

# Rochdale MBC New River Wall and Cofferdam

---

**Contract No:** C830

---

**Client:** Sir Robert McAlpine Ltd.

---

**Location:** New Municipal Offices, Rochdale

---

**Value:** Approximately £400,000.00

---

**Summary:** Design, supply, installation of steel sheet piles to form a river frontage retaining structure and walkway support for the proposed Municipal Offices in Rochdale. In addition, 3 no. temporary earth retaining cofferdams were designed and installed. The temporary cofferdams facilitated the excavation and construction of the proposed Fuel Store structure and the attenuation / rainwater tanks.

---

**Drawing Ref:** River Wall Sections & Detail  
River Wall General Arrangement Plan

---

Sheet Piling UK Ltd were employed by Sir Robert McAlpine Ltd for the design and installation of a new river frontage retaining wall / walkway support structure and 3 no. temporary cofferdams.

Notably, the client's Consulting Engineer specified that all design work (including temporary works) on this scheme was to comply with the recently implemented Eurocodes, namely EC.7 for geotechnical aspects, and EC.3, Part 5 for the structural design of the steel sheet piles. SPUK are already well versed in the new Eurocode design standards and therefore the analyses and design were completed without issue.

For the new river wall, 201 no. 9.0m to 12.0m long NSP.IV.W, L606A and NSP.3W sheet piles were installed using a Bauer Telescopic Leader Rig mounted with a high frequency 100te vibrohammer. Where required due to the variable rock levels, the sheet piles were then back-driven to final level with a crane suspended 2.4te Hydraulic Drop Hammer.

The general soil profile consisted of Made ground over alluvial Clays / Sands and Gravels over weathered Mudstone / Siltstone at varying depths. The vast quantity of boreholes along the sheet pile line and the large variance of the underlying rockhead depths made the analysis, design and installation of the river wall challenging to say the least, but the works were completed successfully, and on time.

In addition to the permanent river wall, SPUK also designed and installed 3 no. temporary cofferdams for the excavation and construction of various underground structures. Approx. 250 no. sheet piles were installed in total for the cofferdams. The cofferdams were designed such that any temporary propping could be removed when the base elements had been cast, thereby leaving an unhindered working area for the follow-on contractors.



## Project Images

---



## Downloads

---

-  [River Wall Sections & Detail](#)
-  [River Wall General Arrangement Plan](#)