

Engineer/ Manage/ Deliver/

Phase I/II Site Investigation & Foundation Assessment



Location: Temple Works, Leeds, West Yorkshire







Temple Works is a former Flax Spinning Mill built in the style of an Egyptian Temple in 1838 and was one of the first large scale single storey factories built.



The mill buildings have fallen into disrepair and major structural failure occurred in 2008 when large stone blocks were ejected from the structure onto an adjacent highway when internal restraints failed. The building is now set for large sale repurposing, and it is hoped will be a Leeds base for the British Library. However, the building is currently too unstable to commence the redevelopment works without intervention and extensive temporary structural support is required before any such works can begin.

Engineering and Design Factors

The majority of the building is too unstable to access and requires support for which large steel external buttresses are to be constructed around the perimeter which will be supported on piled foundations for stability. Excavation works required hand excavation close to the building to minimise the risk of vibration. No records remain of the buried features within and around the building.

Description of the Works

Alan Wood & Partners provided geotechnical and geo-environmental investigation services, along with Ground Penetrating Radar surveys to investigation the potential for buried structures and voids which may present constraints to the proposed pilling works. Intrusive works included rotary drilling to investigation near surface conditions and obtain samples of rock to aid pile design. Concrete coring was carried out to assess the thickness and composition of existing slabs and determine their bearing strata, both within and around the existing mill building. Trial pits were also excavated adjacent to the building to assess existing foundation construction and bearing strata and to investigate a historic water tank which was indicated in historic record to exist close to the mill building.

Core services

Geotechnical and Geoenvironmental Engineering

Sectors

Commercial, Retail and Leisure

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