REVISIONS

Design: G.S. / B.H.  
Drawn: B.A.S.  
Approved: \_\_\_\_\_  
Director

Project Title:  
**WILLIAMSON LAKE  
RESERVOIR  
REPLACEMENT**  
CONTRACT NO. 1  
WATER STORAGE TANK

Drawing Title:  
**WATER STORAGE TANK  
GENERAL  
ARRANGEMENTS  
(SHEET 2 OF 2)**

Scale: \_\_\_\_\_  
D.P.W. Project No. 88-5513 Date: APRIL 1991

Drawing No. M-91-A-2 Revision: 0

N 3140-02-1



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July 18th, 2016

Ms. Nicole Lanchuske  
Project Officer  
Government of Nunavut – Kivalliq Region  
PO Box 490  
Rankin Inlet, NU X0C 0G0

O/Réf. : OTT-0023330-A0

**Object :** Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet, NACE Inspection

---

The scope of this report is to summarize the inspection findings of the interior condition of the coating of the fresh water tank. This report covers the inspection carried out on July 11<sup>th</sup> to 13<sup>th</sup> 2016, located in the Rankin Inlet, Nunavut. Inspection services were required on this structure to:

- Perform a NACE inspection after the cleaning operation;
- Evaluate the overall condition of the protective coating inside of the tank after the cleaning operation;
- Characterize the existing coating by carry out adhesion test and thickness measurements;
- Recommendation involving whether or not a full repaint is required or if maintenance repaint could be considered.

This inspection was carried out under the AWWA/NACE inspection guidelines for water storage facilities. The overall condition of the internal protective coating during the inspection process was made according to ASTM D610/SSPC-Vis 2 (Standard Method for Evaluating Degree of Rusting on Painted Steel Surfaces). This standard was used to estimate the amount/distribution of rusting in the interior surfaces. The adhesion test carried out was performed according to the ASTM D3359 – Method A – X Cut. A Defelsko Positest DFT machine was used to take thickness measurement on the existing coating.

### **General information**

**Name:** Williamson Lake reservoir

**Location:** Imaqaut St, Rankin Inlet, Nunavut

**Tank size:** Diameter: 18288 mm, height: 12 802 mm, Capacity: 3380 m<sup>3</sup>

**Number of shell rings:** six (6) rings

**Type of structure:** Welded carbon steel tank isolated

**Type of foundation:** Concrete ringwall

**Cathodic protection:** None

**Interior ladder:** Fixed shell without cage

**Exterior ladder:** Fixed shell with cage

**Date constructed:** 1991

**Date last painted:** Interior: 1991 Paint system: Two coat epoxy system, Exterior: N/A

**Date last inspected:** Interior: November 2015 (partial, and the tank was not drained), Exterior: N/A





## **Inspection findings**

### **Visual inspection prior and during the cleaning operation - Interior**

On July 11<sup>th</sup>, we made our first visit on the site to see the progress of the cleaning operation and make a visual inspection. The water tank was drained and the contractor responsible for the cleaning was on site. On our arrival, no major cleaning work was completed by the contractor and any equipment was still present or installed on site (water pressure machine, scaffoldings, ladders, etc.). Considering the situation, visual inspection was performed inside the tank prior the cleaning operation.

The internal wall surfaces were all covered with adherent algae making it difficult to see the quality of the coating. Some organic substances located in random places on the surfaces were also noted. On the south part to the tank, two (2) coating failure areas (12ft x 15ft and 12ft x 8ft) were observed on the higher elevation of the tank (last three top rings). The failures were characterized by the delamination between the two epoxy layers and pieces of layer were present on the floor mainly under the failure areas. In both areas, no evidence of major corrosion was observed. Only small tubercles, corresponding to a bacterial corrosion activity in progress, were observed. No evidence of appreciable metal loss was noted. The remaining coating in the failure zone is probably enough to ensure a good protection of the steel during a short period. We expect that the failure zones will become larger after the cleaning operation considering the bad adhesion of the coating close to this zone.

The visual inspection of the ceiling was made from the floor because no scaffoldings was installed permitting to obtain a closer view of the surface. The ceiling tank was in fair condition. No algae were present on the surface. Only some small spots of degradation of the coating were noted.

The floor was in good condition. The fact that the surfaces had been cleaned in November 2015, no algae was present on the surfaces. All visible welds were in good condition showing no evidence of corrosion attack or section loss of the metal. There was no evidence of pitting occurring at the weld seams. Some accumulations of water were noted on the floor mainly on the north part of the tank and at some places in peripheral.

Around 10:00 AM, a skid mounted pressure washer machine (gas-hot water) arrived on site. On the machine no evidence of the capacity was present and because the pressure gage was not installed at the right place we were unable to take pressure readings when the machine was in operation. Hot water at 40°C was used during the operation.

Around 3:00 PM, a section of the bottom ring of the wall was cleaned using pressure hot water and brush. A visual inspection was made by us to evaluate the cleaning operation. The quality of the surfaces were bad and a lot of algae was still present on the surfaces. To see the adherence of the algae on the walls, a small surface was cleaned with the pressure machine beforehand and was brushed with a tightly broom which was available on site. After a couple passes on the surface with the broom, the surface was clean and no algae was present. Following these observations, we concluded that the pressure was not enough to clean properly the surfaces and the brushes used by the contractor were not tightly enough.

At 4:00 PM, the contractor decided to stop the cleaning operation and see the options available in order to rent a pressure machine able to get more psi (up to 10 000 psi).

Following the partial cleaning on the bottom ring, a visual inspection was performed in order to try to obtain more information on the condition of the walls. Few tubercles were present on the surface indicating that bacterial corrosion was in progress. Around and under the tubercles, some evidence of coating failure was

observed. Tubercles were present on approximately 3% of the surface. Some pitting corrosion was also noted on the weld seams. On the small area well cleaned, the general corrosion ranged Rust Grade 6-G (1 % rusted) to Rust Grade 5-G (3 % rusted) according to the SSPC VIS-2. These values are only an approximation of the corrosion degradation observed on the tank interior walls.

The tank overflow pipe, vent pipe, intake pipe and all valves appeared in poor condition with evidence of degradation by the corrosion mainly on the bolted connection. The brackets permitting to fix the intake pipe on the wall were in poor condition and some parts of the missing brackets were found on the floor by the contractor. The second overflow pipe has been disconnected from the upper bracket. The brackets fixing the intake pipe on the floor were in better condition. Leak of water was noted on the bolted connection on the intake pipe located on the north part of the tank. The inside ladder was in good condition but a visual condition should be done after cleaning operation or before the recoating. *The upper supports for the inflow and the overflow piping will need to be corrected at the soonest possible opportunity, this should be done with the use of internal erected scaffolding.*

The roof support columns appeared in good condition. No evidence of deformation and loss material were noted at the base and along the column. Some brown spots like corrosion were present at the top of the column between the fixing plate and ceiling of the tank.

#### **Adhesion test**

Two (2) adhesion test were carried out on the wall surface in the cleaning area of the bottom ring. The results showed that the coating has a medium adhesion (scale 3A according to the ASTM D3389).

#### **Thickness measurements**

The existing coating thickness was measured on the wall surface in the cleaning area of the bottom ring and on the floor. The following readings were obtained:

Floor: 12.2 to 20.2 mils

Wall (bottom ring): 11.5 to 24.6 mils.

The readings are in the range anticipated if we compare with the product data sheet received and according to the D102-14 AWWA Standard for two-coat system of epoxy.

#### **Exterior summary inspection**

The coating along the manhole is exhibiting extensive degradation along the cover face and some corrosion was also present. The condition of the metal of the manhole and the cover are in general good condition with no significant metal loss taking place. The bolt holes are showing no appreciable deformation. The welds were also in good condition.

The steel isolation shell was in good condition. No evidence of deformation was noted and not excessive weathering was also observed during our visual inspection made from the ground. Some small holes (2 to 5 cm of diameter) in the steel randomly located were noted.

There is no evidence of degradation in the form of cracked and spalling concrete along the vertical face of the foundation. The cover coat of concrete was also in good condition. There was no evidence to suggest that the

foundation is being undermined. The site drainage appeared to be adequate. Also, there were no indication that the tank had been leaking.

The visual inspection of the exterior ladder was showing no significant degradation or deformation. More verification should be done to ensure its structural integrity.

The grounded wires partially buried were present at the base of the tank. Some verification should be done to ensure their efficiency.

The outside connections located on the south part of the tank was showing no sign of degradation. Light rusting was only present on the protection steel box.

The tank is not equipped with a cathodic protection system.

No verification was made on the roof of the tank. A structural inspection should be scheduled in the next maintenance program.

### **Conclusion/ Recommendation**

During our visit on site, we have not been able to perform a full NACE inspection as planned considering the cleaning operation of the interior of the tank was not completed adequately by the contractor. The equipment used by the contractor to clean the interior of the tank was not suitable to meet the contractual requirements. Among the offending elements, we have noted a faulty water pressure machine, a lack of scaffolding or similar equipment to reach areas of higher elevation in the tank and a lack of preparation and organisation before and during his presence on site.

A visual inspection was still performed in the interior and the exterior of the tank and some tests were carried out on the existing inside coating. The inspection made on the interior of the tank was limited by the presence of algae on all wall surfaces and on inside pipes, valves, ladder and roof column support.

The inside coating on the floor and on the ceiling are in good condition and can provide a right protection of the steel for a short period considering the age of the coating. On the wall surfaces, an important top coat delamination is present on the higher elevation in the tank resulting on the exposure of the base coat which still appears to be intact and providing adequate protection to the steel substrate for a short period. Several tubercles related to the bacterial corrosion phenomena was also noted. Rust formation resulting from the fracturing of some the referenced tubercles was observed.

Based on NACE Paper 4088 - *Expected Service life and cost considerations for maintenance and new construction protective coating work, Corrosion 2014*, the full repaint for a coating systems for fresh water immersion services should be done after 14 years with a minimum of painting maintenance. Supposing that the coating was installed during the construction, we can consider that his theatrical service life was exceeded.

Following these observations and considering that the coating was installed in 1991, we recommend that the existing coating be removed by sandblast and to apply a new coating according to the AWWA/NACE requirements.

Cathodic protection system could be installed in the tank to prevent or retard the corrosion that naturally occur in a steel water tank.

Management of the tank into the future should include periodic inspection of the tank to assure that the tank and the site are secure and that accidental or intentional contamination is prevented. Inspection of the tank and site are recommended during the first year after the recoating operation. Once the first year inspection done, a schedule could be elaborated in agreement with the findings.



Benoit Gauvin, P.Eng, M.Eng  
NACE CIP Level 2 (Cert. 641924)

Eric Bell, P.Eng., M.Eng  
Project Engineer, Infrastructure Services

BG/ML

# Photographic report

Client: Government of Nonavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 1

Description :

General view of the tank



Photo n° : 2

Description :

Tank identification information



# Photographic report

Client: Government of Nonavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 3

**Description :**

Failure zones on the south part of the tank – Interior surfaces



Photo n° : 4

**Description :**

Closer view of the failure zone



# Photographic report

Client: Government of Nonavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 5

**Description :**

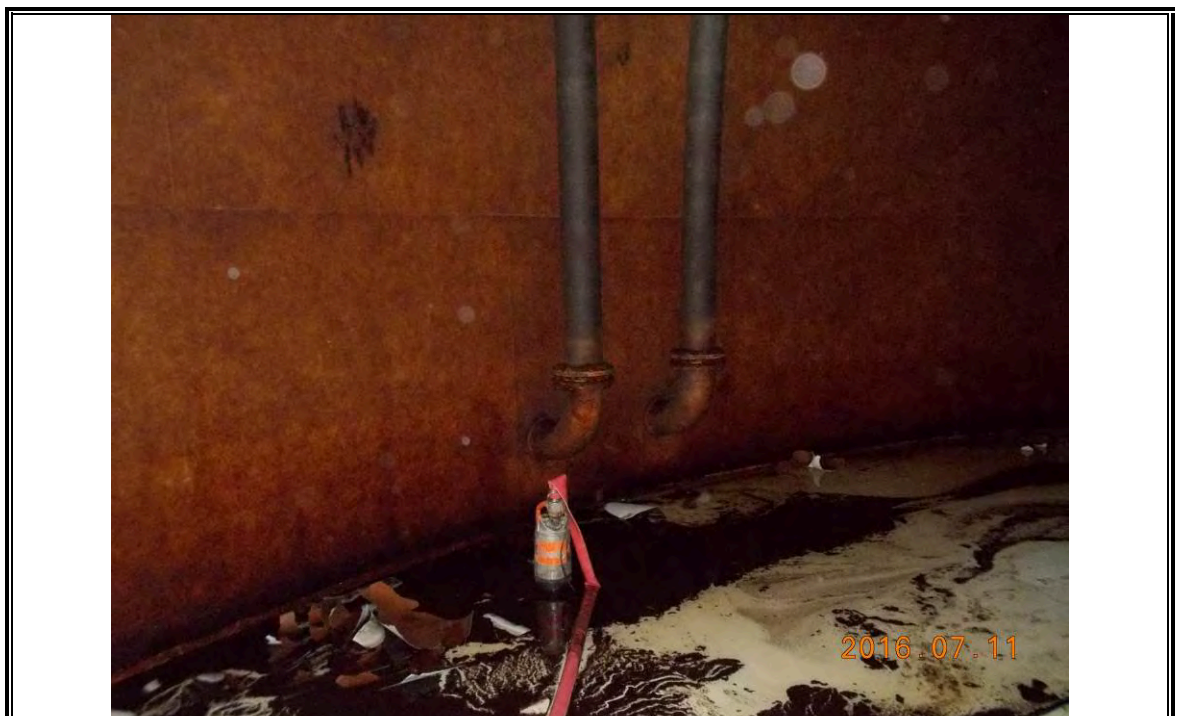
Pieces of layer found on the floor under the failure zones



Photo n° : 6

**Description :**

Algae (brown) observed on the wall surfaces



# Photographic report

Client: Gvernment of Nonavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>. 2016

Folder N° : OTT-00233330-A0

Photo n° : 7

Description :

General view of the ceiling



Photo n° : 8

Description :

General view of the floor





# Photographic report

Client: Government of Nonavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 9

**Description :**

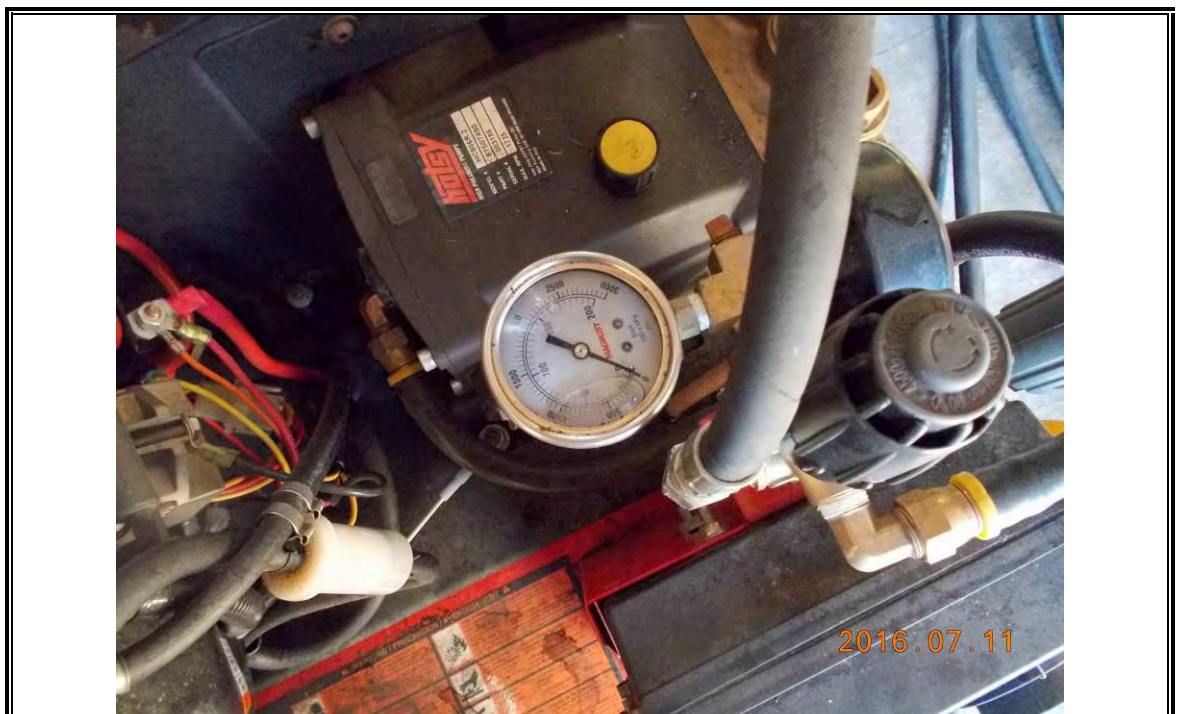
Skid mounted pressure washer machine (gas-hot water) used by the contractor



Photo n° : 10

**Description :**

Unfunctional pressure gage



# Photographic report

Client: Gvernment of Nonavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 11

**Description :**

Water temperature gage



Photo n° : 12

**Description :**

General view of the wall surfaces after the cleaning operation (bottom ring).  
Water accumulation on the floor (north part of the tank)



# Photographic report

Client: Government of Nonavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 13

**Description :**

Section of the wall surface (bottom ring) cleaned with water pressure machine and brushed with a tightly broom. No algae was present on the surface

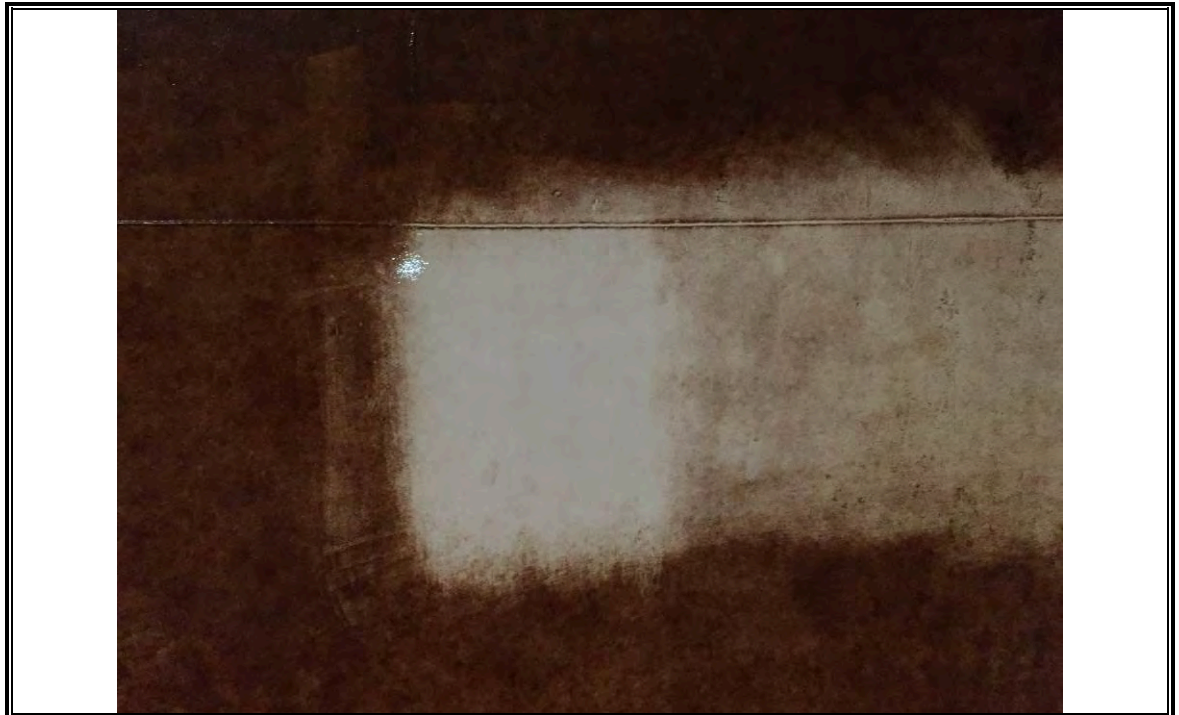


Photo n° : 14

**Description :**

Tubercles observed on the surfaces of the wall indicating bacterial corrosion in progress



# Photographic report

Client: Government of Nonavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 15

**Description :**

**Left view:** Closer view of the tubercles (1.5 cm diameter) observed on the wall surfaces (Right view).

**Right view:** Closer view under the tubercle – Coating failure and corrosion of the steel shell

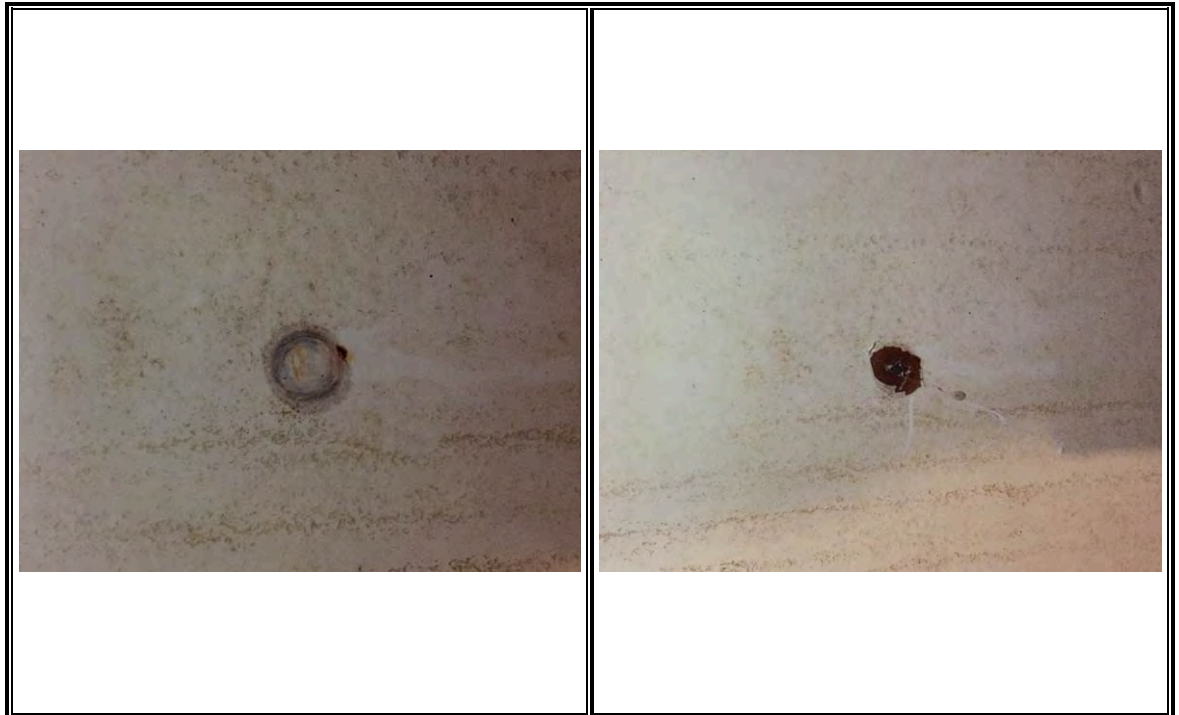


Photo n° : 16

**Description :**

Closer view of tubercles observed on the first coating in the failure zone



# Photographic report

Client: Government of Nunavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 17

**Description :**

Inflow pipe without adequate support (south part of the tank)



Photo n° : 18

**Description :**

Missing bracket on the overflow pipe (north part of the tank)



# Photographic report

Client: Government of Nunavut – Kivalliq Region

Project: Williamson Lake reservoir, Cleaning and Recoating, Rankin Inlet  
NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 19

**Description :**

Inadequate bracket installed on the overflow pipe (north part of the tank)



Photo n° : 20

**Description :**

Closer view of the floor bracket fixing the overflow pipe



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NACE Inspection

Date : July 14<sup>th</sup>. 2016

Folder N° : OTT-00233330-A0

Photo n° : 21

**Description :**

Bad condition of the overflow and vent valves



Photo n° : 22

**Description :**

Closer view of the valves of the overflow pipe



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Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 23

**Description :**

General view of the Inside ladder

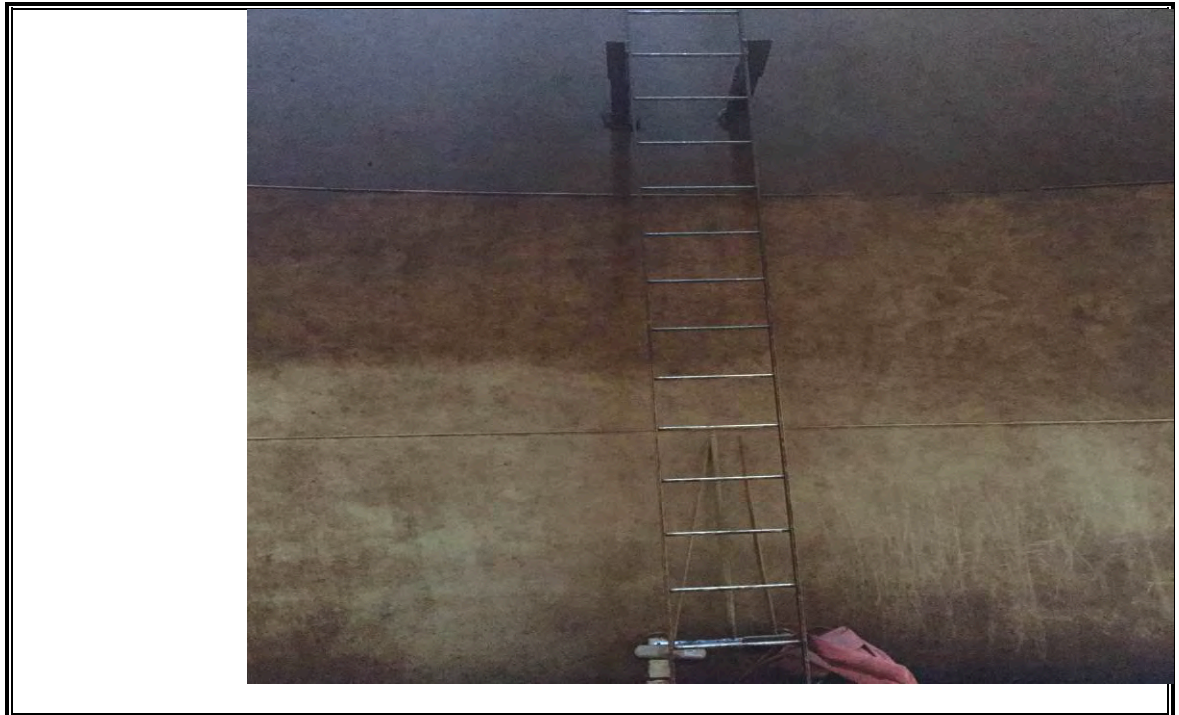


Photo n° : 24

**Description :**

Base of the roof column supports (no cage)





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Folder N° : OTT-00233330-A0

Photo n° : 25

**Description :**

Top of the roof column support



Photo n° : 26

**Description :**

Outside ladder with cage



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Folder N° : OTT-00233330-A0

Photo n° : 27

**Description :**

Outside valves and protection box



Photo n° : 28

**Description :**

Overflow and vent pipe exits outside of the tank



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Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 29

**Description :**

General view of the manhole



Photo n° : 30

**Description :**

General view of concrete foundation



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NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 31

**Description :**

Electrical grounding lug and wire running on the ground



Photo n° : 32

**Description :**

Hole observed on the steel isolation cladding



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NACE Inspection

Date : July 14<sup>th</sup>, 2016

Folder N° : OTT-00233330-A0

Photo n° : 33

**Description :**

Security entrance verification during the cleaning operation

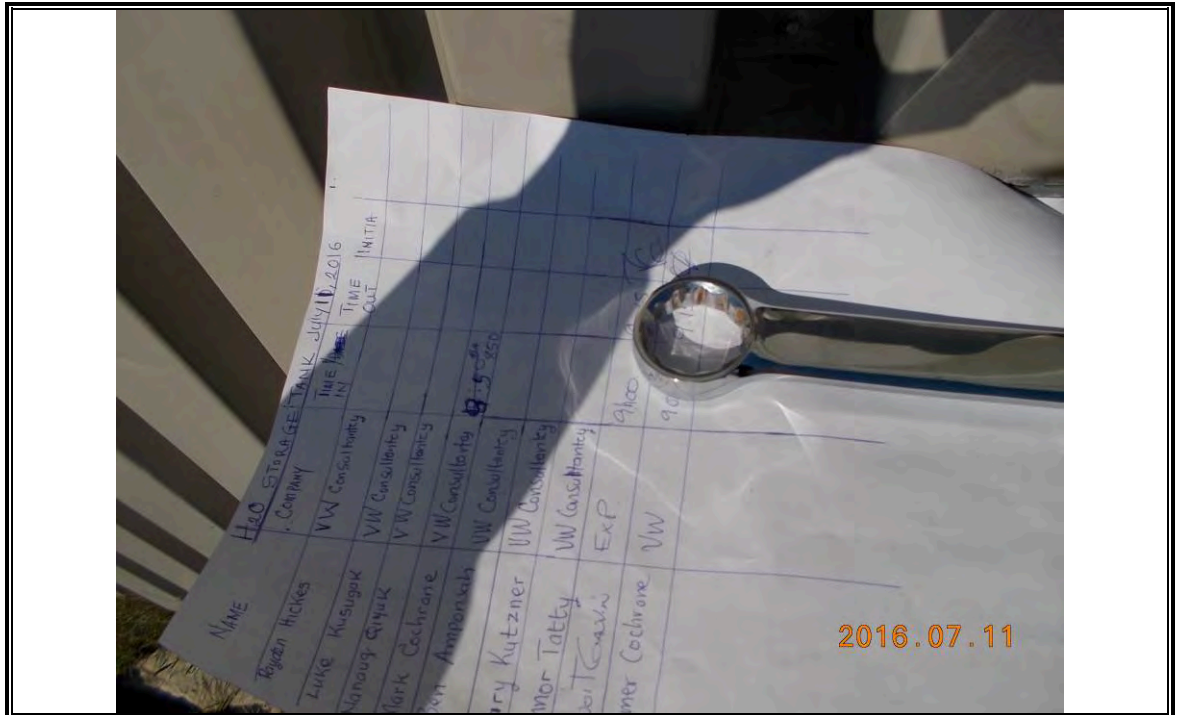


Photo n° :

**Description :**



O:\EXP-LTD\PROJECT\OTT-00227159-A0 - RANKIN CL2 STUDY\OTT-00233330-A0 RANKIN TANK PAINTDRAWINGS\1-1 SITE PLAN AND TANK UPGRADE ITEMS

PATRICK DAIGLE

4/6/2017 3:02 PM



AREA OF WORK



KEYPLAN NOT TO SCALE

PLAN

RANKIN INLET, NU, CANADA

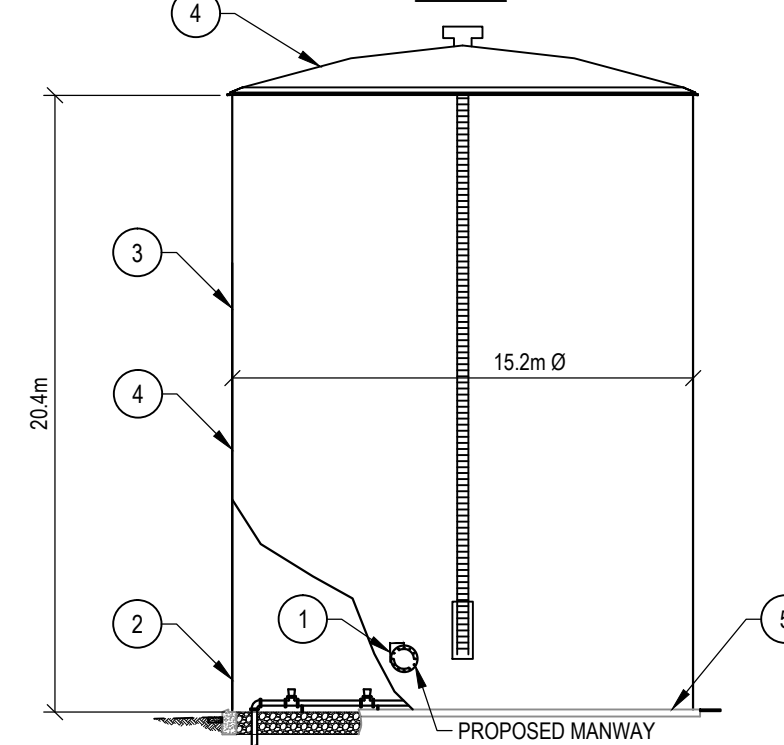
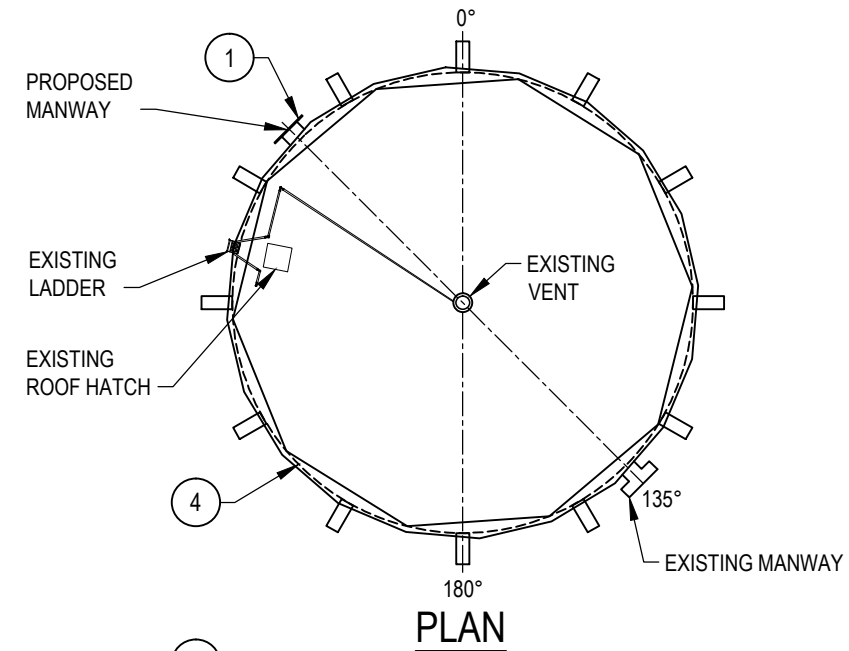
NOT TO SCALE

**GENERAL NOTES:**

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LABOR, MATERIALS AND EQUIPMENT NECESSARY FOR THE DESIGN, FABRICATION, CONSTRUCTION, PAINTING, DISINFECTION AND TESTING PERFORMED ON THE WELDED CARBON STEEL WATER STORAGE TANK.
2. WATER TANK SHALL BE DRAINED OF ALL CONTENTS PRIOR TO COMMENCING ANY WELDING TO THE TANK. IF THIS IS NOT ACHIEVABLE THE WATER LEVEL OF THE TANK SHALL BE 2 FEET (610mm) BELOW THAT LEVEL AT WHICH WELDING IS TAKING PLACE. NO WELDING SHALL BE PERFORMED ON THE TANK WITH A WATER LEVEL ON THE OPPOSITE PLATE FACE.
3. CONTRACTOR TO DESIGN AND INSTALL NEW 36 INCH (918mm) DIAMETER CIRCULAR TANK SHELL MANHOLE (OUTWARD OPENING) WITH FLANGE ON A HINGE OR DAVIT AND BOLTS, INCLUDING DESIGN AND INSTALLATION OF REINFORCEMENT FOR THE EXISTING TANK SHELL.
4. DESIGN OF TANK COMPONENTS, MODIFICATIONS AND REINFORCEMENT SHALL BE IN ACCORDANCE WITH AMERICAN WATER WORKS ASSOCIATION STANDARD (D100-05), "WELDED CARBON STEEL TANKS FOR WATER STORAGE".
5. THE NEW SHELL MANHOLE SHALL BE LOCATED 180 DEGREES FROM THE EXISTING SHELL MANHOLE. NEW PENETRATIONS AND WELDS SHALL BE LOCATED AT LEAST 152mm FROM ANY EXISTING WELD SEAMS.
6. HOLES SHALL NOT BE CUT IN THE TANK WITHOUT PROVISIONS TO SUPPORT THE LOADS ACTING AT THE CUTOUT.
7. MANHOLE NECK REINFORCING PLATES AND SHELL PLATE OPENINGS THAT HAVE SHEARED OR OXYFUEL GAS CUT SURFACES SHALL HAVE SUCH SURFACES MADE UNIFORM AND SMOOTH WITH THE CORNERS ROUNDED, EXCEPT WHERE THE SURFACES ARE FULLY COVERED BY ATTACHMENT WELDS. SURFACES AND EDGES SHALL BE PREPARED IN SUCH A MANNER THAT WILL LEAVE THEM SUITABLE FOR SUBSEQUENT CLEANING AND PAINTING OPERATIONS.
8. ALL WELDS SHALL BE MADE IN A MANNER TO ENSURE COMPLETE FUSION WITH THE BASE METAL. WELDING SHALL NOT BE PERFORMED WHEN THE SURFACES OF THE PARTS TO BE WELDED ARE WET FROM RAIN, SNOW OR ICE, OR WHEN RAIN OR SNOW IS FALLING ON SUCH SURFACES. SURFACES TO BE WELDED SHALL BE FREE FROM LOOSE SCALE, SLAG, HEAVY RUST, GREASE, OIL, PAINT OR ANY OTHER FOREIGN MATERIAL. SURFACES SHALL BE SMOOTH, UNIFORM AND FREE OF FINS, TEARS, AND OTHER DEFECTS THAT ADVERSELY AFFECT PROPER WELDING.
9. INTERIOR OF SHELL MANHOLE OPENING AND COVER TO RECEIVE SAME INTERIOR TREATMENT AS THE INTERIOR OF THE TANK. EXTERIOR OF THE SHELL MANHOLE TO BE PAINTED TO MATCH EXISTING EXTERIOR OF THE TANK.
10. 110V AC POWER AVAILABLE ON SITE. ADDITIONAL POWER REQUIRED IS THE RESPONSIBILITY OF THE CONTRACTOR.
11. POTABLE WATER IS AVAILABLE ON SITE. ACCESS IS TO BE COORDINATED WITH OWNER.
12. CONTRACTOR IS EXPECTED TO COVER SURROUNDING GROUND AREA OF TANK WITH TARPES DURING THE EXTERNAL SURFACE PREPARATION TO CONTAIN PAINT CHIPS, ETC.
13. DRAINING THE TANK WILL BE THE RESPONSIBILITY OF THE OWNER. DEWATER & CLEAN UP OF BOTTOM IS THE RESPONSIBILITY OF THE CONTRACTOR. NO APPRECIABLE AMOUNTS OF SLUDGE ARE EXPECTED IN THIS RESERVOIR.

**KEYNOTES:**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1 NEW MANWAY INSTALLED &amp; PRESSURE TESTED. (180° FROM EXISTING) DRAWING OF SHELL MANHOLE FOR ILLUSTRATIVE PURPOSES. DOES NOT REFLECT DESIGN OR CONFIGURATION.</li> <li>2 INDUCED CURRENT CORROSION PROTECTION UPGRADE.</li> </ol> | <ol style="list-style-type: none"> <li>3 INTERIOR TANK<br/>- SAND BLAST<br/>- ELASTOMER POLYURETHANE</li> <li>4 EXTERIOR TANK<br/>- REPAIR INSULATION</li> <li>5 GROUT REPAIRS.</li> <li>6 WELD/REPAIR WALL MOUNTED PIPE SUPPORTS.</li> </ol> |
|---|---|



DETAIL ELEVATION

TANK UPGRADE

1:250

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No.	Issue	Date

No.	Revision	Date

**FOR INFORMATION ONLY**

Drawn By:	ARL
Dwg Standards Ckd By:	
Designed By:	EAB
Design Checked By:	
Scale:	AS SHOWN

Project Title

**WILLIAMSON LAKE  
 WATER STORAGE TANK  
 INTERIOR RECOATING**

Dwg. Title

**SITE PLAN AND TANK  
 UPGRADE ITEMS**

Project No.

**OTT-00233330-A0**

Dwg. No.	Rev. No.
<b>1-1</b>	<b>0</b>

## V.W. COCHRANE CONSULTING CORP

Your Energy and Environmental Problem Solution

7805 162 Avenue, Edmonton, AB, Canada

Office: 780.641.5284

Direct: 780.918.1087

Fax: 587.521.1528

## Additional Photos

(5) Before and After first pass of Pressure washing.



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(6) Power Washing the Walls.



(7) Corrosion on the Flange on one of the intake Pipes.





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(8) Second bracket on the Intake Pipe.



(9) Condition of Tank Upon Entry the second time.



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- (10) Condition of the Floor of the Tank after 4 weeks of it being cleaned.



- (11) Condition of the Tank before closing it up in July.



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(12) Over Flow Pipes before Repair and cleaning.

