

Schuster Building Weather Station

University of Manchester

Design and Access Statement

June 2023



0.0 Contents

- 0.0 Contents
 - 1.0 Introduction
 - 1.1 Project Brief
 - 2.0 Site Details & Context
 - 2.1 Location
 - 2.2 Planning History
 - 2.3 Site Constraints & Strategy
 - 2.4 Site Photographs
 - 3.0 Proposed Design
 - 3.1 Design Guidance
 - 3.2 Visual Impact
 - 3.3 Existing and Proposed Drawings
 - 4.0 Conclusion

P1.0 Introduction

This Design and Access Statement has been prepared in support of the full planning application submitted on behalf of the applicant, University of Manchester, with reference to the relocation of a weather station from the Pariser Building (Fig. 1) to the roof area of the Schuster Building.

This statement must be read in conjunction with the drawings and documents submitted within the planning application.

1.1 Project Brief

The proposal involves the construction of a new access staircase from the lower 6th floor roof area, and the construction of a big foot platform (approximately 30sqm) for the weather station equipment. The equipment to be located on the proposed platform includes pole mounted instruments, brewers equipment and a height adjustable mini platform at approximately 1m high. In addition to this, the walkway to the existing plant on the roof will be extended to create a link between the two roof areas. This extension of the platform is vital for maintaining the new comms cable route that is required for connecting the equipment to the data monitoring room on the 7th floor (room 7.05)

The relocation of the weather station Pariser building to the Schuster building provide an improved location for the ongoing research being undertaken by the department.

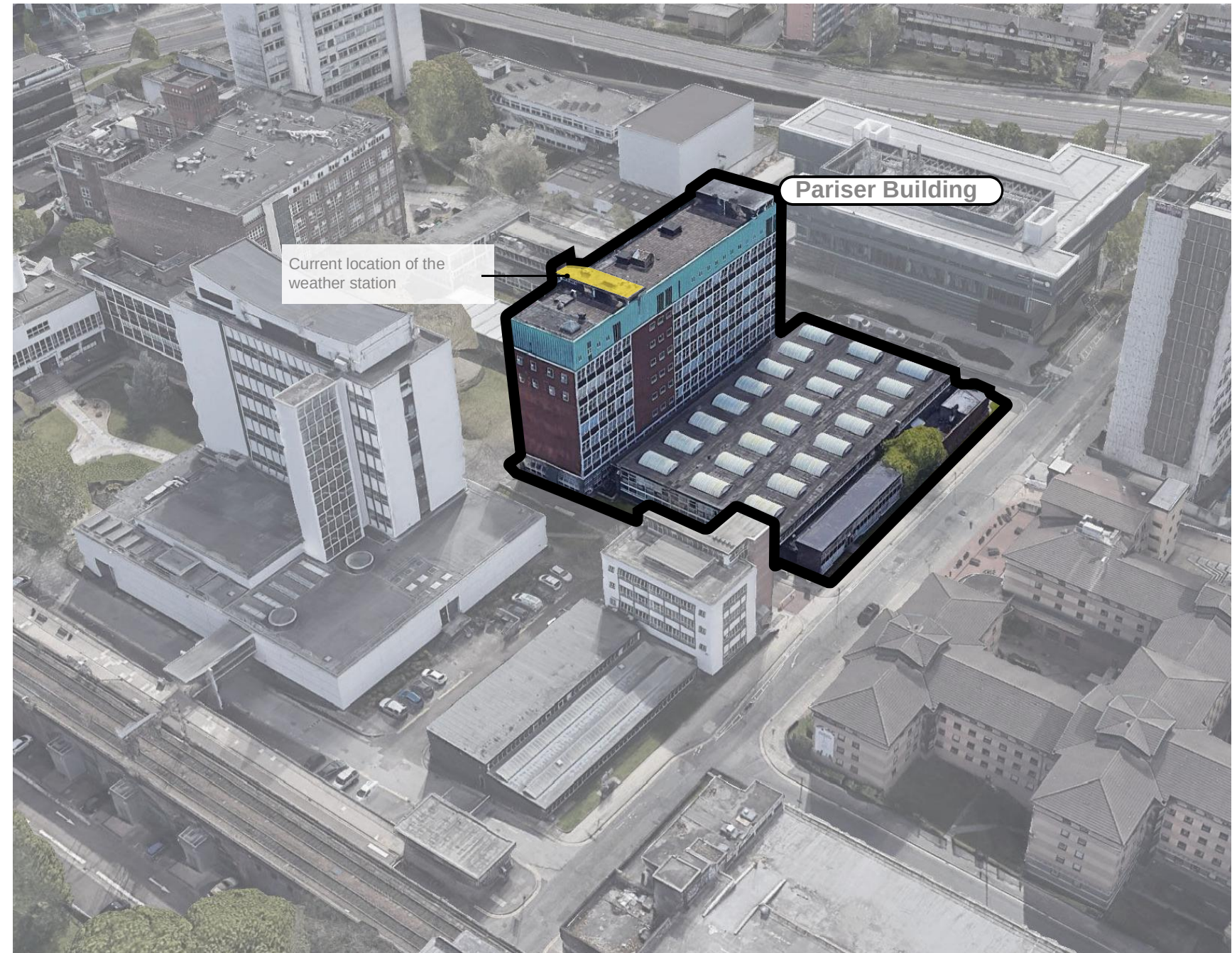


Figure 1 - Current location of the weather station at the Pariser Building.

2.0 Site Details & Context

2.1 Location

The Schuster Building is located at the intersection of Brunswick Street and Rumford Street. It dates back to the late 1960s and forms part of the University of Manchester's centrally located faculty of science and engineering, which is bounded by Upper Brook Street to the east and Oxford Road to the west.

The recently pedestrianised Brunswick street offers easy pedestrian and cycle access to the surrounding campus facilities, whilst Upper Brook Street and Oxford Road offer excellent vehicular and public transport to the city centre and the south of Manchester.

2.2 Planning History

Application Reference: 110986/FO/2016/C1
Erection of a 4 storey annexe building to the School of Physics and Astronomy Schuster Building.
Approved (Completed in 2017)

The Schuster Building has been part of a wider estates strategy to improve existing buildings and facilities within the University of Manchester's campus. The Schuster Annexe completed in 2017 included the construction of a purpose built facility for the School of Astronomy and Physics. During this phase of work, The Schuster Annexe is seamlessly linked to the Schuster building through the construction of a link building which is an extension of the eastern elevation of the Schuster Building.

Location Plan Key

-  Ownership boundary
-  Development site boundary

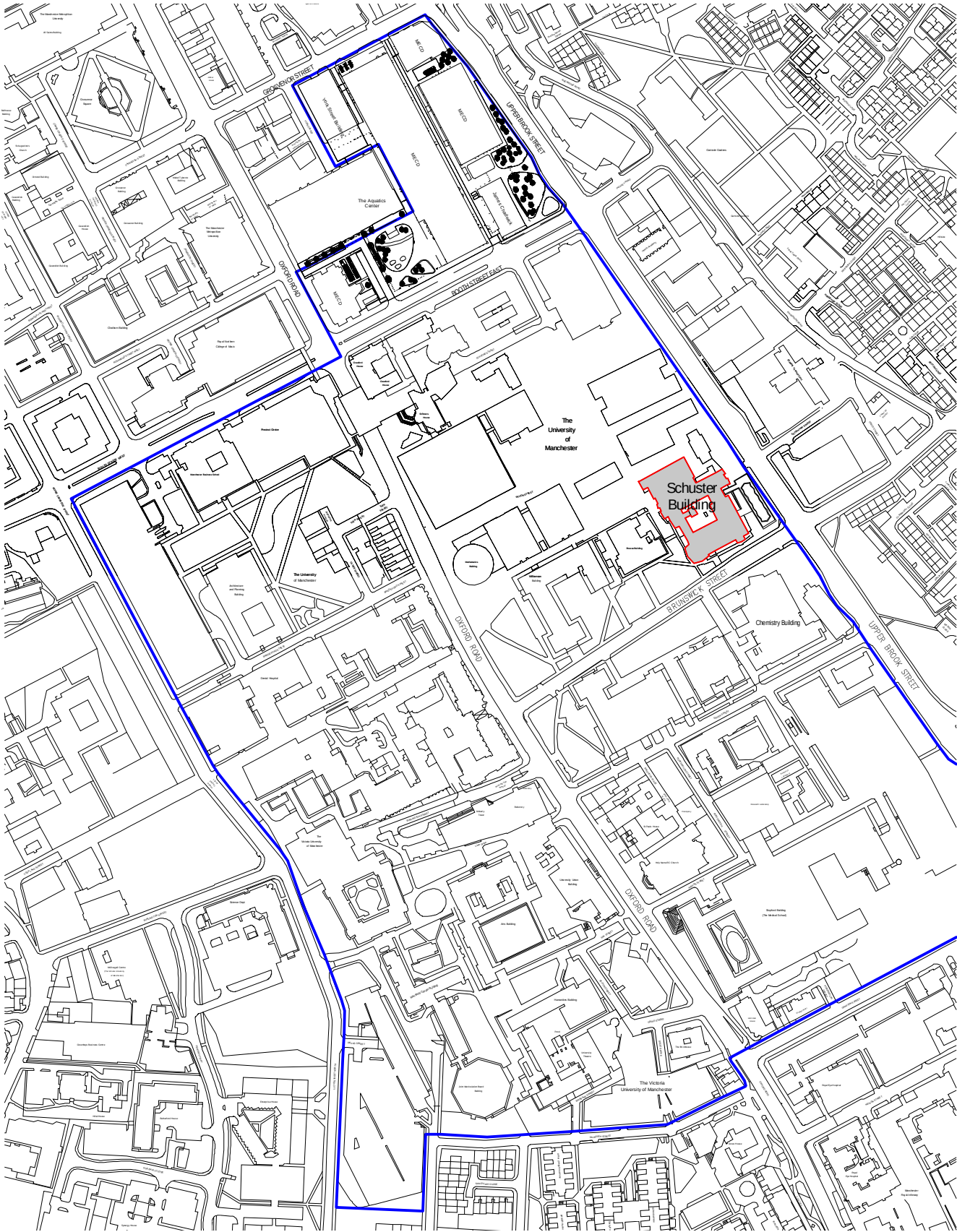


Figure 2 - Site Location Plan

2.3 Site Constraints and Strategy

The proposed development is located on the roof area of the Schuster Building. There is existing secure access to the lower 6th floor roof area which is currently managed by the University of Manchester's estates department. However access to the upper roof area is through a CAT ladder with no direct access to the proposed location of the weather station. Hence, the proposed strategy has been centred on improving access to the vacant upper roof area whilst maintaining the existing fire escape routes and adequate safety measures.

Site Constraints and Strategy

-  Proposed location of the weather station.
-  Current ladder access to roof area with no access to the proposed site.
-  Proposed data collection cable from weather station.
-  Improved access to both roof areas required to maintain cable
-  Potential area for direct access to the proposed weather station site.

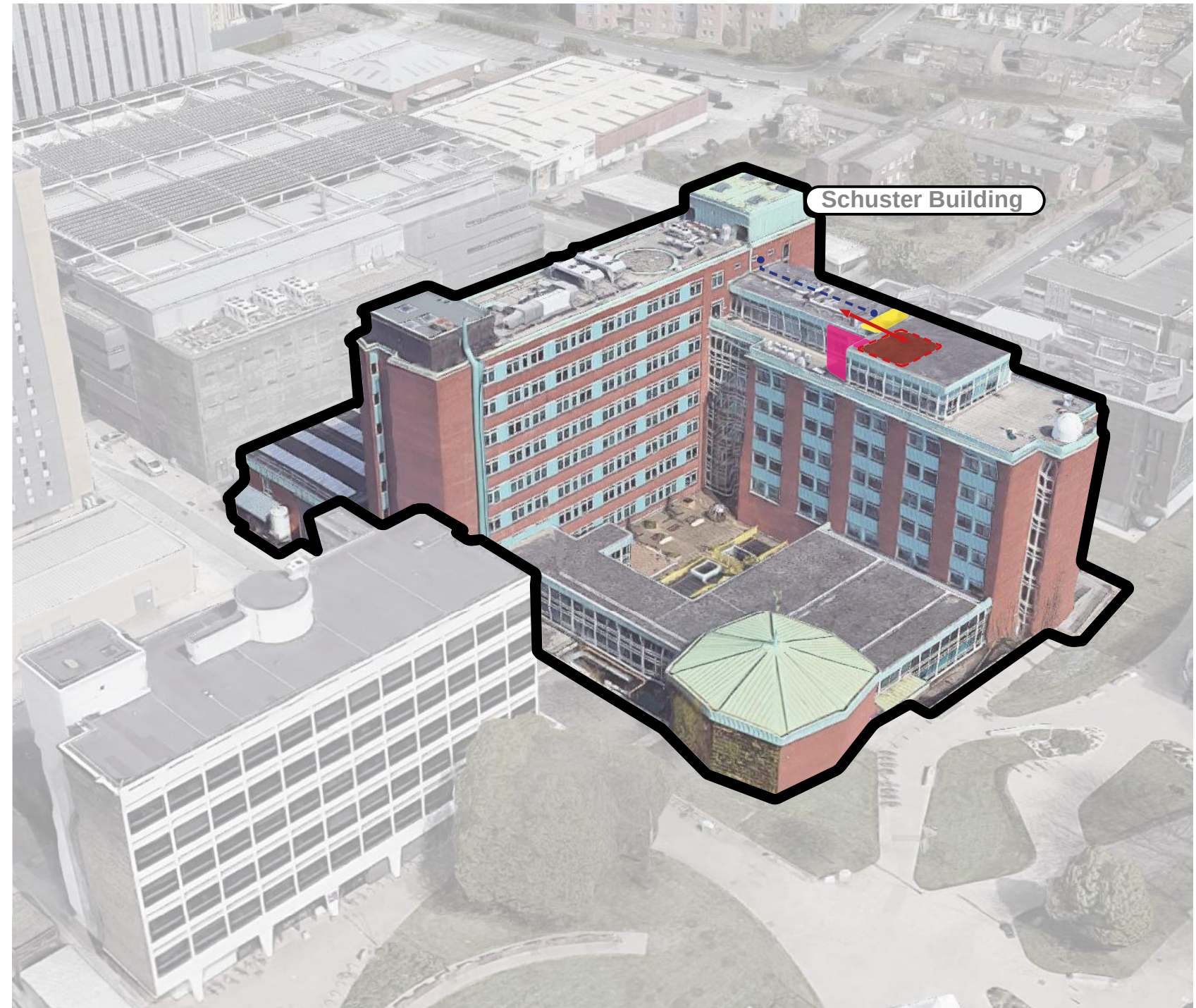


Figure 3 - Site constraints and strategy diagram

2.4 Site Photographs



Figure 4- View looking on to the site of the proposed weather station.

- 1 - Proposed weather station site (no current access to this area)
- 2 - Cat ladder access to upper roof area
- 3 - Walkway leading to accessible upper roof area



Figure 5 - Access to plant roof area

- 4 - Ladder access from walkway to upper roof area

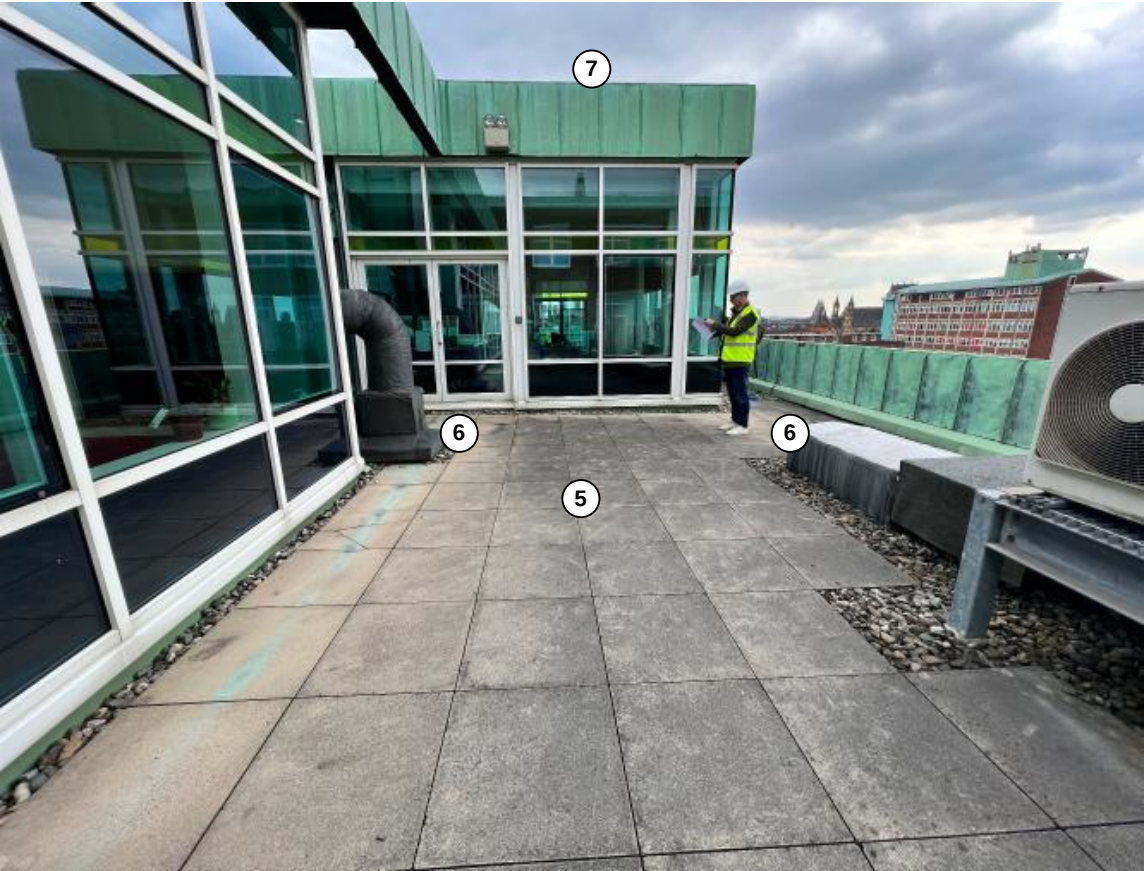


Figure 6 - Proposed location of the access staircase

- 5 - Proposed location of staircase on lower roof area
- 6 - Existing plant machinery
- 7 - Proposed location of weather station

3.0 Proposed Design

3.1 Design Guidance

Halliday Meecham Architects (HMA) have been working closely with the university's estates team and the structural engineer (WML Consulting Ltd) to ensure that the proposed design is in line with the current structural capabilities of the roof area

The proposed design has been developed as a functional response to the research requirements of the department. The proposed structures will act independently with minimal disruption to the existing roof structure above the Neil Bohr's common room.

3.2 Visual Impact

The proposed weather station platform will have minimal visual impact on its surroundings as it is in keeping with the existing edge protection on the roof area. The proposed barrier protection will stand at the recommended 1.1 metres on the west and east elevation, and 2m for the pole mounted instruments on the south elevations. In addition, the equipment and instruments (Fig. 8 and 9) to be stored are lightweight and do not contribute any noise to the surroundings as their sole purpose is for data collection.

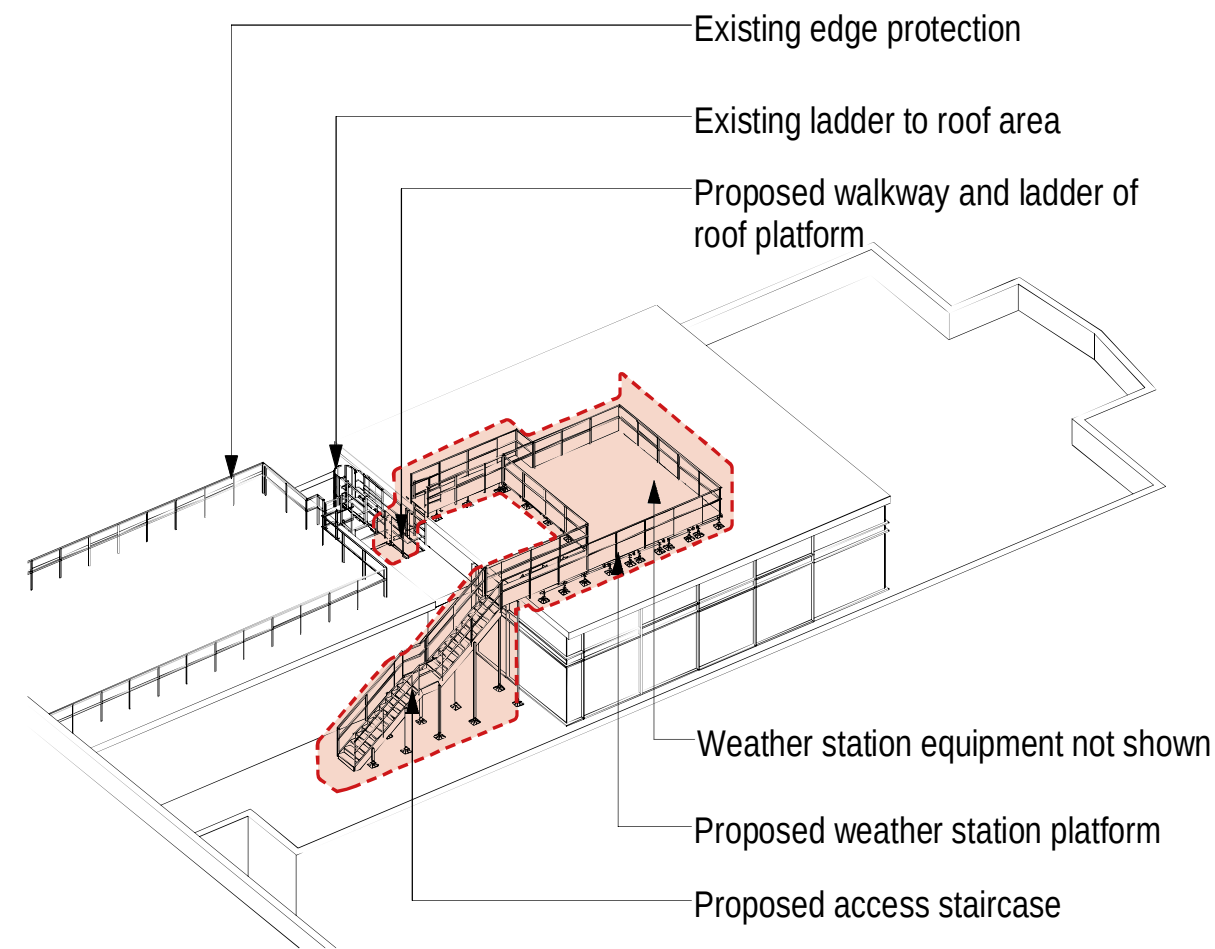


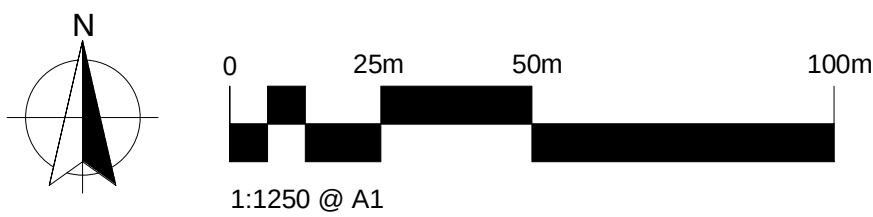
Figure 7 - 3D view of existing and proposed structure on the Schuster Building roof area.



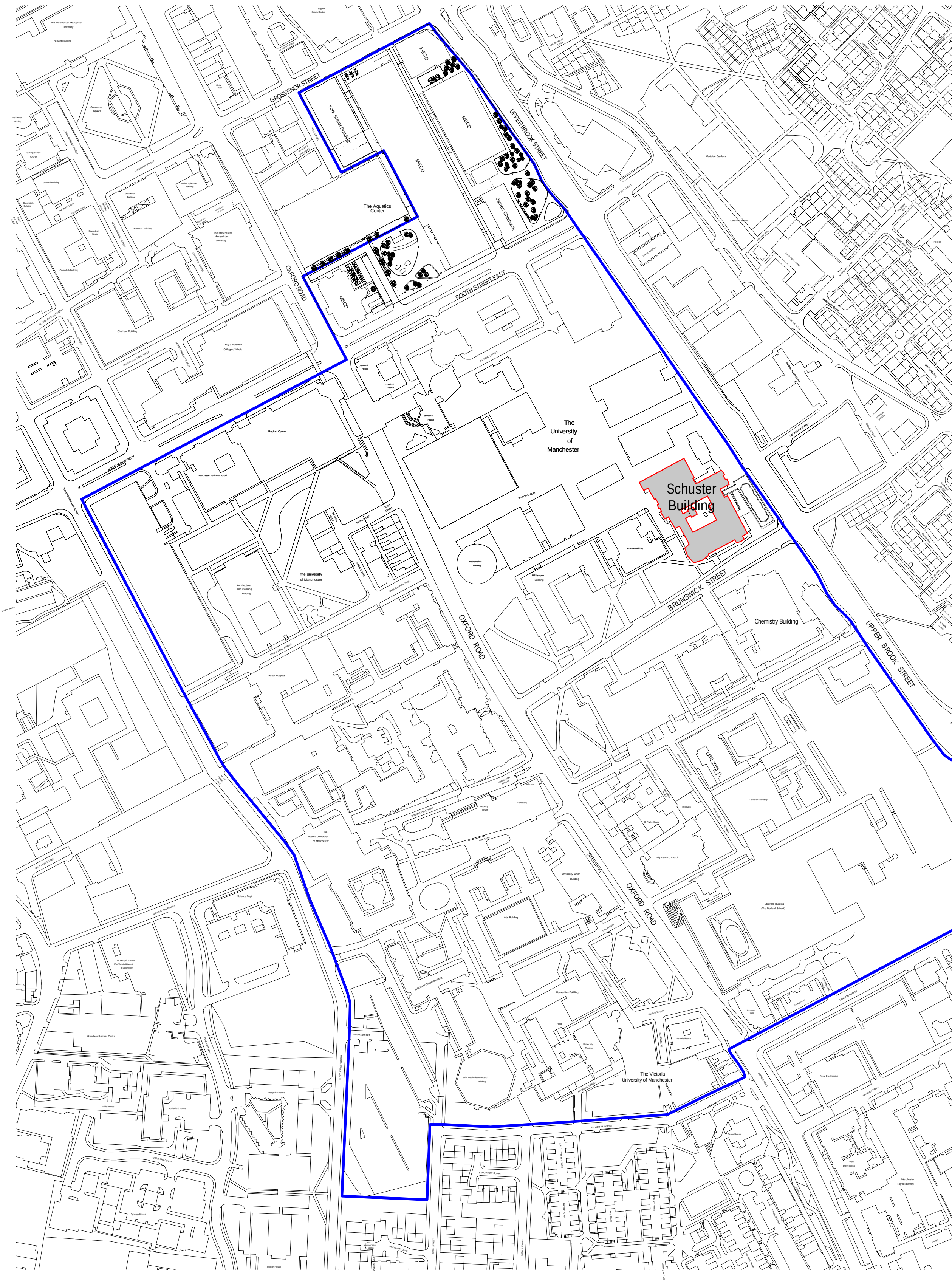
Figure 8 - Brewer's equipment located at the Pariser building



Figure 9 - Pole mounted instruments



- Ownership Boundary
- Development Site Boundary
- Schuster Building



Site Location Plan

1 : 2500 @ A1

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked

Halliday Meecham Architects Limited

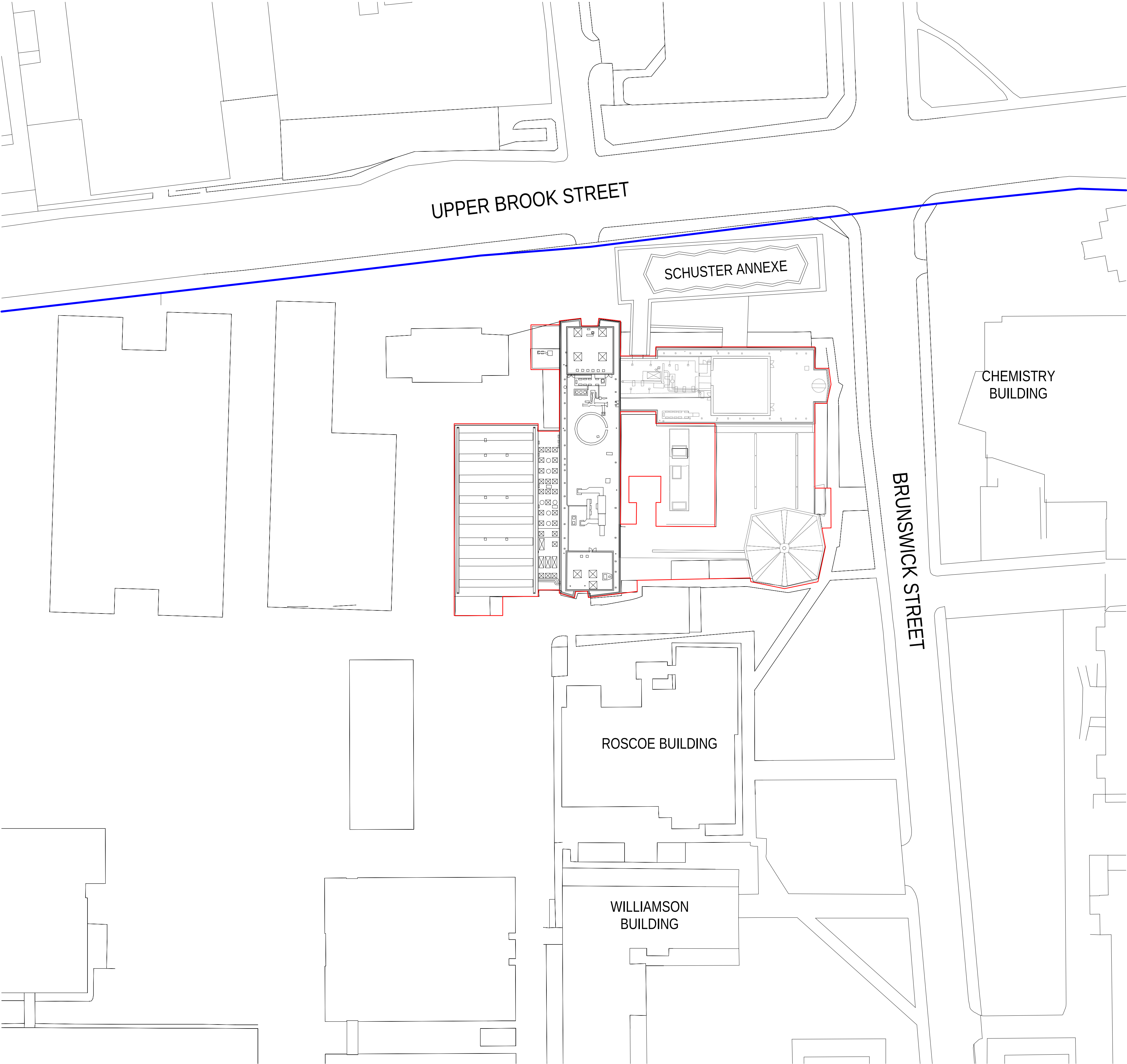
111 Piccadilly Manchester M1 2HY
+44 (0)161 661 5566

4 Devonshire Street London W1W 5DT
+44 (0)203 440 5175

hma@hallidaymeecham.com
www.hallidaymeecham.com



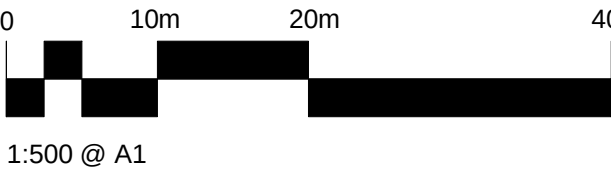
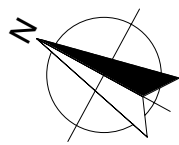
Client:	University of Manchester				
Project:	Schuster Weather Station				
Phase/Location:	Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing:	Site Location Plan				
Scale @ A1	Scale @ A3	Date:	Drawn:	Checked:	Job No.
1:2500	1:5000	30.06.2023	SA	GW	5654
Drawing Ref.					Drawing No.
5654-HMA-SB-ZZ-DR-A-00001					00001
					Revision
					P1



Existing Site Plan

1 : 500 @ A1

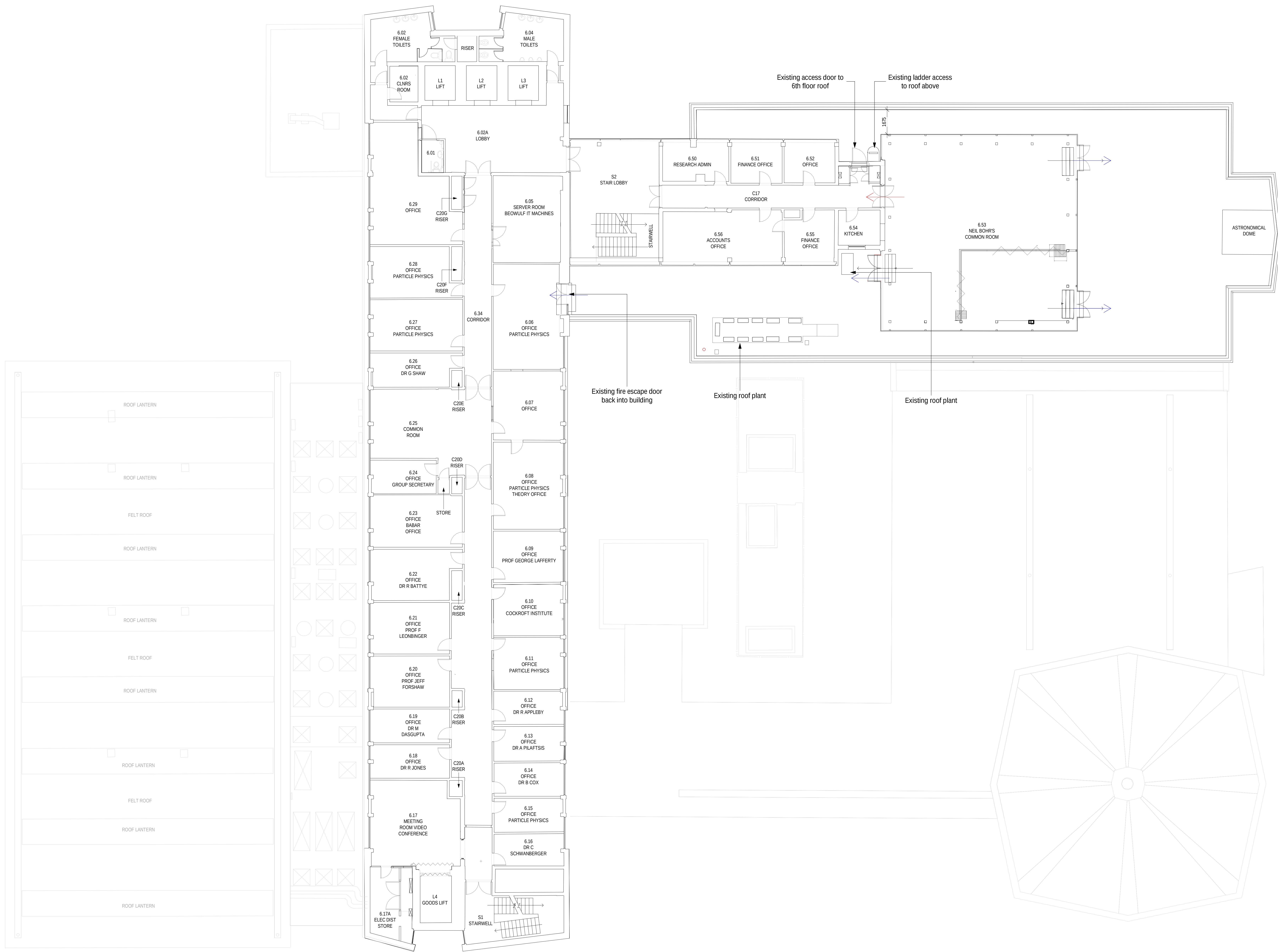
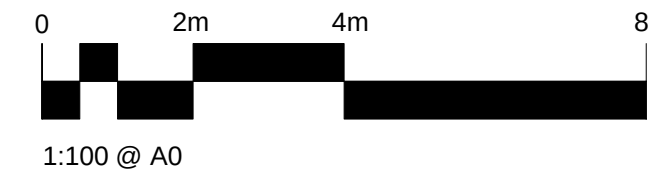
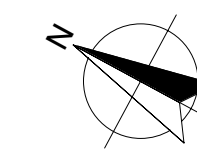
© Copyright: All rights reserved. This drawing must not be reproduced without permission. Do not scale from this drawing. All dimensions are in millimetres unless otherwise stated. Any discrepancies should be reported to the Architect.



KEYS

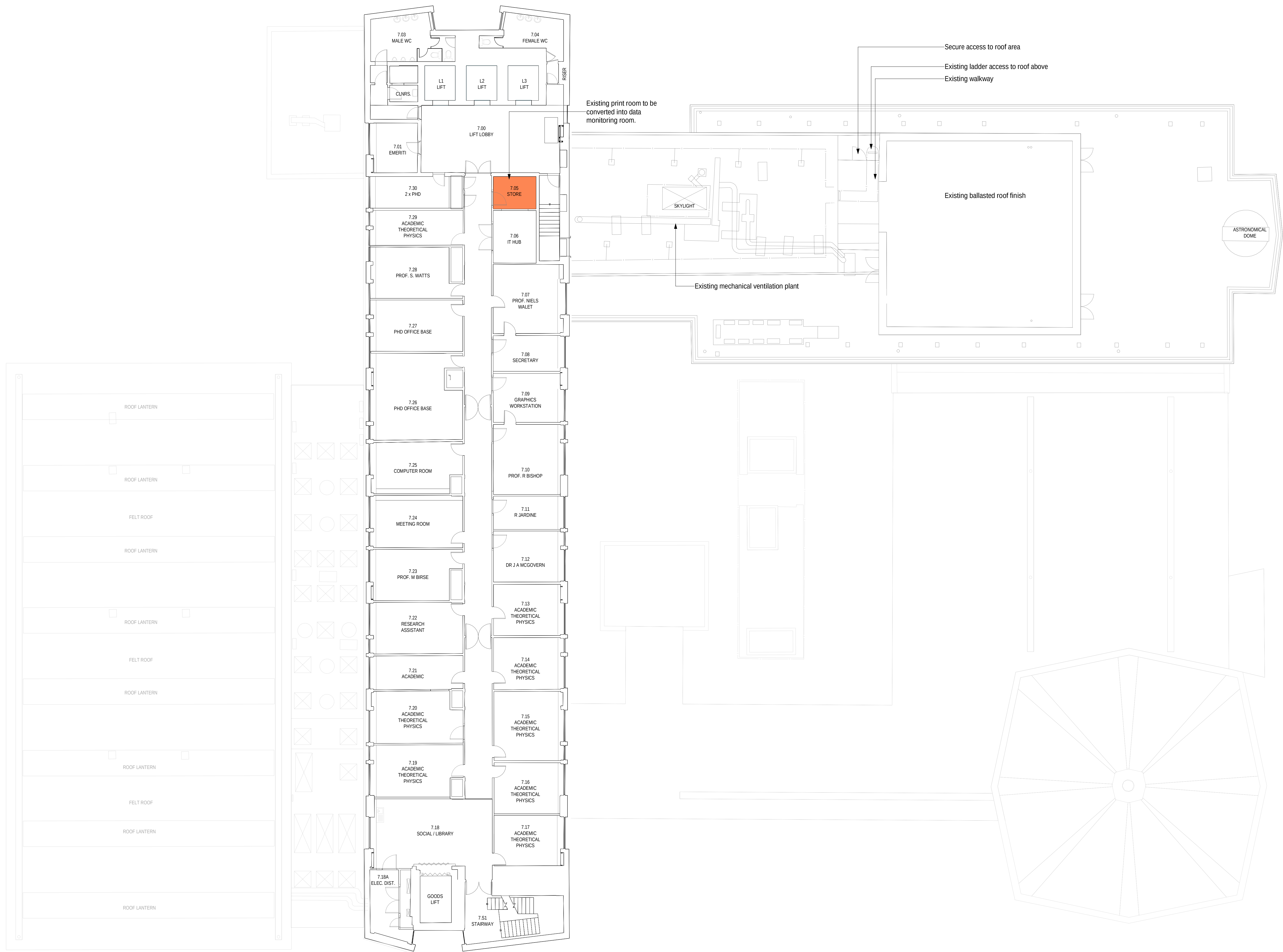
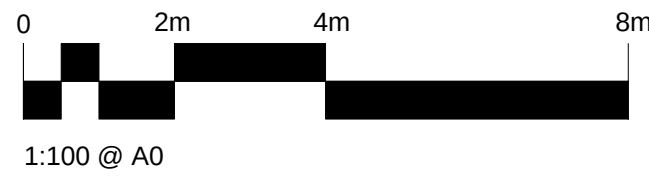
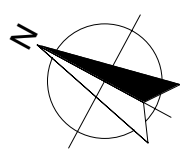
- Ownership Boundary
- Development Site Boundary

P1	Issued for Planning	30.06.2023	SA	GW			
PLANNING							
Revision	Description	Date	Drawn	Checked			
Halliday Meecham Architects Limited							
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566							
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175							
hma@hallidaymeecham.com www.hallidaymeecham.com							
							
Client: University of Manchester							
Project: Schuster Weather Station							
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL							
Drawing: Existing Site Plan							
Scale @ A1	Scale @ A3	Date:	Drawn:	Checked:	Job No.	Drawing No.	
1:500	1:1000	30.06.2023	SA	GW	5654	00101	
Drawing Ref. 5654-HMA-SB-L0-DR-A-00101							Revision P1



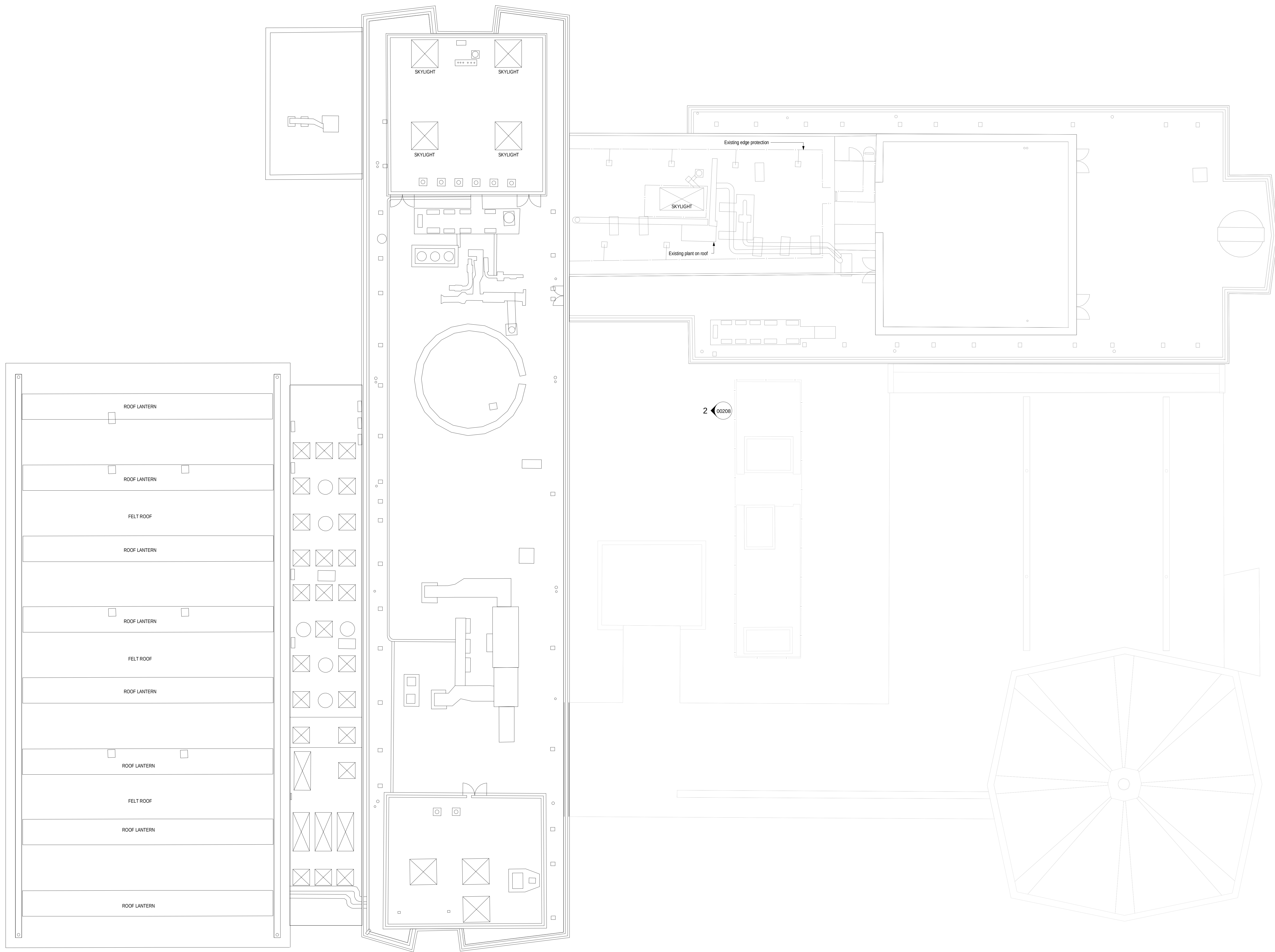
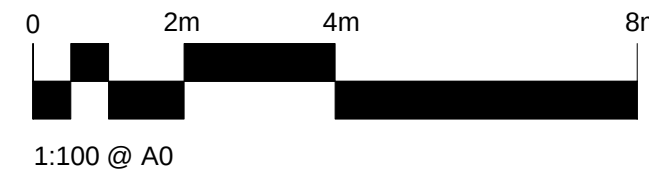
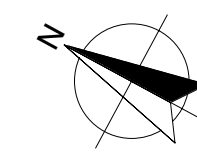
1 Level 6 Existing
1:100 @ A1

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Existing 6th Floor Plan				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
1:100	1:100	30.06.2023	SA	GW
Job No.	Drawing No.	5654	00102	
Drawing Ref.	5654-HMA-SB-L6-DR-A-00102			Revision P1



P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Existing 7th Floor Plan				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
1:100	1:100	30.06.2023	SA	GW
Job No.	5654	Drawing No.	00103	Revision
Drawing Ref. 5654-HMA-SB-L7-DR-A-00103				P1

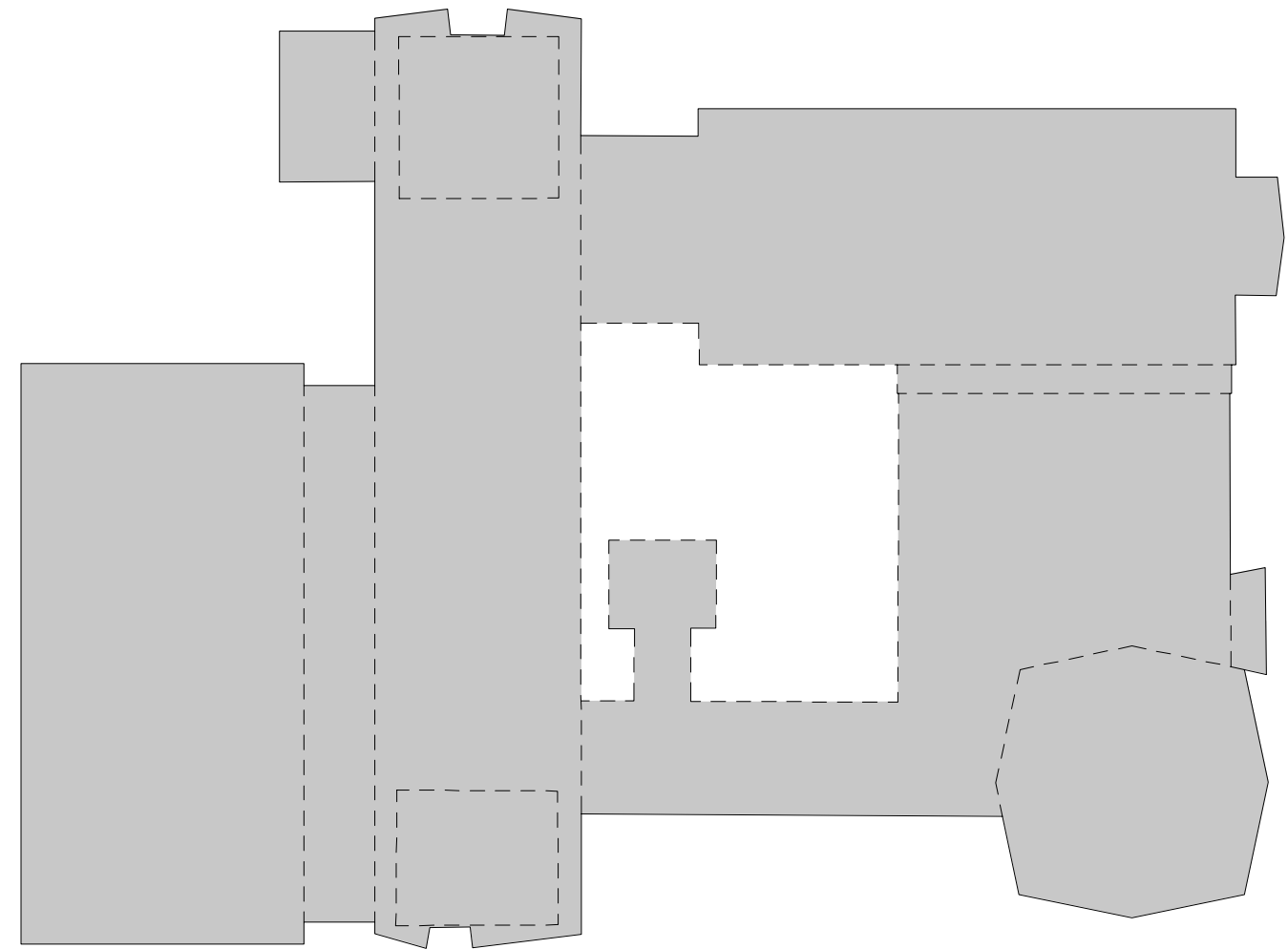
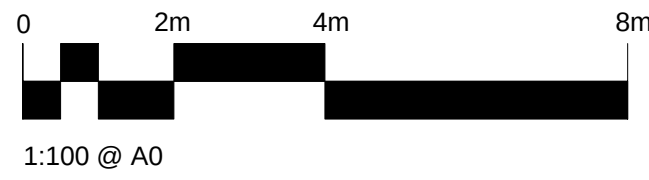
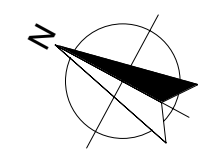




1 Roof Plan Existing
1:100 @ A1

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Existing Roof Plan				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
1:100	1:100	30.06.2023	SA	GW
Job No.	5654	Drawing No.	00104	Revision
5654-HMA-SB-RL-DR-A-00104	P1			

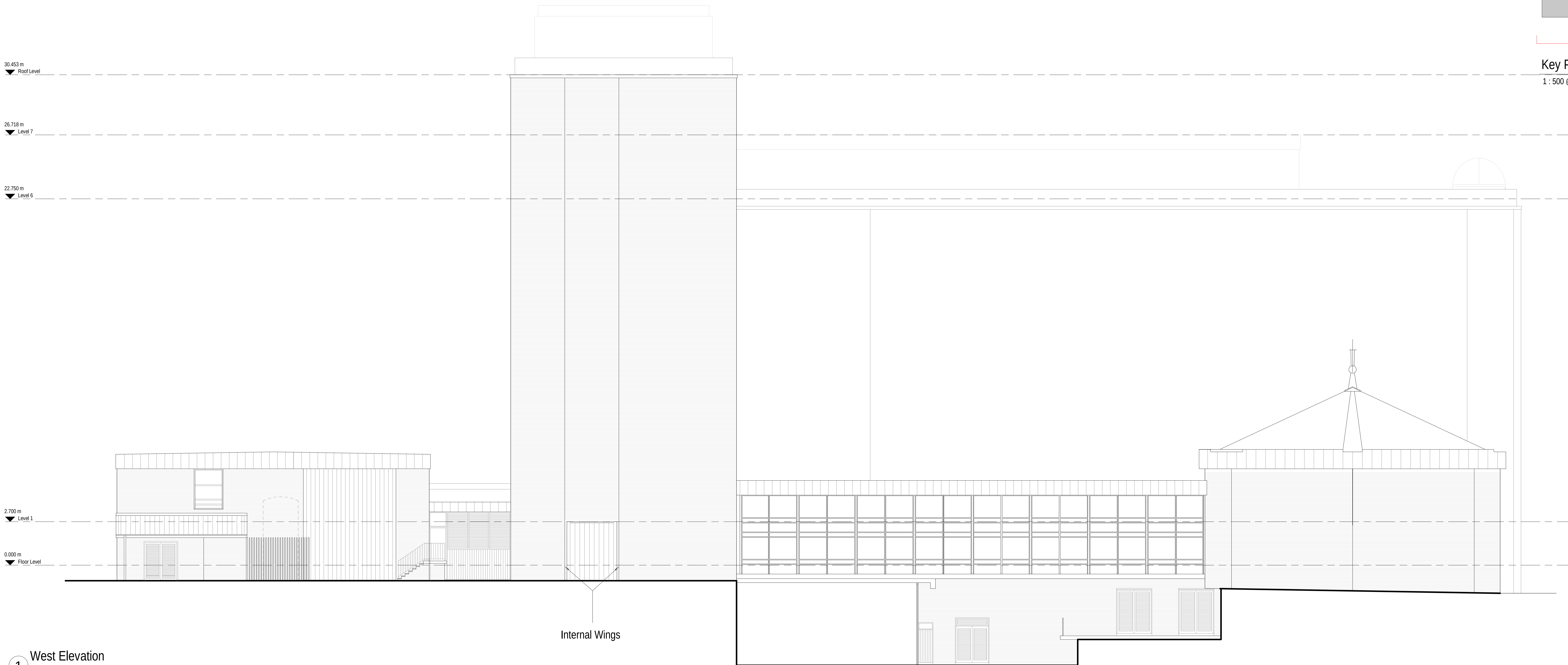




West Elevation

Key Plan

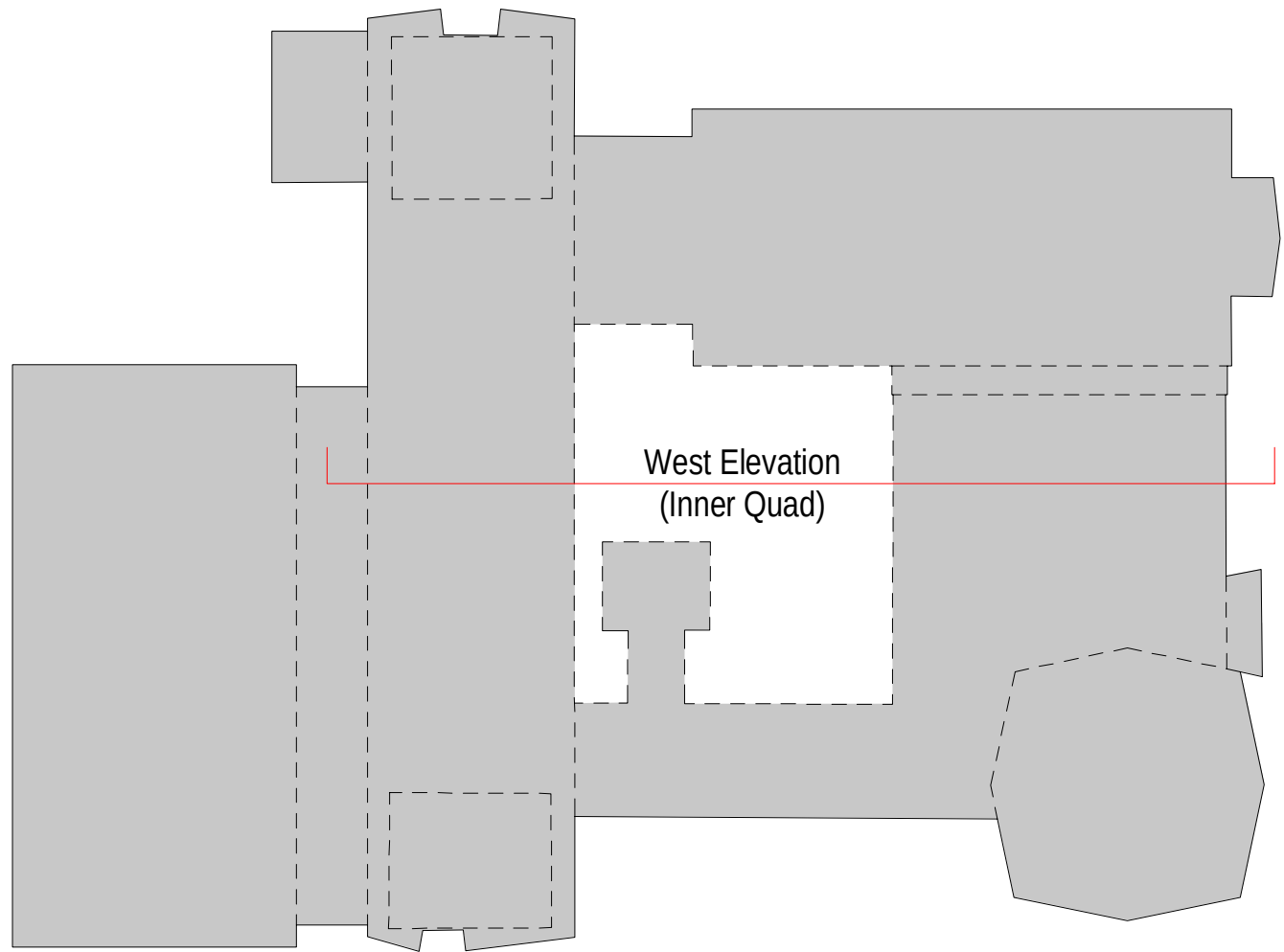
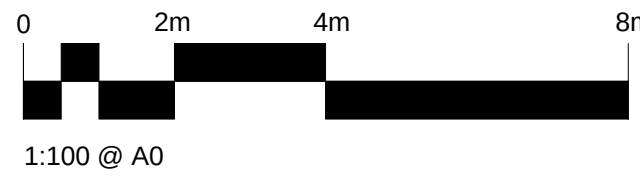
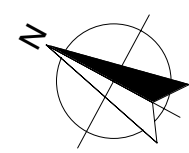
1: 500 @ A0



West Elevation

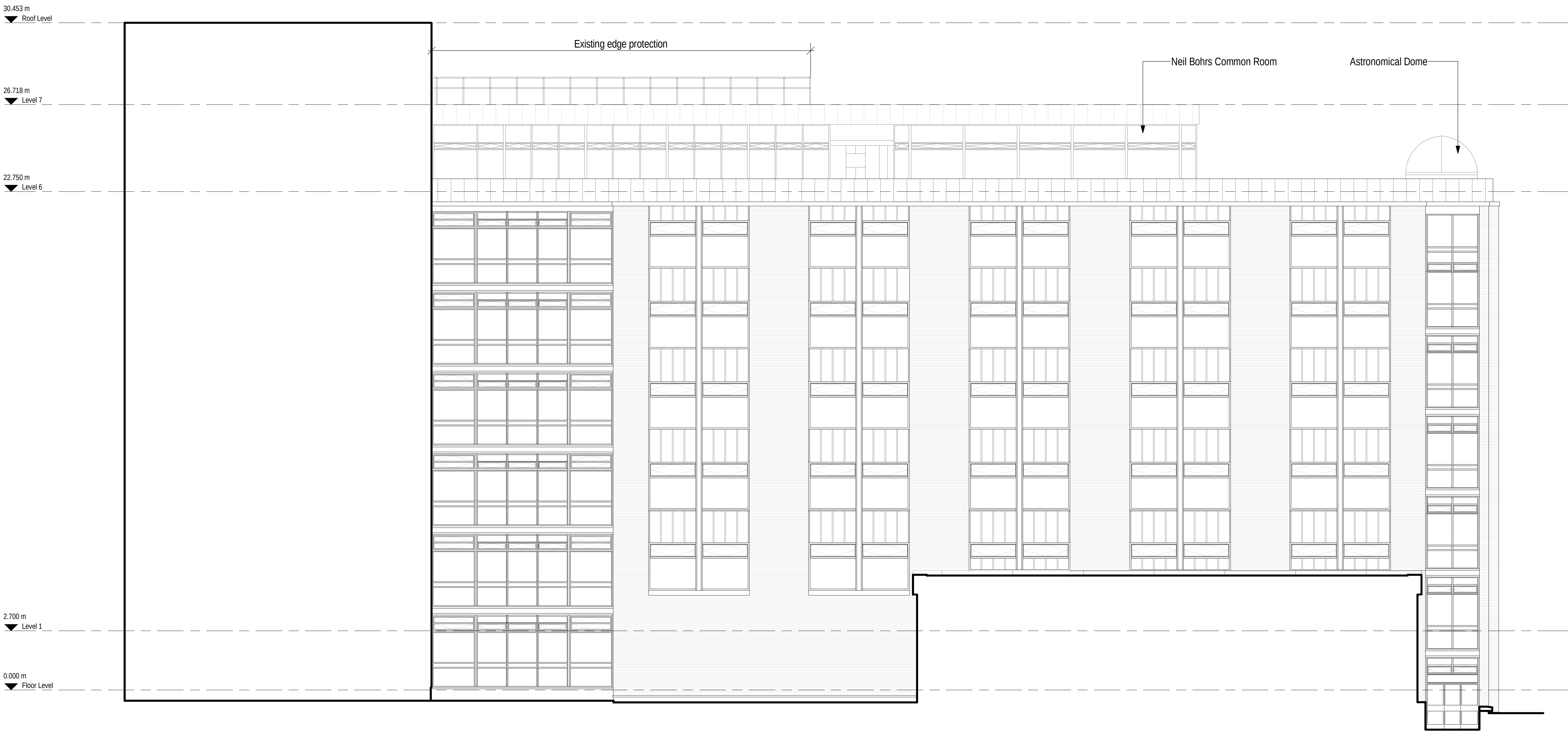
1: 100 @ A1

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Existing West Elevations				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
MIS	SA	30.06.2023	GW	5654
Job No. 5654				Drawing No. 00105
Drawing Ref. 5654-HMA-SB-ZZ-DR-A-00105				Revision P1



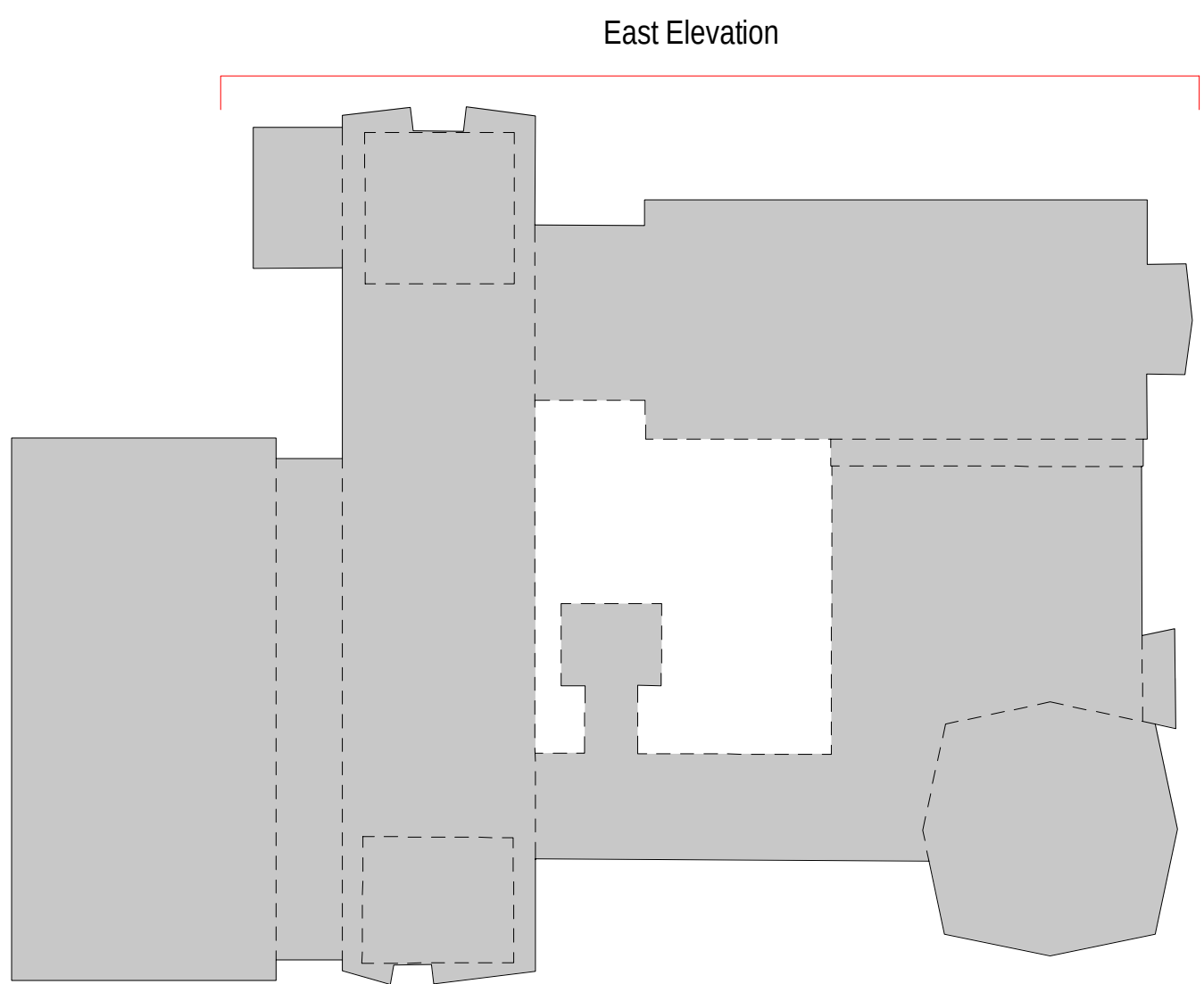
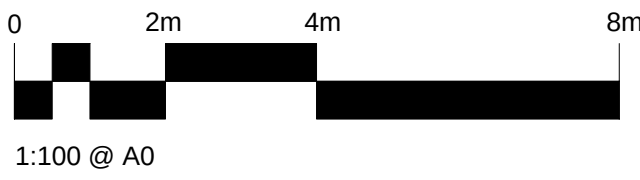
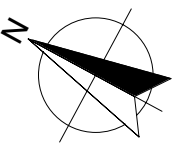
Key Plan

1 : 500 @ A0



1 Existing West Elevation (Inner Quad)
1 : 100 @ A1

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Existing West Elevation (Inner Quad)				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
1:100	1:100	30.06.2023	SA	GW
Job No.	5654	Drawing No.	00106	Revision
5654-HMA-SB-ZZ-DR-A-00106	P1			



Key Plan

1:500 @ A0

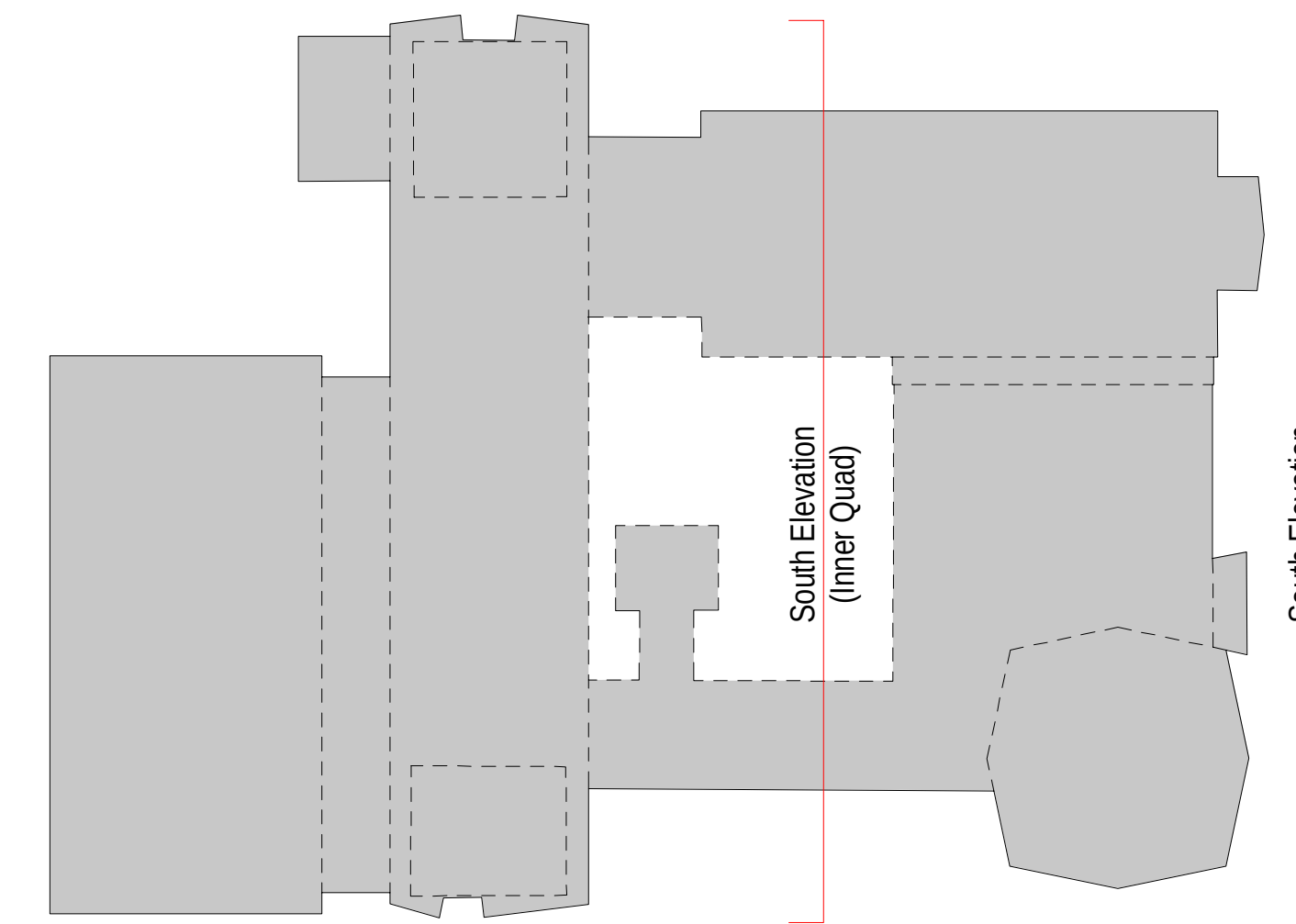
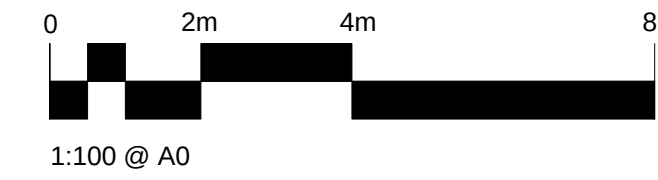
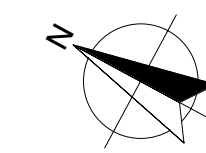


Existing East Elevation

1:100 @ A0

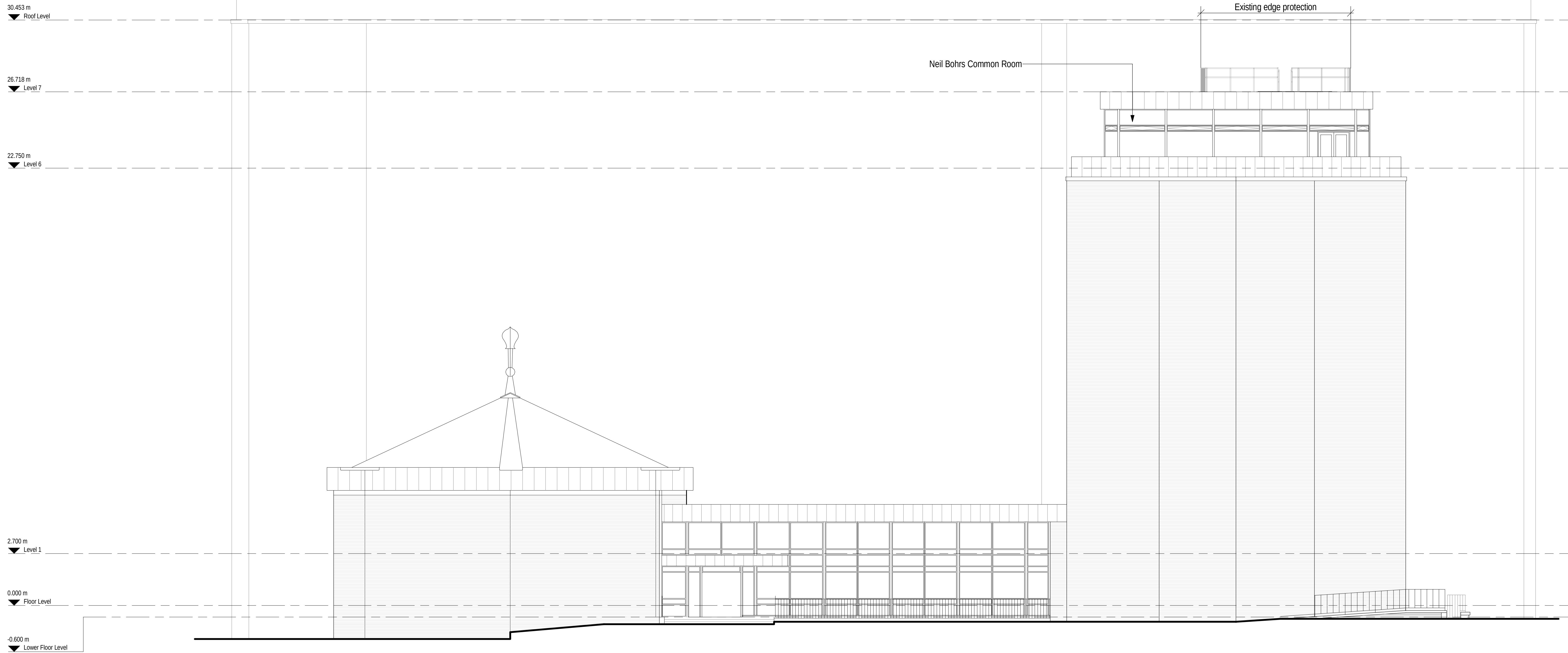
P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Existing East Elevations				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
PLS	SA	30.06.2023	GW	5654
Job No. 5654				Drawing No. 00107
Drawing Ref. 5654-HMA-SB-ZZ-DR-A-00107				Revision P1





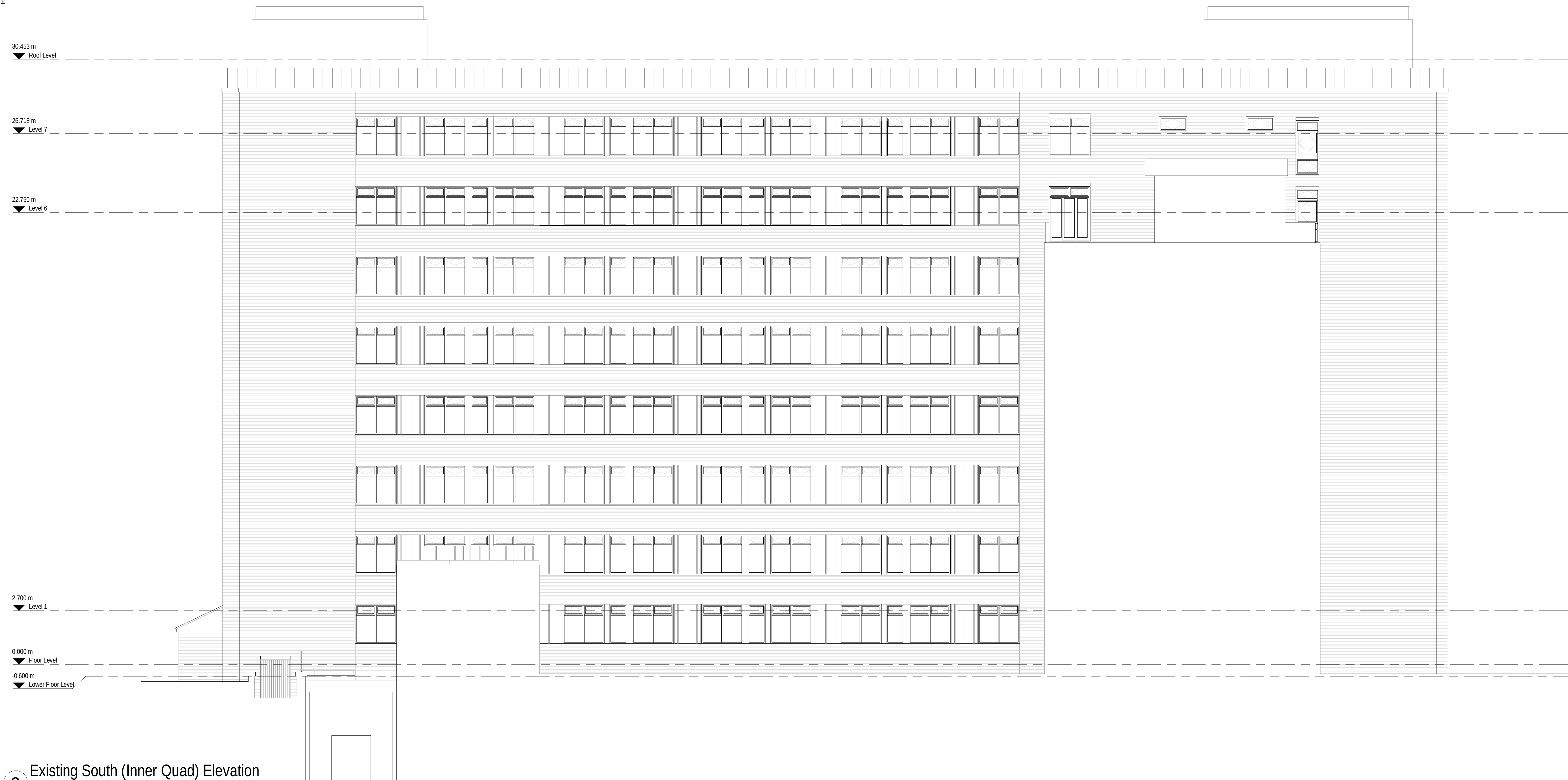
Key Plan

1: 500 @ A1



1 Existing South Elevation

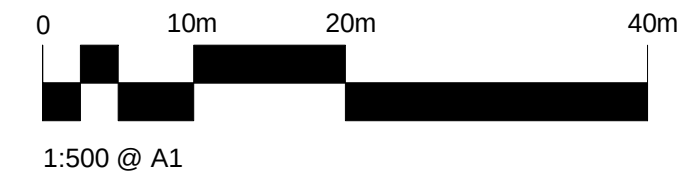
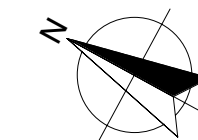
1: 100 @ A1



2 Existing South (Inner Quad) Elevation

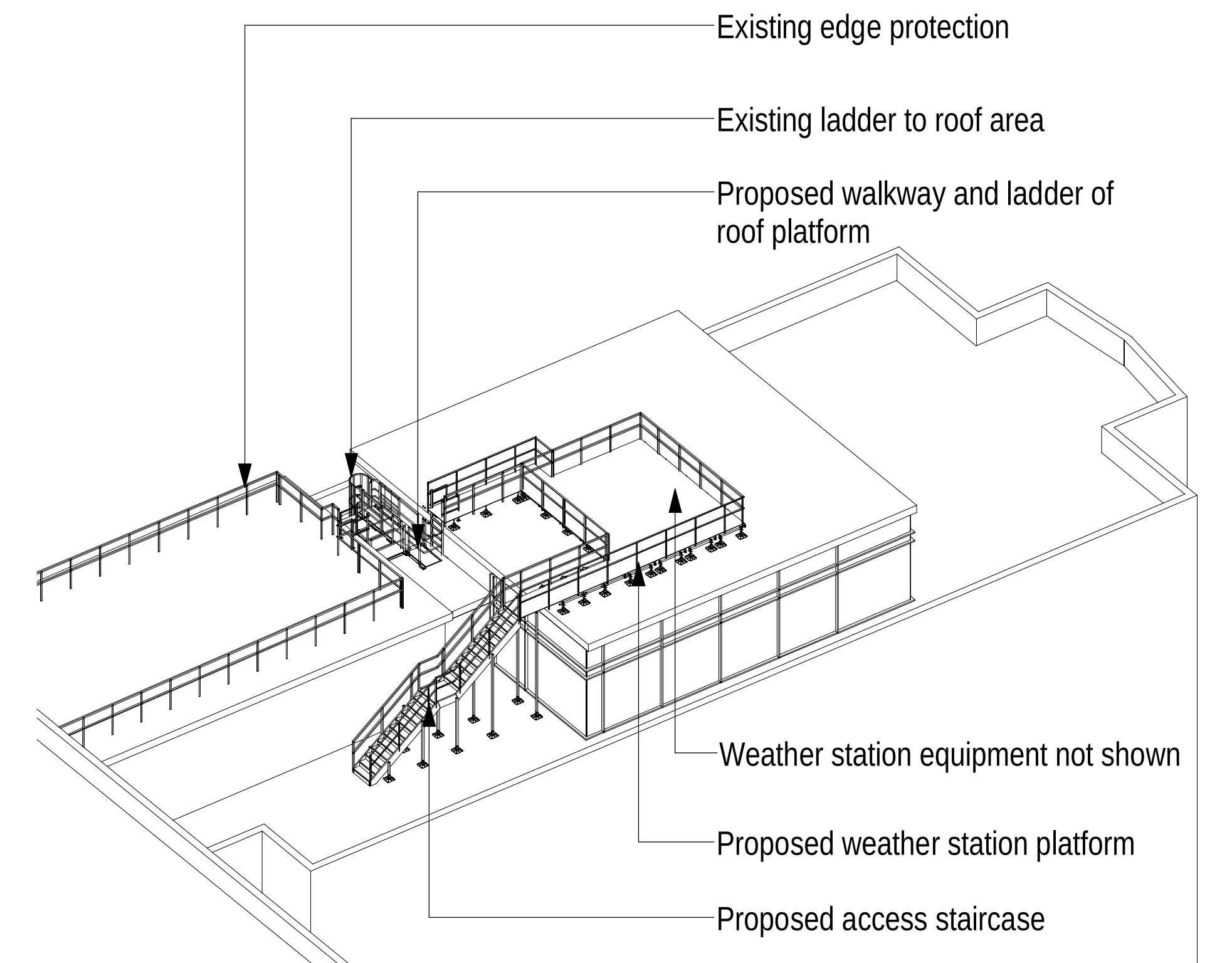
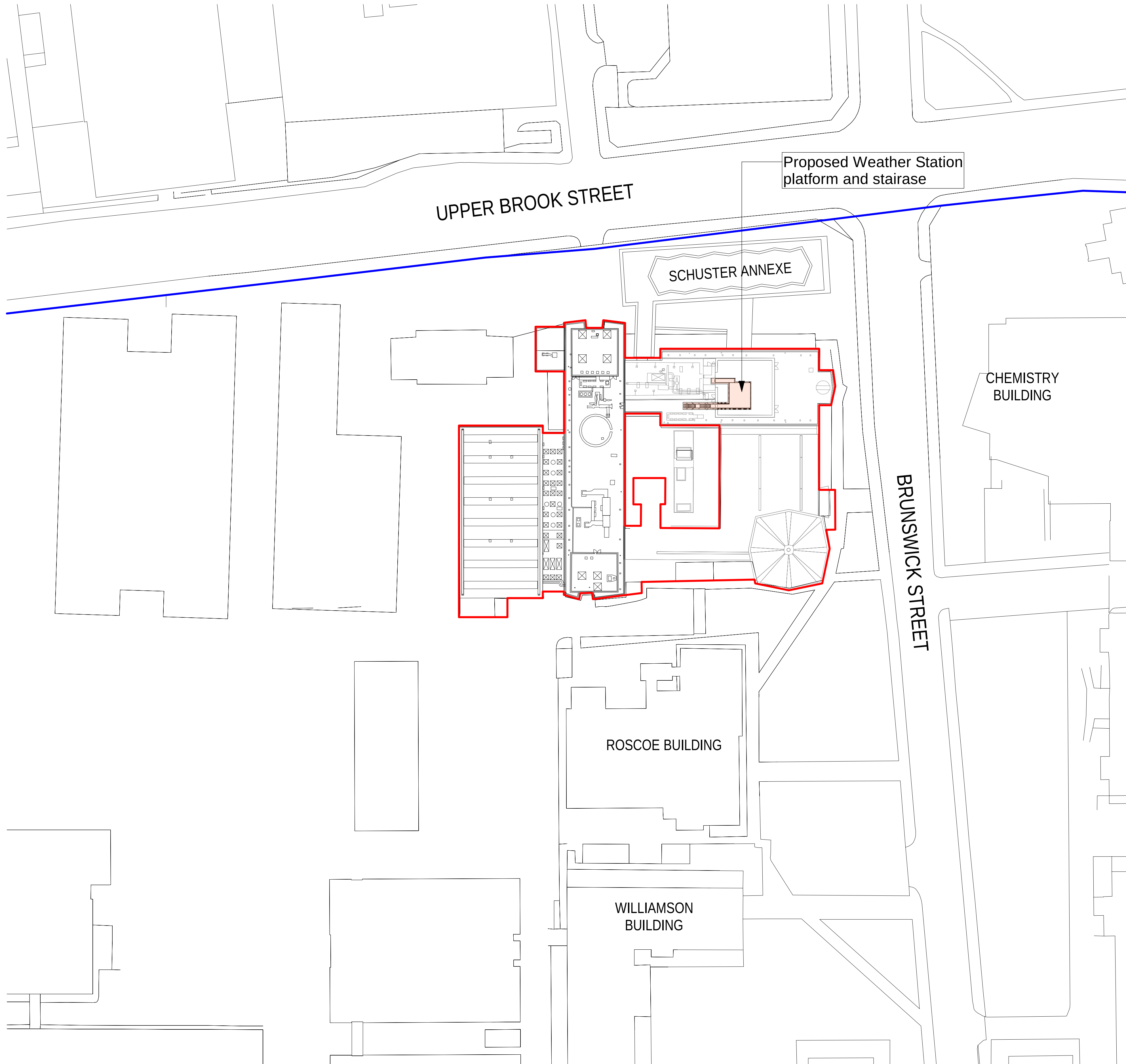
1: 100 @ A1

P1		Issued for Planning		30.06.2023		SA	GW
PLANNING							
Revision	Description			Date	Drawn	Checked	
Halliday Meecham Architects Limited							
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566						HALLIDAY MEECHAM ARCHITECTS	
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175							
hma@hallidaymeecham.com www.hallidaymeecham.com							
Client: University of Manchester							
Project: Schuster Weather Station							
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL							
Drawing: Existing South Elevations							
Scale @ A0		Scale @ A3		Date	Drawn	Checked	Drawing No.
MIS		SA		30.06.2023	GW	5654	00108
Drawing Ref: 5654-HMA-SB-ZZ-DR-A-00108							
							Revision P1



KEYS

- Ownership Boundary
- Development Site Boundary



Proposed Site Plan

1 : 500 @ A1

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked

Halliday Meecham Architects Limited

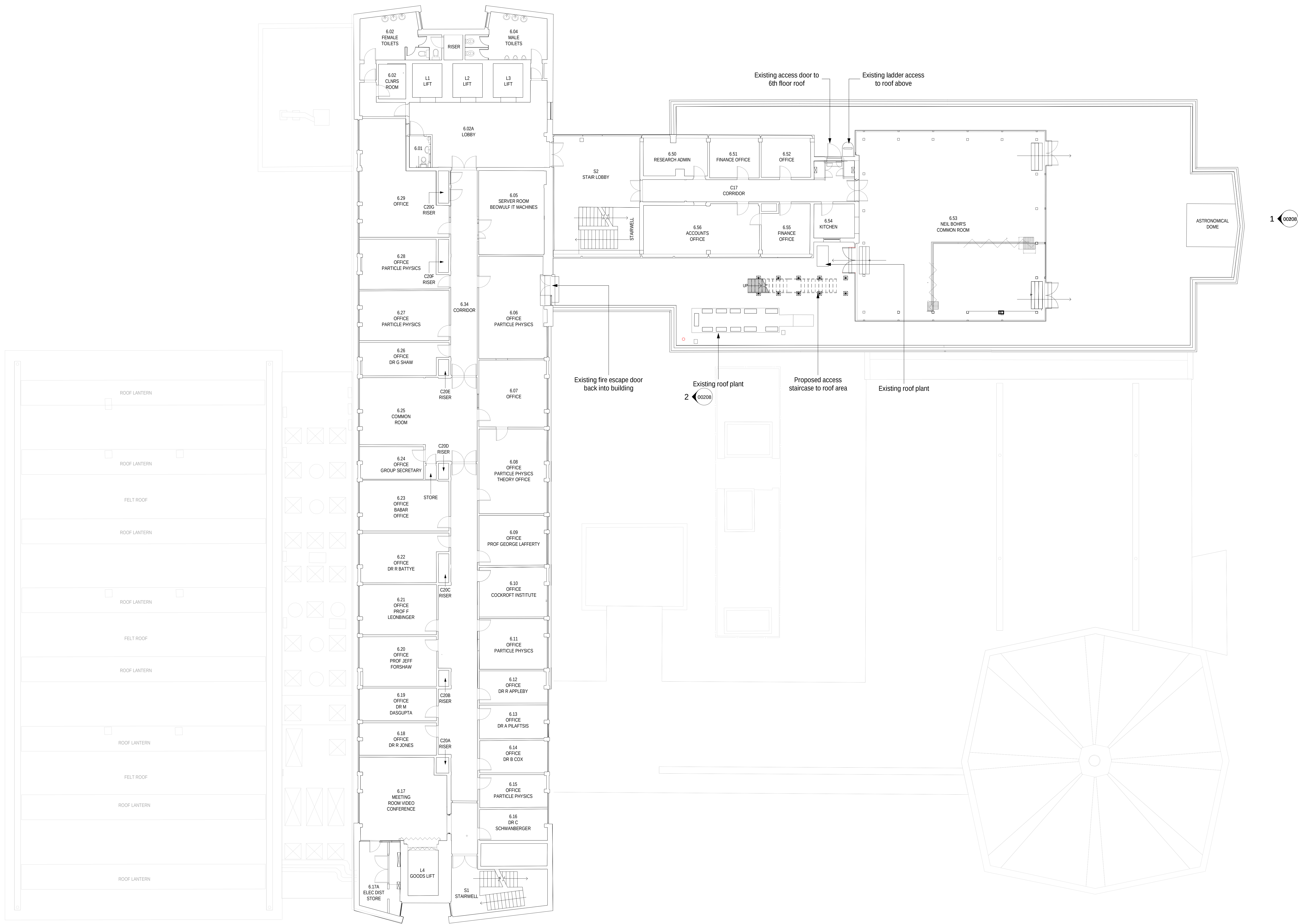
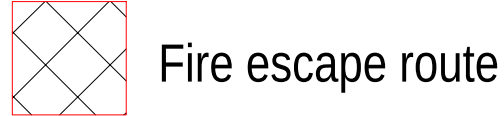
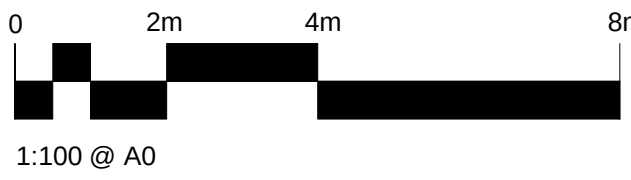
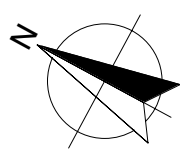
111 Piccadilly Manchester M1 2HY
+44 (0)161 661 5566

4 Devonshire Street London W1W 5DT
+44 (0)203 440 5175

hma@hallidaymeecham.com
www.hallidaymeecham.com



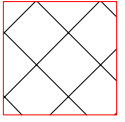
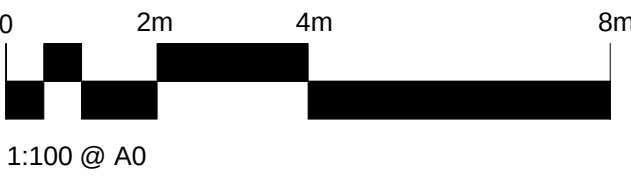
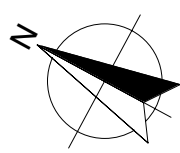
Client:	University of Manchester					
Project:	Schuster Weather Station					
Phase/ Location:	Schuster Building, Brunswick Street, Manchester, M13 9PL					
Drawing:	Proposed Site Plan					
Scale @ A1	Scale @ A3	Date:	Drawn:	Checked:	Job No.	Drawing No.
1:500	1:1000	30.06.2023	SA	GW	5654	00201
Drawing Ref.						Revision
5654-HMA-SB-L0-DR-A-00201						P1



1 Level 6 Proposed
1:100 @ A1

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Proposed 6th Floor Plan				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
MIS	30.06.2023	SA	GW	5654
Job No.	5654	Drawing No.	00202	
Drawing Ref.	5654-HMA-SB-L6-DR-A-00202			Revision P1

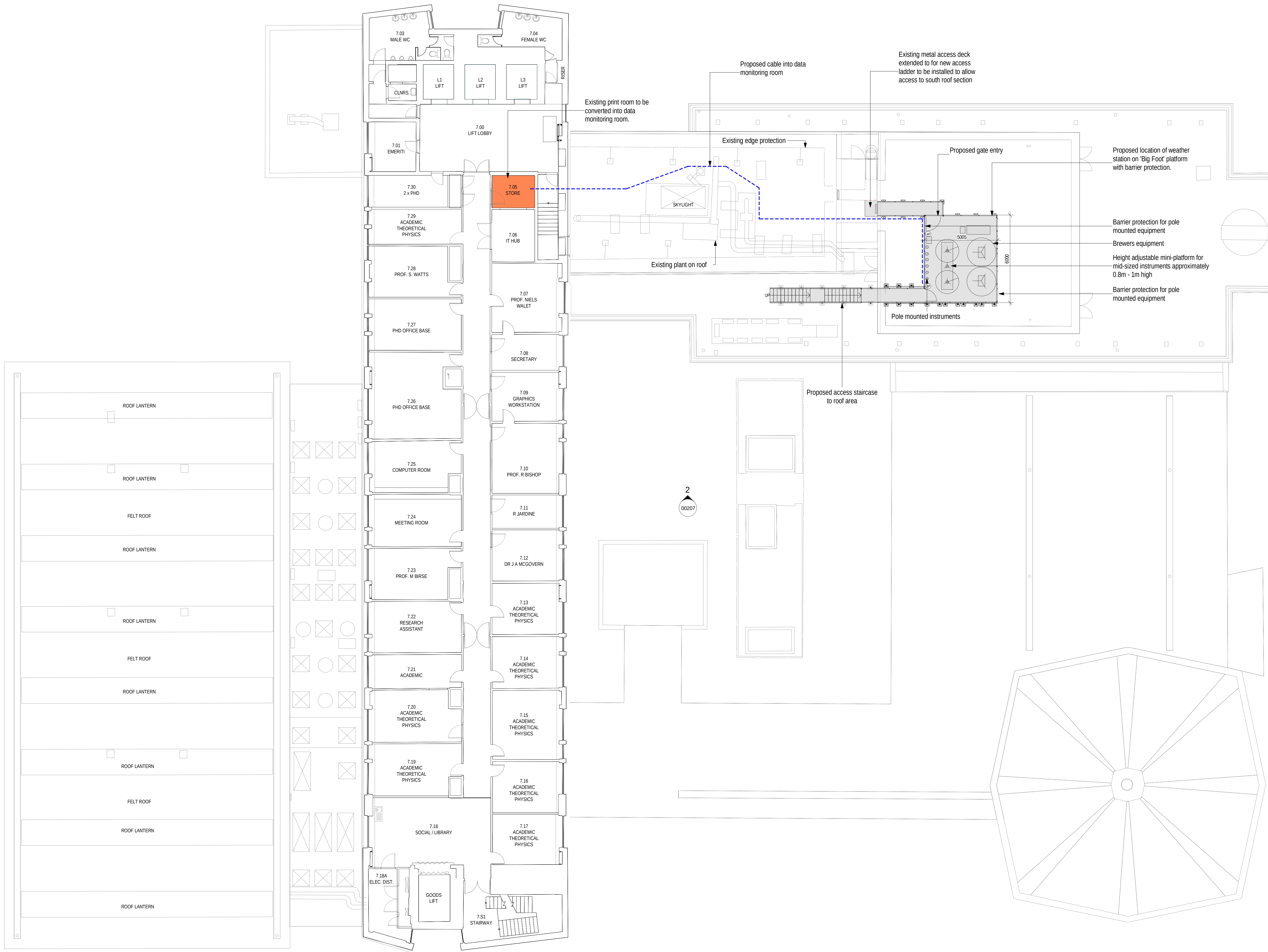




Fire escape route

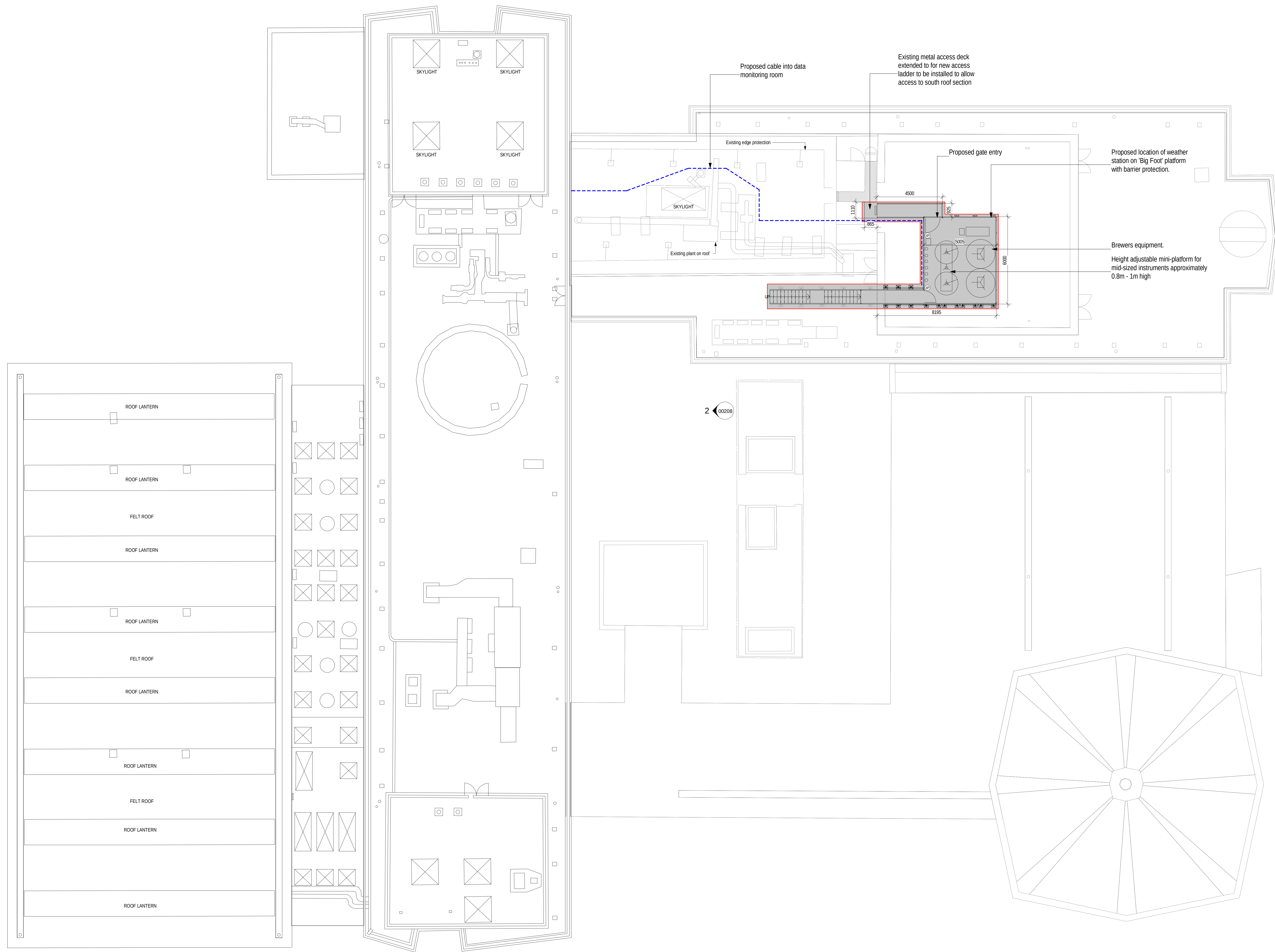
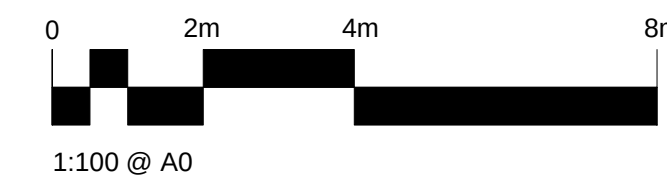
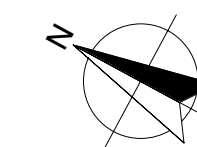


Proposed Brewers weather station equipment to be relocated to the Schuster Building roof.
No noise level information given in manufacturers' specification - assume lack of noise emissions



1 Level 7 Proposed
1:100 @ A1

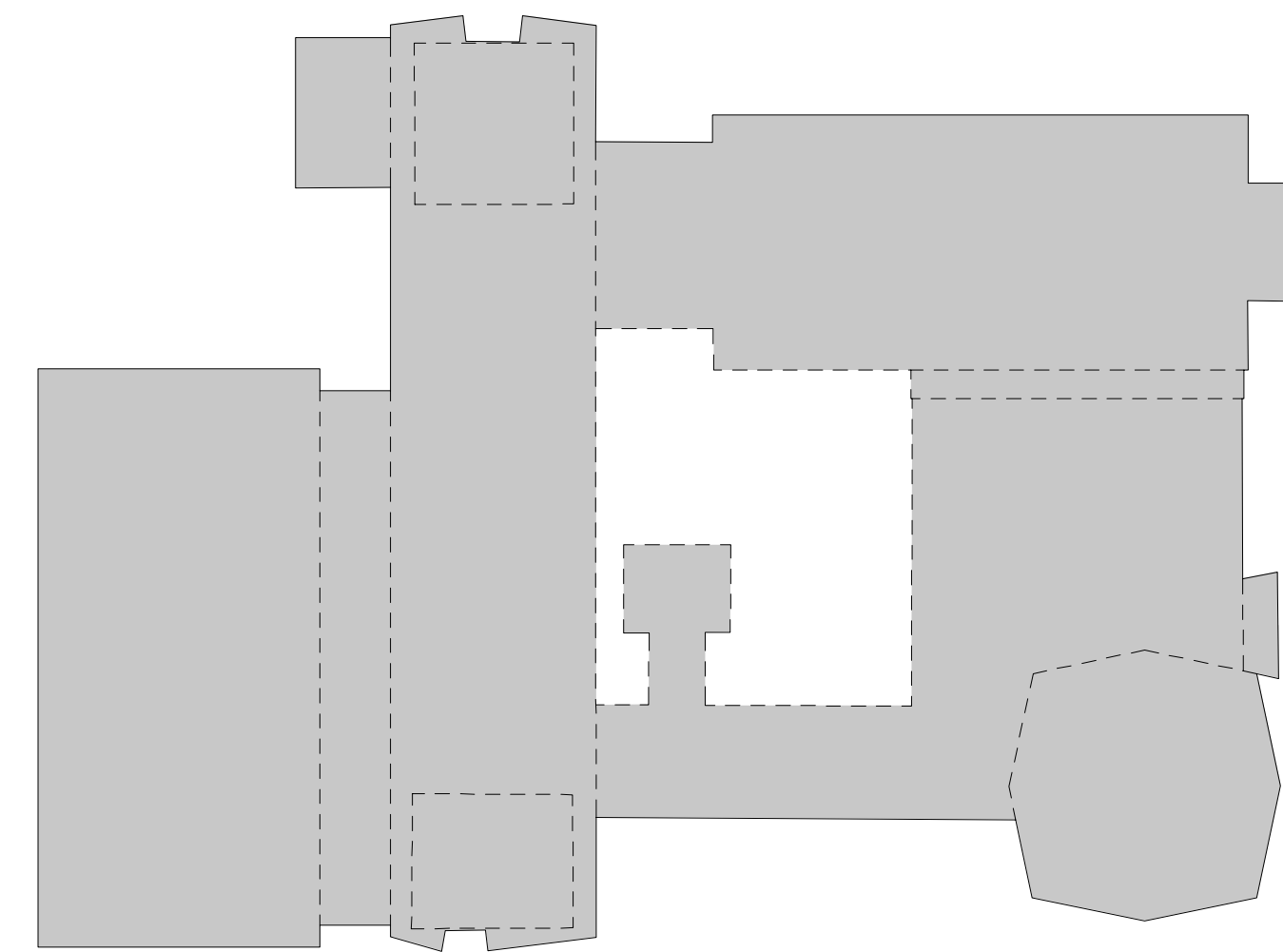
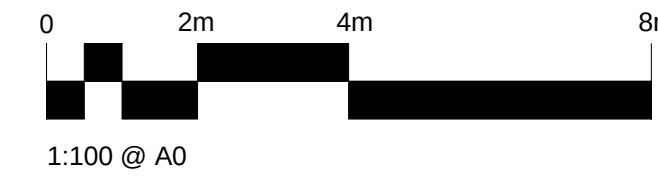
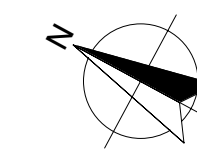
P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Proposed 7th Floor Plan				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
MIS	30.06.2023	SA	GW	5654
Job No. 5654				Drawing No. 00203
Drawing Ref. 5654-HMA-SB-L7-DR-A-00203				Revision P1



1 Roof Plan Proposed
1: 100 @ A1

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Proposed Roof Plan				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
1:100	M1S	30.06.2023	SA	GW
Job No.	5654	Drawing No.	00204	Revision
Drawing Ref.	5654-HMA-SB-RL-DR-A-00204			
				P1

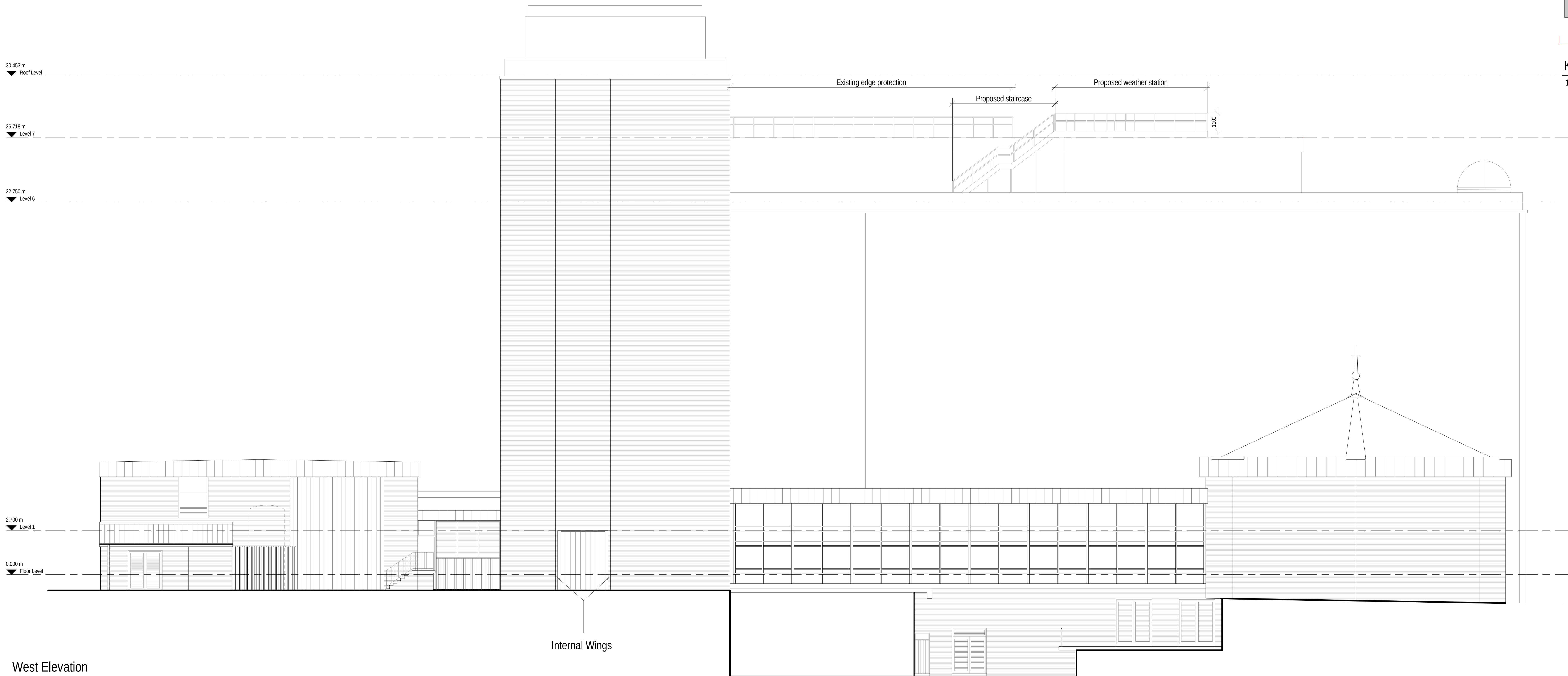




West Elevation

Key Plan

1 : 500 @ A0

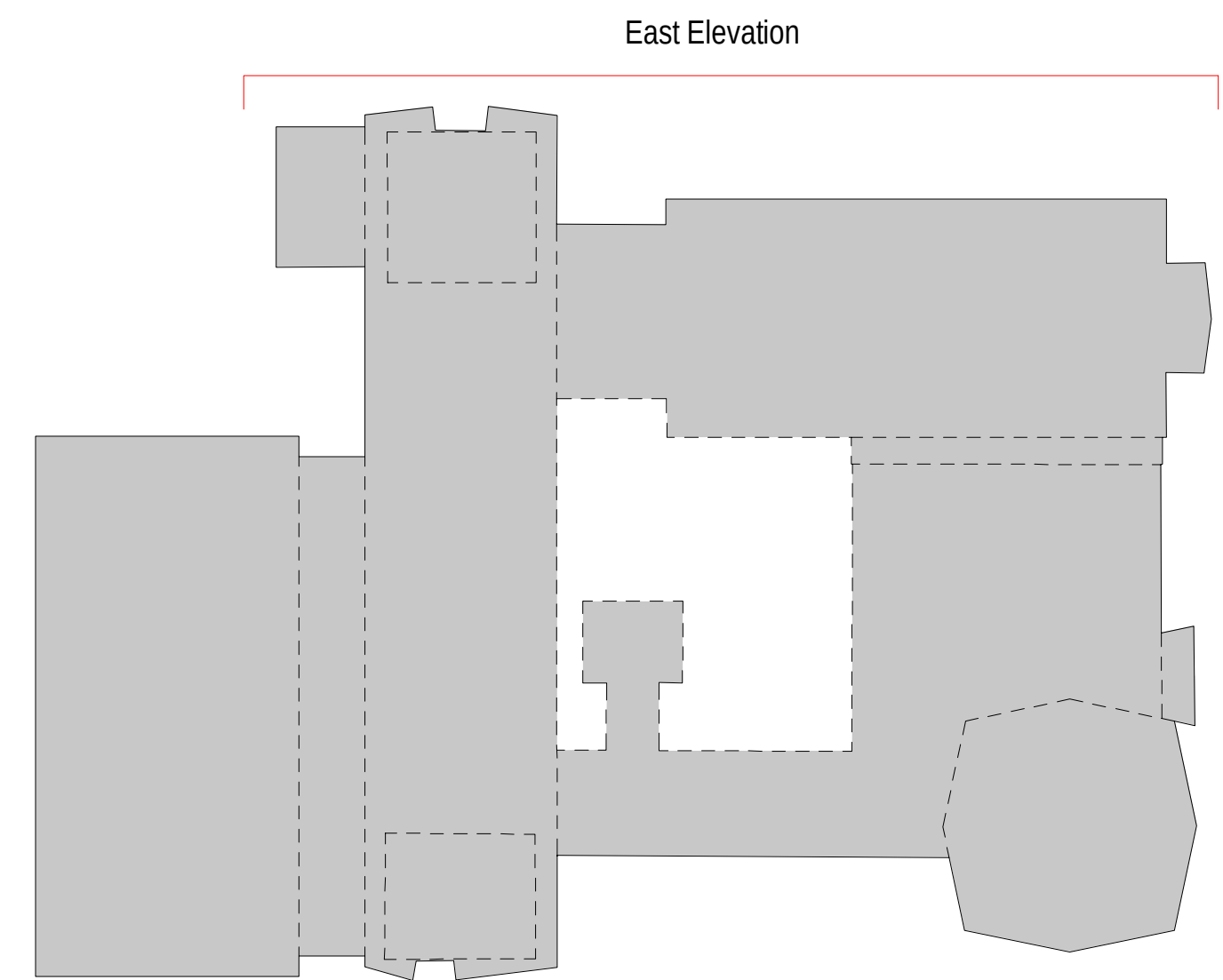
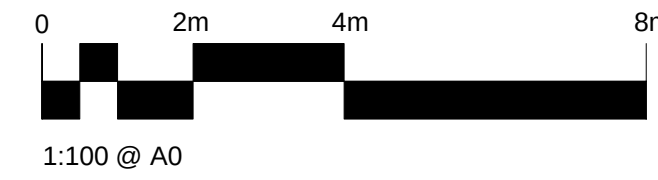
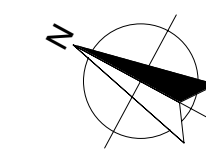


West Elevation

1 : 100 @ A0

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Proposed West Elevations				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
1:100	1:100	30.06.2023	SA	GW
Job No.	5654	Drawing No.	00205	Revision
Drawing Ref.	5654-HMA-SB-ZZ-DR-A-00205			P1





Key Plan

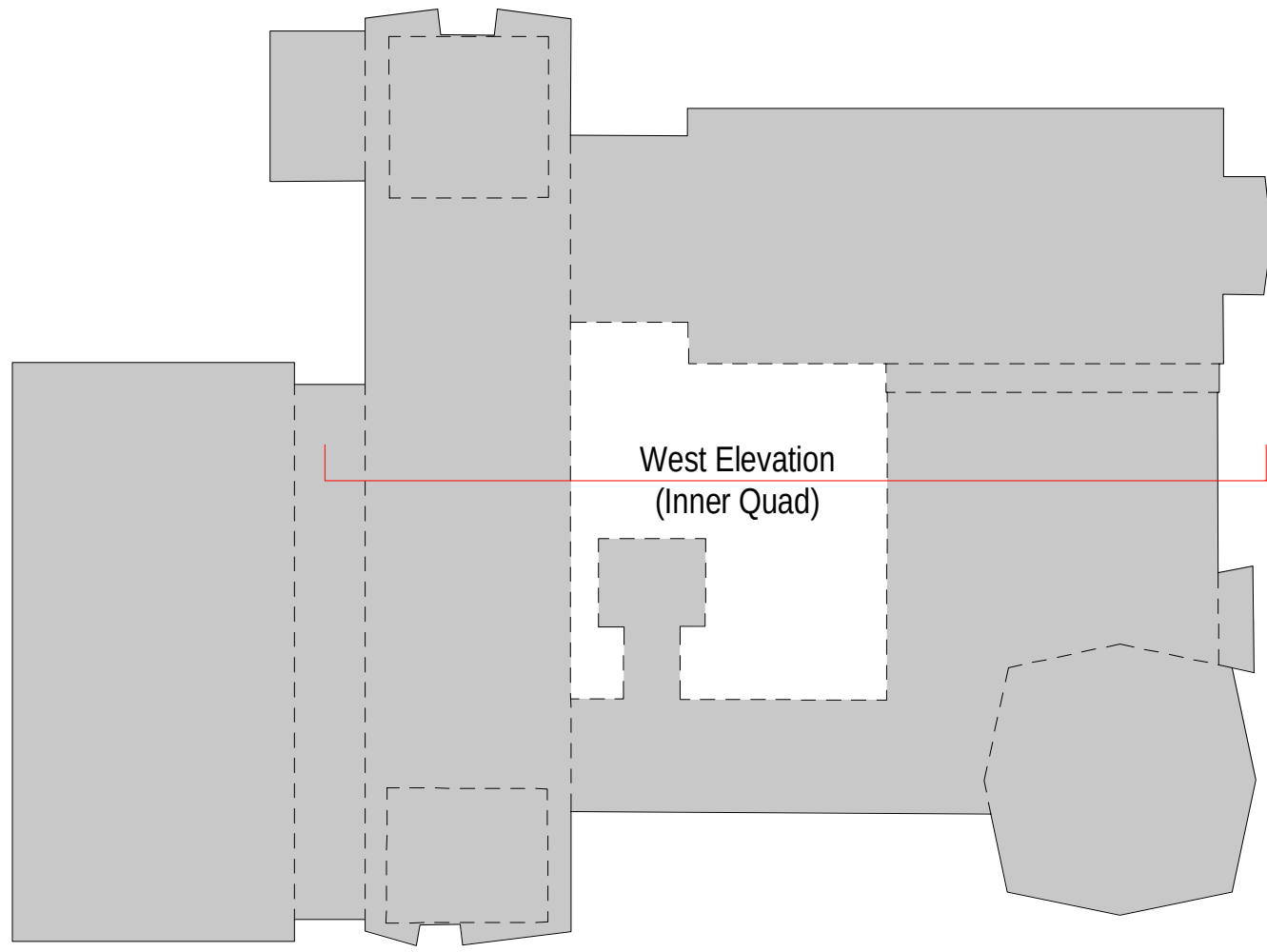
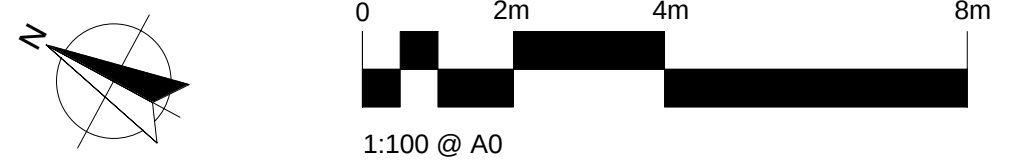
1:500 @ A0



Proposed East Elevation

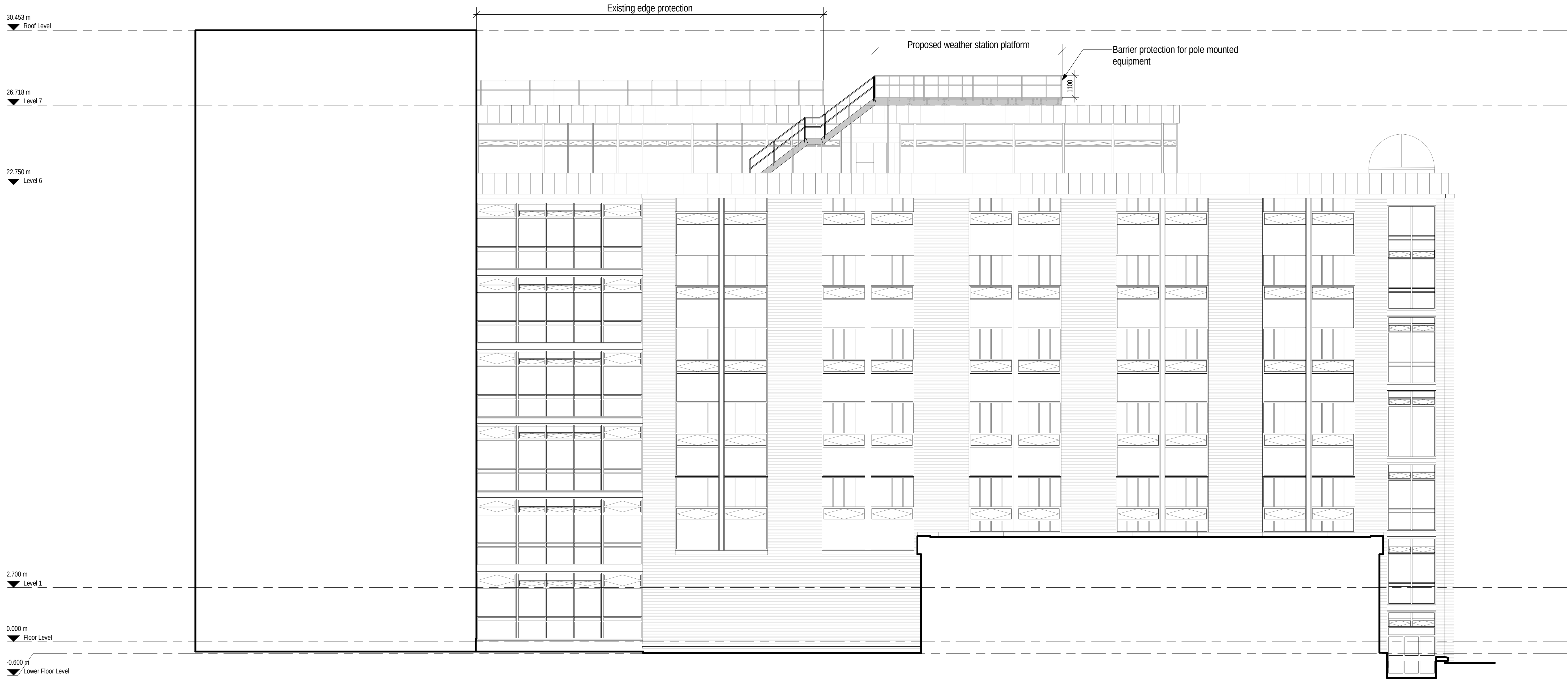
1:100 @ A0

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Proposed East Elevations				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
1:100	1:100	30.06.2023	SA	GW
Job No.	5654	Drawing No.	00206	Revision
Drawing Ref.	5654-HMA-SB-ZZ-DR-A-00206			P1



Key Plan

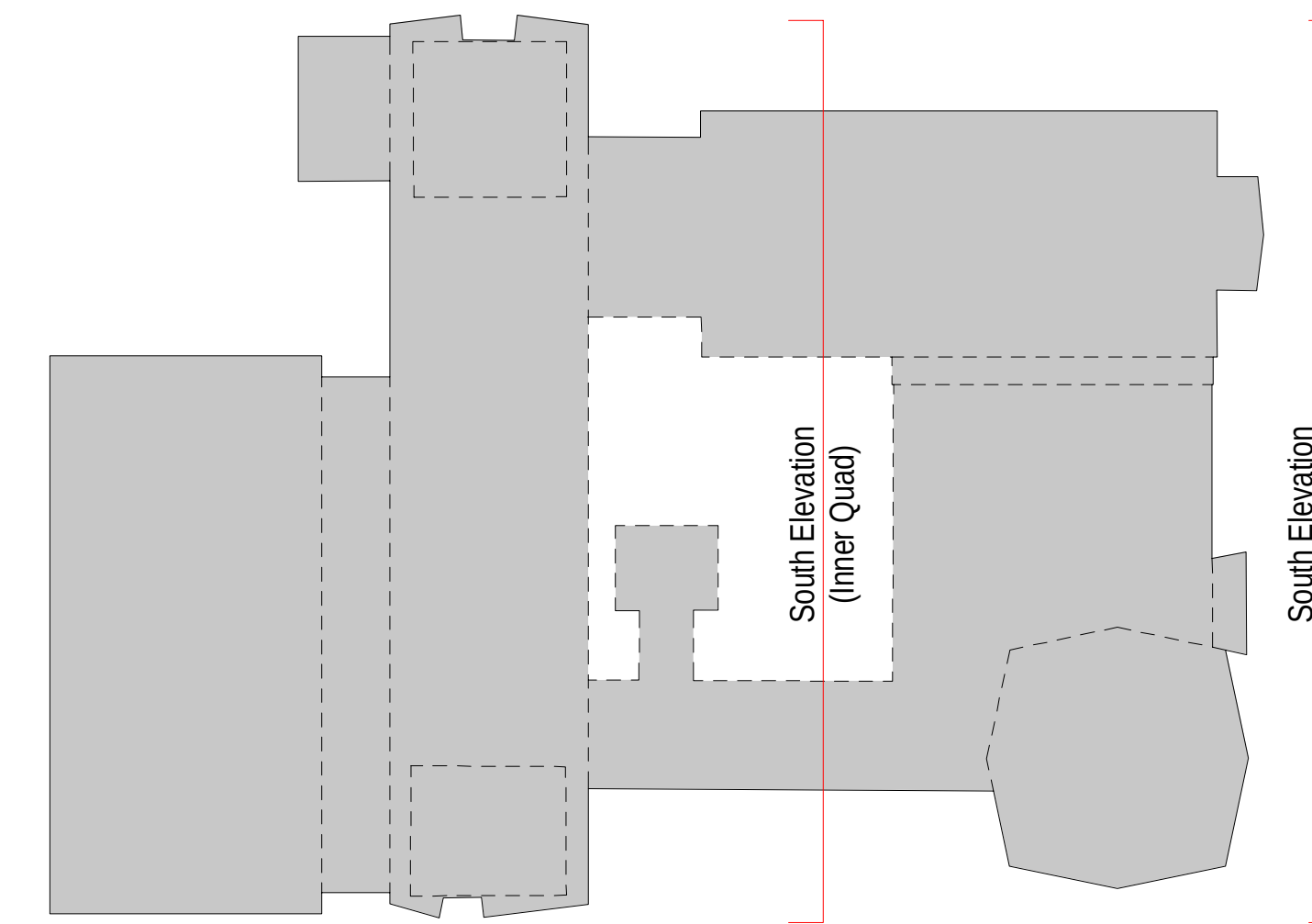
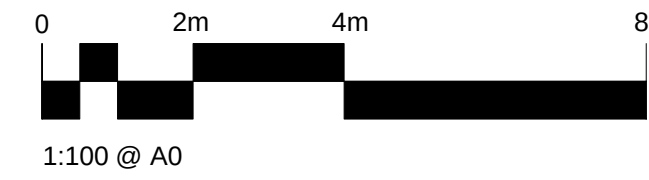
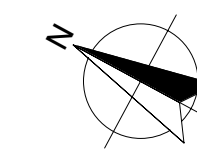
1 : 500 @ A0



Proposed West Elevation (Inner Quad)

1 : 100 @ A0

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/ Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Proposed West Elevation (Inner Quad)				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
1:100	1:100	30.06.2023	SA	GW
Job No.	5654	Drawing No.	00207	Revision
Drawing Ref.	5654-HMA-SB-ZZ-DR-A-00207			P1



Key Plan

1:500 @ A1

30.453 m
▼ Roof Level

26.718 m
▼ Level 7

22.750 m
▼ Level 6

2.700 m
▼ Level 1

0.000 m
▼ Floor Level

-0.600 m
▼ Lower Floor Level

Neil Bohrs Common Room

Proposed weather station platform

Existing edge protection

1.100

1 Proposed South Elevation

1:100 @ A1

30.453 m
▼ Roof Level

26.718 m
▼ Level 7

22.750 m
▼ Level 6

2.700 m
▼ Level 1

0.000 m
▼ Floor Level

-0.600 m
▼ Lower Floor Level

Indicative proposed cable
route into stairwell

Proposed staircase

2 Proposed South Elevation (Inner Quad)

1:100 @ A1

P1	Issued for Planning	30.06.2023	SA	GW
PLANNING				
Revision	Description	Date	Drawn	Checked
Halliday Meecham Architects Limited				
111 Piccadilly Manchester M1 2HY +44 (0)161 661 5566				
4 Devonshire Street London W1W 5DT +44 (0)203 440 5175				
hma@hallidaymeecham.com www.hallidaymeecham.com				
Client: University of Manchester				
Project: Schuster Weather Station				
Phase/Location: Schuster Building, Brunswick Street, Manchester, M13 9PL				
Drawing: Proposed South Elevations				
Scale @ A0	Scale @ A3	Date	Drawn	Checked
PLS	PLS	30.06.2023	SA	GW
Job No.	Drawing No.	5654	00208	
Drawing Ref.	5654-HMA-SB-ZZ-DR-A-00208			Revision
				P1



5.0 Conclusion

In conclusion, the proposal has taken into consideration the access needs of the client in tandem with fire evacuation and barrier protection requirements. Furthermore, the proposed development will cause minimal disruption to the existing Schuster building and its surroundings. It's an improvement on the current location of the weather station at the Pariser building and will have a positive impact on the reasearch being undertaken by the University of Manchester.