Part 1 General

1.1 SECTION INCLUDES

.1 Barriers.

.2 Environmental Controls.

.3 Traffic Controls.

.4 Fire Routes.

1.2 INSTALLATION AND REMOVAL

.1 Provide temporary controls in order to execute Work expeditiously.

.2 Remove from Site all such Work after use.

1.3 HOARDING

.1 Erect temporary Site enclosures using chain link fence fabric to Section 32 31 13 – Chain Link Fences and Gates.

.2 Apply chain link fence fabric vertically flush and butt jointed.

.3 Provide one lockable truck entrance gate and at least one pedestrian door as directed and conforming to applicable traffic restrictions on adjacent streets. Equip gates with locks and keys.

.4 Provide barriers around trees and plants designated to remain as per City of Winnipeg Tree Protection Specifications. Protect from damage by equipment and Construction procedures.

1.4 GUARD RAILS AND BARRICADES

.1 Provide secure, rigid guard rails and barricades around deep excavations, open shafts, open stair wells, open edges of floors and roofs.

.2 Provide as required by governing authorities.

1.5 WEATHER ENCLOSURES

.1 Provide weather tight closures to unfinished door and window openings, tops of shafts and other openings in floors and roofs.

.2 Close off floor areas where walls are not finished; seal off other openings; enclose building interior Work for temporary heat.

.3 Erect enclosures to allow access for installation of materials and Working inside enclosure.

.4 Design enclosures to withstand wind pressure and snow loading.

1.6 DUST TIGHT SCREENS

.1 Provide dust tight screens or insulated partitions to localize dust generating activities, and for protection of Workers, finished areas of Work and public.

.2 Maintain and relocate protection until such Work is complete.

1.7 ACCESS TO SITE

.1 Provide and maintain access roads, sidewalk crossings, ramps and Construction runways as may be required for access to Work.

.2 Build and maintain temporary roads where indicated or directed and provide snow removal during period on Work.

.3 If authorized to use existing roads for access to project Site, maintain such roads for duration of Contract and make good damage resulting from Contractor's use of roads.

1.8 PUBLIC TRAFFIC FLOW

.1 Contractor shall allow for continued public access to the Site throughout the Construction period and shall ensure that the Work is maintained to the approval of the Local Authorities having Jurisdiction, local by-laws, and Work Place Safety and Health Policies. This will also be applicable to street accesses.

.2 Contractor shall observe and enforce all Construction safety measures required by the Manitoba Building Code, Worker's Compensation Board, Municipal Statute or By-Laws. In the event of a conflict between any provisions of the above authorities, the most restrictive provision shall apply.

.3 Contractor shall maintain traffic flow around the Work Area. Contractor's operations shall in no way interfere with the safe movement of pedestrian traffic.

1.9 FIRE ROUTES

.1 Maintain access to property including overhead clearances for use by emergency response vehicles.

1.10 PROTECTION FOR OFF-SITE AND PUBLIC PROPERTY

.1 Protect surrounding private and public property from damage during performance of Work.

.2 Be responsible for damage incurred.

1.11 PROTECTION OF BUILDING FINISHES

.1 Provide protection for finished and partially finished building finishes and equipment during performance of Work.

.2 Provide necessary screens, covers, and hoardings.

.3 Confirm with Contract Administrator locations and installation schedule 3 days prior to installation.

.4 Be responsible for damage incurred due to lack of or improper protection.

1.12 PROTECTION OF EXISTING TREES

.1 The Contractor shall take the following precautionary steps to prevent damage from Construction activities to existing boulevard trees within the limits of the Construction area. If you require further information on these specifications, please contact the City of Winnipeg Forestry Branch at 986-2004:

.1 For trees greater than 100 mm in diameter, attach wood strapping material having a minimum thickness of 25 millimetres and minimum length of 2440 millimetres around tree trunks in a manner that will not harm the trees. Do not use nails or other fasteners that penetrate into trees. The width of strapping should suit the size of the tree being protected. Length of strapping may be reduced to suit tree being protected as approved by the Contract Administrator.

.2 For trees less than 100 mm in diameter, install snow fencing around the tree to a 2.0 meter radius complete with installation hardware. The 2.0 meter radius of the snow fencing may be reduced to suit the tree being protected as approved by the Contract Administrator.

.3 Operation of equipment within the dripline of the trees shall be kept to the minimum required to perform Work. Equipment shall not be parked, repaired, refueled; Construction materials shall not be stored, and earth materials shall not be stockpiled within the driplines of the trees. The dripline of a tree shall be considered to be the ground surface directly beneath the tips of its outermost branches. The Contractor shall ensure that the operations do not cause flooding or sediment deposition on areas where trees are located.

.4 Repair, replace and maintain tree protection material during Construction of the Work.

.5 Remove snow fencing and strapping material without harming trees as soon as the Construction and restoration Work is complete.

.2 Obtain approval from the Contract Administrator to excavate within 2.0 meters of a tree.

.3 Excavate in a manner to minimize damage to root systems. Keep exposed roots in excavations and trenches moist or shaded.

.4 Prune exposed roots with equipment such as trenchers, chain saws, root cutters or other methods acceptable to the Contract Administrator in a manner that will leave a neat, clean root end.

.5 Take precautions to ensure tree limbs overhanging the Site are not damaged by Construction equipment. Contact the Forestry Branch for consultation on pruning of overhanging or damaged limbs and branches and other unanticipated problems with trees during Construction of the Works.

.6 Elm trees are not to be pruned between April 1st and August 1st of any year under provisions of The Dutch Elm Disease Act.

.7 All damage to existing trees caused by the Contractor's activities shall be repaired to the requirements and satisfaction of the Contract Administrator and the Forestry Branch.

Damages must be repaired by an individual with a Manitoba Arborist license or by the Forestry Branch.

.8 The Forestry Branch will remove and replace any trees deemed to have died or that are dying due to damage from carelessness during Construction. Removal and replacement costs will be determined by size, market price of the largest transplantable tree of same or different species and may include appraised value of existing tree as determined by current International Society of Arboriculture evaluation procedure presently used by Forestry Branch in conjunction with City Claims Branch. Estimated replacement cost of a 25 and 60 cm diameter American elm on a boulevard based on an appraised value is approximately $4,700.00 and $27,000.00 respectively.

.9 Protection of existing trees, repair of trees and pruning of damaged limbs will not be measured for payment and will be included with Underground or Surface Works. Removal and replacement of existing trees by the Forestry Branch deemed to have died or that are dying due to damage from carelessness during Construction will be at own costs and will be invoiced for or deducted from any payments owing.

Part 2 Products

2.1 NOT USED

.1 Not Used.

Part 3 Execution

3.1 NOT USED

.1 Not Used.

END OF SECTION