

Part 1 General**1.1 TAXES**

- .1 Pay all taxes properly levied by law (including Federal, Provincial and Municipal).

1.2 FEES, PERMITS AND CERTIFICATES

- .1 Pay all fees and obtain all permits. Provide authorities with plans and information for acceptance certificates. Provide inspection certificates as evidence that work conforms to requirements of Authority having jurisdiction.

1.3 CONSTRUCTION PROGRESS SCHEDULE

- .1 Schedule and execute work with least possible interference or disturbance to the normal use of premises.
- .2 On award of contract submit a bar chart construction schedule for the work, indicating anticipated progress stages within time of completion. Minimum stages include mobilization, shop drawing submittal, order and delivery of major components and equipment, major approval stages, interim and final inspection times, commissioning timeframes, final deficiency corrections and demobilization. When schedule has been reviewed and approved by the Departmental Representative, take necessary measures to complete work within scheduled times. Do not change schedule without written approvals from the Departmental Representative. Contractor must confirm the required power shutdowns required and the activities for each shutdown and have these in his schedule.
- .3 Work shall be executed in phases, as follows:
 - .1 Demolition of existing dynamometer and removal of control devices by Departmental Representative.
 - .2 Demolition by the Contractor responsible of work indicated in the present construction documents.
 - .3 Phase 1 Construction work by Contractor responsible of work indicated in the present construction documents.
 - .4 Installation of new dynamometer by Department Representative.
 - .5 Phase 2 Construction by Contractor responsible of work indicated in the present construction documents.

1.4 HOURS OF WORK

- .1 Regular hours – Monday to Friday – 07:30 to 16:00 hours:
 - .1 Unescorted access to individuals with security clearance, who have taken the required on-site training as required for work within specified work areas.

- .2 Evening work – Monday to Friday – 16:00 to 07:00 hours:
 - .1 All individuals must be escorted during the timelines. This work must be co-ordinated with the site contact and your request will be granted depending on the escort availabilities.
 - .2 Commissionaires can be scheduled in advance however it requires a minimum 2-3 weeks notice to set up a commissionaire contract.
 - .3 On short notice, there is no guarantee for the request to be accommodated, it depends on the availability of the on-site staff.
 - .4 Emergency work will require the site security officer acceptance.
- .3 Weekend work – Friday night from 16:00 to Monday morning 07:00:
 - .1 Same requirements as for Evening work.
- .4 Holiday work
 - .1 Please avoid booking work on these dates, however if it must be, it will be dependent of the availability of the escort.
- .5 Work requiring power shutdown work shall be completed off-hours Monday through Friday from 18:00 hrs to 06:00 hrs and/or on weekends from 07:00 hrs to 18:00hrs.
- .6 Staff training and demonstrations shall be scheduled during regular business hours Monday to Friday. The Contractor shall obtain approvals from the Departmental Representative on the training schedule prior to the scheduled training date and time.

1.5 CONTRACT DOCUMENTS

- .1 Drawings and specifications are complementary, items shown or mentioned in one and not in the other are deemed to be included in the contract work.
- .2 Any questions that arise in relation to the design shall be brought to the attention of the Departmental Representative. Failure to comply with this procedure may necessitate amendments and other layout modifications as required to complete the Work, costs of which shall be solely the responsibility of the Contractor.
- .3 Study all documents, which describe, or are related to any operation before commencement of that operation. Report discrepancies discovered between existing conditions and documentation. Obtain ruling on required interpretation before commencing work.
- .4 Any changes to the scope of work are to be confirmed in writing by the Departmental Representative and Contract value changes approved, prior to start of said work.

1.6 SUBMITTAL PROCEDURES

- .1 Submit promptly to Departmental Representative submittals listed for review, in orderly sequence to not cause delay in work.
- .2 Do not proceed with work affected by submittals until review is complete.

- .3 Shop Drawings:
 - .1 Submit electronic copies of the shop drawings to the Departmental Representative prior to ordering materials. Shop drawings to illustrate details of portion of work specific to the project requirements. Information to clearly indicate the items to be reviewed. Generic drawings are not acceptable.
 - .2 Allow two (2) working weeks for the Departmental Representative's review of each shop drawing submission.
 - .3 The review is for the sole purpose of ascertaining conformance with the general design concept, and does not mean approval of the design details inherent in the shop drawings, responsibility for which shall remain with the Contractor. Such review shall not relieve the Contractor of responsibility for errors or omissions in the shop drawings or of his responsibility for meeting all requirements of the Contract Documents.
- .4 Product Data:
 - .1 Submit PDF copy of product data: manufacturers catalogue sheets, brochures, literature, performance charts and diagrams, used to illustrate standard manufactured products.
 - .2 Cross reference product data information to applicable portions on Contract Documents.
- .5 Submit photographs of surrounding properties, objects and structures liable to be damaged or be the subject of subsequent claims.

1.7 REGULATORY REQUIREMENTS

- .1 References and Codes:
 - .1 Materials shall be new and work shall conform to the minimum applicable standards of the "References" indicated in the specification sections, the National Building Code of Canada and all applicable Provincial and Municipal codes. In the case of conflict or discrepancy, the most stringent requirement shall apply.
- .2 Building Smoking Environment:
 - .1 Smoking is not permitted in the Building. Obey smoking restrictions on building property.
- .3 Hazardous Material Discovery:
 - .1 Stop work immediately when material resembling spray or trowel-applied asbestos, Polychlorinated Biphenyl (PCB), mould or other hazardous substance is encountered during demolition work.
 - .1 Take preventative measure and promptly notify Departmental Representative.
 - .2 Do not proceed until written instructions have been received from Departmental Representative.

1.8 FIRE SAFETY REQUIREMENTS

- .1 Comply with both the National Building Code of Canada 2010 and the National Fire Code of Canada 2010 for safety of persons in buildings in the event of a fire and the protection of buildings from the effects of fire, as follows;
 - .1 The National Building Code (NBC): for fire safety and fire protection features that are required to be incorporated in a building during construction.
 - .2 The National Fire Code (NFC):
 - .1 The on-going maintenance and use of the fire safety and fire protection features incorporated in buildings.
 - .2 The conduct of activities that might cause fire hazards in and around buildings.
 - .3 Limitations on hazardous contents in and around buildings.
 - .4 The establishment of fire safety plans.
 - .5 Fire safety at construction and demolition sites.
- .2 Welding and cutting:
 - .1 Before welding, soldering, grinding and/or cutting work, obtain a permit as directed by the Departmental Representative. Store flammable liquids in approved CSA containers.
 - .2 At least one week prior to commencing cutting, welding or soldering procedure, provide to Departmental Representative:
 - .1 Notice of intent, indicating devices affected, time and duration of isolation or bypass.
 - .2 Completed welding permit as defined in NFC.
 - .3 Return welding permit to Departmental Representative immediately upon completion of procedures for which permit was issued.
 - .3 “Fire Watchers” as described in NFC shall be assigned when welding or cutting operations are carried out in areas where combustible materials within 15m may be ignited by conduction or radiation.
- .3 Where work requires interruption or cause activation of fire alarms or fire suppression, extinguishing or protection systems:
 - .1 Provide “Watchman Service” as described in NFC; In general, watchman service is defined as an individual conversant with “Fire Emergency Procedures”, performing fire picket duty within an unprotected and unoccupied (no workers) area once per hour.
 - .2 Retain services of manufacturer for fire protection systems on daily basis or as approved by Departmental Representative, to isolate and protect all devices relating to:
 - .1 Modification of fire alarms, fire suppression, extinguishing or protection systems; and/or
 - .2 Cutting, welding, soldering or other construction activities that might activate fire protection systems.
 - .3 Immediately upon completion of work, restore fire protection systems to normal operation and verify that all devices are fully operational.

1.9 QUALITY CONTROL

- .1 Testing Laboratory Services:
 - .1 Departmental Representative will appoint and pay for costs of inspection and testing services, unless indicated otherwise.
 - .2 Provide safe working areas and assist with testing procedures, including provisions for materials or services and co-ordination, as required by testing agency and as authorized by Department Representative.
 - .3 Where tests indicate non-compliance with specifications, contractor pay for initial test and all subsequent testing of work to verify acceptability of corrected work.

1.10 HAZARDOUS MATERIALS

- .1 Hazardous Materials: product, substance, or organism that may cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.
- .2 Comply with the requirements of the Workplace Hazardous Materials Information System (WHMIS) regarding use, handling, storage, and disposal of hazardous materials; and regarding labelling and the provision of Material Safety Data Sheets (MSDS).

1.11 TEMPORARY UTILITIES

- .1 Existing services required for work, may be used by the Contractor without charge. Ensure capacity is adequate prior to imposing additional loads. Connect and disconnect at own expense and responsibility.
- .2 Existing electrical services to a maximum of 15 KVA required for the work may be used by the Contractor without charge. Ensure capacity is adequate prior to connecting and imposing additional loads.
- .3 Give the Departmental Representative one week notice related to each necessary interruption of any mechanical or electrical service throughout the course of the work. Keep duration of these interruptions to a minimum. Carry out all interruptions after normal working hours of the occupants, preferably on weekends.

1.12 CONSTRUCTION FACILITIES

- .1 Use of Site:
 - .1 Do not unreasonably encumber site with materials or equipment.
 - .2 Execute the work with the least possible interference or disturbance to the normal use of the existing premises. Make arrangements with the Departmental Representative to facilitate the work as stated.
 - .3 Maintain existing services to the building and provide for personnel and vehicle access.
 - .4 Maintain a proper solid or chain link security fence c/w suitable locks around work and storage areas at all times.
 - .5 Where security is reduced by the work, provide temporary means to maintain security.

- .6 Contractor shall utilize assigned washroom facilities and shall maintain them neat and tidy.
- .7 Contractor to supply their own trailer, phone, fax and storage box. No storage will be provided within the building. Accommodation will be made for limited on-site storage at the discretion of the Departmental Representative in area designated by the Departmental Representative.
- .2 Signage:
 - .1 Provide common-use signs related to traffic control, information, instruction, use of equipment, public safety devices, etcetera, in both official languages or by the use of commonly understood graphic symbols and to approval of the Departmental Representative.
 - .2 No advertising will be permitted on this project.

1.13 TEMPORARY BARRIERS AND ENCLOSURES

- .1 Maintain existing services to building and provide for personnel access.
- .2 Hoarding:
 - .1 Design, erect and maintain temporary site enclosure and covered pedestrian walkways and provide protection, complete with signs and electrical lighting as required by authority having jurisdiction.
- .3 Dust Control:
 - .1 Provide dust tight screens or partitions to localize dust-generating activities, and for protection of workers, finished areas of work and public.
 - .2 Maintain and relocate protection until such work is complete.
 - .3 Protect all furnishings within working area with 0.102mm thick polyethylene film during construction. Remove film during non-construction hours and leave premises in clean, unencumbered an safe manner for normal daytime function.
- .4 Design, construct and maintain temporary “access to” and “egress from” work areas, including stairs, runways, ramps or ladders, independent of finished surfaces and in accordance with relevant municipal, provincial and other regulations.
- .5 Protection:
 - .1 Protect work against damage until take-over.
 - .2 Protect adjacent work against the spread of dust and dirt beyond the work areas.
 - .3 Protect operatives and other users of site from all hazards.
- .6 Work zones:
 - .1 Work zone locations include: Test Cell #1 and 3.
 - .2 The Contractor shall agree to install proper site separation and identification in order to maintain “Time and Space” at all times throughout the life of the project. When Building Operations staff requires access to equipment in order to operate the building, proper coordination and communication must exist between all parties involved.

1.14 COMMON PRODUCT REQUIREMENTS

- .1 Quality of Work:
 - .1 Carry out work using qualified licenced workers or apprentices in accordance with Provincial Act respecting manpower vocational training and qualification.
 - .2 Permit employees registered in Provincial apprenticeship program to perform specific tasks only if under direct supervision of qualified licenced workers.
 - .3 Determine permitted activities and tasks by apprentices, based on level of training attended and demonstration of ability to perform specific duties.
- .2 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.
 - .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seal and labels intact. Do not remove packaging or bundling until required in work.
- .3 Manufacturer's Instructions: 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

1.15 EXAMINATION AND PREPARATION

- .1 Examine site and conditions likely to affect work and be familiar and conversant with existing conditions.
- .2 Before commencing work, establish location and extent of services lines in area of work and notify Departmental Representative of findings.

1.16 EXECUTION

- .1 Cut, Patch and Make Good:
 - .1 Cut existing surfaces as required to accommodate new work.
 - .2 Remove all items so shown or specified.
 - .3 Patch and make good surfaces cut, damaged or disturbed, to Departmental Representative's approval. Match existing material, colour, finish and texture.
- .2 Sleeves, Hangers and Inserts: co-ordinate setting and packing of sleeves and supply and installation of hangers and inserts. Obtain Departmental Representative's approval before cutting into structure.
- .3 Unless otherwise specified, materials for removal become the Contractor's property and shall be taken from site.

1.17 WASTE MANAGEMENT

- .1 Comply with the Environmental Protection Act, Ontario Regulations O. Reg. 102/94 and O. Reg. 103/94 for waste management programs on construction and demolition projects.

1.18 CLOSEOUT SUBMITTALS

- .1 Operational and Maintenance Manuals:
 - .1 One (1) week prior to substantial work inspection, submit to Departmental Representative two (2) copies of approved Operations Data and Maintenance Manual in both official languages, compiled as follows:
 - .1 Bind data in vinyl hard cover 3 "D" ring type loose-leaf binders for 212 x 275mm size paper. Binders must not exceed 75mm thick or be more than 2/3 full.
 - .2 Enclose title sheet labelled "Operation Data and Maintenance Manual," project name, date and list of contents. Project name must appear on binder face and spine.
 - .3 Organize contents into applicable sections of work to parallel project specifications breakdown. Mark each section by labelled tabs protected with celluloid covers fastened to hard paper dividing sheets.
 - .2 Include following information plus data specified:
 - .1 Maintenance instruction for finished surface and materials.
 - .2 Copy of hardware and paint schedules.
 - .3 Description: operation of the equipment. Include nameplate information such as make, size, capacity and serial number.
 - .4 Maintenance: use clear drawings, diagrams or manufacturers' literature which specifically apply and detail the following:
 - .1 lubrication products and schedules;
 - .2 trouble shooting procedures;
 - .3 adjustment techniques; and
 - .4 operational checks.
 - .5 Suppliers' names, addresses and telephone numbers and components supplied by them must be included in this section. Components must be identified by a description and manufacturers part number.
 - .6 Guarantees showing:
 - .1 name and address of projects;
 - .2 guarantee commencement date (date of Interim Certificate of Completion);
 - .3 duration of guarantee;
 - .4 clear indication of what is being guaranteed and what remedial action will be taken under guarantee; and
 - .5 signature and seal of Guarantor.
 - .7 Additional material used in project listed under various Sections showing name of manufacturer and source of supply.
 - .3 Spare parts: list all recommended spares to be maintained on site to ensure optimum efficiency. List all special tools appropriate to unique application. All parts/tools detailed must be identified as to manufacturer, manufacturer part number and supplier (including address).
 - .4 Include one complete set of final shop drawings (bound separately) indicating corrections and changes made during fabrication and installation.

- .5 Provide two (2) copies on digital media .pdf format and of the entire Operations and Maintenance manual. Vendor literature available from the vendor in native .pdf format shall be included. If vendor literature is not available in .pdf it shall be scanned. All other information shall be scanned into .pdf. An electronic index shall be created which allows for easy navigation through the files.
- .2 Records:
 - .1 As work progresses, maintain accurate records to show deviations from the contract drawings. Just prior to completion of work, supply to the Departmental Representative one set of white prints with all deviations neatly inked in. The contractor will deliver the “as-built” records to the Departmental Representative, and will then provide 2 copies on digital CD’s of the “Final Record Drawings” in PDF, and AutoCad formats for the owners records.
- .3 Guarantees and Warranties:
 - .1 Contractor is to correct deficiencies within 90 days discovery of deficiency unless otherwise instructed by Departmental Representative. Failure to clear deficiency within 90 days of discovery (or unless otherwise instructed by Departmental Representative) will cause for the Departmental Representative to proceed with action against Contractor.

1.19 CLEANING

- .1 Clean up as work progresses. At the end of each work period, and more often if ordered by the Departmental Representative, remove debris from site, neatly stack material for use, and clean up generally.
- .2 Upon completion, remove temporary protections and surplus materials. Make good any defects noted at this stage.
- .3 Clean areas affected under the present construction documents to satisfaction of the Departmental Representative.

1.20 SECURITY CLEARANCES

- .1 All personnel employed on this project shall be subject to a security check. Obtain the requisite clearance for each individual required to enter the premises.
- .2 Security access:
 - .1 For access, Contractors must submit the company name, individual names and date of birth along with the individual’s security level clearance to Departmental Representative. Once security has reviewed and accepted these individuals they will be granted access.
 - .2 Enhanced Security level is required for all contractors and individuals on this site.
 - .3 Special escorted access maybe granted but is not guaranteed for those which do not presently meet this requirement.
 - .4 All individuals must sign in and out at the main security desk whenever entering or exiting the site. No matter how long the duration is. The exception to this is deliveries or pickups where the individual is not out of the truck working on site.

1.21 COST BREAKDOWN

- .1 Before submitting first progress claim, submit breakdown of Contract Amount in detail as directed by Departmental Representative and aggregating the Contract Amount. After approval by Departmental Representative cost breakdown will be used as the basis of progress payments.

1.22 SHIPPING AND RECEIVING

- .1 Contractor must be on site to receive all shipments.
- .2 Contractor is responsible to unload all shipments.
- .3 Deliveries maybe turned away if the contractor is not on site.
- .4 Contractor materials are not to be left in the shipping and receiving area.
- .5 Shipper may accept to assist the Contractor to load or unload goods and materials. Any movement of the Contractor's materials will be at the request of the contractor, however the site accepts no responsibility for any damage lost or stolen good or materials. If the contractor does not accept this condition, the shipper will not assist the contractor.

1.23 CONTRACTOR PROJECT SUPERINTENDENT

- .1 The Contractor shall, upon award of contract, designate a Project Superintendent. The Contractor shall provide the name, cellular phone number to the Departmental Representative at the pre-construction meeting. The Project Superintendent shall have full responsibility for the project and shall be authorized to accept and act upon any notice or direction provided by the Departmental Representative. Project Superintendent shall be available on site at all times that work is being performed under this contract.
- .2 Supervise and direct all person engaged in the work, including all tradesmen and suppliers. Become familiar with the requirements of each trade. Coordinate delivery and work operations. Examine the work of all trades during work operations to ensure compliance with the contract requirements. Expedite all work to maintain the contract schedule.
- .3 Cooperate with all other contractors working on site in parallel or related projects.
- .4 Attend coordination and project meetings at the direction of the Departmental Representative.

1.24 CONTRACTOR AND SUB CONTRACTORS

- .1 The Contractor agrees to employ those sub-contractors proposed by him in writing as listed in the Contractor's tender submission.
- .2 Contractor and sub-contractor personnel shall be qualified as per definitions under the Ontario Trades Qualification and Apprenticeship Acts and as required by regulatory agencies in Ontario.

- .3 Electrical work shall be carried out by qualified and licensed electrical contractors as per Ontario regulations.

1.25 TRAINING AND DEMONSTRATION

- .1 Upon completion of the all installations, provide qualified personnel to train and demonstrate all the installations to the site's operations and maintenance personnel. Contractor to review newly installed equipment and demonstrate the start/stop and control functions of the installed equipment. Training and demonstration to be for a duration of four (4) hours or, as indicated in the equipment specification section. Training date and time to be coordinated with and approved by the Departmental Representative.

1.26 PRECEDENCE

- .1 Division 01 Sections take precedence over technical specification sections in other Divisions of this Project Manual.

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 REGULATORY REQUIREMENTS**

- .1 This section provides the required information to meet the requirements of the Canada Labour Code (R.S.C. 1985, C.L-2), under Part II, Section 124 and Canada Occupational Health and Safety Regulation (SOR/86-304) Part X – Hazardous Materials.
- .2 This section provides the required information to meet the requirements of Section 30, of the Occupational Health and Safety Act, R.S.O. 1990, c. O.1.
- .3 The disturbance of asbestos materials on construction projects is controlled by Ontario Regulation 278/05, Asbestos on Construction Projects and in Buildings and Repair Operations.
- .4 The Revised Regulations of Ontario (1990), Regulation 843 (formerly Ontario Ministry of Labour Regulation 536/81) as amended by O. Reg. 519/92 under the Occupational Health and Safety Act outlines the requirements to control airborne lead in industrial establishments. Exposure levels and respiratory protection in this regulation also apply to construction projects at a workplace where workers are likely to be exposed to lead. The disturbance of lead on construction projects is also governed by the Ministry of Labour, Lead on Construction Projects Guideline issued in 2011.
- .5 The Revised Regulations of Ontario (1990), Regulation (formerly Ontario Ministry of Labour Regulation Respecting Silica 769/83) 845 as amended by O.Reg.521/92 which amends the Occupational Health and Safety Act, outlines the requirements to control airborne silica in industrial establishments. Exposure levels and respiratory protection in this regulation also apply to construction projects at a workplace where workers are likely to be exposed to silica. The disturbance of silica on construction projects is also governed by the Ministry of Labour, Silica on Construction Projects Guideline issued in 2011.
- .6 Disposal of construction debris and waste is controlled by The Revised Regulations of Ontario (1990), Regulation 347 (formerly Regulation 309 as amended) under the Environmental Protection Act.
- .7 Notification:
 - .1 All contractors requesting tenders from subcontractors shall furnish this report to subcontractors.
 - .2 Contractors are required, on the Ontario Ministry of Labour Notice of Project form, to list all Designated Substances that may be used, handled or disturbed by work on the project. This includes Designated Substances already present as part of the structure or finishes as well as Designated Substances brought to the project site by the contractor.

1.2 SCOPE AND VALIDITY DATE

- .1 The survey for this report was completed on February 9, 2017. Since that time, Hazardous Materials may have been removed from or added to the project areas.
- .2 Prior to beginning work, confirm with Engineer that additional hazardous materials have not been brought to project areas.

- .3 The site conditions identify the location and condition of all known designated substances on this project.

1.3 ASBESTOS

- .1 Asbestos-containing materials were not identified in the project areas.
- .2 The following materials in the project areas have been determined to not contain asbestos, in accordance with Ontario Regulation 278/05:
 - .1 Straight sections of pipes are uninsulated or insulated with non-asbestos fibreglass insulation;
 - .2 Ducts are either uninsulated or insulated with non-asbestos fibreglass;
 - .3 Yellow adhesive on foam insulation in walls of Test Cell 3 does not contain asbestos.

1.4 LEAD

- .1 Grey paint samples collected from the floor of the project areas contained insignificant concentrations of lead (0.0327 and <0.002 %) and were found to be in good condition and not flaking, peeling or delaminating.
 - .1 The Ontario Ministry of Labour (MOL) has not established a lower limit for concentrations of lead in paint, below which precautions do not need to be considered during construction projects. Pinchin follows the recommendations of the Environmental Abatement Council of Ontario (EACO) Lead Guideline for Construction, Renovation, Maintenance or Repair. The Guideline suggests that 1,000 ug/g (0.1%) lead in paint represents a de minimis concentration of lead in paint for construction hygiene purposes, that is a concentration below which the lead content is not the limiting hazard in any disturbance of leaded paint for non-aggressive disturbance of painted finishes, (hand powered demolition, chipping, scraping, light sanding, etc.). The use of aggressive methods such as power grinding, torching, welding, etc. may result in significant lead exposures even with low concentrations of lead in paints (below 0.1%)

1.5 SILICA

- .1 Crystalline silica is a presumed component in poured concrete in the project areas.

1.6 MERCURY

- .1 Mercury vapour is present in fluorescent lamps in the vicinity of the project areas.

1.7 POLYCHLORINATED BIPHENYLS

- .1 Based on information from the Client and confirmed by visual observations (evidence of T-8 fixtures) the project areas have been comprehensively re-lamped and will not contain PCB ballasts.

1.8 MOULD

- .1 Visible mould growth was not found in the assessed areas.

1.9 REMAINING DESIGNATED SUBSTANCES (O.Reg 490/09)

- .1 The following Ontario Designated Substances are not typically found in building materials in a composition/state is hazardous and are not present in the project areas:

- .1 Arsenic
- .2 Acrylonitrile
- .3 Benzene
- .4 Coke oven emissions
- .5 Ethylene oxide
- .6 Isocyanates
- .7 Vinyl chloride monomer

1.10 NOTIFICATION

- .1 Notify the Owner or Owners Representative, the Joint Occupational Health and Safety Committee and the Ontario Ministry of Labour, as required by Regulation 278/05, if suspected asbestos-containing materials not identified in the contract documents are discovered during the course of the work. Stop work in these areas immediately.

Part 2 Products**2.1 NOT USED**

- .1 Not Used.

Part 3 Execution**3.1 NOT USED**

- .1 Not Used.

END OF SECTION

Part 1 General**1.1 REFERENCES**

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations
- .2 Province of Ontario
 - .1 Occupational Health and Safety Act and Regulations for Construction Projects, R.S.O. 1990, c.0.1, as amended and O. Reg. 213/91 as amended - Updated 2005.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 01 00 10 – General Instructions.
- .2 Submit site-specific Health and Safety Plan: Within 7 days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
 - .1 Results of site specific safety hazard assessment.
 - .2 Results of safety and health risk or hazard analysis for site tasks and operation.
- .3 Submit 2 copies of Contractor's authorized representative's work site health and safety inspection reports to Departmental Representative.
- .4 Submit copies of reports or directions issued by Federal, 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 01 00 10 - General Instructions.
- .7 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within 7 days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within 3 days after receipt of comments from Departmental Representative.
- .8 Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.

1.3 FILING OF NOTICE

- .1 File Notice of Project with Provincial authorities prior to beginning of Work.
- .2 Work zone locations: as shown on drawings
- .3 Contractor shall agree to install proper site separation and identification in order to maintain time and space at all times throughout life of project.

1.4 SAFETY ASSESSMENT

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

1.5 MEETINGS

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

1.6 REGULATORY REQUIREMENTS

- .1 Do Work in accordance with Section 01 00 10 - General Instructions.

1.7 GENERAL REQUIREMENTS

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

1.8 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 Contractor will be responsible and assume the role Constructor as described in the Ontario Occupational Health and Safety Act and Regulations for Construction Projects.
- .3 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.

1.9 COMPLIANCE REQUIREMENTS

- .1 Comply with Ontario Occupational Health and Safety Act, R.S.O. 1990, c. 0.1 and Ontario Regulations for Construction Projects, O. Reg. 213/91.

1.10 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 Departmental Representative verbally and in writing.
- .2 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, advise Health and Safety co-ordinator and follow procedures in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.

1.11 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 work of this contract.
 - .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.

- .5 Be on site during execution of Work and report directly to and be under direction of site supervisor.

1.12 POSTING OF DOCUMENTS

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

1.13 CORRECTION OF NON-COMPLIANCE

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

1.14 BLASTING

- .1 Blasting or other use of explosives is not permitted.

1.15 POWDER ACTUATED DEVICES

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

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

