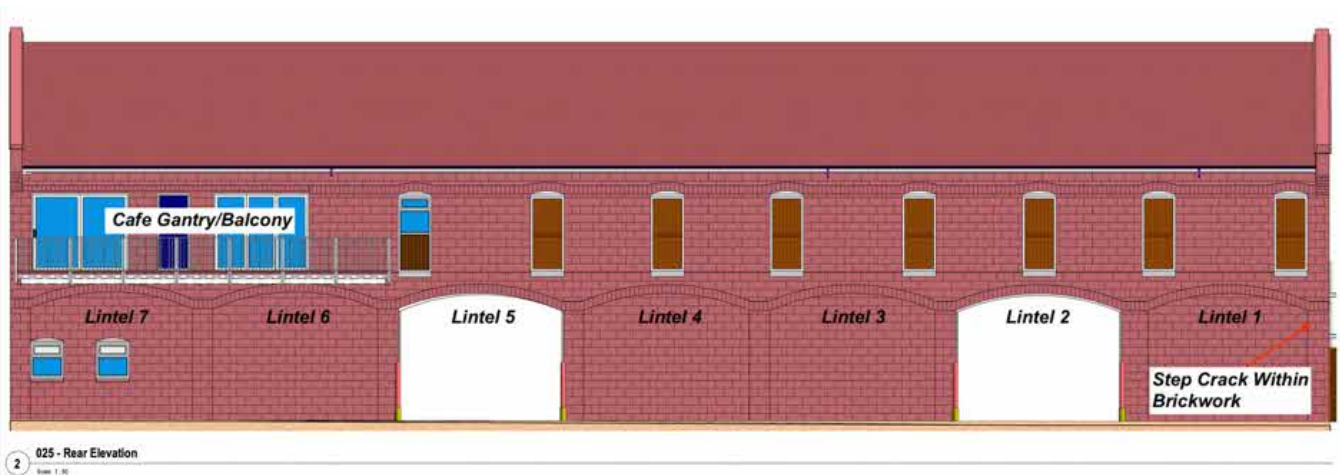
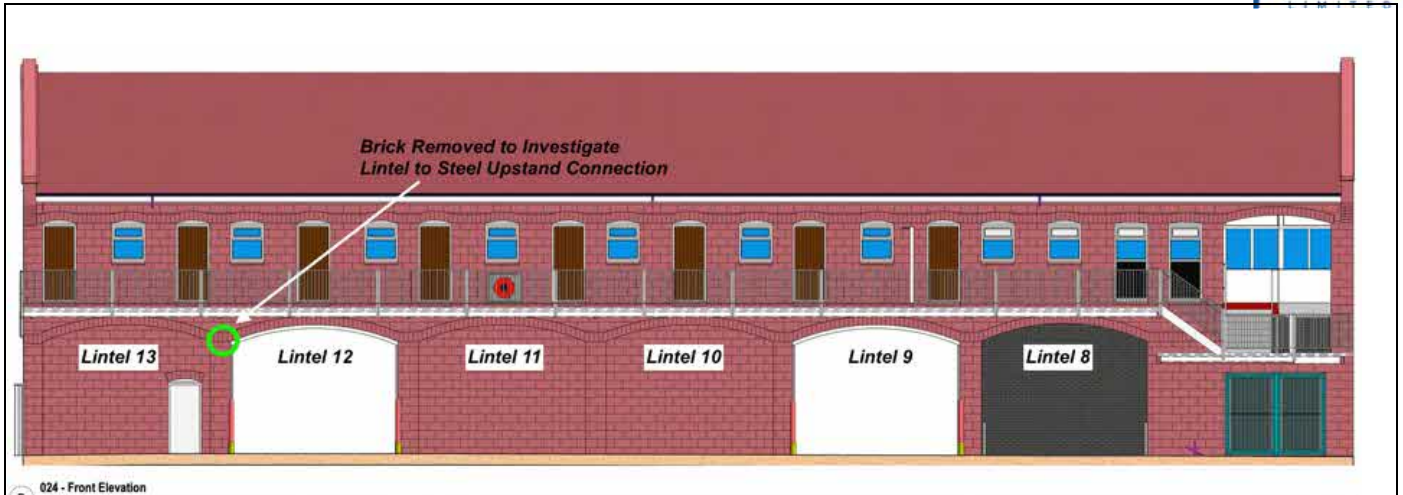


The gantry/balcony to the rear of the café on the harbour side support steelwork is in good condition. However, the bolts are suffering from light corrosion. There are a number of areas where bolts are missing, however, it appears that this was during construction with areas being welded instead of bolted.

It is recommended that 20% of these bolts should be removed and replaced with the removed bolts being sent away for microscopic examination and tensile testing, this will highlight if the bolts remain at the required strength and will also show any cracking within the bolts that is not visible to the human eye.





The walkway on the carpark side of building 3 remains in good condition however, the steelwork does show some signs of breakdown to the galvanised coating again this is not a cause for concern at this time. The Mesh flooring has become smooth through use and is now not very grippy and is now not performing as an anti-slip walkway. A step forms the bridge between Building 2 and Building 3's walkways, this step was found to be insecure.





024 - Front Elevation  
Scale 1:50



- KEY
-  100-200mm dia. slab core / foundation size check. 1m x 1m concrete surface area required for ferro scan
  -  Breakout construction: Down stands full length beams and columns at connections. Identification of block wall thicknesses. Ceiling construction
  -  Investigate roof voids / walls sizes of roof and ceiling members
  -  Measure / corrosion survey / material testing of existing steelwork. Includes balcony and ground floor arch lintels

Building 3



Work at Height. Appropriate scaffold tower or other high level access equipment required.

# REPORT CONTINUATION

Customer: Proteq Ltd.	Date of test: 6 <sup>th</sup> & 7 <sup>th</sup> March 2023	Report Number: AM-23.186
--------------------------	---	-----------------------------



Figure  
Steel Lintel distortion & flashing separation



Figure  
Steel Lintel distortion

# REPORT CONTINUATION

Customer:  
Proteq Ltd.

Date of test:  
6<sup>th</sup> & 7<sup>th</sup> March 2023

Report Number:  
AM-23.186



Figure  
Steel Lintel distortion



Figure  
Steel Lintel distortion

# REPORT CONTINUATION

Customer:  
Proteq Ltd.

Date of test:  
6<sup>th</sup> & 7<sup>th</sup> March 2023

Report Number:  
AM-23.186



Figure  
Steel Lintel distortion



Figure  
Steel Lintel distortion & flashing separation

# REPORT CONTINUATION

Customer:  
Proteq Ltd.

Date of test:  
6<sup>th</sup> & 7<sup>th</sup> March 2023

Report Number:  
AM-23.186



Figure  
Steel Lintel distortion & flashing separation



Figure  
Steel Lintel distortion & flashing separation

# REPORT CONTINUATION

Customer: Proteq Ltd.	Date of test: 6 <sup>th</sup> & 7 <sup>th</sup> March 2023	Report Number: AM-23.186
--------------------------	---	-----------------------------



Figure  
Steel Lintel distortion & flashing  
separation



Figure  
Steel Lintel distortion



## REPORT CONTINUATION

Customer: Proteq Ltd.	Date of test: 6 <sup>th</sup> & 7 <sup>th</sup> March 2023	Report Number: AM-23.186
--------------------------	---	-----------------------------



Figure

Bricks removed to expose steel support structure



Figure

Support structure minor corrosion

# REPORT CONTINUATION

Customer: Proteq Ltd.	Date of test: 6 <sup>th</sup> & 7 <sup>th</sup> March 2023	Report Number: AM-23.186
--------------------------	---	-----------------------------



Figure

Bricks removed to expose steel support structure



Figure

Support structure minor corrosion

## REPORT CONTINUATION

Customer:  
Proteq Ltd.

Date of test:  
6<sup>th</sup> & 7<sup>th</sup> March 2023

Report Number:  
AM-23.186



Figure  
Front gantry bolts



Figure  
Front gantry step from building 2 – 3 is loose

# REPORT CONTINUATION

Customer: Proteq Ltd.	Date of test: 6 <sup>th</sup> & 7 <sup>th</sup> March 2023	Report Number: JB – 0323
--------------------------	---	-----------------------------



Building 1. Cover metre in the Male Toilet shower. Presence of non-ferrous during the scanning which our engineers suspect is copper pipework feeding the toilets. No Reinforcing bar was detected in the area during the scanning works.



Building No. 2 Upstairs Room, the area was inspected with a cover metre and no reinforcing bar was found during the inspection.

# Appendix C



# TESTCRETE

CONSTRUCTION TESTING LIMITED

Carlton Station, Goole, DN14 9NT

Also at: Unit 14 Monde Trading Estate, Trafford Park, Manchester, M17 1LP

Website [www.testcrete.co.uk](http://www.testcrete.co.uk)

Page 1 of 1

Report Number: 11187

## CORE EXAMINATION AND COMPRESSIVE STRENGTH

Client: WM Birch & Sons Ltd.

Site: 18 West Pier, Scarborough

Lab Number	C8109.1	C8109.2	C8109.3	3 cores only
Core Number	1	2	3	
Date concrete cast	Not known			
Date of drilling	Not known			
Direction of drilling	Assumed vertical			
Date of receipt	01.03.23			
Condition of core on receipt	Dry			
Average diameter (mm)	143			
Length as received (mm)	180-190*	160	240-250	
Compaction of concrete	Good	Good	Good	
Distribution of materials	Good	Good	Good	
Coarse aggregate type	Crushed stone	Crushed stone over gravel **	Crushed stone	
Aggregate shape	Angular	Angular/rounded	Angular	
Maximum aggregate size (mm)	20	14 / 40	20	
% Voids	0.5	0.5	0	
Size and depth of reinforcement (mm)	8@180	0	12@135	
Method of end preparation	Diamond saw			
Capping material	HAC			
Depth of core section tested	All	All	40-215	
Date cores tested	09.03.23			
Age (days)	Not known			
Length after preparation (mm)	193			
Area (mm)	16062			
Mode of failure	Normal			
Compressive strength (N/mm <sup>2</sup> )	19.4	19.9	39.4	-----
Estimated in situ cube strength (N/mm <sup>2</sup> )	21.6	22.2	44.0	
Ditto corrected for reinforcement	21.6	22.2	46.4	

\* includes screed topping (removed before test)

\*\* two layers of totally different concrete

Signed on behalf of Testcrete Construction Testing Ltd

Graham G Rose  
09.03.23

Page 1 of 1

# Appendix D



B1 (1)



B1 (2)



B1 (3)



B1 (4)





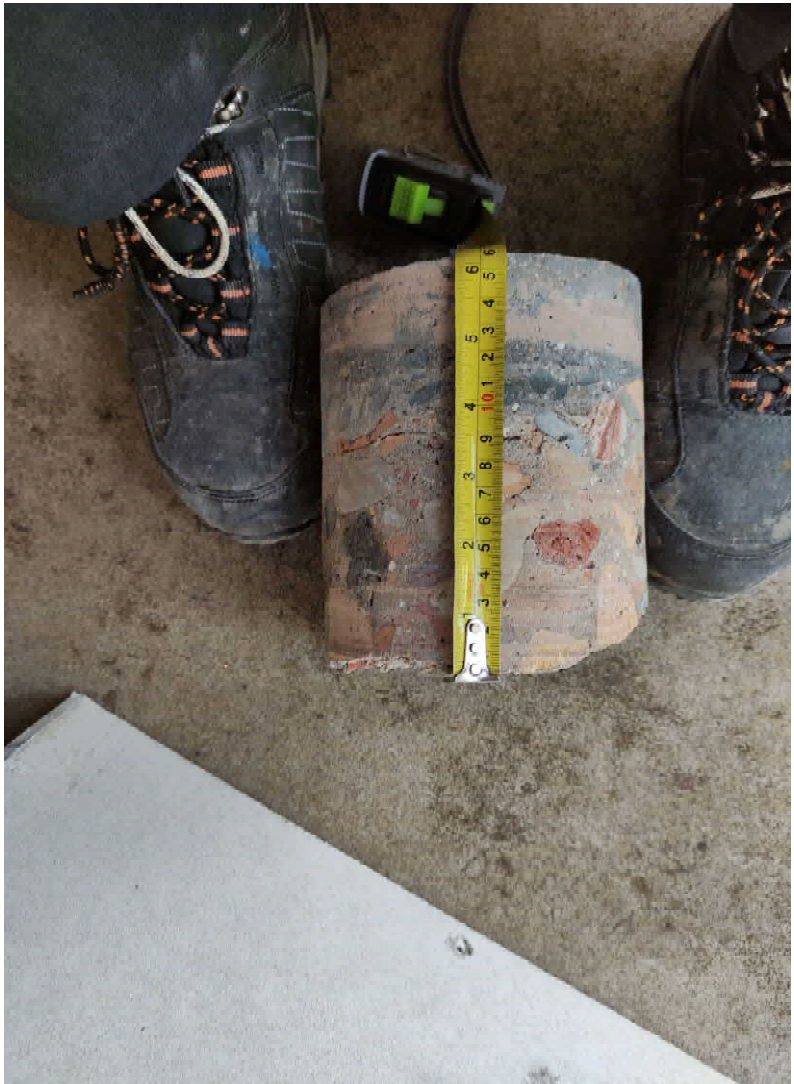
B1 (5)



B2 (1)



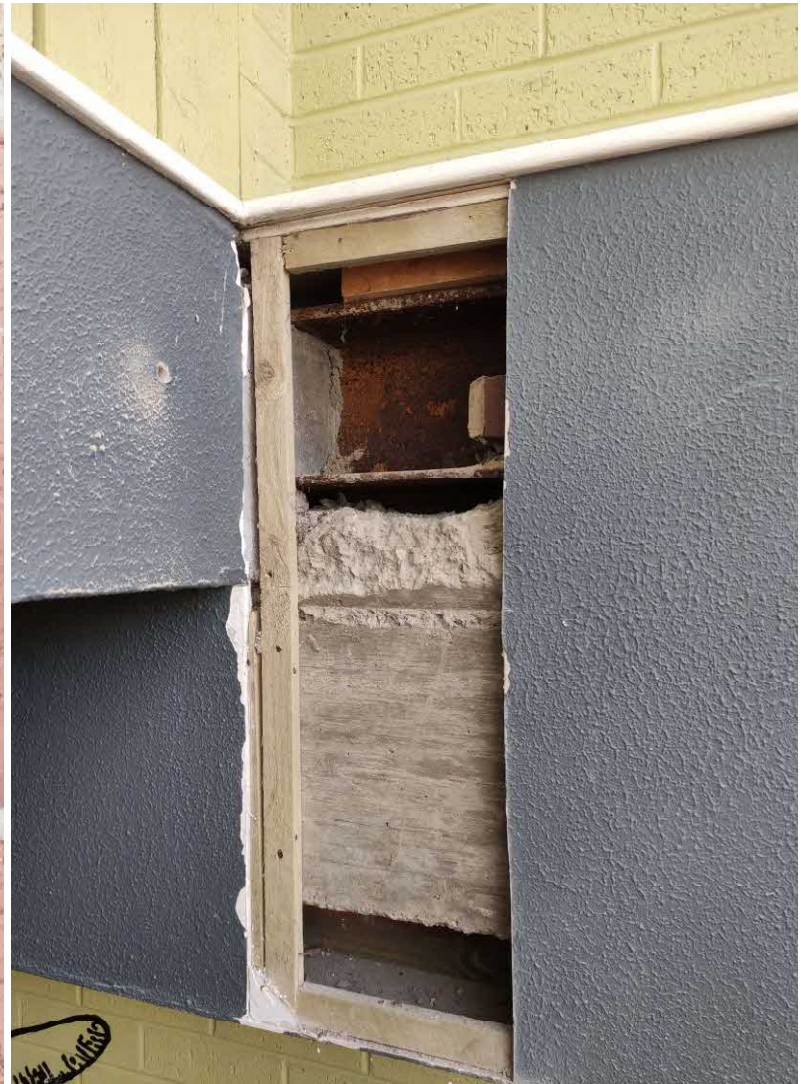
B2 (2)



B2 (3)



B3 (1)



B3 (2)



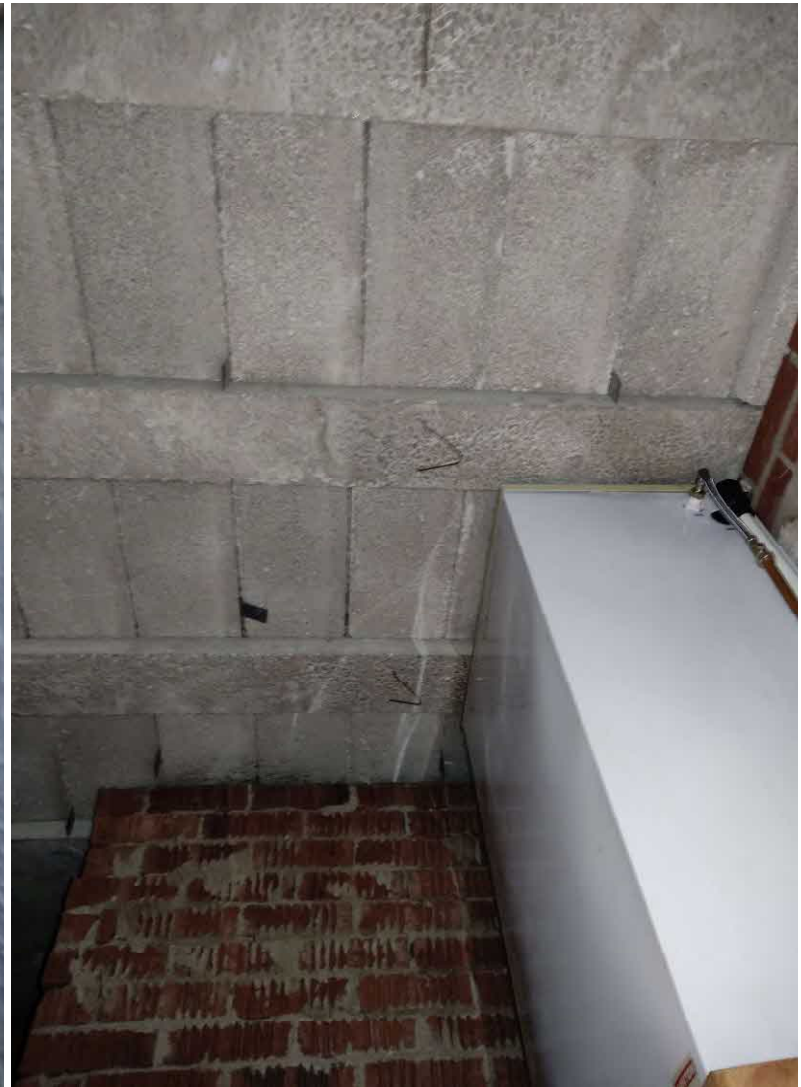
B3 (3)



B3 (4)



B3 (5)



B3 (6)



B3 (7)

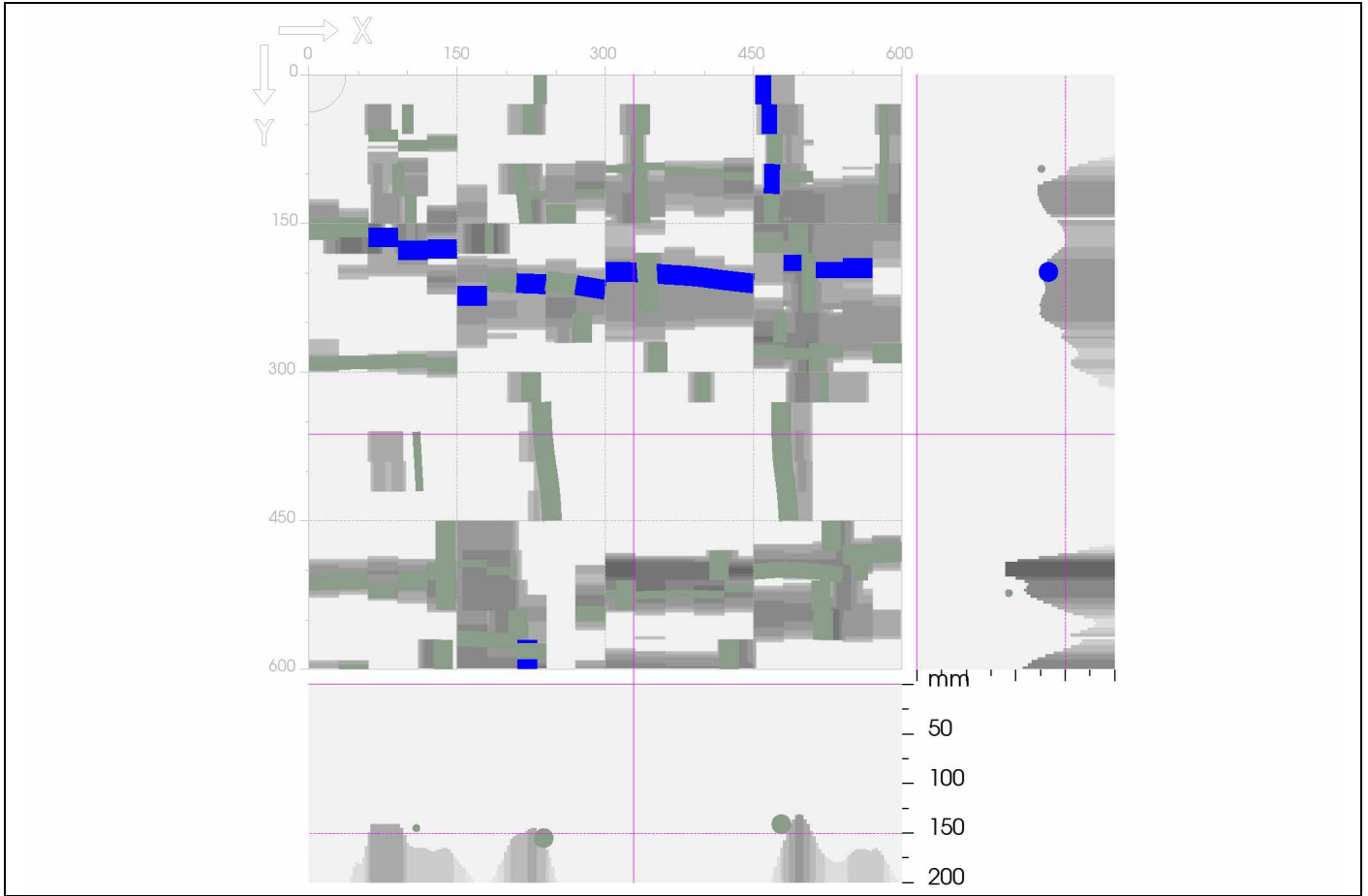


B3 (8)

# Appendix E

# Hilti PROFIS Detection Report

Scan File: gf tos.fscan  
 Serial number: 268200004  
 Date / Time: 2023-02-22 15:25:28  
 Comment: -



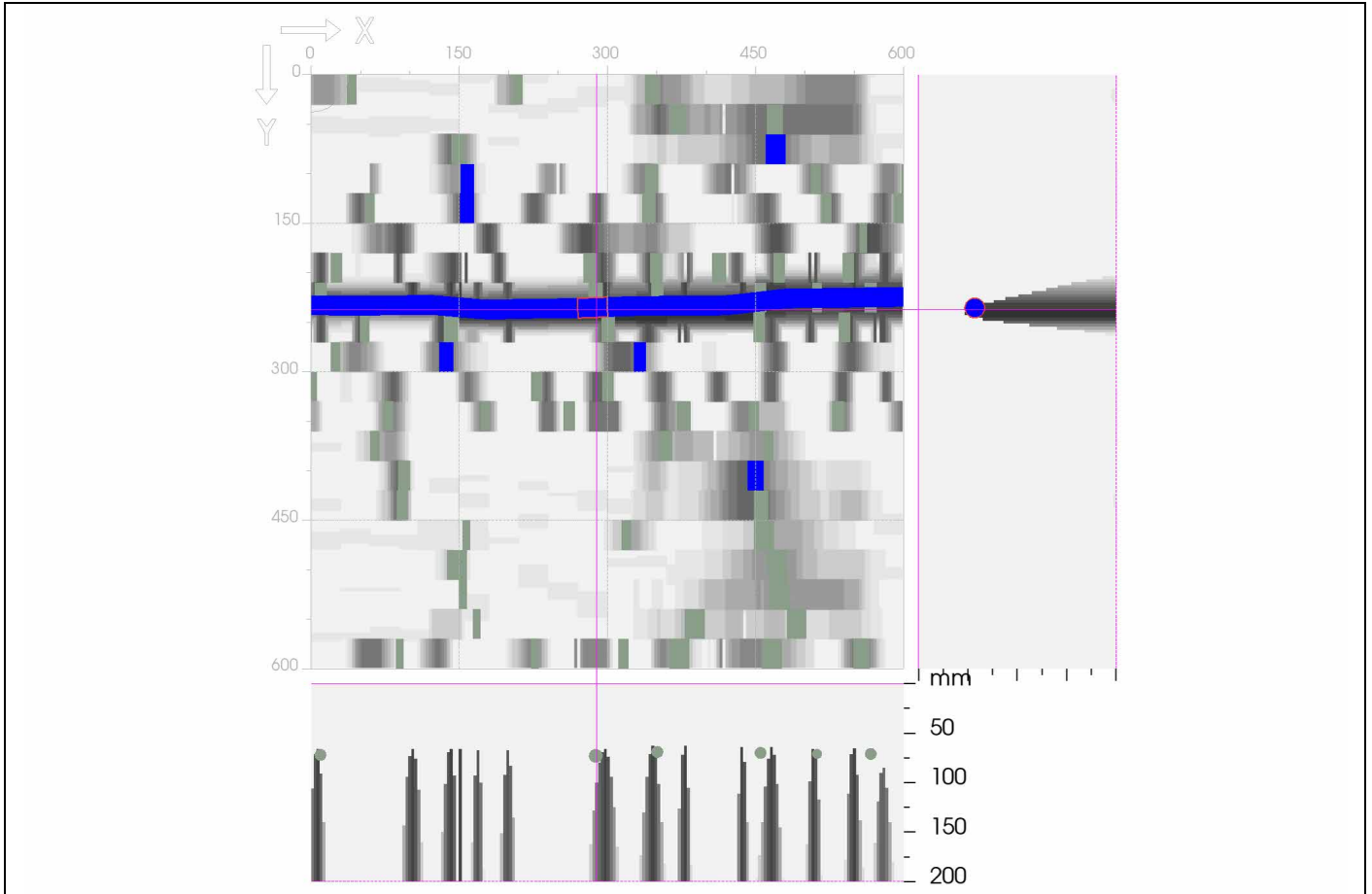
x: 329 mm                      y: 363 mm                      z: 0 mm                      Thickness: 150 mm  
 Overlay: - mm

Project name:	building 1	Customer:	-
Location:	-	Object:	-
User:	-		
Comment:	-		

ØHorizontal:	14 mm +/- 6 mm	Type:	Input
ØVertical:	14 mm +/- 6 mm	Type:	Input
Cover Horizontal:	Auto	Cover Vertical:	Auto
Detection mode:	Auto		

# Hilti PROFIS Detection Report

Scan File: ff tos.fscan  
 Serial number: 268200004  
 Date / Time: 2023-02-21 16:37:23  
 Comment: -



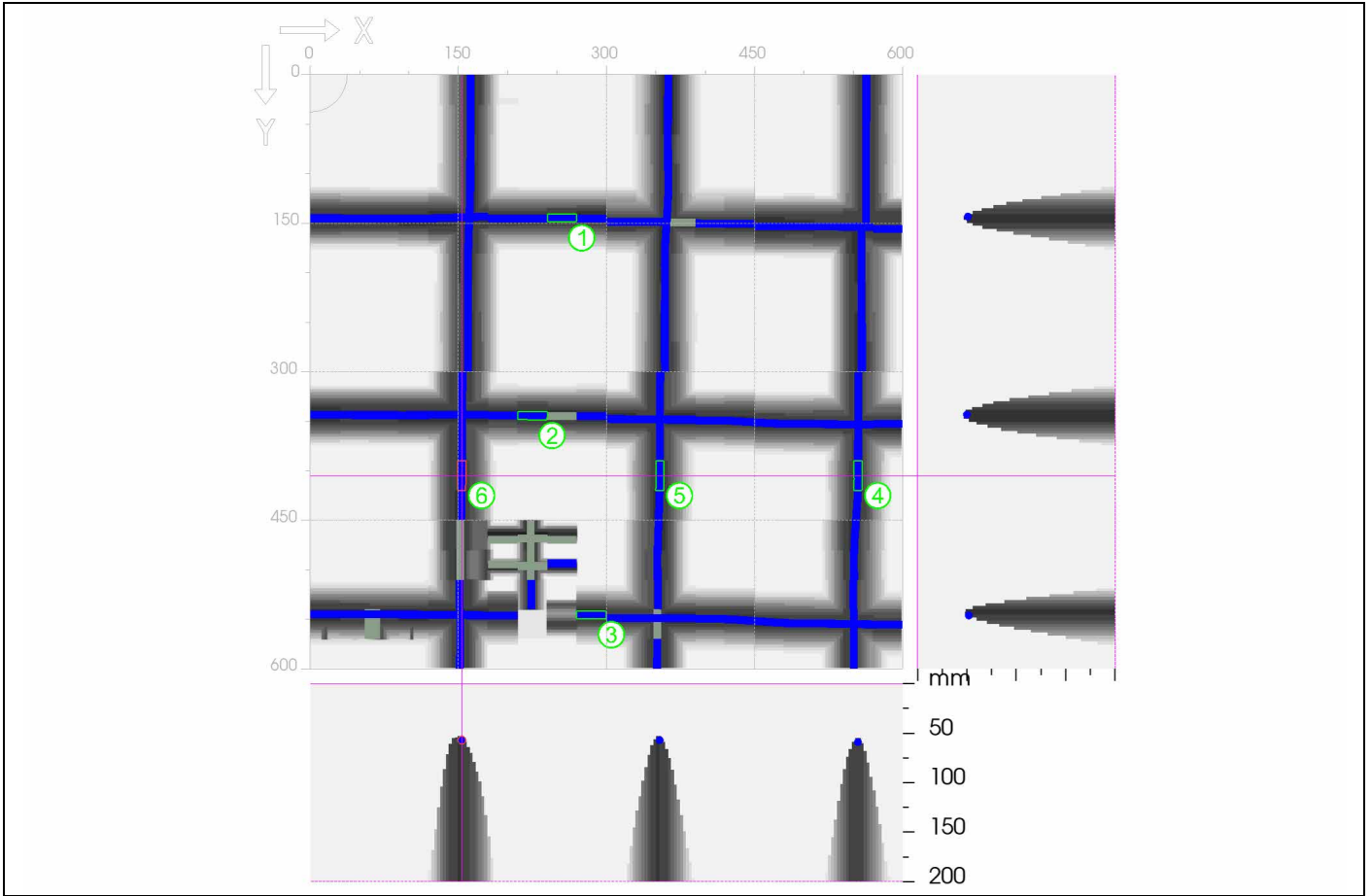
x: 289 mm                      y: 237 mm                      z: 0 mm                      Thickness: 200 mm  
 Overlay: - mm

Project name:	b2	Customer:	-
Location:	-	Object:	-
User:	-		
Comment:	-		

ØHorizontal:	14 mm +/- 6 mm	Type:	Input
ØVertical:	14 mm +/- 6 mm	Type:	Input
Cover Horizontal:	Auto	Cover Vertical:	Auto
Detection mode:	Auto		

# Hilti PROFIS Detection Report

Scan File: ff top of slab.fscan  
 Serial number: 268200004  
 Date / Time: 2023-02-21 15:04:13  
 Comment: -



x: 154 mm                      y: 405 mm                      z: 0 mm                      Thickness: 200 mm  
 Overlay: - mm

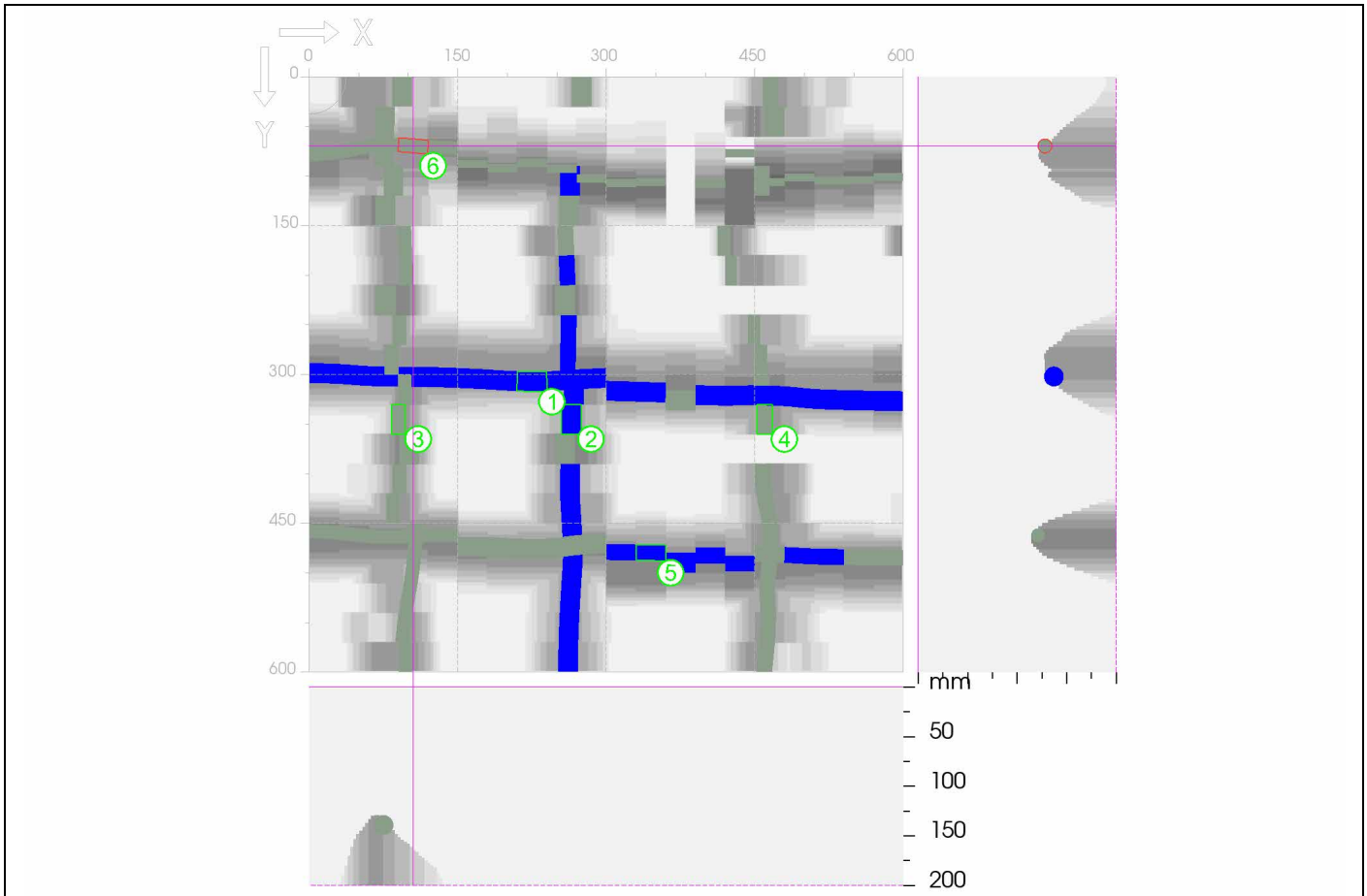
Project name:	building 3	Customer:	-
Location:	-	Object:	-
User:	-		
Comment:	-		

ØHorizontal:	14 mm +/- 6 mm	Type:	Input
ØVertical:	14 mm +/- 6 mm	Type:	Input
Cover Horizontal:	Auto	Cover Vertical:	Auto
Detection mode:	Auto		

Recorded measurements:	x:	y:	Cover:	Ø	Orientation:	Quality:
1.	255 mm	145 mm	47 mm	8 mm	Horizontal	High
2.	225 mm	344 mm	49 mm	8 mm	Horizontal	High
3.	285 mm	546 mm	46 mm	8 mm	Horizontal	High
4.	555 mm	405 mm	55 mm	8 mm	Vertical	High
5.	354 mm	405 mm	53 mm	8 mm	Vertical	High
6.	154 mm	405 mm	53 mm	8 mm	Vertical	High

# Hilti PROFIS Detection Report

Scan File: gf top of slab.fscan  
 Serial number: 268200004  
 Date / Time: 2023-02-21 15:51:55  
 Comment: -



x: 105 mm                      y: 70 mm                      z: 0 mm                      Thickness: 200 mm  
 Overlay: - mm

Project name:	building 3	Customer:	-
Location:	-	Object:	-
User:	-		
Comment:	-		

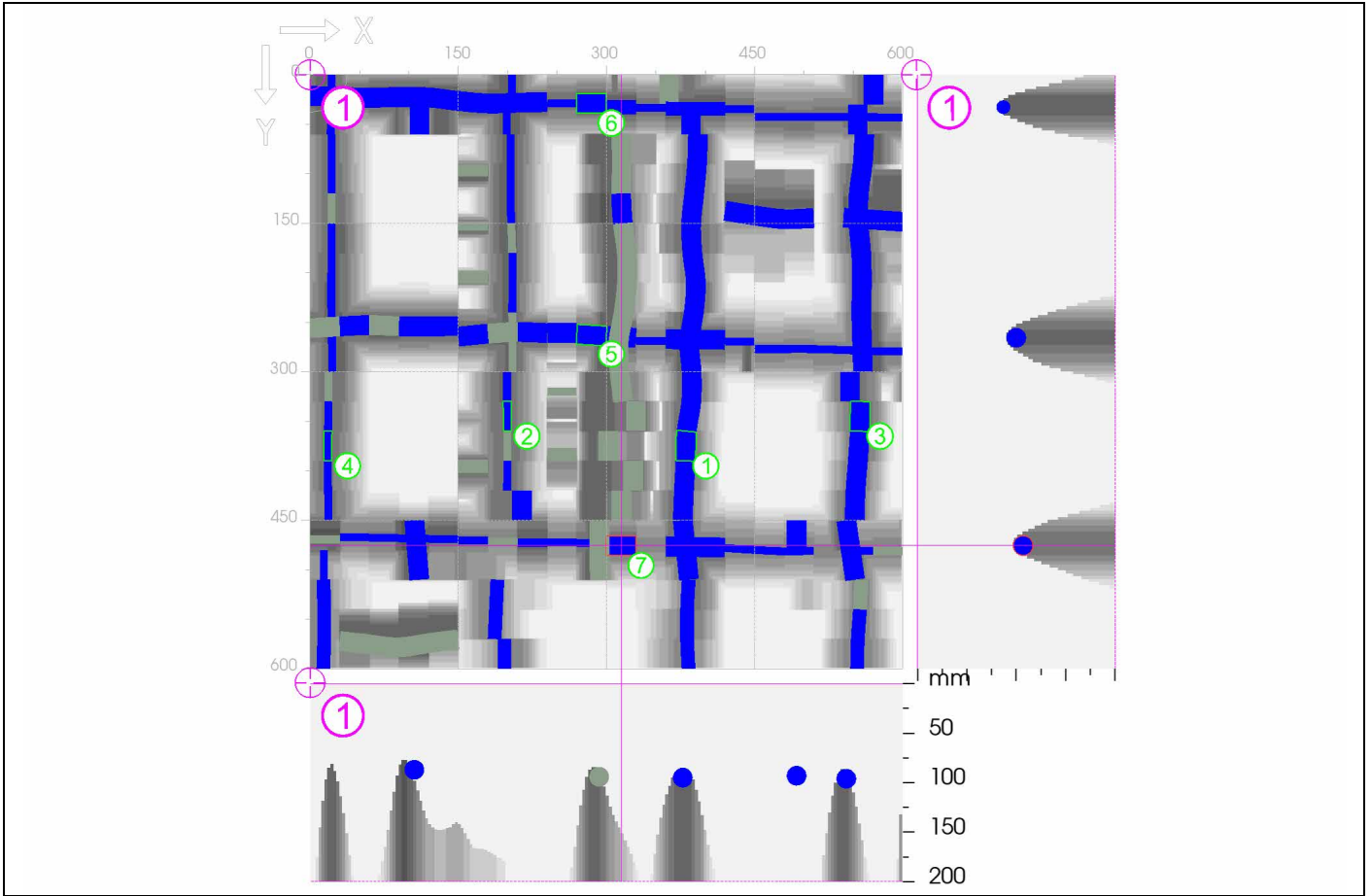
ØHorizontal:	14 mm +/- 6 mm	Type:	Input
ØVertical:	14 mm +/- 6 mm	Type:	Input
Cover Horizontal:	Auto	Cover Vertical:	Auto
Detection mode:	Auto		

Recorded measurements:	x:	y:	Cover:	Ø	Orientation:	Quality:
1.	225 mm	307 mm	128 mm	20 mm	Horizontal	High
2.	264 mm	345 mm	142 mm	20 mm	Vertical	High
3.	90 mm	345 mm	131 mm	14 mm	Vertical	Low
4.	460 mm	345 mm	129 mm	16 mm	Vertical	Low
5.	345 mm	480 mm	115 mm	16 mm	Horizontal	High
6.	105 mm	70 mm	121 mm	14 mm	Horizontal	Low



# Hilti PROFIS Detection Report

Scan File: gf tos 2.fscan  
 Serial number: 268200004  
 Date / Time: 2023-02-21 16:04:11  
 Comment: -



x: 315 mm                      y: 476 mm                      z: 0 mm                      Thickness: 200 mm  
 Overlay: - mm

Project name:	building 3	Customer:	-
Location:	-	Object:	-
User:	-		
Comment:	-		

ØHorizontal:	14 mm +/- 6 mm	Type:	Input
ØVertical:	14 mm +/- 6 mm	Type:	Input
Cover Horizontal:	Auto	Cover Vertical:	Auto
Detection mode:	Auto		

<b>Annotations:</b>	<b>x:</b>	<b>y:</b>	<b>z:</b>	<b>Comment:</b>
1.	0 mm	0 mm	-1 mm	200cc 16mm bar

<b>Recorded measurements:</b>	<b>x:</b>	<b>y:</b>	<b>Cover:</b>	<b>Ø</b>	<b>Orientation:</b>	<b>Quality:</b>
1.	381 mm	375 mm	99 mm	20 mm	Vertical	High
2.	199 mm	345 mm	95 mm	8 mm	Vertical	High
3.	557 mm	345 mm	95 mm	20 mm	Vertical	High
4.	18 mm	375 mm	101 mm	8 mm	Vertical	High
5.	285 mm	262 mm	95 mm	20 mm	Horizontal	High
6.	285 mm	29 mm	87 mm	20 mm	Horizontal	High
7.	315 mm	476 mm	97 mm	20 mm	Horizontal	High

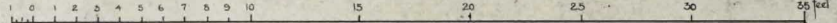
# Appendix F

# BOROUGH OF SCARBOROUGH PUBLIC CONVENIENCE AND OFFICES WEST PIER ADJOINING MARBOUR COMMISSIONERS' OFFICES

NOTE WINDOW OPENINGS AND WIDTHS OF DOORS ARE FIGURED SIZES OF BRICK OPENINGS AND HEIGHTS TO WOOD LINTELS

DRAINS ARE INDICATED BY RED LINES; WATER PIPES BY BLUE LINES; GAS POSITIONS BY GREEN CROSSES, AND FLOOR JOISTS BY BROWN LINES

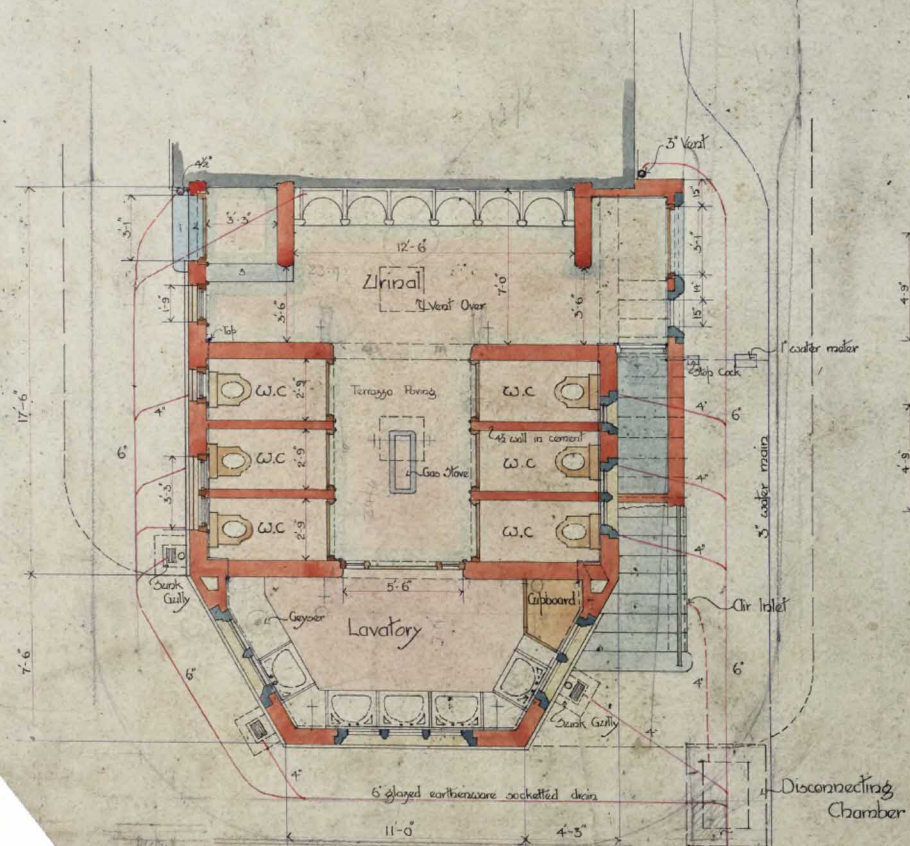
SCALE OF FEET



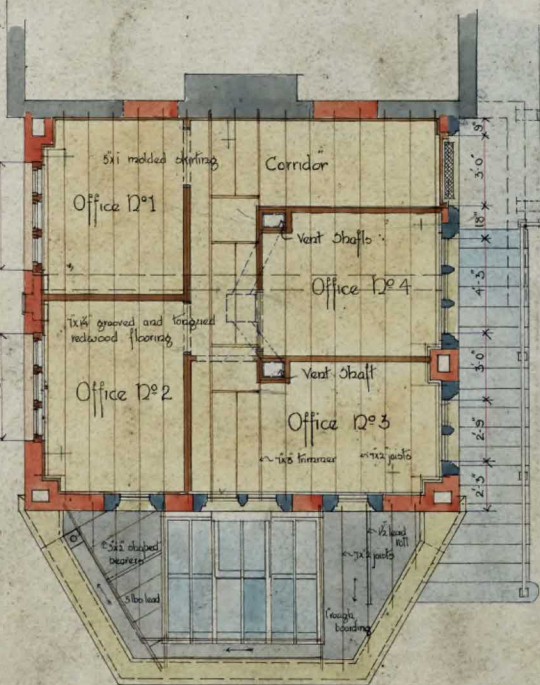
SOUTH WEST ELEVATION



NORTH EAST ELEVATION



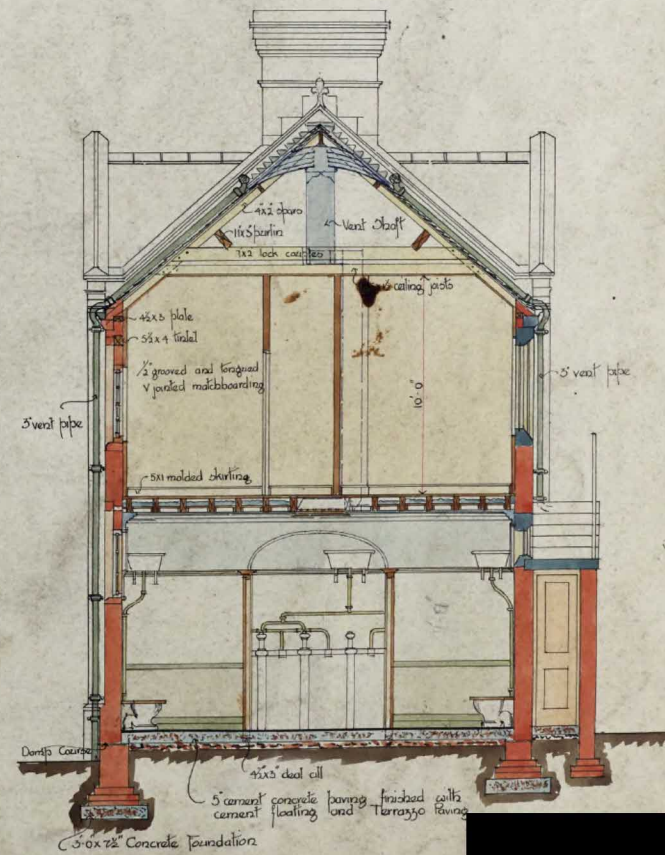
GROUND FLOOR PLAN



FIRST FLOOR PLAN



NORTH WEST ELEVATION

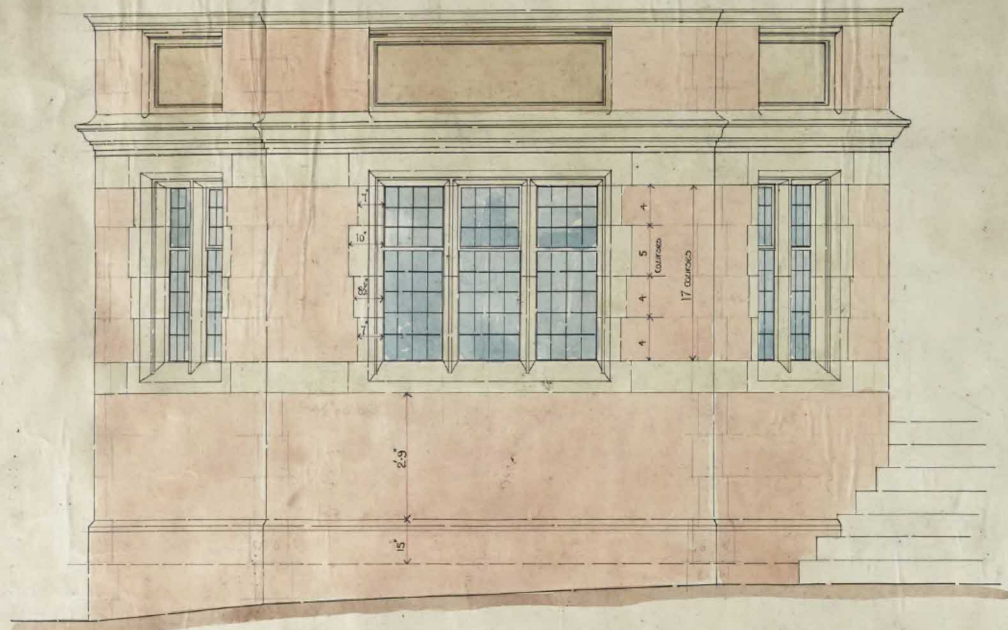


SECTION AA

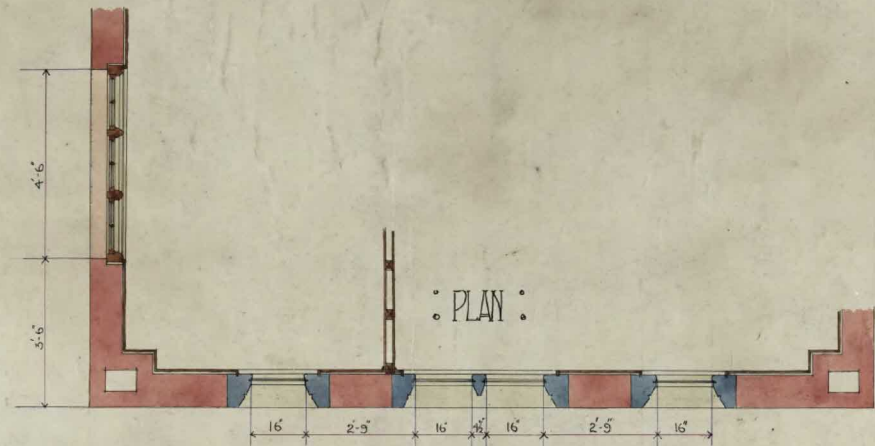
BOROUGH OF SCARBOROUGH

PUBLIC CONVENIENCES WEST PIER

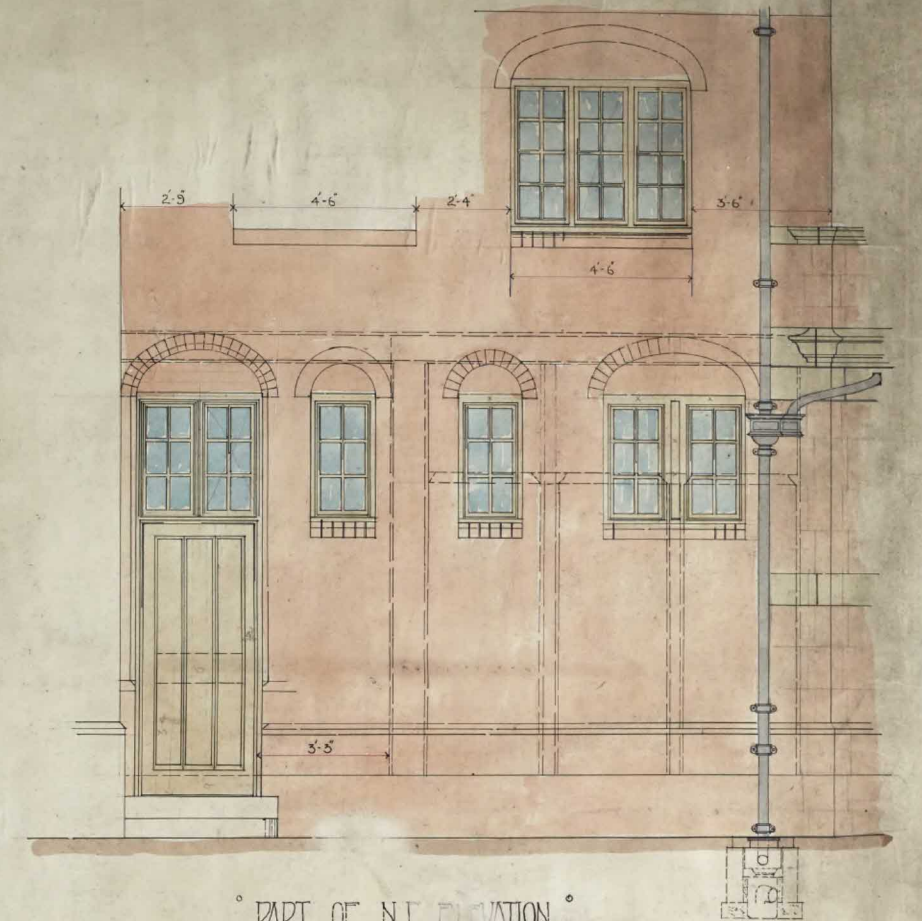
1/2" SCALE DETAILS OF BAY ETC



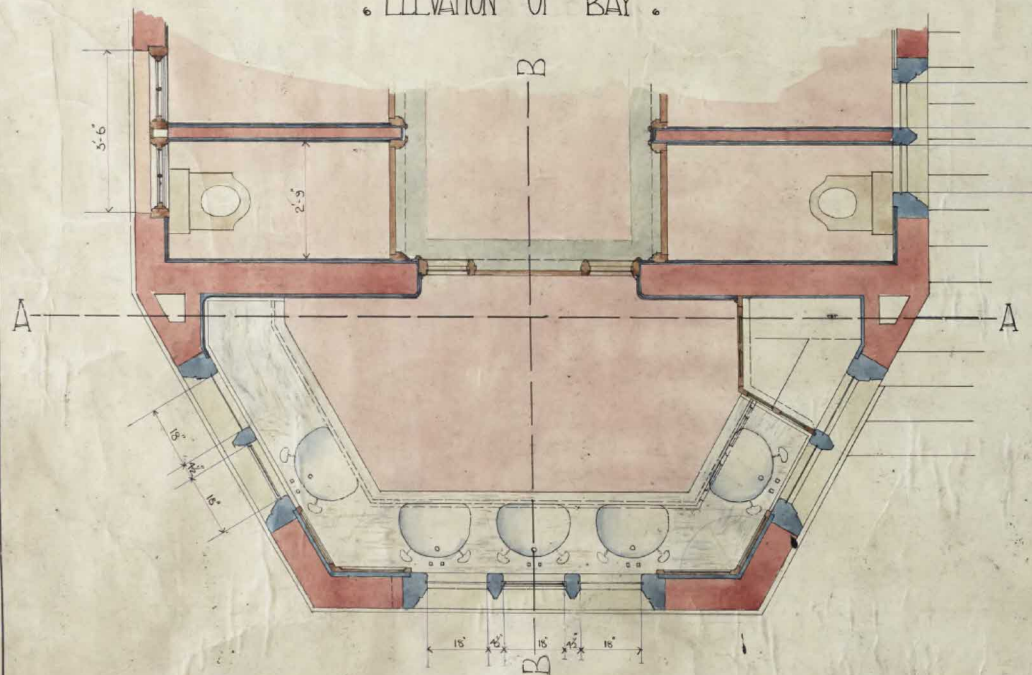
ELEVATION OF BAY



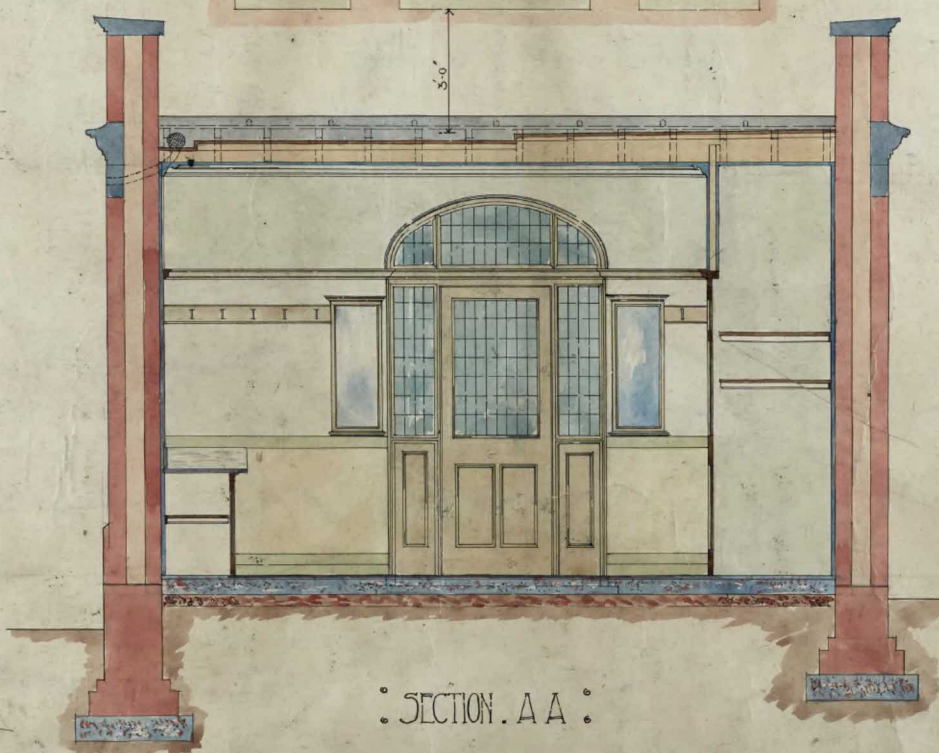
PLAN



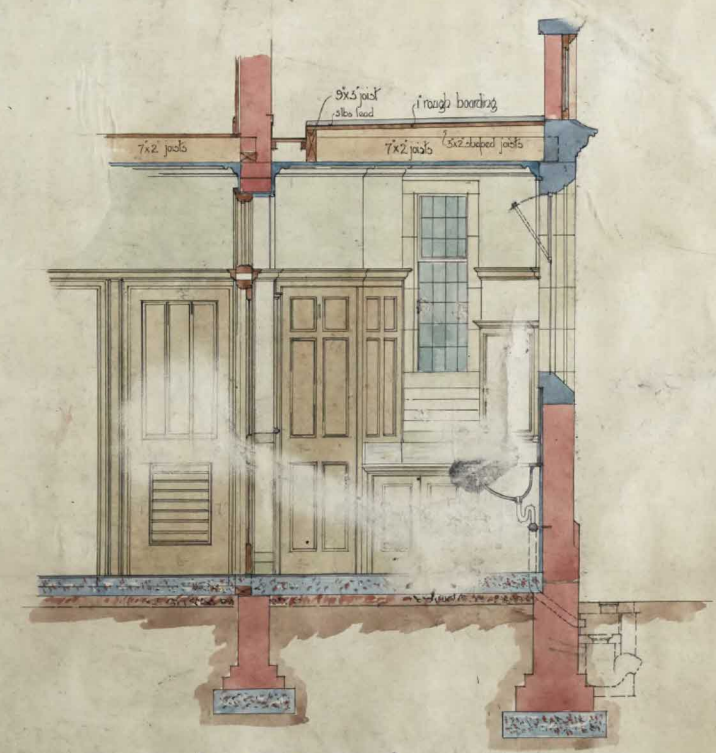
PART OF N.E. ELEVATION



PLAN OF BAY

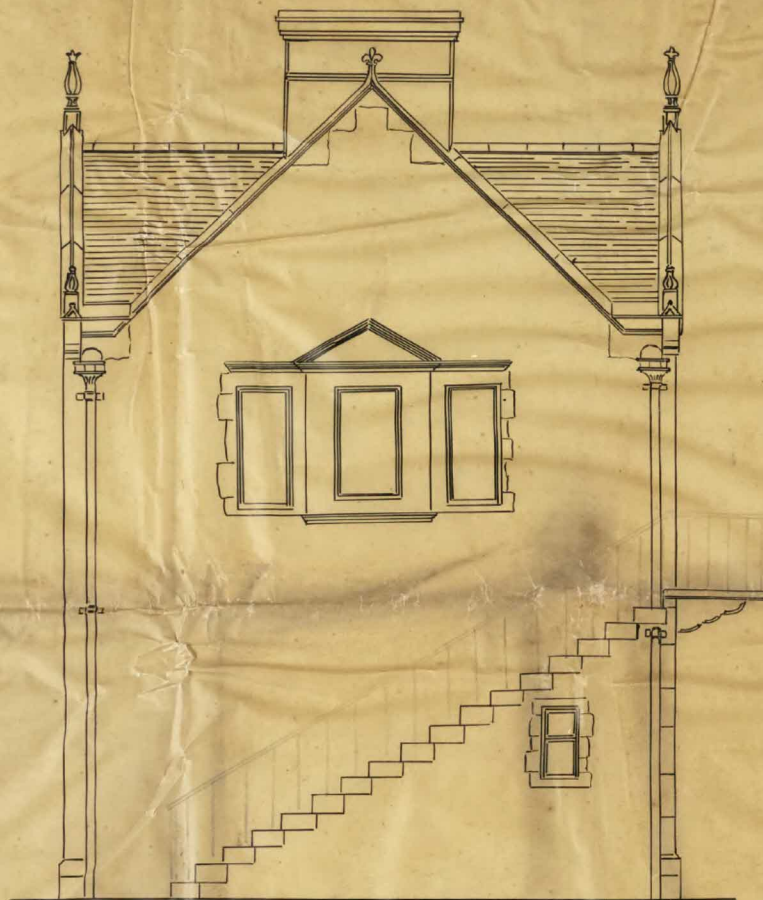


SECTION A A

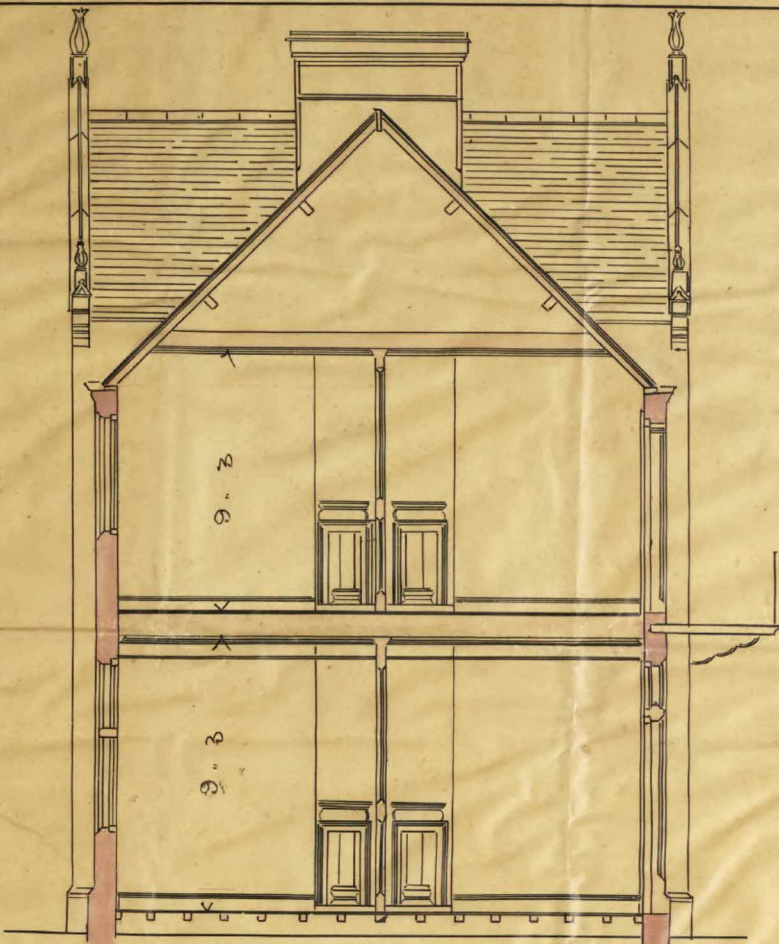


SECTION B B

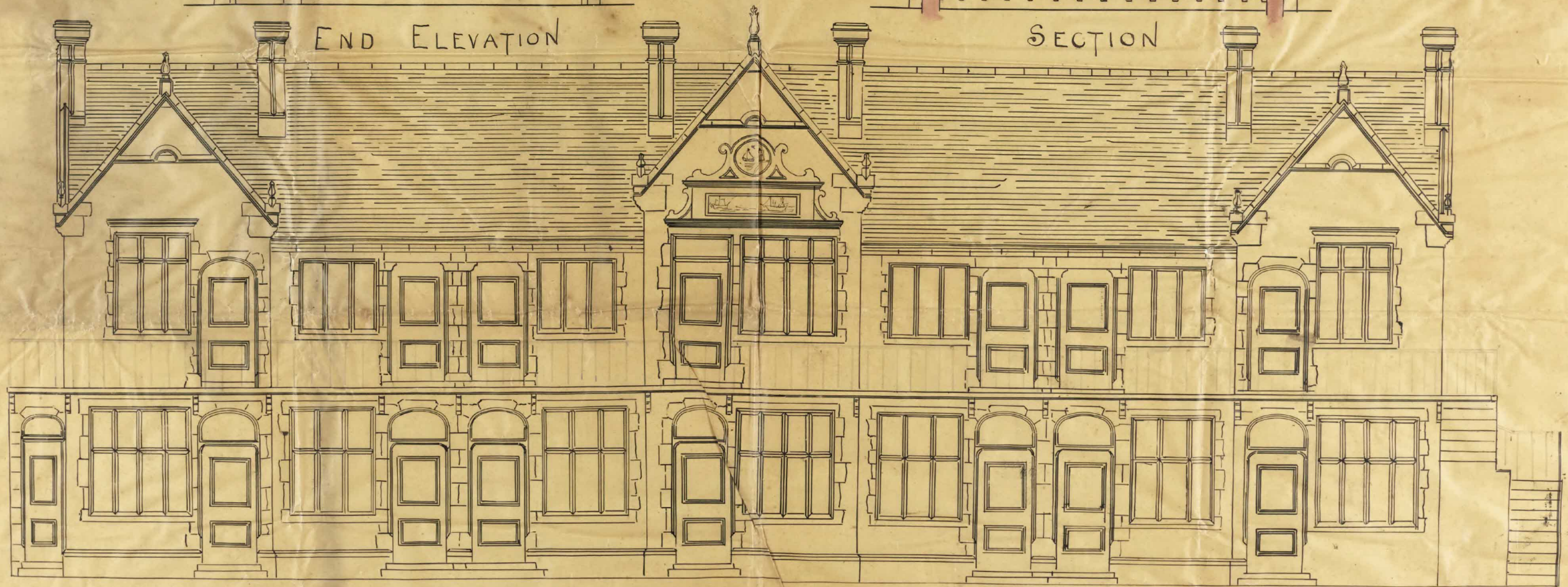
Copy of this detail sent to Mr J. H. Wood on June [redacted]



END ELEVATION



SECTION

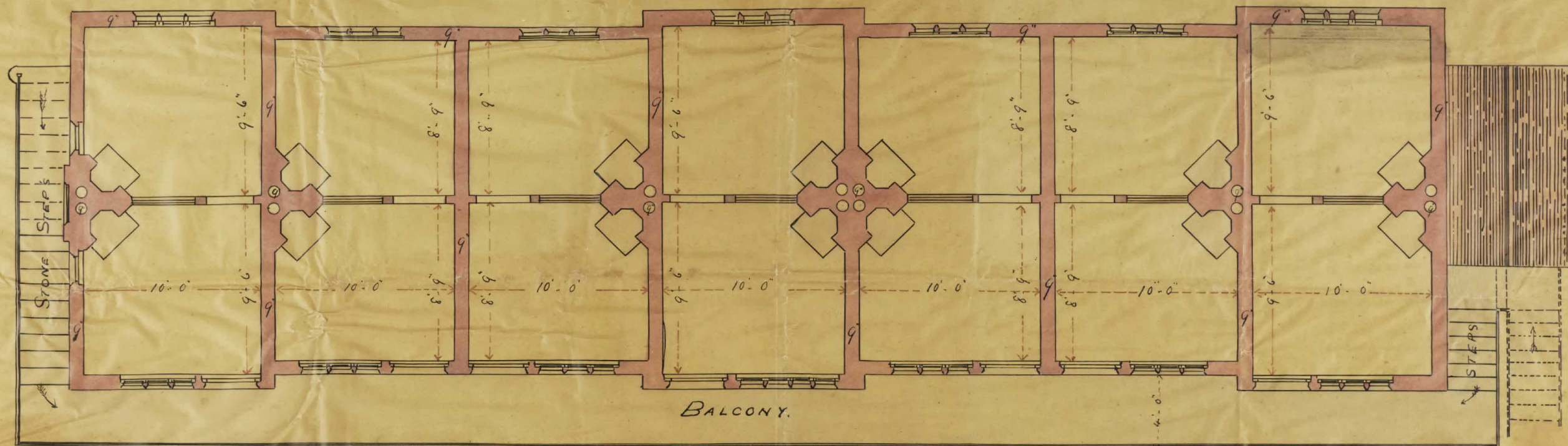


FRONT ELEVATION

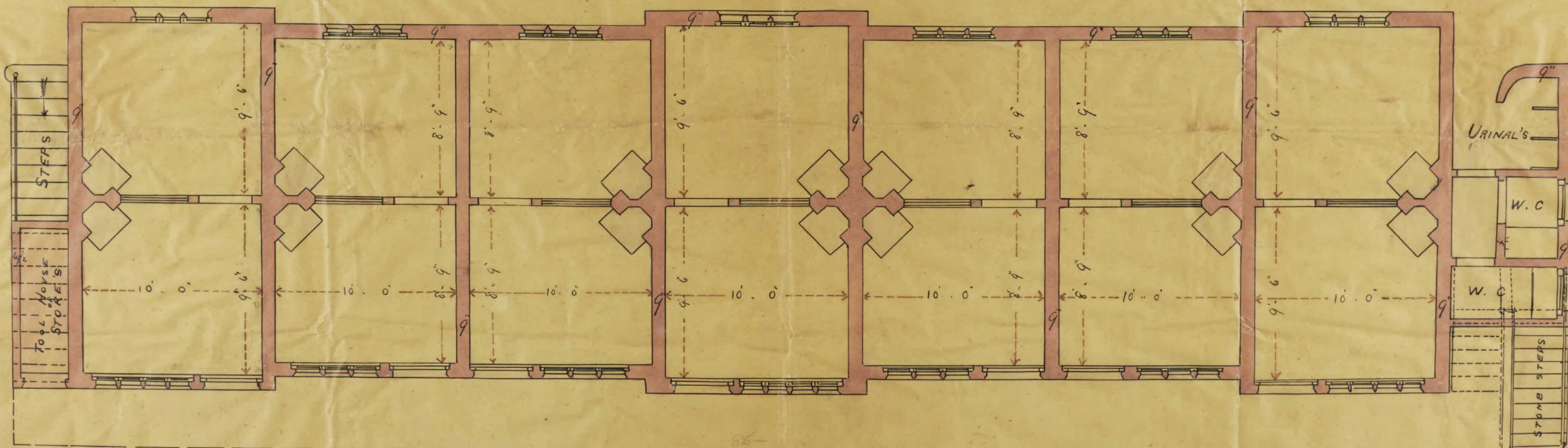


Scale 1/4"

11



PROPOSED FISH-SALESMAN'S OFFICE'S FOR THE HARBOUR-COMMISSIONERS  
FIRST-FLOOR-PLAN.



SCALE FOUR FEET = ONE INCH.



GROUND-FLOOR-PLAN.



Hall and Tugwell  
Architects  
Scarborough.