Support Services Building (formerly Forensic Lab) Heating Supply Upgrade Project

A&E Services
Project Brief and Required Services

Canada

Project Brief

Architectural and Engineering Services
Support Services Building (formerly Forensic Lab) Heating Supply Upgrade Project, Regina, Saskatchewan

Table of Contents:

PROJECT DESCRIPTION

PD 1 PROJECT INFORMATION 3
PD 2 PROJECT INTRODUCTION AND BACKGROUND 3
PD 3 PROJECT OBJECTIVES 6
PD 4 SCOPE OF WORK 8
PD 5 PROJECT DELIVERY APPROACH (construction) 9
PD 6 SCHEDULE 10
PD 7 DESIGN QUALITY 11
PD 8 CONSULTANT TEAM 11
PD 9 EXISTING DOCUMENTATION 13
PA 1 PROJECT ADMINISTRATION 13
PA 2 AUTHORITIES, SUBMISSIONS, REVIEW AND APPROVAL PROCESSES 17
RS 1 Analysis of Project Requirements 18
RS 2 DESIGN DEVELOPMENT 20
RS 3 CONSTRUCTION DOCUMENTS 23
RS 4 TENDERing services 27
RS 5 CONSTRUCTION ADMINISTRATION Services 27
RS6 COMMISSIONING 29
RS7 POST CONSTRUCTION SERVICES 30

PROJECT DESCRIPTION

PD 1 PROJECT INFORMATION

PD 1.1 SERVICES

1.1.3 Royal Canadian Mounted Police (RCMP) requires the services of an architectural firm, acting as prime consultant together with a multi-disciplinary team of sub-consultants for the provision of service required for this project.

PD 1.2 THE GENERAL PROCUREMENT AND PROCEDURES AND STANDARDS DOCUMENT (GP&S)

1.2.3 The Project Brief document must be used in conjunction with the GP&S, as the two documents are complimentary.

1.2.4 The Project Brief describes project-specific requirements, services and deliverables while the GP&S document outlines with minimum standards and procedures common to all projects.

1.2.5 In the case of a conflict between the two documents, the requirements of the Project Brief override the GP&S Document.

PD 1.3 GENERAL

1.3.3 Project Title: Support Services Building Heating Supply Upgrade Project

1.3.4 Location of the Project: RCMP Depot Academy, Regina, Saskatchewan

PD 2 PROJECT INTRODUCTION AND BACKGROUND

PD 2.1 OVERVIEW

2.1.1 The services of an Architectural firm, acting as Prime Consultant, are required to undertake the design and construction administration / review services needed to facilitate the implementation of new supply/return steam lines for the existing Support Services Building in Regina, Saskatchewan for the RCMP.

2.1.2 As Prime Consultant, the selected Architectural firm will provide a full consulting Team including the required expertise in civil, structural, mechanical, electrical, scheduling and commissioning Consultants.

PD 2.2 USER DEPARTMENT

2.2.3 The User Department, referred to throughout the Project Brief, is:

.1 The Royal Canadian Mounted Police (RCMP)

2.2.4 RCMP Mission

The RCMP is Canada's national police service. Proud of our traditions and confident in meeting future challenges, we commit to preserve the peace, uphold the law and provide quality service in partnership with our communities.

2.2.5 The project objective is to deliver the design and construction of new underground steam line vault system complete with all the necessary steam and pumped condensate connections to selected Support Services Building and the existing underground service tunnel (located behind F Division

Headquarters Building). As a result of this work all affected landscape features, asphalt surfaces, curbs, will need to be re-instated to match existing conditions. Coordination with existing underground services will also be required

The new shallow service vault will include:

(a) Removable panels that will allow easy access from the surface;

(b) Steam and condensate lines will be individually supported and insulated within the vault;

(c) Vault design to be in segments to allow for ease of installation complete with end joints capable of being sealed between adjacent segments;

(d) Vault design must allow for drainage of any moisture entering the cavity and alleviate the risk of ground water flooding

(e) Vault design must incorporate a sensing alarm system to detect leaks and facilitate the location of the required repair;

(f) It is expected that the new vault system will be located in approximately the same location as the existing buried lines and that the existing trench will be modified (where possible) to install the new shallow service vault system;

(g) All abandoned lines must be removed;

(h) Vault design must incorporate a weeping tile drainage system that will discharge any accumulated water back to the surface to be drained by the existing storm drainage infrastructure.

There will also be a requirement for provision of a temporary hot water heating system to supply the occupants of the Support Services Building with continued hot water during the construction phase of the project.

Also, three (3) existing humidifiers require removal and replacement and new pipe insulation to be installed on all existing steam and hot water piping located within the mechanical room of the Support Services Building.

Also included will be the requirement to install an underground conduit from the existing service tunnel to the existing Support Services Building for future communications cabling installation.

PD 2.3 SITE CONDITIONS

2.3.3 The characteristics of the existing site are as follows:

.3 The Support Services Building (formerly Forensic Lab) is located on MacConell Drive and is accessed from Dewdney Avenue, the building is located adjacent the RCMP F Division Headquarters building and the Training Academy Depot. The building was constructed in 1995 and is a two storey office building with a basement mechanical room and a crawlspace under the remainder of the building.

.4 The site surrounding the existing Support Building is considered very flat and is predominately covered by existing landscape features, asphalt (or gravel) surface parking lots and access roadways.

.3 The existing Support Services building currently receives its heat from the RCMP Depot Academy Central Heating Plant via underground steam lines. These steam lines run through the existing tunnel system, to a location just South of F Division Headquarters Building. From this location, the existing lines branch off the tunnel system and are direct buried underground heading West to the Support Services Building. These direct buried lines are more than 25 years old and have now reached the end of their life expectancy.

PD 2.4 CONSTRAINTS AND CHALLENGES

2.4.3 The Consultant will be required to become familiar with the project site and obtain local information as required.

2.4.4 All site visits must be arranged through the Departmental Representative.

2.4.5 Security Clearances will be required for personnel working on this project.

2.4.6 The existing tunnel system is considered a confined space. Those accessing the tunnels with require confined space entry training and must follow the RCMP Academy procedures for entry.

2.4.7 The construction work will be performed during the full operation of both the Support Services Building and the adjacent F Division Headquarters Building. The project will need to be scheduled in an orderly and systematic manner to ensure disruptions to the daily operations and site access are kept to a minimum.

2.4.8 The construction work must occur during the summer months when the steam supply is shut off.

2.4.9 Aggressive project schedule for both design (5 months) and construction (5 months) during the summer season.

PD 3 PROJECT OBJECTIVES

PD 3.1 OBJECTIVE ONE: FUNCTIONAL PERFORMANCE

3.1.1 Provide an accessible service vault system that responds to the RCMP's requirements as outlined within this brief and fully supports the ongoing Depot Academy maintenance and operations.

3.1.2 Achieve:

.3 A flexible and functional system in keeping with the current RCMP and Treasury Board Policies.

.4 Advanced system and technologies to support ease of maintenance, contemporary operating requirements and capacity for future growth and change.

PD 3.2 OBJECTIVE TWO: DESIGN QUALITY AND CHARACTER

3.2.3 Provide a service vault system that will effectively enable long term efficient and cost effective life cycle performance for an expected life span of 30 years before major refit.

3.2.4 Achieve:

.3 Design excellence, use of quality materials and precise execution in accordance with best current practice, standards and codes,

.4 A system that meets or exceeds all applicable codes for fire, health and life safety.

.3 A system that fully integrates all components and systems (architectural, structural, mechanical, electrical, civil)

.4 Quality and construction methodologies

PD 3.3 OBJECTIVE THREE: BUILDING SYSTEMS PERFORMANCE

3.3.3 Provide a service vault system that will enable long-term efficient and cost effective life cycle performance.

3.3.4 Achieve:

.3 A system that embodies contemporary sustainable design and application principles and is implemented in an environmentally responsible manner.

.4 Healthy and safe environments that meet or exceed all applicable codes for construction, fire, health, and life safety.

.5 Systems that are of a quality that will provide extended use benefits; designed in response to sound building science principles, life cycle cost effectiveness, ease of maintenance with accessible parts for servicing and constructed with the best workmanship possible.

.6 Systems that can be accessed and easily repaired and / or replaced in the building life cycle as required.

PD 3.4 OBJECTIVE FOUR: PROJECT DELIVERY

3.4.3 Deliver the project utilizing best practices in support of Users' needs, respecting the approved scope, quality, financial budget and schedule.

3.4.4 Achieve:

.3 A cohesive functional partnership and open communication between all members of the project delivery team and stakeholders throughout all phases of project delivery,

.4 An integrated and focused Consultant team with an in-depth understanding and collective 'buy-in' of the project requirements, scope, budget and scheduling objectives, working constructively to ensure a collaborative and cooperative team approach with knowledgeable and timely input and contribution by all project team members, including representatives from the RCMP.

.5 Rigorous quality assurance reviews during the design and construction phases, conducted as an integral element of the design process for all major disciplines,

.6 A rigorous quality management plan in order to respond and correct, in a timely and effective manner, all issues as they occur,

.7 Appointment of a competent and qualified Project Architect to provide enduring vision and guidance for the entire project duration, to be responsible for the production and delivery of all documents, review of construction for conformity to intent, and to ensure that there is a continuity of key personnel working as an integrated dedicated team for the full duration of the project,

.8 Professional conduct in all phases of the project, employing best practices for budget, schedule, quality, and scope management,

.9 A continuous risk identification and management program employing effective methodologies to avoid unexpected project impacts, and to ensure construction claims avoidance,

.10 Continuous and comprehensive documentation of the project at all stages of the project implementation for Records of Decisions, project follow up and development of lessons learned.

PD 4 SCOPE OF WORK

PD 4.1 OVERVIEW- ALL DISCIPLINES

.3 Provide a comprehensive professional service for all phases of project development including, project analysis, design development, tender document production, assistance during tendering, construction administration, post construction services, commissioning and warranty services all as described in more detail in the following sections.

.4 Ensure integration of RCMP user systems and internal stakeholder requirements during all phases of the project.

.5 Maintain consistency and continuity of the multidisciplinary team throughout all project phases.

PHASE I

Review the existing site, the current system requirements, summarize the project mandate, project budget, key parameters, key constraints/risks and project objectives in a Project Design Report.

Meet with RCMP stakeholders to ensure expectations are maintained regarding existing services in the underground tunnel and maintaining all required services during construction.

PHASE II

Design and completion of Tender Documents for the separate corresponding construction contract based upon approval recommendations from Phase I.

PHASE III

Contract Administration of the separate corresponding construction contract including Commissioning and warranty. Ensure complete integration of RCMP Depot Academy user systems and requirements during all stages of the project.

PD 4.2 ARCHITECTURAL SERVICES

4.2.3 Comprehensive professional design services to provide a service vault system for the use of distributing services to existing buildings.

4.2.4 Coordination of all professional services as required to deliver an integrated comprehensive design solution.

4.2.5 Provide Architectural Services as a result of Mechanical and Electrical scopes of work.

PD 4.3 CIVIL ENGINEERING SERVICES

4.3.3 All applicable services required to deliver this project including but not limited to power, fuel, water, storm and sanitary sewers.

4.3.4 All services required for complete site development modifications, including but not limited to excavation and grading, drainage, roads, parking areas, curbs, sidewalks and coordination with site security infrastructure, lighting and landscape elements where required to return the site back to its original condition or better.

PD 4.4 STRUCTURAL ENGINEERING SERVICES

4.4.3 All applicable services required to deliver this project. Comprehensive structural engineering services to design all applicable structural elements to current construction standards, as defined by applicable building codes.

Exterior elements in support of continuity infrastructure components and site development;

PD 4.5 MECHANICAL ENGINEERING SERVICES

4.5.3 Comprehensive mechanical engineering services to provide a service vault for the use of distributing services to existing buildings.

4.5.4 All documentation required from all applicable authorities having jurisdiction for provincial and federal environmental and technical approvals.

4.5.5 Preparation of submissions to all authorities having jurisdiction and liaison as required to achieve approvals.

PD 4.6 ELECTRICAL ENGINEERING SERVICES

4.6.3 Comprehensive electrical engineering services to provide a service vault for the use of distributing services to existing buildings.

4.6.4 Exterior site lighting and power.

PD 5 PROJECT DELIVERY APPROACH (CONSTRUCTION)

PD 5.1 GENERAL

5.1.3 The construction tender activity will use a traditional design – single tender – build approach

5.1.4 The Consultant engaged through this RFP by RCMP will provide the services required under the general direction of the RCMP Project Manager and will

coordinate all design, and construction contract administration activities based on formal direction from the RCMP Departmental representative as delegated.

5.1.5 A General Contractor will be retained by RCMP and report directly to the RCMP Departmental Representative with support from the Consultant to co-ordinate all services related to construction.

PD 6 SCHEDULE

PD 6.1 GENERAL

6.1.3 Target milestones are identified below.

Award of Consultant Contract	January 21 2021
Design Development Report	March 01, 2021
66% Contract Documents	April 29, 2021
99% Contract Documents	June 17, 2021
Final Tender Documents	July 07, 2021
Issue Construction Tender	January 2022
Award Construction Tender	March 2022
Construction Completion	September 2022

PD 6.2 COST

.3 The estimated preliminary construction cost estimate (Class D) in current dollars (excluding GST), at this time, is as follows:

.1

.2 Construction Cost $2.1 Million

.3 _____

.4

.5 Cost estimates do not include contingencies, escalation, risk, Consultant fees, or GST.

.6 A construction estimate of $2.1M has been identified above. Project design must take into consideration the project budget and functional requirements throughout the development of the project to ensure that both Scope and Cost objectives are met.

.7 The project budget is based on the above identified preliminary estimate. Estimates for Construction will be developed and updated by the Consultant at identified stages in project development and will be reviewed by the RCMP for compliance with the overall project budget. Proceeding to subsequent stages will be subject to RCMP approval of estimate variances.

.1

.2

PD 7 DESIGN QUALITY

PD 7.1 PEER REVIEWS

7.1.3 The Prime Architectural Consultant is responsible for controlling quality throughout the life of the project. As part of the design quality assurance process the Prime Architectural Consultant will be responsible for coordinating Peer Reviews for each discipline.

7.1.4 Peer Reviews will be completed by all disciplines/stakeholders and documented with follow up responses for each design submission.

7.1.5 Submit summary documentation of Peer Reviews for review by the RCMP with each stage report.

PD 8 CONSULTANT TEAM

PD 8.1 GENERAL

8.1.3 The Consultant (proponent) and his/her personnel identified in the submission, including sub-Consultants and specialists comprise the integrated Consultant design Team (Consultant Team). The Consultant Team will be required to maintain its expertise for the duration of the project.

8.1.4 The Prime Architectural Consultant shall be responsible to co-ordinate and direct all Consultant Team activities.

8.1.5 The Consultant Team shall be comprised of competent and qualified personnel having professional and technical expertise with extensive relevant experience, and shall be capable of providing the services identified in the Required Services (RS) Section of this Project Brief.

.3 Members of the Consultant Team may have the necessary qualifications and expertise to provide services in more than one discipline or specialty

.4 Proponents are permitted to expand their Consultant Team to include additional disciplines as required, in order to successfully deliver the project.

8.1.6 Expertise and relevant experience requirements for this project are as follows:

.3 Administrative
- .1 Project Management
- .2 Scheduling
- .3 Risk Management
- .4 Cost consulting

.4 Regulatory Analysis, Planning, Design, and Development
- .1 Building Code
- .2 Municipal Zoning
- .3 Occupational Health and Safety
- .4 Fire and Life Safety

.5 Program Analysis, Planning, Design, and Development
- .1 Enriched front end planning
- .2 Functional Programming

.6 Site Analysis, Planning, Design, and Development
- .1 Site Planning
- .2 Landscaping
- .3 Civil Engineering / Municipal Engineering (infrastructure)

.7 Building Analysis, Planning, Design, and Development

.8 Architecture and Specialties:
- .1 General Architecture
- .2 Building envelope

.9 Engineering:

.10 Structural
- .1 Seismic

.11 Mechanical
- .1 Heating Ventilation Air Conditioning (HVAC)
- .2 Plumbing
- .3 Fire protection
- .4 Indoor / outdoor air quality design and control
- .5 Building automation / energy management control systems

.12 Electrical
- .1 Power
- .2 Lighting
- .3 Audio visual systems
- .4 Information technology and communications
- .5 Network Infrastructure systems

.13 Civil

.14 Commissioning

.15 Budget, Schedule and Risk Analysis, Planning, Design, and Development
- .1 Cost planning
- .2 Estimating
- .3 Life cycle costing,
- .4 Change evaluation and cost control
- .5 Time planning, scheduling, and schedule monitoring
- .6 Risk management

PD 9 EXISTING DOCUMENTATION

PD 9.1 EXISTING DOCUMENTATION

9.1.3 To be Made Available to the Successful Proponent

.3 Existing site and complex as-built drawings as available, various dates

.2 Limited AutoCad files will be made available. The Consultant will be responsible for verifying the accuracy of the information provided.

.3 The successful Consultant will be provided with the following background documents:

.1 Forensic Lab Steam Line Replacement Feasibility Study Report 2018

.2 Existing Support Services Building (old Forensic Lab) Arch/Struct/Mech/Elect Autocad files.

.3 Limited applicable Depot Academy underground services Autocad files

9.1.4 Disclaimer:

.1 Reference information will be available in the language it is written.

.2 The documentation may be unreliable and is offered “as is” for use by the Consultant.

PROJECT ADMINISTRATION

PA 1 PROJECT ADMINISTRATION

PA 1.1. GENERAL

1.1.1. The following administrative requirements apply during all phases of the project delivery.

PA 1.2. CONTRACT AUTHORITY

1.2.1. RCMP is the Contract Authority.

1.2.2. Changes to the Consultant agreement can only be authorized by the Contract Authority.

PA 1.3. RCMP PROJECT MANAGEMENT

1.3.1. The RCMP Project Director assigned to the project is the RCMP Departmental Representative.

1.3.2. The RCMP Departmental Representative is directly concerned with the project and responsible for its progress on behalf of the RCMP.

1.3.3. The RCMP Departmental Representative represented by the RCMP Project Manager is the liaison amongst and between the Consultant, and the RCMP.

1.3.4. The RCMP administers the project and exercises continuing control over the project during all phases of development.

1.3.5. Unless directed otherwise by the RCMP Departmental Representative, the Consultant is responsible to obtain all Federal requirements and approvals necessary for the work. Applications and liaison with other GOC departments shall be coordinated through the RCMP Departmental Representative.

PA 1.4. LINES OF COMMUNICATION

1.4.1. Unless otherwise directed by the RCMP Departmental Representative, conduct all project communication through the RCMP Project Manager only.

1.4.2. Formal contact between the Consultant and the RCMP Project Team, which includes RCMP Representatives, shall be through the RCMP Project Manager.

1.4.3. Direct communication between Consultant Team members and the RCMP Project Team on routine matters is required to enable the discussion and resolution of technical issues, however, no communication shall alter the terms of the project scope, budget or schedules unless directed in writing by the RCMP Departmental Representative.

1.4.4. During construction tender call RCMP is responsible for all correspondence with bidders and makes the contract award.

PA 1.5. MEDIA RELATIONS

1.5.1. The Consultant shall not respond to requests for project related information or questions from the media. All media inquiries are to be directed to the RCMP Departmental Representative.

1.5.2. The Consultant shall not use any project related materials, information, drawings, images or photographs in any form for publicity or promotional purposes without the express written authorization of the RCMP Departmental Representative, which may be withheld at the sole discretion of the RCMP.

PA 1.6. GENERAL PROJECT DELIVERABLES

1.6.1. Where deliverables and submissions include summaries, reports, network diagrams, drawings, plans, specifications or finish schedules, submit deliverables as follows:

.1 Hard copies: two (2) English

.2 Electronic format: One (1) copies English. The electronic deliverables shall be provided using Microsoft applications.

.3 Alternate electronic format: the Consultant may submit all work in Adobe Acrobat *.pdf format except for Network Diagrams which must be submitted in

their original electronic format.

.4 All drawings will be generated and distributed in the format using layering and file transfer protocols as prescribed in the reference document available online. *Reference;* http://www.tpsgc-pwgsc.gc.ca/biens-property/cdao-cadd/index-eng.html

.5 Record drawings will be delivered in electronic (PDF and .DWG) and hard copy format.

1.6.2. Construction documents issued for tender purposes must be English.

PA 1.7. ACCEPTANCE OF PROJECT DELIVERABLES

1.7.1. While the RCMP acknowledges the Consultant's obligations to meet project requirements, the project delivery process entitles the RCMP to review work. The RCMP reserves the right to reject undesirable or unsatisfactory work. The Consultant must obtain Departmental Representative acceptances during each of the project stages.

1.7.2. Acceptances indicate that based on a general review of material for specific issues, the material is considered to comply with governmental and departmental objectives and practices, and that overall project objectives are being satisfied.

1.7.3. The acceptance does not relieve the Consultant of professional responsibility for the work and compliance with the contract.

1.7.4. The RCMP acceptances do not prohibit rejection of work, which is determined to be unsatisfactory at later stages of review. If progressive design development or time / cost / risk updates or technical investigation reveals that earlier acceptances must be withdrawn, the Consultant is responsible for re-designing work and re-submitting for acceptance at the Consultant's cost.

1.7.5. Acceptances by other agencies and levels of government must be obtained to supplement the RCMP acceptances. The Consultant shall assist the Departmental Representative in securing all such acceptances and adjust all documentation as required by such authorities when securing acceptance.

PA 1.8. COORDINATION WITH SUB-CONSULTANTS

1.8.1. Throughout all phases of the project, assume responsibility for co-ordinating the work of any Sub-Consultants and specialists retained by the Consultant,

1.8.2. Ensure clear, accurate and ongoing communication of concept design, budget, and scheduling issues including changes as they relate to the responsibilities of all Sub-Consultants and specialists from initial base building reviews to post construction reports.

1.8.3. Co-ordinate input for the Departmental Representative's Risk Management Plan.

1.8.4. Co-ordinate the Quality Assurance process ensuring submissions of Sub-Consultants are complete and signed-off by the designated senior reviewer of the Prime Consultant.

1.8.5. Ensure Sub-Consultants provide adequate site inspection services and attend all required meetings.

PA 1.9. PROJECT RESPONSE TIME

1.9.1. It is a requirement of this project that the key personnel of the prime Consultant and sub-Consultants or specialist firms are personally available to attend meetings or respond to inquiries within two working days of a request by the RCMP Project Manager.

PA 1.10. MEETINGS

The prime Consultant with the RCMP Departmental Representative shall arrange meetings generally throughout the entire project development and implementation period, for all members of the project Team, including representatives from RCMP; Consultant Team; and Contractor.

1.10.1. During design and tendering phases:

.1 Attend the meetings,

.2 Record the issues and decisions,

.3 Prepare and distribute minutes within two (2) working days of the meeting.

.4 Meetings will normally be held at the office of the RCMP Departmental Representative and via teleconference call on an alternate basis, or wherever is deemed to be the most beneficial to meet the requirements of the project.

1.10.2. During construction and implementation:

.1 Attend the meetings,

.2 The Consultant, shall record the issues and decisions of all construction site meetings and prepare and distribute minutes within two (2) working days of the meeting.

.3 Standing agenda items shall include:

.1 Project Planning Monitoring and Control,

.2 Health and Safety,

.3 Schedule,

.4 Cost,

.5 Risk,

.4 On occasion, there may be urgent problem-solving meetings. The Consultant and sub-Consultants as required shall be available to attend such meetings.

PA 2 AUTHORITIES, SUBMISSIONS, REVIEW AND APPROVAL PROCESSES

PA 2.1. FEDERAL GOVERNMENT AUTHORITY/JURISDICTION

2.1.1. The following are authorities having Federal Government jurisdiction over the project:

- .1 Treasury Board of Canada
  - .1 Project approvals
- .2 The Royal Canadian Mounted Police
  - .1 Tendering and procurement
  - .2 Contract approvals
  - .3 Contract Authority
  - .4 Government of Canada Security Policy
  - .5 Technical authority
  - .6 Project delivery
  - .7 Functional design requirements and standards
  - .8 Multimedia
  - .9 IT
  - .10 Security systems
  - .11 Life safety
  - .12 Personnel Security
- .3 Environment Canada
  - .1 Canadian Environmental Assessment Act and
  - .2 Canadian Environmental Protection Act
- .4 National Building Code
  - .1 Building codes and standards

PA 2.2. PROVINCIAL AND MUNICIPAL AUTHORITIES/JURISDICTION

2.2.1. The Federal government does defer to provincial and municipal authorities for specific regulations, standards and inspections. In areas of conflict, the Federal authority prevails.

- .1 Saskatchewan Labour Board
  - .1 Employment Standards
  - .2 Construction Safety
  - .3 Designated Substance Management
  - .4 Workers Compensation
- .2 Saskatchewan Ministry of the Environment
- .3 Technical Safety Authority (TSA)
  - .1 Passenger and Freight Elevator Fuel systems
  - .2 Boilers and pressure vessels
- .4 Local Electrical and Gas Authority
  - .1 Electrical installations
- .5 Natural Gas installation
- .6 Municipality/City Authority/Utility
  - .1 Zoning
  - .2 Site Plan Control
  - .3 Building, Electrical and Plumbing Permits and Inspection
  - .4 Fire Safety, Equipment and access for fire-fighting equipment

REQUIRED SERVICES

RS 1 ANALYSIS OF PROJECT REQUIREMENTS

RS 1.1 INTENT

1.1.1 This stage is intended for the Consultant to review and report on all aspects of the project requirements. The Consultant Team will review, gather and analyse all available program information, consult with the RCMP to develop a functional program and deliver a comprehensive Pre-Design Report. This approved deliverable will become the formal project work plan and will be utilized throughout the project to guide the delivery.

RS 1.2 SCOPE AND ACTIVITIES:

1.2.1 Analyse the project requirements / program including any amendments,

Analyse all available base building and site information,

1.2.2 Review all other available existing material related to the project including requirements identified in the Project Brief,

1.2.3 Identify all additional information that will be needed to deliver the project,

1.2.4 Undertake a budget, schedule and risk analysis and identify any conflicts that will need to be addressed with respect to scope, quality, schedule, cost

1.2.5 Identify and verify all authorities having jurisdiction over the project and codes, regulations and standards that apply,

RS 1.3 DELIVERABLES

1.3.1 Prepare and submit an integrated Stage One Pre-Design Project Report, which includes an analysis of project requirements for review and approval by the Departmental Representative. Revise as required by the Departmental Representative. Resubmit for acceptance.

1.3.2 The Stage One Pre-Design Project Report will consolidate the scope and activities identified above and will be utilized as the benchmark project control document to monitor progress of the project. The report will be used as a basis for monthly reporting of progress and will require supplements and modifications to reflect changes in project parameters as may be identified and accepted throughout the project life cycle.

1.3.3 The structure used for the Stage One Pre-Design Project Report shall be used for the required project reports for all subsequent project stages. The content of the subsequent reports will vary according to the project stage.

RS 1.4 STAGE ONE PRE-DESIGN PROJECT REPORT STRUCTURE AND CONTENT

1.4.1 Executive Summary

The executive summary is intended to provide a précis of the Stage One Pre-Design Project Report and outline any recommendations requiring the RCMP approval.

1.4.2 Administrative

.1 Aspects to be included (but not limited to) are:

.2 Summaries of project start-up meetings, workshops, partnering sessions,

.3 Quality management process for the Consultant Team,

.4 Confirmation that all necessary pre-design documentation required for this project is available and confirmation that the information is still current and up-to-date
.5 Summary analysis of state of project readiness and viability of budget and schedule.

1.4.3 Regulatory Analysis

.1 Aspects to be included (but not limited to) are:
.2 Preliminary summary of regulatory and statutory requirements,
.3 Preliminary summary of authorities having jurisdiction,
.4 Preliminary summary of codes, regulations, and standards, and
.5 Summary analysis of regulatory limitations and project impacts.

1.4.4 Program Analysis

.1 Aspects to be included (but not limited to) are a review and analysis of:,
.2 Summary analysis of Program requirements.

1.4.5 Site Analysis

.1 Aspects to be included (but not limited to) are a review and analysis of:
.2 Site features and restrictions (i.e. landscape features, topographical feature, climatic influences, setback requirements, easements, existing buildings, and / or structures.), parking capacity,
.3 Review of subsurface, geotechnical analysis of soils,
.4 Municipal infrastructure, subsurface and above grade services, including capacities and limitations (i.e. storm water drainage, fire protection, domestic water, power, telecommunications,),
.5 Summary analysis of Site conditions and project impact.

1.4.6 Building Analysis

.1 Aspects to be included (but not limited to) are a review and analysis of:
.2 Substructure, including foundations and basement(s),
.3 Shell, including superstructure, exterior enclosure,

1.4.7 Budget, Schedule, and Risk Analysis

.1 Aspects to be included (but not limited to) are:
.2 Class ’D’ estimate, for construction,
.3 Detailed work breakdown structure complete with level four sub-tasks,
.4 Analysis of risk implications and preliminary mitigation strategies, and
.5 Budget, Schedule, and Risk Analysis section of the pre-design report.

1.4.8 Rebuttal to internal/external Quality Assurance Audit

.1 Aspects to be included (but not limited to) are:
.2 Review and analysis of comments provided by the RCMP Project Team, and
.3 Summary and results of internal Peer Reviews.
.4 Written response to all comments provided by the above and a summary of project impacts.

RS 2 DESIGN DEVELOPMENT

RS 2.1 INTENT

2.1.1 This stage will further develop the design option selected at stage one pre-design report. The Design Development documents consist of drawings and other documents to describe the scope, quality and cost of the project in sufficient detail to facilitate design approval, confirmation of code compliance, detailed planning of construction and project approval. This design will be used as the basis for preparation of construction documents.

RS 2.2 SCOPE AND ACTIVITIES:

2.2.1 Obtain written approval from Departmental Representative to proceed to Design Development Stage,

2.2.2 Review, validate and update details of system requirements, and base building requirements with the RCMP,

2.2.3 If any alterations are required, analyse the impact on all project components, and resubmit for approval if required,

2.2.4 Present / submit design and materials for review and approval to committees, review groups and authorities having jurisdiction as identified in section Project Administration,

2.2.5 Provide and / or coordinate all information for all project disciplines,

2.2.6 Analyse the constructability of the project and advise on the construction phasing process and duration,

2.2.7 Undertake an update to budget (Class C), schedule and risk analysis and identify any conflicts that will need to be addressed with respect to scope, quality, schedule, cost,

2.2.8 Coordinate services with Departmental Representative,

2.2.9 Continue to review all applicable statutes, regulations, codes and by-laws in relation to the design of the project.

2.2.10 Confirm all aspects of the proposed Site design development.

RS 2.3 DELIVERABLES

2.3.1 Prepare and submit an integrated Design Development Report, for review and acceptance by the Departmental Representative. Revise as required by the Departmental Representative. Resubmit for acceptance. The report will update the Stage One Report, consolidate the Scope and Activities identified above, and will continue to be utilized as the benchmark project control document to monitor progress of the project.

2.3.2 The Design Development Report shall include (but not be limited to) the following aspects, in written narrative, graphic, model (traditional and / or computer generated), and photographic format.

2.3.3 Design Development Report:

.1 Drawings and other media to communicate the entire site and building project for all disciplines showing all elements and services to detail necessary to make all design decisions and to substantially estimate the cost of the project,

.2 Provide a list and draft specification sections of all National Master Specification (NMS) sections to be used. Submit outline specifications for all systems and principle components and equipment. Provide in the outline specifications manufacturers' literature about principal equipment and system components proposed for use in the project,

.3 Fire Protection Engineers Report including requirements, strategies or interventions for protection of the building and its occupants,

.4 Outline Commissioning Plan,

.5 Outline Operation and Maintenance (O&M) Manual.

.6 Preliminary construction schedule including long-term delivery items,

.7 Updated Class 'C' Estimate including estimated annual cash flows,

.8 Update life cycle cost analysis;

.9 Update milestone project schedule, complete with summary of revisions and mitigation strategies (if significant change occurs).

.10 Project Log tracking all approved major decisions including those affecting changes to project scope, budget and schedule,

.11 Design Development consolidating all of the above

RS 2.4 DETAILS

2.4.1 Architectural

.1 Site plan showing the building and Infrastructure items including pedestrian, vehicular, parking, fire routes, security, delivery service access,

.2 Floor plans of affected floor areas showing all accommodation required, including all necessary circulation areas, stairs, elevators, and ancillary spaces anticipated for service use. Indicate building grids, modules, and key dimensions. .

.3 Cross-sections through the building(s) to show floor levels, room heights, inner corridor elevations.

.4 Detail Sections of walls or special design features requiring illustration and explanation of this stage, including fireproofing methods.

.5 Architectural, materials, finishing details and samples to determine choice of materials and finishes.

.6 Details of integration of Security Services.

2.4.2 Civil

.1 Further refined site plans showing site services and building service connections referenced to proposed building outlines, site access roads, parking, fire routes and sidewalks, including existing and proposed grades and drainage improvements. Drawings shall contain locations of manholes (complete with invert elevations), valves, and fire hydrant locations. In addition, identify proposed pipe sizes and slopes, where applicable, and include pipe invert elevations at building foundation.

.2 Identify, by means of Design Summary Sheets, pipe capacity and estimated flows for storm and sanitary sewers. Where contributing to an existing sewer, include analysis of impact on existing systems.

.3 Provide Hydraulic Analysis of any relevant alterations to existing water distribution system in the vicinity of the proposed building to confirm anticipated maximum available fire flow. Calculate and compare site flows to building site fire flow.

.4 Provide typical trench and related details, including profiles of below grade services.

.5 Indicate locations of and provide details of independent utility infrastructure and services such as underground tanks, vaults, wells and utility service pads

2.4.3 Structural

.1 Provide detailed description of structural design concept.

.2 Provide detailed description of structural design concept to resist progressive collapse caused by natural or manmade disasters

.3 Structural drawings indicating modifications or new structural systems, structural materials, fireproofing methods and other significant or unusual details.

.4 Drawings shall indicate all design loads, e.g. dead and live loads on all plans with atypical loads marked.

2.4.4 Mechanical

.1 For the selected option develop :

.1. Develop additional sub-systems options, which were not developed in the schematic/concept stage.

.2. Analyse and compare options using methods including internal Peer Review and select a recommended option.

.3. Develop the design in detail with the recommended option

.2 Site Plan showing service entrances for, domestic water supply, sanitary and storm drains and connections to utility services, including all key invert elevations.

.3 Drawings showing preliminary sizing of ventilation, cooling and heating systems showing locations, and all major equipment layouts in mechanical rooms.

.4 Drawings of plumbing system, showing routing and sizing of major lines and location of pumping and other equipment where required.

.5 Drawings of the fire protection systems showing major components.

.6 Provide written description of design concepts and all specific system components to provide service redundancy in support of business continuity

.7 Analysis of selected equipment and plant with schematics and calculations sufficient to justify the economy of the selected systems.

.8 Describe the mechanical systems to be provided and the components of each system including mechanical ancillary devices needed to support emergency power systems.

.9 Describe the building systems control architecture. Provide preliminary Energy Management Control Services (EMCS) network architecture, mechanical control schematics, and sequence of operation of each building system.

2.4.5 Electrical

.1 For the selected option update the electrical design synopsis. Provide data on the total connected load, the maximum demand and diversity factors, and the sizing of the emergency load.

.2 Identify Utility requirements and indicate short circuit information at point of entry.

.3 Indicate metering locations on distribution diagram.

.4 Include lighting design and control schemes for typical lighting arrangements.

.5 Elaborate on exterior lighting scheme. Provide typical fixture concepts.

.6 Indicate security system major conduit requirements on floor plans.

.7 Provide typical security system details (conduit and boxes) that will be included on construction drawings.

2.4.6 Commissioning

.1 To be prepared by the Architect and Mechanical / Electrical Sub-Consultants, in coordination with the Commissioning Sub-Consultant:

.2 Define requirements for project records and how these records will be managed, updated, and submitted at the end of the project.

.3 Provide an outline of the proposed Commissioning procedures, protocols and schedule requirements.

.4 Prepare a list of Spare or specialty equipment, extra material and redundancies needed to operate and maintain this facility over its life expectancy.

.5 Assessment of:

.1. Staffing & skill requirements to operate and maintain the facility.

.2. The need for service contracts, i.e. elevators, water treatment, controls emergency generators, fire alarm.

.6 Prepare a preliminary O&M budget (Class C).

.7 The O&M budget will contain a detailed breakdown of various items with the assessment of the systems selection. For example, provide an order of magnitude for electrical, mechanical, or specialty equipment and systems maintenance and / or service contract costs.

RS 3 CONSTRUCTION DOCUMENTS

RS 3.1 INTENT

3.1.1 The Consultant must obtain written authorization from the Departmental Representative before proceeding with Construction Documents.

.1 The objective of the Construction Document phase is to translate the design development documents into construction drawings and specifications to guide and direct the Contractor and Sub-Contractors in carrying out their work on the project.

.2 Prepare drawings and specifications setting forth in detail the requirements for the construction and final cost estimate for each tender package for the project.
.3 Construction documents shall be prepared in three phases as follows with progressive submissions for review and approval by the RCMP.
.4 66% indicates substantial technical development of the project - well advanced architectural and engineering plans, elevations, sections, details, schedules and specifications,
.5 99% is the submission of complete Construction Documents ready for tender call,
.6 Final Submission incorporates all revisions required in the 99% version and is intended to provide the Departmental Representative with complete Construction documents ready for tender call.
.7 The Final Submission shall be in English.

RS 3.2 GENERAL

3.2.1 Activities are similar at all three stages; completeness of the project development shall reflect the stage of a submission.

RS 3.3 SCOPE AND ACTIVITIES:

3.3.1 Obtain Departmental Representative's approval for Construction Documents submissions (66%, 99% and final),

3.3.2 Confirm format of drawings and specifications,

3.3.3 Provide full coordination of all disciplines between all tender packages,

3.3.4 Clarify special procedures,

3.3.5 Submit drawings and specifications at the required stages (66%, and 99%),

3.3.6 Include base building Information Services and Security pathways and service infrastructure at each stage,

3.3.7 Provide written response to each disciplines peer review comments and incorporate them into Construction Documents where required,

3.3.8 Advise as to the progress of cost estimates and submit updated cost estimates for each tender package as the project develops,

3.3.9 Prepare a Class 'B' estimate for submission with the 66% submission.

3.3.10 Prepare a final Class 'A' estimate with the 99% submission for each tender package including estimated annual cash flows during projected construction period,

3.3.11 Review and approve materials and construction processes and specifications to meet sustainable development objectives and commissioning,

3.3.12 Establish quality control process to be implemented during construction through sample mock-ups or model areas as part of Construction and Contract Administration stage.

3.3.13 For all disciplines, develop outline for project specific Operation and Maintenance Manuals for each building system,

3.3.14 In collaboration with all relevant disciplines; Authorities having Jurisdiction; and relevant Federal, Provincial, and Municipal codes, standards and legislative requirements for the project, refine, develop, and prepare:

.1 Final code statement;
.2 Final fire separations and life safety plans;
.3 100% complete construction documents for submission to local authority for review. As during the previous design stages, the review of the

construction documents by local authorities will also occur during the Tender Call, Bid Evaluation, and Construction Contract Award stage.

RS 3.4 DELIVERABLES

3.4.1 Deliverables shall occur in three stages, completeness of the project development shall reflect the stage of submission: 66%, 99% or 100%.

3.4.2 The Consultant Team shall prepare and submit an integrated Construction Documents as well as the 100% construction documents (drawings and specifications) for review and approval by the Departmental Representative. Revise as required by the Departmental Representative. Resubmit for acceptance. The construction documents will update the Design Development report, consolidate the Scope and Activities identified above, and will continue to be utilized as the benchmark project control document to monitor progress of the project.

3.4.3 Deliverables are similar at 66%, 99% stages; completeness of the project development shall reflect the stage of a submission.

3.4.4 66, and 99% Submissions

- .1 Coordinate all disciplines within and between all tender packages including any scope changes that may be required to remain within budget.
- .2 Documented responses to RCMP review comments from previous submission.
- .3 Complete written peer reviews with responses to review comments and incorporate them into Construction Documents where required,
- .4 Complete specification and working drawings for all tender packages.
- .5 Complete Commissioning plan.
- .6 One copy of support data, studies, calculations.
- .7 Updated Risk Analysis,
- .8 Updated project cost estimate
- .9 Updated Project Schedule.
- .10 Update Project Log tracking all approved major decisions including those affecting changes to project scope, budget and schedule.

3.4.5 Final Submission

- .1 This submission incorporates all revisions required by the review of the 99% submission. Provide the following for each tender package.
  - .1. Coordinate all disciplines between all tender packages including any scope changes that may be required to remain within budget.
  - .2. Complete set of originals of the working drawings for all tender packages in English.
  - .3. Complete sets of English original specifications.
  - .4. Class ‘A’ estimate.
  - .5. Complete Commissioning Plan.
  - .6. Update the Systems Operations Manual to reflect any changes from the 99% submission. Updated project schedule.
  - .7. Submit and obtain approval on plans and specifications required by Inspection Authorities before tender call.
  - .8. Update Project Log, tracking all approved major decisions including those affecting changes to project scope, budget and schedule.

RS 3.5 SUPPLEMENTARY SUBMISSION REQUIREMENTS

3.5.1 Commissioning Specifications

.1 Use NMS for commissioning as the basis for the project specifications for commissioning. Prepare additional specifications for systems where NMS specifications do not exist. Complete design information required in the performance verification report forms.

.2 Specify detailed performance verification procedures and output, documents, scheduling and reporting requirements.

.3 Identify and include in specification all tests to be conducted at manufacturer's plants, on-site during construction, installation, commissioning on-site and during the operation phase.

.4 Develop a training package for Operation & Maintenance personnel and include in specification.

.5 Use NMS for the identification of equipment and inventory in conjunction with the PMSS / MMS.

.6 Provide PMSS / MMS coding and system nomenclature on tender documents within equipment schedules and on all single line diagrams.

.7 Obtain approval of equipment PMSS / MMS identification from the RCMP Commissioning Manager or designate.

3.5.2 Commissioning Submission Requirements

.1 Outline commissioning plans and specifications included with the 66% construction documents should include the following:

.1. Typical floor plans with general ductwork layouts and duct sizes

.2. Mechanical equipment room layouts and sections with all major systems

.3. Schematics of EMCS, system architecture, sequence of operation, wiring diagrams

.4. Riser diagrams

.5. System schematics

.6. Complete specifications including all sections

.7. Commissioning sequence plan

.8. Building management manual and training plan

.9. Updated O & M budget

.10. General plumbing and fixtures layouts

.2 The detailed commissioning specifications are to be submitted with the 66% construction documents stage and updated and resubmitted at each subsequent stage of the construction documents.

.3 PMSS / MMS system and equipment codes are identified for each piece of mechanical and electrical equipment with the 66% construction documents. Completed PMSS / MMS numbering (with equipment unit counters) for all mechanical and electrical equipment are to be provided at the 99% stage. Submit a comprehensive Commissioning Plan for all systems.

.4 Submit a comprehensive system operator Training Plan.

.5 Final submission of SOM, O&M manual and System operator training plan documents to be English

RS 3.6 CONSTRUCTION DOCUMENT PRODUCTION IN-PROGRESS REVIEWS

3.6.1 Technical and Production Meetings (Project Delivery Coordination Meetings)

.1 Production of construction documents will be reviewed during the meetings arranged by the RCMP Departmental Representative and Consultant as required but at maximum intervals of two weeks.

.2 Representatives from RCMP support staff will be present as arranged by the RCMP Departmental Representative.

.3 The Consultant shall

.1. Ensure that staff and the Sub-Consultant representatives attend the technical and production meetings as required.
.2. Arrange for all necessary data, progress prints.
.3. Prepare minutes of the meetings and distribute copies to all participants.

3.6.2 Progress Review

.1 As work progresses on construction drawings, submit drawings, schedules, details, specifications based on the NMS, pertinent design data, updated Cost Plan, updated Project Schedule, updated Commissioning plan, and updated outline O&M manuals as required.

RS 4 TENDERING SERVICES

RS 4.1 GENERAL REQUIREMENTS

4.1.1 The RCMP will undertake the public tendering of the Project.

4.1.2 The Consultant must perform the following services, in accordance with the terms and conditions of the Agreement and all the requirements of the project brief:

a) Document Interpretation
b) Addenda

RS 5 CONSTRUCTION ADMINISTRATION SERVICES

RS 5.1 GENERAL REQUIREMENTS

The Consultant shall perform the following services in accordance with the terms and conditions of the Agreement and all the requirements of the project brief:

Construction Safety Reviews

5.1.1.1 Project Schedule monitoring and advisement
5.1.1.2 Monthly construction progress and quality assurance reports
5.1.1.3 Shop Drawing Reviews
5.1.1.4 Issuance of Site Instructions
5.1.1.5 Periodic Inspections
5.1.1.6 Development of Construction Change documents
5.1.1.7 Evaluate and review pricing for CCNs
5.1.1.8 Interim Inspection
5.1.1.9 Final Inspection
5.1.1.10 Building Occupation
5.1.1.11 Record (As-built) Drawings and Specifications
5.1.1.12 Warranty Inspection
5.1.1.13 Respond to any RFI's from the contractor.
5.1.1.14 Prepare a preliminary Commissioning Activities plan.
5.1.1.15 Direct and monitor the testing adjusting and balancing processes to ensure compliance with the project brief and the approved commissioning plan.

DELIVERABLES

1.2.1 Written reports from site visits including persons involved.

1.2.2 Written reports from site visits on the progress of work and the verification of the work completed on the project at the end of each month in relation to progress claims submitted.

1.2.3 The above mentioned reports to include the following criteria (but not necessarily limited to):

1.2.3.1 Site Conditions,
1.2.3.2 Materials noted,
1.2.3.3 Work progress observed (new and previous visits),
1.2.3.4 Directions given to contractor, issues arising with quality or schedule and risks to be considered.
1.2.3.5 Schedule,
1.2.3.6 Site Photos

5.2 CONSTRUCTION PROJECT MEETINGS

5.2.1 In coordination with RCMP Project Manager arrange meetings as deemed suitable, throughout the entire construction period, for all members of the project team to attend, including representatives from:

A) End- Users
B) Prime Consultant
C) Prime Consultant's Sub-Consultants as determined by the Prime Consultant in conjunction with the Project Manager.
D) Contractor and their Subcontractors

It is expected that there will be a minimum of 10 on-site construction project meetings and not more than 14 meetings on-site for the Support Services Steam Line Replacement project. Teleconference calls will be coordinated as required to review the construction progress status and work through challenges/issues and issues prior to arriving on the construction site. References to the site would normally mean the construction site at RCMP Depot Academy in Regina, Sask.

5.2.2 The Consultant shall include in the contract documents the requirement for the Contractor to attend the meetings and conference calls. The **"consultant"** shall record the issues and decisions of all construction site meetings and teleconferences and prepare and distribute minutes to all the attendees within (3) three working days of the same meeting.

5.2.3 The Prime Consultant and their proposed Sub/Specialist Consultants, should be personally available to attend the design and construction meetings when the specific discipline is required and respond to inquiries within three (3) working days of the Project Manager's request, in the locality of the place of the work, from the date of the award of the Consultant's contract, until final inspection and turnover.

5.2.4 Review previous minutes for errors in fact, omissions or other discrepancies and ensure that previous records are accepted by all parties and that their acceptance is recorded.

5.2.5 Construction meetings will normally be held at the specific project site.

5.2.6 The Consultant shall attend meetings and conference calls, cooperate and coordinate with the Contractor, who shall record the issues and decisions and prepare and distribute minutes within 72 hours of the meeting.

5.2.7 The Consultant shall include in the contract documents, for provision by the Contractor, requirements for a meeting room of sufficient size, appropriate furniture and equipment, to hold Project Meetings.

RS6 COMMISSIONING

6.1 COMMISSIONING

6.1.1 Establish Design Criteria, functional and operational requirements, if not already established in the RFP or Project Brief. Full Commissioning is not required for this facility. The intent is to design, check and verify that all building systems are functioning to the design specifications.

6.1.2 Prepare a preliminary Commissioning Activities plan.

6.1.3 Direct and monitor the testing adjusting and balancing processes to ensure compliance with the statement of work and the approved commissioning plan.

6.1.4 Plan the performance verification (PV) activities, processes and their output, including development of project-specific:

1. Installation / Start-up Check Lists
2. Product Information (PI) Report Forms and Performance Verification (PV) Report Forms, and
3. Design data to PI and PV report forms

6.1.5 Prepare a Training plan.

6.1.6 Identify Contractor and subcontractor PV and testing responsibilities,

6.1.7 Review shop drawings and product data and accompanying Product Information (PI) as completed by the Contractor,

6.1.8 Ensure that all systems have been properly verified, balanced etc. in compliance with the Performance Specifications and Commissioning Plan, prior to occupancy.

6.1.9 Submit three (3) hard copies and one (1) electronic copy of the completed Maintenance Manuals and Maintenance Schedule to the Project Manager.

6.1.10 Ensure that all required training and operating system demonstrations have been properly conducted and completed.

6.1.11 Identify and verify the rectification of all outstanding deficiencies,

6.1.12 Assist in the resolution of all issues relating to commissioning,

6.1.13 Prepare "as-built" documentation (plans and specifications) as described elsewhere in the RFP or Statement of Work,

6.1.14 Recommend acceptance of the completed project,

RS7 POST CONSTRUCTION SERVICES

7.1 GENERAL

7.1.1 The Consultant shall perform the following services, in accordance with the terms and conditions of the Agreement and all requirements of this RFP

7.1.1.2 Ten-Month Warranty Inspection and final Warranty Inspection.