



Department of Finance
Procurement Services

**REQUEST FOR STANDING
OFFER**
Tender Number: 5363
Closing Date: 27-Sept-2019
Closing Time: 12:00PM
Atlantic Time

Dual Coated Glass Bead Tender/Transportation, Infrastructure and Energy

1. Check for changes to this request

Before submitting this proposal, visit the Procurement website www.princeedwardisland.ca/en/tenders to see if any Addenda detailing changes have been issued on this tender. Changes may be posted up until the tender closing time. It is your responsibility to acknowledge and take into account **ALL ADDENDA**.

2. Give your business information (please print)

Name of Company: _____
(If you are not a registered company, give your name)

Street Address: _____

City: _____ Province: _____

Postal Code: _____ Email Address: _____

Mailing Address (if different): _____

Phone Number: _____ Fax Number: _____

HST/GST Registration Number (BN): _____ (leave blank if NOT applicable)

3. Review the following documents, which will form part of your proposal

All documents can be found on the Procurement Services website at www.princeedwardisland.ca/en/tenders.

- **Atlantic Standard Terms and Conditions**
- **This tender opportunity is issued in accordance with the provisions of the Atlantic Procurement Agreement and the Canadian Free Trade Agreement. Vendors are encouraged to read the Atlantic Provinces Standard Terms and Conditions, prior to submitting any bid.**

4. Additional Information

- Prices are to be in Canadian Funds.
- Price to include: Freight & Delivery.
- The quantities listed in the tender document are estimates only, actual quantities over the span of the standing offer may be more or less. The Province of PEI reserves the right to purchase more or lesser amounts depending on requirements. Products to be delivered are on an "as and when required basis" for the standing offer period indicated in this document unless otherwise stated. This applies to the tendering department as well as any other Government Department, Crown Corporation, Agency, Board and Commission including the Broader Public Sector as described in the Atlantic Standard Terms and Conditions (MASH Sector).
- It is the intention of the Province to award the item(s) listed in this tender to one (1) vendor.
- The results of this tender shall be open to all Government Departments, Crown Corporations, Agencies, Boards and Commissions including the Broader Public Sector as described in the Atlantic Standard Terms and Conditions (MASH Sector).
<http://www.atlanticsuppliers.ca/acts-regulations/atlantic-provinces-standard-terms-and-conditions-goods-and-services/>
- Vendors are advised that all documents forming part of the RFSO process, including all submitted proposals, are subject to the *Freedom of Information and Protection of Privacy Act* R.S.P.E.I. 1988, Cap. F-15.01 ("FOIPP"). A copy of FOIPP is available at:
<https://www.princeedwardisland.ca/en/legislation/all/all/a>

5. Give your delivery and payment terms

Delivery Required by:		Goods will be delivered by:	
Delivery Location:	McQuaid's Warehouse, 7 Walker Drive, Charlottetown, PE		
FOB:	Destination <input type="checkbox"/> Other <input type="checkbox"/> (Please Specify) _____		
Payment Terms:	Net 30 <input type="checkbox"/> Other <input type="checkbox"/> (Please Specify) _____		

6. Acknowledge receipt of addenda (if any)

ADDENDUM	SIGNATURE
Addendum #1	
Addendum #2	
Addendum #3	

Were there more than three addenda for this proposal? YES NO

Indicate the number of additional addenda you have received.

Please sign indicating that you acknowledge the additional addenda noted above _____

7. Sign your Proposal

I confirm that the information I provided on this proposal is complete and accurate and that I am authorized to sign on behalf of the company.

Name (please print): _____ Position or Title: _____

Signature: _____ Date: _____

8. Submit Proposal To:

PROCUREMENT SERVICES

95 Rochford Street
2nd Floor South, Shaw Building, Room 27
Charlottetown, PE, C1A 7N8
Telephone: (902)368-4040
Fax: (902)368-5171

When submitting your bid to the above address, please ensure your company name and tender number are clearly marked on the outside of the envelope.

Acceptable methods to submit your bid; courier, mail, hand deliver and fax.

E-mail submissions are not accepted.

9. CONTACT INFORMATION

About the good or service:

Name: Kevin Campbell
Phone: 902-368-5102
E-mail: jkcampbell@gov.pe.ca

About the procurement process:

Procurement Officer: Mark Kays
Phone: 902-368-4764
E-mail: mjkeys@gov.pe.ca

10. Fill in your unit price, extended price, and total price of all items
Quote prices in Canadian dollars, before taxes. Quantities are estimates only, actual quantities may be more or less depending on requirements.

Line	Quantity	Description	Unit Price	Extended Price
1	100,000	Kg moisture resistant Glass Beads		
			Total	

APPENDIX A:

TENDER SPECIFICATIONS:

Material Specifications for Traffic Marking Paint Glass Overlay Beads

1.01 DESCRIPTION

- 1.01.01 This specification is for the supply and delivery of two types of traffic marking paint reflectorizing glass overlay beads; Moisture Resistant Beads and Dual Coated Beads.
- 1.01.02 Moisture Resistant Beads are used with Alkyd (oil based) traffic marking paint and Dual Coated Beads are used with Acrylic (water-borne) traffic marking paint.
- 1.01.03 Moisture Resistant Beads shall conform to all of the specification items identified herein, with the exception of item 3.7, Dual Coating. Dual Coated Beads shall conform to all of the specifications identified herein.

1.02 GENERAL REQUIREMENTS

- 1.02.01 The beads shall be true spheres and their surface shall be smooth, lustrous and free from cavities and scratches. The beads shall be manufactured from glass of a composition designed to be resistant to the effects of traffic wear and weathering. The beads shall be moisture proofed with a suitable moisture-proofing material so as to overcome the effects of water as a vapor or liquid on the beads before the beads are added to the paint stripe. No foreign material shall be contained in or among the beads.

1.03 SPECIFIC REQUIREMENTS

1.03.01 Color

The glass beads shall be colorless to the extent that they do not impart a noticeable hue to the paint.

1.03.02 Refractive Index

The index of refraction of the glass beads shall not be less than 1.50 when tested in accordance with method 49.1 of Canadian General Standards Board (CGSB) Specification 1-GP-71.

1.03.03 Roundness

A minimum of 75% by mass of the glass beads shall be true spheres. The percentage true spheres shall be determined by one of the following methods:

1.03.03 Cont...

(a) counting the beads under 50x and 100x magnification as follows:

- Glass beads larger than #50 sieve size inclusive shall be counted under 50x magnification (see gradation requirements).
- Glass beads smaller than #50 sieve size shall be counted under 100x magnification.
- Approximately 1000 beads contained loosely in a culture dish shall be counted under reflected light for each sieve specified to determine the percentage by mass of perfectly round spheres.

(b) by American Society of Testing and Materials (ASTM) Standard D-1155.

103.03.01 Failure to meet roundness requirements by either method will be cause for rejection.

103.04 Imperfections

- The surface of the beads shall be smooth, lustrous and free from film scratches and pits. Not more than 25% of the true spheres shall have imperfections in the form of milkiness, air inclusions, dark specs and incipient fractures. These properties will be determined using method 149.1 of CGSB Specification 1-GP-71.

103.05 Gradation

The glass beads shall meet the following gradation requirements:

Sieve Opening (um)	Percent Passing
850	100
600	80-100
300	20-35
150	0-8
75	0-2

Tests for gradation shall be made in accordance with ASTM Standard D-1214. The sample size shall not be less than 50 g or more than 100 g.

103.06 Moisture Resistance

- 103.06.01 The beads shall not agglomerate during storage and application. They shall be treated in such a manner as to overcome the effect of water, both as a vapor and a liquid, on the beads before the beads are added to the paint stripe. They shall flow freely from dispensing equipment at any time when surface and atmosphere conditions are satisfactory for painting.

103.06.02 Moisture resistance will be tested by the method described as follows:

A 100g sample of glass beads will be placed in a 500 ml beaker and an equivalent volume of distilled water shall be added to the beaker. The beaker will then stand for 5 minutes at the end of which time the water will be carefully poured off and the glass beads transferred to a clean dry beaker and allowed to stand for 5 minutes. The beads will then be poured slowly into a standard 125 mm length and 10 mm inside diameter container.

The beads shall flow through the stem without stoppage. Slight initial agitation to start the flow through the funnel at the beginning of the test is permissible.

103.07 Dual Coating

103.07.01 The beads shall have both a moisture resistance silicone coating, and an adhesion promoting silane coating. The beads shall pass the moisture resistance test (as per item 3.6), and the adherence coating test.

103.07.02 The adherence coating test is outlined as follows:

Prepare a solution by weighing 0.2 grams of dansyl chloride and dissolving in 25 ml of acetone. This solution can be used for several tests during the day, but must be kept refrigerated in closed dark container between uses. Make a fresh solution daily.

- Weigh 10 grams of beads and place in aluminum trays.
- Saturate the glass beads sample with dansyl chloride solution using an eyedropper.
- Dry the beads in an oven at 60C (140F) for 15 minutes. Beads will be yellow and agglomerated.
- Rinse the beads by placing them in funnel containing new filter paper and pouring 100 ml of acetone over them. Use suction during the step.
- Remove the beads from funnel and place in aluminum trays.
- Dry the beads in the oven until free flowing.

- Place the glass beads filter paper and inspect them under ultra-violet light. Inspection must be in a dark room. A yellow-green fluorescence will be observed if adherence coating is present.

If all beads have a yellow-green fluorescence, the beads are properly coated with adherence coating. If some of the beads have a yellow-green fluorescence, the beads are not properly coated and this is a cause for rejection. If no yellow-green fluorescence is seen, adherence coating was not applied and this is a cause for rejection. Beads with the adherence coating applied correctly will give a yellow-green fluorescence.

103.08 Chemical Stability

103.08.01 When the glass beads are exposed to atmospheric conditions, humidity, diluted acid or alkali solutions or paint film constituents, there shall be no dulling of the surface which would adversely affect reflective properties of the beads.

103.08.02 Calcium chloride resistance shall be determined in the following manner:

- Place 10 grams of beads in a 100 ml beaker;
- Cover the sample with 500 ml of calcium chloride (1.0 Normal Solution);
- Let the beads soak for three hours;
- Rinse the beads three times with 100 ml of distilled water and dry;
- Examine the beads under a microscope and compare them with an untreated sample.

103.08.03 Dulling of the surface or other detrimental effects shall constitute failure of this test.

103.09 Toxicity

103.09.01 The glass beads must not exhibit a characteristic of toxicity relative to heavy metals when tested in accordance with EPA 3052, 6010C (Addition to address heavy metal environmental concerns).

103.10 Heavy Metal Concentration

103.10.01 The maximum concentration of contaminants permissible in glass beads shall be as follows:

- Arsenic: 50 mg/kg (50 ppm)
- Lead: 100 mg/kg (ppm)

1.04 PACKAGING

104.01 The glass beads shall be packaged in 1000 kg bulk boxes.

104.02 The 25 kg bags shall be clean, durable and waterproof, consisting of one of the following types:

- woven polypropylene, lined inside with a sprayed polyethylene coating of 0.25 mm thickness,
- 10-ounce jute, with polyethylene liner of 0.50 mm,
- 50 pound basis weight, multi-walled kraft paper, with polyethylene liner of 0.50 mm thickness.

104.03 These bags must be able to withstand handling and storage between packaging and application of the beads, and must be constructed so as to avoid contamination of the beads with foreign materials. Both ends of the bags shall be securely sealed to prevent leakage.

104.04 Bags of glass beads shall be supplied on non-returnable wood pallets, 40-60 bags per pallet, and shall be lashed or secured to the pallet.

104.05 Each wood pallet shall be clearly marked as to:

- Name of product – type of beads.
- Date of packaging.
- Manufacturer's code and batch no.
- Manufacturer's name and address.

- 104.06 The 1000 kg bulk boxes shall contain a clean, durable and waterproof liner.
- 104.07 The boxes must be able to withstand handling and storage and must be constructed so as to avoid contamination of the beads with foreign materials.
- 104.08 The boxes of glass beads shall be supplied on non-returnable wood pallets.
- 104.09 Each wood pallet shall be clearly marked as to:
- Name of product – type of beads.
 - Date of packaging.
 - Manufacturer's code and batch no.
 - Manufacturer's name and address.
- 104.10 The boxes shall be constructed to the following dimensions – approx 100 cm X 100 cm X 70 cm.

1.05 DELIVERY

- 105.01 All glass beads shall be delivered to the respective destination, as specified.
- 105.02 Advance notice of at least 24 hours must be given to the departmental contact indicated to the arrival of each shipment of beads. This advance notice shall include number of bags / boxes of beads and estimated time of arrival, otherwise the beads will be unloaded at the convenience of personnel unloading them. Delivery will be accepted only on non-holiday weekdays, between 8:00 a.m. and 3:00 p.m.
- 105.03 Payment will not be made for any bags of beads which are received in a ripped or otherwise damaged condition, or which are not properly sealed, resulting in a loss of beads.

1.06 SAMPLING

- 106.01 Samples may be taken from shipments at any time. At the discretion of the Owner, the samples may be tested and analyzed by an independent authority or otherwise. Results obtained from the analysis showing nonconformity to this specification shall be cause for rejection of all or a portion of the shipment. When the receiver rejects part or all of a shipment, any further testing requested or required by the supplier shall be at the supplier's expense.

1.07 MEASUREMENT FOR PAYMENT

- 107.01 Measurement for payment shall be the number of kilograms of beads supplied and delivered in accordance with this specification.

1.08 BASIS OF PAYMENT

- 108.01 Payment for Work under this item shall include a separate unit price for each type of bead identified under this specification.

The Department is asking for a standing offer for a period of one year plus an option for an additional year.