

CALL FOR TENDERS

Contract T.2780

Contract: Design-Build Steveston Water Park

The City of Richmond invites tenders for a design-build Construction Project at the above location. Work under the Contract generally comprises:

the design and construction of a Water Play Area of approximately 690 square metres, and the supply and installation of all Water Play components and all associated Operating System Equipment. This water park is to be located in Steveston, BC on the south side of Lulu Island in the City of Richmond.

The *Contract Documents* are available on or after February 9, 2006 during normal business hours at Front of House of the Richmond City Hall at:

6911 No. 3 Road, Richmond, BC, V6Y 2C1

on payment of a **non-refundable** amount of \$50.00 including GST payable to:

City of Richmond

The *Contract Documents* are available for viewing at:

Front of House, Richmond City Hall, 6911 No. 3 Road, Richmond and City of Richmond Parks Department, 5599 Lynas Lane, Richmond, BC.

Tenders are scheduled to close at:

Tender Closing Time: 3:00 PM local time

Tender Closing Date: February 28, 2006 and will be opened publicly immediately thereafter in Richmond City Hall

Tender Submission Address: Manager – Purchasing & Risk
Front of House, Richmond City Hall
6911 No. 3 Road, Richmond, BC, V6Y 2C1

A valid tender consists of a submission delivered on time complete with the required Bid Bond, Undertaking of Surety and Undertaking of Liability Insurance.

The lowest or any tender will not necessarily be accepted.

Manager – Purchasing & Risk



City of Richmond

6911 No. 3 Road
Richmond, BC V6Y 2C1

Fax Cover Sheet

To:	Name: To Those Companies	File: 02-0775-20-T.2780/Vol 01
	Company: Receiving Copies of	Date: February 22, 2006
	Tender T.2780 - Design-Build	Fax: Various
	Steveston Water Park	
From:	Department: Finance & Corporate Services	Phone: 604-276-4287
	Division	
	Name: David Phipps	Fax: 604-276-4162
	Supervisor, Purchasing	

If you have any problems with this fax, contact: David Phipps at 604-276-4287

Total no. of pages, including cover sheet: 1

Mailed original to follow: No

urgent

for your action

Subject: Request for Tender – Contract T.2780 – Design-Build Steveston Water Park

Addendum Number 1

Page 18 – Owner’s Statement of Requirements

3.4 Utility Coordination

The City will provide all utility services; the sanitary and water supply stubbed out at the property line and the electrical supply to a mutually agreed upon location for connection to the water park systems

Please replace this statement with the following:

3.4 Utility Coordination

The City will provide all utility services; the sanitary, water supply and electrical supply will be extended and stubbed out by the City to a mutually agreed upon location in the vicinity of the water park.

We apologise for any inconvenience that this may cause you and look forward to hearing from you on or before 3:00pm, local time, on Tuesday, February 28, 2006.

Sincerely,

David Phipps
Supervisor, Purchasing
City of Richmond

Tel: 604-276-4287 / e-mail: purchasing@richmond.ca

IMPORTANT - CONFIDENTIAL INFORMATION

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. Any other distribution, copying, or disclosure is strictly prohibited. If you have received this message in error, please notify us immediately by telephone and return the original transmission to us by mail without making a copy.
1770678





City of Richmond

6911 No. 3 Road
Richmond, BC V6Y 2C1

Fax Cover Sheet

To:	Name: To Those Companies	File: 02-0775-20-T.2780/Vol 01
	Company: Receiving Copies of Tender	Date: February 22, 2006
	T.2780 - Design-Build	Fax: Various
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From:	Department: Finance & Corporate Services	Phone: 604-276-4287
	Division	
	Name: David Phipps	Fax: 604-276-4162
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Subject: Request for Tender – Contract T.2780 – Design-Build Steveston Water Park

Addendum Number 2

The following questions were received as a request for clarification and the subsequent responses are being provided to all parties obtaining copies of the Tender Document.

Question Number 1

On page SC1, the indemnification clause of the standard CCA 14 document has been deleted and replaced. The concern with the replacement working is that there is no limitation as to the exposure. I have attached a copy of the standard clause which under 12.1.2 limits the obligations to the coverages and limits agreed to be provided under GC 11.1 Insurance. In the case of this Richmond Tender, that would limit your indemnification to the \$5,000,000 as specified on the same SC1 page. If this is not amended in the documents your surety may well instruct us to add clauses to the bonds which limit or remove this situation as well as instruct or request you to do likewise in your tender submission.

Response to Question Number 1

This clause details the required indemnification and insurance to be provided. In the event a contractor determines additional insurance is required over the stated \$5 million limit, it is the responsibility of the Contractor to obtain the additional insurance coverage necessary for their own protection and to fulfil its obligations under the contract.

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1770732



Question Number 2

Page 19 of the documents raises some other questions. Firstly, is there any expectation of contaminated soil? What was the site previously? If discovered, will you bear any responsibility whatsoever for insuring any aspect of this exposure? Getting insurance extensions for this may prove difficult? Secondly, under Life Cycle, they state the facility must be designed and constructed on an "energy efficient, low maintenance" cost basis. What are the parameters for this? We do not want to be extending coverage under bond for efficiency guarantees, especially with long term obligations.

Response to Question Number 2

The site has been used for agriculture and park purposes only. We do not expect any contaminated soil. Section 3.8 Environmental Impacts states "Should contaminated soil be revealed over the course of the contract, impact on project schedule and the cost of removal and remediation will be born by the City of Richmond."

Question Number 3

Life Cycle requirements also refer to various elements of the work having up to a 25 year life cycle expectations. The Surety will cover no more than 2 years warranty under the bonds anyway but at the same time would not want to see you providing company guarantees for such long periods. Are these assertions to be restricted to manufacturer component guarantees? The warranty section seem to be following the CCA 14 document and I would assume therefore that the requirement is only for 1 or 2 years.

Response to Question Number 3

The purpose of the Life Cycle requirements is to establish the owner's expectations for the quality and durability of the design, materials and products. That is, the facility can be reasonably expected to perform, with appropriate maintenance, to meet the conditions under which the facility will be used for a reasonable period of time. This does not supersede the warranty requirements which address design and manufacturer's defects as per CCA Document 14 -1997.

We apologise for any inconvenience that this may cause you and look forward to hearing from you on or before 3:00pm, Local Time, on Tuesday, February 28, 2006.

Sincerely,

David Phipps
Supervisor, Purchasing
City of Richmond
Tel: 604-276-4287
E-mail: purchasing@richmond.ca



City of Richmond

6911 No. 3 Road
Richmond, BC V6Y 2C1

Fax Cover Sheet

To:	Name: To Those Companies	File: 02-0775-20-T.2780/Vol 01
	Company: Receiving Copies of Tender	Date: February 23, 2006
	T.2780 - Design-Build	Fax: Various
	Steveston Water Park	
From:	Department: Finance & Corporate Services	Phone: 604-276-4287
	Division	
	Name: David Phipps	Fax: 604-276-4162
	Supervisor, Purchasing	

If you have any problems with this fax, contact: David Phipps at 604-276-4287

Total no. of pages, including cover sheet: 1

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Subject: Request for Tender – Contract T.2780 – Design-Build Steveston Water Park

Addendum Number 3

The Richmond Health Department has informed the City of Richmond of the requirement for water treatment in "spray parks" to be to potable water standards. All potential Tenderers will therefore be required to include in their tenders the following:

1. The total cost of a Supplementary Water Treatment System to meet the standards as outline in the Richmond Health Department's regulations for potable water. Please include this as a separate line item cost for budgetary purposes and also include this figure in the Total Tendered Amount on page IV of the Tender Documents.
2. All Tenderers are required to include a complete description of the Supplementary Water Treatment System outlining the type of system used, the manufacturer, and the method used to integrate it with the water park system.

Please also Note: In order to allow bidders sufficient time to address the requirements of this addendum, the tender closing date will be extended as follows:

Revised Tender Closing - Tuesday, March 7, 2006 at 3:00 pm, local time.

We apologise for any inconvenience that this may cause you and look forward to receiving your Tenders on or before 3:00pm, Local Time on Tuesday, March 7, 2006.

City of Richmond Purchasing

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1772163





City of Richmond

6911 No. 3 Road
Richmond, BC V6Y 2C1

Fax Cover Sheet

To:	Name: To Those Companies	File: 02-0775-20-T.2780/Vol 01
	Company: Receiving Copies of Tender	Date: March 6, 2006
	T.2780 - Design-Build	Fax: Various
	Steveston Water Park	

From:	Department: Finance & Corporate Services	Phone: 604-276-4287
	Division	
	Name: David Phipps	Fax: 604-276-4162
	Supervisor, Purchasing	

If you have any problems with this fax, contact: David Phipps at 604-276-4287

Total no. of pages, including cover sheet: 13

Mailed original to follow: No

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for your action

Subject: Request for Tender – Contract T.2780 – Design-Build Steveston Water Park - Addendum Number 4

Please note the following 5 revisions (Addendum Number 4) to the Tender Document, Design-Build Steveston Water Park Project:

Page IV Form of Tenders

- This has now been split into Option A and Option B, revised page attached

Page 1 Table of Contents

- This has now been revised to include the addition of a Schedule of Quantities and Prices as well as additions to the Owner's Statement of Requirements. Revised page is attached.

Page 3 (NEW) Schedule of Quantities and Prices

- This was added so that Option A and Option B could be quoted separately. New page is attached

Page 17 Owner's Statement of Requirements

- This changes from previous page 16 and includes additional information highlighted in bold relating to two Options required for this Tender Document. The revised Owner's Statement of Requirements has been attached. Changes are as follows:

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1777604



- **Item 1.1** – addition of Option 1 and Option 2 Statements (Page 17)
- **Item 2.1** – addition of Option B (Page 17 & 18)
- **Item 5.8.2** – addition of “For Option A Only” (Page 22)

Please Note – Revised Tender Closing Date

Request for Tender T.2780 – Tuesday, March 14, 2006 at 3:00pm, Local Time.

We apologise for any inconvenience that this may cause you and look forward to receiving your submissions on or before 3:00pm, local time on Tuesday, March 14, 2006.

Sincerely,

David Phipps
Purchasing Supervisor
City of Richmond
Tel: 604-276-4287
E-mail: purchasing@richmond.ca

FORM OF TENDER

Manager - Purchasing & Risk
City of Richmond
6911 No. 3 Road
Richmond, BC V6Y 2C1

The undersigned Tenderer, having carefully read and examined the Instructions to Tenderers, Form of Tender, Security Requirements, Form of Tender Annexures, the Agreement, General Conditions of the Contract, Supplemental Conditions of Contract, Owner's Statement of Requirements, Drawings and Addenda # ___ to Addenda # ____, hereby agrees to the same, and having carefully examined the locality and the site of the work, and having full knowledge of the work required and of the materials to be furnished and used, does hereby tender and offer to enter into a Contract to perform and complete the whole of the said Design-Build work and provide all necessary labour, plant, tools and materials, as set forth and in strict accordance with the Owner's Statement of Requirements, Drawings and other Contract Documents, and to do all therein called for on the terms and conditions and under the provisions therein set forth at the

TOTAL TENDERED AMOUNT OF:

Option A \$ _____ INCLUSIVE OF GST

Option B \$ _____ INCLUSIVE OF GST

The undersigned Tenderer agrees to complete the whole of the works within Thirteen (13) Weeks following award of contract

The undersigned Tenderer hereby agrees that the said Total Tendered Amount include and cover all applicable duties, Federal and Provincial taxes, handling charges incidental to and forming part of this Contract.

The undersigned Tenderer hereby agrees with the conditions thereof and encloses herewith either:

- a) a TENDER DEPOSIT in the form of a CERTIFIED CHEQUE made payable to the City of Richmond (hereinafter referred to as the Owner) in the amount not less than 10% of the TOTAL TENDERED AMOUNT as tendered herein.

OR

- b) a BID BOND on a form approved by the Insurance Bureau of Canada in the amount not less than 10% of the TOTAL TENDERED AMOUNT tendered herein, issued by a Surety Company licensed to conduct business in the Province of British Columbia and approved by the City,

The TENDER DEPOSIT, or BID BOND, shall be forfeited to the Owner as liquidated damages and not by way of penalty in accordance with the conditions specified on the form of Bid Bond as specified herein, if the undersigned Tenderer declines or neglects to execute the Contract; to submit to the City a copy of the required Performance Bond as specified herein in the amount not less than 50% of the TOTAL TENDERED AMOUNT tendered herein, issued by a Surety Company licensed to conduct business in the Province of British Columbia and approved by the Owner; to submit to the Owner a copy of the required Labour and Materials Payment Bond as specified herein in the amount not less than 50% of the TOTAL TENDERED

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SCHEDULE OF QUANTITIES AND PRICES

The City shall pay in lawful money of Canada the amount shown for the following items subject to the conditions of the Contract Documents.

Option A: Design-Build Steveston Water Park with Supplemental Water Treatment Facility

ITEM	DESCRIPTION	EXTENSION
1	Design-Build Steveston Water Park as per Request for Tender T.2780	\$ _____
	Addendum Number 3 – requirements for Supplemental Water Treatment Facility.	\$ _____
	GST	\$ _____
	Total Quoted Amount (Carried forward to Tender Form – Option A)	\$ _____

Option B:

ITEM	DESCRIPTION	EXTENSION
1	Design-Build Steveston Water Park as per Request for Tender T.2780	\$ _____
	Addendum Number 4 – removal of requirement for re-circulating Water System and/or Supplemental Water Treatment Facility.	(\$ _____)
	GST	\$ _____
	Total Quoted Amount (Carried forward to Tender Form – Option B)	\$ _____

OWNERS STATEMENT OF REQUIREMENTS

1. Introduction

1.1. Nature of the Project

The City of Richmond will be the beneficiary of a new community facility. The Project located at 4111 Moncton Street in Steveston Park, will include:

- a water park divided into two areas; a 485 sq. m. school age area and a 205 sq. m. pre-school area,
- a concrete surface graded to allow for shallow channels of running water during water park operation, and
- **Option 1 - an efficient recirculation and water treatment system.**
- **Option 2 - a direct supply system using potable water, draining directly to the sanitary sewer.**

1.2. Purpose of the Owners Statement of Requirements

The City is issuing this Tender and Owners Statement of Requirements to maintain a uniform construction standard for the Project and to encourage sustainable initiatives.

Therefore the Project should reflect the following:

- Designing and constructing a water park facility, which meets, and preferably exceeds, the performance standards specified herein.
- Obtaining all necessary regulatory and other approvals relating to the Project, except as otherwise set out in the Contract Documents.
- Cooperating and coordinating with the City during the Project Term.

2. Project Definition

2.1. Description of Project

The Contractor will be responsible for the following aspects of the Project:

Option A

- detailed design of the water park,
- technical specifications and construction documents
- supply and installation of water park components
- supply and installation of operating, recirculating and water treatment systems,
- design and construction of concrete water park surface paving
- coordination with City constructed park elements surrounding the water park

Option B

- **detailed design of the water park,**
- **technical specifications and construction documents**

- **supply and installation of water park components**
- **supply and installation of operating system,**
- **design and construction of concrete water park surface paving**
- **coordination with City constructed park elements surrounding the water park**

2.2. Description of Works

The Contractor will be required to design and construct, over the Project Term, the Facility and all works constructed within the Lands for the Project Term.

The Contractor will be responsible for the Project including, but not limited to, the following:

- Provision of final grading, and base material
- Provision of all structures and fixtures required to provide for the Water Park elements.
- Provision of all mechanical and electrical work required to make the Facility fully functional.
- Provision of all other associated works within the Lands required to provide a fully operational Facility.

2.3. Regulatory Relationships and Approval Objectives

It shall be the Contractors duty to initiate, take over or carry out all work needed to achieve regulatory approvals relating to the Facility.

2.4. Project Timing Objectives

Substantial Completion of the Work must be on or before June 1, 2006. If there are foreseeable problems with the project timing, provide an alternate schedule including the rationale for the proposed timing.

3. Design and Construction Requirements

3.1. General Requirements

The purpose of this section is to ensure that a full understanding exists between the City and the Contractor regarding the design-build phases of the Project without limiting the prior description of the works to be provided, the Contractor will supply all design, materials, plant equipment and labour to create a finished Facility.

3.2. Design and Construction Delivery Plan

The Contractor is required to provide the following:

- Adequate design and construction drawings to demonstrate the breadth and quality of the works proposed in sufficient detail to permit an evaluation of their reasonableness and achievability.

- A clear technical description of the proposed design, highlighting how the design meets or exceeds the City's objectives and complies with all regulatory and code requirements.
- Descriptions of the various major equipment components and their manner of operation.
- A construction procedure and schedule, including details of the proposed Facility design and construction team. The construction procedure should describe the methods to be used for construction in a high groundwater environment.

3.3. Design Criteria

Section 5 outlines the performance requirements to be used to develop the design parameters for the Facility. The Tender must include evidence that the design and construction of the Facility follows best practices of the professions, manufacturers and trades involved, and meets or exceeds the requirements of all industry, legislative and regulatory codes, standards and requirements.

3.4. Utility Coordination

The City will provide all utility services; the sanitary and water supply stubbed out at the property line and the electrical supply to a mutually agreed upon location, for connection to the water park systems.

3.5. Third Party Inspections

The Contractor shall address the issue of third party inspections required in connection with the Project by City departments, utilities, agencies and other government bodies. The Contractor shall be responsible for coordinating and bearing all costs associated with these inspections.

3.6. Commissioning

Upon completing the Facility the Contractor will advise the City of its intention to Commission the Facility. This will require testing all systems and equipment until the necessary approvals from all regulatory bodies are obtained, at which time the Contractor will advise the City that the Project is ready for use.

3.7. Public Convenience and Safety

During the course of construction, the Contractor shall ensure that all works within the Lands are safe according to applicable standards. The Contractor will install temporary fencing to prevent public access to the Project and due diligence shall be exercised by the Contractor to prevent unauthorized entry to the Project

The Contractor shall meet the laws and by-laws of the City and the Province of British Columbia's Ministry of Environment, or its successor, regarding: noise, hours of work, ensuring that local roads are free of construction debris due to haulage and the posting of adequately illuminated signs and lamps to warn of danger with respect to access to

the lands. Further, the Contractor will ensure that all signage is consistently and professionally presented at least in the English language.

The Contractor will keep all portions of the work properly and successfully drained and ensure that any ensuing runoffs do not cause damage beyond the Lands.

3.8. Environmental Impacts

The Contractor will be responsible for ensuring that all environmental issues are satisfactorily dealt with during the design, construction and operating phases of the Project and for the duration of the Project Term.

The City of Richmond has determined that an environmental assessment of the site is not required. Should contaminated soil be revealed over the course of the contract, impact on project schedule and the cost of removal and remediation will be born by the City of Richmond.

3.9. Life Cycle

The Facility must be designed and constructed on an energy efficient, low maintenance cost basis with a life for:

- Structural elements of at least 25 years.
- Mechanical components of at least 15 years.
- Electrical/instrumentation items of at least 15 years.
- With no major overhauls or replacements anticipated during the first 15 years.
- Items that have a life cycle of less than 20 years must be clearly identified.

The Contractor will include a fully detailed lifecycle costing that will contain costs of the design and construction of the Facility.

4. City Provided Items

4.1. Site Preparation

The City will provide a cleared, level site on or before Monday, March 27, 2006.

Water, and sanitary services will be supplied to the park property line to the south on Moncton Street, electrical supply to a mutually agreed upon location within the park.

4.2. Site Information

The City will provide digital base plans in AutoCAD v.2000 format including all current survey information.

The City will provide the Steveston Community Park Water Park Concept Plan L-01 with the Tender Packages to assist with the design phase.

4.3. Public Consultation

The City will facilitate up to 3 (three) meetings with a designated community steering committee to provide input during design phase.

5. Performance Requirements

5.1. Approvals, Design, Codes:

- 5.1.1 Contract documents are to be prepared in accordance with CCA Document 14 - 1997, the City of Richmond Zoning By-laws and Regulations, the Ministry of Health, the Ministry of the Environment and other authorities having jurisdiction.
- 5.1.2 Include submission, approval and payment for all necessary permits, fees and licenses from authorities having jurisdiction.

5.2. Sustainable Development

- 5.2.1 Consideration should be given to the effects of the Project on the ecology and environment as well as the harmful impact site and building may have on occupants.
- 5.2.2 The Design-Builder shall give full consideration in their design concept to providing Public and Personal Safety in/on and around the completed Water Park Facility, including, but not limited to the prevention of vandalism and graffiti.

5.3. Accessibility

- 5.3.1 The water park shall be designed and constructed to be accessible to the fullest extent possible including wheelchairs and persons with visual impairment.

5.4. Water Park Design

- 5.4.1 The contractor will design the water park in consultation with the Steveston Water Park Committee and with City staff to understand current conditions at Steveston Park and to obtain community input on configuration and selection of water park elements.
- 5.4.2 The contractor is responsible for detailed design of the water play area including all mechanical, electrical and plumbing systems; layout of water play elements; contour of ground plane as per community input and conforming to health and safety regulations and standards.
- 5.4.3 The design and specifications for the water park must resolve the issues related to the high water table at the site.
- 5.4.4 Coordinate with City construction supervisors with regard to grading, drainage and paving of the surrounding park areas being constructed by City forces.

5.5. Drawings and Documentation

- 5.5.1 Maintain one set of white prints, including all supplementary and revision drawings on site, solely for the purpose of recording, in red, any change and/or deviation from the Contract drawings as it occurs. Include elevations and detailed locations of buried services. The Record Drawings Prints shall be available at all times.

5.5.2 Specifications will be provided by the contractor for all materials including water play area surface, water play elements, mechanical, electrical and plumbing systems.

5.5.3 At the completion of the work, submit the record drawings for approval and then update drawings in AutoCAD v. 2000 format or later, and certify that the drawings are accurate and complete. Deliver AutoCAD drawing files and a set of prints to the Owner.

5.6. Construction And Workmanship

5.6.1 Materials and workmanship to comply with recognized Canadian Construction Standards wherever possible. Where no standards are applicable, professional workmanship to be to best industry standards.

5.6.2 In accordance with GC3.13, all containers, surplus materials, tools and equipment used in the work, and clean up (remove from site) all cuttings, packing, crating, debris and refuse, and leave the site in a clean and orderly condition.

5.7. Operations & Maintenance

5.7.1. Ease of Operations: Provide facility, equipment, and systems that are easily operated by personnel with a reasonable level of training for similar activities.

5.7.2. Ease of Maintenance: Minimize the amount of maintenance required.

5.7.3. Ease of Repair and Replacement: Provide equipment and systems that are easily repaired and/or easily replaced by the manufacturer.

5.8. Equipment Specifications

5.8.1 The Contractor shall supply and install all water play components as determined through consultation with City staff and the community.

5.8.2 **For Option A only** - Supply and installation of a recirculating water park operating system including water treatment in an underground vault system shall be as per manufacturer's specifications.

5.9. Cast-in-Place Concrete

5.9.1 Reference Standards: Do concrete work in accordance with CANICSA-A23. I-Nil, Concrete Materials and Methods of Concrete Construction.

5.9.2 Layout construction and control joints to minimize random cracking. Joints to be coincident with design features or water park components where possible. If reinforced, joint spacing to be in accordance with Portland Cement Association recommendations.

5.9.3 All concrete surfaces to have a non-slip finish.

5.9.4 Cure slabs using a water cure by covering the slab immediately after finishing with burlap and keep burlap soaked for 72 hours minimum.

5.10 Plumbing Systems

5.10.1 Work and material shall comply with the following current regulations and authorities

- B.C. Fire Marshal
- BC Worksafe Board
- BC Electrical Code
- MMCD

5.10.2 Provide all labour and materials for a complete and operational in-ground plumbing system

5.10.3 All materials to be new and conform to the standards of the Canadian Standards Association.

5.10.4 Piping to be schedule 80 PVC designed for solvent welding.

5.10.5 Drains and Valve Boxes to be installed flush with finish grade.

5.11 Mechanical Systems

5.11.1 The mechanical work shall include all material, labour and equipment required for the design, installation, testing and placing in initial operation of the mechanical systems for the water park.

5.11.2 Performance and Reliability: The systems must perform to provide the required and desired environment.

5.11.3 Energy and Water Conservation: Economy of operation is a foremost consideration. Systems will be designed to be adjusted for peak and low-use periods and to be shut down and winterized.

5.12 Miscellaneous Mechanical Requirements

5.12.1 All equipment and their components shall have a visible manufacturer's nameplate, which shall indicate the manufacturer's name and the model number, serial number, capacity data, electrical characteristics and approval stamps.

5.12.2 Use of installed equipment during construction shall not shorten or alter the guarantee period as specified in the Contract. Guarantee period shall start from the date of substantial completion.

5.12.3 All work shall be readily accessible for adjustment, operation and maintenance.

5.12.4 All piping, equipment and components, shall be labeled for identification. Follow

existing labeling standards and color-coding.

5.12.5 All work shall be inspected and tested prior to concealment.

5.12.6 Systems shall be maintained in full operation during the complete testing and balancing period.

5.13 Miscellaneous Electrical Requirements

5.13.1 Provide all labour and materials for complete and operating electrical systems as specified herein. Any work, even if not specified or shown on the drawings, which are obviously necessary or reasonably implied to complete the work, is to be provided as if both shown and specified.

5.13.2 These documents are preliminary in nature and are intended to indicate the general requirements only. Utilize these documents as a guide.

5.14 Standards of Material and Workmanship

5.14.1 Where reference is made to Standards and Specifications such as EEMAC, NEMA, GSA, LPCEA, ULC, etc. the latest editions and revisions of such standard specifications are to apply.

5.15 Warranty

5.15.1 Warranty information shall be in accordance with CCA Document 14 – 1997, GC 12.3 Warranty.