PART W60
DREDGING

CONTENTS

1. GENERAL

.1 This Part specifies the requirements for set out, undertaking the dredging and measurement.

2. QUALITY REQUIREMENTS

.1 The Contractor's Procedures shall at a minimum address the following:
- (a) Dredging of material;
- (b) Dredging of material/seagrass mix;
- (c) Dredging of seagrass only;
- (d) Disposal management methods;
- (e) Determination of shape and depth of dredged areas;
- (f) Verification of channel shape; and
- (g) Frequency and density of measurements.

.2 If not provided beforehand the procedures shall be submitted at least 14 days prior to the commencement of site work.

.3 Provision of the procedures listed in this Clause shall constitute a **HOLD POINT**.

3. PLANT

.1 The Contractor shall use the plant nominated in the Schedule of Technical Data and ensure that it is:
- (a) properly maintained and in good working order to allow maximum efficiency in operation; and
- (b) fit and suitable for the work under the Contract.

.2 Access to the site by labour and land based support vehicles shall be limited to:
- (a) The Contractor gaining the approval of the Local Council and where applicable; local land owners, lessees or authorities having control over that land; and
- (b) The use of existing tracks.

.3 The Contractor shall not remove plant from the work site prior to completion, without the consent of the Principal, except where conditions pose a threat to the safety of the Contractor’s personnel or equipment.

.4 Where the Contractor elects to remove the plant from a site prior to dredging work at that site being completed, the Contractor shall be liable for any costs associated with the demobilising, transport and re-establishment of such plant.

4. SETTING OUT AND DREDGING

.1 The Contractor shall carry out dredging in the areas to be dredged as indicated in the Drawings or in accordance with any direction of the Principal.

.2 The Contractor is responsible for setting out the works. The dredge shall be fitted with a certified Differential Global Positioning Satellite (DGPS) system to ensure positional control to dredge the area accurately.

.3 The Contractor will be given a datum level and detailed drawings clearly demarcating the area to be dredged.

.4 The Contractor shall install a standard tide gauge board at a convenient point. Tide levels vary significantly around South Australia and atmospheric conditions can cause further significant departures from predicted tides.

5. DISPOSAL OF DREDGED MATERIAL

.1 The Contractor shall dispose of all dredged material in accordance with the approved Quality Plan, Environment Management Implementation Plan (EMIP) and Water Quality Monitoring Program.

.2 If discharge pipes are to be used, they shall be placed either on the sea bed or floating on the water in a direct line from the dredge to the discharge site. The pipeline shall be clearly marked with floating buoys with the appropriate navigational signals to prevent other vessels from crossing the pipeline.

.3 If offshore discharge diffusers are to be used, they shall be located on a floating pontoon provided with suitable moorings to secure the diffuser in all weather conditions. Discharge from the diffuser will be in a downward direction, with a deflector plate located centrally in the path of the discharge such that the flow is evenly directed horizontally in all directions. The Contractor shall move the diffuser to prevent accumulation of discharge in one location.

6. ACCURACY OF DREDGING

.1 The Contractor shall dredge to the declared/target depths within the range of – 300 mm to + 00 mm over the areas unless otherwise specified, with side slopes not steeper than 1:10 for stability.

.2 The Principal will only consider claims for side slopes shall ower than 1:10 under special cases such as the side slope under the toe of a breakwater. The Contractor shall provide written notice detailing such an occurrence within 48 hours of the occurrence becoming known to the Contractor.

.3 The Contractor shall limit the depth and profile of dredging operations near breakwaters, wharves/jetties revetment structures etc, such that the structural integrity of such structures is not compromised. The Contractor shall be responsible for obtaining all information from the Principal relating to such depths and profile limitations in advance of starting operations. The Contractor shall be liable for any damage cause to any structure due to over-dredging near the structure.

7. PRESERVATION OF EXISTING DEPTHS

.1 The Contractor shall ensure that the depths in the existing area and associated areas are not reduced by the operations.

.2 The Contractor shall bear the full responsibility and be liable for any damage to boating caused by non-observance of these conditions, and remove, at the Contractor's cost, any material displaced into adjacent areas by the operations.

8. MEASUREMENT OF DREDGING WORK

.1 The Contractor shall record and maintain a daily productive rate of pumping. The Contractor shall carry out a test dredge of the material prior to commencing the dredging operation using the continuous recording devices, pressure gauges and any other associated instrumentation.

.2 The following pressures are to be established under normal operating conditions with the dredge and equipment fully assembled, including the connection of the entire discharge line:

(a) Suction and delivery pressures when pumping sea water only; and

(b) Suction and delivery pressures when pumping dredge material at a rated capacity.

.3 On completion of the Test Dredge a **HOLD POINT** shall apply.

.4 The hours of non-productive dredging will be determined by the Principal from the continuous chart records showing the pressures on the suction and delivery sides of the pump. The Principal shall be provided with 2 clear and legible copies of all pressure records and the log as soon as practicable after the conclusion of each day's dredging. After checking, an initialled copy of the records and log will be returned to the Contractor.

.5 The Principal will accept an acceptable data printout from a mass flow meter or similar device which records the mass of the material passing through the discharge pipe as it leaves the dredge.

9. HOLD POINTS

.1 The following is a summary of the Hold Points in this Part:

CLAUSE REF.	HOLD POINT	RESPONSE TIME
2.3	Provision of contractor's procedures	-
8.3	Completion of Test Dredge	-