PART E

SPECIFICATIONS

PART E - SPECIFICATIONS

GENERAL

E1. GENERAL

E1.1 These Specifications shall apply to the Work.

E2. GOODS

- E2.1 The Contractor shall supply and deliver winter sand in accordance with the requirements hereinafter specified.
- E2.2 **Item 1** Winter sand shall be supplied and delivered to the designated locations as specified in Table B Delivery Locations:
- E2.2.1 Sand to be used for winter sand shall consist of sound, hard and durable grains from crushed or screened material. It shall be free from organic matter, dust, loam or other deleterious matter. It shall meet the following gradation requirements:

Sieve Size	Gradation Limits (% Passing)
10 mm	100
5 mm	85 – 100
1.25 mm	40 – 75
315 um	0 – 25
80 um	0 – 5

- E2.2.2 Winter sand shall consist of sand meeting the requirements in E2.2.1 and blended uniformly with 5.0% sodium chloride (road salt) by weight. The Contractor shall mix the sand and road salt using a calibrated system that can accurately control the amount of salt. Bucket mixing with loaders or other similar means will not be allowed.
- E2.2.3 For mixing and main stockpiling of winter sand, the City will allow the Contractor, as an option, to use the site at 849 Ravelston Avenue West. The Contractor shall not mix salt and sand at any other delivery location.
- E2.2.3.1 Should the Contractor decide to use the site listed in clause E2.2.3, the Contractor shall prepare the site for stockpiling by levelling the designated site, then constructing a base pad of sand over the area to be used for stockpiling.
- E2.2.4 During mixing operations, the Contractor shall take precautions to store and handle the salt in an environmentally responsible manner to minimize the release of road salt to the environment.
- E2.2.5 The Contractor shall haul the winter sand material from the mixing site and stockpile it at the locations and in the quantities shown in Table B.
- E2.2.6 The Contractor shall use a radial stacking conveyor of a minimum length of thirty (30) meters to stockpile winter sand outside at the locations in Table B.
- E2.2.6.1 The location at 1220 Pacific is a indoor site, the Contractor shall use a separate conveyor system to initially fill the facility to its intended capacity of approximately 9,000 tonnes. The dimensions of this facility are thirty (30) meters wide, six-seven (67) meters long, and fourteen (14) meters high at the peak with 2.5m high concrete walls along the sides and end.

- E2.2.6.2 The Contractor shall maintain a minimum supply of 3,000 tonnes of winter sand throughout the Contract period at the 1220 Pacific Avenue location.
- E2.2.6.3 To maintain supply at 1220 Pacific Avenue during winter operations, the Contractor shall have and maintain a minimum hauling capacity of 1,000 tonnes per day.
- E2.2.7 Depending on the severity of the winter, the Contractor shall have the capability of mixing and supplying additional winter sand during the winter months. The minimum additional order shall be 10,000 tonnes, delivered as required to the locations identified in Table B.
- E2.3 **Item 2** Remixing of existing stockpile at 849 Ravelston Avenue West shall be done in accordance with these specifications.
- E2.3.1 The Contractor shall remix the existing stockpile of winter sand with 2% sodium chloride by weight. The Contractor shall remix the sand and road salt using a calibrated system to control the amount of salt.
- E2.3.2 The Contractor shall stockpile the material on site using a radial stacking conveyor of a minimum length of thirty (30) meters.
- E2.4 The City of Winnipeg shall supply the Contractor with the road salt (sodium chloride) for mixing with the sand at no charge within a hauling distance of twenty (20) km of the City limits.
- E2.5 Winter sand delivered to the locations in Table B shall be free flowing, free of lumps and not contain any contaminants. The Contractor shall be responsible for removal of all rejected material.
- E2.6 At the end of the winter session, the Contractor shall haul and fill the indoor facility at 1220 Pacific with surplus winter sand from a location shown in Table B, as directed by the Contract Administrator. The Contractor shall use a conveyor system to maximize the capacity of the facility.

E3. DELIVERY

- E3.1 Goods shall be delivered on an "as required" basis during the term of the Contract, f.o.b. destination, freight prepaid, to various locations within the City.
- E3.1.1 Goods shall be delivered within one (1) Business Day of the placing of an order, except where otherwise agreed at the time of ordering.
- E3.2 Goods shall be delivered between 8:30 a.m. and 4:30 p.m. on Business Days.
- E3.3 The Contractor shall off-load goods as directed at the delivery location.
- E3.4 Table B of these Specifications, listing intended delivery locations, is provided for the convenience of the Bidder only. The City reserves the right to add or delete locations, within the boundaries of the City, or alter the type or quantity of goods to be supplied to any location as required by changes in its operations during the term of the Contract.

TABLE B – DELIVERY LOCATIONS

LOCATION	INITIAL STOCKPILE QUANTITY	APPROXIMATE TOTAL QUANTITY
849 Ravelston Ave. West	15,000 tonnes	15,000 tonnes
1539 Waverley Street	10,000 tonnes	15,000 tonnes
590 St. Anne's Road	5,000 tonnes	7,500 tonnes
1220 Pacific Avenue (indoor storage)	9,000 tonnes	27,500 tonnes

* **NOTE**: The capacity of storage facility at 1220 Pacific Avenue is approximately 9,000 tonnes. This will have to be recharged several times during winter operations.