



**FINANCE & CORPORATE SERVICES**

FAX 276-4162

Admin. 276-4219      Accounts Receivable 276-4217  
Payroll 276-4137      Purchasing 276-4097  
Tax 276-4145

February 17, 2006

**Re:    REQUEST FOR QUOTATION CONTRACT 2815Q  
      - SUPPLY AND DELIVERY OF READY MIXED CONCRETE**

Your quotation is invited to supply and deliver ready mixed concrete for the City of Richmond's casual requirements for the period April 3, 2006 to April 3, 2007. The approximate annual casual requirement is 2,000 cubic metres plus additives, delivery, etc.

Supply and delivery is on an "as and when" required basis, F.O.B. job site.

Sealed quotations, plainly marked on the envelope:

**CONTRACT 2815Q - SUPPLY AND DELIVERY OF READY MIX CONCRETE**

will be received at the Information Counter, Main Floor, Richmond City Hall, addressed to the Purchasing and Insurance Department, 6911 No. 3 Road, Richmond, BC, V6Y 2C1, until 12:00 noon, Local time:

Friday, March 3, 2006

Quoted prices are to be on a per metric tonne basis and will be firm for the period.

In the event the description shown on the City's form differs from that of your delivery tickets, please modify the City's description to match that shown on your delivery tickets.

Payments will be made to suppliers based on each delivery ticket. Transactions will be posted daily accumulating all the activity from a respective vendor. Cheques will be issued weekly from activity in the proceeding week.

Quotations received will be posted to our casual concrete supply. The City may, throughout the year, call for the supply and delivery of concrete. Please ensure that the materials supplied to the City have been quoted and that a packing slip is left with our representative. **Failure to ensure the materials supplied have been quoted to the Purchasing Department shall result in non payment of invoices for those materials.**

Bidders are advised that submissions of quotes shall be in compliance to the Freedom of Information and Privacy Act.

The lowest or any quotation not necessarily accepted.

For further information contact the undersigned at (604) 244 – 1244.

Yours truly,

Arthur Trinidad  
Buyer

**QUOTATION FORM**

<b>Name of Firm Quoting:</b>	
<b>Address:</b>	
<b>City:</b>	
<b>Phone #:</b>	
<b>Location of Concrete Dispatch Yard:</b>	
<b>Email Address</b>	
<b>Name of Contact:</b>	

**Material Schedule**

ITEM	MATERIAL	UNIT COST	G.S.T.	P.S.T.	TOTAL
714	Concrete 15mm Aggregate Type 10 32 MPA	M3			
715	Concrete 15mm Aggregate Type 30 High Early 32 MPA	M3			
384	Concrete Extruded Curb Mix 32 MPA	M3			

**Note: MPA based on 28 day compressive strength**

**Additives and Trucking Schedule**

ITEM	ADDITIVES & TRUCKING	COSTS	M3	G.S.T.	P.S.T.	TOTAL
385	Concrete - High Early Strength	_____	M3	_____	_____	_____
386	Hot Water	_____	M3	_____	_____	_____
		_____		_____	_____	_____
		_____		_____	_____	_____
		_____		_____	_____	_____
		_____		_____	_____	_____
391	Mixes using 10mm Aggregate	_____	M3	_____	_____	_____
392	Cartage Rate less than 1 M3	_____	Unit	_____	_____	_____
393	Cartage Rate greater than 1.1 M3 less than 2 M3	_____	Unit	_____	_____	_____
394	Cartage Rate greater than 2.1 M3 less than 3 M3	_____	Unit	_____	_____	_____
395	Cartage Rate greater than 3.1 M3 less than 4 M3	_____	Unit	_____	_____	_____
398	Cartage Rate greater	_____		_____	_____	_____

ITEM	ADDITIVES & TRUCKING	COSTS		G.S.T.	P.S.T.	TOTAL
	than 4.1 M3 less than 5 M3		Unit			
399	Cartage Rate greater than 5 M3 less than 6 M3		Unit			
400	Stand by Time		Hour			
401	Move Charge		Unit			
	Lead time required to have concrete on site		Hrs.			
402	Concrete Pumper Truck		Hrs.			
	Concrete Pumping		M3			
403	Non Chloride Accelerator (856 Pozz-U-Teck 20)		Lts.			

SPECIFICATIONS  
Excerpts from City of Richmond "Schedule F"  
Specifications for Installation of  
Concrete Sidewalk, Extruded Curb and  
Combined Curb and Gutter

**SECTION 3 - CONCRETE DESIGN, HANDLING AND TESTING**

**3.1 SCOPE**

These Specifications shall cover material requirements, design, subsequent properties, handling and testing of concrete used for sidewalks, extruded curb and curb and gutter.

**3.2 APPLICABLE STANDARDS**

The latest revisions of the following CSA standards shall apply;

CAN3-A5-M77	Specifications for Portland Cement
CAN3-A23.1-M77	Specifications for Concrete and Materials and Methods of Concrete Construction
CAN3-A23.2-M77	Specification for methods of Test for Concrete

**3.3 MATERIALS**

(a) Cement

The cement shall be Portland cement conforming to CSA A-5, Type 10; upon approval of the Engineer, other types and/or kinds will be permitted.

(b) Fine Aggregate

Fine aggregate (smaller than 10 mm sieve size) for concrete shall conform to CSA A-23.1 Clause 5.3.

(c) Coarse Aggregate

Coarse aggregate (larger than 10 mm sieve size) shall be gravel, crushed stone or slag conforming to CSA A-23.1 Clause 5.4 with maximum size as specified further herein.

(d) Water

The water shall be clean and free from injurious amounts of oils, acids, alkalis, organic materials, sediments or other deleterious substances and shall conform to CSA A-23.1 Clause 4.

(e) Admixtures

Admixtures as specified in CSA A-23.1 Clause 6 may be used by the concrete producer

in order to achieve the qualities of strength, uniformity, durability, workability, acceleration or retardation called for under this Specification or required by job conditions, and only if approved by the Engineer.

(f) Joint Filler

Expansion joint filler shall be of the pre-formed, non-extruded, bituminous type, 14 mm thick, and conforming to ASTM-D1751.

### 3.4 STORAGE OF MATERIALS FOR CONCRETE

(a) Cement

Cement shall be stored so as to prevent deterioration or contamination. Cement which has become caked, partially set or otherwise deteriorated, damaged or contaminated shall be rejected.

(b) Aggregates

The aggregates shall be stored and handled separately so as to preserve the gradation and cleanliness of the material. Segregation and/or contamination are cause for rejection and the deficient material shall be removed and replaced.

### 3.5 DESIGN OF CONCRETES

(a) Control

All concrete shall be controlled concrete in accordance with CSA A-23.1 Clause 18.

(b) Strength and Composition

All concrete shall have a minimum compressive strength of 30 MPa at 28 days. Slump shall be 80 mm and maximum size aggregate shall be 20 mm.

Entrained air content shall be maintained between 2% and 4%.

(c) Bleed Water

The City requires that all concrete supplied present no bleed water. Acceptance/rejection of concrete presenting minimal bleed water will be at the discretion of City Staff. Testing for bleed water is not to be carried out at the required worksite.

(d) Mix Design

The concrete mix design shall be the responsibility of the ready-mix supplier if plant mix is used (preference shall be for use of plant mix concrete), or of the Contractor if he chooses to mix on site in which case he shall be required to employ the services of a recognized independent testing company to do the mix design for him in accordance with CSA A-23.1 Clause 14.



### **3.6 BATCHING AND MIXING**

The materials shall be measured and batched in accordance with the requirements of CSA A-23.1 Clause 18.1 and 18.2. Weigh-batch apparatus for conventional type mixes shall also meet the same requirements.

(1) Plant Mix

Plant Mix concrete shall be used throughout in accordance with CSA A23.1 Clause 18.3.

(b) Site Mix

Site mix concrete may be used only if allowed by the Engineer and then only if method of storing material, batching, mixing material, and type of mixing equipment is approved by the Engineer.

(c) Mixing Time

The concrete shall be mixed until there is a uniform distribution on the materials and shall be discharged completely before the mixer is recharged. For job-mixed concrete the mixer shall be rotated at the speed recommended by the manufacturer and mixing shall be continued for at least two minutes after all materials are in the mixer. For mixers larger than one cubic metre capacity, the minimum mixing time shall be increased 20 seconds for each additional cubic metre of concrete or fraction thereof.

(d) Cold Weather

When the temperature is below, or is likely to fall below, 5 degrees C during the 24 hour period after placing, adequate equipment shall be provided for heating the concrete material. Temperatures of the separate materials, including the mixing water when placed in the mixer, shall not exceed 60 degrees C. When placed in forms the concrete shall have a temperature between 10 degrees C and 32 degrees C.

(e) Hot Weather

In hot weather, delivery of concrete to the job site shall be scheduled such that placement can be made within 15 minutes of its arrival.

### **3.7 TESTING OF CONCRETE**

(a) Testing Company

Concrete testing shall be done by a recognized independent testing company appointed by the Contractor subject to the Engineer's approval and the cost of this testing shall be borne by the Contractor.

(b) Strength Test

Strength tests shall comply with CSA Standard CAN3-A23.1-M77 except that one strength test shall comprise three test cylinders and will be required for each pour or for each 100 cubic metres of concrete. One cylinder shall be tested for ultimate compressive strength at the age of seven (7) days, one at fourteen (14) days and one at the age of twenty-eight (28) days.

The cylinders shall be removed from the site no sooner than twelve (12) hours nor later than twenty-four (24) hours by a representative of the testing company, and cured for the remainder of the time till they are broken under standard conditions of temperature and humidity in accordance with CSA Test Method A23.2-9c and 14c. Field cured cylinders will not be taken except with the express order of the Engineer in accordance with CSA Test Method A23.2-3c.

(c) Slump and Air Content Tests

Tests for air content, carried out in accordance with CSA Test Method A23.2-4c or 7c, and slump (A23.2-6c) shall be taken from each day's pour at the same time that the test cylinders are made and a record shall be kept. The Inspector employed by the testing company shall notify the Engineer immediately if the results of these tests are not in conformity with the Specifications in order that the fault may be corrected at once on the site.

### **3.8 STRENGTH REQUIREMENTS**

The strength level of each class of concrete shall be considered satisfactory if the averages of all sets of three consecutive strength tests for that class of concrete, at one age, equal or exceed the specified strength and no individual strength test is more than 3.5 MPa below the specified strength, in accordance with Clause 17.5 of CSA Standard CAN3-A23.1-M77.

If any of the criteria of the foregoing clause are not met, the Engineer shall have the right to require remedial measures or further tests as outlined in Clause 17.6 of the foregoing CSA Standard.