

PART 1 – GENERAL

1.1 WORK COVERED BY
CONTRACT DOCUMENTS

- .1 Installation of new diesel generator including but limited to generator, sub-base fuel tanks, enclosure, concrete slab, security fence, automatic transfer switch, and hardware.
- .2 Trenching and installation of new underground wiring in conduit
- .3 Connection of new diesel generator to new automatic transfer switch in electrical room.
- .4 Connection of 120V circuits to battery charger, block heater, and generator heater.
- .5 Installation of security fence.
- .6 Construct Work under a single, stipulated price contract, CCDC#2 subject to Federal Government amended General Conditions.
- .7 Final completion as contract dictates.

1.4 CONTRACTOR USE
OF PREMISES

- .1 Construct Work in stages to accommodate Owner's continued use of the existing premises at all times during the construction.
- .2 The Contractor shall have restricted use of the site location.
- .3 Obtain and pay for use of additional storage or work areas needed for operations under this Contract.
- .4 Remove or alter existing work to prevent injury or damage to portions of existing which will remain.

1.5 OWNER OCCUPANCY

- .1 Owner will occupy existing premises for execution of normal operations up to a point to be determined with the Contractor, and to be able to resume operations as soon as possible.
- .2 Co-operate with Owner in scheduling operations to minimize conflicts and to facilitate Owner usage.

1.6 DOCUMENTS
REQUIRED

- .1 Maintain at job site, one copy each document as follows:
 - .1 Contract Drawings.
 - .2 Specifications.
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- .3 Addenda.
- .4 Reviewed Shop Drawings.
- .5 List of Outstanding Shop Drawings.
- .6 Change Orders.
- .7 Other Modifications to Contract.
- .8 Field Test Reports.
- .9 Copy of Approved Work Schedule.
- .10 Health and Safety Plan and Other Safety Related Documents.
- .11 Other documents as specified.

PART 2 - PRODUCTS Not Used.

PART 3 - EXECUTION Not Used.

PART 1 – GENERAL

1.1 ADMINISTRATIVE

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

1.2 SHOP DRAWINGS
AND PRODUCT DATA

- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by the Contractor to illustrate details of a portion of Work.
 - .2 Submit shop drawings bearing stamp and signature of qualified professional engineer registered or licensed in Province of New Brunswick, Canada where required.
 - .3 Indicate materials, methods of attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
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- .4 Allow 5 days for Departmental Representative's review of each submission. Allow an additional five days for the Consultant's review of each submission.
 - .5 Adjustments made on shop drawings by the Departmental Representative and/or the Consultant are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Departmental Representative prior to proceeding with Work.
 - .6 Make changes in shop drawings as Departmental Representative and/or Consultant may require, consistent with Contract Documents. When resubmitting, notify Consultant, in writing, of any revisions other than those requested. Consultant is to provide initial review of submittals.
 - .7 Accompany submissions with transmittal letter containing:
 - .1 Date.
 - .2 Project title and number.
 - .3 Contractor's name and address.
 - .4 Identification and quantity of each shop drawing, product data and sample.
 - .5 Other pertinent data.
 - .8 Submissions shall include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Subcontractor.
 - .2 Supplier.
 - .3 Manufacturer.
 - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
 - .5 Details of appropriate portions of Work as applicable:
 - .1 Fabrication.
 - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
 - .3 Setting or erection details.
 - .4 Capacities.
 - .5 Performance characteristics.
 - .6 Standards.
 - .7 Operating weight.
 - .8 Wiring diagrams.
 - .9 Single line and schematic diagrams.
 - .10 Relationship to adjacent work.
 - .9 After Consultant's review, distribute copies to suppliers and installers as appropriate for manufacture and installation.
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- .10 Submit shop drawings for each requirement requested in specification sections and as Departmental Representative may reasonably request.
- .11 Submit shop drawings of product data sheets or brochures for requirements requested in specification Sections and as requested by Departmental Representative where shop drawings will not be prepared due to standardized manufacture of product.
- .12 Submit all shop drawing, product data sheets and brochures as PDF files electronically via email.
- .13 Delete information not applicable to project.
- .14 Supplement standard information to provide details applicable to project.
- .15 If upon review by Consultant, no errors or omissions are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of Work may proceed.

1.3 SAMPLES

- .1 Submit for review samples in duplicate as requested in respective specification Sections. Label samples with origin and intended use.
- .2 Deliver samples prepaid to Departmental Representative's business address.
- .3 Notify Departmental Representative, in writing, at time of submission of deviations in samples from requirements of Contract Documents.
- .4 Where colour, pattern or texture is criterion, submit full range of samples.
- .5 Adjustments made on samples by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Departmental Representative prior to proceeding with Work.
- .6 Make changes in samples which Departmental Representative may require, consistent with Contract Documents.
- .7 Reviewed and accepted samples will become standard of workmanship and material against which installed Work will be verified.

1.4 CERTIFICATES AND TRANSCRIPTS

- .1 Immediately after award of Contract, submit Workers' Compensation Board status, transcription of insurance and other documentation required by the Contract.
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PART 2 – PRODUCTS Not Used.

PART 3 – EXECUTION Not Used.

PART 1 - GENERAL

1.1 REFERENCES

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations.
- .2 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
 - .1 Material Safety Data Sheets (MSDS).
- .3 Province of New Brunswick
 - .1 Occupational Health and Safety Act, S.N.B. 1983.

1.2 SUBMITTALS

- .1 Make submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
 - .1 Results of site specific safety hazard assessment.
 - .2 Results of safety and health risk or hazard analysis for site tasks and operation found in work plan.
- .3 Submit 2 copies of Contractor's authorized representative's work site health and safety inspection reports to Departmental Representative.
- .4 Submit copies of reports or directions issued by Federal and Provincial health and safety inspectors.
- .5 Submit copies of incident and accident reports.
- .6 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 3 days after receipt of plan. Revise plan as appropriate and resubmit plan to Consultant 3 days after receipt of comments from Departmental Representative.
- .7 Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .8 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.

1.3 FILING OF NOTICE

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

1.4 SAFETY

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

1.5 REGULATORY REQUIREMENTS

- .1 Do Work in accordance with Section 01 41 00 - Regulatory Requirements.

1.6 GENERAL REQUIREMENTS

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

1.7 RESPONSIBILITY

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

1.8 COMPLIANCE REQUIREMENTS

- .1 Comply with Occupational Health and Safety Act, Occupational Safety General Regulations, N.B. Reg. O.C. 91-1035.

1.9 UNFORSEEN HAZARDS

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

1.10 POSTING OF DOCUMENTS

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

1.11 CORRECTION OF NON-COMPLIANCE

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

1.12 BLASTING

- .1 Blasting or other use of explosives is not permitted.
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1.13 POWDER
ACTUATED DEVICES

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

1.14 WORK STOPPAGE

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

PART 2 - PRODUCTS

Not used.

PART 3 - EXECUTION

Not used.

PART 1 - GENERAL

1.1 DEFINITIONS

- .1 Environmental Pollution and Damage: presence of chemical, physical, biological elements or agents which adversely affect human health and welfare; unfavourably alter ecological balances of importance to human life; affect other species of importance to humankind; or degrade environment aesthetically, culturally and/or historically.
- .2 Environmental Protection: prevention/control of pollution and habitat or environment disruption during construction. Control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2 FIRES

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

1.3 DISPOSAL OF WASTES

- .1 Do not bury rubbish and waste materials on site.
- .2 Do not dispose of waste or volatile materials, such as mineral spirits, oil or paint thinner into waterways, storm or sanitary sewers.

1.4 DRAINAGE

- .1 Do not pump water containing suspended materials into waterways, sewer or drainage systems.
- .2 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.5 POLLUTION CONTROL

- .1 Maintain temporary pollution control features installed under this contract.
- .2 Control emissions from equipment to local authorities' emission requirements.
- .3 Prevent extraneous materials from contaminating air and waterways beyond application area, by providing temporary enclosures.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris.

1.6 NOTIFICATION

- .1 Departmental Representative will notify Contractor in writing of observed noncompliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of Contractor's Environmental Protection plan.
 - .2 After receipt of such notice, inform Departmental Representative of proposed corrective action and take such action for approval by
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Departmental Representative.

- .3 Departmental Representative will issue stop order of work until satisfactory corrective action has been taken.
- .4 No time extensions granted or equitable adjustments allowed to Contractor for such suspensions.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

PART 1 - GENERAL

1.1 GENERAL

- .1 Due to nature of this Facility, and client operations therein, security regulations pertaining to site will be in place during the work resulting in need for:
 - .1 Control and limit movement of construction workers at the site and inside building;
 - .2 Escort and continuous supervision of workers by security personnel;
 - .3 All Workers must undergo a security clearance process;
 - .4 Specific rules and regulations as specified in this section and as directed by the Departmental Representative to be stringently followed.
- .2 It is the Contractor's responsibility to:
 - .1 Submit necessary documentation required and obtain security clearance for all workers;
 - .2 Become familiar with and abide by security rules and regulations;
 - .3 Brief all workers and subcontractors in respect of the security regulations and ensure that they abide by all rules and directives.
- .3 The Departmental Representative will coordinate a pre-construction meeting between Contractor, Facility Management and Security Personnel who will provide details and directives on control and movement on site.
- .4 Any infraction of site security regulations on the part of the Contractor, members of work force or any Subcontractor in his employ, could result in:
 - .1 Financial penalties in the form of progress payment reduction on holdback assessments being levied against the Contractor and;
 - .2 Demand immediate removal of offending party from the site.

1.2 SECURITY PERSONNEL

- .1 Obtain and pay for the services of security personnel, employed by the Canadian Corps of Commissionaires to provide escort and security supervision of all workers during the work of this contract.
- .2 Commissionaires employed on this project must have a current Enhanced Reliability Security Clearance status issued by RCMP.
- .3 Provide minimum of 1 Commissionaire to be on site at all times when work is carried out inside RCMP Detachment building, having the following responsibilities:
 - .1 Limit movement of workers to within the boundaries established by the Departmental Representative;
 - .2 Maintain security control list of workers authorized to be on site as determined by Contractor and the Departmental Representative;
 - .3 Manage the distribution and control of worker ID tags;
 - .4 Escort workers who need to circulate on site beyond the established boundaries of work, including the corridors, stairwells and elevators used for entry into and work inside the existing building and access to and from work areas.
 - .5 Escort and supervise short term visitors who need access to the work

- site such as for material deliveries or to conduct inspections.
- .4 Provide additional commissionaires when required to perform supervision or escort function as may be needed due to Contractor's work operations in order that no worker is left unsupervised if work is to take place inside restricted building(s) on site.
 - .5 Ensure Commissionaire(s) are present on site for entire work shift including work breaks and time period after work shifts until all workers have left site.
 - .6 Commissionaire must stay within the actual construction area and provide surveillance of all workers ensuring that security rules and requirements are obeyed and to limit movement to approved work areas of site.
 - .7 Commissionaire must also escort workers from approved entry locations and work area(s).
 - .8 Escort and supervision of workers by Commissionaire, when required by the Work, will be provided at all times when work of the contract is being performed regardless of whether this is during regular business hours or beyond.
 - .9 Commissionaire shall report directly to the Departmental Representative and ensure that site security directives are obeyed by all workers.
 - .1 Empower Commissionaire with authority to remove any worker deemed non-compliant with security directives.
 - .10 Ensure Commissionaire is fitted and wears approved safety hard hat, safety footwear and other personnel protective equipment appropriate to work in accordance with applicable Occupational Health and Safety requirements specified.

1.3 SECURITY CLEARANCE REQUIREMENTS

- .1 All persons employed by Contractor or by subcontractors who will be working on site must undergo the following check:
 - .1 Apply for RCMP personnel security clearance screening and obtain a clearance ranging from a Facility Access 1 for exterior work or Facility Access 2 (escort required) for all work completed inside the Detachment building.
 - .2 The Contractor must have a Foreman/Site Superintendent on site at all times. As such, the Contractor shall have a back-up Foreman/Site Superintendent.
 - .3 All of the Contractor's and/or Subcontractor's workers require RCMP Facility Access 1 for exterior work or Facility Access 2 (Escort Required) for all work carried out inside RCMP Detachment buildings.
- .2 Persons who do not have security clearance, as specified above, will not be allowed on site.
- .3 Departmental Representative will advise when worker security clearance has been received and whether escort and supervision is still needed for

any worker.

1.4 SECURITY CLEARANCE
APPLICATION

- .1 In order to expedite the security clearance process, the successful bidder must submit the application forms and all supporting documentation for all workers who require Security Clearance as soon as the project is officially awarded.
 - .1 Make application for all workers as one submission to facilitate processing and minimize delays.
 - .2 To obtain the RCMP Facility Access 1 (No Escort Required for Exterior or Grounds Work Only) or for Facility Access 2 (Escort Required - Work inside of RCMP Building) clearance, the following information is required for each applicant:
 - .1 "Personnel Screening, Consent and Authorization form" (Form No. TBS/SCT #330-23E (rev. 2006/02) Completed by each worker.
 - .2 Contractor declaration to Public Works & Government Services Canada (PWGSC Security Form "A") Completed by Contractor attesting to having conducted an assessment of reliability for each worker applicant verifying employment and other reference data.
 - .3 Proof of applicant's identity consisting of a picture ID such as a Canadian Motor Vehicle Driver's License or other similar official ID card. Provide copy of front and back of driver's license. The photo ID must be verified and signed by the Departmental Representative / Project Authority.
 - .4 Proof of applicant's Canadian Citizenship consisting of a provincial issued birth certificate, baptismal certificate, citizenship certificate or passport. (Provide Copy)
 - .5 Include forms along with clear legible photocopy of the citizenship and identity documents submitted as one complete package for each applicant.
 - .3 A sample of the above mentioned forms are included at the end of this Specification Manual for reference purposes and marked Appendix "A".
 - .1 Information of filling out form TBS/SCT #330-23E are as follows:
 - .1 Part A: by RCMP Project Manager;
 - .2 Part B: by applicant. Provide full name, including middle name (not simply an initial). Ensure addresses listed represent last five (5) years of residence and each address is fully completed including postal code. Print data in clear, legible manner.
 - .3 Part C: Only boxes, 1, 2 and 5 need to be completed, requiring applicant's initials. Name of official requested here can be RCMP Project Manager or regional RCMP security agent provided that contractor submits the RCMP Security Form "A" specified above.
 - .4 Processing Time:
 - .1 The RCMP Departmental processing time to obtain all security clearance is estimated to be up to 8 weeks from date of receipt of required and correct documentation.
 - .2 To avoid delays, prepare worker documentation as soon as possible, however, submit documentation for each applicant as one package

and send information for entire workforce as one submission. Ensure forms are fully completed, signed and that all information and photo identification is clear and legible.

- .3 Be aware that processing time for applicants with criminal convictions may take longer and could extend to 6 months duration.
- .5 Facilitate workers security clearance process as follows:
 - .1 Prepare comprehensive list of workers who will require security clearance throughout project, including those of subcontractors.
 - .2 Provide copy of list to Departmental Representative.
 - .3 Coordinate and expedite submission of various subcontractors.
 - .4 Brief and assist applicants in preparing and submitting documentation.
 - .5 Review documentation of each applicant for completeness before submission.
 - .6 Have each worker keep a copy of their completed application form in case the initial submission gets lost.
 - .7 Submit documentation in an organized manner with transmittal letter clearly identifying project for which worker clearance is required.
- .6 Send submission(s) directly to Departmental Representative or to the approved mailing address as directed by Departmental Representative.
- .7 Persons who have not been successful in obtaining security clearance, upon documentation review by RCMP, will not be allowed further access on site and cannot work on project any longer.

1.5 SECURITY PASSES

- .1 All personnel, visitors or workers, requiring access on site and/or inside the existing building(s) on site beyond the public lobby require a HRMIS number issued by RCMP. It is the responsibility of the Contractor and all personnel, visitors and workers to know their HRMIS number.

1.6 SECURITY CONTROL LIST

- .1 Provide a list of employee names from workforce and from subcontractors who will be present at site during the course of work.
- .2 List to include each person's name, address and telephone number.
- .3 Submit copy of list to Departmental Representative and to Security Commissionaire for control of workers.
- .4 Update list as work progresses.
- .5 Ensure that each worker can provide proof of identity upon demand, when requested by Security Personnel or Departmental Representative.

1.7 BUILDING ACCESS

- .1 Keys and door security access cards necessary for access to restricted areas may be issued at the discretion of the Departmental Representative. Follow all instructions in regards to use, care and disposition of all keys and access cards so issued,
- .2 Keys and security access cards given to the Commissionaire for his sole

- possession, as determined by Departmental Representative, shall not under any circumstances be given to any worker or subcontractor.
- .3 Do not, under any circumstances, make or allow workers to make duplicates of keys issued.
 - .4 At end of project, return to Departmental Representative all keys and access cards issued.
 - .5 Immediately report to Departmental Representative any lost, stolen or destroyed keys and door security access cards.
- 1.8 SITE SECURITY
- .1 When work must be carried out during Off Hours or beyond the work hours previously agreed upon at start of work, provide notice within 48 hours beforehand to minimize impact on security and other operations on site.

END OF SECTION

PART 1 - GENERAL

1.1 REFERENCES AND
CODES

- .1 Perform Work in accordance with National Building Code of Canada (NBC) including amendments up to tender closing date and other codes of provincial or local application provided that in the case of conflict or discrepancy, the more stringent requirements apply.
- .2 Meet or exceed requirements of:
 - .1 Contract documents.
 - .2 Specified standards, codes and referenced documents.

1.2 BUILDING
SMOKING ENVIRONMENT

- .1 Comply with smoking restrictions and municipal by-laws.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

PART 1 – GENERAL

1.1 INSPECTION

- .1 Allow Departmental Representative and the Consultant access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Give minimum 48 hour notice requesting inspection by Consultants, or if Work is designated for special tests, inspections or reviews by Consultant, or law of Place of Work.
- .3 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .4 Consultant or the Department Representative may order any part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction. If such Work is found in accordance with Contract Documents, Consultant shall pay cost of examination and replacement.

1.2 INDEPENDENT
INSPECTION AGENCIES

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

1.3 ACCESS TO WORK

- .1 Allow inspection/testing agencies access to Work.
- .2 Co-operate to provide reasonable facilities for such access.

1.4 PROCEDURES

- .1 Notify appropriate agency and Consultant in advance of requirement for tests, in order that attendance arrangements can be made.
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- .2 Submit samples and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in an orderly sequence so as not to cause delay in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

1.5 REJECTED WORK

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Consultant as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If in opinion of Consultant it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner may deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which shall be determined by Consultant.

1.6 REPORTS

- .1 Submit 3 copies of inspection and test reports to Departmental Representative.

1.7 TESTS AND MIX DESIGNS

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

1.8 MILL TESTS

- .1 Submit mill test certificates as required of specification Sections.

1.9 EQUIPMENT AND SYSTEMS

- .1 Submit reports for equipment and systems as required of specification Sections.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

PART 1 – GENERAL

1.1 SUBMITTALS

- .1 Provide submittals in accordance with Section 01 33 00 – Submittal Procedures.

1.2 SCAFFOLDING

- .1 Scaffolding in accordance with CAN/CSA-S269.2.
- .2 Provide and maintain scaffolding, ramps, ladders, swing staging, platforms and temporary stairs.

1.3 HOISTING

- .1 Provide, operate and maintain hoists required for moving workers, materials and equipment. Make financial arrangements with Sub contractors for their use of hoists.

1.4 CONSTRUCTION
PARKING

- .1 Parking will be permitted on site provided it does not disrupt performance of Work nor the operations of the Facility.

1.5 CLEAN-UP

- .1 Remove construction debris, waste materials, packaging material from work site daily.
- .2 Clean dirt or mud tracked onto paved or surfaced roadways.
- .3 Store materials resulting from demolition activities that are salvageable.
- .4 Stack stored new or salvaged material in a location other than the construction facilities.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

PART 1 - GENERAL

1.1 REFERENCES

- .1 Within text of each specifications section, reference may be made to reference standards.
- .2 Conform to these reference standards, in whole or in part as specifically requested in specifications.
- .3 If there is question as to whether products or systems are in conformance with applicable standards, Consultant reserves right to have such products or systems tested to prove or disprove conformance.
- .4 Cost for such testing will be born by the Departmental Representative in event of conformance with Contract Documents or by Contractor in event of non-conformance.

1.2 AVAILABILITY

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

1.3 STORAGE, HANDLING AND PROTECTION

- .1 Handle and store products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions when applicable.
 - .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove from packaging or bundling until required in Work.
 - .3 Store products subject to damage from weather in weatherproof enclosures.
 - .4 Store cementitious products clear of earth or concrete floors, and away from walls.
 - .5 Store sheet materials, and lumber on flat, solid supports and keep clear of ground. Slope to shed moisture.
 - .6 Store and mix paints in heated and ventilated room. Remove oily rags and other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.
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- .7 Remove and replace damaged products at own expense and to satisfaction of Consultant.
- .8 Touch-up damaged factory finished surfaces to Departmental Representative's satisfaction. Use touch-up materials to match original. Do not paint over name plates.

1.4 TRANSPORTATION

- .1 Pay costs of transportation of products required in performance of Work.

1.5 MANUFACTURER'S INSTRUCTIONS

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

1.6 QUALITY OF WORK

- .1 Ensure Quality of Work is of highest standard, executed by workers experienced and skilled in respective duties for which they are employed. Immediately notify Consultant if required Work is such as to make it impractical to produce required results.
- .2 Do not employ anyone unskilled in their required duties. Departmental Representative reserves right to require dismissal from site, workers deemed incompetent or careless.
- .3 Decisions as to standard or fitness of Quality of Work in cases of dispute rest solely with Departmental Representative whose decision is final.

1.7 CO-ORDINATION

- .1 Ensure co-operation of workers in laying out Work. Maintain efficient and continuous supervision.
- .2 Be responsible for coordination and placement of openings, sleeves and accessories.

1.8 CONCEALMENT

- .1 In finished areas conceal pipes, ducts and wiring in floors, walls and ceilings, except where indicated otherwise.
 - .2 Before installation inform Departmental Representative if there is interference. Install as directed by Consultant.
-

1.9 REMEDIAL WORK

- .1 Refer to Section 01 73 03 - Execution Requirements.

1.10 LOCATION OF
FIXTURES

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

1.11 FASTENINGS

- .1 Provide metal fastenings and accessories in same texture, colour and finish as adjacent materials, unless indicated otherwise.
- .2 Prevent electrolytic action between dissimilar metals and materials.
- .3 Use non-corrosive hot dip galvanized steel fasteners and anchors for securing exterior work, unless stainless steel or other material is specifically requested in affected specification Section.
- .4 Space anchors within individual load limit or shear capacity and ensure they provide positive permanent anchorage. Wood, or any other organic material plugs are not acceptable.
- .5 Keep exposed fastenings to a minimum, space evenly and install neatly.
- .6 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.

1.12 FASTENINGS -
EQUIPMENT

- .1 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- .2 Use heavy tamper-proof heads, semi-finished unless otherwise specified. Use No. 304 stainless steel for exterior areas.
- .3 Bolts may not project more than one diameter beyond nuts.
- .4 Use plain type washers on equipment, sheet metal and soft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.

1.13 PROTECTION OF
WORK IN PROGRESS

- .1 Prevent overloading of parts of building. Do not cut, drill or sleeve load bearing structural member, unless specifically indicated, without written approval of Departmental Representative.

1.14 EXISTING
UTILITIES

- .1 When breaking into or connecting to existing services or utilities, execute Work at times directed by local governing authorities, with minimum of disturbance to Work, and pedestrian and vehicular traffic.
 - .2 Protect, relocate or maintain existing active services. When services are encountered, cap off in manner approved by authority having jurisdiction.
-

Stake and record location of capped service.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

PART 1 - GENERAL

1.1 SUBMITTALS

- .1 Submittals: in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit written request in advance of cutting or alteration which affects:
 - .1 Structural integrity of elements of project.
 - .2 Integrity of weather-exposed or moisture-resistant elements.
 - .3 Efficiency, maintenance, or safety of operational elements.
 - .4 Visual qualities of sight-exposed elements.
 - .5 Work of Owner or separate contractor.
- .3 Include in request:
 - .1 Identification of project.
 - .2 Location and description of affected Work.
 - .3 Statement on necessity for cutting or alteration.
 - .4 Description of proposed Work, and products to be used.
 - .5 Alternatives to cutting and patching.
 - .6 Effect on Work of Owner or separate contractor.
 - .7 Written permission of affected separate contractor.
 - .8 Date and time work will be executed.

1.2 MATERIALS

- .1 Required for original installation.
- .2 Change in Materials: Submit request for substitution in accordance with Section 01 33 00 - Submittal Procedures.

1.3 PREPARATION

- .1 Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- .2 After uncovering, inspect conditions affecting performance of Work.
- .3 Beginning of cutting or patching means acceptance of existing conditions.
- .4 Provide supports to assure structural integrity of surroundings; provide devices and methods to protect other portions of project from damage.
- .5 Provide protection from elements for areas which are to be exposed by uncovering work; maintain excavations free of water.

1.4 EXECUTION

- .1 Execute cutting, fitting, and patching including excavation and fill, to complete Work.
 - .2 Fit several parts together, to integrate with other Work.
 - .3 Uncover Work to install ill-timed Work.
 - .4 Remove and replace defective and non-conforming Work.
-

- .5 Provide openings in non-structural elements of Work for penetrations of mechanical and electrical Work.
- .6 Execute Work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
- .7 Employ original installer to perform cutting and patching for weather-exposed and moisture-resistant elements, and sight-exposed surfaces.
- .8 Cut rigid materials using masonry saw or core drill. Pneumatic or impact tools not allowed on masonry work without prior approval by Departmental Representative.
- .9 Restore work with new products in accordance with requirements of Contract Documents.
- .10 Fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- .11 At penetration of fire rated wall, ceiling, or floor construction, completely seal voids with firestopping material in accordance with ULC S115-05 Standard Method of Fire Tests and Firestop Systems for full thickness of the construction element.
- .12 Refinish surfaces to match adjacent finishes: Refinish continuous surfaces to nearest intersection. Refinish assemblies by refinishing entire unit.
- .13 Conceal pipes, ducts and wiring in floor, wall and ceiling construction of finished areas except where indicated otherwise.

1.5 WASTE
MANAGEMENT AND
DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management And Disposal.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

PART 1 - GENERAL

1.1 PROJECT
CLEANLINESS

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris.
- .2 Remove waste materials from site at regularly scheduled times. Do not burn waste materials on site.
- .3 Bank/pile snow in designated areas only or if not available, remove from site.
- ..4 Clean interior areas prior to start of finishing work, and maintain areas free of dust and other contaminants during finishing operations.
- .5 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .6 Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
- .7 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
- .8 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.

1.2 FINAL CLEANING

- .1 When Work is Substantially Performed remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.

1.3 WASTE
MANAGEMENT AND
DISPOSAL

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management And Disposal.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

PART 1 - GENERAL

1.1 DEFINITIONS

- .1 Inert Fill: inert waste - exclusively asphalt and concrete.
- .2 Materials Source Separation Program (MSSP): consists of series of ongoing activities to separate reusable and recyclable waste material into material categories from other types of waste at point of generation.
- .3 Recyclable: ability of product or material to be recovered at end of its life cycle and re-manufactured into new product for reuse.
- .4 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .5 Recycling: process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for purpose of using in altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- .6 Reuse: repeated use of product in same form but not necessarily for same purpose. Reuse includes:
 - .1 Salvaging reusable materials from re-modelling projects, before demolition stage, for resale, reuse on current project or for storage for use on future projects.
 - .2 Returning reusable items including pallets or unused products to vendors.
- .7 Salvage: removal of structural and non-structural materials from deconstruction/disassembly projects for purpose of reuse or recycling.
- .8 Separate Condition: refers to waste sorted into individual types.
- .9 Source Separation: acts of keeping different types of waste materials separate beginning from first time they became waste.

1.2 STORAGE, HANDLING AND PROTECTION

- .1 Store, materials to be reused, recycled and salvaged in locations as directed by Consultant.
 - .2 Unless specified otherwise, materials for removal become Contractor's property.
 - .3 Separate non-salvageable materials from salvaged items. Transport and deliver non-salvageable items to licensed disposal facility.
 - .4 Protect surface drainage, mechanical and electrical from damage and blockage.
-

- .5 Separate and store materials produced during dismantling of structures in designated areas.
- .6 Prevent contamination of materials to be salvaged and recycled and handle materials in accordance with requirements for acceptance by designated facilities.
 - .1 On-site source separation is recommended.
 - .2 Remove co-mingled materials to off-site processing facility for separation.
 - .3 Provide waybills for separated materials.

1.3 DISPOSAL OF WASTES

- .1 Do not bury rubbish or waste materials.
- .2 Do not dispose of waste volatile materials mineral spirits oil paint thinner into waterways, storm, or sanitary sewers.
- .3 Remove materials from deconstruction as deconstruction/disassembly Work progresses.
- .4 Provide documentation to Owner that proper disposal has been completed.

1.4 SCHEDULING

- .1 Co-ordinate Work with other activities at site to ensure timely and orderly progress of Work.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.1 APPLICATION

- .1 Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes.
 - .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
 - .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and other packaging material in appropriate on-site containers for recycling in accordance with MSSP.
 - .4 Divert unused metal materials from landfill to metal recycling facility if available.
 - .5 Ensure emptied containers are sealed and stored safely.
 - .6 Unused paint or coating material must be disposed of at an official hazardous material collections site.
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- .7 Do not dispose of unused paint material into sewer system, into streams, lakes, onto ground or in other location where it will pose health or environmental hazard.
 - .8 Dispose of unused sealant material at official hazardous material collections site.
 - .9 Unused sealant and caulking materials must not be disposed of into sewer system, into streams, lakes, onto ground or in other location where it will pose health or environmental hazard.
 - .10 Dispose of unused adhesive material at official hazardous material collections site.
 - .11 Fold up metal banding, flatten and place in designated area for recycling.
- 3.2 CLEANING
- .1 Remove tools and waste materials on completion of Work, and leave work area in clean and orderly condition.
 - .2 Clean-up work area as work progresses.

PART 1 - GENERAL

1.1 INSPECTION AND DECLARATION

- .1 Contractor's Inspection: Contractor and Subcontractors: conduct inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents.
 - .1 Notify Departmental Representative in writing of satisfactory completion of Contractor's Inspection and that corrections have been made.
 - .2 Request Consultant's Inspection.
 - .2 Consultant's Inspection: Consultant and Contractor will perform inspection of Work to identify obvious defects or deficiencies. Contractor to correct Work accordingly.
 - .3 Completion: submit written certificate that following have been performed:
 - .1 Work has been completed and inspected for compliance with Contract Documents.
 - .2 Defects have been corrected and deficiencies have been completed.
 - .3 Equipment and systems have been tested, adjusted and balanced and are fully operational.
 - .4 Certificates required by utility companies have been submitted.
 - .5 Operation of systems have been demonstrated to Owner's personnel.
 - .6 Work is complete and ready for final inspection.
 - .4 Final Inspection: when items noted above are completed, request final inspection of Work by Departmental Representative, Consultant, and Contractor. If Work is deemed incomplete by Departmental Representative and Consultant, complete outstanding items and request re-inspection.
 - .5 Declaration of Substantial Performance: when Departmental Representative and Consultant consider deficiencies and defects have been corrected and it appears requirements of Contract have been substantially performed, make application for certificate of Substantial Performance.
 - .6 Commencement of Lien and Warranty Periods: date of Departmental Representative's acceptance of submitted declaration of Substantial Performance shall be date for commencement for warranty period and commencement of lien period unless required otherwise by lien statute of Place of Work.
 - .7 Final Payment: when Departmental Representative and Consultant consider final deficiencies and defects have been corrected and it appears requirements of Contract have been totally performed, make application for final payment. If Work is deemed incomplete by Departmental Representative and Consultant, complete outstanding items and request re-inspection.
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- .8 Payment of Holdback: after issuance of certificate of Substantial Performance of Work, submit an application for payment of holdback amount.

1.2 CLEANING

- .1 Clean premises in accordance with Section 01 74 11 - Cleaning.
- .2 Remove waste and surplus materials, rubbish and construction facilities from the site in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.

PART 1 - GENERAL

1.1 SUBMITTALS

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

1.2 FORMAT

- .1 Organize data as instructional manual.
 - .2 Binders: vinyl, hard covered, 3 'D' ring, loose leaf 8-1/2" x 11" paper size with spine and face pockets.
 - .3 When multiple binders are used correlate data into related consistent groupings. Identify contents of each binder on spine.
 - .4 Cover: identify each binder with type or printed title 'PROJECT RECORD DOCUMENTS'; list title of project and identify subject matter of contents.
 - .5 Arrange content by systems, under Section numbers and sequence of Table of Contents.
 - .6 Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
 - .7 Text: manufacturer's printed data, or typewritten data.
 - .8 Drawings: provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
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1.3 CONTENTS

- .1 Table of Contents: provide title of project;
 - .1 Date of submission; names.
 - .2 Addresses, and telephone numbers of Contractor, Sub-contractors, and Consultant and with name of responsible parties.
 - .3 Schedule of products and systems, indexed to content of volume.
- .2 For each product or system:
 - .1 List names, addresses and telephone numbers of subcontractors and suppliers, including local source of supplies and replacement parts.
- .3 Product Data: mark each sheet to identify specific products and component parts, and data applicable to installation; delete inapplicable information.
- .4 Drawings: supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams.
- .5 Typewritten Text: as required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions specified in Section 01 45 00 - Quality Control.

1.4 RECORDING
ACTUAL SITE
CONDITIONS

- .1 Submit one set of red line drawings to Consultant for review.
 - .2 Contract Drawings and shop drawings: mark each item to record actual construction, including:
 - .1 Measured depths of elements of foundation in relation to finish first floor datum.
 - .2 Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - .3 Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
 - .4 Field changes of dimension and detail.
 - .5 Changes made by change orders.
 - .6 Details not on original Contract Drawings.
 - .7 References to related shop drawings and modifications.
 - .3 Specifications: mark each item to record actual construction, including:
 - .1 Manufacturer, trade name, and catalogue number of each product actually installed, particularly optional items and substitute items.
 - .2 Changes made by Addenda and change orders.
 - .4 Other Documents: maintain manufacturer's certifications, inspection certifications, field test records, required by individual specifications sections.
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1.5 FINAL SURVEY

- .1 Submit final site survey certificate in accordance with Section 01 71 00 - Examination and Preparation certifying that elevations and locations of completed Work are in conformance, or non-conformance with Contract Documents.

1.6 WARRANTIES AND BONDS

- .1 Assemble approved information in binder and submit upon acceptance of work. Organize binder as follows:
 - .1 Separate each warranty or bond with index tab sheets keyed to Table of Contents listing.
 - .2 List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
 - .3 Obtain warranties and bonds, executed in duplicate by subcontractors, suppliers, and manufacturers, recognizing date of Substantial Completion.
 - .4 Verify that documents are in proper form, contain full information, and are notarized.
 - .5 Co-execute submittals when required.
 - .6 Retain warranties and bonds until time specified for submittal.
- .2 Conduct joint 12 month warranty inspection, measured from time of acceptance, with Departmental Representative and Consultant.
- .3 Respond in a timely manner to oral or written notification of required construction warranty repair work.
- .4 Written verification will follow oral instructions. Failure to respond will be cause for the Departmental Representative to proceed with action against Contractor.

1.7 ELECTRONIC DATA

- .1 In addition to the above hard copy submittals, provide *all* documentation, including shop drawings, test reports, Operations and Maintenance Manuals, Record Drawings, training materials, spare parts lists, etc., as PDF format files on CDs.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

Not Used.
