

Part 1 General

1.1 REFERENCES

- .1 Not used.

1.2 MEASURING PROCEDURE

- .1 Provision for labour, materials, tools, equipment, protection, transportation, administrative overhead, profit margin and necessary financing, etc., to complete the work stipulated in this project shall be included in each of the items listed below, except where otherwise indicated.

- .2 The procedure for measuring the categories of labour, tools and materials which constitute the work as follows:

- .1 Repair Harbour in reference to the leaves 1 to 7 plan RM13008C.

- .1 Part 1: Works fixed price:

- .1 .1 Position #1 – Organization site:

This item will be paid as a firm fixed price. The bid price shall include all costs required for on site installation including office, equipment and labour. Also include all items from section 01 of the specifications not covered on other sections.

The site organization refers to all documents of plans and specification.

- .2 .2 Position #2 - Partial Wharf demolition and Pier head excavation:

This position will be measured comprehensively and includes equipment and labor necessary to perform the demolition, excavation and backfill the dismantling of various existing structures to be demolished, as indicated in the plan. Recovering a portion of stone fill through from the existing structure and reused in new construction. Also, it is included to remove and replace concrete slabs on the south and north pier for laying riprap. The bid price will also include shipping offsite disposal costs of materials and recovery of gravel from the seabed along the jetties. Also, it is included removal of 9 concrete bases with 7 lights.

- .3 .3 Position #3 – Stone 8 to 12 m.t.:

This position will be measured overall and include equipment and labor required to perform the work of consolidation of riprap. The bid price shall include all costs required to perform excavation of pier head, transport on and off site of stones and wall consolidation with recuperated stones, as shown on drawings. Disposition fees are also included in this item. The bid price must also include the loading, transport from different sites storage and the establishment of the stone 8-12 metric tons provided by the Departmental Representative.

- .4 Position #4 – Stone 1 to 3 m.t.:
- This position will be measured overall and include equipment and labor required to perform the work of consolidation of riprap. The bid price shall include all costs required to perform excavation of pier head, transport on and off site of stones and wall consolidation with recuperated stones, as shown on drawings. Disposition fees are also included in this item. The bid price must also include the loading, transport from different sites storage and the establishment of the stone 1 to 3 metric tons provided by the Departmental Representative.
- .5 Position #5 – Stone 1 to 1.5 m.t.:
- This position will be measured overall and include equipment and labor required to perform the work of consolidation of riprap. The bid price shall include all costs required to perform excavation of pier head, transport on and off site of stones and wall consolidation with recuperated stones, as shown on drawings. Disposition fees are also included in this item. The bid price must also include the loading, transport from different sites storage and the establishment of the stone 1 to 1.5 metric tons provided by the Departmental Representative.
- .6 Position #6 – Stone 300 to 450 mm:
- This position will be measured overall and include equipment and labor required to perform the work of consolidation of riprap. The bid price shall include all costs required to perform excavation of pier head, transport on and off site of stones and wall consolidation with recuperated stones, as shown on drawings. Disposition fees are also included in this item. The bid price must also include the loading, transport from different sites storage and the establishment of the stone 300 to 450 mm provided by the Departmental Representative.
- .7 Position #7 – Stone 100 to 300 kg:
- This position will be measured overall and include equipment and labor required to perform the work of consolidation of riprap. The bid price shall include all costs required to perform excavation of pier head, transport on and off site of stones and wall consolidation with recuperated stones, as shown on drawings. Disposition fees are also included in this item. The bid price must also include the loading, transport from different sites storage and the establishment of the stone 100 to 300 kg provided by the Departmental Representative.
- .8 Position #8 – Pit run stones:
- This position will be measured overall and include equipment and labor required to perform the work of consolidation of riprap. The bid price shall include all costs required to perform excavation of pier head, transport on and off site of stones and wall consolidation with recuperated stones, as shown on drawings. Disposition fees are also included in this item. The bid price must also include the loading, transport from different sites storage and the establishment of the pit run stones provided by the Departmental Representative.

- .9 Position #9 – Articulated panels of concrete stone blocks:
This position will be measured overall and include equipment and labor required to perform the work of consolidation of riprap. The bid price shall include all costs required to perform excavation of pier head, transport on and off site of stones and wall consolidation with recuperated stones, as shown on drawings. Disposition fees are also included in this item. The bid price must also include the loading, transport from different sites storage and the establishment of the articulated panels of concrete stone blocks provided by the Departmental Representative.
- .10 Position #10 – Geotextile type I:
This position will be measured overall and include equipment and labor required to perform the work of consolidation of the geotextile of type I, as indicated in the plan. It will include the supply, transportation and installation of this engineering fabric.
- .11 Position #11 – Geotextile type II:
This position will be measured overall and include equipment and labor required to perform the work of consolidation of the geotextile of type II, as indicated in the plan. It will include the supply, transportation and installation of this engineering fabric.
- .12 Position #12 – Storm sewers:
This position will be measured overall. It will include the supply of the pipes, concrete, geotextile, stone 14.5 mm of diameter, accessories and connection to the existing network at the location indicated in the plan.
- .2 Part 2: Work unit prices:
- .1 Position #1 – Concrete walls:
This position will be measured in linear meter and included equipment and labor necessary to perform the work, such as concrete, reinforcing steel, anchor bolts, the formwork, the ripening, finishing, tools, implementation and installation, as described in the plans and specifications.
- .2 Position #2 – Wooden railing:
This position will be measured in linear meter and included equipment, material and labor necessary to perform the work, such as the wooden pieces 254 x 254, the training of the racquet bevel, drilling parts, wood treatment, bolts, iron L and etles accessories.
- .3 Position #3 – Stone 8 to 12 m.t.:
This position will be measured in linear meter and includes the provision of the missing stone to work, the equipment, material and labor necessary to perform the establishment of the 8 to 12 m.t. of stones, as mentioned in the plans and specifications. This position includes the production, transportation, weighing and establishing the item.
- .4 Position #4 – Stone 1 to 3 m.t.:
This position will be measured in linear meter and includes the provision of the missing stone to work, the equipment, material and

labor necessary to perform the establishment of the 1 to 3 m.t. of stones, as mentioned in the plans and specifications. This position includes the production, transportation, weighing and establishing the item.

.5 Position #5 – Pit run stones:

This position will be measured in linear meter and includes the provision of the missing stone to work, the equipment, material and labor necessary to perform the establishment of the pit run stones, as mentioned in the plans and specifications. This position includes the production, transportation, weighing and establishing the item.

.6 Position #6 – Stone Mg-20:

This position will be measured in linear meter and include the supplies, the equipment, the material and labor necessary to perform the establishment of the stone MG-20, as mentioned in the plans and specifications. This position includes the production, transportation, weighing and establishing the item, levelling and material compaction.

.7 Position #7 – Stone 25 to 150 mm:

This position will be measured in linear meter and include the supplies, the equipment, the material and labor necessary to perform the establishment of the stone 25 to 150 mm, as mentioned in the plans and specifications. This position includes the production, transportation, weighing and establishing the item, levelling and material compaction.

.8 Position #8 – Excavation of contaminated materials:

This position will be measured in linear meter and include the supplies, the equipment, the material and labor necessary to make the decontamination works in the zone of the old hydrocarbon tank as indicated on the plan. This position includes the excavation, transportation and disposition in a secure and accepted site, the contaminated materials of A-B category.

.2 Protection works abutments and rehabilitation of the steel structure of the bridge
Whalen references to sheets 8 to 16 plan RM13008C.

.1 Part 1: Works fixed price:

.1 Position #1 – Removal, recovery and replacement of guardrails:

This position will be measured globally. The price includes the cost of labor of all materials needed to complete the execution of the work, including, without limitation, equipment, removal and recovery of existing slides, supply and implementation of materials for laying of existing slides, anchors and all expenses incident to the work.

.2 Position #2 – Steel surface to be repaired:

This position will be measured globally. The price includes mainly the cost of the following items without limitation:

.1 All that is described in section 099719 “Repainting exterior metal surface” such as surface preparation, the measures environmental protection (containment, recovery, transportation and disposal of solid and liquid waste), the

- supply of materials and equipment needed, implementation and any incidental expenses;
- .2 Everything that is described in the plan.
- .3 Position #3 – Replacements of bolts, nuts and washers for structural steel:
This position will be measured globally. The price includes mainly the cost of the following items without limitation:
- .1 All that is described in section 051233 “Steel for bridge construction”;
 - .2 Every thing that is described in the plan;
 - .3 Supplies of material and equipment, the labor and all expenses related to the work.
- .4 Position #4 – Repair bases of old concrete abutments:
This position will be measured globally. The price includes mainly the cost of the following items without limitation:
- .1 All that is described in section 031000 “Concrete formwork and accessories”;
 - .2 All that is described at the section 024199 “Demolition – minor works”;
 - .3 All that is described in section 051233 “Steel for construction of bridges”;
 - .4 All that is described in section 033000 “Poured concrete on place”;
 - .5 All that is described in section 312333.01 “Excavation, digging, trenching and backfilling” as the supply of the material and equipment is necessary, excavation regardless of the land, protection of the existing structures and works, backfilling, the rented equipment, removal of the exceeding level from the excavation, there transportation, there labor, the filling, the transitions, including also all expenses related to the works;
 - .6 The supply of all that material and equipment necessary to complete the execution of this project, the concrete demolition, the labor, the execution, concrete curing, the correction of the surface, the protection when it’s either hot or cold, concrete finishing, installation and removal of formwork and shoring (including accessories), the supply and installation of reinforcement (including mounting frames), setting a disposal of demolition materials and any expenses incidental to the work.
- .5 Position #5 – Cofferdams and pumping:
This position will be measured globally. The price includes mainly the cost of the following items without limitation:
- .1 All that is described in section 312333.01 “Excavation, trenching and backfilling”;
 - .2 The supply of the material and equipment necessary to complete the execution of the work, the labor, the excution

the excavation and the transportation of the equipment, loading and consolidation, development of cofferdam, dewatering of excavations and any expense incident to work.

- .6 Position #6 – Demolition of stone wall and cemented wall construction weight sandbag cement:

This position will be measured globally. The price includes mainly the cost of the following items without limitation:

- .1 All that is described in section 024199 “Demolition – Minor works”;
- .2 All that is described in section 312333.01 “Excavation, trenching and backfilling” such as the supply of the materials and equipment necessary, excavation without protection of existing structures of the land, backfilling, borrowing materials, removal of surplus material from the excavation, transportation, implementation, compaction, transitions and any expense incident to work;
- .3 The shipping, the transportation and the disposition in a appropriate site as required by regulations.

- .7 Position #7 – Riprap and repair the seat mattresses articulated concrete blocks:

This position will be measured globally. The price includes mainly the cost of the following items without limitation:

- .1 All that is described in section 313700 “Riprap blanket”;
- .2 All that is described in section 312333.01 “Excavation, trenching and backfilling” as requested by the materials supply (except the stone 100-300 kg and the stone 25-150 mm that are paid in another measuring position) and equipment necessary, excavation without protection of existing structures on the land, backfilling, borrowing materials, removal of surplus material from the excavations, transportation, implementation, compaction, transitions and any expense incident to work;
- .3 All that is described in section 313219.01 “Geotextiles”;
- .4 The supply for the material and equipment necessary, the labor, the implementation, the transportation and storage of materials, assembly of the water wall, tie rods, pins, and other accessories, the fabric, cleaning and levelling of the surface to be covered, and any incidental expenses in the proceedings;
- .5 Removal and replacement mattresses articulated concrete blocks after reshaping the land and establishment of the membrane geotextile and stone 25 to 150 mm.

Part 2 Products

2.1 NOT USED

.1 Not used.

Part 3 Execution

3.1 NOT USED

.1 Not used.

END OF SECTION