

Walton Supply Resilience (Chessington) - Pump & Surge Vessel Grouting Failures

Background:

Structural issues occurred due to improper baseplate grouting practices. Grout was mistakenly applied on top rather than beneath the baseplates, undermining proper load transfer and compromising structural integrity. Furthermore, an improper unfilled void beneath the pump's slab led to grout settlement. The absence of correct grout finishing, such as chamfering and confinement, resulted in cracking. These failures indicate significant shortcomings in procedural compliance and communication.

What did we do?

- **Grout Removal and Void Filling:** Excess grout was precisely trimmed from the affected areas, following the MWH design team's instructions, we then filled the existing void and around the exposed pump's bolt with appropriate TS and BB grout.
- **Plinth Repair and Finishing:** Damaged plinth surfaces for both the pump and surge vessel were repaired and repainted to restore their integrity and appearance.



What should we have done?

- Follow the design and procedures strictly
- Thorough preparation and management
- Clear communication and training
- Supervision and quality control
- Immediate post-grouting inspection

If you have any questions, please contact your quality advisor.

