

Part 1 General

1.1 WORK COVERED BY CONTRACT DOCUMENTS

- .1 Work of this Contract comprises structural repairs of the existing powerhouse coal vault storage located at building C-12 within the CSC Stony Mountain Institution (SMI). The project includes bracing the vault foundation wall, infilling the vault area, reinforcing the existing main-floor slab under the electrical room and replacing the garage floor area slab. An area of the main-floor outside of the vault area will require slab soffit and beam pressure grouting repairs.

The work area contains electrical equipment, conduit and cabling that is critical to the operation of SMI. Any damage or interruption to this equipment, conduit and cabling will result in a catastrophic shut down of the Institution. All electrical equipment and associated conduit/cabling must be protected with extreme diligence against any and all harm throughout the course of construction.

1.2 CONTRACT METHOD

1.3 REFERENCES AND CODES

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

1.4 WORK BY OTHERS

- .1 Co-operate with other Contractors in carrying out their respective works and carry out instructions from Departmental Representative.
- .2 Co-ordinate work with that of other Contractors. If any part of work under this Contract depends for its proper execution or result upon work of another Contractor, report promptly to Department Representative, in writing, any defects which may interfere with proper execution of Work.

1.5 WORK SEQUENCE

- .1 Construct Work in phases to accommodate continued safe and secure use of the powerhouse by Correctional Service Canada staff and institutional inmates during construction
- .2 General Contractor will be solely responsible to develop and maintain the detailed construction schedule in accordance with means and methods necessary to execute the project. Generally anticipated work phases have been derived from CSC's requirement to continue powerhouse during renovations. Contractor shall prepare detailed phase planning. Alternatives to the stated phasing may be proposed but must meet requirements to remain suitably operational and must be approved by CSC.
- .3 Co-ordinate Progress Schedule and co-ordinate with Department Representative during construction.
- .4 Generally Anticipated work phases:

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- .1 Phase 1 – Install steel shoring post system along interior vault walls.
 - .2 Phase 2 – Infill existing interior foundation wall openings and create openings in existing vault hopper walls to facilitate the infill of stabilised fill in the vault. Infill with stabilized fill in uniform lifts to 1800mm below the underside of the existing main-floor slab to construct slab reinforcing below the electrical room with self-consolidating concrete.
 - .3 Phase 3 – Infill remaining vault areas with stabilized fill in uniform lifts and then pressure grout the existing floor areas.
 - .4 Phase 4 – Remove the existing work room area concrete slab and steel grating then install concrete slab-on-grade once stabilized fill has cured.

1.6 CONTRACTOR USE OF PREMISES

- .1 Use of premises by Contractor is restricted to the areas necessary for execution of the work, storage and access as well as a site perimeter.
- .2 Co-ordinate ongoing use of powerhouse by CSC under direction of Departmental Representative.
- .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 work which remain.
- .5 Repair or replace portions of existing work which have been altered during construction operations as directed by Departmental Representative.
- .6 At completion of work, ensure condition of existing surfaces is equal to or better than before work started.

1.7 DEPARTMENTAL REPRESENTATIVE

- .1 CSC will occupy Powerhouse during entire construction period for execution of normal operations.
- .2 Co-operate with Departmental Representative in scheduling.

1.8 ALTERATIONS, ADDITIONS OR REPAIRS TO EXISTING BUILDING

- .1 Execute work with least possible interference or disturbance to SMI operations, building operations, occupants and normal use of powerhouse. Make all arrangements with Departmental Representative to facilitate execution of work.

1.9 EXISTING SERVICES

- .1 Notify, Departmental Representative and utility companies of intended interruption of services and obtain required permission.
- .2 Where Work involves connecting to existing services, give Department Representative minimum 48 hours notice for necessary interruption of mechanical or electrical service throughout course of work. Minimize duration of interruptions. Carry out work at times as directed by governing.
- .3 Provide alternative routes for personnel and vehicular traffic.

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- .4 Establish location and extent of service lines in area of work before starting Work. Notify Departmental Representative of findings.
 - .5 Submit schedule to and obtain approval from Departmental Representative for any shut-down or closure of active service or facility including power and communications services. Adhere to approved schedule and provide notice to affected parties.
 - .6 Provide temporary services when directed by Departmental Representative to maintain critical building and tenant systems.
 - .7 Where unknown services are encountered, immediately advise Departmental Representative and confirm findings in writing.
 - .8 Protect, relocate or maintain existing active services. When inactive services are encountered, cap off in manner approved by authorities having jurisdiction.
 - .9 Record locations of maintained, re-routed and abandoned service lines.
 - .10 Construct barriers in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.

1.10 PLANS AND SPECIFICATIONS

- .1 Plans, specifications and other contract documents are complementary, presenting a whole in which each part shall bind the Contractor as does the whole.
- .2 The Contractor must not take advantage of any error or omission in plans or specifications. Contractor must bring it to the attention of the Department Representative who will be permitted to make the corrections or changes necessary to allow the Work to be completed in the spirit of the plans and specifications.
- .3 Unless indicated otherwise, material specification implies installation, just as specification of Work implies the required materials, even when the terms "supply and install" are not used.
- .4 The Contractor and subcontractors must take note of general conditions and the Contractor must be aware of the particular specifications. Lack of awareness by the Contractor will not justify any claims or omissions from the contract.
- .5 It is the intention of the contract documents that the Contractor performs the required Work and supplies the materials as required by the plans and specifications, including ancillary Work and repairs not described in the specifications, but required by the needs of the project and good workmanship.

1.11 REVIEW OF PLANS, SPECIFICATIONS, AND WORK SITE

- .1 The Bidders must carefully and personally examine plans, specifications and contract documents as well as the location of projected work to inspect conditions capable of affecting execution of work specified in contract.

1.12 DRAWINGS

- .1 Keep a copy of plans and specifications on site, as well as approved shop drawings.

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- .2 Scale: No measurement taken to scale from the drawings may serve as an interpretation of construction dimensions.

1.13 ADDITIONAL DRAWINGS .

- .1 The Departmental Representative may issue additional drawings to clarify certain details.
- .2 These additional drawings shall be considered to have the same significance and scope as if they were included in the original plans and specifications.

1.14 AS BUILT PLANS

- .1 For Substantial Completion, the Contractor must submit a copy of the as built plans to the Departmental Representative. The copy must be clean and marked only by revisions that have been made. The Contractor must submit as built plans for all plans: architecture, structure, mechanical, electricity, plumbing, etc.
- .2 Plans submitted by the Contractor will be verified by the Departmental representative and may have to be redone by Contractor if judged unsatisfying or incomplete.

1.15 DOCUMENTS REQUIRED

- .1 Maintain at job site, one copy each document as follows:
 - .1 Contract Drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Reviewed Shop Drawings.
 - .5 Change Orders.
 - .6 Other Modifications to Contract.
 - .7 Field Test Reports.
 - .8 Copy of Approved Work Schedule.
 - .9 Health and Safety Plan and Other Safety Related Documents including:
 - .1 Material data sheets (MSDS) on all products used in Project.
 - .10 Other documents as specified.
- .2 Maintain at the Job site 2 copies each of Contract Drawings & specifications. One shall be updated with all approved changes & adjustments on a daily basis and one unaltered original.

1.16 WORK SEQUENCE

- .1 The powerhouse will remain operational throughout the duration of the Work.
- .2 The contractor will be responsible for the sequence of works to minimize total time of Work. However, the final decision regarding this sequence must be approved by the Departmental Representative and CSC. The Departmental representative may accept a different sequence from the one suggested in the specifications.
- .3 To ensure proper follow-through on the schedule of works, an initial coordination meeting will be convened in the week following award of contract to advise Contractor of safety

requirements under the direction of the Departmental Representative during Work and so as to validate the Work calendar.

- .4 During the meeting, the Departmental Representative will assign main coordinators of each department involved in the project to advise all stakeholders of the scope of work.

1.17 SITE MEETINGS

- .1 As per Section 01 31 19 - Project Meetings.

1.18 SPECIAL INSPECTIONS

- .1 The Departmental Representative may subcontract specialized inspections at different stages of the project. The Departmental Representative shall bear the costs of such inspections.

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 ACCESS AND EGRESS

- .1 Design, construct and maintain temporary "access to" and "egress from" work areas, in accordance with relevant to CSC Security Criteria, municipal, provincial and other regulations.

1.2 USE OF SITE AND FACILITIES

- .1 Execute work with least possible interference or disturbance to normal use of premises. Make arrangements with Departmental Representative and CSC Security to facilitate work as stated.
- .2 Maintain existing services to building and provide for personnel and vehicle access.
- .3 Where security is reduced by work provide temporary means to maintain security.
- .4 Ensure that Contractor personnel employed on site become familiar with and obey regulations including safety, fire, traffic and security regulations.
- .5 Keep within limits of work and avenues of ingress and egress.

1.3 WORKING HOURS

- .1 Normal construction Work hours within the Institution are 07:30 to 16:30 hours Monday thru Friday.
- .2 The Department Representative reserves the right to occasionally restrict work in select areas of the powerhouse to accommodate powerhouse functions. The Contractor will be provided minimum of 3 working days notice of such restrictions.

1.4 BUILDING SMOKING ENVIRONMENT

- .1 Smoking is not allowed.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- .1 Particular requirements for inspection and testing to be carried out by testing laboratory designated by Departmental Representative are specified under various sections.

1.2 APPOINTMENT AND PAYMENT

- .1 All testing required to meet specifications is Quality Control testing to be carried out by a certified Material Testing Laboratory engaged and paid by contractor. Departmental Representative may engage to carry out random Quality Assurance testing and will pay for it.
- .2 Where tests or inspections by designated testing laboratory reveal Work not in accordance with contract requirements, pay costs for additional tests or inspections as required by Departmental Representative to verify acceptability of corrected work.

1.3 CONTRACTOR'S RESPONSIBILITIES

- .1 Provide labour, equipment and facilities to:
 - .1 Provide access to Work for inspection and testing.
 - .2 Facilitate inspections and tests.
 - .3 Make good Work disturbed by inspection and test.
 - .4 Provide storage on site for laboratory's exclusive use to store equipment and cure test samples.
- .2 Notify testing agency sufficiently in advance of operations to allow for assignment of laboratory personnel and scheduling of test.
- .3 Where materials are specified to be tested, deliver representative samples in required quantity to testing laboratory.
- .4 Pay costs for uncovering and making good Work that is covered before required inspection or testing is completed and approved by Departmental Representative.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 ADMINISTRATIVE

- .1 Schedule and administer project meetings throughout the progress of the work at weekly site meetings with the Departmental Representative.
- .2 The Contractor will prepare agenda for meetings.
- .3 The Contractor will distribute written notice of each meeting four days in advance of meeting date to the Departmental Representative. The Contractor shall distribute to Subcontractors and suppliers as required.
- .4 Provide physical space and make arrangements for meetings.
- .5 Departmental Representative to preside at meetings.
- .6 Contractor to record the meeting minutes. Include significant proceedings and decisions. Identify actions by parties.
- .7 Contractor to reproduce and distribute copies of minutes within three days after meetings and transmit to meeting participants, affected parties not in attendance and Departmental Representative.
- .8 Representative of Contractor, Subcontractor and suppliers attending meetings must be qualified and authorized to act on behalf of party each represents.

1.2 PRECONSTRUCTION MEETING

- .1 Within 5 days after award of Contract, a meeting of parties in contract will be called to discuss and resolve administrative procedures and responsibilities.
- .2 Departmental Representative, Contractor, major Subcontractors, field inspectors and supervisors will be in attendance.
- .3 A time and location of the meeting will be established, and parties concerned will be notified a minimum of 5 days before meeting.
- .4 Incorporate mutually agreed variations to Contract Documents into Agreement, prior to signing.
- .5 Agenda to include:
 - .1 Appointment of official representative of participants in the Work.
 - .2 Schedule of Work: in accordance with Section 01 32 16.07 - Construction Progress Schedules - Bar (GANTT) Chart.
 - .3 Schedule of submission of shop drawings, samples, colour chips. Submit submittals in accordance with Section 01 33 00 - Submittal Procedures.
 - .4 Special procedures in accordance with Section 01 35 13 – Special Project Procedures for Correctional Service Canada Security Requirements
 - .5 Requirements for temporary facilities, site sign, offices, storage sheds, utilities, fences in accordance with Section 01 52 00 - Construction Facilities.

- .6 Delivery schedule of specified equipment.
- .7 Site security in accordance with Sections 01 56 00 - Temporary Barriers and Enclosures & 01 35 13 Special Project Procedures for CSC Requirements.
- .8 Proposed changes, change orders, procedures, approvals required, mark-up percentages permitted, time extensions, overtime, administrative requirements.
- .9 Departmental Representative provided products.
- .10 Record drawings in accordance with Section 01 33 00 - Submittal Procedures.
- .11 Maintenance manuals in accordance with Section 01 78 00 - Closeout Submittals.
- .12 Take-over procedures, acceptance, warranties in accordance with Section 01 78 00 - Closeout Submittals.
- .13 Monthly progress claims, administrative procedures, photographs, hold backs.
- .14 Appointment of inspection and testing agencies or firms.
- .15 Insurances, transcript of policies.

1.3 PROGRESS MEETINGS

- .1 During course of Work schedule progress meetings at weekly intervals.
- .2 Contractor, major Subcontractors involved in Work, Consultant and Departmental Representative are to be in attendance.
- .3 Parties will be notified minimum 4 days prior to meetings.
- .4 Contractor will be responsible for recording minutes of meetings and circulate to attending parties and affected parties not in attendance within three working days after meeting.
- .5 Agenda to include the following:
 - .1 Review, approval of minutes of previous meeting.
 - .2 Review of Work progress since previous meeting.
 - .3 Field observations, problems, conflicts.
 - .4 Problems which impede construction schedule.
 - .5 Review of off-site fabrication delivery schedules.
 - .6 Corrective measures and procedures to regain projected schedule.
 - .7 Revision to construction schedule.
 - .8 Progress schedule, during succeeding work period.
 - .9 Review submittal schedules: expedite as required.
 - .10 Maintenance of quality standards.
 - .11 Review proposed changes for affect on construction schedule and on completion date.
 - .12 Other business.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.

END OF SECTION

Part 1 General

1.1 Definitions

- .1 Activity: element of Work performed during course of Project. Activity normally has expected duration, and expected cost and expected resource requirements. Activities can be subdivided into tasks.
- .2 Bar Chart (GANTT Chart): graphic display of schedule-related information. In typical bar chart, activities or other Project elements are listed down left side of chart, dates are shown across top, and activity durations are shown as date-placed horizontal bars. Generally Bar Chart should be derived from commercially available computerized project management system.
- .3 Baseline: original approved plan (for project, work package, or activity), plus or minus approved scope changes.
- .4 Construction Work Week: Monday to Friday, inclusive, will provide five day work week and define schedule calendar working days as part of Bar (GANTT) Chart submission.
- .5 Duration: number of work periods (not including holidays or other nonworking periods) required to complete activity or other project element. Usually expressed as workdays or workweeks.
- .6 Master Plan: summary-level schedule that identifies major activities and key milestones.
- .7 Milestone: significant event in project, usually completion of major deliverable.
- .8 Project Schedule: planned dates for performing activities and the planned dates for meeting milestones. Dynamic, detailed record of tasks or activities that must be accomplished to satisfy Project objectives. Monitoring and control process involves using Project Schedule in executing and controlling activities and is used as basis for decision making throughout project life cycle.
- .9 Project Planning, Monitoring and Control System: overall system operated by Contractor to enable monitoring of project work in relation to established milestones.

1.2 REQUIREMENTS

- .1 Ensure Master Plan and Detail Schedules are practical and remain within specified Contract duration.
- .2 Plan to complete Work in accordance with prescribed milestones and time frame.
- .3 Limit activity durations to maximum of approximately 10 working days, to allow for progress reporting.
- .4 Ensure that it is understood that Award of Contract or time of beginning, rate of progress, Interim Certificate and Final Certificate as defined times of completion are of essence of this contract.

1.3 SUBMITTALS

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

- .2 Submit to Departmental Representative within 10 to 15 working days of Award of Contract Bar (GANTT) Chart as Master Plan for planning, monitoring and reporting of project progress.
- .3 Submit Project Schedule to Departmental Representative within 5 working days of receipt of acceptance of Master Plan.

1.4 PROJECT MILESTONES

- .1 Project milestones form interim targets for Project Schedule.

1.5 MASTER PLAN

- .1 Structure schedule to allow orderly planning, organizing and execution of Work as Bar Chart (GANTT).
- .2 Departmental Representative will review and return revised schedules within 5 working days.
- .3 Revise impractical schedule and resubmit within 5 working days.
- .4 Accepted revised schedule will be used as baseline for updates.

1.6 PROJECT SCHEDULE

- .1 Develop detailed Project Schedule derived from Master Plan.
- .2 Ensure detailed Project Schedule includes as minimum milestone and activity types as follows:
 - .1 Award.
 - .2 Shop Drawings, Samples.
 - .3 Permits.
 - .4 Mobilization.
 - .5 Structural Steel.
 - .6 Concrete as per phasing
 - .7 Electrical
- .3 Include work phases as described in Section 01 11 00 – Summary of Work and in 1.4 of this section.

1.7 PROJECT SCHEDULE

- .1 Update Project Schedule on weekly basis reflecting activity changes and completions, as well as activities in progress.
- .2 Include as part of Project Schedule, narrative report identifying Work status to date, comparing current progress to baseline, presenting current forecasts, defining problem areas, anticipated delays and impact with possible mitigation.

1.8 PROJECT MEETINGS

- .1 Discuss Project Schedule at regular site meetings, identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind

schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.

- .2 Weather related delays with their remedial measures will be discussed and negotiated.

Part 2 Products

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

Part 1 General

1.1 ADMINISTRATIVE

- .1 Submit to Department Representative submittals listed for review. Submit promptly and in orderly sequence to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with Work affected by submittal until review is complete.
- .3 Present shop drawings, product data, samples and mock-ups in SI Metric units.
- .4 Where items or information is not produced in SI Metric units converted values are acceptable.
- .5 Review submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents.
- .6 Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and considered rejected.
- .7 Notify Departmental Representative, in writing at time of submission, clearly highlighting deviations from requirements of Contract Documents stating reasons for deviations.
- .8 Verify field measurements and affected adjacent Work are co-ordinated.
- .9 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
- .10 Contractor's responsibility for deviations in submission from requirements of Contract Documents and any resultant corrections required is not relieved by Departmental Representative review.
- .11 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 Contractor to illustrate details of a portion of Work.
- .2 Submit drawings stamped and signed by a qualified professional engineer registered or licensed in Manitoba, Canada, where required.
- .3 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been co-ordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- .4 Allow 7 days for Departmental Representative's review of each submission.

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- .5 Adjustments made on shop drawings 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 Keep (1) copy of documents submitted by subcontractor and verified by Departmental Representative.
 - .7 Make changes in shop drawings as Departmental Representative may require, consistent with Contract Documents. When resubmitting, notify Departmental Representative in writing of revisions other than those requested.
 - .8 Accompany submissions with transmittal letter, in duplicate, containing:
 - .1 Date.
 - .2 Project title and number.
 - .3 Contractor's and supplier's name and address.
 - .4 Identification and quantity of each shop drawing, product data and sample.
 - .5 Section number.
 - .6 The signature of the shipper responsible for the concerned document, attesting that it is in conformity with the plans and technical specification.
 - .7 Shop drawings identification sheet is included in this section and should be obligatorily filled, in the absence of what the drawings will be turned back without being checked.
 - .8 Other pertinent data.
 - .9 Submissions include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Contractor.
 - .2 Subcontractor.
 - .3 Supplier.
 - .4 Manufacturer.
 - .4 Section number.
 - .5 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
 - .6 Shop drawings :
 - .1 Original drawings or modified standard drawings, prepared by supplier and illustrating portions of work related to the project.
 - .7 Technical data sheet :
 - .1 Catalogue Sheets of the manufacturer, graphs and diagrams of performance or output being used to illustrate the standard products manufactured.
 - .2 Sheet dimensions: 8½ po x 11 po or 11 po x 17 po.
 - .3 Crossing out of the information which does not apply to present work.
 - .4 Additional information which applies to present work.
 - .5 Shop drawings identification sheet fully filled and accompanying the shop drawing must be provided in 1 copy, electronic, PDF, color, high quality

- and sent to Departmental Representative. Shop drawings and technical sheets sent by fax are not authorized and will be refused.
- .8 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.
 - .10 After Departmental Representative's review, distribute copies.
 - .11 Submit one electronic copy of shop drawings for each requirement requested in specification Sections and as Departmental Representative may reasonably request.
 - .12 Submit 1 electronic copy 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.
 - .13 Submit 1 electronic copy of test reports for requirements requested in specification Sections and as requested by Departmental Representative.
 - .1 Report signed by authorized official of testing laboratory that material, product or system identical to material, product or system to be provided has been tested in accord with specified requirements.
 - .2 Testing must have been within 3 years of date of contract award for project.
 - .14 Submit 1 electronic copy of certificates for requirements requested in specification Sections and as requested by Departmental Representative.
 - .1 Statements printed on manufacturer's letterhead and signed by responsible officials of manufacturer of product, system or material attesting that product, system or material meets specification requirements.
 - .2 Certificates must be dated after award of project contract complete with project name.
 - .15 Submit 1 electronic copy of manufacturers instructions for requirements requested in specification Sections and as requested by Departmental Representative
 - .1 .1 Pre-printed material describing installation of product, system or material, including special notices and Material Safety Data Sheets concerning impedances, hazards and safety precautions.
 - .16 Submit 1 electronic copy of Manufacturer's Field Reports for requirements requested in specification Sections and as requested by Departmental Representative.
 - .17 Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.
 - .18 Submit 1 electronic copy of Operation and Maintenance Data for requirements requested in specification Sections and as requested by Departmental Representative.

- .19 Delete information not applicable to project.
- .20 Supplement standard information to provide details applicable to project.
- .21 If upon review by Departmental Representative, 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.
- .22 The review of shop drawings by Departmental Representative is for sole purpose of ascertaining conformance with general concept.
 - .1 This review shall not mean that the Departmental Representative approves detail design inherent in shop drawings, responsibility for which shall remain with Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting requirements of construction and Contract Documents.
 - .2 Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of Work of sub-trades.

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 site office.
- .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 PHOTOGRAPHIC DOCUMENTATION

- .1 Submit electronic copy of color digital photography in jpg format, standard resolution monthly with progress statement and as directed by Departmental Representative.
- .2 Project identification: name and number of project and date of exposure indicated.
- .3 Number of viewpoints: 2 locations.
 - .1 Viewpoints and their location as determined by Departmental Representative.
- .4 Frequency of photographic documentation: weekly as directed by Departmental Representative.

- .1 Upon completion of: framing and services before concealment, of Work, and as directed by Departmental Representative.

1.5 CERTIFICATES AND TRANSCRIPTS

- .1 Immediately after award of Contract, submit Workers' Compensation Board status.
- .2 Submit transcription of insurance immediately after award of Contract.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 PURPOSE

- .1 To ensure that both the construction project and the institutional operations may proceed without undue disruption or hindrance and that the security of the Institution is maintained at all times.

1.2 DEFINITIONS

- .1 "Contraband" means:
 - .1 An intoxicant, including alcoholic beverages, drugs and narcotics.
 - .2 Vaping, tobacco or associated tobacco products.
 - .3 An igniting device, lighter or matches.
 - .4 A weapon or a component thereof, ammunition for a weapon, and anything that is designed to kill, injure or disable a person or that is altered so as to be capable of killing, injuring or disabling a person, when possessed without prior authorization.
 - .5 An explosive or a bomb or a component thereof.
 - .6 Any item not described in paragraphs 1.2.1.1 to 1.2.1.6 that could jeopardize the security of a Penitentiary or the safety of persons, when that item is possessed without prior authorization.
- .2 "Unauthorized Smoking and related Items" means all smoking items including, but not limited to, cigarettes, cigars, tobacco, chewing tobacco, cigarette making machines, matches and lighters.
- .3 "Commercial Vehicle" means any motor vehicle used for the shipment of material, equipment and tools required for the construction project.
- .4 "CSC" means Correctional Service Canada.
- .5 "Warden" means Warden or his/her representative of the Institution as applicable.
- .6 "Construction Employees" means persons working for the General Contractor, the sub-contractors, equipment operators, material suppliers, testing and inspection companies and regulatory agencies.
- .7 "Departmental Representative" means the project manager from Public Works and Government Services Canada.
- .8 "Perimeter" means the fenced or walled area of the Institution that restrains the movement of the inmates.
- .9 "Construction Limits" means the Work Area as shown on the contract drawings that the Contractor will be allowed to work. This Work Area may or may not be isolated from the security area of the Institution.
 - .1 The Contractor is responsible for the safety and security of the Work Area.
 - .2 The Contractor shall be expected to cooperate with the Institutional personnel in ensuring that security requirements are observed within the Work Area.

- .3 Contractors and their employees shall be confined to their Work Area. All other buildings and grounds shall be considered "Out of Bounds". Contractor's movement outside of the Work Area shall be escorted by an officer of CSC.
- .4 Contractors and their employees shall not contact or attempt to contact or deal in any way with inmates.

1.3 PRELIMINARY PROCEEDINGS

- .1 Prior to the commencement of work, the Contractor shall meet with the Warden or his/her representative to:
 - .1 Discuss the nature and extent of all activities involved in the Project.
 - .2 Establish mutually acceptable security procedures in accordance with this instruction and the institution's particular requirements.
- .2 Contractor shall:
 - .1 Ensure that all Construction Employees are aware of the security requirements.
 - .2 Ensure that a copy of the security requirements is always prominently on display at the job site.
 - .3 Co-operate with institutional personnel in ensuring that security requirements are observed by all Construction Employees.

1.4 SURVEILLANCE AND INSPECTION

- .1 Construction activity and all related movement of personnel & vehicles shall be subject to surveillance and inspection by institutional staff to ensure that security requirements are met and understanding of the need for this action is established and maintained throughout.

1.5 CONSTRUCTION EMPLOYEES

- .1 Submit to the Warden or designate a list of the names with date of birth of all Construction Employees to be employed on the construction site and a security clearance form for each employee.
 - .1 The names of all construction personnel to be employed on the site shall be submitted in writing via Form #1279 (Institutional Access / CPIC Clearance Request) which may be obtained from Supervisor Construction Security (SCS), Security Intelligence Officer (SIO), Chief, Works & Engineering and/or PWGSC Departmental Representative.
- .2 All Contractors and their employees, including subcontractors and their employees, involved in contract, must report to the Construction Security under the supervision of the Correctional Manager Operations prior to the first day of employment to submit picture identification and receive a security briefing. This will only be done after a Security Clearance Request form (CPIC) is completed and approved by the Warden.
- .3 Allow up to 10 working days for Security Clearance Approval. Employees will not be admitted to the Institution without a valid security clearance in place and a recent picture identification such as a provincial driver's license. Security clearances obtained from other CSC Institutions are not valid at this Institution.
- .4 The Warden requires facial photographs to be taken of Construction Employees and these photographs may be displayed at appropriate locations in the Institution or in an electronic database for identification purposes. The Warden requires Photo ID cards for all Construction Employees. ID cards will then be left at the Principle Entrance to be

picked upon arrival at the institution and shall be displayed prominently on the Construction Employees' clothing at all time while Construction Employees are in the institution.

- .5 Any person employed on the construction site shall enter and exit the Institution via the Principle Entrance.
- .6 All contractors must sign in at designated point of entry before proceeding to work site and sign out again when leaving. The Warden or his/her designate has the right to refuse permission to enter institutional property to any person whom he/she has reason to believe may be a security risk.
- .7 Any person employed on the construction site will be subject to immediate removal from Institutional Property if they:
 - .1 Appear to be under the influence of alcohol, drugs or narcotics.
 - .2 Behave in an unusual or disorderly manner.
 - .3 Are in possession of contraband.
- .8 Smoking is prohibited anywhere on CSC property.
 - .1 Designated Contractor's smoke area is outside of the Principle Entrance, North of Building A1.
 - .2 Contractors shall be escorted to the designated smoke area. The Contractor shall go through security checks at the Principle Entrance each time they exit and enter the Institution.
 - .3 Ensure Contractor's personnel is familiar with and obey the Institution's assigned smoke hours. Comply with smoking restrictions.
- .9 The Warden or his/her designate may prohibit or restrict access to any part of the institution. The Warden may require that, in certain areas or at certain times, no Contractor is allowed unless accompanied by an officer of the Correctional Service of Canada (CSC).

1.6 VEHICLES

- .1 All unattended vehicles on CSC property shall have windows closed; doors and trunks shall be locked and keys removed. The keys shall be securely in the possession of the Department Representative or an employee of the company that owns the vehicle.
 - .1 Failure to comply with the above will result in an immediate shutdown of the job site and stoppage of work for an indefinite period of time at the Contractor's expense.
- .2 The Warden may limit at any time the number and type of vehicles allowed within the Institution.
- .3 Trucks delivering materials, equipment, and tools to the Work Area will be allowed access only after the contents are certified by the Contractor and by the CSC Institution Representative as being strictly necessary for the execution of the work. Security requirements such as wheel covers, lockable fuel caps, lockable doors and windows are still required unless special provisions are made through the CS I/C Construction. Trucks or vehicles, after being unloaded, are to be parked in the designated area outside the security wall or fence.
- .4 Drivers of delivery vehicles shall first report to the CSC Representative at the CSC Security Construction Site Office upon arriving Stony Mountain Institution.

- .5 The Institution may require the drivers have security clearances.
- .6 Delivery vehicles will not be admitted to the institution after normal working hours or on weekends/holidays without prior arrangement with the Warden or designate.
- .7 If the Warden permits trailers to be left inside the secure perimeter of the Institution, these trailer doors will be locked at all times. All windows will be securely locked when left unoccupied. All trailer windows shall be covered with expanded metal mesh. All storage trailers inside and outside the perimeter shall be locked when not in use.

1.7 PARKING

- .1 Parking area(s) to be used by Construction Employees will be designated by the Warden. Parking in other locations will be prohibited and vehicles may be subject to removal.
- .2 Contractor's designated parking area is next to the staging area.
- .3 All unattended vehicles shall have windows closed, doors and trucks locked, and keys removed.
- .4 Vehicles shall not contain any type of weapons, ammunition or spirits (empty, partial, or full).

1.8 SHIPMENTS

- .1 All shipments of project material, equipment and tools shall be addressed in the Contractor's name to avoid confusion with the Institution's own shipments. The Contractor must have his/her own employees on site to receive any deliveries or shipments. CSC staff will NOT accept receipt of deliveries or shipments of any material, equipment or tools.

1.9 TELEPHONES

- .1 Contractor shall obtain approval from the Warden or designate for the installation of telephones that shall be located so that they are not accessible to inmates.
- .2 Contractor shall obtain approval from the Warden or designate for the installation of internet connection. The computer shall be located in a secured room where it is not accessible to inmates. The computer shall have an approved password protection that will stop an internet connection to unauthorized personnel.
- .3 Cell phones are NOT allowed inside the security wall, fence or buildings.
- .4 Two-way radio communications are NOT allowed inside the security wall, fence or buildings. CSC's Commissionaire will carry two-way radio communication devices.

1.10 WORK HOURS

- .1 Normal construction Work hours within the Institution are 07:30 to 16:30 hours Monday thru Friday.

1.11 OVERTIME WORK

- .1 No overtime work will be allowed without permission of the Warden. Give a minimum forty-eight (48) hours advance notice when overtime work on the construction project is

necessary and approved. If overtime work is required because of an emergency such as the completion of a concrete pour or work to make the construction safe and secure, the Contractor shall advise the Warden as soon as this condition is known and follow the directions given by the Warden.

- .2 When overtime work, weekend, or statutory holiday work is required and approved by the Warden, extra staff members may be posted by the Warden or designate, to maintain the security surveillance at the CSCs expense.

1.12 TOOLS AND EQUIPMENT

- .1 Maintain a complete list of all tools and equipment to be used during the construction project. Make this inventory available for inspection when required.
- .2 Throughout the construction project maintain up-to-date the list of tools and equipment.
- .3 Contractor shall maintain an inventory of all tools and equipment, including the number of cartridges for power-driven tools brought on site, and a record of every shot fired. (Empty cartridges taken out after completion of work and counted with live cartridges. Total cartridges taken in must add up to those taken out, counting those that have been fired.) A copy of these tool lists shall be kept with the tools, a second copy in the CSC Security Construction Site Office and one must be left with the officer in charge at the service entrance.
- .4 The Contractor shall keep all tools and equipment under constant supervision and not leave them unattended, paying particular attention to power-driven and cartridge-driven tools, cartridges, files, saw blades, rod saw, wire, rope, extension cords, ladders and any sort of jacking device. All used blades and wheels must be accounted for and disposed of in a manner determined by CSC.
- .5 The contractor shall store all tools and equipment in places and under conditions approved by the Warden or his designate and shall lock all toolboxes when not in use. He shall report immediately all missing or lost tools or equipment to the Warden or his designate and complete 'Missing Tools Report' form. This form is available to the General Contractor.
- .6 Lock all tool boxes when not in use. Keys to remain in the possession of the employees of the Contractor.
 - .1 Scaffolding shall be secured and complete with wire fencing all around when erected. The manner in which it is secured shall be agreed upon with the Institutional designate.
- .7 The Warden requires the daily removal and locking up of tools and equipment.
- .8 All missing or lost tools or equipment shall be reported immediately to the Warden or designate.
- .9 The Warden shall ensure that the security staff members carry out checks of the Contractor's tools and equipment against the list provided by the Contractor. These checks may be carried out at the following intervals:
 - .1 At the beginning and conclusion of every construction project.
 - .2 Weekly, when the construction project extends longer than a one week period.
 - .3 The Contractor may be subject to random checks by security staff to ensure proper storage and security of tools throughout the project.

- .10 If propane or natural gas is used for heating the construction, the Institution will require that an employee of the Contractor supervise the construction site during non-working hours.
- .11 If torches or grinders are required tools to perform Work, Contractor shall complete a Hot Work Permit as supplied by CSC. Completed original form(s) are copied and posted on the work site in a conspicuous location. Original documents are to remain with the Institutional Fire Chief.
- .12 Contractor shall provide permanent identification (engraving) to all tools indicating that they are the personal property of the employee/tradesperson or employing company. Negligence in this regard may result in confiscation of tools.

1.13 KEYS

- .1 Security Hardware Keys:
 - .1 The Contractor shall arrange with the security hardware supplier/installer to have the keys for the security hardware to be delivered directly to Institution, specifically the Security Maintenance Officer (SMO).
 - .2 The Security Maintenance Officer (SMO) will provide a receipt to the Contractor for security hardware keys.
 - .3 The Contractor will provide a copy of the above-mentioned receipt to the Departmental Representative.
- .2 Other Keys:
 - .1 The Contractor will use standard construction cylinders for locks for his/her use during the construction period.
 - .2 The Contractor will issue instructions to his/her employees and sub-trades, as necessary, to ensure safe custody of the construction set of keys.
 - .3 Upon completion of each phase of the construction, the CSC representative will, in conjunction with the lock manufacturer:
 - .1 Prepare an operational keying schedule.
 - .2 Accept the operational keys and cylinders directly from the lock manufacturer
 - .3 Arrange for removal and return of the construction cores and install the operational core in all locks.
- .3 Upon putting operational security keys into use, the CSC construction escort shall obtain these keys as they are required from the Security Maintenance Officer (SMO) and open doors as required by the Contractor. The Contractor shall issue instructions to his/her employees advising them that all security keys shall always remain with the CSC construction escort.

1.14 SECURITY HARDWARE

- .1 Turn over all removed security hardware to the Warden of the Institution for disposal or for safekeeping until required for re-installation.

1.15 PRESCRIPTION DRUGS

- .1 Employees of the Contractor who are required to take prescription drugs during the workday shall obtain approval of the Warden to bring a one-day supply only into the Institution.

1.16 SMOKING RESTRICTIONS

- .1 Contractors and construction employees are not permitted to smoke inside correctional facilities or outdoors within the perimeter of a correctional facility and must not possess unauthorized smoking items within the perimeter of a correctional facility.
- .2 Contractors and construction employees who are in violation of this policy will be requested to immediately cease smoking or dispose of any unauthorized smoking items and, if they persist, will be directed to leave the institution.
- .3 Smoking is only permitted outside the perimeter of a correctional facility in an area to be designated by the Warden.

1.17 KEY CONTROL

- .1 Commissioner's Directive 573 Control of Items Critical to the Security" Safety of the Institution under section 3 C & E and Institutional Standing Order 573
- .2 The general contractor shall maintain control of all new keys as follows:
 - .1 Upon receipt of keys from the security hardware supplier/installer:
 - .1 Provide a receipt to the security hardware supplier, listing all keys and quantity of each, by key code.
 - .2 Provide a copy of the receipt to the appropriate Correctional Service of Canada representative at the site (Security Maintenance Officer).
 - .3 Locks are to be handed over to SMO Officer for the purpose of repining of lock to CSC standards. Once locks have been repined, locks will be returned to General Contractor for installation.
 - .4 Keys for locks will be made available to the Security Construction Gate to maintain CSC regulation control.
 - .3 Upon putting operational keys into use:
 - .1 Keys will be issued thru the CSC Security personnel as per CSC standards and to ensure that keys are issued to responsible personnel only and the keys are turned in at the end of the day's work. No keys are to be retained by an employee for any period longer than that for which the key is required.
 - .2 The issue and receipt of all keys is recorded, showing the date, time, key code number, issued to, including the name of the recipient and employer. The time of return should be signed in by the key control officer (Gate Security) and witnessed by CSC site representative at the end of each working day.
 - .3 Report, in writing, any untoward circumstances, such as loss, disfigurement, misuse, or mishandling, etc., to the security hardware supplier or CSC/SMO, identifying keys by code and/or number, so that appropriate action may be taken to affect replacement or abandonment of that particular code as circumstances may warrant.
 - .4 Send a copy of these reports to the CSC site representative.
 - .5 Misuse or improper control of CSC keys can result in that employee being denied access to keys or removal from CSC property.
 - .6 No inmates are allowed to handle or be given access to CSC keys.
- .4 Upon completion of the contract and takeover of the buildings:
 - .1 Provide a list of all keys, by number and/or key code, with space for the signature of recipients (both PWGSC Departmental Representative and CSC representative) and the date of receipt.

- .2 Provide certification to Departmental representative that all reasonable caution and care has been exercised in accordance with these instructions, and include a copy for CSC.
- .3 Once locks have been installed on new installation, all keys pertaining to that lock and code shall immediately be turned over to the CSC/SMO.
- .4 All locks removed during demolition must immediately be turned over to CSC/SMO.
- .5 No inmates are allowed to handle or be given access to CSC keys.

1.18 CONTRABAND

- .1 Weapons, ammunition, explosives, alcoholic beverages, drugs and narcotics are prohibited on Institutional Property.
- .2 Discovery of Contraband on the construction site and the identification of the person(s) responsible for the Contraband shall be reported immediately to the Warden.
- .3 Contractors shall be vigilant with both their staff and the staff of their sub-contractors and suppliers that the discovery of Contraband may result in cancellation of the security clearance of the affected employee. Serious infractions may result in the removal of the company from the Institution for the duration of the construction.
- .4 Presence of arms and ammunition in vehicles of Contractors, sub-contractors and suppliers or employees of these will result in the immediate cancellation of security clearances for the driver of the vehicle.
- .5 Contractor is responsible for ensuring that all persons employed directly or indirectly upon the project are familiar with Correctional and Conditional Release Act section 45. Summary Convictions as follows:
 - .1 CCRA Summary Conviction Offences 45. Every person commits a summary conviction offence who:
 - .1 is in possession of contraband beyond the visitor control point in a penitentiary;
 - .2 is in possession of anything referred to in paragraph (b) or (c) of the definition "contraband" in section 2 before the visitor control point at a penitentiary;
 - .3 delivers contraband to, or receives contraband from, an inmate;
 - .4 without prior authorization, delivers jewellery to, or receives jewellery from, an inmate; or
 - .5 trespasses at a penitentiary.
- .6 Search:
 - .1 Where the Warden or his designate suspects, on reasonable grounds, that an employee of the contractor is in possession of contraband, he may order that person to be searched, under, Correctional Conditional Release Regulations Section 42.1 Contraband, Sections 43-46, 54.1-2, 55.1 Search and Seizure and Section 57 Seizure, Commissioner's Directives 566-8 section 9-16.

1.19 SEARCHES

- .1 All vehicles and persons entering Institutional property may be subject to search.

- .2 When the Warden or designate suspects, on reasonable grounds, that an employee of the Contractor is in possession of Contraband or unauthorized items, he/she may order that person to be searched.
- .3 All employees entering the Institution may be subject to screening of personal effects for traces of Contraband drug residue.

1.20 ACCESS TO AND REMOVAL FROM INSTITUTION PROPERTY

- .1 Construction personnel and commercial vehicles will not be admitted to the Institution after normal working hours, unless approved by the Warden.

1.21 MOVEMENT OF VEHICLES

- .1 Delivery vehicles shall not leave the Institution until an inmate count is completed.
- .2 The Contractor shall advise the Warden or designate twenty four (24) hours in advance to the arrival on the site of heavy equipment such as concrete trucks, cranes, etc.
- .3 Vehicles being loaded with soil or other debris, or any vehicle considered impossible to search, must be under continuous supervision by CSC Staff or Commissionaires working under the authority of the Warden.
- .4 Delivery vehicles shall be refused access to Institutional Property if, in the opinion of the Warden or designate, they contain any article which may jeopardize the security of the Institution.
- .5 With the approval of the Warden, certain equipment may be permitted to remain inside the contractor Work Area overnight or over the weekend. This equipment shall be securely locked, with the battery removed. The Warden requires the equipment to be secured with a chain and padlock to another solid object.

1.22 MOVEMENT OF CONSTRUCTION EMPLOYEES ON INSTITUTIONAL PROPERTY

- .1 Subject to the requirements of good security, the Warden will permit the Contractor and his/her employees as much freedom of action and movement as is possible.
- .2 However, notwithstanding the paragraph above, the Warden may:
 - .1 Prohibit or restrict access to any part of the Institution.
 - .2 Require that in certain areas of the Institution, either during the entire construction project or at certain intervals, Construction Employees only be allowed access when accompanied by a member of the CSC security staff.
- .3 During the lunch and coffee/health breaks, all employees will remain within the construction site. Employees are not permitted to eat in the officer's lounge and dining room.

1.23 CONFINED SPACE ENTRY

- .1 Confined Space Entry Regulations are now in effect. Personnel entering confined space areas must have passed the required Confined Space Training Course to enter Class "A" or "B" areas at SMI.
- .2 Confined Spaces Area "A" are typically areas below grade within the duct areas of the Stony Mountain Institution and farm annex. Confined Space Area "A" requires the issue of

a permit from the SMI Works Department prior to entry of area or issue of keys. This includes all necessary equipment and safety personnel.

- .3 Confined Spaces Area "B" are all areas above grade within a confined space area such as attics, mechanical rooms and ducts. This does not require a permit from Works Department, but does require that you sign a waiver form. This form is for you to indicate that you have had the Confined Space Training. To enter Confined Spaces you are required to have all necessary equipment. The waiver form must be completed prior to entry or before the issuance of any keys

1.24 STOPPAGE OF WORK

- .1 The Warden may request at any time that the Contractor, his/her employees, sub-contractors and their employees not enter or leave the work site immediately due to a security situation occurring within the Institution. The Contractor's site supervisor shall note the name of the staff member making the request and the time of the request and obey the order as quickly as possible.

1.25 CONTACT WITH INMATES

- .1 Unless specifically authorized, it is forbidden to come into contact with inmates, to talk with them, to receive objects from them or to give them objects. Any employee doing any of the above will be removed from the site and his/her security clearance revoked.
- .2 It is forbidden to take pictures of inmates, of CSC staff members or of any part of the Institution other than those required as part of this Contract.

1.26 COMPLETION OF CONSTRUCTION PROJECT

- .1 Upon completion of the construction project or, when applicable, the takeover of a facility, the Contractor shall remove all remaining construction material, tools and equipment that are not specified to remain in the Institution as part of the construction contract.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

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 Manitoba
 - .1 The Workers Compensation Act RSM 1987 - Updated 2006.
 - .2 Manitoba Regulation 217/2006 – Workplace Safety and Health Regulation latest edition.
 - .3 Safe Work Procedures – G-9 - Confined Space Entry latest edition.
 - .4 Part 15 Confined Spaces of the Manitoba Workplace Safety and Health Regulation.
- .4 Appendix A – Environmental Assessment of Powerhouse Coal Storage Area by Wood Environment & Infrastructure Solutions.

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 1 copy of Contractor's authorized representative's work site health and safety inspection reports to Departmental Representative and authority having jurisdiction weekly.
- .4 Submit copies of reports or directions issued by Federal, Provincial and Territorial health and safety inspectors.
- .5 Submit copies of incident and accident reports.
- .6 Submit to Departmental representative WHMIS MSDS - Material Safety Data Sheets in accordance with Section 01 33 00 - Submittals and Section 02 81 01 - Hazardous Materials. Contractor must also keep one copy of these documents on the construction site.
- .7 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 10 days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within 10 days after receipt of comments from Departmental Representative. Departmental representative reserves the right not to authorize the start of work on the construction site as long as the content of the prevention program is not satisfactory. The Contractor shall then update his prevention program and resubmit it to the Departmental representative if the scope of work changes or if the working methods of the Contractor differ from his initial plans or for any other applicable new condition.

- .8 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.
- .9 Submit copies of Contractor's authorized representative's construction site health and safety inspection reports to Departmental representative, at least once a week.
- .10 Submit to Departmental representative within 24 hours a copy of any inspection report, correction notice or recommendation issued by Federal, Provincial and Territorial health and safety inspectors.
- .11 Submit to Departmental representative within 24 hours an investigation report for any accident involving injury and any incident exposing a potential hazard.

The investigation report shall contain at least the following:

- .1 date, time and place of accident;
- .2 name of sub-contractor involved in the accident;
- .3 number of persons involved and condition of wounded;
- .4 witness identification;
- .5 detailed description of tasks performed at the time of the accident;
- .6 equipment being used to accomplish the tasks performed at the time of the accident;
- .7 corrective measures taken immediately after the accident;
- .8 causes of the accident;
- .9 preventive measures that have been put in place to prevent a similar accident.
- .12 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.
- .13 Submit to Departmental Representative an on-site Emergency Response Plan at the same time as the prevention program. The Emergency Response plan must contain the elements listed in the article "GENERAL REQUIREMENTS" of this section.
- .14 Submit to Departmental representative copies of all training certificates required for the application of the prevention program, in particular (if applicable) for the following:
 - .1 first aid in the workplace and cardiopulmonary resuscitation;
 - .2 work likely to release asbestos dust (mandatory for all work where asbestos is present);
 - .3 work in confined spaces (mandatory for all work in confined spaces);
 - .4 lockout-tagout procedures (mandatory for all work requiring lockout);
 - .5 safely operating forklift trucks (mandatory for all forklift usage);
 - .6 safely operating elevating work platforms (mandatory for the use of all elevating platforms);
 - .7 any other requirement of Regulations or the safety program.
- .15 In addition, the certifications of the General Health and Safety Training for Construction Sites shall be available on demand on the construction site.

1.3 FILING OF NOTICE

- .1 File Notice of Project with Manitoba authorities prior to beginning of Work
- .2 Contractor shall agree to install proper site separation and identification in order to maintain time and space at all times throughout life of project.

1.4 SAFETY ASSESSMENT

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

1.5 MEETINGS

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

1.6 REGULATORY REQUIREMENTS

- .1 Comply with all legislation, regulations and standards applicable to the construction site and its related activities.
- .2 Comply with specified standards and regulations to ensure safe operations on a site containing hazardous or toxic materials.

1.7 PROJECT/SITE CONDITIONS

- .1 Work at site will involve contact with:
 - .1 Coal debris.

1.8 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 and must include any applicable health and safety requirements forthcoming from provincial or federal regulations concerning COVID19.
- .2 Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.

1.9 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.

1.10 COMPLIANCE REQUIREMENTS

- .1 Comply with:
 - .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations

- .2 Province of Manitoba
 - .1 The Workers Compensation Act RSM 1987 - Updated 2013.
 - .2 The Workplace Safety and Health Act, C.C.S.M. 2016

1.11 UNFORESEEN 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 Manitoba having jurisdiction and advise Departmental Representative verbally and in writing.

1.12 POSTING OF DOCUMENTS

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

1.13 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.

1.14 PREVENTION OF VIOLENCE

- .1 Health and safety management of Public Works and Government Services Canada construction sites includes the implementation of measures designed to protect the psychological health of all persons who access the construction site where the work is taking place. Consequently, in addition to physical violence, verbal abuse, intimidation and harassment are not tolerated on the construction site. Any person who demonstrates such actions or behaviours will receive a warning and/or could be definitely expelled from the construction site by the Departmental representative.

1.15 BLASTING

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

1.16 POWDER ACTUATED DEVICES

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

1.17 LOCKOUT-TAGOUT

- .1 For all work on electrically or otherwise energized equipment, the Contractor shall draw up and implement a general lockout-tagout procedure and submit it to the Departmental representative.

1.18 ELECTRICAL WORK

- .1 Contractor shall ensure that all electrical work is executed by qualified employees in accordance with the provincial regulation respecting vocational training and qualification.
- .2 Contractor shall respect all requirements of standard CSA Z462 Workplace Electrical Safety Standard.
- .3 Contractor shall advise in writing the Departmental Representative of all the work that cannot be done with de-energized equipment and obtain his authorization. Contractor shall demonstrate to the Departmental representative that it is impossible to do the work with de-energized equipment and provide all the information necessary to request and obtain an energized electrical work permit (indicate working procedures, arc flash hazard analysis, protective perimeter, protective equipment, etc.) before the beginning of the work, excluding for the exceptions indicated in standard CSA Z462 Workplace electrical safety
- .4 If for the operational requirements of the occupants of the site the representative of the site requires that the Contractor performs work in an energized condition, the Contractor shall obtain all the information required to request and obtain an energized electrical work permit (indicate working procedures, arc flash hazard analysis, protective perimeter, protective equipment, etc.) and have it signed by the representative of the site assigned by the Departmental representative before the beginning of the work.

1.19 ASBESTOS EXPOSURE

- .1 General contractor has to stop immediately work operation and advise the Departmental Representative if he finds materials likely to contain asbestos.

1.20 FUNGAL CONTAMINATION

- .1 General contractor has to stop immediately work operation and advise the Departmental Representative if he finds potentially contaminated with fungal materials.

1.21 EXPOSURE TO SILICA

- .1 For any interior or exterior work generating silica, the Contractor must respect the following requirements, in addition to those in the Manitoba Workplace Safety and health Act.
 - .1 Work in wet environment or use tools with the inflow of water in order to reduce dustiness, if not, collect dust at the source and retain it with a high-efficiency filters not to propagate dust in the environment.
 - .2 Clean surfaces and tools with water, never with compressed air.
 - .3 Sand and pickle surfaces by using an abrasive containing less than 1% of silica (also called amorphous silica).
 - .4 Install shields or other containment device to prevent silica dust from migrating toward other workers or the public.
 - .5 Wear individual respiratory and ocular protection equipment during all the operations that could generate silica dust in accordance with the requirements of the authority having jurisdiction.
 - .6 Wear coveralls to prevent contamination outside the construction site.
 - .7 Do not eat, drink, or smoke in a dusty environment.
 - .8 Wash the hands and the face before drinking, eating or smoking.

1.22 SANDBLASTING

- .1 Prior to starting any sandblasting work, the Contractor must:
 - .1 Provide a written procedure of the work that meets the requirements of the authority having jurisdiction
 - .2 Demonstrate that he has all the material and equipment required on hand to respect the procedure and for safely conducting the work. All sanding and sandblasting work shall be done by using an abrasive containing less than 1% of silica.

1.23 LEAD-BASE PAINT REMOVAL

- .1 Prior to all work where workers are likely to handle materials containing lead-base paint or other substances containing lead, the Contractor must:
 - .1 Provide a written procedure for the work which respects all the requirements of the authority having jurisdiction, as well as the requirements indicated in the document "Guideline for Lead on Construction Projects" published by the Ontario Ministry of Labour (http://www.labour.gov.on.ca/english/hs/pdf/gl_lead.pdf) If there is a discrepancy between the Manitoba regulation and the Ontario document, the most stringent requirement shall apply.
 - .2 Demonstrate that he has all the material and equipment required on hand to respect the procedure and for safely conducting the work.

1.24 RESPIRATORY PROTECTION

- .1 Contractor must ensure that all wear a respirator in accordance with the requirements of the workplace safety and health act.

1.25 FALL PROTECTION

- .1 Plan and organize work so as to eliminate the risk of fall at the source or ensure collective protection, thereby minimizing the use of personal protective equipment. When personal fall protection is required, workers must use a safety harness that complies with CSA standard CAN/CSA Z-259.10 M90. A safety belt must not be used as fall protection.
- .2 Every person using an elevating platform (scissors, telescopic mast, articulated mast, rotative mast, etc.) must have a training regarding this equipment.
- .3 The use of a safety harness is mandatory for all elevating platforms with telescopic, articulate or rotative mast.
- .4 Define the limits of the danger zone around each elevating platform.
- .5 All openings in a floor or roof must be surrounded by a guardrail or provided with a cover fixed to the floor able to withstand the loads to which it could be exposed, regardless of the size of the opening and the height of the fall it represents.
- .6 Everyone who works within two metres from a fall hazard of three metres or more must use a safety harness in accordance with the requirements of the regulation, unless there is a guardrail or another device offering an equivalent safety.
- .7 Despite the requirements of the regulation, the Departmental representative may require the installation of a guardrail or the use of a safety harness for specific situations presenting a risk of fall less than three metres.

1.26 HOT WORK

- .1 Hot work means any work where a flame is used or a source of ignition may be produced, i.e., riveting, welding, cutting, grinding, burning, heating, etc.
 - .1 Before the beginning of each shift of work and for each sector, the Contractor must obtain a "Hot Work Permit" emitted by the person responsible for the site.
 - .2 A working portable fire extinguisher suitable to the fire risk shall be available and easily accessible within a 5 m radius from any flame, spark source or intense heat.
 - .3 The Contractor must appoint an individual to do continuous monitoring of the fire risks for a period of one (1) hour after the end of the shift of hot work. This individual shall sign the section for this purpose on the permit and give it to the person in charge of the construction site after the one-hour period.
 - .4 When the hot work is done in areas where there is combustible materials or where the walls, ceilings or floors are made of or covered with combustible materials, a final inspection of the work area must be scheduled four (4) hours after the work has finished. Unless specified otherwise by the Departmental representative, the Contractor must assign a person to carry out this monitoring.
- .2 Welding and cutting
 - .1 In addition to the requirements prescribed in the preceding paragraphs, the Contractor must respect the following requirements:
 - .2 Welding and cutting work must be carried out in accordance with the requirements the authority having jurisdiction and CSA standard W117.2, Safety in Cutting, Welding and Allied Processes.

1.27 1.27 INTERIOR USE OF INTERNAL COMBUSTION ENGINES

- .1 Perform work in accordance with the requirements of the authority having jurisdiction.

1.28 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

2.1 NOT USED

- .1 Not used.

Part 3 Execution

3.1 NOT USED

- .1 Not used.

END OF SECTION

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.

1.2 SUBMITTALS

- .1 Prior to commencing construction activities or delivery of materials to site, provide Environmental Management Plan for review by Departmental Representative.
- .2 Ensure Environmental Management Plan includes comprehensive overview of known or potential environmental issues to be addressed during construction.
- .3 Address topics at level of detail commensurate with environmental issue and required construction task[s].
- .4 The Environmental Protection Plan shall be submitted to Departmental Representative prior to work commencing on-site.
 - .1 The Environmental Protection Plan shall be made in accordance with the recommendations of the report titled "Assessment of Powerhouse Coal Storage Area" prepared by Wood Environment and Infrastructure Solutions, dated 24 June 2020.

1.3 ENVIRONMENTAL MANGEMENT PLAN

- .1 The Environmental Management Plan shall include the following:
 - .1 Name of person(s) responsible for ensuring adherence to Environmental Management Plan.
 - .2 Name of person(s) responsible for manifesting hazardous waste to be removed from site.
 - .3 A site plan showing the overall site layout, intended staging and storage areas, waste processing areas, loading areas, temporary fencing locations, parking, access and emergency routes and location of the Contractor's site office.
 - .4 Transportation routes to and from the work area for equipment and wastes. Truck transportation to follow designated truck routes.
 - .1 Ensure plans include measures to minimize amount of mud transported onto paved public roads by vehicles or runoff..
 - .2 Consideration shall be made to avoid high public traffic periods when scheduling the trucking materials off site to waste disposal facilities as required.
 - .5 Work area plan showing proposed activity in each portion of area and identifying areas of limited use or non-use. Ensure plan includes measures for marking limits of use areas and methods for protection of features to be preserved within authorized work areas.

- .6 Spill Control Plan that includes procedures, instructions, and reports to be used in event of unforeseen spill or release.
- .7 Pollution Control Procedures including the following:
 - .1 Contractor to provide hazardous material management and disposal procedure for any contractor generated wastes expected to be generated during the project (i.e. batteries, waste oil and other fluids, etc.).
 - .2 Contractor to provide hazardous material management and disposal procedure for known hazardous wastes.
 - .3 Contaminant Prevention Plan identifying potentially hazardous substances to be used on job site; intended actions to prevent introduction of such materials into air, water, or ground; and detailing provisions for compliance with Federal, Provincial, and Municipal laws and regulations for storage and handling of these materials.
 - .4 Procedures to ensure equipment, materials and wastes are stored or handled in such a manner as to prevent contamination of ground surfaces. Provide secondary containment or preventative spill, leak or release containment to prevent contamination.
 - .5 Waste Water Management Plan identifying methods and procedures for management and/or discharge of waste waters which are directly derived from construction activities, such as concrete curing water, clean-up water, dewatering of ground water, disinfection water, hydrostatic test water, and water used in flushing of lines.
 - .6 Air pollution control plan detailing provisions to assure that dust, debris, materials, and trash, do not become air borne and travel off project site.
 - .1 Contractor shall limit dust generating project activities during times of high winds or implement control measures to prevent migration of dust from the project site.
 - .2 Control measures may include covering and/or wetting of dry materials and rubbish; dust control during demolition and waste processing activities, temporary enclosures and dust control for roadways.
 - .8 Non-Hazardous solid waste disposal plan identifying methods and locations for solid waste disposal including clearing debris.
 - .9 Historical, archaeological, cultural resources biological resources and wetlands plan that defines procedures for identifying and protecting historical, archaeological, cultural resources, biological resources and wetlands.
 - .1

1.4 FIRES

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

1.5 DRAINAGE

- .1 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.
- .2 Provide system for the collection of suspended solids and filter water as required to meet Federal, Provincial or Municipal regulations or bylaws for disposal.
- .3 Do not pump water containing suspended materials into waterways, sewer or drainage systems.

- .4 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.
- .5 Protect land drainage system inlets and catch basins from debris or run-off of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.6 SITE CLEARING AND PLANT PROTECTION

- .1 Protect trees and plants on site and adjacent properties as indicated.
- .2 Vegetation and trees, are to remain in place unless removal is necessary to facilitate demolition activities. The contractor should take reasonable measures to minimize removal of existing vegetation and trees.
- .3 Contractor is to repair damaged grassed areas as required by the Departmental Representative. Repairs shall be such to match existing conditions.

1.7 NOTIFICATION

- .1 Departmental Representative will notify Contractor in writing of observed non-compliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of environmental protection. After receipt of such notice, inform the Departmental Representative in writing of proposed corrective action and take such action as authorized in writing by the Departmental Representative.
- .2 Departmental Representative may issue stop order of work until satisfactory corrective action has been taken.
- .3 No time extensions will be granted or equitable adjustments allowed to Contractor for such suspensions.

END OF SECTION

Part 1 General

1.1 INSPECTION

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

1.2 INDEPENDENT INSPECTION AGENCIES

- .1 All testing required to meet specifications is Quality Control. Testing to be carried out by a certified Material Testing Laboratory engaged and paid by contractor. Departmental representative may engage to carry out random Quality Assurance testing and will pay for it.
- .2 Independent Inspection/Testing Agencies will be engaged for purpose of inspecting and/or testing portions of Work. Cost of such services will be paid by the Contractor via the testing cash allowance.
- .3 Allocated costs: to Section 01 21 00 - Allowances.
- .4 Provide equipment required for executing inspection and testing by appointed agencies.
- .5 Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
- .6 If defects are revealed during inspection and/or testing, appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and irregularities as advised by Departmental Representative at no cost to The Department Representative. Pay costs for retesting and reinspection.

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 in advance of requirement for tests, in order that attendance arrangements can be made.

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

1.5 REJECTED WORK

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Departmental Representative 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 the Departmental Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Departmental Representative will deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which will be determined by Departmental Representative.

1.6 REPORTS

- .1 Submit copies of inspection and test reports to Departmental Representative.
- .2 Provide copies to subcontractor of work being inspected or tested [manufacturer or fabricator of material being inspected or tested].
- .3 Provide copies of concrete test results to Concrete Supplier.

1.7 TESTS AND MIX DESIGNS

- .1 Furnish test results and mix designs as specified under various sections.
- .2 Cost of tests and mix designs beyond those called for in Contract Documents or beyond those required by law of Place of Work will be appraised by Departmental Representative and may be authorized as recoverable.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 INSTALLATION AND REMOVAL

- .1 Provide temporary utilities controls in order to execute work expeditiously.
- .2 Remove from site all such work after use.

1.2 WATER SUPPLY

- .1 Departmental Representative will provide continuous supply of potable water for construction use.
- .2 Arrange for connection with appropriate utility company and pay costs for installation, maintenance and removal.
- .3 Contractor will pay for utility charges at prevailing rates.
- .4 The Contractor shall provide all necessary hoses, lines, connections, and other ancillary hardware which may be required.
- .5 The services are to be returned to their original condition at the temporary locations, or left in an altered condition only as approved by the Departmental Representative.

1.3 TEMPORARY HEATING AND VENTILATION

- .1 Provide temporary heating required during construction period, including attendance, maintenance and fuel.
- .2 Construction heaters used inside building must be vented to outside or be flameless type. Solid fuel salamanders are not permitted.
- .3 Provide temporary heat and ventilation in enclosed areas as required to:
 - .1 Facilitate progress of Work.
 - .2 Protect Work and products against dampness and cold.
 - .3 Prevent moisture condensation on surfaces.
 - .4 Provide ambient temperatures and humidity levels for storage, installation and curing of materials.
 - .5 Provide adequate ventilation to meet health regulations for safe working environment.
- .4 Maintain temperatures of minimum 10 degrees C in areas where construction is in progress.
- .5 Ventilating:
 - .1 Prevent accumulations of dust, fumes, mists, vapours or gases in areas occupied during construction.
 - .2 Provide local exhaust ventilation to prevent harmful accumulation of hazardous substances into atmosphere of occupied areas.
 - .3 Dispose of exhaust materials in manner that will not result in harmful exposure to persons.
 - .4 Ventilate storage spaces containing hazardous or volatile materials.

- .5 Ventilate temporary sanitary facilities.
- .6 Continue operation of ventilation and exhaust system for time after cessation of work process to assure removal of harmful contaminants.
- .6 Permanent heating system of building may be used for heating. Be responsible for damage to heating system if use is permitted.
- .7 Maintain strict supervision of operation of temporary heating and ventilating equipment to:
 - .1 Conform with applicable codes and standards.
 - .2 Enforce safe practices.
 - .3 Prevent abuse of services.
 - .4 Prevent damage to finishes.
 - .5 Vent direct-fired combustion units to outside.
- .8 Be responsible for damage to Work due to failure in providing adequate heat and protection during construction.

1.4 TEMPORARY POWER AND LIGHT

- .1 Contractor will provide and pay for temporary power during construction for temporary lighting and operating of power tools, to a maximum supply of 230 volts 30 amps.
- .2 Arrange for connection with appropriate utility company. Pay costs for installation, maintenance and removal.
- .3 Temporary power for electric cranes and other equipment requiring in excess of above is responsibility of Contractor.

1.5 TEMPORARY COMMUNICATION FACILITIES

- .1 Provide and pay for temporary telephone, data hook up, lines equipment necessary for own use and use of Departmental Representative.

1.6 FIRE PROTECTION

- .1 Provide and maintain temporary fire protection equipment during performance of Work required by insurance companies having jurisdiction and governing codes, regulations and bylaws.
- .2 Burning rubbish and construction waste materials is not permitted on site.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CSA-A23.1/A23.2-09, Concrete Materials and Methods of Concrete Construction/Methods of Test and Standard Practices for Concrete.
 - .2 CSA O121-08, Douglas Fir Plywood.

1.2 SUBMITTALS

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

1.3 INSTALLATION AND REMOVAL

- .1 Prepare site plan indicating proposed location and dimensions of area to be fenced and used by Contractor, number of trailers to be used, avenues of ingress/egress to fenced area and details of fence installation. Comply with CSC Construction fence types where indicated.
- .2 Identify areas which have to be graveled to prevent tracking of mud.
- .3 Indicate use of supplemental or other staging area.
- .4 Provide construction facilities in order to execute work expeditiously.
- .5 Remove from site all such work after use.

1.4 SCAFFOLDING

- .1 Scaffolding shall be design and erected in accordance with Manitoba Regulation 217/2006 and CAN/CSA S269.2.
 - .1 Where Manitoba Regulation 217/2006 requires scaffolds to be designed by a professional engineer. Submit shop drawings bearing the seal of professional engineer registered in the Province of Manitoba.

1.5 SITE STORAGE/LOADING

- .1 Confine work and operations of employees by Contract Documents. Do not unreasonably encumber premises with products.
- .2 Do not load or permit to load any part of Work with weight or force that will endanger Work.

1.6 CONSTRUCTION PARKING

- .1 Parking will be permitted on site provided it does not disrupt performance of Work.
- .2 Provide and maintain adequate access to project site.
- .3 Clean runways and taxi areas where used by Contractor's equipment.

1.7 EQUIPMENT, TOOL AND MATERIALS STORAGE

- .1 Provide and maintain, in clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.
- .2 Locate materials not required to be stored in weatherproof sheds on site in manner to cause least interference with work activities.

1.8 Offices

- .1 Provide office heated to 22 degrees C, lighted 750 lx and ventilated, of sufficient size to accommodate site meetings and furnished with drawing laydown table.
- .2 Provide marked and fully stocked first-aid case in a readily available location.
- .3 Subcontractors to provide their own offices as necessary. Direct location of these offices.
- .4 Departmental Representative's office will be provided in the existing building. To be determined.

1.9 SANITARY FACILITIES

- .1 Provide sanitary facilities for work force in accordance with governing regulations and ordinances.
- .2 Post notices and take precautions as required by local health authorities. Keep area and premises in sanitary condition.

1.10 Construction Signage

- .1 No signs or advertisements, other than warning signs, are permitted on site.
- .2 Direct requests for approval to erect Consultant/Contractor signboard to Departmental Representative. For consideration general appearance of Departmental Consultant/Contractor signboard must conform to project identification site sign. Wording in both official languages.
- .3 Signs and notices for safety and instruction in both official languages Graphic symbols to CAN/CSA-Z321.
- .4 Maintain approved signs and notices in good condition for duration of project, and dispose of off site on completion of project or earlier if directed by Departmental Representative.

1.11 PROTECTION AND MAINTENANCE OF TRAFFIC

- .1 Maintain and protect traffic on affected roads during construction period except as otherwise specifically directed by Departmental Representative
- .2 Provide measures for protection and diversion of traffic, including provision of watch-persons and flag-persons, erection of barricades, placing of lights around and in front of equipment and work, and erection and maintenance of adequate warning, danger, and direction signs
- .3 Protect travelling public from damage to person and property.

- .4 Contractor's traffic on roads selected for hauling material to and from site to interfere as little as possible with public traffic.
- .5 Verify adequacy of existing roads and allowable load limit on these roads. Contractor: responsible for repair of damage to roads caused by construction operations.
- .6 Provide necessary lighting, signs, barricades, and distinctive markings for safe movement of traffic.
- .7 Dust control: adequate to ensure safe operation at all times.
- .8 Lighting: to assure full and clear visibility for full width of work areas during night work operations.
- .9 Provide snow removal during period of Work.

1.12 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 not in construction facilities.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 REFERENCE STANDARDS

- .1 Public Works Government Services Canada (PSPC) Standard Acquisition Clauses and Conditions (SACC)-ID: R0202D, Title: General Conditions 'C', In Effect as Of: May 14, 2004.

1.2 INSTALLATION AND REMOVAL

- .1 Provide temporary controls in order to execute Work expeditiously.
- .2 Remove from site all such work after use.

1.3 HOARDING

- .1 Erect temporary site enclosures using 38 x 89 mm construction grade lumber framing at 600 mm centres and 1200 x 2400 x 13 mm exterior grade fir plywood to CSA O121.
- .2 Apply plywood panels vertically as indicated.
- .3 Provide one lockable truck entrance gate and at least one pedestrian door as directed and conforming to applicable traffic restrictions on adjacent streets. Equip gates with locks and keys.
- .4 Erect and maintain pedestrian walkways including roof and side covers, complete with signs and electrical lighting as required by law.

1.4 GUARD RAILS AND BARRICADES

- .1 Provide secure, rigid guard rails and barricades around deep excavations, open shafts, open stair wells, open edges of floors and roofs.

1.5 WEATHER ENCLOSURES

- .1 Provide weather tight closures to unfinished door and window openings, tops of shafts and other openings in floors and roofs.
- .2 Close off floor areas where walls are not finished; seal off other openings; enclose building interior work for temporary heat.

1.6 DUST TIGHT SCREENS

- .1 Provide dust tight screens, polyethylene sheets or insulated partitions to localize dust generating activities, and for protection of workers, finished areas of Work and public.
- .2 Protection installations are to meet Departmental Representative's requirements.
- .3 Maintain and relocate protection until such work is complete.

1.7 TEMPORARY PARTITIONS

- .1 The Contractor must always restrict access to site so that no unauthorized person can have access to work areas.

- .2 Provide fire security means as indicated on plan.

1.8 FIRE ROUTES

- .1 Maintain access to property including overhead clearances for use by emergency response vehicles.

1.9 PROTECTION FOR OFF-SITE AND PUBLIC PROPERTY

- .1 Protect surrounding private and public property from damage during performance of Work.
- .2 Be responsible for damage incurred.

1.10 PROTECTION OF BUILDING FINISHES

- .1 Provide protection for finished and partially finished building finishes and equipment during performance of Work.
- .2 Provide necessary screens, covers, and hoardings.
- .3 Be responsible for damage incurred due to lack of or improper protection.

1.11 STAGING AREA

- .1 Erect temporary site enclosure staging area using new 1.83 m high chain-link fence with steel posts spaced at 2.4 m on centre. Provide one lockable truck gate. Maintain fence in good repair.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Within text of each specifications section, reference may be made to reference standards. Conform to these reference standards, in whole or in part as specifically requested in specifications.
- .2 Conform to latest date of issue of referenced standards in effect on date of submission of Bids, except where specific date or issue is specifically noted.
- .3 If there is question as to whether products or systems are in conformance with applicable standards, Departmental Representative reserves right to have such products or systems tested to prove or disprove conformance.
- .4 The Cost for such testing will be borne by the Contractor or Supplier.

1.2 QUALITY

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

1.3 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, Departmental Representative reserves right to substitute more readily available products of similar character, at no increase in Contract Price or Contract Time.

1.4 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 Keep sand, when used for grout or mortar materials, clean and dry. Store sand on wooden platforms and cover with waterproof tarpaulins during inclement weather.
- .6 Store sheet materials, lumber on flat, solid supports and keep clear of ground. Slope to shed moisture.
- .7 Store and mix paints in heated and ventilated room. Remove oily rags and other combustible debris from site daily. Take every precaution necessary to prevent spontaneous combustion.
- .8 Remove and replace damaged products at own expense and to satisfaction of Departmental Representative .
- .9 Touch-up damaged factory finished surfaces to Departmental Representative 's satisfaction. Use touch-up materials to match original. Do not paint over name plates.

1.5 TRANSPORTATION

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

1.6 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 Departmental Representative in writing, of conflicts between specifications and manufacturer's instructions, so that Departmental Representative will establish course of action. Where conflicts exist, the more stringent instruction will be enforced.
- .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.

1.7 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 Departmental Representative 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.

1.8 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.

1.9 REMEDIAL WORK

- .1 Perform remedial work required to repair or replace parts or portions of Work identified as defective or unacceptable. Co-ordinate adjacent affected Work as required.
- .2 Perform remedial work by specialists familiar with materials affected. Perform in a manner to neither damage nor put at risk any portion of Work.

1.10 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 .

1.11 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/or building occupants.
- .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

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 PROJECT CLEANLINESS

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris, other than that caused by Department Representative or other Contractors.
- .2 Remove waste materials from site at daily regularly scheduled times. Do not burn waste materials on site.
- .3 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .4 Provide on-site containers for collection of waste materials and debris.
- .5 Dispose of waste materials and debris off site.
- .6 Clean interior areas prior to start of finishing work, and maintain areas free of dust and other contaminants during finishing operations.
- .7 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .8 Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
- .9 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.
- .10 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.
- .2 Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
- .3 Prior to final review remove surplus products, tools, construction machinery and equipment.
- .4 Remove waste products and debris other than that caused by Department Representative or other Contractors.
- .5 Remove waste materials from site at regularly scheduled times. Do not burn waste materials on site.
- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .7 Remove stains, spots, marks and dirt from existing surfaces, fixtures, and finishes within the work area or affected by the affected by the Work.

- .8 Broom clean and wash exterior walks, steps and surfaces; rake clean other surfaces of grounds.
- .9 Remove dirt and other disfiguration from exterior surfaces.
- .10 Sweep and power wash clean all work areas.

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 NOT USED

- .1 Not Used.

END OF SECTION

Part 1 General

1.1 WASTE MANAGEMENT GOALS

- .1 Prior to start of Work conduct meeting with Departmental Representative to review and discuss PSPC's waste management goal and Contractor's proposed Waste Reduction Workplan for Construction, Renovation and /or Demolition (CRD) waste to be project generated.
- .2 PSPC's waste management goal: to divert a minimum 75 percent of total Project Waste from landfill sites. Prior to project completion provide Departmental Representative documentation certifying that waste management, recycling, reuse of recyclable and reusable materials have been extensively practiced.
- .3 Minimize amount of non-hazardous solid waste generated by project and accomplish maximum source reduction, reuse and recycling of solid waste produced by CRD activities.
- .4 Protect environment and prevent environmental pollution

1.2 REFERENCE STANDARDS

- .1 Canadian Construction Association (CCA)
 - .1 CCA 81-2001: A Best Practices Guide to Solid Waste Reduction.
 - .2 Public Works and Government Services Canada (PSPC)
 - .1 2002 National Construction, Renovation and Demolition Non-Hazardous Solid Waste Management Protocol.
 - .2 CRD Waste Management Market Research Report (available from PSPC's Environmental Services).
 - .3 Sustainable Development Strategy 2007-2009: Target 2.1 Environmentally Sustainable Use of Natural Resources.

1.3 DEFINITIONS

- .1 Approved/Authorized recycling facility: waste recycler approved by applicable provincial authority or other users of material for recycling approved by the Departmental Representative.
- .2 Class III: non-hazardous waste - construction renovation and demolition waste.
- .3 Construction, Renovation and/or Demolition (CRD) Waste: Class III solid, non-hazardous waste materials generated during construction, demolition, and/or renovation activities
- .4 Inert Fill: inert waste - exclusively asphalt and concrete.
- .5 Recyclable: ability of product or material to be recovered at end of its life cycle and re-manufactured into new product for reuse.
- .6 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .7 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.
- .8 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.
- .9 Salvage: removal of structural and non-structural materials from deconstruction/disassembly projects for purpose of reuse or recycling.
- .10 Separate Condition: refers to waste sorted into individual types.
- .11 Source Separation: act of keeping different types of waste materials separate beginning from the point they became waste.
- .12

1.4 USE OF AND FACILITIES

- .1 Execute Work with minimal interference and disturbance to normal use of premises.
- .2 Maintain security measures established by facility provide temporary security measures approved by Departmental Representative.

1.5 WASTE PROCESSING SITES

- .1 Contractor is responsible to research and locate waste diversion resources and service providers. Salvaged materials are to be transported off site to approved and/or authorized recycling facilities or to users of material for recycling.

1.6 STORAGE HANDLING AND PROTECTION

- .1 Store, materials to be reused, recycled and salvaged in locations as directed by Departmental Representative.
- .2 Unless specified otherwise, materials for removal do not become Contractor's property.
- .3 Protect, stockpile, store and catalogue salvaged items.
- .4 Separate non-salvageable materials from salvaged items. Transport and deliver non-salvageable items to licensed disposal facility.
- .5 Protect structural components not removed and salvaged materials from movement or damage.
- .6 Support affected structures. If safety of building is endangered, cease operations and immediately notify Departmental Representative.
- .7 Protect surface drainage, mechanical and electrical from damage and blockage.
- .8 Provide on-site facilities and containers for collection and storage of reusable and recyclable materials.
- .9 Separate and store materials produced during project in designated areas.
- .10 Prevent contamination of materials to be salvaged and recycled and handle materials in accordance with requirements for acceptance by designated processing facilities.
 - .1 On-site source separation is recommended.
 - .2 Remove co-mingled materials to off site processing facility for separation.
 - .3 Obtain waybills, receipts and/or scale tickets for separated materials removed from site.
 - .4 Materials reused on-site are considered to be diverted from landfill and as such are to be included in all reporting.

1.7 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 Keep records of construction waste including:
 - .1 Number and size of bins.
 - .2 Waste type of each bin.
 - .3 Total tonnage generated.
 - .4 Tonnage reused or recycled.
 - .5 Reused or recycled waste destination.
- .4 Remove materials on-site as Work progresses.
- .5 Prepare project summary to verify destination and quantities on a material-by-material basis as identified in the waste audit.

1.8 SCHEDULING

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

Part 2 Products

2.1 NOT USED

- .1 Not Used.

Part 3 Execution

3.1 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
 - .1 Leave work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
 - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.
 - .2 Source separate materials to be reused/recycled into specified sort areas.

3.2 DIVERSION OF MATERIALS

- .1 From following list, separate materials from general waste stream and stockpile in separate piles or containers, as reviewed by Departmental Representative, and consistent with applicable fire regulations.
 - .1 Mark containers or stockpile areas.
 - .2 Provide instruction on disposal practices.
- .2 On-site sale of salvaged, recovered, reusable, recyclable material is not permitted.

3.3 WASTE DIVERSION REPORT

- .1 At completion of Project, prepare written Waste Diversion Report indicating quantities of materials reused, recycled or disposed of as well as the following:
 - .1 Identify final diversion results and measure success against goals from Waste Reduction Workplan.
 - .2 Compare final quantities/percentages diverted with initial projections in Waste Audit and Waste Reduction Workplan and explain variances.
 - .1 Supporting documentation.
 - .2 Waybills and tracking forms.
 - .3 Description of issues, resolutions and lessons learned.

3.4 CANADIAN GOVERNMENTAL DEPARTMENTS CHIEF RESPONSIBILITY FOR THE ENVIRONMENT

- .1 Environment Building 2, 139 Tuxedo Avenue, Winnipeg MB R3N 0H6 T. 204-945-7100
- .2 The Clean Environment Commission, 284 Reiner Avenue, Box 21420 Steinback MB R0A 2T3 T. 204-326-2395

END OF SECTION

Part 1 General

1.1 ADMINISTRATIVE REQUIREMENTS

- .1 Acceptance of Work Procedures:
 - .1 Contractor's Inspection: Contractor: 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 submit verification that corrections have been made.
 - .2 Request Departmental Representative 's inspection.
 - .2 Departmental Representative's Inspection:
 - .1 Departmental Representative and Contractor to inspect Work and identify defects and deficiencies.
 - .2 Contractor to correct Work as directed.
 - .3 Completion Tasks: submit written certificates that tasks have been performed as follows:
 - .1 Work: completed and inspected for compliance with Contract Documents.
 - .2 Defects: corrected and deficiencies completed.
 - .3 Work: complete and ready for final inspection.
 - .4 Final Inspection:
 - .1 When completion tasks are done, request final inspection of Work by Departmental Representative, and Contractor.
 - .2 When Work incomplete according to Departmental Representative , complete outstanding items and request re-inspection.
 - .5 Declaration of Substantial Performance: when Departmental Representative considers deficiencies and defects corrected and requirements of Contract substantially performed, make application for Certificate of Substantial Performance.
 - .6 Commencement of Lien and Warranty Periods: date of Department Representative's acceptance of submitted declaration of Substantial Performance to 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:
 - .1 When Departmental Representative considers final deficiencies and defects corrected and requirements of Contract met, make application for final payment.
 - .2 When Work deemed incomplete by Departmental Representative , complete outstanding items and request re-inspection.
 - .8 Payment of Holdback: after issuance of Certificate of Substantial Performance of Work, submit application for payment of holdback amount in accordance with contractual agreement.

1.2 FINAL CLEANING

- .1 Clean in accordance with Section 01 74 11 – Cleaning.
 - .1 Remove surplus materials, excess materials, rubbish, tools and equipment.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Operation and maintenance data.
- .2 As-built drawings, samples, and specifications.
- .3 Product data, materials and finishes, and related information.
- .4 Record documents.
- .5 Spare parts, special tools and maintenance materials.
- .6 Warranties and bonds.

1.2 SUBMISSION

- .1 Prepare instructions and data using personnel experienced in maintenance and operation of described products.
- .2 Copy will be returned after final inspection, with Departmental Representative's comments.
- .3 Revise content of documents as required prior to final submittal.
- .4 If requested, furnish evidence as to type, source and quality of products provided.
- .5 Defective products will be rejected, regardless of previous inspections. Replace products at own expense.
- .6 Pay costs of transportation.

1.3 AS-BUILT DOCUMENTS AND SAMPLES

- .1 In addition to requirements in General Conditions, maintain at the site for Departmental Representative one record copy of:
 - .1 Contract Drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Change Orders and other modifications to the Contract.
 - .5 Reviewed shop drawings, product data, and samples.
 - .6 Field test records.
 - .7 Inspection certificates.
 - .8 Manufacturer's certificates.
- .2 Store as-built documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage.

- .3 Label as-built documents and file in accordance with Section number listings in List of Contents of this Project Manual. Label each document "AS-BUILT DOCUMENTS" in neat, large, printed letters.
- .4 Maintain as-built documents in clean, dry and legible condition. Do not use as-built documents for construction purposes.
- .5 Keep as-built documents and samples available for inspection by Departmental Representative.

1.4 RECORDING ACTUAL SITE CONDITIONS

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

1.5 RECORD DOCUMENTS

- .1 Prior to Substantial Performance of the Work, electronically transfer the marked up information from the as-built documents to a master set of drawing and specification files provided by the Departmental Representative, as follows:
 - .1 Drawings: AutoCAD Release 2018
 - .2 Specifications: Microsoft Word 2003.
- .2 Mark revised documents as "RECORD DOCUMENTS". Include all revisions, with special emphasis on mechanical, electrical, structural steel, and reinforced concrete.

- .3 Employ a competent computer draftsman to indicate changes on the electronic set of record drawings. Provide updated record drawings in AutoCAD Release 2018.
- .4 Employ a competent specification writer to indicate changes to the electronic set of record specifications. Provide updated record specifications in Microsoft Word 2003.
- .5 Submit completed record documents to Departmental Representative electronically and accompanied by 3 hard copy sets.

1.6 MATERIALS AND FINISHES

- .1 Building Products, Applied Materials, and Finishes: include product data, with catalogue number, size, composition, and colour and texture designations.
- .2 Additional Requirements: as specified in individual specifications sections.

1.7 STORAGE, HANDLING AND PROTECTION

- .1 Store spare parts, maintenance materials, and special tools in manner to prevent damage or deterioration.
- .2 Store in original and undamaged condition with manufacturer's seal and labels intact.
- .3 Store components subject to damage from weather in weatherproof enclosures.
- .4 Store paints and freezable materials in a heated and ventilated room.
- .5 Remove and replace damaged Products at own expense and to satisfaction of Departmental Representative.

1.8 WARRANTIES AND BONDS

- .1 Separate each warranty or bond with index tab sheets keyed to Table of Contents listing.
- .2 List Subcontractor, Supplier, and manufacturer, with name, address, and telephone number of responsible principal.
- .3 Obtain warranties and bonds, executed in duplicate by Subcontractors, Suppliers, and manufacturers, within ten days after completion of the applicable item of work.
- .4 Except for items put into use with Department Representative's permission, leave date of beginning of time of warranty until the Date of Substantial Performance is determined.
- .5 Verify that documents are in proper form, contain full information, and are notarized.
- .6 Co-execute submittals when required.
- .7 Retain warranties and bonds until time specified for submittal.

END OF SECTION