

2. ENGINEERING

2.1 *Employer's Design*

The *Employer* designs all parts of the *Works*, except for the detailed long-sections (horizontal & vertical alignments) and cross-sections for the upgrading of the revetment slopes. The *Employer* provides a functional specification for designing the revetment alignments and slopes.

The design work for the permanent *Works* has been undertaken by Transnet National Ports Authority. The *Employer's* design for the *Works* is contained in the *Works* Information and all annexures thereto, including drawings and technical specifications.

- The *Employer* grants the *Contractor* a licence to use the copyright in design data presented to the *Contractor* for the purpose of the *Works* (and the *Contractor's* obligation under paragraph 2.2 of the *Employer's Works* Information) ONLY.
- The information that the *Contractor* requires from the *Employer* under bullet above will be made available on request and limited to the specific detail as the *Project Manager* determines.
- The *Employer* provides the *Contractor* with a constructability proposal as Annexure-C3 (Constructability Report) of this *Works* information document.

2.2 *Contractor's Design*

The *Contractor* designs the tie-in revetment alignments and cross-sections based on the *Employer's* functional specification provided in this *Works* Information, further to this the *Contractor* is to design the following parts of the *Works*:

- All required temporary *Works* other than the permanent *Works* indicated on the drawings and which shall be removed from the Site on completion of the *Works*. The major temporary *Works* requiring *Contractor's* design include but are not limited to:
 - Design of the temporary access platform for load of material from landside to waterside (Ensure that the platform maintains a reasonable distance or clearance from the structure of Berth 9).
 - Design tie-ins for the new revetment to the existing infrastructure (this must include but not limited to tying into Deck-on-Pile Structures, Sheet-Piles, Cope Beams, Stormwater Outlets etc.).
 - Design of access route to the site office establishment, material stockpile area including traffic control system for entrance to the site. This must include preparing traffic management plan detailing but not limited to delivery routes, links between sites, traffic control, signs, considering traffic constraints, congestion etc.