

Gazebo at Bank Hall, Sawley

Heritage Statement

Introduction

Bank Hall is a Grade II listed property located in the village of Sawley, near Grindleton and within the Sawley protected conservation area under Ribble Valley Council. The property is an 18th Century sandstone house, built in 1780 by William Tipping the conservative MP for Stockport. The property also has connections to the family of Sir Robert Peel.

Approximately 50m south east of the main house there is an early 19th Century gazebo. The gazebo has a separate Grade II listing from the house.

Structural Description

The gazebo is a single storey structure approximately 4 metres wide by 4.5 metres long. The structure varies in height, with the East elevation forming part of the river retaining wall, 2.5m below ground level. The walls are solid stone masonry with lime mortar. The walls have a thick pebble-dashed cement render finish externally and are plastered internally. The masonry walls have a parapet around all four sides, with a battlement detail.

Structural Condition

In December 2015, Storm Desmond caused the River Ribble to burst its banks and flood the immediate surrounding area. The river water level rose to 1.2m above the top of the river retaining wall, and as the river wall forms part of the gazebo structure, the gazebo was flooded. Drawing 101 Gazebo Elevations, shows the approximate flood level line. As the soil was saturated beneath the structure it is thought that the sub soil settled causing significant structural movement of the masonry walls above.

The cement render and masonry stone walls have significant cracks largely by the window and door openings. On the north elevation there is a wide crack, approximately 70mm wide. Each elevation is also out of plumb by approximately 300mm. As part of the structural appraisal, stability calculations were carried out on the masonry walls, highlighting a high risk of collapse.

The structure was temporarily propped shortly after the floods and the condition survey further emphasised the need to keep the temporary supports in place until a more permanent solution could be carried out.

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Proposed Works

There are two main options for permanent works to the gazebo.

- Stabilise the structure in its present condition, reducing the risk of any further settlement or lateral movement and preventing collapse.
- Demolish and re-build the structure.

The proposals, set out in the Structural Appraisal and Drawings 100 - 102, detail various repairs to the structure in order to stabilise it, in its present condition.

The proposals include;

1. Underpinning (steel mini-piles and concrete needle beams) to the existing masonry walls. This type of underpinning was chosen because of the existing ground conditions, the mini-piles enable the load to be transferred to a suitable soil type. This solution will also be underground, so no visible repairs.
2. Tying the masonry walls together at high level using Cintec Anchors. Cintec Anchors are a discrete method of stabilising masonry walls.
3. Locally repairing any cracks, damaged masonry and cement render with suitable stone, lime mortar and lime render. The repairs are minimal but required to protect the masonry from any further damage or decay. The use of lime render instead of cement render is considered best practice to protect the masonry behind.