

Turnbridge Mills  
Quay Street, Huddersfield, West Yorkshire:  
photographic record of the former engine house



March 2026

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# Turnbridge Mills

## Quay Street, Huddersfield, West Yorkshire:

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#### SUMMARY

The former beam engine house of ca. 1872 at Turnbridge Mills, Huddersfield (NGR: SE 14925 16835), was recorded photographically to comply with an anticipated condition of planning permission for a mixed use development. The structure was built as part of a large cotton spinning and doubling mill, but the engine was removed and the building extensively altered in the mid 20th century.

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*This project has the OASIS ID: stephenh1-540634*

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## Turnbridge Mills, Quay Street, Huddersfield, West Yorkshire: photographic record of the former engine house

### 1 Introduction

- 1.1 This report presents the results of the photographic recording of the former engine house on the north side of Quay Street, Huddersfield, within the complex of buildings known as Turnbridge Mills. It was commissioned by the owner and developer John L Brierley Property Ltd, to support a current planning application for the site, which includes the proposed refurbishment of the building recorded (Kirklees Council, ref: 2025/91122).
- 1.2 The former engine house was built between 1871 and 1873 for Reuben and William Hirst as part of their cotton spinning and doubling mill, and housed a large beam engine to provide rotary power. The engine was removed in the 20th century, and the exterior and interior of the building were subsequently altered.
- 1.3 The recording work, which comprised a photographic survey, was carried out in accordance with a written scheme of investigation, produced to reflect a brief informally agreed with Kirklees Council and the West Yorkshire Archaeology Advisory Service (see Appendix). This report will be submitted to the client, the local planning authority, the West Yorkshire Historic Environment Record, and the OASIS Project for publication on the internet<sup>1</sup>, while the photographs will be deposited with the Archaeology Data Service.

### 2 Location

- 2.1 The Turnbridge Mills site lies to the east of Huddersfield town centre, on both sides of Quay Street, which leads to the Huddersfield Broad Canal (figures 1 & 2). The former engine house stands on the north side of the street, facing south onto it, and adjoins a four-storey warehouse to the west, and the former boiler house to the east (figure 3). The NGR for the building is SE 14925 16835.

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<sup>1</sup> [Online Access to the Index of Archaeological Investigations](#)

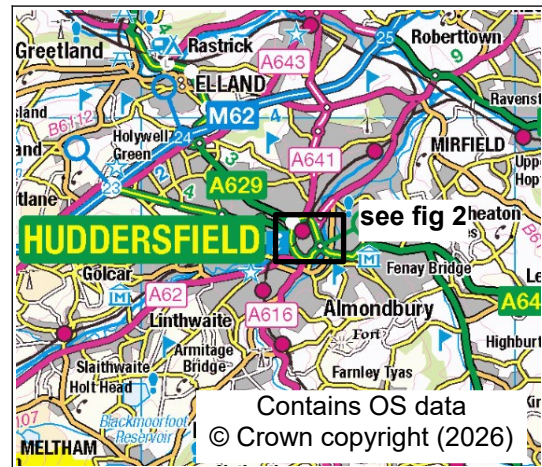


Figure 1: Location map (i), 1:200,000

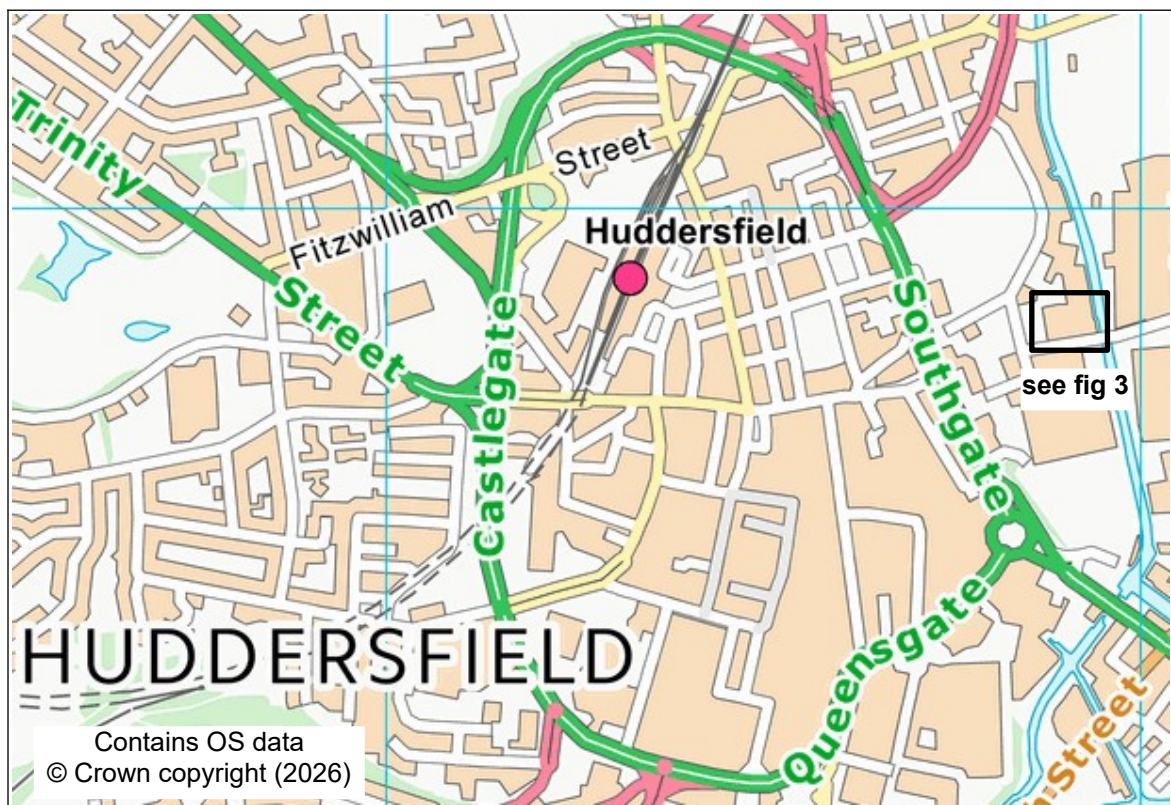


Figure 2: Location map (ii), 1:10,000

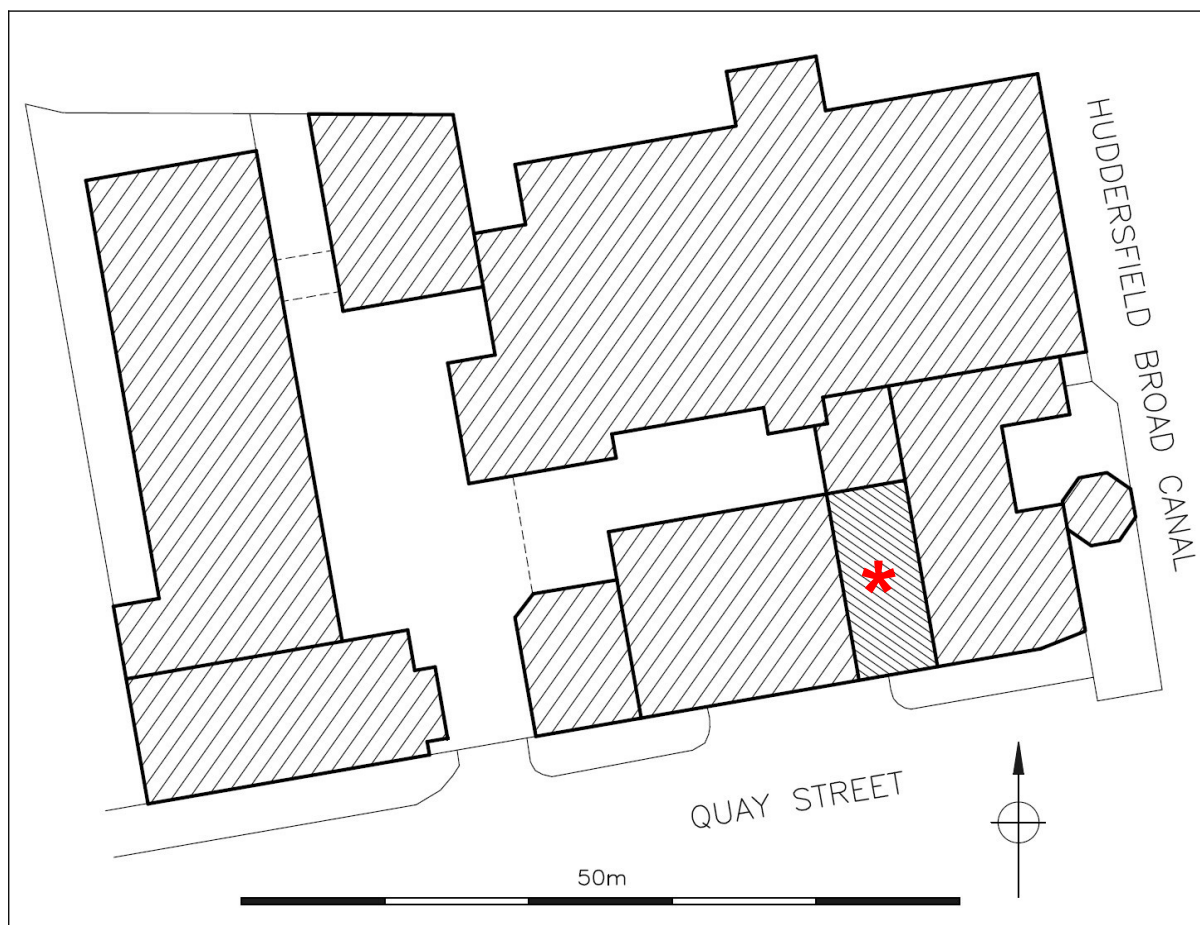


Figure 3: Plan of Turnbridge Mills, with former engine house marked (1:500)

### 3 Planning context

- 3.1 The former engine house is not a designated heritage asset but stands close to two grade II listed buildings ("*Spinning block, Turnbridge Mills (Hirst's Mill)*"<sup>2</sup>, and the mill chimney<sup>3</sup>).
- 3.2 A planning application for a mixed use development at Turnbridge Mills is currently under consideration by Kirklees Council (ref: 2025/91122). The engine house forms part of building D in the application.
- 3.3 Within the draft conditions proposed by the council, no. 4, included following advice received from the West Yorkshire Archaeology Advisory Service (WYAAS), requires recording to be made within building D prior to any works being carried out.

<sup>2</sup> National Heritage List entry no: 1492710

<sup>3</sup> National Heritage List entry no: 1409815

- 3.4 Following informal discussions with the council and WYAAS, a written scheme of investigation for recording was produced by the present writer (see appendix), and the recording carried out in accordance with that.
- 3.5 The proposed draft condition no. 3 for both the planning application, and for a related listed building consent application (ref: 2025/91645), would also require recording to be carried out at other buildings within the site; that work is covered by a separate report, also by this author (*Turnbridge Mills, Quay Street, Huddersfield, West Yorkshire: record of selected buildings*).

#### 4 Previous investigative work

- 4.1 The site was visited during a survey of Yorkshire textile mills in the late 1980s by the Royal Commission on the Historical Monuments of England<sup>4</sup>, but no detailed recording is known to have taken place at that time or any other. However a heritage statement<sup>5</sup> supplied with the planning application provides useful details regarding the historical background to the site, as does the National Heritage List entry for the spinning block noted above.

#### 5 Historical background

- 5.1 The present complex of buildings on the north side of Quay Street was for the most part established between 1871 and 1873 by the brothers Reuben and William Hirst, cotton spinners and doublers, who seem previously to have operated in mill buildings to the south of the street. The 1870s scheme was designed by the local architects John Kirk and Sons, and appears largely to have replaced earlier industrial structures shown on the 1851 Ordnance Survey town plan<sup>6</sup>, comprising an iron and brass foundry and a malt kiln. Tenders for the construction indicate that the Hirsts' project was to include a cotton mill, warehouse, scotching room, boiler house, engine house and chimney; the 1890 1:500 town plan<sup>7</sup> illustrates the layout of the site after these had been established (figure 4).
- 5.2 Following construction, a local newspaper described how a "new immense beam engine" known as *The Templar* had been installed at the site by Robert Gledhill of Bradley Mills. The engine was said to be the largest in the town, with a 48 inch cylinder and 7 foot stroke, capable of 29 strokes a minute. In about 1904 it

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<sup>4</sup> Historic England Archive, ref BF063087, and photographs including MF078/Q/31, 32, 33, 34, 35

<sup>5</sup> Humble Heritage 2025 *Turnbridge Mills, Quay Street, Huddersfield: Heritage Statement for Proposed Warehouse, Quay Street*

<sup>6</sup> Huddersfield sheet 5, surveyed 1848, published 1851 (not shown at original scale)

<sup>7</sup> Huddersfield - Yorkshire, sheet 246.15.95, surveyed 1888, published 1890 (not shown at original scale)

was "McNaughted", the name given to a particular means of increasing efficiency. Rotative power from the engine was transmitted to the multi-storey spinning block to the north, perhaps via the projecting tower on the south side of the block, which now houses a modern lift.

- 5.3 The Ordnance Survey town plan of 1890<sup>8</sup> (figure 4) shows the engine house with the same footprint as today, except for the presence of external stairs at the north side. Its position close to the canal would have been chosen to provide a source of water for the boilers, and no doubt for the shipping of coal, as well as of raw and finished materials to and from the mill.

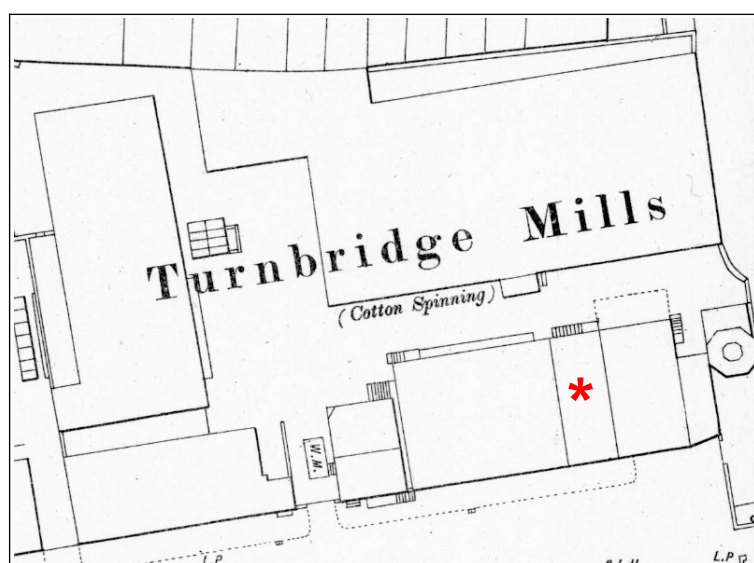


Figure 4: Ordnance Survey 1:500 town plan, 1890

- 5.4 The Hirst brothers dissolved their partnership in 1886, but William continued in business as William Hirst and Son, a company which was later bought out by John L Brierley. Brierley had first established a textile company in Huddersfield in about 1893, in partnership with a Mr Haigh, and in 1895 moved into existing premises on the south side of Quay Street, also known as Turnbridge Mills. The company then acquired the premises on the north side of the street from William Hirst & Son in 1925, in order to expand production.

- 5.5 A number of high quality oblique aerial photographs taken in 1949<sup>9</sup> show the engine house with a tall, round-arched window in its south gable, which was no

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<sup>8</sup> Yorkshire, sheet 246.15.9, surveyed 1888, published 1890

<sup>9</sup> Historic England Aerofilms Collection, EAW025240 - EAW025246. Copyright prevents reproduction, but these are available to view on Historic England's Aerial Photograph Explorer - <https://historicengland.maps.arcgis.com/apps/webappviewer/index.html?id=2626ed0c37484d96b8954dd33187084e&mobileBreakPoint=300>

longer present by 1985 (see footnote above), but otherwise it appears in those views largely as it does today.

## 6 Recording methodology

- 6.1 Recording was carried out on 11 February 2026 and involved inspection of all accessible parts of the building, together with a photographic survey.
- 6.2 The photographic record comprises JPG files taken with a 12 megapixel digital SLR camera, and includes both external and internal views, generally using a scale in the form of a 2m ranging pole with 0.5m graduations. The photographs are referred to in the following account by numbers in **bold**, and reproduced at the end of this report, while their locations are shown on a site plan and copies of sketch floor plans (figures 5 and 6). They are to be deposited with the Archaeology Data Service for long-term curation.

## 7 Former engine house

- 7.1 The building is contemporary with the four-storey building to the west and the boiler house to the east, and is built from coursed sandstone (**1,2**).
- 7.2 Its front elevation has clearly been much altered and originally contained a single, tall, arched window (possibly broken by a transom), characteristic of beam engine houses, but the opening has been reduced in size to a loading doorway at first floor level, and windows have been inserted to both ground and second floors since 1949. There appears to have been a matching window to the rear, similarly altered and now slighted by a later roof (**3**), with inserted ground floor window below (**4**). The outline of the original ground floor doorway survives to the east of this, defined by a pair of projecting jambs (**5**), and this entrance would have been reached via the external steps shown on figure 4 above. Below these ground floor openings, the north wall contains some massive stone blocks (**6**).
- 7.3 The engine house's east side faces into the adjoining boiler house (**7**), where there is a pair of centrally-placed, massive stone blocks very likely relating to the former beam engine (**8,9**); possibly they formed a horizontal bearing. There is a much better-defined opening for a bearing in this wall, above the boiler house roof (**10**), perhaps for the working beam.
- 7.4 The engine house roof was altered after 1949 by the introduction of glazing into the east pitch (**11**).

- 7.5 The wall forming the engine house's west side was entirely removed in the 20th century, in order to merge its interior with that of the adjoining four-storey building, and the engine bed also appears to have been removed or levelled down at that time, while first and second floors have also been inserted, at the levels of those in the adjoining building. This has left very few internal features of interest.
- 7.6 The ground floor has two rooms of entirely modern appearance (**12,13**), as does the first floor, where the 20th century steel frame carrying the inserted floors can be seen (**14,15**). Here, the rear window is partly visible, together with vertical boarding, but these are 20th century features. Likewise, the 20th century creation and treatment of the second (attic) floor is entirely modern, and provides no evidence for the nature of the engine housed here (**16-18**).

## Appendix: Written Scheme of Investigation

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Turnbridge Mills, Quay Street, Huddersfield:

### Written scheme of investigation

for an archaeological photographic record of Building D (engine house)

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Kirklees Council, planning ref: 2025/91122, draft condition 4

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## 1 Introduction

- 1.1 This written scheme of investigation (WSI) sets out the proposed methodology for an archaeological photographic record of the former engine house at Turnbridge Mills. The current planning application is for:  
*“Redevelopment of site for mixed-use E(g) (i, ii and iii) and B8 including: demolition of buildings and re-cladding of southern elevation of retained adjoining building; retention, conversion and renovation of existing mill/office/workshop/engine house building including alterations; erection of two new buildings; formation of two vehicular access points, service yard and parking areas; and other associated works”.*
- 1.2 A consultation response from the council's archaeological adviser, the West Yorkshire Archaeology Advisory Service (WYAAS)<sup>10</sup>, notes that:  
*“The heritage statement supplied with this application provides a record and review of the mill complex. This provides a generally good record of the site as a whole the one feature on the site that could be expanded on is the engine house. The engine house accommodated a type 2 McNaughted beam engine with gear drives to vertical shafts at the mill. Such an engine will have impacted on the interior of the engine house with feature (hoist points etc) on the walls and roof to aid in the construction and maintenance of the engine. An examination and record should be made of the interior of the engine house to identify and record such features. This would likely be a photographic record. Such a record should be made prior to any construction works starting in the engine house.”*
- 1.3 A requirement for recording to satisfy the WYAAS recommendation is included within the draft conditions for the planning approval (condition 4). The present scheme of investigation sets out how this would be achieved and follows discussion between Stephen Haigh and Glyn Davies (WYAAS Senior Archaeological Officer).

## 2 Proposed recording method

- 2.1 The work will be confined to that part of Building D which has been identified as a former engine house in the heritage statement<sup>11</sup>.
- 2.2 The work will be undertaken in accordance with the guidelines for a “Photographic Survey”, set out in *Understanding Historic Buildings: a guide to good recording practice* (Historic England 2016, p27).

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<sup>10</sup> dated 12.06.2025

<sup>11</sup> Humble Heritage 2025 *Turnbridge Mills, Quay Street, Huddersfield: Heritage Statement for Proposed Warehouse, Quay Street*

- 2.3 The record will be made using a digital camera with a resolution of 12 mega pixels, in JPG format. It will comprise general photographs of the site and setting, and a thorough survey of the exterior and interior of the engine house, including detailed photographs of specific features of interest relating to the former engine and transmission of its power.
- 2.4 Detailed photographs will contain a graduated photographic scale.
- 2.5 Following site work, a report will be produced. It will be illustrated appropriately, with location maps, photographs, and photograph location plan(s). It will be supplied to the Historic Environment Record, and to OASIS<sup>12</sup>, from where it is expected to be published to the Archaeology Data Service Library.
- 2.6 Deposition of the report with the Historic Environment Record by Stephen Haigh will implicitly give permission for the material presented within it to be used by the WYAAS in perpetuity, although Stephen Haigh will retain the right to be identified as the author of all project documentation and reports as specified in the Copyright, Designs and Patents Act 1988 (chapter IV, section 79). The permission will allow the WYAAS to reproduce material, including for commercial use by third parties, with the copyright owner suitably acknowledged.

### **3 Archive**

- 3.1 The project archive will comprise a full set of photographic image files and will be submitted to the Archaeology Data Service.

### **4 Timetable**

- 4.1 No works would be carried out to Building D until recording has been completed, and the Historic Environment Record confirms receipt of the report and the Archaeological Data Service confirms receipt of the photographs, in both cases in writing.

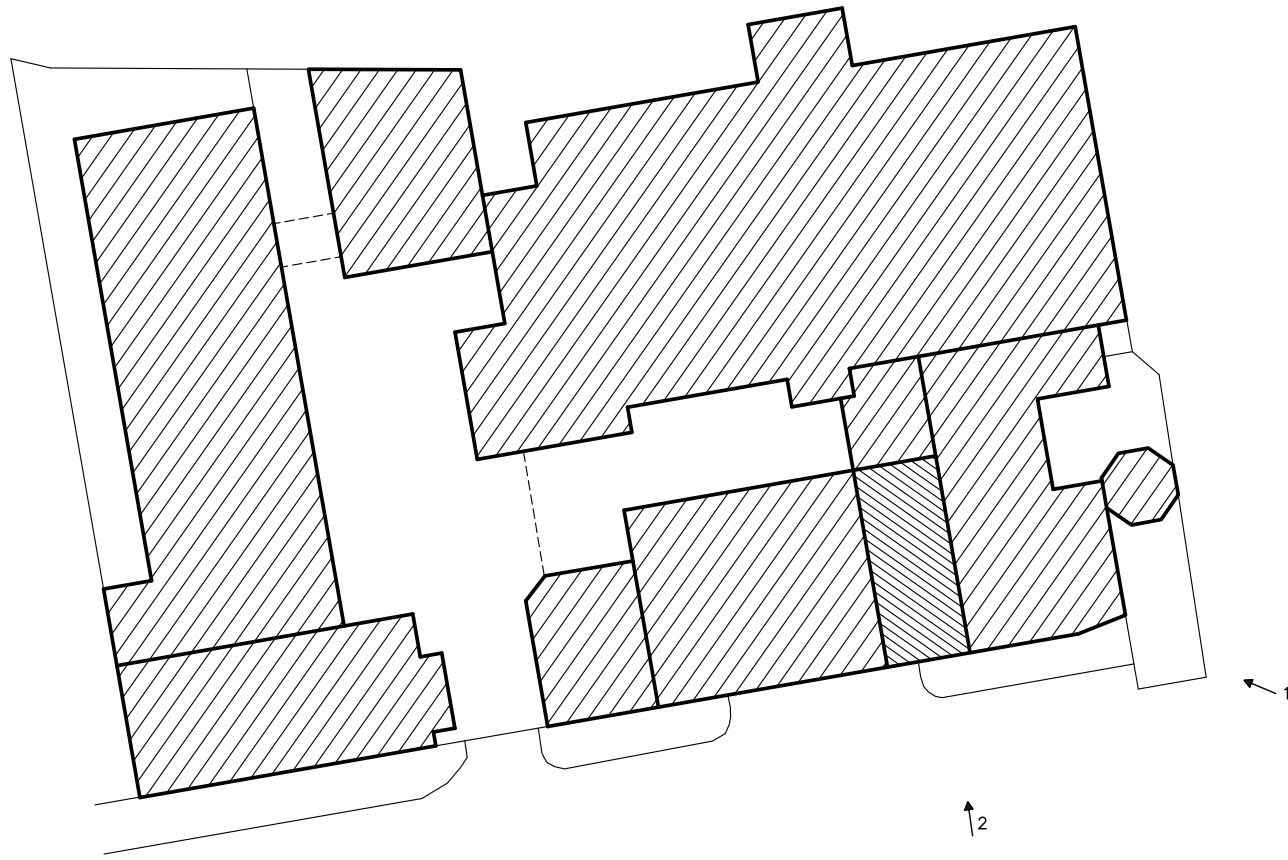
### **5 Personnel**

- 5.1 All work will be undertaken personally by Stephen Haigh MA, a buildings archaeologist with many years experience of investigating and recording historic buildings including those associated with the West Yorkshire textile industry.

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<sup>12</sup> An online reporting form to provide information about archaeological investigations to Historic Environment Records, etc <https://oasis.ac.uk/>



KEY

↗ 1: photograph direction and number



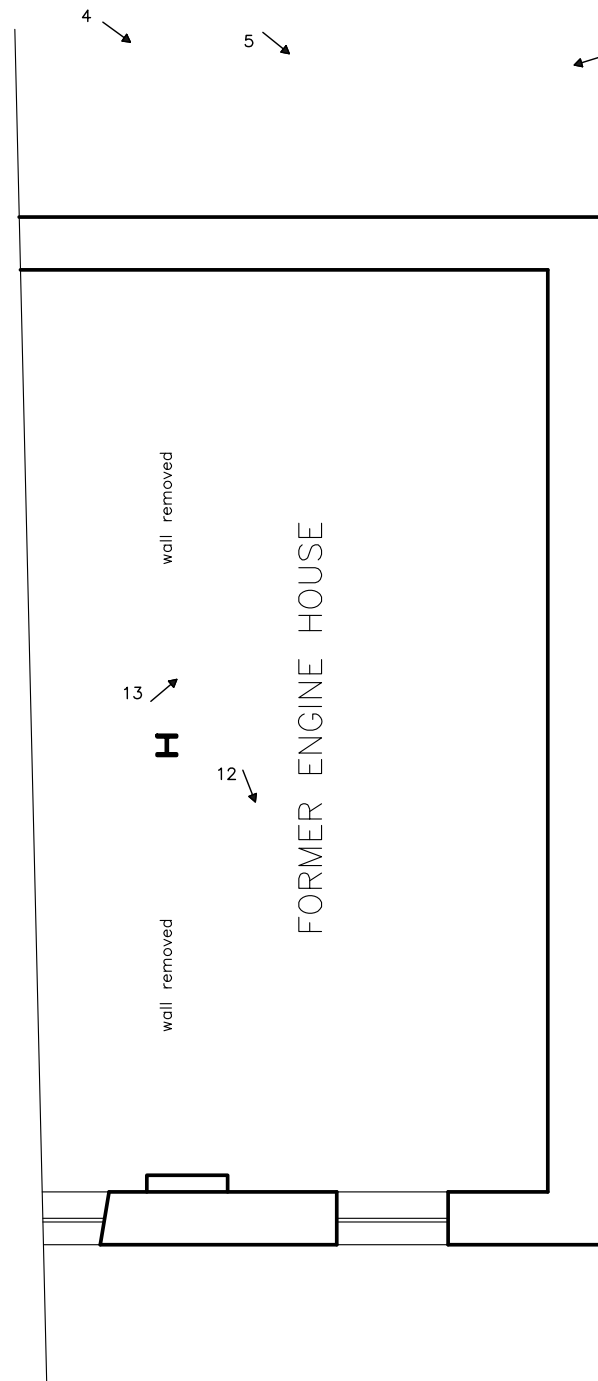
TURNBRIDGE MILLS  
QUAY STREET  
HUDDERSFIELD, WEST YORKSHIRE  
NGR: SE 14925 16835:  
RECORD OF FORMER ENGINE HOUSE

FIGURE 5:  
SITE PLAN  
WITH KEY TO PHOTOGRAPHS

SCALE: 1:500 (at A4)

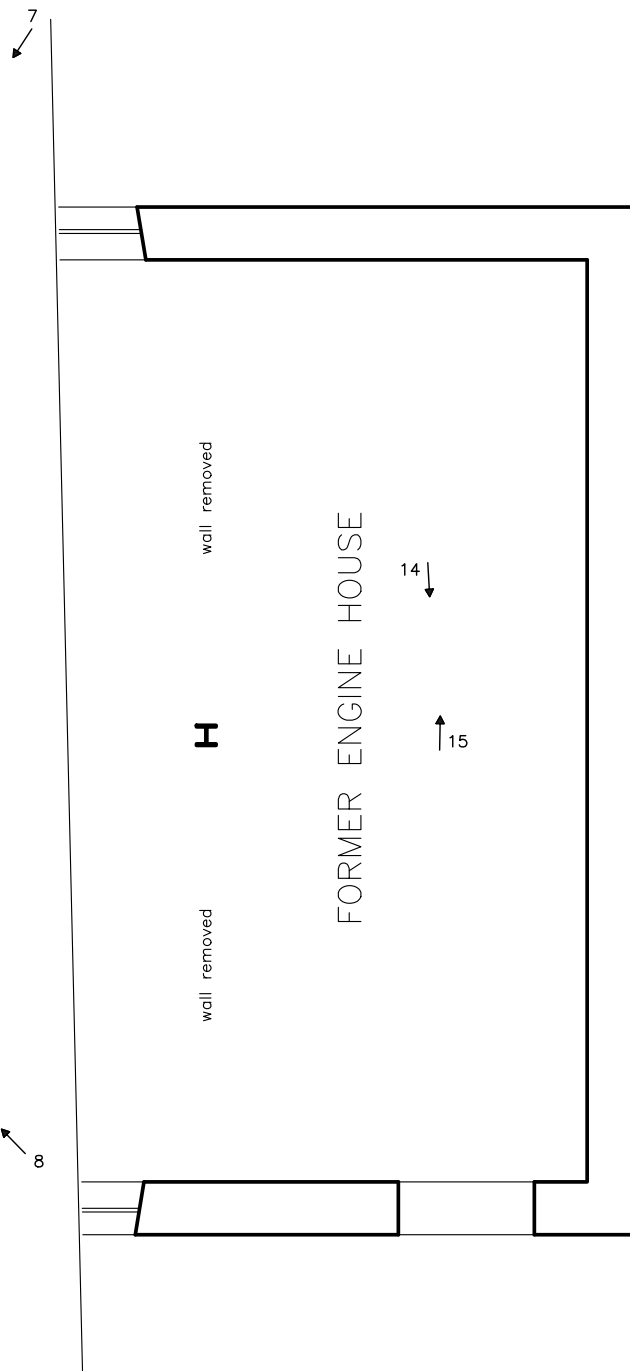
DATE OF SURVEY: FEBRUARY 2026

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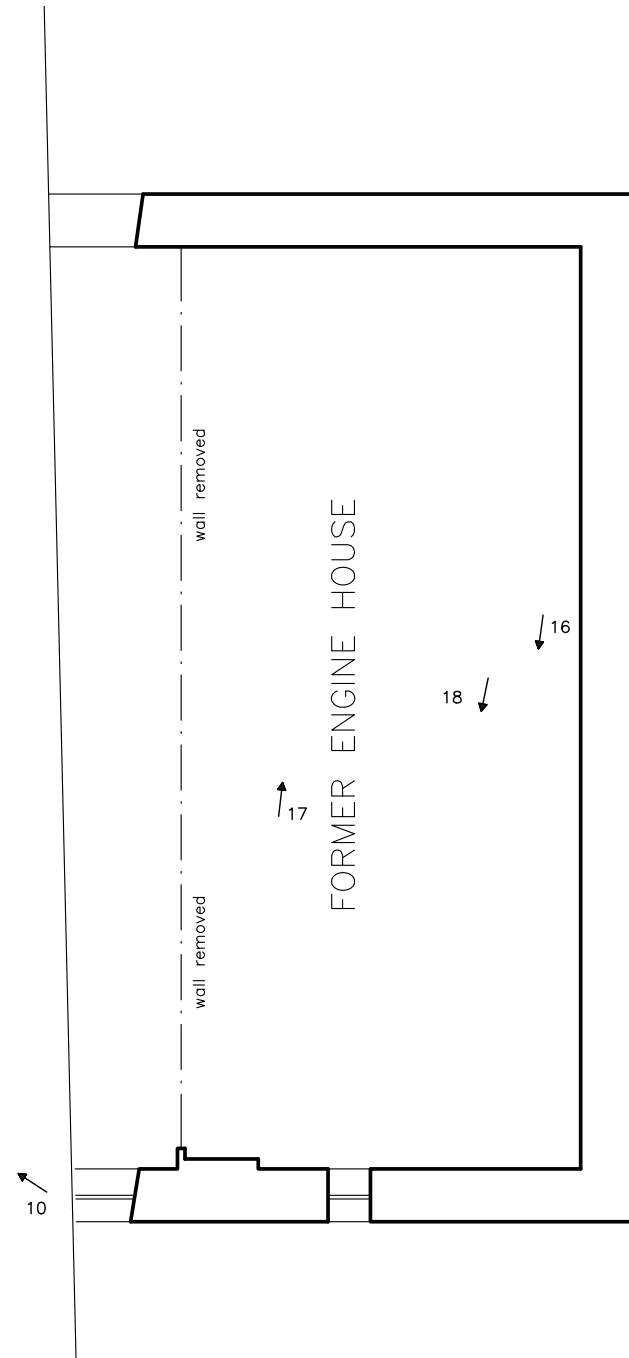


GROUND FLOOR

FORMER BOILER HOUSE



FIRST FLOOR



SECOND FLOOR



10m



BASE PLAN BY T D JAGGER LTD

KEY

↗ 1: photograph direction and number

TURNBRIDGE MILLS  
QUAY STREET  
HUDDERSFIELD, WEST YORKSHIRE  
NGR: SE 14925 16835:  
RECORD OF FORMER ENGINE HOUSE

FIGURE 6:  
SKETCH FLOOR PLANS  
WITH KEY TO PHOTOGRAPHS

SCALE: APPROX 1:100 (at A3)

DATE OF SURVEY: FEBRUARY 2026

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01: General view of former engine house from the south-east; former boiler house in foreground



02: Front of former former engine house (south elevation)



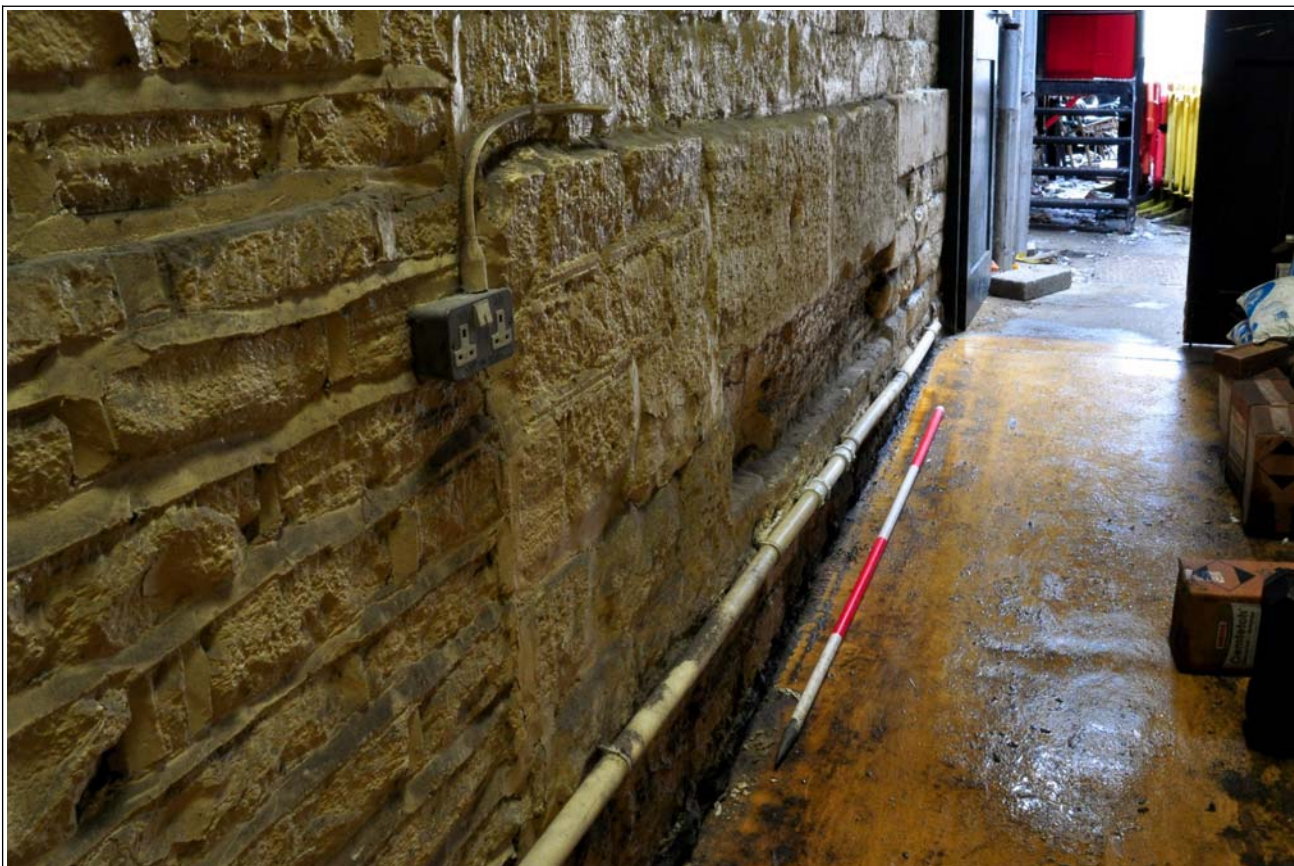
03: Top of former window in north elevation



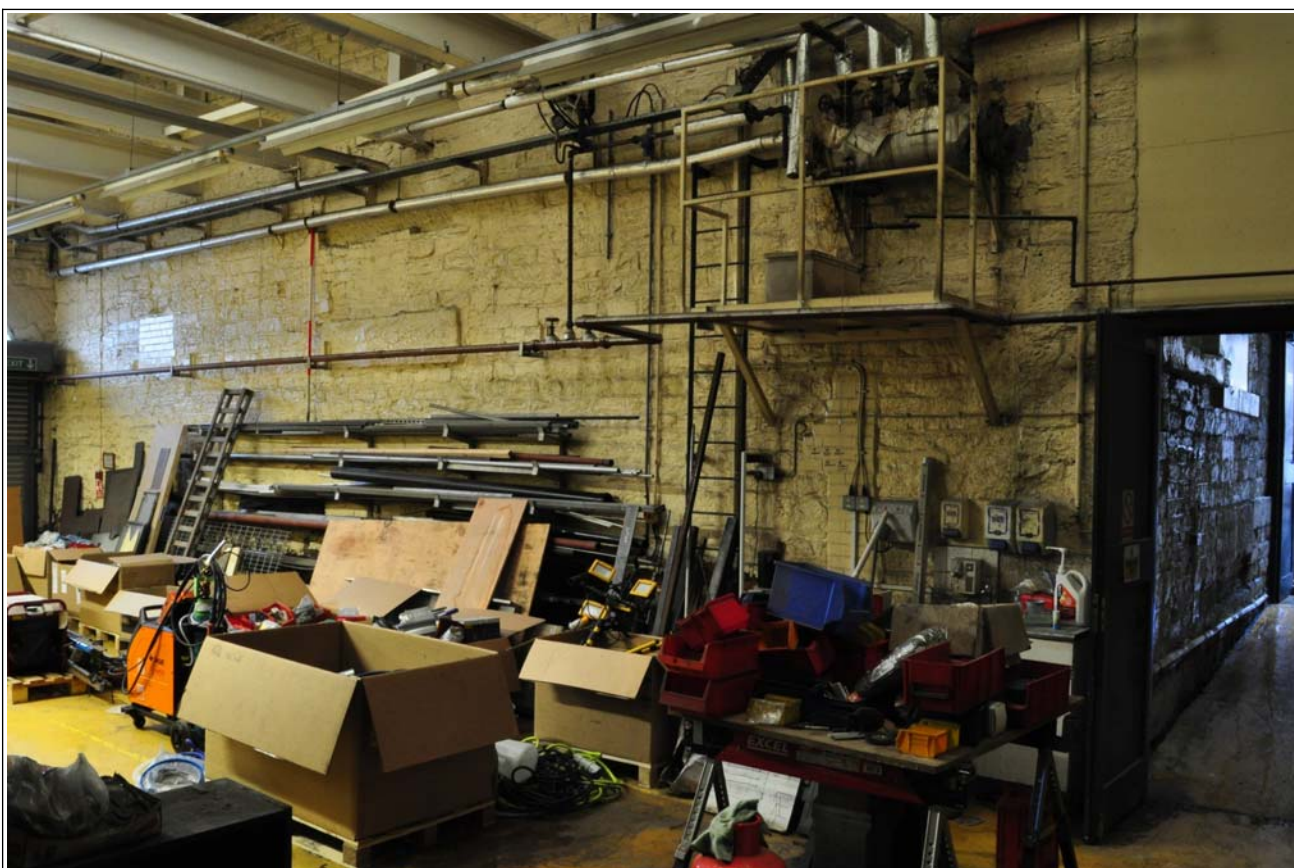
04: Openings at ground floor level, north elevation (doorway and later window), looking east



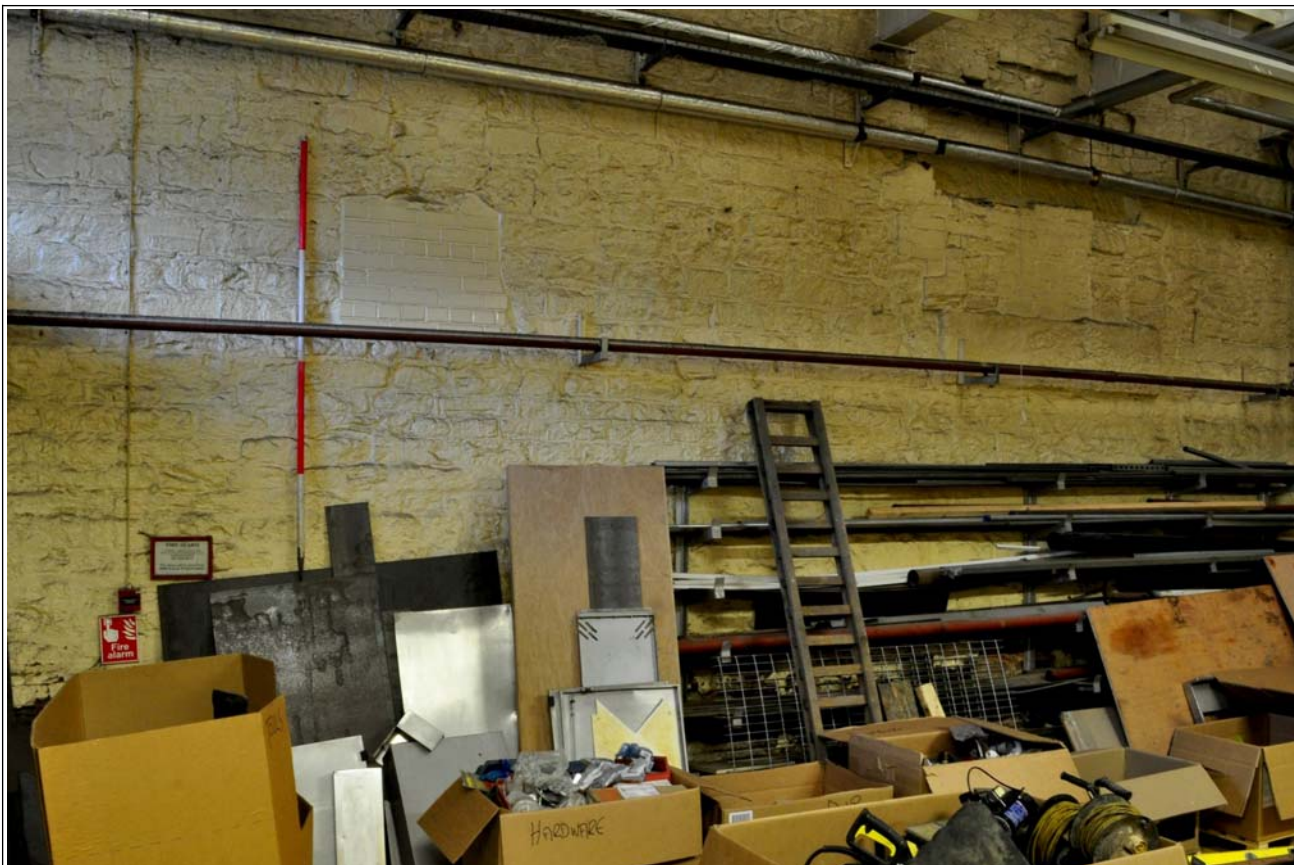
05: Foot of former doorway, north elevation, looking east



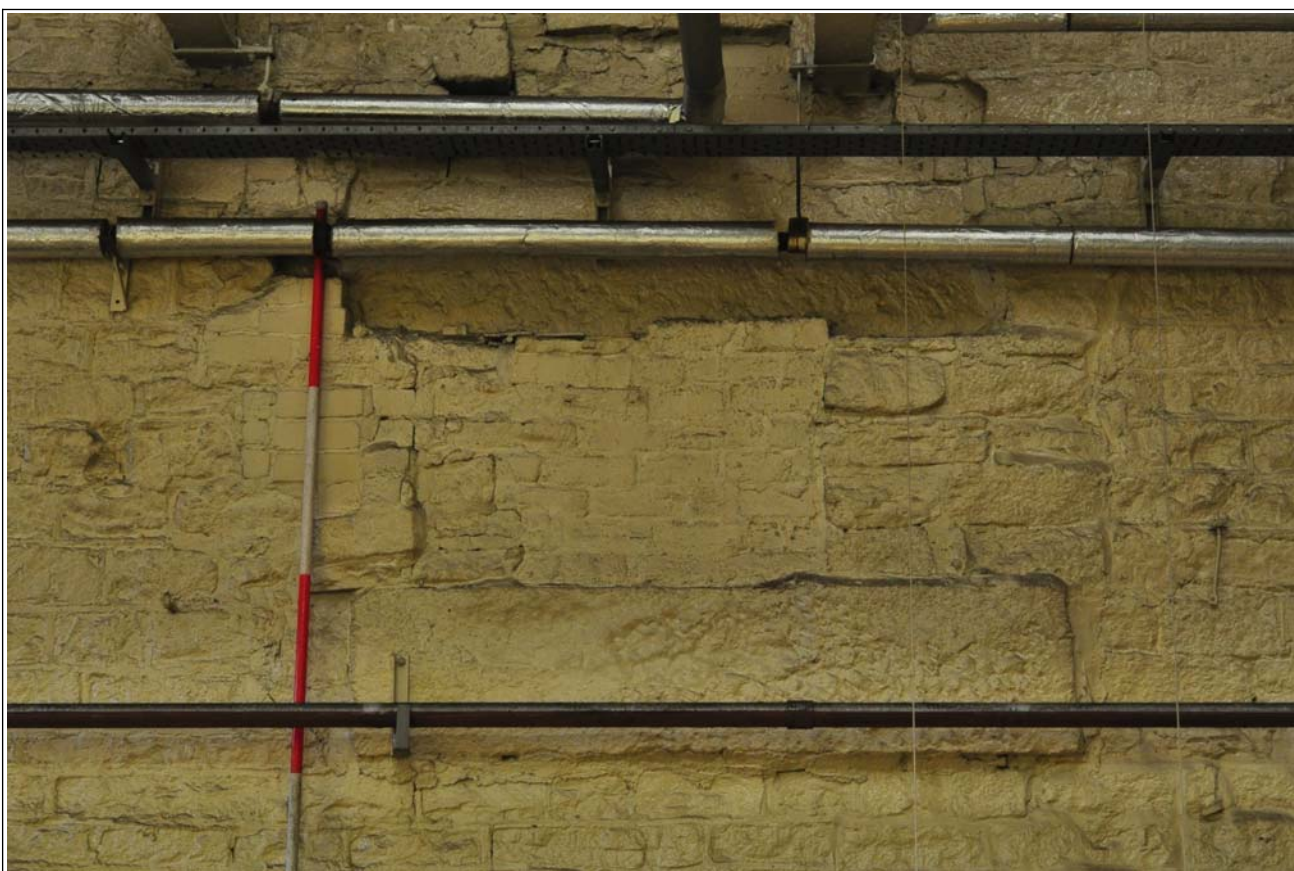
06: Foot of north elevation, basement level, looking west



07: East elevation within former boiler house, looking south-west



08: East elevation within former boiler house, looking north-west



09: Former opening/bearing, middle of east elevation, ground floor level



10: East elevation above former boiler house, looking north-west



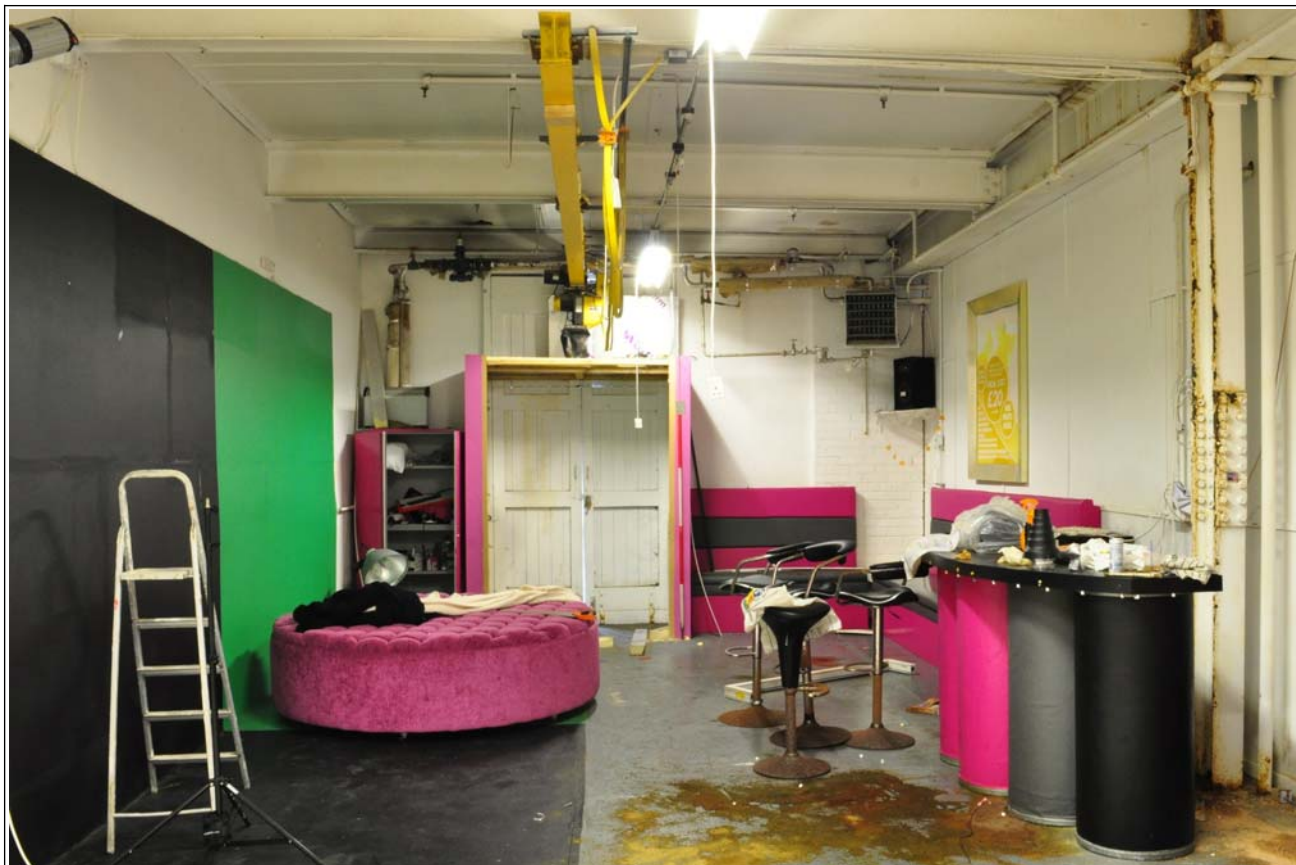
11: View of roof, looking south-west



12: Ground floor, looking south-east



13: Ground floor, looking north-east



14: First floor, looking south



15: First floor, looking north



16: Second floor, looking south



17: Second floor, looking north



18: Roof structure, looking south