



Travaux publics et  
Services gouvernementaux  
Canada

Public Works and  
Government Services  
Canada

**CROSS SECTIONS AND LONGITUDINAL  
TRANSITION  
REPLACEMENT OF RESCUE LADDERS  
BAIE-COMEAU WARF**

**SPECIFICATIONS**

**RÉF. : R.082935.001 AND R.082074.001  
N/D : 5792**



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<b>SUIVI DES MODIFICATIONS</b>			
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**1 GENERAL****1.1 WORK SEQUENCE**

- .1 Construct Work in stages to accommodate the Departmental Representative's use of premises during construction.
- .2 Co-ordinate Progress Schedule [and co-ordinate with the Departmental Representative Occupancy during construction.
- .3 Construct Work in stages to provide for continuous public usage. Do not close off public usage of facilities until use of one stage of Work will provide alternate usage.
- .4 Maintain fire access/control.

**1.2 CONTRACTOR USE OF PREMISES**

- .1 Overall, the contractor shall plan and coordinate its work in such a way to allow the continuity of operation on the installation (all the federal warf).
- .2 Regularly communicate with the harbor director (418-796-4296) to be informed of expected traffic affected by the works.
- .3 No work allowed on the following days where cruise ships are already scheduled in berth 1 and 2 (september 15, 23 and 27 and October 3, 5, 7, 9, 17 and 19, see Appendix A – On September 15<sup>th</sup>, the cruise ship "Pearl Must" will be anchored or in station 3 and 4).
- .4 During those periods, the contractor may station its equipment at the extremity of berth 1, river side (exact location to be determined with the government representative), the warf shall be clean and secure for pedestrians and vehicules.
- .5 Other than cruise ships, there will be some fuel and repair supply ships (based on logs 1 to 2 ships per month).
- .6 Request of current regulations in public harbors.
- .7 Comply with signalling and access control on site.
- .8 Emit a navigation notice for works in water.
- .9 Find additional storage space required to the execution of work under this agreement and assume all charges.
- .10 Respect the load carrying capacity of warf estimated at 30 kPa or CL-625 truck.

- .11 Coordinate works with these of other construction if needed.
- .12 Limit construction site to all berth 1 and 2 (control to be made at junction of station 2 and 3).

### **1.3 OCCUPANCY BY THE DEPARTMENTAL REPRESENTATIVE**

- .1 The Departmental Representative will occupy premises during entire construction period for execution of normal operations.
- .2 Co-operate with the Departmental Representative in scheduling operations to minimize conflict and to facilitate the Departmental Representative usage.
- .3 The ship schedule is shown in Appendix A. No work is permitted in the presence of cruise ships.

### **1.4 PARTIAL OCCUPANCY BY THE DEPARTMENTAL REPRESENTATIVE**

- .1 Schedule and substantially complete designated portions of Work for the Departmental Representative's occupancy prior to Substantial Performance of entire Work.
- .2 Execute Certificate of Substantial Performance for each designated portion of Work prior to the occupancy by the Departmental Representative. Contractor shall allow:
  - .1 Access for the Departmental Representative personnel.
  - .2 Use of parking facilities.
- .3 Execute Partial Interim Certificate of Completion for each designated portion of Work prior to the Departmental Representative occupancy. Contractor shall allow:
  - .1 Access for the Departmental Representative personnel.
  - .2 Use of parking facilities.

### **1.5 ALTERATIONS, ADDITIONS OR REPAIRS**

- .1 Execute work with least possible interference or disturbance to normal use of premises. Arrange with Departmental Representative to facilitate execution of work.

### **1.6 REQUIRED DOCUMENTS**

- .1 Maintain at job site, one copy each document as follows:

- .1 Contract Drawings.
- .2 Specifications.
- .3 Addenda.
- .4 Reviewed Shop Drawings.
- .5 List of Outstanding Shop Drawings.
- .6 Change Orders.
- .7 Other Modifications to Contract.
- .8 Field Test Reports.
- .9 Copy of Approved Work Schedule.
- .10 Health and Safety Plan and Other Safety Related Documents.
- .11 Other documents as specified.

## **2 PRODUCTS**

### **2.1 NOT USED**

- .1 Not Used.

## **3 EXECUTION**

### **3.1 HARBOR DUES EXEMPTION FOR CONTRACTOR**

- .1 During the contract period and exclusively within the frame work or the current construction works, the contractor will be exempt of all public harbor and public harbor installation dues from Transport Canada, which are mooring, storage (site determined by government representative), harbor, wharfage and transfer applicable dues for the maritime installations within the current construction works.

**1 GENERAL****1.1 RELATED REQUIREMENTS**

- .1 Not used.

**1.2 ACCESS AND EGRESS**

- .1 Design, construct and maintain temporary "access to" and "egress from" work areas, including, runways, ladders and scaffolding, independent of finished surfaces and in accordance with relevant municipal, provincial and other regulations.

**1.3 USE OF SITE AND FACILITIES**

- .1 Execute work with least possible interference or disturbance to normal use of premises. Make arrangements with Departmental Representative to facilitate work as stated.
- .2 Maintain existing services to building and provide for personnel and vehicle access.
- .3 Where security is reduced by work provide temporary means to maintain security.
- .4 Closures: protect work temporarily until permanent enclosures are completed.

**1.4 EXISTING SERVICES**

- .1 Notify, Departmental Representative and utility companies of intended interruption of services and obtain required permission.
- .2 Provide for pedestrian and vehicular traffic.
- .3 Construct barriers in accordance with Section 01 56 00 - Temporary Barriers and Enclosures.

**1.5 SPECIAL REQUIREMENTS**

- .1 Submit schedule in accordance with Section 01 33 00 – Submittal procedures.
- .2 Ensure Contractor's personnel employed on site become familiar with and obey regulations including safety, fire, traffic and security regulations.
- .3 Keep within limits of work and avenues of ingress and egress.

**1.6 SECURITY**

- .1 Where security has been reduced by Work of Contract, provide temporary means to maintain security.

**1.7 NO SMOKING ENVIRONMENT**

- .1 Comply with smoking restrictions.

**2 PRODUCTS****2.1 NOT USED**

- .1 Not Used.

**3 EXECUTION****3.1 NOT USED**

- .1 Not Used.

**1 GENERAL****1.1 MEASUREMENT METHOD**

- .1 The Contractor shall, within ten (10) days after receiving an acceptance notice for the contract, provide cost breakdown for global units items.
- .2 The Contractor shall provide, within ten (10) days after receiving an acceptance notice for the contract, a list of equipment and the hourly rates for each of the equipment available for the works.
- .3 The Contractor shall, within ten (10) days after receiving an acceptance notice for the contract, provide a list of hourly rates for his staff.
- .4 The lump sum prices will include, but not limited to, leasing, equipment installation, equipment, tools, labour, administrative costs, profit, funding, expenditure for work even if not specifically defined either in the plan, or specifications or any other tender documents, but considered necessary so as to conform to best practices.
- .5 All work described in this specifications, or presented in the plans, or necessary for the completion of all the work specified herein, but not defined as a separate item requiring a fixed rate, will be considered as directly or indirectly linked to the overall purpose of the contract and no separate payment will be made for any of these works; the cost of any work that is directly or indirectly linked to the aim of this contract must however be included in the prices quoted in the tender.
- .6 The method used to measure labour, tools or materials for the contract will be as follows:
  - .1 Lump sum works: such jobs will be appraised as a global unit. They include, but are not limited to:
    - .1 Item 1.1 - Mobilization and demobilization
      - .1 This item will be measured as a global unit and will include all costs related to the transportation and handling of all equipment and construction of facilities.
      - .2 This item will be paid following a 50% proportion at the beginning of the contract and 50% after premises have been returned to pre-work state and the final cleaning. If some equipment are to be demobilized before the end of the contract, a justified payment may be done upon approval from the Departmental Representative.

.2 Item 1.2 - Site organization

.1 This item will be measured as a global unit and will include, but not be limited to, the following:

- .1 Surety and administrative charges;
- .2 Investigation, planning, management and supervision;
- .3 Permits and request for authorization (municipal, provincial and federal);
- .4 Management of general waste that is not included in other items;
- .5 Bills for temporary public services (electricity, telephone, Internet, water, etc.);
- .6 Supply and construction of temporary fences around construction sites and dismantling them around the different areas (construction site, assembly, storage, etc.);
- .7 Temporary installations at construction sites;
- .8 Tidiness at the construction site and final cleaning;
- .9 Security services, signallers, guards, etc.;
- .10 All components under section 01 of the specifications. It also includes works indicated in the plans and specifications for which payment was not designated in another measured item.

.2 This item will be paid in proportion of completed work, following bid form costs. The value of this item shall, at no time, go beyond 5% of the total cost for the bid.

.3 Item 1.3 - Demolition

.1 This item will be measured as a global unit and will include, but not be limited to, the following:

- .1 Demolition of concrete and asphalt for reconstruction of cross sections and longitudinal transition.

- .2 This item also includes disposal of non-recovered materials from the demolition site, following applying regulation.
- .4 Item 1.4 – Cross sections
  - .1 This item will be paid as a global unit and will include fabrication and installation of all 4 concrete cross sections, berth 2 harbor side, construction joints included ( $\pm$  212 m).
  - .2 The tendered price will include the cost for all labour, machinery, transportation and materials needed for the fabrication and final installation of cross sections.
- .5 Item 1.5 – Longitudinal transition
  - 1 This item will be paid as a global unit and will include fabrication and installation of 5 longitudinal transition in the center of berth 2.
  - .2 The tendered price will include the cost for all labour, machinery, transportation and materials needed for the fabrication and final installation of longitudinal transition.
- .6 Item 2.1 – Mobilization and demobilization
  - .1 This item will be measured as a global unit and will include all costs related to the transportation and handling of all equipment and construction of facilities.
  - .2 This item will be paid following a 50% proportion at the beginning of the contract and 50% after premises have been returned to pre-work state and the final cleaning. If some equipment are to be demobilized before the end of the contract, a justified payment may be done upon approval from the Departmental Representative.
- .7 Item 2.2 – Site organisation
  - .1 This item will be measured as a global unit and will include, but not be limited to, the following:
    - .1 Surety and administrative charges;
    - .2 Investigation, planning, management and supervision;

- .3 Permits and request for authorization (municipal, provincial and federal);
  - .4 Management of general waste that is not included in other items;
  - .5 Bills for temporary public services (electricity, telephone, Internet, water, etc.);
  - .6 Supply and construction of temporary fences around construction sites and dismantling them around the different areas (construction site, assembly, storage, etc.);
  - .7 Temporary installations at construction sites;
  - .8 Tidiness at the construction site and final cleaning;
  - .9 Security services, signallers, guards, etc.;
  - .10 All components under section 01 of the specifications. It also includes works indicated in the plans and specifications for which payment was not designated in another measured item.
- .2 This item will be paid in proportion of completed work, following bid form costs. The value of this item shall, at no time, go beyond 5% of the total cost for the bid.
- .8 Item 2.3 – Demolition and material recovery on the sea bed
- .1 This item will be measured as a global unit and will include, but not limited to, the following:
    - .1 4 ladders to be dismantled on the sea side face of the warf at berth 1 and 2.
    - .2 4 steel plates and angles to be dismantled on the sea side face of the warf at berth 1 and 2.
    - .3 4 steel plats (4' x 8') to be recovered on the sea bed, sea side, berth 1 and 2.
    - .4 4 ladders to be recovered on the sea bed, sea side, berth 1 and 2.

- .5 The concrete demolition for the installation of 16 new grates, sea side, berth 1 and 2.
- .6 Material disposal according to current regulations.
- .7 Cutting the anchors to be flush with the surface (anchor for 8 steel plates and angles).
- .9 Item 2.4 – New rescue ladders
  - .1 This berth will be measured as a global unit and will include, but not limited to, the following:
    - .1 5 new galvanized steel ladders in sections, to be made and installed on the sea side of berth 1 and 2.
    - .2 1 new ladder at the extremity of berth 1.
- .10 Item 2.5 – New grates
  - .1 This item will be measured as a global unit and will include, but not limited to, the following:
    - .1 16 new galvanized steel grates to be made and installed, sea side, berth 1 and 2.
    - .2 Concrete slabs on each side of the grates to permit attachment.

**2 PRODUCTS****2.1 NOT USED**

- .1 Not used.

**3 EXECUTION****3.01 NOT USED**

- .1 Not Used.

**1 GENERAL****1.1 RELATED REQUIREMENTS**

- .1 Not used.

**1.2 REFERENCES**

- .1 Not used.

**1.3 ADMINISTRATIVE**

- .1 Submit to Departmental Representative submittals listed for review. Submit promptly and in orderly sequence to not cause delay in Work. Failure to submit in ample time is not considered sufficient reason for extension of Contract Time and no claim for extension by reason of such default will be allowed.
- .2 Do not proceed with Work affected by submittal until review is complete.
- .3 Present shop drawings, product data, samples and mock-ups in SI Metric units.
- .4 Where items or information is not produced in SI Metric units converted values are acceptable.
- .5 Review submittals prior to submission to Departmental Representative. This review represents that necessary requirements have been determined and verified, or will be, and that each submittal has been checked and co-ordinated with requirements of Work and Contract Documents. Submittals not stamped, signed, dated and identified as to specific project will be returned without being examined and considered rejected.
- .6 Notify Departmental Representative, in writing at time of submission, identifying deviations from requirements of Contract Documents stating reasons for deviations.
- .7 Verify field measurements and affected adjacent Work are co-ordinated.
- .8 Contractor's responsibility for errors and omissions in submission is not relieved by Departmental Representative's review of submittals.
- .9 Contractor's responsibility for deviations in submission from requirements of Contract Documents is not relieved by Departmental Representative review.
- .10 Keep one reviewed copy of each submission on site.

**1.4 SHOP DRAWINGS AND PRODUCT DATA**

- .1 The term "shop drawings" means drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are to be provided by Contractor to illustrate details of a portion of Work.
- .2 Indicate materials, methods of construction and attachment or anchorage, erection diagrams, connections, explanatory notes and other information necessary for completion of Work. Where articles or equipment attach or connect to other articles or equipment, indicate that such items have been co-ordinated, regardless of Section under which adjacent items will be supplied and installed. Indicate cross references to design drawings and specifications.
- .3 Allow 7 days for Departmental Representative's review of each submission.
- .4 Adjustments made on shop drawings by Departmental Representative are not intended to change Contract Price. If adjustments affect value of Work, state such in writing to Departmental Representative prior to proceeding with Work.
- .5 Make changes in shop drawings as Departmental Representative may require, consistent with Contract Documents. When resubmitting, notify Departmental Representative in writing of revisions other than those requested.
- .6 Email submissions with PDF documents.
- .7 Submissions include:
  - .1 Date and revision dates.
  - .2 Project title and number.
  - .3 Name and address of:
    - .1 Subcontractor.
    - .2 Supplier.
    - .3 Manufacturer.
  - .4 Contractor's stamp, signed by Contractor's authorized representative certifying approval of submissions, verification of field measurements and compliance with Contract Documents.
  - .5 Details of appropriate portions of Work as applicable:

- .1 Fabrication.
  - .2 Layout, showing dimensions, including identified field dimensions, and clearances.
  - .3 Setting or erection details.
- .8 Submit electronic copies of product data sheets or brochures for requirements requested in specification Sections and as requested by Departmental Representative where shop drawings will not be prepared due to standardized manufacture of product.
- .9 Submit electronic copies of test reports for requirements requested in specification Sections and as requested by Departmental Representative.
  - .1 Report signed by authorized official of testing laboratory that material, product or system identical to material, product or system to be provided has been tested in accord with specified requirements.
- .10 Submit electronic copies of manufacturers instructions for requirements requested in specification Sections and as requested by Departmental Representative.
  - .1 Pre-printed material describing installation of product, system or material, including special notices and Material Safety Data Sheets concerning impedances, hazards and safety precautions.
- .11 Delete information not applicable to project.
- .12 Supplement standard information to provide details applicable to project.
- .13 If upon review by Departmental Representative, no errors or omissions are discovered or if only minor corrections are made, transparency copies will be returned and fabrication and installation of Work may proceed. If shop drawings are rejected, noted copy will be returned and resubmission of corrected shop drawings, through same procedure indicated above, must be performed before fabrication and installation of Work may proceed.
- .14 The review of shop drawings by Public Works and Government Services Canada (PWGSC) is for sole purpose of ascertaining conformance with general concept.
  - .1 This review shall not mean that PWGSC approves detail design inherent in shop drawings, responsibility for which shall remain with Contractor submitting same, and such review shall not relieve Contractor of responsibility for errors or omissions in shop drawings or of responsibility for meeting requirements of construction and Contract Documents.

- .2 Without restricting generality of foregoing, Contractor is responsible for dimensions to be confirmed and correlated at job site, for information that pertains solely to fabrication processes or to techniques of construction and installation and for co-ordination of Work of sub-trades.

### **1.5 PHOTOGRAPHIC DOCUMENTATION**

- .1 Submit electronic copy of colour digital photography in jpg format, standard resolution at the end of works as directed by Departmental Representative.
- .2 Project identification: name and number of project and date of exposure indicated.

### **1.6 CERTIFICATES AND TRANSCRIPTS**

- .1 Immediately after award of Contract, submit Workers' Compensation Board status.
- .2 Submit transcription of insurance immediately after award of Contract.

### **1.7 PROJECT SCHEDULE**

- .1 Submit to Departmental Representative within 10 working days of Award of Contract Bar (GANTT) Chart as Master Plan for planning, project progress.
- .2 Departmental Representative will review and return revised schedules within 5 working days.
- .3 Revise impractical schedule and resubmit within 5 working days.
- .4 Accepted revised schedule will become Master Plan and be used as baseline for updates.
- .5 Ensure detailed Project Schedule includes as minimum milestone and activity types as follows:
  - .1 Award.
  - .2 Shop Drawings, Samples.
  - .3 Permits.
  - .4 Mobilization.
  - .5 Demolition.
  - .6 Fabrication.
  - .7 Cross joint.

- .8 Longitudinal transition.
- .9 Ladders.
- .10 Demobilization.
- .6 Update Project Schedule on [weekly] basis reflecting activity changes and completions, as well as activities in progress.
- .7 Discuss Project Schedule at regular site meetings, identify activities that are behind schedule and provide measures to regain slippage. Activities considered behind schedule are those with projected start or completion dates later than current approved dates shown on baseline schedule.
- .8 Weather related delays with their remedial measures will be discussed and negotiated.

## **2 PRODUCTS**

### **2.01 NOT USED**

- .1 Not Used.

## **3 EXECUTION**

### **3.01 NOT USED**

- .1 Not Used.

**1 GENERAL****1.1 RELATED REQUIREMENTS**

- .1 Section 01 33 00 – Submittal procedures

**1.2 REFERENCES**

- .1 Canada Labour Code, Part 2, Canada Occupational Safety and Health Regulations (L.R.Q. c. S-2.1)
- .2 Province of Quebec, an Act Respecting Occupational Health and Safety (L.R.Q., c.S-2.1 current edition) - Updated 2016.
- .3 Canada Shipping Act, 2001- Collision Regulations (C.R.C., ch.1416).
- .4 Workplace Hazardous Materials Information System (WHMIS)
- .5 CAN/CSA-Z259.10-12 – Full body harnesses
- .6 CAN/CSA-Z460-13 – Control of hazardous energy - Lockout and other methods
- .7 CAN/CGSB-65.7-2007 – Life Jackets
- .8 CAN/CSA-Z275.2 - Occupational safety code for diving operations

**1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.
- .2 Submit to Departmental Representative the site-specific Health and Safety Plan: Within seven (7) days after date of Notice to Proceed and prior to commencement of Work. Health and Safety Plan must include:
  - .1 Commitment of the management and the workers to the health and the safety.
  - .2 Policy of the company regarding health and safety.
  - .3 Procedures in case of accidents/incidents.
- .3 Each two Weeks submit two (2) copies of Contractor's authorized representative's work site health and safety inspection reports to Departmental Representative.
- .4 Submit to Departmental representative within 24 hours a copy of any inspection report, correction notice or recommendation issued by Federal, Provincial and Territorial health and safety inspectors.

- .5 Submit to Departmental representative within 24 hours an investigation report for any accident or incident.
- .6 Submit WHMIS MSDS - Material Safety Data Sheets if needed. Contractor must also keep one copy of these documents on the construction site.
- .7 Departmental Representative will review Contractor's site-specific Health and Safety Plan and provide comments to Contractor within ten (10) days after receipt of plan. Revise plan as appropriate and resubmit plan to Departmental Representative within ten (10) days after receipt of comments from Departmental Representative.
- .8 Departmental Representative's review of Contractor's final Health and Safety plan should not be construed as approval and does not reduce the Contractor's overall responsibility for construction Health and Safety.
- .9 Medical Surveillance: where prescribed by legislation, regulation or safety program, submit certification of medical surveillance for site personnel prior to commencement of Work, and submit additional certifications for any new site personnel to Departmental Representative.
- .10 Submit to Departmental Representative copies of all training certificates required for the application of the prevention program, in particular (if applicable) for the following:
  - .1 First aid in the workplace and cardiopulmonary resuscitation;
  - .2 Wearing and adjustment of personal protective equipment;
  - .3 Any other training requirement of Regulations or the safety program.
- .11 Engineer's plans and certificates of compliance: Contractor must submit to the Departmental representative and to the Commission des normes, de l'équité, de la santé et de la sécurité du travail (CNESST) a copy signed and sealed by engineer of all plans and certificates of compliance required pursuant to the Code de sécurité pour les travaux de construction (S-2.1, r.4) (Safety code for the construction industry) or by any other legislation or regulation or by any other clause in the specifications or in the contract. The Contractor must also submit a certificate of conformity signed by an engineer once the facility for which these plans were prepared has been completed and before a person uses the facility. A copy of these documents must be available on site at all times.
  - .1 Any modification in an equipment or a part of machinery which was not authorized in writing by the manufacturer. A copy of these documents must be available any time on the work site.

- .12 Submit all the documents relative to diving works.

#### **1.4 COMMISSION DES NORMES, DE L'ÉQUITÉ, DE LA SANTÉ ET DE LA SÉCURITÉ DU TRAVAIL DU QUÉBEC (CNESST)**

- .1 Comply with the Loi sur la santé et la sécurité du travail (L.R.Q., c. S-2.1) (Act Respecting Occupational Health and Safety) and the Code de sécurité pour les travaux de construction (S-2.1, r. 4.) (Safety code for the construction industry) in addition to respecting all the requirements of this specification manual.

#### **1.5 FILING OF NOTICE OF CONSTRUCTION SITE OPENING**

- .1 Notice of site opening: Notice of site opening shall be submitted to the CNESST before work begins. A copy of such notice shall be submitted to Departmental Representative at the same time and another posted in full view on the worksite. At demobilization, a notice of site closing shall be forwarded to CNESST with copy to Departmental Representative.
- .2 The Contractor shall assume the role of being the Primary Contractor in the limits of the construction site and elsewhere where he must execute work within the framework of this project. The Contractor shall recognize the responsibility of being the Principal Contractor of the project and identify himself as such in the notice of the construction site opening he provides to the CNESST.
- .3 Works will take place in zones below:
- .1 Defined on plans.
- .4 The Contractor shall accept to divide and identify the construction site adequately in order to define time and space at all times throughout the course of the project.

#### **1.6 CERTIFICATION OF COMPLIANCE (CNESST)**

- .1 Certification of compliance delivered by CSST: the certification of compliance (Attestation de conformité) is a document issued by CSST to confirm that the Contractor is in good standing with CSST, that is, all amounts owing to CSST with respect to a given contract have been paid. The document shall be submitted to the Departmental Representative at work completion.

#### **1.7 EVALUATION OF RISKS/DANGERS**

- .1 Contractor must proceed to an identification of the dangers relative to each of the tasks carried out on the working construction site / place.

- .2 Plan and organize work so as to eliminate the risk of fall at the source or ensure collective protection, thereby minimizing the use of personal protective equipment. When personal fall protection is required, workers must use a safety harness that complies with CSA standard CAN/CSA Z-259.10 M90. A safety belt must not be used as fall protection.
- .3 Equipment, tools and protective gear which cannot be installed, fitted or used without compromising the health or safety of workers or the public shall be deemed inadequate for the work to be executed.
- .4 All mechanical equipment shall be inspected before delivery to the construction site. The Departmental representative can at all times, if he suspects a malfunction or the risk of an accident, order the immediate stop of any piece of equipment and require an inspection by a specialist of his choice.

### **1.8 MEETINGS**

- .1 Schedule and administer Health and Safety meeting with Departmental Representative prior to commencement of Work.

### **1.9 RISK INHERENT TO THE WORK SITE**

- .1 Personnel responsible for the execution of the work on the construction site will be exposed to the following risks :
  - .1 Ground transportation and stones transshipment, concrete blocks and massive steel elements, assembled or not.
  - .2 Sea transport and maritime construction work, on the floating material, the operation involving risks of drowning and the work near heavy equipment used for the implementation steel ladders.
  - .3 Works exposed to the variable weather conditions, among which the heat, the cold, the winds, the rain, the snow, etc.
  - .4 Demolition works.
  - 5 Diving works.

### **1.10 GENERAL REQUIREMENTS**

- .1 Before undertaking the work, prepare a site-specific prevention program based on the hazards identified according to the article "HAZARD ASSESSMENT" and the article "RISKS INHERENT TO THE WORKSITE" in this section. Apply this program in its totality from the start of the project until demobilization of all personnel from the

construction site. The prevention program shall take into consideration the specific characteristics of the project and cover all the work to be executed on the construction site.

The safety program must include at least the following:

- .1 company safety and health policy;
- .2 description of the stages of the work;
- .3 total costs, schedule and projected workforce curves;
- .4 flow chart of safety and health responsibilities;
- .5 physical and material layout of the construction site;
- .6 risk assessment for each stage of the work, including preventive measures and the procedures for applying them;
- .7 identification of the preventive measures relative to the specific risks inherent to the worksite indicated in the article "RISKS INHERENT TO THE WORKSITE";
- .8 identification of preventive measures for health and safety of employees and / or public works site as indicated in the article "SPECIFIC REQUIREMENTS FOR THE HEALTH AND SAFETY OF OCCUPANTS AND PUBLIC";
- .9 training requirements;
- .10 procedures in case of accident/injury;
- .11 written commitment from all parties to comply with the safety program;
- .12 construction site inspection checklist based on the preventive measures;
- .13 emergency response plan which shall contain at least the following:
  - .1 construction site evacuation procedures;
  - .2 identification of resources (police, firefighters, ambulance services, etc.);
  - .3 identification of persons in charge of the construction site;
  - .4 identification of the first-aid attendants;

- .5 communication organizational chart (including the person responsible for the site and the Departmental representative);
- .6 training required for those responsible for applying the plan;
- .7 any other information needed, in the light of the construction site's characteristics.

If available the Departmental representative will provide the evacuation procedures to the Contractor who shall then coordinate the construction site procedure with that of the site and submit it to the Departmental representative.

- .2 Departmental representative may respond in writing, where deficiencies or concerns are noted in the prevention program and may request resubmission with correction of deficiencies or concerns.
- .3 In addition to the prevention program, during the course of the work the Contractor shall elaborate and submit to the Departmental representative specific written procedures for any work having a high risk factor of accident (for example: demolition procedures, specific installation procedures, hoisting plan, procedures for entering a confined space, etc.) or at the request of the Departmental representative.
- .4 The Contractor shall plan and organize work so as to eliminate the danger at source or ensure collective protection, thereby minimizing the use of personal protective equipment.
- .5 Equipment, tools and protective gear which cannot be installed, fitted or used without compromising the health or safety of workers or the public shall be deemed inadequate for the work to be executed.
- .6 All mechanical equipment (for example, but not limited to: hoisting devices for persons or materials, excavators, concrete pumps, concrete saws) shall be inspected before delivery to the construction site. Before using any mechanical equipment, the Contractor shall obtain a certificate of compliance signed by a qualified mechanic dated less than a week prior to the arrival of each piece of equipment on the construction site; the certificate shall remain on the construction site and transmitted to the Departmental representative on demand.
- .7 Ensure all inspections (daily, periodic, annual, etc.) for the hoisting devices for persons or materials required by the current standards are carried out and be able to provide a copy of the inspection certificates to the Departmental representative on demand.

- .8 The Departmental representative can at all times, if he suspects a malfunction or the risk of an accident, order the immediate stop of any piece of equipment and require an inspection by a specialist of his choice.
- .9 The Departmental representative must be consulted for the location of storing gas cylinders and tanks on the construction site.

### **1.11 RESPONSIBILITY**

- .1 The Contractor must acknowledge and assume all the tasks and obligations which customarily devolve upon a principal Contractor under the terms of the Loi sur la santé et la sécurité du travail (L.R.Q., ch. S-2.1) (Act Respecting Occupational Health and Safety) and the Code de sécurité pour les travaux de construction (S 2.1, r.4) (Safety code for the construction industry).
- .2 The Contractor must be responsible for health and safety of persons on construction site, safety of property on construction site and for the protection of persons adjacent to construction site and the environment to the extent that they may be affected by conduct of the work.
- .3 No matter the size or location of the construction site, the Contractor must clearly define the limits of the construction site by physical means and respect all specific regulation requirements applicable in this regard. The means chosen to define the limits of the construction site must be submitted to the Departmental representative.
- .4 Comply with and enforce compliance by employees with safety requirements of Contract Documents, applicable federal, provincial, territorial and local statutes, regulations, and ordinances, and with site-specific prevention Plan.

### **1.12 COMPLIANCE REQUIREMENTS**

- .1 Comply with the Loi sur la santé et la sécurité du travail (L.R.Q., c. S-2.1) (Act Respecting Occupational Health and Safety) and the Code de sécurité pour les travaux de construction (S-2.1, r. 4.) (Safety code for the construction industry) in addition to respecting all the requirements of this specification manual.

### **1.13 UNFORSEEN HAZARDS**

- .1 When unforeseen or peculiar safety-related factor, hazard, or condition occur during performance of Work, follow procedures in place for Employee's Right to Refuse Work in accordance with Acts and Regulations of Province having jurisdiction and advise Departmental Representative verbally and in writing.

**1.14 POSTING OF DOCUMENTS**

- .1 Ensure applicable items, articles, notices and orders are posted in conspicuous location on site in accordance with Acts and Regulations of Province having jurisdiction, and in consultation with Departmental Representative.

**1.15 CORRECTION OF NON-COMPLIANCE**

- .1 Immediately address health and safety non-compliance issues identified by authority having jurisdiction or by Departmental Representative.
- .2 Provide Departmental Representative with written report of action taken to correct non-compliance of health and safety issues identified.
- .3 Departmental Representative may stop Work if non-compliance of health and safety regulations is not corrected.

**1.16 WORK STOPPAGE**

- .1 Give precedence to safety and health of public and site personnel and protection of environment over cost and schedule considerations for Work.

**1.17 DIVING OPERATIONS**

- .1 In accepting this contract, the Contractor agrees to satisfy the following requirements:
  1. Compliance with all the requirements of the Règlement sur la santé et la sécurité du travail (S-2.1, r.13) (Regulation respecting occupational health and safety), more precisely section XXVI. I, entitled Travail effectué en plongée (Underwater Work). Compliance, furthermore, with the latest editions of standards CAN/CSA Z275.2 – Occupational Safety code for Diving Operations, CAN/CSA Z275.1 – Hyperbaric Chambers and CAN/CSA Z275.4 – Competency Standard for Diving Operations. In the event of conflict between these requirements, the most stringent requirement shall apply.
  2. In addition to the above, in cases where construction work is involved, compliance with the Code de sécurité pour les travaux de construction (S-2.1, r.4) (Safety code for the Construction Industry).
  3. Before starting the work, submit to the Departmental representative the following documents, as per the Règlement sur la santé et la sécurité au travail (S-2.1, r.13) (Regulation respecting occupational health and safety):

- a. the professional diving training certificate of each member of the dive team OR a document recognizing the skills of those persons in accordance with the Competency Standard for Diving Operations, CAN/CSA Z275.4-02, as per section 312.8 of the Regulation;
  - b. the workplace first-aid training certificate of each member of the dive team;
  - c. the medical certificate of each member of the dive team;
  - d. for each dive included in this contract, a dive plan containing the following information, in addition to that required under the Règlement sur la santé et la sécurité au travail (Regulation respecting occupational health and safety):
    - i. the thermal protection to be used;
    - ii. the repetitive dive factor;
    - iii. the no-decompression limit;
    - iv. the circumstances in which the dive must be terminated;
    - v. the procedures to be followed to ensure that machinery, equipment or devices that could create a hazard have been locked out;
    - vi. the decompression table to be used, as required;
  - e. notification confirming that a system for communicating with the Service d'assistance médicale pour les urgences en plongée (Medical assistance service for diving emergency) is available at the diving station at all times.
4. The Contractor shall take into account the following specific characteristics of the worksite, and adapt its dive plan accordingly:
  5. Where the dive takes place at one of the following locations, provide the Departmental representative confirmation that the authorities concerned have been notified:
    - a. in marine waterways;
    - b. in port facilities.

6. If the dive station is more than 2 metres above the water, provide the Departmental representative:
  - a. a drawing of the equipment used to transport the worker through the air-water interface, if a device other than a stage is used for that purpose;
  - b. a drawing of the device used to hoist the stage or other device, unless that device is a crane or boom truck.
7. If the dive is carried out from a vessel, provide the Departmental representative the following documents:
  - a. proof of qualification of the vessel operator;
  - b. the vessel's certificate of compliance from Transport Canada.
8. Before starting the work, carry out an underwater rescue simulation at the site, as required under section 312.31 of the Règlement sur la santé et la sécurité du travail (S-2.1, r.13) (Regulation respecting occupational health and safety).
9. On a daily basis, complete and provide to the Departmental representative a checklist confirming the presence and condition of the equipment required at the dive site as per the dive plan.
10. Ensure that all other documents required under section XXVI of the Règlement sur la santé et la sécurité du travail (S-2.1, r.13) (Regulation respecting occupational health and safety) are available at the construction site at all times (diving logbook, diver's logbook, etc.).

### **1.18 FLOATING MATERIAL**

- .1 Conform to the codes and to the municipal, provincial and national regulations concerning the present works
- .2 Mark out the floating equipment by navigation lights according to the Regulation on boarding and to the Notices to the sailors.
  - .1 Maintain a maritime radio set VHF (channel 16) aboard the floating equipment.
- .3 Obtain and submit to the Department Representative a letter of conformity emitted by Transport Canada for the approval of any boat (transport, rescue, inspection or other one) before the beginning of the works
- .4 Floating equipment have to be of sufficient capacity and in good working order, to allow the execution of works in a satisfactory way, according to the calendar and to the specification.

- .5 Organize activities so as to minimize the interference with the sailors and the fishermen using the harbor.
- .6 Maintain any time the access to the neighboring quays
- .7 Supply and place the necessary buoys of warning to indicate the zone of the works.

### **1.19 WORKS NEAR BODIES OF WATER**

- .1 For all the works involving risks of drowning, the following requirements must be met:
  - .1 Respect article 2.10.13 of the Safety code for building work.
    - .1 Wear a life jacket or a floating device allowing to maintain the head of the user outside the water and to be able to float effortlessly arms and in compliance with the following standard:
      - .1 CAN/CGSB-65.7-2007 – Life jackets
      - .2 Or for some exceptions, be accepted by Transport Canada.
    - .2 Or be protected by a safety net or a protective device against the falls.
  - .2 For every boat used (transport, rescue, inspection or other one), submit to the Departmental Representative, before the beginning of the works, a letter emitted by Transport Canada giving evidence that the boat is corresponding to the stipulations statutory of the Law on the merchant navy of Canada 2001. If there is more than a year between the date of delivery of this letter and the date of realization of the present works, submit also to the Departmental Representative a confirmation in the effect that the annual report of conformity required by Transport Canada was completed for the current year.
  - .3 Ensure that a rescue vessel moored and in the water is available at each place where a worker may fall in the water. However, a vessel may serve more than one workplace on the same construction site provided the distance between any of these workplaces and the vessel is less than 100 m.
  - .4 Make sure that the boat is equipped with an engine powerful enough to navigate in worksite conditions..
  - .5 Make sure that the boat has required characteristics to take onboard the people there susceptible to take part in the rescue operation.

- .6 Make sure that the boat of rescue is available any time for the workers in case of emergency
- .7 Make sure that a qualified person is available to run the emergency equipment. This person has to hold its competence certificate according to the length of the boat.
- .8 Establish and transmit to the Department Representative the emergency procedures in which we find the information mentioned below and make sure that all the workers concerned by these procedures received the necessary training(formation) and the information to apply them :
  - .1 A description of completes procedures, including responsibilities of the people whom is allowed the access instead of work; ;
  - .2 The location of the emergency equipment.
- .9 Where the construction site is a wharf, a pier, a quay or any similar structure, a ladder with at least two (2) rungs below the surface of the water shall be installed on the front of the structure every 60 m. This measure applies even if it is a construction project. In this situation, if the owner does not possess the basic installations, a temporary (or portable) ladder can be used and taken off at the end of works. Contractor shall mention in writing to the owner that the site is not in compliance with the Canadian Code of the work, the part II.

## **1.20 LIFTING MATERIAL**

- .1 Lifting devices shall be positioned in such a way that loads are not carried over workers, occupants or the public.
- .2 All mobile cranes manufactured after January 1st 1980 must be equipped with a safety device against overload.
- .3 All mobile cranes with cables manufactured after January 1st 1970, except if they are used for other end than lifting loads, must be provided with a safety device against two-blocking. Regarding mobile cranes with cables manufactured before January 1st 1970, they will have to be equipped with the device at the latest on December 31st 2006.
- .4 The Contractor shall provide the Department Representative with a mechanical service inspection certificate for each lifting device. Inspections must be carried out just prior to the delivery of the equipment to the work site.

- .5 For all winch installations, the Contractor shall provide the Department Representative with the installation method recommended by the manufacturer. If unavailable, the Contractor shall then provide an installation procedure signed and sealed by an engineer. The installation procedure must take into account load bearing capacity, the amount, weight and location of counterweight and any other detail that may affect the capacity and stability of the device.
- .6 In addition to the mechanical service inspection certificate, the annual inspection certificate and the crane logbook must be aboard all crane and crane-truck cabs.
- .7 The entire lifting area shall be closed off to prevent non-authorized people from entering it.
- .8 The Contractor shall carefully inspect all of the slings and lifting accessories and make sure that those in poor condition are destroyed or scrapped.
- .9 Compressed-gas cylinders shall be lifted with a basket specially designed for this purpose.

### **1.21 FALL PROTECTION**

- .1 Contractor must ensure that any worker exposed to a fall hazard higher than 2.4 m wears a safety harness.
- .2 Plan and organize work so as to eliminate the risk of fall at the source or ensure collective protection, thereby minimizing the use of personal protective equipment. When personal fall protection is required, workers must use a safety harness that complies with CSA standard CAN/CSA Z-259.10 M90. A safety belt must not be used as fall protection.
- .3 Every very person using an elevating platform (scissors, telescopic mast, articulated mast, rotative mast, etc.) must have a training regarding this equipment.
- .4 The use of a safety harness is mandatory for all elevating platforms with telescopic, articulate or rotative mast.
- .5 Define the limits of the danger zone around each elevating platform.

**2 PRODUCTS****2.01 NOT USED**

.1 Not Used.

**3 EXECUTION****3.01 NOT USED**

.1 Not Used.

**1 GENERAL****1.1 RELATED REQUIREMENTS**

- .1 Not used.

**1.2 REFERENCES**

- .1 Definitions:
  - .1 Environmental Pollution and Damage: presence of chemical, physical, biological elements or agents which adversely affect human health and welfare; unfavourably alter ecological balances of importance to human life; affect other species of importance to humans; or degrade environment aesthetically, culturally and/or historically.
  - .2 Environmental Protection: prevention/control of pollution and habitat or environment disruption during construction.

**1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Before commencing construction activities or delivery of materials to site, submit Environmental Protection Plan for review by Departmental Representative.
- .2 Environmental Protection Plan must include comprehensive overview of known or potential environmental issues to be addressed during construction.
- .3 Address topics at level of detail commensurate with environmental issue and required construction task[s].

**1.4 FIRES**

- .1 Fires and burning of rubbish on site.
- .2 Provide supervision, attendance and fire protection measures as directed.

**1.6 WORK ADJACENT TO WATERWAYS**

- .1 Waterways to be kept free of excavated fill, waste material and debris.

**1.7 POLLUTION CONTROL**

- .1 Maintain temporary erosion and pollution control features installed under this Contract.
- .2 Control emissions from equipment and plant in accordance with local authorities' emission requirements.

- .3 Prevent sandblasting and other extraneous materials from contaminating air and waterways beyond application area.
  - .1 Provide temporary enclosures.
- .4 Cover or wet down dry materials and rubbish to prevent blowing dust and debris. Provide dust control for temporary roads.

## **1.8 NOTIFICATION**

- .1 Departmental Representative will notify Contractor in writing of observed noncompliance with Federal, Provincial or Municipal environmental laws or regulations, permits, and other elements of Contractor's Environmental Protection plan.
- .2 Contractor: after receipt of such notice, inform Departmental Representative of proposed corrective action and take such action for approval by Departmental Representative.
  - .1 Take action only after receipt of written approval by Departmental Representative.
- .3 Departmental Representative will issue stop order of work until satisfactory corrective action has been taken.
- .4 No time extensions granted or equitable adjustments allowed to Contractor for such suspensions.

## **2 PRODUCTS**

### **2.1 NOT USED**

- .1 Not Used.

## **3 EXECUTION**

### **3.1 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section [01 74 11 - Cleaning].
  - .1 Leave Work area clean at end of each day.
- .2 Ensure public waterways, storm and sanitary sewers remain free of waste and volatile materials disposal.

- .3 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 01 74 11 - Cleaning.
- .4 Waste Management: separate waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
  - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

**1 GENERAL****1.1 RELATED REQUIREMENTS**

- .1 Not used.

**1.2 REFERENCES**

- .1 Not used.

**1.3 INSPECTION**

- .1 Allow Departmental Representative access to Work. If part of Work is in preparation at locations other than Place of Work, allow access to such Work whenever it is in progress.
- .2 Give timely notice requesting inspection if Work is designated for special tests, inspections or approvals by Departmental Representative instructions, or law of Place of Work.
- .3 If Contractor covers or permits to be covered Work that has been designated for special tests, inspections or approvals before such is made, uncover such Work, have inspections or tests satisfactorily completed and make good such Work.
- .4 Departmental Representative will order part of Work to be examined if Work is suspected to be not in accordance with Contract Documents. If, upon examination such work is found not in accordance with Contract Documents, correct such Work and pay cost of examination and correction.

**1.4 INDEPENDENT INSPECTION AGENCIES**

- .1 Independent Inspection/Testing Agencies will be engaged by Departmental Representative for purpose of inspecting and/or testing portions of Work. Cost of such services will be borne by Departmental Representative.
- .2 Provide equipment required for executing inspection and testing by appointed agencies.
- .3 Employment of inspection/testing agencies does not relax responsibility to perform Work in accordance with Contract Documents.
- .4 If defects are revealed during inspection and/or testing, appointed agency will request additional inspection and/or testing to ascertain full degree of defect. Correct defect and irregularities as advised by Departmental Representative at no cost to Departmental Representative. Pay costs for retesting and reinspection.

**1.5 ACCESS TO WORK**

- .1 Allow inspection/testing agencies access to Work, off site manufacturing and fabrication plants.
- .2 Co-operate to provide reasonable facilities for such access.

**1.6 PROCEDURES**

- .1 Notify appropriate agency and Departmental Representative in advance of requirement for tests, in order that attendance arrangements can be made.
- .2 Submit samples and/or materials required for testing, as specifically requested in specifications. Submit with reasonable promptness and in orderly sequence to not cause delays in Work.
- .3 Provide labour and facilities to obtain and handle samples and materials on site. Provide sufficient space to store and cure test samples.

**1.7 REJECTED WORK**

- .1 Remove defective Work, whether result of poor workmanship, use of defective products or damage and whether incorporated in Work or not, which has been rejected by Departmental Representative as failing to conform to Contract Documents. Replace or re-execute in accordance with Contract Documents.
- .2 Make good other Contractor's work damaged by such removals or replacements promptly.
- .3 If in opinion of Departmental Representative it is not expedient to correct defective Work or Work not performed in accordance with Contract Documents, Owner will deduct from Contract Price difference in value between Work performed and that called for by Contract Documents, amount of which will be determined by Departmental Representative.

**1.8 REPORTS**

- .1 Submit inspection and test reports in PDF format to Departmental Representative.
- .2 Provide copies to subcontractor of work being inspected or tested.

**1.9 TESTS AND MIX DESIGNS**

- .1 Furnish test results and mix designs as requested.

- .2 Cost of tests and mix designs beyond those called for in Contract Documents or beyond those required by law of Place of Work will be appraised by Departmental Representative and may be authorized as recoverable.

**2 PRODUCTS****2.1 NOT USED**

- .1 Not Used.

**3 EXECUTION****3.1 NOT USED**

- .1 Not used.

**1 GENERAL****1.1 RELATED REQUIREMENTS**

- .1 Not used.

**1.2 REFERENCES**

- .1 Public Works Government Services Canada (PWGSC) Standard Acquisition Clauses and Conditions (SACC)-ID: R0202D, Title: General Conditions 'C', In Effect as Of: May 14, 2004.

**1.3 INSTALLATION AND REMOVAL**

- .1 Provide temporary controls in order to execute Work expeditiously.
- .2 Remove from site all such work after use.

**1.4 GUARD RAILS AND BARRICADES**

- .1 Provide secure, rigid guard rails and barricades around deep excavations.

**1.5 ACCESS TO SITE**

- .1 Provide and maintain access roads, sidewalk crossings, ramps and construction runways as may be required for access to Work.

**1.6 PUBLIC TRAFFIC FLOW**

- .1 Provide and maintain competent signal flag operators, traffic signals, barricades, lights, or lanterns as required to perform Work and protect public.

**1.7 FIRE ROUTES**

- .1 Maintain access to property including overhead clearances for use by emergency response vehicles.

**1.8 PROTECTION FOR OFF-SITE AND PUBLIC PROPERTY**

- .1 Protect surrounding private and public property from damage during performance of Work.
- .2 Be responsible for damage incurred.

**1.9 PROTECTION OF FINISHES**

- .1 Provide protection for finished and partially finished building finishes and equipment during performance of Work.

- .2 Provide necessary screens, covers, and hoardings.
- .3 Be responsible for damage incurred due to lack of or improper protection.

**1.10 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management And Disposal.

**2 PRODUCTS****2.1 NOT USED**

- .1 Not Used.

**3 EXECUTION****3.1 NOT USED**

- .1 Not used.

**1 GENERAL****1.1 RELATED REQUIREMENTS**

- .1 Not used.

**1.2 REFERENCES**

- .1 Not used.

**1.3 PROJECT CLEANLINESS**

- .1 Maintain Work in tidy condition, free from accumulation of waste products and debris.
- .2 Remove waste materials from site at daily. Do not burn waste materials on site.
- .3 Clear snow and ice from access.
- .4 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .5 Provide on-site containers for collection of waste materials and debris.
- .6 Provide and use marked separate bins for recycling. Refer to Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
- .7 Dispose of waste materials and debris.
- .8 Store volatile waste in covered metal containers, and remove from premises at end of each working day.

**1.4 FINAL CLEANING**

- .1 When Work is Substantially Performed remove surplus products, tools, construction machinery and equipment not required for performance of remaining Work.
- .2 Remove waste products and debris other than that caused by others, and leave Work clean and suitable for occupancy.
- .3 Prior to final review remove surplus products, tools, construction machinery and equipment.
- .4 Remove waste products and debris.

- .5 Remove waste materials from site. Do not burn waste materials on site.
- .6 Make arrangements with and obtain permits from authorities having jurisdiction for disposal of waste and debris.
- .7 Broom clean and wash surfaces.

## **1.5 WASTE MANAGEMENT AND DISPOSAL**

- .1 Separate waste materials for reuse and recycling in accordance with Section 01 74 21 - Construction/Demolition Waste Management And Disposal.

## **2 PRODUCTS**

### **2.1 NOT USED**

- .1 Not Used.

## **3 EXECUTION**

### **3.1 NOT USED**

- .1 Not used.

**1 GENERAL****1.1 WAST MANAGEMENT GOALS**

- .1 Minimize amount of non-hazardous solid waste generated by project and accomplish maximum source reduction, reuse and recycling of solid waste produced by CRD activities.
- .2 Protect environment and prevent environmental pollution damage.

**1.2 RELATED REQUIREMENTS**

- .1 Not used.

**1.3 REFERENCE**

- .1 Definitions
  - .1 Approved/Authorized recycling facility: waste recycler approved by applicable provincial authority or other users of material for recycling approved by the Departmental Representative.
- .2 Construction, Renovation and/or Demolition (CRD) Waste: Class III solid, non-hazardous waste materials generated during construction, demolition, and/or renovation activities
- .3 Inert Fill: inert waste - exclusively asphalt and concrete.
- .4 Waste Source Separation Program (WSSP): implementation and co-ordination of ongoing activities to ensure designated waste materials will be sorted into pre-defined categories and sent for recycling and reuse, maximizing diversion and potential to reduce disposal costs.
- .5 Recyclable: ability of product or material to be recovered at end of its life cycle and re-manufactured into new product for reuse.
- .6 Recycle: process by which waste and recyclable materials are transformed or collected for purpose of being transferred into new products.
- .7 Recycling: process of sorting, cleansing, treating and reconstituting solid waste and other discarded materials for purpose of using in altered form. Recycling does not include burning, incinerating, or thermally destroying waste.
- .8 Reuse: repeated use of product in same form but not necessarily for same purpose. Reuse includes:

- .1 Salvaging reusable materials from re-modelling projects, before demolition stage, for resale, reuse on current project or for storage for use on future projects.
- .2 Returning reusable items including pallets or unused products to vendors.
- .9 Salvage: removal of structural and non-structural materials from deconstruction/disassembly projects for purpose of reuse or recycling.
- .10 Separate Condition: refers to waste sorted into individual types.
- .11 Source Separation: act of keeping different types of waste materials separate beginning from the point they became waste.

#### **1.4 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures.

#### **1.5 WASTE SOURCE SEPARATION PROGRAM (WSSP)**

- .1 Provide sufficient on-site facilities and containers for collection, handling, and storage of anticipated quantities of reusable and recyclable materials.

#### **1.6 USE OF SITE AND FACILITIES**

- .1 Execute Work with minimal interference and disturbance to normal use of premises.
- .2 Maintain security measures established by facility provide temporary security measures approved by Departmental Representative.

#### **1.7 WASTE PROCESSING SITES**

- .1 Waste disposal is to follow current regulations in authorized sites.

#### **1.8 STORAGE, HANDLING AND PROTECTION**

- .1 Unless specified otherwise, materials for removal [do not become] [become] Contractor's property.
- .2 Protect, stockpile, store and catalogue salvaged items.
- .3 Separate non-salvageable materials from salvaged items. Transport and deliver non-salvageable items to licensed disposal facility.
- .4 Protect structural components not removed and salvaged materials from movement or damage.

- .5 Support affected structures. If safety of works is endangered, cease operations and immediately notify Departmental Representative.
- .6 Protect surface drainage from damage and blockage.
- .7 Provide on-site facilities and containers for collection and storage of reusable and recyclable materials.
- .8 Separate and store materials produced during project in designated areas.
- .9 Prevent contamination of materials to be salvaged and recycled and handle materials in accordance with requirements for acceptance by designated processing facilities.
  - .1 On-site source separation is recommended.
  - .2 Remove co-mingled materials to off site processing facility for separation.
  - .3 Obtain waybills, receipts and/or scale tickets for separated materials removed from site.
  - .4 Materials reused on-site are considered to be diverted from landfill and as such are to be included in all reporting.

## **1.9 DISPOSAL OF WASTES**

- .1 Do not bury rubbish or waste materials.
- .2 Do not dispose of waste into waterways, storm, or sanitary sewers.
- .3 Remove materials on-site as Work progresses.

## **1.10 SCHEDULING**

- .1 Co-ordinate Work with other activities at site to ensure timely and orderly progress of Work.

## **2 PRODUCTS**

### **2.1 NATURE OF THE MATERIALS**

- .1 Construction and demolition waste include without being limited to concrete, asphalt and steel.

**3 EXECUTION****3.1 APPLICATION**

- .1 Handle waste materials not reused, salvaged, or recycled in accordance with appropriate regulations and codes.

**3.2 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section [01 74 11 - Cleaning].
  - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section [01 74 11 - Cleaning].

**1 GENERAL****1.1 RELATED REQUIREMENTS**

- .1 Not used.

**1.2 REFERENCES**

- .1 Canadian Environmental Protection Act (CEPA)
  - .1 SOR/2008-197, Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations.

**1.3 ADMINISTRATIVE REQUIREMENTS**

- .1 Acceptance of Work Procedures:
  - .1 Departmental Representative Inspection:
    - .1 Departmental Representative and Contractor to inspect Work and identify defects and deficiencies.
    - .2 Contractor to correct Work as directed.
  - .2 Completion Tasks: submit written certificates that tasks have been performed as follows:
    - .1 Work: completed and inspected for compliance with Contract Documents.
    - .2 Defects: corrected and deficiencies completed.
    - .3 Work: complete and ready for final inspection.
  - .3 Final Inspection:
    - .1 When completion tasks are done, request final inspection of Work by Departmental Representative, and Contractor.
    - .2 When Work incomplete according to Departmental Representative, complete outstanding items and request re-inspection.
  - .4 Declaration of Substantial Performance: when Departmental Representative considers deficiencies and defects corrected and requirements of Contract substantially performed, make application for Certificate of Substantial Performance.

- .5 Commencement of Lien and Warranty Periods: date of Owner's acceptance of submitted declaration of Substantial Performance to be date for commencement for warranty period and commencement of lien period unless required otherwise by lien statute of Place of Work.
- .6 Final Payment:
  - .1 When Departmental Representative considers final deficiencies and defects corrected and requirements of Contract met, make application for final payment.
  - .2 When Work deemed incomplete by Departmental Representative, complete outstanding items and request re-inspection.
- .7 Payment of Holdback: after issuance of Certificate of Substantial Performance of Work, submit application for payment of holdback amount in accordance with contractual agreement.

#### **1.4 FINAL CLEANING**

- .1 Clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Remove surplus materials, excess materials, rubbish, tools and equipment.
- .2 Waste Management: separate waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.

### **2 PRODUCTS**

#### **2.01 NOT USED**

- .1 Not Used.

### **3 EXECUTION**

#### **3.01 NOT USED**

- .1 Not Used.

**1 GENERAL****1.1 RELATED REQUIREMENTS**

- .1 Not used.

**1.2 REFERENCES**

- .1 CSA International
  - .1 CSA S350-[M1980(R2003)], Code of Practice for Safety in Demolition of Structures.
- .2 U.S. Environmental Protection Agency (EPA)/Office of Water
  - .1 EPA 832/R-92-005, Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices.

**1.3 ACTION AND INFORMATIONAL SUBMITTALS**

- .1 Submit in accordance with Section 01 33 00 - Submittal Procedures and 01 74 21 - Construction/Demolition Waste Management Disposal.
- .2 Erosion and Sedimentation Control: submit erosion and sedimentation control plan.

**1.4 SITE CONDITIONS**

- .1 Review "Designated Substance Report" and take precautions to protect environment.
- .2 Notify Departmental Representative before disrupting access to anybody on warf.

**2 PRODUCTS****2.1 NOT USED**

- .1 Not used.

**3 EXECUTION****3.1 EXAMINATION**

- .1 Inspect site with Departmental Representative and verify extent and location of items designated for removal, disposal, alternative disposal, recycling, salvage and items to remain.
- .2 Locate and protect utilities. Preserve active utilities traversing site in operating condition.

- .3 Notify and obtain approval of utility companies before starting demolition.

### **3.2 PREPARATION**

- .1 Protection of In-Place Conditions:
  - .1 Prevent movement, settlement, or damage to adjacent structures, to remain in place. Provide bracing and shoring required.
  - .2 Keep noise, dust, and inconvenience to occupants to minimum.
  - .3 Protect building systems, services and equipment.
  - .4 Provide temporary dust screens, covers, railings, supports and other protection as required.
  - .5 Do Work in accordance with Section [01 35 29.06 - Health and Safety Requirements] .
- .2 Demolition/Removal:
  - .1 Remove items as indicated.
  - .2 Removal of Pavements:
    - .1 Square up adjacent surfaces to remain in place by saw cutting or other method approved by Departmental Representative.
    - .2 Protect adjacent joints and load transfer devices.
    - .3 Protect underlying and adjacent granular materials.
  - .3 Remove existing parts to permit new construction.
  - .4 Trim edges of partially demolished elements to tolerances as defined by Departmental Representative to suit future use.

### **3.3 CLEANING**

- .1 Progress Cleaning: clean in accordance with Section 01 74 11 - Cleaning.
  - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section [01 74 11 - Cleaning].

- .3 Refer to demolition drawings and specifications for items to be salvaged for reuse.
- .4 Waste Management: separate waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management and Disposal.
  - .1 Remove recycling containers and bins from site and dispose of materials at appropriate facility.

# Appendix A

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**Schedule cruise**

**ANNEXE A**  
**HORAIRE CROISIÈRES / SCHEDULE CRUISES**  
**BAIE-COMEAU**

	DATE	JOUR / DAY	NOM / NAME		TEMPS D'ACCOSTAGE / TIME DOCKING	LONGUEUR / LENGHT	
			NAVIRES / SHIPS	COMPAGNIE / COMPANY		P / F	M
<b>1</b>	2016-05-25	Mercredi / Wednesday	PEARL SEAS CRUISES	Pearl Mist	9h - 19h	335	102,1
<b>2</b>	2016-09-15	Jeudi / Thursday	SEABOURN QUEST	Seabourn Cruise Line	7h - 16h	650	198,1
<b>3</b>	2016-09-15	Jeudi / Thursday	PEARL SEAS CRUISES	Pearl Mist	7h - 16h	335	102,1
<b>4</b>	2016-09-23	Vendredi / Friday	CRYSTAL SERENITY	Crystal Cruises	8h - 16h	820,2	250
<b>5</b>	2016-09-27	Mardi / Tuesday	SEABOURN QUEST	Seabourn Cruise Line	11h - 19h	650	198,1
<b>6</b>	2016-10-03	Lundi / Monday	PEARL SEAS CRUISES	Pearl Mist	9h - 18h	335	102,1
<b>7</b>	2016-10-05	Mercredi / Wednesday	SEABOURN QUEST	Seabourn Cruise Line	7h - 16h	650	198,1
<b>8</b>	2016-10-07	Vendredi / Friday	PEARL SEAS CRUISES	Pearl Mist	6h - 18h	335	102,1
<b>9</b>	2016-10-09	Dimanche / Sunday	M/S AMADEA	Phoenix Reisen	9h - 18h	674,2	205,5
<b>10</b>	2016-10-17	Lundi / Monday	SEABOURN QUEST	Seabourn Cruise Line	11h - 19h	650	198,1
<b>11</b>	2016-10-19	Mercredi / Wednesday	CRYSTAL SERENITY	Crystal Cruises	8h - 18h	820,2	250