FISHERGATE POSTERN TOWER

YORK

HISTORIC BUILDING RECORDING

REPORT

DECEMBER 2009

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FISHERGATE POSTERN TOWER

YORK

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REPORT

December 2009

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Summary

This documents presents the results of historic building recording undertaken on Fishergate Postern, York by the Historic Buildings Section of Field Archaeology Specialists (FAS) Ltd on behalf of City of York Council. Fieldwork was undertaken between the of 3rd September and the 7th October 2009.

The historic building recording programme consisted of metric survey, photographic recording and archaeological analysis of the roof structure. Pictorial evidence indicates that the structure was in place by the early years of the 17th century. Attempts to date the roof using dendrochronology were unsuccessful, but did indicate that many groups of the timbers had come from common sources. The roof underwent a significant amount of repair in the 18th century, with the insertion of additional common rafters and a new roof covering.

Acknowledgements

FAS would like to thank John Oxley, Principal Archaeologist, City of York Council and Brian Hebditch, Senior Engineer, York Consultancy, City of York Council for their support and assistance. We are also grateful to Keith Emerick and Peter Marshall, English Heritage, for enabling dendrochronological sampling of the roof timbers, and Robert Howard and Alison Arnold of the Nottingham Tree-Ring Dating Laboratory for undertaking the sampling.

1.0 INTRODUCTION

This documents presents the results of historic building recording undertaken on Fishergate Postern, York by the Historic Buildings Section of Field Archaeology Specialists (FAS) Ltd on behalf of City of York Council. Fieldwork was undertaken between the of 3rd September and the 7th of October 2009.

1.1 LOCATION AND LAND USE

Fishergate Postern Tower is located on the south side of the central area of the City of York (Figure 1; NGR 6067 5132; Plate 1). The tower's west elevation faces onto the southern end of Piccadilly, looking across Castle Mills Bridge towards Tower Street. The north side is bounded by Lead Mill Lane, while the south side connects with the city walls running along Fishergate. When built originally the river Foss ran almost up to the north and west sides of the tower.

Plate 1 Fishergate Postern looking southeast

1.2 AIMS AND OBJECTIVES

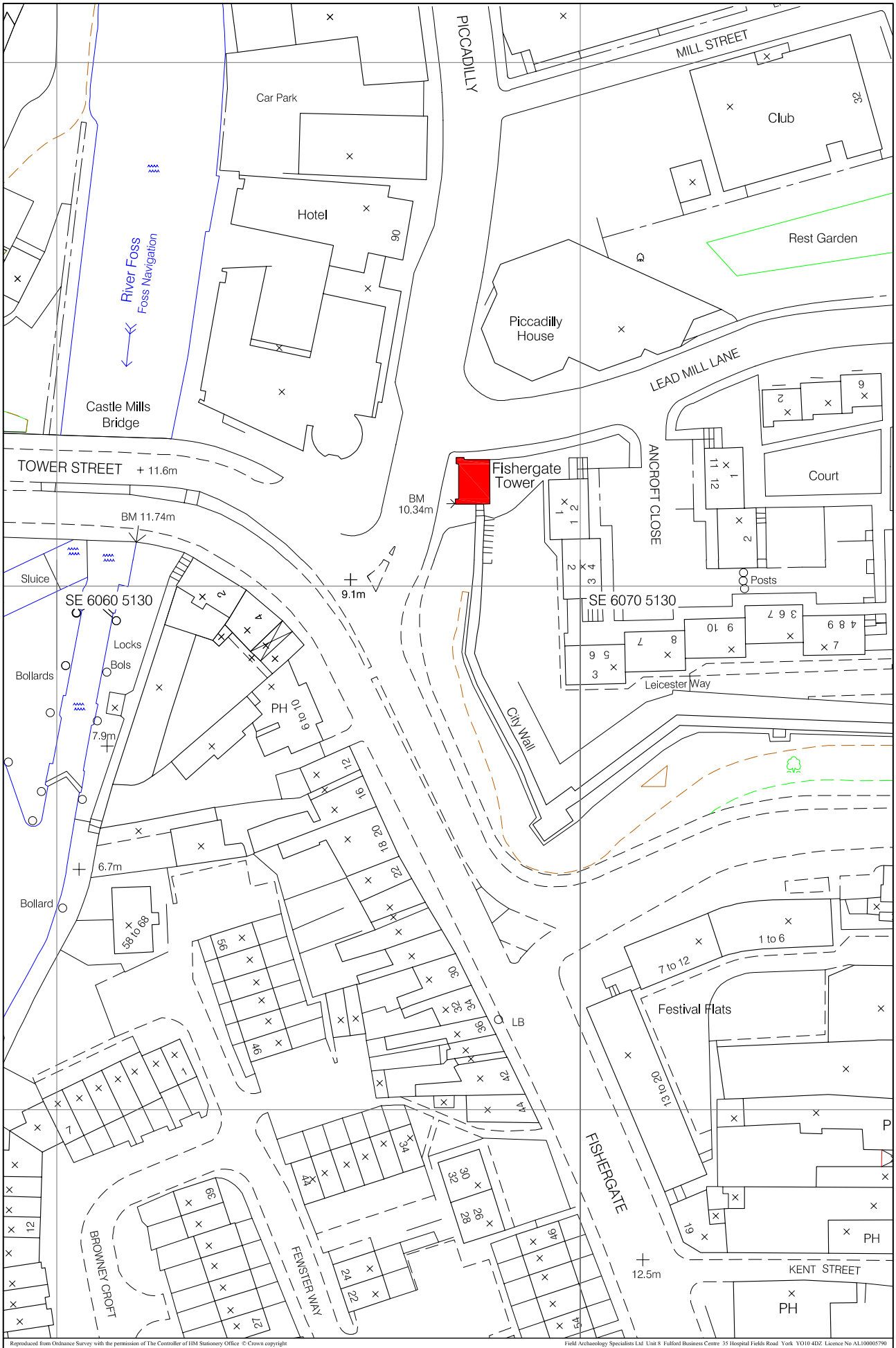
The aim of the recording was to create a record of the roof structure of the tower before any significant alterations are considered. Further, the recording and analysis intended to provide a fuller assessment of the significance of the structure to inform proposals for repair or alteration.

1.3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

The portion of city defences from Fishergate Bar to the river Foss was rebuilt in stone from 1345, presumably replacing a timber palisade on an earth rampart (RCHME 1972, 13). The contract to build the wall was given to a mason called Master Thomas de Staunton, and included for construction of 20 perches of wall at £7 a perch. The wall was to be six ells (22' 6") in height. The construction of a tower or postern gate is not mentioned in the contract (*ibid.* 13-15), but keyholders for the Fishergate postern are recorded in a custody of 1380 (*ibid.* 15-18), suggesting that the postern had been constructed as part of the 1345 contract.

A new tower is mentioned in the Fishergate area in 1388 (YCA B1, f.37v), which was repaired in 1453-4 (YCA C1A, f. 135-135v) and was subsequently let to Thicket Priory (YCA C86.1, 2). The tower appears to have been called Talkan Tower, possibly after the Lord Mayor of York in 1399 called Robert Talkan (RCHME 1972, 156). In 1440 the postern gate was called '*posternam iuxta Skarletpit*' (YCA C82.10, 11), while in 1450-4 it was called '*posterna iuxta ecclesiam Sancti Georgii*' in the Chamberlains' Rolls of Accounts (YCA C1).

Both Fishergate and Walmgate Bars were burnt by rebels led by Sir John Egremont and John Chambers in May 1489, but it is not known if Fishergate Postern was also damaged at the time (RCHME 1972, 19). Expenditure is recorded on repairs to the walls in the Walmgate area in subsequent years, but there is no explicit reference



Location map | Scale 1:1000 | Figure 1

to Fishergate Postern or tower. It is generally thought that the tower was rebuilt following a statement of intention in 1502 in which:

> 'it was determyned that ther shalbe a substanciall posterne maid at Fyshergate which is now closed up an by reason thereof aswell the stretts and beldyngs within the wallez as without ar clerly decayed and gon down' (Raine, ii, 172)

An increase in rent charged for the Talkan Tower, from 1*s*. 4*d*. in 1503 to 10*s*. in 1507 has been taken to indicate that the tower had been rebuilt on a larger scale within the period, and it is possible that the £30 10*s*. which was spent on the walls between Walmgate and the Foss in 1506-9 included works to the tower (RCHME 1972, 20; 156).

The earliest illustration of the tower is in John Speed's *c*.1610 map of York, although ambiguous in detail, it appears to indicate that the tower had a roof similar to that which survives today (Plate 2). In 1636 the tower, or least part of it, was being used as a dovecote (RCHME 1972, 156). This was probably only the upper floor, although there is now no evidence for nesting boxes anywhere in the tower.

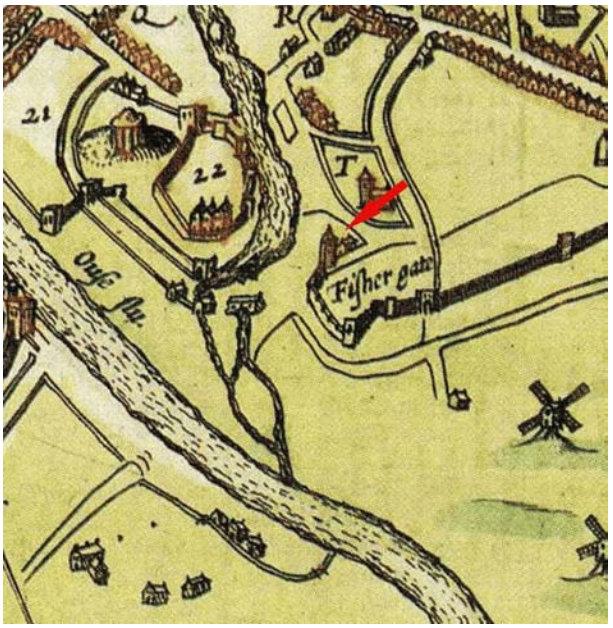


Plate 2 Detail from John Speed's map of York *c*.1610

It is unknown if Fishergate Postern was damaged in the Civil War, although the nearby St George's Church was completely wrecked. A watchman is mentioned at the postern in 1652, in an assault case (YCA F7/330), suggesting that the gate was manned. Two drawings from the late 17th-century show Fishergate Postern. A prospect of York by Francis Place, dated 1676, shows a distant view of the tower with its roof and one of the chimneys (Plate 3), while a drawing by William Lodge, entitled *York from Fishergate Postern*, dates from 1678, and shows the roof and tower in more detail (Plate 4). Both drawings indicate that the current roof had been established by the 1670s, although the Lodge drawing shows the apparent use of pantiles to cover it.

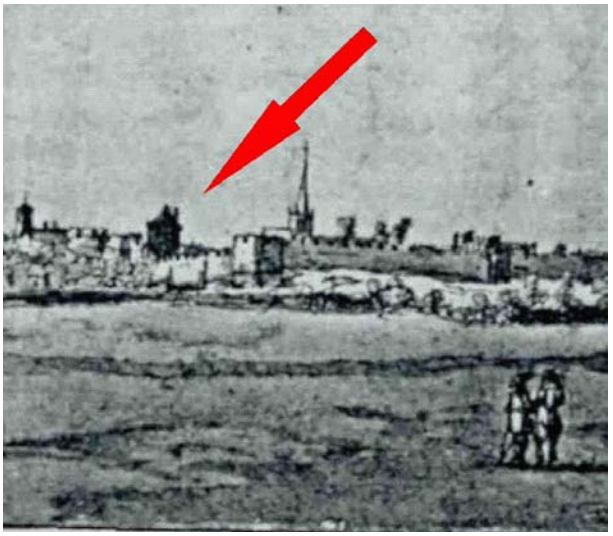


Plate 3 Detail from a Prospect of York by Francis Place, dated 1676

Archer's 1680 plan of York shows the road passing past the south side of the tower, while the King's Fishpool, formed by the dammed river Foss, nearly washing at the north foot of the tower. A plan of the city by Jacob Richards, dated 1685, shows much of the same arrangement. A prospect of *York from Fishergate Bar* by Francis Place, often dated to *c*.1700 but probably

from before 1688, shows the tower in much the same form as today, with a tall chimney stack on the east elevation shown in position and the small gablets in the roof (Plate 5).

The tower was apparently re-roofed in 1740 (Cooper 1904, 312; Tillot 1961,510-20), although this probably relates to repairs and the replacement of the pantiles with the current tiles. Before 1818 the second floor had been removed and replaced with a gallery (Hargrove 1818, 24). Restoration of the tower took place in 1838, and in 1960 an internal staircase at the south end was removed (RCHME 1972, 156).

Plate 4 Drawing by William Lodge dated, 1678

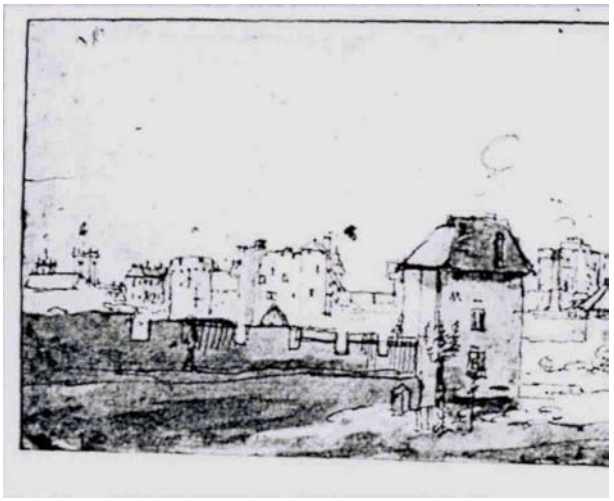


Plate 5 Detail of York from Fishergate Bar by Francis Place, dated *c*.1700

2.0 FIELDWORK PROCEDURE

2.1 MEASURED SURVEY AND ANALYSIS

A measured survey was undertaken consisting of a reflected roof plan produced from a set of control stations established within and around the building aligned to the Ordnance Survey grid. The stations formed part of a series of closed traverses within and around the building. Overall dimensional accuracy was within 20mm and all drawings were created at a scale of 1:20 in order to achieve a high dimensional accuracy when reproduced at 1:50. A reflectorless total station theodolite was used for all the survey work. In addition a section drawing was created in order to show the truss form of the roof structure.

The drawings resulting from the measured survey were used as the basis for an archaeological study of the fabric of the roof. Drawings were enhanced to include details of construction and sequence.

2.2 PHOTOGRAPHY

A general photographic record was made of the roof structure using colour and monochrome 35mm photography, with additional specific features photographed in greater detail. A series of digital photographs were taken to supplement the film-based record. A photographic register was created and a plan produced showing the location of each shot (Appendix A).

2.3 DENDROCHRONOLOGICAL ANALYSIS

As part of the survey a programme of dendrochronological sampling was undertaken on the roof structure by

the Nottingham Tree-Ring Dating Laboratory, commissioned by English Heritage.

3.0 FIELDWORK RESULTS

3.1 SUMMARY DESCRIPTION OF THE TOWER

3.1.1 External

A chamfered plinth runs around part of the exterior, the stepping down to the north, visible on the west and east elevations, presumably reflecting the topography down to the river Foss. The north side has no visible plinth because it has been buried by the build up of the surrounding ground level and the infilling of the east side of the River Foss.

West Elevation
On the west elevation there is a single loop lighting the second floor, and three windows formed in the embrasures at third-floor level. The central embrasure has been reduced in size in order to accommodate one of the roof's supporting posts.

South Elevation
The south elevation has a single window at third-floor level contrived within a former embrasure. A projection contains the internal newel staircase which is lit by a single small loop which faces to the east. The projection also receives the city wall and postern gate from the south. The postern gate has moulded jambs and two-centre head. The gate jambs retain the portcullis grooves although it has been blocked in the door head with brick. The gate pintels also remain *in situ.*

North Elevation
North elevation has a two-light window at ground-floor level with blind spandrels and segmental heads to the lights. Disruption in the masonry coursing around the window opening might indicate that it is a later insertion. At first-floor level there is a projection containing a garderobe chute and at second-floor level there is a single loop window. At the intended original roof height there are a pair of rainwater spouts, while two windows are formed in the parapet embrasures.

East Elevation
There are two-light windows on the east elevation at first- and second-floor levels, both show breaks in the coursing around them and it is therefore possible that the windows' tracery are later insertions. Alternatively, the stone mouldings were cut off-site as proposed by the Royal Commission (1972, 156). Three parapet embrasures have been converted into windows. In the east elevation the tower is entered through a doorway which has a four-centred head. The door housed in the opening appears to be of 19th-century date, perhaps a replacement from the restoration of 1838.

3.1.2 Internal

The tower consists of four floors, the upper floors now accessed by a newel stair in the south wall. All of the internal timber floors are replacements from 1838, 1960 and later.

Ground Floor

The west wall has no features of note, while the north wall has a deep window embrasure. The bottom part of the splays in the embrasure show signs of having been cut back - presumably the embrasure originally had masonry window seats. The east wall has a fireplace with segmental head, which had been partially blocked with brick until being reopened some time in the past 35 years. The south wall has a doorway with four-centre head. To the west of the doorway is an area of blocking which might have been a squint to view the approach to the exterior of the postern gate.

First Floor

In the east and west walls are a series of joist holes below the current ceiling height, which do not appear to relate to each other. The north wall has a two-centre headed door opening which leads into a short passage to a garderobe. To the east of the door opening is a fireplace with segmental head which has been blocked with rubble. The east wall has a large window embrasure, the lower part of which has blocked with brick perhaps after the window seats had been removed. To the south of the window embrasure a recess or cupboard has been cut into the original fabric.

Second Floor

The west wall has a window loop set in a narrow embrasure. Just below current ceiling height are three large beam holes which probably relate to the gallery that was subsequently removed. The north wall has a large recess with a segmental head and further loop window opening to the east of it, while the east wall has a large window embrasure.

Upper Floor

The upper floor of the tower is reached by a newel stair which originally appears to have been intended to extend into a small turret above the level of the parapet. The timber floor is modern and replaces an intended low-cambered roof drained by stone spouts in the north wall which would have discharged into the river Foss. The roof would have been seated on the chamfered off-set visible at second-floor level, probably on a timber wall plate. The truss form is unknown, but, with a shallow cambered form, the roof is likely to have been covered with lead.

The wall-head of the tower is finished with a thin parapet wall, provided with a crenellated parapet. The embrasures between the merlons have been subsequently converted into windows, which now have modern glazing. The parapet wall-walk, which ran between the parapet wall and where the original roof was intended, appears unfinished with exposed rubble core work, while the masonry forming the parapet wall shows no evidence for the wall-walk having been reduced in level.

3.2 ROOF STRUCTURE

3.2.1 Roof form

The roof consists of a timber-framed two-bay structure formed within the masonry parapet of the tower (Figure 2; Plate 6). The structure is supported on six posts, located at the corners and mid-point within the parapet walls. That in the southeast corner has been removed. Curved braces from the posts support the wall plates, one brace has been removed from the mid-post on the east side of the building (Plate 7) in addition to a further brace which would have joined with the absent corner post.

Plate 6 Roof structure

The roof is formed of common rafters which have high collars tenoned and pegged into them. Some of the collars are now missing or have been replaced with face-nailed replacements, and additional common rafters have been introduced between the originals. The rafters are supported by long purlins made of reused timber. The central truss consists of a slightly cambered tie beam with curved struts, or queen-posts, to the purlins (Figure 3; Plate 8). The purlins are thus of the clasped form which is common from *c*.1500. A further truss is provided at the north end of the building, again on a cambered tie beam which also acts as a wall plate. Both of the tie beams rest on the jowled heads of the posts.

Plate 7 Mid-post of the roof structure

Despite a very careful examination of the surface all the timbers there was little evidence for the carpenters' marks on the timbers, although there were several lines which might have been marking out lines for the cutting of, for example, the position of mortices. The complete absence of numbering of the individual timbers is quite unusual and suggests that the roof timbers were not cut in a framing-field in readiness to be assembled on site. Instead the timbers appear to have been cut actually as the structure was erected, possibly actually on top of the tower.

Plate 8 Central truss

3.2.2 Reused timber

It is evident that many of the timbers used in the roof's construction have been reused from other structures.

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Fishergate Postern York

HISTORIC BUILDING SURVEY

Reflected Roof Plan

Project: FAS2009 YFP389

Replaced timbers

Collars and braces

CLIENT

CITY OF YORK COUNCIL
9 St Leonard's Place
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SCALE	DRAWING NO.	REVISION
1:20 @ A1	Figure 2	final

SITE CODE	YFP
CREATED BY	JGL/RJ
DATE	25/09/09
AUTHORISED BY	JRC
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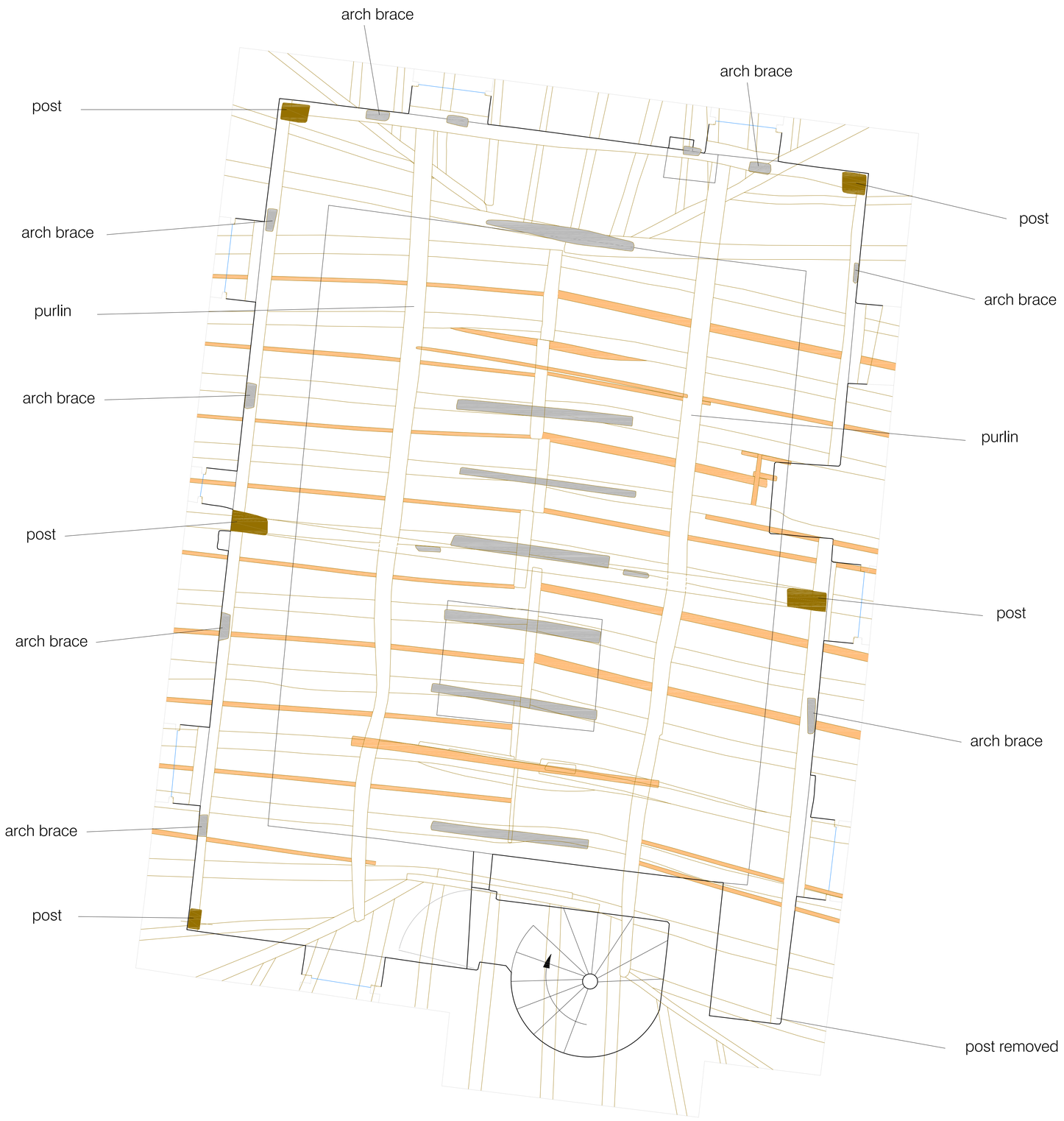

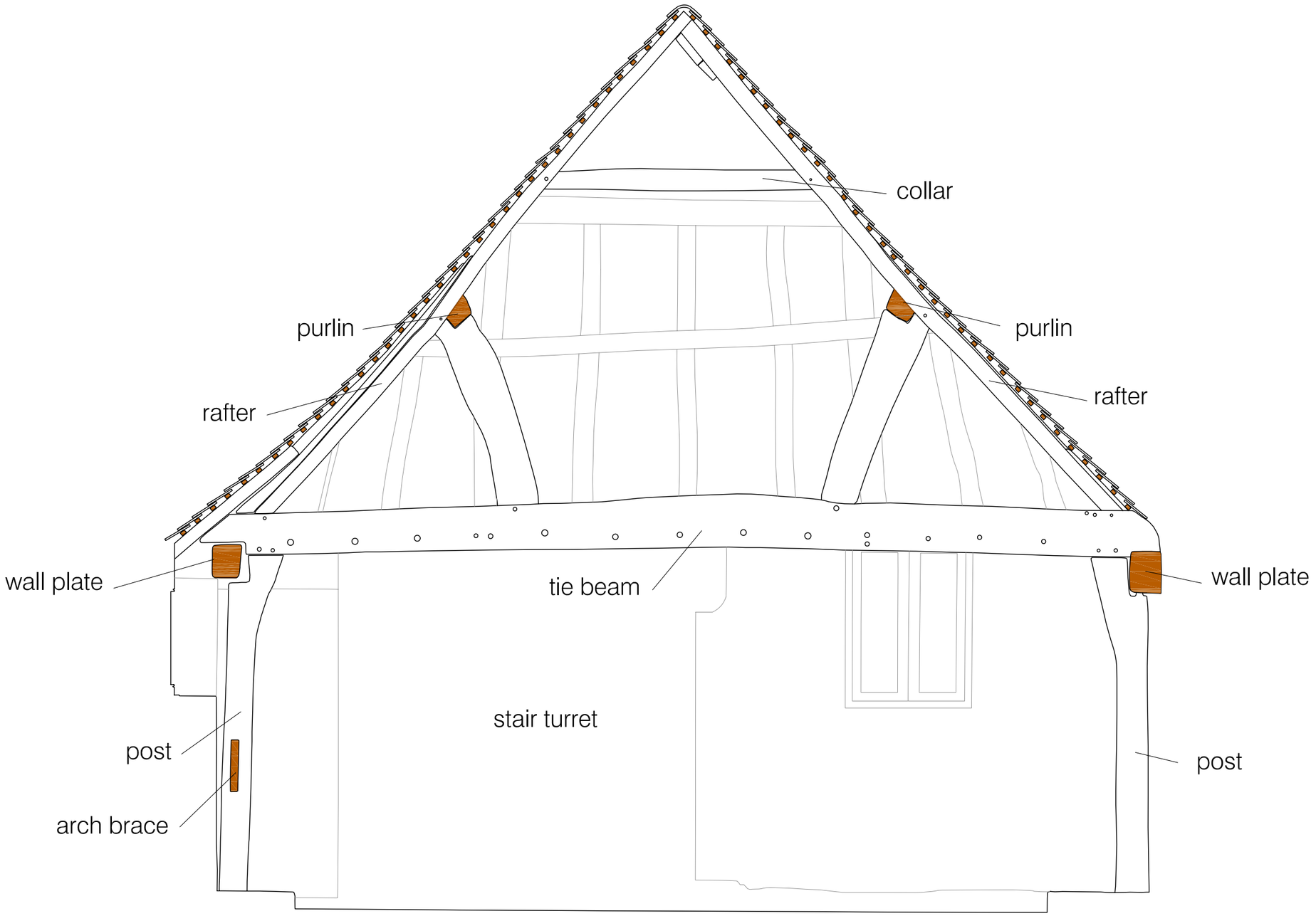

Section showing central truss form | Scale 1:25 | Figure 3

The purlins appear to have been rails or wall plates from a timber-framed building with regularly spaced mortices cut into them, many still retaining pegs (Plate 9). They are of considerable length at *c*.7.0m, and have evidently come from a building of some size. Their length would preclude them from having formed part of the original roof, timbers for which would not have exceeded the internal length of *c*.5.5m. The struts are also of reused timbers and have grooves in their sides indicating they are from a timber-framed building which had daubed in-fill panels.

Plate 9 Roof purlin showing mortices

The north wall tie-beam has a number of peg holes which do not relate to the current structure, and therefore appears to be a reused timber. The length of the timber, at *c*.7.5m, would again preclude its use in the original roof structure of the tower.

The central tie beam has redundant mortices in its upper surface and peg holes through its vertical faces (Plate 10). The peg holes generally do not relate to the mortices. It is possible that these features were intended for a partition wall, with the mortices serving to take studs above the tie beam and the peg holes to take face pegged studs below. However, there is no evidence that if studs were inserted in the mortices that their upper ends were fixed to either the braces or rafters. It can only be concluded that the tie beam is also a reused timber in its current context.

Plate 10 Peg holes in tie beam

3.2.3 Primary timbers

Although the west and east wall plates are too long to have come from within the tower they show little evidence for reuse (Plate 11). The same situation pertains to the posts and arch braces, where there is little evidence for reuse. It is therefore highly likely that these timbers were cut for their current application in the structure.

Most of the common rafters also show little evidence for reuse and are therefore likely to have been cut specifically for the roof.

Plate 11 Wall plate

3.2.4 Phases of roof construction

In general the current roof structure appears to have been erected in one event with only minor subsequent modification. The main alteration consisted of additional common rafters being inserted between the originals which were spaced at intervals of *c*.0.4m (see Figure 2). The replacements were inserted equidistantly between the originals. This repair might have been undertaken in *c*.1740 when substantial works were apparently undertaken to the roof, including new tiles.

4.0 CONCLUSIONS AND ASSESSMENT

4.1 EVIDENCE FOR THE DATE OF CONSTRUCTION

4.1.1 Dendrochronological dating

Unfortunately, attempts to dendrochronologically date the timbers in the roof structure have proved unsuccessful; a problem that has been identified with some other groups of timbers from historic buildings in York. However, preliminary results from the Nottingham Tree-Ring Dating Laboratory indicate that there were groups of timbers that had come from common sources. All of the sampled posts appear to have come from trees growing in close proximity to each other, forming one group. The tie beams forming the trusses are likely to have come from two trees in the same woodland, forming a second group, while the braces from the posts to wall plates appear to come from adjacent trees in the same woodland.

While these observations do not provide a date for construction, they do indicate that at least some of the timbers (which show no evidence of reuse) were gathered from a common source.

4.1.2 Documentary and pictorial evidence

For the purposes of dating the roof we are therefore dependant on documentary and pictorial evidence. From this evidence it would seem reasonable to suggest that the current roof had been assembled on the tower by *c*.1600. The earliest illustration of the roof which is sufficiently detailed to show its form is that by Francis Place 1676 (see Plate 3). This does show the roof of the tower in its present form, so it can be assumed to have been rebuilt by this time. It is tempting to see the roof as a replacement following damage in the Civil War, however, John Speed's drawing of the tower, although not detailed, does show a steeply pitched roof surmounting the tower, which could easily be the current roof. The fact that the tower was being used as a dovecote in 1636, for which the upper floor would have been ideal, suggests the roof was in its current form by this time.

4.1.3 Roof form

The roof form, with its clasped purlins, queen posts and high collars, is generally consistent with a 16th- to 17th-century date, although later examples are known. Unusually, the absence of numbering of the timbers and the

mix of reused and primary timbers suggests that the roof was erected on a rather *ad hoc* basis, perhaps with the timbers cut either on site or actually as the roof was being erected. This would suggest that the roof was not particularly well planned, and erected relatively cheaply and quickly.

4.2 ASSESSMENT

Despite the absence of a dendrochronological date for the primary timbers in the roof structure, there is sufficient evidence to indicate that the structure was in place by the early years of the 17th century. However, the circumstances in which the tower received the roof remains unclear. It seems highly unlikely that a tower that was built in the early years of the 16th century should require an entirely new roof within a 100 year period because of decay. It has to be concluded that the current roof was erected because of a disastrous event to the original (resulting in none of the timbers being reusable), or that the planned roof was never erected. In which case the current roof is original to the construction of the tower.

The period and sequence of construction of the masonry elements of the tower remain uncertain and only further detailed analysis of the fabric would allow this to be elucidated. A greater understanding of the towers development would perhaps provide the necessary information to confirm the position of the roof in this sequence.

5.0 ARCHIVE

A paper and electronic copy of this report will be deposited with the City of York Council, and the report will be made available *via* OASIS. The photographic archive will be deposited with the City of York Council. A short note on the survey programme and results will be prepared and submitted to *Post-Medieval Archaeology*.

References

Primary sources
YCA (York City Archives)

Cartographic sources
Speed's Map of York *c*.1610

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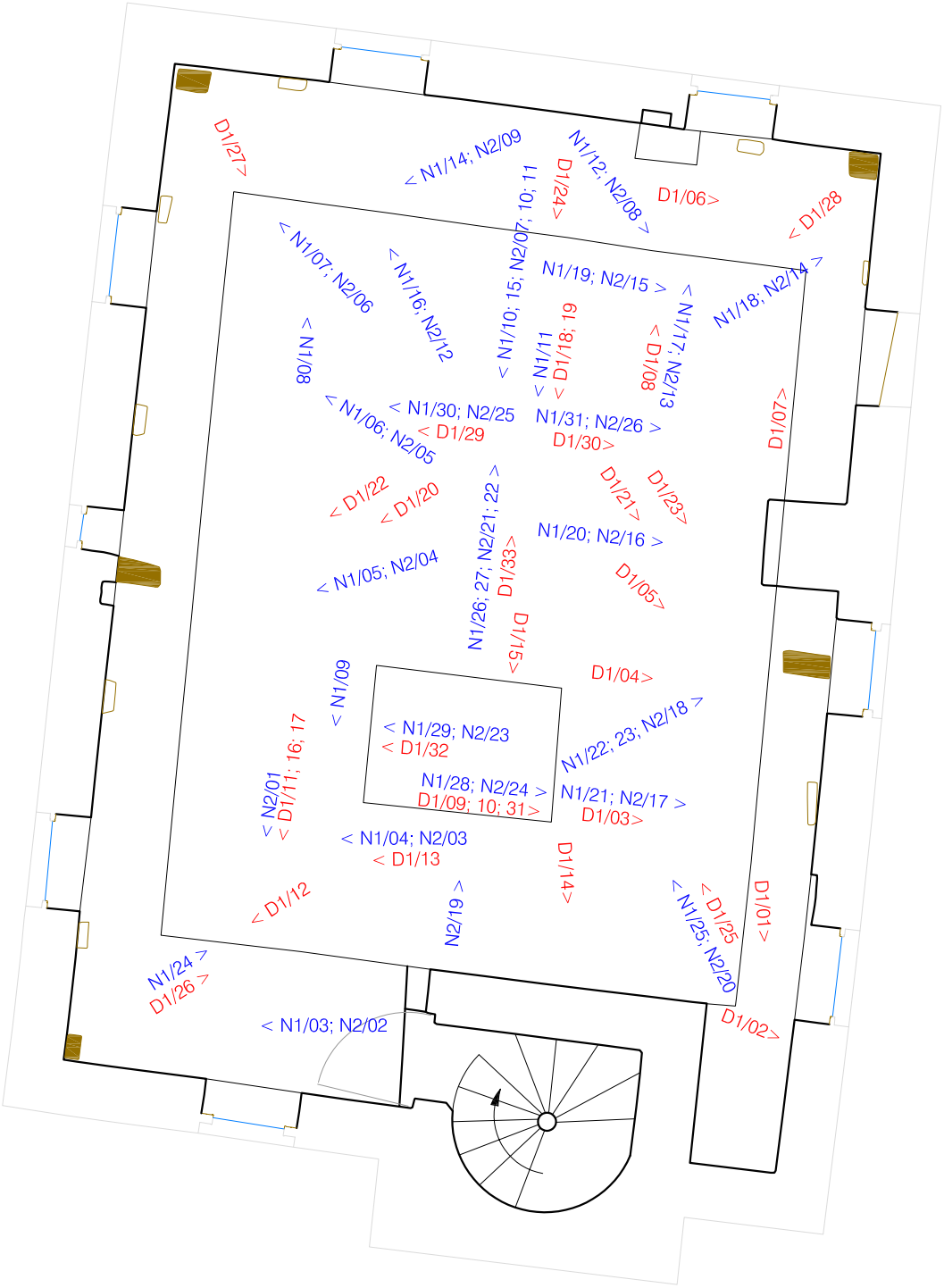
APPENDIX A PHOTOGRAPHIC LOCATION PLAN



Photographic location plan	Scale 1:50		Appendix Ai

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