

## Dover Western Docks Revival

# Strengthening the 'best port in the world's' reputation

**£4m**

/ Project value

**July 2015**

/ The build commenced

**March 2016**

/ The build was completed

Described as a 'one-off opportunity for the regeneration of Dover', the Dover Western Docks Revival project is primed to increase the development of the port's cargo business, create greater space for ferry traffic and enhance the business appeal of the waterfront. Our Early Contractor Involvement (ECI) Phase 1 works, incorporating an enabling works programme based at the Hoverport and the Prince of Wales Pier, have made an important contribution to the overall scheme within Europe's busiest ferry port. Significantly, we generated 17% of cost savings during ECI Phase 1, reducing the target cost from an initial £127m to £105m.

**The Brief**

Dover Harbour Board (DHB) appointed us to assume responsibility for ECI Phase 1, encompassing Pre-Construction and Detailed Design Development for Stages 1-4 (ten areas of work). ECI Phase 1 also provided the opportunity for a NEC3 Contract Option E, involving enabling works at the Prince of Wales Pier.



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Thomas Craven  
Contracts Director

### The challenges

Reflecting the scale, and strategic importance, of the site for the UK economy, it was essential that we delivered a high quality and durable solution, with an emphasis on the whole lifecycle. While focused on developing a commercially successful outcome for DHB, we also had to be fully conscious of the sensitive environmental and heritage setting of the port, in addition to the potential impact of the development works. The port remained fully operational throughout the works, meaning we had to maintain close liaison with the Harbour Master at all times. Our methodology also took the concerns of the local community and businesses on board, particularly around congestion.

### GRAHAM’s solution

With a 400-year trading history, the Port of Dover is a major international gateway for passengers, and trade, and boasts one of the busiest roll-on roll-off terminals in the world. Tasked with creating a ‘lasting legacy’ for the Dover area, the scope of the ECI Phase 1 works was to facilitate the creation of two new cargo berths, a cruise terminal and marina. During our 28-week Pre-Construction phase, we developed optioneering reports for all structures and developed the design to RIBA Stage 3. This was carried out with a cost and programme assessment in order to develop the most efficient programme and target cost. Committed to adopting a collaborative approach, we co-located with our designers (Rambol/RPS/DHB) to evaluate and develop the design options from concept to developed design stage. As part of the ECI programme, we also conducted enabling works for the Prince of Wales Pier. The professionalism of our construction was recognised by the CCS with a Silver Award.

### Outputs & Benefits

- / **Cost Savings:** 17% cost savings were generated during ECI Phase 1 - £127m to £105m - due to design efficiencies (combi wall, marina pier and construction method optioneering), collaborative supply chain engagement and significant programme efficiencies
- / **Drive Analysis:** We commissioned a detailed drive analysis study, which provided a high-level of confidence in the anticipated ground conditions and subsequent selection of the plant for installing the combi walls
- / **POW Pier:** A structural assessment of the Pier demonstrated that reducing the height of the sheet pile section would increase the loading capacity to 35kN/m<sup>2</sup>, making it capable of carrying earthworks plant during the future redevelopment of the docks
- / **Grade II Listed:** We prepared the method statements to support the Prince of Wales Pier’s Listed Building Consent application. Historical items, such as the ornate lamp standards and handrails, were carefully removed and stored



For more information on how we’re delivering lasting impact:

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**GRAHAM**