

# birmingham archaeology

NIPHON WORKS  
BLAKENHALL  
WOLVERHAMPTON

Laser Scan Survey of  
External Elevations

2008

UNIVERSITY OF  
BIRMINGHAM



**Project No. 1768**

**Niphon Works, Blakenhall, Wolverhampton**

Laser Scan Survey of External Elevations

May 2008

by

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## **Niphon Works, Blakenhall, Wolverhampton**

Laser Scan Survey of External Elevations, May 2008

### **TABLE OF CONTENTS**

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
1.1	Background to the Project.....	1
1.2	Aims and Objectives.....	1
<b>2</b>	<b>METHODOLOGY.....</b>	<b>1</b>
<b>3</b>	<b>BUILDING DESCRIPTION.....</b>	<b>2</b>
<b>4</b>	<b>ACKNOWLEDGEMENTS.....</b>	<b>2</b>
<b>5</b>	<b>REFERENCES.....</b>	<b>2</b>
 <b>APPENDIX A: Local List Entry.....</b>		 <b>3</b>

#### **List of Figures**

- Figure 1: Location Plan
- Figure 2: Survey Key Plan
- Figure 3: Western, Street Elevation
- Figure 4: Southern Extension, Street Elevation
- Figure 5: North Range, Courtyard Elevation
- Figure 6: SouthRange, Courtyard Elevation
- Figure 7: West Range, Courtyard Elevation
- Figure 8: Southern Extension, South Elevation

#### **List of Plates**

- Plate 1: Point-cloud data of main western elevation.
- Plate 2: Point-cloud data of west range gable decoration.
- Plate 3: Point-cloud data for courtyard elevations.
- Plate 4: Detail of junction of north and west ranges.

**Niphon Works, Blakenhall, Wolverhampton**

Laser Scan Survey of External Elevations, May 2008

**SUMMARY**

*Birmingham Archaeology was commissioned in December 2007 by Raymon Staien Design on behalf of Future Home Developments of Birmingham to undertake a programme of laser scan survey at the Niphon Works, Blakenhall, Wolverhampton. The work led on from an initial Historic Building Assessment, undertaken in September 2007, and has been undertaken in advance of submission of a planning application regarding the premises.*

*The survey was undertaken by means of a high-definition Leica HDS6000 laser scanner resulting in a 'point-cloud' of data comprising 3 dimensionally surveyed points at 5mm intervals across the full face of the recorded elevations.*

## **Niphon Works, Blakenhall, Wolverhampton**

Laser Scan Survey of External Elevations, May 2008

### **1 INTRODUCTION**

#### **1.1 Background to the Project**

- 1.1.1 Birmingham Archaeology was commissioned in December 2007 by Raymond Staien Design on behalf of Future Home Developments of Birmingham to undertake a programme of laser scanning at Niphon Works, Lower Villiers Street, Wolverhampton to support a revised Planning Application for conversion of the premises to residential use.
- 1.1.2 The laser scanning survey led on from an Historic Building Assessment, undertaken by Birmingham Archaeology in September 2007 (Tyler, 2007).
- 1.1.3 The Niphon Works was established at the Lower Villiers Street site by Robert Stroud in c.1865 and the surviving manufactory buildings represent a notably complete and relatively intact example of mid-late Victorian industrial complex, associated with the tin-plate and japanning trades. Their importance as such is acknowledged through their inclusion on the Black Country Sites and Monuments Record (SMR ref. 8599) and on the Wolverhampton *Local List* (Appendix A). The principal western elevation onto Lower Villiers Street, forms a focal point of the contemporary streetscape and represents an important link with the area's industrial heritage

#### **1.2 Aims and Objectives**

- 1.2.1 The objective of the project was to record in detail, by means of 3-dimensional laser scanner, the following exterior elevations of the manufactory buildings:
- The principal street elevation of the west range and southern extension
  - The courtyard elevation of the north range
  - The courtyard elevation of the south range
  - The courtyard elevation of the west range
  - The south elevation of the southern extension

### **2 METHODOLOGY**

- 2.1 The elevations were recorded using a Leica HDS6000 laser scanner. The HDS6000 is a high-speed, high-definition laser scanner used for landscape and structural survey, whose high resolution also makes it ideal for the recording and modelling of architectural and archaeological elements. The scanner was used to create a series of measurements at a spacing of less than 5mm interval across the face of the building. This 'point-cloud' was then used to produce line drawings of the elevations in AutoCAD, which have been further enhanced using Adobe Illustrator software for the figures accompanying this report. A series of 'screen grabs' of the raw 'point-cloud' data are included below as Plates 1 - 4.

### **3 BUILDING DESCRIPTION<sup>1</sup>**

- 3.1 The buildings of the Niphon Works manufactory represent a notably complete and relatively intact example of mid-late Victorian industrial complex. The principal western elevation onto Lower Villiers Street, forms a focal point of the contemporary streetscape and represents an important link with the area's industrial heritage. The earlier, lesser ranges around the courtyard are more utilitarian in nature though they retain to a significant degree their original exterior appearance. A characteristic and definable architectural vocabulary is used throughout the complex and details such as the use of blue-grey brick banding within the red-brick elevations, and the repeated use of the standard window unit with distinctive cast-iron windows add to the unified effect throughout the complex, which extends to the buildings of the Marshall's industrial estate further to the east.
- 3.2 The continued use of the site for light industrial purposes throughout the course of the 20<sup>th</sup> century has resulted in the periodic alteration and adaptation of the buildings. Such alterations are concentrated more to the lower levels, and the ground floor level in particular has suffered from unsympathetic alteration works into the recent past.

### **4 ACKNOWLEDGEMENTS**

- 4.1 The project was commissioned by Raymond Staien Design on behalf of Future Home Developments of Birmingham. Fieldwork was undertaken by Michael Lobb of Birmingham Archaeology. Data was processed Michael Lobb and Shane Kelleher, and the figures for the current report were prepared by Ric Tyler. The project was managed by Chris Hewitson of Birmingham Archaeology.

### **5 REFERENCES**

Tyler R, 2007. *The Niphon Works, Lower Villiers Street, Blakenhall, Wolverhampton, West Midlands: Historic Building Assessment*.

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<sup>1</sup> A full description of the buildings and an outline of their historical development is given in the previously issued *Historic Building Assessment* report (Tyler, 2007). A brief summary only is included here.

## APPENDIX A: Local List Entry

*The statutory framework for the protection of the historic environment generally adopts selection criteria which favour sites and buildings of national importance. The Statutory List of Buildings of Special Architectural or Historical Importance effectively excludes buildings of only 'local' importance and severely restricts the number of post-1840 buildings included. Local authorities can designate conservation areas to help protect the character and appearance of groups of buildings and areas of local interest but this still leaves many elements of the wider historic environment, especially many individual buildings of 19th and 20th century date, with no formal recognition or protection.*

*Local List policies were adopted by Wolverhampton City Council on 16<sup>th</sup> March 2000, to extend a level of protection to buildings acknowledged as making a significant contribution to the local environment, often valued by the community as an important part of the local heritage of the city.*

*The building descriptions for the purposes of the Local List entry are duplicates of the entries for the Black Country Sites and Monuments Record (SMR), which is reproduced here.*

SMR Number	Site Name	Record Type
8599	NIPHON WORKS; LOWER VILLIERS STREET; WOLVERHAMPTON	Building

### **Monument Types and Dates**

JAPANNING WORKS (Post Medieval - 1540 AD to 1900 AD)

### **Description and Sources**

#### **Description**

Classic 19th century factory building. Four-storey frontage with tall, narrow workshops to rear. Decorative central bay with elaborate pediment and 'Niphon Works' in relief above ground floor windows. Established c. 1865 by Robert Stroud for the manufacture of tin trunks, tinware and japanned goods. Prominent landmark in local area.

#### **Sources**

(1) Local list: 2004. Wolverhampton City Council: Local List - Annual Update 26 April 2004.

#### **Location**

##### **National Grid Reference**

Centroid SO 9140 9738 (MBR: 67m by 45m) SO99NW Area

#### **Administrative Areas**

Council	Wolverhampton
Ward	Blakenhall, Wolverhampton

#### **Address/Historic Names - None recorded**

#### **Designations, Statuses and Scorings**

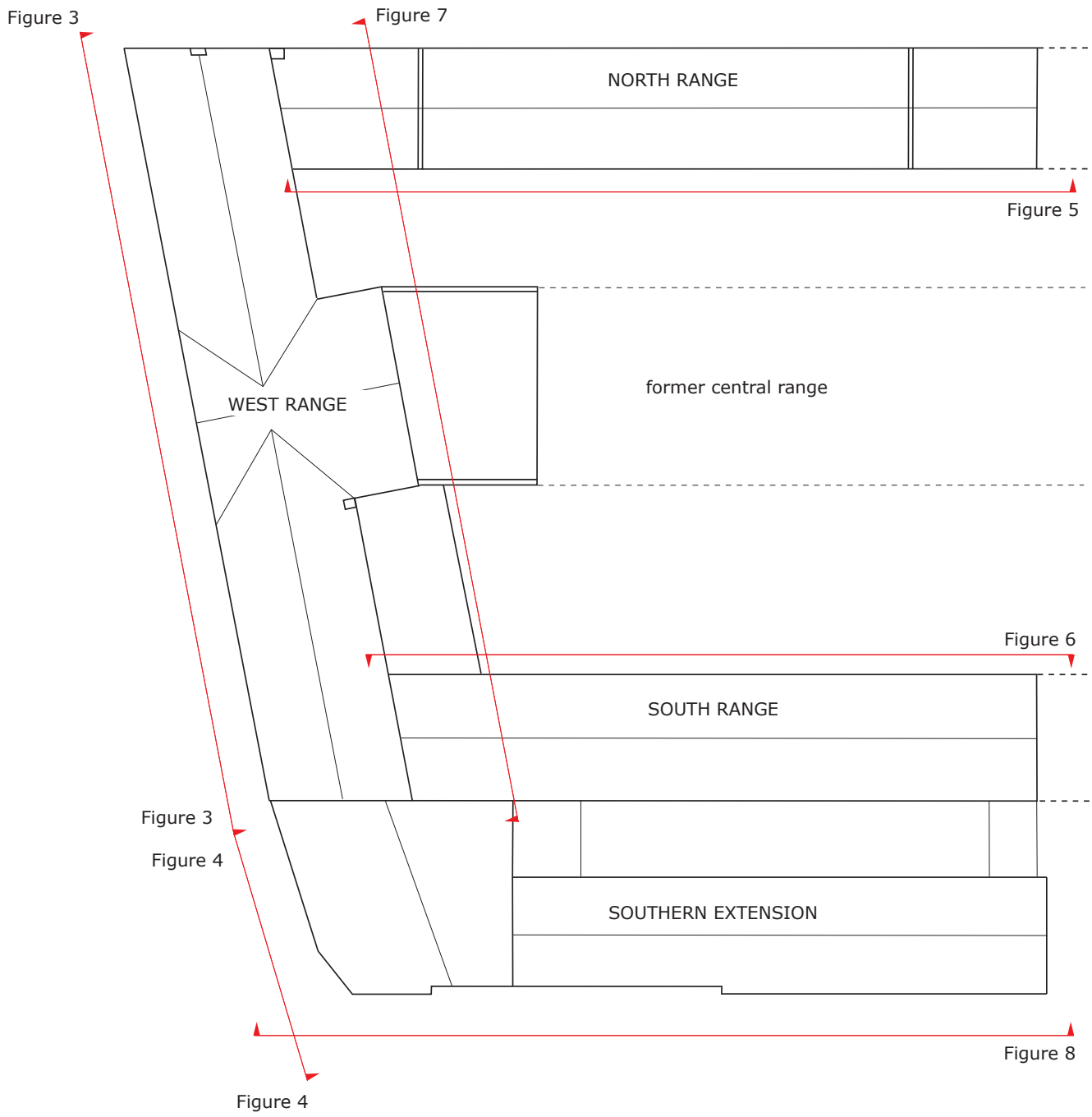
#### **Associated Legal Designations - None recorded**

#### **Other Statuses and Cross-References**

ABCD Heritage Asset Number - 16	Active
Local list	Active
Black Country SMR No - 8599	Active







NORTH

SOUTH



**KEY**

 Stone

(see Figure 4)

NORTH

SOUTH



**KEY**



Stone

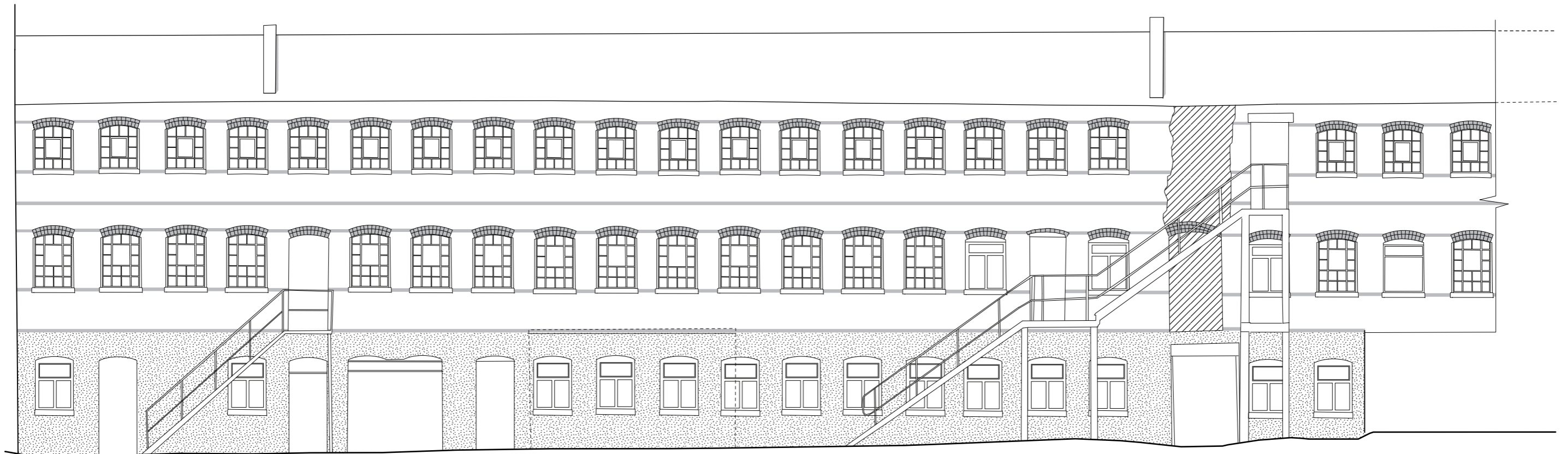


Blocked opening

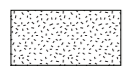


0 5 10 m

WEST

EAST

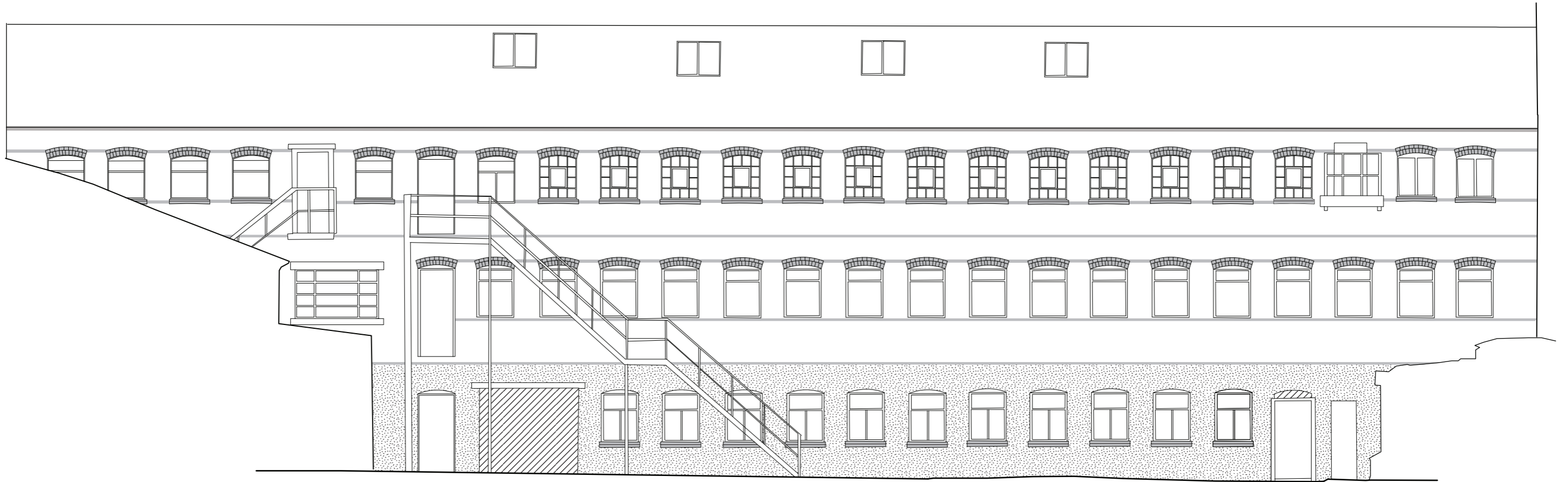


**KEY**

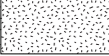


-  Render
-  Engineering brick  
(banding and window cills/heads)
-  Blocked opening

EAST

WEST

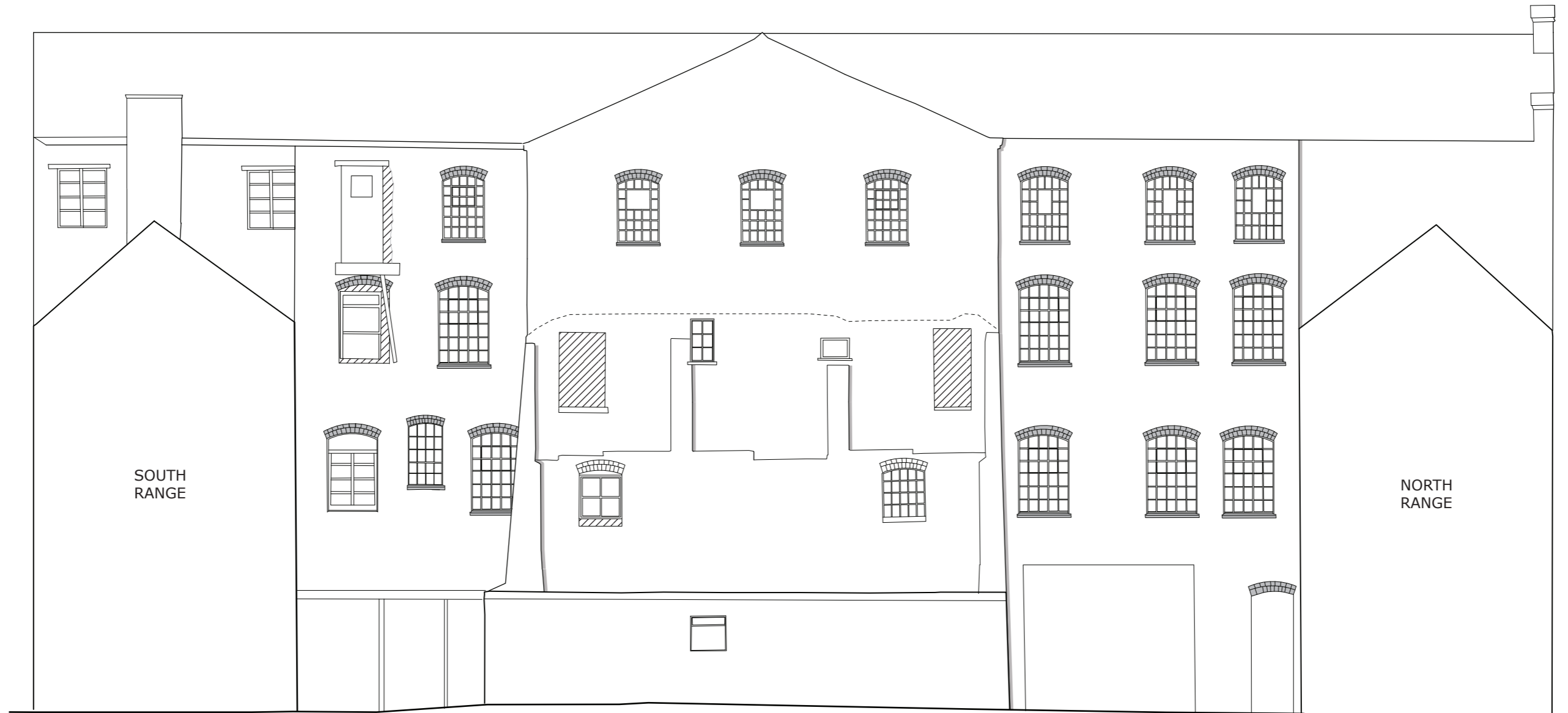


**KEY**

-  Render
-  Engineering brick (banding and window cills/heads)
-  Blocked opening

SOUTH

NORTH

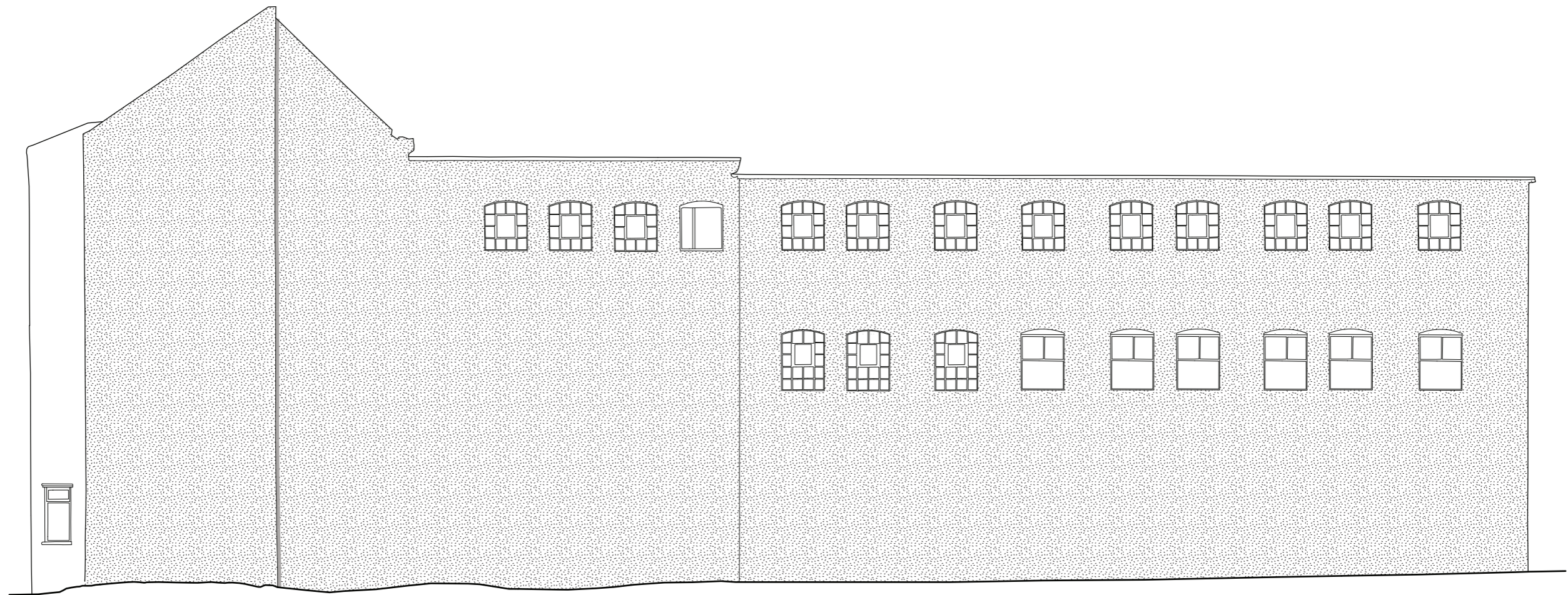


**KEY**

- Engineering brick (window cills/heads)
- Blocked opening

WEST

EAST



**KEY**



Render



**Plate 1:** Point-cloud data of main western elevation.



**Plate 2:** Point-cloud data of west range gable decoration.





**Plate 3:** Point-cloud data for courtyard elevations.



**Plate 4:** Detail of junction of north and west ranges.