Part 1 General

1.1 ACTION AND INFORMATIONAL SUBMITTALS

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

.2 Submit a schedule including all procedures and utility authorizations to cut existing services. Written approval must be obtained and be reviewed by Departmental Representative before any of this work begins.

.1 Aqueduc - City of Ottawa.
.2 Sewer - City of Ottawa.
.3 Storm - City of Ottawa.
.4 Steam.
.5 Condensate.
.6 Chilled Water.

.3 Sustainable Design Submittals:

.1 Construction Waste Management:
.1 Submit project Waste Reduction Workplan highlighting recycling and salvage requirements.

1.2 CLOSEOUT SUBMITTALS

.1 Submit in accordance with Section 01 78 00 - Closeout Submittals.

.2 As-built drawings:
.1 Identify on a site drawing exactly where all services have been capped including aqueduct, sewer, storm, steam, condensate and chilled water.

Part 2 Products

2.1 NOT USED

Part 3 Execution

3.1 DEMOLITION – FIRE PROTECTION (FIRE HOSE CABINETS AND SPRINKLER SYSTEM)

.1 System Description:

.1 The building is protected by a wet pipe sprinkler system and fire hose cabinets on each floor from the basement to the penthouse. The main water pipe in the basement splits to supply the domestic water distribution and the fire protection system header. The main fire protection header with alarm valve and main isolating valves are located in the basement mechanical room. On the main header are connected two (2) supervised isolating valves. One valve isolates the sprinkler distribution pipe, and the second valve isolates the distribution pipe to the fire hose cabinets and the fire department connections. Sanitary waste for the basement and weeping tile drains are collected in sump pits and pumped up to the basement ceiling level to be drained out in the main sewer piped out to the municipal services.

.2 General Considerations for Removal:

.1 Once the building has been designated a construction site, there is no longer a specific requirement to maintain a fire suppression system. This system is permitted to be removed as soon as the Contractor takes control of the site from a building code perspective.

.3 Required Decommissioning Activities:

.1 The decommissioning of the fire suppression system must be coordinated with the decommissioning of the fire alarm system. Once the fire alarm system is off, the alarm valve, the supervised valves and the flow switches will no longer communicate with a supervised system. Also if the fire suppression system is removed before the fire alarm system, alarms from the supervision devices will have to be disabled. The decommissioning of the fire suppression system must be coordinated with the decommissioning of the domestic water supply. The water supply must be maintained until the fire suppression system is no longer maintained. The decommissioning sequence must begin with the closing and locking of the two (2) main isolating valves on the fire suppression header and/or the main water supply valve. The removal of the isolating valves and header will be part of the domestic water supply decommissioning. Once the valves are closed and the supervision devices are disconnected, drain all the pipes. Before any pipe or device is removed, remove the fire department connections to prevent any accidental water pumped into the building. Then all distribution pipes, fire hose cabinets and sprinklers can be removed.

.4 Portable Fire Extinguishers:

.1 All the floors are protected by portable fire extinguishers. The construction site must be protected by portable fire extinguishers for as long as workers occupy the building. The awarded Contractor may use them as part of their fire safety plan and will be responsible to make sure the adequate type, number and location respects code requirements.

3.2 DEMOLITION – PLUMBING (DOMESTIC WATER, SANITARY WASTE AND VENT)

.1 System Description:

.1 The building has all the base plumbing systems such as storm drains for the roof, domestic cold and hot water distribution to plumbing fixtures, sanitary waste and vent. The cold water supply enters the building and splits to domestic water supply and fire suppressions system. The domestic water supply is metered and distributed to the domestic hot water production system and the plumbing fixtures. The hot water production system consists of steam shell and tube heat exchangers and storage tanks and a recirculating pump. The laboratories are also supplied with propane gas and compressed air. A medical grade compressed air production system is located in the penthouse. Propane gas tanks are located in the basement. Both systems are piped to various laboratory equipment located throughout the building.

.2 General Conditions for Removal:

.1 It is assumed that the Departmental Representative will completely disconnect any equipment intended for salvage and reuse prior to the building being handed over to the Contractor for demolition, such as laboratory equipment, icemakers and exhaust hoods. Any built-in laboratory equipment such as eye wash, specialty sinks, walk in refrigerators, etc, will be decommissioned and removed by the Contractor. If the utility clearance allows, the Contractor may want to maintain a few washrooms for worker use. The water main

and water heater must remain to supply any washroom and plumbing fixtures used during the demolition.

.3 Required Decommissioning Activities:
.1 All fixtures and piping can be removed as long as they are properly isolated from the live water mains. If some fixtures remain during the demolition, cut and cap all removed branches from the mains to avoid any water spills. Once all water demands have been decommissioned (fire suppression system and plumbing fixtures), close the main water supply valve in the basement mechanical room and lock it. The lock, valve and any remaining piping can only be removed once the city has confirmed in writing that the water supply to the building has been cut off. The drain waste piping must be rinsed (by HC decontamination pre-project) before removal to ensure no toxic chemical residues remain. Drain all the cold and hot water distribution system including hot water tanks and heat exchangers. Remove all fixtures before removing any piping, starting from the highest floor down. Open drainpipes will need to be temporarily capped at the end of every work shift and as the work progresses to avoid exposing the workers to sewer gases. Permanently cap the main sewer pipe as per the utility clearance requirements.

3.3 DEMOLITION – STORM WATER PIPING

.1 System Description:
.1 The flat roofs are drained through a storm piping system down to the basement level and out through the foundation wall toward the municipal services.

.2 General Considerations for Removal:
.1 Storm drain piping must remain until the building is down to concrete floors and empty of all other material.

.3 Required Decommissioning Activities:
.1 All piping and accessories can be removed once the building the building is down to concrete floors and empty of all other material. Permanently cap the main sewer pipe as per the utility clearance requirements.

3.4 PROPANE GAS

.1 System Description:
.1 Propane gas is used in laboratories and is supplied via propane gas tanks located in the basement and a piping distribution system, up various shafts, to every floor.

.2 General Considerations for Removal:
.1 The propane tanks will be returned to the gas supplier by the Health Canada. The Contractor will be responsible for removing all piping and accessories.

.3 Required Decommissioning Activities:
.1 All piping and accessories must be removed once the building has been turned over to the contractor for demolition.

3.5 COMPRESSED AIR

.1 System Description:
.1 A medical grade compressed air production system is located in the penthouse, and the compressed air is distributed to the laboratories via a piping distribution system, down various shafts, to every floor.

.2 General Considerations for Removal:

.1 It is assumed that the Departmental Representative will completely disconnect any equipment intended for salvage and reuse prior to the building being handed over to the contractor for demolition such as laboratory equipment, icemakers and exhaust hoods. It is also assumed that the Departmental Representative will either remove the compressors for salvaging and reuse or leave them for demolition.

.3 Required Decommissioning Activities:

.1 All equipment, piping and accessories can be removed once the building has been turned over to the contractor for demolition.

3.6 CLEANING

.1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.

.1 Leave Work area clean at end of each day.

.2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.

.3 Waste Management: separate waste materials for reuse and recycling in accordance with Section 01 74 19 - Construction/Demolition Waste Management.

Remove recycling containers and bins from site and dispose of materials at appropriate facility.

END OF SECTION