

Brotherton Ings Spillway

CLIENT: Stillwater Associates

LOCATION: UK

YEAR OF COMPLETION: 2023

Brotherton Ings Spillway was constructed near Ferrybridge Power Station, Leeds, to aid the modification of a redundant reservoir. The spillway will allow water ponding in the disused reservoir to drain.

We undertook the detailed design of the new spillway constructed with reinforced concrete slab invert slabs with masonry training walls and masonry steps. The masonry walls were reinforced where required to retain the depth of backfill. We carried out the detailed design of the spillway. The headwalls were also reinforced masonry construction.

The spillway was 2.4m wide with 6m long headwalls. The total length was 120m long with 12 steps. The training walls were between 560mm to 800mm high.

The analysis was revisited post construction to check for the risk of cracking where movement joints were not installed correctly.

KEY FACTS:

- Spillway
- Reinforced Concrete
- Reinforced Masonry
- Detailed Design

