1.1 COMMENCEMENT OF WORK

- .1 Construction shall commence and shall continue without interruption until completion of all Work included in the Contract.
- .2 The Contractor shall schedule an initial job Site meeting for the purpose of laying out and phasing the Work as required.

1.2 PERMITS

.1 The Contractor shall be responsible for obtaining and paying all associated costs for all necessary permits.

1.3 SCHEDULING DELIVERIES

.1 All materials shall be delivered to the Site in ample time for proper incorporation into the Work in accordance with the normal progress of the job.

1.4 LAYOUT OF WORK

.1 The Contractor's superintendent on the job Site shall lay out the Work correctly, establishing schedules and shutdowns, etc.

1.5 SCHEDULE OF WORK

- .1 Within one week of award of Contract, the Contractor shall submit a schedule showing the times at which he proposes to do the various items of Work. This schedule shall include the following items:
 - .1 Schedules/length of time required for shut-downs.
 - .2 The Subcontractors schedule shall recognize and incorporate the following basic requirements.
 - .1 Timing of power and equipment interruptions and the amount of interruptions shall be kept as short as possible/to a minimum.
 - .2 Timing of all noise creating Work shall be coordinated with The City's Representative.

1.6 WORK PERIODS

- .1 All Work shall be scheduled by the Contractor and approved by The City.
- .2 It is imperative that all Work be carried out such that the period of interruption of services is minimized. All required interruptions must be scheduled with and coordinated with The City. Obtain signed services shutdown notice from The City prior to proceeding with each shutdown required. Sample shutdown notice is included at the end of this section. Where deemed necessary by The City's representative, this Work shall be carried out at night and on weekends.
- .3 All Work shall be done in such a manner that it does not disrupt the normal operation of the Building. All additional costs for overtime, or for Work required at other than normal working hours shall be included in the Bid Opportunity price.

1.7 SECURITY

.1 All mechanical room doors and doors leading to roof, crawlspace & mechanical rooms access shall be kept closed and locked.

1.8 ADDITIONAL REQUIREMENTS OF CONTRACTOR

- .1 Comply with the following additional requirements as set out by The City:
 - .1 The City must be notified of all Subcontractors involved in the project, including a contact name and telephone number.
 - .2 Building Permit will be posted at the job Site.
 - .3 Delivery or removal of building materials must be scheduled with The City.
 - .4 Co-ordinate with The City for weight restrictions, cab dimensions, door openings, etc.
 - .5 Carts for moving supplies will be supplied by Contractor.
 - .6 Requests for access must be submitted to The City with list of names for approval.
 - .7 Entrance keys must be issued to Subcontractors by The City.
 - .8 Public corridors are to be kept free of construction materials, tools or debris and are NOT to be used as storage areas.
 - .9 Contractor will leave all public areas in a neat and tidy appearance.
 - .10 WHMIS product data sheets will be supplied to The City prior to use on job Site. This includes all chemicals, paints, glues, cleaners, or odour causing substances, etc. The City reserves the right to deny permission for use of substances deemed to be a health or safety hazard to building occupants.
 - .11 Use of all odour producing substances will be restricted to hours agreed to by The City.
 - .12 All garbage must be removed from the Site by the Contractor and its Subcontractors. The City's garbage bins are NOT available to Subcontractors. Subcontractors must co-ordinate storage of garbage disposal bins on The City's property with The City.
 - .13 Contractor is responsible for after construction cleanup.
 - .14 Contractor will supply vacuums, brooms, etc. for use at the job Site equipment belonging to The City will NOT be used by Contractor's staff..

.2 Fire Safety Precautions:

- .1 While brazing, soldering, grinding, cutting or welding, protect building and contents against heat, sparks and fire by shielding. Maintain a fire extinguisher (ABC Multipurpose Class, minimum 10 lb. capacity) in working order, at each workstation, within close reach of all personnel located at that station, including stations where lead or lead joints are heated and where materials are heated with torches or open flames.
- .2 Maintain cleanliness and order in all areas at all times. DO NOT ALLOW RUBBISH TO COLLECT. Keep fire alarm pull stations, alarm panels, doorways, exits and corridors free of obstructions. Do not use wood wedges or other objects to hold open fire doors.
- .3 Personnel shall know location of fire alarm pull stations, fire extinguishing equipment and fire exits and evacuation routes for areas in which they are working.
- .4 Personnel shall know proper method of operating portable fire extinguishers, be familiar with various classifications of fire and appropriate method of extinguishers agent for each classification.

- .5 Store flammable or combustible gases used on construction Site in ULC containers. Use and storage of these materials is subject to approval of The City.
- .6 Contractor shall provide additional staff to act as spotter for "hot Work" operations. Spotter's responsibility shall be to observe welding, soldering, flammable operations and to extinguish any sparks or fires resulting from Work.

1.9 PROJECT PHASING

.1 Contractor shall coordinate with operations staff for timing of Work to be performed. Facility to remain in operation throughout construction process. Work for project will need to be phased to ensure minimal interruptions to operations.

1.1 BARRIERS

.1 Erect and maintain guard rails, fences, temporary enclosures, gates, warning signs and lighting, etc., as may be required by local by-laws, ordinances, and regulations, etc.

1.2 SECURITY

.1 All temporary doors, or other access to the Work shall be equipped with secure locking devices, and upon completion of each day's Work all such accesses shall be securely closed and locked.

1.3 PROTECTION OF WORK AND PROPERTY

- .1 Weather Protection: This shall include protection of the Work from damage due to rain, water and snow. Provide and maintain temporary weathertight enclosures for all exterior openings as the need arises.
- .2 Provide protective plywood walkways on all new and existing roof sections subject to roof traffic, including tie-ins, water stops, and overnight seals in order to maintain integrity during all phases of construction.

1.4 FIELD OFFICES

.1 Space for a field office will **not** be provided in existing building by The City.

1.5 STORAGE OF MATERIALS ON SITE

.1 Storage space is to be determined in construction meeting.

1.6 PARKING

.1 A Contractor parking area is available in the facilities.

1.1 GENERAL

- .1 In addition to the standard cleanup requirements, the following shall apply.
- .2 Conduct cleaning and disposal operations to comply with local ordinances and antipollution laws.
- .3 Store volatile wastes in covered metal containers, and remove from premises daily.
- .4 Prevent accumulation of wastes which create hazardous conditions.
- .5 Provide adequate ventilation during use of volatile or noxious substances.

1.2 MATERIALS

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

1.3 CLEANING DURING CONSTRUCTION

- .1 Maintain The City's grounds, and public properties free from accumulations of construction waste materials and rubbish.
- .2 Provide trash receptacles where Work is being done, for storing trash and construction debris. Construction debris shall be removed from the premises in accordance with job progress.
- .3 Dispose of waste materials, and rubbish at designated areas, or at authorized public refuse grounds.
- .4 Vacuum clean interior building areas when ready for substantial completion or occupancy.
- .5 Contain all Work that generates dust and contamination. Protect The City's Work areas to eliminate any cross contamination.
- .6 If instructed to do so by the Contract Administrator or The City, the Contractor will clean any areas in question immediately.

1.1 SECTION INCLUDES

- .1 Provide all labour, materials, methods, equipment and accessories to do all demolition, renovations, alterations, removals Work.
 - .1 Temporary, permanent shoring, protective devices, etc.
 - .2 Co-ordinate Work of trades, schedule elements of demolition, renovations Work, by procedures, methods to expedite completion.
 - .3 Cut, move or remove items as necessary to provide access, to allow alterations, new Work to proceed. Include such items as:
 - .1 Break through new openings, fill in openings, etc. in remaining construction indicated.
 - .2 Repair or remove hazardous conditions.
 - .3 Remove abandoned items, items serving no useful purpose, such as abandoned ductwork.
 - .4 Clean surfaces, remove surface finishes as required to install new Work, and finishes.
 - .5 Other existing Work, materials, etc. required for new Work in this Contract.
 - .4 Patch, repair, refinish existing items and surfaces to remain to new condition for each Material, with approved transition to adjacent new construction.
 - .5 Repair all damage done to remaining existing walls, other materials, surfaces, properties, etc. caused by Work of this Contract.

1.2 EXAMINATION

.1 Examine all areas undergoing renovation, alteration and demolition Work, and determine nature and extent of existing materials to remain.

1.3 ALTERATIONS, CUTTING, PROTECTION

- .1 Assign Work of moving, removal, cutting and patching to trades qualified to perform Work in manner to cause least damage to each type of Work.
- .2 Perform cutting, removal Work to remove minimum necessary, in manner to avoid damage to adjacent Work.
- .3 Provide temporary enclosures to separate Work areas from existing areas occupied by The City, provide protection, as required.

Part 2 Products

2.1 SALVAGED PRODUCTS

.1 Salvage sufficient quantities of cut or removed materials to replace damaged Work of existing construction, when Material is not readily obtainable on current market.

- .2 Items not required for use in repair of existing Work shall remain the property of The City. Legally dispose off Site when advised by The City.
- .3 Incorporate salvaged or used Material in new construction only with permission of Contract Administrator, as specified, indicated.

2.2 MATERIAL FOR PATCHING, EXTENDING MATCHING

.1 Patch, replace any portion of remaining existing finished surfaces with matching Material.

Part 3 Execution

3.1 PERFORMANCE

- .1 Make smooth, workmanlike transition when new Work abuts, finishes flush with existing Work.
- .2 Terminate existing surface in neat manner along straight line. Provide trim appropriate to finished surfaces.

3.2 RENOVATION ALTERATION

- .1 Co-operate fully, Work in conjunction with other trades for removal, breaking through, patching, repairing in existing building.
- .2 Execute all Work in orderly, careful manner, with due consideration for occupants of existing buildings. ARRANGE RENOVATION/ALTERATION SO USE OF EXISTING BUILDING REQUIRED BY THE CITY IS MAINTAINED.
- .3 Operations shall remain during construction as much as possible. Coordinate the shut down of areas with The City on Site.
- .4 Provide, maintain temporary access indicated, required, as directed.
- Arrange renovation, alteration so operations required, used in present function of adjacent existing building is/are maintained in full use.
- Arrange to disconnect, relocate items at time satisfactory to The City. Phase all operations to suit The City. Co-operate with The City.
- .7 Comply with Section 8, National Building Code for all Work.
- .8 Do not allow accumulation of scrap materials on job Site.
- .9 Rebuild, restore Work demolished, damaged beyond limits shown, at no cost to The City.
- .10 Provide adequate protection to persons, property. Execute Work in manner to avoid interference with use of, passage to, from adjoining buildings, facilities.

3.3 CLEANING

- .1 Clean The City's occupied areas daily.
- .2 Provide temporary filters on return air openings; turn off ventilation systems, etc. all as required to minimize dust migration during dust producing operations.
- .3 Clean spillage, overspray, and heavy collection of dust in The City's occupied areas immediately.
- .4 Contain all Work that generates dust and contamination. Protect The City's Work areas to eliminate any cross contamination.