

PART 1 - GENERAL

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| <u>1.1 DESCRIPTION</u> | .1 | This section specifies requirements for supply, placing, finishing, protecting and curing precast structural concrete for lower deck panels associated with wharf deck. |
| <u>1.2 RELATED SECTIONS</u> | .1 | Section 03 10 00 - Concrete Forming and Accessories. |
| | .2 | Section 03 20 00 - Concrete Reinforcing. |
| | .3 | Section 03 30 00 - Cast-in-Place Concrete. |
| <u>1.3 SUBMISSIONS</u> | .1 | Submissions in accordance with Section 01 33 00 - Submittal Procedures. |
| | .2 | The review of submittals by the engineer shall not in any way relieve the contractor from the responsibility for the proper fitting, finishing, quality, quantities, and erection of the works in accordance with the requirements of the contract documents for errors/omissions in the contractor's submittals, or from the responsibility of furnishing materials and workmanship not specifically indicated or specified but required and necessary to properly complete the works. Without restricting generality of the foregoing requirements, the contractor is responsible for dimensions to be confirmed and correlated at the job site, for information that pertains solely to fabrication processes or to techniques of construction, installation, and for coordination of the works of all subtrades. |
| | .3 | Each drawing or procedure document submitted with respect to the pre-cast panels for the lower deck shall bear the |

Wharf Reconstruction (Phase II)

Grand Bank, NL

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stamp and signature of a qualified Professional Engineer registered in the Province of NL.

- .4 Submit concrete mix designs and test results based on trial mixes showing that concrete meets the specification as per Section 03 30 00.

1.4 MEASUREMENT FOR PAYMENT

- .1 Precast Deck Panels: Supply and installation of the precast structural concrete for the lower deck panels to be measured in square metres (m²) calculated from actual field measurements. Contractor to provide all plant, equipment, material, and labour including concrete, reinforcing steel, lifting, transportation and formwork to assist with install.

PART 2 - PRODUCTS

2.1 MATERIALS

- .1 Concrete mixes and materials: to Section 03 30 00 (Cast-in-Place Concrete).
- .2 Reinforcing steel: to Section 03 20 00 (Concrete Reinforcing)

PART 3 - EXECUTION

3.1 PREPARATION

- .1 Manufacture units in accordance with CSA-A23.4. Mark each precast unit to correspond to identification mark on shop drawings for location with date cast in location not exposed in finished work.
- .2 Cast members in accurate rigid molds designed to withstand high frequency vibration. Set reinforcing anchors and auxiliary items to indicated on shop drawings. Cast in anchors, blocking and

inserts as required to accommodate. Vibrate concrete during casting for full thickness. Maintain even and uniform appearance.

- .3 Anchors, lifting hooks, shear bars, spacers and other inserts or fittings required for a complete and rigid installation. Each to conform to requirements of local codes. Lift hooks adequately sized to safely handle panels according to member dimension and weight. Conceal anchors and inserts where practical.
- .4 Shop prime anchors and steel inserts after fabrication and touch up primer on anchors after welding. Do not apply primer to embedded portion of anchor or inserts.

3.2 CONSTRUCTION

- .1 Manufacture units in accordance with CAN/CSA-A23.1, CAN/CSA-A23.4 and CAN/CSA-A-251. Manufacturing tolerances of precast elements shall be in accordance with CAN/CSA-A23.4.
- .2 Place and support steel reinforcement for precast panels as shown on the drawings and to Section 03 20 00 (Concrete Reinforcement).
- .3 Precast concrete work in accordance with CSA-A23.4. Set elevations and alignment between units to approval of Departmental Representative before connecting units.
- .4 All precast concrete surfaces shall be finished in accordance with CSA-A23.1.