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PART I - GENERAL

1.1 Description

- .1 The requirements of this specification shall apply to the contract as a whole and pertain to all of the work as specified by the contract documents.
- .2 The contractor shall furnish all labour, materials, equipment and supervision to construct work at the project site in accordance with the contract documents.

1.2 Project Co-ordination

- .1 The contractor shall co-ordinate the progress of the work, progress schedules, submittals, use of site, temporary utilities, construction facilities and controls.
- .2 The contractor shall organize divisions of labour and supply of materials essential to complete the work in all its parts.

1.3 Specifications

- .1 Wherever in the contract documents the word "provide" is used in any form, it shall mean that the work concerned shall include both supply and installation of the products required for completion of that part of the work.
- .2 Wherever in the contract documents it is specified that work is to proceed or to meet approval, direction, or selection of jurisdictional authorities or others, such approval, direction, selection or request shall be in writing.
- .3 All references to OPSS and OPSD are deemed to mean Ontario Provincial Standard Specifications and Ontario Provincial Standard Detail Drawings respectively.

1.4 Contractor Qualification

- .1 The work shall be done by a contractor having an established reputation and a minimum of five years proven experience on previous work, utilizing similar materials and methods of construction. Only tradesmen qualified and experienced in their trades shall be employed on this project. The contractor shall meet the standards of "Landscape Ontario" and shall be approved by the Community Services Department. The consultant will submit a list of all contractors and sub-contractors one week prior to commencement of work.
- .2 The Community Services Department reserves the right to request that a synopsis of the contractor/supplier, its responsible officers,

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and a list of jobs completed during the last three years be submitted for Community Services Department approval prior to commencement of work.

- .3 Give two working days notice, in writing, to the Community Services Department when materials are available for inspection at the source.
- .4 Approval of plant materials at source of supply shall not impair the right of the Community Services Department to inspect plants upon arrival on the site or during the course of construction and to reject plants which have been damaged or which, in any way, do not conform to the specifications.

1.5 Field Engineering

- .1 Promptly notify consultant in writing if subsurface/surface conditions at place of work differ materially from those indicated in contact documents, or reasonable assumption of probable condition based thereon.
- .2 After prompt investigation, should consultant determine that conditions do differ materially, instructions will be issued for changes in the work.

1.6 Testing and Quality Control

.1

- The contractor will submit the following independent tests to Community Services prior to acceptance of the works being tested. All tests will be arranged and paid for by the contractor and certified by the testing agency.
 - .1 **Subbase Compaction:** Refer to Section 02211, Item 3.2.6
 - .2 **Topsoil:** Refer to Section 02212, Item 2.2
 - .3 Crushed Stone Paving Subbase Compaction: Refer to Section 02512, Item 3.3
 - .4 **Crushed Stone Paving Paving Compaction:** Refer to Section 02512, Item 3.3
 - .5 **Limestone Screening Paving -Composition:** Refer to Section 02513, Item 2.1.2

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- .6 Limestone Screening Paving -Subbase Compaction:
 Refer to Section 02513. Item 3.2
- .7 **Limestone Screening Paving -Paving Compaction:** Refer to Section 02513. Item 3.2
- .8 **Mississauga Sports Mix Composition:** Refer to Section 02514, Item 2.1.1
- .9 **Mississauga Sports Mix Subbase Compaction:** Refer to Section 02514, Item 3.3
- .10 **Mississauga Sports Mix Sports Mix Compaction:** Refer to Section 02514, Item 3.3
- .11 **Asphalt Paving Composition:** Refer to Section 02552, Item 2.1
- .12 **Asphalt Paving Subbase Compaction:** Refer to Section 02552, Item 3.6
- .13 **Asphalt Paving Granular Compaction:** Refer to Section 02552, Item 3.6
- .14 **Asphalt Paving Paving Compaction:** Refer to Section 02552, Item 3.6
- .15 **Asphalt Paving Paving Thickness:** Refer to Section 02552, Item 3.6
- .16 **Playground Sand Composition:** Refer to Section 02861, Item 2.2
- .17 Cast-in-Place Concrete Subbase Compaction: Refer to Section 03300, Item 3.5
- .18 Cast-in-Place Concrete Granular Compaction: Refer to Section 03300, Item 3.5
- .19 **Cast-in-Place Concrete:** Refer to Section 03300, Item 3.5

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- .2 The Community Services representative and the consultant shall have access to the work at all times.
- .3 If the contractor covers or permits to be covered work that has been designated for special tests, inspections or approvals before such is made, contractor is to uncover such work, have inspections or tests satisfactorily completed and make good such work. The contractor shall bear all costs.
- .4 The contractor shall be required to comply with all Ministry of Environment regulations when importing any earth materials to the site. Further, the contractor shall, when directed, be required to provide satisfactory written evidence and/or report analysis attesting to the source and quality of such materials in accordance with soil criteria for residential parkland use as per MOE regulations. The cost for any requirement to ensure environmental compliance shall be deemed to be included in the contract prices bid for the work.

1.7 Protection of Water Quality

.1 At all times, the contractor shall maintain existing stream flows and shall control all construction work so as not to allow sediment or other deleterious materials to enter streams. Refer to City of Missisauga, Transportation and Works requirements for Protection of Water Quality.

1.8 Water Supply

- .1 Provide a supply of potable water for construction use and planting purposes.
- .2 If required, contractor to arrange for connection with appropriate utility company and pay costs for installation, maintenance, removal and use of water

1.9 Access Control

.1

Before the contractor enters the site with his vehicles or equipment, he shall request direction from the owner for an appropriate access route. The contractor shall appropriately barricade, to the satisfaction of the Community Services representative, the access route to and around the construction area in order to minimize dumping and damage to the grounds, plantings, turf and surrounding facilities at the place of work. The contractor shall be responsible for restoring to the original condition any or all damages including any damage to public and private roads and facilities caused by his/her operation under this

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contract. This includes street cleaning.

.2 Cost of providing temporary protection, roads and services, including removal of same at completion of the work and restoration of the involved areas to original state, shall be included in the contractor's costs.

1.10 Construction Schedule

- .1 Submit, for approval, a construction schedule within fourteen (14) calendar days of notification of tender award.
- .2 Correct, revise, up-date and otherwise maintain the schedule during progress of construction. Supply each corrected, revised and up-dated schedule to the Community Services representative, the consultant and to sub-contractors.

1.11 Examination .1 Site:

- .1 Contractor to examine the site, and ensure that each subcontractor performing work related to the site conditions has examined the site, such that all sub-contractors are fully informed on all particulars which affect the work thereon and in order that construction proceeds competently and expeditiously.
- .2 Contractor to ensure by examination that all physical features and working restrictions and limitations which exist are known.
- .2 Previously Completed Work it is the contractor's responsibility to:
 - .1 Verify dimensions of completed work in place before fabrication of work to be incorporated within it.
 - .2 Verify that previously executed work and surfaces are satisfactory for installation or application, or both, and that performance of subsequent work will not be adversely affected by previously completed work.
 - .3 Commencement of work will constitute a acceptance of site conditions and previously executed work as satisfactory, as it affects the subsequent work.

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- .4 Report to consultant any defects in prior work which will affect quality of subsequent work, or construction schedule.
- .3 Site Layout and Construction Measurements:
 - .1 The contractor shall provide all site layout required for the execution of the work with respect to location, lines and levels of all items of the contract. All lines and levels will be subject to inspection by the Community Services representative; the contractor shall make work available for inspection at any time. Work installed prior to layout inspection by Community Services Department and found to be unacceptable by the Community Services Department shall be removed and reinstalled in accordance with the approved layout. The contractor shall bear all costs of work which is to be removed and reinstalled.
 - .2 Before commencing the installation of work, verify that its layout is accurate in accordance with the intent of the drawings, and that positions, levels, and clearances to adjacent work are as specified.
 - .3 If the work is installed in the wrong location, reinstate the affected area prior to continuing with construction.

1.12 Protection of Work

- .1 Include in the work necessary methods, materials, and labour to ensure that no damage or harm occurs to the work, materials, property and persons resulting from the performance of this contract.
- .2 Keep all excavations, pits, and structures free of water. Pump dry as required.
- .3 Protect adjacent private and public property and make good any damages caused in performing the work under this contract. Refer to Section 02104, Site Protection.
- .4 Keep surfaces on which finish materials will be applied free from grease, oil, and other contamination which would be detrimental in any way to the application of the finish materials.

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- .5 Protect finished surfaces of completed work from damage by restriction of access or by use of physical means suitable to the material and surface location. Establish with each sub-contractor the suitability of such protection in each case.
- .6 It shall be the contractor's responsibility to arrange for accurately staking out all underground services and utilities prior to starting any work, whether or not these services are indicated on the drawings.
- .7 Protect existing mechanical, electrical, telephone and similar services from damage. The relocation, removal, protection and capping of existing utility services shall be performed only by the applicable utility. All damaged services and utilities shall be repaired at the contractor's expense.
- .8 Do not damage root systems of existing trees which are to remain, and future landscaping areas by piling surplus soil over them, by dumping of plaster or cement flushings or debris over them, by cutting when excavating and grading, or by driving or storing heavy equipment. Do not use trees for anchorage or rigging cables.

1.13 Underground Utilities

.1

- The contractor is responsible for any damage caused to underground utilities or services by his work forces or subcontractor(s) in the execution of this contract. The contractor shall obtain clearance from the appropriate agencies prior to commencing work. Submit copies of all stakeout reports/ sheets to the Community Services Department.
- .2 No responsibility will be assumed by the City for the correctness or completeness of the drawings with respect to existing utilities, pipe, or other objects underground or on the surface. It shall be the responsibility of the contractor to determine the location of such utilities, pipe or other objects.

1.14 Site Meetings

- .1 It is the responsibility of the consulting landscape architect to arrange an on site meeting with the Community Services representative prior to commencement of work.
- .2 During construction, the consulting landscape architect must have regular site meetings with the Community Services representative.

 The scheduling of these meetings will be at the discretion of the

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Community Services representative.

1.15 Workplace Safety

- .1 The contractor is required to comply with all WHMIS (Workplace Hazardous Materials Information System) regulations, requirements, and amendments in completion of the work performed under this contract.
- .2 The contractor possesses, and shall comply with, and shall be responsible for ensuring that, the provisions of statutes, regulations and bylaws pertaining to the safe performance of the work are observed, and that the methods of performing the work do not endanger the personnel employed thereon and the general public in accordance with the latest edition of the Occupational Health and Safety Act.

1.16 Fastenings

- .1 Include in the work all necessary fastenings, anchors, insets, attachment accessories, and adhesives.
- .2 Do not install wood plugs or blocking for fastenings in masonry, concrete, or metal construction, unless specified or indicated on the drawings.
- .3 Use only fastenings which do not cause spalling or cracking of materials to which they are attached.
- .4 Install metal-to-metal fastenings fabricated of the same metal, or of a metal which will not set up electrolytic action causing damage to fastenings or components, or both, under moist conditions.
- .5 Install work with fastenings or adhesives in sufficient quantity to ensure permanent secure anchorage of materials, constructions, components, and equipment. Space anchors within limits of load-bearing or sheet capacity of the anchors.
- .6 Space exposed fastenings evenly and in an organized pattern. For exposed fastenings, use metal of same material, texture, colour and finish as metal on which they occur.

1.17 Cleaning

.1 Maintain the work areas in a tidy condition, "broom clean" where applicable, and free from an accumulation of waste products and debris.

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- .2 Include in the work of each section, the removal of spatters, droppings, soil, labels and debris from surfaces prior to receiving finishes.
- .3 Use only cleaning materials which are compatible with the materials of the surfaces to be cleaned.
- .4 Ensure that cleaning operations are scheduled to avoid deposit of dust or other foreign matter on surfaces during finishing work and until wet or tacky surfaces are cured.
- .5 Do not burn or bury waste material at the site. Remove all waste as often as required to avoid accumulation. Provide containers in which to collect waste material and debris.
- .6 Prior to Preliminary Acceptance by the City:
 - .1 Dispose of all rubbish and surplus materials off-site.
 - .2 Leave the site in a neat and presentable condition and suitable for use by the City.
 - .3 Remove surplus products, tools, construction machinery and equipment.
 - .4 Broom clean paved surfaces and rake clean other surfaces of the grounds.
 - .5 Restore all surfaces used to access the site to their original condition. All sodded areas which have been damaged or disturbed are to be re-sodded.
 - .6 Clean and flush out all Catch Basins.
- .7 Temporary park designation signs are to be removed at a date specified by the Community Services Department or at time of Preliminary Acceptance by the City. Post holes are to be reinstated after removal of signs.

1.18 Traffic Maintenance

.1 The contractor to conduct his operations on the site of these works so that the use of adjacent roadways by vehicles employed under this contract will not endanger public, pedestrian and vehicular

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traffic thereon nor hinder the use of such facilities.

- .2 The contractor shall clean and maintain the cleanliness of adjacent site roadways and the property occupied by him from waste materials or refuse resulting from his operations. Debris to be removed from site on a continuous basis.
- .3 Trucks hauling excavated material, cement, sand, stone, or other loose materials from or to the site to have their loads trimmed before leaving the site and their bodies shall be tight in order that no spillage of loads will occur.
- .4 Should the contractor be negligent of his duties in maintaining the proper street cleanliness, the City will take necessary steps to perform such cleaning and shall charge the contractor all related costs.
- .5 Flagging for traffic control on this contract shall be in conformance with the procedure outlined in the pamphlet entitled "Correct Methods for Traffic Control" issued by the contractor Safety Association of Ontario. Copies of this pamphlet may be obtained from the Ministry of Transportation of Ontario's District Office.

1.19 Dust Control

- .1 The contractor shall be required to prevent dust nuisance resulting from his operations.
- .2 Where the work requires the sawing of asphalt or the sawing or grinding of concrete, blades and grinders of the wet type shall be used together with sufficient water to prevent the incidence of dust, wherever dust would affect traffic or wherever dust would be a nuisance to residents of the area where the work is being carried out.
- .3 Prevent spread of dust, caused by all sources including earthworks, beyond the construction site by wetting or by other approved means. Should the contractor be negligent of his duties in maintaining appropriate dust control, the City will take necessary steps to perform such control and shall charge the contractor all related costs.
- .4 The cost of all such dust control preventative measures shall be

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borne by the contractor.

1.20 Material and Equipment

.1 Product and Material Quality

- .1 Products, materials, equipment and articles (referred to as products throughout specifications) incorporated in work shall be new, not damaged or defective, and of best quality for purpose intended. If requested, furnish evidence as to type, source and quality of products provided.
- .2 When requested by the consultant, provide an affidavit from the manufacturer that materials are in accordance with the specifications before delivery of the materials.
- .3 Defective products will be rejected, regardless of previous inspections. Inspection does not relieve responsibility, but is precaution against oversight or error. Contractor to remove and replace defective products at own expense and be responsible for delays and expenses caused by such rejection.
- .4 Should any dispute arise as to quality or fitness of products, decision rests solely with Community Services based upon requirements of contract documents.

.2 Storage, Handling and Protection

- .1 Handle and store products in manner to prevent damage, adulteration, deterioration and soiling and in accordance with manufacturer's instructions when applicable.
- .2 Store packaged or bundled products in original and undamaged condition with manufacturer's seals and labels intact.
- .3 Store products subject to damage from weather in weatherproof enclosures.

.3 Manufacturer's Instructions

.1 Unless otherwise indicated in specifications, install products in accordance with manufacturer's instructions.

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Do not rely on labels or enclosures provided with products. Obtain written instructions directly from manufacturers.

.2 Improper installation of products authorizes the Community Services representative to require removal and reinstallation with all costs to be borne by the contractor.

.4 Items Provided by City for Installation

.1 Install equipment and furniture supplied by the City as noted on drawings, during the work of this contract. Coordinate shipping and delivery with the City. Store items provided by the City on site, protected from damage. Install completely, and leave in full operating condition in accordance with manufacturer's/supplier's directions.

.5 Workmanship

- .1 Workmanship shall be best quality, executed by workers experienced and skilled in respective duties for which they are employed.
- .2 Decisions as to quality or fitness of workmanship in cases of dispute rest solely with the City, whose decision is final.

1.21 Salvage

- .1 Unless otherwise specified, salvaged material resulting from construction, surplus materials and construction debris shall become property of contractor, who must dispose of it off-site, at no cost to the City.
- .2 Treasure, such as coins, bills, papers of value and articles of antiquity, discovered during digging and cutting at the site, shall remain property of the City, and shall be delivered immediately to the Office of the City Clerk.

1.22 Restrictions on Open Burning

.1

Open fires will not be permitted within the limits of this contract. Brush and debris shall be disposed of outside the contract limits and in compliance with the requirements specified elsewhere for management and disposal of excess material.

1.23 City Occupancy

.1 Partial occupancy or installation of equipment by the City shall not imply acceptance of the work in whole, or in part, nor shall it

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imply acknowledgement that the terms of the contract are fulfilled.

PART II - PRODUCTS Not Used

PART III - EXECUTION Not Used

END OF SECTION 01005