Project Profile: Tipner Interchange **Project:** M275 Tipner Interchange Bridges, Portsmouth **Client:** Portsmouth City Council



The project: Tipner Interchange Bridges are part of the main gateway to the city of Portsmouth, supporting the M275 motorway. The interchange was designed to accommodate a grade separated junction between the M275 & Tipner, an area that was earmarked to undergo major redevelopment to form the 'key gateway' to Portsmouth. Principal Bridge Inspections highlighted leaking deck joints and patch defects in the supporting structures.

Concrete testing also confirmed the presence of high chloride ion concentrations. As part of an Early Contractor Involvement scheme (ECI), **APA** were selected as the specialist contractor to provide practical design assistance and the main works package during the construction phase.





The project team, headed by Portsmouth City Council, was formed with **APA Concrete Repairs Ltd** chosen as one of the preferred partners and members of the Design Team for the E.C.I. phase of the Project. The team formed a repair & protect scheme to maintain the life of the bridges, avoiding the costlier option of demolition & rebuild.

The solution: This scheme primarily involved the design, installation and commissioning of an



impressed current cathodic protection system (ICCP). A 'mesh & overlay' type ICCP system was selected by the team and installed by **APA**. Titanium mesh anode was fixed to the structure & overlaid with a 30mm thick layer of dry-sprayed concrete.





The outcome: The works were successfully completed with the ICCP System being commissioned and working well to provide ongoing protection to the support structures from

future corrosion. The deteriorated concrete was repaired, and the sprayed concrete overlay successfully encapsulated the ICCP system and provided an improved aesthetic finish.



Materials Utilised:

- Weber Certite Bedding Mortar
- Weber Mulsifix Keycoat
- Weber Mulsifix High Build Repair Mortar
- Masterseal 525 Waterproof Coating
- Weber Mulsifix Brushcoat
- Weber Mulsifix Spray Concrete DS

For further enquires please contact:

E-mail: sales@apaconcreterepairs.co.uk Tel: 01422 379640

Northern Office

Black Brook Way Greetland Halifax West Yorkshire HX4 8ED Telephone: 01422 379 640 Fax: 01422 374 938

Southern Office

Abbey House Wellington Way Brooklands Business Park Weybridge London KT13 0TT Telephone: 0208 853 0627

E-mail: <u>info@apaconcreterepairs.co.uk</u>

Web: <u>www.apaconcreterepairs.co.uk</u>

PROFESSIONAL MEMBERSHIPS & ACCREDITATIONS HELD

