

PART 1 GENERAL

1.1 Precedence

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

1.2 Description of Work

- .1 Work of this Contract comprises the site drainage and roadway upgrades, including, but not limited to, the following:
 - .1 Mobilization and demobilization of all personnel, equipment, support facilities and materials, and acquiring all necessary permits and licenses required to complete the Work.
 - .2 Stripping of all organic material within the working areas and stockpiling on site.
 - .3 Locate existing utilities through Hydrovac and protect from damage existing utilities and existing paved entrance access and paved roadways.
 - .4 Excavating and disposing of unsuitable materials.
 - .5 Excavating and grading all classes of materials for new parking area.
 - .6 Supply, load, haul, place and compact all classes of materials for repair of existing gravel roadways and walking paths.
 - .7 Supply, load, haul, place and compact asphalt concrete for new parking area, existing gravel roadways and walking paths.
 - .8 Construction of erosion protection consisting of silt fences.
 - .9 Disposal of all unusable materials, such as excess stripped topsoil and all stockpiled materials offsite or onsite pending client approval.
 - .10 Supply and install new light fixture and pole.
 - .11 Supply and install conduit and wire for lighting and power pedestals.
 - .12 Install underground conduits as identified on the drawing.
 - .13 Lighting circuit will source from existing light; car plug pedestal circuits will source from the building "m" electrical room.
 - .14 Supply and install new 60A 3A-breaker and cabling within existing panel CB-2B.
 - .15 Supply and install new relay system in existing time control panel. Existing time control panel to be modified to accommodate the new contactor and replacement timer.
 - .16 Remove existing mechanical timer within panel and replace with new digital timer.
 - .17 Supply and install wheel stops.
 - .18 Topsoil placement and seeding at designated areas.
 - .19 General site rehabilitation and clean-up

1.3 Submittals

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

1.4 Work Schedule

- .1 Provide and maintain Work Schedule in accordance with instructions of Section 01 32 16.07 - Construction Progress Schedules - Bar (GANTT) Chart.

1.5 Work by Others

- .1 Co-operate with other Contractors in carrying out their representative works and carry out instructions from Departmental Representative.

1.6 Contractor Use of Premises

- .1 Contractor has restricted use of site until substantial performance.
- .2 Limit use of premise for Work, for storage, and for access, to allow Departmental Representative occupancy.
- .3 Coordinate use of premises under direction of Departmental Representative.

1.7 Alterations, Additions or Repairs to Existing Building

- .1 Execute work with least possible interference or disturbance to building operations, occupants, public and normal use of premises. Arrange with Departmental Representative to facilitate execution of Work.

1.8 Existing Services

- .1 Notify Departmental Representative 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 notice for necessary interruption of mechanical or electrical service throughout the course of work. Minimize duration of interruptions. Carry out work at times as directed by governing authorities with minimum disturbance to pedestrian and vehicular traffic.
- .3 Provide alternative routes for pedestrian and vehicular traffic.
- .4 Establish location and extent of service lines in area or work before starting Work. Notify Departmental Representative of findings.
- .5 Submit schedule to and obtain approval from Departmental Representative for any shutdown or closure of active service or facility including power and communications services. Adhere to approved schedule and provide notice to affected parties.
- .6 Provide adequate bridging over trenches which cross sidewalks or roads to permit normal traffic.
- .7 Record locations of maintained, rerouted and abandoned service lines.

1.9 Documents Required

.1 Maintain at job site, one copy each of the following:

- .1 Contract drawings.
- .2 Specifications.
- .3 Requests for Clarification and responses.
- .4 Addenda.
- .5 Change Orders.
- .6 Reviewed shop drawings.
- .7 Other modifications to Contract.
- .8 Field test reports.
- .9 Copy of approved Work Schedule.
- .10 Manufacturers' installation and application instructions.
- .11 Material and Safety Data Sheets Specifications.
- .12 Other documents as specified.

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, including stairs, runways, ramps or ladders [and scaffolding], independent of finished surfaces and in accordance with relevant 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 to facilitate work as stated.
- .2 Maintain existing services to building and provide for temporary means to maintain security.
- .3 Where security is reduced by work provide temporary means to maintain security.
- .4 Closures: protect work temporarily until permanent enclosures are completed.

1.3 Special Requirements

- .1 Ensure that Contractor personnel employed on site become familiar with and obey regulations including safety, fire, traffic and security regulations.
- .2 Comply with Section 01 14 10 – Security Requirements.

PART 2 PRODUCTS

- .1 Not used.

PART 3 EXECUTION

- .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 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,
 - .3 an explosive or a bomb or a component thereof,
 - .4 currency over any applicable prescribed limit \$50.00, and
 - .5 any item not described in paragraphs (a) to (d) 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 "Director" means Director, Warden or Superintendent 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" within the context of these specifications the term Departmental Representative refers to the person exercising the roles and attributes of Canada under the Contract.
- .8 "Perimeter" means the fenced or walled area of the institution that restrains the movement of the inmates.
- .9 "Construction limits" means the area as shown on the contract drawings that the contractor will be allowed to work. This area may or may not be isolated from the security area of the institution.

1.3 Preliminary Proceedings

- .1 Prior to the commencement of work, the contractor will meet with the Director or his 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 The contractor will:
 - .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 Construction Employees

- .1 Submit to the Director 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.
- .2 Allow two (2) weeks for processing of security clearances. 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.
- .3 The Director may require that facial photographs may 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 Director may require that Photo ID cards be provided for all construction workers. ID cards will then be left at the designated entrance to be picked upon arrival at the institution and shall be displayed prominently on the construction employees clothing at all time while employees are in the institution. Verify this requirement with the Departmental Representative
- .4 Entry to Institutional Property will be refused to any person there may be reason to believe may be a security risk.
- .5 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.

1.5 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 owner or an employee of the company that owns the vehicle. The Institution requires lockable gas caps on all vehicles and motorized equipment used in the construction area.

- .2 The director may limit at any time the number and type of vehicles allowed within the Institution.
- .3 Drivers of delivery vehicles for material required by the project will not require security clearances but must remain with their vehicle the entire time that the vehicle is in the Institution. The director may require that these vehicles be escorted by Institutional staff or Commissionaires while in the Institution.
- .4 If the Director 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 must be locked when not in use.

1.6 Parking

- .1 The parking area(s) to be used by construction employees will be designated by the Director. Parking in other locations will be prohibited and vehicles may be subject to removal.

1.7 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 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.

1.8 Telephones

- .1 There will be no installation of telephones, Facsimile machines and computers with Internet connections permitted within the perimeter of the institution unless prior approval of the Director is received.
- .2 The Director will ensure that approved telephones, Facsimile machine and computers with Internet connections are located where they are not accessible to inmates. All computers will have an approved password protection that will stop an Internet connection to unauthorized personnel.
- .3 Wireless cellular and digital telephones, including but not limited to devices for telephone messaging, pagers, BlackBerries, telephone used as 2-way radios, are not permitted within the perimeter of the Institution unless approved by the Director. If wireless cellular telephones are permitted, the user will not permit their use by any inmate.
- .4 The Director may approve but limit the use of two way radios.

1.9 Work Hours

- .1 Work hours within the Institution are: Monday to Friday 8:00 a.m. (0800 hrs) to 4:00 p.m. (1600 hrs).

- .2 Work will not be permitted during weekends and statutory holidays without the permission of the Director. A minimum of seven days advance notice will be required to obtain the required permission. In case of emergencies or other special circumstances, this advance notice may be waived or period shortened by the Director.

1.10 Overtime Work

- .1 No overtime work will be allowed without permission of the Director. 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 the completion of a concrete pour or work to make the construction safe and secure, the contractor will advise the Director as soon as this condition is known and follow the directions given by the Director. Costs to the Crown for such events may be attributed to the contractor.
- .2 When overtime work, weekend statutory holiday work is required and approved by the Director, extra staff members may be posted by the Director or his designate, to maintain the security surveillance. The Departmental Representative may post extra staff for inspection of construction activities. The actual cost of this extra staff may be subject to reclamation by the Crown.

1.11 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. Tool lists are to include the following as well as any screw & or drill bits and any disposable tool items such as disposable blades etc.
 - .1 Restricted tools (tools requiring special permission to carry on to site)
 - a) Explosive tools (Hilti-gun, etc.)
 - b) Bolt cutters
 - c) Acids
 - d) Bottle jacks (hydraulic)
 - e) Knives (other than approved hobby knives and cutlery)
 - f) Scissors, tailors;
 - g) Adjustable wrenches, 10" long or more;
 - h) Tin snips
 - i) Linesmen pliers
 - j) Metal cutting devices
 - k) Hacksaw blades Wrecking or cross bars
 - l) Files
 - m) Vice grip pliers with cutters in jaws
 - n) Picks
 - o) Portable, electrically driver power tools capable of cutting or drilling (skillsaws, jigsaws and drill motors)
 - p) Welding equipment (accessories locked up)
 - q) Rope, heavy cord
 - r) Axes
 - s) Ladders
 - t) Gasoline
 - u) Coal oil, turpentine
 - v) Lacquers and sealers
 - w) Pure ammonia
 - x) Pneumatic guns and staplers

- y) Propane cylinders
 - .2 Non restricted tools:
Includes tools which are used daily and are not usually expected to be used to effect an escape.
- .2 Throughout the construction project maintain up-to-date the list of tools and equipment specified above.
- .3 Keep all tools and equipment under constant supervision, particularly power-driven and cartridge-driven tools, cartridges, files, saw blades, rod saws, wire, rope, ladders and any sort of jacking device.
- .4 Store all tools and equipment in approved secure locations.
- .5 Lock all tool boxes when not in use. Keys to remain in the possession of the employees of the contractor. Scaffolding shall be secured and locked when not erected and when erected, will be secured in a manner agreed upon with the Institutional designate.
- .6 All missing or lost tools or equipment shall be reported immediately to the Director.
- .7 The Director will 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.
- .8 Certain tools/equipment such as cartridges and hacksaw blades are highly controlled items. The contractor will be given at the beginning of the day, a quantity that will permit one day's work. Used blades/cartridges will be returned to the Director's representative at the end of each day.
- .9 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.

1.12 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 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 Engineer.

.2 Other Keys

- .1 The contractor will use standard construction cylinders for locks for his use during the construction period.
- .2 The contractor will issue instructions to his 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:
 - .a Prepare an operational keying schedule;
 - .b Accept the operational keys and cylinders directly from the lock manufacturer;
 - .c Arrange for removal and return of the construction cores and install the operational core in all locks.
- .4 Upon putting operational security keys into use, the CSC construction escort shall obtain these keys as they are required from the SMO and open doors as required by the Contractor. The Contractor shall issue instructions to his employees advising them that all security keys shall always remain with the CSC construction escort.

1.13 Security Hardware

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

1.14 Prescription Drugs

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

1.15 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 Director.

1.16 Contraband

- .1 Weapons, ammunition, explosives, alcoholic beverages, drugs and narcotics are prohibited on institutional property.
- .2 The discovery of contraband on the construction site and the identification of the person(s) responsible for the contraband shall be reported immediately to the Director.

- .3 Contractors should 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.

1.17 Searches

- .1 All vehicles and persons entering institutional property may be subject to search.
- .2 When the Director suspects, on reasonable grounds, that an employee of the Contractor is in possession of contraband or unauthorized items, he 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.

1.18 Access to and Removal from Institutional Property

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

1.19 Movement of Vehicles

- .1 Escorted commercial vehicles will be allowed to enter or leave the institution through the vehicle access gate during the following hours:
 - .1 8:00 a.m. (0800 hrs.) to 4:00 p.m. (1600 hrs.) (or within approved hours of work).
- .2 The contractor shall advise the Director 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 Director.
- .4 Commercial vehicles will only be allowed access to institutional property when their contents are certified by the Contractor or his representative as being strictly necessary to the execution of the construction project.
- .5 Vehicles shall be refused access to institutional property if, in the opinion of the Director, they contain any article which may jeopardize the security of the institution.
- .6 Private vehicles of construction employees will not be allowed within the security wall or fence of medium or maximum security institutions without the permission of the Director.

- .7 With prior approval of the Director, a vehicle may be used in the morning and evening to transport a group of employees to the work site. This vehicle will not remain within the Institution the remainder of the day.
- .8 With the approval of the Director, certain equipment may be permitted to remain on the construction site overnight or over the weekend. This equipment must be securely locked, with the battery removed. The Director may require that the equipment be secured with a chain and padlock to another solid object.

1.20 Movement of construction employees on Institutional Property

- .1 Subject to the requirements of good security, the Director will permit the Contractor and his employees as much freedom of action and movement as is possible.
- .2 However, notwithstanding paragraph above, the Director 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.

1.21 Surveillance and Inspection

- .1 Construction activities and all related movement of personnel and vehicles will be subject to surveillance and inspection by CSC security staff members to ensure that established security requirements are met.
- .2 CSC staff members will ensure that an understanding of the need to carry out surveillance and inspections, as specified above, is established among construction employees and maintained throughout the construction project.

1.22 Stoppage of Work

- .1 The director may request at any time that the contractor, his 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.

The contractor shall advise the Engineer within 24 hours of this delay to the progress of the work.

1.23 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 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.

1.24 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.

END OF SECTION

PART 1 GENERAL

1.1 Applications for Progress Payment

- .1 Submit to Departmental Representative, at least 14 days before first application for payment, Cost Breakdown, in detail as directed by Departmental Representative, for parts of Work, aggregating total amount of Contract Price, so as to facilitate evaluation of applications for payment. After approval by Departmental Representative, Cost Breakdown will be used as basis for progress payments.

- .2 Support claims for products delivered to Place of Work but not yet incorporated into Work by such evidence as Departmental Representative may reasonably require to establish value and delivery of products.

PART 2 PRODUCTS

- .1 Not used.

PART 3 EXECUTION

- .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 the call of Departmental Representative.
- .2 Departmental Representative to prepare agenda for meetings.
- .3 Departmental Representative will give written notice of each meeting five (5) days in advance of meeting date to Contractor.
- .4 Provide physical space and make arrangements for meetings.
- .5 Departmental Representative will preside at meetings.
- .6 Departmental Representative will record the meeting minutes. Include significant proceedings and decisions. Identify actions by parties.
- .7 Reproduce and distribute copies of minutes within three (3) days after meetings and transmit to meeting participants and affected parties not in attendance.
- .8 Representative of Contractor, Sub-Contractor and suppliers attending meetings will be qualified and authorized to act on behalf of party each represents.

1.2 Preconstruction Meeting

- .1 Within five (5) days after award of Contract, request a meeting of parties in contact to discuss and resolve administrative procedures and responsibilities.
- .2 Departmental Representative, Contractor, Sub-Contractors, field inspectors and supervisors will be in attendance.
- .3 Establish time and location of meeting and notify parties concerned minimum of five (5) days before meeting.
- .4 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 and samples. Submit submittals in accordance with Section 01 33 00 - Submittal Procedures.
 - .4 Requirements for temporary facilities site sign, offices, storage sheds, utilities, fences in accordance with Section 01 52 00 – Construction Facilities.
 - .5 Proposed changes, change orders, procedures, approvals required, markup percentages permitted, time extensions, overtime, administrative requirements.

- .6 Record drawings in accordance with Section 01 33 00 – Submittal Procedures.
- .7 Take-over procedures, acceptance, warranties in accordance with Section 01 78 00 – Closeout Submittals.
- .8 Monthly progress claims, administrative procedures, photographs, hold backs.
- .9 Appointment of inspection and testing agencies and firms.

1.3 Progress Meetings

- .1 During course of Work and two (2) weeks to project completion, schedule progress meetings every 2 weeks.
- .2 Contractor, Sub-Contractors involved in Work and Departmental Representative are to be in attendance.
- .3 Notify parties prior to meetings.
- .4 Record minutes of meetings and circulate to attending parties and affected parties not in attendance within days of meeting.
- .5 Agenda may include:
 - .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 schedule.
 - .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

- .1 Not Used.

PART 3 EXECUTION

- .1 Not Used.

END OF SECTION

PART 1 GENERAL

1.1 Requirements

- .1 Plan to complete Work in accordance with prescribed milestones and time frame.
- .2 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 to this contract.
- .3 Limit activity durations to maximum of approximately 10 working days, to allow for progress reporting.

1.2 Submittals

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

1.3 Project Schedule

- .1 Develop detailed Project Schedule.
- .2 Ensure detailed Overall Project Schedule includes as minimum milestone and activity types as follows:
 - .1 Award of Contract
 - .2 Start-up meeting
 - .3 Contractor supplied equipment and materials
 - .4 Permits
 - .5 Mobilization
 - .6 Material delivery
 - .7 Topsoil Stripping
 - .8 Backfilling and re-grading
 - .9 Placement of granular materials
 - .10 Asphalt Paving
 - .11 Pavement Marking
 - .12 Pavement rehabilitation
 - .13 Topsoil and Seeding
 - .14 Utility Adjustments and Culvert Installation
 - .15 Electrical/Lighting Work
 - .16 Demobilization
 - .17 Project completion and Final Certificate of Completion.

1.4 Project Schedule Reporting

- .1 Submit formal revised Project Schedule on bi-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.

1.5 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

- .1 Not used.

PART 3 EXECUTION

- .1 Not used.

END OF SECTION

PART 1 GENERAL

1.1 Administrative

- .1 Submit to Departmental Representative submittals listed for review. Submit promptly and in orderly sequence so as to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for an extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with work affected by submittal until review is complete.
- .3 Present shop drawings, product data, samples and mockups 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-coordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and shall be considered rejected.
- .6 Notify Departmental Representative, 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 Departmental Representative's review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative review.
- .10 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 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 reference to design drawings and specifications.
- .3 Allow five (5) days for Departmental Representative's review of each submission.

- .4 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.
- .5 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.
- .6 Accompany submissions with transmittal letter, in duplicate, containing:
 - .1 Date.
 - .2 Project title and number.
 - .3 Contractor's name and address.
 - .4 Identification and quantity of each shop drawing, product data and sample.
 - .5 Other pertinent data.
- .7 Submissions shall include:
 - .1 Date and revision dates.
 - .2 Project title and number.
 - .3 Name and address of:
 - .1 Subcontractor.
 - .2 Supplier.
 - .3 Manufacturer.
 - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
 - .5 Details of appropriate portions of Work as applicable:
 - .1 Fabrication.
 - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
 - .3 Setting or erections details.
 - .4 Capacities.
 - .5 Performance characteristics.
 - .6 Standards.
 - .7 Operating weight.
 - .8 Wiring diagram.
 - .9 Single line and schematic diagrams.
 - .10 Relationship to adjacent work.
- .8 After Departmental Representative's review, distribute copies.
- .9 Submit one transparency and an electronic copy of shop drawings for each requirement requested in specification Sections and as Departmental Representative may reasonably request.
- .10 Delete information not applicable to project.
- .11 Supplement standard information to provide details applicable to project.

- .12 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.
- .13 The review of shop drawings by Department Representative is for sole purpose of ascertaining conformance with general concept.
 - .1 This review does not mean that the Department Representative approves detail design inherent in shop drawings, responsibility for which remains with Contractor submitting same, and such review does not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting all 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 for co-ordination of Work of sub-trades.

PART 2 PRODUCTS

- .1 Not used.

PART 3 EXECUTION

- .1 Not used.

END OF SECTION

PART 1 GENERAL

1.1 Construction Safety Measures

- .1 Observe and enforce construction safety measures required by National Building Code 1990 Part 8 Provincial Government, **Alberta Occupational Health and Safety Regulations**, Workers' Compensation Board and municipal statutes and authorities.
- .2 The contractor shall immediately bring any conflict between any provisions of the above authorities to the attention of the Department Representative, who shall give direction on which provisions shall apply.
- .3 The contractor shall ensure that appropriate measures are taken to protect workers from the hazards created by traffic including the provision and wearing of safety vests at all times.
- .4 If the work site has an existing emergency plan, the contractor shall familiarize all workers on site of the contents of this plan.
- .5 The contractor shall adhere to any key control systems established by the client to protect the work site.
- .6 The contractor shall develop procedures for dealing with site specific electrical hazards to be made available to the Department Representative upon request. The contractor shall ensure that these procedures include hazard assessment and control measures and that the workers on the site that are exposed or potentially exposed to electrical hazards shall be familiar with, and follow the procedures prescribed.

1.2 Submissions

Prior to commencement of construction, submit the following to the Department Representative:

- .1 Copies of the Codes of Practice required by the Occupational Health and Safety Act for work to be performed on the project.
- .2 The Departmental Representative must receive the Codes of Practice at least 72 hours before construction. The Departmental Representative may provide comment to the contractor regarding the Codes of Practice but this comment will not in any way reduce or limit the contractors responsibility for the safety of workers and/or the general public affected by the work.
- .3 Information for contacts for safety matters namely:
 - .1 The name(s) of the person(s) who will ensure compliance with the applicable health and safety legislation.
 - .2 The name of the site superintendent plus as many representatives as the contractor determines are required to ensure adequate supervision.
 - .3 Twenty four hour emergency contact person(s) and associated telephone number(s).

1.3 Responsibilities For Worksites With More Than One Employer

On all worksites where there is more than one employer, the designated Prime Contractor is responsible for:

- .1 Ensuring that information is available on all contacts for safety matters as outlined in 1.2.3 above.
- .2 Ensuring that all information provided by the Department Representative on safety matters is communicated to all other work site contractors.
- .3 Establish and maintain a system or process that will ensure compliance with the Occupational Health and Safety Act and Regulations in respect of the work site, including:
 - .1 Documentation of the system or process for health and safety management that will be used at the work site.
 - .2 Documentation of the site wide hazard assessment, critical tasks hazard assessment and codes of practice established for the work site.
 - .3 Forwarding a copy of this documentation to the Occupational Health and Safety Services section of the Department responsible for the contract.

1.4 Inspection and Reporting

- .1 The contractor shall conduct frequent inspections to ensure compliance with legislation. Any unsafe conditions or work practices observed shall be corrected as soon as possible. In the event of an imminent danger situation, Section 27 of the Occupational Health and Safety Act shall be followed. All reports provided by outside agencies shall be copied to the Department Representative within 24 hours following the inspection.
- .2 All serious or potentially serious accidents or incidents shall be reported as required by the Occupational Health and Safety Act. In addition the Department Representative shall be notified immediately and provided with a copy of the investigation report as soon as practicable.

1.5 Alberta Environmental Protection and Enhancement Act (AEPEA)

- .1 The contractor and subcontractors shall meet all aspects of the AEPEA. Contractors will be responsible for reporting all of their own, and their subcontractors releases or spills in or about the work site in accordance with the Act. Reporting shall be to the Director of Pollution Control, Alberta Environment. The Departmental Representative shall be copied on all AEPEA reports.

1.6 Pre-Construction Safety Meeting

- .1 Prior to the commencement of work on the site, a meeting will be held with all the personnel likely to be involved during the construction phase including consultants, designers, project managers, the Departmental Representative, contractors site and head office personnel, and subcontractors.
- .2 The meeting will discuss all aspects of site safety with specific reference to the way in which the prime contractor intends to discharge their responsibilities.

- .3 The Departmental Representative may raise particular aspects of the Occupational Health and Safety Act or related issues considered to be of special importance to the contract at this meeting.

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. Control of environmental pollution and damage requires consideration of land, water, and air; biological and cultural resources; and includes management of visual aesthetics; noise; solid, chemical, gaseous, and liquid waste; radiant energy and radioactive material as well as other pollutants.

1.2 Fires

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

1.3 Disposal of Wastes

- .1 To comply with section 01 74 21 "Construction/Demolition Waste Management and Disposal"

1.4 Drainage

- .1 Provide erosion and sediment control plan that identifies type and location of erosion and sediment controls to be provided. Ensure that the plan includes monitoring and reporting requirements to assure that control measures are in compliance with the erosion and sediment control plan as well as Federal, Provincial, and Municipal laws and regulations.
- .2 Provide temporary drainage and pumping as necessary to keep excavations and site free from water.
- .3 Ensure pumped water into waterways, sewer or drainage systems is free of suspended materials.
- .4 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authority requirements.

1.5 Site Clearing

- .1 Protect trees and plants on site and adjacent properties where indicated.
- .2 Protect roots of designated trees to dripline during excavation and site grading to prevent disturbance or damage. Avoid unnecessary traffic, dumping and storage of materials over root zones.
- .3 Restrict tree removal to areas indicated or designated by Departmental Representative.

PART 2 PRODUCTS

 .1 Not used.

PART 3 EXECUTION

 .1 Not used.

END OF SECTION

PART 1 GENERAL

1.1 References and Codes

- .1 Perform Work in accordance with 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:
 - .1 Contract documents.
 - .2 Specified standards, codes and referenced documents.

1.2 Hazardous Material Discovery

- .1 Asbestos: demolition of spray or trowel applied asbestos is hazardous to health. Stop work immediately when material resembling spray or trowel applied asbestos is encountered during demolition work. Notify Departmental Representative.
- .2 PCB: Polychlorinated Biphenyl: stop work immediately when material resembling Polychlorinated Biphenyl is encountered during demolition work. Notify Departmental Representative.
- .3 Mould: stop work immediately when material resembling mould is encountered during demolition work. Notify Departmental Representative.

PART 2 PRODUCTS

- .1 Not used.

PART 3 EXECUTION

- .1 Not used.

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 may order any part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such Work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction. If such Work is found in accordance with Contract Documents, Departmental Representative shall pay cost of examination and replacement.

1.2 Procedures

- .1 Notify appropriate agency and Departmental Representative 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 an orderly sequence so as not to cause delay in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site.

1.3 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 Departmental Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner may deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which shall be determined by Departmental Representative.

1.4 Reports

- .1 Submit four (4) copies of inspection and test reports to Departmental Representative.
- .2 Provide copies to subcontractor of work being inspected or tested.

PART 2 PRODUCTS

- .1 Not used.

PART 3 EXECUTION

- .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 Dewatering

- .1 Provide temporary drainage and pumping facilities to keep excavations and site free from standing water.

1.3 Water Supply

- .1 Departmental Representative will pay for utility charges at prevailing rates.

1.4 Temporary Power and Light

- .1 Arrange for connection with appropriate utility company. Pay costs for installation, maintenance and removal.
- .2 Provide and maintain temporary lighting throughout project.

1.5 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

- .1 Not used.

PART 3 EXECUTION

- .1 Not used.

END OF SECTION

PART 1 GENERAL

All work performed on construction facilities shall adhere to Section 01 14 10 – Security Requirements.

1.1 Submittals

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

1.2 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.

.2 Provide construction facilities in order to execute Work expeditiously.

.3 Remove from site all such Work after use.

1.3 Hoisting

.1 Provide, operate and maintain hoists required for moving of workers, materials and equipment. Make financial arrangements with Sub-Contractor(s) for use of hoists.

.2 Hoists to be operated by qualified operator.

1.4 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 a weight or force that will endanger Work.

1.5 Construction Parking

.1 Provide and maintain adequate access to project site.

.2 Parking will be permitted on site provided it conforms with section 01 14 10 – Security Requirements and does not disrupt performance of Work.

1.6 Equipment, Tool and Material Storage

.1 Provide and maintain, in clean and orderly condition, lockable weatherproof sheds for storage of tools, equipment and materials.

1.7 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.

1.8 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 salvageable material not in construction facilities.

PART 2 PRODUCTS

- .1 Not used.

PART 3 EXECUTION

- .1 Not used.

END OF SECTION

PART 1 GENERAL

1.1 References

- .1 If there is question as to whether products or systems are in conformance with applicable standards, the Departmental Representative reserves right to have such products or systems tested to prove or disprove conformance.
- .2 Cost for such testing will be paid by the Departmental Representative in event of conformance with Contract Documents or by the Contractor in event of non-conformance.

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 Procurement policy is to acquire, in a cost effective manner, items containing the highest percentage of recycled and recovered materials practicable consistent with maintaining satisfactory levels of competition. Make reasonable efforts to use recycled and recovered materials and in otherwise utilizing recycled and recovered materials in execution of work.
- .3 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.
- .4 Should disputes arise as to quality or fitness of products, decision rests strictly with the Departmental Representative based upon requirements of Contract Documents.
- .5 Unless otherwise indicated in specifications, maintain uniformity of manufacture for any particular or like item throughout building.
- .6 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 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 for 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 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.
- .7 Remove and replace damaged products at own expense and to satisfaction of the Departmental Representative.
- .8 Touch-up damaged factory finished surfaces to the Departmental Representative's satisfaction. Use touch-up materials to match original. Do not paint over name plates.

1.4 Transportation

- .1 Pay costs of transportation of products required in performance of Work.
- .2 Transportation cost of products supplied by Owner will be paid for by the Departmental Representative. Unload, handle and store such products.

1.5 Manufacturer's Instructions

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

1.6 Quality of Work

- .1 Ensure Quality of Work is of highest standard, executed by workers experienced and skilled in respective duties for which they are employed. Immediately notify the 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. The 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 the Departmental Representative, whose decision is final.

1.7 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.

1.8 Fastenings

- .1 Provide metal fastenings and accessories in same texture, colour and finish as adjacent materials, unless indicated otherwise.
- .2 Prevent electrolytic action between dissimilar metals and materials.
- .3 Use non-corrosive hot dip galvanized steel fasteners and anchors for securing exterior work, unless stainless steel or other material is specifically requested in affected specification Section.
- .4 Space anchors within individual load limit or shear capacity and ensure they provide positive permanent anchorage. Wood, or any other organic material plugs are not acceptable.
- .5 Keep exposed fastenings to a minimum, space evenly and install neatly.
- .6 Fastenings which cause spalling or cracking of material to which anchorage is made are not acceptable.
- .7 Use fastenings of standard commercial sizes and patterns with material and finish suitable for service.
- .8 Use heavy hexagon heads, semi-finished unless otherwise specified. Use No. 304 stainless steel for exterior areas.
- .9 Bolts may not project more than one diameter beyond nuts.
- .10 Use plain type washers on equipment, sheet metal and soft gasket lock type washers where vibrations occur. Use resilient washers with stainless steel.

1.9 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 the Departmental Representative.

1.10 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, building occupants and vehicular traffic.
- .2 Protect, relocate or maintain existing active services. When services are encountered, cap off in manner approved by authority having jurisdiction. Stake and record location of capped service.

PART 2 PRODUCTS

.1 Not used.

PART 3 EXECUTION

.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 PWGSC's Waste Management Plan and Goals.
- .2 PWGSC's Waste Management Goal is that project waste to be diverted from landfill sites. Provide Departmental Representative documentation certifying that waste management, recycling, reuse of recyclable and reusable materials have been extensively practiced.
- .3 Accomplish maximum control of solid construction waste.
- .4 Preserve environment and prevent pollution and environment damage.

1.2 Disposal of Wastes

- .1 Do not bury rubbish or waste materials.
- .2 Do not dispose of waste, volatile materials, mineral spirits, oil, paint thinner into waterways, storm, or sanitary sewers.
- .3 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
- .4 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard, and packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.
- .5 Unused material 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.
- .6 Divert unused metal and wiring materials from landfill to metal recycling facility as approved by the Departmental Representative.
- .7 Do not dispose of preservative treated wood through incineration.
- .8 Do not dispose of preservative treated wood with other materials destined for recycling or reuse.
- .9 Dispose of treated wood, end pieces, wood scraps and sawdust at sanitary landfill approved by the Departmental Representative.
- .10 Fold up metal banding, flatten and place in designated area for recycling.

1.3 Use of Site and Facilities

- .1 Execute work with least possible interference or disturbance to normal use of premises.
- .2 Maintain security measures established by existing facility. Provide temporary security measures approved by Departmental Representative.

1.4 Scheduling

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

PART 2 PRODUCTS

- .1 Not used.

PART 3 EXECUTION

3.1 Application

- .1 Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes.

3.2 Cleaning

- .1 Remove tools and waste materials on completion of Work, and leave work area in clean and orderly condition.
- .2 Clean-up work area as work progresses.

END OF SECTION

PART 1 GENERAL

1.1 Inspection and Declaration

- .1 Contractor's Inspection: Contractor and all Subcontractors to conduct an 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: Departmental Representative and Contractor will inspect work and identify defects and deficiencies. Contractor shall correct Work as directed.
- .3 Completion: submit written certificates in english that tasks have been performed as follows:
 - .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 and are fully operational.
 - .4 All required certificates have been submitted.
 - .5 Operation of systems have been demonstrated to Owner's personnel.
 - .6 Work is complete and ready for Final Inspection.
- .4 Final Inspection: when items noted above are completed, request final inspection of Work by Departmental Representative and Contractor. If Work is deemed incomplete by Departmental Representative, complete outstanding items and request re-inspection.

PART 2 PRODUCTS

- .1 Not used.

PART 3 EXECUTION

- .1 Not used.

END OF SECTION

PART 1 GENERAL

1.1 Submittals

- .1 Provide submittals in accordance with Section 01 33 00 Submittal Procedures.
- .2 Prepare instructions and data using personnel experienced in maintenance and operation of described products.
- .3 Copy will be returned after Departmental Representative's comments.
- .4 Revise content of documents as required prior to final submittal.
- .5 Two (2) weeks prior to Substantial Performance of the Work, submit to the Departmental Representative, four (4) final copies of operating and maintenance manuals in English.
- .6 Provide spare parts, maintenance materials and special tools of same quality and manufacture as products provided in Work.
- .7 Furnish evidence, if requested, for type, source and quality of products provided.
- .8 Defective products will be rejected, regardless of previous inspections. Replace products at own expense.
- .9 Pay costs for transportation.

1.2 Format

- .1 Organize data as instructional manual.
- .2 Binders: vinyl, hard covered, 3 "D" ring, loose leaf 219 x 279 mm 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 and text pages.

1.3 Contents – Each Volume

- .1 Table of Content: 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 identify specific products and component parts, and data applicable to installation; delete inapplicable information.
- .4 Drawings: supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams.
- .5 Typewritten Text: as required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions specified in Section 01 45 00 Quality Control.

1.4 As-Builts and Samples

- .1 Maintain, in addition to requirements in General Conditions, at site for Departmental Representative one record copy of:
 - .1 Contract drawings.
 - .2 Specifications.
 - .3 Addenda.
 - .4 Change Orders and other modifications to 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 conditions. Do not use record documents for construction purposes.
- .5 Keep record documents and samples available for inspection by Departmental Representative.

1.5 Recording Actual Site Conditions

- .1 Record information on set of blue line opaque drawings 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: mark each item to record actual construction, including:
 - .1 Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
 - .2 Measured locations of internal utilities and appurtenances, referenced to visible and accessible features of construction.
 - .3 Field changes of dimension and detail.
 - .4 Changes made by change order.
 - .5 Details not on original Contract Drawings.
 - .6 References to related shop drawings and modifications.
- .5 Specifications; mark each item to record actual construction, including:
 - .1 Manufacturer, trade name, and catalogue number of each product actually installed, particularly optional items and substitute items.
 - .2 Changes made by Addenda and change orders.
- .6 Other documents: maintain manufacturer's certifications, inspection certifications, field test records, required by individual specifications sections.
- .7 Provide digital photos, if requested, for site records.

1.6 Warranties and Bonds

- .1 Assemble approved information in binder and submit upon acceptance of work. Organize binder as follows:
 - .1 Separate each warranty or bond with index tab sheets keyed to Table of Contents listing.
 - .2 List subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.
 - .3 Obtain warranties and bonds, executed in duplicate by subcontractors, suppliers, and manufacturers, within ten (10) days after completion of applicable item of work.
 - .4 Verify that documents are in proper form, contain full information, and are notarized.
 - .5 Co-execute submittals when required.
 - .6 Retain warranties and bonds until time specified for submittal.

PART 2 PRODUCTS

 .1 Not used.

PART 3 EXECUTION

 .1 Not used.

END OF SECTION