

1.1 PRECEDENCE

- .1 Division 1 Sections take precedence over technical specification sections in other Specification Divisions.

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- .1 Work of this Contract comprises the furnishing of all labour, materials, equipment and supervision required for the modernization of two passenger elevators at the facility for Fisheries and Oceans Canada located in Winnipeg, Manitoba.
- .2 Refer to Specification Sections for division of scope.
- .3 Refer to Drawings for location of elevators.

1.3 DEFINITIONS

- .1 The word "provide" means "supply and install".
- .2 The term "Occupant" means the organization who is, or will be, occupying the building site.

1.4 WORK SEQUENCE

- .1 Note: General Contractor will apply for permit to the Office of the Fire Commissioner and will register the installations as major alterations and obtain and pay for all government permits and licenses.
- .2 Construct Work to accommodate continuous use of premises by the Occupants and by the public where access by the public is permitted, during construction. Do not close off public usage of facilities until temporary barrier, directional signage and swing space reception is set up.
- .3 The work shall be accomplished in phases. Complete the modernization of one elevator at a time.
- .4 The building will continue to be occupied during the entire phased renovation. The Fire Alarm must be kept operational and exits must be clear and free of all obstructions during working hours. During regular construction hours a temporary dust barrier for ingress of dust must be constructed.
- .5 Coordinate Progress Schedule with Consultant, Departmental Representative and User Department occupancy during construction.
- .6 Maintain fire access/control.

1.5 TIME OF COMPLETION

- .1 Work under this contract is to be performed in a timely manner. Commence planning and preparatory work immediately upon receipt of official notification of acceptance of Contract and complete the work within time stipulated in the Construction Tender.
- .2 Before work is undertaken to specific areas, ensure that all materials and trades required are available to finish work in as short a period as possible.

1.6 INTERPRETATION OF DOCUMENTS

- .1 In the event of discrepancies or conflicts in interpreting the Plans (drawings) and Specifications,
 - .1 Division 1 Sections take precedence over technical specification sections in other Divisions;
 - .2 Specifications take precedence over drawings bound with specifications;
 - .3 Specifications take precedence over door schedules, whether they are bound with the specifications or integral with the drawings;
 - .4 Door schedules take precedence over drawings, whether they are bound with the specifications or integral with the drawings.
- .2 Plans (drawings) and Specifications are complementary. When work is shown or mentioned on the drawings but is not indicated in the Specifications, or when work is indicated in the Specifications but is not shown or mentioned on the Drawings, it shall nevertheless be included in the Contract.
- .3 The sub-division of the Specification into sections, identified by title and number, is for convenience only and does not modify the singularity of the document, nor does it operate to make or imply that the Consultant is an arbiter to establish the limits or extent of contract between Contractor and Subcontractors or to determine the limits or extents of work that may be decided by trade unions or contractors' organizations. Extras to the Contract will not be considered on the grounds of differences in interpretation of the Specification and/or Plans (drawings) as to which trade performs the work.

1.7 SUBCONTRACTORS

- .1 Within 48 hours of tender acceptance submit a list of subcontractors

1.8 SUPPLEMENTARY INFORMATION FOR PROGRESS PAYMENTS

- .1 Submit to PSPC's representative, within 5 working days of Contract Award, cost breakdown, in detail as directed, and on form provided, by PWGSC Representative, for parts of Work, aggregating total amount of Contract Price, so as to facilitate evaluation of applications for payment. After approval by PSPC Representative, cost breakdown will be used as basis for progress payments.
- .2 Show separately cost of equipment purchased exempt from Retail Sales Tax under contractor's Sales Tax license number.

1.9 CONTRACTOR USE OF PREMISES

- .1 Contractor shall limit use of premises for Work, for storage, and for access, to allow;
 - .1 Occupancy.
 - .2 Partial occupancy.
 - .3 Occupancy of other facilities on site and deliveries.
 - .4 Public usage.
- .2 Refer to Section 01 52 00 – Construction Facilities.

- .3 Coordinate use of premises under direction of PSPC and DFO/FWI.
- .4 Obtain and pay for use of additional storage or work areas needed for operations under this Contract.
- .5 Do not unreasonably encumber the site with materials and equipment.
- .6 Assume full responsibility for protection and safekeeping of products under this Contract.
- .7 Move stored products or equipment which interfere with operations of Occupants.

1.10 OCCUPANCY

- .1 Premises will be occupied during entire construction period for execution of normal operations. (Area under renovation will be off limits to occupants)
- .2 Cooperate with PSPC, Consultant and Occupants in scheduling operations to minimize conflict and to facilitate Occupant usage.
- .3 The existing building must remain legally accessible and kept operational at all times.
- .4 PSPC shall have access to all parts of the site to do minor maintenance and repairs to the existing building within the area of construction. The PSPC and Departmental Representative (who is the key contact) will co-ordinate the scheduling of Occupant's work with the Contractor.

1.11 CONTRACTOR'S WEEKLY SUBMISSION REPORT

- .1 Each week for the duration of the contract, complete all applicable information required on Contractor's Submission Sheet and submit to the Departmental Representative on every Thursday of each week.

1.12 SECURITY CLEARANCE

- .1 Personnel employed on this project will be subject to security check.
- .2 Obtain requisite clearance as instructed by Departmental Representative.
- .3 On award of Contract the Departmental Representative will provide 'Personnel Screening Request and Authorization' form; 'Declaration Regarding Criminal Convictions' form and 'Security Screening Certificate and Briefing Form' to the Contractor.
- .4 These forms must be filled out for each person who will have access to the work area.

1.13 SECURITY REQUIREMENTS

- .1 Contractors must apply for and obtain a contractor security pass prior to work in the facility.
- .2 Security clearance or supervision by a person with adequate security clearance will be required for all Contractor personnel and subtrades working in the areas affected by this project. In the absence of adequate security clearance, an approved commissioner will have to be engaged by the Contractor to accompany personnel without adequate security clearance.

.3 Level of security clearance required for this project: Reliability Status.

END OF SECTION

1.1 EXISTING SERVICES

- .1 Notify Departmental Representative, Facility Manager and utility companies of intended interruption of services and obtain required permission.
- .2 Where Work involves breaking into or connecting to existing services, give Departmental Representative 48 hours of notice for necessary interruption of mechanical or electrical service throughout course of work. Keep duration of interruptions to a minimum.
- .3 Construct barriers in accordance with Section 01 56 00.
- .4 Contractor to provide access to fire alarm annunciator panel for fire department at all times (keep panel energized and accessible). Panel may be off line during business hours.

1.2 SPECIAL REQUIREMENTS

- .1 All construction will occur during regular business hours Monday to Friday (6:00 am - 6:00 pm).
- .2 Carry out noise generating work Monday to Friday from 6:00 pm to 6:00 am hours
 - .1 Loud noise generating operations such as coring, drilling, use of pneumatic hammers, etc.
 - .2 Other work as may be directed by Departmental Representative.
- .3 Submit schedule in accordance with Section 01 32 18.

1.3 ALTERATIONS, ADDITIONS OR REPAIRS TO EXISTING BUILDING

- .1 Confirm all dimensions on site. Assume all risks associated with scaling of drawings.
- .2 Maintain integrity of exits at all times.
- .3 Maintain fire access/control.
- .4 Where security has been reduced by work of Contract, provide temporary means to maintain security.
- .5 Make good any damage to existing finishes or furniture caused by work under the contract. Making good means restoration to at least original condition in terms of strength, workmanship and appearance. Protect all furniture and belongings of tenants.
- .6 Execute work with least possible interference or disturbance to occupants, public and normal use of premises. Arrange with Departmental Representative to facilitate execution of work.
- .7 Existing operations must remain in service without interruption during construction period.
- .8 Provide tacky mats (soil walk off type temporary carpets) to prevent traffic from carrying construction debris into other parts of the building.
- .9 Bag or otherwise protect all smoke detectors in the construction area during activities which create dust. Vacuum or otherwise clean smoke detectors on completion of each construction activity.
- .10 Provide plywood cover on common area ceramic tile floors to remain. Protect these floors from damage and clear on completion.

- .11 Retract existing window covering – bag or otherwise protect from harm during activities which create dust. Vacuum or otherwise clean upon completion of each construction activity/phase.

END OF SECTION

1.1 DEFINITIONS

- .1 Alternative Price: a price for a substitution which is an addition or deduction from the Base Bid Price. It may be required by the Owner or offered by the Bidder for selection at the discretion of the Owner.
- .2 Separate Price: a price for Work that shall be added to the Base Bid Price if selected by the Owner. The Work defined in a Separate Price is not included in the Base Bid Price.
- .3 Itemized Price: a price for Work that shall be deducted from the Base Bid Price if selected by the Owner. The Work defined in an Itemized Price is included in the Base Bid Price.

1.2 GENERAL

- .1 Acceptance of Alternatives is at the sole discretion of the Owner.
- .2 Submit complete and accurate prices for each Alternative, including overhead and profit, labour and materials.
- .3 Include in each Alternative costs by Work of Subcontractors whose Work is affected, including costs for modifications to their Work as may be required should the Alternative be accepted.
- .4 Claims for extras to the Contract because of the acceptance of an Alternative will not be accepted.

1.3 ALTERNATIVE PRICES

- .1 Not used.

1.4 SEPARATE PRICES

- .1 Submit a separate price to provide maintenance for a term of five years following the expiry of the warranty period. The maintenance shall be as described in Section 14 20 06.
- .2 Submit a separate price to provide maintenance for a term of five years subsequent to the five-year term described in paragraph .1 above.
- .3 Submit a separate price to provide maintenance for a term of five years subsequent to the five-year term described in paragraph .2 above.

1.5 ITEMIZED PRICES

- .1 Not used.

END OF SECTION

1.1 LOCATION

- .1 To be held at 501 University Crescent, Winnipeg, Manitoba.

1.2 START-UP MEETING

- .1 After award of Contract, but before start of Work, convene a start-up meeting to discuss and resolve administrative procedures and responsibilities.
- .2 Senior representatives of the Consultant, Owner, Contractor, major Subcontractors are to attend.
- .3 Agenda:
 - .1 Appointment of official representatives of participants in the work.
 - .2 Schedules of work, progress scheduling.
 - .3 Schedule of submission of shop drawings, product data, samples, mock-ups, spare parts, extra materials, final survey, etc.
 - .4 Requirements for temporary utilities, temporary barriers and controls, construction facilities, lay down areas, site sign and other temporary construction.
 - .5 Record drawings.
 - .6 Maintenance Manuals.
 - .7 Take-over procedures, acceptance, warranties.
 - .8 Monthly progress claims, administrative procedures, holdbacks.
 - .9 Commissioning.
- .4 Establish time and location of meeting and notify all concerned parties within five working days of meeting.
- .5 Chair meeting, record minutes, and distribute minutes to all attending parties within four working days after meeting.

1.3 JOB PROGRESS MEETINGS

- .1 After award of Contract and signing of Agreement, convene job progress meetings at regularly scheduled intervals to ensure proper coordination of the Work.
- .2 Designate times and locations of meetings, and notify all parties concerned, including Subcontractors, to attend.
- .3 Chair meetings, record minutes, and distribute minutes to all attending parties within four working days after meetings.

END OF SECTION

1.1 SCHEDULES REQUIRED

- .1 Submit schedules as follows:
 - .1 Construction Progress Schedule.
- .2 Submittal Schedule for Shop Drawings.
 - .1 Indicate dates for submitting, review time, resubmission time, last date for meeting fabrication schedule.
 - .2 Include dates when submittals will be required for products.
 - .3 Include dates when reviewed submittals will be required from Departmental Representative/Consultant.
- .3 Product Delivery Schedule.
- .4 Shutdown or closure activity.
- .5 Within ten working days occurring between commencement of Work and final completion, and within ten working days after final completion, provide to PWGSC and Consultant:
 - .1 Statement of total person days of labour used on site in performance of Contract, including labour provided under sub-contracts.
 - .2 Estimate of total value in dollars of material delivered to site and installed, including material provided and installed under sub-contracts.

1.2 FORMAT

- .1 Prepare schedule in form of a horizontal Gantt bar chart.
- .2 Provide a separate bar for each major item of work trade or operation or phases.
- .3 Split horizontally for projected and actual performance.
- .4 Provide horizontal time scale identifying first work day of each week.
- .5 Format for listings: Table of Contents of this specification.
- .6 Identification of listings: By specification Section numbers.

1.3 SUBMISSION

- .1 Submit initial format of schedules within 5 working days after award of Contract.
- .2 Submit one opaque reproduction, plus 2 copies to be retained by Departmental Representative.
- .3 Consultant will review schedule and return review copy within 5 working days after receipt.
- .4 Resubmit finalized schedule within 3 working days after return of review copy.
- .5 Submit updated progress schedule with each application for payment.
- .6 Distribute copies of revised schedule to:
 - .1 Job site office.
 - .2 Subcontractors.
 - .3 Other concerned parties.
- .7 Instruct recipients to report to Contractor within 3 days, any problems anticipated by timetable shown in schedule.

END OF SECTION

1.1 SECTION INCLUDES

- .1 Shop drawings.
- .2 Product data, test reports, certificates.
- .3 Manufacturer's instructions and field reports.
- .4 Samples.
- .5 Cash flow forecast.

1.2 ADMINISTRATIVE

- .1 Submit to Consultant 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 Consultant. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and coordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and considered rejected.
- .6 Notify Consultant, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .7 Verify field measurements and affected adjacent Work are coordinated.
- .8 Contractor's responsibility for errors and omissions in submission is not relieved by Consultant's review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Consultant review.
- .10 Keep one reviewed copy of each submission on site

1.3 SHOP DRAWINGS AND PRODUCT DATA

- .1 Shop drawings that do not include the stamp, date, and signature of the person responsible for reviewing the shop drawings before submittal to the Consultant will be rejected and returned without being examined.
- .2 Submit shop drawings bearing stamp and signature of qualified professional engineer registered or licensed in Province of Manitoba, Canada where specifically requested in the specifications. Shop drawings not bearing the required Engineer's stamp will be rejected and returned without being examined.

- .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 coordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- .4 Adjustments made on shop drawings by the Consultant are not intended to change the Contract Price. If it is deemed that such adjustments affect the value of Work, state such in writing to the Consultant prior to proceeding with fabrication or the Work.
- .5 Make changes in shop drawings that the Consultant may require, consistent with Contract Documents. When resubmitting, notify the Consultant in writing of any revisions other than those requested.
- .6 Accompany submissions with transmittal letter, containing:
 - .1 Date.
 - .2 Project title and number.
 - .3 Contractor's name and address.
 - .4 Identification and quantity of each shop drawing, product data, and samples.
 - .5 Other pertinent data.
- .7 Submissions include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Subcontractor.
 - .2 Supplier.
 - .3 Manufacturer.
 - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
 - .5 Details of appropriate portions of Work as applicable:
 - .1 Fabrication.
 - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
 - .3 Setting or erection details.
 - .4 Capacities.
 - .5 Performance characteristics.
 - .6 Standards.
 - .7 Operating weight.
 - .8 Wiring diagrams.
 - .9 Single line and schematic diagrams.
 - .10 Relationship to adjacent work.
- .8 Submit one (1) digital file in Adobe PDF file format of the following submittals:
 - .1 Shop drawings for each requirement requested in specification sections and as the Consultant may reasonably request.
 - .2 Product data sheets or brochures for requirements requested in specification Sections and as requested by Consultant where shop drawings will not be prepared due to standardized manufacture of product.
 - .3 Test reports for requirements requested in specification Sections and as requested by Consultant.

- .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 three years of date of contract award for project.
- .4 Certificates for requirements requested in specification Sections and as requested by Consultant.
 - .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.
- .5 Manufacturers' instructions for requirements requested in specification Sections and as requested by Consultant.
 - .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.
- .6 Manufacturer's field reports for requirements requested in specification Sections and as requested by Consultant.
 - .1 Documentation of the testing and verification actions taken by manufacturer's representative to confirm compliance with manufacturer's standards or instructions.
- .9 Delete information not applicable to project.
- .10 Supplement standard information to provide details applicable to project.
- .11 If upon review by the Consultant, no errors or omissions in compliance with the Contract Documents are discovered or if only minor corrections are made, copies will be returned and fabrication and installation of Work may proceed. If, however, shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through the same procedure indicated above, must be performed before fabrication and installation of Work may proceed.
- .12 No extension of Contract Time will be allow for delays in the Work which may be caused for Consultant's rejection of shop drawings.
- .13 Shop drawings which contain deviations from the Contract Documents which are not presented to the Consultant in writing, as specified in General Condition GC 3.10, will be rejected and returned without being examined.

1.4 SAMPLES

- .1 Submit for review samples for each requirement requested in specification sections and as the Consultant may request.
- .2 Label samples as to identify material, manufacturer, make/model number, origin and intended use in the Work.
- .3 Deliver samples prepaid to Consultant's business address or as directed.
- .4 Notify the Consultant in writing, at the time of submission of deviations in samples from requirements of Contract Documents.

- .5 Adjustments made on samples by the Consultant are not intended to change the Contract Price. If adjustments affect the value of Work, state such in writing to the Consultant prior to proceeding with the Work.
- .6 Make changes in samples that the Consultant may require, consistent with Contract Documents.

1.5 CERTIFICATES AND TRANSCRIPTS

- .1 Prior to commencement of the Work, provide evidence of compliance with worker's compensation legislation at the Place of the Work, including payments due thereunder.
- .2 Submit transcription of insurance immediately after award of Contract.

END OF SECTION

Part 1 General

1.1 SECTION INCLUDES

- .1 Health and safety considerations required to ensure that PWGSC shows due diligence towards health and safety on construction sites, and meets the requirements laid out in PWGSC/RPB Departmental Policy DP 073 - Occupational Health and Safety - Construction.

1.2 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.

1.3 SUBMITTALS

- .1 Make submittals in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit site-specific Health and Safety Plan: Within seven (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.
- .3 Submit three (3) copies of Contractor's authorized representative's work site health and safety inspection reports to Departmental Representative and Consultant 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 WHMIS MSDS - Material Safety Data Sheets in accordance with Section 02 81 01 - Hazardous Materials.
- .7 Consultant will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within five (5) days after receipt of plan. Revise plan as appropriate and resubmit plan to Consultant within three (3) days after receipt of comments from Consultant.
- .8 Departmental Representative's and Consultant'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 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.
- .10 On-site Contingency and Emergency Response Plan: address standard operating procedures to be implemented during emergency situations.

1.4 FILING OF NOTICE

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

1.5 SAFETY ASSESSMENT

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

1.6 MEETINGS

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

1.7 REGULATORY REQUIREMENTS

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

1.8 PROJECT/SITE CONDITIONS

- .1 Work at site will involve contact with:
 - .1 Site Foreman and Construction Project Manager

1.9 GENERAL REQUIREMENTS

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

1.10 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.

1.11 COMPLIANCE REQUIREMENTS

- .1 Comply with The Workers Compensation Act, Workplace Safety Regulation, Manitoba.

- .2 Comply with Occupational Health and Safety Regulations, 1996.
- .3 Comply with Occupational Health and Safety Act, General Safety Regulations.
- .4 Comply with Canada Labour Code, Canada Occupational Safety and Health Regulations.

1.12 UNFORSEEN HAZARDS

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

1.13 HEALTH AND SAFETY CO-ORDINATOR

- .1 Employ and assign to Work, competent and authorized representative as Health and Safety Co-ordinator. Health and Safety Co-ordinator must:
 - .1 Have site-related working experience specific to activities associated with interior phased renovations .
 - .2 Have working knowledge of occupational safety and health regulations.
 - .3 Be responsible for completing Contractor's Health and Safety Training Sessions and ensuring that personnel not successfully completing required training are not permitted to enter site to perform Work.
 - .4 Be responsible for implementing, enforcing daily and monitoring site-specific Contractor's Health and Safety Plan.

1.14 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 Province having jurisdiction, and in consultation with Departmental Representative and Consultant.

1.15 CORRECTION OF NON-COMPLIANCE

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

1.16 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

1.1 SECTION INCLUDES

- .1 Construction aids.
- .2 Mechanical Room – within Renovation area
- .3 Parking

1.2 PRECEDENCE

- .1 For Federal Government projects, Division 1 Sections take precedence over technical specification sections in other Divisions of this Project Manual.

1.3 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CAN/CSA-Z321-96(R2001), Signs and Symbols for the Occupational Environment.

1.4 INSTALLATION AND REMOVAL

- .1 Prepare plan indicating proposed location of screening to be used by Contractor.
- .2 Indicate use of supplemental or other staging areas.
- .3 Provide construction facilities in order to execute work expeditiously.
- .4 Remove from site all such work after use.

1.5 STAGING AREA

- .1 Owner will designate a staging area for Contractor's use after award of Contract – in areas of renovation.

1.6 SITE STORAGE/LOADING

- .1 Confine work and operations of employees to areas defined by Contract Documents. Do not unreasonably encumber premises with products.
- .2 Do not load or permit to load any part of Work with a weight or force that will endanger the Work.
- .3 Deliver materials and tools required for interior Work through the facility deliveries area (loading dock).

1.7 CONSTRUCTION PARKING

- .1 Make arrangements with owner for parking that may be required.

1.8 OFFICES

- .1 Contractor may provide himself with a site office at his discretion. Locate in construction staging area.
- .2 Owner site meetings will be held in the rooms within the existing building as designated by the Departmental Representative.

1.9 EQUIPMENT, TOOL AND MATERIALS STORAGE

- .1 Provide and maintain, in a clean and orderly condition, lockable units for storage of tools, equipment and materials.
- .2 Locate materials in a manner to cause least interference with work activities.

1.10 SANITARY FACILITIES

- .1 Designated sanitary facilities within the building will be available for worker use. Keep premises clean and sanitary at all times.
- .2 Sanitary facilities are for personal worker use only. Do not use washrooms for dumping of liquids or for cleaning tools such as paint brushes.

1.11 CONSTRUCTION SIGNAGE

- .1 Project sign not required.
- .2 No company signs or signs for advertisements, other than warning signs, are permitted on site.
- .3 Signs and notices for safety and instruction shall be in both official languages. Graphic symbols shall conform to CAN3-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.

END OF SECTION

1.1 GENERAL

- .1 Comply with Section 01 74 21 - Construction/Demolition Waste Management and Disposal, and Waste Management Plan.
- .2 Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
- .3 Store volatile waste in covered metal containers, and remove from premises at end of each working day.
- .4 Provide adequate ventilation during use of volatile or noxious substances. Use of building ventilation systems is not permitted for this purpose.
- .5 Remove waste materials and debris from the site at regularly scheduled times or dispose of as otherwise directed by the Consultant. Do not burn or bury waste materials or debris on site.
- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.

1.2 MATERIALS

- .1 Use only cleaning materials recommended by manufacturer of surface to be cleaned, and as recommended by cleaning material manufacturer.

1.3 CLEANING DURING CONSTRUCTION

- .1 Provide on-site containers for collection of waste materials, and debris.
- .2 Dispose of waste materials and debris off site at regularly scheduled intervals.
- .3 Maintain the Work in tidy condition, free from accumulation of waste products and debris.
- .4 Schedule cleaning operations so that resulting dust, debris and other contaminants will not fall on wet, newly painted surfaces nor contaminate building systems.
- .5 Clean interior areas prior to start of finish work; maintain areas free of dust and other contaminants during finishing operations.

1.4 FINAL CLEANING

- .1 When the Work is complete, remove surplus products, tools, construction machinery and equipment. Remove waste products and debris and leave the Work clean and suitable for occupancy by the Owner.
- .2 Leave the work 'broom clean' before the inspection process commences.
- .3 Clean lighting reflectors, lenses, and other lighting surfaces.
- .4 Remove stains, spots, marks, and dirt from electrical and mechanical fixtures, furniture fitments, walls and floors.
- .5 Vacuum clean and dust building interiors, behind grilles, louvers and screens.
- .6 Clean equipment and fixtures to a sanitary condition, clean or replace filters of mechanical equipment.
- .7 Inspect finishes, fitments and equipment and ensure proper workmanship and operation.

- .8 Broom clean and wash exterior walks, steps and platforms.
- .9 Remove dirt and other disfigurations from exterior surfaces.
- .10 Sweep and wash clean paved areas as applicable.

END OF SECTION

1.1 WASTE MANAGEMENT OBJECTIVES

- .1 The Project shall generate the least amount of waste possible and that processes shall be employed that ensure the generation of as little waste as possible including prevention of damage due to mishandling, improper storage, contamination, inadequate protection or other factors as well as minimizing over packaging and poor quantity estimating.
- .2 Of the inevitable waste that is generated, the waste materials designated in this specification shall be salvaged for recycling. Waste disposal in landfills or incinerators shall be minimized. This means careful recycling of job site waste.
- .3 The Contractor shall:
 - .1 Institute construction waste reduction practices.
 - .2 Effect optimum control of construction waste.
 - .3 Implement a site recycling program that includes source separation of solid waste materials.
 - .4 Prepare and implement a solid waste management and environmental protection plan for the Project.
 - .5 Submit monthly a summary of solid waste generated by construction operations.
 - .6 Be responsible for final implementation of site recycling program by disposal of recyclable solid waste at appropriate recycling centres.
 - .7 Transport and dispose of waste materials that are not identified to be recycled at permitted landfill facilities.

1.2 WASTE MANAGEMENT PLAN

- .1 Waste Management Plan: Submit to the Consultant a Waste Management Plan. Use sample form included in Project Manual or provide a custom form containing the same information. The Plan shall contain the following:
 - .1 Analysis of the proposed job site waste to be generated, including the types of recyclable and waste materials generated (by volume or weight).
 - .2 Alternatives to landfilling: Designate responsibility for preparing a list of each material proposed to be recycled during the course of the Project.
 - .3 List of compulsory materials to be recycled, shall include, at minimum, the following designated materials:
 - .1 Old corrugated cardboard, paper and packaging.
 - .2 Clean dimensional wood, palette wood.
 - .3 Concrete/Concrete Block/Asphalt.
 - .4 Scrap metals.
 - .5 Unpainted gypsum wallboard.
 - .6 Glass and plastics.
 - .7 Beverage containers.
 - .8 Paint (to be returned to Paint Depot).
- .2 Meetings: Conduct Project Waste Management meetings. Meetings shall include Subcontractors affected by the Waste Management Plan. At a minimum, waste management goals and issues shall be discussed at the following meetings:
 - .1 Pre-construction meeting.
 - .2 Regular job-site meetings.
- .3 Materials Handling Procedures: prevent contamination of materials to be recycled source and handle materials consistent with requirements for acceptance by designated facilities.

- .4 Waste Bins: provide individual waste bins for each recyclable solid waste material and shall clearly designate recycling bins by colour coding and/or large identification signs. (Example: orange bin for wood only, green bin for trash).
- .5 Source Separation: educate and monitor Subcontractors about the acceptable methods of source separation. The Contractor may be held liable for illegal dumping by Subcontractors. Subcontractors shall indemnify the Contractor for any illegal dumping activity by the Subcontractors.
- .6 Location: place the recycling bins in convenient locations that are out of the way of construction traffic and shall designate this recycling area on site to prevent misuse or contamination of bins.
- .7 Contamination: When the recycling program is first started, and during construction operations remind workers to keep trash out of the recyclable material bins. Coffee cups, caulking tubes, etc. must not be deposited into recycling bins.
- .8 Handling: Recyclable materials shall be free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to recycling process. The Subcontractor shall monitor source separation and ensure workers clean materials that are contaminated prior to placing in collection containers.
- .9 Collection: arrange and pay for collection by or delivery of recyclable materials to the appropriate recycling company that accepts construction waste for purpose of recycling. Coordinate regular or "when-called" pick-up or delivery to eliminate overflowing bins. Gypsum board Subcontractor shall dispose of all their waste at their own expense.
- .10 Waste Management Plan Implementation:
 - .1 Manager: designate an on-site party (or parties) responsible for instructing workers and overseeing and recording results of the Waste Management Plan for the Project.
 - .2 Distribution: distribute copies of the Waste Management Plan to the Job Site Superintendent, each Subcontractor, and the Consultant.
 - .3 Instruction: provide on-site instruction of appropriate separation, handling, and recycling to be used by all parties at the appropriate stages of the Project.
 - .4 Separation Facilities: layout and label a specific area to facilitate separation of materials for recycling. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid contamination of materials.
 - .5 Hazardous Wastes: Any hazardous wastes shall be separated, stored, and disposed of in accordance with federal Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.
 - .6 Application for Progress Payments: The Subcontractor shall submit with each Application for Progress Payment a copy of all required LEED documentation (where applicable). Failure to submit this information shall render the Application for Payment incomplete and shall delay the Progress Payment.
 - .7 Submit monthly to the Consultant a summary of waste materials, recycled, and disposed of using the sample form or a custom form containing the same information. The Summary shall contain the amount (in metric tonnes) of material landfilled or incinerated from the Project, and the identity of the landfill or transfer station. For each material recycled from the Project, include the amount (in tonnes) and the destination (i.e. the material recovery facility, transfer station, landfill, incinerator or used materials yard). The Summary shall include copies of logs, manifests, weight tickets and receipts.

1.3 RECYCLABLE AND REUSABLE WASTE

- .1 Separate waste materials suitable for reuse and recycling in accordance with Waste Reduction Workplan to the maximum extent economically possible.
- .2 Clearly label location of salvaged material's storage areas and provide barriers and security devices.
- .3 Collect and separate for disposal steel, metal, plastic wood waste in accordance with Waste Reduction Workplan.
- .4 Divert damaged or unused masonry and concrete materials from landfill to local facility acceptable to Consultant.
- .5 Divert unused aggregate materials from landfill to local facility for reuse as reviewed by Consultant.
- .6 Divert unused gypsum materials from landfill to recycling facility approved by Consultant.
- .7 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard, wood and other packaging material in appropriate on-site bins. Fold up metal and plastic banding, flatten and place in designated bins.
- .8 Wood waste.
 - .1 Separate wood waste and place in designated areas in the following categories for recycling: solid wood/softwood/hardwood, composite wood, treated, painted, or contaminated wood.
 - .2 Separate sheet materials, framing members, wood cut-offs which are large enough for reuse on site.
 - .3 Set aside damaged wood for acceptable alternative uses (e.g. bracing, blocking, cripples, bridging, finger-joining, or ties). Store this separated reusable wood waste convenient to cutting station and area of work.
 - .4 Do not burn scrap at the project site.
 - .5 Divert reusable materials for reuse at nearest used building materials facility or similar type facility.

1.4 HAZARDOUS WASTE

- .1 Separate waste defined as hazardous from recyclable and reusable materials. Place hazardous materials in designated containers.
- .2 Handle, transport and dispose hazardous materials not scheduled for reuse or recycling in accordance with applicable local, Provincial/Territorial and National regulations.
- .3 Unused chemicals, admixtures, additives, sealants, caulking, and surface coating materials must not be disposed of into sewer system, into streams, lakes, onto ground or in other location where it will pose health or environmental hazard.
- .4 Divert hazardous materials from landfill and dispose of at official hazardous material collections site.
- .5 Ensure emptied containers are sealed and stored safely for disposal away from children.
- .6 Unused or damaged glazing materials are not recyclable. These materials must not be disposed of with materials destined for recycling.

- .7 Plastic containers from toxic and hazardous materials are not recyclable and must not be diverted for recycling with other plastic materials. Do not dispose of empty containers with plastic materials destined for recycling.

END OF SECTION

1.1 SECTION INCLUDES

- .1 Administrative procedures preceding preliminary and final inspections of Work.

1.2 RELATED SECTIONS

- .1 Section 01 78 00 - Closeout Submittals.

1.3 INSPECTION AND DECLARATION FOR SUBSTANTIAL PERFORMANCE OF THE WORK

- .1 Contractor's Inspection: prior to application for Certificate of Substantial Performance of the Work Contractor and all Subcontractors shall conduct an inspection of Work, identify deficiencies and defects, and repair as required to conform to Contract Documents.
 - .1 Notify Consultant in writing of satisfactory completion of Contractor's Inspection and that corrections have been made and that the building is clean and in condition ready for occupancy.
 - .2 Request Consultant's Inspection.
- .2 Consultant's Inspection: Consultant and Contractor will perform inspection of Work to identify obvious defects or deficiencies. Consultant shall prepare a list of defects deficiencies and provide a signed copy to the Contractor.
- .3 Contractor shall correct Work accordingly.
- .4 Declaration of Substantial Performance: when Consultant considers deficiencies and defects have been corrected and it appears requirements of Contract have been substantially performed, make application for certificate of Substantial Performance of the Work.
- .5 Commencement of Lien and Warranty Periods: date of Owner's acceptance of submitted declaration of Total Performance shall be date for commencement for warranty period and commencement of lien period unless required otherwise by lien statute of Place of Work.
- .6 Payment of Holdback: After issuance of certificate of Substantial Performance of Work, submit an application for payment of holdback amount.

1.4 INSPECTION AND DECLARATION FOR FINAL COMPLETION

- .1 When satisfied that the entire work is complete, make a final inspection of the Work to ensure that it is complete.
- .2 Completion: submit written certificate that following have been performed:
 - .1 Work has been completed and inspected for compliance with Contract Documents.
 - .2 Defects have been corrected and deficiencies have been completed.
 - .3 Equipment and systems have been tested, adjusted and balanced and are fully operational.
 - .4 Certificates required by the Office of the Fire Commissioner have been submitted.
 - .5 Operation of systems have been demonstrated to Owner's personnel.
 - .6 Building and premises are clean and ready for occupancy.
 - .7 Work is complete and ready for Final Inspection.

- .3 Final Inspection: when items noted above are completed, request final inspection of Work by Owner, Consultant, and Contractor. The Consultant's final review of the Work will be completed within ten days of the Consultant's receipt of the written request from the Contractor. The final review will constitute the review precedent to the issuance of the Final Certificate for Payment.
- .4 Consultant will list defects or deficiencies determined by this review, and will provide a copy to the Contractor. The list will be recognized as a final list for acceptance of the Work under the Contract. If Work is deemed incomplete by Consultant, complete outstanding items and request re-inspection, in writing.
- .5 If a re-inspection is required Consultant shall conduct the re-inspection within seven days of date of the request. If Work is deemed incomplete by Consultant, complete outstanding items and request re-inspection. If Work is deemed complete by the Consultant submit invoice for final payment.

Final Payment: When Consultant considers final deficiencies and defects have been corrected and it appears requirements of Contract have been totally performed, make application for final payment.

END OF SECTION

1.1 SECTION INCLUDES

- .1 As-built, samples, and specifications.
- .2 Equipment and systems.
- .3 Product data, materials and finishes, and related information.
- .4 Operation and maintenance data.
- .5 Spare parts, special tools and maintenance materials.
- .6 Warranties and bonds.
- .7 Final site survey.

1.2 RELATED SECTIONS

- .1 Section 01 77 00 - Closeout Procedures.

1.3 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 Consultant's comments.
- .3 Revise content of documents as required prior to final submittal.
- .4 Two weeks prior to Substantial Performance of the Work, submit to the Consultant, four final copies of operating and maintenance manuals in English.
- .5 Ensure spare parts, maintenance materials and special tools provided are new, undamaged or defective, and of same quality and manufacture as products provided in Work.
- .6 If requested, furnish evidence as to type, source and quality of products provided.
- .7 Defective products will be rejected regardless of previous inspections. Replace products at own expense.
- .8 Pay costs of transportation.

1.4 FORMAT

- .1 Organize data in the form of an instructional manual.
- .2 Binders: vinyl, hard covered, 3 'D' ring, loose leaf, letter size format with spine and face pockets.
- .3 When multiple binders are used, correlate data into related consistent groupings. Identify contents of each binder on spine.
- .4 Cover: Identify each binder with type or printed title 'Project Record Documents'; list title of project and identify subject matter of contents.
- .5 Arrange content by systems under Section numbers and sequence of Table of Contents.
- .6 Provide tabbed fly leaf for each separate product and system, with typed description of product and major component parts of equipment.
- .7 Text: Manufacturer's printed data, or typewritten data.

- .8 Drawings: provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.

1.5 CONTENTS - EACH VOLUME

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

1.6 AS-BUILTS AND SAMPLES

- .1 Maintain at the site for Consultant 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 record documents and samples in field office apart from documents used for construction. Provide files, racks, and secure storage.
- .3 Label record documents and file in accordance with Section number listings in List of Contents of this Project Manual. Label each document "PROJECT RECORD" in neat, large, printed letters.
- .4 Maintain record documents in clean, dry and legible condition. Do not use record documents for construction purposes.
- .5 Keep record documents and samples available for review by Consultant.

1.7 RECORDING ACTUAL SITE CONDITIONS

- .1 Record information on three sets of black line opaque drawings, and in copy of Project Manual which shall be provided by Consultant.
- .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 horizontal and vertical locations of main piping runs and appurtenances, referenced to permanent surfaces, visible and accessible features of construction.
 - .2 Field changes of dimension and detail.
 - .3 Changes made by change orders.
 - .4 Details not on original Contract Drawings.
 - .5 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.

1.8 EQUIPMENT AND SYSTEMS

- .1 Each Item of Equipment and Each System: include description of unit or system, and component parts. Give function, normal operation characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and commercial number of replaceable parts.
- .2 Panel board circuit directories: provide electrical service characteristics, controls, and communications.
- .3 Include installed colour coded wiring diagrams.
- .4 Operating Procedures: include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- .5 Maintenance Requirements: include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- .6 Provide servicing and lubrication schedule, and list of lubricants required.
- .7 Include manufacturer's printed operation and maintenance instructions.
- .8 Include sequence of operation by controls manufacturer.
- .9 Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- .10 Provide installed control diagrams by controls manufacturer.
- .11 Provide Contractor's coordination drawings, with installed colour coded piping diagrams.
- .12 Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- .13 Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- .14 Include test and balancing reports.
- .15 Additional requirements: As specified in individual specification sections.

1.9 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 Owner'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