ELLESMERE ISLAND COMMERCIAL SUPPORT CONTRACT STATEMENT OF WORK

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OPERATIONS

1 DND Context

1.1. Context

The Contractor must provide Site Support Services as well as Programme Management and Administration Support for the maintenance and operations of the Canadian Forces Station (CFS) Alert, Nunavut. On Station, the Department of National Defence (DND) conducts its own operations and activities, and supports other groups such as Environment Canada, various Other Government Departments (OGDs), and guests of Canada who are co-located and conducting work in the Canadian Arctic. It is anticipated that there may also be a requirement for support to other Canadian Forces Operations and infrastructure across Ellesmere Island. Unless specifically included in this document however, any additional requirements will be assigned through future Task Authorizations, or contract amendments.

1.1.1. Description of Existing Conditions

1.1.1.1. CFS Alert History and Background

CFS Alert is a military station located in Nunavut on the North-Eastern tip of Ellesmere Island, the northern most island of the Canadian Arctic Archipelago. The region also includes Axel Heiberg Island and vicinity. The station is approximately 817 km from the North Pole, and the nearest settlement is the Inuit community of Grise Fiord, about 725 km to the south.

CFS Alert began as a Joint Canadian Forces experimental wireless station and Environment Canada Weather station in 1956 and has operated as a permanently occupied station to this day. At its zenith, the station was operated and supported by 300 DND persons providing signals monitoring and interpretation (SIGINT) capability for Canada on a permanent basis. In the mid 1990's however, the Canadian Forces Supplementary Radio System (CFSRS) Remoting Project was initiated with a goal of turning the sites at Masset, Gander, Alert and Leitrim into Remote Collection Facilities and when the project was completed in 1998, there were only a few remaining SIGINT technicians required at CFS Alert to maintain the signals monitoring equipment. Virtually all Station infrastructures remained yielding significant surplus capacity. A decade later, a commercial support contract approach was initiated (circa 2009) to reduce the uniformed presence on Station to a manageable minimum. This integrated approach (DND led with alternate service delivery (ASD) support) now meets the needs of National Defence and OGDs utilizing the Station, while maintaining a sovereign uniformed presence in the Canadian Arctic.

In early 2009, the ownership of CFS Alert was transferred to the Royal Canadian Air Force from CFIOG, and the Station began a new phase of its existence as a more versatile Federal Arctic asset with a broader mission concept. The core task of collecting SIGINT data is still maintained and continues to exert a significant influence on the activities of the Station, but the surplus capacity of the facility is increasingly dedicated to supporting Arctic Science and other authorized tasks in support of Canadian Arctic sovereignty. Military regional operations and Search and Rescue (SAR) tasks are conducted out of the Station as required, but National and International science projects, sponsored largely by OGDs, are playing an increasing role in the life of the Station.

The CFS Alert Station is composed currently of approximately 90 buildings, with some 19 major structures in the core complex. These were typically built between 1960 and 1998, and total approximately 22,500 m^2 (242 000 ft^2) of facilities. The collective facilities provide all the necessary capability to live and work in the Arctic environment on a permanent basis. There is a 5500 ft gravel runway, several miles of roads, a quarry operation, landfills, fuel farms, scientific labs, and antenna farms in the local area.

CFS Alert is currently part of 8 Wing Trenton, ON and all command and control and logistical support is provided through that Wing. The Alert Management Office (AMO) at 8 Wing is the primary coordination agency to support Station activities over the medium term, and most weekly sustainment flights depart and return to that location. Seasonal support operations (Op BOXTOP) are coordinated from the AMO, but are executed as a general Air Force operation with Air Force resources.

Even as the role of the Station expands in support of Canadian sovereignty, CFS Alert remains a closed military facility not open to general public access or use.

1.2. Work to Be Performed

1.2.1. CFS Alert Purpose

The role for CFS Alert is: "To maintain a sovereign Canadian Arctic outpost, in support of all assigned government tasks":

1. Collection and re-transmission of SIGINT data;
2. Uphold Canadian Sovereignty;
3. Support an Environment Canada weather station and Arctic science programme; and
4. Support operations by all authorized users (military and civilian).

CFS Alert is a station of the Royal Canadian Air Force, presided over by a Commanding Officer. It is assigned to, and commanded by, the Commander of 8 Wing Trenton. The military communications activities on Station are conducted under the operational command of CFIOG. Environment and Climate Change Canada activities are conducted under its own authority and coordinated, as required, with DND. Science activities are authorized by DND, and coordinated as required through various OGDs. Regional operations, and all activities involving the Station, are authorized exclusively by the military chain of command.

DND has classified specific services at CFS Alert as "Core" which require that they be delivered by DND military/civilian employees. Those services which are considered "Core" and have been excluded from the SOW as follows:

1. Command and Control
2. Aerospace Technology and Information System (ATIS) Technicians
3. Medical
4. Core Administration and Finance
5. Material Supply
6. Traffic Technician (Airlift)
7. Fire Fighter Services (with the exception of Fire Brigade members)
8. Physical Site Security

1.2.2. Organizational Structure.

CFS Alert employs approximately 28 DND and 25 FM Contractors at any given time with the possibility of 10 sub-Contractors at any given time. During the summer period, DND, Other Government Departments (OGD) and sub-Contractors can account for another 50 to 100 people. An organizational chart for CFS Alert is displayed at the end of this section.

1.3. Reports and Deliverables

1.3.1. Commitments to the Environment

All work is to be performed without affecting the Government's commitments to the environment and the Inuit communities. All due precautions to safeguard wildlife, the environment, and the health and interests of all people in the region will be maintained by both DND and the Contractor.

1.3.2. Inuit and Northern Development Benefits

The Contractor must demonstrate commitment to Inuit Benefits and Northern Development programme inclusive to the contract. A Plan will be developed and submitted for review and approval by the Contracting Authority (CA), and the Contractor must incorporate the CA's comments into the final plan and resubmit it for acceptance. A report detailing plan measurables is to be updated and submitted to the CA for review annually.

1.3.3. Inuit and Northern Development Report

The Contractor must submit an Inuit Benefits Report to the CA in accordance with the terms of the Contract. The Plan and Report must be based on the Nunavut Land Claim Agreement (NLCA) articles 24 with reported measures of progress in CA indicated areas.

Specific areas of interest as:

1. Increased business opportunities,
2. Improved competitive capacity for government contracts,
3. Employment at representative levels,
4. Increased access to upgrading, skills, apprenticeships and On-Job-Training, and
5. Opportunities for Inuit to create, operate and Manage Northern Businesses.

2 Contractor Considerations

2.1. Context

Established in Sept 1958 the station has had many upgrades and changes. Specifically, in 1976 there were buildings added to augment the modern station demands and operations. The age of some buildings and their condition due to Arctic conditions adds challenge to facilities management which is further described in the Infrastructure section. Some Historical specifics are listed below.

2.1.1. Description of Existing Conditions

As CFS Alert is a DND establishment all personnel, including visitors and contractors, are subject to the National Defence Act (NDA). This may include search of personnel, personal clothing and baggage, and equipment when entering and leaving CFS Alert.

2.2. Work to be Performed

2.2.1. SOW Interpretation

In case of disputes regarding interpretation of any part of this SOW, or any of its referenced documents, the interpretation of the Project Authority (PA) in consultation with PSPC and other DND authorities, as may be required, must prevail.

Wherever plans and procedural documents are required by the Contract, the Contractor must work to the DND approved version of these documents. It will be the Contractor's responsibility to align any work with such requirements if such work has commenced before approval of the applicable plans and/or procedures and is affected by them.

2.2.2. Contractor Responsibility for Service Delivery

The Contractor is responsible for delivering the services and for acting independently and making decisions required to achieve acceptable performance. Contractor written acceptance is required from the PA for deliverables and responding to PA requests. The Contractor is accountable to the PA and TA for the delivery of services, and is required to report and be answerable to the PA for the performance and consequences of the services provided.

The Contractor will collaborate with third parties engaged by Canada to monitor the quality of Work performed by the Contractor and, as required, to support oversight of activities undertaken by third parties engaged by Canada to perform construction work in buildings.

The Contractor is responsible for its Service Delivery Regime (SDR), including the programmes, quality management and other systems, processes, procedures and performance management capabilities needed to fulfil the Contract requirements.

2.2.3. Have a Project Delivery Regime

Have a PDR that meets the needs of the services and requirements set out in the SOW, with processes and procedures suited to each Project Category as set out in the Provide Project Delivery Services section. Ensure that the PDR is consistent with the most current versions of the Project Management Institute's (PMI's) standards and associated guidelines as recognized by the American National Standards Institute (ANSI), including:

1. the Standard for Program Management – ANSI/PMI 08-002;
2. the Standard for Portfolio Management – ANSI/PMI 08-003;
3. A Guide to the Project Management Body of Knowledge (PMBOK Guide) – ANSI/PMI 99-001; and
4. the Construction Extension to the PMBOK Guide

Provide for application of the PDR to each project, in a manner suited to:

1. DND's project management policy framework and systems; and
2. the complexity and level of risk of each project.

2.2.4. Contractor and NPP Resources

CFS Alert is a Canadian Military establishment and provides Non-Public Property (NPP) and Non-Public Fund (NPF) resources in the form of Mess, Station and Recreation to its military members. Contractors and visitors are encouraged to pay mess dues to utilize NPP and NPF as Associate Mess Members only. The CFS Alert boat is not an NPP asset and cannot be used for recreation, or by the Contractor.

2.2.5. Contractor Site Personnel

The Contractor must establish a team of Contractor Site Personnel to conduct all the work during both low and peak activity periods at CFS Alert. The Contractor Site Personnel must be comprised of key personnel with support of personnel in sufficient numbers to ensure that all work is conducted in a timely and professional manner regardless of seasons, or accommodation levels.

2.2.6. Critical Staff at all Times

The Contractor must have on-site sufficient station personnel to perform and fulfil the work identified in the SOW, and these individuals must not be assigned to (or be responsible for) other duties. During the peak activity period, the Contractor must ensure the appropriate level of surge staffing is provided in all applicable categories in order to accommodate the surge in the Station population and activities. Any requests for Contractor personnel to visit the Station for purposes other than filling Contractor functions, or approved work task, must be submitted to the PA for consideration.

2.2.6.1. Non-Critical Staff.

In addition to the critical staff positions the Contractor must have sufficient staff in all categories to perform all work required in this SOW.

2.2.7. Personnel Scheduling.

The Contractor must ensure the appropriate level of staffing in all applicable categories to accommodate any surge in the Station population and activities. The Contractor must annually submit an updated staffing plan in conjunction with the annual Engineering Works Plan (EWP) to the PA for acceptance providing details on all forecasted Contractor staffing levels to the coming year. The PA will review to co-ordinate the forecasted Station activities and resolve possible conflicts between Contractor staffing levels and DND, OGD and authorized personnel performing work at the Station.

A staffing plan review meeting held at the AMO will result in an approved Contractor staffing level forecast and visitor schedule with PA final approval. Settlement of any impact to the Contractor's proposed staffing and resource levels for SOW work required will be resolved by the PA. The PA will have final approval on all Staffing issues.

2.2.8. Contractor Programme Management and Administration (CPMA)

Canada requires the Contractor to provide CPMA activities in support of this requirement as defined herein and provide support and assistance to the Contractor Site Personnel during its conduct of work at CFS Alert.

2.2.8.1. Contractor Programme Management and Administration Office (CPMAO)

Canada requires the Contractor to have a CPMAO represented by a Contractor Programme Manager (CPM) who will be the Contractor's authorized representative and be responsible for:

1. administration,
2. planning,
3. coordinating,
4. managing, and
5. prioritizing

of the contract and all deliverables. The CPM will also interface with the various Government Authorities, AMO and any other required programme contact points.

The CPM will be responsible for overall CPMA activities to ensure that all Contractor obligations both on and off site are conducted in a professional manner and meet the PA's priorities and requirements of the Statement of Work. It will liaise with

the AMO and the Public Services and Procurement Canada (PSPC) CA.

Canada requires that the CPM must have a Level II (Secret) Security Level Classification and before visiting the CFS Alert Site the CPM must also ensure the basic mandatory requirements.

2.2.9. DND Airlift

The primary aircraft for most DND airlift delivery to CFS Alert are the CC130 and CC177 (as available) aircrafts. Therefore, the quantity and type of material/equipment supplied to CFS Alert is dependent on the configuration of aircraft and space available. Personnel are transported to and from CFS Alert stopping at United States Air Force Base (USAFB) Thule, Greenland overnight on each leg of the flight. However, depending on weather, or aircraft serviceability the flight could spend additional time in USAFB Thule, or could divert to other stopover locations.

2.2.10. Canada Customs

Aircraft routed through Thule, Greenland will be required to clear Canada Customs through the Station Traffic Tech in his capacity as Acting Customs and Excise Enforcement Officer (ACEEO), and signed customs declarations will be returned to Thule for review. All personnel are subject to applicable duties on purchases made outside Canada as prescribed by law. There is no personal alcohol permitted to be brought into CFS Alert.

The Contractor Personnel traveling to CFS Alert are urged to contact Canada Border Services Agency (CBSA) before their tour to have any items such as cameras, watches, radios, and other items, listed on the Y38 Identification of Articles Export form to facilitate clearance through a Canada Customs port. All Contractor Personnel returning from CFS Alert must pass through customs at the arrival terminal, normally CFB Trenton.

2.2.11. Medical Care for Contractor Site Personnel

There are no medical doctors or dental care at CFS Alert, and only limited medical facilities. If a medevac is required the cost will be borne by the Contractor (who must ensure adequate insurance coverage). The CF will provide medical care to civilians in an emergency situation to alleviate pain and suffering, and to preserve life allowing Contractor arrangements for patient evacuation to a civilian medical facility. The decision that a patient requires an emergency medevac will be made by the CF Medical provider at the Station with arrangements coordinated between the Contractor and the CF allowing expeditious patient evacuation. The Contractor will review, but cannot approve the medevac procedure. The provision of non-emergency care by the CF will be governed by in the letter, “Provision of non-emergency care to civilians at Canadian Forces Station Alert” as signed by the Minister of National Defence (15 Feb 2011).

2.2.11.1. Refuelling of Civilian Aircraft

Only under exceptional circumstances (i.e., medical emergency), and when authorized by the AMO, can CFS Alert refuel civilian aircraft from its fuel supply. The Contractor will reimburse DND on a cost recovery basis for all refuelling costs related to use CFS Alert resources. The contractor requires sufficient insurance to protect their risk of a civilian authorized landing at CFS Alert.

2.2.12. Access to Secure Areas/Classified Material

All Contractor Site Personnel who are required to work in an operationally sensitive location must receive prior approval from the CO before entering a designated secure area at CFS alert, and must be escorted at all times, or carry an appropriate and valid security clearance for the area in question. Contractors working in the SIGINT Operations area will require a Secret clearance and be under escort. Identified contractors are an electrician, refrigeration/mechanical tech and a cleaner.

On all DND establishments Contractor Personnel are required to immediately identify themselves when CAF member and may be subject to search upon arrival and departure. All Contractor Personnel must comply with any direction given by a DND.

2.2.13. Kitchen Systems

The Contractor performing gas work, fixture installation and pipework that forms any part of the Kitchen System must be tested and certified at the legislated intervals by the appropriate safety authority for ‘Nunavut. The Contractor must, unless otherwise instructed by DND, make all necessary arrangements and facilitate the testing and inspection by the safety authority. The

Contractor's costs for facilitating tests and inspections (including re-tests and re-inspections) must be included in the overall cost for this service at the Phase-In assessment. Refer to Section 13 of the SOW for additional requirements regarding personnel qualifications, applicable references and facilities maintenance service standards.

Any persons undertaking design work directed by DND on Kitchen Systems or components must be a member of one of the following professional bodies:

1. Food Service Consultants International Canada (FSCI Canada)
2. National Kitchen and Bath Professionals (NBKA)

2.2.14. CFS Alert Hours of Operation

CFS Alert is operational on a 24/7 basis with the DND core hours of operation for administrative and maintenance work as 0800 to 1700hrs, Monday to Friday. The Contractor must establish hours of work that meet the requirements of the SOW and be in accordance with the applicable Labour references. The Contractor must be available at all times in order to respond to emergencies and to accommodate operations that occur outside the Contractor's core hours of operation.

2.2.15. CFS Alert Emergency Response

The Contractor must ensure that in the case of:

1. disaster,
2. breakdown, or
3. contamination

The Contractor must be available at all times in order to respond to emergencies and to accommodate operations.

Unless otherwise stated in this SOW the general response times for all services must be as follows:

1. General Demand Calls – non urgent: 48hr response, 7-day rectification
2. General Demand Calls – Urgent: 24hr response, 3-day rectification
3. Emergency Demand Calls: 2hr response, 24hr rectification

The Contractor must report the details of the emergency within 24 hours after the fact in an Incident Report, which must be kept in record and submitted to the PA at the end of the contract.

2.2.16. Phase-In / Phase-Out

The Contractor must make all the arrangements to ensure that the Phase-In period is conducted in an orderly manner, and does not disrupt outgoing Contractor Phase-Out activities (or DND personnel conducting the work) until handover completion. The Phase-in period for each trade must be detailed, and recorded by the incoming Contractor.

If required, the Contractor will arrange for a charter aircraft for all other required Contractor Site Personnel to arrive at CFS Alert with sufficient time before Handover to ensure site familiarization and handover completion.

During the Phase-In period, the Contractor must ensure that all reasonable efforts are made to familiarize its staff with the existing Site, Real Property Assets, CO Alert, applicable existing procedures and all documentation.

2.3. Reports and Deliverables

2.3.1. Worker Compensation Coverage

The Contractor must provide and maintain worker's compensation coverage for all employees for the duration of the contract. Before the employee starts work, provide to the PA a letter [certificate] of clearance from the Workers' Compensation Board indicating that the Contractor's account is in good standing.

2.3.2. Hazardous Occurrence Reporting

The Contractor must immediately notify the CO, and provide information as per Deliverables, section 5.2.6.1. and Section 13.

2.3.3. Contractor Site Personnel Protective Equipment (PPE) and Clothing

The CPMAO will ensure that Contractor Site Personnel are provided with all Personal Protective Equipment (with the exception of firefighting protection gear) worn to minimize and mitigate exposure to workplace hazards and risks which pose a threat to workers' safety and quality of life. The Contractor will:

1. Procure,
2. Furnish and ensure fitting to their Personnel,
3. Train to correctly
    a. wear, and
    b. maintain
4. Account and track

This applies to all appropriate personnel protective equipment (PPE) in accordance with the Contractor Work Place Health and Safety Plan. Contractor Personnel working at CFS Alert, and in specific locations such as:

1. Waste Treatment Plant (WTP),
2. Power Plant Operators,
3. Waste Management,
4. Incinerator Operators,
5. Carpenters,
6. Kitchen,
7. Welders, and
8. For all areas otherwise identified in this SOW IAW legislation.

The contractor employee must be supplied with PPE before arriving at CFS Alert.

2.3.3.1. Foods Service Uniforms and Protective Personal Equipment

The Contractor must ensure that Personnel employed in Food Service facilities wear uniforms of suitable type and design for food service use. Employees must wear aprons, caps and hair nets, where required. The Contractor must provide uniforms, sanitary headwear, gloves and PPE for all food services personnel.

2.3.3.2. Contractor Staff Uniforms

The Contractor must supply all employees' uniforms suitable for each discipline. Employees are expected to be clean and neat in each service area. The Contractor will be responsible for cleaning uniforms using the appropriate site laundry facilities.

2.3.4. Contractor Furnished Material and Equipment

The Contractor is responsible to order and obtain any supplies, material or equipment required to perform contracted services which are NOT provided as part of the Government Furnishings.

3 Contractor Personnel Requirements

3.1. Context

All Contractor personnel travelling to CFS Alert must be cognizant of Canadian, DND and Foreign travel requirements. Correct documentation, support and equipment must be adhered to.

The Contractor must establish a team of Contractor Site Personnel mandatory to perform all work during all CFS Alert activity periods. The Contractor Site Personnel will be comprised of critical personnel supported by non-critical personnel in sufficient numbers ensuring all work activities are conducted in a timely and professional manner.

The following establishes the Contractor Site Personnel Basic Mandatory Requirements and the individual demonstrated work experience, training, qualifications and certifications by job category. Refer to Section 13 of the SOW for additional resource qualification requirements.

3.2. Work to Be Performed

3.2.1. Contractor Personnel Travel to CFS Alert

Contractor Personnel traveling to CFS Alert must be fully briefed and are to be cognizant of all travel requirements as indicated in the Joining Instructions. An “in clearance” process will be completed for each arrival to CFS Alert.

3.2.2. Access to CFS Alert

All access to CFS Alert is strictly controlled by DND and all routine travel to and from CFS Alert will normally be conducted on DND aircraft, or DND chartered aircraft, and dispatched from CFB Trenton, Ontario. There are typically 24 seats available for all users (DND, OGD, Contractor) on a weekly basis and the Contractor can reasonably expect to have access to 30% of these seats to move personnel, subject to DND operational requirements. If the Contractor chooses to use a private, or charter aircraft, all special arrangements will have to be authorized, in advance (at least 3 weeks) through the PA. All costs for refuelling and emergency repairs, or maintenance for Contractor aircraft will be chargeable to the Contractor on a cost recovery basis at the most current applicable rate published.

3.2.3. DND Travel Approval

The Contractor must submit the necessary particulars of all their Personnel travelling to CFS Alert at minimum 28 calendar days before departure to ensure the proper staffing is completed.

All Contractor Personnel will be provided transport between CFS Alert and CFB Trenton Ontario, unless otherwise stated. Transportation provided will be based on the agreed standard Contractor’s scheduled rotation, per position, and will be provided on a space availability basis, as determined by DND.

The Contractor must ensure that all Contractor Personnel authorized to travel to CFS Alert are aware of and, in conformance with all restrictions for baggage articles, quantity and weight as determined by DND joining instructions and the Contractor Clearance Advisory Message. Note that DND does NOT allow any cannabis product of any kind:

1. to travel on DND aircraft,
2. to be transported internationally, or
3. at CFS Alert

The Contractor Personnel may be subject to a non-scheduled operational stop when traveling to and from CFS Alert and CFB Trenton as flights may be diverted, or may have to stay overnight (i.e. aircraft problems). All personnel must carry a personal “overnight” kit and be flexible for an extended stop over.

The Contractor Personnel may be subject to flight delays to and from CFS Alert and CFB Trenton, as flights may not leave on schedule. It is expected that up to 12 x 1-day delays may occur each Contract Year and should the delays exceed 6 days then the Contractor will be reimbursed as per the terms and conditions of the Contract.

3.2.4. Suitable Clothing

The Contractor must ensure that Contractor Site Personnel have in their possession suitable clothing essential for operational activities in CFS Alert. The clothing must be, as a minimum, equivalent to the DND Standard Arctic Environment Clothing List (Mil B25). This clothing requirement consists of:

1. Extreme Cold Weather Parka and Pants
2. Wind Pants (Ski Pants or equivalent)
3. Extreme Cold Weather Winter Boots (Mukluks)
4. Extreme Cold Weather Gloves or Arctic Mitts (shell and inserts)
5. 2 x pair Heavy Arctic Socks
6. Balaclava
7. Toque and Scarf
8. Duffle Bag

Contractor Site Personnel will not be permitted on a DND aircraft without this clothing in their possession.

3.2.5. Contractor Monitoring of Site Personnel

The Contractor must have a monitoring system and commit to assessing the reliability of individuals being considered for employment, as well as the continuous assessment/evaluation assessing their character, trustworthiness and fitness for continued employment of personnel in a remote and isolated area.

3.2.6. Contractor Selection of Site Personnel

The Contractor must ensure that all personnel selected for employment at CSF Alert have been thoroughly screened and assessed as being physically, medically, dentally, and mentally fit before traveling to CFS Alert as the environment can be physically and mentally demanding increasing the potential for instability.

3.2.6.1. Contractor Site Personnel Access to Medical Assistance/Medicine

A written physician's assessment must be obtained, and annually currency maintained, for all site personnel indicating the suitability to work in the Alert environment. As a minimum, the physician's assessment must incorporate the DND criteria provided plus any other criteria as considered necessary in the professional opinion of the physician.

The Contractor must screen out all Contractor Personnel with known and chronic conditions that are not completely stable, or with any conditions that could lead to an unpredictable crisis during the performance of their duties under the mission-specific environmental conditions present in CFS Alert. This includes anyone requiring routine physician follow-up (and especially that of a specialist physician), and anyone requiring regular laboratory tests for disease as access to specialist and medical ancillary services are not possible at CFS Alert.

Contractor Personnel must ensure they have a sufficient supply of all prescription medications for the duration of their stay in CFS Alert as re-supply and replacement of medical equipment and medication will be very limited, serious contractor and DND scrutiny will be applied to anyone on compulsory medication.

As part of the "in clearance":

1. The CFS Alert Physician's Assistant (starlight) will be provided with an annual, current doctor's certificate confirming medical, dental, physical and mental fitness,
2. A copy of the contractor employee's medical records with the CSM will be checked and updated for annually currency and accuracy (required for medical emergencies), and
3. Completion of the PA medical questionnaire provided by DND to include any physical or pharmaceutical conditions.

3.2.6.2. Contractor Site or Visiting Personnel Medicals Records

The Contractor will keep current personal medical records on all Contractor Personnel. These medical records will include a doctor's certificate providing evidence of required annual medical check-up, attesting the Contractor employees are medically fit and have no communicable diseases. The CSM Office in CFS Alert will have a duplicate of the current personnel medical

records for DND CFS Alert medical staff to respond to a required Contractor Personnel emergency situation.

3.2.6.2.1. Reimbursement for Medical Care

In the event that medical assistance is required, all Health Services provided to Contractor Personnel will be on a cost recovery basis. The Contractor will be charged for the services in accordance with the annually adjusted and published schedule, or suggested rates from the applicable federal/provincial professional regulating bodies or associations. Where no published rate is available, or where the published rate does not cover the cost incurred by the CF for the services provided, the CF will charge the Contractor what is deemed reasonable by the CF Surgeon General / Commander CF Health Services Group. Generally, the rates will be in accordance with professional association guidelines of Ontario.

3.2.6.3. Medical Certificate for Food Services Personnel

All food service personnel who have been away from their duties for medical reasons (40 days or more must have a medical examination before resumption of duty. Employees must obtain written clearance from a treating physician before returning to work after medical leave or illness due to communicable diseases. The Contractor must have a programme / policy in place where employees are encouraged to report illnesses to management, particularly those involving digestive upsets and infections.

If the Contractor has reason to suspect that an employee may have a health-related condition that could be of a health, or safety concern to others (such as a communicable disease), the Contractor will require the employee to consult a physician and provide medical certification before returning to work. If any Contractor employees are found medically unfit for performance of their duties under this Contract, the Contractor must promptly remove and replace them with medically examined and fit persons as necessary. The Contractor, when required, must provide medical certificates for each employee in the kitchens, dining halls and food handling facilities, or for personnel who come in contact with the handling of food used in the preparation of meals.

The Contractor must provide medical certificates for each employee in the:

1. kitchens,
2. dining halls,
3. food handling facilities, or
4. for personnel who come in contact with the handling of food used in the preparation of meals.

As a term of their employment, the Contractor must ensure that Food personnel at CFS Alert are subject to inspection and physical examination by medical authorities ensuring they are free from communicable disease or illness.

3.2.7. Contractor Personnel Files and Records

The Contractor will be responsible for:

1. preparing and maintaining,
2. monitoring and controlling, and
3. updating the records \

for all Contractor Personnel to ensure that:

1. demonstrated work experience,
2. training and qualifications, and
3. basic mandatory requirements

are current and accurate. All Contractor Personnel who travel to CFS Alert must meet all basic mandatory requirements and pre-conditions for travel before requesting approval for travel to CFS Alert. The Contractor is also required to produce personnel rotation plan forecasted 3 months out, updated monthly.

3.2.7.1. Lists and Information for Contractor Personnel Travel to and from CFS Alert

Contractor personnel scheduled to travel to and from CFS Alert must make available the following records for Government verification when required. These records and documents must be routinely maintained, current and available at all times:

1. Individual Name and Initial,
2. Citizenship,
3. Current security clearances meeting required classifications by position,
    a. All Contractor site personnel must have a minimum Reliability status at the enhanced level.
4. Current Passport information (i.e. number, expiry date),
5. Medical Records,
6. DND 404 Driver Permits Numbers (if applicable) and valid provincial or territorial driver's license,
7. Records of specialized training,
    a. Cardiopulmonary Resuscitation (CPR) Training Certification,
    b. Fire Extinguisher Training, and
    c. Workplace Hazardous Materials Information System (WHMIS) Training Certification, and
    d. Basic Spills Response training.
8. Individual Contractor Personnel records which include
    a. demonstrated work experience,
    b. training, and
    c. qualifications
9. Special qualifications, certifications or licenses
    a. HALOCARBON,
    b. journeyman's licenses,
    c. ODS certification, and
    d. current Interprovincial license for each respective trade or food service certification

Travel Documents as:

1. Photo Identification,
2. Visit Clearance Authorisation (VCA) - Personal identification in accordance with the Contractor Clearance Advisory Message in order for the AMO to arrange "In-theatre Clearance to the Thule Defence Area",
3. Valid and current Passport with expiry date 6 months beyond end of rotation date,
4. CBSA Y38 Identification of Articles Export form for accompanied equipment (tools, extra packages)
5. Medical document (as required)
    a. Current with Doctor's certificate,
    b. Physical, Dental, Mental fitness to perform work in CFS Alert attested by qualified Doctor, and
6. Personnel Protective Clothing and Equipment (details and description of Contractor Furnished items).

The PA will approve all visit and travel to CFS Alert by means of a VCA.

3.2.8. Obtaining DND Documentation

DND will assist the Contractor in obtaining any DND documents deemed necessary by the Contractor and DND to successfully accomplish the assigned tasks. Unless otherwise noted, only the most current issue, including up-to-date revisions of any publication, specification, or any other document is authorized for use. Most publications are currently available through the DND Intranet to which the Contractor will have access. If a publication or document is not available, a temporary waiver will be obtained from DND.

3.2.9. Vehicle Training and Licence

All operators of vehicles and equipment in CFS Alert will be trained, qualified and possess DND 404s driver permits. The Contractor Site Personnel required to operate vehicles at CFS Alert will process through DND for their 404s.

DND 404 training required for any Contractor employee will include:

1. CAF Safe Driving Course,
2. Safe Backing,
3. DND Air brake Course, and
4. Will be conducted at 8 Wing Trenton, or a mutually agreed authorized base.

Further, Contractor vehicle operators will provide the PA and 8 Wing Road and Vehicle Safety (RVS):

1. a recent driver abstract,
2. proof of valid Provincial Driver's License, and
3. qualification equivalent to the DND vehicle operated.

Qualifications are then provided to the PA and the Contractor Driver Examiner to update the Fleet Management System (FMS).

3.2.9.1. 404 Permit Issue

Only 8 Wing RVS will issue DND 404 permits. However, once driver qualifications are certified by the Contractor's Driver Examiner, personnel trained on DND's FMS will be able to update the initial 404 permit. The Contractor will coordinate all training with the 8 Wing RVS Training Cell.

3.2.10. Training

3.2.10.1. Emergency Response Plan (ERP) training

The Contractor will train and participate in a monthly station ERP exercise. It is expected that a combined DND and Contractor execution of the ERP in training mode will last approximately two (2) hours per execution. The Contractor must correct all errors in procedures as identified, and amend its portion of the ERP within Five (5) days of completion of exercise.

3.2.10.1.1. Post Emergency Response Plan (ERP) De-Briefings

The Contractor will participate in monthly post-ERP debriefing to compile exercise responses and coordinating action.

3.2.10.2. Fire Brigade Members

A minimum of six suitable personnel will be identified as Volunteer Fire Brigade Members. These members will be placed on 24-hour on-call rotational schedule for incidents reaction. Fire Brigade duty is to be considered a secondary duty for all identified Fire Brigade Contractor Personnel. When members are identified as "on-call", they must not consume alcoholic beverages for the duration of their duty. These members must also be exclusive of drivers and operators.

DND will provide all the fire-fighting equipment and clothing accordingly to Fire Orders pertaining to Fire Brigade members and duties. However, if personnel cannot be fitted with a standard size mask it will be the responsibility of the Contractor to provide that person a mask.

3.2.10.2.1. Fire Brigade Training

The Contractor Personnel identified as Fire Brigade members will attend training at an accredited facility to a level equivalent to National Fire Protection Association 1081 Standard for Industrial Fire Brigade Member Professional Qualifications, Chapter 6 – Advanced Exterior Industrial Fire Brigade Member, and Chapter 7 - Interior Structural Industrial Fire Brigade Member.

The Contractor will make arrangements as necessary ensuring all selected Fire Brigade members attend mandatory training sessions provided by DND Firefighters. There will be a weekly Fire Fighter training session which will last approximately two (2) hours and it is expected that there will be 1 training session per year of a week's duration.

For all required, formal Fire Brigade Training Courses not provided by DND, the cost of mandated courses charged to the Contractor will not be cost reimbursable, and is to be included in the Contractors base contract cost.

3.2.10.2.2. Respiratory Protection Equipment and Self-Contained Breathing Apparatus

All Contractor Site Personnel selected as Fire Brigade Members must be qualified on the use of Respiratory Protection Equipment and Self- Contained Breathing Apparatus.

Canada will provide Respiratory Protection Fit Testing for all Contractor Fire Brigade Members who require Respiratory Protection as part of their Fire Brigade duties, when arrival in Alert.

3.2.10.3. Controlled Goods Training

The following DLN e-learning modules must be completed by each contractor requiring access to the DWAN:

1. (ADMMAT CGGAT 301328) Controlled Goods and General Awareness Training,
2. (VCDS SA A230E SP) Security Awareness, and
3. (HRCIV IM 301746 WBT) DND/CAF Information Management.

These courses are only available on the DWAN from the DLN website, and must be completed before arrival at CFS Alert. The PA (or his designate) will be responsible for submitting a nomination on behalf of the Contractor. When completion of the e-learning modules, Contractors will provide a copy of their certificate to the PA.

3.2.10.4. Haz-Waste Testing

The Contractor must be able to identify all waste on station through their Haz-Waste technician who must be capable of operating the GFE tester. The Contractor will be responsible to ensure employee currency and qualification for tester operation. This is also a requirement for the mapping and identification of station waste drums for the 8 Wing Env O.

3.2.10.5. Contractor Site Personnel Additional Training Requirements

Unless identified in this SOW, The CPM must request approval for required training through the PA. Training is only required to confirm the initial establishment of qualifications and skills as a result of the introduction of new systems, or equipment mandated by DND. All successive training for new and follow on personnel to maintain this establishment is the Contractor's responsibility and cost.

PA approval and funding is required before Contractor training scheduling. Training cost will be reimbursable without addition of overhead, mark-up or profit. Travel and living expenses will be IAW Government travel regulations.

The Contractor will be notified by DND of new training requirements as required.

3.3. Reports and Deliverables

3.3.1. Documentation and Records

The Contractor will provide a list of personal and their rotation with appropriate:

1. Documentation (travel, personal and skill),
2. Clearances (Health and Security),
3. Clothing, and
4. Skills,

As Identified above.

3.3.2. Clothing

The Contractor will provide their employees with the correct and proper clothing for Arctic Travel and work in CFS alert as related to their work and as detailed above.

3.3.3. Safety Provisions

The Contractor must ensure that Contractor Site Personnel, before their departure to CFS Alert, are fully briefed on all Safety programmes references which the Contractor will be subject to. Contractor individuals working at CFS Alert fall under Nunavut's "Worker's Compensation Act". The Contractor is required to register with Nunavut's Workers' Safety and Compensation Commission, and pay any fees to ensure its personnel are covered under the Act.

The Contractor ensures that all Contractor Personnel while in transit to CFS Alert, or while on site at CFS Alert comply with all CFS Alert Safety provisions for protective clothing requirements, safety practices, procedures and plans.

3.3.4. Contractor Site Personnel Training / Handling of Hazardous Material and Dangerous Goods

The CPMAO must ensure that Contractor Site Personnel are properly trained to respond to any Hazardous Material emergencies in accordance with applicable regulations and the specific duties of the Personnel. The Contractor is to have on site in CFS Alert at all times 1 employee who has successfully completed the 5-day HAZWOPER course.

Training will ensure Contractor Site Personnel can properly handle Hazardous Material (including packaging and labelling) IAW with applicable standards and regulations, and ensure the workplace has material safety data sheets as per the requirements of the WHMIS. The Contractor will be required to provide assistance to DND in the loading and unloading of Hazardous Material and Dangerous Goods from aircraft and vehicles.

3.3.5. Training

The Contractor will ensure Contractor employees have been properly trained to function and perform all required contract tasks, and the Contractor will also ensure currency of training, skills and abilities of their employees before required application.

4 Contractor Site Manager (CSM)

4.1. Context

The following outlines the sections and service activity groupings which comprise the Contractor Site Services Support and apply to all Sections, where applicable:

4.1.1. Description of Existing Conditions

The Contractor must have a Qualified CSM located at all times at CFS Alert responsible for the planning, coordinating, managing and prioritizing all Contractor Site activities. This CSM must be on site 365 days / 24 hrs.

If the Contractor hires apprentices, all apprentices must be registered with the appropriate Territorial or Provincial institution

4.2. Work to Be Performed

4.2.1. Contractor Site Manager's Responsibilities

The CSM will be the Contractor's representative on site, responsible for the Management and Administration of all operational requirements and activities of Facilities and support services in CFS ALERT as specified as:

1. Managing,
    a. planning,
    b. controlling,
    c. coordinating all on-site work activities on behalf of the Contractor Programme Manager, and
    d. Auditing Contractor work
2. Attending all meetings and liaising with the CO at CFS Alert to ensure that all administrative and safety matters are addressed,
3. Organizing staff to ensure:
    a. work is prioritized to meet the CFS Alert operational needs, and
    b. that all work is conducted in a professional and timely manner meeting
        i. all standards
        ii. base operating procedures, and
        iii. guidelines,
4. Ensuring that all CFS Alert Emergency Response plans are supported,
5. Liaising with other National Defence Authorities, as required, such as the Alert Management Office and CF Health Services,
6. Ensuring that Phase-in and Phase-out requirements are well planned and conducted, and
7. Preparation and submitting all reports and data deliverables as identified.

4.2.2. DND and Contractor Site Manager Interface

The CSM will act as the official point of contact for the Contractor, with sufficient delegated technical and financial authority to respond appropriately to any contractual matters. The CSM is to routinely interface with the Commanding Officer (CO) at CFS Alert for all day-to-day operations and administrative matters ensuring all work is conducted in a professional manner, meeting Industry standards and, CFS Alert priorities. A draft Organizational Chart for CFS Alert is included for informational purposes. For all matters related to specifics of the Contract, the official Point of Contact must be the PA.

4.2.3. Weekly Meetings with the Station Commanding Officer (CO)

The CSM will attend weekly meetings with the CO to ensure that the Contractor has all the necessary and up-to- date information to identify work priorities and carry out special work assignments.

4.2.4. Visits

4.2.4.1. DND/CF Staff visits

The CSM to make arrangements as necessary and provide assistance and cooperation during DND staff visits with the purpose

of monitoring the Contactor's performance and quality of service. The CSM will be responsible for ensuring that all deficiencies or discrepancies are corrected within 30 days of notification.

4.2.4.2. Annual Regulatory Compliance Inspection

The CSM will make arrangements as necessary and provide assistance and cooperation during inspections conducted by DND, Department of Fisheries Oceans Canada (DFO), Environment Canada (EC) and other Government Departments, as authorized. The CSM will be responsible for ensuring that all deficiencies or discrepancies are corrected within 30 days of notification. There may be up to 8 visits per year.

4.2.4.3. DND/CF Staff during Annual Technical Inspections (ATI)

The CSM must prepare information on the equipment status and maintenance administration (such as safety reports) in advance of the Annual Technical Inspection **(**ATI) visits and ensure that equipment is made available to inspection team. ATI visits can be up to 3 weeks in length.

8 Wing Transportation Electrical Mechanical Engineering (TEME) Flight (Flt) ATI will normally occur when Fort Eureka is accessible (open). A follow-up report on actions, or procedures, taken to correct deficiencies will be provided to the ATI team leader within 30 days, and 8 Wing Officer Commanding TEME Flt within 60 days of ATI completion.

4.2.4.4. Very Important Person (VIP) Visits

The CSM will make access arrangements for VIP visits by various DND, DFO and EC personnel to facilities under the Contractor's utilization, and all other premises where processes and work are being conducted. There may be 8 visits per year.

4.2.4.5. Project Authority (PA) Inspections and Audits

The CSM will make arrangements providing assistance and cooperation in inspections, internal reviews and audits conducted by the PA. This will include, but is not limited to:

1. ensuring that records are made available,
2. answering official enquiries, and
3. providing escorts when required.

The PA reserves the right to inspect periodically the Contractor's records throughout the term of the Contract. The CSM must provide and assist in all audits by the PA, and / or PA representative. Audits can be conducted on a quarterly and bi-annual basis.

4.2.5. Reference Library

The Contractor will have access to a reference library held for each section, and DND publications will be up-dated as required. The CSM is to ensure that the Contractor maintains a current index and ensure that amendments to manuals are incorporated into all copies of all official publications and technical data concerning the equipment in use as directed in the "Reference" section**.**

4.2.6. Access to Facilities under the Contractor's Utilization

The CSM, when required by the PA, will make arrangements for access within 1 hour to facilities under the Contractor's utilization and all other premises where processes and work are being conducted. The PA may authorize access to various government representatives such as the PSPC Contracting Authority, other DND representatives or civilian departments.

4.2.7. Safety Management in Areas of Shared Occupation

The CSM will make arrangements to ensure co-operation in and support for the DND Safety Programme and the Station CO's Policy Statement on Safety. The CSM must maintain risk assessments for shared areas in accordance with Occupational Safety and Health requirements and in conjunction with existing DND assessments. The Contractor must ensure that its methods of operations do not endanger the life or health of the personnel working on the Station. There are to be two (2) assessments per year and the CSM must ensure that each assessment is complete and accurately reflects Occupational Safety and Health

Guidelines. All changes in the Contractor's methods of operations must be reflected in a revised assessment to be provided to the PA within five (5) days of the change taking place.

4.2.8. Emergency Response Plan (ERP)

The CSM will make arrangements for participation and execution of the Contractor's portion of the ERP on a monthly basis.

4.2.8.1. Post Emergency Response Plan (ERP) De-Briefings

The CSM will make arrangements to conduct a monthly post-ERP debriefing by compiling exercise responses and coordinating action as approved by the PA or its delegated representative.

4.2.9. Fire Brigade Members

The CSM will make arrangements and identify a minimum of six suitable personnel as Fire Brigade Members.

4.2.9.1. Fire Brigade Training

The CSM / Contractor will make arrangements as necessary ensuring all selected Fire Brigade members attend mandatory training sessions provided by DND Firefighters.

4.3. Reports and Deliverables

The following are reports and deliverables that the Contractor is required to deliver in the conduct of work.

4.3.1. Annual Engineering Works Programme

The CSM must prepare and submit an Annual Engineering Works Programme (EWP) that must be aligned with DND business plan timelines. Refer to Section 13 of the SOW for additional requirements pertaining to real property planning services. This Programme will provide details on the proposed infrastructure work for the upcoming year. The Programme is to include:

1. all required annual SOW works and inspections,
2. all Contractor-recommended infrastructure work projects,
3. as identified by the initial Facilities Condition Assessment Report, and
4. any other works as assigned by the PA.

This Programme will be reviewed jointly by the Contractor and the PA to determine priority, resource requirements and funding mechanisms. The EWP will be submitted for review annually.

As early as possible after the submission of the EWP, the Contractor and the PA will meet to review and discuss the details of required resources, scheduling, planned implementation and funding (for Task Authorization activities) of the Programme. All tasks included in the EWP that are not part of the SOW requirements may be handled through the Task Authorization process. The PA will retain final EWP approval.

4.3.2. Contractor Costs Management

The CSM must provide and maintain a Cost Management System. Refer to Section 13 of the SOW pertaining to labour resource plan requirements that must include labour resource costs. The System will be designed to meet generally accepted accounting standards reporting all of the Contactor's expenditures of material, equipment or personnel associated with the performance of this SOW. The System must be capable of logging all activities, and providing a report for each section.

The Contractor must provide an expenditure report related to all operational expenses and level of effort expended for materials and labour of operations provided to CFS ALERT. For this report, "operational expenses" refers to the direct costs expended by the Contractor in terms of cost of materials and labour hours to support the maintenance work of this SOW with the exception of maintenance data collected directly into DND systems. The report does not have to include cost of any materials purchased by DND. The submission must be a Computerized Maintenance Management System (CMMS)–based. A sample submission must be provided when requested. The System must also be able to provide access to DND personnel for review. At the expiration of the contract the Contractor must provide DND with the CMMS system information and data accumulated over the term of the contract. The data from the CMMS must be compatible with MS Office.

5 Plans and Reports

5.1. Context

The Contractor must deliver the following during the conduct of work, in addition to the listed reports and deliverables related to specific services as identified in this document.

5.1.1. Description of Existing Conditions

Contractor deliverables, in addition to other deliverable requirements set out Section 13 of the SOW, include:

1. Quality Plans,
2. Preventive Maintenance Plans,
3. Safety Plans,
4. Emergency Response Plans,
5. Hazardous Occurrence and/or Risk Assessment Reports,
6. Government Furnished Reports,
7. Daily Work Order Log and Monthly Reports,
8. Meetings, and
9. Weekly Sustainment and Op BOXTOP Forecast
10. Snow and Ice Control (SNIC) Plan

Timelines for deliverables are detailed in the "Reports" section. Once reviewed and PA comments are addressed all plans and deliverables become part of the contract.

5.1.1.1. Draft Plans

A draft Plan must be submitted to the PA for review and comment no later than 15 days before Phase-In and site acceptance. Refer to Section 13 of the SOW for additional requirements pertaining to acceptance of the Service Delivery Regime. The Contractor must incorporate the PA comments into the final version of the plan and resubmit it for acceptance. The Preventive Management Plan must be reviewed, updated and submitted to the PA for review and acceptance on a Monthly basis.

5.1.1.2. Audits

DND, or an assigned representative, will audit Contractor performance throughout contract duration cyclically as determined by the SME, or as required with reports submitted to the PA. The audit plan will be managed by DND ensuring Contractor action on any deficiency, or repairs noted.

5.1.1.3. Work Performance

The Contractor must coordinate and execute all work with the least possible interference or disturbance to the building occupiers and the public. Refer to Section 13 of the SOW for additional requirements pertaining to the delivery Of Real Property Services. To complete the operation and maintenance, it may be necessary to shut down or isolate various parts of the main/other systems. The contractor must plan all Scheduled Maintenance in advance and will notify the CO Alert and all affected building occupiers of potential shutdowns and interruptions. The shutdown notices must be provided to the CO Alert one (1) calendar month before the work commencing.

The Contractor must participate in handover/witness testing and/or training as replacement/new systems or assets are added to the contract. The contractor is required to participate in Canada led technical inspections (ATI), investigations or project planning tasks. The contractor must make the appropriate resource(s) available to participate in handover, witness testing/training.

5.1.1.4. Equipment Downtime

Is the time in hours that equipment is out of service for repairs, maintenance, or awaiting parts. The work week used to compute downtime is defined as 7/24 (hour/days), with no exception for holidays. Equipment that is out of service due to safety recalls is not included in the Downtime computations. Downtime begins when the equipment is removed from service and ends when it is ready to return to service.

5.1.1.5. Keep Assigned Working Areas Cleaned and Tidy

The Contractor is required keep their shops, working areas and job sites neat, clean, free of debris and other material that could cause unsafe conditions. This includes:

1. identifying unsafe, broken equipment,
2. disposing of unsafe, broken equipment,
3. securing the work area,
4. labelling material, and
5. securing items (such as POL, tools, cleaning chemicals).

The cleaning would normally be affected at the end of a work day.

5.2. Work to be Performed

The following services must provide Plans as applicable, and as set out in Section 13 of the SOW

1. Accommodations and Janitorial services,
2. Food Services,
3. Transportation and Vehicle Maintenance,
    a. Ground equipment Maintenance
4. Buildings and Structures,
    a. Airfield Ground Structures,
    b. Fire Prevention and Suppression systems
5. Roads and Grounds Services,
6. Water,
    a. Treatment,
    b. Supply
7. Sewage,
8. Power Generation,
    a. Main and Stand-by,
    b. Heating Systems
    c. Co-Generation (HRS), and
    d. Auxiliary and Portable.
    e. Fuel Systems
    f. Electrical Distribution
9. Airfield Operations, Equipment and Electrical Systems
10. Bulk Fuel Systems and Handling,
11. Environmental protection and Control
    a. Hazardous Waste,
    b. Hazardous Material Management
    c. Solid Waste, and
    d. Glycol Mitigation

5.2.1. Contractor Quality Plan (QP)

The Contractor must develop and implement a Quality Plan (QP) which must describe in detail the Contractor's proposed quality control and assurance practices. Refer to Section 13 of the SOW for additional requirements pertaining to management of the quality of Real Property Services. The QP will result in reports describing the outcome of quality assurance activities provided to the Project Authority on a quarterly basis. All information required to make a judgment of inspection quality are to be referenced and validated. This will be provided to the CO Alert and the PA. An updated QP for review and acceptance must be submitted annually to the PA.

5.2.1.1. Quality Plan Elements

The Quality Plan must address the Services and Elements (by way of procedures) as a minimum, to the extent that they apply to the scope of the Contract, including requirements set out in Section 13 of the SOW:

Elements:

1. Management Responsibility
2. Quality Management Personnel
3. Inspection
    a. Frequency of inspections
    b. Checks and Tests
    c. Inspection Milestones
4. Document Control
5. Non-conformance, Corrective / Preventive Actions
6. Training
7. Safety

5.2.2. Contractor Corrective Maintenance (CM)

CMs are any Contractor action taken to restore full serviceability after any failure/functional degradation has occurred. This includes what would normally be referred to as repairs, modifications and overhauls. Refer to Section 13 of the SOW for additional requirements pertaining to the provision of Maintenance Management Services.

The Contractor is responsible for all CMs that can be performed at CFS Alert. CMs which involve shipping items south will be coordinated with the station DND responsibility. The Contractor will be requested to prepare the item for shipment in accordance with established DND procedures.

5.2.3. Contractor Preventive Management Plan (PM)

Preventive Maintenance are actions performed to prevent failure, and detect possible failure of existing building systems, machinery, grounds, roads and building components. Refer to Section 13 of the SOW for additional requirements pertaining to the provision of Maintenance Management Services. The Contractor must develop and implement a Preventive Management Plan (PM) which must describe in detail the Contractor's proposed inspections, corrective actions and PM maintenance practices confirming that practices are pro-active, produce work and meet requirements. An updated PM for review and acceptance must be submitted monthly to the PA. The CPM will prepare reports describing PM activity results provided to the PA on a quarterly basis.

5.2.3.1. Preventive Management (PM) Plan Elements

The Preventive Management plan must address the Services and Elements (by way of procedures) as a minimum, to the extent that they apply to the scope of the Contract.

Elements:

1. Personnel and Responsibility,
2. System Existing conditions,
    a. Including ancillary support equipment
    b. Government Furnished Equipment (GFE)
3. Scope of work,
4. References,
    a. Environmental,
    b. Manufactures,
    c. DND, and
    d. Specialists
5. Frequency of Inspection and Testing,
6. Equipment Condition Assessment,
    a. Checklists and inspection procedures
    b. Equipment / system age and wear
7. Article requiring Repair and Maintenance,
    a. Equipment deficiencies,
8. Corrective actions,
9. Parts and equipment consumption,

10. Risk assessment, Risk Management,
    a. Identify local weather conditions
    b. List critical equipment and items where failure would compromise CFS Alert operation and mission
        i. Identify and ensure redundancy
        ii. Identify mitigation plans, options and timelines
    c. Other pertinent factors
11. Document Control,
12. Training, and
13. Safety.

The Plan is to be submitted for review and acceptance by the PA, and the Contractor must incorporate the PA's comments into the Plan and resubmit it for acceptance. This Plan is to be updated and submitted for review and acceptance, in accordance with the requirements stated in the "Reports" section.

5.2.3.2. Fuel Systems Dyke Pumping

Before any dyke is pumped, notification is required to 8 Wing Environment as soon as possible to obtain approval from the Nunavut Water Board and INAC Inspector as Dyke water is now a controlled and regulated substance where the disposal (pumping) requires approval. As of 2011, testing occurs before pumping.

8 Wing Environmental Management conducts the testing and pays for the analytics as per management of the Nunavut Water Board Licence. After receipt of the analytical results a 10-day notice is required to the INAC Inspector for the **intent** to pump dyke water. If water is contaminated, the Contractor must us DND's water filtration system at CFS Alert to pump the dyke with water testing; at the beginning, middle and end of the pumping process. This pumping should be conducted in the presence of 8 Wing Environment Staff.

5.2.4. Contractor General Safety Plan

The Contractor must prepare and deliver the Contractor General Safety Plan. The plan is to be developed and maintained in accordance with current references. Refer to Section 13 of the SOW for additional requirements pertaining to Occupational Health and Safety. The plan is to be submitted to the PA during Phase-In and as required. This plan is to be updated and submitted in accordance with the requirements stated in the "Reports" section.

5.2.4.1. Contractor General Safety Management Plan

The Contractor must ensure that Contractor Site Personnel implement and maintain the Contractor General Safety Management Plan. Refer to Section 13 of the SOW for additional requirements. The Plan includes, but is not limited to:

1. full risk assessment records,
2. reviews,
3. updates, and
4. must remain in compliance with Health and Safety references.

5.2.4.2. Contractor Safety Compliance Audits

The Contractor will conduct semi-annual safety audits within areas solely utilized by the Contractor to monitor the compliance with the Contractor General Safety Management Plan. The audits must be thorough, and performed on schedule with remedial measures to correct non-compliant conditions implemented in a timely manner.

The Contractor will establish a workplace health and safety committee (WHS). Monthly on-site WHS meeting minutes must be provided to the CO Alert (and the PA), stating comments, findings and recommendations. A representative of the contractor WHS committee must attend the Station Occupational Health and Safety (OHS) committee meetings (**but is not a member as they cannot make motions, take actions or hold officer/council positions)** to allow the timely sharing of information and/or safety concerns. Conversely, a DND station (OHS) representative will attend the contractor WHS (**but is not a member**) meeting.

5.2.5. Contractor Portion of the CFS Alert Emergency Response Plan (ERP)

The Contractor must provide its portion of the Emergency Response Plan, which allows the Contractor and DND to respond to an "ON" or "OFF" site emergency in a coordinated and effective manner. As part of the ERP the contractor will indicate how they will staff the Fire Brigade positions. The types of emergencies could include, but are not limited to:

1. vehicle accidents,
2. environmental accidents,
3. fire in the kitchen or food storage area, or
4. emergencies involving Hazardous Materials.

The Contractor Plan is to be in accordance with, and include, all aspects of the CFS Alert Emergency Response Plan.

5.2.6. Hazardous Occurrence and/or Risk Assessment Reporting

The Contractor must Identify Hazardous Occurrences and Risk Assess all hazards for mitigation.

5.2.6.1. Hazardous Occurrence Reporting

The Contractor must immediately notify CO Alert, investigate and report hazardous occurrences as required by the Canada Labour Code Part II, the Provincial / Territorial Occupational Safety and Health Act, and the Regulations made pursuant to the Acts. Refer to Section 13 of the SOW and twenty-five (25) associated references for additional requirements related to Real Property Services. In addition to the legislated investigation requirements, the contractor must investigate and report the following;

1. hazardous occurrences that caused property damage;
2. incidents that did not injure someone, but had the potential to do so;
3. incidents that did not cause material damage, but had the potential to do so; and
4. off-duty accidents that occurred while participating in authorized activities.

Considerations in reporting:

1. A resulting injury that may or may not require medical aid but involves lost time at work by the injured person(s),
2. Exposure to toxic chemicals or substances, and
3. Interruption to adjacent and/or integral infrastructure operations with potential loss implications.

A copy of all the reports mentioned above must be provided to the CFS Alert UGSO and PA.

5.2.6.2. Risk Assessment Reporting

The Contractor will identify hazards, analyse the risk and provide an evaluation and mitigation strategies to remove, or reduce the issue. Risk analysis will follow the process of:

1. **Hazard identification** – the process of finding, listing, and characterizing hazards,
2. **Risk analysis** – a process for comprehending the nature of hazards and determining the level of risk.
    a. Risk analysis provides a basis for risk evaluation and decisions about risk control.
    b. Information can include current and historical data, theoretical analysis, informed opinions, and the concerns of stakeholders.
    c. Risk analysis includes risk estimation.
3. **Risk evaluation** – the process of comparing an estimated risk against given risk criteria to determine the significance of the risk, usually probability of event occurring vs the severity of the damage establishing a High to Low risk. and
4. **Risk control** – actions implementing risk evaluation decisions.

Note: Risk control can involve monitoring, re-evaluation, and compliance with decisions.

5.2.6.3. Shared Areas Risk Assessments

The CSM must maintain risk assessments for shared areas in accordance with Occupational Safety and Health requirements, and in conjunction with existing DND assessments. There will be two (2) assessments per year and the CSM must ensure that each assessment is complete and accurately reflecting Occupational Safety and Health Guidelines. All changes in the Contractor's methods of operations or any new hazards identified must be reflected in a revised assessment to be provided to the PA within five (5) days of the change taking place.

5.2.7. Government Furnished Reports

The Contractor must prepare and submit an annual Government Furnished Reports to the PA, which provides details on materials, vehicles, equipment, facilities and inventory used, acquired or disposed of during the Contract Year. The report is to be submitted and the Government loan agreement is to be amended accordingly. Reports required are:

1. Government Furnished Materials (GFM),
2. Government Furnished Vehicles and Equipment (GFV and GFE), and
3. Government Furnished Facilities (GFF),

These reports are also required as a Phase-In and a Phase-Out requirement.

5.2.7.1. Government Furnishings

The Contractor will be provided by DND with the equipment, materials and facilities to fulfil the site work responsibilities and employment requirements in accordance with approved methods of operations. This includes the replenishment or replacement of all supplies, materials and equipment through the standard DND approval and procurement practices. Reference to Section 13 of the SOW provides additional requirements pertaining to utilization of Government Furnished Property. All Government Furnishings must be monitored and tracked to ensure accountability and serviceability as the contractor will be required to report holdings of all Government Furnishings, when requested by DND, and will be held accountable for the loss of any Government Furnished Equipment. The CFS Alert boat is not GFE for Contractor use.

5.2.7.2. Damage Clause for Government Furnishings

The Contractor must operate the buildings/ infrastructure assets in a safe and efficient manner and take all reasonable precautions to prevent damage to the buildings or infrastructure assets. The Contractor will repair, at no cost to Canada, any damage caused to the buildings and infrastructure assets arising from the Contractor's acts or omissions.

The Contractor must provide annual condition-based assessments of all equipment with recommended action for repairs for deficiencies noted. All work performed must be entered into the CMMS system.

5.2.8. Condition Based Assessment

A semi-annual review of all work performed, since the last assessment, on an identified piece of equipment to confirm that it is operating as per specifications and that scheduled Preventive Maintenance will continue. The assessment is also used to identify concerns or repairs that may need to occur in advance of scheduled maintenance, as well as the identification of parts and material required to be delivered to CFS Alert.

5.2.9. New Work

The construction of a new building, addition to a building, replacement of entire facility, installation of new works, alterations, renovations, replacement, disconnecting and properly securing utilities and distribution systems servicing abandoned facilities and demolitions. This does not include work conducted as part of Preventative Maintenance (PM). This work is approved by the PA and TA. MRPDP will be provided to the Contractor by RP Ops North before the end of every fiscal year.

5.2.10. Work Requests

The Contractor must provide a single point of contact to receive requests for services from building occupiers and users, and must provide and maintain a "call receipt", acknowledgment and dispatch capability to register CM "work order" requests 24 hours / day. Refer to Section 13 of the SOW for additional requirements. A work order must then be prepared to action the request. All work orders are to be logged, classified, and prioritized in coordination with CO Alert and DND staff. The fulfilment of the request is conducted against the applicable SOW line items and the service is to be provided at all times. The Contractor

will provide, when required from the PA, full supporting documentation for each job comprising of date and time, name of contractor responding, condition before request, description of required service and identified (with justification) corrective work that could not be performed.

5.2.11. Computerised Maintenance Management System (CMMS) Implementation

The Contractor must use a Computerised Maintenance Management System (CMMS) that meets the maintenance planning, implementation, monitoring and reporting requirements set out in this SOW and Technical Annexes. Refer to Section 13 of the SOW for additional requirements pertaining to the Optimized Maintenance Programme and equipment and system labelling and information requirement. The CMMS system must be configured to allow export of data in MS Excel, TM or .csv file type for import into other CMMS software platforms. All components in the CMMS system must be named and classified in accordance with Uniformat II nomenclature.

The Contractor must establish and implement a process to ensure that changes to the asset inventory (e.g. new buildings, replacement assets/components) are accurately reflected in CMMS asset inventory within 1 month of the changes occurring.

The Contractor must make available to the PA, PA Representative, and to other DND approved persons, access to the CMMS system on a read only and report production basis.

5.2.11.1. Electronic Records of Work Activities

The Contractor must maintain an electronic record of all CM, PM and other related engineering work activities in a CMMS for access by the PA. Refer to Section 13 of the SOW for additional requirements related to the management of real property records, including quality management, performance management, Occupational Health and Safety and other record management and information management requirements. Work and other engineering activity records are to be current and maintained electronically on DND supplied computers for PA access and review (when requested).

5.2.11.2. CMMS Access

The Contractor must provide local access to the electronic work order records and daily work logs for the PA, when requested. The database will include:

1. all activities
2. activity descriptions,
3. Property Record Identification Number (PRIN),
4. number of direct labour hours with the start and completion dates of the activity, and
5. quantities of materials.

At the end of the Contract, the Contractor will provide DND with an export of the database in a MS compatible format. The PRIN Number will be provided by DND to the Contractor.

5.2.12. Daily Work Order Log

The Contractor must accurately record all work orders undertaken, in the form of daily logs or preventive maintenance books for each of the systems and facilities, as well as records of normal and abnormal operating conditions and malfunctions along with corrective actions taken. Refer to Section 13 of the SOW for additional requirements. Standard tasks will state work correction times with comparison against published industry standards and references. At a minimum, the records are to include the data required as outlined in the applicable manufacturers' recommendations. The records are to be readily available for inspection and the records are not to be out of date by more than 3 days and must accurately reflect maintenance performed at least up to that time.

5.2.12.1. Monthly Work Plan

The monthly work plan must list on a daily basis the location and description of work to be performed during the month. All preventive and corrective maintenance activities will require a monthly written report as per industry standards detailing the before and after equipment and work performed with supporting data from tests and inspections. The plan firmly represents the work that the Contractor intends to accomplish in the coming month DND will use the monthly work plan as one of the methods to monitor the Contractor's progress and quality of work.

5.2.13. Meetings

The Contractor will participate in monthly Project Review meetings and 2 semi-annual contract review meetings.

5.2.13.1. Monthly Project Review Meeting (PRM)

The Project Authority (Alert Management Office (AMO)) will conduct a monthly Project Review Meeting with the Contractor, and any other required DND Authorities. The purpose of meeting is to discuss:

1. the progress of
    a. tasks,
    b. issues, and
    c. additional work requirements being conducted by the Contractor at CFS Alert,
2. provide the Contractor with the necessary and up-to-date information on future Work requirements, and
3. other project related items.

The meetings will be held at the AMO office located at CFB Trenton, and the Contractor will be responsible and required:

1. for the preparation of the agenda,
2. outline the purpose,
3. planned items for discussion,
4. provide the names of the Chairperson and other participants,
5. to keep meeting minutes,
    a. prepare a summary list of recorded decisions and action items for review,
    b. minutes containing items discussed during the meeting, milestones accomplished to date,
    c. status of previous action items,
    d. new action items identified and their relative due dates
6. record item action agreement, and
7. establish next meeting dates before adjournment.

The contractor will distribute the minutes for review by all participants who must agree with the final version. The Contractor then distributes the final minutes within 2 weeks after the PRM, before the next established PRM.

5.2.13.2. Semi-Annual Contract Review Meeting

The Contract Authority will conduct a Semi-Annual Contract Review Meeting with the Contractor, Project Authority, Alert Management Office (AMO), the CFS Alert Station Commanding Officer (CO) representative and any other required DND Authorities. The purpose of meeting is to discuss:

1. progress and performance of the Contractor,
2. the status of deliverables,
3. quality control audits, and
4. any issues or potential problems.

These meetings will be approximately 1 day in duration and will be held at CFB Trenton, or agreed on Location.

The Contract Authority will prepare a summary list of recorded decisions and action items to be reviewed and agreed unanimously before the meeting adjourns, and prepare meeting minutes containing:

1. items discussed during the meeting,
2. milestones accomplished to date,
3. status of previous action items, and
4. new action items identified and their relative due dates.

5.2.14. Weekly Sustainment and Op BOXTOP forecast

The Contractor will provide this deliverable as per Section 7, Procurement

5.2.15. Snow and Ice Control (SNIC) Plan

The Contractor must provide and maintain a SNIC Plan. Refer to Section 13 of the SOW for additional requirements. The SNIC Plan will be established and provided by the Contractor in consultation with the CO and must include the elements of the current SNIC Plan outlined in the Section 13. The SNIC Plan is to be updated annually in July and submitted to the CO Alert for acceptance.

5.3. Reports and Deliverables

The Contractor must ensure that each section provides the following Plans and reports:

1. Quality Plans,
2. Preventive Maintenance Plans,
3. Safety Plans,
4. Emergency Response Plans,
5. Hazardous Occurrence and/or Risk Assessment Reports,
6. Government Furnished Reports,
7. Daily Work Order log and Monthly Work Plans,
8. Meetings, and
9. Weekly Sustainment and Op BOXTOP Forecast
10. Snow and Ice Control (SNIC) Plan
11. Condition Based Assessment

Phase-In and Phase-Out is further discussed in their Section. A Summary of deliverables with time periods is detailed in the "Reports" Section.

6. Phase-In / Phase-Out

6.1. Context.

The Contractor must be prepared to assume, or terminate site responsibilities after award of contract within time prescribed schedule. All personnel, deliverables and records must be complete. Phase-In and Phase-Out activities are separated below.

6.1.1. Description of Existing Conditions.

The Phase-In period addresses that period of time when a Contractor is preparing to take over delivery of services and continues until completion of handover. Phase-In starts immediately after Contract award and will be executed as per Phase-In schedule, before the expiration of the existing contract and consists of two (2) parts:

1. Transition-in (starting after Contract award and ending at the beginning of the hand-over phase), and
2. Hand-over (starting at the end of transition-in phase and ending at the start of the O & M).

After the Contract award the PA will provide the incoming Contractor with all available historical data such as:

1. Preventive maintenance programme,
2. Facility condition assessments,
3. Work order renewals,
4. Plans, and
5. Specifications

All current inventories of Government Furnished Materials, Equipment and Facilities will be updated and forwarded to the incoming contractor through the PA. Phase-In will be considered complete when the Contractor has completely taken over all the required responsibilities as detailed in the SOW.

6.2. Work to be Performed

6.2.1. Phase-In.

The incoming Contractors must be aware that at the time of contract award and before commencing Phase-In activities CFS Alert support services may be provided by a contractor fulfilling its contract Phase-Out responsibilities, or by DND Military personnel (if there is no Contractor in place). Incoming Contractor Personnel assume complete operation during the regular O & M, and are to arrive in CFS Alert for the purposes of familiarization before the scheduled hand-over date.

During Phase-In the Contractor will undertake the Operational Transition in an orderly manner:

1. consult with the PA, TA and Occupiers, and review existing Building Emergency Plans and Infrastructure Continuity Plans;
2. establish relationships and collaborate with key parties, including the PA, TA, CA, Occupiers, and other stakeholders, as required, potentially including incumbent contractors;
3. plan and coordinate activities leading up to the Handover so as avoid disruption to operations;
4. establish an initial response capability for building and site emergencies;
5. develop and test information systems and protocols; and
6. process information on Government-Furnished Equipment (GFE), Government-Furnished Accommodation (GFA) and Government-Furnished Information (GFI), which will be provided at Contract Award.

Reference to Section 13 of the SOW for additional requirements related to Real Property Services, including those related to the Service Delivery Regime (SDR) Acceptance Review process. The Contractor must also obtain Acceptance-in-Principle of the proposed SDR for Real Property Infrastructure as set out in Section 13 before the Handover Date, as well as ensure continuity of building operations and uninterrupted service response as of the Handover Date.

The Contractor will meet Time-Phased Implementation Requirements:

1. No later than 30 calendar days following Contract Award:

a. submit a Preliminary Labour Resource Plan and Travel Plan for the first Year of operations effective on the Handover Date;
b. undertake the Work to obtain required security clearances for labour resources under the Contractor's authority; and
c. assign key labour resources under the Contractor's authority once security clearances have been obtained.

2. No later than 90 calendar days before the Handover Date coordinate access to buildings.
3. No later than 60 calendar days before the Handover Date: submit a Final Labour Resource Plan and Travel Plan for the first Year of operations effective on the Handover Date.
4. No later than 30 calendar days before the Handover Date:

    a. validate and, where necessary, establish Standard Operating Procedures (SOPs) for each asset and confirm safety, security and emergency preparedness and environmental procedures;
    b. develop a door and equipment key inventory;
    c. verify GFA and GFE Inventories;
    d. demonstrate the submission of performance measures as set out in Section 13 and the processes that will be used to provide performance information as of the Handover Date;
    e. confirm that required labour resources under the Contractor's authority are in place, familiar with the buildings they will be supporting, and security-cleared, and submit an updated Labour Resource Plan and Travel Plan, reflecting changes for the first Year of operations;
    f. demonstrate the operation of management systems, including the QMS, EMS and CMMS;
    g. review existing Annual Building Plans (ABPs) and prepare to implement these plans as of the Handover Date;
    h. submit contingency plans, including a Contractor business continuity plan, for acceptance, confirming that effective risk management is in place;
    i. identify equipment and system data deficiencies, enter data and schedule maintenance using the CMMS; and
    j. ensure labour resources under the Contractor's authority are familiar with fire safety responsibilities and Building Infrastructure Continuity Plans and that they are prepared to deal with emergencies.

5. By the Handover Date:

    a. operate the QMS, EMS and provide IM/IT capabilities to enable the TA to validate and verify data and record, track, search, sort, query, comment and report on quality nonconformities, subsequent corrective and preventive action, and their resolution;
    b. submit the Quality Management Plan indicating how the Contractor will meet quality requirements, including timelines, organizational structures and resources; and
    c. complete the transfer of building data into the CMMS and confirm maintenance and scheduling requirements.

6.2.1.1. Site Personnel Requirements.

Immediately after contract award the Contractor must commence the process of preparing, obtaining and finalizing all requirements for their site personnel working at CFS Alert. This will include:

1. Qualifications and certificates,
2. Security clearances,
3. Passports,
4. Clothing, and
5. Other activities required by the SOW)

Contractor site personnel will be ready to travel to CFS Alert as per the Phase-In schedule.

6.2.1.2. Contractor Site Manager Activities.

The Contractor Site Manager (CSM) must arrange to travel to CFS Alert by the earliest weekly sustainment flight, and be on site for a minimum of 8 weeks before departure of existing outgoing contractor personnel for the purpose of familiarization and

preparation of Phase-In responsibilities. This includes reviews and verification (with PA oversight) of:

1. Government Furnished Materials,
2. Government Furnished Vehicles,
3. Government Furnished Equipment,
4. Government Furnished Facilities, and
5. Contractor-Operated Industrial and Administrative Facilities

6.2.1.3. Contract Site Supervisor Team.

The Contractor must make arrangements for a Contractor Phase-In Team comprising of:

1. Supervisor of Food Services,
    a. Accommodations, and
    b. Janitorial Services,
2. Supervisor of Transportation, and
    a. Vehicle Maintenance Services, and
    b. Maintenance of Roads and Grounds Services
3. Supervisor of Buildings and Infrastructure

This team will travel to CFS Alert by the earliest weekly sustainment flight, and before the departure of the remaining outgoing contractor support personnel for the purpose of familiarization and preparation of Phase-Out completion. The Phase-In timelines are identified in Table 6.3.6.1 Phase-In / Phase-Out schedule.

6.2.1.4. Phase-In Review Meetings.

The incoming CPM must attend PA chaired Phase-In Review and Coordination Meetings from time of Contract award until handover completion. Phase-In reporting will require minutes and weekly reporting as deliverables. If the incumbent Contractor is the successful bidder, Phase-In meetings will occur to account for any contract changes.

6.2.1.5. Partnering Meeting

Within 6 months after service commencement date, the Contractor must arrange and host a partnering meeting between the parties to the contract including:

1. the Contractor's key personnel,
2. key sub-contractor personnel,
3. PSPC and other key PSPC staff, and
4. key DND Representatives.

The cost of the partnering meeting will be included in the Contractor's lump sum price. The following are meeting objectives:

1. Foster a common understanding of all parties' aims and objectives for the Contract.
2. Form an effective Contract team.
3. Agree an issues resolution ladder.
4. Resolve any issues generated in Contract during initial period.
5. Develop a brief Contract charter, agreed to by all parties.

6.2.2. Phase-Out.

The following provides the Contractor requirements for the Phase-Out period at the end of contract, and applies to situations where the Contractor participates:

1. In the transfer of responsibilities for delivering contract services to DND, or
2. An incoming Contractor, or
3. Continues to provide the services under a new contractual arrangement.

The Phase-out for a specific service will be executed, at a minimum, as per Phase-Out schedule before the Contract expiration

date. The Phase-out is considered complete with the Contractor's complete acceptance of responsibility for contract service delivery. Phase-out will begin, at a minimum, as per Phase-Out schedule before the contract expiry date.

The Contractor will manage the Phase-out Period following the Phase-out Plan, and support the transition, involving a replacement contract or another incoming contractor through:

1. Support and coordinate transition activities to ensure an effective transition:

    a. ensure continuity of building and Occupant operations;
    b. plan the transition to an incoming contractor, as required;
    c. plan and coordinate work leading up to the Contract Expiration Date;
    d. establish lines of communication with key parties, including the PA, TA and CA; and
    e. provide information on GFE and, where applicable, GFA and GFI.

2. At least 12 months before the Operational Completion Date:

    a. designate a single point of contact for the CA, PA and TA to manage and coordinate Operational Completion;
    b. report on the status of projects that will not be complete before the Operational Completion Date;
    c. notify labour resources under the Contractor's authority of upcoming Operational Completion; and

3. Within four months before the Operational Completion Date:

    a. provide an updated Key Inventory Sheet;
    b. provide complete documentation on existing warranties;
    c. provide an up-to-date documentation archive for each building, including:
        i. O&M manuals,
        ii. CMMS records and data
        iii. maintenance management records and data in other formats
        iv. manufacturer literature and equipment manuals, and
        v. drawings, warranties and other building systems and equipment information, as required, for each asset;
    d. provide copies of current building SOPs, site-specific OHS plans, building and site emergency plans, and Infrastructure Continuity Plans;
    e. support the PA and TA in transferring the information described above to DND or the incoming contractor systems and archives.

4. Within two (2) months before the Operational Completion Date provide an updated list of GFE, GFA and GFI.

5. Within 30 days before the Operational Completion Date:

    a. provide a status report on projects that will not be complete by the Contract Expiration Date, including a description of outstanding Work and recommendations for its completion;
    b. provide final updates to inventories and documentation provided during the Contract Completion Period; and
    c. transmit O&M and other information, data and records retained over the Contract Period to the TA, in a manner that will ensure they will be persistently accessible for the legislated period of
    d. time.

6. On the Operational Completion Date:

    a. provide certification that suppliers and subcontractors have been paid for Work up to the completion date;
    b. return GFE, GFA and GFI to Canada;
    c. provide access to records demonstrating compliance and information supplied in relation to legislative and regulatory requirements governing the delivery of services, including the OHS and Environmental Management requirements;
    d. provide complete documentation on outstanding quality nonconformities as of the Contract Expiration Date; and

e. provide a complete financial reconciliation, including revenues, expenditures and necessary data to determine applicable fees and other payments due.

6.2.2.1. Contractor Site Personnel and Equipment.

Any Contractor personnel, Contractor personnel belongings, Contractor equipment, records, etc… that have not been removed from CFS Alert before, at contract expiration or completion of Phase-Out will be the Contractor's responsibility arrange and complete.

6.2.2.2. Phase-Out Review Meetings.

The outgoing CPM must attend PA chaired Phase-Out Review Meetings from Phase-out commencement until handover completion. If the incumbent Contractor is the successful bidder, Phase-Out meetings will occur to account for any contract changes.

6.3. Reports and Deliverables.

The following are reports and deliverables that the Contractor is required to deliver in the conduct of work.

6.3.1. Phase-In / Phase-Out Review Meetings.

The applicable CPM must attend PA chaired Phase-In / Phase-Out Review and Coordination Meetings from time of Contract award until handover completion for discussion on:

1. Phase-In / Phase-Out plan, and
2. CPM progress reports on all Phase aspects.

The CPM will prepare an agenda outlining:

1. Purpose of the meeting,
2. Planned items for discussion, and
3. That identifies the Chairperson and participants.

The agenda must be distributed to all participants no later than 2 working days before the meeting.

Before meeting adjournment, the CPM will review a list of decisions and action items for meeting participant agreement, and provide accurate meeting minutes containing:

1. Meeting items discussed,
2. Milestones accomplished to date,
3. Status of previous action items,
4. Items essential to smooth transition not identified,
5. New action items identified, and
6. Relative due dates.

The minutes are submitted for PA signature no later than 5 working days after the meeting. Within 5 working days after PA approval the CPM will distribute the minutes to all attendees.

The CPM must provide the PA with weekly Progress Reports detailing the transition of services.

All meetings are held at the PA's location (AMO, 8 Wing Trenton) each month during Phase-In / Phase-Out transition period and are 1 day in duration. If the incumbent Contractor is the successful bidder, Phase meetings will occur to account for any contract changes.

6.3.2. Phase-In Plan.

The Contractor must provide a draft version of the Phase-in plan to the PA outlining the transfer of services and activities from the existing contractor, and / or to take over responsibilities. The Phase-in plan will be finalized jointly with the PA.

6.3.3. Government Furnished Reports

As part of Phase-In the Contractor must prepare and submit a Government Furnished Report to the PA, which provides inventory accepted, rejected or required for use and care by the Contractor. This will be reviewed against DND inventory to determine requests beyond inventory which can be submitted through DND procurement, and will verify the condition of existing furnishings for suitability to perform the work specified in this SOW. Government furnished reports are further discussed in section 6, Plans and Reports.

Facilities which cannot be inspected due to weather will be identified, and inspection will be completed as soon as weather permits. All inspections must be completed before the Handover date, and the facilities requiring rectification must be identified to the PA before Phase-In completion.

6.3.3.1. DND-Contractor review.

The Contractor and DND will conduct a joint review and verification of actual inventory no later than 21 days before the Handover date. Materials, Vehicles, Equipment and Facilities inventory not selected by the Contractor will be disposed of through the DND supply chain. The inventory checks are to be completed no later than 5 days before the Handover date and the Report submitted will form part of a Government loan agreement.

6.3.4. Contractor-Operated Industrial and Administrative Facilities.

The Contractor must prepare and deliver to the PA a Facilities Use Plan for Contractor-utilized Industrial and administrative facilities. The plan is to reflect:

1. Existing use of space
2. Planned changes including,
    a. Renovations,
    b. Maintenance, and
    c. Repairs.

The plan is to be submitted for review and PA approval. PA comments are be incorporated into the Plan and resubmitted for acceptance. This plan is to be updated and submitted for review and acceptance, in accordance with the requirements stated in “Reports”.

6.3.5. Phase-Out Plan.

The Contractor must prepare and submit a Phase-Out plan to the PA for review and acceptance outlining the transfer of services and activities to DND or an incoming Contractor, including the removal of Contractor resources without disruption to Station operational activities. The Contractor must incorporate the PA’s comments into the final plan and resubmit it for PA acceptance.

6.3.6. Phase-In / Phase-Out Schedule.

The following Table 6.3.6.1 provides the schedule for the completion of Contractor Phase-In activities. Phase-In is considered complete when the incoming Contractor has assumed all responsibilities from the out-going Contractor. Phase-In / Phase-Out transition to completion is a six (6) month period.

Table 6.3.6.1 Phase-In / Phase-Out Schedule.

	Phase-In Period			**Phase-Out Period**	
Time in Calendar Days Following Contract Award	**30 Days after start**	**60 days after start**	**180 days after start**	**180 days before completion**	**120 days before completion**
Completion of Mobilization					
Contractor Programme Management and Administration (CPMA)	**X**			**X**	

Contractor Site Management		**X**			**X**
Real Property Infrastructure Service Delivery Regime (preliminary Acceptance)			**X**		**X**
Completion of Service Handover					
Food Services			**X**		**X**
Accommodations and Janitorial Services			**X**		**X**
Transportation and Vehicle Maintenance Services			**X**		**X**
Real Property Infrastructure Services			**X**		**X**
Environmental Protection, Hazardous Waste and Material Control			**X**		**X**

7. Procurement through DND

7.1. Context.

The Contractor is responsible to order and obtain supplies, material or equipment required to perform the services in the SOW, which are not provided as part of the Government Furnished Equipment, Material, Facilities or Vehicles such as PPE and PP&S.

7.1.1. Description of Existing Conditions

The Government provides material, equipment, and supplies to fulfil Contractor work responsibilities which include replenishment, replacement and un-forecasted items. The Contractor will coordinate and integrate the ordering and tracking of material, equipment and supplies through the DND Supply system utilizing DND approval and procurement processes which is subject to DND logistic operations (weather, aircraft availability, Resources).

The Contractor will minimize the logistical effort with respect to the shipment of material, equipment and supplies by maximizing bulk shipments and minimizing individual packaging.

There are (2) types of procurement:

1. Weekly sustainment Flights, and
2. Yearly Op BOXTOP replenishment (usually Sept/Oct).

7.1.1.1. Weekly Sustainment Flights.

Once a week a DND Service Flight usually arrives at CFS Alert and departs the same day with minimal time on the ground (a few hours). Ordered items on these flights will follow the procurement process below.

Food orders will be handled directly between the Alert Food Services Officer (FSO) Contractor and 8 Wing Food Services separate from this process, but as part of weekly sustainment delivery.

7.1.1.2. Op BOXTOP Sustainment.

Op BOXTOP sustainment is done twice a year; in the spring for fuel (wet Op BOXTOP) and in autumn (dry Op BOXTOP) for dry items and fuel. The procurement process is coordinated through the Alert Management Office (AMO) and dry item (including Food) procurement is discussed below.

7.2. Work to Be Performed.

7.2.1. Material Request

It is the Contractor's responsibility to substantiate the requirement, identify all material requests required to carry out work associated with the contract and provide 3 quotes for all requests (at a minimum), and DND will validate requests on a case-by-case basis. Refer to Section 13 of the SOW for additional requirements, including those associated with implementing the Real Property Services Optimized Maintenance Program.

7.2.2. Material Accountability

The contractor must maintain proper warehouse orderliness for all infrastructure workshops and storage areas, ensuring that orders are tracked and not duplicated, records are maintained for all items received, and that materiel is stored in an orderly fashion on labelled shelves in order to facilitate stocktaking.

Monthly the contractor will perform stocktaking, Life cycling of material, physical reorganization of material, completion of stocktaking count sheets, reports, and DND directed tasks to assist with materiel verifications and maintenance of CFS Alert Storage Locations (SLoc). Contractor accountability includes the contractor disposal of time expired, worn, redundant and scrap items from the warehouse.

Contractor tracking must be provided identifying:

1. project and consumable material ordered,
    a. ordering tracking
        i. Date ordered; date received
    b. Verification not duplicated
2. Warehouse material location,
3. Max/Min count sheets, and
4. Material Life Cycle schedule

Contractor accountability will be applied to all material, equipment, and supplies accepted at contract award, during performance of contract and on termination of contract. All material and items will be associated to a CFS Alert SLoc and brought "on charge" through DRMIS.

The Contractor is responsible for the cost of tools due to poor accountability as these are controlled items, and must establish a tool control process. Damaged or broken tools must be returned to the Supp O for exchange, and lost tools require a "lost tool" report to meet GFE requirements.

7.2.3. Store and Retrieve Material

During the weekly sustainment airlift and BOXTOP, material is taken off the aircraft and transported to the DND supply depot where it is accounted by DND before issuance to users. The users will pick-up their material when notified. The process of weekly sustainment offloading and transport of material to supply depot has historically taken, on average, 2 hours a week.

7.2.4. Communicate Additional Sustainment Requirements

The Contractor will follow the "DND Procurement" process outlined in this SOW for un-forecasted requirements.

7.2.5. Weekly Sustainment Flights.

The Contractor must be knowledgeable of the Material Priority Code (MPC) system and its implications for proper completion of a DND 2227/2228 provided at time of requirement.

The process for submitting requisitions must be as follows:

1. Contractor sections will identify a demand and the appropriate Section Supervisor must submit item demand(s) to the contractor's Administration Clerk. Information provided must include:
    a. Item ID,
    b. Stock number, description, unit of issue and quantity,
    c. Justification for the requirement (e.g. substantiation paragraph),
    d. (MPC) Priority level/code (0X = IOR immediate operational requirement, 01 = Operational Critical; 02 = Operational Impaired; 03 = Operational Routine),
    e. Any additional information regarding the item(s) to aid in sourcing (e.g. catalogue reference), and
    f. Three (3) quotes.

2. The Contractor's Administration Clerk acknowledges receipt of the demand and initiates the DND 2227/2228. Information to be included on the 2227/2228 must be:
    a. SLoc (Storage Location which DND controls. This is requested from DND);
    b. Delivery location;
    c. Date required;
    d. MPC;
    e. Originator info (name, telephone);
    f. Date;
    g. Special instructions (substantiation/justification for demand); and
    h. Item information (i.e. Qty, Stock Code/Manufacture's Part number if available).

For Infrastructure orders include the Material Order number and the Work Order number on the 2227/2228.

3. The Administration Clerk forwards the requisition(s) to the Contract Site Manager (CSM) for vetting. Once reviewed, the requisition is then forwarded for DND acceptance and approval to the Alert Supply Manager

(Supp O) for material and Transport/maintenance requests, or the SCEO for Real Property/infrastructure requests.

4. If the requisition is a PRI 0X (Immediate Operational Requirement (IOR)) the CO Alert must provide concurrence through Email, or phone call and the Alert Management Office (AMO) in Trenton must also be notified.

Material, Transport / Maintenance (Supp O)

a. Alert Supp O must vet the requisition(s) before DND procurement ensuring information above has been provided. When satisfied, the Supp O will inform the originator (as identified directly on the 2227) that the requisition has been sent for action.

Infrastructure (SCEO)

a. The SCEO will vet the requisition(s) before DND procurement ensuring information above has been provided. When satisfied, the SCEO will inform the originator (as identified directly on the 2227) that the requisition has been sent for actions.

5. When delivery at Alert the material the Contractor's Administrative Clerk is informed, Defence Resource Management Information System (DRMIS) transaction is completed (if applicable), and the item is brought on charge to the applicable SLoc.

6. The Contractor will then acquire their requests for completion of their work order, or warehousing.

7.2.6. Op BOXTOP Sustainment.

Canada requires the Contractor to provide an annual Requirement Forecast Report as an annual deliverable detailing the forecasted material, equipment and items to be delivered during the Fall Op BOXTOP. The report will list the repeated items used throughout the year and planned project items that cannot be delivered through sustainment flights. The Op BOXTOP order process is:

1. Each Section compiles their requirement list and submit to their supervisor,
2. Supervisor reviews and submit to CSM for review of accuracy and complete,
    a. Weekly consumables are removed,
    b. Contractor PPE and PP&S are removed,
    c. Tools are removed (these are a controlled item through the Supp O), and
    d. Immediate requirements are removed.
3. Supp O and SCEO review,
4. CO review and submit to MSS CO / AMO (Aug),
5. When MSS CO approval (end Aug) AMO, W Replen and TEME procure, and
6. Montreal Delivery (mid-May) for Sea lift to Thule.

When compiling the list of items required for the Op BOXTOP sustainment, the contractor will verify all materiel in stock in contractor-managed workshops and vet the sustainment list accordingly to ensure that no materiel is ordered unnecessarily. The list will contain recurring items used throughout the year and a list of planned project material (18-month lead time) too large for weekly sustainment. Deviation from order schedule may result in items not procured.

All received items are to be brought on charge to an applicable SLoc.

7.3. Reports and Deliverables.

7.3.1. Weekly Sustainment Orders.

The Contractor must provide all weekly sustainment orders for procurement orders as described above. All orders must be tracked and accounted aligned with Supp O and SCEO. A current list of orders and receipts will be provided to DND when requested.

7.3.2. Op BOXTOP Sustainment Orders.

The Contractor will provide DND a reviewed Op BOXTOP sustainment list for the CO Alert to Submit by end November each year. The contractor will not resubmit a sustainment list from a previous BOXTOP sustainment without a confirmatory review of the materiel in stock and removal of redundant items from the list.

7.3.3. Contractor Warehousing and Stock

The Contractor will provide tracking information detailed above for use to verify CFS Alert SLoc holdings, DRMIS and procurement.

7.3.4. Tool Accountability Reports

The Contractor will provide tool accountability. Each shop will provide monthly audit of toolkits and deficiencies which will be tracked through “lost tool” reports and one-for-one exchanges. Special DND tools will be tracked through “loan card” systems with the SCEO and the Supp O. Unaccounted tool discrepancies will be Contractor replacement cost.

8. Accommodations and Janitorial Services

8.1. Context.

The Contractor must provide services required as per Annex E. This also includes producing the list of material spares, and replacement equipment required to operate and maintain the Facilities. The Contractor must utilize environmentally friendly, GREEN products to the extent possible.

8.1.1. Description of Existing Conditions.

The facilities were designed to support a maximum capacity of 200 permanent staff and visitors at any one time. The winter season population of non-contractor personnel averages about 75 and the summer season population of non-contractor personnel can surge up to 150. Permanent staff will be responsible for cleaning their own rooms and bed spaces within the accommodation complex.

The cleaning services are to be provided to common areas, with the occupant being responsible for cleaning within their assigned room. Once an occupant vacates the room, the Contractor will be required to clean the room before re-occupation. DND will coordinate the room allocations. There are three large commercial washers provided to assist the Contractor Personnel in laundering requirements.

Janitorial services must be carried out during times that accommodate operational requirements, but barracks must be cleaned during DND work hours, whenever possible. Cleanliness conditions of all areas and the use of certified environmentally friendly products are to meet or exceeds the minimum standards of cleanliness stated in the References, Appendices D and E, Specification or legislation. At no time will any area be left in an untidy or unsuitable condition

8.2. Work to be Performed

8.2.1. Common Rooms and Kitchen Areas of Residences.

The Contractor must clean all common areas. The Contractor will not be required to clean:

1. Kitchen utensils,
2. Pots,
3. Pans,
4. Dishes, and
5. Appliances

In the kitchen area of the residences as these are the responsibilities of the occupants**.**

8.2.2. Co-ordinate the Requirements for Housekeeping Services.

The Contractor must provide housekeeping services to all rooms and to coordinate these services with the Station Warrant Officer. The Contractor will maintain the information required for the Monthly Occupation report and ensure that all housekeeping services are initiated within 24 hours of request. The Station Warrant Officer is responsible for the assignment of all accommodations. The Contractor must provide daily inspection and cleaning, where necessary, of unoccupied rooms. The Contractor must ensure that a safe and clean environment is maintained in all unoccupied rooms at all times. Any interruption of services, or areas must be planned and coordinated 1 month in advance with the station (and inform the PA) to minimize any affects.

8.2.3. Bed Linen.

The Contractor must provide clean bed linen. The seasonal and permanent personnel staying at CFS Alert will be provided 1 set of bed linen which will be returned when departure and the occupant of the room will be responsible to make the bed, strip the bed and do his/her own laundry of bed linen during his/her occupation of the room. The Contractor will wash linen when personnel departure and provide clean bed linen for the new occupant before their arrival.

8.2.4. Unoccupied Room Cleaning.

The Contractor must clean the rooms for new occupants. The Contractor must ensure rooms are cleaned and fresh linens are

provided for all bedding. The occupants of rooms will be responsible for the cleanliness of the room during their stay at CFS Alert. The room is to be cleaned within 48 hours of the projected arrival time of the new occupant.

8.2.5. Cleaning of Common Areas (Not Including Washrooms)

The Contractor must clean all common areas. However, residents are responsible for cleaning their work area daily, including personal items in common room areas.

8.2.6. Cleaning of Washrooms

The Contractor must clean all washrooms to standards listed in reference section.

8.2.7. Miscellaneous Cleaning (Service Calls)

The Contractor must provide miscellaneous cleaning beyond regular requirements of daily activities.

8.2.7.1. Minor Cleaning

Minor cleaning incidents as;

1. Clean up of spills,
2. Broken glass, and
3. Overflowed toilets.

The miscellaneous minor cleanings will be completed efficiently within four (4) hours. Response to service calls is to be within 30 minutes. Historically, there have been 12 miscellaneous minor cleaning (Service Calls) per year.

8.2.7.2. Major Cleaning (Service Calls)

Major cleaning incidents as;

1. Clean up of flooding,
2. Renovations, and
3. Special events.

The miscellaneous major cleanings will be completed between four (4) hours to sixteen (16) hours, and historically there have been 2 miscellaneous major cleaning Service Calls) per each year.

8.2.8. Damaged or Unserviceable items of Inventory in Barracks

Any unserviceable or damaged items (i.e. furniture, appliances… etc) are to be reported immediately to the Station Warrant Officer (SWO). If the SWO determines applicable, the Contractor will perform minor, cost effective repairs as Corrective Maintenance.

8.2.9. Removal of Snow and Ice from Walkways and Stairs

The Contractor must remove and clear snow and ice from all foot traffic areas and building access points to ensure that these areas are safe for passage of personnel, as well as integrate to the road SNIC plan for access. The majority of the snowstorms at CFS Alert are the result of blowing snow, not falling snow. The priority buildings for snow removal are:

1. 115 Quarters-Chimo,
2. 116 Quarters-Ladner,
3. 117 Quarters-Whitehorse,
4. 125 HAPS Centre,
5. 119 Operations, and
6. 39 Gymnasium.

After the priority building clearance, the remainder of station buildings will be cleared. The removal of snow and ice from

walkways and stairs must be commenced within 4 hours from the end of a snow or ice storm, and the removal of snow and ice from walkways and stairs must be commenced before snow accumulation reaches 10 centimetres as a result of blowing snow. Historically, there are 40 events a year. Snow and ice removal from walkways and stairs are the responsibility of the Contractor 365/24hrs/day. The Contractor must ensure the safety of each identified area is maintained at all times.

8.3. Reports and Deliverables

The following are reports and deliverables that the Contractor is required to deliver in the conduct of work.

1. Janitorial Preventive Maintenance Plan
2. Janitorial Quality Plan
3. Janitorial Safety Plan
4. Weekly Sustainment Request
5. Annual Requirement Forecast Report
    a. The Contractor must provide an annual Requirement Forecast Report (Sept / Oct of each year) detailing the material and equipment to be delivered during the Fall BOXTOP the following year.

9. Food Services

9.1. Context

The Contractor must provide the services in this section including the provision of meals using healthy recipes in a cafeteria style self-service style 365 days a year. The Contractor is responsible:

1. For the ordering,
2. Warehouse Management,
3. Prepare and serving and,
4. Accounting for all food including;
    a. Box meals, and
    b. Hot Dispersed meals

The Contractor is also responsible for producing:

1. The weekly food order, and
2. The annual forecast including;
    a. A list of non-perishable food,
    b. Non-food material (i.e. disposable dinning wares), and
    c. Replacement of equipment required to operate and maintain the kitchen

The Contractor's operations will minimize the logistical burden of shipping pre-made / packaged material from the south (e.g. Contractor baking of bread / pastries vs shipment of pre-made loaves and packaged baked goods), and to maximize the shipment of long shelf life items in bulk. This includes organizing food supplies to stock the kitchen units in the quarters and support of Operations at Fort Eureka where the Contractor must organize bulk food supplies on a weekly basis in May, June & July.

The Contractor must also reduce material of single use plastic such as plastic cups, bowls and utensils to decrease station waste.

9.1.1. Description of Existing Conditions

The facilities were designed to support a maximum capacity of 200 permanent staff and visitors at any1time. The winter season population of non-contractor personnel averages about seventy-five (75) and the summer season population of non-contractor personnel can surge up to one hundred and fifty (150).

The food services are provided in a cafeteria style dining hall located in the HAPS building with the ration storage adjacent to the kitchen consisting of freezers, fridges and dry goods warehousing of 60-day food storage capacity. The Contractor will operate a multi-faceted, Moderate Volume Food Services Operation of food preparation and service that will offer more than 1 type of food service (i.e. cafeteria, vending, limited table service, off-site catering).

Meal service is to be available seven days a week. Dining room hours must be as follows unless otherwise instructed:

Weekdays (Breakfast – 07:00-08:00; Lunch – 11:30-12:30; Dinner -17:00-18:00)
Weekends and Holidays (Brunch – 10:30-12:30; Dinner -16:30-17:30)
During Op BOXTOP – (2 weeks in April and September) – (Late Meal 22:30-00:30)

9.1.1.1. Extended Operating Hours

The Contractor must be responsible to serve CFS personnel at various time of the day/night to meet operational requirements. DND will provide the Contractor arrival and departure times for operations with estimated counts of personnel within 24 hours of each event. The Contractor is to accommodate CFS Alert personnel:

1. On late arrival of aircraft,
2. Op BOXTOP operations before and after normal operating hours (when requested), and
3. Maintain the capability of at least 5 persons per minute flow rate through the entire line.

The extension will normally be of 1.5 hours in duration and there are historically 50 occasions per year.

The Op BOXTOP late meal between 22:30 to 00:30 hours will be served to approximately 20 personnel, with 2 Op BOXTOP operations per year at historically 12 days per Op BOXTOP operation.

9.1.2. 4-Week Cycle and 10-Day Cycle Menu.

The Contractor must provide 2 complete menu revisions per year, based on 75% use of the 8 Wing's 4-week Cycle Menu, which must comply with references in the preparation. The menus will follow the 4-Week Cycle Menu provided by the 8 Wing Food Services O, or 8 Wing D/Food Svcs O. The Contractor will also follow the 10-Day Cycle Menu for cold box meals provided by 8 Wing Trenton Food Svcs. Any menu changes are to be submitted for review and acceptance by PA.

9.2. Work to be Performed

9.2.1. Menus

The Contractor must post menus before each meal, clearly visible to all customers and following the 4-week cycle menu.

9.2.2. Cafeteria Style Self-Service

The Contractor must provide Cafeteria Style Self-Service meals in accordance with the approved cycle menu. The Contractor must ensure the meal items meet the availability and portion size standard provided at references. As much as possible, the same meal item choices and portion sizes will be offered to all diners of a meal. The Contractor will maintain the short order and breakfast flow rates of at least three (3) persons per minute, and maintain the capability to provide an average flow rate through the line of at least 6 persons per minute for all other items. In addition, an all-inclusive meal based on the up to date reference is to be offered at each meal, which defines the combination of meal components (for breakfast, lunch and supper) including dispersed meals.

9.2.3. Theme Meal Occasions

The Contractor must support the following special meals:

1. Christmas Dinner,
2. Easter Dinner,
3. New Year's Day Levee,
4. Canada Day Celebrations,
5. St. Jean Baptiste Day,
6. Remembrance Day Reception, and
7. One weekly theme dinner.

Theme dinners (e.g. cultural or ethnic theme) are to be selected by the Contractor and will be built into the menu. For these occasions, the style of service may be other than cafeteria style as authorized by the PA.

9.2.4. Special Dietary Meals

The Contractor must be familiar with DND Religious and Spiritual Accommodation policy as per reference. The Contractor may be required to adjust standard operating procedures, routine practices and provide special dietary meals accommodating (when practical) religious, spiritual beliefs and temporary illness when directed by PA. As well, at least 1 healthy choice selection must be available at lunch and dinner in accordance with references.

9.2.5. Cold Box Meals for Personnel on Operational Duty

For personnel on operational duties who cannot attend dining hall operating hours the Contractor must provide cold box meals prepared for either delivery, or pick-up by the customer as per prior arrangement. The box meals are to be time and date stamped when completely assembled, and each box is to be stamped with "Consumption must be within four hours unless refrigerated". The food is to be served in amounts specified for standard portion sizes and quality in accordance with reference standards. All meals are to be refrigerated until pickup, and must be ready for pickup within 15 minutes of specified pick-up time. The Contractor will be required to accommodate special dietary needs accommodating religious beliefs and temporary illness when directed by the PA. Historically, the Contractor will prepare 1,050 cold box meals per year, not including meals for

Contractor Site employees.

9.2.6. Hot Dispersed meals

The Contractor must provide hot dispersed meals which are to be prepared and packed to the standard of Dispersed Meal/Infrequent Meal Pattern. The insulated food containers will be provided as GFE, and the Contractor will produce dispersed hot meals using foods that retain their appearance and form with travel holding temperature within the "safe" zone. The food is to be served in amounts specified for standard portion sizes and quality in accordance with references, and must be ready for pickup within 15 minutes of the specified time. The CO Alert will provide a minimum lead-time of 48 hours to the Contractor indicating the requirement for hot dispersed meals to be provided. Historically, the Contractor will prepare 252 hot dispersed meals per year, not including meals for Contractor Site employees.

9.2.7. Refreshment Serving – Outside of Dinning Hall

The Contractor must provide 24/7, daily, continuous services to refreshment servicing equipment which will be kept stocked throughout the day and working properly to provide hot water, regular coffee and cool drinks (juice). Three dispensing machines are located in the "Beach area" next to the kitchen.

The Contractor will provide a daily "Soup" at 10:00 each week day morning, and a baked snack plate. This will be a Menu planning requirement.

9.2.8. Between Meal Allowances (BMA) for Quarters

The Contractor must provide Between Meal Allowance to the Quarters on a weekly basis. Quarter occupant requests are submitted to the Contractor who completes the BMA form provided by 8 Wing Food Services (who will provide requested BMA with regular food orders), and will be packaged for Quarter's personnel pick up. Historically, there are 140 orders per year.

The Quarters' weekly requirements must be ready for pick-up at the specified time with strict food items control maintained. The issues to the Quarters will not be made to the detriment of the Station's kitchen; items will require no preparation time by food staff and will be comprised of snack type items such:

1. As bread,
2. Condiments,
3. Fruit, and vegetables, or
4. Other items as authorized by the 8 Wing Food Services, not to exceed 20% of the BFC.

The Contractor will be provided an SOP of the BMA Form to assist in monitoring the quantities issued ensuring Station needs are satisfied.

9.2.9. Catering for Coffee Breaks and Meetings

The Contractor must provide catering for coffee breaks, and small meetings possibly requiring special set-up as well as meal provisions. These events may include coffee and other beverages with, or with light snacks for up to 25 people. Historically, 19 coffee breaks, or small meetings may occur each year. A minimum of 24-hour notice will normally be provided to the Contractor by the CO.

9.2.10. Catering for Special Events

The Contractor may be required to prepare and provide special request items which include, but not limited to, the following:

1. Hot wings,
2. Sandwich trays, and
3. Various types of fruit and vegetable trays.

for catering special events and meetings for up to 25 people per meeting. Historically, 12 special catering events or meetings may occur each year.

9.2.11. Support to Fort Eureka

Food from 8 Wing in support of Fort Eureka (May to July, inclusive) will be stored by the Contractor and provided as required. The Contractor must package the non-perishable, dry goods and foodstuff being provided ensuring contamination prevention. A Fort Eureka coordinator at CFS Alert will organize the required support.

9.2.12. Food Safety Programme

The Contractor must provide a copy of its food safety programme to the 8 Wing Foods Svcs O / PA who reserves the right to inspect food service areas. W Foods will conduct a yearly inspection visit ensuring compliance. All kitchen and food dispensing/storage areas must be maintained and inspect on a daily basis with inspection reports completed and provided monthly to the PA. A final sanitary inspection must be conducted daily. The Contractor must take immediate action to rectify food safety deficiencies; any delay caused by factors beyond the contractor's control must be properly documented and brought the attention of PA immediately.

The Contractor must provide and implement its food services in compliance with the Food Safety and Defence Programme references. All personnel involved in food preparation will be cognizant of the programme with successfully completing a nationally recognized food safety programme in the past 5 years.

The programme is to be submitted for review and acceptance by the PA, and the Contractor must incorporate the PA's comments and resubmit it for acceptance. The DND will send a Technical Assistance Visit (TAV) team to review food safe practices, and current operating procedures on an annual basis. This Programme is to be updated and submitted for review with the requirements stated in the "Reports" section.

9.2.13. Receipt and Storage of Food Supplies

The Contractor must implement responsible and correct receiving procedures, and perform receiving and food supplies storage in accordance with references for:

1. Dry goods,
2. Frozen, and
3. Chilled food supplies

Stock holdings must be sufficient to meet the feeding requirements between deliveries, and management efficiency must optimize the quality and freshness of food stocks. This includes ensuring no time-expired shelf goods and short shipments are addressed within three (3) working days to minimize the impact.

The Contractor must provide monthly inventory sheets of stored goods and materials to the PA.

9.2.14. Operation & Maintenance of Equipment

The Contractor must operate and maintain all kitchen equipment in accordance with the manufacturers' instructions and operating procedures, which will be available to staff 100 % of the time. All food services staff operating food service equipment must be instructed on proper use and methods, with current staff training records maintained. Any operation or maintenance issues identified are to be initiated within 24 hours of notification and completed within 14 days.

The Contractor will inspect and clean the Kitchen main and four (4) smaller range hoods in accordance with references. All inspection and cleaning work performed must be under direction of a lead person who is certified using GFE.

The Contractor must ensure Food Services equipment and utensils are maintained within the Contractor's PM programme. Monthly kitchen inventory condition reports for all equipment, including walk-in coolers, must be provided. All kitchen equipment will be life cycled IAW life cycle material management (LCMM) instructions thru DND supply system. Any shortfalls are to be identified to the CF Food Services Support Wing for consideration.

9.2.15. Diner Care Quality Programme.

The Contractor must conduct a Diner Care Quality Programme, in accordance with the DND Food Services Manual, which is to measure diner satisfaction by including comment cards on dining tables and possibly conducting exit interviews. The PA will agree when the survey approach and the system is to be reviewed annually and changes submitted to the PA for approval and the Contractor must incorporate the PA's comments into the Plan and resubmit it for acceptance.

9.3. Reports and Deliverables.

The following are reports and deliverables that the Contractor is required to deliver in the conduct of work.

1. Food Services Preventive Maintenance Plan
2. Food services Quality Plan
3. Food Services Safety Plan
4. Annual Requirement Forecast Report
    a. The Contractor must provide an annual Requirement Forecast Report (Aug of each year) detailing the material and equipment to be delivered during the Fall BOXTOP the following year.

9.3.1. Weekly Food Services Order.

The Contractor must provide a weekly food order indicating the requirements to be delivered on the weekly sustainment flights. Note that it takes approximately three (3) weeks from the order date to the delivery on the sustainment flight. This requirement includes the food for all personnel eating in CFS Alert.

The weekly food order will also contain any requirements beyond the 10 day / 4-week cycle menu plan. Significant lead time must be incorporated into these orders to meet requirements.

1. Between Meal Allowances (BMA),
2. Theme, and
3. Specialty Requirements
    a. Special catering
    b. Coffee Breaks

9.3.1.1. Food Services Menu Cycle.

The cycle menu to be revised every 6- months and the 4-week cycle menu is to be submitted for approval through the PA.

9.3.2. Annual Food Services Requirement Forecast Report.

The Contractor must provide an annual Food Services Requirement Forecast Report (Sept / Oct of each year) detailing the dry goods and non-perishable items to be delivered during Fall Op BOXTOP the following year. This requirement includes the food for all personnel eating at CFS Alert. Forecasted quantities are to be IAW known feeding and menu requirements.

9.3.3. Monthly Meal Consumption Report.

The Contractor must provide an accurate and complete monthly Meal Consumption Report to the PA that includes, as a minimum, the number of meals served separated by:

1. Day,
2. Meal,
3. Category of diners (visitors, Contractor Personnel, military permanent staff), and
4. Type of service (cafeteria, box meal, hot meal, Between Meal Allowance / Extra Calorie Food issues).

The supporting documentation, including all requisitions for meals (e.g. box meal and hot meal), refreshments and feeding requirements must accompany the report.

9.3.4. Diner Care Quality Programme Report.

The Contractor must prepare and submit a monthly Diner Care Quality Programme Report. The report is to include the number of survey cards filled and details of the comments provided. The report is to also include the Contractor's method and timeframe to resolve issues raised by diners.

9.3.5. Cold Box Meal Cycle Menu.

The Contractor must provide two (2) complete Cold Box Meal Cycle menu revisions per year which comply with references. The cycle menu is to be revised every 6-months and the 10-day cycle menu is to be submitted for approval through the PA.

9.3.6. Monthly Inventory of Food Services Supplies.

The Contractor must provide a monthly closing balance of the monthly inventory report (by item) for Unitrak reporting. The inventory list must include all perishable and canned / boxed goods. DND will perform an annual audit of the food material sent to CFS Alert and the monthly inventories.

10. Transportation and Vehicle Maintenance

10.1. Context.

The Contractor must provide personnel movement and vehicle maintenance services (fleet management services). This includes Contractor maintenance of ECCC vehicles as part of the Contractor bid. ECCC will be responsible for procurement of their vehicles and parts.

10.1.1. Description of Existing Conditions.

The Government provides several vehicle fleets for maintaining CFS Alert operations which the Contractor will support. The scope of work includes at a minimum:

1. Vehicle maintenance services (including interior cleaning),
    a. Including heavy equipment,
2. Provision of the movement of personnel,
3. Material and equipment as required by DND and operations,
4. Driver training,
5. Accident investigation,
6. Aircraft de-icing, and
7. Maintenance and servicing of all small engines and related accessories and attachments.

This applies to all vehicles, equipment, and related attachments provided (as GFE, GFV and GFM) for DND, Contractor and government employee use in CFS Alert, and permanent DND vehicles and equipment in AFB Thule, Greenland. This requirement includes producing the list of material, spares replacement and equipment required to operate and maintain all equipment. Fleet management and accountability will utilize Fleet Management System (FMS) and Defence Resources Management Information System (DRMIS) software.

1. The current list of vehicles and equipment at CFS Alert is detailed in DRMIS and the latest Vehicle Off Road (VOR) is held by 8 Wing TEME Flt. The VOR will be verified during the Phase-In as a Government Furnishing report.

10.2. Work to Be Performed.

The Contractor must support the Tasks and responsibilities:

10.2.1. Contractor Driver Examiner.

Contractor driver examiners certify vehicle operator qualifications in Alert and update FMS. If no Contractor personnel possess the Driver Examiner qualifications 8 Wing TEME Flt will conduct an annual five (5) day course. DND FMS training can be an additional 2 more days. 8 Wing TEME Flt will qualify and authorize driver examiners with a scope of work and limitation of vehicles for CFS Alert.

10.2.2. Transportation and Dispatch Services.

The Contractor must provide transportation services for all CFS Alert personnel including:

1. Movement of supplies,
2. Movement of equipment,
3. Recovery, and
4. Breakdown service.

Historically, 700 dispatches occur each year including 100 passenger trips. For short term or “One-Off” type dispatches, the Contractor must provide the services of vehicles within 3 hours of receiving notice (e.g. Pick-up, or drive aircraft passengers to and from weekly flights). The trips are normally 1 hour in duration with up to 100 trips occurring each year.

The Contractor must provide material transportation vehicles within three (3) hours of receiving notice, including material handling, vehicles and drivers (e.g., transport equipment and material during weekly sustainment flights). The material is to be picked up within 10 minutes. For material pickup dealing with aircraft, the equipment operator is to be on site 15 minutes before the arrival of the aircraft.

10.2.3. Contractor Staffing

The Contractor will ensure that 8 Wing TEME Flt ETQMS / OIC EME is informed of any maintenance or transport staffing changes providing names for DRMIS maintenance programme access. The Contractor is required to ensure any new Maintenance Supervisor, Transport Supervisor or DRIMIS clerk spend a minimum of 1 day with 8 Wing TEME Flt before CFS Alert deployment for discussion of any current CFS Alert Maintenance and Transport issues.

10.2.4. Vehicles for DND Permanent Staff.

The Contractor must make 6 x crew cab vehicles available "at all times" for DND staff from within the existing fleet.

10.2.5. Maintenance and Servicing of Vehicles, Equipment and Related Attachments.

The Contractor must provide maintenance and servicing as:

1. All first and second line repairs,
2. Inspections, and
3. Preventive maintenance

As directed in:

1. Canadian Forces Technical Orders (CFTO),
2. Manufacturer's recommendations,
3. Manufacturer's schedules, and
4. C-04-020-006/AG-001 (for commercial vehicle inspection)

10.2.5.1. Preventive Maintenance

The Contractor will provide preventive vehicle maintenance as pre- scheduled and/or directed, in a DND formatted inspection routine and/or servicing intended to prevent equipment breakdown or damage, as per LEMS policy. The Preventive Maintenance plans are described in Deliverables section.

10.2.6. First and Second Line Maintenance

This concept only applies to Transport and Vehicles repair and maintenance.

10.2.6.1. First Line Maintenance

It is defined as: Level one that includes operator maintenance and preventive maintenance such as servicing, preliminary diagnosis of faults and corrective maintenance tasks of a "minor nature". Minor Nature infers short duration (less than 4 hours), and relatively simple repairs. Further information on operator maintenance is found in A-LM-158-005/AG-001 – Transportation Manual.

10.2.6.2. Second Line Maintenance

This only applies to Transport and Vehicles repair and maintenance. It is defined as: Level two includes operator corrective maintenance by repair or replacement of parts and assemblies, limited only by time (this limit is campaign dependent, but usually is limited to 24 hours).

10.2.7. Serviceability Rate

The Contractor will present a report to the CO CFS Alert and the PA of the vehicle serviceability rate stated as the Vehicle Off-Road Report (VOR). The VOR is defined as the number of vehicles, or special equipment within the fleet (the actual vehicles allocated to the Station Commanding Officer to complete the mandated function) that are fit to perform their intended function at the time reported as a percentage of the fleet. The serviceability rate is expressed weekly as a percentage of Vehicles available over the number of vehicles held, and can further be expressed by vehicle type.

The VOR calculation will be determined by 8 Wing TEME Flt for PA authorization and contractor implementation.

10.2.8. Vehicle Movement by Airlift

Before any movement the ETQMS / Maint O at 8 Wing Trenton will review, approve or deny all instances where equipment or parts require shipment to TEME Flt Trenton for second line repairs. In the event the current workforce in CFS Alert cannot meet the repair requirements of the fleet in location, then the Contractor must provide extra resources to augment the basic workforce ensuring all vehicles and equipment are repaired with minimal delay. A minimum serviceability rate of 50% per fleet and 80% overall is required and is further detailed based on specific vehicles.

CFS Alert could have up to 8 BV206s at any given time with TEME Flt maintaining 1 extra serviceable BV206 in reserve to deploy. However, the Contractor must maintain a 75% of the existing fleet of BV206s serviceable at all times.

10.2.9. Parts and Tooling

DND provides spare parts and tooling to perform repair, with additional or replacement requirements being reviewed and authorized by 8 Wing TEME Flt ETQMS / Maint O. DND will also inventory of all tooling in the Maintenance shops that the Contractor must confirm through annual SLOC verifications. As validation, the Contractor will maintain a catalogue system and scaling of first and second line spare parts inventory with additional spare parts authorized by 8 Wing TEME Flt ETQMS / Maint O. Spare parts must be confirmed in CFS Alert before being ordered from 8 Wing TEME Flt.

The Contractor will audit all GFE tools (personal, and general) and will provide a monthly verification report of completeness. As GFE is accountable on a SLoc a "lost tool" report must be submitted to the Supp O substantiating the loss. A broken tool must be exchanged through the Supp O on a one-for-one basis. Unaccounted missing and broken tools / equipment will be the responsibility, and cost of the contractor.

10.2.10. Procurement.

DND will provide equipment and materials, as required using weekly sustainment and yearly forecasts for Op BOXTOP provision. The process for procurement is detailed in the Procurement Section.

10.2.11. Conduct Vehicle Accident Investigations.

The Contractor must provide the services of a certified Level 2 accident investigator from an accredited Police Service Academy to:

1. Investigate accidents involving vehicles and equipment,
2. Produce an Accident Report,
3. Equipment Files (ORL),
4. Complete form CF1153 providing repair estimate and forward to 8 Wing RVS Section, and
5. Enter the accident data into FMS.

Accidents must be reported within 24 hours of occurrence to:

1. RVS,
2. TEME Transportation Controller,
3. ETQMS / Maint O,
4. TEME Prod WO, and
5. AMO.

Historically, 12 investigations may occur yearly.

10.2.12. Vehicle and Equipment Recovery and Breakdown Service.

The Contractor must provide Recovery/Towing services and as required on-site repair services which may utilize non-conventional Recovery/Towing equipment such as graders, dozers, front-end loaders and heavy equipment. The Recovery/Breakdown services are not limited to boosting batteries and assisting in the recovery of Aircraft (e.g., heavy lift assistance for propeller changes). Historically, 50 recoveries may occur yearly.

10.2.13. Material Support to USAFB Thule and Fort Eureka.

The Contractor must provide vehicle maintenance support to USAFB Thule and Fort Eureka. The parts and material required will be delivered to the Traffic Section 24 hours before scheduled flight departure. Historically, there have been 12 requests yearly.

10.2.14. Government Furnished Maintenance Record System.

The Contractor must use the Government Furnished Maintenance Record System (DRMIS) for all work orders and notifications maintaining records on equipment history, and to produce reports as required in electronic and/or paper format. The work orders must be processed accurately within 1 day of final receipt of parts, and corrections to input data effected within 5 days of deficiency report receipt from the DRMIS Administrator.

10.2.15. Training on BV 206 Tracked Vehicles.

The Contractor must train selected DND personnel on vehicle operations such as, but not limited to, the BV 206 (Bandvagn 206) tracked vehicles. The Contractor has a minimum of forty-eight (48) hour notice from request for training to provision of service. Historically, there has been a requirement for 50 personnel requiring training yearly.

10.2.16. Washing of DND User-Driven Vehicles.

The Contractor must keep the exterior and interior of all non-DND assigned vehicles clean and washed at all times. DND Vehicle users are also responsible to maintain and ensure cleanliness standards. Cleaning and washing services of the vehicles will be conducted outside normal working hours and may be weather dependent.

10.2.17. Airfield Friction Testing

The Contractor must provide friction testing on the airfield utilizing GFE. Friction testing on the airfield is seasonal and/or must be carried out when there is physical evidence of snow or ice on the runway surface. Initial training of Friction testing equipment will be provided by DND in CFS Alert. After initial training, the Contractor is responsible for training personnel and maintaining this capability internally, including annual refresher training. The Contractor must ensure proper usage and care of the friction testing equipment and must perform regular maintenance on the equipment.

The Contractor must carry out friction testing on the Alert airfield 3 hours, and again 1 hour before the landing of CC-177 flights in Alert, 3 hours, and again 1 hour before the departure of CC-177 flights from Alert, and as required by DND. Friction test results must be recorded and reported to the CO Alert.

10.2.18. DND Staff during Annual Technical Inspections (ATI).

DND will perform yearly vehicle and equipment inspections in Alert. In advance of the ATI the Contractor must provide current information on:

1. Equipment status,
2. Maintenance administration,
3. Safety reports,
4. Parts,
5. Tooling, and
6. Ensure that equipment is made available to inspection team.

After ATI completion the contractor will provide a corrective action report to the DND team lead within 30 days, and 8 Wing TEME Flt ETQMS / Maint O within 60 days.

10.2.19. Government Furnished Maintenance Record System Software System (DRMIS) Training.

The Contractor must be proficient on DND's DRMIS to record maintenance activity. DND system training will be made available to the Contractor for up to 10 people over the life of the contract. The course is available online, and training will also be provided through 8 Wing TEME Flt. Contractor proficiency must be demonstrated to ETQMS and Prod WO before working at

CFS Alert.

10.2.20. Fleet Management System (FMS) and Training.

The Contractor must use and operates a stand-alone version of the FMS to record transport activities with training provided through 8 Wing TEME Flt.

10.3. Reports and Deliverables.

The following are reports and deliverables that the Contractor is required to deliver in the conduct of work.

10.3.1. Maintain Record of Petroleum, Oils and Lubricants (POL) Consumed and Supplied.

The Contractor must record all consumed petroleum products, and must provide monthly reports to the PA. This will be an inventory control list detailing:

1. Quantity,
2. Type,
3. Date of product used,
4. Vehicle/equipment number where product was used, and
5. Used/new product storage information.

10.3.2. Fleet Management Services (FMS) Report

The Contractor in Alert must prepare and submit a monthly FMS report required for import by 8 Wing TEME FMS. The report will be sent as an Email attachment.

10.3.3. Material and Equipment Requirement Forecast

The Contractor must prepare and submit Material and Equipment Requirement Reports. Weekly reports as required, and yearly forecast for Op BOXTOP.

10.3.4. Weekly Vehicles Off-Road (VOR) Report

The Contractor must prepare and submit an accurate weekly VOR report detailing the Fleet serviceability identifying:

1. Vehicles
2. Trailers
3. SNIC and Heavy Equipment, and
4. AMSE

That are:

1. unsafe for use,
2. have damaged safety related components,
3. leaking petroleum oils,
4. uncertified, or
5. involved in accidents.

11. Airfield Operations

11.1. Context.

The Contractor must provide support to airfield and aircraft during operations. This will include operation, maintenance and repair of AMSE equipment and Aircraft Servicing.

11.1.1. Description of Existing Conditions.

The runway at CFS Alert is a graded gravel-based airstrip, 5500 feet long and 150 feet wide on a true bearing of 050/230 true - 110/290 magnetic -110 grid. There are no hangars for aircraft.

The station has the following amenities for airfield operations:

1. Limited parking for overnighting aircrafts.
2. Electrical outlets.
3. Refuelling capabilities.
4. De-icing capabilities.
5. Meteorological services.
6. Medical services.
7. ARFF Vehicles,
8. Loading/unloading heavy aircraft.
9. Canada Customs.
10. Exercise facilities.

11.2. Work to Be Performed.

11.2.1. Loading and Unloading Aircraft.

The Contractor must assist the station traffic section in the off-loading and loading of all transiting aircraft. This will include operating Aircraft Handling Equipment, Aircraft fuelling and De-icing. Historically, there are 100 occurrences of each activity per year**.**

11.2.2. Preventive Maintenance Plan (PM).

The Contractor must perform Preventive Maintenance on the all airfield equipment establishing a 24/7 serviceability.

11.2.3. Corrective Maintenance (CM).

The following response and rectification times must apply when corrective maintenance is required for equipment:

a. Response Time: 1 hour.
b. Rectification Time: 8 hours.

Historically, the Contractor will have 150 repairs per year.

11.3. Reports and Deliverables.

The following deliverables are required for the AMSE and airfield service equipment:

1. AMSE and service equipment PM Plan.
2. AMSE and service equipment Quality Plan.
3. AMSE and service equipment Checklists.
4. AMSE and service equipment Weekly Sustainment Report.
5. AMSE and service equipment BOXTOP Forecast Report.
6. AMSE and service equipment Monthly Report.
    a. The Contractor must include all incident reports for the month, detailing all events and actions taken.

12. Environmental Protection and Domestic, Industrial and Hazmat Waste Collection, Handling and Disposal

12.1. Context

The Contractor must provide management of all domestic, industrial, and Hazardous Materials (HAZMAT) wastes to keep a sanitary and neat environment. In addition, the Contractor must clean and maintain equipment and waste containers. Refer to Section 13 of the SOW for additional requirements pertaining to the delivery of Real Property Services, including environmental aspects of Sustainability Plans and Environmental Management Services.

In regard to the transport of Hazardous Waste, the Contractor is considered to be acting on behalf of Canada insofar as the title and ultimate responsibility for the Hazardous Waste produced by DND remains with DND even though interim handling and storage is affected by the Contractor. This statement does not absolve the Contractor from liability should it be demonstrated that the Contractor did not follow all applicable regulations during the process of removing and disposing of the material. DND will coordinate the transport of various specified Hazardous Waste from CFS Alert to CFB Trenton. The Hazardous Waste at the station is to be accurately monitored and inventoried in order to minimize risk to personnel and the environment.

12.1.1. Description of Existing Conditions

The garbage is characterized according to whether it can be recycled south, used as landfill without hurting the environment, incinerated or flushed away. The general categories and how garbage is presently disposed of are: wet garbage, dry garbage, plastic, tin, glass, pop and beer cans, metal and wood products, aerosol cans, electronic wastes, surplus materials, HAZMAT and HAZWASTE.

1. Wet garbage is disposed of through the garburator in each building, or the Mess Hall garburator.
2. Aerosol Cans are collected and disposed of on-site.
3. Dry garbage is collected, compacted, and incinerated in a 2-Ton Thermal Oxidizer at Building 29. Ash without metal clinkers produced by incinerator operations is placed in the Main Station (Domestic) Landfill. Items burned in the incinerator are: Small amounts of waste petroleum, oil, and lubricants (POL): punched aerosol cans; N/S clothing; kitchen grease; axle grease from maintenance; air, oil and fuel filters; garbage bales; and food wastes and bones. Ash with significant metals (clinkers) due to wastes that could not be reasonably sorted, segregated, and separated is placed in the (Industrial) Landfill. The disposal activity in the Domestic and Industrial Landfills are controlled by the Hazmat position and DND 8 Wing.
4. Recyclable materials are collected and recycled in accordance with the Station Recycling initiative and Contractor's recycling programme.
5. Non-recyclable material is to be backhauled south for appropriate disposal. Contractors must handle and properly prepare any materials that need to be backhauled, such as: materials are to be sorted and containers are to be washed before backhaul.
6. All electronic-wastes and appliances are to be backhauled south for appropriate disposal.
7. All surplus materials are to be backhauled south for appropriate disposal with 8 Wing as the final decision maker.
8. All vehicle batteries and parts to be backhauled south for appropriate disposal with 8 Wing as the final decision maker.
9. All wastes (excluding Dangerous Goods) must be properly sorted and packaged through the Alert Supply and traffic sections for backhaul to 8 Wing for proper disposal.
10. The Contractor will enforce recycling, lead and create waste minimization initiatives, and ensure efforts are taken to ensure that materials are backhauled south.

<u>For on-site landfill operations</u>:

CFS Alert currently has two (2) legacy landfills. The usage of the landfills is restricted and at the direction of DND (8 Wing and RP Ops North). The (Industrial) landfill is designated for non-hazardous bulky metallic wastes and clinker ashes; the Main Station (Domestic) Landfill is designated for non-hazardous household incinerated waste ashes.

"Clinker" ashes are metal remaining after an incinerator burn which can fall through a sifting screen of maximum 2" x 2" grid size.

<u>For Existing Contaminated Site Areas</u>:

The CFS Alert Environmental Baseline study was updated in 2020 and is provided as reference. This report details the known areas of contamination within the Station site. The Contractor must ensure that its activities do not create new sites and, within these known contaminated sites, do not create an additional negative environmental impact.

12.2. Work to Be Performed

12.2.1. Crush Barrels and Drums

The Contractor will hold, control and maintain a number of empty barrels on Station, as agreed with the W Env Officer, for potential spills. All remainder barrels are to be crushed, over-packed and recycled south.

If Landfill disposal is supported by the W Env O, then the Contractor must first clean barrels, incinerate and crush before being deposited at a landfill site. No barrels or drums are to be sent to the landfill site without being crushed and proven cleaned.

Historically, the Contractor will dispose of 50 barrels of drums a year.

12.2.2. Solid Waste

The Contractor must remove, dispose and track of all waste materials collected at the station. The Contractor must ensure that an appropriate quantity and type of exterior bins is provided at each site/building to hold the waste and recycle materials until collection. If additional or larger bins are required, they will be provided by the Contractor. Waste and recycling pick up service will be carried out on a scheduled weekly basis.

The Contractor must empty the 11 dumpsters (20 cu. ft. each) located in CFS Alert. This consists of picking up dumpsters, shredding content and disposing of the remains as per the Solid Waste Management Plan. The plastic, tin and glass are deposited at the HAPS recycle containers, then taken to be recycled and backhauled south, as per the PM plan. Metal and wood products are deposited in separate large orange containers (located at the carpenter shop, maintenance shop, and Bldg 29) is considered scrap metal for backhaul south as per PM Plan; non-pressure-treated scrap wood can be incinerated with the ash taken to the Domestic Landfill.

The areas surrounding dumpsters are to be kept clean and the dumpsters are to be emptied at least once a week. Fluorescent lamps must be disposed of in the purpose-built fluorescent tube crusher on-site; once full, arrange for hazwaste backhaul. The Contractor must ensure that all waste bins and dumpsters are in proper working order and secured to prevent animals from accessing the waste within the containers. Any issues with the dumpsters will be rectified by the Contractor under corrective maintenance.

12.2.3. Additional Collections of Normal Refuse or Bulky Items

At last resort when backhauling in no longer an option by the Contractor, and only when approved by DND, the Contractor may transport and dispose of additional collections of normal non-hazardous refuse, or non-hazardous bulky items at the Industrial Landfill. The loose debris must not fly or fall from the vehicle or container, and the pickup is to be affected within 1 working day of request. Historically, the Contractor has performed 1 (1) additional pick up per month.

12.2.4. Incinerator

The Contractor must operate the incinerator once bales arrive, then place them in the tray and incinerate them. The operator must then collect the ash and sends it to the appropriate Landfill (see above). Historically, the Contractor will incinerate 2 to 3 bales per week. The Contractor must track the number of bales, weight, and incineration duration (date and times) as part of the existing log practices.

12.2.5. Recycling Programme

The Contractor must operate the recycling programme, which applies to beer cans, pop cans, scrap metal, plastics, e-wastes, appliances, batteries, and surplus materials. All beer and pop cans are to be drained, crushed, collected and deposited in separate containers, marked BEER CANS ONLY & POP CANs ONLY, at the HAPS ramp. The beer cans and pop cans are not to be mixed. These items will then be taken to Building 29 and sent south for recycling. All plastics that have food wastes must be cleaned before collection to prevent contamination.

There are approximately 19 recycling stations at CFS Alert and the recycling containers will be emptied on a scheduled weekly basis or as per the planned schedule in the Solid Waste Management Plan.

12.2.6. Halocarbon Management System

The Contractor must implement a Halocarbon Management System compliant to Federal Legislations and Regulations, addressing proper storage, use, practices, and responses when it is exposed to the environment.

12.2.7. Operate Landfill Sites.

The Contractor must operate 2 landfill sites, keeping refuse material in the specified areas of the landfill. The material is currently delivered to the landfill site at the discretion of the Hazmat technician. Once in the late summer / fall, a 0.3m cover will be placed on the top of the refuse to keep it contained and the site organized into cells to prevent scattering. The area in m^2 will depend from year to year and how the station users deposit waste at the landfill facilities.

In 2011, both the "Main Station" and "Industrial" landfill were covered with 765 m^3 of gravel. This material was pit run gravel and this does not form part of the annual 10,000m^3 of crushed quarry material.

12.2.8. Operate Existing Hydrocarbon Contaminated Soil Land farms

The Contractor must turn existing hydrocarbon contaminated soil in 3 land farm facilities in order to remediate the soil. The soil requires turning twice every summer (typically July and August). The turning of the soils will typically be performed at the request of the PA and will generally coincide with visiting 8 Wing Environmental staff or their authorized Agent who will monitor the soil turning operations. Historically, the turning operations will require 50 hours of excavator time each year. The usage and access of the land farm facilities are strictly under the management of 8 Wing Environment.

12.2.9. Solid Waste Equipment and Containers

The Contractor must clean dumpsters. All cleaning operations must be performed in a manner so as not to result in environmental contamination, health problems or the creation of nuisance conditions. Water is used for cleaning and there must be no violations of environmental or health laws. The solid waste equipment and containers are to be kept in a sanitary and clean condition. Historically, the Contractor will clean 120 pieces of equipment and containers each year.

12.2.10. Activities of Solid Waste Management Plan (not already covered)

The Contractor must conduct all activities of the Solid Waste Management Plan. This includes any other activities not formally identified above, but required in order for the Solid Waste Management Plan to be implemented fully. Historically, such activities will require an average of 4 hours of direct labour each. The Contractor will be required to action an average of 52 occurrences per year.

12.2.11. Handling HAZMAT

The Contractor must provide hazardous waste management services. It must have the ability to provide bins or containers of the appropriate type and quantity at each site/building to safely hold the waste until collection. The Contractor must also properly label HAZMAT, train personnel in the handling of HAZMAT, and ensure the workplace has material safety data sheets. Contractor Personnel must be furnished with appropriate personal protective equipment (PPE) and trained to correctly wear and maintain PPE. Contractor Personnel must be trained to operate and report malfunctions of issued equipment.

12.2.12. Pickup and Transport of HAZMAT

The Contractor must pick up and transport HAZMAT to and from DND storage sites or generation points. The pickups must be made within 24 hours of the request of the Alert CO. Historically, the Contractor will pick up 50 barrels of HAZMAT waste per year.

12.2.13. Disposal of Hydrocarbon (Waste Oil, Waste Fuel, Glycol)

The Contractor must dispose of hydrocarbons (waste oil, waste fuel, glycol). The disposal will be conducted through the incineration in the thermal-oxydater or small incinerator (furnace) at the EME building or backhaul south. The waste material

must not be held in storage for more than 180 calendar days and it is expected that an average of 3,000 litres of waste hydrocarbons will be incinerated per year.

12.2.14. HAZMAT Received for Storage and Coordinate Local Delivery

The Contactor must receive, check, inspect, certify, and control incoming HAZMAT received for storage and coordinate local delivery to ensure that users/groups that generate the HAZMAT completely and accurately fill out all required documentation, (i.e. transfer documents, copy of SDS, DND Forms). The Contractor is responsible for the storage of all HAZMAT turned in and to keep complete and accurate documentation.

12.2.15. Other Activities of the HAZMAT Management Plan

The Contractor must implement all other activities associated with HAZMAT Management not formally identified but required in order for the HAZMAT Management Plan to be fully implemented. Historically, these activities would require 3 hours of direct labour each and the Contractor will handle on average 52 occurrences per year.

12.2.16. HAZMAT Generated from Minor Spills (Fuel, Oil, Glycol)

The Contractor must collect and clean up HAZMAT generated from spills; this includes spill reporting. The Contractor is to respond to any spills on a 24/7 basis and inform the Alert CO of spills within 15 minutes of being made aware of a spill. The collection and clean-up of spills is to commence within 30 minutes of notification of a spill. Timely inform 8 Wing Environment within 24 hours of the spill occurrence using a spill report form. There is a Duty to Report all spills to 8 Wing Environment.

1. Minor spill of HAZMAT:
    a. Response Time: 15 minutes.
    b. Rectification Period: 30 minutes.

Historically, the Contractor will have 10 spills per year.

12.2.17. Other Environmental Corrective Maintenance

When environmental Corrective Maintenance is required, the following response and rectification times must apply unless stated otherwise:

1. Emergency Call Out (During Normal Business Hours):
    a. Response Time: 15 minutes.
    b. Holding or Temporary Repair: 1 hour.
    c. Rectification Time: 3 hours.

2. Emergency Call Out (Outside Normal Business Hours):
    a. Response Time: 90 minutes.
    b. Holding or Temporary Repair: 3 hours.
    c. Rectification Time: 24 hours.

3. Normal Call Out (During Normal Business Hours):
    a. Response Time: 2 hours.
    b. Holding or Temporary Repair: 4 hours.
    c. Rectification Time: 24 hours.

4. Normal Call Out (Outside Normal Business Hours):
    a. Response Time: 4 hours.
    b. Holding or Temporary Repair: 6 hours.
    c. Rectification Time: 24 hours.

12.3. Reports and Deliverables

12.3.1. Quarterly

1. Hazard waste Map and Record
    a. Each quarter (Mar, June, Sept, Dec) the Technician will provide a current, updated map listing:
        i. Site of barrels on station,
        ii. Clearly identifying empty barrels,
        iii. Clearly identifying waste barrels and contents
    b. Each quarter (Mar, June, Sept, Dec) the Technician will provide a current, updated record listing:
        i. Barrels (barrels must be numbers for tracking),
        ii. Contents (empty, or contents),
        iii. Location, and
        iv. Dates barrels were placed and when documented.

Map and list must data must coordinate. The record must also identify what action will be taken to reduce empty barrels to a minimum required and when hazardous barrels will be removed from site. Coordination for barrel / waste removal will be coordinated between contractor, PA and W Enviro.

12.3.2. Monthly Reports

1. Hazardous Waste Report
    a. The Contractor must provide a Monthly Hazardous Waste Report which contains details of all hazardous waste handling and disposal, including waste descriptions, quantity of each type of waste handled and liaison with CFS Alert traffic personnel for the arrangement of transportation of the waste to CFB Trenton. The CFS Alert Traffic Technician will be responsible for arranging airlift of hazardous waste and CFB Trenton will be responsible for final disposal of hazardous waste. The Report is to be complete and signed off by the Contractor Site Manager.
    b. At the end of each Contract year, the Contractor will present a summary of hazardous waste collected.
2. Incinerator Usage
    a. The Contractor must provide a Monthly Incinerator Usage Report, which is to include the dates of incineration, including start and end times, number of bales, litres of waste oil, weight of bones, amount of hazardous waste, quantity of filters, weight of item(s), and other (usually liquid hazardous waste). The Report is to be completed and signed off by the Contractor Site Manager.
3. De-icing and Anti-icing Fluid Usage
    a. The Contractor must maintain records of de-icing and anti-icing fluid on a database which records receipt and use by type and quantity as applied per airframe registration number. These records will also include the results of the “Clear and Bright” refractometer tests. The records must include date, operator, aircraft type and registration number, estimated amount of de-icing and anti-icing fluid used and recovered.
4. Weekly Sustainment Report.

12.3.3. Annually

1. BOXTOP Environmental Material Forecast Report

13. Real Property Infrastructure

13.1. Introduction

13.1.1 General

13.1.1.1 Among its strategic objectives, DND is committed to responsible stewardship of its real property assets, including:

1. providing workplaces that are safe, healthy, secure and affordable, contributing to the productivity of Occupiers;
2. maintaining a high level of Occupier satisfaction based on timely delivery of integrated and customized services; and
3. ensuring that buildings are managed effectively in a manner that is financially, socially, functionally and environmentally sustainable.

13.1.2 Purpose and Scope

13.1.2.1 DND's purpose in contracting for the services set out in this Section of the SOW is to support the attainment of DND's strategic objectives by engaging the Contractor to:

1. provide responsive real property services in a manner that:
    a. enables DND and the CAF to focus resources on service administration and Occupier relationships, and
    b. maximizes the benefits of the Contractor's service delivery expertise;
2. manage risk effectively, which includes ensuring due diligence and compliance with applicable legislation and policy;
3. improve the financial, social, functional and environmental sustainability of its assets, and assist Canada in balancing related considerations, including:
    a. implementation of approved investment strategies, consistent with direction provided by the TA,
    b. ensuring financially sound and affordable investments, and
    c. reducing the environmental impact of its assets and operations and meeting DND Sustainable Development Strategy (SDS) targets and other environmental targets;
4. demonstrate, on an ongoing basis, that it is ensuring Best Value in the services it provides and receives, considering cost, quality, competition and transparency.

13.1.2.2 The scope of Work includes the provision of the services described in this Subsection, firm and additional Construction Engineering and Maintenance Services and Facility Maintenance Services and, if Canada exercises its option, the provision of 1 or more Optional Services.

13.1.2.3 Buildings are typically stand-alone; however, there are some facilities that provide common services to other buildings. Building requirements vary according to their functional use and the needs of Occupiers.

13.1.3 References

13.1.3.1 General

13.1.3.1.1 References pertaining to this Section of the SOW are provided in the References section. The references provided are for information and do not constitute an exhaustive set of legislative, standards-based or equipment manufacturer-related requirements for the delivery of services. The applicability of the references, associated compliance requirements, or requirements for specific services to be consistent with them are generally as set out in the main body of this Section of the SOW and its Appendices. In the course of providing the services set out in the SOW, the Contractor is responsible for complying with and otherwise meeting the more stringent of requirements set out in:

1. federal legislation, including regulations and codes;
2. DND and CAF policies, directives, technical orders and standards;
3. 'Territorial' legislation, including regulations and codes; and
4. municipal requirements.

13.1.3.1.2 If there is conflict among the requirements, advise the PA and TA and recommend an appropriate course of action for acceptance.

13.2. Have and Follow a Service Delivery Regime

13.2.1 Scope of the Service Delivery Regime

The scope of the SDR covers the processes and procedures associated with the provision of each of the services set out in this Section of the SOW and the Contractor's management regimes, programmes, processes and capabilities required to support the delivery of those services and meet the Service Levels set out in Appendix C.

13.2.2 Have a Real Property Performance Measurement Regime

13.2.2.1 Have a Real Property Performance Measurement Regime (RP-PMR) that meets the needs of Real Property services and requirements.

13.2.2.2 Ensure that the RP-PMR is capable of providing data and information in a manner that will enable the Contractor and DND to assess performance.

13.2.2.3 Ensure that the RP-PMR is:

1. results-oriented, focusing on outputs and outcomes;
2. reliable, producing data and information that are accurate and consistent over time;
3. accessible, providing results that are available to the TA on an ongoing basis; and
4. life cycle-based, enabling continual improvement over time.

13.2.2.4 Ensure that the RP-PMR is capable of providing for the collection and production of performance measurement data and information to support the Performance Measures (PfMs) identified in Appendix A, Performance Measurement Regime Information, and the following Performance Indicators (PIs) aimed at ensuring successful service delivery:

1. Asset Integrity PI: success in sustaining the value and condition of assets, complying with applicable policy and legislation;
2. Satisfaction PI: success in meeting TA expectations, promoting Occupier satisfaction, safeguarding the well-being of Occupiers and promoting ease of doing business; and
3. Financial PI: success in providing services that are cost-effective and represent Best Value.

13.2.2.5 Ensure that the RP-PMR is capable of generating performance measurement data and information for each service appropriate to the buildings and other assets in the Contract, identifying:

1. inputs, in terms of financial and non-financial resources used to deliver activities, produce outputs and accomplish outcomes;
2. activities, in terms of processes required to meet requirements and produce deliverables; and
3. outputs, in terms of direct products generated from the services provided.

13.2.2.6 Ensure that the RP-PMR:

1. provides performance measurement data and information to an appropriate level of detail; and
2. aggregates PMs into PIs.

13.2.3 Have an Optimized Maintenance Programme

13.2.3.1 Have an Optimized Maintenance Program (OMP), and optimize O&M strategies using a reliability-centred approach and a Computerized Maintenance Management System (CMMS) to:

1. foster innovation in maintenance practices and management;
2. reduce life cycle cost;
3. minimize unscheduled repairs and eliminate unnecessary maintenance activities;
4. identify the best opportunities to perform maintenance;

5. minimize disruptions to Occupiers; and
6. maximize building availability.

13.2.3.2 Ensure that the OMP provides capabilities to:

1. analyse failure data to identify maintenance problems and challenges, and improve reliability and operating efficiency; and
2. rationalize spares, consumables and supply requirements.

13.2.3.3 Ensure that the OMP provides maintenance strategies for the systems, equipment and components that influence overall building availability, including:

1. inspection, testing and maintenance of life safety and fire protection and control equipment;
2. intrusion alarms;
3. door locking systems (locksmithing);
4. incinerators;
5. aerodrome systems;
6. quarrying systems;
7. heating, ventilation, air conditioning and refrigeration (HVACR) systems;
8. electrical supply and distribution systems;
9. structural and architectural components;
10. results of seismic screening and assessments, carried out in accordance with DND policy;
11. vertical transportation systems;
12. energy systems;
13. water, sewer and plumbing systems;
14. building envelopes; and
15. storage tanks and associated piping systems.

13.2.3.4 Ensure that the OMP provides for assessment of individual buildings to determine the optimum balance between repairs and predictive, preventive and corrective maintenance, considering factors such as:

1. the nature of operations, Occupier reliability requirements and the provisions of specific Tenant agreements;
2. maintenance service requirements set out in the most recent commissioning report;
3. the building age, condition, structure, construction details, risk of hidden deterioration, exposure conditions, systems and equipment;
4. failure rates;
5. service call trends;
6. capital investment strategy;
7. total lifecycle cost; and
8. heritage designation.

13.2.4 Use Products That Meet Standards

Ensure that products, equipment, fixtures, fittings, devices, wiring and other materials installed under the Contract meet the appropriate CSA, CGSB or ULC standard and are clearly marked to show compliance. Where no CSA or ULC standard exists for a material or product being installed, utilize materials or products that follow good industry practice and are fit for purpose.

13.2.5 Ensure Labour Resources Are Qualified

13.2.5.1 Ensure that labour under the Contractor's authority, whether employees or sub-contracted, undertaking design work and supervision are registered, as follows:

1. For Engineers & Geoscientists in accordance with NAPEG requirements; and
2. For Architects, in accordance with a Province or Territory in Canada.

13.2.5.2 Meet the requirements set out in Table 1: Resource Qualification Requirements, and otherwise ensure that labour resources under the Contractor's authority are suitably trained and supervised to perform assigned Work.

13.2.5.3 Ensure that a minimum of two (2) journeyman for each trade are onsite 24 hours/day, 365 days per year to ensure safe working practices, recognizing the extreme isolation and harsh environmental conditions associated with CFS Alert.

13.2.5.4 If Work is to be carried out by Apprentices, Engineers in Training or Architect Interns, in accordance with a Territorially-approved requirements, ensure that a suitably trained and qualified resource provides direct and comprehensive supervision of the Work.

13.3. Provide Management Services

13.3.1 General

Provide Real Property Services in accordance with the Service Levels set established yearly through PA, TA and contractor negotiations referring to Tables 1, 2 and 3, as indicated in Appendix C: Real Property Service Levels, which establish minimum levels of Service.

13.3.1.1 Refer to the Facilities Catalogue and Fixed Assets Registry provided.

13.3.1.2 Ensure that Work complies with applicable legislation and is consistent with government-wide policies, directives and standards. Comply with the National Building Code, the National Fire Code of Canada and applicable 'Nunavut legislation and municipal building and fire codes, meeting the more stringent of these requirements. If there is conflict among them, advise the PA and TA, recommend an appropriate course of action and obtain its acceptance.

13.3.1.3 Support DND in complying with legislation and government-wide policies, directives and standards, and other applicable guidance documents, and, as requested, in implementing DND strategies and initiatives.

13.3.1.4 Collaborate with DND and work together in an environment of mutual respect and trust.

13.3.1.5 Participate in regular meetings to develop a shared vision and values that will govern the relationship.

13.3.1.6 Establish and maintain close business and operational relationships with the PA and TA and, as requested, with other stakeholder organizations.

13.3.1.7 Establish and maintain a co-operative and professional approach when liaising with Occupiers and ensure a high level of Occupier satisfaction.

13.3.1.8 Ensure that the Contractor's employees and other labour resources under the Contractor's authority interact with DND, Occupiers, the public and other contractors in accordance with a Code of Conduct and the accepted SDR Specification.

13.3.1.9 Plan and schedule Work in consultation with Occupiers to minimize disruption to Occupier operations or programs.

13.3.1.10 Deliver solutions that provide Best Value to Canadians, based on the optimal use of allocated labour, financial and other resources, in a manner consistent with the TB Policy on Management of Real Property and the TB Guide to the Management of Real Property.

13.3.1.11 Manage the quality of products and services and continually evaluate and propose new industry processes and innovations to improve the efficiency and effectiveness of services, and initiate changes to the SDR accordingly.

13.3.1.12 Use processes and tools to promote efficient sharing of information and knowledge across the Contractor and DND organizations.

13.3.1.13 Ensure trades labour resources under the Contractor's authority have appropriate personal protective equipment and corporate work wear, and uniforms bearing the Contractor's corporate identification.

13.3.2 Manage Quality

13.3.2.1 Manage the quality of Real Property services and deliverables using the QMS.

13.3.2.1.1 Participate in scheduled DND Quality Monitoring reviews, which will provide a forum for identifying nonconformities, whether raised by the Contractor, the PA and TA or their designated representatives, or the Registrar.

13.3.2.1.2 Collaborate with and support the PA and TA in conducting Quality Monitoring, including activities to support DND in ensuring due diligence related to:

1. regulatory compliance, and
2. health and safety compliance.

13.3.2.1.3 Co-operate and participate with the PA and TA during Quality Monitoring inspections and provide required resources and information.

13.3.2.1.4 Support quality audits deemed appropriate by the PA and TA, whether carried out by the PA, TA or by other parties engaged by DND, to assure that requirements are being met. The PA and TA may raise nonconformities to rectify service or process deficiencies, and may raise these nonconformities as Contract-wide nonconformities, applicable to each Portfolio, if they are deemed to be systemic.

13.3.3 Measure Real Property Performance

13.3.3.1 Apply the RP-PMR to provide performance measurement data and information in accordance with the Asset Integrity Performance Indicators (PIs) and Performance Measures (PfMs) identified in the Real Property Performance Measurement Regime (RP-PMR) section supporting evidence-based decision-making about the Contractor's performance.

13.3.3.2 Measure and report on performance:

1. calculate the PfMs and PIs and submit this no later than five days after the end of each month;
2. provide the PA and TA with unrestricted, real-time access to performance measurement information used to calculate each PI;
3. submit new data records, together with the rationale for the change, for acceptance by the PA and TA to:
    a. correct errors or omissions,
    b. resolve disagreement between the PA and TA and the Contractor regarding the accuracy of the information, and
    c. reflect audit results; and
4. coordinate with the PA and TA and plan, host and participate in joint quarterly meetings to review performance, and:
    a. analyse performance as indicated by PIs,
    b. prepare a Monthly Real Property Performance Report in accordance with the RPDRL, to ensure understanding of performance status, including identification of performance issues and problems, and actions being taken to resolve these,
    c. submit the report at least 1 week in advance of the scheduled meeting, and
    d. present the report and an action plan to the PA and TA to support the review of performance results.

13.3.3.3 Identify and recommend continual improvement opportunities for the service levels indicated by the PIs for the following year, and submit these to the PA and TA by May 15 of each year for consideration as part of the management review with the PA and TA.

13.3.4 Propose and Implement Innovation Opportunities for Gain Sharing

13.3.4.1 Identify innovation opportunities to improve services, assets and value for money throughout the Contract Term. DND will provide mechanisms to enable the Contractor to share in savings resulting from innovative proposals approved by the PA and TA and implemented.

13.3.4.2 Before implementing any innovative idea, present a shared savings proposal to the PA and TA for review, including:

1. a detailed description of the proposal,
2. an outline implementation plan,
3. a Capital investment proposal (If applicable),
4. near- and long-term O&M savings generated, and

5. a payback period calculation.

13.3.4.3 Conclusively demonstrate financial savings over an extended period and obtain the PA's written approval to proceed to implementation.

13.3.4.4 Where the Contractor's proposed innovation involves a financial investment, then the proportion of shared savings will be based on the amount of the financial investment by the respective parties. For example: if the Contractor invests 40 percent of the implementation cost, then the shared savings with Canada will be 40/60. The Contractor's maximum financial investment, and thus share of potential savings, is limited to a maximum of 50 percent.

13.3.4.5 Following implementation, savings may be shared between the parties where the total saving is proven to be above $5,000 annually. The payback period cannot extend beyond the term of the original contract (extensions to the contract term are excluded).

13.3.4.6 Where the contractor's innovation involves no financial investment but results in savings above $5,000 annually to Canada, then the Contractor can negotiate the portion of actual savings to be paid to the Contractor. The proportion of savings paid to the contractor will not exceed 50% of the savings achieved during the remainder of the Contract term.

13.3.4.7 Canada will pay the Contractor's gain share if actual savings in excess of $5,000 annually are achieved and supporting evidence of the saving is provided to the PA's and TA's satisfaction. The Contractor's gain share entitlement will be the previously-agreed share of the actual savings made during the year, but with no entitlement to gain share beyond the original Contract completion date.

13.3.5 Provide Real Property Planning Services

13.3.5.1 General

13.3.5.1.1 Develop annual plans for buildings and other assets, in accordance with the RPDRL, including:

1. a Labour Resource Plan;
2. Annual Building Plans (ABPs) for each designated building; and
3. a Real Property Roll-up Plan.

13.3.5.1.2 Ensure that planning is undertaken considering:

1. DND objectives, strategies and priorities;
2. Opportunities to improve the condition of buildings, and extend the life of assets;
3. Use of Facility Condition Index (FCI)[1] and Systems Condition Index (SCI) to provide objective evidence of condition improvement over time; and
4. Sustainability, considering the entire asset lifecycle.

13.3.5.1.3 Provide site knowledge and expertise and otherwise assist the PA and TA to develop targeted strategies for inclusion in Asset Management Plans aimed at improving FCIs and SCIs.

13.3.5.1.4 Present the Annual Building Plans to the PA and TA, respond to questions and adjust accordingly to obtain acceptance of Annual Building Plans.

13.3.5.1.5 Submit proposed changes to the Work set out in the Annual Building Plan.

13.3.5.2 Develop the Annual Engineering Works Program

13.3.5.2.1 Develop an Annual Engineering Works Programme (EWP), including:

1. a strategic overview and management analysis;
2. a roll-up and summary of planning information; and

[1] As defined by PA and TA

3. a subcontracting plan (if required).

13.3.5.2.2 Present the Annual Engineering Works Programme (EWP) to the PA and TA, respond to questions and adjust accordingly to obtain acceptance of the plan.

13.3.5.3 Provide Input to Asset Management Plans

13.3.5.3.1 Review available AMPs annually, provide information, participate in meetings to support the development of AMPs and Building Condition Reports (BCRs) by DND, and undertake associated Work to support the AMP development process, as requested.

13.3.5.4 Help Develop and Test Emergency Plans

13.3.5.4.1 Collaborate with DND and Occupiers in emergency response planning, and assist them in fulfilling their respective responsibilities:

1. assist Occupiers in developing Building Emergency Plans to meet legislated requirements, as requested; and
2. support Occupiers in implementing emergency response plans.

13.3.5.4.2 Support DND and Occupiers in fulfilling their legislated health and safety obligations in DND space as set out in the Canada Labour Code (CLC), Part II, and the National Fire Code, and assist Occupiers in assuring due diligence, as requested, by:

1. assisting in preparing, regularly updating and implementing a fire safety plan for each building, in co-operation with fire department authorities, other applicable regulatory authorities and Occupier workplace health and safety committees and representatives;
2. keeping a copy of the fire safety and emergency evacuation plan at a central location in the lobby or entrance area of each building, and ensuring that it is readily accessible to emergency service personnel;
3. providing a copy of the fire safety and emergency evacuation plan to responsible supervisory resources under the Contractor's authority in each building and to emergency wardens; and
4. posting fire safety and emergency evacuation procedures, with floor schematic diagrams, in the elevator lobby or entrance area of each floor and adjacent to the exit stairwells on each floor.

13.3.5.4.3 Participate in and assist with the coordination of fire and emergency evacuation, as requested.

13.3.5.4.4 Provide responsible labour resources under the Contractor's authority with required information concerning the location of portable and installed fire protection and emergency equipment.

13.3.5.4.5 Assist Occupiers, as requested, in developing emergency procedures related to other emergencies such as explosions, earthquakes, power failures, chemical accidents or spills, medical emergencies, demonstrations, entrapments in elevator cars and violence against personnel.

13.3.5.5 Support the Development of Emergency Plans

13.3.5.5.1 Assist the PA and TA and Occupiers, as requested, in developing emergency plans.

13.3.5.6 Provide Building Infrastructure Continuity Planning and Readiness Services

13.3.5.6.1 Recommend development of new Building Infrastructure Continuity Plans for buildings where these are not available, but are needed.

13.3.5.6.2 Maintain Infrastructure Continuity Plans for each designated building in accordance with the RPDRL.

13.3.5.6.3 Ensure that Building Infrastructure Continuity Plans include information on:

1. building systems, including equipment and component Operations and Maintenance (O&M) manuals and tombstone data such as manufacturer, model and serial numbers;
2. supplier contacts and resource requirements;

3. equipment uses, system redundancies and impact of system failure on building operations; and
4. system recovery and impact mitigation plan.

13.3.5.6.4 Ensure that labour resources under the Contractor's authority are prepared to respond to emergencies in accordance with plans.

13.3.5.6.5 Familiarize Occupiers with the plans as requested.

13.3.5.6.6 Collaborate with Occupiers to ensure that their business resumption plans are coordinated with Infrastructure Continuity Plans.

13.3.5.6.7 Test plans, participate in Quality Monitoring and assessments and evaluations of the testing of plans, recommend improvements, and activate plans in emergencies or on system failure.

13.3.5.6.8 Develop a Risk Assessment, Monitoring and Control Plan for the Buildings in the Contract. Assess each building and provide a Risk Assessment Report with treatment, monitoring and control recommendations to the TA within three months of service commencement.

13.3.6 Conduct Building Condition Assessments

13.3.6.1 General

13.3.6.1.1 The intent of the BCR is to identify events required to bring an asset to a defined standard and to maintain that level throughout a 30-year planning horizon, in accordance with associated Asset Management Plans and the RP OPS NORTH MRPDP. The concept of full lifecycle costing for assets is the basis for the development of the long-term capital plan and other inputs to the RP OPS NORTH MRPDP. The 30-year capital plan should indicate the optimal timing / grouping of recommended events to minimize overall cost and occupier disruption.

13.3.6.1.2 Conduct Building Condition Assessments (BCAs) and prepare Building Condition Reports (BCRs), as requested for individual and groups of station assets. Meet the requirements of KPI measures established from PA, TA and contractor. Provide capabilities and services, utilizing an acceptable integrated building condition assessment methodology and commercially-available software tool. Produce BCRs and various analytical outputs from quality-assured data.

13.3.6.1.3 The level of effort required could range from a single stand-alone task, up to investigations required for a complete BCR. Determine stakeholder engagement requirements in consultation with the PA and TA and refer to the applicable Building Performance Review (BPR) conducted annually.

13.3.6.2 Provide Building Condition Assessment Services

13.3.6.2.1 Provide the following Building Condition Assessment services:

1. Conduct BCAs and prepare BCRs covering actions required to maintain the asset in operating condition during the coming 30 years;
2. Import existing BCR data as required;
3. Apply industry-recognized subclasses for both Capital and Repair events;
4. Record the associated building systems/element life expectancies, remaining life, and renewal and remedial costs;
5. Investigate the full range of building and site improvement factors;
6. Accurately estimate the condition of capital assets and their replacement values in Canadian dollars, allowing for data entry in imperial and metric units;
7. Identify the risks (e.g. risks associated with not addressing critical infrastructure needs) associated with different levels of investment;
8. Benchmark the progress of targeted investment and their impact on the overall condition of station assets;
9. Provide services via a secure, authenticated and trusted computing environment located in Canada in accordance with security requirements;
10. Provide training to the PA and TA authorized users in the use of tools;
11. Provide the PA and TA local and remote access to a central source using a reporting and query to support capital planning decisions;

12. Recommend final BCRs for acceptance.

13.3.7 Manage Real Property Incidents

13.3.7.1 Manage and respond to incidents in a manner consistent with DND requirements, or as requested, and:

1. minimize risk to the safety of people and assets; and
2. maintain performance and Occupier satisfaction.

13.3.7.2 Manage and respond without delay to unexpected events that could result in injury to persons, damage to equipment, material or the environment, or the temporary disruption of essential services and where immediate action is required

13.3.7.3 Notify designated authorities, respond and take corrective measures within defined timeframes.

13.3.7.4 Communicate in accordance with defined criteria, advising the TA on progress during incidents, including the following milestones for critical incidents:

1. incident cause identified;
2. responders called and on site;
3. response to incident under way;
4. incident resolved and report submitted; and/or
5. incident escalating to critical incident or emergency, potentially leading to building shutdown.

13.3.7.5 Submit incident reports in accordance with the RPDRL and the applicable DND policies with appropriate format, quality, conciseness and response timelines, or as requested.

13.3.7.6 Comply with investigation and reporting requirements of regulatory authorities.

13.3.7.7 Collect data and analyse incident trends to identify root causes, recommend measures to reduce incidents, identify improvement opportunities, including rectification of operational deficiencies, inadequate asset maintenance and shortcomings in Annual Building Plans or BPRs, and provide reports in accordance with the RPDRL or as requested.

13.3.8 Ensure Health and Safety in Real Property

13.3.8.1 General

13.3.8.1.1 Assume control and exercise responsibility for workplace OHS matters in relation to Work being carried out, except as specifically excluded in writing by the PA and TA, whether carried out by:

1. the Contractor and its subcontractors; or
2. Occupiers, and other contractors and subcontractors under contract to them.

13.3.8.1.2 Follow general safety requirements and undertake Work in a safe manner in accordance with good industry practices, ensuring that appropriate safe work procedures are put in place and followed for repair work.

13.3.8.1.3 Support DND and Occupiers in meeting their responsibilities as employers under the CLC, Part II, and the TB's Fire Protection Standard and Standard for Fire Safety Planning and Fire Emergency Organization – Chapter 3-1.

13.3.8.1.4 Comply with the requirements of authorities having jurisdiction, and, except as specifically excluded in writing by the PA and TA:

1. act as Construction Contractor for construction project Work; and
2. act as OHS Control Authority, as Canada's agent, for:
    a. Work carried out to provide the services in accordance with the SOW, and
    b. work carried out by third parties.

13.3.8.1.5 Protect the health and safety of persons granted access to the workplace, including federal government employees, CAF personnel, labour resources under the Contractor's authority, employees of other contractors under contract to DND and the public.

13.3.8.1.6 Prepare and follow an OHS plan for each building so designated in the Fixed Asset Register, in collaboration with the PA and TA, in accordance with the requirements of the OHS Program, including an OHS Code of Practice for safe operating procedures and other requirements.

13.3.8.1.7 Develop specific OHS requirements and safe work procedures and practices, including a job hazard and risk analysis for critical tasks, to eliminate or mitigate foreseeable hazards associated with Work to be performed.

13.3.8.1.8 Comply with CSA Z462: Workplace Electrical Safety and the Nunavut's Electrical Safety Code when conducting electrical work.

13.3.8.1.9 Identify and provide a contact list of key personnel responsible for the OHS Program and building- and project-specific OHS plans and emergency action plans for handling emergency work when normal procedures cannot be followed.

13.3.8.1.10 Implement OHS hazard communication procedures for resources under the Contractor's authority.

13.3.8.1.11 Ensure that persons granted access to the workplace comply with building- and project-specific OHS plans.

13.3.8.1.12 Ensure that appropriate parties obtain necessary approvals and permits from authorities having jurisdiction, including building permits and confined space entry permits before performing Work, such as asbestos abatement work, raised platform work, trenching and excavation work, hot work and live-steam work.

13.3.8.1.13 Ensure that labour resources under the Contractor's authority are fully aware of, and adhere to, the requirements of applicable OHS legislation when performing Work.

13.3.8.1.14 Ensure that materials used in the workplace are classified and labelled according to the Workplace Hazardous Materials Information Systems (WHMIS2015) and that Material Safety Data Sheets for materials are available immediately when requested.

13.3.8.1.15 Keep a binder with copies of Material Safety Data Sheets (MSDS) and Technical Bulletins on the premises. Update these when new products are introduced on Site. Ensure 'full disclosure' on MSDSs. Where information is not fully disclosed, contact suppliers to obtain this information. Make the binder available to the PA and TA when requested.

13.3.8.1.16 Ensure that equipment used to perform Work is fit for purpose and is in a state of good repair. The TA reserves the right to have equipment judged to be unsafe, not suitable or defective and taken out of service.

13.3.8.1.17 Ensure that necessary barricades, signage and other necessary measures are in place to ensure a safe environment and prevent door use during Contractor's activities.

13.3.8.1.18 Ensure that an appropriate safe work procedure is put in place and followed for work on electrical circuits associated with Door Systems. Ensure suitably qualified and trained individuals use appropriate tools, notices and equipment, plan and execute Work that involves isolation and/or lock out of circuits.

13.3.8.1.19 Ensure that labelling (circuit identification, main switches etc.) is maintained in place. Keep and maintain drawings of circuits, notices, data etc., in known and accessible locations. Ensure that single line schematic drawings are updated and revised to show the current status of circuits and equipment. Keep and maintain drawings of circuits, system schematic layouts, notices, data etc. in elevator motor rooms or other accessible locations. Update single line schematic drawings to ensure they indicate the current status of circuits and equipment.

13.3.8.1.20 Undertake elevator and lifting systems Work safely in accordance with the most recent version of ASME A17.1 / CSA B44-16.

13.3.8.1.21 Handle and store chemicals, lubricants or other potentially harmful substances, etc., that need to be kept on site in a manner that meets WHMIS Standards. Supply special cabinets, etc., required to store supplies. Supplies that do not have suitable storage facilities are removed from site after each service call.

13.3.8.1.22 Do not store propane or other pressurized containers inside DND buildings not designated for the purpose. Ensure they are removed and stored in a safe, ventilated and secure location at the end of each working day.

13.3.8.1.23 Assess risks before executing environmental work and then, if considered safe by the Contractor, undertake Work in a safe manner in accordance with good industry practices and in a manner that reduces risks to human safety, environmental impact and damage to buildings to the lowest practicable level.

13.3.8.1.24 Ensure that suitable and sufficient equipment and risk mitigation measures in place for workers and other persons potentially affected by the hazards when reacting to Hazardous Material spills or when testing or remediating designated substances.

13.3.8.1.25 Comply with 'DND health and safety regulations regarding the generation and disposal of Hazardous Material is generated and disposed.

13.3.8.1.26 Ensure that personnel have the appropriate information, instruction, training and equipment to safely work around Hazardous Materials or undertake Hazardous Material handling activities in fulfilment of this Contract.

13.3.8.1.27 Take immediate steps to affix warning notices to the system and advise the PA and TA of the system failure if a life safety system is found to be unsafe or unsuitable for use.

13.3.8.1.28 Immediately advise the PA and TA of Hazardous Waste that is identified in a waste stream.

13.3.8.1.29 Maintain overall control of activities regarding OHS management, coordinate and control Work in buildings and at Sites, and establish appropriate safeguards to protect health and safety:

1. manage other contractors' access to buildings, in conjunction with building security measures;
2. assign project work sites to other contractors, and coordinate and schedule use of elevators, loading docks and work site access routes;
3. identify and communicate issues related to scheduling of Work;
4. provide an orientation to other contractors granted access to the site, and provide them with appropriate information, including:
    a. the building OHS plan,
    b. a description of OHS responsibilities and procedures,
    c. a code of practice for safe work procedures and emergency preparedness procedures, and
    d. hazard assessments and job hazard analyses for critical tasks;
5. attend and provide input to health and safety committee meetings and project meetings of other contractors and DND, as requested;
6. act as the point of contact with authorities having jurisdiction and submit documentation required by them, such as notices of projects and related information;
7. maintain copies of communications, reports and orders received as a result of visits by authorities having jurisdiction;
8. control access to mechanical and electrical rooms and other building operations locations, and oversee Work in these locations;
9. organize and lead meetings with stakeholders as required for health and safety and construction coordination;
10. coordinate construction activity;
11. coordinate with Occupiers on building issues and issues related to ongoing and planned Work;
12. participate in identifying OHS requirements for Occupier and facilities management units performing electrical Work;
13. monitor the compliance of other contractors with OHS legislation, building- and project-specific OHS plans and other OHS Standard Operating Procedures (SOPs), and instruct contractors as required to resolve OHS issues;
14. obtain regular feedback from health and safety personnel and workers to identify issues; and
15. resolve issues related to construction coordination and other aspects of OHS involving other contractors.

13.3.8.2 Maintain Records and Report on Health and Safety

13.3.8.2.1 As requested, provide support to the designated DND OHS authority, when they are completing accident reports and hazardous occurrence investigation reports.

13.3.8.2.2 Maintain OHS records and provide OHS information and reports related to the Work in accordance with the requirements of the CLC, Part II, the Occupational Health and Safety Directive, DND policies and the requirements of authorities having jurisdiction.

13.3.8.2.3 Provide information on building- and project-specific OHS plans, hazard identification, safety training, life safety systems and equipment inspection, maintenance, testing and nonconformities, on request.

13.3.9 Use and Maintain Government-Furnished Property (GFP)

13.3.9.1 DND will provide the Contractor with Government-Furnished Accommodation (GFA) and Government-Furnished Equipment (GFE) at CFS Alert as appropriate to meet the needs of the Contract. GFA space will be allocated through a zero-cost service agreement determined considering available space and Contractor labour resource requirements as indicated in the accepted Labour Resource Plan.

13.3.9.2 Locate Contractor labour resources in the GFA provided, including general purpose office space, as indicated in the Contract:

1. locate the Contractor's property managers and other key building operations labour resources under the Contractor's authority within the space provided;
2. identify unused space to the TA and return this space to Canada;
3. obtain written approval to alter GFA, including the furniture configuration;
4. comply with DND fit-up standards; and
5. undertake approved alterations at the Contractor's expense.

13.3.9.3 Maintain finishings and GFP in good working order at the Contractor's expense.

13.3.10 Respond to Real Property Service Calls

13.3.10.1 Respond to service calls.

13.3.10.2 Acknowledge Emergency and Urgent service calls from Occupiers by live voice contact within 10 minutes, 24 hours per day, 365 days per year.

13.3.10.3 Unless otherwise stated in this Section of the SOW and accompanying Appendices, the general response and rectification times for Demand Calls for Hard and Soft Services are as follows:

1. General Demand Calls – Non-Urgent: 48hr response, 10 Working Day rectification;
2. General Demand Calls – Urgent: 24hr response, 3 Working Day rectification; and
3. Emergency Demand Calls – 1hr response, 24hr rectification.

13.3.10.4 Inform the PA and TA, without delay, of Work for which the response and rectification times cannot be met. Provide the PA and TA with an alternative response and rectification plan that ensures normal station operations are not affected by the delay.

13.3.10.5 Respond to Occupier calls 24 hours per day, 365 days per year, in accordance with the response times indicated in Real Property Performance Standards, and:

1. take appropriate action following the receipt of the service call to respond to the requirement identified in the service call;
2. begin an investigation within the maximum permissible response times;
3. provide an update on the service call status to the Single Point of Contact for Service Calls (SPCSC) by electronic data file as soon as Work to close the service call is complete;
4. undertake the required Work; and
5. update the SPCSC on the status and results of responses to service calls within 24 hours of responding to the service call.

13.3.10.6 Analyse service call reports from the SPCSC, identify trends and variances from the norm, prepare action plans and undertake required corrective action.

13.3.10.7 Maintain and provide a call record. Provide and maintain a call receipt, acknowledgement and dispatch capability that Occupiers can use to register demand requests during normal Business Hours. The call record will state the call receipt date and time and name of the staff member who dealt with the issue.

13.3.11 Assist DND in Sustainability Planning

13.3.11.1 General

13.3.11.1.1 Identify opportunities and support DND in meeting federal SDS requirements by establishing objectives and plans.

13.3.11.1.2 Include proposals in Annual Building Plans where opportunities exist to assist DND in greening government operations, as requested, including activities to:

1. reduce greenhouse gas and other air-polluting emissions;
2. provide for green procurement;
3. reduce potable water consumption;
4. remediate contaminated sites;
5. improve the management of waste; and
6. improve the environmental performance of vehicles involved in delivering services.

13.3.11.2 Provide Real Property Sustainability Planning Input

13.3.11.2.1 Provide annual sustainability planning input to the Annual Engineering Works Programme (EWP), describing the capacity, activities, processes and performance measurement information that will be applied to attain, report on, and continually improve financial, social, functional and environmental sustainability results arising from the services provided.

13.3.11.2.2 Provide sustainability inputs to planning processes, including the Annual Building Plan and Annual Engineering Works Programme (EWP).

13.3.11.3 Support DND in Improving Financial Performance

13.3.11.3.1 Identify and recommend opportunities for continual improvement in efficiencies and cost reductions.

13.3.11.3.2 Monitor, evaluate and make recommendations on new technologies and systems that could reduce operating costs.

13.3.11.3.3 Identify, evaluate, and make recommendations on projects that best contribute to improving efficiencies and reducing life cycle costs.

13.3.11.4 Support DND in Improving Environmental Performance

13.3.11.4.1 Support DND in achieving environmental commitments set out in its SDS and additional sustainability requirements identified by the PA and TA.

13.3.11.4.2 Take steps to increase environmental awareness of employees and other labour resources under the Contactor's authority.

13.3.12 Conduct Building Performance Reviews

13.3.12.1 Conduct regular visual inspections of buildings at intervals commensurate with operational requirements.

13.3.12.2 Conduct BPRs and submit BPR reports in accord ace with the RPDRL, for each designated building:

1. research relevant information on the assets and their serviceability;

2. inspect each asset in a manner appropriate to its use, age, construction details;
3. inspect the cladding system and potential for hidden deterioration;
4. consult with designated Tenant representatives; and
5. provide information to support asset planning and budgeting.

13.3.13 Manage Real Property Information, Report and Keep Records

13.3.13.1 General

13.3.13.1.1 Manage information in accordance with the Information Management Methodology specified in the accepted SDR Specification.

13.3.13.1.2 Provide support to the PA and TA and other key stakeholders to clarify specific situations and provide in-depth knowledge required to ensure effective decision-making, including ad hoc reports, analyses and briefings.

13.3.13.1.3 Capture, manage and report information that relates to the management and maintenance of the facilities and infrastructure.

13.3.13.1.4 Provide reporting tools that have the flexibility to provide data and format data as requested by the PA and TA. For example: reports by Building; reports by System; reports by day, by month, by year; etc.

13.3.13.2 Collect and Organize Information

13.3.13.2.1 Collect and organize information, and manage records and data necessary to:

1. meet legislative and policy requirements for business administration and Quality Monitoring purposes;
2. support service delivery and meet reporting requirements arising from legislation governing the provision of services set out in this Section of the SOW;
3. identify gaps in information; and
4. track and report performance and quality results.

13.3.13.2.2 Manage the quality of information and data to ensure its accuracy and completeness and ensure file formats and standards are consistent with DND standards, or as requested.

13.3.13.2.3 Update the Facilities Catalogue, including information on changes to the data elements within 30 working days after work orders or project completion date. Update information and data on new facilities, acquisitions or demolitions within 30 working days of completion, whether the work was self-performed or performed by third parties.

13.3.13.2.4 Provide the PA and TA electronic access to facility information.

13.3.13.3 Provide Information Access and Reporting

13.3.13.3.1 Prepare and submit real property management information and building operational information electronically, including planning, inspection, O&M and utilities, project, performance, quality and other information, in accordance with the RPDRL. Submit information specified, encrypting data using software compatible with that used by Canada, as requested.

13.3.13.3.2 Meet information management and reporting requirements related to Optional Services, in accordance with the RPDRL.

13.3.13.3.3 Maintain the Halocarbon Management Database and update records including data related to the inventory of equipment, PfM inspections, spills and leak tests.

13.3.13.3.4 Update and distribute the Designated Substance Management Plan annually, updating database records following the removal of asbestos and changes to condition of Buildings and infrastructure (i.e. renovations and demolitions).

13.3.13.3.5 Provide accurate, complete and current PMI reports.

13.3.13.3.6 Support the PA and TA by responding to requests for information and Quality Monitoring and information requirements on a timely basis, and as requested.

13.3.13.3.7 Complete DND-prescribed forms, in hard copy and PDF formats, and as requested.

13.3.13.4 Manage Real Property Technical Information

13.3.13.4.1 Keep technical information up to date and ensure that:

1. electrical drawings are kept current and in accordance with DND's Standard on Electrical Safety; and
2. copies of drawings required for operational purposes are held in a secure area of buildings and that access is only granted to authorized personnel only.

13.3.13.4.2 Keep and maintain drawings of piping and electrical system schematic layouts, notices, and data in known and accessible locations.

13.3.13.4.3 Revise single line schematic drawings to show the current status of pipes, circuits, and equipment.

13.3.13.4.4 Provide the PA and TA access to electronic and hard copy technical information as requested, without delay.

13.3.13.5 Retain and Protect Information

13.3.13.5.1 Store, back up, organize and protect information with due regard to business continuity considerations and disaster recovery.

13.3.13.5.2 Maintain and ensure the integrity of documentation required to demonstrate regulatory compliance and meet legislative reporting requirements. Assist the TA in Quality Monitoring activities, ensuring that records are available in an electronic system so that they are readily available for the legislated period of time.

13.3.13.5.3 Keep building O&M and utilities information current in a manner consistent with appropriate industry practices.

13.3.13.5.4 Adjust to Changing Information Management and Technology Standards and Interfaces. Plan and implement changes to the means of exchanging information with DND.

13.3.13.6 Comply with Quality Monitoring, Technical Assessment, Reporting and Liaison Requirements

13.3.13.6.1 Provide complete and transparent access to systems, information and records that support business administration and service delivery processes.

13.3.13.6.2 Support and coordinate with DND, Occupiers and other parties engaged in Quality Monitoring, including technical audits conducted by third parties on behalf of Canada.

13.3.13.6.3 Maintain files in good order, ensure that documents and other information are available and kept in a state of assessment readiness, and ensure that information required to support Quality Monitoring is available without delay.

13.3.13.7 Provide ongoing, timely updates to the TA on the status of active claims.

13.4. Provide Trade Mentoring

13.4.1 Provide apprenticeship mentoring to designated military and DND civilian members as requested.

13.4.2 The mentoring will be a collaborative effort between DND and the contractor, and limited in duration to ensure minimal disruption to station operations.

13.5. Provide Facilities Management Services

13.5.1 General

Provide Facilities Management Services in accordance with the Service Levels established from PA, TA and contractor negotiations referring to Tables 1, 2 and 3, as indicated in Appendix C: Real Property Services Levels, which establish minimum levels of service.

13.5.1.1 Plan Work in Annual Building Plans (ABPs) for individual buildings designated in (Facilities Catalogue), considering opportunities for coordination, economies of scale and grouping of similar Work to provide Best Value and reduce overall downtime.

13.5.1.2 Coordinate Work with utilities providers and other organizations responsible for services such as information technology and telecommunication services, as requested.

13.5.2 Provide Maintenance Management Services

13.5.2.1 General

13.5.2.1.1 Apply maintenance strategies consistent with the OMP.

13.5.2.1.2 Coordinate maintenance activities with QMS continual improvement activities and ongoing performance measurement, considering occupancy requirements and relevant Portfolio factors such as:

1. Building Occupier operations and reliability requirements;
2. Asset age, construction details, condition, heritage designation and exposure conditions; and
3. O&M and utilities costs.

13.5.2.1.3 Provide a draft Preventive Maintenance (PM) schedule in electronic format within 2 months after Contract Award and provide a final schedule within three months after Contract Award for acceptance by the PA and TA. Update the PM plan to ensure that it is consistently up-to-date.

13.5.2.1.4 Ensure that systems and equipment requiring maintenance are identified, labelled and record applicable data, drawings, manuals and other information in the CMMS.

13.5.2.1.5 Ensure that labelling of systems is maintained following alterations to the equipment or associated components.

13.5.2.1.6 Ensure building system components installed under the Contract meet the appropriate CSA standard and are clearly marked to show compliance.

13.5.2.1.7 Update existing O&M manuals as required to keep facility documentation current with changes occurring during the life of the Contract.

13.5.2.1.8 Obtain and coordinate warranty Repair service for equipment under warranty:

1. obtain manufacturer's and installer's guaranties for equipment supplied and installed; and
2. ensure that guaranties name Canada as the holder and beneficiary of the guaranty.

13.5.2.1.9 Continually monitor maintenance activities to ensure compliance with life-safety, health and environmental legislation**.**

13.5.2.1.10 Provide access to aged work order information to the TA, including work orders that were not completed within the scheduled completion date.

13.5.2.1.11 Provide certification annually that inspection, testing and maintenance of life safety, health and environmental systems and equipment have been performed in accordance with legislative requirements and continue to meet life safety, health and environmental systems and equipment legislative and other compliance requirements.

13.5.2.2 Inspect, Test, Maintain and Repair Life Safety Systems

13.5.2.3 Ensure that the maintenance management plan is sufficiently flexible to enable DND to self-perform or engage third parties to implement minor or major projects, and large programs.

13.5.2.3.1 Repair, replace or install life safety systems in accordance with the CSA Z91, CSA Z259, CSA Z271 and Territorial Safety Standards, as applicable to the site or system.

13.5.2.3.2 If the system or components being installed or replaced form part of a window cleaning safety system undertake work must be in accordance with ANSI/IWCA I-14.1-2001 Window Cleaning Standard.

13.5.2.3.3 Where no CSA or ANSI standard exists for a material or product being installed, the must utilize materials or products that follow good industry practice and are fit for purpose.

13.5.2.3.4 During the course of the contract, if changes in legislation require more frequent or less frequent inspection or testing of Life Safety Systems, negotiate adjustments with the PA and TA and ensure these changes are applied.

13.5.2.4 Continually Improve Maintenance Strategies

13.5.2.4.1 Apply the OMP to foster ongoing improvement in maintenance strategies, including a rigorous approach to improving the Preventative Maintenance Plan and how corrective maintenance will be executed over the term of the Contract to:

1. Ensure regulatory requirements are fulfilled, including accessibility, building code, HazMat and occupation and health and safety requirements.
2. Optimize the integrity of station buildings and equipment in terms of their integrity, considering their lifecycle and reliability;
3. Optimize energy utilization and otherwise improve sustainability; and
4. Incorporate technological improvements.

13.5.2.4.2 Implement a Maintenance Stabilization Program covering the first full-year of operations and subsequent annual updates to the Preventative Maintenance Plan.

13.5.2.4.3 Analyse building maintenance management data and initiate corrective action accordingly:

1. analyse issues and trends in key areas, such as system and equipment failures and unscheduled repair costs, and recommend improvements; and
2. prepare reports and maintain records and data to achieve the optimum balance between repairs and predictive, preventive and corrective maintenance activities.

13.5.2.4.4 Review and update the effectiveness of maintenance strategies and the OMP, and improve and adjust associated practices, processes and resources to reflect the results of experience, to meet requirements of legislative and regulatory changes, manufacturer recalls and changes in industry practices, and to ensure lifecycle cost-effectiveness.

13.5.2.4.5 Use maintenance information as inputs to planning and project identification for capital improvements, repairs and re-commissioning.

13.5.3 Operate and Maintain Building Systems and Equipment

13.5.3.1 General

13.5.3.2 Operate and maintain plant, machinery, equipment and building envelope in accordance with the maintenance strategies and where appropriate, operate building equipment and systems in accordance with manufacturer recommendations or as set out elsewhere in the SOW.

13.5.3.3 Undertake maintenance based on evidence of need:

1. ensure a safe, healthy and productive work environment for Occupiers;
2. meet Occupier requirements for building availability and system and equipment reliability;
3. ensure that operations are cost-effective and that asset and equipment systems perform at peak efficiency;
4. comply with warranty requirements;
5. preserve asset integrity and the value of capital investments, and realize the maximum economic life

expectancy of systems and equipment;
6. demonstrate due diligence and minimize legal exposure to Canada; and
7. provide effective analysis, decision-making and planning for future repair programs, capital investments and re-commissioning of assets.

13.5.3.4 Conduct preventative inspection and maintenance activities meeting KPI measures established from PA, TA and contractor.

13.5.3.5 Manage, assemble, organize and retain system and equipment data, drawings and manuals and schedules:

1. identify, schedule and implement predictive, preventive and corrective maintenance inspections, tests, analyses, surveys, checks, treatments, tasks and monitoring based on legislative requirements and appropriate industry standards and practices;
2. coordinate scheduling of maintenance that might disrupt Occupier operations with the PA and TA and Occupiers; and
3. provide the PA and TA and Occupiers with a minimum of 2 weeks advance notice, or other period, as requested, of proposed shutdowns and other Work that may disrupt Building Occupier operations, to allow time for contingency planning.

13.5.3.6 Test and certify pressure vessels and associated pipework that form part of Pneumatic Systems, Heating, Ventilation and Air Conditioning systems at the legislated intervals, by the appropriate safety authority for the 'Nunavut. Make necessary arrangements and facilitate the testing and inspection by the safety authority Unless otherwise instructed by the PA and TA.

13.5.3.7 Ensure suitably qualified and trained individuals plan and execute Work that involves isolation of a system / area.

13.5.3.8 Make appropriate resources available to participate in handover, witness testing/training.

13.5.3.9 Maintain electronic records of PM activities:

1. include the date, asset identifier, PM activity description and related details as per KPI measures established from PA, TA and contractor; and
2. ensure records are readable in a spreadsheet or database format when required

13.5.3.10 Maintain Security and Access Control Systems

13.5.3.10.1 Maintain and repair access control systems, including card readers, control systems, parking gates and CCTV cameras.

13.5.3.11 Provide Corrective Maintenance

13.5.3.11.1 Perform CM of mechanical systems, including repair, renewal or alteration. Replace equipment with the same kind, grade, quality and size as the original construction and installation.

13.5.3.11.2 Perform miscellaneous work, including the production, installation, removal and modification of works and services related to this Section as required and authorized by the PA and TA.

13.5.3.12 Operate and maintain building systems and equipment 24 hours per day, 365 days per year:

1. ensure that buildings are available and meet Occupier operational requirements as requested, and provide healthy and safe work environments; and
2. coordinate day-to-day operational activities with Occupiers, including activities carried out during extended hours of operation, and as requested.

13.5.3.13 Repair and maintain building systems and equipment, including building envelopes, HVAC, electrical systems, locks and doors, elevators etc., of properties listed in the Facilities Catalogue in accordance with applicable laws, good industry practice and the standards set out in the SOW.

13.5.3.14 Operate building systems and equipment in accordance with the most current release of appropriate industry standards and government policies and guidelines, including:

1. American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE) Standards for Thermal Environmental Conditions for Human Occupancy and Ventilation for Acceptable Indoor Air Quality;
2. CSA Z204 Guideline for Managing Indoor Air Quality in Office Buildings;
3. Health Canada Guidelines for Indoor Air Quality and Drinking Water Quality;
4. National Joint Council (NJC) – OHS Directive;
5. CLC, Part II; and
6. National Energy Code of Canada for Buildings.

13.5.3.15 Implement appropriate practices to prevent indoor air quality problems.

13.5.3.16 Follow SOPs consistent with the CLC, Part II.

13.5.3.17 Maintain records on site pertaining to inspection, testing and maintenance to comply with the National Fire Code, and make structural drawings and assessments available to emergency responders.

13.5.3.18 Immediately report issues and problems associated with indoor air and potable water quality identified as a result of testing.

13.5.3.19 Resolve issues and problems related to health and safety and the provision of working environments, and provide reports related to resolution of these problems, as requested.

13.5.3.20 Provide support to commissioning activities for projects carried out by the Contractor and by third parties.

13.5.3.21 Operate and maintain sanitary collection systems:

1. perform PM on sewage lift system, sewer collection system and treatment system;
2. clean and flush sanitary collection systems;
3. monitor effluent and storm characteristics conforming to DND Effluent Monitoring Program;
4. perform CM on system failures affecting Critical Areas, and or Non-critical Areas that could potentially result in further damage;
5. perform CM for non-critical service calls;
6. disconnect and properly secure utilities and distribution systems, and service abandoned facilities at the direction of the TA; and
7. log and record data.

13.5.3.22 Operate and maintain potable water systems:

1. operate water treatment plant;
2. perform leak surveys on the distribution system;
3. test water quality;
4. collect and analyse water samples for bacteriological analysis;
5. perform CM following system failures;
6. provide a one-hour response time for system failures affecting Critical Areas;
7. provide an eight-hour response time for Non-critical system failures;
8. begin repair work for Non-critical areas system failures within eight hours;
9. disconnect and secure the systems from abandoned facilities;
10. provide a Plant PM Plan;
11. submit reports;
12. provide and maintain a utilities reference library; and
13. maintain a water plant log.

13.5.4 Manage Energy and Utilities

13.5.4.1 Manage the supply and use of energy and support DND as requested in pursuing various initiatives to reduce electrical and heating fuel usage on the station. Operate and maintain the supply and use of electrical and heat energy so as to maximize co-generation and heating efficiency, minimizing fuel usage.

13.5.4.2 Operate and maintain the main and standby power systems, including:

1. operation of main and standby power plants; and
2. operation and maintenance of the station heat recovery system.

13.5.4.3 Perform CM following system failures:

1. provide a 30-minute response time for system failures affecting Critical Areas;
2. provide an eight-hour response time for Non-critical system failures;
3. begin repair work for Non-critical areas system failures within eight hours;
4. provide a Plant PM Plan;
5. submit reports; and
6. maintain an energy system plant log.

13.5.5 Provide Power Plant Operations Training to DND Electrical Generating Systems (EGS) Technicians

13.5.5.1 Provide designated DND members access to the power plant throughout the year for the purposes of training apprentice military EGS Technicians as requested. During the training period, apprentices will be supervised by a qualified military EGS Technician Supervisor in the function of a fully operational power plant under real load conditions.

13.5.5.2 The military EGS Technician trainees will effectively operate the power plant under conditions mutually agreed between the Technical Authority and the Contractor to ensure that the Contractor retains responsibility for power plant operations. During this period, the Contractor must maintain an oversight role and be available to immediately respond to emergency situations to ensure the provision of ongoing continuous power to the Station.

13.5.5.3 Jointly establish a schedule with the Military EGS Technician supervisor to ensure continuous plant maintenance and operation. At the start and end of each training shift, the Contractor and DND will jointly inspect the power plant to confirm the conditions of the power plant.

13.5.5.4 Perform 11,000 and 22,000 hour rebuilds on the main plant generators, noting that to maintain key EGS Technician skills, DND retains the option, with notice, to conduct these rebuilds. The Technical Authority will provide notice within six months of scheduled 11,000 or 22,000 hour rebuild events if DND intends to exercise this option.

13.5.6 Provide Common Services

13.5.6.1 Manage common services provided to buildings, including CHP services, ensuring that these services meet the operational requirements of individual buildings.

13.5.6.2 Provide common services, including:

1. distribution of electrical, heating and cooling, and other utilities;
2. identification of improvements for site energy management; and
3. planning for new and increased electrical loads and metering.

13.5.6.3 Provide environmental protection and conservation services, including:

1. potable domestic and drinking water;
2. surface water quality and monitoring;
3. groundwater and wastewater pollution prevention and monitoring;
4. activities related to routine and special sampling, investigations, inspections and report preparation associated with underground storage tanks; and
5. inputs to environmental quality and compliance programs.

13.5.6.4 Operate and maintain infrastructure and distribution systems, including:

1. heating and cooling distribution;
2. sanitary sewer system piping;
3. snow and ice clearing;
4. passive building foundation cooling systems;
5. storage tanks;
6. storm drainage systems;
7. utility tunnels and cabling;
8. fuel storage, distribution and dispensing;
9. water resource systems, including drinking water sources, storage and distribution systems;
10. prime and standby power generation and distribution;
11. uninterruptable power systems;
12. street and building obstruction lighting;
13. distribution systems for electrical and other utilities;
14. electrical vaults and firefighting stations;
15. Airfield Lighting Systems, Constant current regulators and controls (building airfield signs, light fixtures and NAVAIDS on 176), approach lights, threshold lights on and off the airfield;
16. Power distribution system (Overhead, Surface Laid, Underground, Airfield Power Distribution System, circuit breakers, meters, protective relays);
17. transformer stations;
18. static grounding system; and
19. energy management and control systems and the interfaces with individual building management systems.

13.5.6.5 Inspect, monitor, operate, maintain and repair the sanitary collection systems and sewage treatment systems. Refer to the Facilities Catalogue and the Fixed Assets Registry for a description of existing conditions for sanitary collections systems, sewage lift stations, sewage collection system and treatment systems.

13.5.6.6 Operate the electrical distribution system and the airfield electrical system:

1. perform CM for a system failure affecting Critical Areas;
2. disconnect and properly secure utilities and distribution systems servicing abandoned facilities; and
3. maintain historical data on major equipment.

13.5.6.7 Provide utility locating services, as required.

13.5.6.8 Liaise with authorities having jurisdiction, as required.

13.5.6.9 Operate, Maintain and Repair the Incinerator

13.5.6.9.1 Provide incinerator operation, maintenance and repair, including oil burner, controller, software, refractory brick, enclosure, oxidizer, chimney and thimble.

13.5.6.9.2 Provide a Monthly Incinerator Usage Report including the dates of incineration, start and end times, number of bales, litres of waste oil, weight of bones, amount of hazardous waste, quantity of filters, weight of item(s), and other (usually liquid hazardous waste).

13.5.7 Provide Quarry Services

13.5.7.1 The Contractor must provide crushed gravel using GFE. A minimum of 10,000 m^3 of crushed gravel must be produced annually from the Quarry. The task consists of:

1. Rock blasting;
2. Crushing;
3. Screening;
4. Hole drilling, aggregate placement, grubbing, grading of areas including roadwork;
5. Hauling of various gravel aggregate sizes to a designated stockpiling area or to other locations across the CFS Alert site in support of regular maintenance requirements and the annual Engineering Works Programme;

13.5.7.2 Sufficient gravel must be accessible for use before the 2nd week in June and must remain available for use until 31 Aug;

13.5.7.3 The Contractor must source and provide commercial type blasting material that can be legally transported on commercial aircraft. DND will retain the responsibility for the transportation of blasting material to CFS Alert, from 8 Wing Trenton;

13.5.7.4 The crushed gravel material is to conform to the granular material specifications listed in Real Property Quarry Operations section;

13.5.7.5 Develop and submit an annual quarry management plan that meets the requirements under the territorial Mines Act: and

13.5.7.6 The Contractor must drill holes in the ground as specified in the EWP using quarry drills. Drilling will typically occur when the quarry is in operation. Permafrost conditions may be encountered depending on the location of drill and depth of required holes. Location and number of holes will vary annually.

13.5.8 Provide Grounds Upkeep Services

13.5.8.1 Provide grounds upkeep services appropriate to the needs of each building and in accordance with applicable environmental standards.

13.5.8.2 Surfaces: The runway at CFS Alert is a graded, gravel-based airstrip, 5500 feet long and 150 feet wide. The total unpaved airfield surfaces are 103,123 m^2 and there are 150,000 m^2 of unpaved road surfaces, which include station roads plus the road to the water pump house; the road to the transmitter; the road to the Environment Canada Global Atmospheric Weather lab and new roads constructed for CFS Alert and ECCC operation.

13.5.8.3 Develop a Snow and Ice Clearing Plan incorporating the criteria found in the References section. The plan must be presented to the PA and TA with two (2) months of the contract award.

13.5.8.4 Conduct seasonal grounds upkeep:

1. maintain exterior signage;
2. maintain exterior civil, mechanical and electrical systems;
3. remove snow and ice from building entrances and exits, steps, ramps, sidewalks, driveways and parking areas to ensure Occupier safety and support Occupier operations, and ensure buildings are free of blown, ploughed or piled snow;
4. perform domestic snow and ice clearing (SNIC) operations. When snow depth thresholds or other triggers are met, the Contractor must respond to the event in accordance to the response and rectification times stated in the SNIC Plan. The Contractor must clean roads, buildings, and parking lots in accordance with the SNIC Plan and mark all hazards and obstructions. The priority of SNIC of domestic areas will be provided by the DND onsite staff;
5. perform airfield snow and ice clearance (SNIC) operations. The contractor must clear the runway and airfield surfaces of snow and ice in accordance with the SNIC Plan
6. carry out spring clean-up and prepare building grounds for summer;
7. maintain surface laid, above ground and underground utility and communication ducts;
8. perform a thorough inspection of all aircraft runway, taxiways, aprons, and other airfield surfaces before and after each aircraft movement, landing, or take-off. At minimum, all airfield surfaces must be inspected daily to ensure the integrity of the landing surface
9. perform maintenance of the airfield surfaces with GFE on a regular basis. Before, and after each aircraft movement, landing or take-off, the airfield surfaces must be compacted with the pull-type pneumatic tire rollers (GFE) by going over each section of the runway twice (e.g. once down the longitudinal length of the runway and once back). The roller ballast will be filled with 1,800lbs of aggregate per tire. The Contractor must apply water or aerate as necessary during compacting operations to meet requirements set out by the PA and TA;
10. perform minor repairs and /or compact any surface irregularities in all airfield surfaces. All airfield repairs must be treated as priority work and will be coordinated with the DND onsite staff in advance of the initiation of work.

11. perform corrective maintenance to the airfield when the airfield fails the friction test. Once corrective maintenance is completed, the Contractor must redo the friction test to confirm successful repair of the airfield. Friction test results must be communicated to the onsite DND staff as designated by the PA and TA.
12. perform maintenance, repair, replace and install traffic signs within CFS Alert and the airfield as required;
13. perform soil erosion controls. Significant erosion control activities that would require civil engineering design advice and heavy civil works in order to complete the task must be identified as part of the annual EWP. This also includes stabilizing slopes around the site. Erosion control includes: maintenance and repair of drainage collection points, ditching, culverts, swales and the like to ensure the station lands are free from standing water. All surface water (snowmelt, precipitation) must drain in a manner not to cause any environmental impact to the surrounding area, including bodies of water;
14. maintain all structural and hydraulic properties and 5,000 hectares of surface drainage;
15. maintain and repair all road surfaces to allow normal vehicle operations, including the maintenance and repair of roads, bridges, ditching and culverts. The snowmelt can wash away roads and other horizontal assets that are must be repaired quickly. Hasty repair efforts should be completed within 24 hours and enduring repairs should be completed within 2 weeks from occurrence;
16. maintain and repair all building foundation drainage areas to ensure drainage flows away from buildings;
17. grading of vehicle parking surfaces.
18. collect litter and empty garbage exterior of buildings.

13.6. Provide Engineering Services

13.6.1 General

13.6.1.1.1 Prepare Class A, B, C and D Cost estimates using local established pricing and RSMeans as required.

13.6.1.1.2 Prepare scopes of work as requested by PA and TA.

13.6.1.1.3 Prepare Designs and Specifications (D&S)

13.6.1.1.3.1 Ensure Engineering D&S packages are signed and sealed by a professional engineer of the appropriate discipline. The package must include a detailed statement prescribing materials, dimensions, requirement (safety, legal, technical code requirements) and workmanship. Specifications are in National Master Specifications (NMS) format unless otherwise specified by the PA and TA.

13.6.1.1.3.2 Conduct civil, structural, mechanical, and electrical engineering investigations to resolve problems as required to determine the Best Value from the perspective of acquisition, maintenance of structures, equipment and utilities as requested by the PA and TA. Prepare and submit reports on investigations.

13.6.2 Provide Engineering Input

13.6.2.1.1 Provide engineering advice as requested by PA and TA. Conduct a review of each project and WA using the DND Environmental Impact Assessment (EIA) process.

13.6.2.1.2 As requested, provide technical support to third parties designated by the PA and TA, such as Defence Construction Canada (DCC) and visiting military engineering units, including drawing reviews, inspection assistance and hand-over assistance for projects undertaken by third parties.

13.6.3 Perform Drafting Room Functions

13.6.3.1 Reproduce drawings for DND authorized clients. Record drawing reproductions in a log identifying the name of the authorized requestor and the number of sheets requested.

13.6.3.2 Prepare and Submit Site Approvals

13.6.3.2.1 Conduct property surveys and collect field data for incorporation in location maps and records in support of civil engineering. Set control points, grade stakes, locate underground utilities and other appurtenances. Provide certification by a registered land surveyor when required.

13.6.3.2.2 Approve and issue digging permits before start of digging operation. Verify the area from as-built drawings and, as required, toning services performed to confirm location of underground structures, appurtenances and utility lines, before excavating.

13.6.3.3 Prepare special drawings, including charts, posters, signs, and blow-outs of portions of existing drawings with color-coding of specific buildings.

13.6.3.4 Provide new or updated AutoCAD drawings for new or existing work.

13.6.3.5 Maintain record drawings (as-built) for facilities, works and installed equipment.

13.6.3.6 Maintain the MRPDP. Identify required projects and record them in the MRPDP. Provide research analysis and sustainability project recommendations to meet Wing requirements. Ensure that projects are completed as per the MRDPP priority provided by the PA and TA.

13.7. Provide Optional Project Delivery Services

13.7.1 General

13.7.1.1 Manage maintenance and construction, consultant and service contracting activities, including the tendering process, bid evaluation, contract award and contract supervision, as requested.

13.7.1.2 For each Project, develop and maintain an audit-ready Project File, including project milestones, cost tracking and risk management, in accordance with the SOW, to reflect process, deliverable and procedural requirements.

13.7.1.3 Complete a Business Case using an approved template provide by DND, and proceed with additional management provisions commensurate with the risk and complexity of the project and as requested.

13.7.2 Purpose and Scope

13.7.2.1.1 Provide Optional Project Delivery Services on an as-and-when requested basis for Construction or Repair and Other Real Property projects greater than 150 Labour hours.

13.7.2.2 Raise and control project files and ensure they are complete and current within five working days of changes.

13.7.2.3 As applicable, ensure that Project Files include the authorized Task Authorization form, cost estimate, design, specifications, drawing(s), as-built drawing(s), scope of work, study, engineering inputs and final report.

13.7.3 Initiate and Plan Construction and Repair Projects

13.7.3.1 Manage risk effectively:

1. Assess project risk using an appropriate toolset and appropriate processes, and comply with the risk requirements of the SOW; and
2. Triage projects according to their level of risk, complexity and cost, in accordance with the needs of each Project Category.

13.7.3.2 Develop and maintain an audit-ready Project File for each project in accordance with the SOW, and submit it to the PA and TA on request without delay:

13.7.3.3 Develop a Generic Project File Checklist for each Project, aligned with applicable project milestones, to measure the completeness and accuracy of project file documentation and to support associated cost tracking; and

13.7.3.4 Tailor the Project File Checklist to the needs of each project.

13.7.3.5 Collaborate with the PA and TA project design reviews, as requested.

13.7.3.6 Apply appropriate industry risk management practices consistent with DND's Project Complexity and Risk Assessment (PCRA) methodology, and initiate changes to the SDR, in accordance with the SOW, to reflect process, deliverable and procedural requirements.

13.7.3.7 Provide input to briefing notes required to support the PA and TA in obtaining approval of capital projects.

13.7.3.8 Complete a Business Case developed in accordance with DND's template and proceed with additional management provisions commensurate with the risk and complexity of the project and as requested.

13.7.3.9 Make project presentations to various stakeholders, as requested, and adjust content accordingly to obtain acceptance of the project plan.

13.7.3.10 Interact with various organizations, as required, to ensure effective delivery of projects, including organizations such as:

1. Government organizations; and
2. Third parties, such as:
    a. Other contractors providing services; and
    b. Municipal, Territorial and territorial regulatory and other authorities.

13.7.3.11 Recommend design solutions consistent with the most current version of the DND facilities condition index and in keeping with the character of existing building architectural and engineering components.

13.7.3.12 Prepare and submit project initiation and planning documents to support government approval processes, as requested, including:

1. Statements of Requirement (SORs);
2. Project charters, in accordance with the PA and TA requirements;
3. Requirements definition and feasibility studies;
4. Business Cases, including:
    a. Consideration of life cycle resource consumption and environmental burdens in project investment analyses;
    b. Life cycle costing;
    c. Evaluation of social impacts;
    d. Mitigation of negative impacts; and
    e. Complete CEAA procedures and environmental assessments.

13.7.3.13 Plan and Initiate Projects:

1. Plan projects included in the Project Listings.
2. Plan for the substitution of projects, as required, to meet changing priorities and available funding throughout the year, as requested.
3. Develop and present project initiation and planning deliverables for each project, including an SOR, if requested, and a Business Case at the preliminary design stage for acceptance, in accordance with the SOW.
4. Submit requests for approval to substitute projects on a project-by-project basis, and proceed as authorized.
5. Monitor and Control Project Performance.

13.7.4 Deliver Repair and Construction Projects

13.7.4.1 Execute projects in accordance with direction provided by the PA.

13.7.4.2 Ensure that the structural, electrical, architectural, mechanical and functional integrity of buildings is maintained.

13.7.4.3 Design and implement projects, incorporating materials, methods and workmanship standards consistent with existing architectural and heritage characteristics, building design, functional use and the PA's and TA's strategic direction for the building.

13.7.4.4 Conduct more detailed planning and design Work, as required, to respond to unanticipated conditions arising during the performance of physical Work, including repairs, construction and, in some cases, deconstruction.

13.7.4.5 Modify and refine schedules, work breakdown structures, cost plans and estimates, project plans, risk management plans and risk assessments prepared during the project identification stage.

13.7.4.6 Protect against damage to building elements that define heritage character during construction activities.

13.7.4.7 Submit completed monthly inventory data at completion of projects, in accordance with the SOW.

13.7.5 Provide Commissioning Services

13.7.5.1 Undertake commissioning as required, ensuring that O&M concerns are resolved, that the quality of commissioning documentation and activities is adequate.

13.7.5.2 Provide advice, identify opportunities to improve building performance through commissioning, and recommend re-commissioning and retro-commissioning

13.7.5.3 Carry out commissioning activities for each project, as requested, including:

1. Prepare and implement a Commissioning Plan setting out commissioning activities to be conducted over the life cycle of the project;
2. Identify operational requirements, issues and concerns;
3. Provide input and comments during the design phase;
4. Develop commissioning specifications for testing of equipment, systems, subsystems and integrated systems;
5. Document the concept of operations;
6. Inspect and test equipment and systems;
7. Place equipment and systems in operation;
8. Balance equipment and systems;
9. Evaluate performance against the intended design specification;
10. Ensure the timely transfer of project documentation from the project team to those responsible for O&M, including warranty management documents, as-built drawings and updated base-building drawings;
11. Prepare and issue operating manuals; and
12. Train building operators.

13.7.6 Deliver Other Real Property Projects

13.7.6.1 Deliver other real property projects as requested, which may require application of specialized technical knowledge and expertise, analysis, and superior business and technical written communications competencies, including projects involving, for example:

1. Specialty areas associated with:
    a. sustainability,
    b. performance measurement,
    c. architecture,
    d. drafting services,
    e. interior design,
    f. engineering,
    g. environmental considerations and contaminated sites, and
    h. illumination;
2. Conversion services to transfer hard-copy asset information to Computer Aided Design and Drafting (CADD) and other electronic formats;
3. Studies and assessments as may be requested as an outcome of environmental assessments and to support the ECMP; Services and building studies not involving construction, including coordination and planning of professional and technical specialized discipline services; and
4. Professional and technical expertise pertaining to areas such as feasibility studies, investigations and reports.

13.7.6.2 Plan and manage other real property projects, as requested:

1. develop specific, appropriate approaches to the management of scope, schedule, cost and risk;
2. define processes and procedures;
3. incorporate specialized expertise and resources; and
4. provide required reporting and information and deliverables.

13.7.6.3 Manage Project Warranties and Warranty Information

13.7.6.3.1 Manage project warranties until project close-out and provide warranty information to property managers to enable subsequent warranty management.

13.7.7 Manage Project Technical Information

13.7.7.1 Develop and provide technical documentation produced as a result of projects or to record other building changes, as required, including:

a) architectural, mechanical, structural and electrical drawings and specifications;
b) shop drawings;
c) as-built drawings;
d) single-line diagrams; and
e) other graphical representations.

13.7.7.2 Convert original information to electronic format, as requested, if changes are made to assets for which original drawings are in non-electronic or another form that is not compliant with accepted standards.

13.7.7.3 Manage PA and TA provided Computer Assisted Design and Drafting (CADD) drawings in accordance with the requirements of the most recent DND National CADD Standard and the Information Management Methodology:

1. maintain drawings throughout the life cycle of projects;
2. ensure that drawings are filed with other project information; and
3. update drawings and return them on project completion using appropriate transmittal forms. Provide electronic CADD master drawing files to the PA and TA in accordance with the RPDRL, including:
    a. mechanical, electrical, architectural and structural information from construction projects, for updating of CADD master files; and
    b. single-line electrical diagram CADD master files.

13.7.7.4 Ensure that CADD construction drawings are available in accordance with DND CADD standards at the project tender stage, and transmit them to the PA and TA as requested.

13.7.7.5 Provide CADD as-built and record drawings and ensure that they represent the project as constructed.

13.7.7.6 Provide electrical diagrams:

1. update single-line diagrams, and installation and other drawings after completion of Work for buildings and multi-building sites, and ensure they are posted in the main electrical room, or where required by the users, in accordance with requirements of authorities having jurisdiction; and
2. ensure that electrical as-built and single-line drawings are kept current and in accordance with DND's Electrical Safety policy.

13.7.7.7 Provide other project-specific information:

1. assemble project specifications using appropriate information formats, typically in PDF format;
2. retain originals of signed tender drawings in a secure area not accessible to the public or labour resources involved in building operations;
3. assemble and file drawings with other project information and project deliverables, and maintain an electronic list for ease of reference; and
4. send copies of drawings and other project-specific information to the PA and TA, as requested.

13.7.7.8 Provide Geomatics information as requested, in accordance with DND's National CADD Standard, TB and DND Policies on Information Management, TB Metadata Standards and the TB Standard on Geospatial Data.

13.7.8 Close Out Projects

13.7.8.1 Close out projects in accordance with the project plan, ensuring relevant stakeholder participation and sign-off.

13.7.8.2 Conduct project assessments covering the full scope of the PDR and in accordance with the SOW.

13.7.8.3 Conduct a project assessment for each project as requested, to validate project quality, including design, workmanship and materials, licences and permits, coordination and commissioning, project cost estimates and the project schedule. Tailor the Project Quality Checklist and the assessment procedure to the needs of each project to be reviewed before project execution.

13.7.8.4 Complete applicable documentation and include it in the Project File:

1. ensure that as-built drawings are provided at the end of each project and that building drawings are current; and
2. conduct a project file review, complete the tailored Project File Checklist and ensure the Project File is complete.

13.7.9 Real Property Deliverable Requirements

Provide Real Property Services in accordance with the Service Levels established yearly through PA, TA and contractor negotiations referring to Tables 1, 2 and 3, as indicated in Appendix C: Real Property Services Levels, which establish minimum levels of service

13.7.9.1 General

Real Property Deliverable Requirements are included in Table 14-1 Reports and Deliverables of Section 14 of the SOW.

13.7.9.2 As part pf the SDR Acceptance Review, the PA and TA will engage the Contractor as required leading to acceptance of format and content that specific deliverables will be required to meet.

13.7.9.3 The Submission Purpose includes the following:

1. For Acceptance: Deliverables that require a decision from the PA and TA before the Contractor can proceed or expenditures can be authorized or paid.
2. For Review: Deliverables that form critical input to fulfil DND or regulatory, legislative, policy or reporting obligations. Assessment of the information contained in these deliverables may result in the PA or TA 's request for a change, but do not require a decision before the Contractor can proceed.
3. For Information*:* Deliverables provided by the Contractor for DND record-keeping, reference or analysis purposes.

13.7.9.4 Deliverables that are required on a specific date (e.g. May 1) are due on the first business day that follows that date, in cases where the required date falls on a weekend or statutory holiday.

13.7.9.5 Document Status

Apply the following to indicate the status of document deliverables, as they evolve through their life cycle:

1. Draft: format and structure of the document are complete. Document details are being developed and should reflect current requirements. To Be Determined (TBD) items are allowed, even to the extent that an entire section can be TBD, provided that requirements for that section have not been developed.
2. Preliminary: the sections of the document are complete and significant detail has been provided. Some TBDs are acceptable where information is not yet available. Whenever possible, TBDs should include bracketed values, or text that reflects the most current thinking on an item or approach. Example: TBD [120° C]
3. Final: The document is complete. TBDs are allowed only on a case-by-case basis with acceptance by the TA.

Updates to the final document are controlled and treated as document revisions.

4. Current: documents specifically called out in this Section of the SOW or RPDRL for which the Contractor is required to provide periodic updates to reflect changes and to re-submit for review and acceptance or for information.

13.7.10 Real Property Quarry Operations and Crushed Aggregate for Surfacing of Unpaved Runways

13.7.10.1 General

13.7.10.2 Section Includes

13.7.11 This specification covers the general and specific requirements for crushed aggregates used as runway surface courses.

13.7.11.1 References

13.7.12 All references for Quarry production from American Society for Testing and Materials (ASTM) and Canadian General Standards Board (CGSB) are contained in the Reference section.

13.7.12.1 Products

13.7.12.1.1 Materials

1. Aggregate quality: sound, hard, durable material free from soft, thin, elongated or laminated particles, organic material, clay lumps or minerals, or other substances that would act in deleterious manner for use intended.
    a. Aggregates must satisfy all physical requirements shown in Table 1.
2. Coarse aggregates must be one of, or blend of, the following:
    a. Crushed rock composed of hard, uncoated, cubical fragments, produced from rock formations or boulders of uniform quality; or
    b. Crushed gravel composed of hard, durable, uncoated particles, produced from naturally formed deposits.
3. Fine aggregates must be one of, or blend of, the following:
    a. Natural sand.
    b. Manufactured sand.
    c. Screenings produced in crushing of quarried rock, boulders or gravel.

13.7.12.2 Execution

13.7.12.2.1 Processing

1. The Contractor must process aggregates uniformly using methods that prevent contamination, segregation and degradation.
2. The Contractor must blend aggregates if required to meet the gradation requirements specified. Use approved methods and equipment.
3. Blending to increase the percentage of crushed particles or decrease percentage of flat elongated particles is permitted.
4. Washing of aggregates will be permitted if this should prove necessary in order to meet specified gradation. Washing must be done with approved equipment
5. The Contractor must screen and reject aggregates if required to meet gradation requirements specified using approved methods and equipment.
6. When producing crushed aggregates, all rocks and frozen lumps encountered up to 300 mm in diameter are to be crushed and incorporated into work, as they are encountered.

13.7.12.3 Handling

1. The Contractor must handle and transport aggregate to avoid segregation, contamination and degradation.

13.7.13 Stockpiling

1. The Contractor must stockpile aggregates on site in locations coordinated with the Station.
2. The Contractor must level the stockpile site as necessary to achieve a level area.
3. Stockpile sites are to be level, well drained, and of adequate bearing capacity and stability to support stockpiled materials.
4. The Contractor must provide a base comprised of the aggregate being produced to not less than 300 mm in depth to prevent contamination of aggregate. The 300 mm base will not be included in the calculation of the quantity of material in placed in the stockpile.
5. The Contractor must take all necessary measures to ensure oversize and deleterious materials are not incorporated into the stockpile.
6. The Contractor must stockpile materials in uniform layers of thickness not exceeding 1.0 m.
7. The Contractor must complete each layer over the entire stockpile area before beginning next layer.
8. The Contractor must uniformly spot-dump aggregates delivered to stockpile and build up stockpile as specified. If material is dumped by vehicles, it will be spread with a dozer. The construction of each layer must progress from the outer edges towards the centre.
9. Coning of piles or spilling of material over edges of the pile will not be permitted.
10. If different types of material are to be stockpiled, the piles must be located and constructed so that no intermingling of material will occur.
11. Use of a conveying stacker is not permitted.
12. The completed stockpile must be neat and regular in form and must be constructed to occupy the smallest feasible area.
13. The Contractor must prevent ice and snow from becoming mixed in the stockpile or in material being removed from the stockpile.

13.7.13.1 Quality Control Testing

1. Inspection, sampling, and testing of crushed surfacing aggregate must be carried out by the Contractor.
2. All sampling must be in accordance with ASTM D75.
3. The Contractor must be required to conduct sieve analysis testing locally to confirm required gradation is being met.
    a. Minimum testing frequency: 1 test per 250 m3 of material produced.
4. The Contractor must also conduct 3 rounds of material testing for confirmation purposes conducted throughout the crushing operation by sending samples to a certified lab. This testing must include all properties outlined in Table 1 in accordance with the following:
    a. One sample must be taken within first 2 weeks of commencing crushing operations and the other two may be spaced out during the remainder of the crushing season with minimum 2 weeks between samplings.
    b. Results from the Micro-Deval, Los Angeles Abrasion, Flat and Elongated Particles, Liquid Limit, and Plastic Limit tests will not be used for material acceptance purposes.
5. Submit test results for review and approval as they become available.

Table 1 – Physical Requirements

PROPERTY	TEST METHOD	LIMIT
Gradation (sieve size)	CAN/CGSB 8.2	(% passing)
25 mm		100
19 mm		70 - 100
9.5 mm		50 – 80
4.75 mm		35 – 65
2.00 mm		20 – 50
0.425 mm		15 - 30
0.075 mm		8 – 15
Liquid Limit (Maximum)	ASTM D 4318	25
Plasticity Index (Maximum)	ASTM D 4318	6
Degradation by Abrasion In the Micro-Deval Apparatus		
i. Coarse Aggregate (Percent, Maximum)	ASTM D 6928	25 (Note 1)
ii. Fine Aggregate (Percent, Maximum)	ASTM D 7428	30 (Note 1)
Degradation by Abrasion By the Los Angeles Abrasion Test (Percent, Maximum)	ASTM C 131	30 (Note 1)
Flat and Elongated Particles in Coarse Aggregate, Length to Thickness Ratio Greater than 5 (Percent, Maximum)	ASTM D 4791	15
Percent Crushed Particles (Percent of particles with at least 1 freshly fractured face, Minimum)	ASTM D 5821 Material to be divided into following ranges: 19.0 mm to 4.75 mm	60

Note 1 – The Contractor may submit data showing compliance with either the Micro-Deval or Los Angeles abrasion tests. Only one of these abrasion tests will be required for this project.

14. Reports

14.1. Context

This is a summary of the major deliverables specified. Submission of additional deliverables, as required by Legislation or other reference material, remains the responsibility of the Contractor.

14.1.1. Description of Existing Conditions

SOW sections identify reports, plans, schedules, lists and meetings that the Contractor must provide deliver, or perform.

14.2. Work to Be Performed

Contractor CSM through the CPMAO will provide Reports and Deliverables.

14.3. Reports and Deliverables

Contractor Programme Management and Administration deliverables.

A copy of all deliverables will be provided to the PSPC Contracting Authority.

Reports and Deliverables Table 14-1

Delivery Requirement	Frequency	Delivery Date	Delivery To
GENERAL			
Draft Quality Plan	Once	15 days before Phase-In	PA
Annual Quality Plan	Annually	Annual anniversary date of each Contract Year	PA
All Services Preventive Maintenance Plans	Annually – overall Plan	Annual anniversary date of each Contract Year	PA / SME
	Monthly – Inspection data	First day each month	PA / SME
Contractor General Safety Management Plan	Once	15 days before Phase-In	PA / UGSO
	Annually or as required	Annual anniversary date of each Contract Year	PA / UGSO
Compliance Audits to Contractor General Safety Plan	Semi – annually	Copies 5 days of completion	PA / UGSO
Copies of Contractor Workplace Health and Safety Meeting Minutes	Monthly	maximum 7 days of meeting	CO Alert and PA
Emergency Response Plan	Annually	Annual anniversary date of each Contract Year	PA
Hazardous Occurrence Investigation Report	As required	Notification – Immediate Written report 14 Days	CO Alert UGSO and PA
Risk Assessments	Semi-annually or as required	Within 5 days of change	PA
Government Furnished Materials Report	Semi-Annual	14 days before the Change of Command	PA
Government Furnished Vehicles and Equipment Report	Annually	15 November of each Contract year	PA
Government Furnished Facilities Report	Annually	Maximum 30 days after the completion of each Contract Year End	PA
Engineering Works Programme	Annually	September each year	PA and TA
Weekly Sustainment Order	Weekly	Friday each week	Procurement process
Op BOXTOP Sustainment Order	Annually	1 October	CO and PA

Contact List of Contractor Personnel Responsible for Health and Safety (OHS)	Once	Phase-In	PA and TA
Copies of Communications Reports and Orders Received as A Result of Visits by Authorities Having Jurisdiction	As required	Notification – Immediate Written report 14 Days, or when requested	PA and TA
Specific OHS requirements and safe work procedures and practices	As required	Before work start	UGSO, PA and TA
Building Performance Review Report	Per BPR call Letter	Per Call Letter	PA and TA
Copies of Trade, Professional, and other certificates from applicable regulatory Authority	Annually and when changes	Before contract award	PA and TA
Contractor Management			
Monthly Project Review Meeting	Monthly	Agenda minimum 2 working days before meeting Draft minutes maximum 5 working days after the meeting for signature. Final minutes maximum 5 working days after approval.	PA with a copy to all attendees PA with a copy to attendees PA with a copy to attendees
Semi-Annual Contract Review Meeting	Semi-Annual	Draft minutes maximum 5 working days after the meeting for signature. Final minutes maximum 5 working days after approval.	CA with a copy to attendees. CA with a copy to attendees.
Inuit Benefits Report	Annually	Annual anniversary date of each Contract Year	CA
Lists and Information for Contractor Personnel Travel to/from Alert	Monthly and as required.	Monthly and Twenty-one 21 calendar days (three weeks) before the anticipated travel	PA
3-Month Personnel Forecast Rotation Plan	Monthly	7 days after end of month	PA
Annual Contractor Forecasted Staffing and Resource Plan	Annually	15 January of each Contract Year	PA
PHASE-IN			
Phase-In Plan	Once during Phase-In	As per Schedule	PA
8 Wing Hazardous Material Management Plan (HMMP)	Once during Phase-In	As requested	PA and TA for acceptance
Hazardous Material Spill Plans	Once during Phase-In	As requested	PA and TA for acceptance
3-Week Cycle Menu	Once during Phase In	As per Schedule	PA and 8 Wing Food Svc O
10-Day Cycle Menu for Cold Box Meals	Once during Phase In	As per Schedule	PA and 8 Wing Food Svc O
Food Safety Programme	Once during Phase In and then annually	30 days before completion of Phase-In and then 1 June of each Contract Year	PA
All Services Draft Preventive Maintenance (PM) Plan	Once	30 days prior Phase-In	PA
Phase –In Government Furnished Reports	Once	On the handover date	PA
PHASE-OUT			

Phase-Out Plan	Once	10 months before Contract Expiry date	PA
Contractor Site Services			
Contractor Costs Management	Quarterly	1 June/ 1 September/ 1 December/ 1 March/ each Contract Year	PA
Final Accumulated CMMS Information and Data	Once	At contract expiration	PA
Engineering Works Programme Status Report	Monthly	7 days after end of month	PA
Food Services, Accommodations Services and Janitorial Services			
Food Safety Programme Inspection Summaries	Monthly	7 days after end of month	PA
Diner Care Quality Programme	Once and then annually	7 days before Handover and Annual anniversary date of each Contract Year	PA
Cleaning Services Report	Monthly	5 days after end of month	PA
Government Furnished Equipment – Kitchen Inventory condition reports	Monthly	7 days after end of month	PA
Food Services Orders	Weekly	1200 hrs each Tuesday	PA
Food Services Requirement Forecast Reports	Annually	1 October of each Contract Year	CO and PA
Meal Consumption Reports	Monthly	7 days after end of month	PA
Diner Quality Care Programme Reports	Monthly	7 days after end of month	PA
Food Services Menu Cycle revisions	Semi-annually	7 August / 7 February/ each Contract Year	PA, and 8 Wing Food Svcs
Cold Box Meals Menu Cycle revisions	Semi-annually	7 August / 7 February/ each Contract Year	PA, and 8 Wing Food Svcs
Inventory of Food Services Supplies	Monthly	7 days after end of month	PA
Transportation and Vehicle Maintenance			
Inventory of Tooling and Maintenance	Semi-annually	At CO Handover	Alert Sup O
Record of Petroleum, Oils and Lubricants	Monthly	7 days after end of month	PA
Fleet Management Services (FMS) Report	Monthly	7 days after end of month	8 Wing TEME Fleet
Government Furnished Maintenance	Quarterly	3 weeks from the end of the	PA
Weekly Vehicles Off-Road (VOR) Report	Weekly	Tuesday each week	CO, PA, 8 Wing TEME
Snow and Ice Control (SNIC) Plan	Annually	31 July of each Contract Year	CO Alert, PA and TA
Real Property Deliverables			
Update and Distribute Asbestos and Designated Substance Management Plan	Annually	Annual anniversary date of each Contract Year	PA and TA
Water Test results	Monthly – water storage	7 days after end of month	PA and TA
Water Enforcement and Compliance Assurance (WECA) and Action Plans	Annually	Per W Env O direction	W Env O, PA and TA
Maintenance inspection activity/ deficiency/corrective maintenance report	As required	10 days after activity completion	PA and TA

Power Plant, HRS, Waster Plant, Waste	Monthly	7 days after end of month	PA and TA
Real Property input to reports on Fuel jettisoning, POL spills, Halocarbon	As required	Per W Env O direction	W Env O, PA and TA
Quarry Management Plan	Annually	Before Quarry Operations	PA and TA
Real Property Quality Management Plan	Once	Phase-In	PA and TA
Building OHS Plans	Annually	Annual anniversary date of each Contract Year	PA and TA
Project-specific OHS Plans	As required	Before work start	PA and TA
Energy Audit Reports	Per Work Authorization	7 days after completion	PA and TA
Real property management information and building operational information, including planning, inspection, O&M and utilities, project, performance, quality and other information.	Annually as requested	Annual anniversary date of each Contract Year	PA and TA
Infrastructure Continuity Plan	Annually or when	Annually per call letter	PA and TA
Business Case using an acceptable	Once during project	Per project schedule	PA and TA
Project Delivery Services Risk and Complexity Screening Questionnaire	Once during project planning and updated as required	Initial version - no later than March 31 for projects identified through the planning cycle Updated version - as determined by the project schedule	PA and TA
Canadian Environmental Assessment Act	Once during project	Per project schedule	PA and TA
Environmental Effects Evaluation (EEE) Letter and Report	Required once, when an EEE Letter is	Per project schedule	PA and TA
Long-form Business Case (EA) Business Case using an approved template – Category III Projects	once during the Project Execution stage for Expenditure Authority	Per project schedule	PA and TA
Project Charter	Once when requested by TA – Category III	Per Work Authorization	PA and TA
Building Technical Documentation and Drawings, Including BIM Data, As-Built Plans, Drawings and Diagrams	Once at Project completion	On project completion	PA and TA
Construction Project Assessment	As requested	As requested	PA and TA
Project Statements of Requirements	As requested	As requested	PA and TA
Project Specifications	As requested	As requested	PA and TA
Commissioning Deliverables	As requested	As requested	PA and TA
Updated drawings and return them	As requested	As requested	PA and TA
Project Warranty Information	As requested	As requested	PA and TA
Project File	As requested	As requested	PA and TA
Project Complexity and Risk Assessment (PCRA) Report for Category III Projects	Before Project planning	Per project schedule	PA and TA
RP-QMS Internal Audit Findings Report	Monthly	5th business day of month	PA and TA
RP-QMS Management Review Report	Annually – Per	30 days from receipt of	PA and TA
Nonconformity Report	Monthly	5th business day of month	PA and TA
Monthly Real Property Performance	Monthly	One week before monthly	PA and TA

Incident Report	Immediately	Per 8 Wing Incident reporting Standard	PA and TA
Environmental activities Report	As requested	As requested	PA and TA
Building Environmental Performance Assessment	Every 5 years	01 May	PA and TA
Inventory of Regulated Systems, Building	As requested	As requested	PA and TA
Summary of PI Continual Improvement Opportunities for the Following Year	Annually	15 May	PA and TA
Building Occupier Satisfaction Survey	As requested	As requested	PA and TA
Incident Trends and Root Cause Analysis Reports and recommendations for improvements in BPRs	As requested	As requested	PA and TA
8 Wing Storage Tank System Identification and Registration Form	As required	At least 1 week before system fill, or 60 days of any changes to system, management or personnel	PA and TA
8 Wing Storage Tank System Withdrawal and Removal Form	As required	Within 30 days after of system temporary, or permanent with drawl from service	PA and TA
Annual Confirmation and Certification of Inspections, Testing and Maintenance of Life Safety and Health Systems and Equipment	Annual	01 May	PA and TA
Operational Data, Manuals and Records	As required	As required	PA and TA
Bi-Weekly Work Order Report	Bi-weekly	1 day after week end	PA and TA
Annual Building Plan	Annually	Annual anniversary date of each Contract Year	PA and TA
Monthly Operation Report	Monthly	7 days after end of month	PA
Engineering Drawings Update	As required	As required	PA and TA
Monthly POL Activity Report	Monthly	7 days after end of month	PA
Bulk Fuel Systems Inspection Report	Annually	By 1 March of each Contract Year.	PA
Semi-Annual water sample test	Semi-annually	15 April / 15 November	PA
Monthly Hazardous Waste Report	Monthly	7 days after end of month	PA
Monthly Incinerator Usage Report	Monthly	7 days after end of month	PA
Monthly De-Icing and Anti-icing Fluid	Monthly	7 days after end of month	PA
Solid Waste Management report	Monthly	7 days after end of month	PA and TA

15. Task Authorization Process – Additional Work Request (AWR)

15.1. Context

As well as Facilities Management (FM) services of daily CFS Alert station operations the Contractor must provide additional work services through a Task Authorization process. Refer to Section 13 of the SOW for additional requirements.

15.1.1. Description of Existing Conditions

From the Facilities Condition Report (FCR), EWP submission and as identified there will be work required greater than station FM. DND will have "first right of refusal" for any AWR support. The Contractor will estimate the effort required and propose their resolution of the requirement.

15.2. Work to be Performed

15.2.1. Description of TA / AWR

The majority of CFS Alert FM work is conducted as Corrective Maintenance (CM), and this includes work identified through Preventive Maintenance (PM). However, there are two (2) cases when a Contractor Task Authorisation / AWR can be considered:

1. When work is greater than FM services capability / capacity, and
2. When the CM work hours are excessive.

When either condition exists then an AWR SOW will be required. The Contractor may provide an AWR estimate for DND approval, or DND can tender an AWR through PSPC to industry competition for issue resolution.

15.2.2. Work Greater Than FM Services

Based on the EWP, FCR or identified issues the work required at CFS Alert will be assessed between DND and the Contractor to determine if it is beyond the Contractors current capabilities. The resolution could demand extra personnel, material, Sub-contracting or DND involvement. If the assessment determines the work is beyond contractor capabilities and capacity an AWR can be submitted through the PA to the CA.

15.2.3. Excessive CM Work

The Contractor must perform PM activities which will identify CM activities. However, if CM activity time for correction on 1 event (eg. replace electrical outlet) becomes complicated that correction time is excessive the possibility of an AWR may be discussed with the PA. An estimate in excess of 150 direct labour hours can be discussed with the PA for the submission of an AWR. However, notification to the PA occurs when the repair exceeds 100 labour hours.

Note:

1. recurring AWRs are considered CM and will be objectively inspected by DND for confirmation,
2. Accumulation of CM work, or repeated CM work will not be considered for an AWR (e.g. work as a result of long-term poor performance, lack of CM)
3. Time outside of labour is not an AWR consideration (e.g. procurement time)

15.2.4. TA Submission Requirements

Each TA proposed to DND will follow a PSPC approved format must contain specific information for DND assessment as:

1. Work schedule,
    a. Start Date,
    b. Completion date, and
    c. Milestone dates.
2. Resources required,
    a. Waste Plan

3. Safety and Hazard risk assessment
    a. Mitigation Plan
4. Testing (as required),
5. Warranty period,
6. Cost estimate, and
7. Final Completion Certificate (FCC) before invoice

The Contractor's performance will be assessed by the CO Alert and the SCEO. When the TA is satisfactorily completed a notice of completion (FCC) will be sign and sent to the PA. The date of this notice will be used to commence product or workmanship guarantee periods as they apply to each project/TA. Canada recognizes that parts availability, complexity of repair or extreme weather may impact the rectification period and any increase to the deviation period will need to be negotiated with the PA.

Further TA details are provided through the CA (PSPC) contracting process.

15.3. Reports and Deliverables

15.3.1. Task Authorization

When work is greater than FM services capability / capacity, or CM effort is determined to be excessive than an AWR submission can be proposed based on CA approved format and based on the PSPC SACC process.

16 Acronyms and Definitions

Table 1 Acronyms and Definitions

Reference	Description
ABP	Annual Building Plan
Alarms and Controls System	Includes Fire Alarm systems; Microkey Fire Management systems; portable hazardous gas units; fixed hazardous gas systems; Veeder-root fuel management; water management Supervisory Control and Data Acquisition (SCADA) system; power plant steam heat SCADA system; ultrasonic level measurement system; Fuels Manager Card Control system; Door Access controllers; DDC and HVAC control systems; Camera systems with networking recorders; METASYS; UV treatment system; base radio controlled remote HV switching; Intrusion Alarms.
AMO	Alert Management Office located at 8 Wing, Trenton.
AMP	Asset Management Plan
ARFFV	Airfield Rescue & Fire Fighting Vehicle
Aerosol Cans	All spray paint, hair spray, cleaning spray and any other pressured cans.
AMSE	Aircraft Mobile Support Equipment
Annually	Means "per Contract year"
BCR	Building Condition Report
Best Value	best value to Canada, as determined through: 1. optimal use of allocated labour, financial and other resources; and 2. consideration of sustainability, cost, quality, competition and transparency.
BFC	Basic Food Cost
BMA	Between Meal Allowance
Boss Beaver	SCEO / DND Facilities Manager
BPR	Building Performance Review
Building	Existing, new, permanent or temporary structures enclosed within exterior walls and a roof, and including attached apparatus, equipment and fixtures.
Building Envelop	The structures and support towers for equipment including: exterior walls, framing, masonry units and exterior trim, flooring and foundations; exterior doors, windows and screens; roofing includes cleaning of roof gutter and downspouts; exterior and interior hardware; interior walls, framing, doors and partitions; ceilings and framing members; floor coverings; painting; concrete work; supports for mechanical, electrical, electronic, civil equipment, including appliances and galley equipment; and welded and fabricated metal components. Locking mechanism (device used on a door or a safe, to hold, close or secure, and that is operated by a key, combination, or a key card); Petroleum, Oil & Lubricants (POL) storage tanks; and other similar components.
Building Maintenance Category	1. **Category "A"** is an active facility and receives planned maintenance in accordance with normal schedules as detailed in the Engineering Works Programme. 2. **Category "M1"** is a mothballed facility requiring restoration to Category "A" within forty-eight (48) hours. 3. **Category "M2"** is a mothballed facility requiring restoration to Category "A: within ninety (90) days. 4. **Category "M3"** is a mothballed facility that will not be restored and is scheduled for disposal or demolition. 5. **Category "X"** is a facility, which is excluded from maintenance under this Contract for which maintenance is the responsibility of a third party.
BV 206	Bandvagn 206
CA	Contracting Authority (PSPC)
CADD	Computer-Aided Design and Drafting
Capitol Construction	new construction of buildings or facilities in support of new and existing tasks and missions.
CCME	Canadian Council of Ministers of the Environment
CE	Construction Engineering
CEAA	Canadian Environmental Assessment Act
CETO	Construction Engineering Technical Orders
CF	Canadian Forces

CFCEM	Canadian Forces Construction Engineering Manual
CFESA	Commercial Food Equipment Service Association
CFIOG	Canadian Forces Information Operations Group
CFS	Canadian Forces Station
CFTO	Canadian Forces Technical Orders.
CGSB	Canadian General Standards Board
Class S	A condition in which all vehicle safety features are functioning, the vehicle is able to perform its intended function and meet all Federal and Territorial highway safety acts.
CLC	Canada Labour Code
CM	Corrective Maintenance
CMMS	Computerized Maintenance Management System
CO	Station Commanding Officer
Conduct Period	Period of time between a negotiated start and negotiated completion date for any specific task.
Contract Award Date	Date that the Contract is awarded
Contract Completion	Activities required of the Contractor to complete the Contract and receive final payment
Contract Expiration Date	The last day of the Contract
Contract Programme Manager (CPM)	Contractor personnel empowered to act as the official point of contact between the Contractor and DND with sufficient delegated technical and financial authority to respond appropriately to any contractual matters.
Contractor	The prime supplier, vendor, or company that PSPC engages to satisfy the requirements of the Contract.
Contractor Personnel	Any individual that the Contractor utilizes in meeting the requirements of the Contract. This includes, but is not limited to, the Contractor's employees and the employees of the Sub-Contractors employed by the Contractor.
Controlled Product	A product or substance that is listed in 1 of the six hazard classes in Controlled Products Regulations, defined for Workplace Hazardous Materials Information System (WHMIS).
Construction Projects	A project involving specific construction work, including additions or changes to the outline of a structure and alterations to structural systems (structural systems include bearing walls, trusses and roof systems but do not include non-bearing partitions); installation of, and addition to, fixed equipment that is an essential part of a facility, including, elevators, automatic fire protection systems, heating and air-conditioning equipment; alterations or improvements that change the current functional use of a facility; alterations that significantly increase or reduce the design capacity of a facility; and major restoration of a facility that has been seriously damaged by fire, flood or other means, or that has become structurally unsound.
Corrective Maintenance (CM)	Unplanned or responsive maintenance, repair or service requirements.
CPM	Contract Programme Manager
CPMA	Contractor Programme Management and Administration
CPMAO	Contractor Programme Management and Administration Office
Critical Area or System	Operationally sensitive spaces, back-up power systems, systems in support of site security, life safety or other critical areas that are listed in the Contract or may be designated by the PA and TA from time to time.
Critical Area or System Main and Standby Power Plant	Area or system potentially impacting operations, health and safety. Critical area or system includes the generators and controls.
Critical Area or System Potable Water	Area or system potentially impacting operations, health and safety. Critical area or system for the potable water would be sump pumps, filtering system and chlorine injection system. Non-critical area/system could be the pump monitoring system.
Critical Area or System Electrical and Electrical Airfield Distribution	Area or system potentially impacting operations, health and safety. Critical area/system include all components required to provide electrical power to the Station and airfield lighting including battery backup and emergency lighting systems and life safety systems
CSA	Canadian Standards Association
CSM	Contractor Site Manager
Day	A calendar day.
DDR	Due Diligence Review
Defence Construction Canada (DCC)	Defence Construction (1951) Limited, known under the Federal Identity Program as DCC.DCC provides services to the DND, which acts as owner and design authority.

Delivery Phases	For clarification within this document DND has established the following phases for completion of the Contract: 1) The Phase-in (Starts after Contract award and ends at the start of the Operational & Maintenance); 2) The Phase-out (Ends with the expiry of Contract).
Designated Holidays	For this Contract, the following are designated holidays: New Year's Day, Good Friday, Easter Monday, Victoria Day, Canada Day, Ontario Civic Holiday, Labour Day, Thanksgiving, Remembrance Day, Christmas and Boxing Day. If a Designated holiday falls on a Saturday or Sunday, the Monday immediately after will be considered a designated holiday.
Designated Officer (DO)	The DND contract liaison on site in Alert. The Station Commanding Officer is the "DO" and may further nominate respective "DOs" for each service area or section of this SOW.
DLN	Defence Learning Network
D Maj Proc S	Directorate Major Procurement Services
DND	Department of National Defence
Door Systems	Electrically powered or manually operated overhead doors, shutters, garage doors, sliding doors, revolving doors including structure, fabric, hardware motors, gears, tracks, safety systems and finishes.
Domestic Water	Water used for heating Systems
DRDC	Defence Research Development Canada
DREPs	Defence Research Establishment Pacific – Now DRDC
DRMIS	Government Furnished Record System Software – Defence Resource Management Information System
ECCC	Environment and Climate Change Canada
ECMP	Environmental Compliance Management Plan
EGS	Electrical Generating System
EIA	Environmental Impact Assessment
Electrical Systems	Electrical equipment and system components including power distribution, residential and industrial above or below ground; interior lighting; electric motors; electric meters and other small electrical devices / appliances, document destruction devices (shredder), laminators; wiring systems; conduit systems; cable systems; distribution systems; conductors; switches; receptacles; outlets; device plates; grounding points; and light fixtures and other similar electrical items.
EME	Electrical Mechanical Engineers
Emergency Demand Call	Emergency is one that identifies a required repair, maintenance or other service-related issue that prevents the Canadian Armed Forces from carrying out its mission or one that presents an immediate health and safety risk to the Occupiers of the Site or the general public.
Engineering Inspection	Consists of a scheduled examination and/or test of works and buildings to determine their physical condition with respect to prescribed maintenance standards.
Engineering Work Programme	An annually developed / updated plan that identifies major work requirements to be performed on all infrastructure. This plan identifies the work to be performed, costs, timelines and resource requirements. This plan includes maintenance as required by this SOW, and work that may be added through Task Authorization.
ERP	Emergency Response Plan.

Estimates	**Class "A" (Pre-Tender) Cost Estimate –** An estimate based on confirmed price quotes for material, labour, and other associated costs provided for complete plans and specifications. The estimate is prepared by providing material and labour costs against the completed design details. Contingencies or escalations are not usually included. The Class 'A' Estimate should be within +/- 5-10% of the actual contract award price. **Class "B" (Substantive) Cost Estimate –** An estimate based on substantially completed specifications and plans. These are usually prepared during design development stages to confirm budgets or identify cost overruns, and include major systems and subsystems. The Class 'B' Estimate should be within +/- 10-15% of the actual contract award price. **Class "C" Cost Estimate –** An estimate based on conceptual plans and an outline of the design proposed. These estimates are usually used for preliminary budgeting purposes. Client submitted scopes of work are a basis for the Class 'C' estimates. The Class 'C' Estimate should be within +/- 15-20% of the actual contract award price. **Class "D" (Indicative) Cost Estimate –** An order of magnitude estimate primarily based on unit prices for identified disciplines. The information available for a Class 'D' estimate is usually very limited. The estimates are prepared by using lump sums with percentages. The Class 'D' Estimate should be within +/- 20-30% of the actual contract award price.
ETQMS	Equipment Technical Quarter Master Sergeant
EWP	Engineering Works Programme
Facility Condition Assessment	The coordinated analysis, by trained professionals, of a facility in terms of age, design, construction methods and materials. The analysis looks at all systems (architectural, mechanical and electrical) contained within that facility to determine the condition of the individual systems as well as the overall condition of the facility.
Facilities Manager	DND military position also known as SCEO, or Boss Beaver
FCC	Final Completion Certificate of TA
FCI	Facilities Condition Index
FCR	Facilities Condition Report
Fire Detection and Suppression Systems	Systems installed in buildings or other assets that are used to detect and/or suppress fire.
Fiscal Year	the federal fiscal year, which is from April 1 to March 31.
FMS	Fleet Management System.
FOB	Freight On Board
FOD	Foreign Object Debris (generally found on airfield)
Fort Eureka	A small seasonal DND establishment that is co-located with the Environment Canada station at Eureka, NU.
General Contractor	the prime accountable authority for health and safety and Occupational Health and Safety (OHS) in relation to construction, as defined in Nunavut's applicable legislation.
General Demand Call – Non-Urgent	is a Demand Call that identifies a required repair, maintenance or other service-related issue that does not significantly impact operational effectiveness or result in a significant negative impact to the work environment.
General Demand Call - Urgent	a Demand Call that identifies a required repair, maintenance or other service-related issue that has significant impact to operational effectiveness or the work environment. This would also include issues that, if left unattended, will become an Emergency Demand Call.
Generators and Auxiliary Power Unit (APU)	**m**eans equipment used to provide auxiliary power to an asset when mains power is not available.
GFA	Government Furnished Accommodation
GFE	Government Furnished Equipment
GFF	Government Furnished Facilities
GFI	Government Furnished Information
GFM	Government Furnished Material
GFP	Government Furnished Property
GFV	Government Furnished Vehicles

Good Industry Practice	means using standards, practices, methods and procedures to a good commercial standard, conforming to law and exercising that degree of skill and care, diligence, prudence and foresight which would reasonably and ordinarily be expected from a qualified, skilled and experienced person engaged in a similar type of undertaking under the same or similar circumstances
Greyline	The electronic tank fluid level measuring system used at CFS Alert.
Ground Structures	Structures include but are not limited to roads, drainage structures, fences, parking areas, drives, shoulders, retaining walls, paths, landing pads, recreation areas, signs, antennas, flag poles, airfield, taxiways, water catchment areas, parking aprons magazines, storage tanks, temporary construction roads and roads under construction with associated drainage and fencing, as well as the cemetery.
Ground Maintenance	This maintenance includes surface drainage, erosion control, weeding out of special areas, traffic / road signs, and roadway from designated building entrances and sidewalks.
Guests	Anyone authorized by DND to use the services to be performed under the SOW.
HADCS	High Arctic Data Communications System
Handover Date.	the date by which the Contractor completes the transition to full operations.
HAPS	Headquarters, Administration, and Personnel Services Building
Hard Services	Those services that are structured within the building and cannot be removed. These include services such as to the Building Envelope and Structure, Heating, Ventilation, Air Conditioning and Refrigeration (HVAC) Systems, Door Systems, Electrical Systems, Elevator and Lifting Systems, Plumbing Systems, Fire Detection and Suppression Systems, Generators and Auxiliary Power Units (APUs), Life Safety Systems, Alarm and Control Systems, etc.
Hazardous Material (HazMat or HM)	Any material which because of its quantity, concentration, or characteristics (physical/chemical or infectious) may pose a hazard to human health or the environment or when released or spilled into the environment is considered hazardous.
Hazardous Occurrence	An undesirable event which results in (or has the potential to result in) injury or illness to personnel, material losses and/or property damage.
Hazardous Waste (HazWaste or HW)	Any discarded material, liquid, solid or gaseous, and associated containers, which meets the definition of Hazardous Material, is considered a Hazardous Waste. A Hazardous Material may become a Hazardous Waste after it has served its intended purpose, exceeds its shelf life, becomes contaminated, or has been spilled. A waste can be hazardous if it is either listed as hazardous by the Canadian Environmental Protection Act 1999 (CEPA 1999) or if it exhibits any one of four characteristics: corrosive, reactivity, ignitability or toxicity.
HRAI	Heating, Refrigeration and Air Conditioning Institute (of Canada)
HRS	Heat Recovery System
HVACR	Heating, Ventilation and Air Conditioning and Refrigeration - machinery, equipment, pipework, valves, ducting, dampers, wiring, control systems Building Management Systems, Building Automation Systems), software and ancillary equipment normally associated with HVACR systems; mechanical system equipment, cooling coils, condensate drip pans, drain piping, refrigerant piping, air cooled condensers, refrigerant dryers, strainers, valves and compressors; window air conditioning units; and air filters.
IAW	In Accordance With
IEEE	Institute of Electrical and Electronics Engineers
Including	where “including” is used preceding a colon, followed by a list, the list is non-exclusive.
Installed Equipment	Equipment and systems which are permanently installed and become an integral part of the building.
ITM & ITM&R	Inspection, Testing, Maintenance & Repairs
Life Safety Equipment	Installations such as anchor points, Fall Arrest Systems, Fall Restriction Systems, travel restraint system or guard rails intended to be used to prevent or minimize the effect of persons falling from heights.
m & m2	metre and square metre
Master Real Property Development Plan	MRPDP is a plan developed to provide guidance for the comprehensive, long-range use, design, acquisition, construction, demolition, redevelopment, reduction, maintenance, operation and disposition of DND realty assets.

Maintenance	The act of preserving and maintaining facilities in their "as constructed" condition to the extent practicable.
Maint O	Maintenance Officer
Material	Parts, pieces, elements consumed in use or installed on equipment becoming part of the equipment (e.g. nuts, bolts, drywall sheets, plywood, filters, drill bits).
MDC	Material Distribution Centre
Mechanical Systems	Motors, drive assemblies and fans; wiring and electrical controls; guards, casings, supports, platforms, and mounting bolts; water fountains, freezers and ice machines; and other similar mechanical components and items such as "Installed Equipment".
MG	Motor Generator Set
MPP	Main Power Plant
MRPDP	Master Realty Property Development Plan
MSE Safety	Mobile Systems Equipment Safety
NMS	National Master Specifications
O	Officer
Occupiers	People and tenants present in buildings.
O & M	**Operations & Maintenance** - Work activities associated with providing building operations and maintenance services.
ODP	Ozone Depletion Prevention (Certificate)
OHS	Occupational Health and Safety
Occupational Health and Safety Control Authority (8 WGSO)	the authority accountable for OHS, in relation to Construction Engineering and Maintenance Management Services and Facilities Maintenance Services.
OIC	Officer In Charge
Officer	A Military Member of Supervisory, or Management Rank and Authority
OMP	Optimized Maintenance Program
Op BOXTOP	Twice yearly Operation for the yearly Fuel and dry goods replenishment of CFS Alert
Operational Transition	Activities required to transition to full operations during the Phase-in Period
Op NEVUS	Yearly operation to maintain the HADCS system
ORL	Outstanding Repair Ledger
PA	Project Authority
PDF	ISO 32000 Portable Document Format
PDR	Project Delivery Regime
Per Year	Means “per Contract year”.
Permanent Staff	DND personal manning the station
PfM	Performance Measure
Phase-In Period	The period within which the Contractor is required to undertake an orderly transition between contracts in the lead-up to handover, including activities required to achieve acceptance of the Contractor’s Service Delivery Regime for Real Property Infrastructure, beginning 90 Days before the Operational Start Date
Phase-out Period	The period within which the Contractor is required to undertake an orderly handover of services to another Contractor during the period beginning 90 days before the Operational Completion Date and ending on the Operational Completion Date
PI	Performance Indicator
Plant Inspection	Plant inspection consists of a periodic scheduled examination, lubrication, minor adjustment and servicing of plant equipment and systems for which specific operations personnel are responsible.
Plumbing Systems	Water systems, include water lines, interior, to and including the services valves and box outside of the buildings and lines from the building to the connection with the main (laterals); domestic hot water piping; interior and exterior sanitary waste lines and lift stations to main; drainage, waste and vent systems; sanitary sewer systems; fittings, valves, pumps, grease traps, plumbing fixtures, filters, meters, gauges, steam generators including related steam equipment, and other appurtenances related to the above systems; steam distribution and lagging; Petroleum, Oil & Lubricants, gas and fuel distribution systems; fire sprinkler systems; and other similar plumbing components.

PM	**Preventive Maintenance** - PM plan is a predetermined and scheduled procedure that operates on a continuous basis and which is designed primarily to detect maintenance requirements early and thus prolong the useful life of facilities, works and installed equipment described in SOW.
PMBOK	Project Management Body of Knowledge
PMI	Project Management Institute
PoC	Point of Contact
POL	Petroleum Oil Lubricants
POP	Programme of Projects
Potable Water System	This water is safe for Human consumption. This Includes all components and systems found on the station including associated systems.
Project Authority (PA)	Authority for the contract – the Department of National Defence of Canada.
Pressure vessels	Boilers, Gas Cylinders, compressors bottles, Any vessel containing a fluid under pressure
Personal Protective Equipment (PPE)	Worn to minimize and mitigate exposure to workplace hazards and risks which pose a threat to workers' safety and quality of life.
PP&S	Pens, Pencils, and Stationary
PRIN	**Property Record Identification Number** – Each Bldg / Structure is identified with a PRIN for DND accountability and maintenance records.
PSPC	Public Service Procurement Canada
QMS	Quality Management System
Quality Monitoring	the quality-related service administration role played by the PA and TA, including various activities performed by or on behalf of Canada to assess the Contractor's conformance with requirements, verification of the Contractor's performance and deliverables, and oversight of the Contractor's Quality Management System (QMS) outputs.
RAMM	Realty Asset Management Manual
Recurring Work	Repetitive work that is performed periodically such as periodic inspections or preventive maintenance type tasks.
Rectification Period	The time it takes for a Contractor to correct or repair a deficiency. This period commences after the initial response has elapsed, where the Contractor finishes preparing the necessary resources to rectify the problem.
Repair	Scheduled or Corrective activities pertaining to existing building elements, resulting in: the repair or, replacement of an existing building element or component to ensure that buildings operate safely and are in a condition that allows the building function to continue without disruption.
Repair Threshold	A baseline amount to determine repairs that the Contractor will carry out under the Fixed Price portion of the Contract. This includes Contractor's costs for undertaking repairs in excess of $15 000 labour, or 150 labour hours effort per Demand Call or per Repair requirement resulting from a scheduled activity. Repairs covered under this threshold include breakdowns, failure or malfunction of building systems, and components that are included in the Fixed Asset Registry. Building systems and components include – the structure and fabric of the building interior and exterior, machinery, components and associated wiring, pipework, ductwork, controls etc. that form part of, or are fixed to the Building and form part of the normal function of the Building. Repairs under the Repair Threshold can be carried out without Task Authorization meeting Response Times as identified in the Contract. Specialist systems or equipment that are not listed in the Fixed Asset Registry are not covered under the Repair Threshold. Specialist systems may include – scientific equipment, communications room equipment etc. Repairs above or outside of the Repair Threshold are carried out as Task Authorizations or through other means (i.e., DCC or military).
Response Time	The elapsed time from when a request is received by the Contractor at the trouble desk until commencement of work at the Site with adequate number of qualified personnel, equipment, necessary tools, and parts / materials.
Risk Assessment	The overall process of hazard identification, risk analysis, and risk evaluation.
RHU	Residential Housing Unit
RP-KPI	Real Property Key Performance Indicator
RP Ops (N)	Real Properties Operations North
RPDRL	Real Property Deliverable Requirements List

RP-PMR	Real Property - Performance Measurement Regime
RVS	Road and Vehicle Safety
Sanitary and Clean Condition	This criterion is defined as meeting the following conditions – Removal of waste to minimize obnoxious odours; scattered or loose solid waste; vector problems such as rodents; fly breeding conditions; unsightly conditions; and overflowing trash containers preventing proper closing of doors.
SbPP	Stand-By Power Plant
SCADA	Supervisory Control and Data Acquisition
SCEO	Station Construction Engineering Officer – DND Facilities Manager
Scheduled Maintenance	Planned, preventive or proactive maintenance activities as described in the SOW.
SCI	Systems Condition Index
SDR	Service Delivery Regime
SDS	Sustainable Development Strategy
Secondary Duty	A group of tasks or work requirements that fall outside of an individual's primary work description or set of duties.
Section	section or subsection of the SOW.
Security and Access Control Systems	Systems or installations that are intended to prevent, control, monitor or record personal and vehicular access to a site, building or zone.
Serviceability Rate	Is defined as the number of vehicles, or special equipment within the fleet that are fit to perform their intended function reported as a percentage of the fleet.
Shop Inspection	Shop inspection consists of a periodic scheduled examination, lubrication, minor adjustment and servicing of installed equipment and systems that are unattended during their normal operation.
SLoc	Supply Location
SLTN	Service Leak test Notice
SNIC	Snow & Ice Control
Soft Services	Services not included in Hard Services that contribute to the quality of comfort, health and safety of building Occupiers. These include services such as pest control, landscaping, waste management, hazardous waste management, and accommodations support services.
Solid Waste	Garbage, including animal and vegetable waste resulting from the handling, preparation, cooking and consumption of foods, refuse including ashes, debris, rubbish and other solid waste materials.
SOP	Standard Operating Procedure
SOR	Statement of Requirement
SOW	Statement of Work
SPCSC	Single Point of Contact for Service Calls
SRCL	Security requirements checklist
Sub-Contractor	Supplier, vendor, or company that the Contractor engages to satisfy the requirements for the performance or supply of a part of the work.
Supp O	Supply Officer
Svcs	Services
System Operating Voltage	Voltage measured across a secondary of generator bus potential transformer.
SWO	Station Warrant Officer
TA	Technical Authority
Task Authorization (TA)	A work request issued to the Contractor that is beyond tasks described in the contract documents. This type of work will be performed on an "as and when required basis".
TB	Treasury Board
TCN	Tracking Control Number
TDS	Total Dissolved Solids
TEME	Transportation Electrical Mechanical Engineering
TEME Prod WO	Transportation Electrical Mechanical Engineering Production Warrant Officer
Transition	Grouping of activities involved in initiating or terminating the provision of services at the beginning or end of the Contract Period
TN MWO	Transport Master Warrant Officer

Travel Restraint System or Fall restraint System	An assembly of components capable of restricting a worker's movement on a work surface and preventing the worker from reaching a location from which he or she could fall.
Trouble Calls	requirements that present an imminent threat to life, property or mission.
ULSD	Ultra-Low Sulphur Diesel
UPS	Un-interruptible Power System/Supply.
VOR	Vehicle Off Road
WHMIS	Workplace Hazardous Materials Information System
Work Day / Business Day	weekdays, excluding statutory holidays as set out in applicable legislation.
Work Place	the workplace as defined in the *Canada Labour Code (CLC)*, Part II.
WMS	Work Management System
WTP	Water Treatment Plant
24/7	24 hours per day and 7 days per week

17. References

17.1. Context

The contractor must be aware of all public Acts, orders, publications, notices, references, publications, policies, etc… applicable to delivery of Contract services. These references will be considered as integral to "Work to be Done" and "Reports and Deliverables", and must be read as if they were reproduced within the SOW. The Contractor must be fully familiar with their contents and requirements, and the latest edition of all standards will be applied.

The following references are applicable to this Section of the SOW. Unless otherwise noted, comply with the latest editions of technical and regulatory standards referenced below and in other parts of the SOW, and with new codes and regulations enacted during the contract term. If a document is deleted or removed from use, recommend, seek guidance and obtain acceptance from the PA and TA on a suitable alternative

If requirements set out in the references are concurrent or conflict, meet the most stringent requirements, seeking clarification or guidance from the TA and regulatory authorities as required. Keep copies of the most current edition of applicable Codes and Standards, at the time of entering into the Contract, readily available for the duration of the contract

When reference is made to certain detailed specifications or similar related data as published by DND or equipment suppliers, the Contractor will be solely responsible for obtaining these from the described sources.

17.2. Work to Be Performed

The Contractor will create, maintain and update reference libraries for their work at CFS Alert. DND references will be made available to the Contractor and DND will provide up-dates and new versions when requested, or as required.

The Contractor is to maintain a current index and ensure that amendments to manuals are incorporated into all copies of all official publications and technical data concerning the equipment in use as:

1. all systems
2. installation,
3. appropriate regulations,
4. parts list, and
5. manufacturer's instructions**.**

The Contractor will meet the most stringent reference requirement in work performance. Any conflict between references will be resolved by DND. The PoC for all approved document versions will be the Project Authority (PA).

17.3. Reports and Deliverables

The Contractor will obtain and use Federal, Provincial, Territorial and Manufacturer reference documents as applicable. Contractor requirement of DND documents are listed here. The Contractor must become aware of reference deletion, rescinding, currency, updates and new references.

The following is a list of DND references.

17.3.3. Table of References and Publications

DND Reference Table 17.3.1

Category	Reference No.	Title
CFS Alert		CFS Alert Emergency Response Plan
		CFS Alert Environmental Management System (EMS)
		CFS Alert Environmental Baseline Studies
		CFS Alert HazMat Management Plan
		CFS Alert Station Fire Department Standard Operating Procedures
		CFS Infrastructure Assessment
		CFS Alert Station Fire Orders

		CFS Alert Station Guidelines for Airfield Operations
		CFS Alert Station Standing Orders
		CFS Alert Clothing Requirement Scale B25
		CFS Alert Buildings Drawings
		CFS Alert Hazardous Materials Survey
		Prohibited Item List aboard DND aircraft
		Damage Control Division Standing Orders
		National Defence Security Orders and Directives (NDSODs), Physical Security Technical Standards
		International Civil Aviation Organization (ICAO) standards
		C-98-001-003/MS-022 Aerodrome Standards and Recommended Practices MIL 312
		Operating Records and Reports (Water Pollution Control Services) Operations and Maintenance
		MND Letter – Provision of non-emergency care to civilians at Canadian Forces Station Alert
		Contractor Medical Screening Forms
		Supply Administration Manual (SAM)
		8 Wing Building Facilities Usage Catalogue
		8 Wing Electrical and Airfield Distribution Systems Drawings
		RS Means - FM and Repair and Cost data Book
		Manufacturer operation, maintenance and repair manuals that apply to the make and model of equipment in use
Environment	1 Cdn Air Div Order 1-109	Environmental Protection and Resource Conservation
		Endangered Species List Regulations
		Species at Risk Act
		Pesticides Control Regulations
		Environmental Directive ED 4003-4/07 To Reduce the Use of Pesticides on DND Properties
	1 Cdn Air Div Order 1-112	Hazardous Material Management
		Hazardous Products Act
		Federal Halocarbon Regulations
		Halocarbon Regulations
		Ozone-depleting Substance Regulations
	CFAO 29-7	Energy Management and Conservation
	Directive P5/92	Canadian Forces and National Defence policy on the Environment
	DAOD 2008-3	Issue and Crisis Management
	DAOD 4003-0	Environmental Protection Management and Stewardship
	DAOD 4003-1	Hazardous Materials Management
		Asbestos Abatement Regulations
		Asbestos Management Plan
		Asbestos Waste Disposal Guidance Document
	SOP B29	Fuel Spill Contingency Plan
		Migratory Birds Convention Act and Regulations
		Canadian Environmental Protection Act
		Canadian Environmental Assessment Act
		Nunavut Environmental Protection Act
		CFDS Infection Control Precis,
		DND Effluent Monitoring Program
	Licence No. 3BC-ALT1015	Nunavut Water Board (NWB)
		Nunavut Waters Regulations
		DND – Environmental Impact Assessment Directive, June 2016 (DND-DGIEGPS)
Safety	A-GG-040- 001/AG-001	DND General Safety Programme – Policy and Programme

	C-02-040- 009/AG-001	DND General Safety Programme – General Safety Standards
		Nunavut Safety Standards
	A-GG-040- 004/AG-001	General Safety Programme, Hazardous Material Safety Manual
	C-98-007-002/TP-001	Canadian Forces Policy for Controlling Civil Access to Dangerous DND Lands, Ranges and Training Area
	A-GG-040-006/AG-001	DND Explosives Safety Programme (M)
	C-09-005-002/TS-000	Ammunition and Explosives Safety Manual Vol 2 Storage and Facility Operations
		8Wg Trenton Explosive Safety Standing Orders
		C-09-005-002/TS-000 Ammunition and Explosives Safety Manual Vol 2 Storage and Facility Operations
		Canadian General Standards Board (CGSB)
		Canada Labour Code – Part II (CLC-Part II)
		Occupational Health and Safety Act and Regulations
		Canadian Forces Fire Marshal Directives
		National Fire Code of Canada
		National Fire Protection Association (NFPA) [Codes/Best Practices etc.]
		Canadian General Standards Board (CGSB) standards cited
		Canada Occupational Health and Safety Regulations
		Environmental Emergency Regulations
	C-87-040- 000/MS-001	DND Respiratory Protection Programme
		DAOD 5021-1, Respiratory Protection
		DAOD 5018-2, Reports of Injuries and Exposure to Toxic Substances
Foods	A-85-269- 001/FP-001 Food Services Manual	Chapter 4 Annex B Standard Meal Item Availability Table - http://collaboration-dmpa.forces.mil.ca/sites/DI/Organizations/sjs/supp-food-chap-02-food-svcs-standards.pdf
		Chapter 4 Annex C – Portion Size Standard http://collaboration-admpa.forces.mil.ca/sites/DI/Organizations/sjs/supp-food-chap-02-food-svcs-standards.pdf
		Chapter 7 Food Safety and Defence Programme http://collaboration-admpa.forces.mil.ca/sites/DI/Organizations/sjs/supp-foods-chap-7-food-safety-defence-program.pdf
		Chapter 4 Annex A – Standard Meal Entitlement Pattern http://collaboration-admpa.forces.mil.ca/sites/DI/Organizations/sjs/supp-food-chap-02-food-svcs-standards.pdf A. Chapter 6 Section 613 – Religious and Spiritual Accommodation http://collaboration-admpa.forces.mil.ca/sites/DI/Organizations/sjs/lp-chap-06-nutrition-special-diets.pdf
		Chapter 6 Section 613 – Religious and Spiritual Accommodation http://collaboration-admpa.forces.mil.ca/sites/DI/Organizations/sjs/lp-chap-06-nutrition-special-diets.pdf
		Eating Well with Canada Food Guide – found at http://www.hc-sc.gc.ca/fn- an/food-guide-aliment/index-eng.php

		Food Safety Code of Practice for Canada's Food Services Industry – found at http://www.crfa.ca/shop/foodsafetycodeofpractice.asp
Infrastructure		
		Interim Real Property Services Standard
		Asset Management Plan Standard
		Building Condition Assessment Standard
		Canadian Electrical Code
		Canadian Forces Construction Engineering Manual (CFCEM)
		CCME – Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum Products and Allied Petroleum Products (Canadian Council of Ministers for the Environment)
		CCME – Environmental Code of Practice for Elimination of Fluorocarbon Emissions from Refrigeration and Air Conditioning
		Construction Engineering Technical Orders (CETOs)
		Controlled Products Regulations
		DND / CAF Storage Tank System, Mandatory Monthly Visual Inspection Checklist, Record for Leak Detection DND / CAF Monthly Checklist v 3.0, RP Ops North, Canadian Forces Real Property Operations Group, 21 October 2016
		GB 202 PM checklist
		National Building Code of Canada
		National Master Specification (NMS)
		National Plumbing Code of Canada
		Preventative Maintenance Program
		Nunavut Guidelines
		Realty Assets Management Manual (RAMM)
		Specific Standards Association (CSA) standards cited
		Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations (SOR/2008-197 June 12, 2008)
		Surface Coating Materials Regulations
		Electrical Safety: CSA Z462: Workplace Electrical Safety and 'Nunavut Electrical Safety Code
	ASME A17.1 / CSA B44-16	Elevator and Lifting Systems inspection, testing, repair and
	CSA Z91	Life Safety Systems
	CSA Z259	Life Safety Systems
	CSA Z271	Life Safety Systems
		Canadian Institute of Plumbing and Heating (CIPH)
		Environmental Control Water and Sewage Regulations NLR 65/03,
	NLR 803/96	Sanitation Regulations
		Preventive Maintenance Program and Checklists
	CETO C-98-15F-002/MG-001	Grease and Oil Interceptors
		American Water Works Association (AWWA) Standards
		Preventive Maintenance Historical Data
	CETO C-98-15W-002/MG-010	Operations and Maintenance - Water Supply and Distribution Systems
	CETO C-98-15W-003/MS-010	Comprehensive Maintenance Manual - Chlorination of Canadian Drinking Water Quality Guidelines
		Canadian Water Quality Guidelines - CCME
		American Water Works Association (AWWA), A100-90 to F102-91 - Provides direction on the full range of fluid handling for Water and Wastewater systems

		Guidelines for Canadian Drinking Water Quality, Health Canada, February 2017
		Guidance for Issuing and Rescinding Boil Water Advisories in Canadian Drinking Water Supplies, Health Canada, January 2015
Accommodations and Cleaning	DND Publication	Accommodation and Buildings - Cleaning
	C-98-009- 002/MF-002	Janitorial Maintenance Manual
	Green Seal GS-37	General purpose
	Green Seal GS-40	Floor care
	Green Seal GS-41	Hand cleaner
	Environmental Choice CCD-XX	As applicable to purpose
	Masonry: National Association of Brick	Building for the Future, A Guide to Masonry Construction
	Concrete	ASTM D4258, Standard Practice for Surface Cleaning Concrete for Coating and for precast concrete surfaces
	Glass	Glass Association of North America's Glass Informational Bulletin (GANA 01-0300)
	Anodized aluminium	The Anodized Aluminium Council
	Vinyl	The Master Painters Institute's Architectural Painting Specification Manual, 'Cleaning of Vinyl Wall Coverings' and manufacturer's instruction
	Tile / Terrazzo	Terrazzo, Tile and Marble Association of Canada's (TTMAC) 2000 Maintenance Guide
	Flooring and washable walls	refer to ASTM D4488: Standard Guide for Testing Cleaning Performance of Products Intended for Use on Resilient Flooring and Washable Walls
	Wood surfaces	Architectural Woodwork Manufacturers Association of Canada (AWMAC) and manufacturer's instructions
	Carpet	Canadian Carpet Institute and the Carpet and Rug Institute's 'Carpet Maintenance Guidelines for Commercial Applications'
	Other surfaces	manufacturer's instructions
Transportation, Maintenance,	A-LM-158- 005/AG-001	Transportation and Management 404 Driver Permit iaw: Chp 2, Sect 8, para2(c)
	C-02-040- 010/MB-001	Rules and Regulations for Drivers of DND Vehicles Driver's Regulations
	C-02-040- 010/MB-003	Driver's Manual for Dangerous Goods
	C-02-040- 010/MB-004	Unit Driver Trainer – Examiner Standard Training Package
	C-04-020- 002/AG-000	Technical Management Policy and Procedures – Land Maintenance System (LMS) Inspection System
	C-04-020- 006/AG-001	PM Procedures Mobile Support Equipment
	C-31-012- 001/MS-000	Handbook Airbrakes from the Driver's Seat
	DND Publication	Drivers Training Standards and Qualifications
	DND Publication	Monthly FMS procedures to extract information and send to 8 Wing Trenton
	DND Publication	Premier De-icer Model MT35P75
	DND Publication	Sample VOR Report dated 16 June 06
	DND Publication	Station Standing Orders Chapter 8 – Authorized use of MSE
	DND Publication	CFS Alert Snow and Ice Control (SNIC) Plan
	DND Publication	NIS involvement in Vehicle Accident Investigations

	DND Publication	Wheel Safety for Trucks and Buses
	Transport (TC) Pub. TP14052	Guidelines for Aircraft Ground-icing Operations found at
	DND Publication	Technical Airworthiness Authority Advisory 2010-01a
	DND Publication	Appendix A-4 Aircraft Type-Specific Procedures – CC130J Hercules
	DND Publication	TC TP312 and MIL312 Aerodrome Standards and Recommended
	C-98-001- 003/MS-022	DND Aerodrome Standards and Recommended Practices – Obstruction Limitation Criteria
Auxilary / Portable	CSA 282-15	Table 6 - inspections
Infrastructure	C-98-15F- 002/MG-001	Grease and Oil Interceptors, Operations and Maintenance
	C-98-15W- 002/MG-007	Operations and Maintenance Wastewater Treatment plants
		Alert 2012 final report, How the Terraces work v 1.3, 2012 Assessment
	C98-15W-002- MG-010	Water Supply and Distribution Systems
	C98-15W-003- MS-010	Chlorination of Domestic Water Swimming,
	CETO C98- 15W-002-MG-005	Operating and Maintenance - Water Distribution Systems
	DND Publication	Canadian Engineering technical Orders
	Manufacturer's Publication	Caterpillar, Maintenance Management Schedules for Industrial and Generator Set Engines, Part # SEBU6103-05 date Jan 1998
	Manufacturer's Publication	Manufacturer's Manuals for specific equipment /systems
	C-98-16G- 001/NY-002	PM Uninterrupted Power Supply (UPS)
	C-98-16G- MIS/NY-010	Generator Set Miscellaneous Auxiliary Power Units Maintenance
	IEEE Std-450	Recommended Practice for Maintenance , Testing and Replacement of Vented Lead-Acid Batteries For Stationary Applications – found at
	IEEE Std-1188	Recommended Practice for Maintenance , Testing and Replacement of
	C-98- 16G/001/DD-004	PM Programme of Gen Sets and their Auxiliaries – Central Heating
	C-98- 16G/MIS/VB-001	Paints of Walls, Floors and Machinery in Generating Plants
	C-98- 01GMIS/TS-001	Electrical Facilities Safe Practices
	C-98- 16G/001/NY-001	PM programme of Generator Sets and Their Auxiliaries
	DND Publication	Realty Asset Management Manual (RAMM)
	R-006-93	Nunanvut Boiler and Pressure Vessels Act – Consolidation of Boiler and Pressure Vessels Regulations
Bulk Fuel	A-LM-188- 001/JS-001	Supply Manual for POL/Fuel Handling
	DAOD-4003-0	Environmental Protection and Stewardship
	CETO C-98- 15F-MIS/TP-012	Bulk Fuel - Installation and Maintenance Practices
	CETO C-98- 15P-003/MS-015	Handbook - Bulk Petroleum Pipelines, Valves & Fittings
	CETO C-98- 15F-001/DD-001	Design Criteria Fuel Facilities
	ED 4003- 1/2003	Spill Reporting
	ED 4003- 02	Management of Storage Systems for Petroleum Products and Allied Petroleum Products
	DND Publication	CFS Alert Environmental Management System: POL Facilities
	DND Publication	Aircraft Refuelling SOP
	CFTO C-82- 010-007/TP-000	Procedures and Responsibilities for Aviation Fluids Handling

Quarry Operations	ASTM C131-06	Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
	ASTM D75M-14	Standard Practice for Sampling Aggregates.
	ASTM D4318-10	Standard Test Methods for Liquid Limit, Plastic Limit and Plasticity
	ASTM D4791-10	Standard Test Method for Flat Particles, Elongated Particles, or Flat
	ASTM D5821 - 13(2017)	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
	ASTM D6928-17	Standard Test Method for Resistance of Coarse Aggregate to
	ASTM D7428-15	Standard Test Method for Resistance of Fine Aggregate to Degradation by Abrasion in the Micro-Deval Apparatus.
	CAN/CGSB-8.2-88	Sieves, Testing, Woven Wire, Metric Series.

Territorial Environmental Protection References Table 17.3.2

Air Pollution Control Regulations 2004
Dangerous Goods Transportation Act (DGTA), 2013 - Dangerous Goods Tickets Offences Regulations - Dangerous Goods Regulations
Endangered Species Act - Endangered Species List Regulations
Environmental Assessment Act - Environmental Assessment Regulations
Environmental Control - Water and Sewage Regulations 2003
Environmental Protection Act - Halocarbon Regulations - Heating Oil Storage Tank System Regulations - Pesticides Control Regulations - Used Oil Control Regulations - Waste Management Regulations
Executive Council Act
Fire Protection Services Act, 2016
Forestry Act - Cutting of Timber Regulations - Forest Fire Regulations - Plant Protection Act
Health and Community Services Act
Animal Health and Protection Act
Occupational Health and Safety Act, 2009 and Regulations and Amendments - Nunavut Safety Acts
Territorial Guidelines
Public Health Act - Sanitation Regulations, 2010
Storage and Handling of Gasoline and Associated Products Regulations, 2003
Storage of PCB Wastes Regulations, 2003
Waste Management Act

Water Resources Act - Environmental Control Water and Sewage
Wildlife Act - Wildlife Regulations - Animal Protection Act

Government of Canada Acts, Regulations and Guidelines Table 17.3.3

Aeronautics Act - Canadian Aviation Regulations 302.301 to 302.308
Canada Labour Code; Canada Occupational Health and Safety Regulations
Canada Wildlife Act & Regulations
Canadian Environmental Assessment Act
Canadian Environmental Protection Act, and: - Environmental Emergency Regulations - Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations - Federal Halocarbon Regulations - Interterritorial Movement of Hazardous Waste Regulations - National Pollutant Release Inventory - Ozone-depleting Substance Regulations - PCB Regulations - PCB Waste Export Regulations - Perfluorooctane Sulfonate and its Salts and Certain Other Compounds Regulations - Release and Environmental Emergency Notification Regulations - Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations
Canadian Standards Association Standard Z773 Environmental Compliance Auditing
Environmental Enforcement Act
Explosives Act; Explosives Regulations
Guidelines for Canadian Drinking Water Quality
Federal Sustainable Development Strategy for Canada
Firearms Act
Fisheries Act
Hazardous Products Act, and: - Controlled Products Regulations - Surface Coating Materials Regulations - Hazardous Products Regulations
Migratory Birds Convention Act, and Migratory Birds Regulations
Transportation of Dangerous Goods Act (TDGA), and Transportation of Dangerous Goods Regulations
Emergency Response Guidebook (2016)

DND Governing Operating Procedures Table 17.3.4

Number	**Publication Name**
DAOD 4003-0	Environmental Protection and Stewardship
DAOD 4003-1	Hazardous Material Management
	Environmental Assessment – Directive Regarding Environmental Impact Assessment
	DND/CAF Storage Tank System, Mandatory Monthly Visual Inspection Checklist, Record for Leak Detection DND/CAF Checklist v 3.0, RP OPS North, Canadian Forces Real Property Operations Group, 21 October 2016
ED 4003-1	Spill Reporting

ED 4003-2	Management of Storage Systems for Petroleum Products and Allied Petroleum Products
ED 4003-3	Responding to Environmental Enforcement Actions
ED 4003-4	To Reduce the Use of Pesticides on DND Properties
ED 4003-5	Halocarbon Management
ED 4003-7	Management and Monitoring of Liquid Effluents
ED 4003-9	Hazardous Materials Management Plans
	Environmental Impact Assessment Directive, June 2016 (DND-DGIEGPS)
	One Canadian Air Division Order 12-200, Volume 12, Environmental Protection and Resource Conservation, June 2014
	One Canadian Air Division Order 12-201, Volume 12, Hazardous Materials Management, June 2014
	One Canadian Air Division Order 12-201, Volume 12, International Waste, June 2014
	One Canadian Air Division 1-114 General Environmental Awareness Training, General Hazardous Materials Awareness Training
	One Canadian Air Division 1262-2 (A4 Hazmat) – Uniform Spill Reporting Protocol
	One Canadian Air Division – Effluent Monitoring Manual
	One Canadian Air Division – Operations Manual for Aerodrome Bird and Wildlife Control
	One Canadian Air Division Order s, Vol 1, 1-602 Wildlife Control Programme
CFAO 29-7	Energy Management and Conservation
CFAO 34-46	Pest Control
CFAO 36-4	Disinfection of vehicles, military equipment and personal goods entering mainland Canada
CFAO 55-28	Disinfection, Medical and Quarantine International Requirements for Aircraft
	8 Wing – Hazardous Materials Management Plan
	8 Wing – Hazardous Materials Spill Plan
	8 Wing – Emergency Response Plan
	8 Wing – Environmental Policy
A-GG-040-004/AG-001	General Safety Program – Hazardous Materials Safety and Management Manual
A-MD-005-000/AA-001	Canadian Forces Dental Services Infection Control Guideline
C-07-010-011/TP-000	Canadian Forces Air Weapons Ranges
C-98-007-002/TP-001	Asbestos Cement Products
	CETOs and CFTOs (POL Storage and Handling)
	CETOs and CFTOs (Wastewater)
	CETOs and CFTOs (Water Treatment and Storage)
A-LM-007-014/AG-001	CF Supply Manual for POL/Fuel Handling, Vol 3 Chap 18
CFAO 29-7	Energy Management and Conservation
DAOD 2008-3	Issue and Crisis Management
DAOD 7014-0	Memoranda of Understanding (MoU)
	8 Wing Flying Orders

DND Governing Fire Detection and Suppression Systems Inspection, Testing and Maintenance Procedures Table 17.3.5

CEPA 1999 - Canadian Environmental Protection Act 1999
Ozone depleting Substances Regulations, 1998

Federal Halocarbon Regulations, 2003
Department of National Defence/Canadian Forces Asbestos Management Directive dated March 2007
Department of National Defence / Environmental Directive 4003 – 05
Department of National Defence Realty Asset Manual (RAMM) Ch. 10 - Fire Protection and Emergency Services and all referenced standards
Treasury Board Policies and Standards - As they pertain to the installation and Maintenance of Fire Alarm and Fire Protection Systems. (http://www.tbs-sct.gc.ca/tbs-sct/index-eng;.asp)
National Fire Code of Canada 2015, errata, revisions and supplements
National Building Code of Canada 2015, errata, revisions and supplements
National Plumbing Code of Canada 2015, errata, revisions and supplements
CFFM Fire Marshal Directive (FMD) 4000 Electromagnetic Door Locks
CFFM Fire Marshal Directive (FMD) 4003 Fire Protection and Life Safety Engineering Design Guide
CFFM Fire Marshal Directive (FMD) 4005 Partial Occupancy
CFFM Fire Marshal Directive (FMD) 4006 Fire Protection System Impairments
CFFM Fire Marshal Directive (FMD) 4007 Fire Alarm Policy
CSA C22.1 – Canadian Electrical Code
CAN/ULC-S524 – Standard for the Installation of Fire Alarm Systems
CAN/ULC-S536 – Inspection and Testing of Fire Alarm Systems
CAN/ULC-S537 – Verification of Fire Alarm Systems
CAN/ULC-S552 – Maintenance and Testing of Smoke Alarms
ULC/ORD-C1058.5-1993, entitled Halon Recovery and Reconditioning Equipment
ULC/ORD C1058.18-1993, entitled The Servicing of Halon Extinguishing Systems
CSA Z460 – Control of hazardous energy - Lockout and other methods
CSA Z462 – Workplace Electrical Safety (Arch Flash Protection)
CSA C282 – Emergency Power Supply for Buildings
NFPA 11 – Standard for Low-, Medium-, and High-Expansion Foam
NFPA 12 – Standard for Carbon Dioxide Extinguishing Systems
NFPA 12A – Standard for Halon 1301 Fire Extinguishing Systems
NFPA 13 – Standard for the Installation of Sprinkler Systems
NFPA 13D - Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
NFPA 13R - Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height
NFPA 14 – Standard for the Installation of Standpipes and Hose Systems
NFPA 15 – Standard for Water Spray Fixed Systems for Fire Protection
NFPA 16 – Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems
NFPA 17 – Standard for Dry Chemical Extinguishing Systems
NFPA 17A – Standard for Wet Chemical Extinguishing Systems
NFPA 20 – Standard for the installation of Stationary Pumps for Fire Protection
NFPA 25 – Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems
NFPA 96 – Ventilation Control and Fire Protection of Commercial Cooking Appliances
NFPA 409 – Standard on Aircraft Hangars
NFPA 2001 – Standard on Clean Agent Fire Extinguishing Systems
Canadian Forces Fire Marshal (CFFM) Directives
Applicable municipal, Territorial, and federal acts, regulations, codes and standards for waste management and disposal
Applicable Base Standing Orders for each specific site/area
CFFM Fire Marshal Directives, covering inspection, testing and Maintenance of fire protection systems and devices
When NFPA 72 is referenced in any standard, replace it with applicable ULC standards, namely: CAN/ULC-S536 Inspection and Testing of Fire Alarm Systems and CAN/ULC-S552 Maintenance and Testing of Smoke Alarms.
Standards referenced within NFPA, ULC, NFC, TBS, CLC and COHS documents are also deemed to form part of this table.

DND Reference Table 17.3.6 – Auxiliary and Portable Generating Units

Location	Model/Make	Serial #	Mode #	Monthly Hours	In-service hours
TX Site	Cummins/Onan	KT-1150G	3110-429	4.0	1706.5
LWPH	Cummins	60DGCB	D9706-36	4.3	684.7
Water Plant FBP	Perkins	1791/2600	U65236C	3.8	325.5
Runway Lighting	Cummins/Onan	125DGEA	D9706658-36790	4.1	983.9
Tacan/Beacon	Caterpillar	3208	29A01985-D950	4.5	155.5
Quarry APU	Cummins/Onan	D920462308	LTA-10G1	255	2167.2

DND Reference Table 17.3.7 – Station UPS

Location	Model/Make	Serial #	Mode #	Monthly Hours	In-service hours
Power Plant	Alpha	1500	0892-0692	744.0	N/A
Water Plant	U.P.S	Dual-Lite	XLAC-240	744.0	N/A
OPS Center	Pillar	2406/6	LR12982	744.0	74640.0

DND Reference Table 17.3.8 – Station Main Power Generators

Total Generator hrs	Manufacturer	Model	Serial #
Unit # 1 / MPP	Caterpillar	3212	67Z00801
Unit # 2 / MPP	Caterpillar	3212c	
Unit # 3 / MPP	Caterpillar	3212	67Z00798
Unit # 4 / MPP	Caterpillar	3212	67Z00799
Unit # 5 / SbPP	Caterpillar	3216	25Z02171
Unit # 6 / SbPP	Caterpillar	3216	25Z02173

17.3.4. Water / Sewage Sample Collection and Handling Protocols

The purpose of this information is to provide clear instructions, outlining the correct method for sampling and storing water samples for microbiological testing. It is important that this information is reviewed carefully before sampling ensuring that final test results are valid within the limits of the analysis.

17.3.3.1. Sample Holding/Travel Time

Water samples from time of sample collection to initiation of analysis will be a maximum of 24 hours. If the time exceeds 24 hours, results for total and faecal coliform analyses are invalid due to bacterial stress and die-off. Minimum sample testing required are table 1 and table 2 of the Canadian Drinking Guidelines.

1. Sample Containers and Preservatives

Parameters for Analysis	Bottle size & type	Preservative	# of Bottles	Sets
Faecal coliform (e-coli)	300 ml sterile plastic	Sodium thiosulphate	1	
Total Coliform	300 ml sterile plastic	Sodium thiosulphate	1	
Sulphide	145 ml HDPE *	ZNAC/NAOH *	1	
PFAS * (synthetic chemicals)	60 ml HDPE *	Sodium thiosulphate	1	
Gen Chem Turbidity/NTA/ TDS/ Colour	500 ml plastic	NONE	2	
HAA (Haloacetic Acid)	40 ml amber vials	Ammonium Chloride	2	
Cyanide	60 ml	NAOH *	1	

Formaldehyde	40 ml P&T	Chloride + Copper Sulphate	2	
Chlorate/Chlorite/Bromate	60 ml HDPE *	EDA *	2	
NDMA (Nitresodiummethylamine)	1 litre amber	NONE	2	
NH3 (Ammonia)	100 ml glass	H2SO4 *	1	
CR6 (Hexavalent chromium)	60 ml HDPE	NAOH + buffer	1	
VOC (Volatile Organic Compound)	40 ml	Sodium thiosulphate	2	1
DW Pesticides (incl PCBs & MCPA*)	1 litre amber	Sodium thiosulphate	3	
Diquat/Parquat/Glyphosate (Herbicide)	60 ml HDPE	Sodium thiosulphate	1	
Alidcarb/Diuron (insecticide, algaecide & Herbicide	60 ml amber	Sodium thiosulphate	1	
Metals	125 ml HDPE	HNO3	1	
Additional Metals	60 ml HDPE	HNO3	1	
Mercury	40 ml vials	HCL *	1	
Fluoride/Nitrate/Nitrate (derivative of Nitric Acid)	250 ml PET *	NONE	1	
THM (Trihalomethanes – refrigerant, solvent)	40 ml vials	Sodium thiosulphate	2	1

Notes: *

PFAS* must not be stored in a cooled area. Ship in cooler WITHOUT cooling preservatives.
HDPE – High Density Polyethylene
ZNAC/NAOH – Zinc Acetate/Sodium Hydroxide
H2SO4 – Sulfuric Acid
EDA - Ethylenediamine
HNO3 – Nitric Acid
CR6 – Hexavalent Chromium
MCPA - methyl-4-chlorophenoxyacetic acid
HCL – Hydrochloric Acid
PET - Polyethylene terephthalate

2. Potable Water Sampling Procedures

    a. Potable water samples taken from tap.
        i. Taps used for sampling must be free of aerators, strainers, hose attachments, mixing type faucets and purification devices.
        ii. Avoid leaky taps.
        iii. Always take sample from a COLD water tap.
            1. Samples from WTP and farthest tap from WTP (multiple site testing).
        iv. Clean and Disinfect tap to be sampled with sodium hypochlorite solution
        v. Flush tap by running water (to waste) for three (3) minutes; this will allow for adequate flushing of the pipe between the water main and tap.
        vi. Once flushing is complete throttle tap back so only a pencil with stream is coming from the tap.
        vii. Sample both free and total chlorine levels and record them on chain of custody form.

3. Aseptic Sampling Procedure

    a. Wash hands before sampling.
    b. Remove lid of sample container with one hand.
    c. While holding lid with one hand, fill bottle with other hand.
        i. To prevent sample contamination
            1. Do not adjust water line or water flow rate while taking the sample.
            2. Do not rinse bottle before sampling.
            3. Be careful not to touch sides or inside lid of bottle against anything.
    d. Do not overfill the sample container.
        i. Make sure there is approximately the shoulder of the bottle unfilled allow air space for adequate shaking before analysis.

e. Once filled, immediately replace lid tightly.

4. If sample contamination is possible discard and resample.

    a. Samples should be placed on ice/ice packs during transit to laboratory to maintain a temperature below 10ºC

17.3.5. Snow and Ice Control (SNIC) Plan Criteria

General	• Bank cleared snow and ice along roadway sides and remove it where it obstructs sidewalks and walkways and drainage ditches • Ensure that snow banks do not impair visibility for pedestrian and vehicular traffic • Remove snow and stock pile in area designated by the TA. Use manual snow shovelling only where motorized equipment cannot be safely operated • Plow snow from all areas when there is an accumulation of 5.0 cm (2”) on the ground • Ensure that there is no accumulation of more than 2cm of snow remaining on travelled surface areas at completion of snow removal • Ensure that there never an accumulation of more than 20cm of snow in height adjacent (within 2m) to perimeter fences • Do not pile, plow or place snow onto or against fences, gates, or other adjacent structures or areas; • Open fence gates and clear snow from underneath them • Ensure that oil filler pipes, loading docks, Siamese connectors, fire hydrants, access to refuse containers, access to storage sheds and other service structures are clear of snow • Remove and transport snow to designated dumping areas on site when snow and ice banks reach a maximum height of 1.5 m or, in the opinion of the TA, they interfere with site operations • In the spring season, rectify damage caused by snow clearing operations to grounds, structures and buildings and restore property to its original condition to the satisfaction of the TA
Roads, parking lots	• Clear roads of snow to bare surface as is reasonably practicable • Ensure that snow is not left in windrows or blocks access to laneways • Clear parking lots within 30 cm of the perimeter of the parking lot • Ensure that snow pilling or accumulation does not reduce the number of parking spaces
Sidewalks, steps and landings	• Clear walkways of snow and ice ensuring that pedestrian traffic surfaces are safe and unobstructed • Clear snow and ice from the main entries (up to the door) • Clear snow and ice from Fire Exit doors, landings and stairways.

The contractor will provide a SNIC plan to the CO Alert each year for approval who will provide the PA and TA with a copy. The plan will be developed in July of each year and will, at a minimum meet these criteria.

Appendix A: Real Property Performance Measurement Regime (RP-PMR)

1 Introduction

1.1 Purpose

The Real Property Performance Management Regime (RP-PMR) is aimed at supporting the PA and TA, supporting organizations and other subject matter experts involved in Oversight and Quality Monitoring (QM), and to evaluate the Contractor's annual real property service delivery performance completed after March 31 of each year. To be considered successful, the Contractor must achieve a score of at least 80% in each of three Real Property Key Performance Indicators (RP-KPIs).

The RP-PMR is a mechanism aimed at:

1. providing insight into how well the Contractor is delivering services;
2. supporting a dialogue with the Contractor aimed at jointly fostering continual improvement; and
3. This Section provides the following information:
    a. Background for the establishment of the RP-PMR;
    b. The overall RP-PMR Framework of RP-KPIs and Performance Indicators (PIs); and
    c. Guidance for implementing RP-KPIs and descriptions of PIs.

In accordance with the SOW, the Contractor is responsible for collecting and producing performance measurement data to support the identified PIs.

The Contractor has total responsibility for measuring and reporting performance and providing the PA and TA access to underlying systems and data. The Contractor's approach constitutes the RP-PMR documented and accepted as part of its Service Delivery Regime Specification (SDRS), which is outlined in the SOW.

The Subsection of the SOW entitled "Have and Follow a Service Delivery Regime" requires the Contractor to:

1. Apply a RP-PMR in accordance with the accepted SDRS. Provide performance measurement data and information in accordance with the PMs;
2. Measure and report on performance;
3. Identify and recommend continual improvement opportunities for the PM level Minimums (Mins) and Benchmarks (BMs) for the following year; and
4. Incorporate changes to the RP-PMR resulting from the addition, and waiving or suspension of PIs.

1.2 Performance Measurement Regime

DND monitors the Regime through its Oversight Framework to ensure effective internal controls are in place.

1.3 Performance Indicators – Their Origin

The PMR is modelled on a balanced scorecard approach that comprises the following Performance Indicators:

1. *Asset Integrity*: success in sustaining the value and condition of assets and complying with applicable policy and legislation;
2. *Satisfaction*: success in meeting PA and TA expectations, promoting Occupier satisfaction, safeguarding the well-being of Occupiers and promoting ease of doing business; and
3. *Financial*: success in delivering affordable services that represent Best Value.

In exercising Optional Services, including those for project delivery, the PA, TA and Contractor will collaborate in developing appropriate performance measures to meet the needs of individual projects, covering, at a minimum, measures to indicate Satisfaction, Timeliness and Budgeting/Estimating/Cost Control effectiveness.

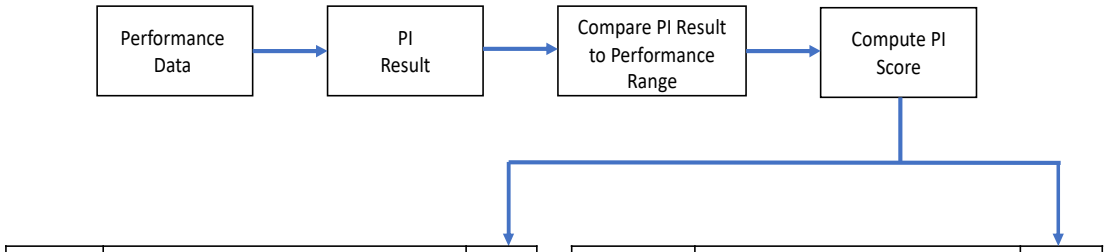
2 Real Property Performance Measurement Framework

2.1 General

The performance measurement framework illustrated in the figure below, demonstrates how performance data is used to compute PI scores and the distribution of maximum scores across the Performance Measures within a PI.

The PA and TA monitors the Contractor's performance throughout the year using information from QM evaluations and Performance Measure and PI information provided by the Contractor. Evaluation of the Contractor's annual performance is completed in accordance with the Performance Measurement Framework for the Contract set out in KPI measures established from PA, TA and contractor.

Additional PIs may be added during the term of the Contract at the discretion of the PA to meet other needs and cater for Optional Services in advance of the Options for these being exercised. Refer to Figure 1 for an overview of the RP-PMR Framework.



RP-KPI	Performance Indicator (PI)	Max. Score
Asset Integrity	AI-1: Environmental Regulatory Compliance Nonconformity Reduction Index	20
	AI-2: OHS Nonconformity Reduction Index	20
	AI-3: General Nonconformity Reduction Index	25
	AI-4: Maintenance Completion Index	25
	AI-5: POP Progress Index	10
	Total	100

RP-KPI	Performance Indicator (PI)	Max. Score
Satisfaction	S-1: Service Call Responsiveness Index	30
	S-2: Incident Management Index	40
	S-3: Relationship Index	30
Financial	F-1: Cost Control Index	30
	F-2: Forecasting Accuracy Index	30
	F-3: Project Management Cost Efficiency Index	40
	Total	100

Figure 1: RP-PMR Framework

2.2 RP Key Performance Indicators, Performance Indicators and Performance Indicator Components

Each RP-KPI comprises a number of Performance Indicators, each of which in turn has at least 1 PI Component (PIC), with some PIs having several PICs as illustrated in the following table.

RP-KPI	Performance Indicator (PI)	PI Description	Max Score	PI Measure Components
Satisfaction	S-1: Service Call Responsiveness Index	Measures success in responding to Occupier-initiated service calls in a timely, professional and effective manner	30	S-1.1: Response effectiveness expressed as the percentage of service calls addressed in accordance with the Performance Levels set out in Real Property Performance Standards
				S-1.2: Survey results based on Service Call Centre sample of at least 20% of total number of calls expressed as the average for the overall ratings of each survey element.

Typically, each RP-KPI is allocated a maximum score of 100, distributed across the PIs and in turn the PICs that make up that RP-KPI. When PIs are not applicable, waived, suspended, added, modified, or deleted for a given Fiscal Year (FY), the following rules apply:

1. when a PIC is waived, the Contractor continues to monitor it for the entire FY and receives the maximum score associated with that PIC.
2. when a PIC is suspended, its maximum score is removed from the total score available for its related RP-KPI. For example, if a PIC worth 20 is suspended, the RP-KPI maximum score is 80 rather than 100. A suspended PI remains listed under its RP-KPI for future consideration and possible use.
3. when a PIC is added, modified or deleted, the TA, following consultation with the Contractor, redistributes the maximum scores associated with the remaining components in the RP-KPI to maintain a maximum RP-KPI score of 100.

The performance range for each PI is defined by a Minimum (Min) and Benchmark (BM). The Min is the minimum tolerable PI Result and the BM is the RP-PMR that results in 100% of the Maximum Score. The PI Result associated with 80% of the Maximum Score is referred to as the Baseline (BL). The performance range is applicable during the entire Fiscal Year (FY), rather than monthly or quarterly, unless specifically annotated as such in the applicable schedule. The Contractor monitors and reports the PI Result at an agreed frequency. The PI Result is used to determine the corresponding PI score as follows:

1. if the PI Result is worse than the Min, the PI score is zero;
2. if the PI Result is equal to the Min, a PI score is computed2 (can be either zero or greater than zero);
3. if the PI Result falls between the Min and BM, a PI score is computed; or
4. if the PI Result is equal to or better than the BM, the maximum PI score is assigned unless otherwise noted.

A two-phase approach to setting individual PIC performance ranges may be considered by mutual agreement between the Contractor, PA and TA as follows:

1. a Transition Range may be established to provide time to determine if a performance range for the affected PIC is realistic; followed by
2. a Stabilization Range, involving a more stringent performance range as a point-of-departure for follow-on FYs.

Points that constitute scores for some PICs at specific periods, e.g. end of P3[3], end of P6[4] and end of P8[5], are independently determined for each performance period.

[2] Computation of the PI score is based on the straight line connecting the Min and BM. The computation can use either the equation for the straight line or equality-of-slope.
[3] P3 = Period 3 (June)
[4] P6 = Period 6 (September)
[5] P8 = Period 8 (November)

A PIC may or may not count in the determination of the overall PI score, based on the need to adopt one of the following approaches:

1. *Collect data for use in calculating the PI Result*: this approach is taken when an assessment of the data is required to determine if it is representative, reliable and repeatable – and is not counted in determining the RP-KPI score;
2. *Measure the PI*: using reliable data, this approach is taken to calculate and track the PI Result to determine if it is fair and achievable – it is not counted in determining the RP-KPI score; and
3. *Count the PI*: using reliable data, this approach is taken to measure, calculate and track the PI Result – and counts in determining the overall RP-KPI score.

The Contractor aggregates the individually-computed PI scores from the PI Results to calculate the score for RP-KPIs.

2. 3 Integration of the RP-PMR with Quality Management Requirements

2.3.1 Treatment of Nonconformities

A Nonconformity (NC) is raised when the Contractor fails to comply with the requirements set out in the SOW, including:

1. the Service Levels set from KPI measures established from PA, TA and contractor;
2. the Performance Levels set out in Attachment B: Real Property Performance Standard; and
3. the Contractor's Service Delivery Regime as accepted by the PA and TA.

There are three sources of NCs: Environmental Regulatory Compliance, Occupational Health and Safety and General.

The onus is on the Contractor to identify NCs using its Quality Management System (QMS), including identifying root causes and taking timely corrective measures in accordance with corrective action plans. NCs identified by the Contractor do not affect the PI Result unless they are outstanding or recurring. See Section entitled "Impact Criteria and Nonconformities" for more information related to NCs identified by the PA and TA.

The Contractor, the PA, the TA or the TA's delegate are the only resources who can raise an NC. However, an NC can be initiated by RP Ops through the regional QM lead and forwarded to the PA. A Recurring NC arises when the corrective action for a specific NC does not resolve it. If an NC recurs within a 12-month period from the time of its closure, it is deemed to be a recurring NC. A second recurrence of the same NC is weighted by a factor of 2 and recurrences beyond the second by a factor of "n" where "n" is 3, 4, 5 etc. If the NC recurs outside the 12-month period it is considered as new.

Outstanding NCs occur when:

1. The root cause of an NC is not identified and corrective actions have not been assigned within five business days after the NC was first identified, unless the PA has agreed to an extension including associated due dates; or
2. Corrective actions are not completed by the accepted target date; or
3. Effectiveness of corrective actions is not verified within the designated timeline identified in the associated corrective action plan; or
4. The NC has not been closed-out within the designated timeline subsequent to successful verification.

2.3.2 Impact Criteria and NCs

When the PA or TA identifies an NC (Environmental, OHS or General) and if one or more Impact Criteria apply to that NC, it will impact the applicable PI Result[6]. The impact criteria are identified for a specific FY. For example, DND identified impact criteria may include:

1. **Gross Negligence**: a conscious and voluntary disregard of the need to use reasonable care, which is likely to cause foreseeable grave injury or harm to persons, property, or both, have an impact on the reputation of the department, contravene regulatory compliance or represents a significant material loss and or accounting

[6] A PA and TA -identified NC will count as one occurrence if DND assesses that one or more of the Impact Criteria for a specific FY apply.

irregularity. To be invoked, DND must clearly demonstrate how gross negligence occurred.

2. **Chronic, systemic and pervasive issues involving services across multiple assets**: this refers to chronic, systemic and pervasive issues identified by DND, with supporting evidence.
3. **Root Cause Analysis and Action Plan are not acceptable**: this refers to the Contractor developed Root Cause Analysis (RCA) and Action Plan required for each NC submitted by DND, and to the need for DND to clarify its expectations in terms of prescribed timeframes and quality of these deliverables. The impact determination must be based on the established acceptability criteria.
4. **"Significant" contract deliverables or terms not met**: this refers to key deliverables or terms not being met by the Contractor that would have a profound effect on the quality of service delivery and that would become precedent setting. Until concrete examples are identified and documented to further define what constitutes "significant contract deliverables", members of the Contract Management function must agree when submitted findings meeting this criterion.

2.4 Performance Measures – Awareness Guidance

The various PICs are not independent of one another, i.e. changing the calculation method or range for one PIC could have unintended consequences. It is paramount that participants in PIC range and text revision discussions be sensitive to potential ripple effects throughout the RP-PMR.

2.4.1 Contract/PA/TA Range-Setting Sessions

Range setting is an inexact process that requires good faith and trust from all parties. The following will be considered in these discussions:

1. Conducting a review of the applicable PI Result by month for an entire FY, e.g. if the trend is indicating the PI Result is always between the BL and BM, there is likely a case to move one or both upward – incremental continuous improvement;
2. Whether Transition and Stabilization periods may be useful, e.g. to address extenuating circumstances such as the introduction of a new process by either the Contractor or Canada; and
3. Industry benchmarks that might apply.

2.4.2 Elaborating Performance Measurement Requirements – PIC Characteristics

Each PIC is associated with a RP-KPI and has the following general descriptive information:

1. Numeric identifier, e.g. AI-1, and text identifier e.g. "Environmental Regulatory Compliance Nonconformity Reduction Index";
2. Description, e.g. "measures compliance with applicable regulations";
3. Maximum score;
4. PIC score;
5. Units – either a number or percentage;
6. Reporting frequency – monthly, quarterly, P3, P6, P8, P10 or annually; and
7. Performance range for a specific year consisting of a Min, BL and BM.

For each PIC, a PI Result is calculated by the Contractor based on data collected by them and stored in their system. There are three generic types of PI Results:

1. A number, e.g. number of NCs;
2. Ratio expressed as a percentage, i.e. A / B × 100, e.g. Project Completion Checklist; or
3. Variance expressed as a percentage, i.e. [(A – B) / B] × 100, e.g. Forecast accuracy = (Actual – Forecast) /Forecast

2.4.3 Program of Projects (POP)

For Performance Measurement Regime purposes, there are three types of POP defined as follows:

1. Initial POP: determined by the PA, TA and Contractor before March 31st of the preceding FY, including associated funding;

2. Acknowledged POP: determined by the PA, TA and Contractor by April 30th; and
3. Adjusted POP: incorporating adjustments to the Acknowledged POP, as mutually agreed by the PA, TA and Contractor, to account for:
    a. Project cancellation (whether client-driven or to accommodate emergency projects);
    b. Project substitutions;
    c. Incremental funding;
    d. Emergency projects; or
    e. Project category changes (Category II to III and vice versa).

2.5 Key Dates

Key dates to be aware of are indicated in the following table. This schedule is to be coordinated and integrated with the Process for determining the Performance Incentive Fee as applicable.

PIR Timing of Key Activities		
Activity	OPIs	Timing
Initial discussions on PIs, measures, ranges and the identification of Category III special projects	PA, TA & the Contractor	February 1
Development and sharing of proposals for as many PICs as possible	PA, TA & the Contractor	March 1
Definition of the POP for RP-PMR purposes	PA and TA	Initial POP March 31st
		Acknowledged POP April 30th
		Adjusted POP that caters for add/deletes throughout the FY in accordance with accepted rules
Conduct of discovery sessions	PA, TA & the Contractor	April/May
Preliminary acceptance	PA and TA	June 15th
Final acceptance of PIs that will count, including their ranges. If no agreement than ranges default to those of the previous FY.	PA and TA	July 15th

2.6 RP-KPI/PI Reporting

The RP-PMR Monthly Report Dashboards and Event printouts are the primary for tracking individual PI Results.

2.7 PIC, PI Result and Score Calculations

2.7.1 General

The Contractor is responsible for providing various types of performance information, including individual PIC performance ranges for a specific FY with graphs indicating MIN, BL and BM, how the PI Result is calculated and determination of the actual score, and the source of data required for the calculation.

2.7.2 Calculation Methods to Determine a PI Score

The PI Score for each PI has been normalized on a scale of zero to 100%. For example, a PI with a maximum score of 25 and a calculated % of score equal to 80% would receive 80% of 25. To calculate the PI score, proceed as follows:

1. Determine the PI Result using applicable data
2. Calculate the % of PI Score from the straight line that connects Min, BL and BM using one of the following methods:
    a. Equation of a straight line (this is the method likely to be used by the Contractor):
        i. Calculated % of PI Score = [(m × PI Result) + b] where “m” is the slope of the line and “b” value where the straight line intersects the y-axis
    b. Equality of slope (eliminates determining the value for “b”): determine the slope of the straight line at two different points, equate the two slopes and solve for % of PI Score
        i. Slope 1 = (100-Calculated % of PI Score) ÷ (BM-PI Result)
        ii. Slope 2 = 20 ÷ (BM-BL)

iii. Calculated % of PI Score = 100 - (BM-PI Result)(Slope 2)

3. PM score = Calculated % of PM Score from a) or b) above x Max Score for the PM

See the diagram below for application of both methods.

AI-1: Environmental Regulatory Compliance Nonconformity Reduction Index

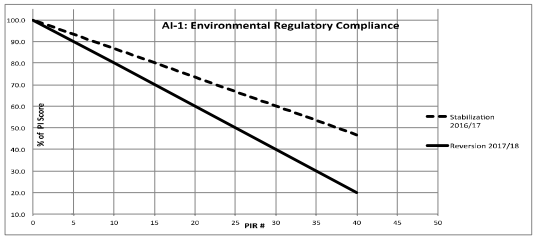
Measurement:
PIR = Σ the number of [TA identified NCs + recurrences of the same NC + outstanding NCs]

Example: using a PIR of 6 in 2016-17
- Equation of straight line: % of PI Score = m (slope) × PIR + b:
  - % of PI Score = (-1.33)(6) + 100 = 92%
  - PI Score out of 15 = 0.92 × 15 = 13.8
- Equality of Slope:
  - Slope 1 = 20 ÷ (BM-BL) = 20 ÷ (0-15) = -1.33
  - Calculated % of PI Score = 100 - (BM-PIR)(Slope 1)= 92%
  - PI Score out of 15 = 0.92 × 15 = 13.8

	m (slope)	b
Stabilization Line	-1.33	100

Stabilization 2016-17 (dash Line)

	PIR (#)	% of PI Score	Score out of 15
Min	40	**46.7**	7
BL	15	80	12
BM	0	100	15



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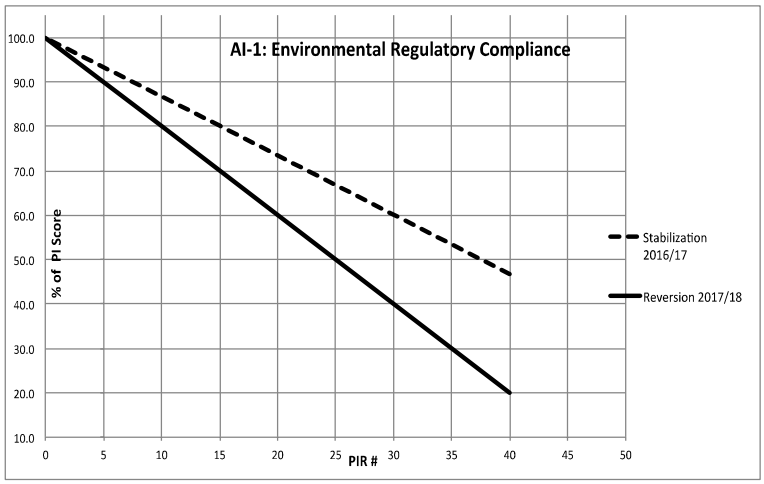
	m (slope)	b
Stabilization Line	-1.33	100
Reversion Line	-2.0	100



Stabilization 2016-17 (dash Line)

	PIR (#)	% of PI Score	Score out of 15
Min	40	**46.7**	7
BL	15	80	12
BM	0	100	15

Reversion 2017-18 (Solid Line)

	PIR (#)	% of PI Score	Score out of 15
Min	40	**20**	3
BL	10	80	12
BM	0	100	15

Table1: Performance Measure and Component Descriptions

KPI	Performance Indicator	Performance Indicator Description and Business Objective	Performance Indicator Components	Performance Range	
				Min	BM
Asset Integrity	AI-1: Environmental Regulatory Compliance Nonconformity Reduction Index	Measures compliance with applicable regulations. The objective is to encourage the Contractor behaviours that will result in full compliance with associated regulations.	AI-1.1: Number of PA/TA-identified environmental NCs.	5	0
			AI-1.2: Number of environmental NC recurrences identified by either the Contractor, PA or TA.	1	0
			AI-1.3: Number of environmental outstanding NCs identified by either the Contractor, PA or TA	1	0
	AI-2: OHS Program Nonconformity Reduction Index	Measures success in OHS compliance. The objective is to encourage the Contractor behaviours that will result in full compliance with associated regulations.	AI-2.1: Number of PA or TA identified OHS nonconformities.	5	0
			AI-2.2: Number of OHS NC recurrences identified by either the Contractor, PA or TA.	1	0
			AI-2.3: Number of outstanding OHS NC identified by either the Contractor, PA or TA	1	0
	AI-3: General Nonconformity Reduction Index	Measures success in reducing quality nonconformities. The objective is to encourage the Contractor behaviours to comply with accepted service delivery processes.	AI-3.1: Number of General nonconformities identified by the PA or TA.	10	0
			AI-3.2: Number of General NC recurrences identified by either the PA, TA or Contractor.	2	0
			AI-3.3: Number of outstanding General NCs identified by either the Contractor, PA or TA.	2	0
	AI-4: Maintenance Completion Index	Measures success in completing legislated and life-cycle maintenance. The objective is to encourage the Contractor behaviours that will result in full compliance with associated legislation and to successfully complete lifecycle maintenance.	AI-4.1: Number of legislated maintenance activities that were not completed by the legislated timeframe.	8	0
			AI-4.2: Number of scheduled life-cycle maintenance activities that were not completed within 45 days of their targeted start date.	25	7
	AI-5: POP Progress Index	Measures success in delivering a baseline POP. The objective is to encourage the Contractor to ensure that project requirements are fully met, and to provide assurances that POP implementation is proceeding as planned.	AI-5.1: Ratio of number of projects with fulfilled requirements as indicated in Project Quality Checklists, to the total completed projects in the accepted POP.	80	100
			AI-5.2: Ratio of the actual amount invoiced to the end of P3, P6 and P8 to the total funding in the applicable POP. To achieve the score allocated to P3, P6 and P8 the Contractor must spend, by the end of each of these periods, at least the percentage targets established for that year.	At least 50%	
				At least 70%	
				At least 85%	
Satisfaction	S-1: Service Call Responsiveness Index	Measures success in responding to Occupier-initiated service calls in a timely, professional and effective manner. The objective is to encourage the Contractor	Response effectiveness expressed as the percentage of service calls addressed within the allowable Maximum Response Time (MRT).	80%	95%

KPI	Performance Indicator	Performance Indicator Description and Business Objective	Performance Indicator Components	Performance Range	
				Min	BM
		behaviour that meet Service Call requirements and foster Occupier satisfaction.			
	S-2: Incident Management Index	Measures the failure to prevent or respond to incidents (critical and non-critical) based on documenting and reporting incidents once they have occurred, including the Contractor's responsibility in preventing or foreseeing the event. The objective is to encourage the Contractor to foresee, prevent and respond effectively to incidents.	The Incident Management Index is the sum of the Critical Incident and Non-Critical Incident scores.	20	14
	S-3: Relationship Index	Measures effectiveness of the relationships between the TA and the Contractor and among the Contractor and others based on a 360° assessment using a standardized methodology and an acceptable sample size. The objective of this PM is to encourage the Contractor to develop and maintain effective relationships with stakeholders.	Results from a survey of a statistically valid random sample conducted by a neutral party	85	95
Financial	F-1: Cost Control Index	Measures success in controlling costs to levels in final approved Task Authorizations for Additional Work and Optional Services. The objective is to encourage the Contractor behaviours that will minimize project change orders.	F- 1.1: POP cost control for Category II projects expressed as a ratio of 'A' to 'B' where: • 'A' equals the number of projects whose variance between total actual cost of the project and final Task Authorization is equal to or less than 10%; and 'B' equals the total number of completed Category II projects	80	95
			F- 1.2: Stabilization of O&M costs: variance between current Fiscal Year accepted Annual Building Plan (as of the same date each year) and the previous year ABP (at the same date) compared to a performance range that considers the Annual Inflation Adjustment (AIA).	CPI plus 2%	CPI plus 0.5%
	F-2: Forecast Accuracy Index	Measures: • accuracy of forecast expenditures from different periods to year-end: and • number of unplanned carry-over projects. The objective is to encourage the Contractor to forecast accurately for both projects and O&M and Utilities spending, to plan projects effectively and to minimize unplanned carry-over projects.	F-2.1: POP forecast accuracy, variance between POP year-end actuals and forecast expenditures including carry-over projects, at P3, P6 and P8 to year-end where Variance = (Actuals minus Forecast)/Forecast.	+1.5 & -4%	+/- 1%
			F-2.2: O&M and Utilities forecast accuracy: variance between O&M and Utilities year-end actuals and forecast expenditures at P3, P6 and P8 (excluding utilities) to year-end where	+1.5 & -4%	+/- 1%

KPI	Performance Indicator	Performance Indicator Description and Business Objective	Performance Indicator Components	Performance Range	
				Min	BM
			Variance = (Actuals minus Forecast)/Forecast.		
			F-2.3: Unplanned carry-over projects: Ratio of total number of unplanned carry-over projects, to the total number of projects (excluding carry-over projects) in the accepted POP.	+15%	5%
	F-3: POP Project Management Cost Efficiency Index	Measures success in efficiently managing project management costs. The objective is to encourage the Contractor to effectively control project management labour costs.	POP project management cost efficiency as determined by an acceptable method of calculation.	35%	15%

Table 2: Performance Indicator and Component Data Sources

Performance Indicator	Performance Indicator Component	Data and Source
AI-1: Environmental Regulatory Compliance Nonconformity Reduction Index	AI-1.1	▪ Number of NCs ▪ Quality Management Tool
	AI-1.2	
	AI-1.3	
AI-2: OHS Program Nonconformity Reduction Index	AI-2.1	▪ Number of NCs ▪ Quality Management Tool
	AI-2.2	
	AI-2.3	
AI-3: General Nonconformity Reduction Index	AI-3.1	▪ Number of NCs ▪ Quality Management Tool
	AI-3.2	
	AI-3.3	
AI-4: Maintenance Completion Index	AI-4.1	Available Data Source Manager – PM Work Order Export Report
	AI-4.2	
AI-5: POP Progress Index	AI-5.1	Available Data Source
	AI-5.2 (P3, P6 & P8)	Available Data Source – Alert POP Progress Index
S-1: Service Call Responsiveness Index		Available Data Source
S-2: Incident Management Index		Quality Management Tool (Incident Tracker), Closed Incidents and TA Evaluation
S-3: Relationship Index		Annual Survey
F-1: Cost Control Index	F-1.1	Available Data Source – Alert POP Cost Control Report
	F-1.2	Available Data Source
F-2: Forecast Accuracy Index	F-2.1	Available Data Source – Alert Cost Efficiency Report
	F-2.2	Available Data Source – Alert Cost Efficiency Report
	F-2.3	Available Data Source – Alert Cost Efficiency Report
F-3: POP Project Management Cost Efficiency Index		Available Data Source

Table 2: Performance Measure and Component Data Sources

Performance Measure	Performance Measure Component	Data Source.
AI-1: Environmental Regulatory Compliance Nonconformity Reduction Index	AI-1.1	▪ Number of NCs ▪ Quality Management Tool
	AI-1.2	
	AI-1.3	
AI-2: OHS Program Nonconformity Reduction Index	AI-2.1	▪ Number of NCs ▪ Quality Management Tool
	AI-2.2	
	AI-2.3	
AI-3: General Nonconformity Reduction Index	AI-3.1	▪ Number of NCs ▪ Quality Management Tool
	AI-3.2	
	AI-3.3	
AI-4: Maintenance Completion Index	AI-4.1	Available Data Source Manager – PM Work Order Export Report
	AI-4.2	
AI-5: POP Progress Index	AI 5.1	Per Project

Appendix B: Real Property Performance Standard

Service Area	Performance Level
Building Envelope Corrective Maintenance (CM)	Critical Areas – 1-hour response and 4 hours rectification General Areas – 4 hours response and 3 days rectification
Door Systems CM	Critical Areas – 4 hours Non-Critical Areas – 24 hours
Electrical Systems CM: Light Fixtures and Lamp replacements Other Electrical Systems	 Critical Areas – 4 hours Non-Critical Areas – 48 hours Critical Areas– 2 hours Non-Critical Areas – 24 hours
Fire Detection and Suppression Systems CM	Critical Buildings/Areas – 1hour Non-Critical – Occupied Buildings – 4 hours Non-Critical – (Unoccupied Buildings – 48 hours Portable fire extinguisher CM calls – 72 hrs
Generator Call Out/Demand Requests	All Buildings / Areas – 4 hrs
HVACR Systems CM 1. Heating Systems 2. Cooling & Refrigeration Systems	1. Critical Areas – 1 hour Non-Critical Areas – 4 hrs 2. Critical Areas – 1 hour Non-Critical Areas – 4 hrs
HVACR Systems CM (excluding Heating and Cooling Systems) faults and failures holding or corrective action	Critical Areas– 4 hours Non-Critical Areas – 48 hrs
Life Safety Systems CM	Non-urgent repairs – 24 hrs Urgent repairs – 4 hrs
Plumbing Systems CM (blocked drains, fracture or loose pipes / joints or loss of water supply) CM	Critical Areas – 4 hours General Areas – 4hours - 1 day
Security & Access Control Systems site response for faulty or inoperable systems and CM	Critical Areas – 4 hours Non-Critical Areas – 24 hrs
Kitchen Systems CM	Emergency Call Out - During Normal Business Hours Response –15 minutes Holding or temporary repair –1 hour Rectification –3 hours (or as agreed in writing with PA and TA) Emergency Call Out - Outside Normal Business Hours Response – 90 minutes Holding or temporary repair – 3 hours Rectification –24 hours (or as agreed in writing with PA and TA) Normal Call Out - During Normal Business Hours Response –2 hours Holding or temporary repair –4 hours Rectification –24 hours (or as agreed in writing with PA and TA) Normal Call Out - Outside Normal Business Hours Response – 4 hours Holding or temporary repair –6 hours

Service Area	Performance Level
	Rectification –24 hours (or as agreed in writing with PA and TA)
Hazardous Waste Spills Demand Calls	Emergency Demand Call - During Normal Business Hours Response – 30 minutes Holding or temporary repair –1 hour Rectification –3 hours (or as agreed in writing with PA and TA) Emergency Demand Call - Outside Normal Business Hours Response – 90 minutes Holding or temporary repair – 3 hours Rectification –24 hours (or as agreed in writing with PA and TA) Normal Demand Call - During Normal Business Hours Response –2 hours Holding or temporary repair –4 hours Rectification –24 hours (or as agreed in writing with PA and TA) Normal Demand Call - Outside Normal Business Hours Response – 4 hours Holding or temporary repair –6 hours Rectification –24 hours (or as agreed in writing with PA and TA)

Appendix C: Real Property Service Levels

General

The following tables set out the estimated level of work for specific cyclical tasks or deliverables associated with this Section of the SOW in terms of their quantity and frequency. The levels indicated are for the purpose of establishing an initial scope of work and to provide a baseline against which the performance of specific tasks can be tracked.

The Appendix includes the following tables:

Table 1: Provide Management Services - Service Levels
Table 2: Provide Facilities Management Services - Service Levels
Table 3: Provide Engineering Services - Service Levels

Refer to the Interim Real Property Services Standard indicated in the References for standards applicable to services.

Table 1: Provide Management Services - Service Levels

Service	Service Level
Propose and Implement Innovation Opportunities for Gain Sharing	As determined

Table 2 Provide Facilities Management Services - Service Levels

Service	Service Level	Service Standard Reference
Operate Building Systems and Equipment		Not Applicable
Operate and Maintain Sanitary Collection Systems		
Monitor effluent and storm characteristics conforming to DND Effluent Monitoring Program	Monthly	
Perform CM for system failures affecting Critical Areas or Non-Critical Areas but with the potential for further damage	3 CMs requiring up to 48 direct labour hours and 1 CM requiring more than 48 direct labour hours per year, but less than 144 hrs	
Perform CM for Non-Critical service calls	8 CMs per year	
Disconnect and properly secure utilities and distribution systems servicing abandoned facilities at the direction of the PA and TA	1 abandoned facility per year	
Log and record data	10 daily logs	
Provide Operations of Potable Water Systems		
Operate water treatment plant	48,000 cubic meters of water per year	
Perform leak surveys on the distribution system	1 survey per year	
Perform flushing and disinfection of water mains	1 flush of mains per year 2 disinfections of mains per year	Not Applicable
Test water quality	Daily	
Collect and analyze water samples for bacteriological analysis	6 samples weekly.	
Collect and analyze water samples for chemical and physical parameters	3 samples quarterly	
Perform CM following system failures	20 repairs requiring up to 48 direct labour hours and 2 repairs requiring more than 48 direct labour hours per year	
Provide a 2-hour response time for a system failure affecting critical areas	2 failures per year	

Service	Service Level	Service Standard Reference
Provide an 8-hour response time for a non-critical system failure. Commence repair work for non-critical areas system failures within 8 hours.	2 failures per year	
Disconnect and secure systems from abandoned facilities	1 abandoned facility per year	
Provide a Plant PM Plan	1 Plant PM plan per year	
Submit report	Monthly	
Provide a water contingency plan	Annually on 01 March	
Provide and maintain a utilities reference library	20 instructions and documents. Average of 1 update per month	
Maintain water plant log	1 daily log	
Provide Common Services		
Electrical and Airfield Distribution Systems		
Operate the electrical distribution system and the airfield electrical system	24 hours per day, 7 days per week	
Perform CM for a system failure affecting Critical Areas	10 activities per year	
Perform CM (repair / renovate / alter) on systems not already addressed in SOW Ref)	100 activities per year	
Disconnect and properly secure utilities and distribution systems servicing abandoned facilities	1 abandoned facility per year	
Maintain historical data on Major Equipment	120 pieces of major equipment	
Corrective Maintenance (CM)		
Perform CM (Repair/ Renovate / Alter) on mechanical systems	350 activities per year	
Change codes on door locks	Semi-annually; 50 door codes.	
Perform miscellaneous work	10 activities per year	
Pressure vessels and associated pipework Unless otherwise instructed by the PA/TA, arrange and facilitate the testing and inspection of pressure vessels and associated pipework that form part of Pneumatic Systems, Heating, Ventilation and Air Conditioning systems, at the legislated intervals, by the appropriate safety authority for the 'Nunavut, including inspection and testing of: • Expansion Tanks • Low Pressure Boiler • Pressure Vessels • Pressure Vessels fitted with Rapid Opening Closure (ROC) • Station HRS System	As required by applicable legislation and in accordance with Service Standard	S1
Building Envelope		S2
Valve off and drain Exterior Faucets/ Bib outlets	Annually in the fall before.	
Inspect Windows/Doors and exterior wall /roof penetrations	Annually by 30 June	
Inspect Roof finishes		
Inspect Siding, cladding, soffits and eaves		
Electrically-operated Overhead Doors and Shutters	Annually	S2.2
Electrically-operated Garage Doors	Annually	S2.3
Electric/Hydraulic Sliding Doors, Gates and Arms	Semi-annually	S2.6
Fire Doors - Sliding and Vertical Rolling	Quarterly	S2.7
Hangar Doors	Quarterly	S2.8
Electrical Systems	Annually and as indicated in the Service Standard	S3
Distribution panels (Secondary)	Annually	S3.1
Transformers (Dry)	Annually	S3.2
Transformers (Oil)	Annually	S3.3

Service	Service Level	Service Standard Reference
Interior and Exterior Lighting Systems	Annually	S3.4
Lighting Protection	Annually	S3.5
Grounding Protection	Annually	S3.6
Automatic Transfer Switches	Every 3 years	S3.7
Motor Control Centers (MCC)	Annually	S3.8
Starters	Annually	S3.9
Elevators and Lifting Systems		S4
Hoists/Winches (Electric or Pneumatic)	Annually	S4.1
Bridge Cranes – (Electric or Manual)	Annually	S4.2
Hydraulic Lifts – (Automotive or Loading Dock)	Annually	S4.3
Elevators – Hydraulic	Annually, Quarterly & Monthly	S4.4
Fire Detection and Suppression Systems	Annually and as indicated in the Service Standard	S5
Generators	Monthly and in conformance with CSA282-15 and the Service Standard; complete the Quinquennial (every 5 years) Inspection as listed in Table 6 of CSA 282-15 during the first year of the Contract	S6
HVACR Systems	Semi-annually ad as indicated in the Service Standard	S7
Air Compressor	Semi-annually	S7.1
Air Dryer	Semi-annually	S7.2
Air Handling Unit	Semi-annually	S7.3
Backflow Preventers	Annually	S7.4
Unit Heaters, Electric	Semi-annually	S7.5
Expansion Tanks	Semi-annually	S7.6
Fans, Propeller, 24" Diameter or Larger	Semi-annually	S7.7
Plate Heat Exchangers	Annually	S7.8
Humidification Systems	Semi-annually	S7.9
Kitchen Exhaust Hoods, Duct Systems	Semi-annually	S7.10
Forced Air Heaters – Oil Fired	Annually, Semi-annually, Quarterly and As Req'd	S7.10
Unit Heaters – Ceiling Hung Oil Fired	Annually and Quarterly	S7.12
Boilers, Internal Inspection and Hydrostatic Test	Annually, Monthly and As Required	S7.13
Boilers, External Inspection	Annually	S7.14
Boilers, Preventative Maintenance	Annually, Semi-annually, Quarterly, Monthly and Daily	S7.15
Variable Frequency Drives	Annually, Semi-annually and Quarterly	S7.16
Life Safety Systems	Every 10 years, 5 years, Annually, and in accordance with CAN/CSA Z271 and as indicated in the Service Standard	S8
Inspect systems and report on compliance with CAN/CSA Z271	Within 4 months of contract start date	S8.1

Service	Service Level	Service Standard Reference
Plumbing Systems	Annually, Semi-annually, Quarterly and as indicated in the Service Standard	S9
Hot Water Heaters	Quarterly	S9.1
Plumbing Pumps	Semi-annually	S9.2
Plumbing Pumps (Submersible)	Semi-annually	S9.3
Back-Flow Preventers	Annually	S9.4
Eye Wash Station/Emergency Showers	Quarterly and Weekly	S9.5
Septic Tanks	Annually and As Required	S9.6
Sewage Ejector Pumps (Sump)	Annually	S9.7
Water Tanks	Annually and As Required	S9.8
Pressurized Water Tanks	Annually	S9.9
Water Softeners	Semi-annually	S9.10
Water Treatment Systems (Heating System)	Monthly	S9.11
UV water Purification Systems	Annually, after 6000 Hours of Use and As Required	S9.12
Kitchen Systems	Annually, Semi-annually, Quarterly and as indicated in the Service Standard	S10
Refrigerated Displays	Annually	S10.1
Coffee Urns	Quarterly	S10.2
Deep Fryers	Quarterly	S10.3
Char Broilers	Quarterly	S10.4
Upright Fridges	Annually	S10.5
Convection Ovens	Monthly	S10.6
Steam Tables	Semi-annually	S10.7
Walk-in Freezers/Refrigerators	Semi-annually	S10.8
Steam Kettles (Tilting)	Quarterly	S10.9
Tilting Skillets/Braising Pans	Quarterly	S10.10
Steamers (Boilerless)	Quarterly	S10.11
Ranges / Food Warmers / Griddles	Quarterly	S10.12
Refrigerated Table / Cold Food Preparation Station	Annually	S10.13
Dishwashers	Quarterly	S10.14
Ice Machines	Quarterly	S10.15
Update Facilities Catalogue	150 updates per year	
Maintain the MRPDP	1 MRPDP per year	
Provide a draft PM schedule in electronic format within 2 months of award, and provide a final schedule within 3 months of award for approval by the TA. Provide an annual update.	One draft and one final document, and annual updates	Not Applicable
Ensure that labeling of systems are maintained following alterations to the equipment or associated components	Every system: refer to Fixed Asset Registry and Building Facilities Catalogue (Appendices G & H)	
Update existing O&M manuals as required to keep facility documentation current with changes occurring during the life of the Contract	Every system and equipment	
Water Sampling and Testing Ensure water analysis and testing Laboratories employed are accredited by the Standards Council of Canada and comply with ISO/IEC 17025. Send test results to the TA within 5 days of samples being taken.	Annually, Semi-annually, Quarterly and as indicated in the Service Standard	S11
Inspect Above-Ground Storage Tanks in accordance with the Daily/weekly Above-Ground Storage Tanks Checklist and issue inspection results to the TA representative monthly; Retain completed checklists for 5 years	Daily/Weekly	S11.1 Refer to Checklist

Service	Service Level	Service Standard Reference
Inspect Above-Ground Storage Tanks in accordance with the Monthly Above-Ground Storage Tanks Checklist and issue inspection results to the TA representative monthly; Retain completed checklists for 5 years	Monthly	S11.2 Refer to Checklist
Raw Water Testing - Septic System Indicator Parameters		S11.5
Raw Water Testing for Metals and General Chemistry		S11.6
Assess each Contractor activity and project using the DND Environmental Effects Determination (EED) process	10 reports per year	Not Applicable
Conduct annual Environmental Compliance Evaluation (ECE) Self Audit. ECE to be conducted IAW Canadian Standards Association Z773 Environmental Compliance Auditing	1 evaluation per year	
Implement the Hazardous Material Management Plan as it applies Real Property services	As required	
Decommission Buildings	1 decommissioning per year	
Support the clean-up and disposal of Hazardous Materials / waste including lead paint, mould, and asbestos	10 activities per year	
Support the Preparation of Hazardous Waste Records and Deliverables		
Support the preparation and of other reports as required by regulations, e.g. as associated with PCB, fuel jettisoning, POL spill, Halocarbon release, glycol release or other	5 per year	
Maintain a reference library	1 reference library	

Table 3: Provide Engineering Services - Service Levels

Service	Service Level
Prepare and execute Work Orders to action requests	500 requests initiated by non-Contractor Personnel per year
Prepare and submit site approvals	1 site approval request per year
Prepare special drawings	50 drawings per year
Provide new or updated AutoCAD drawings for new or existing work as set out in the SOW	5 drawings per month
Make the necessary resources available to participate in handover/witness testing and/or training as replacement or new systems or assets are added to the Contract	2 per year
Schedule and chair weekly meetings, or as approved by the TA, with the TA and appropriate Contractor resources responsible for Engineering issues; produce and distribute minutes within 2 business days following meetings	50 meetings per year
Reproduce drawings	50 sheets reproduced per year
Capture, manage and report information that relates to the management and maintenance of the facilities and infrastructure; provide data and format it as required by the TA, for example; reports by building; reports by system; by day; by month; by year; etc.	4 reports per month
Keep and maintain drawings of piping and electrical system schematic layouts, notices, and data in known and accessible locations; update single line schematic drawings to show the current status of pipes, circuits, and equipment	Every system, approximately 10 times annually; refer to Fixed Asset Registry and Building Facilities Catalog (Appendices G & H)
Prepare Class A Cost Estimates	5 cost estimates per year for projects less than $25,000. 26 cost estimates per year for projects greater than $25,000
Prepare Class B Cost Estimates	10 cost estimates per year for projects less than $25,000. 25 cost estimates per year for projects greater than $25,000
Prepare Class C Cost Estimates	As required

Service	Service Level
Prepare Class D Cost Estimates	15 cost estimates per year for projects less than $25,000. 15 cost estimates per year for projects greater than $25,000
Define Scopes of Work	50 scopes of work per year
Execute Engineering investigations	50 investigations per year
Provide Engineering input	50 requests per year
Provide technical support to DCC	5 projects per year

Table 4: Perform Additional Work and Provide Optional Services - Service Levels

SOW Ref.	Service	Service Level
	Raise and control project files	20 projects a year
	Maintain record drawings (as-built)	50 drawings per year
	Conduct Building Condition Assessments	In accordance with Task Authorizations
	Develop Asset Management Plans	In accordance with Task Authorizations

Appendix D: Accommodations and Janitorial Performance Standard

Service Area	Performance Level
Routine Cleaning	Normal working hours for cleaning services are Monday to Friday, 08:00-16:00, closed on week-ends and statutory holidays
Demand (Routine) Cleaning	Hours Response – 4 hours Rectification – 24 hours
Provide housekeeping services to quarters based on occupancy levels	No instances of housekeeping services not being provided
Provide regular cleaning services	At least 95% of rooms to be cleaned to standard
Provide Miscellaneous Cleaning Services	No incidence of failure to provide major cleaning service upon request within 4 hours
Provide In-depth Cleaning Services	At least 95% of floors stripped and re-waxed as scheduled; remaining 5% to be undertaken within 28 days of scheduled cleaning
Strip and re-wax polished flooring	At least 95% of carpets, mats and rugs cleaned as scheduled; remaining 5% to be undertaken within 28 days of scheduled clean
Deep clean carpet, mats and rugs	95% of light fixtures cleaned as scheduled; remaining 5% to be undertaken within 14 days of scheduled clean
Clean light fixtures:	95% of blinds, and shades cleaned as scheduled; remaining 5% to be undertaken within 14 days of scheduled clean
Remove, clean and replace in working order window blinds and shades.	95% of curtains to be dry cleaned as scheduled; remaining 5% to be undertaken within 28 days of scheduled clean

Appendix E: Accommodations and Janitorial Service Levels

General

The following tables set out the estimated level of work for specific cyclical tasks or deliverables associated with this Section of the SOW in terms of their quantity and frequency. The levels indicated are for the purpose of establishing an initial scope of work and to provide a baseline against which the performance of specific tasks can be tracked.

The Appendix includes the following tables:

Table 1: Provide Management Services - Service Levels
Table 2: Provide Facilities Management Services - Service Levels
Table 3: Provide Engineering Services - Service Levels

Refer to the Interim Real Property Services Standard indicated in the References for standards applicable to services.

Table 1: Provide Management Services - Service Levels

Service	Service Level
Propose and Implement Innovation Opportunities for Gain Sharing	As determined

Table 2: Provide Facilities Management Services - Service Levels

Service	Service Level	Service Standard Reference
Cleaning Services - General		S12
a. Surfaces and objects are free of dust, stains, spills, debris and soil immediately after cleaning operation; b. Passageways are not blocked by machinery or equipment and are free of trip hazards; c. Caution signs are located adjacent to affected areas on approaches; d. Furnishings moved by cleaners are relocated to their original location		
Regular Cleaning		S12.1
a. Previously affected areas are free of stains, streaks and soil; b. Surfaces are free of over-spray from spray applicators	Spot Cleaning	
Floor areas including open areas and flooring around furniture legs and into corners are free of dirt and litter	Sweeping	
a. Areas are clean of dirt, mud and debris with no water ponding as a result of cleaning with a hose; b. Equipment has been removed and stored immediately after use	Cleaning with a Hose	
Floor areas including open areas and flooring around furniture legs and into corners are free of debris and dust film	Dust Mopping	
a. Floor areas including open areas and flooring around furniture legs and into corners are clean and free of surface stains, soil, mop streaks, loose mop strands and water spotting; b. Areas are swept or dry mopped immediately before damp mopping; c. Damp mopping is conducted with clean water and mop; d. Walls, baseboards and other surfaces are free of splash marks	Damp Mopping	
a. Standards outlined in ''Damp Mopping'' are met; b. Surfaces are rinsed free of cleaning solution after floors were washed; c. Areas are free of dirt, stains, splashing, cleaning chemical and water accumulations as well as scuff marks	Floor Washing	
a. Areas are free of dirt, stains, scuff marks, splashing, cleaning chemical and water accumulations; b. Corners and other areas not accessible to a mechanical floor scrubber are scrubbed manually	Machine Scrubbing	

Service	Service Level	Service Standard Reference
a. Following spray buffing, areas present an overall appearance of cleanliness, have a bright shine through out and are free of debris and dust; b. Spills, scuffs and stains are removed prior to spray buffing	Spray Buffing	
a. Carpet surfaces have a clean overall appearance and are free of visible dust, dirt and grit; b. Vacuums with a two-motor power head design are used (1 for suction, 1 for power head)	Vacuuming	
a. Carpets and walk-away mats have no visible stains or discoloration after stain removal operation; b. Where stain removal involved wetting of a hard surface floor, caution signs are placed around affected work area	Stain Removal	
a. Carpets and walk-away mats subjected to Hot Water Extraction are clean and free of accumulated dust, dirt and stain; b. Areas are clean to walls and corners	Hot Water Extraction	
a. Following damp wiping, surfaces are free of dust, stains, streaks and water spotting; b. Wiping cloths are rinsed frequently and are free of stains and odours; c. Feather dusters are not used	Damp Wiping	
a. Glass is cleaned from both sides, and both are free of streaks and finger marks; b. Adjacent areas including frames, casing and ledges are free of water spotting, splash marks and streaks	Glass and Mirror Cleaning	
a. Surfaces are free of dust; b. High dusting is accomplished using damp rag wiping or vacuuming; c. The method specified by the TA is followed; d. Dust is contained and prevented from floating freely in the air during operation	High dusting	
a. TA-approved, commercial disinfectant cleaner is used; b. Manufacturer's instructions are followed; c. No residual disinfectant is left on surfaces cleaned and disinfected	Clean and Disinfect	
Meet Regular and In-depth Cleaning service levels as required	Miscellaneous Cleaning	
In-depth Cleaning		S12.2
a. 'Machine Scrubbing' performance standards are met; b. The coat of finish applied is compatible with existing finish; c. On completion of 'Scrub and Refinish', areas present an overall appearance of cleanliness free of scuffs and stains, have a bright shine and are free of debris and dust	Scrub and Refinish	
a. 'Scrub and Refinish' performance standards are met; b. Old finishes are removed and residual stripper chemical are cleaned away; c. New finish is applied to the entirety of floors; d. Two coats of material are used in re-finishing; e. On completion of ''Strip and Refinish'', areas are clean and clear of stains, blemishes and dirt, and have a consistent shine free of scrapes and marks	Strip and refinish polished flooring	
a. "Machine Scrubbing" performance standards are met; b. The coat of finish applied is compatible with existing finish; c. On completion of ''Scrub and Refinish'', areas present an overall appearance of cleanliness free of scuffs and stains, have a bright shine and are free of debris and dust	Scrub and refinish polished flooring	
a. Outside areas, within 15 feet of the Building are policed regularly for cleanliness, and kept free from refuse and other extraneous materials; b. There is no unpleasant or distasteful odour emanating from the Buildings / properties; c. Means of egress are left clear and unhindered; d. Garbage bins are at less than 90% capacity and free from malodour (applies to non-commercial bins only;	Cleaning of Exterior Areas	

Service	Service Level	Service Standard Reference
e. External electrical and light fittings are substantially free of grit, dirt, chewing gum, leaves, cobwebs, rubbish, cigarette butts, moss growth and bird excreta; f. External surfaces of glass and exterior windows are clear of dirt, residue, chewing gum, spots and marks; g. Landings, ramps, stairwells, handrails, fire exits, steps, entrances, porches, patios, podiums, penthouses, decks, safety barriers (bollards), walkways, balconies, eaves, external doors and doorframes are generally free of dirt, grit, chewing gum, soil and cobwebs; h. Door tracks and doorjambs are free of grit and debris; i. Ventilation outlets are kept unblocked and generally free of dust, grit, chewing gum, soil, film, cobwebs, scuffs and other marks and are kept clear and uncluttered following cleaning		
In-depth Cleaning		S12.3
a. 'Machine Scrubbing' performance standards are met; b. The coat of finish applied is compatible with existing finish; c. On completion of 'Scrub and Refinish', areas present an overall appearance of cleanliness free of scuffs and stains, have a bright shine and are free of debris and dust	Scrub and Refinish	
a. 'Scrub and Refinish' performance standards are met; b. Old finishes are removed and residual stripper chemical are cleaned away; c. New finish is applied to the entirety of floors; d. Two coats of material are used in re-finishing; e. On completion of ''Strip and Refinish'', areas are clean and clear of stains, blemishes and dirt, and have a consistent shine free of scrapes and marks	Strip and refinish polished flooring	
a. "Machine Scrubbing" performance standards are met; b. The coat of finish applied is compatible with existing finish; c. On completion of ''Scrub and Refinish'', areas present an overall appearance of cleanliness free of scuffs and stains, have a bright shine and are free of debris and dust	Scrub and refinish polished flooring	
a. Outside areas, within 15 feet of the Building are policed regularly for cleanliness, and kept free from refuse and other extraneous materials; b. There is no unpleasant or distasteful odour emanating from the Buildings / properties; c. Means of egress are left clear and unhindered; d. Garbage bins are at less than 90% capacity and free from malodour (applies to non-commercial bins only; e. External electrical and light fittings are substantially free of grit, dirt, chewing gum, leaves, cobwebs, rubbish, cigarette butts, moss growth and bird excreta; f. External surfaces of glass and exterior windows are clear of dirt, residue, chewing gum, spots and marks; g. Landings, ramps, stairwells, handrails, fire exits, steps, entrances, porches, patios, podiums, penthouses, decks, safety barriers (bollards), walkways, balconies, eaves, external doors and doorframes are generally free of dirt, grit, chewing gum, soil and cobwebs; h. Door tracks and doorjambs are free of grit and debris; i. Ventilation outlets are kept unblocked and generally free of dust, grit, chewing gum, soil, film, cobwebs, scuffs and other marks and are kept clear and uncluttered following cleaning	Cleaning of Exterior Areas	

Table 3: Accommodations Lists

Bldg. Number and Name	Total Area to be Cleaned (sq m)
115 QUARTERS-CHIMO (4 common areas/ 4 washrooms)	**554.96**
116 QUARTERS-LADNER (4 common areas/ 4 washrooms)	**554.96**
117 QUARTERS-WHITEHORSE (4 common areas/ 4 washrooms)	**554.96**
125 HAPS CENTER (Office, Mess, Bar, Library, Washrooms)	**2, 600**
LINK WAYS	**500**
Total	**4, 765**

Table 4: Inventory of Single Quarters

BUILDING NUMBER	Location	SINGLE ROOMS
Whitehorse Hall	1st Fl – Chimo 1	103
Whitehorse Hall	1st Fl – Chimo 1	104
Whitehorse Hall	1st Fl – Chimo 1	105
Whitehorse Hall	1st Fl – Chimo 1	106
Whitehorse Hall	1st Fl – Chimo 1	107
Whitehorse Hall	1st Fl – Chimo 1	108
Whitehorse Hall	1st Fl – Chimo 1	109
Whitehorse Hall	1st Fl – Chimo 1	110
Whitehorse Hall	1st Fl – Chimo 1	111
Whitehorse Hall	1st Fl – Chimo 1	112
Whitehorse Hall	1st Fl – Chimo 1	113
Whitehorse Hall	1st Fl – Chimo 1	114
Whitehorse Hall	1st Fl – Chimo 1	115
Whitehorse Hall	1st Fl – Chimo 1	116
Whitehorse Hall	1st Fl – Chimo 1	117
Whitehorse Hall	1st Fl – Chimo 2	129
Whitehorse Hall	1st Fl – Chimo 2	130
Whitehorse Hall	1st Fl – Chimo 2	131
Whitehorse Hall	1st Fl – Chimo 2	133
Whitehorse Hall	1st Fl – Chimo 2	135
Whitehorse Hall	1st Fl – Chimo 2	136
Whitehorse Hall	1st Fl – Chimo 2	137
Whitehorse Hall	1st Fl – Chimo 2	138
Whitehorse Hall	1st Fl – Chimo 2	139
Whitehorse Hall	1st Fl – Chimo 2	140
Whitehorse Hall	1st Fl – Chimo 2	141
Whitehorse Hall	1st Fl – Chimo 2	142
Whitehorse Hall	1st Fl – Chimo 2	143
Whitehorse Hall	1st Fl – Chimo 2	144
Whitehorse Hall	2nd Fl – H of Chefs	201
Whitehorse Hall	2nd Fl – H of Chefs	203
Whitehorse Hall	2nd Fl – H of Chefs	204
Whitehorse Hall	2nd Fl – H of Chefs	205
Whitehorse Hall	2nd Fl – H of Chefs	206
Whitehorse Hall	2nd Fl – H of Chefs	207
Whitehorse Hall	2nd Fl – H of Chefs	208
Whitehorse Hall	2nd Fl – H of Chefs	209
Whitehorse Hall	2nd Fl – H of Chefs	210

Whitehorse Hall	2nd Fl – H of Chefs	211	
Whitehorse Hall	2nd Fl – H of Chefs	212	
Whitehorse Hall	2nd Fl – H of Chefs	213	
Whitehorse Hall	2nd Fl – H of Chefs	215	
Whitehorse Hall	2nd Fl – H of Chefs	217	
Whitehorse Hall	2nd Fl – Vimy	225	
Whitehorse Hall	2nd Fl – Vimy	227	
Whitehorse Hall	2nd Fl – Vimy	229	
Whitehorse Hall	2nd Fl – Vimy	231	
Whitehorse Hall	2nd Fl – Vimy	233	
Whitehorse Hall	2nd Fl – Vimy	234	
Whitehorse Hall	2nd Fl – Vimy	235	
Whitehorse Hall	2nd Fl – Vimy	236	
Whitehorse Hall	2nd Fl – Vimy	237	
Whitehorse Hall	2nd Fl – Vimy	238	
Whitehorse Hall	2nd Fl – Vimy	239	
Whitehorse Hall	2nd Fl – Vimy	240	
Whitehorse Hall	2nd Fl – Vimy	241	
Whitehorse Hall	2nd Fl – Vimy	242	
Whitehorse Hall	2nd Fl – Vimy	243	
Whitehorse Hall	2nd Fl – Vimy	244	
Whitehorse Hall	2nd Fl – Vimy	245	
Whitehorse Hall	2nd Fl – Vimy	246	
Whitehorse Hall	2nd Fl – Vimy	247	
Whitehorse Hall	2nd Fl – Vimy	248	
Whitehorse Hall	2nd Fl – Vimy	249	
Ladner Hall	1st Fl – Ole Folks	103	
Ladner Hall	1st Fl – Ole Folks	104	
Ladner Hall	1st Fl – Ole Folks	105	
Ladner Hall	1st Fl – Ole Folks	106	
Ladner Hall	1st Fl – Ole Folks	107	
Ladner Hall	1st Fl – Ole Folks	108	
Ladner Hall	1st Fl – Ole Folks	109	
Ladner Hall	1st Fl – Ole Folks	110	
Ladner Hall	1st Fl – Ole Folks	111	
Ladner Hall	1st Fl – Ole Folks	112	
Ladner Hall	1st Fl – Ole Folks	113	
Ladner Hall	1st Fl – Ole Folks	114	
Ladner Hall	1st Fl – Ole Folks	115	
Ladner Hall	1st Fl – Ole Folks	117	
Ladner Hall	1st Fl – Zoo	128	
Ladner Hall	1st Fl – Zoo	129	
Ladner Hall	1st Fl – Zoo	130	
Ladner Hall	1st Fl – Zoo	131	
Ladner Hall	1st Fl – Zoo	133	
Ladner Hall	1st Fl – Zoo	135	
Ladner Hall	1st Fl – Zoo	136	
Ladner Hall	1st Fl – Zoo	137	
Ladner Hall	1st Fl – Zoo	138	
Ladner Hall	1st Fl – Zoo	139	
Ladner Hall	1st Fl – Zoo	140	
Ladner Hall	1st Fl – Zoo	141	
Ladner Hall	1st Fl – Zoo	142	
Ladner Hall	1st Fl – Zoo	143	
Ladner Hall	1st Fl – Zoo	144	

Ladner Hall	2nd Fl – Manor	201	
Ladner Hall	2nd Fl – Manor	203	
Ladner Hall	2nd Fl – Manor	204	
Ladner Hall	2nd Fl – Manor	205	
Ladner Hall	2nd Fl – Manor	206	
Ladner Hall	2nd Fl – Manor	207	
Ladner Hall	2nd Fl – Manor	208	
Ladner Hall	2nd Fl – Manor	209	
Ladner Hall	2nd Fl – Manor	210	
Ladner Hall	2nd Fl – Manor	211	
Ladner Hall	2nd Fl – Manor	212	
Ladner Hall	2nd Fl – Manor	213	
Ladner Hall	2nd Fl – Manor	215	
Ladner Hall	2nd Fl – Manor	216	
Ladner Hall	2nd Fl – Manor	217	
Ladner Hall	2nd Fl – Monster	217	
Ladner Hall	2nd Fl – Monster	229	
Ladner Hall	2nd Fl – Monster	231	
Ladner Hall	2nd Fl – Monster	233	
Ladner Hall	2nd Fl – Monster	234	
Ladner Hall	2nd Fl – Monster	235	
Ladner Hall	2nd Fl – Monster	236	
Ladner Hall	2nd Fl – Monster	237	
Ladner Hall	2nd Fl – Monster	238	
Ladner Hall	2nd Fl – Monster	239	
Ladner Hall	2nd Fl – Monster	240	
Ladner Hall	2nd Fl – Monster	241	
Ladner Hall	2nd Fl – Monster	242	
Ladner Hall	2nd Fl – Monster	243	
Ladner Hall	2nd Fl – Monster	244	
Ladner Hall	2nd Fl – Monster	245	
Ladner Hall	2nd Fl – Monster	246	
Ladner Hall	2nd Fl – Monster	247	
Ladner Hall	2nd Fl – Monster	248	
Ladner Hall	2nd Fl – Monster	249	
Chimo Hall	1st Fl – In & Out	103	
Chimo Hall	1st Fl – In & Out	104	
Chimo Hall	1st Fl – In & Out	105	
Chimo Hall	1st Fl – In & Out	106	
Chimo Hall	1st Fl – In & Out	107	
Chimo Hall	1st Fl – In & Out	108	
Chimo Hall	1st Fl – In & Out	109	
Chimo Hall	1st Fl – In & Out	110	
Chimo Hall	1st Fl – In & Out	111	
Chimo Hall	1st Fl – In & Out	112	
Chimo Hall	1st Fl – In & Out	113	
Chimo Hall	1st Fl – In & Out	114	
Chimo Hall	1st Fl – In & Out	115	
Chimo Hall	1st Fl – In & Out	118	
Chimo Hall	1st Fl – Aircrew	129	
Chimo Hall	1st Fl – Aircrew	130	
Chimo Hall	1st Fl – Aircrew	131	
Chimo Hall	1st Fl – Aircrew	133	
Chimo Hall	1st Fl – Aircrew	135	
Chimo Hall	1st Fl – Aircraft	136	

Chimo Hall	1st FI – Aircraft	137	
Chimo Hall	1st FI – Aircraft	138	
Chimo Hall	1st FI – Aircraft	139	
Chimo Hall	1st FI – Aircraft	140	
Chimo Hall	1st FI – Aircraft	141	
Chimo Hall	1st FI – Aircraft	142	
Chimo Hall	1st FI – Aircraft	143	
Chimo Hall	1st FI – Aircraft	145	
Chimo Hall	2nd FI – Hut 53	201	Permanent Staff
Chimo Hall	2nd FI – Hut 53	202	Permanent Staff
Chimo Hall	2nd FI – Hut 53	203	Permanent Staff
Chimo Hall	2nd FI – Hut 53	204	Permanent Staff
Chimo Hall	2nd FI – Hut 53	205	Permanent Staff
Chimo Hall	2nd FI – Hut 53	206	Permanent Staff
Chimo Hall	2nd FI – Hut 53	207	Permanent Staff
Chimo Hall	2nd FI – Hut 53	208	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	203	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	204	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	207	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	208	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	209	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	210	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	215	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	216	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	217	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	218	Permanent Staff
Chimo Hall	2nd FI – Hut 53 Annex	219	Permanent Staff