

## **PART 1        GENERAL**

### **1.1            General and Related Work**

- .1 Read this Section in conjunction with all drawings and all other Sections so as to comply with the requirements of Division 1 and the General Conditions of the Contract.
- .2 Related work specified elsewhere:
- .3 Section 02 82 00.01      Asbestos Abatement – Type 1 Procedures
- .4 Section 02 82 00.02      Asbestos Abatement – Type 2 Procedures
- .5 Site Conditions identifies all known hazardous building materials within the Project Area. The information provided is for general reference only. Each Contractor must confirm existing conditions on site prior to tender close.
  - .1 The specification fulfils the requirements of Section 30 of the Ontario Occupational Health and Safety Act.
  - .2 The specification fulfils the requirements of the Section 10 of Ontario Regulation 278/05.
- .6 The Outline of Work identifies the location, quantities of hazardous building materials to be removed as part of this project.
  - .1 It is the intent that work prescribed this Section will result in the removal of all hazardous materials as outlined and the decontamination of all surfaces or materials which may have been or become contaminated by hazardous materials either during or prior to work of this Contract.

### **1.2            Site Conditions**

- .1 Refer to the report entitled “Hazardous Building Materials Report”, dated February 26, 2024, prepared by Pinchin Ltd., file number 335495.019.
- .2 Refer to Drawing HM-01 for the locations of identified asbestos-containing materials.
- .3 Asbestos:
  - .1 The following materials have been confirmed to contain asbestos:
    - .1 Gold sink mastic, containing chrysotile asbestos, is present in the locations as follows:
      - .1 Classroom 8B (Location 54)
      - .2 Classroom 8A (Location 56)
      - .3 Staffroom 17 (Location 57)
    - .2 Vinyl floor tile, containing chrysotile asbestos is present in the following locations:
      - .1 Server Room 17A (Location 58)
    - .3 Drywall with drywall joint compound containing chrysotile asbestos is

present as wall finishes in the following locations:

- .1 Classroom 8B (Location 54)
    - .2 Staffroom 17 (Location 57)
  - .4 Paint and primer, containing chrysotile asbestos, is present on masonry block walls, in the following locations:
    - .1 Server Room 17A (Location 58)
  - .2 The following materials are presumed to contain asbestos:
    - .1 Mastic adhesive, behind tack boards and blackboards in the following locations:
      - .1 Classroom 8B (Location 54)
      - .2 Classroom 8 (Location 55)
      - .3 Classroom 8A (Location 56)
- .4 Lead:
  - .1 The following paint finishes have been confirmed to contain significant concentrations of lead:
    - .1 Blue paint on wood door (0.12%)
  - .2 The following paint finishes have been confirmed to contain insignificant concentrations of lead:
    - .1 Off-white paint on concrete block (0.0012% and <0.00049%)
  - .3 The following building materials are presumed, or have been confirmed, to contain lead:
    - .1 Red paint on steel joists (>0.1%)
- .5 Mercury:
  - .1 The following building materials are presumed, or have been confirmed, to contain mercury:
    - .1 Fluorescent lamp tubes in light fixtures.
- .6 Silica:
  - .1 The following building materials are presumed, or have been confirmed, to contain silica:
    - .1 Concrete
    - .2 Masonry and mortar
    - .3 Drywall
    - .4 Ceiling tiles
- .7 Polychlorinated Biphenyls:
  - .1 PCB containing materials are not present.
- .8 Mould:
  - .1 Mould growth is not present.

- .9 Remaining designated substances including arsenic, acrylonitrile, benzene, coke oven emissions, ethylene oxide, isocyanates, vinyl chloride monomer, are not typically found in building materials in a composition/state that is hazardous and are not presumed to be present within the Work Areas.

### 1.3 Outline of Work

- .1 Coordinate the following items with the Owner's Project Manager and the Construction Manager, including but not limited to: electrical isolations, GFI connection, water connections, HVAC and exhaust ventilation system isolation, bin placement, schedule, disconnects, etc.
- .2 Refer to the Contract Drawings prepared by Barry Bryan Associates for the extent of construction work and the Work Areas.
- .3 Refer to Drawing HM-01 for the extent of the Abatement Work Area(s).
- .4 Using procedures prescribed in the Section identified in Related Work, remove, and dispose of the following using Type 1 procedures.
  - .1 Asbestos-containing gold sink mastic, in the following locations:
    - .1 Classroom 8B (Location 54) 1 EA
    - .2 Classroom 8A (Location 56) 1 EA
    - .3 Staffroom 17 (Location 57) 1 EA
  - .1 Asbestos-containing vinyl floor tiles in the following location:
    - .1 Server Room 17A (Location 58) 300 SF
  - .2 Remove tackboards, chalkboards and presumed-asbestos-containing mastic/adhesive from wall substrate and tackboards in the following locations:
    - .1 Classroom 8B (Location 54) (~9 blackboards)
    - .2 Classroom 8 (Location 55) (~9 blackboards)
    - .3 Classroom 8A (Location 56) (~9 blackboards)
    - .4 If mastic/adhesive cannot be removed from tackboards/chalkboards, dispose of boards as asbestos waste.
- .5 Using procedures prescribed in the Section identified in Related Work, perform the following using Type 2 procedures as marked by the General Contractor.
  - .1 Remove and dispose of asbestos-containing paint/primer from block walls scheduled for demolition using HEPA filtered power tool in Server Room 17A (Location 58) 600 SF.
    - .1 Where removal of all paint/primer from the block walls is not practical, remove and dispose of the block walls as asbestos waste.
  - .2 Removal/installation of affixed items to block walls with asbestos-containing paint/primer using HEPA filtered power tool in locations:
    - .1 Server Room 17A (Location 58)

- .3 Removal/installation of affixed items, and repair of drywall walls with asbestos-containing joint compound using HEPA filtered power tool in locations:
  - .1 Classroom 8B (Location 54)
  - .2 Staffroom 17 (Location 57)
- .6 Refer to Specification Sections identified in the Related Work for specified personnel protective measures for the safe handling, removal, clean-up, enclosure, or repair of hazardous materials in each phase or work area.
- .7 Visit the site prior to tender close to confirm the location and extent of any hazardous building materials or materials contaminated by hazardous materials.
- .8 Protect surfaces, building fabrics and items remaining within the Abatement Work Area.
- .9 Without disturbing hazardous materials, perform removals where required, prior to abatement work.
  - .1 Maximize waste diversion by recycling building materials .
- .10 Isolate the Abatement Work Area from adjoining Occupied and Non-Occupied Areas whether present at an interior or exterior location.
- .11 Maintain emergency and fire exits from Abatement Work Area, or establish alternative exits satisfactory to Provincial Fire Marshall and local authorities having jurisdiction. Maintain extra routes from occupied areas. Place emergency exit signs at locations to clearly mark exit route. Seal emergency exit doors so as not to impede use of door during emergency evacuation.
- .12 Remove and dispose of as appropriate waste, building components, materials and items contaminated by hazardous materials that cannot be effectively cleaned.
- .13 Final clean work area to remove visible signs of asbestos and other hazardous materials, other debris or settled dust.
- .14 Apply lock-down agent to exposed surfaces throughout the work area and to surfaces from which any hazardous materials have been removed.
  - .1 Do not apply lock-down to materials which would be damaged by its application.
- .15 Unless otherwise specified, the handling, removal, clean-up or repair of hazardous materials or surfaces contaminated with hazardous materials is to be performed following wet removal techniques.

#### **1.4 Schedule**

- .1 Provide necessary manpower, supervision, equipment and materials to maintain and complete the project on schedule.
- .2 Work Hours:
  - .1 Coordinate all work, scheduling and phasing with the Owner.

- .3 Provide 48 hours written notice to the Abatement Consultant of any request to work outside normal working hours. Obtain written approval before proceeding.
- .4 Any work disturbing asbestos and lead containing materials must be performed while teachers and students are not present in the building.
- .5 Provide 48 hours written notice to the Abatement Consultant of any request to work outside normal working hours. Obtain written approval before proceeding.

## 1.5 Definitions

- .1 Abatement Consultant: Owner's Representative providing inspection and air monitoring.
- .2 Abatement Contractor: Contractor or sub-contractor performing work of this section.
- .3 Abatement Work Area: Area where work takes place which will, or may, disturb hazardous materials.
- .4 Amended Water: Water with wetting agent added for the purpose of reducing surface tension to allow thorough wetting of materials.
- .5 Asbestos: Any of the fibrous silicates defined in Regulation 278/05 including: actinolite, amosite, anthophyllite, chrysotile, crocidolite and tremolite.
- .6 Asbestos-Containing Material (ACM): Material identified under Site Conditions including any debris, overspray, fallen material and settled dust.
- .7 Authorized Visitors: Building Owner, Abatement Consultant, or designated representative, and persons representing regulatory agencies.
- .8 Competent Worker: A worker who is qualified because of knowledge, training and experience to perform the work, is familiar with Regulation 278/05 and the Occupational Health and Safety Act, and has knowledge of the potential or actual danger to health and safety in the work.
- .9 Contaminated Waste: Material identified under Site Conditions, including fallen material, settled dust, other debris and materials or equipment deemed to be contaminated by the Abatement Consultant.
- .10 Curtained Doorway: Doorway consisting of two (2) overlapping flaps of rip-proof polyethylene arranged to permit ingress and egress from one room to another while permitting minimal air movement between rooms.
- .11 DOP Test: A testing method used to determine the integrity of the Negative Pressure unit or vacuum using a Dispersed Oil Particulate (DOP) or Poly Alpha Olefin (PAO) HEPA filter leak test. This test is to be conducted on site where units are to be installed. Refer to the Environmental Abatement Council of Ontario (EACO) DOP/PAO Testing Guideline 2013 or ANSI/ASME N510-2007.
- .12 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.

- .13 HEPA: High Efficiency Particulate Aerosol filter that is at least 99.97 percent efficient in collecting a 0.3 micrometre aerosol.
- .14 Lead-Containing: The Ontario Ministry of Labour, Immigration, Training, and Skills Development (MLTSD) 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 Canada (EACC) Lead Guideline for Construction, Renovation, Maintenance or Repair. The Guideline suggests that 0.1% (1,000 ppm) 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.).
- .15 Lead Waste: Waste generated from removal of lead-containing materials, or the substrate and paint finish where left intact.
- .16 Mercury Waste: Equipment, materials or items containing mercury or contaminated with mercury.
- .17 Milestone Inspection: Inspection of the Abatement Work Area at a defined point in the abatement operation.
- .18 Negative Pressure: A reduced pressure within the Abatement Work Area (> 0.02 inches of water column) established by extracting air directly from Abatement Work Area and discharging it to exterior of building.
- .19 Non-Friable Material: Material that when dry cannot be crumbled, pulverized or powdered by hand pressure.
- .20 Occupied Area: Any area of the building or adjoining space outside the Abatement Work Area.
- .21 Personnel: All Contractor's employees, sub-contractors employees, supervisors.
- .22 PCM: Phase Contrast Microscopy.
- .23 Remove: Remove means remove and dispose of (as applicable type of waste) unless followed by other instruction (e.g. remove and turn over to Owner).
- .24 TEM: Transmission Electron Microscopy.

## **1.6 Regulations and Guidelines**

- .1 Comply with Federal, Provincial, and local requirements, provided that in any case of conflict among those requirements or with these Specifications, the more stringent requirements shall apply. Work shall be performed under regulations in effect at the time work is performed.

- .2 Where regulations are not present, follow accepted industry standards and applicable Guideline documents.
- .3 Regulations and Guidelines include but are not limited to the following:
  - .1 Ministry of Labour, Immigration, Training, and Skills Development Occupational Health and Safety Act Regulations for Construction Projects including Revised Statutes of Ontario 1990, Chapter 0.1 and Ontario Regulation 278/05.
  - .2 Ministry of the Environment and Climate Change Regulation for the disposal of waste, including R.R.O. 1990, Reg. 347 as amended.
  - .3 PCB Regulations, SOR 2008-273 and R.R.O. 1990, Reg 362.
  - .4 Regulation 490/09 Designated Substances.
  - .5 Environmental Abatement Council of Canada (EACC), Lead Guideline For Construction, Renovation, Maintenance or Repair, October 2014.
  - .6 Ministry of Labour, Immigration, Training, and Skills Development, Guideline, Silica on Construction Projects, 2011.

## **1.7 Quality Assurance**

- .1 Removal and handling of hazardous materials is to be performed by persons trained in the methods, procedures and industry practices for Abatement.
- .2 Ensure work proceeds to schedule, meeting all requirements of this Specification.
- .3 Complete work so that at no time airborne dust, visible debris, or water runoff contaminate areas outside the Abatement Work Area.
- .4 Any contamination of surrounding area (indicated by visual inspection or air monitoring) shall necessitate the clean-up of affected area, and in the same manner applicable to an Abatement Work Area at no cost to the Owner.
- .5 All work involving electrical, mechanical, carpentry, glazing, etc., shall be performed by licensed persons experienced and qualified for the work required.

## **1.8 Supervision**

- .1 Provide on site for each work shift, a Shift Superintendent(s), who has authority regarding all aspects related to manpower, equipment and production.
- .2 Supervisory personnel must have performed supervisory functions on at least five (5) other asbestos abatement projects of similar size and complexity.
- .3 At all times during work, the Shift Superintendent(s) must be on site. Failure to comply with this requirement will result in a stoppage of all work, at no cost to the Owner.

- .4 Replace supervisory personnel, with approved replacements, within three (3) working days of a written request from the Owner. Owner reserves the right to request replacement of supervisory personnel without explanation.
- .5 Do not replace supervisory personnel without written approval from the Owner.

#### **1.9 Instruction and Training**

- .1 Instruction and training must be provided by a competent person.
- .2 All workers completing Type 1, or 2 asbestos abatement must be trained in compliance with Section 19 of O.Reg. 278/05.

#### **1.10 Notification**

- .1 Before commencing work, notify orally and in writing, an inspector at the office of the Ontario Ministry of Labour, Immigration, Training, and Skills Development nearest the project site, where required.
- .2 Inform all trades on site of the presence and location of hazardous materials identified in the Contract documents.
- .3 Notify the Owner or Owner's Representative, the Joint Occupational Health and Safety Committee and the Provincial Ministry of Labour, Immigration, Training, and Skills Development, 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.
- .4 Notify Sanitary Landfill site as per O.Reg. 347/90 as amended.

#### **1.11 Submittals**

- .1 Submit, to Pinchin, prior to starting work:
  - .1 Provincial Workers' Compensation Board Clearance Certificate.
  - .2 Insurance certificates.
  - .3 Copy of Company Health and Safety Policy and applicable programs.
  - .4 Ministry of Labour, Immigration, Training, and Skills Development Notice of Project form.
  - .5 Copy of Certificate of Approval for disposal of hazardous materials waste and location of landfill.
- .2 Submit, to Pinchin, the following information regarding personnel prior to starting work:
  - .1 Written statement that personnel have had instruction on hazards of exposure to hazardous materials identified within this scope, the use of respirator, protective



- clothing, worker and waste decontamination procedures, and all aspects of work procedures and protective measures.
- .2 WHMIS training certificates for all personnel.
- .3 Certificate proving that each worker on site has been fit tested for the respirator appropriate for the work being performed.
- .3 Submit, to Pinchin, the following information regarding HEPA filtered devices prior to construction of enclosure or asbestos abatement:
  - .1 Performance data on HEPA filtered vacuums including DOP tests no more than 3 months old.
  - .2 DOP tests to be performed by an independent testing company.
    - .1 DOP testing company is required to submit a detailed technical report of testing protocol, including Introduction, Methodology, Results, Conclusions, and Recommendations, including results of the Air-Aerosol Mixing Uniformity test as per ASME N510-1989 (1995).
    - .2 DOP testing company must also provide calibration certificates from an independent calibration firm or from the manufacturer of the testing equipment for both the aerosol photometer and the pressure gauge on the aerosol generator dated within 1 calendar year from the on-site testing date.
    - .3 DOP testing company must also provide the National Sanitation Foundation (NSF) certification name and number of the on-site technician performing the testing.
  - .3 Proof of calibration of DOP testing equipment.
- .4 Submit, to Pinchin, the following prior to isolating the work area:
  - .1 Safety Data Sheets for chemicals or material used in the course of the Abatement Project.
- .5 Submit, to Pinchin, the following upon completion of the work.
  - .1 Manifests, waybills, bills of lading etc. as applicable for each type of waste.

## **1.12 Insurance**

- .1 Maintain a Commercial General Liability Policy with an insurance company acceptable to Pinchin Ltd. And Kawartha Pine Ridge District School Board. The intent of this policy is to hold Pinchin Ltd. and Kawartha Pine Ridge District School Board harmless as it relates to claims for Bodily Injury or Property Damage or both, relating to the contract. Commercial General Liability insurance shall be provided on an “occurrence” basis to cover injury or damage (whether detected or not during the policy period) which happens during the policy period.

- .2 Maintain an Automobile or Fleet Policy, and Non-owned Automobile Policy with an insurance company acceptable to Pinchin Ltd. And Kawartha Pine Ridge District School Board. The intent of these policies is to hold Pinchin Ltd. And Kawartha Pine Ridge District School Board harmless as it relates to claims for Bodily Injury or Property Damage or both, relating to the contract.
- .3 Maintain a Pollution Liability Policy (or asbestos/lead liability policy or specific coverage under the CGL for asbestos/lead abatement) with an insurance company acceptable to Pinchin Ltd. And Kawartha Pine Ridge District School Board. The intent of this policy is to hold Pinchin Ltd. And Kawartha Pine Ridge District School Board harmless as it relates to claims for Bodily Injury or Property Damage or both, relating to the contract. Pollution Liability shall be provided on an “occurrence” basis to cover injury or damage (whether detected or not during the policy period) which happens during the policy period. Without limiting the generality of the foregoing, the policy shall insure the operations of abatement and shall not contain any environmental and/or health hazard exclusions relating to remediation operations.
- .4 Forward all certificates to Pinchin Ltd. And Kawartha Pine Ridge District School Board before work is commenced, showing Pinchin Ltd. And Kawartha Pine Ridge District School Board as additional insured as their interest may appear.
- .5 Pinchin Ltd. And Kawartha Pine Ridge District School Board may request a certified true copy of the policies.
- .6 The limits will not be less than:
  - .1 Commercial General Liability \$5,000,000.00
  - .2 Automobile \$2,000,000.00
  - .3 Pollution Policy \$5,000,000.00

### **1.13 Inspection**

- .1 From commencement of work until completion of clean-up operations, the Abatement Consultant is empowered by the Owner to inspect for compliance with the requirements of governing authorities, adherence to specified procedures and materials, and to inspect for final cleanliness and completion.
- .2 The Abatement Consultant is empowered by the Owner to order a shutdown of work when leakage of asbestos from the controlled work area has occurred or is likely to occur.
- .3 Any deviation from the requirements of the Specifications or governing authorities that is not approved in writing may result in a stoppage of work, at no cost to the Owner.
- .4 Additional labour or materials expended by the Contractor to rectify unsatisfactory conditions and to provide performance to the level specified shall be at no additional cost to the Owner.

- .5 Inspection and air monitoring performed as a result of Contractor's failure to perform satisfactorily regarding quality, safety, or schedule, shall be back-charged to the Contractor.
- .6 Facilitate inspection and provide access as necessary. Make good work disturbed by inspection and testing at no cost to the Owner.
- .7 Refer to the Sections identified in Related Work for specified milestone inspections which are to take place at defined points throughout the abatement operation specific to each phase or work area.
- .8 Provide 24 hours written notice to the Abatement Consultant of any request for scheduling of milestone inspections or transportation of waste through Occupied Areas.
- .9 The following Milestone Inspections may take place, at the Owner's cost, as outlined in each related specification section.
  - .1 Milestone Inspection - Clean Site Preparation
    - .1 Inspection of preparations and set-up prior to contaminated work in the Abatement Work Area.
  - .2 Milestone Inspection – Bulk Removal Inspection
    - .1 Inspection during asbestos removal, monitoring removal methods, site deficiencies, performing occupied air monitoring, etc.
  - .3 Milestone Inspection - Visual Clearance
    - .1 Inspection of Abatement Work Area after completion of all abatement, but prior to application of lock-down agents or dismantling of enclosure.
  - .4 Milestone Inspection – Post abatement sampling
    - .1 Air monitoring performed following removal of asbestos ensure fibre levels from the Type 2 enclosure(s) are within the acceptable limits. The number of samples to be collected and analysed are based on the requirements of O.Reg. 278/05.
- .10 Refer to the Sections identified in Related Work for specified milestone inspections which are to take place at defined points throughout the abatement operation specific to each phase or work area.
- .11 Do not proceed with next phase of work until written approval of each milestone is received from the Abatement Consultant.

#### **1.14 Air Monitoring - Asbestos**

- .1 Air monitoring will be performed using Phase Contrast Microscopy (PCM) following the National Institute for Occupational Safety and Health Method 7400.
- .2 Co-operate in the collection of air samples, including providing workers to wear sample pumps for up to full-shift periods. Contractor will be responsible for the cost of testing equipment repairs or resampling resulting from the actions of the Contractor's forces.

- .3 Results of PCM samples at or exceeding 0.05 fibres per cubic centimeter of air (fibre/cc) or greater, outside an Abatement Work Area, or from within the Abatement Work Area during or following Glove Bag Work, will indicate asbestos contamination of these areas. Respond as follows:
  - .1 Suspend work within the adjoining Abatement Work Area until written authorization to resume work has been received from the Abatement Consultant.
  - .2 Isolate and clean area in the same manner applicable to the Abatement Work Area.
  - .3 Maintain work area isolation, and repeat clean-up operations until visual inspection and air monitoring results are at a level equal to that specified.
  - .4 At the discretion of the Abatement Consultant provide additional negative air units at locations specified in response to elevated fibre levels being detected in the Clean Change Room or Occupied Areas.
- .4 Results of PCM samples at or greater than 0.05 fibres per cubic centimeter of air (fibre/cc), collected within the Abatement Work Area enclosure after the site has passed a visual inspection, and an acceptable coat of lock-down agent has been applied, will indicate asbestos contamination of these areas. Respond as follows:
  - .1 Maintain work area isolation and re-clean entire work area. Then apply another acceptable coat of lock-down agent to exposed surfaces throughout the work area.
  - .2 Repeat above measures until visually inspected and air monitoring results are at a level equal to that specified.
  - .3 Alternate to items above, the Asbestos Abatement Contractor can pay for analysis of PCM samples by Transmission Electron Microscopy (TEM) at NVLAP accredited laboratory.
    - .1 Enclosure to remain sealed, with negative pressure maintained, and subject to required daily inspections until TEM results are received.
- .5 Additional labour or materials expended by the Contractor to rectify unsatisfactory conditions and to provide performance to the level specified shall be at no additional cost to the Owner.
- .6 Cost of additional inspection and sampling performed as a result of elevated fibre levels in areas outside the Abatement Work Area or from within the work area following completion of work, will be back-charged to the Contractor.

## **1.15 Worker Protection**

- .1 Instruct workers before allowing entry to the Abatement Work Area. Instruction shall include training in use of respirators, dress, showering, entry and exiting from an Abatement Work Area, and all other aspects of work procedures and protective measures.

- .2 Workers shall not eat, drink, chew gum or tobacco, vape or smoke in the Abatement Work Area.
- .3 Workers shall be fully protected at all times when possibility of disturbance of hazardous materials exists.
- .4 Provide soap, towels and facilities for washing of hands and face, which shall be used by all personnel when leaving the Abatement Work Area.
- .5 Respiratory Protection
  - .1 Refer to each particular Section of the Specification for specified type of respiratory equipment specific to each phase or work area.
  - .2 Respirators shall be:
    - .1 Certified by the National Institute of Occupational Safety and Health (NIOSH) or other testing agency acceptable to the Ministry of Labour.
    - .2 Fitted so that there is an effective seal between the respirator and the worker's face. Ensure that no person required to enter an Abatement Work Area has facial hair which affects the seal between respirator and face.
    - .3 Assigned to a worker for their exclusive use.
    - .4 Maintained in accordance with manufacturer's specifications.
    - .5 Cleaned, disinfected and inspected by a competent person after use on each shift, or more often if required.
    - .6 Repaired or have damaged or deteriorated parts replaced.
    - .7 Stored in a clean and sanitary location.
    - .8 Provided with new filters as necessary, according to manufacturer's instructions.
    - .9 Worn by personnel who have been fit checked by qualitative or quantitative fit-testing.
    - .10 Instruction on proper use of respirators must be provided by a competent person as defined by the Occupational Health and Safety Act.
  - .3 Provide protective clothing, to all personnel which:
    - .1 Is made of a material that does not readily retain nor permit penetration of asbestos fibres.
    - .2 Consists of head covering and full body covering that fits snugly at the ankles, wrists and neck.
    - .3 Once coveralls are worn, treat and dispose of as contaminated waste.
    - .4 Is replaced or repaired if torn or ripped.
  - .4 Use hard hats, safety footwear and other protective equipment and apparel required by applicable construction safety regulations.

#### **1.16 Visitor Protection**

- .1 Provide clean protective clothing and equipment to Authorized Visitors.
- .2 Instruct Authorized Visitors in the use of protective clothing and Abatement Work Area entry and exit procedures.

- .3 Authorized visitors are required to be fit tested on respirators, prior to entering Abatement Work Area.
  - .1 Respirator worn must be compliant with Section 13 and Table 2 of O.Reg. 278/05.

#### **1.17 Signage**

- .1 Asbestos Abatement Signs: Post signs at access points to the Abatement Work Area, stating at minimum, the following:
  - .1 There is an asbestos dust hazard.
  - .2 Access to the work area is restricted to persons wearing protective clothing and equipment.
- .2 Vehicles, Bins and Asbestos Waste Containers: Post signs on both sides of every vehicle used for the transportation of asbestos waste and on every asbestos waste container. Signs must display thereon in large, easily legible letters that contrast in colour with the background the word “CAUTION” in letters not less than ten centimetres in height and the words:
  - .1 CONTAINS ASBESTOS FIBRES
  - .2 Avoid Creating Dust and Spillage
  - .3 Asbestos May be Harmful To Your Health
  - .4 Wear Approved Protective Equipment.
- .3 Place placards in accordance with Transportation of Dangerous Goods Act.

#### **1.18 Waste and Material Handling**

- .1 Waste bins must be placed on grade or in receiving.
- .2 All bins for hazardous materials must be covered and locked when waste transfer is not being performed.
- .3 Ensure redundant non-ACM, rubble, debris, etc. removed during contaminated work are treated, packaged, transported and disposed of as appropriate waste.
- .4 Clean, wash and apply Post Removal Sealant to metal waste prior to removal from Abatement Work Area. Recycle metals.
- .5 Clean, wash and apply Post Removal Sealant to non-porous materials prior to disposal as clean waste. Obtain prior written approval from the Abatement Consultant for each individual type of material.
- .6 Clean and wash equipment prior to removal from Abatement Work Area if removed prior to completion.

- .7 Place all equipment, tools and unused materials that cannot be cleaned in Abatement Waste Containers.
- .8 As work progresses, and at regular intervals, transport the sealed and labelled waste containers from the Abatement Work Area to waste bin.
- .9 Place items in bins according to waste classification. Place asbestos waste, lead waste, metals, non-asbestos waste, etc. in separate bins.
- .10 Removal of waste containers and decontaminated tools and materials from the Abatement Work Area shall be performed as follows:
  - .1 Remove any visible contamination from the surface of non-porous or cleanable waste being removed from the Abatement Work Area. If the item can be cleaned, remove it from the site as clean waste.
  - .2 Place waste or item in Waste Container and seal closed.
  - .3 Wet wipe outside of Waste Container.
  - .4 Within Decontamination Facility, Transfer Room or at the perimeter of the Abatement Work Area, place in second Waste Container. Seal closed.
  - .5 Remove waste containers and transport to appropriate bin.
- .11 Transport waste and materials via the predetermined routes and exits. Arrange waste transfer route with Owner. Use a closed, covered cart to transport through Occupied Areas.
- .12 Provide workers transporting waste with means to access full personal protective equipment and all tools required to properly clean up spilled material in the case of a rupture of a Waste Container.
- .13 Pick-up and drop off of garbage bin shall be at pre-approved times, and must not interfere with the Owners operations.
- .14 Transport hazardous waste to landfill or waste transfer station licensed by the provincial Ministry of the Environment.
- .15 Cooperate with the provincial Ministry of the Environment inspectors and immediately carry out instructions for remedial work at dump to maintain environment, at no additional cost to the Owner.

## **PART 2 PRODUCTS AND FACILITIES**

### **2.1 Materials and Equipment**

- .1 Refer to the Sections identified in Related Work for specified materials, equipment or facilities specific to each phase or work area.

- .2 Materials and equipment must be in good condition and free of debris and fibrous materials. Disposable items must be of new materials only.
- .3 Airless Sprayer: AC powered pressure washer that allows wetting agent to mix with water, uses no air or compressed air, and has a nozzle to regulate power and pressure.
- .4 Amended Water: Water with wetting agent added for purpose of reducing surface tension to allow thorough wetting of materials.
- .5 Asbestos Waste Container: A container acceptable to disposal site, Ministry of the Environment, and Ministry of Labour, comprised of the following:
  - .1 Dust tight.
  - .2 Suitable for the type of waste.
  - .3 Impervious to asbestos.
  - .4 Identified as asbestos waste.
- .6 Discharge Ducting: Polyethylene Tubing. Reinforced with wire. Diameter to equal negative pressure machine discharge. Not to be longer than required, or so long that negative pressure is compromised.
- .7 HEPA Filtered Negative Pressure Machine: Portable air handling system which extracts air directly from the Abatement Work Area and discharges the air to the exterior of the building. Equipped as follows:
  - .1 Prefilter and HEPA filter. Air must pass HEPA filter before discharge.
  - .2 Pressure differential gauge to monitor filter loading.
  - .3 Auto shut off and warning system for HEPA filter failure.
  - .4 Separate hold down clamps to retain HEPA filter in place during change of prefilter.
- .8 HEPA Vacuum: Vacuum with necessary fittings, tools and attachments. Discharged air must pass through a HEPA filter.
- .9 Hose: Leak-proof, minimum bursting strength of 500 PSI or greater if required, abrasion resistant covering, reinforcing, and machined-brass couplings. Maintained and tested. Hose to be temperature resistant if it is to carry domestic hot water.
- .10 OSB: Oriented Strand Board.
- .11 Polyethylene Sheeting: 6 mil (0.15 mm) minimum thickness unless otherwise specified, in sheet size to minimize joints.: 6 mil (0.15 mm) minimum thickness unless otherwise specified, in sheet size to minimize joints.



- .12 Post Removal Sealant (or Lockdown): Sealant that when applied to surfaces serves the function of trapping residual asbestos fibres or other dust. Product must have flame spread and smoke development ratings both less than 50. Product shall leave no stain when dry. Post Removal Sealant shall be compatible with replacement insulation or fireproofing where required and capable of withstanding service temperature of substrate. Apply to manufacturer's instructions.
- .13 Protective Clothing: Disposable coveralls complete with head covering and full body covering that fits snugly at the ankles, wrists and neck.
- .14 Rip-Proof Polyethylene Sheeting: 8 mil (0.20 mm) fabric made up from 5 mil (0.13 mm) weave and two (2) layers of 1.5 mil (0.05 mm) poly laminate or approved equal. In sheet size to minimize on-site seams and overlaps.
- .15 Sprayer: Garden type portable manual sprayer or water hose with spray attachment if suitable.
- .16 Tape: Duct tape or tape suitable for sealing polyethylene to surfaces under both dry and wet conditions in the presence of Amended Water.
- .17 Wetting Agent: Non-sudsing surfactant added to water to reduce surface tension and increase wetting ability.

### **PART 3 EXECUTION**

- .1 Refer to the Sections identified in Related Work for specified procedures for work area preparation, maintenance, site dismantlement, application of lock-down agent and all other procedures for the safe handling, removal and clean-up of hazardous materials specific to each phase or work area.

### **END OF SECTION**

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## **PART 1 GENERAL**

### **1.1 General and Related Work**

- .1 Read this Section in conjunction with all drawings and all other Sections so as to comply with the requirements of Division 1 and the General Conditions of the Contract.
- .2 Requirements specified elsewhere:
  - .1 Section 02 81 00 Hazardous Materials – General Provisions
  - .2 Section 02 82 00.02 Asbestos Abatement – Type 2 Procedures

### **1.2 Outline of Work**

- .1 Refer to Section 02 81 00 Hazardous Materials – General Provisions for the Outline of Work.
- .2 Refer to Drawing HM-01 for the extent of the Abatement Work Areas.
- .3 The intent of this Section is to provide safe work practices and procedures to govern the handling, removal, clean-up and disposal of asbestos-containing materials following Type 1 procedures, and Pinchin and Owner specific requirements.

### **1.3 Personal Protection**

- .1 Protect all personnel at all times when possibility of disturbance of ACM exists.
  - .1 Provide non-powered half-face respirators with P100 high efficiency (HEPA) cartridge filters when requested by personnel.
  - .2 When requested by personnel, provide protective clothing.
- .2 Provide protective clothing, to all personnel entering the Abatement Work Area.
- .3 Wear hard hats, safety shoes and other personal protective equipment required by applicable construction safety regulations.

### **1.4 Inspections**

- .1 Refer to Part 1.13 Inspections in Section 02 81 00 – General Provisions.
- .1 If Pinchin is not on site in a full-time capacity the following Milestone Inspection is to be scheduled.
  - .1 Milestone Inspection - Visual Clearance

## **PART 2 PRODUCTS AND FACILITIES**

- .1 Refer to Section 02 81 00.

## **PART 3 EXECUTION**

### **3.1 Site Preparation**

- .1 Remove stored or non-fixed items from the Abatement Work Area including but not limited to equipment, furniture, waste etc. Store in area provided by Owner.
- .2 Moving of equipment, tools, supplies, and stored materials that can be performed without disturbing ACM will be performed by others.
- .3 Remove visible dust and friable material from all surfaces in the work area including those to be worked on, using HEPA Vacuums or wet wiping.
- .4 Install one layer of polyethylene sheeting on walls, floors, finishes, millwork, electrical

equipment, equipment and furnishings remaining in the Abatement Work Area.

- .5 Install one layer of rip-proofing polyethylene sheeting over one layer of polyethylene sheeting on walls, floors, finishes, millwork, electrical equipment, equipment and furnishings remaining in the Abatement Work Area.
- .6 Install polyethylene drop sheets below areas of work.
- .7 Install polyethylene sheeting on openings in walls and floors (as required) and seal.
- .8 Install signage in clearly visible locations and in sufficient numbers to adequately warn of an asbestos dust hazard.
- .9 Provide amended water for wetting ACM, and adequate method of wetting (garden sprayers, airless sprayers, etc).
- .10 Without disturbing asbestos-containing materials, remove and dispose of non-hazardous materials as clean waste prior to asbestos removal work, where possible.

### **3.2 Maintenance of Abatement Work Area**

- .1 Inspect polyethylene sheeting and ensure it is effectively sealed and taped. Repair damage and remedy defects immediately.
- .2 Inspect electrical panels and ensure locks and tags are on panels prior to entering the Abatement Work Area.
- .3 Maintain Abatement Work Area in tidy condition.
- .4 Remove any standing water on polyethylene/floor at the end of every shift.

### **3.3 Asbestos Removal - General**

- .1 Do not use powered tools or non-hand held tools.
- .2 Do not use compressed air to clean or remove dust or debris.
- .3 Do not break, cut, drill, abrade, grind, sand or vibrate ACM if it cannot be wetted. Type 2 procedures would be required if the material cannot be wetted due to hazard or damage.
- .4 Wet ACM prior to work and keep ACM wet throughout the removal process.
- .5 Frequently and at regular intervals during the work, clean up dust and waste using HEPA vacuums and/or wet sweeping or mopping.
- .6 Frequently and at regular intervals, place all waste in asbestos waste containers.
- .7 Immediately upon completion of work, clean area with HEPA vacuum and/or wet sweeping or mopping.

### **3.4 Asbestos Removal - Vinyl Asbestos Tile**

- .1 Wedge a heavy duty scraper in seam of two adjoining tiles and gradually force edge of one tile up and away from floor. Do not break off pieces of tile, but continue to force balance of tile up.
- .2 Place tile, without breaking into smaller pieces, into Asbestos Waste Container.
- .3 Force scraper through tightly adhered areas by striking scraper handle with a hammer.
- .4 Heat tile thoroughly with a hot air gun until heat penetrates through tile and softens adhesive in areas where scraper will not remove tile.
- .5 Scrape up adhesive remaining on floor with a hand scraper until only a thin smooth film remains.

- .6 Use a hot air gun where deposits are heavy or difficult to scrape.
- .7 Deposit scrapings into asbestos waste disposal bag.
- .8 HEPA vacuum floor on completion of work in area.

### **3.5 Asbestos Removal – Mastic, Chalkboards and Tackboards**

- .1 Using hand tools, carefully remove chalkboard and tackboards from wall.
- .2 Use scraper or squeegee to remove mastic. Place waste into an asbestos waste container.
- .3 Wash substrate with clean water. Let dry.
- .4 Confirm no residual mastic is present on wall or on boards.

### **3.6 Asbestos Removal - Removal of Other Non-Friable Asbestos Materials (Sinks)**

- .1 Wet all material to be disturbed.
- .2 Undo fasteners if necessary to remove material.
- .3 Break material only if unavoidable, and wet material if broken during work.
- .4 Use only non-powered hand-held tools to remove ACM.
- .5 Place removed ACM directly into an asbestos waste container.

### **3.7 Abatement Work Area Dismantling**

- .1 Wash or HEPA vacuum equipment and tools used in contaminated Abatement Work Area to remove all asbestos contamination, or place in Asbestos Waste Containers prior to being removed from Abatement Work Area.
- .2 Place tools and equipment used in contaminated work site but not cleaned in polyethylene bags prior to removal from Abatement Work Area.
- .3 Clean polyethylene sheeting and drop sheets which with HEPA vacuum or wet cleaning methods at completion of work.
- .4 Wet drop sheets and polyethylene sheeting.
- .5 Carefully roll polyethylene sheeting and drop sheets toward the centre. As polyethylene is rolled away, immediately remove visible debris beneath with a HEPA vacuum.
- .6 Remove remaining polyethylene sheeting and tape.
- .7 Place polyethylene sheeting, drop sheets, tape, disposal clothing and other contaminated waste in asbestos waste containers, wet wipe and place in second asbestos waste container.

### **3.8 Waste and Material Handling**

- .1 Refer to Section 02 81 00.

## **END OF SECTION**

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## **PART 1 GENERAL**

### **1.1 General and Related Work**

- .1 Read this Section in conjunction with all drawings and all other Sections so as to comply with the requirements of Division 1 and the General Conditions of the Contract.
- .2 Requirements specified elsewhere:
  - .1 Section 02 81 00 Hazardous Materials – General Provisions

### **1.2 Outline of Work**

- .1 Refer to Section 02 81 00 Hazardous Materials – General Provisions for the Outline of Work.
- .2 Refer to Drawing HM-01 for the extent of the Abatement Work Areas.
- .3 The intent of this Section is to provide safe work practices and procedures to govern the handling, removal, clean-up and disposal of asbestos-containing materials following Type 2 procedures, and Pinchin and Owner specific requirements.

### **1.3 Personal Protection**

- .1 Protect all personnel at all times when possibility of disturbance of ACM exists.
- .2 Provide the following minimum respiratory protection to all personnel:
  - .1 Non-powered half-face respirators with P100 high efficiency (HEPA) cartridge filters.
- .3 Provide protective clothing, to all personnel entering the Abatement Work Area.
- .4 Wear hard hats, safety shoes and other personal protective equipment required by applicable construction safety regulations.

### **1.4 Inspections**

- .1 Refer to Part 1.13 Inspections in Section 02 81 00 – General Provisions.
- .2 The following Milestone Inspections are to be scheduled:
  - .1 Milestone Inspection - Clean Site Preparation
  - .2 Milestone Inspection – Bulk Removal Inspection
  - .3 Milestone Inspection - Visual Clearance
  - .4 Milestone Inspection – Post-Abatement Sampling

## **PART 2 PRODUCTS AND FACILITIES**

- .1 Refer to Section 02 81 00.

### **2.2 Hoarding Walls**

- .1 Type A Hoarding Wall: One layer of rip-proof polyethylene sheeting installed floor to ceiling, secured with telescopic poles, clips, or other suitable methods.
- .2 Windows: Install sufficient transparent windows area in hoarding walls to allow observation of entire work area from outside the enclosure where existing solid walls do not make up the perimeter.

## **2.3 Curtained Doorways**

- .1 Construct as follows:
  - .1 Install two flap doors, full width and height of door opening at all doors to Abatement Work Area and both ends of Transfer Room.
  - .2 Construct each flap door of two layers of polyethylene sheeting with all edges reinforced with tape. Use wood strapping to securely fasten flap doors to head and alternate jambs.
  - .3 Install weights attached to bottom edge of each door flap.
  - .4 Provide direction arrows on flaps to indicate opening.

## **PART 3 EXECUTION**

### **3.1 Site Preparation - General**

- .1 Remove stored or non-fixed items from the Abatement Work Area including but not limited to equipment, furniture, waste etc. Store in area provided by Owner.
- .2 Moving of equipment, tools, supplies, and stored materials that can be performed without disturbing ACM will be performed by others.
- .3 Remove visible dust and friable material from all surfaces in the work area including those to be worked on, using HEPA Vacuums or wet wiping.
- .4 Provide power from ground fault interrupt circuits.
- .5 Shut down HVAC systems serving the Abatement Work Area.
  - .1 Install polyethylene sheeting over openings in ducts and diffusers and seal.
  - .2 HVAC to remaining areas of building must not be disrupted during work of this section.
  - .3 System shall remain inoperative until completion of work, unless ducts can be effectively capped.
  - .4 Perform work at scheduled times after shutting down HVAC systems affecting the Abatement Work Area.
- .6 Provide amended water for wetting ACM, and adequate method of wetting (garden sprayers, airless sprayers, etc).

### **3.2 Site Preparation –Enclosure Required**

- .1 Install polyethylene enclosure complete with Windows at Abatement Work Areas for the following work:
  - .1 Removal of friable asbestos-containing materials (less than 1 square metre).
  - .2 Removal of a false ceiling (or part of) where asbestos-containing material is presumed or known to be present on the surface.
- .2 Construct Type A Hoarding Walls between Abatement Work Area perimeter and occupied areas.
- .3 Install polyethylene sheeting at openings in walls (as required) and seal.
- .4 Install 6 mil polyethylene sheeting on walls within the Abatement Work Area., including existing walls that make up, or are within, the Abatement Work Area.
- .5 Provide a completely sealed polyethylene top for free standing enclosures.

- .6 Extend to underside of ceiling system, enclosures for access into ceilings. Enclosure may be supported from the ceiling system if ceiling can support the polyethylene.
- .7 Install Curtained Doorways.
- .8 Establish negative pressure in Abatement Work Areas as follows:
  - .1 Provide sufficient HEPA filtered negative pressure machines to exchange a volume of air equivalent to that of the Abatement Work Area a minimum of every 20 minutes.
  - .2 Provide additional HEPA filtered negative pressure machines as required to ensure air flow from Occupied Area into Abatement Work Area.
  - .3 Arrange negative air units to maximize the distance between units and decontamination facilities.
  - .4 Provide weighted flaps in perimeter Hoarding Walls as necessary to provide make-up air.
  - .5 Operate HEPA filtered negative pressure machines continuously from first disturbance of ACM until completion of dismantling.
  - .6 Replace prefilters to maintain specified flow rate.
  - .7 Replace HEPA filter as required to maintain flow rate and integrity of unit.
- .9 Establish negative pressure in Abatement Work Areas as follows:
  - .1 Use HEPA Vacuum.
  - .2 Insert vacuum hose into enclosure, leave HEPA vacuum outside enclosure. Provide enough hose to reach all areas of enclosure.
  - .3 Operate HEPA vacuum continuously at all times when ACM may be disturbed.
- .10 Place required tools to complete the abatement within the Abatement Work Area.
- .11 Install Signage in clearly visible locations and in sufficient numbers to adequately warn of an asbestos dust hazard.

### **3.3 Site Preparation – No Enclosure Required**

- .1 Install caution tape around work area where existing walls are not present.
- .2 Cover walls, floors, finishes, millwork, equipment and furnishings remaining in the Abatement Work Area with polyethylene sheeting before disturbing ACM to control the spread of dust.
- .3 Install one layer of 6 mil polyethylene sheeting so as to protect all equipment and finishes in the Abatement Work Area that may be damaged. Items to remain include but are not limited to:
  - .1 Doors.
  - .2 Bulkheads.
  - .3 Electrical Equipment.
  - .4 Mechanical Equipment.
- .4 Install Signage in clearly visible locations and in sufficient numbers to adequately warn of an asbestos dust hazard.
- .5 Install temporary lighting in enclosure to a level that will provide for safe and efficient use of work area - minimum 550 LUX.

- .6 Place HEPA vacuum in Abatement Work Area.
- .7 Place required tools to complete the abatement with the Abatement Work Area.

### **3.4 Maintenance of Abatement Work Area**

- .1 Inspect polyethylene sheeting and ensure it is effectively sealed and taped. Repair damage and remedy defects immediately.
- .2 Inspect electrical panels and ensure locks and tags are on panels prior to entering the Abatement Work Area.
- .3 Inspect HEPA filtered negative pressure machines including discharge ducting at the beginning and end of each working period. Inspection must be performed by competent person.
- .4 Maintain Abatement Work Area in tidy condition.
- .5 Remove standing water on polyethylene/floor at the end of every shift.
- .6 Turn off water supply to any hoses and reduce pressure in hose, prior to leaving the Abatement Work Area at end of shift.

### **3.5 Asbestos Removal - General**

- .1 Do not use compressed air to clean or remove dust or debris.
- .2 Frequently and at regular intervals during the work, clean up dust and waste using HEPA vacuums and/or wet sweeping or mopping.
- .3 Frequently and at regular intervals, place all waste in asbestos waste containers.
- .4 Immediately upon completion of work, clean area with HEPA vacuum and/or wet sweeping or mopping.

### **3.1 Grinding Asbestos containing Paint and Primer from block and Removal. - Other Non-Friable Asbestos Materials with HEPA Filtered Power Tools**

- .1 Use the procedures described above under *Site Preparation –Enclosure Required*.
- .2 Wet all material to be disturbed.
- .3 Turn on HEPA vacuum. Vacuum to remain operation throughout work.
- .4 Remove remaining adhered paint/primer by wet scraping or grinding as follows:
  - .1 Scrape/Grind off all remaining material.
  - .2 Place scrapings in Asbestos Waste Container.
- .5 Place removed ACM directly into an asbestos waste container.
- .6 IF power tool can disconnect from HEPA vacuum, remove tool, and HEPA vacuum tool and bit, blade, etc., and shrouds.
- .7 Wet clean or HEPA vacuum the entire Abatement Work Area, including surfaces not covered with polyethylene sheeting. Any materials or equipment removed to access ACM that are to be reused, must be wet cleaned or vacuumed prior to reinstatement.

### **3.1 Drilling Through Masonry Block Walls with Asbestos-containing Primer/Paint with HEPA Filtered Power Tools AND Drywall with Asbestos Drywall Joint Compound**

- .1 Use the procedures described above under *Site Preparation –No Enclosure Required*.
- .2 Wet all material to be disturbed.



- .3 Turn on HEPA vacuum. Vacuum to remain operation throughout work.
- .4 IF power tool can disconnect from HEPA vacuum, remove tool, and HEPA vacuum tool and bit, blade, etc, and shrouds.
- .5 Wet clean or HEPA vacuum the entire Abatement Work Area, including surfaces not covered with polyethylene sheeting. Any materials or equipment removed to access ACM that are to be reused, must be wet cleaned or vacuumed prior to reinstatement.

### **3.2 Abatement Work Area Dismantling**

- .1 Wash or HEPA vacuum equipment and tools used in contaminated Abatement Work Area to remove all asbestos contamination, or place in Asbestos Waste Containers prior to being removed from Abatement Work Area.
- .2 Place tools and equipment used in contaminated work site but not cleaned in polyethylene bags prior to removal from Abatement Work Area.
- .3 Clean polyethylene sheeting and drop sheets which with HEPA vacuum or wet cleaning methods at completion of work.
- .4 Wet drop sheets and polyethylene sheeting.
- .5 Carefully roll polyethylene sheeting and drop sheets toward the centre of enclosure. As polyethylene is rolled away, immediately remove visible debris beneath with a HEPA vacuum.
- .6 Remove remaining polyethylene sheeting and tape, and dispose of as asbestos waste.
- .7 Place polyethylene sheeting, drop sheets, tape, disposal clothing and other contaminated waste in asbestos waste containers, wet wipe and place in second asbestos waste container.
- .8 Remove remaining site isolation, seals, tape, etc.
- .9 Remove seals, tape, Signage etc.
- .10 Immediately upon shutting down negative air units, seal air inlet grill and exhaust vent with polyethylene and tape.
- .11 Seal openings in HEPA vacuums.
- .12 Remove and dispose of the pre-filters from HEPA filtered negative pressure machines as asbestos waste.
- .13 Remove HEPA filtered negative pressure machines and discharge ducting or HEPA vacuums.
- .14 Remove temporary lights.
- .15 Place contaminated materials including polyethylene sheeting, drop sheets, seals, tape, disposable coveralls, and other contaminated waste in asbestos waste containers.

### **3.3 Waste and Material Handling**

- .1 Refer to Section 02 81 00.

### **3.4 Re-Establishment of Items**

- .1 Upon completion of work:
  - .1 Move items that were removed from Abatement Work Area prior to work, back into same location within Abatement Work Area.
  - .2 Clean, mop and vacuum Abatement Work Area.

### **END OF SECTION**

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SCOPE OF WORK

- 1

FOLLOWING TYPE 1 ASBESTOS PROCEDURES REMOVE ASBESTOS CONTAINING VINYL FLOOR TILE.
- 2

FOLLOWING TYPE 1 ASBESTOS PROCEDURES REMOVE SINKS WITH ASBESTOS CONTAINING SINK MASTIC.
- 3

FOLLOWING TYPE 2 ASBESTOS PROCEDURES REMOVE/INSTALL MATERIALS/FIXTURES ON CONCRETE BLOCK WALLS WITH ASBESTOS-CONTAINING PAINT/PRIMER WITH POWER TOOL USING HEPA SHROUD AS DIRECTED BY GENERAL CONTRACTOR.
- 4

FOLLOWING TYPE 2 ASBESTOS PROCEDURES REMOVE/INSTALL MATERIALS/FIXTURES ON DRYWALL WALLS WITH ASBESTOS-CONTAINING DRYWALL JOINT COMPOUND WITH POWER TOOL USING HEPA SHROUD AS DIRECTED BY GENERAL CONTRACTOR.
- 5

FOLLOWING TYPE 1 ASBESTOS PROCEDURES REMOVE PRESUMED ASBESTOS CONTAINING MASTIC BEHIND CHALKBOARDS
- 6

FOLLOWING TYPE 2 ASBESTOS PROCEDURES REMOVE AND DISPOSE OF ASBESTOS CONTAINING PAINT/PRIMER FROM WALLS SCHEDULED FOR DEMOLITION.

N

LEGEND

OUTSIDE ASSESSMENT SCOPE

WORK AREAS

ASBESTOS-CONTAINING MATERIALS:

JOINT COMPOUND ON WALLS

VINYL FLOOR TILES

PAINT/PRIMER

S

SINK MASTIC

NOT ALL KNOWN OR SUSPECTED HAZARDOUS BUILDING MATERIALS MAY BE DEPICTED ON THE DRAWING. REFER TO THE HAZARDOUS BUILDING MATERIALS ASSESSMENT REPORT FOR A COMPLETE LIST OF KNOWN AND SUSPECTED HAZARDOUS BUILDING MATERIALS.

LEGEND IS COLOUR DEPENDENT. NON-COLOUR COPIES MAY ALTER INTERPRETATION.

BASE PLAN PROVIDED BY CLIENT.

PROJECT NAME:

SCOPE OF WORK

CLIENT NAME:

KAWARTHA PINE RIDGE DISTRICT SCHOOL BOARD

PROJECT LOCATION:

GRAFTON PUBLIC SCHOOL,  
654 STATION ROAD,  
GRAFTON, ONTARIO

FIGURE NAME:

GROUND FLOOR

PROJECT NUMBER:

335495.019

SCALE:

NOT TO SCALE

DRAWN BY:

MD

REVIEWED BY:

WA

DATE:

FEB. 2024

FIGURE NUMBER:

HM-01

