1 GENERAL

1.01 SUMMARY

.1 Section Includes.
- .1 Methods and procedures for demolishing, salvaging, recycling and removing sitework items designated to be removed in whole or in part, and for backfilling resulting trenches and excavations.
- .2 Provide all labour, methods, equipment, and accessories for the demolition, and removal of the following existing items as indicated on the drawings:
  - .1 Existing portion of concrete / asphalt roadway, approaches and sidewalks (as indicated on the drawings) to be removed.
  - .2 Existing trees to be removed (as indicated on the drawings).
  - .3 Existing chain link fence to be removed (as indicated on the drawings).

.2 Related Requirements
- .1 Section 01 56 39 – Temporary Tree and Plant Protection.

1.02 REFERENCES

.1 Canadian Council of Ministers of the Environment (CCME).
- .1 PN1326, Environmental Code of Practice for Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products.

.2 Department of Justice Canada (Jus).
- .1 Canadian Environmental Assessment Act (CEAA), 1995, c. 37.
- .2 Canadian Environmental Protection Act, 1999 (CEPA), c. 33.

.3 Health Canada/Workplace Hazardous Materials Information System (WHMIS).
- .1 Material Safety Data Sheets (MSDS).

.4 Transport Canada (TC).
- .1 Transportation of Dangerous Goods Act, 1992 (TDGA), c. 34.

.5 Motor Vehicle Safety Act (MVSA), 1995.

1.03 DEFINITIONS

.1 Demolition: rapid destruction of building following removal of hazardous materials.

.2 Hazardous Materials: dangerous substances, dangerous goods, hazardous commodities and hazardous products, may include but not limited to: asbestos PCB's, CFC's, HCFC's poisons, corrosive agents, flammable substances, ammunition, explosives, radioactive substances, or other material that can endanger human health or well being or environment if handled improperly.

.3 Waste Audit (WA): detailed inventory of materials in building. Indicates quantities of reuse, recycling and landfill.
- .1 Involves quantifying by volume/weight amounts of materials and wastes

generated during construction, demolition, deconstruction, or renovation project.

.2 Indicates quantities of reuse, recycling and landfill.

.4 Waste Management Coordinator (WMC): contractor representative responsible for supervising waste management activities as well as coordinating related, required submittal and reporting requirements.

.5 Waste Reduction Workplan (WRW): written report which addresses opportunities for reduction, reuse, or recycling of materials. WRW is based on information acquired from WA.

1.04 DELIVERY, STORAGE AND HANDLING

.1 Perform Work in accordance with Section 01 35 43 - Environmental Procedures.

.2 Storage and Protection.

- .1 Protection of trees and shrubs in accordance with Section 01 56 39 –Temporary Tree and Plant Protection.
- .2 Protect in accordance with Section 31 23 10 - Excavating, Trenching and Backfilling.
- .3 Protect existing items designated to remain. In event of damage to such items, immediately replace or make repairs to approval of Contract Administrator and at no additional cost to Contract.
- .4 Store and protect in accordance with requirements for maximum preservation of material.
- .5 Existing utilities and structures:
  - .1 Size, depth and location of utilities and structures as indicated on drawings are for guidance only. Completeness and accuracy are not guaranteed.
  - .2 Prior to commencing any demolition, notify applicable Contract Administrator or authorities having jurisdiction, establish location and state of use of services, utilities, pipes and other objects. Clearly identify and know locations to prevent disturbance during work.
  - .3 Maintain and protect from damage, existing utilities and infrastructure on site including but not limited to: power/electrical lines and outlets, water lines, sewer lines, roads, concrete pads, fencing, building walls, windows etc.
  - .4 Record location of maintained, re-routed and abandoned services, utilities and pipes.

.3 Waste Management and Disposal.

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 19 – Construction Waste Management And Disposal.
- .2 Divert excess materials from landfill to site approved by Contract Administrator.
- .3 Separate for reuse and recycling and place in designated containers Steel, Metal, Plastic waste in accordance with Waste Management Plan.
- .4 Place materials defined as hazardous or toxic in designated containers.
- .5 Handle and dispose of hazardous materials in accordance with CEPA, TDGA, Regional and Municipal, regulations.
- .6 Label location of salvaged material's storage areas and provide barriers and security devices.
- .7 Ensure emptied containers are sealed and stored safely.
- .8 Source separate for recycling materials that cannot be salvaged for reuse

including wood, metal, concrete and asphalt, and gypsum.

.9 Remove materials that cannot be salvaged for reuse or recycling and dispose of in accordance with applicable codes at licensed facilities.

1.05 SITE CONDITIONS

.1 Site Environmental Requirements.

.1 Perform work in accordance with Section 01 35 43 - Environmental Procedures.

.2 Ensure that selective demolition work does not adversely affect adjacent watercourses, groundwater and wildlife, or contribute to excess air and noise pollution.

.3 Do not dispose of waste of volatile materials including but not limited to, mineral spirits, oil, petroleum based lubricants, or toxic cleaning solutions into watercourses, storm or sanitary sewers.

.1 Ensure proper disposal procedures are maintained throughout the project.

.4 Do not pump water containing suspended materials into watercourses, storm or sanitary sewers or onto adjacent properties.

.5 Control disposal or runoff of water containing suspended materials or other harmful substances in accordance with local authorities and/or as directed by Contract Administrator.

.2 Existing Conditions.

.1 An Environmental Site Assessment studies (ESA I & II) were conducted at 1201 Archibald Street, the outcome of which confirmed the presence of environmental contamination associated with the past use of the land. The ESA studies and associated reports, as well as a subsequent Remediation Action Plan (RAP) were prepared in 2013 by Concentric Associates International Incorporated and will be made available upon request.

.2 The Remediation Action Plan has been completed by the City.

.3 Extent of Remediation Action Plan is attached hereto at end of this section.

2 PRODUCTS

2.01 EQUIPMENT

.1 Use equipment best suited for applicable demolition activities. Equipment and machinery
used to meet or exceed all applicable emission requirements and operate in compliance with MVSA.

3 EXECUTION

3.01 PREPARATION

.1 Inspect project site with Contract Administrator and verify extent and location of items designated for removal, disposal, alternative disposal, recycling, and items to remain.

.2 Locate and protect utilities. Preserve active utilities traversing site in operating condition.

.3 Notify and obtain approval of utility companies before starting demolition.

3.02 REMOVAL OPERATIONS

.1 Remove items as indicated on the drawings.

.2 Do not disturb items designated to remain in place.

.3 Removal of Pavements, Curbs and Gutters:

.1 Square up adjacent surfaces to remain in place by saw cutting or other method approved by Contract Administrator.

.2 Protect adjacent joints and load transfer devices.

.4 Prevent contamination with base course aggregates, when removing asphalt pavement for subsequent incorporation into hot mix asphalt concrete paving,

.5 Disposal of Material.

.1 Dispose of materials not designated for salvage or reuse on site, off-site to an approved disposal / recycling area or facility.

3.03 RESTORATION

.1 Restore areas and existing works outside areas of demolition to match condition of adjacent, undisturbed areas.

3.04 CLEANING

.1 Remove debris, trim surfaces and leave work site clean, upon completion of Work.

.2 Use cleaning solutions and procedures which are not harmful to health, are not injurious to plants, surface integrity of existing surfaces designated to remain, and do not endanger wildlife, adjacent water courses or ground water.

END OF SECTION.

ARCHIBALD STREET

15–MW05

15–MW06

15–MW01

15–MW04

15–MW02

15–MW03

DRAINAGE CHANNEL

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LEGEND:

- APPROXIMATE LOCATION OF PERIMETER FENCE
- APPROXIMATE FINAL EXCAVATION EXTENTS
- 15–MW# APPROXIMATE LOCATION OF MONITORING WELL
- APPROXIMATE LOCATION OF BURIED SEWER LINE

EXCAVATION PLAN

SCALE: 1:400

E N S W

CONCENTRIC
CLIENT-CENTRIC. CHALLENGE DRIVEN.

LONDON OTTAWA MISSISSAUGA
IQALUIT SASKATOON WINNIPEG

CLIENT NAME: CITY OF WINNIPEG

PROJECT ADDRESS: 1201 ARCHIBALD STREET, WINNIPEG MA

PROJECT NAME: PHASE II ESA

DRAWING TITLE: SITE PLAN

DESIGN: GB
DRAWN: STM
DATE: MAY/2015
FILE No: 14-5643-E

NO.	REVISION	DATE
1	XXX	MTH. DD, YYYY
2		
3		

SHEET No.

FIG 2

1. GENERAL

1.1. REFERENCES

.1 Definitions:

.1 Dangerous Goods: product, substance, or organism specifically listed or meets hazard criteria established in Transportation of Dangerous Goods Regulations.

.2 Hazardous Material: product, substance, or organism used for its original purpose; and is either dangerous goods or material that will cause adverse impact to environment or adversely affect health of persons, animals, or plant life when released into the environment.

.3 Hazardous Waste: hazardous material no longer used for its original purpose and that is intended for recycling, treatment or disposal.

.2 Reference Standards:

.1 Canadian Environmental Protection Act,1999 (CEPA 1999)

.1 Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations (SOR/2005-149).

.2 Department of Justice Canada (Jus)

.1 Transportation of Dangerous Goods Act, 1992 (TDG Act) [1992], (c. 34).

.2 Transportation of Dangerous Goods Regulations (T-19.01-SOR/2001-286).

.3 Green Seal Environmental Standards (GS)

.1 GS-11-[2008, 2nd Edition], Paints and Coatings.

.2 GS-36-[00], Commercial Adhesives.

.4 Health Canada / Workplace Hazardous Materials Information System (WHMIS)

.1 Material Safety Data Sheets (MSDS).

.5 National Research Council Canada Institute for Research in Construction (NRC-IRC)

.1 National Fire Code of Canada-[2005].

1.2. ACTION AND INFORMATIONAL SUBMITTALS

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

.2 Product Data:

.1 Submit manufacturer's instructions, printed product literature and data sheets for hazardous materials and include product characteristics, performance criteria, physical size, finish and limitations.

.2 Submit two copies of WHMIS MSDS in accordance with Section 01 35 29 - Health and Safety Requirements to Contract Administrator for each hazardous material required prior to bringing hazardous material on site.

.3 Construction Waste Management:

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

.2 Submit calculations on end-of-project recycling rates, salvage rates, and landfill rates demonstrating that 50% of construction wastes were recycled or salvaged

.4 Low-Emitting Materials: submit listing of adhesives and sealants and paints and coatings used in building, comply with VOC and chemical component limits or restrictions requirements.

1.3. DELIVERY, STORAGE AND HANDLING

.1 Deliver, store and handle materials in accordance with Section 01 61 00 -

Product Requirements and with manufacturer's written instructions.

.2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.

.3 Transport hazardous materials and wastes in accordance with Transportation of Dangerous Goods Act, Transportation of Dangerous Goods Regulations, and applicable provincial regulations.

.4 Storage and Handling Requirements:

.1 Co-ordinate storage of hazardous materials with Contract Administrator and abide by internal requirements for labelling and storage of materials and wastes.

.2 Store and handle hazardous materials and wastes in accordance with applicable federal and provincial laws, regulations, codes, and guidelines.

.3 Store and handle flammable and combustible materials in accordance with National Fire Code of Canada requirements.

.4 Keep no more than 45 litres of flammable and combustible liquids such as gasoline, kerosene and naphtha for ready use.

.1 Store flammable and combustible liquids in approved safety cans bearing the Underwriters' Laboratory of Canada or Factory Mutual seal of approval.

.2 Storage of quantities of flammable and combustible liquids exceeding 45 litres for work purposes requires the written approval of the Contract Administrator.

.5 Transfer of flammable and combustible liquids is prohibited within buildings.

.6 Transfer flammable and combustible liquids away from open flames or heat-producing devices.

.7 Solvents or cleaning agents must be non-flammable or have flash point above 38 degrees C.

.8 Store flammable and combustible waste liquids for disposal in approved containers located in safe, ventilated area. Keep quantities to minimum.

.9 Observe smoking regulations, smoking is prohibited in areas where hazardous materials are stored, used, or handled.

.10 Storage requirements for quantities of hazardous materials and wastes in excess of 5 kg for solids, and 5 litres for liquids:

.1 Store hazardous materials and wastes in closed and sealed containers.

.2 Label containers of hazardous materials and wastes in accordance with WHMIS.

.3 Store hazardous materials and wastes in containers compatible with that material or waste.

.4 Segregate incompatible materials and wastes.

.5 Ensure that different hazardous materials or hazardous wastes are stored in separate containers.

.6 Store hazardous materials and wastes in secure storage area with controlled access.

.7 Maintain clear egress from storage area.

.8 Store hazardous materials and wastes in location that will prevent them from spilling into environment.

.9 Have appropriate emergency spill response equipment available near storage area, including personal protective equipment.

.10 Maintain inventory of hazardous materials and wastes, including product name, quantity, and date when storage began.

2. PRODUCTS

2.1. MATERIALS

.1 Description:

.1 Bring on site only quantities hazardous material required to perform Work.

.2 Maintain MSDS in proximity to where materials are being used. Communicate this location to personnel who may have contact with hazardous materials.

2.2. 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.

.1 Dispose of hazardous waste materials in accordance with applicable federal and provincial acts, regulations, and guidelines.

.2 Recycle hazardous wastes for which there is approved, cost effective recycling process available.

.3 Send hazardous wastes to authorized hazardous waste disposal or treatment facilities.

.4 Burning, diluting, or mixing hazardous wastes for purpose of disposal is prohibited.

.5 Disposal of hazardous materials in waterways, storm or sanitary sewers, or in municipal solid waste landfills is prohibited.

.6 Dispose of hazardous wastes in timely fashion in accordance with applicable provincial regulations.

.7 Minimize generation of hazardous waste to maximum extent practicable. Take necessary precautions to avoid mixing clean and contaminated wastes.

.8 Identify and evaluate recycling and reclamation options as alternatives to land disposal, such as:

.1 Hazardous wastes recycled in manner constituting disposal.

.2 Hazardous waste burned for energy recovery.

.3 Lead-acid battery recycling.

.4 Hazardous wastes with economically recoverable precious metals.

END OF SECTION.