### AMCO-GIFFEN



# KING'S LOCK BANK PROTECTION WORKS

### Project Location: London, South East

**Project Timeframes:** January 2017 to March 2017

**Client:** Environment Agency

AmcoGiffen Discipline/Sector: Environmental

### **Project Overview**

Due to the health risk to boat users caused by the erosion and damage of the left bank of the River Thames, just upstream of King's Lock, AmcoGiffen were contracted to design and build an effective bank stabilisation solution.

As King's Lock is a popular location for visitors to this part of Oxfordshire, developed for 24-hour moorings, the continued use of these moorings and the creation of additional anchorages were considered a priority.

## AmcoGiffen's Scope of Works

Selected to deliver bank reinforcements and increased protection, alongside providing the design and build of supplementary mooring pontoons, our scope of works included:

#### **Bank Protection**

- Repairs to a 60m stretch of the left bank, just upstream of King's Lock
- Piling to water level, with a walkway providing access to the whole length of the bank and existing mooring posts

#### **Mooring Pontoons**

- Installation of two piles to tether two existing mooring pontoons
- Installation of the existing access walkway to provide access to the lock island
- Tree works to enable piling and vegetation clearance to create a natural walkway from the moorings to the lock
- Removal of existing redundant landing stage platform (mounted on timber piles) situated at the downstream end of the existing mooring pontoons

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The Project Executive, NCPMS Project Manager, Operations Delivery Lead, CH2M Project Manager, EA Chief Designer and a British Waterways Engineer all congratulated us on an excellent job carried out in difficult circumstances during a lock closure period. Mick Houghton, AmcoGiffen Contracts Manager



## **Innovation Applied**

Since the client's original outline would not withstand boat impact loading, the innovative sheet pile solution with associated walkway and moorings was adopted after a number of iterations. Our in-house design team enabled a quick response time to each of the changes, helped through constant dialogue and collaboration with the Environment Agency.

Because all works were located on an island, all plant and materials were transported by pontoons.

Throughout the works, the safe use of King's Lock by pleasure-craft and the lock-keeper was unaffected, and the footpaths on the island were kept open for public use throughout. Use of the in-house design team allowed flexibility of design, and considerable time savings.

## **Benefits Provided**

The end result was the provision of a moorings area which was aesthetically pleasing, safe and functional, as well as providing more mooring points than had existed previously.

Further benefits provided included:

- An increase in revenue
- Introduction of new safety features, such as ladders, safety chains and anti-slip walkways
- Soft landscaping of the riverbank and increased grassed areas to allow for camping and picnic use
- The riverbed levels adjacent to the moorings were lowered so that larger boats could be accommodated
- A robust and comprehensive understanding of the technical scope
- A strong commitment to around the clock health and safety

### **Project Contact**

For further info please contact Mick Houghton, mhoughton@amco.co.uk