

## Montague Rd, FSA Culvert Desilt

Land & Water undertook Early Contractor Involvement (ECI) under its Framework agreement with the Environment Agency regarding the clearance of large volumes of silt and debris deposited within the Montague Flood Storage Area of Salmons Brook Culvert in Edmonton, North London.

Samples of the silt were taken showing that the materials, whilst classified non hazardous, were unsuitable for depositing elsewhere in the local area and therefore would need to be completely removed from site to a suitable disposal location. Volumes were established using a combination of manual investigation and drone footage taken within the culvert system revealing a build up of approx. 700 m<sup>3</sup> of material to be removed to restore the culverts to optimum use. The location of the culvert system meant public access and equipment locations would need careful consideration in order to complete the works safely.

On successful contract award Land & Water elected to divert water flows along alternate culverts in succession using a sand bag dam system. Dewatering of the culverts could then take place in order to safely clear the culverts. Further mitigation measures were used including a sediment tank and straw bales to prevent any fines re-entering the watercourse during the works.

Using confined space trained personnel and the world's first fully electric remote controlled skid steers, Land & Water began the process of removing the silt from the heavily congested culverts. The skid steers transferred the silt into skips where it was then unloaded into muck away lorries removing any large debris in the process.

Debris material was disposed of as mixed waste with Land & Water electing to send the remaining silt deposition to its licensed Wetland Habitat Creation scheme at Rainham Marshes for onward use providing more environmental solutions for this project.

The team and the electric skid steers successfully removed approx. 700m<sup>3</sup> from the 2 culverts as well as a further 200m<sup>3</sup> from the downstream channel connecting the bypass culvert and Salmons Brook, restoring it to its natural state. Indicative yellow lines were painted along the inside of both culverts on both sides, representing 50% and 75% capacity to allow for future monitoring of the silt levels within them.



### Project Particulars

Client: Environment Agency (SE Hub)  
July to September 2022

PROJECT  
VALUE:

**£520,000**