



London Gateway Port – Stage Two Revetment Works

Contract Value: £1,433,000
Consulting Engineer: Scott Wilson
Client: Dredging International
Client's Representative: John Hughes (07500804898)
Works completed: April 2013

Categories:- Coastal Defences, Marine Civil Engineering, Shingle profiling.

A joint venture between Laing O'Rourke and Dredging International (LORDI) were appointed by DP world to construct the new London Gateway deep water Container Port and associated Logistics Park on the north shore of the Thames River at Stanford Le Hope. As part of this new development, Ashleigh Contracts operating as a Sub contractor to Dredging International constructed approx. 1750m of new Rock Armour Revetment including final profiling of the underlying sand and shingle material that had been pumped ashore from associated dredging works to provide protection to the phase two areas of the project. Ashleigh Contracts works commenced on Site in August 2012 and were completed by the end of April 2013.

Works Comprised:

- The construction of approx. 1750m of coastal protection Revetments associated with the reclamation of new ground and raising of existing levels to create the new Port Development site.
- Formation of the Revetments comprised final shaping of the dredged sand and shingle that had been pumped ashore as part of the channel widening and deepening of the approaches to the Port area, placing of geotextile on top of the profiled shingle and placing of the underlayer and armour rock to form a core bund along the full length of the stage 2 site to allow for the retention of reclamation material comprising mainly dredged sands & gravels.
- The Revetments comprised seaward slopes varying between 1:3 and 1:7 protected with approx. 101,000T of primary Rock Armour graded in 60 to 300Kg placed in an 800mm deep layer on top of 50,000T of 5 to 40Kg underlayer (360mm deep layer).
- The Revetment comprised a south leg running 1400m in length parallel to the Thames River and a west leg of 350m length returning inland alongside a mud flat nature reserve. Both legs had a crest level of +8.0m above Ordnance Datum and a Toe level of -7.00m. Low tide level was -2.55m which meant that all of the lower revetment was constructed below water using long reach excavators with the requirement for divers being removed by the use of an in house constructed roller attachment for placing of geotextile.
- Ashleigh Contracts also undertook other minor works within the site area whilst on site including maintenance of haul roads and preparation of bund areas for the disposal of unexploded ordnance which was brought ashore as part of the dredging works.
- Both low tides during each 24 Hour period were utilized to ensure that the works were completed on programme.



ASHLEIGH CONTRACTS

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