

**Part 1            General**

**1.1                RELATED REQUIRMENTS**

- .1            Section 01 35 29.06 – Health and Safety Requirements.
- .2            Section 01 14 25 – Designated Substances Report.

**1.2                TAXES**

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

**1.3                FEES, PERMITS and CERTIFICATES**

- .1            Pay all fees and obtain all permits.
- .2            Provide authorities with plans and information for acceptance certificates.
- .3            Obtain inspection certificates as evidence that work conforms to requirements of Authority Having Jurisdiction.

**1.4                WORK RESTRICTIONS**

- .1            Use of Site and Facilities.
  - .1            Execute work with least possible interference or disturbance to the normal use of premises. Make arrangements with Departmental Representative to facilitate work as stated. Refer to sub-paragraph 1.3.2 Special Scheduling Requirements below for work that must be done during "off hours".
  - .2            Maintain existing services to building and provide for occupant, visitor and vehicle access.
  - .3            Contain deliveries and temporary parking as designated by Departmental Representative. No parking permitted outside of designated parking spot.
    - .1            Temporary parking permitted for Contractor employees in company-marked vehicles only.
- .2            Special Scheduling Requirements.
  - .1            When Court is in recess until end of September, carry out work during "regular hours", Monday to Friday from 07:00 to 18:00 hours.
  - .2            Give Departmental Representative one week notice for work to be carried out during the following "off hours":
    - .1            Monday to Friday from 18:00 to 06:00 hours and on Saturdays, Sundays, and statutory holidays.
  - .3            Deliver and pick up materials during "off hours", unless directed in writing by Departmental Representative.
- .3            Status of Work at end of work day.
  - .1            Windows are to be weathertight and secure at the end of work each day. Temporary protection to be removed. Clean work space at end of shift. Return furnishings to original position.

## **1.5 ADMINISTRATIVE REQUIREMENTS**

- .1 Site/Contractor Project Meetings.
  - .1 Schedule and administer construction project meetings throughout progress of the Work.
  - .2 Prepare agenda for meetings.
  - .3 Preside at meetings.
  - .4 Record the meeting minutes. Include significant proceedings and decisions. Identify actions by parties.
  - .5 Reproduce and distribute copies of minutes within three days after meetings and transmit to meeting participants and Departmental Representative.
  - .6 Representative of Contractor, Subcontractor attending meetings will be qualified and authorized to act on behalf of party each represents.
- .2 Start-up Meeting.
  - .1 Convene start-up meeting minimum 2 weeks prior to beginning construction start works. Key contractor personnel, contractor site supervisor, Departmental Representative to attend.
  - .2 Verify project requirements. Agenda to include:
    - .1 Schedule of Work: in accordance with Article 1.6 Scheduling below.
    - .2 Schedule of submission of shop drawings, samples, mock-ups. Submit submittals in accordance with Article 1.8 Submittal Procedures below.
    - .3 Requirements for temporary facilities, site sign, offices, storage sheds, utilities, fences in accordance with Article 1.14 Construction Facilities below.
    - .4 Site security in accordance with Article 1.14 Construction Facilities below.
    - .5 Proposed changes, procedures, approvals required, administrative requirements.
    - .6 As-built/Record drawings in accordance with Article 1.20 Closeout Submittals below.
    - .7 Monthly progress claims, administrative procedures, photographs, hold backs.
  - .3 Record minutes of meetings and circulate to attending parties and affected parties not in attendance within four (4) days after meeting.
- .3 Regular Project Meetings.
  - .1 Hold project meetings every two (2) weeks.
  - .2 Key contractor personnel, contractor site supervisor, Departmental Representative to attend.
  - .3 Notify parties minimum five (5) days prior to meetings.
  - .4 Record minutes of meetings and circulate to attending parties and affected parties not in attendance within four (4) days after meeting.

- .5 Agenda to include the following:
  - .1 Review, approval of minutes of previous meeting.
  - .2 Review of Work progress since previous meeting.
  - .3 Use of Site, Safety and Security
  - .4 Field observations, Site Reviews,
  - .5 Review of delivery schedules.
  - .6 Upcoming work and any Revisions to construction schedule.
  - .7 Review of submittal schedules: expedite as required.
  - .8 Review of any proposed changes for effect on construction schedule and on completion date.

## **1.6 SCHEDULING**

- .1 Schedule and execute work with least possible interference or disturbance to the normal use of premises.
- .2 Within one (1) week of award of contract submit bar chart construction schedule for work, indicating anticipated progress stages within time of completion. When the Departmental Representative has reviewed schedule, take necessary measures to complete work within scheduled time.
  - .1 Changes to approved schedule: Submit proposed changes to approved schedule in writing minimum seven (7) days in advance of proposed changes. Obtain Departmental Representative's approval before proceeding with changes to schedule.
  - .2 Allow for six (6) unforeseen work stoppages, by Departmental Representative, of each 48 hours in duration.
  - .3 Provide a separate schedule of material deliveries, showing quantity and type of material.
  - .4 Provide a separate two week look-ahead schedule, based on the detailed project schedule, to show the advancement of upcoming work. Submit for approval an updated two-week look ahead schedule, every other week, 48 hours prior to the project progress meeting.

## **1.7 SUBMITTAL PROCEDURES**

- .1 Provide submittals listed for review to Departmental Representative in orderly sequence to not cause delay in work.
- .2 Proceed with work affected by submittals only after review is complete.
- .3 Provide inspection certificates as evidence that work conforms to requirements of Authority Having Jurisdiction.
- .4 Shop Drawings:
  - .1 Submit five (5) copies of shop drawings.
  - .2 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.
- .3 Commence manufacture or order materials only after shop drawings are reviewed.
    - .1 When requested by Departmental Representative, make changes to submitted shop drawings consistent with Contract Documents. Resubmit as directed by Departmental Representative.
  - .5 Product Data:
    - .1 Submit five (5) copies of product data: manufacturer's 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.
    - .3 Delete information not applicable to the Work.
    - .4 Submit product data minimum 5 days before undertaking respective work.
  - .6 Samples:
    - .1 Submit samples: examples of materials, equipment, quality, finishes and workmanship.
    - .2 Where colour, pattern or texture is criterion, submit full range of samples.
    - .3 Reviewed and accepted samples will become standard of material and workmanship, against which installed work will be verified.
  - .7 Submit photographs of surrounding properties, objects and structures liable to be damaged or be the subject of subsequent claims.

## **1.8 REGULATORY REQUIREMENTS**

- .1 References and Codes:
  - .1 Materials: new unless specified otherwise.
  - .2 Work to conform to the minimum applicable standards of the "References" indicated in the specification sections, the National Building Code of Canada 2015 (NBC) and all applicable Provincial and Municipal codes. In the case of conflict or discrepancy the most stringent requirement applies.
- .2 Building Smoking Environment:
  - .1 The Building is a non-smoking environment.
  - .2 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 designated substance is encountered during demolition work.
    - .1 Take preventive measures and promptly notify Departmental Representative.

- .2 Do not proceed until written instructions have been received from Departmental Representative.

## **1.9 FIRE SAFETY REQUIREMENTS**

- .1 Comply with both the National Building Code of Canada 2015 and the National Fire Code of Canada 2015 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.

## **1.10 QUALITY CONTROL**

- .1 Mock-ups:
  - .1 Prepare mock-ups for Work specifically requested in specification sections. Include for Work of Sections required to provide mock-ups.
  - .2 Construct in locations acceptable to Departmental Representative.
  - .3 Prepare mock-ups for Departmental Representative's review with reasonable promptness and in orderly sequence, to not cause delays in the Work.
  - .4 Failure to prepare mock-ups in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
  - .5 If requested, Departmental Representative will assist in preparing schedule fixing dates for preparation.
  - .6 Specification section identifies whether mock-up may remain as part of Work or if it is to be removed and when.

## **1.11 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).

**1.12 TEMPORARY UTILITIES**

- .1 Do not use existing services.
- .2 Provide service requirements for execution of the Work from off-site sources.

**1.13 CONSTRUCTION FACILITIES**

- .1 Access equipment and materials:
  - .1 Provide access equipment and materials required to carry out the Work in accordance with IHSA recommendations and the Occupational Health and Safety Act.
  - .2 Be responsible for work area security.
  - .3 Where security is reduced by work: provide temporary means to maintain security.
    - .1 Submit proposed temporary means to Departmental Representative for review minimum 5 days before undertaking respective work.
  - .4 Sanitary facility access as designated by Departmental Representative. Keep facilities clean.
  - .5 Scaffolding
    - .1 Design scaffold in accordance with CAN/CSA-S269.2.
    - .2 Provide and maintain scaffolding, ramps, ladders, platforms and temporary stairs as required for the work.
    - .3 Provide shop drawings, signed and sealed by a qualified Professional Engineer, licensed in the Province of Ontario, where prescribed.
    - .4 Additions and modifications to scaffolding must be approved by a qualified Professional Engineer in writing.
    - .5 Access into the courtyards is limited and only possible through a single entrance door from the parking garage structure.
      - .1 All material deliveries into the courtyards must be through this door and/or via crane.
  - .6 Crane Mobilization
    - .1 Crane is not to be left permanently on site.
    - .2 Confirm with Departmental Representative restrictions on time of day, locations for set up, weight restrictions, access approvals.
    - .3 Include crane time on site in construction schedule.
    - .4 Obtain approval from Departmental Representative to bring crane on site.
      - .1 All vehicle traffic located on the upper deck of the parking garage is restricted to a maximum speed of 10km/hr.
      - .2 Size, weight and weight distribution of crane and/or lift utilized on the existing garage platform is to be determined by a qualified Professional Engineer, licensed in the Province of Ontario, provided by the contractor.

- .3 Submit crane and lift plan to Departmental Representative. Indicate weights and locations of all equipment.
  - .4 Submit crane and lift plan to Departmental Representative at least 10 days before the service is needed.
- .7 Site Storage / Loading
- .1 Do not unreasonably encumber premises with products, tools or equipment.
  - .2 Do not load or permit to load any part of Work with weight or force that will endanger Work.
  - .3 Storage of materials, tools or equipment on site is not permitted.
- .8 Construction Parking
- .1 Parking will not be permitted on site.
- .9 Construction Signage
- .1 Provide common use signs related to traffic control, information, instruction, use of equipment, public safety devices, etc.
  - .2 Signs and notices for safety and instruction in both official languages Graphic symbols to CAN/CSA-Z321.
  - .3 The Departmental Representative will provide signs describing the project for the information of the public. Install signs at locations as directed by Departmental Representative.
  - .4 Maintain approved signs and notices in good condition for duration of project, and dispose of off-site on completion of project or earlier if directed by Departmental Representative.
  - .5 No other signs or advertisements, other than warning signs, are permitted on site.
- .10 Protection and Maintenance of traffic
- .1 Provide access roads as necessary to maintain traffic.
  - .2 Maintain and protect traffic on affected roads during construction period.
  - .3 Provide measures for protection and diversion of traffic, including provision of watch-persons and flag-persons, erection of barricades, placing of lights around and in front of equipment and work, and erection and maintenance of adequate warning, danger, and bilingual direction signs
  - .4 Protect travelling public from damage to person and property.
  - .5 Contractor's traffic on roads selected for hauling material to and from site to interfere as little as possible with public traffic.
  - .6 Provide necessary lighting, signs, barricades, and distinctive markings for safe movement of traffic. Signs and notices for safety and instruction in both official languages Graphic symbols to CAN/CSA-Z321.
  - .7 Dust control: adequate to ensure safe operation at all times.

#### **1.14 TEMPORARY BARRIERS AND ENCLOSURES**

- .1 Provide for occupant, visitor and vehicle access to building at all times.
- .2 Temporary Barriers:
  - .1 Design, erect and maintain temporary barriers (caution tape, hoarding, etc.) as required by authority having jurisdiction.
- .3 Fume and Dust Control:
  - .1 Prevent spread of dust for protection of workers, finished areas of work and public.
  - .2 Provide adequate ventilation to ensure fumes do not enter interior space.
  - .3 Maintain and relocate protection until such work is complete.
- .4 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.
- .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.

#### **1.15 COMMON PRODUCT REQUIREMENTS**

- .1 Quality of Work:
  - .1 Carry out work using qualified 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 licensed 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:
  - .1 Unless otherwise indicated in specifications, install or erect products in accordance with manufacturer's written instructions.
  - .2 Do not rely on labels or enclosures provided with products.
  - .3 Obtain written instructions directly from manufacturers

**1.16 EXAMINATION AND PREPARATION**

- .1 Examine site and conditions likely to affect work and be familiar and conversant with existing conditions.
- .2 Provide photographs of surrounding properties, objects and structures liable to be damaged or be the subject of subsequent claims.
- .3 Submit to Departmental Representative before commencement of work in any location.
- .4 Window coverings, furniture and other office equipment obstructing work to be removed by Departmental Representative.
  - .1 Submit itemized list of items requiring removal, including their location, to Departmental Representative at least 10 days before the service is needed.

**1.17 EXECUTION**

- .1 Cut, Patch and Make Good:
  - .1 Remove items so shown or specified.
  - .2 Patch and make good surfaces cut, damaged or disturbed, to Departmental Representative's approval. Match existing material, colour, finish and texture.
- .2 Unless otherwise specified, materials for removal become the Contractor's property. Take removed materials from site.

**1.18 WASTE MANAGEMENT**

- .1 Comply with Environmental Protection Act, Ontario Regulations: O. Reg. 102/94 – Waste Audits and Waste Reduction Work Plans; and O. Reg. 103/94 – Industrial, Commercial and Institutional Source Separation Programs; for waste management on construction and demolition projects.

**1.19 CLOSEOUT SUBMITTALS**

- .1 Additional material used in project listed under various Sections showing name of manufacturer and source of supply.
  - .1 Manufacturers' literature:
    - .1 Include suppliers' names, addresses and telephone numbers and components supplied.
    - .2 Identify components by a description and manufacturers part number.
- .2 Records:
  - .1 As work progresses, maintain accurate records to show deviations from contract drawings. Just prior to Departmental Representative's inspection for issuance of final certificate of completion, supply to the Departmental Representative one (1) set of white prints with all deviations neatly inked in. The Departmental Representative will provide two sets of clean white prints for this purpose.

- .2 Include one complete set of final shop drawings (bound separately) indicating corrections and changes made during fabrication and installation.
- .3 Guarantees and Warranties:
  - .1 Before completion of work collect all manufacturer's guarantees or warranties and deposit with Departmental Representative.

**1.20 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 scaffolding, temporary protection and surplus materials. Make good defects noted at this stage.
- .3 Wash and polish glass, window sash and stops at areas of work.
- .4 Clean areas under contract to a condition equal to what previously existed and to approval of Departmental Representative.

**1.21 SECURITY CHECK**

- .1 All personnel employed on this project will be subject to security check. Obtain requisite clearance of Reliability Status for each individual required to enter the premises.

**1.22 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.

**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 Federal Legislation:
  - .1 Canada Labour Code, Part II, Section 124 and 125. Canada Occupational Health and Safety Regulations.
  - .2 Transportation of Dangerous Goods Act, 1992 (TDGA).
  - .3 Canada Consumer Product Safety Act:
    - .1 Surface Coating Materials Regulations SOR/2005-109.
  - .4 Canadian Environmental Protection Act, 1999 (CEPA):
    - .1 PCB Regulations (SOR/2008-273).
    - .2 Federal Halocarbon Regulations, 2003 (SOR/2003-289).
- .2 Provincial Legislation:
  - .1 Ontario Occupational Health and Safety Act, R.S.O. 1990, 2010 edition:
    - .1 Ontario Regulation 490/09 – Designated Substances (O.Reg. 490/09).
    - .2 Ontario Regulation 278/05 – Designated Substance - Asbestos on Construction Projects and in Buildings and Repair Operations, (O.Reg. 278/05).
    - .3 Ontario Regulation 213/91 for Construction Projects (O.Reg. 213/91).
  - .2 Ontario Environmental Protection Act, R.R.O. 1990:
    - .1 Ontario Regulation 347/09, General – Waste Management (O.Reg. 347/09).
    - .2 Ontario Regulations 362/90 – Waste Management, PCBs (O.Reg. 362/90).
    - .3 Ontario Regulation 463/10, Ozone Depleting Substances and Other Halocarbons (O.Reg. 463/10).
- .3 Canadian General Standards Board (CGSB).
- .4 Canadian Standards Association (CSA International). CAN/CSA-Z94.4-11 - Respiratory Protection.
- .5 Underwriters' Laboratories of Canada (ULC).

**1.2                DEFINITIONS**

- .1 Asbestos-Containing Materials (ACMs): means material that contains 0.5 per cent or more asbestos by dry weight as per Ontario Regulation 278/05.

- .2 Friable Material: material that when dry can be crumbled, pulverized or powdered by hand pressure and includes such material that is crumbled, pulverized or powdered.
- .3 Lead-Containing Material: Paint or surface coating that contains concentrations of lead above the Federal Canada Consumer Product Safety Act's limit of 90 ppm.
- .4 Time-weighted average exposure limit (TWAEEL): the time-weighted average airborne concentration of a biological or chemical agent to which a worker may be exposed in a work day or work week as prescribed by Ontario Regulation 490/09 Designated Substances, as amended.

### 1.3 DESIGNATED SUBSTANCES

- .1 Confirm with the Departmental Representative that no additional designated substances have been brought to the project area prior to beginning work.
- .2 Additional designated substances and hazardous materials may exist outside the accessible survey areas but are beyond the scope of this project.
- .3 Should any additional material, suspected to be a designated substance, be encountered within the project area, any disturbance of such material must be stopped, precautionary measures taken, and the Departmental Representative must be notified immediately. Do not proceed until written instructions have been received.
- .4 Survey results:
  - .1 ACRYLONITRILE: Not Identified.
  - .2 ARSENIC: Not Identified.
  - .3 ASBESTOS: **Identified.**

Based on bulk sampling and laboratory analysis, the following materials contain regulated amounts of asbestos:

- Black and white window putty, generally observed between and beneath the metal frame components and the window glass. Black and white window putty was confirmed by laboratory to contain 2.81% and 0.91% Chrysotile asbestos respectively. Based on visual observations of all the different types of windows, all building window types should be assumed to be comprised of asbestos-containing window putty between and beneath the metal frame components and glass of each respective window throughout the building, unless proven otherwise by bulk sampling and laboratory analysis.

Bulk sampling and laboratory analysis has determined that the following materials do not contain regulated amounts of asbestos:

- White window putty associated with the JJ Window, East elevation, inner window. However, based on the confirmed presence of asbestos in window putty materials denoted above, all window putty associated with all windows shall be considered asbestos-containing.

- Black caulking between the window frame and stone, JJ Window, East Elevation.
- Grey/black caulking between screen and metal frame, JJ Window, East Elevation;
- Brown painted caulking, between metal frame and stone, G Window, East Elevation;
- Black caulking, between metal frame and stone, A Window, East Elevation;
- Caulking, painted brown, between metal frame and metal frame, in window groove, O Window, West Courtyard;
- Black caulking between inner window and outer window on marble transition piece, E Window, East Courtyard;
- Grey caulking between metal frame and window, interior side, E Window, East Courtyard;
- Black caulking around the door frames associated with the south elevation bronze doors and west elevation bronze door;
- Exterior stone mortar;
- Grey caulking around the door frame associated with the north elevation bronze doors; and
- Caulking materials homogeneous to the above noted samples were identified at the various building window types throughout the building. Based on the above noted laboratory results, caulking materials visually homogeneous to the above noted materials in this section are considered non-asbestos-containing.

- .4 BENZENE: Not Identified.
- .5 COKE OVEN EMISSIONS: Not identified.
- .6 ETHYLENE OXIDE: Not Identified.
- .7 ISOCYANATES: Not Identified.
- .8 LEAD: **Identified.**

Based on the analytical results, the following paints contain concentrations of lead greater than the Federal Canada Consumer Product Safety Act's limit of 90 ppm:

- Brown paint collected from Window D-D, North Elevation, contains 921 ppm lead; and
- Brown paint collected from Window JJ, East Elevation, contains 707 ppm lead.

No other lead paint samples were collected for lead content analysis, as other paints and surface coatings encountered in the project areas were in good condition and sampling without matrix interference (i.e. removing the paint without the substrate material) would have proved difficult. All other paints and surface coatings shall be assumed to contain detectable concentrations of lead, unless specific bulk sampling and laboratory analysis confirms otherwise.

Based on the analytical results, the exterior stone mortar contains 8.5 ppm lead. This mortar is considered to be lead-containing, though, as a point of reference, at a concentration significantly below well below the Federal Canada Consumer Product Safety Act's limit of 90 ppm for surface coatings.

.9 MERCURY: Not Identified.

.10 SILICA: **Identified.**

Free crystalline silica is expected to be present in the following materials:

- Stone and mortar materials.

.11 VINYL CHLORIDE MONOMER: Not Identified.

.12 POLYCHLORINATED BIPHENYLS (PCBs): Not Identified.

.13 MOULD: Not Identified.

.14 HALOCARBONS: Not Identified.

.15 OTHER HAZARDOUS MATERIALS: Not Identified.

## 1.4 RECOMMENDATIONS

### .1 ASBESTOS

.1 All work must be done in accordance with *O.Reg 278/05* (as amended).

.2 The disturbance of ACMs on construction and demolition projects in the province of Ontario is governed by *O.Reg 278/05*, as amended. This regulation classifies all asbestos disturbances as Low Risk (Type 1), Moderate Risk (Type 2), or High Risk (Type 3), each of which has defined precautionary measures. All asbestos materials are subject to specific handling and disposal precautions, and must be removed prior to demolition. The Ontario Ministry of Labour (MoL) must be notified of any project involving removal of more than a minor amount (e.g. typically 1 square metre) of friable asbestos material.

.3 Type 1 work procedures can be used for the removal of non-friable ACMs (e.g. window putty's), provided that the material can be wetted and removed using only non-powered hand tools. If these conditions cannot be met, then more stringent (e.g., Type 2 or Type 3) procedures are necessary.

.4 Disposal of asbestos waste must be done in accordance with "General – Waste Management" *O.Reg 347/90* (as amended) under the Ontario Environmental Protection Act and the federal Transportation of Dangerous Goods Act. The waste must be disposed at a licensed waste disposal site. Proper notification must be issued to the Departmental Representative prior to transportation of waste.

### .2 LEAD

.1 Follow recommendations provided in the Ontario Ministry of Labour (MoL) Guideline entitled "Guideline: Lead on Construction Projects". This guideline classifies all lead disturbances as Type 1, Type 2a, Type 2b,

- Type 3a or Type 3b work, and assigns different levels of respiratory protection and work procedures for each classification.
- .2 Work procedures and personal protective equipment must be used to ensure that workers are not exposed to airborne lead levels that exceed the TWAEL of 0.05 milligram per cubic metre (mg/m<sup>3</sup>) prescribed by *O.Reg 490/09*.
  - .3 The use of mechanically-powered tools or torches on lead-containing materials increases the concentration of airborne lead dust or fumes requiring more stringent respiratory protection and controlled work procedures.
  - .4 Even at low concentrations, there may be a potential for exposure to high concentrations of lead depending on the activities performed that disturb the lead-containing materials. At low lead concentrations, conducting a risk assessment to assess the potential for exposure is required to determine the need to follow precautionary measures.
  - .5 Disposal of construction waste containing lead must be done in accordance with *O.Reg 347/90* – General Waste Management, as amended, under the Ontario Environmental Protection Act and the federal Transportation of Dangerous Goods Act. The classification of the waste is dependent upon the result(s) of leachate test(s). The waste can be classified as “hazardous, “non-hazardous” or “registerable solid waste” depending on the results of the leachate test.
- .3 SILICA
- .1 Comply with Ontario Regulations *O.Reg 490/09* when performing works that may disturb silica-containing materials. The regulation provides requirements for allowable exposure levels.
  - .2 Silica dust can be generated through such processes as blasting, grinding, crushing, and sandblasting silica-containing material. Since silica is present in select materials within the project area, appropriate respiratory protection and ventilation must be donned during the demolition and modifications of these structures.
  - .3 Follow recommendations provided in the MoL Guideline entitled “Guideline: Silica on Construction Projects”. This document classifies all silica disturbances as Type 1, Type 2 or Type 3 work, and assigns different levels of respiratory protection and work procedures for each classification. These work procedures shall be followed when performing work involving the disturbance of silica-containing materials.

## Part 2 Products

Not used.

**Part 3      Execution**

Not used.

**END OF SECTION**

**Part 1            General**

**1.1                RELATED REQUIREMENTS**

- .1        Section 01 00 10 – General Instructions.
- .2        Section 01 14 25 – Designated Substances Report.

**1.2                REFERENCES**

- .1        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] - current edition.
- .2        Canadian Construction Association.
  - .1        CCA 82 – 2004: Mould Guidelines for the Canadian Construction Industry

**1.3                ACTION AND INFORMATIONAL SUBMITTALS**

- .1        Submit in accordance with Section 01 00 10 – General Instructions.
- .2        Submit site-specific Health and Safety Plan:
  - .1        Submit within 15 days after date of Notice to Proceed and prior to commencement of Work.
  - .2        Prepare Site Specific Health and Safety Plan for:
    - .1        Work on site at Supreme Court of Canada, 301 Wellington Street, Ottawa.
  - .3        Health and Safety Plan must include:
    - .1        Results of site specific safety hazard assessment.
    - .2        Results of safety and health risk or hazard analysis for site tasks and operation found in work plan.
- .3        Submit two 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        The Constructor shall immediately advise the Departmental Representative of any incident, accident, injury, near-miss, fire, explosion or chemical spill occurring at the work site, and submit copies of incident and accident reports within 24 hours after the event to the Departmental Representative.
- .6        Submit WHMIS SDS – Safety Data Sheets of products used to complete the Work.
- .7        Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within five days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental

Representative within five 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.
- .9 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.

#### **1.4 FILING OF NOTICE**

- .1 File Notice of Project with Provincial authorities prior to beginning of Work.
- .2 Contractor shall be responsible and assume the Constructor as described in the Ontario Occupational Health and Safety Act and Regulations for Construction Projects role for each work zone location and not the entire complex. Contractor shall provide a written acknowledgement of this responsibility with 3 weeks of contract award.
- .3 Work zone locations include:
  - .1 Supreme Court of Canada, 301 Wellington Street, Ottawa.
- .4 Contractor shall agree to install proper site separation and identification in order to maintain time and space at all times throughout life of project.

#### **1.5 SAFETY ASSESSMENT**

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

#### **1.6 MEETINGS**

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

#### **1.7 PROJECT/SITE CONDITIONS**

- .1 Work at site will involve contact with:
  - .1 Operating vehicles on roadways and pathways shared with the public.
  - .2 Bird droppings.
  - .3 Contact with broken glazing, lead, asbestos and silica.
  - .4 Operating equipment, vibration and noise.
  - .5 Cold and hot temperatures.
  - .6 See also Designated Substance 01 14 25.

#### **1.8 GENERAL REQUIREMENTS**

- .1 Develop written site-specific Health and Safety Plan based on hazard assessment prior to beginning site Work and continue to implement, maintain, and enforce plan until final demobilization from site. Health and Safety Plan must address project specifications.

- .2 Departmental Representative may respond in writing, where deficiencies or concerns are noted and may request re-submission with correction of deficiencies or concerns.
- .3 Submit copies of worker certification. (i.e. equipment operator certification, working from heights)

**1.9 RESPONSIBILITY**

- .1 Be responsible for health and safety of persons on site, safety of property on site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of Work.
- .2 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.

**1.10 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.

**1.11 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 the employer and follow procedures in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.

**1.12 POSTING OF DOCUMENTS**

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of 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**