Air Terminal Building Taloyoak, Nunavut RFP 2015-59



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Government of Nunavut Request for Proposals

Taloyoak Air Terminal Building Taloyoak, Nunavut

RFP # 2015-59

ISSUE DATE – September 1, 2015

CLOSING DATE – September 23, 2015



## **Request for Proposals (RFP)**

The Government of Nunavut (GN) department of Community and Government Services, on behalf of Economic Development and Transportation, is issuing this Request for Proposals (RFP) for a qualified professional Architectural/Engineering firm to provide a design and construction administration services for a 311 m.sq New Air Terminal Building in Taloyoak, Nunavut as further outlined in this RFP document.

Proponents should ensure that they have received this document directly from the Nunavut Tenders web site, (http://www.nunavuttenders.ca/). Only proponents that download this document directly from the Nunavut Tenders web site will be registered to receive notice of Addenda as they are issued. If you have received this document from another source, you will not receive notice of addenda that may be issued. If you have not received this document directly from the Nunavut Tenders website, you should go to the site now and register and obtain this document from the source site. Registration only requires your organization or individuals name and an email address so that notifications of addenda and awards can be received.

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#### **Instructions to Proponents**

- 1. Proposals must be received in hard copy or by fax on or before September 23, 2015 at 17:00hrs (5:00 PM) Local Time in Igaluit Nunavut
- 2.

**Department of Community and Government Services** Government of Nunavut Attention: Susan Noseworthy Hand Delivered to 3<sup>rd</sup> Floor, Brown Building Igaluit Nunavut Telephone: (867)975-5434 Fax: (867)975-5450

a) Proposals received after the exact time and date noted above will be considered late and will be rejected.

- b) The original and three (3) copies are to be submitted, quoting
   "Air Terminal Building Taloyoak Nunavut RFP 2015-59", closing date and proponent's name on the outside of the envelope.
- c) After the closing time, and subject to the Access to Information and GN reporting provisions contained herein, only the names and addresses of the proponents will be made public.
- 3. The GN will not accept or be responsible for any proposal that:
  - a) does not indicate the RFP title, reference number, closing date, proponents name and address on the proposal envelope or packaging; or
  - b) is delivered to any building address or fax number other than that provided above;
  - c) is not accompanied by a Declaration of Conformity form.
- 4. <u>NUNAVUT TENDERS BID BOX</u>: The GN is offering vendors the <u>option of submitting bids</u> <u>electronically for some, but not all, tenders and requests for proposals</u>, using the Nunavut Tenders website (<u>http://www.nunavuttenders.ca</u>). If this RFP is eligible for the Nunavut Tenders Bid Box, a "Submit" button will appear on the webpage. By using the Bid Box, proponents are agreeing to the Terms of Use, which are linked to the Nunavut Tenders webpage.
- 5. If proposals are sent by fax:
  - a) The proposal must be received in its entirety before the closing date and time at the fax machine number stated. For greater certainty, "received in its entirety" means that the fax transmission is complete and all pages of the proposal are fully printed by the receiving fax machine. To ensure the proposal is received in its entirety before the closing time, it is recommended that the proponent commence the fax transmission well in advance of the closing time, and confirm receipt by a telephone enquiry. The fax machine is used for other government business and may be busy prior to closing.
  - b) The GN does not guarantee that fax transmissions will be received and any proponent who submits a proposal by fax machine does so at its own risk. The GN accepts no liability for any claim or damages resulting from a fax transmission which is interrupted, not received in its entirety, received after the stated closing time and date, received by any other fax machine other than the one stated herein, or for any other reasons.
  - c) While the GN will undertake to handle fax submissions in a secure and confidential manner, it is impossible to guarantee the confidentiality of information contained therein; therefore, by faxing their proposal, the proponent waives any legal claim of confidentiality against the GN.

Failure to comply with or agree to any of the foregoing provisions will result in disqualification of the proposal.

6. As soon as practical after sending a proposal by fax, the proponent should provide confirmation that the proposal and required copies have been sent by the most expedient means to:

Government of Nunavut Susan Noseworthy Department of Community and Government Services PO Box 1000 Stn 1600 Brown Building Iqaluit, Nunavut X0A 0H0

- a) In the event of any inconsistency, discrepancy or conflict between the proposal received by fax transmission and the proposal received after the closing date and time, the faxed proposal shall govern.
- 7. Due to limited bandwidth, file size restrictions and connectivity interruptions, submitting a proposal by e-mail is unreliable. **Proposals submitted by e-mail will not be accepted.** Notwithstanding the foregoing, the GN reserves the right to request an unaltered electronic version of the proposal after the closing date and time.

- 8. One of the priorities of the GN is to ensure Inuit, Nunavut and Local businesses supply materials, equipment, and services on any GN contract, and that Inuit, Nunavut and Local labour is used to the fullest extent practical; therefore, the Nunavummi Nangminiqaqtunik Ikajuuti (NNI Policy) applies to this Request for Proposals.
  - a) To maximize incentives available under the NNI Policy, proponents **must** identify cost components for Inuit, Nunavut and Local Content.
  - b) Failure to complete and submit the NNI Incentives form with the proposal **will** result in a denial of any adjustments the proponent may otherwise be entitled to under the NNI Policy. Failure to provide complete business names **will also** result in a denial of adjustments.
  - c) Proponents can obtain information about the NNI Policy from the GN's NNI Secretariat at 1 888 975 5999. A copy of the NNI Policy may be downloaded from the website <u>http://nni.gov.nu.ca/policy</u>. A registry of approved Nunavut Businesses is available on the internet at the website <u>http://www.nni.gov.nu.ca/search</u>. Proponents may also obtain information about Inuit Firms from Nunavut Tunngavik Inc. (NTI) at 1 867 975 4900 or from their website <u>http://inuitfirm.tunngavik.com/</u>. The registry of approved Inuit Firms can be accessed on the internet at the website <u>http://www.inuitfirm.com/public/search.php</u>.
  - d) The Contracting Authority cannot guarantee the accuracy of, nor is it liable for any information provided by the NNI Policy Secretariat on the NNI Business Search website, or Nunavut Tunngavik Inc. on the Inuit Firm Registry; however, proponents may rely on the websites on the date of writing the proposal, and the evaluation committee may rely on the accuracy of the websites on the closing date for the purposes of applying the NNI Policy in evaluating proposals. Accordingly, for the purposes of ensuring the correct bid adjustments are applied, proponents should indicate the NNI and, or, NTI Registration Numbers on the NNI Incentives Application Form.
  - e) Unsuccessful proponents may challenge the NNI evaluation of their proposal pursuant to s.18.11 of the NNI Policy within five (5) days of receiving notice of a contract award.
- 9. For one year from the date their employment ceases, former GN senior officers may not own, operate, control or be employed by any business enterprise in which they may be in a position to unduly exploit knowledge they gained while employed by the GN. If, however, within one year after employment ceases, a senior officer is offered a contractual position by a department, the Deputy Minister (DM) of that department may make a request of the Senior Personnel Secretariat (SPS) to waive the last 6 months of the required waiting period. If six (6) months have passed since the end of a senior officer's employment, the SPS may, in its sole discretion, waive the remaining waiting period.
- 10. The GN reserves the right to deem a proponent "not responsible" on the basis of performance problems in any similar contract which performance problems occurred in the past 12 months. Performance problems include default, failure to perform, unsatisfactory quality of result, or unsatisfactory contract management practice. A proposal submitted by a proponent who is "not responsible" will be rejected.
- 11. All questions, enquiries or any other communications concerning this RFP should be in writing and faxed or e-mailed to:

#### Susan Noseworthy, snoseworthy@gov.nu.ca Ph 867-975-5434 Fax 867-975-5450

- a) Responses to any communication made by a GN employee other that the contact person identified herein should not be relied on and can not be guaranteed.
- b) Verbal communications are discouraged, can not be relied upon, and are not binding on either party. Verbal responses to any inquiry or communication made by the contact person identified herein, or any other person, are not binding on either party and cannot be relied upon or construed to be an implied term of this RFP or any ensuing contract. The GN will accept no

liability for any losses, damages or claims by an unsuccessful proponent who has relied on verbal information or communication from any other party, including our client.

- c) A response to any enquiry received later than five (5) calendar days prior to the proposal closing deadline can not be guaranteed.
- 12. Any amendments made by the GN to this RFP will be issued in writing and available via automatic notification in an addendum format for download to those proponents who have registered and who have received the original documents from the GN Tender website. Proponents who do not register will not get the addenda.
- 13. Proponents may amend their proposal by fax at any time prior to the closing date and time. If submitting via the Nunavut Tenders Bid Box is permitted, proponents may upload a revised proposal, or upload proposal amendments. Amendments or amended proposals should be clearly identified as such. The latest version will be considered the proponent's official submission.
- 14. The GN reserves the right to request clarifications and negotiate modifications with any proponent who has submitted a proposal. Proponents are encouraged to submit enquiries and seek clarifications to the RFP document prior to the stated closing date and time. A Proponent seeking modifications to the Agreement terms should specifically request those changes in writing prior to the closing date and time, and the GN may respond by way of addendum.
- 15. The GN reserves the right to issue an addendum after the closing date.
- 16. An evaluation committee will review each proposal. The evaluation committee reserves the exclusive right in its sole discretion, to determine the scores of all proposals relative to the evaluation criteria, weights and rating legend provided in this RFP. For greater clarity, the evaluation committee reserves the right to make adjustments to a proposal following the closing date in accordance with the NNI Policy by taking into account any information that will assist it in doing so, including by taking into account information obtained from the Nunavut Business Registry maintained by the NNI Secretariat and the Inuit Firm Registry maintained by NTI. For greater certainty, if the GN determines that a proposal should, or should not, receive a bid adjustment pursuant to the NNI Policy, it can adjust the evaluation and scoring of a proposal accordingly.
- 17. Proponents may be short listed. Proponents who are short listed may be requested to make a formal presentation. Such presentations shall be made at the cost of the proponent.
- 18. 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.
- 19. The GN is not bound to accept the Proposal that provides for the lowest price or the highest score nor any proposal of those submitted. The GN has the right to cancel this RFP at any time, in whole or in part, and to reissue it for any reason whatsoever, without incurring any liability and no proponent will have any claim against the GN as a consequence. The GN further reserves the right to accept proposals in whole or in part.
- 20. If a contract is awarded as a result of this RFP, it will be offered first to the proponent who is responsive and responsible and whose proposal provides the best potential value to the GN as determined by the highest score. "Responsive" means compliant in all material respects. "Responsible" means the capability in all respects to perform fully the contract requirements and the integrity and reliability to assure performance of the contract obligations. See also paragraphs 9 above and 22 below.

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- 21. If a contract is awarded as a result of this RFP, it will contain the relevant provisions of this RFP and the accepted proposal, the terms and conditions of the Agreement and any other terms as may be mutually agreed upon, whether arising from the accepted proposal or as a result of any clarifications or negotiations prior or subsequent thereto; and this ensuing agreement will be forwarded to the successful proponent for signature prior to the GN's authorized representative signing it.
- 22. The GN and the successful proponent shall not acquire any legal or equitable rights or privileges under any ensuing agreement until it is signed by both parties.
- 23. In the event the successful proponent elects to withdraw its proposal after acceptance and not enter into an ensuing agreement, then the GN may, at its sole discretion, disqualify the successful proponent from any further participation in the RFP process, revoke the offer of the ensuing agreement presented for signature, and accept the proposal of the next highest scoring proponent, or cancel the RFP. Furthermore, as a result of withdrawing its proposal, the withdrawing proponent may be required to submit bid security on future RFPs, or be deemed 'not responsible' for future projects, at the sole discretion of the GN.
- 24. If a contract is awarded as a result of this RFP, it will be governed by the laws of Nunavut; therefore, the successful proponent 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 Safety and Compensation, Labour Standards including requirements of the Labour Standards Board, income tax, Nunavut Payroll Tax, Canada Pension Plan, occupational health and safety and environmental protection legislation.
  - a) If you are a new business in Nunavut, you will be required to register your business with the Workers Safety and Compensation Commission (WSCC) prior to undertaking any work or services in Nunavut. For greater clarity, the Nunavut does not have any reciprocity agreements with other provincial and territorial workers safety and compensation commissions. The GN may check with the WSCC prior to awarding a contract to ensure that the successful proponent is in compliance with the Workers Compensation Act. For more information, please call Employer Services at (867) 979-8500 or toll free at 1 877 404 4407 or visit the Registering A Business page on the website: <u>http://www.wscc.nt.ca/Pages/default.aspx</u>
  - b) If you are a new business in Nunavut, you will be required to comply with the Business Corporations Act and other applicable legislation governing the conducting of business in Nunavut. The GN will will check with its Corporate Registries branch in the Department of Justice, prior to the awarding of a contract, to ensure that the successful proponent is in compliance with the legislation. It will be a condition of contract award, that the successful proponent register its business with the GN's Department of Justice's Legal Registries Division prior to undertaking an work or services in Nunavut. For more information, call (867) 975 – 6590; e-mail ; or visit the Corporate Registries website at: http://nunavutlegalregistries.ca/cr\_index\_en.shtml
  - c) All engineers, geoscientists and firms practising in the Northwest Territories and Nunavut are required to be licensed by NAPEG in adherence to the Acts of Northwest Territories and Nunavut. NAPEG does not have a category of registration for a limited licence or temporary licence or provisional licence. Accordingly, if you are not already a registered Permit Holder with the NAPEG, upon entering into a contract with the GN, you will be required to register, or show proof of registration and good standing with this Association. More information is available at the website: <u>http://www.napeg.nt.ca/registration</u>
    - d) Nunavut imposes payroll taxes on gross remuneration of all employees who work in Nunavut. For more information on Nunavut's unique Payroll Tax, e-mail the Department of Finance Taxation Division at payrolltax@gov.nu.ca, or visit the website: <u>http://www.finance.gov.nu.ca/apps/authoring/dspPage.aspx?page=tax\_payroll</u>

- 25. In the event of any inconsistency between this RFP and any ensuing contract, the contract shall govern.
- 26. Proponents should familiarize themselves with the insurance requirements in the attached form of contract, and take the cost of those insurances into account in making their proposal. Please note the requirement that the Consultant ensure that all individuals (including the Contractor if an individual, and including all employees, officers and subcontractors) who are physically present in Nunavut during the term of this contract have extended medical benefits that cover the full cost of ambulance and medical evacuation. Beneficiaries under the *Nunavut Land Claim Agreement* are automatically covered by the NIHB (Non-Insured Health Benefits) program. Individuals may have extended medical benefits through a group program, including a group program to which their spouse belongs. Private coverage is available. Individuals present for a short time in Nunavut may buy the necessary coverage with their airfare. In the event this coverage is not in place for an individual who must be medically evacuated while in Nunavut, the Consultant will indemnify the GN for the cost of the medical evacuation.
- 27. The Access to Information and Protection of Privacy Act, S.N.W.T. 1994, c. 20, as duplicated for Nunavut by s. 29 of the Nunavut Act, S.C. 1993, c. 28 ("the ATIPP Act") will define the GN's responsibilities with respect to any information received by it pursuant to this RFP process. Subject to the Act and any applicable law, proposals and all related information shall be treated as confidential and shall not be disclosed to any person without the consent of the proponent, and such disclosure, where permitted, will only be to the extent required to satisfy the GN's obligations under this RFP, or pursuant to any applicable law. The GN will:
  - a) take all reasonable steps to ensure that confidential information is secured;
  - b) subsequent to the RFP closing, disclose only the names and addresses of those who submitted proposals; and
  - c) in the case of any contract resulting from this RFP, publish the successful proponent, contract title, location, award method and value in a public procurement accountability report for the fiscal year in which the contract is awarded.
- 28. The proponent represents, warrants, and covenants that it does not have, and will not incur, a pecuniary interest in the business of any third party, or any other conflict of interest that would affect the proponent's objectivity in the performance of its duties under any contract arising from this RFP. Should an event giving rise to such a conflict of interest occur after a contract is awarded, the successful proponent (consultant) shall immediately notify the GN, in writing, and present a plan whereby the conflict may be managed or avoided. Upon receipt of such notice, the GN may, in its sole discretion, elect to terminate the contract, or continue under the contract subject to the consultant's satisfactory compliance with a conflict management plan.
- 29. The GN is not liable for any costs of preparation or presentation of any proposals. All proposals and accompanying documentation received by the GN in response to this RFP shall become the property of the GN and will not be returned.
- 30. Notwithstanding any other provision, a proponent who submits a proposal to this RFP agrees that the GN's liability for any claim for damages or compensation of any kind shall be limited to the proponent's actual proposal preparation cost. Proposal preparation cost is the actual cost borne by a proponent to prepare and submit its response to this RFP. By submitting a proposal to this RFP a proponent acknowledges and accepts this limitation.
- This procurement document can be made available, upon request, in any of the 4 official languages (Inuktitut, Inuinnaqtun, English, French), of Nunavut. ▷ σ ▷ ል<sup>ናь</sup>C<sup>ና</sup>b<sup>c</sup>C<sup>∿</sup>σ<sup>∿</sup>J<sup>c</sup> ∩∩<sup>ናь</sup>b<sup>ናь</sup>
   ⊲⊃Δ<sup>°</sup> α ▷ ∀<sup>°</sup> α <sup>ናь</sup>D<sup>5</sup><sup>b</sup>, D<sup>i</sup> Y <sup>ናь</sup>C<sup>b</sup>D<sup>j</sup> σ, α ⊂ ⊲<sup>\*</sup> σ ⊃ Δ<sup>°</sup> α <sup>ናь</sup> Δ ⊂ \ 1 √ ▷ Y <sup>5</sup> ▷ ▷ Y <sup>6</sup><sup>c</sup>D<sup>j</sup> σ, α ⊂ ⊲<sup>\*</sup> σ ⊃ Δ<sup>°</sup> α <sup>ናь</sup> Δ ⊂ \ 1 √ ▷ Y <sup>5</sup> ▷ ▷ Y <sup>6</sup> □ α ∩ C<sup>c</sup>, ▷ Δ ἀ D<sup>c</sup>, ▷ Δ ◊ D<sup>c</sup>, ▷ D<sup>c</sup>,

#### Air Terminal Building Taloyoak, Nunavut RFP 2015-59

Qablunatut, Uiviititut), Nunavunmit Ce document d'approvisionnement est disponible, sur demande, dans les quatre langues officielles (inuktitut, inuinnaqtun, anglais, français) du Nunavut.



#### **Terms of Reference**

#### Purpose

The Department of Community and Government Services, on behalf of the department of Economic Development and Transportation, is seeking to contract with a qualified professional Architectural/Engineering firm to provide a design and construction administration services for a 311m<sup>2</sup> Air Terminal Building in Taloyoak, Nunavut. The building will be utilized year round by airline staff, travelers, and the general public and is to be opened in March 2018 (depending on foundation type).

The Project Brief details the requirements identified for the development of an Airport Terminal Building (ATB) design that will be constructed in Taloyoak, NU over the course of 2016-2018. Additionally, this ATB design will be designed to be easily repeated in the four communities of Chesterfield Inlet, Repulse Bay, Whale Cove, and Kimmirut in the future. Schematic layouts that reflect the identified needs of the repeat ATB are provided in this Brief and will form the basis of design.

#### Note to Consultants:

As the intention is to utilize the same design for future ATB projects required by the GN, the following disclaimer will apply to the design work of this project:

#### COPYRIGHT

Title to any report, drawing, photograph, plan, specification, model, prototype, pattern, sample, design, logo, technical information, invention, method or process and all other property, work or materials which are produced by the Consultant in performing the Services or conceived, developed or first actually reduced to practice in performing the Services, (herein called "the Property") shall vest in the GN and the Consultant hereby absolutely assigns to the GN the copyright in the Property for the whole of the term of the copyright.

The Consultant **agrees to waive to the Government of Nunavut** any copyright, including all moral rights in relation to the **functional model** and **Standard Design** as expressed above. All intellectual property created in relation to the functional model and Standard design as stated above, and all associated rights thereto, will become the property of the Government of Nunavut. The Government of Nunavut will have unlimited rights to reuse, reproduce, and modify the functional model and Standard Design.

The Consultant shall ensure that its contractual relations with employees and subcontractors preserve copyright for the GN, in compliance with the subsection above.

The consultant will have no liability for any reuse or reproduction by the GN for any purpose other than that contemplated under the services agreement, or for any modification that may be made by the GN.

The full functional program and design brief are attached herewith and will guide the design(s) resulting from this RFP. It describes the functional and operational needs of its users, as well as the guiding principles and design objectives for the selected AE to consider in order to deliver a successful project.

# Note: Drawings must be stamped by a NAPEG registered engineer prior to issuing for tender.

#### Background

The Hamlet of Taloyoak is in the western portion of Nunavut on the Boothia Peninsula within the Kitikmeot Region. According to the July 2014 census report from the Nunavut Bureau of Statistics, the population of Taloyoak is at 998 people with ten and twenty year projections of 1155 and 1323 people respectively<sup>1</sup>. The GN's department of Economic Development & Transportation (EDT) is responsible for the operation and maintenance of the communities' Airport building and the services it provides. The existing Taloyoak Airport was constructed in 1980 and is no longer suitable to deliver the services required of an ATB.

The existing ATB currently serves multiple scheduled flights a week, occasional charter flights, and cargo flights on a regular basis. The ATB accommodates both Canadian North and First Air, and functions as a 24/7 station for rerouted flights from other communities. Being one of the oldest ATBs in Nunavut, it is undersized for its daily operations and overall does not meet current and future operational needs. Therefore, a new ATB will be designed and constructed on the same site over the years of 2015-2017.

#### **Project Restraints**

Due to the nature of this building and the current conditions on site the following will be a requirement of the consultant's contract and **must** be noted when preparing the RFP proposal:

- 1. The existing ATB is currently connected to the Field Electrical Center building (FEC) for both power and controls. The cable is located underground under the proposed location for the new ATB. The consultant will be required to determine location of the cabling and provide options with associated costs for the temporary connection to the existing ATB while construction is underway of the new ATB. Drawings, specifications and scope of works associated with the removal of the existing cabling and the new cabling location to the existing ATB will be part of the construction contract and must be provided by the consultant. Both the existing and new ATB will both have to be powered for continued operation of the Taloyoak Airport.
- 2. Improvements to the apron's lighting and security fencing are underway this year. Upon completion and occupation of the new ATB in Taloyoak, the demolition of the existing ATB and minor modification to the new security fencing to connect it to the new building will be required. Consultant will be required to provide a work plan and construction documentation for the demolition/removal of the existing ATB as indicated by the client as well as the modifications required for the fencing and possibly the apron's lighting.
- 3. The existing NAV Canada instrumentation/equipment as well as Nunavut Airports and airline equipment will be transferred over to the new ATB. The consultant will be responsible for coordination with the client and NAV Canada to ensure proper space allocation and routing of equipment is per NAC Canada, Nunavut Airports and airline requirements. This includes but not limited to the fastening of antennas and strobe lights to the new ATB, wiring of specialized equipment from the roof to the mechanical/electrical room, etc.
- 4. A stand-alone generator is to be specified by the consultant to operate the ATB and all functions of the airport including runway lighting, airport equipment and instrumentation, etc.
- 5. The client's desire is to have the building on grade for ease of access therefore a thermosyphon foundation is preferred.

<sup>&</sup>lt;sup>1</sup> "Population Estimates." Nunavut Bureau of Statistics. Government of Nunavut, *n.d.* Web. 26 Jun. 2015. <<u>http://stats.gov.nu.ca/en/Population%20estimate.aspx</u>>

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6. Consultant is to follow the Schematic Design provided in the Design Brief and submit a Class D estimate with their proposal based on the Schematic Design. Class D to also include stand-alone generator, new connection from existing ATB to FEC, removal of the existing ATB, and luggage shed.

#### Schedule

The delivery of this project will be governed by the following critical milestones:

#### Planning & Design

#### 2015

July	Site Assessment/Geotechnical Study
-	Design Brief/RFP Completed
September 1st	RFP Issued
September 23 <sup>rd</sup>	RFP Closed
September 29 <sup>th</sup>	RFP Review
October 9 <sup>th</sup>	RFP Award
Mid - October	Schematic Design/Start up meeting
Mid - November	Design Development submission
December 1 <sup>st</sup>	Go to meeting – team meeting
Mid-December	50% Construction Drawings submission
	September 23 <sup>rd</sup> September 29 <sup>th</sup> October 9 <sup>th</sup> Mid - October Mid - November December 1 <sup>st</sup>

January 31 <sup>st</sup>	99% Contract Document submission
February 15 <sup>th</sup>	Issue for Tender
April 1 <sup>st</sup>	Tender Award

#### Construction Schedule: Option 1 - Slab on grade foundation with thermosyphons

#### 2016

2016

July	Sealift cut off
July	Mobilization, site preparation, etc.
September	Sealift arrives, construction begins
Sept/Oct.	Thermosyphons foundation
November	Construction on hold

#### 2017

	June September	Construction continues (Structure, envelope) Sealift arrives
	October	Interior work
2018		
	January	Building Substantially Complete
	February	Building Commissioning
	June	Demolition of old ATB

#### **Construction Schedule: Option 2 – Pile Foundation**

#### 2016

June	Site preparation, mobilization and piling
July	Sealift cut off
September	Sealift arrives, material on site
November	Structural framing complete

2017

May	Construction continues
July	Building Substantially Complete
August	Building Commissioning
September	Demolition of old ATB

#### **Project Requirements**

Services under any contract resulting from this RFP will include but not necessarily be limited to the provision of the necessary designs and construction administration services for the construction of a new 311 sq.m Air Terminal Building with luggage shed, reconnection of power to the existing ATB from the FEC and demolition of the existing ATB. The specific requirements under the RFP and Design brief are for the community of Taloyoak but will ultimately be used for other ATB's in Nunavut. Occupancy for the Taloyoak ATB is scheduled no later than March 2018.

The project has a \$9,000/sq.m budget based on the GN Capital Plan. Proponents are to submit a Class D estimate and are to indicate if the budget will be sufficient based on the Class D submitted.

Proponents should be aware that a Geotechnical Investigation to determine the existing soil conditions and requirements for the building foundation of the proposed site has been completed and will be available after September 18<sup>th</sup>, 2015.

The Architectural/Engineering Services shall be delivered as described in Section E of the attached Architectural/Engineering Full Services Agreement to be modified as follows:

The Project will be completed in two Phases due to the funding restrictions. Phase 1 will incorporate all work as outlined in Section E of the A/E Service Agreement up to the end of Item 1.4 "Bidding or Negotiation Phase". Phase 2 of this project will incorporate all works associated with Item 1.5 "Construction Phase – Administration of the Construction Contract" to the end of Item 1.6 "Post Construction Phase". The successful proponent will enter into a contract to undertake all works associated with Phase 1 with the GN having the option to increase the Consultants scope to incorporate Phase 2 works.

In regards to Section E the Schematic Design Phase -1.1, the Design Development Phase -1.2 and the Construction Document Phase -1.3:

- 1. The Schematic Design is provided by the GN and should be followed as per the requirements listed in the attached Project Brief. The proponent is to include a Class D estimate with their proposal submission.
- 2. The Design Development phase will require either a face-to-face team meeting or a Go to Meeting that will be set up by the consultant. This will be determined at award depending on the schedule.
- 3. Construction Documentation Phase will have 2 reviews. Drawings and specifications will be submitted at 50% and 99% to CGS for review and comment. Notwithstanding the foregoing, the AE will be required to comply with the provisions of the Construction Document Phase with respect to reviews at 50%, 75% and 100% complete.
- 4. The AE will assist the GN in obtaining preliminary approvals from the following authorities having jurisdiction (AHJ):
  - Electrical Review CGS Electrical Inspector's Office;
  - Development Permits Municipality of Taloyoak;
  - Fire Marshall's Office

Construction Documents will be reviewed by AHJ only when 100% complete.

In regards to the Bidding or Negotiations Phase – Section E 1.4:

The AE will prepare and deliver five (5) hard copy sets to be issued for tender. Drawings are to be made accessible in PDF for the purposes of email sharing and posting on the GN's 'Nunavut Tenders' web site (<u>http://www.nunavuttenders.ca</u>) and/or NWT & Nunavut Construction Association web site (<u>http://nwtca.ca/</u>)

The AE shall also deliver the following Additional Services in accordance with Section F of the attached Architectural/Engineering Full Services Agreement to be modified as follows:

- 1. The Consultant shall provide the GN with 4 electronic copies (CD) of all drawings, IFC and As-Built, (AutoCAD 2013) and specifications (MS Word), with complete read/write access.
  - 1.1. All documents submitted for review shall be in the following formats:
    - A. PDF format in grey scale, with a minimum resolution of 1200 dpi. PDF paper size shall be the same as the paper size for hard copy. Each page of the hard copy will be represented as a separate PDF file. The PDF file will be named using the drawing number and the drawing name, separated with a dash (eg. A1-Site Plan).
    - B. Specifications shall be in Microsoft Word and PDF. The Consultant shall prepare "As-Built" electronic drawings (AutoCAD 2013) from marked up white prints produced by the construction contractor. Also to provide 4 sets white print "As-Built" drawings.
  - 1.2. The consultant shall provide site or further services as follows:
    - .1. Architectural
    - .2. Mechanical
    - .3. Electrical
    - .4. Structural
    - .5. Geotechnical
    - .6. Site investigations to determine cabling run beneath the proposed site.
    - .7. Interior designer/Furniture selection
    - .8. Hardware/Keying/Security (including Scan Card Access, Cameras)
    - .9. Class D,C, B, and A estimates are required to be submitted as specified in the GN Design and Review Stages and Submissions document. These estimates are to be "Elemental Construction Estimates" in compliance with the current Canadian Institute of Quantity Surveyors (CIQS) Elemental Format.
    - .10. Commissioning Plan

#### **Technical Requirements**

1. The Consultant is responsible for using current standards, design codes and guidelines and for ensuring current legislation and regulations are being followed including the GN Good Building Practices Guidelines. The Prime consultant retained by the department is responsible for the engineering integrity and professional liability of all work performed under their agreement, including work by any sub-consultant. The checking of the Consultant's or Sub-Consultant's work by the Department of Community and Government Services, or the signing of drawing by the Department staff does not relieve the consultant from any responsibility for the work. Therefore these guidelines will generally use the terminology of "acceptance" rather than "approval" when referring to

#### Air Terminal Building Taloyoak, Nunavut RFP 2015-59

engineering issues submitted to the Department by the consultant. Acceptance meaning-work is accepted by the Department without detailed checking of the engineering principles and calculations. The GN Design Review Stages and Submissions document is to be used as a guideline during all stages of design.

- 2. The Consultant shall provide geotechnical services for foundation design and monitoring during the Construction phase. The GN will provide the consultant with the geo-technical site investigation report from the visit in July 2015. If a pile foundation is the best option, the Consultant will provide on-site pile installation monitoring services of a professional engineer who is well-versed in piles in permafrost. Or, if a thermosyphon system is advocated, on site monitoring services are required during installation by the thermosyphon designer.
- 3. The consultant shall undertake a ground study for all/any cabling or structure/material that may be under the proposed location of the new ATB. A relocation/removal plan will need to be prepared by the consultant to ensure installation of the foundation can be achieved while following all necessary codes and building requirements.
- 4. The Consultant shall be responsible for obtaining approvals from all authorities having jurisdiction. These will consist of, but not be limited to: Nunavut Environmental Impact Review Board, Nunavut Water Board, Environment Canada, Department of Fisheries and Oceans (Canada), Department of Community and Government Services (for any required land transactions, re-surveying, land acquisition, lease arrangements and road closure with the relevant authorities), GN Protection Services (Office of the Fire Marshall, Boiler and Electrical Divisions), or any other required transactions with the Hamlet of Taloyoak. Consultant shall prepare Development Permit for the GN submission to the Hamlet of Taloyoak.
- 5. The consultant shall develop, with Nunavut Airports, and provide a Keying and Scan Access schedule to incorporate into the Final Tender Documents with the Construction Drawings.
- Part of the detailed design is to be structured with the requirements of the wiring system for telephone, computers & other telecommunication required by the Department of Economic Development and Transportation.
- 7. All tender documents shall be noted "**Issued for Tender**", "Not for Construction", at the tender stage. All tender documents will be detailed, clearly written descriptions (plain language) of the work required.
- 8. After Tender Close, and prior to contract award, the consultant shall modify all tender documents incorporating requirements from authorities having jurisdiction and all changes in design addenda from "Issued for Tender", and note the documents "Issued for Construction".
- 9. All details shown on project documents shall be cross-referenced to note detail number, originating location and location shown.
- 10. All tender documents shall be completed and available for tender February 15, 2016.
- 11. The consultant shall develop and provide Fire Escape Plans for occupancy purposes to be posted throughout the facility as required by the Office of the Fire Marshall.
- 12. The design of a fall protection system built into the structural component of the building is to be included in the project's design and verified and approved by a Professional Engineer licensed to practice in NWT/NU who is qualified in the design of fall protection of safe work on the roof, its application and safety requirements. The fall arrest system shall be attached to an anchor/horizontal lifeline at all times or equivalent members on the building at all times and be designed as per Occupational Health and Safety Regulations.

#### **Owner Supplied Services:**

1. A Geotechnical Report of the existing site.

The GN will provide the services described in Section D of the attached Architectural/Engineering Full Services Agreement to be modified as follows:

With regards to Section D 1.3, on calling tenders and awarding a contract during the Bidding and Negotiating Phase, the GN will:

- Provide tender advertising
- Advise the A/E on the number of sets of documents required for tender; documents must be assembled correctly and bound.
- Number and distribute tender documents
- Maintain a plan holders log
- Receive all enquiries and coordinate the distribution of addenda; technical enquiries may be referred to the A/E
- Analyse tenders and recommend award
- Obtain bonds and insurance
- Prepare the construction contract for execution and obtain Contractor and GN signatures
- Distribute signed construction contracts to the Contractor and the Owner's Representative

With regards to Section D 1.4, on managing the Construction Contract during the Construction Phase, the GN will:

- Appoint a Project Officer to act as the Owner's Representative for the purposes of managing the Construction Contractor;
- Issue Substantial and Final Completion certificates in accordance with the Construction Contract Documents

#### Program Manager and Contract Authority

Contracts resulting from this RFP will be managed by a Project Officer from the Department of Community and Government Services Kitikmeot Regional Projects Division. The name and contact information will only be provided upon advice of proposal acceptance.

#### **RFP** Authority

For the purposes of this RFP, the sole contact person for all enquiries with respect to this project is **Susan Noseworthy, Procurement Officer**. This is for the purposes of ensuring all proponents receive the same information during the RFP period. The process for enquiries is further described in the Instructions to Proponents.

Enquiries may be addressed to:

Susan Noseworthy Department of Community and Government Services Procurement Division 3rd Floor, Brown Building P.O. Box 1000 Stn 1600 Iqaluit, NU X0A 0H0 Phone: (867) 975-5434 Fax: (867) 975-5450 E-mail: <u>SNoseworthy@gov.nu.ca</u>

## **Proposal Evaluation**

When an alternative is proposed regarding any specific requirement, it will be evaluated to ensure that the desired results will be achieved.

Proponents should be aware that certain mandatory requirements may have been set out in the Terms of Reference. Proposals that fail to provide these requirements shall be deemed not responsive and will not be evaluated.

#### **Proposal Response Guidelines**

The following are guidelines meant to assist proponents in responding to this RFP and will be utilized in evaluating each submission. They are not meant to limit or restrict proposals.

Proponents should take care to comply with any mandatory proposal requirements set out herein. Mandatory proposal requirements are preceded by terms such as "proponents must", "proponents shall" or "proponents will".

Note: Mandatory proposal requirements are not the same thing as **contractual obligations.** A contractual obligation is something that must be done under the contract that is expected to result from this RFP. Proposals will not be rejected for failing to demonstrate compliance with contractual obligations. Contractual obligations are identified by terms such as "consultant must", "consultant is required to", "consultant shall", etc.

#### Proposal Format

To allow for a thorough yet timely evaluation, proposals should be presented in a clear and concise manner. Failure to present information in the manner requested may be to the proponent's disadvantage. It is suggested that the following format and sequence be followed in order to provide consistency in proponent response and to ensure each proposal receives full consideration:

- 1. Proposal Cover Letter
- 2. Corporate Profile & Legal Identity for the Purposes of Entering into a Contract
- 3. Project Team & Key Personnel Roles & Responsibilities
- 4. Project Delivery Methodology Approach & Work Plan to Successful Construction
- 5. Additional Services
- 6. Project Schedule & Critical Milestones
- 7. Detailed Project Budget/Fees & Expenses
- 8. Past Related Experience on Similar Projects Proponent Firm
- 9. Past Related Experience on Similar Projects Project Team Members
- 10. Proposal Attachments
  - a. Proposal Submission Form (Legal Identity)
  - b. NNI Incentives Application Form & Inuit Content
  - c. Declaration of Conformity (Mandatory Requirements)
  - d. Others as may be proposed

The cover letter should provide a summary of your organization's interest and suitability for this project. It should be no more than 2 pages in a standard business format and should identify and be signed by the people who prepared the proposal, and include a contact person responsible to answer questions regarding the proposal contents.

#### Corporate Profile & Legal Identity

If the proponent is not legally registered to do business in Nunavut, then the proponent will have to register their business in order to lawfully enter into any contract resulting of this RFP.

#### Consultant/Project Team - Qualifications, Knowledge, Skills

Identify key personnel to be involved in the project, and ensure their roles and responsibilities are clearly defined. Identify a team leader and clearly establish lines of communication within the team, and with the GN Project Manager.

The proposal shall include brief resumes for the proposed sub consultants and project team members with a description indicating how, and in what ways the proposed resource satisfies the needs identified in the Request for Proposal.

#### Related & Past Experience – Similar Projects

To demonstrate knowledge, skill and related experience of each member proposed to carry out work on the project, the proponent should provide a detailed list of similar projects completed in the past five (5) years, and identify who the projects were completed for. Also provide a brief description of the work that was done and the project outcomes.

The proposal content is expected to demonstrate appropriate and relevant knowledge, skills and experience within the team, however, personal resumes for each of the proposed team members should be provided to support the proposal. Personal resumes should be limited to not more than two (2) or three (3) pages per person.

Letters of Reference from past clients and other governments may also be provided to support the proposal. Proponents should also be aware that where it has done past similar work for the GN, the GN Department and Division that the work was done for will automatically become a reference for the purposes of verifying the proponent's satisfactory performance for that particular work, and suitability for the work contemplated in this RFP.

#### Project Methodology – Approach & Work Plan to Successful Completion

Your proposed solution will demonstrate your understanding of the project and potential for achieving the project objectives. Provide details of your solution and how it will be implemented. Explain how it will successfully achieve the department's goals and objectives and benefit the end users.

Your methodology should also include your proposed means of working with the GN project manager, the levels of authority within the Project Team and all lines and means of communication.

You may also summarize your methodology in a work plan or other format which demonstrates a logical sequence of events, and identifies specific tasks and the person responsible for completing them.

#### Project Schedule & Critical Milestones

Provide a schedule for the sequence of events described in the methodology. Identify a project start and end date and any time frames allocated for each planned task. Identify key milestone dates for submittals, approvals, travel, meetings, etc., Your timeline will be evaluated in light of the time constraints discussed in the Terms of Reference and the timeframes you have set out for each task.

#### Detailed Project Budget/Fees & Expenses

1. The proposal must include cost information as follows:

- 1.1. A lump sum fixed fee for schematic design, design development, construction document, bidding phases and post construction phases, and in-house management fees during construction phase.
- 1.2. The project will be completed in 2 Phases and we will require a further break down of the fees. The Proposal must include a separate lump sum pricing for each Phase of work. Phase 1 will incorporate all work as outlined in Section E of the A/E Service Agreement up to the end of Item 1.4 "Bidding or Negotiation Phase". Phase 2 of this project will incorporate all works associated with Item 1.5 "Construction Phase – Administration of the Construction Contract" to the end of Item 1.6 "Post Construction Phase". Note: The evaluation will be based on total work.
- 1.3. An estimate of disbursements for non-field expenses such as telephone, facsimile, courier, copy, photographic, postage, computer and tender document printing costs.
- 2. Proposal submissions are to broken down into lump sums for each of the following services (include an estimate for fees and disbursements):
  - 2.1. Site Visits and Construction Inspection
    - .1. Architect 8 trips to community (1 trip for design development, 4 during construction, 1 at substantial completion, 1 at final completion and 1 at warranty).
    - .2. Mechanical and Electrical Engineer 5 trips each to community (1 at rough-in, 1 during construction, 1 at substantial completion, 1 at final and 1 at warranty).
    - .3. Structural Engineer 2 trips (2 structural inspections).
- Note: The number of trips listed above is an estimate based on our experience with similar projects and is meant to provide a consistent measure across all proposals. The Consultant should include the number of expected/proposed travel and site days based on the site visits outlined in Item 2.1. The actual numbers may differ and will be amended based on the Consultant's published rates and per diems.

Proponents should:

- a) Submit a billing cycle. It is preferred that invoices will only be issued as specific tasks are completed. The GN's Financial Administration Manual provides for payments terms of net thirty (30) days or net twenty (20) days for an NNI registered Nunavut Business.
- b) Provide a list of hourly rates for each team member in the event additional services may be required. For greater certainty, additional work must be specifically requested and approved by the GN Project Authority and itemized with associated additional costs within a written contract change order.
- c) Additional Services: The proponent should include hourly rates for project team members' time if required to provide additional services over and above those provided in the proposal. Note that additional services will only be authorized in writing by the CGS contract manager on request of a written quotation, and if acceptable, the contract will be amended accordingly in writing.

The Consultant is to provide cost details, daily rate schedule and per diem rates for project team members for in and out of office services.

Clearly identified cost components will be adjusted in accordance with the NNI Policy for the amount of work to be done by Inuit and Nunavut businesses and for the amount of work to be done by Inuit and Nunavut Residents. In order to receive these adjustments, proponents must complete the NNI Incentives Application Form and submit it with their proposal. Failure to do so will result in a denial of any adjustments permitted by the NNI Policy.

Pricing must be stated in actual dollars and cents expressed in Canadian funds. The GN will pay the Goods and Services Tax (GST); however, do not include GST in your proposed pricing.

It should be noted that the GN will not provide an advance payment to any proponent upon the signing of a contract; therefore requests for such an advance will be denied and the contract will reflect same.

#### Inuit Content

In compliance with Article 24 of the Nunavut Land Claims Agreement (NLCA) and the NNI Policy, the GN will provide consideration for Inuit Content. Accordingly, proponents are encouraged maximize business relationships with Inuit Firm sub-consultants and suppliers and hire Inuit workers to work on the project. All information should be provided in detail in the attached NNI Incentives Application Form.

Inuit Content is the dollar value of goods and services provided by an Inuit Firm, and the dollar value of Inuit Employment in carrying out the work, including Inuit employees from an Inuit or non-Inuit Firm. An Inuit Firm is a company that is approved by Nunavut Tunngavik Inc. (NTI) and included in the Inuit Firms Database which is available online at <u>www.inuitfirms.com</u>. An Inuk is any person included in the Inuit Enrolment List under the NLCA Article 35, or anyone entitled to be enrolled under that article.

One (1) point will be awarded for each 10% of work to be done by Inuit Firms where this information has been substantiated in the proposal. Likewise, proponents will be awarded one (1) point for each 10% of work that will be done by Inuit workers where the names and dollar values are provided. No points will be given for values lower than 10%.

In order to determine the percentage of work associated with Inuit Firms and Inuit Employment, the following variables are required:

- Total Proposal Price
- Total Labour Costs
- Inuit Labour Costs
- Total Goods & Services (excluding labour)
- Inuit Goods & Services Costs (excluding labour)

Failure to provide this level of detail in your proposal pricing will result in the evaluation committee not being able to determine Inuit Content percentage levels to award points appropriately.

#### **Evaluation Criteria**

The evaluation team will utilize the following criteria to evaluate each proposal. Points awarded will be consistent with the Points Rating Legend on the Proposal Rating Schedule. <u>Points awarded will be confidential and no details will be released to any of the other proponents</u>.

Each proposal will be evaluated using the following criteria:

- 25% Methodology Design & Project Delivery Approach
- 20% Project Design Team (Qualifications of Personnel Assigned/Made Available to Project)
- 15% Project Schedule & Ability to Achieve Targeted Tender Issue Date
- 15% Past Relevant Experience Corporate/Team members
- 10% Fees and Expenses (NNI adjusted for Nunavut, Inuit and Local Content prior to rating)
- 15% Inuit Content (10% for Inuit Employment and 5% for use of Inuit Firms)

#### Nunavummi Nangminiqaqtunik Ikajuuti (NNI Policy)

One of the priorities of the GN is to ensure that Inuit, Local, and Nunavut businesses supply materials, equipment and services, and that Inuit, Local and Nunavut labour are used to the fullest extent practical on any GN contract. Therefore the NNI Policy applies to this Request for Proposals.

To receive the benefits of this Policy, proponents must identify cost components for Inuit and Nunavut content including the names of any subcontractors, suppliers, and the residency of project team members or other labour proposed to carry out the work. Consideration will also be given for the proponent's Inuit Firm or Nunavut Business status.

Prior to rating, proposed pricing may be adjusted in accordance with the NNI Policy for the amount of work to be done by Inuit, Nunavut and Local businesses and residents. Cost components must be clear; therefore, proponents are encouraged to complete and submit the NNI Incentives Application Form attached to this RFP. Instructions are provided to guide proponents on what level of detail to include. Also refer to the Instructions to Proponents for more information. Failure to complete and submit this form with appropriate detail will result in a denial of NNI adjustments.

For greater certainty, the evaluation committee reserves the right to make adjustments to a proposal following the closing date in accordance with the NNI Policy by taking into account any information obtained from the Nunavut Business Registry maintained by the NNI Secretariat and the Inuit Firm Registry maintained by NTI. If the GN determines that a proposal should or should not receive a bid adjustment pursuant to the NNI Policy, it can adjust the evaluation and scoring of a proposal accordingly.

#### **NNI Incentives Application Form**

The following information MUST be provided by proponents wishing to receive any pricing adjustments permitted under the NNI Policy. If the information is not provided or is incomplete, bid adjustments will NOT be granted.

Values provided in this form must be substantiated by the information provided in the proposal. It will be necessary to provide the names of all proposed team members along with their location of residence. Place a check mark in the column where you wish to receive the adjustment. The Evaluation Committee will use the NNI and NTI Registries to verify the status of sub-consultants and suppliers. If the GN determines that a proposal should or should not receive a bid adjustment pursuant to the NNI Policy, it can adjust the evaluation and scoring of a proposal accordingly.

Proponent's Name					
I. Employment/Labour/Payroll – Include adm	inistrative/op	erational ex	penses in	payroll va	alues).
Name & Location of Worker (or proposed new hires)	Labour Cost	Nunavut (7%)	Inuit (7%)	Local (7%)	Other (0%)
	\$				
	\$				
	\$				
	\$	-V	2		
	\$				
Total Value of Labour	\$				
Value of Inuit Labour	\$				
II. Proponent/Sub-Contractor Amounts – Mis	cellaneous E	xpenses inc	luding Tra	vel Estim	ates
Name & Location of Proponent or Sub- Contractor and Nature of Services	Unit Costs	Nunavut (7%)	Inuit (7%)	Local (7%)	Other (0%)
	\$				
	\$				
	\$				
	\$				
	\$				
Total Goods & Services (excluding labour)	\$				
Inuit Goods & Services (including labour)	\$				
Total Proposal Value	\$				
Note: This information is required in order to app <b>RFP, the Subject Community is Taloyo</b> completing this form are on the following p <b>If more space is needed</b>	<b>ak and the Lo</b> bage.	ocal adjustm	ent will ap		

#### NNI Adjustment Application Form Instructions

The following guidelines are given to assist proponents in applying for NNI adjustments:

#### I. Employment/Labour (Payroll Expenses):

This section is for the labour of both the main Consultant (the proponent) and any Sub-Consultants. The work being done by the employees who don't live in Nunavut doesn't qualify for an adjustment. Any portion of payroll dollars for the work that will be done by Nunavut Residents does qualify (Nunavut 7%). If the Nunavut Residents are also Inuit, they qualify for the additional Inuit adjustment (7%). If the Inuit employees are not Nunavut Residents, they do not get the Nunavut adjustment; they only get the Inuit adjustment (7%). If the Nunavut Residents are also local to the benefiting community, then they qualify for the additional Local adjustment (7%). If the Inuit employees are Local Nunavut Residents, they get the full 21% adjustment. Inuit employees who are not Nunavut Residents don't qualify for Local adjustments.

#### II. Other/Miscellaneous Expenses/Sub-Consultants:

This section is for both the main Consultant (the proponent) and any Sub-Consultants. Some of the work may have to be done by another consultant. This is referred to as a 'sub-contract'. If any other services required for the completion of the contract will be provided by the proponent or any other business, it must be identified here. If the proponent or other company is a Nunavut Business, then they will get the Nunavut adjustment (7%). If they are listed in the NTI Inuit Firms database, then they will get the Inuit adjustment (7%). If the company is listed in both databases, they get both adjustments. If they are also located in the benefitting community, then they get the additional Local adjustment (7%). If the sub-consultant is not on either the NNI or NTI List, it does not qualify for a bid adjustment of any kind.

#### Application of NNI & NTI Adjustments:

Adjustments are applied to the sub-total dollar values associated with each listed component and subconsultant or supplier according to their registration status. Accordingly, the Evaluation Committee will check the NNI and NTI databases to verify that the sub-consultant or supplier listed is actually registered and adjustments will be given according to the registered status.

For Example, if the proponent indicates that a company is both a Nunavut Business and an Inuit Firm by placing check marks in the 'Nunavut' and 'Inuit' columns, and the Evaluation Committee determines that the company is included on the NNI Registry but is not included on the NTI Inuit Firms Listing, then the Nunavut adjustment will be allowed and the Inuit adjustment will be denied.

Proponents are hereby reminded that registration in the NNI and NTI registries requires annual updates, therefore, proponents are encouraged to check the NNI and NTI websites to verify the status of any subconsultants and suppliers they propose in carrying out the work. Proponents should also ensure that their own information is up to date. Refer to the Instructions to Proponents paragraph 6 for website addresses.

<u>Total Labour Value</u>: is the total of all of the individual team members assigned to tasks in the project and listed in each row.

<u>Total Goods and Services Value</u>: is the value of the proponent's own involvement, as well as the involvement of other consultants and suppliers with the labour values excluded.

The Evaluation Committee will use this information to apply any pricing adjustments you may be entitled to under the NNI Policy. The websites will be used to verify the information provided for proponents, sub-consultants and suppliers.

#### **NNI EXAMPLE:**

This scenario is for a solution of services where a small amount of goods may be required to deliver the service. Instead, a substantial amount of labour is required to complete the contract and the costs for any materials necessary for delivering the service are ancillary<sup>2</sup>, and therefore included in the Contractor's Administration or General Expenses line item in the bid. For this example, we are using the hypothetical value of \$1,000,000 dollars for the proposed total contract price from a company called Local Inuit Nunavut Company (LINC). The contract price is arrived at based on the volume of work to be completed. Note this value was chosen for this example only and is not based on any real prices or a specific volume. It is for illustrative purposes only.

Total Proposal Price of Local Inuit Nunavut Company (LINC): <u>A \$1,000,000</u>

The proposal is further broken down to separate the Proponent and sub-contractor labour values from the non-labour portion of the services, and for the purposes of applying bid adjustments, the status of each company is verified.

<b>Total Proposal Price of LINC</b>		<b>\$ 1,000,000</b>
Labour Component	Worker Status	Payroll Cost
LINC Labour	Inuit, Nunavut, Local	\$ 200,000
	(Local Inuit are Nunavummiut)	
LINC Labour	Non-Inuit, Nunavut based, not Local	\$ 300,000
Sub-Contractor A Labour	Not-Inuit, Not-Nunavut, (Montreal)	\$ 100,000
<b>Other Services Components</b>	Firm Status	<b>Other Service Component Costs</b>
LINC Materials	Inuit, Nunavut, Local	\$ 200,000
Sub Contractor A	Not Inuit, yes Nunavut, yes Local	\$ 100,000
Sub Contractor B	Yes Inuit, not Nunavut, yes Local	\$ 100,000

#### For the Proponent Company: Local Inuit Nunavut Company (LINC)

- ✓ Inuit ownership Included on the NTI Inuit Firms Registry Yes Inuit
- ✓ Nunavut based and owned Included on the GN NNI Secretariat Nunavut Business Registry Yes Nunavut
- ✓ NTI or NNI Registered and based in the community where the Services are required Yes Local

#### For the Sub-Contractor "A"

- ✓ No Inuit ownership Not on NTI Inuit Firm Registry Not Inuit
- ✓ Nunavut based and owned Included on the GN NNI Secretariat Nunavut Business Registry Yes Nunavut
- ✓ NNI Registered and based in the community where the Services are required Yes Local

#### For the Sub-Contractor "B"

- ✓ Inuit ownership Included on the NTI Inuit Firms Registry Yes Inuit
- ✓ Nunavut based & owned but NOT listed on the GN NNI Secretariat Nunavut Business Registry Not Nunavut
- ✓ NTI Registered and based in the community where the Services are required Yes Local

#### This example is given to illustrate two things:

- 1) How Bid Adjustments are Applied; and
- 2) How Inuit Content (Labour and Firms) is Evaluated

<sup>&</sup>lt;sup>2</sup> Minor, subsidiary, supporting.

#### 1) How the Bid Adjustments are Applied

#### Calculate Allowable NNI Adjustments to Determine NNI Adjusted Bid Price - this is a 2-Part Step

**Table I.** This analysis is based on the Proponent's identified workforce, and workers to be used by its subs. Proponents must indicate in their bids the dollar value estimates for workers and indicate if they are Inuit or not, if they are working in Nunavut or not, and which community they're based in. This level of detail is needed to accurately calculate adjustments. For each value component and status category of labour, the value of the labour will be multiplied by the total allowable adjustment percentage factor.

Estimated Labour/Payroll Expenditures Breakdown Table							
Employers and Labour Forces	Value of Labour (\$)	Nunavut Residents 7%		Local Residents 7%	Other Residents 0%	Total Adjustmen t (%)	Value of Adjustment (\$ x %)
LINC: Inuit based in service community (Local Inuit are considered Nunavummiut	\$200,000	V		Ø		21%	\$ 42,000
LINC: Nunavut workers based outside service area (not LCA beneficiaries)	\$300,000	Ø				7%	\$ 21,000
Sub-Contractor A: Non- Inuit & not working in Nunavut (not Inuit or Nunavut)	\$100,000				Ø	0%	\$ 0.00
Total Estimated Labour				\$600,000			
Total Estimated Inuit Labour			\$200,000				

Value of Adjustments on Total Labour (\$42,000 + \$21,000)

63.000

= **B** \$

Table II. This analysis is based on the Proponent's identified Value of Services to be provided by theContractor and Sub-Contractors. Bidder must have provided all 'Own Forces' amounts and Name(s) and DollarValues of all intended Sub-Contractors in their bid. To calculate the adjustments, multiply the Value of Services bythe Total Adjustment Percentage factor.

Other Services (Excluding Payroll Estimates) Fees/Price Breakdown							
Contractors Names & Line Items	Value of Services (\$)	Nunavut Businesse s 7%	Inuit Firms 7%	Local 7%	Other Business 0%	Total Adjustmen t %	Value of Adjustment (\$ x %)
<b>LINC: Materials &amp;</b> <b>Administration</b> (Nunavut, Inuit & Local)	\$200,000	Ø	V	Ø		21%	\$ 42,000
Sub-Contractor A: Specific Services (Nunavut and local, but not Inuit)	\$100,000			Ø		14%	\$ 14,000
Sub-Contractor B: Specific Services (Inuit and Local, not Nunavut)	\$100,000			Ø		14%	\$ 14,000
Total of Other Services				\$400,000			
Inuit Portion of Total Other Services			\$300,000				

Value of Adjustments on Other Services excluding Labour (\$42K + \$14K + \$14K) = C \$

70,000

To determine the Total Value of Adjustments, add the total adjustments under the Payroll Breakdown Table (B) and the total adjustments from under the Other Services table (C) to find the Total Value of Adjustments: (\$63,000 + \$70,000) = D \$ 133,000 This is the proposal price value that will be used to determine score in the pricing evaluation. See Rate/Price explanation on page 4.

#### 2) How Inuit Content (Labour and Firms) would be Evaluated

#### Labour Component:

In order for Proponents to maximize points available for Inuit Labour, the will need to clearly outline their estimates for labour required to deliver the contract. This will include the value of the labour directly engaged by the Proponent company, and the value of labour provided by sub-contractors. Proponents should also be sure to identify the beneficiary status and location of the workers (i.e., Inuit or not, based in Nunavut and if any will be working in any of the communities within the Sealift Area they're bidding on (this will determine Local adjustments). The GN may request a description of the job title (Laborer, Account Representative, Sales Agent, Customer Service etc.), and the value of the labour to deliver the service to that Area; however this information should be included somewhere in the proposal submission.

Note that the Sub-Contractor labour values can only be included if they are part of the Proponent's proposal price, and part of the payroll. If they are charged to the GN separately by another company or contractor, they are not to be included.

#### **Other Expenses Component:**

The 2<sup>nd</sup> pricing breakdown table provided on page 2 (Other Services – Excluding Payroll) is provided for the Proponent to identify other expenses and who they're being provided by. This includes all of the other components and costs of delivering the service, including any sub-contracted services, supplies, fuel, administrative costs, overhead, profit margin, hotels, insurance, advertising, transportation costs, maintenance, depreciation, etc.

For the purposes of providing pricing, Proponents should present their pricing in a format similar to the table provided in the RFP. Costs or components that are internal to the Contractor such as profit margin, insurance, overhead etc., should be listed under the Proponent's name and will be considered as 'own forces'. Other components that may be broken out and identified as Inuit and or Nunavut and or Local companies should be listed separately. If the services are being delivered by a Local Inuit or Nunavut firm, they should be listed separately.

Note that Sub-Contractor work values can only be included if they are included in the proposal pricing as part of the overall expenses. If they are charged to the GN separately, they are not to be included.

#### **Proposal Scores and Inuit Content:**

From the RFP document, the chart entitled Proposal Rating Schedule; we see that the Inuit Content Rating Criterion includes Inuit Employment (10%) and Inuit Firms (5%). From the information proponents submit on the chart entitled "RFP NNI Adjusted Price Calculation Information", we will complete the scores for Inuit Employment, Inuit Firms and the Bid Adjustment.

#### How Inuit Labour is Evaluated:

To determine the score for Inuit Labour, the GN will award points for the percentage of payroll dollars that is outlined as Inuit Labour. In this example, the total value of Inuit Labour is \$200,000. The total value of all labour is \$600,000. Therefore the score for Inuit Labour is calculated as follows:

Inuit labour Score	= \$ Inuit labour / \$Total Labour = \$200,000 / \$600,000
	= .33
Inuit Labour score	= 3.3/10

#### How Inuit Firms is Evaluated:

To determine the score for Inuit Firms, the GN will award (approximately) 1 point for each 10% of Inuit Content to be provided for delivering the contract in comparison to the total overall proposal value for the contract. <u>This includes Inuit Labour</u>.

In our example, the total value of Other Services (Supplies/Materials, Contractor or Sub-Contractor) is \$400,000, and the total value of proposed labour is \$600,000. This is a total overall proposes contract value of \$1,000.000. The Inuit portion of the Total Labour component on Table 1 is \$200,000, and the Inuit Portion of the Other Services component on Table 2 is \$300,000. This makes the total Inuit Content \$500,000: (\$200,000 for LINC Inuit Labour + \$100,000 for Sub-Contractor B Labour + \$200,000 for LINC Materials & Admin, etc.)

Accordingly, from our example the proponent LINC would score the following:

Inuit Firm Score	= \$Total Inuit Content / \$Total Contract Value
	= \$500,000 / \$1,000,000 = .5
Inuit Firm score	= 5/10

**Bid Adjustments** - In terms of NNI Adjustments, our Example Company LINC would have achieved the following adjustments (as illustrated on page 2):

Adjusted Price	= (\$Total Contract Value)-(Total Adjustments) = \$1,000,000 - 133,000 = <b>\$867,000</b>
Bid Adjustment Rate	= \$Total Adjustments / \$Total Contract Value = \$133,000 / \$1,000,000 = .133 = <b>13.3%</b>
Rate/Price	The proponent with the least costly price, after bid adjustments are applied, for the geographical area, receives a score of 10/10. The next least costly bid after adjustment, receives a score relative to the best score.

#### **Air Terminal Building** Taloyoak, Nunavut RFP 2015-59

#### **PROPOSAL RATING SCHEDULE**

ltem	Rating Criteria		Unit Points Awarded (A)	Assigned Weight (B)	Total Points (A) x (B) = (C)
1	Methodology or Approach to design and project delivery			25	
2	Project Team – Personnel Assigned/Made available to the project			20	
3	Project Schedule			15	
4	Past Relevant Experience – Corporate/Team			15	
5	Project Budget/Fees & Expenses			10	
6 Inuit Content	Inuit Labour		10		
	Inuit Firms		5		
PROPONENT:			TOTAL:		

Comments:

15 

Committee Member: \_\_\_\_\_ Date: \_\_\_\_\_

LEGEND:	RATING POIN	ITS:
<ul> <li>A – Evaluation Points Awarded</li> <li>B – Weighting Factor</li> <li>C – Sub-Total Weighted Score (A times B)</li> </ul>	Poor Fair Good Excellent	0 - 3 points 4 - 6 points 7 - 8 points 9 - 10 points

The following is provided as a guide to assigning an appropriate score relative to the quality of the proposal submission:

- 1) If the Quality of the Response is:
  - No information provided;
  - Requirement was not mandatory, but proponent did not provide any information or address the issue:

Award the Following Points: 0 (Zero)

- 2) If the Quality of the Response is:
  - Falls short of meeting basic expectations;
  - has a low probability of success.

Award the following points: 1 – 3 (Poor)

- 3) If the Quality of the Response is:
  - Acceptable at a minimum level; meets our basic requirements; has a reasonable probability of success: res
  - some objectives may be met.

Award the following points: 4 - 6 (Fair)

- 4) If the Quality of the Response is:
  - A sound response; fully meets most of our requirements; very good probability of success;
  - achieves all objectives in a reasonable fashion.

Award the following points: 7 - 8 (Good)

- 5) If the Quality of the Response is:
  - Meets all of our requirements; exceeds expectations;
  - excellent probability of success in achieving all objectives;
  - very innovative.

Award the following points: 9 - 10 (Excellent)

Note that a zero (0) score is reserved only for instances where the proposal does not address an issue that was requested in the RFP or where desired information is not provided. A zero (0) would be used in the event of a proponent not having any Inuit content or for not meeting a minimum standard. It should not be confused with failure to address a mandatory requirement which would render the proposal noncompliant and warrant rejection without further consideration.

#### **PROPOSAL SUBMISSION FORM**

The following information should be provided by proponents wishing to have their proposal evaluated. If the proponent is not legally registered with the Government of Nunavut's Department of Justice, Legal Registries Division, in order to legally do business in Nunavut, then the proponent will be required to register should their proposal be acceptable to the GN.
ADDRESS:
Please indicate if the entity submitting this application is an Incorporated Company:
If yes, which province is the registration in?
Is the company registered in any other province as extra-provincially?
If yes, which province(s)?
AUTHORIZED PERSON(S):
NAME(S) & TITLE(S) IN CAPITAL LETTERS:
int())
AUTHORIZED CONTACT PERSON:
PHONE NUMBER:
FAX NUMBER:
E-MAIL ADDRESS:
DATE:
AUTHORIZED SIGNATURE(S):

#### **Declaration of Conformity**

**Material Conformity:** The Proponent hereby acknowledges and agrees that the proposal must be fully compliant with all requirements in order for it to be considered.

**Substantial Conformity (Proponent Options & Substitutions):** When an exception or alternative is proposed regarding a specified product, it will be evaluated to ensure that the performance capability meets the minimum requirements. The Proponent acknowledges and agrees that listing an exception or alternative does not necessarily constitute compliance with the specification, and that acceptance is subject to the GN's satisfaction that the exception or alternative does not constitute a material non-compliance with a mandatory requirement. Proponents are strongly encouraged to seek pre-approval from the GN prior to the stated Closing Date and Time.

#### GN REQUIREMENTS/SPECIFICATIONS THAT WILL NOT BE MET BY SUBMISSION

The Proponent hereby identifies the following exceptions or alternatives to the products specified in the RFP.

Item Reference #	Exception/Alternative	Performance Capability
		ares
	IZON	012
	<b>102</b>	
	11-	
<i>B</i> .		

If more space is required, photocopy and attach additional pages. Proponent should indicate the RFP Reference No., "Cont'd" and initial each additional page.

This declaration forms an integral part of the proposal and shall be signed by the Proponent and included with the proposal submission as per the Instructions to Proponents.

#### Signed by Proponent's Authorized Representative

Name & Title

Date



b)  $\log \log \sqrt{2^{5b}} = \sqrt{2^{5b}} = \sqrt{2^{5b}}$ Building  $N_{unavut}$  Together  $N_{unavut}$  liuqatigiingniq Bâtir le  $N_{unavut}$  ensemble

# 2015

# **Taloyoak - New Airport Terminal Building**

# infos



# **DESIGN BRIEF**

Capital Project Division Community & Government Services 8/26/2015

# **Taloyoak Airport Terminal Building Repeat Design**

Note to the reader:

The following Design Brief includes essential functional and operational program information regarding the needs, objectives, and vision of the project to guide and direct architects and engineers in their design. The project design team will translate the Project Brief and the presented schematic building layout, into a set of working, tender-ready documents for an Airport Terminal Building in Taloyoak. The current design will form the basis for future ATB projects in other communities (See Copyright note, p.2).

The Project Brief will be used throughout the design process as a reference document to evaluate how well the design meets the stated objectives.

Changes to the Project Brief:

While the Project Manager is the primary point of contact for project management, any proposed changes or modifications to this Project Brief must be referred to the Manager of Facility Planning within the Capital Projects Division. The Manager of Facility Planning, in consultation with the Project Manager, will inform the client department about the implications of any proposed changes. The changes must be approved in writing by the individuals mentioned above before any implementation.

Prepared by: **Krista MacWilliam Interim Facility Planner Capital Projects Division – Department of Community and Government Services** PO Box 1000, Station 620, Iqaluit, NU, X0A 0H0 P: 867-975-5456, F: 867-975-5457

Reviewed by: **Richard Carbonnier Manager Facility Planning Capital Projects Division – Department of Community and Government Services** PO Box 1000, Station 620, Iqaluit, NU, X0A 0H0 P: 867-975-5348, F: 867-975-5457

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# Introduction

In view of aging airport terminals (ATB)'s in many of our communities, the department of Economic Development and Transportation (ED&T) requested from Community and Government Services (C&GS) Capital Project Division and planning, to develop a "standard model" for the replacement of older ATB's in the coming years.

The present Design Brief is based on a repeat design for a standalone ATB and outlines the program requirements for the community of Taloyoak Airport Terminal Building. The consultants are asked to develop their design based on the approved standard layout presented in Section 4 of this brief.

It is the goal of this Design Brief to clearly define the planning principles, guidelines, and building requirements necessary to provide the users of the new Airport Terminal Buildings with an inviting and functional environment that can effectively serve the community & all of Nunavut. These requirements and priorities were determined based on:

- Planning meetings with ED&T representatives,
- Previous Airport Terminal Building Designs,
- Post Occupancy Evaluations of existing ATBs of a similar design,
- Site visits and documentation of the existing Taloyoak ATB.

This Brief is based on information collected from evaluations of existing ATBs and the client department. The information is selected to meet the regulations of (but not limited to) the Government of Nunavut Good Building Practice Guidelines and the National Building Codes. Architectural and engineering consultants are encouraged to consider IQ (Inuit Qaujimajatuqangit or "traditional knowledge") principles and associated planning elements, which embrace and foster programs that reinforce and celebrate Inuit culture and heritage.

The Project Brief reflects the requirements of the proposed Airport Terminal Building repeat design, as derived from several sources including but not limited to: authorized representatives of the Capital Projects & Technical Services Divisions of Community and Government Services, authorized representatives of Economic Development and Transportation, and the Government of Nunavut's Good Building Practices Guideline.

#### Note to Consultants:

As the intention is to utilize the same design for future ATB projects required by the GN, the following disclaimer will apply to the design work of this project:

#### COPYRIGHT

Title to any report, drawing, photograph, plan, specification, model, prototype, pattern, sample, design, logo, technical information, invention, method or process and all other property, work or materials which are produced by the Consultant in performing the Services or conceived, developed or first actually reduced to practice in performing the Services, (herein called "the Property") shall vest in the GN and the Consultant hereby absolutely assigns to the GN the copyright in the Property for the whole of the term of the copyright.

The Consultant **agrees to waive to the Government of Nunavut** any copyright, including all moral rights in relation to the **functional model** and **Standard Design** as expressed above. All intellectual property created in relation to the functional model and Standard design as stated above, and all associated rights thereto, will become the property of the Government of Nunavut. The Government of Nunavut will have unlimited rights to reuse, reproduce, and modify the functional model and Standard Design.

The Consultant shall ensure that its contractual relations with employees and subcontractors preserve copyright for the GN, in compliance with the subsection above.

The consultant will have no liability for any reuse or reproduction by the GN for any purpose other than that contemplated under the services agreement, or for any modification that may be made by the GN.

# **1. Project Identification**

1.1 Name:	Airport Terminal Building Repeat Design - Taloyoak
1.2 Location:	Taloyoak, Nunavut South-East of the existing Terminal on <b>Lot 879 Plan 4028.</b> <i>See the Schematic Site Plan in Section 6.</i>
1.3 Sponsor Department	Economic Development & Transportation Government of Nunavut P.O. Box 560 Nunavut Airports Division Rankin Inlet, Nunavut, XOC 0G0
1.4 Users:	Hamlet of Taloyoak, Airlines, and Travelers
<b>1.5 Project Personnel:</b> 1.5.1 Government of Nunavut C	contact Information
*Primary Project Contact:	Amanda Doiron, Project Officer Community and Government Services, Bag 200, Cambridge Bay, NU, X0B 0C0 Tel: 867-983-4161, Fax: 867-983-4124, <u>adoiron@gov.nu.ca</u>
	Richard Carbonnier, Manager Facility Planning Community and Government Services, P.O. Box 1000, Station 620, Iqaluit, NU, X0A 0H0 Tel: 867-975-5348, Fax: 867-975-5457, e-mail: <u>rcarbonnier@gov.nu.ca</u>
	*Note: Include Project Officer in all correspondence with Facility Planner.

\*Primary Client contact:

#### Brian McKay, Manager of Facilities Engineering

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#### Todd McKay, Director Nunavut Airport Division

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#### Fred Fast, Manager of Standards & Program Development

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\*Note: Include Project Officer and primary client contact in all correspondence.

# 2. Needs Analysis

### 2.1 Background

Travel by land or sea between the communities of Nunavut can be very challenging if not impossible at different times of the year. Air transportation is the only year round transportation that is reliable for Nunavut. Therefore each community needs an operational and up to date Airport to facilitate air traffic. Currently in Nunavut, the airport infrastructure is ageing and deteriorating in many communities. The existing infrastructure is significantly undersized due to rapid population and economic growth. As travel and freight demands between communities increase due to growth in community size and tourism, the need for ATBs that can facilitate effective service delivery is high.

### 2.2 Vision

EDT and CGS wish to see an ATB design that is cost effective and satisfies all the requirements detailed in this Design Brief. This building will be a hub for travelers and often the first impression travelers will have of the community. Therefore, it's important to ensure the building is designed to deliver efficient services and foster an inviting atmosphere.

The new ATB should be a welcoming space for travelers designed with sustainable building practices in mind. The building will be large enough to accommodate the daily work of three airlines and will provide an up to date Community Aerodrome Radio Station (CARS) office for efficient operation. Detailed spatial requirements, a schematic layout, and elevations of the desired ATB are provided in Section 4 as the basis of design. Any proposed modifications to the approved layout should be discussed and approved by the project manager and project facility planner.

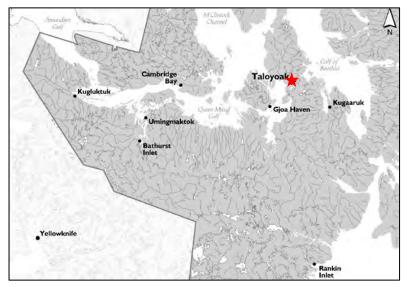
## 2.3 The Hamlet of Taloyoak and Airport

The Hamlet of Taloyoak (see Image 1) is in the western portion of Nunavut on the Boothia Peninsula within the Kitikmeot Region (See Image 2). According to the July 2014 census report from the Nunavut Bureau of Statistics, the population of Taloyoak is at 998 people with ten and twenty year projections of 1155 and 1323 people respectively<sup>1</sup>. The GN's

**Image 1:Aerial View of Taloyoak** 



<sup>&</sup>lt;sup>1</sup> "Population Estimates." Nunavut Bureau of Statistics. Government of Nunavut, *n.d.* Web. 26 Jun. 2015. <<u>http://stats.gov.nu.ca/en/Population%20estimate.aspx</u>>



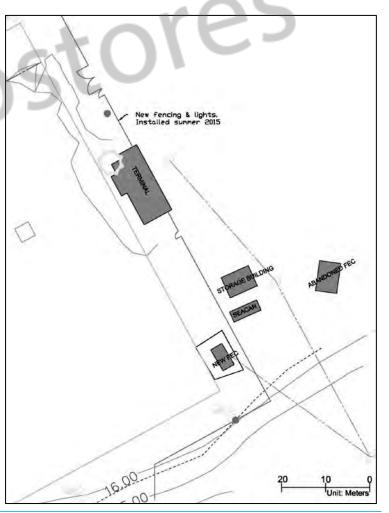
department of Economic Development & Transportation (EDT) is responsible for the operation and maintenance of the communities' Airport building and the services it provides. The existing Taloyoak Airport was constructed in 1980 and is no longer suitable to deliver the services required of an ATB.

**Image 2: Location of Taloyoak** 

The existing ATB currently serves multiple scheduled flights a week, occasional charter flights, and cargo flights on a regular basis. The ATB accommodates both Canadian North and First Air, and functions as a

24/7 station for rerouted flights from other communities. Being one of the oldest ATBs in Nunavut, it is undersized for its daily operations and overall does not meet current and future operational needs (see Images 4-9).

Improvements to the apron's lighting and security fencing are underway this year. Upon completion and occupation of the new ATB in Taloyoak, the demolition of the existing ATB and minor modification to the new security fencing to connect it to the new building will be required.



**Image 3: Existing Site Layout** 

### **Existing building photos:**

### **Image 4: Building Exterior from Community**



Image 6: Stairs to Bathroom in the Public Space

#### **Image 5: Canadian North Ticket Counter**



Image 7: First Air Ticket Counter (Offices in behind)

FIRST AIR





7



**Image 9: Building Exterior from Apron** 



### **2.4 Environmental Conditions**

As a northern community, environmental conditions in Taloyoak can be harsh. Experiencing roughly two months of 24hr darkness in the winter and 24hr daylight in the summer<sup>2</sup> the average daily temperature falls to -33.7°C in January with the high of 8.4°C in July<sup>3</sup>. This tundra climate receives little precipitation with the annual norm being 187.4mm. Maximum hourly wind speeds in Taloyoak can reach 80km/h with majority of the strongest winds coming from a NW direction.<sup>3</sup>

The design of the new ATB must take into consideration the specific environmental conditions of Taloyoak to ensure its long term durability. As the Design Data tables in the National Building Code of Canada (NBCC) do not cover all Nunavut Communities, supplemental data has been collected by Environment Canada at the request of CGS. Design Data can be requested for Nunavut Communities not covered in the NBCC through CGS – Capital Planning and Technical Services.



<sup>&</sup>lt;sup>2</sup> "Weather & Climate." Nunavut Tourism. Nunavut Tourism, *n.d*. Web June 26, 2015. <<u>http://www.nunavuttourism.com/about-nunavut/weather-climate</u>>

<sup>&</sup>lt;sup>3</sup> "Canadian Climate Normals 1981-2010 Station Data." Government of Canada. Government of Canada, February 11, 2015. Web June 26, 2015.

<sup>&</sup>lt;<u>http://climate.weather.gc.ca/climate\_normals/results\_1981\_2010\_e.html?stnID=1783&lang=e&dCode=4&dispB\_ack=1</u>>

# **3. Operational Requirements**

# **3.1 Operational Model**

The new ATB will be the hub for all air traffic in and out of the community, providing transportation for people and cargo. The information in the following sections is intended to provide a glimpse into the regular operation at the Taloyoak ATB.

## 3.2 Air Transportation Service Delivery

The airlines operating out of the Taloyoak have scheduled passenger flights set up on a weekly basis; cargo and charter flights land regularly too. In total, the Taloyoak Airport receives approximately 900 flights annually, the majority of which are scheduled passenger flights. Furthermore, Taloyoak operates as 24/7 station for rerouted flights from other communities.

Passengers on scheduled flights will be required to check luggage, pick up boarding passes, and wait for flights at the ATB. A comfortable and welcoming space shall be provided to accommodate them. Upon arrival, passengers will retrieve their checked luggage from an outdoor kiosk adjacent to the airport building.

Several companies offer charter flight services across Nunavut. Passengers & crew on these flights will require the use of the ATB as well. The crew may need to interact with the CARS operator or airline staff, and passengers will use the public space and washroom facilities while waiting.

Although Cargo flights land at the airport, the building is not to be used by cargo companies for storage. These airlines are responsible for storing all cargo for short and long term holding outside of the ATB.

## **3.3 Airline Offices**

The new ATB design will be able to accommodate three separate airlines. Each airline requires an office for their staff. Staff will need phone, fax & internet services, space to do paper work, and some file storage. In addition to the staff at the airports, pilots often use the office to check weather and flight information between flights.

# 3.4 Community Aerodrome Radio Station (CARS) Office

A separated office space on the second floor is required for the CARS operator and all their equipment. Good visibility of the apron and runway are required by the operator. Exterior lights should be controllable from the CARS office and direct access to the outside of the building on the apron side is needed for observational purposes.

### **3.5 Support Services Delivery**

A custodian will be responsible for keeping the building clean. A building maintainer will be responsible for maintaining and fixing any problems that arise with the mechanical, electrical, water or sewage systems.

# **4. Spatial Requirements**

# 4.1 General

Based on consultations with the Department of Economic Development and Transportation (EDT) the new repeat design ATB for Taloyoak will be approximately  $311m^2$  to fulfill the needs of the community. The building will be utilized year round by airline staff, travelers, and the general public. A schematic level design of the desired floor plan for the new ATBs has been developed and is presented in section *4.3 Schematic Layout for the New Airport Terminal Building*. This schematic was based on a building classification of A2 occupancy for the public areas and D for the office spaces, and a specified maximum occupancy load of 100 in accordance with NBCC sentence 3.1.17.1.(1)c & (2). The consultant will be responsible for completing a full code analysis of the building and ensuring all final drawings meet code requirements.

Below is a brief description of what the new ATB should include for its overall spatial requirements.

The new ATB design will include three airline offices, a large public space, public washrooms, a ticket area, luggage room, storage room, janitor's closet, mechanical/fan room, tank room, and a second floor CARS observation and work space. The large public space will provide a welcoming atmosphere for travelers and a comfortable waiting environment. Circulation in the public space should be efficient to reduce congestion for incoming and outgoing travelers. The public washrooms must be universally accessible and adjacent to the public space for ready access. The airline offices are intended to accommodate the daily needs of airline staff, such as: paperwork, making phone calls, checking flight schedules, checking weather etc. The small storage room will provide additional space for airline staff to store office supplies. The luggage room will only be used for outgoing checked luggage; arrival passenger luggage will be offloaded outside directly onto an exterior kiosk for that purpose. The CARS office is separated from the public allowing for a controlled access workspace. Access to all the equipment and systems in the mechanical, tank, and janitorial rooms should allow easy maintenance and repairs when needed.

## **4.2 Detailed Program Requirements**

It is the responsibility of the consultant to ensure that the information contained in this section is reviewed and utilized extensively when designing the building.

The table on the following page lists all the rooms required in the new Airport Terminal Building. In section *4.2.2 Detailed Requirements* the data sheets give the specific requirements of each designated space.

### 4.2.1 Detailed Program Requirements Table

	Fund	Function		Area (net m <sup>2</sup> )	Special Delivery Requirements
	A1	Entrance Vestibule	2	5.9	Barrier free
Airport Terminal Building	A2	Public Waiting Area	1	116.9	A welcoming space that is reflective of the local community
Buil	A3	Airline Offices	3	9.0-9.2	
inal	A4	Ticket Area	1	7.5	At least 1 counter to be barrier free
[erm	A5	Secure Storage	1	8.9	Secure storage for airline staff
ort 1	A6	Baggage Room	1	16.0	
Airp	A7	Washrooms	2	10.3	One male and one female barrier free washroom (Based on NBC occupant load)
	A8	CARS	1	20.8	Controlled access to this office space
	Net Subtotal – Administration/ Exhibit area		11	213.6	
	В	Service			405
	B1	Mechanical	1	15.5	
	B2	Tank Room		10.1	
Services	B3	Janitorial	1	3.2	
Serv	B4	Fan Room	1	6.0	Intake away from any exhausts
	B5	Exterior Entrance Court from Community side	-	-	
	B6	Exterior Entrance from Air Side	-	-	
	B7	Exterior Service Court	-	-	
	B8	Exterior Luggage Claim Kiosk	1	5.6	Covered luggage platform
	Net Subtotal - service		1	34.8	
	Total Net Area			248.4	
	Ci	irculation gross-up factor	-	27.7	Approx. 11.2%
	Structural gross-up factor		-	35.3	Approx. 14.2%
		Gross Floor Area		311.4	

# 4.2.2 Detailed Requirements

A.1 Airport Terminal	Entrance Vestibule		
ARCHITECTURAL REQUIREMENTS			
ACTIVITIES	Main entrance, circulation area.		
OCCUPANTS	Building staff and general public.		
ACCESS/ LOCATION	<b>Adjacent To:</b> One must lead onto the apron and the other out toward the community. Both vestibules must open onto the Public Waiting Area. Both must be accessibility code compliant.		
VIEWS	Must be visible from the ticket area		
HOURS of USE	Dependent on flight schedule. Ability to access 24/7 is required.		
FINISHES	<i>Floors:</i> Non-slip resilient flooring <i>Walls:</i> painted drywall/Abuse Resistant GWB with 1/2" plywood backing <i>Ceilings:</i> painted drywall or acoustic tile or exposed structure		
HARDWARE	Locksets and closers on exterior doors; Automatic door openers in both directions on community side vestibule; push, pulls on interior vestibule doors, c/w kick plates.		
DOORS	Two doors for separate entry and exit in each vestibule. Three point locking, solid mullion, vandalism proof doors. Continuous hinges on the exterior steel doors		
FURNITURE	N/A		
EQUIPMENT	N/A		
MILLWORK	N/A		
SPECIALTIES	N/A		
NET AREA	Approximately 5.9 <sup>2</sup> each		
HEIGHT	Approximately 2.4 m		
	ENVIRONMENTAL REQUIREMENTS		
HEATING	Hydronic heating		
VENTILATION	Mechanical ventilation to code		
LIGHTING	LED lighting, locally switched, to IES standards		
ACOUSTICS	Acoustically separated from other areas.		
SERVICE REQUIREMENTS			
PLUMBING	N/A		
POWER	Min. 1 duplex outlet		
COMMUNICATIONS	N/A		

EQUIPMENT	N/A	
A.2 Airport Terminal	Public Waiting Area	
ARCHITECTURAL REQUIREMENTS		
ACTIVITIES	Public seating, circulation for incoming & outgoing travellers. Display of posters, pamphlets, local art etc.	
OCCUPANTS	Building staff and general public.	
ACCESS	Adjacent To: Ticket counter, vestibules Close to: Washrooms	
VIEWS	Windows to outside on both the community & air sides	
HOURS of USE	Dependent on flight schedule. Ability to access 24/7 is required.	
FINISHES	<ul> <li>Floors: Resilient flooring.</li> <li>Walls: Abuse resistant painted drywall with additional protection for lower half of the walls</li> <li>Ceilings: painted drywall or acoustic tile or exposed structure.</li> <li>*Finishes must withstand wear and tear from high traffic &amp; abuse from vandalism</li> </ul>	
HARDWARE	N/A	
FURNITURE	Seating minimum 20; displays, racks etc.	
EQUIPMENT	N/A	
MILLWORK	Displays can be custom millwork or purchased as furniture	
SPECIALTIES	N/A	
NET AREA	Approximately 116.9m <sup>2</sup>	
HEIGHT	2.4 m minimum	
	ENVIRONMENTAL REQUIREMENTS	
HEATING	Hydronic heating	
VENTILATION	Mechanical ventilation to code	
LIGHTING	LED lighting, locally switched, to IES standards	
ACOUSTICS	Acoustically separated from other areas.	
SERVICE REQUIREMENTS		
PLUMBING	N/A	
POWER	Min. 6 duplex outlets with USB ports, available to passengers in seating areas.	
COMMUNICATIONS	Provisions for public pay phone and ATM.	

A.3 Airport Terminal	Airline Offices	
ARCHITECTURAL REQUIREMENTS		
ACTIVITIES	Administrative work space. Duties include answering telephones, checking flight schedules & weather, and providing other services to the general public.	
OCCUPANTS	2-3 airline staff plus transitory flight crews	
ACCESS	<i>Adjacent To:</i> Ticket area <i>Close To:</i> Baggage room	
VIEWS	Views to ticket counter; window to outside	
HOURS of USE	Dependent on flight schedule. Ability to access 24/7 is required.	
FINISHES	<i>Floors:</i> Resilient flooring with installation and O&M requirements compatible with Northern buildings <i>Walls:</i> Painted drywall <i>Ceilings:</i> Painted drywall or acoustic tile	
HARDWARE	Admin. office area to be lockable	
FURNITURE	Airlines to provide their own furniture.	
EQUIPMENT	Airlines to provide their own equipment.	
MILLWORK	N/A	
SPECIALTIES	Provide window coverings.	
NET AREA	Approximately 9.0m <sup>2</sup> each	
HEIGHT	2.4 m minimum	
	ENVIRONMENTAL REQUIREMENTS	
HEATING	Hydronic heating	
VENTILATION	Mechanical ventilation as required by code	
LIGHTING	LED lighting, to IES standards, locally switched. Full spectrum lighting.	
ACOUSTICS	Acoustic separation from ticket & baggage areas	
SERVICE REQUIREMENTS		
PLUMBING	N/A	
POWER	Wall mounted duplex outlets sufficient for required equipment.	
COMMUNICATIONS	Telephone; fax; Conduit and pull wire for voice/ data and connections; Conduit sized for coax cable for radio transmission to each office. Run to antennas placed on walls of baggage area.	

A.4 Airport Terminal	Ticket Area
	ARCHITECTURAL REQUIREMENTS
ACTIVITIES	Public interaction, checking luggage, & issuing boarding passes.
OCCUPANTS	Airline staff
ACCESS	<i>Adjacent To:</i> Baggage room & public waiting area <i>Close To:</i> Airline Offices
VIEWS	Public Waiting Area
HOURS of USE	Dependent on flight schedule. Ability to access 24/7 is required
FINISHES	<ul> <li>Floors: Resilient flooring</li> <li>Walls: Abuse resistant painted drywall</li> <li>Ceilings: Painted drywall or acoustic tile</li> <li>Counter: Highly durable and abuse/vandalism resistant material</li> </ul>
HARDWARE	N/A
FURNITURE	Allow for work station chairs.
EQUIPMENT	Computer complete with ticket printers and accessories; luggage scales
MILLWORK	Ticket counters to be custom millwork, at least one counter to be wheelchair accessible
SPECIALTIES	Two luggage 'pass-thru' doors are needed with visual separation to prevent the public from being able to see luggage in the back room.
NET AREA	Minimum 7.5m <sup>2</sup>
HEIGHT	2.4 m minimum
	ENVIRONMENTAL REQUIREMENTS
HEATING	Hydronic heating
VENTILATION	Mechanical ventilation as required by code
LIGHTING	LED, to IES standards, locally switched. Full spectrum lighting.
ACOUSTICS	Ticket area to have acoustic dampening to reduce transfer of sound from public waiting area.
	SERVICE REQUIREMENTS
PLUMBING	N/A
POWER	Minimum of 4 wall mounted outlets
COMMUNICATIONS	Telephone; Conduit and pull wire for voice/ data and connections; PA system to broadcast inside and outside (airside and ground side).

A.5 Airport Terminal	Storage/Office	
ARCHITECTURAL REQUIREMENTS		
ACTIVITIES	Administrative work space; storage for extra equipment and office supplies needed by the airline staff. To be used as an office for future needs.	
OCCUPANTS	Restricted to airline staff	
ACCESS	<i>Adjacent To:</i> Luggage Room <i>Close to:</i> Airline Offices	
VIEWS	Views to outside	
HOURS of USE	Ability to access 24/7	
FINISHES	<i>Floors:</i> Resilient flooring. <i>Walls:</i> Abuse resistant drywall with painted/stained plywood or metal for protection on lower sections. <i>Ceilings:</i> painted drywall or acoustic tile or exposed structure	
HARDWARE	Lockable handset.	
FURNITURE	3 lockable storage cages – one for each airline; adjustable metal shelving 500mm deep to support heavy storage.	
EQUIPMENT	N/A	
MILLWORK	N/A	
SPECIALTIES	Window coverings	
NET AREA	Approximately 8.9m <sup>2</sup>	
HEIGHT	2.4 m minimum	
	ENVIRONMENTAL REQUIREMENTS	
HEATING	Hydronic heating	
VENTILATION	Mechanical ventilation to code	
LIGHTING	LED lighting, locally switched, to IES standards	
ACOUSTICS	N/A	
	SERVICE REQUIREMENTS	
PLUMBING	N/A	
POWER	Duplex outlets as needed.	
COMMUNICATIONS	Telephone; fax; Conduit and pull wire for voice/ data and connections; Conduit sized for coax cable for radio transmission to each office. Run to antennas placed on walls of baggage area.	

A.6 Airport Terminal	Baggage Room	
ARCHITECTURAL REQUIREMENTS		
ACTIVITIES	Temporary storage of checked luggage before to loading onto planes.	
OCCUPANTS	Restricted to airline staff	
ACCESS	Direct access to apron; loading trucks to transport baggage to airplanes. <i>Adjacent To:</i> Ticket counter & exterior apron <i>Close to:</i> Airline offices & public area	
VIEWS	N/A	
HOURS of USE	Dependent on flight schedule. Ability to access 24/7 is required	
FINISHES	<ul> <li><i>Floors:</i> Abuse resistant resilient flooring or polished concrete.</li> <li><i>Walls:</i> Abuse Resistant GWB with painted/stained plywood or metal for protection on lower sections.</li> <li><i>Ceilings:</i> painted drywall or acoustic tile or exposed structure</li> </ul>	
HARDWARE	Area must be lockable.	
FURNITURE	Open shelving	
EQUIPMENT	N/A	
MILLWORK	N/A	
SPECIALTIES	Two luggage 'pass-thru' doors are needed from the ticket area.	
NET AREA	Approximately 16m <sup>2</sup>	
HEIGHT	2.4 m minimum	
	ENVIRONMENTAL REQUIREMENTS	
HEATING	Hydronic heating	
VENTILATION	Mechanical ventilation to code.	
LIGHTING	LED lighting, locally switched, to IES standards	
ACOUSTICS	Must be acoustically separated from offices & ticket area	
SERVICE REQUIREMENTS		
PLUMBING	N/A	
POWER	Min 2 duplex receptacles	
COMMUNICATIONS	N/A	

ARCHITECTURAL REQUIREMENTS           ACTIVITIES         Public hygiene and grooming. Must be barrier free.           OCCUPANTS         Available to all staff and the public.           ACCESS         Adjacent To: Tank room Close To: Public Area           VIEWS         Should be screened from public areas and views           HOURS of USE         Dependent on flight schedule. Ability to access 24/7 is required           FINISHES         Floors: Non-slip resilient flooring. Walls: Abuse, vandalism, and moisture resistant finishes Cellings: Painted drywall           HARDWARE         N/A           FURNITURE         N/A           EQUIPMENT         Water and energy efficient fixtures.           MILLWORK         Vanity as per barrier-free code.           SPECIALTIES         Mirror, grab bars, coat hook, etc. as per barrier-free code; room should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soand dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser; anitary napkin dispensers; wall recessed paper towel dispenser; anitary napkin dispensers; wall recessed paper towel dispenser;           NET AREA         Approximately 10.3m <sup>2</sup> each (to meet NBC barrier free requirements)           HEIGHT         2.4 m minimum           VENTILATION         Mechanical ventilation as required by code.           LIGHTING         Proctect LED area light; mirror light. Locally controlled, to IES Standards.           ACOUSTICS<	A.7 Airport Terminal	Washroom		
OCCUPANTS       Available to all staff and the public.         ACCESS       Adjacent To: Tank room Close To: Public Area         VIEWS       Should be screened from public areas and views         HOURS of USE       Dependent on flight schedule. Ability to access 24/7 is required         FINISHES       Floors: Non-slip resilient flooring. Walls: Abuse, vandalism, and moisture resistant finishes Ceilings: Painted drywall         HARDWARE       N/A         FURNITURE       N/A         EQUIPMENT       Water and energy efficient fixtures.         MILLWORK       Vanity as per barrier-free code.         SPECIALTIES       Mirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soapi dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser;         NET AREA       Approximately 10.3m <sup>2</sup> each (to meet NBC barrier free requirements)         HEIGHT       2.4 m minimum         VENTILATION       Mechanical ventilation as required by code.         LIGHTING       Protected LED area light; mirror light. Locally controlled, to IES Standards.         ACOUSTICS       Requires acoustic separation from adjacent areas.         SERVICE REQUIREMENTS       SERVICE REQUIREMENTS         PLUMBING       Water close	ARCHITECTURAL REQUIREMENTS			
ACCESSAdjacent To: Tank room Close To: Public AreaVIEWSShould be screened from public areas and viewsHOURS of USEDependent on flight schedule. Ability to access 24/7 is requiredFINISHESFloors: Non-slip resilient flooring. Walls: Abuse, vandalism, and moisture resistant finishes Ceilings: Painted drywallHARDWAREN/AFURNITUREN/AEQUIPMENTWater and energy efficient fixtures.MILLWORKVanity as per barrier-free code.SPECIALTIESMirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser; sanitary napkin/condom dispenser;NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumCENVIRONMENTAL REQUIREMENTSHEATINGHydronic heatingVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas. SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	ACTIVITIES	Public hygiene and grooming. Must be barrier free.		
Close To: Public AreaVIEWSShould be screened from public areas and viewsHOURS of USEDependent on flight schedule. Ability to access 24/7 is requiredFINISHESFloors: Non-slip resilient flooring. Walls: Abuse, vandalism, and moisture resistant finishes Ceilings: Painted drywallHARDWAREN/AFURNITUREN/AEQUIPMENTWater and energy efficient fixtures.MILLWORKVanity as per barrier-free code.SPECIALTIESMirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser and garbage; hand dryer; sanitary napkin/condom dispenser;NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	OCCUPANTS	Available to all staff and the public.		
VIEWS       Should be screened from public areas and views         HOURS of USE       Dependent on flight schedule. Ability to access 24/7 is required         FINISHES       Floors: Non-slip resilient flooring. Walls: Abuse, vandalism, and moisture resistant finishes Ceilings: Painted drywall         HARDWARE       N/A         FURNITURE       N/A         EQUIPMENT       Water and energy efficient fixtures.         MILLWORK       Vanity as per barrier-free code.         SPECIALTIES       Mirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser; anitary napkin/condom dispenser;         NET AREA       Approximately 10.3m² each (to meet NBC barrier free requirements)         HEIGHT       2.4 m minimum         ENVIRONMENTAL REQUIREMENTS         HEATING       Hydronic heating         VENTILATION       Mechanical ventilation as required by code.         IGHTING       Protected LED area light; mirror light. Locally controlled, to IES standards.         ACOUSTICS       Requires acoustic separation from adjacent areas.         SERVICE REQUIREMENTS       SERVICE REQUIREMENTS         PLUMBING       Water closets/lavatories as required by code.         POWER       1 GFI at v	ACCESS	Adjacent To: Tank room		
HOURS of USEDependent on flight schedule. Ability to access 24/7 is requiredFINISHESFloors: Non-slip resilient flooring. Walls: Abuse, vandalism, and moisture resistant finishes Ceilings: Painted drywallHARDWAREN/AFURNITUREN/AEQUIPMENTWater and energy efficient fixtures.MILLWORKVanity as per barrier-free code.SPECIALTIESMirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; sanitary napkin dispenser; wall recessed paper towel dispenser; anitary napkin/condom dispenser;NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumVENTILATIONMechanical ventilation as required by code.UIGHTINGProtected LED area light; mirror light. Locally controlled, to IES standards.ACOUSTICSRequires acoustic separation from adjacent areas.SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.		<i>Close To:</i> Public Area		
FINISHES       Floors: Non-slip resilient flooring.         Walls: Abuse, vandalism, and moisture resistant finishes         Ceilings: Painted drywall         HARDWARE       N/A         FURNITURE       N/A         EQUIPMENT       Water and energy efficient fixtures.         MILLWORK       Vanity as per barrier-free code.         SPECIALTIES       Mirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser and garbage; hand dryer; sanitary napkin/condom dispenser;         NET AREA       Approximately 10.3m² each (to meet NBC barrier free requirements)         HEIGHT       2.4 m minimum         ENVIRONMENTAL REQUIREMENTS       Hextmand         HEATING       Hydronic heating         VENTILATION       Mechanical ventilation as required by code.         LIGHTING       Protected LED area light; mirror light. Locally controlled, to IES Standards.         ACOUSTICS       Requires acoustic separation from adjacent areas.         SERVICE REQUIREMENTS       SERVICE REQUIREMENTS         PLUMBING       Water closets/lavatories as required by code.         POWER       1 GFI at vanity; power or hand dryer.	VIEWS	Should be screened from public areas and views		
Walls: Abuse, vandalism, and moisture resistant finishes Ceilings: Painted drywallHARDWAREN/AFURNITUREN/AEQUIPMENTWater and energy efficient fixtures.MILLWORKVanity as per barrier-free code.SPECIALTIESMirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; 	HOURS of USE	Dependent on flight schedule. Ability to access 24/7 is required		
Ceilings: Painted drywallHARDWAREN/AFURNITUREN/AEQUIPMENTWater and energy efficient fixtures.MILLWORKVanity as per barrier-free code.SPECIALTIESMirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser; sanitary napkin/condom dispenser;NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumENVIRONMENTAL REQUIREMENTSHEATINGHydronic heatingVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.ENVIRO MERTENTSPLUMBINGWater closets/lavatories as required by code.PLUMBINGI GFI at vanity; power or hand dryer.	FINISHES	Floors: Non-slip resilient flooring.		
HARDWARE       N/A         FURNITURE       N/A         EQUIPMENT       Water and energy efficient fixtures.         MILLWORK       Vanity as per barrier-free code.         SPECIALTIES       Mirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser and garbage; hand dryer; sanitary napkin/condom dispenser;         NET AREA       Approximately 10.3m² each (to meet NBC barrier free requirements)         HEIGHT       2.4 m minimum         ENVIRONMENTAL REQUIREMENTS         HEATING       Hydronic heating         VENTILATION       Mechanical ventilation as required by code.         LIGHTING       Protected LED area light; mirror light. Locally controlled, to IES Standards.         ACOUSTICS       Requires acoustic separation from adjacent areas.         SERVICE REQUIREMENTS       SERVICE REQUIREMENTS         PLUMBING       Water closets/lavatories as required by code.         POWER       1 GFI at vanity; power or hand dryer.				
FURNITUREN/AEQUIPMENTWater and energy efficient fixtures.MILLWORKVanity as per barrier-free code.SPECIALTIESMirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser and garbage; hand dryer; sanitary napkin/condom dispenser;NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumENVIRONMENTAL REQUIREMENTSHEATINGHydronic heatingVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.		Ceilings: Painted drywall		
EQUIPMENTWater and energy efficient fixtures.MILLWORKVanity as per barrier-free code.SPECIALTIESMirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser and garbage; hand dryer; sanitary napkin/condom dispenser;NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumLEATINGHydronic heatingVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	HARDWARE	N/A		
MILLWORKVanity as per barrier-free code.SPECIALTIESMirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser and garbage; hand dryer; sanitary napkin/condom dispenser;NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumENVIRONMENTAL REQUIREMENTSHEATINGHydronic heatingVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	FURNITURE	N/A		
SPECIALTIESMirror, grab bars, coat hook, etc. as per barrier-free code; room sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser and garbage; hand dryer; sanitary napkin/condom dispenser;NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumLETATINGHydronic heatingVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	EQUIPMENT	Water and energy efficient fixtures.		
sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser and garbage; hand dryer; sanitary napkin/condom dispenser;NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumLEATINGHydronic heatingVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.PLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	MILLWORK	Vanity as per barrier-free code.		
NET AREAApproximately 10.3m² each (to meet NBC barrier free requirements)HEIGHT2.4 m minimumENVIRONMENTAL REQUIREMENTSHEATINGHydronic heatingVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	SPECIALTIES	sign. Public washroom partitions as needed. Stall wall & doors should be chosen to withstand abuse and be anchored into studs; Toilet paper dispenser; soap dispenser; sanitary napkin dispensers; wall recessed paper towel dispenser and garbage; hand dryer;		
ENVIRONMENTAL REQUIREMENTS         HEATING       Hydronic heating         VENTILATION       Mechanical ventilation as required by code.         LIGHTING       Protected LED area light; mirror light. Locally controlled, to IES Standards.         ACOUSTICS       Requires acoustic separation from adjacent areas.         SERVICE REQUIREMENTS         PLUMBING       Water closets/lavatories as required by code.         POWER       1 GFI at vanity; power or hand dryer.	NET AREA	Approximately 10.3m <sup>2</sup> each (to meet NBC barrier free		
HEATINGHydronic heatingVENTILATIONMechanical ventilation as required by code.LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	HEIGHT	2.4 m minimum		
VENTILATION       Mechanical ventilation as required by code.         LIGHTING       Protected LED area light; mirror light. Locally controlled, to IES Standards.         ACOUSTICS       Requires acoustic separation from adjacent areas.         SERVICE REQUIREMENTS         PLUMBING       Water closets/lavatories as required by code.         POWER       1 GFI at vanity; power or hand dryer.		ENVIRONMENTAL REQUIREMENTS		
LIGHTINGProtected LED area light; mirror light. Locally controlled, to IES Standards.ACOUSTICSRequires acoustic separation from adjacent areas.SERVICE REQUIREMENTSPLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	HEATING	Hydronic heating		
Standards.         ACOUSTICS       Requires acoustic separation from adjacent areas.         SERVICE REQUIREMENTS         PLUMBING       Water closets/lavatories as required by code.         POWER       1 GFI at vanity; power or hand dryer.	VENTILATION	Mechanical ventilation as required by code.		
SERVICE REQUIREMENTS         PLUMBING       Water closets/lavatories as required by code.         POWER       1 GFI at vanity; power or hand dryer.	LIGHTING			
PLUMBINGWater closets/lavatories as required by code.POWER1 GFI at vanity; power or hand dryer.	ACOUSTICS	Requires acoustic separation from adjacent areas.		
POWER 1 GFI at vanity; power or hand dryer.	SERVICE REQUIREMENTS			
	PLUMBING	Water closets/lavatories as required by code.		
COMMUNICATIONS N/A	POWER	1 GFI at vanity; power or hand dryer.		
	COMMUNICATIONS	N/A		

A.8 Airport Terminal	CARS		
	ARCHITECTURAL REQUIREMENTS		
ACTIVITIES	Air traffic controller office space		
OCCUPANTS	CARS operator		
ACCESS	Controlled access –operator , pilots/ airline staff, and building maintainer		
VIEWS	Good view in all directions; specifically of the apron and runway.		
HOURS of USE	Ability to access 24/7 is required		
FINISHES	<i>Floors:</i> Resilient flooring <i>Walls:</i> Painted drywall <i>Ceilings:</i> Painted drywall		
HARDWARE	Office area to be lockable		
FURNITURE	N/A		
EQUIPMENT	To be provided by EDT		
MILLWORK	Consult with project officer on millwork required for the equipment		
SPECIALTIES	Tinted windows/ window coverings.		
NET AREA	Approximately 20.8m <sup>2</sup>		
HEIGHT	2.4 m minimum		
	ENVIRONMENTAL REQUIREMENTS		
HEATING	Hydronic heating		
VENTILATION	Mechanical ventilation as required by code. Cooling may be required during summer months.		
LIGHTING	Protected LED area light; mirror light. Locally controlled, to IES Standards.		
ACOUSTICS	Requires acoustic separation from adjacent areas.		
SERVICE REQUIREMENTS			
PLUMBING	N/A		
POWER	Consult with EDT on power requirements for the CARS equipment.		
COMMUNICATIONS	Telephone; conduit and pull wire for voice/ data and connections; multiple connection conduits from mech/elec room; antenna connection from CARS to the roof;		

B.1 – Service	Mechanical Room	
ARCHITECTURAL REQUIREMENTS		
ACTIVITIES	Housing of mechanical/electrical equipment and controls Storage of as- built drawings and O&M manuals. Include Exterior Back-up generator.	
OCCUPANTS	Building maintenance staff	
ACCESS	Adjacent To: CARS, fan room	
VIEWS	N/A	
HOURS of USE	As required	
FINISHES	<ul><li><i>Floors:</i> Non-Slip Resilient flooring</li><li><i>Walls:</i> Painted drywall. Paint to be resistant to moisture &amp; chemicals.</li><li><i>Ceilings:</i> Painted drywall or exposed structure</li></ul>	
HARDWARE	Lock set.	
FURNITURE	N/A	
EQUIPMENT	As needed; NAV Canada Equipment to be located in mechanical room – coordinate with project officer during design phase;	
MILLWORK	Heavy duty adjustable steel shelving.	
SPECIALTIES	Room sign; zoning diagram of fire alarm system.	
NET AREA	Approximately 15.5m <sup>2</sup>	
HEIGHT	As required.	
	ENVIRONMENTAL REQUIREMENTS	
HEATING	Hydronic heating	
VENTILATION	As required.	
LIGHTING	LED lighting, locally controlled, to IES standards	
ACOUSTICS	Noise from mechanical room should not carry into adjacent rooms, min. 48 STC rating.	
SERVICE REQUIREMENTS		
PLUMBING	Meter required for tracking fueling consumption.	
POWER	Minimum 2 duplex receptacles. Easily accessed and readable master control panel for mechanical alarm systems.	
COMMUNICATIONS	N/A	

B.2 – Service	Tank Room	
ARCHITECTURAL REQUIREMENTS		
ACTIVITIES	Housing for water tanks. Sewage tanks to be located on exterior.	
OCCUPANTS	Building maintenance staff	
ACCESS	<i>Adjacent To:</i> Washrooms (minimize plumbing runs), exterior wall for fill access.	
VIEWS	N/A	
HOURS of USE	As required	
FINISHES	<i>Floors:</i> Non-Slip Resilient flooring <i>Walls:</i> Painted drywall. Paint to be resistant to moisture & chemicals. <i>Ceilings:</i> Painted drywall or exposed structure	
HARDWARE	Lock set.	
FURNITURE	N/A	
EQUIPMENT	N/A	
MILLWORK	N/A	
SPECIALTIES	Room sign	
NET AREA	Approximately 10.1m <sup>2</sup>	
HEIGHT	As required.	
	ENVIRONMENTAL REQUIREMENTS	
HEATING	Hydronic heating	
VENTILATION	As required.	
LIGHTING	LED lighting, locally controlled, to IES standards	
ACOUSTICS	Noise from tank room should not carry into adjacent rooms, min. 48 STC rating.	
SERVICE REQUIREMENTS		
PLUMBING	Meters required tracking water consumption.	
POWER	2 duplex receptacles.	
COMMUNICATIONS	N/A	

B.3 – Service	Janitorial Closet	
ARCHITECTURAL REQUIREMENTS		
ACTIVITIES	Storage of material and equipment for janitorial staff.	
OCCUPANTS	Janitorial staff	
ACCESS	Close To: Tank room (minimize plumbing runs)	
VIEWS	N/A	
HOURS of USE	As required	
FINISHES	<i>Floors:</i> Non-Slip Resilient flooring <i>Walls:</i> Painted drywall. Paint to be resistant to moisture & chemicals. <i>Ceilings:</i> Painted drywall or exposed structure	
HARDWARE	Lock set.	
FURNITURE	N/A	
EQUIPMENT	N/A	
MILLWORK	N/A	
SPECIALTIES	N/A	
NET AREA	Approximately 3.2m <sup>2</sup>	
HEIGHT	As required.	
	ENVIRONMENTAL REQUIREMENTS	
HEATING	Hydronic heating	
VENTILATION	As required.	
LIGHTING	LED lighting, locally controlled, to IES standards	
ACOUSTICS	Acoustically separated from public area	
SERVICE REQUIREMENTS		
PLUMBING	Janitor's sink.	
POWER	2 duplex receptacles.	
COMMUNICATIONS	N/A	

B.4 – Service	Fan Room	
ARCHITECTURAL REQUIREMENTS		
ACTIVITIES	Air exchange; separate from any fumes produces from mechanical equipment.	
OCCUPANTS	Building maintenance staff	
ACCESS	Adjacent To: Mechanical room (can be within mechanical room)	
VIEWS	N/A	
HOURS of USE	As required	
FINISHES	<ul> <li>Floors: Non-Slip Resilient flooring</li> <li>Walls: Painted drywall. Paint to be resistant to moisture &amp; chemicals.</li> <li>Ceilings: Painted drywall or exposed structure</li> </ul>	
HARDWARE	Lock set.	
FURNITURE	N/A	
EQUIPMENT	N/A	
MILLWORK	N/A	
SPECIALTIES	N/A	
NET AREA	Approximately 6.0m <sup>2</sup>	
HEIGHT	As required.	
	ENVIRONMENTAL REQUIREMENTS	
HEATING	Hydronic heating	
VENTILATION	As required.	
LIGHTING	LED lighting, locally controlled, to IES standards	
ACOUSTICS	Noise from fan room should not carry into adjacent public or office spaces, min. 48 STC rating.	
	SERVICE REQUIREMENTS	
PLUMBING	N/A	
POWER	2 duplex receptacles	
COMMUNICATIONS	N/A	

B.5 – Service	Exterior Entrance Court from Community Side
	ARCHITECTURAL REQUIREMENTS
ACTIVITIES	Main approach for pedestrians and vehicles, drop off, parking of vehicles including snowmobiles and ATV.
OCCUPANTS	Staff, travelers, and residents of Taloyoak. Consult with project officer for required number of parking spaces.
ACCESS	Close To: Entry to public waiting area
VIEWS	N/A
HOURS of USE	Accessible 24 hours per day.
FINISHES	Gravel/fill with proper drainage/slope
HARDWARE	N/A
FURNITURE	N/A
EQUIPMENT	N/A
MILLWORK	N/A
SPECIALTIES	Building sign; Barrier Free access ramp; Parking rail to prevent damage to the building, (no concrete bollards).
NET AREA	Design dependent
HEIGHT	N/A
	ENVIRONMENTAL REQUIREMENTS
HEATING	N/A
VENTILATION	N/A
LIGHTING	Protected LED lights. Provide light beside entry vestibule doors and on building exterior to illuminate the parking area and the building service access points.
ACOUSTICS	N/A
	SERVICE REQUIREMENTS
PLUMBING	N/A
POWER	Provide Intelligent Parking Lot Controller (IPLC); 5 smart parking outlets with a microprocessor, temperature sensors.
COMMUNICATIONS	N/A

B.6 – Service	Exterior Entrance from Air Side
	ARCHITECTURAL REQUIREMENTS
ACTIVITIES	Travellers and vehicles approach from apron
OCCUPANTS	Travelers and airline staff
ACCESS	Close To: Entry to public waiting area
VIEWS	N/A
HOURS of USE	Accessible 24 hours per day.
FINISHES	Gravel/fill with proper drainage/slope
HARDWARE	N/A
FURNITURE	N/A
EQUIPMENT	N/A
MILLWORK	N/A
SPECIALTIES	Building sign. Barrier Free access Ramp
NET AREA	Design dependent
HEIGHT	N/A
	ENVIRONMENTAL REQUIREMENTS
HEATING	N/A
HEATING VENTILATION	N/A N/A
VENTILATION	N/A Protected LED lights. Provide light beside entry vestibule doors. If necessary provide floodlight on south-west corner of the building to improve light coverage of the apron. Provide light beside entry vestibule
VENTILATION	N/A Protected LED lights. Provide light beside entry vestibule doors. If necessary provide floodlight on south-west corner of the building to improve light coverage of the apron. Provide light beside entry vestibule doors to illuminate the entrance.
VENTILATION	N/A         Protected LED lights. Provide light beside entry vestibule doors. If         necessary provide floodlight on south-west corner of the building to         improve light coverage of the apron. Provide light beside entry vestibule         doors to illuminate the entrance.         N/A
VENTILATION LIGHTING ACOUSTICS	N/A         Protected LED lights. Provide light beside entry vestibule doors. If         necessary provide floodlight on south-west corner of the building to         improve light coverage of the apron. Provide light beside entry vestibule         doors to illuminate the entrance.         N/A         SERVICE REQUIREMENTS

B.7 – Service	Exterior Service Court (Community Side)
	ARCHITECTURAL REQUIREMENTS
ACTIVITIES	Vehicle access and turn-a-round for fuel and water delivery, and sewage pump out.
OCCUPANTS	Service and maintenance vehicles.
ACCESS	Access from community/ground side of perimeter fence. Sewage truck must approach within 2.5 m of pump out connection. Vehicle turning radius, along with snow ploughing and removal are to be in accordance with TSD Design Standards and Guidelines. Sewage & water connection points should be separated and easily distinguishable to avoid confusion Sewage pump out should also be away from air intake.
VIEWS	Separation from entrance court.
HOURS of USE	Accessible 24 hours per day.
FINISHES	Gravel with proper drainage
HARDWARE	N/A
FURNITURE	N/A
EQUIPMENT	N/A
MILLWORK	N/A
SPECIALTIES	Road signs
NET AREA	Design dependent
HEIGHT	N/A
1	ENVIRONMENTAL REQUIREMENTS
HEATING	N/A
VENTILATION	Ensure that fumes from oil tank, vehicle exhaust and sewage pump out are located away form the building. The air intake for the ventilation system must be isolated from potential odor contaminants.
LIGHTING	Provide protected LED lights beside service access points.
ACOUSTICS	N/A
	SERVICE REQUIREMENTS
PLUMBING	N/A
POWER	N/A
COMMUNICATIONS	Clearly visible fill indicator

B.8 – Service	Exterior Luggage Claim Kiosk
	ARCHITECTURAL REQUIREMENTS
ACTIVITIES	Airside off-loading of passenger luggage by airport staff; arrival luggage pick up by passengers from community side.
OCCUPANTS	Airport staff and passengers
ACCESS	Situated on the centre line of the perimeter fence and open on two sides to provide through access from the airside to the parking lot side. A vehicle must be able to back up on the airside of the fence and staff to unload luggage onto a raised platform; Passengers will claim luggage on the community side of the fence.
VIEWS	N/A
HOURS of USE	Accessible 24 hours per day.
FINISHES	An elevated concrete slab platform covered by a roof structure with a deep overhang.
HARDWARE	N/A
FURNITURE	N/A
EQUIPMENT	N/A
MILLWORK	N/A
SPECIALTIES	Exterior signage
NET AREA	5.6m2 (12ft x5ft)
HEIGHT	N/A
	ENVIRONMENTAL REQUIREMENTS
HEATING	N/A
VENTILATION	N/A
LIGHTING	Provide lighting on the underside of roof structure.
ACOUSTICS	N/A
	SERVICE REQUIREMENTS
PLUMBING	N/A
POWER	N/A
COMMUNICATIONS	N/A

### 4.3 Schematic Layout for the New Airport Terminal Building

The Schematic Floor Plan & Elevations presented below were developed in consultation with EDT and based off the layout of several ATBs that were constructed in Nunavut in the 90's. Based on a general review of what layouts have worked well for ATBs in the past, detailed Post Occupancy Evaluations of two of the existing ATB with similar floor plans, and a National Building Code review, the following schematic layout was agreed upon.

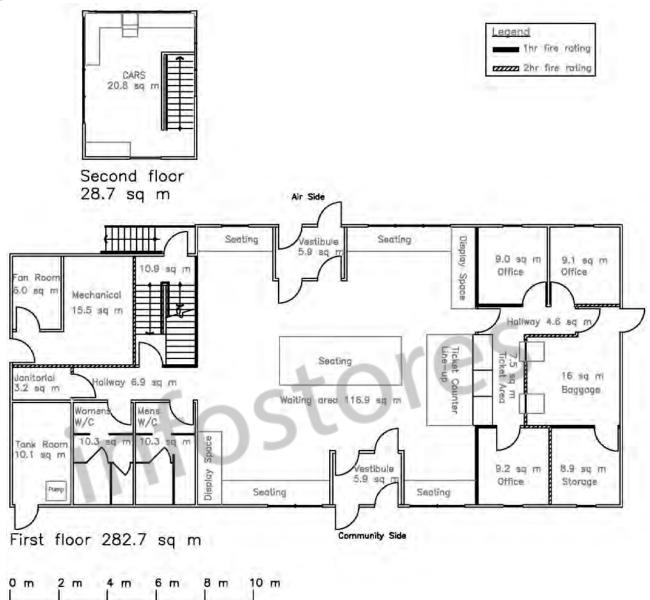
From this schematic level the ATB should be designed to be easily adaptable to either slab on grade or pile foundations. Slab on grade with a thermosyphon system is the preferred foundation system to simplify accessibility to the building. Pile foundations would also be considered based on the geotechnical investigation.

Please note that window placement and size are suggested only.

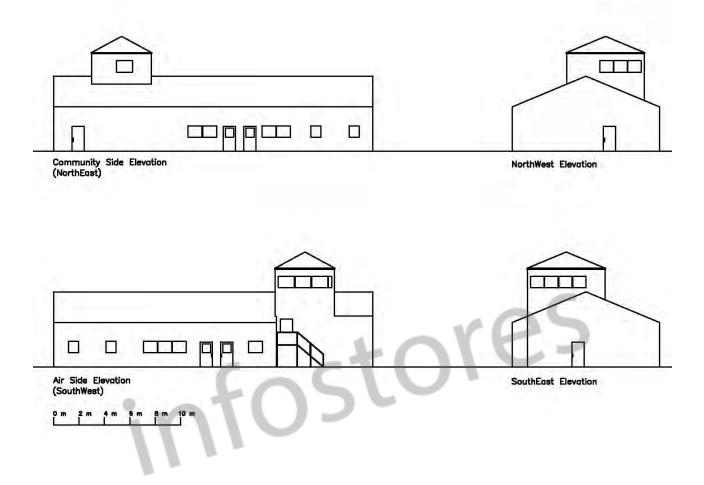
The consultant is to follow the layout and elevations as closely as possible. Any major changes will require a justification.







### Figure 2: ATB Schematic Elevation



# **5. Technical Requirements**

### **5.1 Good Building Practice**

All design in any form shall incorporate the "Good Building Practices Guideline (GBPG) – Second Edition 2005 ". All proponents shall be familiar with this document and will incorporate the sections that apply to each project. If the proponent does not already have a copy of the GBPG, they should request a copy from the Facility Planner or Project Officer.

The GBPG can also be downloaded from:

http://cgs.gov.nu.ca/PDF/Good%20Building%20Practices%20Guideline.pdf

The following sections have clarifications taken from the **Good Building Practices Guideline** as they relate to the Taloyoak Airport Terminal Building Project and additional building requirements requested by CGS and EDT. Note that the room data sheets and requirements provided in Section 4.2 are based solely on operational requirements, and may not reflect technical or code requirements (e.g. fire resistance ratings). The architect/engineer is required to apply appropriate National Building Code of Canada analysis and technical considerations to all systems, assemblies, and components.

# **5.2 Architectural Requirements**

#### **Wall Finishes**

Vinyl wall covering should **not** be used. Most walls will be abuse resistant painted gypsum board. Provide a more durable material or wainscoting to a height of at least 4' in corridors and the public space. Provide corner guards at exposed corners at high traffic areas. Avoid vinyl behind sinks, use tile or stainless steel instead.

Removable Plexiglas panels to cover artwork, photographs and displays should be installed in the public area at appropriate locations. Consult with EDT on desired number and location of display boards. **Please consult with the Office of the Fire Marshall to ensure proper code compliance.** 

#### **Floor Finishes**

Durable floor finishes throughout the building that can withstand high traffic are required. Specifically in the vestibules, the flooring must also be able to handle varying temperatures without degrading. Consultant to provide a pricing option for using polished concrete finish throughout the facility.

#### **Acoustics**

All offices, the washrooms, and the mechanical room are required to be acoustically separated from other areas. The public area requires acoustic treatment to control excessive sound reverberation.

### **Ceiling Finishes**

Drop ceiling or exposed structure is acceptable provided the selected finish and any architectural details match the overall look and feel of the building's design.

#### Windows

Windows in the public area are to be fixed while windows in offices can be operable. Consultant to consider different means of controlling solar and heat gain from equipment during summer months by means of operable windows or mechanical cooling.

All windows should reduce solar gain, be triple pane, and vandalism resistant.

#### Window Coverings

Provide sun control on the airline office windows and CARS office; blackout is not required, vertical or horizontal blinds are acceptable. No sun controls required in the public area.

#### **Interior Lighting**

Interior lights are also to be LED. The lighting design shall provide sufficient light to all areas of the building during light and dark periods of the year. Further details on Lighting Design are given in section 5.5 Electrical Requirements.

#### **Keying**

EDT and CGS will provide information to consultants to develop a keying schedule. The keying will conform to GN standards (best locks) and the consultant will develop a keying pattern consistent with user needs and required zoning for the building. The contractor should supply and install permanent cylinders.

#### Roof

Roof framing system is to include structural supports for a Permanent Roof Anchorage System -WSCC (Workers Safety and Compensation Commission) requirement.

#### **Exterior Finishes**

All siding and finishes are to be robust materials that can withstand the climate. Special consideration should be given to elements near the ground that may be easily damaged during snow removal around the building.

#### **Exterior Lighting**

LED lighting to be provided on exterior walls, luggage claim kiosk, as well as at all entry points into the building; consideration to be given to exterior work spaces.

#### Signs

Interior and exterior building signs are required. Proper local translations must be supplied. The consultant should coordinate with EDT and the Project Manager for proper translation. This process should proceed as soon as the plan layout has been finalized.

## 5.3 Fire and Life Safety

The facility must comply with applicable fire safety codes and the most current National Building Code including all revisions and errata issued in the supplements to that Code. The facility must have fire prevention and emergency situation capabilities including:

- Provision for an adequate fire protection service;
- Availability of fire protection equipment at appropriate locations throughout the building;
- A fire evacuation plan;
- A procedure to facilitate fire department access to the building; and,
- Autodial or direct enunciator to the fire department.

The following life and safety systems must be provided in accordance with the standards of the fire authority having jurisdiction:

- Emergency Lighting;
- Fire Detection and Alarm A central, modular, microprocessor based, fully addressable fire alarm system should be designed for the ATB in accordance with CAN/ULC-S524-06
- Emergency Power;
- Exits;
- Water Supply; and,
- Fire Separation.

All the average recommended design luminance energy efficiency requirements shall conform to the following:

- Illuminating Engineering Society (IES) "Lighting Handbook" 2011
- National Energy Code of Canada (NECB) 2011

# **5.4 Mechanical Requirements**

### Plumbing

Potable Water Services

- Water storage tank to be located in a separate room from the boilers or furnaces.
- The recommended minimum water consumption estimates as per **Good Building Practice Guidelines**: Non-residential occupancies - 25 liters/person/day.

### Piping

Domestic water supply lines and waste water piping as per National Plumbing Code and Good Building Practice Guidelines.

#### **Floor Drains**

Floor drains should be provided in the washrooms, janitor's closet and mechanical room to provide drainage in the event of emergency. To ensure continuity of the seal, all floor drains should be trap seal prime type.

#### Sewage Disposal-Holding Tanks

Sewage holding tanks are to be sized relative to the capacity of the domestic potable water supply.

- Large/complex buildings: equal
- Small/simple buildings: 1.5 times

Suitable sewage system and tank location options should be proposed by the consultant.

#### **Plumbing Fixtures**

Energy efficient plumbing fixtures are required. Recommended Fixtures:

- Water closet with six liter low flush
- Metering faucets/infrared technology
- Stainless steel lavatories (commercial)
- Janitor's sink
- Other products '4 liter low flush flapperless closet should be considered

All other fixtures are to be as per the **National Plumbing Code** and the **Good Building Practice Guidelines.** 

### Fuel Oil: Interior Day Tank and Exterior Oil Tank

Interior double wall day tank to be located in the mechanical room(commercial). Day tank to be provided with dual fuel oil pumps complete with control panel.

Provide an exterior above ground double wall storage tank system having capacity of 2500L as per *Good Building Practices Guideline (GBPG).* 

#### **Oil Burning Equipment**

All oil burning equipment to be installed as per CSA-B139-00 Installation Code for Oil Burning Equipment.

#### Ventilation

A typical direct digital control system (DDC) has been developed for ventilation unit control. The system will provide some consistency in operation and maintenance. Provide a modem module connection on building where required allowing off-site monitoring of the system performance. The GN and the Department of Community and Government Services have highly recommended the installation of DDC systems in their buildings throughout the Nunavut Territories. As per the **Good Building Practice Guidelines section 8.1.** 

#### **Heating Controls**

Heating controls should be accessible to users in offices, but restricted to a limited range of about 5 degrees. **No heating controls should be provided in the public area**. The public area and all other rooms except the offices should be on the main building heating control system.

#### **Back-up Generator**

The facility will require standby diesel-fired generator to maintain heating-related systems, life safety systems, and airport/runway lights. Enclosure to be design dependant, stand-alone, and to conform to all appropriate codes and standards.

### **5.5 Electrical Requirements**

#### **Electrical Services**

Efforts shall be made as design develops to locate the utility transformer as close as practicable to the main electrical room where the service terminates and extend the primary overhead lines to as close as practicable to the transformer to minimize the length of underground components of primary and secondary wiring and maximize their cost efficiency. All electrical systems should be designed in accordance with the CSA C22.1-15, 23<sup>rd</sup> edition of Electrical Code. Electrical consultant should coordinate with QEC on electrical design & supply to the building.

#### **Surge Protection**

Provide TVSS system that should be high performance tracking hybrid filter designed as listed under UL (1283 &1449) to provide transient voltage surge suppression, and high frequency electrical noise filtering, while connected in parallel with the ATB's main distribution system

#### Lighting Design

It is of utmost importance that the choice of sources and fixtures be examined carefully for the ability to: function with natural light; achieve required levels of lighting and colour temperatures compatible with the often critical functional requirements; control glare and shadowing; and, operate efficiently with readily maintainable components. All the average maintained horizontal and vertical luminance levels at a specified height or location must conform to the Illuminating Engineering Society (IES) 10th Edition of "Lighting Handbook" & National Energy Code for Buildings 2011(NECB). All exterior lighting fixtures should be controlled by a photo-controller to ensure that the lights are not operating when the natural lighting levels are sufficient to not require any artificial lighting.

#### **Motion and Occupancy Sensor**

In order to reduce energy costs in areas where the usage warrants, occupancy and motion sensors that cover entries, hallways, storage room, janitor room, washrooms, and the airline offices should be used.

#### **Airport Equipment**

Consultants to coordinate placement, accessories and electrical requirements for additional airport equipment, such as:

- Internet satellite dish
- New Halogen Rotating Non-strobe Beacon
- NAV Canada equipment

### 5.6 Security, Data, & Communications

#### **Communications**

All Structured wiring must conform to the Government of Nunavut Community and Government Services (CGS-IPS) "Structured Cabling Guidelines Version 1.7 – August 2015". A copy can be obtained from the project officer.

All offices and the ticket counter will require a telephone. The construction contract will include conduit, providing, and pulling the wiring. Providing and installing the telephone system, and instructing the users on the operating system is done by IPS. Northwestel brings service to the de-mark point.

For computer systems, the construction will include cable trays and installation and certification of computer wiring **(CAT 6 wiring)** up to the patch panels. Include installation and certification for all computers **(CAT 6 wiring)** etc. All local area network (LAN) outlets are specified as quads, to accommodate wiring for 4 computers, offices need only one corresponding electrical receptacle. Power bars can be considered. **Provide floor model rack for housing telephone and LAN connections, including switch and router space.** 

Provide blocking/support for three radio antennas located on the exterior wall of the baggage area. Provide coax cable sized conduits to connect exterior antennas to each office.

#### **Public Announcement System**

Provide an indoor/outdoor PA system that will announce throughout the ATB, as well as the exterior airside and groundside.

#### Security & Surveillance Cameras

The ATB must include CCTV security cameras at all entrances, offices, and around the exterior of the building etc. Exact locations and numbers to be determined during design development. Cameras should be linked to a main control computer/monitor. The building will also be equipped with an intrusion alarm.

### **5.7 Civil Requirements**

#### **Parking & Circulation**

Designated parking spots shall be located to provide easy access to the building from the community side and not interfere with the water or sewer truck's access to the building. A clear path of circulation from the road to the ATB's designated parking shall be provided including traffic signs indicating designated parking spots and circulation. Parking rails shall be provided to protect the building from damage.

#### **Pedestrian Access**

The building should be easily identifiable & path to entrances easily maintained.

### **Intelligent Parking Lot Controller (IPLC)**

Five parking receptacles with integral time and temperature controls should be located at selected stalls in the parking area for airport and airline staff. Location of these parking receptacles is to be separate from public parking spots.

The parking receptacles are energized based on time and temperature. System shall utilize smart panels with remote controlled circuit breakers and integral controllers specifically manufactured and preprogrammed for this purpose and the associated temperature sensor. The suggested system would provide the necessary protection for staff vehicles parked for long periods of time while maintaining the highest level of energy efficiency.



# 6. The Taloyoak ATB Site

## **6.1 Location & Zoning Provisions**

The airport is separate from the community, located over a kilometer North-West of the Hamlet of Taloyoak (Image 9).

The airport site is zoned by the Hamlet of Taloyoak as Transportation (T). The following text from the Hamlet of Taloyoak's Zoning By Laws 2010 gives the Zone Regulations:

### TRANSPORTATION (T) 6.25 Permitted Uses

Airport and related uses Communications Facility Sealift facility



Image 10: Airport Location with respect to the Community

### 6.26 Zone Requirements

(a) Any development within the Transportation Influence Zone as indicated on the General Land Use Map shall be subject to the approval of NAV Canada.

(b) No development shall occur within 150 metres (492 feet) of the Non-Directional Beacon Site.

### **6.2 Site Layout**

The new ATB will be positioned roughly south-east of the existing terminal. Presently there are a few storage containers and small buildings used by the airport and airlines that are in this location. They will be moved prior to construction and repositioned, as shown on the schematic site plan- Image 11, as part of the scope of construction work. During construction they must be temporarily placed in a safe and convenient location so airport and airline staff can access them.

Furthermore, portions of the site fencing will be removed prior to construction. After demolition of the existing ATB, new security fencing will be installed to reconnect the remaining sections to the new ATB. A freestanding luggage claim kiosk will be added on the exterior of the ATB for arrived luggage to be offloaded by staff on the airside, and picked up by passengers on the parking lot side of the fence.

The location of the new ATB is between the existing ATB and the Field Electrical Center (FEC) which provides electricity to the building and apron lights. The overhead electrical lines from the FEC to the building run through the intended location of the new ATB.

Additionally, an underground cable runs between the FEC and existing ATB as shown in Image 13. Careful consideration will need to be given to how uninterrupted electricity will be supplied to the existing building and apron lights during construction of the new ATB. Designers should coordinate with QEC during the design development stage.

The consultant is to provide a detailed workplan/scheme showing the proposed sequence and methods for:

- Relocating the existing structures on site;
- Providing uninterrupted power to the existing ATB during construction with electrical load requirements, including FEC underground cabling connection options with cost estimates;
- Final FEC connections to new ATB;
- ATB demolition
- New fencing





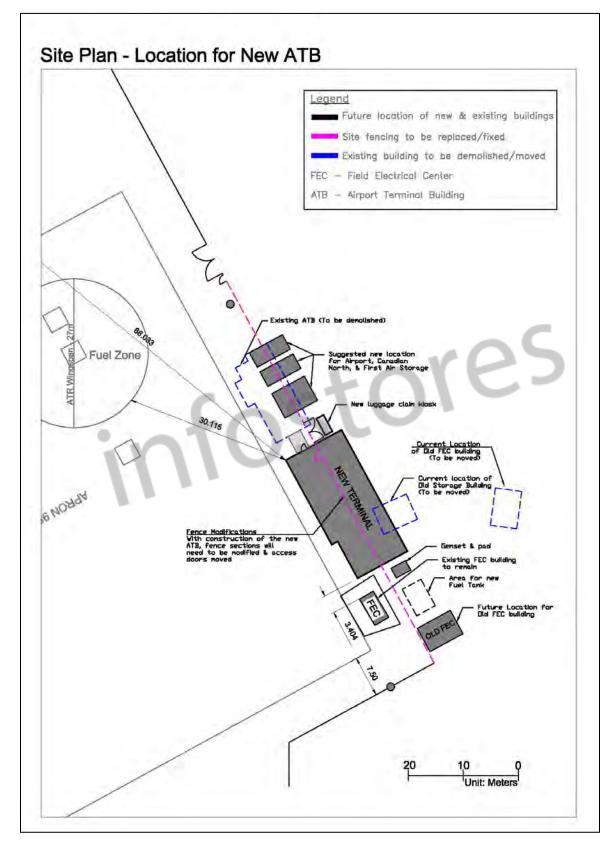
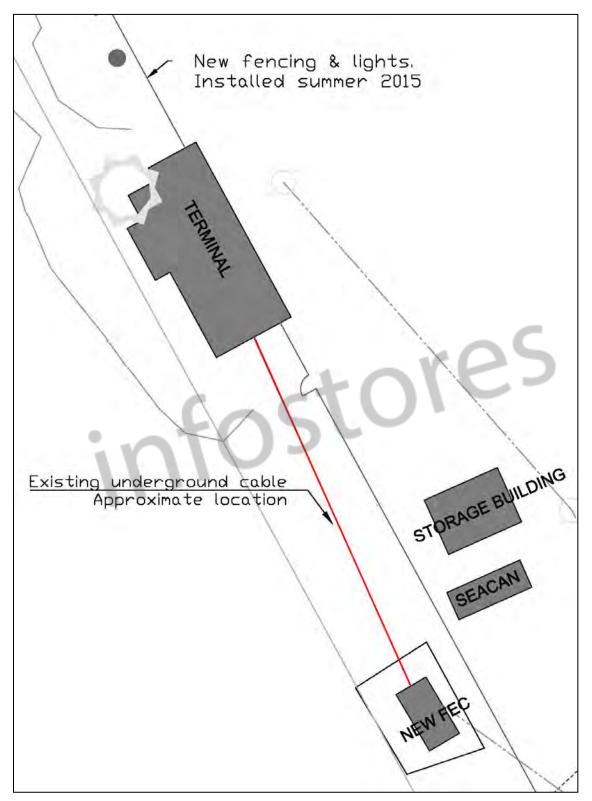


Image 13: Detail of Existing underground cable between existing ATB and FEC



## **6.4 Geotechnical Report**

An onsite geotechnical investigation was conducted on July 23<sup>th</sup> to determine the existing soil conditions and requirements for the building foundations. The full results of the investigation can be found in TetraTech EBA's report which will be completed on September 18, 2015 and available to the successful proponent to inform their design.

## 6.5 Snow and Wind Study

The successful proponent will include in their design a full Snow and Wind study of the site and buildings. The study will take into account the future positions for the FEC buildings and storage containers. This will ensure snow fall and prevailing winds will not create undue snowdrift activity in critical areas that could interfere with building access and potentially result in increased snow removal costs. Also to be considered is the placement of entrances; both in terms of pedestrian comfort and the location of air intakes and exhausts with respect to the potential for wind flows to direct exhaust from the building or service vehicles towards air intakes. Dependent on the results of the Geotechnical investigation the snow study may also consider a slab on grade with thermalsyphons or pile foundation system.

# 7. Cost Estimate

**The proponents will include with their proposal a** <u>Class D</u> **construction estimate** based on the present brief. This will include estimates for the new Airport Terminal Building as well as the demolition of the existing ATB and any associated site work, including security fence modifications. Other items to be included are: relocation of existing structures, a stand-alone generator, temporary and new FEC power connections, New Luggage Claim Kiosk.

# 8. Schedule

The project consultants will provide a detailed project schedule showing at minimum the anticipated dates for design reviews (allow a maximum of 10 business days for each review) and logistical milestone phases. The project schedule will depend in part on funding, cash flow, sealift delivery and construction schedule.

## **Planning & Design**

2015 July August 31<sup>st</sup> Sept. 23<sup>rd</sup> Sept. 29<sup>th</sup> Oct. 9<sup>th</sup> Mid October

Site Assessment/Geotechnical Study (completed) RFP issued RFP Close Proposal Review A&E Contract Award Project Start-up meeting Mid November Dec. 1<sup>st</sup> Mid-December Design Development submission Design Development presentation 50% Contract Document Submission

#### 2016

Jan. 31<sup>st</sup>99% Contract Document ReviewFeb. 15thIssue for TenderMarchTender Award

#### Construction

#### Option 1: Slab on grade foundation with thermosyphons

#### <u>2016 (con't)</u>

July July September September/October November

#### <u>2017</u>

June September October

<u>2018</u>

January February June

#### **Option 2: Pile Foundation**

#### 2016 (con't)

June July September November Site Preparation, Mobilization and Piling Sealift cut off 1<sup>st</sup> Sealift Arrives, Construction Begins Structural Framing Complete

#### <u>2017</u>

May July August September Construction Continues Building Substantially Complete Building Commissioning Demolition of old ATB

1<sup>st</sup> Sealift Arrives, Construction Begins Thermosyphon foundation Construction on hold

Mobilization, site preparation, etc.

Sealift cut off

Construction Continues (Structure, envelope) 2<sup>nd</sup> Sealift Interior Work

Building Substantially Complete Building Commissioning Demolition of old ATB

# 9. Procurement Requirements & Resources

The delivery of the Taloyoak ATB is planned to be a two year construction project with funding spread over the fiscal years of 2016/17 and 2017/18. Design will be completed in early 2016 to allow time for construction tender and mobilization to meet the sealift cut offs dates for 2016. There are two companies that provide sealift services to Taloyoak: NEAS (Nunavut Eastern Arctic Shipping) and NTCL (Northern Transportation Company Ltd.). Based off 2015's shipping schedules, the barges can be anticipated to arrive in the community of Taloyoak in September, (consultant to confirm future schedules)

Below is a link to a list of potentially useful municipal contacts and local businesses in Taloyoak:

http://www.gov.nu.ca/sites/default/files/files/Taloyoak%20Profile%20new%20layout.pdf

# **10. Furniture and Equipment**

A cash allowance based on 2% of the construction value of the project costs plus an administration fee will be used to purchase furniture, equipment for this project.

As part of their contract the consultants will be responsible for working with the project officer and Economic Development & Transportation to ensure that furniture and equipment are supplied and installed for this project. The procurement and installation of FF&E shall be included in the construction tender. EDT must approve all recommended FF&E. The purchase of furniture and equipment is to be included in the construction cost estimate.

## Community & Government Services Architectural/Engineering Full Services Agreement



Project Title

Location

Project No.

Architect/Engineer

**Contract No.** 

#### CONTENTS

### SECTIONS

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### APPENDICES

- A. \_\_\_\_\_ Proposal dated \_\_\_\_\_
- B. Request for Proposal

#### ARTICLES OF AGREEMENT

These ARTICLES OF AGREEMENT made in duplicate this day of \_\_\_\_\_\_ 20\_\_.

Between:

The Government of Nunavut (referred to hereinafter as the "GN")

And:

(referred to in this Agreement as the "Architect/Engineer", hereinafter referred to as "A/E");

witness that the GN and the A/E covenant and agree as follows:

#### A1 AGREEMENT DOCUMENTS

- 1.1 The documents forming this Agreement between the GN and the A/E are:
  - 1.1.1 "Articles of Agreement", Section A;
  - 1.1.2 "Terms of Payment", Section B;
  - 1.1.3 "General Conditions", Section C;
  - 1.1.4 "GN's Responsibilities", Section D;
  - 1.1.5 "Architect/Engineer Services", Section E;
  - 1.1.6 "Additional Services", Section F;
  - 1.1.7 "Architect's Or Engineer's Proposal", Appendix
    "A".
  - 1.1.8 "Request for Proposal", Appendix "B".

#### A2 DESCRIPTION OF SERVICES

(Include detailed description of project. If applicable, the Project Requirements and Project Brief may be referred to and put in an Appendix).



#### A3 CONTRACT AMOUNT

- 3.1 Subject to any increase, decrease or set off that may be made under this Agreement, the GN shall pay the A/E, as consideration for the execution of the Services described in this Agreement, a sum of money calculated in accordance with the provisions contained in the "Terms of Payment" at the times and in the manner therein set out.
- 3.2 It is understood by the GN and agreed by the A/E and the GN that the fees are payable only when the Services have been performed to the satisfaction of the GN within the stipulated cost estimate established to perform these Services and any payment in respect of a phase or part of a phase is not to be deemed a waiver of the GN's rights of set-off at law or under this Agreement for costs or expenses arising from default or negligence of the A/E.
- 3.3. The attention of the A/E is drawn to the following statutory provision of Section 46 of the *Financial* Administration Act (Nunavut) as amended or re-enacted in successor legislation:

"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."

3.4 The maximum amount payable by the GN under this Agreement shall not exceed a total sum of \$ \_\_\_\_\_\_ unless specifically authorized by a written change order approved by the GN.

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

#### ARCHITECT/ENGINEER:

Architect/Engineer's Full Business Name and Address

Corporate Seal

Signature

Name and Title

Signature

Name and Title

#### GOVERNMENT OF NUNAVUT (GN)

Address:

Department of Community and Government Services

P.O. Bag 200

Cambridge Bay, NUNAVUT

X0B 0C0

Signature

Date

Date

Witness

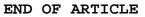
Name and Title

Name

Witness Signature

Title

Name



#### TERMS OF PAYMENT

#### TP1 AMOUNT PAYABLE - GENERAL

1.1 Subject to any other provisions of this Agreement, the GN shall pay the A/E, at the times, in the manner and for the amounts hereinafter set out and the A/E shall accept that amount as payment in full satisfaction for everything furnished and done by him in respect of the Services to which the payment relates.

#### TP2 AMOUNT PAYABLE TO THE A/E

#### 2.1 PAYMENTS ON ACCOUNT OF BASIC SERVICES

2.1.1 Fee for Services as described in Section E shall be computed as follows:

Α.	А	Stipulated	Sum	Fee	of		
	\$				<u> </u>		
	or	<u> </u>		6		V	
			1				

B. A Time Rate Fee calculated on the basis of the following hourly rate: Payroll Costs + %

Payroll Costs are defined as the direct salaries of all the A/E's personnel engaged on the project, and the portion of the cost of their mandatory and customary contributions and benefits related thereto, such as employment taxes and other statutory employee benefits, insurance, sick leave, holidays, vacations, pensions, and similar contributions and benefits. Payroll costs are subject to annual review; any increases must have the prior approval in writing of the GN.

Travelling time authorized by the GN during normal working hours shall be chargeable as time worked. Authorized travelling time outside of normal working hours shall be chargeable to a maximum of three (3) hours per day. However, not more than eight (8) hours in any one day shall be claimed for the time spent in travelling.

#### SECTION B TERMS OF PAYMENT

All overtime must be authorized in advance in writing by the GN and payment will be calculated on the basis of the following hourly rate:

Payroll Costs + \_\_\_\_\_% (Overtime Rate) or

C.

(Alternate Time Rate Fee)

or

D. A Percentage of Construction Cost calculated as
 follows:

Architectural Contracts

Fees shall be calculated according to the current (based on the date this Agreement is approved by the GN) Recommended Conditions of Engagement and Schedule of Professional Fees as published by the Alberta Association of Architects; or alternatively in accordance with:

#### Engineering Contracts

Fees shall be calculated according to the current (based on the date this Agreement is approved by the GN) guideline of Consultant Fees for General Engineering Assignments as published by the Association of Professional Engineers, Geologists and Geophysicists of Alberta; or alternatively in accordance with:

Fees for both Architectural and Engineering Services shall be calculated based on the A/E's estimate of the Construction Cost until the Construction Contract is established. Fees will then be based on the Construction Cost. The adjustment of the fee to take into account the change orders of the Construction Contract shall be made at the time the Interim Certificate of Completion is issued.

2.1.2 Progress payments shall be made on a monthly, or mutually agreed basis. Where compensation is based on a Stipulated Sum or Percentage of Construction Cost, monthly payments shall be made so that the Basic Compensation for each phase shall equal the following percentages of the total basic compensation payable. The GN will pay the Goods and Services Tax (GST).

(Include additional phases or modify these phases as appropriate):

Schematic Design Phase	<u></u> 0
Design Development Phase	00
Construction Document Phase	<u></u> 0
Bidding or Negotiation Phase	<u></u> 0
Construction Phase	%
Post Construction Phase	00

#### 2.2 PAYMENTS ON ACCOUNT OF ADDITIONAL SERVICES

2.2.1 In addition to the fees for services identified in Section E, the GN will pay the A/E for Additional Services, as specified in Section F as authorized by the GN as follows:

> (Here insert basis of compensation including rates and/or multiples of payroll costs for Principles and Employees. Identify Principals and classify Employees if required. All overtime must be authorized in advance by the GN; indicate appropriate rate).

#### 2.3 PAYMENTS FOR REIMBURSEABLE EXPENSES

Reimbursable Expenses, or disbursements, include actual expenditures made by the A/E and the A/E's employees in the interest of the project. These expenses must have the prior approval of the GN.

- 2.3.1 Reimbursable expenses shall be computed as a multiple of \_\_\_\_\_\_ times the amounts expended by the A/E. The A/E shall provide the GN with copies of all invoices for reimbursement.
- 2.3.2 Reimbursable expenses shall include the following:
  - A. Reproduction of plans, drawings, specifications and other documents, excluding reproductions for the A/E's use.
  - B. Travel Expenses Unless noted otherwise, travel and accommodation costs approved by the GN shall be paid in accordance with the rates established under the GN Collective Agreement with the Union of Northern Workers or the subsequent Nunavut Employees Union.
  - C. Telecommunication expenses. Long distance telephone calls, telex, telegrams, courier service, electronic conveyances and postage.
  - D. Living expenses for personnel where authorized by the GN, for out-of-town travel.
  - E. Equipment and Vehicle Rental Costs Vehicle rental costs are reimbursable only when the work is done out of town from the A/E's office. CADD equipment and other computer expenses are not considered to be reimbursable unless otherwise noted in Clause "F".
  - F. Other expenses are herein noted (list any applicable):

#### TP3 TIME OF PAYMENT

- 3.1 The A/E shall, in all cases, deliver on a monthly or mutually agreed basis to the GN, in respect of that payment period, a written progress claim that sufficiently describes any part of the Service that has been completed during that payment period for payment purposes.
- 3.2 The GN shall, not later than ten days after receipt by the GN of a progress claim referred to in TP 3.1, issue a progress report, a copy of which the GN will give to the A/E, that indicates the value of the part of the Services described in the progress claim that, in the GN's opinion, is in accordance with this Agreement and was not included in any other progress report relating to this Agreement.
  - 3.2.1 The progress report referred to in TP 3.2 may take the form of an endorsement of the A/E's progress claim.
- 3.3 All payments will be made in accordance with the GN payment policy as described in the GN Financial Administration Manual, Directive 803-3. Subject to TP1, Nunavut A/E's shall be paid 20 days after receipt of their progress claim. Non-Nunavut firms shall be paid 30 days after receipt of their progress claim. A Nunavut firm is a firm that is registered in accordance with the Government of Nunavut Nunavummi Nangminiqaqtunik Ikajuuti (NNI) Policy and has received a Nunavut designation.

# TP4 PROGRESS REPORT AND PAYMENT THEREUNDER NOT BINDING ON THE GN

4.1 Neither a progress report referred to in TP 3.2 nor any payment made by the GN pursuant to these Terms Of Payment shall be construed as an admission by the GN that the Services or any part thereof is complete, is satisfactory or is in accordance with this Agreement.

#### TP5 DELAY IN MAKING PAYMENT

- 5.1 Any delay by the GN in making any payment when it is due pursuant to these Terms of Payment shall not be a breach of this Agreement by the GN.
- 5.2 When the GN delays in making a payment that is due pursuant to TP 3.3, the A/E shall be entitled to receive interest on the amount that is overdue, in accordance with the GN's Financial Administration Manual, Directive 803-4.

#### TP6 RIGHT OF SET-OFF

6.1 Without limiting any right of set-off or deduction given or implied by law or elsewhere in this Agreement, the GN may set-off any amount payable to the GN by the A/E under this Agreement or under any contract against any amount payable to the A/E under this Agreement.

END OF TERMS OF PAYMENT

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#### GENERAL CONDITIONS

#### GC1 DEFINITIONS

In this Agreement:

- 1.1 "GN" means the Government of Nunavut as represented by the Minister of Public Works & Services, the Deputy Minister of Public Works & Services or any person specially authorized by them to act on their behalf.
- 1.2 "A/E" means the Architect or Engineer as designated in the Articles of Agreement.
- 1.3 **"Subconsultant"** means a person, firm or corporation to whom the A/E has subcontracted the whole or any part of the Services.
- 1.4 "Contractor" means the person, firm or corporation contracting with the GN to provide labour, materials and equipment for the execution of the Work.
- 1.5 "Subcontractor" means a person, firm or corporation to whom the Contractor has subcontracted the whole or any part of the Work.
- 1.6 "Services" means the totality of all labour, materials and equipment used or incorporated into the project by the A/E pursuant to this Agreement. The extent of the Services are further defined in the Articles Of Agreement, Section A2.
- 1.7 **"Project Brief"** means the document describing in sufficient detail the services to be provided to permit the design to proceed. It may include general project information, content plan, time plan, cost plan, and design data, specifically related to the subject project.
- 1.8 "Project Requirements" mean instructions and directions in writing, which may include data, documents, plans, drawings, specifications, tendering procedures and pretender addenda provided by the GN concerning the project, its administration, time and cost limits and may include the Project Brief.
- 1.9 **"Work"** means the totality of all labour, materials and equipment used or incorporated into the project by the Contractor pursuant to the Construction Contract.

- 1.10 "Construction Cost" means the contract price of all elements of the Work designed or specified by the A/E. Where there is no contract price for all or part of the project, the Construction Cost shall be the estimated cost at current market rates as determined by the A/E and agreed by the GN. Construction Cost does not include the compensation of the A/E and the Sub-Consultants, and other costs such as the cost of the land and rights-of-way.
- 1.11 "Construction Contract" means the contract between the GN and the Contractor for the provision of labour, materials, and equipment for the execution of the Work by the Contractor.
- 1.12 "Construction Contract Documents" means the Construction Contract and all documents relating to the Work issued by or through the Α/E, including the plans, drawings, specifications, all variations schedules and and modifications thereto.

#### 1.13 "Cost Estimates"

1.13.1 Class C Estimate

This estimate, which is prepared with limited site information, is based on probable conditions affecting the project. It represents the summation of all identifiable project elemental costs. It is used for program planning, to establish a more specific definition of client needs and to obtain preliminary approval.

1.13.2 Class B Estimate

This estimate is prepared after site investigations and studies have been completed and the major systems defined. It is based on a project brief and preliminary design. It is used for obtaining approvals, budgetary control and design cost control.

1.13.3 Class A Estimate

This is a detailed estimate based on final drawings and specifications; it is used to evaluate tenders.

#### GC2 TIME OF ESSENCE

- 2.1 Time is of the essence of this Agreement.
- 2.2 The A/E shall submit a detailed schedule suitable to the

project for the performance of their Services for the project and shall adhere to the schedule approved by the GN. If a change in the approved schedule becomes necessary, the A/E shall submit a report to the GN and obtain approval for any change therein.

#### GC3 SUSPENSION OF SERVICES

- 3.1 The GN may require the A/E to suspend performance of this Agreement for a specified or unspecified period by giving written notice of suspension to the A/E.
- During the period of suspension the A/E shall minimize 3.2 their payroll costs and operating expenses and within 10 days of the receipt of the notice of suspension, deliver to the GN a schedule of net expenses in respect of which they claim to be reimbursed. The GN will give due consideration to the claim and will make such payment as seems in the opinion of the GN to compensate the A/E for reasonable costs and expenses incurred during the period of suspension.
- 3.3 If the period of suspension is 60 days or less, the A/E shall, upon the expiration of that period, resume the performance of this Agreement.
- 3.4 If the period of suspension is more than 60 days, and if the GN and the A/E agree that the performance of this Agreement will be continued by the A/E, the A/E shall resume performance of this Agreement subject to any terms and conditions agreed upon by the GN and the A/E (Fees and/or schedule may have to be revised). If agreement cannot be reached to continue this Agreement, the notice of suspension shall be deemed to be a notice of termination.

#### GC4 TERMINATION OF AGREEMENT

- 4.1 The GN may terminate this Agreement at any time by giving a written notice of termination to the A/E. When a written notice is received by the A/E, the A/E shall, subject to any conditions stipulated in the notice, forthwith cease all operations in performance of this Agreement.
- 4.2 If the GN terminates this Agreement because of default by the A/E, the insolvency of or the commission of an act of bankruptcy by the A/E, the A/E shall be liable to and upon demand therefore pay to the GN an amount equal to all loss and damage suffered by the GN by reason of the noncompletion of the services by the A/E. If the A/E fails to

pay for such loss or damage on demand, the GN shall be entitled to deduct the same from any payments due and payable to the A/E. Termination under this subsection does not operate so as to relieve or discharge the A/E from any obligation under this Agreement or imposed upon them by law in respect to the services or any portion thereof that they have completed.

- 4.3 In the event of termination, the GN will pay and the A/E will accept in full as settlement of all claims, an amount calculated under the Terms Of Payment in this Agreement specified for that phase or a proportionate part thereof based on the Services performed together with such further amount as will in the opinion of the GN compensate the A/E for reasonable expenses continuing after the date of termination.
- 4.4. Unless otherwise stated in GC 4.5, the A/E's Services shall be considered complete after the one year warranty period expires whenever corrections required of the Contractor at the end of this period are completed, or after the Final Certificate Of Completion is issued, whichever is the latest. The Warranty Period and Final Certificate of Completion are defined on the Construction Contract.
- 4.5 This Agreement shall terminate on <u>20</u>. Clause 4.4. applies if no date is inserted here.

#### GC5 OWNERSHIP AND USE OF DOCUMENTS

- 5.1 All surveys, reports, drawings, calculations, designs, plans, specifications, and other data, information and material collected, compiled, drawn and produced including computer disks and printouts pursuant to this Agreement are the property of the GN and the copyright of this material shall belong to the GN.
- 5.2 Any information given by the GN to the A/E in performing the Services in accordance with this Agreement shall be treated as privileged and confidential.

#### GC6 LITIGATION

6.1 This Agreement shall be deemed to have been made in Nunavut and shall be governed by the laws of Nunavut as far as applicable.

6.2 In the event of any legal action arising out of this Agreement, the A/E, if originating such action, may sue the GN in the name and style of "The Government Nunavut" and the GN, if originating such action, may commence the action against the A/E in their own behalf in the name and style of the "Government of Nunavut".

#### GC7 SUCCESSORS AND ASSIGNS

- 7.1 This Agreement shall ensure to the benefit of and be binding upon the parties hereto and their lawful heirs, executors, administrators, successors and assigns.
- 7.2 This Agreement may not be assigned by the A/E, either in whole or in part, without the written consent of the GN.

#### GC8 SUBCONSULTANTS

- 8.1 Neither the whole nor any part of this Agreement may be subcontracted by the A/E without written approval of the GN. The firms proposed to be used as Subconsultants for these services must also be approved by the GN.
- 8.2 Every Subconsultant agreement entered into by the A/E shall adopt all of the terms and conditions of this Agreement that are of general application.
- 8.3 Neither a Subconsultant nor the GN approval to a Subconsultant shall be construed to relieve the A/E from any obligation under this Agreement or to impose liability upon the GN.

#### GC9 NO IMPLIED OBLIGATIONS

- 9.1 No implied terms or obligations of any kind by or on behalf of the GN shall arise from anything in this Agreement and the express covenants and agreements therein contained and made by the GN are the only covenants and agreements upon which any rights against the GN are to be founded.
- 9.2 This Agreement supersedes all communications, negotiations and agreements, either written or oral, relating to the Services that were made prior to the date of this Agreement.

#### GC10 EFFECT OF APPROVALS

10.1 No acceptance or approval by the GN whether expressed or implied shall be deemed to relieve the A/E of their professional or technical responsibility for the plans, drawings, calculations or other material prepared or assembled by the A/E.

#### GC11 INDEMNIFICATION BY A/E

The A/E shall indemnify and save harmless the GN and the Commissioner of Nunavut from and against all claims, losses, damages, costs, actions and other proceedings, made, sustained, brought or prosecuted in any manner based upon, occasioned by or attributable to any injury, infringement or damage arising from any negligent act or omission of the A/E, their servants or agents or persons for whom they had assumed responsibility in the performance or purported performance of his services under this Agreement.

#### GC12 RECORDS TO BE KEPT BY A/E

12.1 The A/E shall:

- 12.1.1 maintain full records of the estimated and actual costs of the A/E Services together with all contracts, correspondence, invoices, receipts and vouchers relating thereto;
- 12.1.2 make all records and material available to audit and inspection by the GN or by persons acting on behalf of the GN when requested;
- 12.1.3 allow any of the persons referred to in GC 12.1.2 to make copies of and to take extracts from any of the records and material referred to in GC 12.1.1;

and

12.1.4 furnish any person referred to in GC 12.1.2 with any information they may require from time to time in connection with such records and material.

The records maintained by the A/E pursuant to GC 12.1.1 shall be kept intact by the A/E until the expiration of two years after the date that a Final Certificate of Completion was issued to the Contractor or until the expiration of such other period of time as the GN may direct.

#### GC13 CHANGES IN DESIGN

- 13.1 The A/E, if requested in writing to do so by the GN, will make any required changes in the design for the project notwithstanding its previous approval and advise the GN of any effect on the time schedule, budget and other implications of the changes. Nothing done by the A/E to remedy design errors or other problems attributable to shortcomings of the A/E, including persons consulted, employed or supervised by them, shall entitle the A/E to additional fees.
- 13.2 If the GN requires changes in design or revisions after approval of the Construction Documents for reasons other than design and cost factors within the control of the A/E, the GN will pay the A/E a further amount, in respect of the additional work, to be negotiated between the parties.

#### GC14 DISPUTES

In the event of a disagreement regarding any aspect of the services or any instructions given under this A/E's Agreement, the A/E may give notice of their dispute in writing to the GN requesting a decision. Such notice shall be delivered to the GN within 14 days of the origin of the disagreement or receipt of the instructions. Pending such decision the A/E shall continue to perform their Services in accordance with the instructions of the GN who shall give its decision in writing to the A/E within 30 days of receiving the said notice. In the event that the A/E is dissatisfied with the decision, they shall continue to perform their Services and, within 14 days from receipt of the decision, they may submit a written request for the Deputy Minister of Public Works & Services to review the matter in dispute. The Deputy Minister and the A/E may appoint a mutually acceptable person to mediate in the dispute.

#### GC15 ERRORS AND OMISSIONS

15.1 Notwithstanding any other provision of the Agreement, no fee payment will be made by the GN based on the cost of Services incurred by the A/E, and/or the cost of the Work incurred by the Contractor, to remedy errors or omissions for which the A/E is responsible.

#### GC16 LOCAL/NUNAVUT LABOUR

16.1 Insofar as is practicable the A/E shall employ and use Local, Nunavut, and Canadian labour in the execution of this Agreement and provide labour according to the Nunavut Labour Standards Act.

#### GC17 INSURANCE REQUIREMENTS

17.1 Commercial General Liability insurance with limits of not less than two million dollars (\$2,000,000) inclusive per occurrence for bodily injury, death and damage to or loss of use of property. Such insurance shall include but shall not be limited to the following terms and conditions:

- Products and Completed Operations
- Owners & Contractors Protective
- Contractual Liability;
- Broad Form Property Damage;
- Personal Injury
- Cross Liability and Severability of Interest;
- Medical Payments
- Non-Owned Automobile Liability including contractual liability
- Underground Property Damage; (in respect to any work involving ground disturbance.)
- Contingent Employers Liability
- Employees as Additional Insureds.
- 17.2 Professional Liability Insurance with limits of not less than two million dollars (\$2,000,000) per claim, to cover claims arising out of the rendering of or failure to render any professional service under the Agreement.
- 17.3 All motor vehicles, watercraft or snowcraft used by the Contractor in the performance of the agreement , regardless of ownership, shall be insured by Standard Liability Insurance in an amount not less than two million dollars (\$2,000,000) per occurrence for bodily injury, death and damage to property;

# In Contracts for Construction Where the Cost of Materials Exceeds \$100,000:

The Contractor will maintain in effect during the term of this Agreement Course of Construction Insurance with

limits no less than the value of the contract.

- 17.4 The insurance policies shall name the GN, its directors, officers, employees, agents and contractors as Additional Insureds, only with respect to the terms of this Agreement (except on Workers Compensation, motor vehicles insurance and Professional Liability insurance), with a cross liability and severability of interests clauses. Such insurance shall be primary without right of contribution from other insurances available to the GN, and shall extend to cover the employees of the insureds hereunder.
- 17.5 All insurance policies shall include a provision whereby the insurers agree to provide not less than thirty (30) Days written notice to the GN prior to any insurance policies being materially altered, cancelled, or terminated by the insurers.
- 17.6 The Contractor must have an account in good standing with its respective Worker's Compensation authority and provide evidence of same to the GN upon request from time to time.
- 17.7 The Contractor shall be responsible for any deductibles, exclusions and/or insufficiencies of coverage relating to such policies. The Contractor's liability is not capped to the amount of and scope of coverage required under the agreement.
- 17.8 The Contractor shall deposit with the GN prior to commencing the work, certificate(s) of insurance evidencing the insurance required by this Agreement in a form satisfactory to the GN and with insurance companies satisfactory to the GN, and shall provide evidence of continuing coverage on request.
- 17.9 The Contractor will ensure that all individuals (including the Contractor if an individual, and including all employees, officers and subcontractors) who are physically present in Nunavut during the term of this contract have extended medical benefits that cover the full cost of ambulance and medical evacuation. Beneficiaries under the Nunavut Land Claim Agreement are automatically covered. Individuals may have extended medical benefits through a group

program, including a group program to which their spouse belongs. Individuals present for a short time in Nunavut may buy the necessary coverage with their airfare. In the event this coverage is not in place for an individual who must be medically evacuated while in Nunavut, the Consultant will indemnify the GN for the cost of the medical evacuation.

#### GC18 CLAIMS AGAINST AND OBLIGATIONS OF THE A/E OR SUBCONSULTANT

- 18.1 The A/E shall ensure that all their lawful obligations and lawful claims against them arising out of the execution of the Services are discharged and satisfied at least as often as this Agreement requires the GN to discharge its obligations to the A/E.
- 18.2 The GN may, in order to discharge lawful obligations of and satisfy lawful claims against the A/E or a Subconsultant arising out of the execution of the Services, pay any amount, which is due and payable to the A/E under this Agreement, if any, directly to the obligees of and the claimants against the A/E or Subconsultant.

#### GC19 CERTIFICATION

19.1 Upon notification of award of this Agreement, the A/E is required to furnish within 14 days, when requested by the GN:

19.1.1 Proof of compliance with Nunavut's Engineers, Geologists and Geophysics Act. All plans, reports or similar documents prepared by an Engineer, Geologist or Geophysicist shall bear the NAPEG stamp or seal.

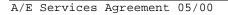
19.1.2 Architects must furnish proof of professional standing in a Canadian Provincial organization.

#### GC20 OTHER CONDITIONS OF SERVICES

#### GOVERNMENT OF NUNAVUT RESPONSIBILITIES

#### GN1 GN'S RESPONSIBILITIES

- 1.1 The GN shall provide the A/E with the Project Requirements.
- 1.2 The GN shall provide promptly written decisions, instructions, acceptances and other relevant information required by the A/E to enable the A/E to perform the services as scheduled.
- 1.3 If tenders are to be called, the GN shall arrange for such tenders, assemble and issue the tender documents, receive bids and award the Construction Contract.
- 1.4 The following duties and responsibilities of the GN to the A/E are added to this Agreement as noted herein: None (Initial any additions): N/A



#### ARCHITECT/ENGINEER SERVICES

#### AE1 BASIC SERVICES

The A/E's Basic Services consist of the six phases described in Paragraphs 1.1 through 1.6 and includes any other services included in GC20 which are designated as part of Basic Services.

#### 1.1 SCHEMATIC DESIGN PHASE

- 1.1.1 The A/E shall study the Project Requirements furnished by the GN to ascertain the requirements of the project and shall review the understanding of such requirements with the GN. The A/E shall advise the GN of the need for any further information and data including surveys, borings, soundings, and soil reports.
- 1.1.2 The A/E shall provide a preliminary evaluation of the project and a Class C cost estimate. The A/E shall also furnish a proposed project schedule in a format acceptable to the GN as noted in GC 2.2.
- 1.1.3 Based on the mutually agreed upon program and budget, the A/E shall review with the GN, alternative approaches to design and construction of the project.
- 1.1.4 The A/E shall prepare, for approval by the GN, schematic/preliminary design documents consisting of drawings and other documents appropriate to the size of the project illustrating the scale and relationship of project components.
- 1.1.5 The A/E shall participate in a review of the schematic design documents and the Class C cost estimates with the GN Written approval of the schematic design and estimates must be obtained from the GN prior to commencement of the design development phase.

#### 1.2 DESIGN DEVELOPMENT PHASE

1.2.1 Based on the approved schematic design documents and the approved budget, the A/E shall prepare, for approval by the GN, design development documents consisting of drawings, outline specifications and other documents appropriate to the size of the project to fix and describe the size and character

#### SECTION E A/E SERVICES

of the entire project as to architectural, structural, mechanical, and electrical systems, materials, and such other elements as may be appropriate.

- 1.2.2 The A/E shall assist the GN in obtaining preliminary approvals from authorities having jurisdiction, (such as the Safety Division, Territorial Fire Marshal, Health and Welfare Canada and Municipal Governments) as required.
- 1.2.3 The A/E shall prepare a Class B cost estimate.
- 1.2.4 The A/E shall participate in a review of the design development documents and Class B cost estimate with the GN. Written approval of the design must be obtained from the GN prior to commencement of the contract documents phase.

#### 1.3 CONSTRUCTION DOCUMENT PHASE

- 1.3.1 Based on the approved design development documents, the A/E shall prepare construction contract documents consisting of drawings and specifications setting forth in detail the requirements for construction of the project.
- 1.3.2 The A/E shall participate, when requested by the GN, in reviews with the GN when the plans and specifications are 50%, 75% and 100% complete. If requested by the GN, written approvals shall be obtained from the GN at each review stage prior to commencing further work.
- 1.3.3 The A/E shall revise the cost estimate to reflect changes in the design, the tender date or market conditions. A Class A cost estimate will be submitted at the 100% review.
- 1.3.4 The A/E shall assist in obtaining final approvals from authorities having jurisdiction over the project as noted in the design development phase.

#### 1.4 BIDDING OR NEGOTIATION PHASE

- 1.4.1 The A/E shall assist the GN in obtaining bids or proposals.
- 1.4.2 The A/E shall review any tenders or proposals that

are submitted to verify their completeness and the A/E shall then make a recommendation for the award of a contract.

# 1.5 CONSTRUCTION PHASE - ADMINISTRATION OF THE CONSTRUCTION CONTRACT

- 1.5.1 Unless otherwise provided in this Agreement, the A/E shall provide administration of the Construction Contract as set forth below.
- 1.5.2 The A/E shall conduct inspections at intervals appropriate to the stage of construction that they consider necessary to enable them to determine if the Work is proceeding in general accordance with the Construction Contract Documents. However, the A/E shall not be required to make exhaustive or continuous on-site inspections to check the quality work, unless or quantity of the otherwise stipulated in this Agreement. On the basis of such on-site observations, the A/E shall keep the GN informed of the progress and quality of the work, and shall endeavor to guard the GN against defects and deficiencies in the work of the Contractor.
- 1.5.3 The A/E shall not have control or charge of and shall not be responsible for construction means, methods, techniques, sequences, or procedures or for safety precautions and programs in connection with the Work, nor will they be responsible for the acts or omissions of the Contractor, Subcontractors, or any other persons performing any of the Work.
- 1.5.4 The A/E shall at all times have access to the Work wherever it is in preparation or progress.
- 1.5.5 The A/E shall determine the amounts owing to the Contractor based on observations at the site and on evaluation of the Contractor's application for payment, and shall issue, in a timely manner, certificates for payment in such amounts, as provided in the Construction Contract Documents.

The issuance of a certificate for payment shall constitute a representation by the A/E to the GN based on the A/E's observations at the site as provided in Subparagraph 1.5.2 and on the data comprising the Contractor's application for payment, that the Work has progressed to the point indicated; that, to the best of the A/E's knowledge,

#### SECTION E A/E SERVICES

information, and belief, the quality of the Work is in accordance with the Construction Contract Documents and that the Contractor is entitled to

#### CONSTRUCTION PHASE - ADMINISTRATION OF THE CONSTRUCTION CONTRACT (Continued)

1.5.6 payment in the amount certified. Such certification
is subject to continuing evaluation of the Work as
it progresses for general conformance with the
Construction Contract Documents, to the results of
any subsequent tests

required by or performed under the Construction Contract Documents, to minor deviations from the Construction Contract Documents correctable prior to completion, and to any specific qualifications stated in the certificate for payment.

- 1.5.7 The A/E shall render interpretations necessary for the proper execution or progress of the Work with reasonable promptness on the written request of the and shall render written decisions within a GN reasonable time, on all claims, disputes, and other in question between the GNand matters the Contractor relating to the execution or progress of the Work or the interpretation of the Construction Contract Documents, when so requested by the GN.
- 1.5.8 Interpretation and decisions of the A/E shall be consistent with the intent of and reasonably inferable from the Construction Contract Documents and shall be in written or graphic form.
- 1.5.9 The A/E shall notify the GN of all work which does not conform to the Construction Contract Documents, and the A/E shall make a recommendation as to whether or not said work should be rejected. Whenever, in the A/E's opinion, it is necessary or advisable for the implementation of the intent of the Construction Contract, the A/E will request the GN for special inspection or testing of the work, whether or not such work be then fabricated, installed, or completed.
- 1.5.10 The A/E shall review or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data, and Samples for

#### SECTION E A/E SERVICES

conformance with the design concept of the Work and with the requirements and intent of the Construction Contract Documents. Such action shall be taken with reasonable promptness.

- 1.5.11 The A/E shall prepare Change Orders and other project documentation required for the GN's review and approval or execution in accordance with the Construction Contract Documents.
- 1.5.12 The A/E shall supply all engineering equipment normally associated with work of this nature limited including but not to slump cones, thermometers, transits, levels, chains, tapes, rods range poles. Specialized equipment may be and purchased or leased by the A/E on a reimburseable basis; however, prior approval of the GN will be required and purchased equipment will become the property of the GN at the conclusion of the Work.
- 1.5.13 The A/E shall coordinate project meetings with the Contractor and their Subcontractors when necessary and the A/E shall attend all such meetings, unless otherwise advised, and report the results of each to the GN with copies of the minutes of each meeting.
- 1.5.14 In the absence of other directions from the GN, the A/E shall submit monthly reports on the progress of the Work.
- 1.5.15 The A/E shall prepare deficiency lists and advise the GN of work to be done in order to complete the project, and prepare an Interim Certificate of Completion in accordance with the provisions of the Construction Contract. The A/E shall carry out further inspections necessary to ensure that all deficiencies are rectified and prepare the Final Certificate of Completion for approval by the GN.

The A/E shall take steps towards ensuring that all operating manuals, warranties, guarantees and instructions are provided to the GN as specified in the Construction Contract Documents.

#### 1.6 POST CONSTRUCTION PHASE

The A/E will assess any reported defects or deficiencies arising during the one-year warranty period as specified in the Construction Contract and when requested the A/E shall inspect the work with the GN prior to the expiry of that period. This trip, if required, will be paid for as an additional service. The A/E shall issue on behalf of the GN the necessary instructions to the Contractor if work is required to correct such defects or deficiencies.

#### AE2 CONSTRUCTION COST ESTIMATES

- 2.1 If at any time the A/E considers their estimates indicate costs will exceed the project budget they will immediately advise the GN. If in the opinion of the GN the excess is due to design, costs factors or matters under the control or reasonably foreseeable by the A/E, the GN may require the A/E at their expense and at no additional cost to the GN, do everything by way of revision of design to bring the cost estimate within the project budget.
- 2.2 If the lowest tender for the project exceeds the latest approved estimate of construction as set out in paragraph 1.3.3 by more than 10%, the A/E at their own expense and at no additional cost to the GN shall, if required by the GN, do everything necessary (including redesign) to bring the cost of the tendered work within the limits stipulated.
- 2.3 If the bidding or negotiation phase has not commenced within three months after the A/E submits the Construction Contract Documents to the GN, any estimate of Construction Cost may be adjusted to reflect any change in the general level of prices in the construction industry between the date of submission of the Construction Contract Documents to the GN and the date on which the bids are sought. The cost to adjust such estimate shall be considered an additional service.

#### END OF A/E SERVICES

#### AS1 ADDITIONAL SERVICES

The following Services are not included in Basic Services unless so identified elsewhere in this Agreement. They shall be provided <u>only if authorized or confirmed in writing by</u> <u>the GN prior to any work being done</u>. They shall be paid for by the GN as provided in this Agreement, in addition to the compensation for Basic Services.

- 1.1 If the GN requests that continuous representation at the site is required, the A/E shall provide one or more project representatives to assist the A/E in carrying out such responsibilities. Such project representatives shall be selected, employed and directed by the A/E as approved by the GN. The duties, responsibilities and limitations of authority of such project representatives shall be as mutually agreed between the GN and the A/E.
- 1.2 Providing consultation concerning replacement of any work damaged by fire or other similar cause during construction, and furnishing services as may be required in connection with the replacement of such work.
- 1.3 Providing services made necessary by the default of the Contractor or by minor defects or deficiencies in the Work of the Contractor.
- 1.4 Preparing a set of reproducible record drawings showing changes in the work made during construction based on marked up prints, drawings, and other data furnished by the Contractor to the A/E. Drawings to be labelled "As-Built", dated and signed by the A/E.
- 1.5 Preparing operation and maintenance manuals, and/or training personnel for operation and maintenance.
- 1.6 Providing services after expiry of the warranty period.
- 1.7 Providing translation to a language other than the English language.
- 1.8 When requested by the GN, providing a perspective presentation drawing or model for the use of the GN.
- 1.9 Preparing contract change orders to the Construction Contract which do not get implemented.

- 1.10 Providing calculations which establish the optimum insulation values, life-cycle costs and pay-back periods for energy related systems and components.
- 1.11 Providing pre-design services such as surveys and soil investigation analysis.
- 1.12 Providing any other services not otherwise included in this Agreement as herein noted: **None**



END OF ADDITIONAL SERVICES