Dunwich Greyfriars, Dunwich
DUN 110

Archaeological Monitoring Report

SCCAS Report No. 2012/123

Client: Suffolk County Council

Author: Stuart Boulter

November/2012

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Report Date: November/2012

HER Information

Site Code:	**DUN 110**
Site Name:	**Dunwich Greyfriars**
Report Number	**2012/123**
Planning Application No:	**NA**
Date of Fieldwork:	**August - September 2012**
Grid Reference:	**TM 4777 7036**
Oasis Reference:	**Suffolkc1 - 135244**
Curatorial Officer:	**Dr Jess Tipper and Edward Martin**
Senior Project Officer:	**Stuart Boulter**
Client/Funding Body:	**Suffolk County Council**
Client Reference:	**NA**

Digital report submitted to Archaeological Data Service:
http://ads.ahds.ac.uk/catalogue/library/greylit

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Date:	November 2012

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Date:	November 2012
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Summary

An English Heritage grant aided programme of rebuilding and consolidation work was targeted on areas of the extant Dunwich Greyfriars precinct wall which had fallen into disrepair.

During the associated archaeological monitoring, major phases of rebuilding were identified, along with frequent more piecemeal repairs.

Observations suggested that only the standing west gateways and a *c*.48m length of the east wall are medieval survivals. The latter exhibiting a regular internal face constructed from locally derived crag limestone blocks and an external face dominated by septaria, another locally sourced stone.

Other than a section of the east wall located to the north of the medieval fabric that was thought to have been constructed during the early 20th century, due to the presence of graffiti, probably executed by the builders, the remaining phases were considered to be of 18th or 19th century date.

1. Introduction

The monastic site of Dunwich Greyfriars is perched on the low sandy cliffs to the south of the modern village (Fig. 1). Covering an area of some three hectares, the site is surrounded by a wall which, from its varying character, clearly does not all date to the same period.

The only buildings now standing within the walled precinct are a central ruin that has tentatively been identified as part of the medieval refectory and a *c.*19th century structure built against the western precinct wall and used for agricultural purposes.

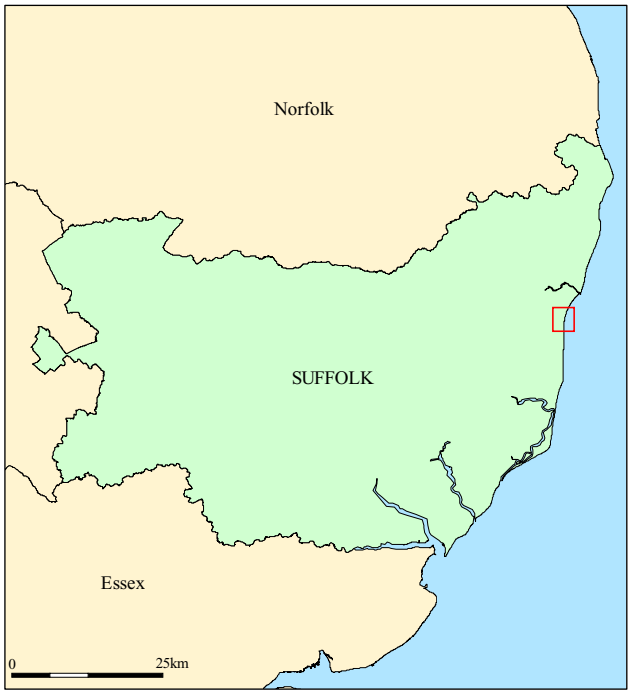
Dunwich Greyfriars is a Scheduled Ancient Monument (SAM SF40) and is currently owned by Suffolk County Council. The protected status of the monument requires that archaeological recording is factored in as part of any work which effects either the above or below ground structures/features.

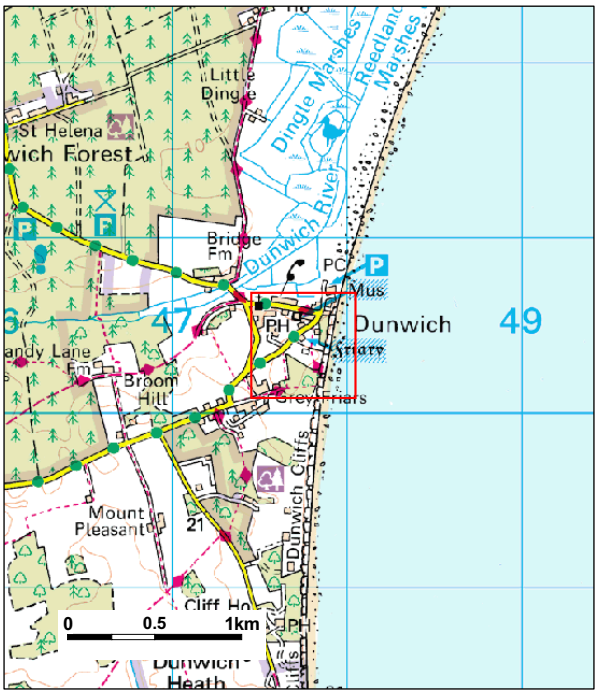
This report details the results of a programme of archaeological monitoring associated with localised consolidation and rebuilding of the precinct wall that was undertaken in the late summer of 2012. The overall work programme was funded by a combination of an English Heritage grant and Suffolk County Council's own money.

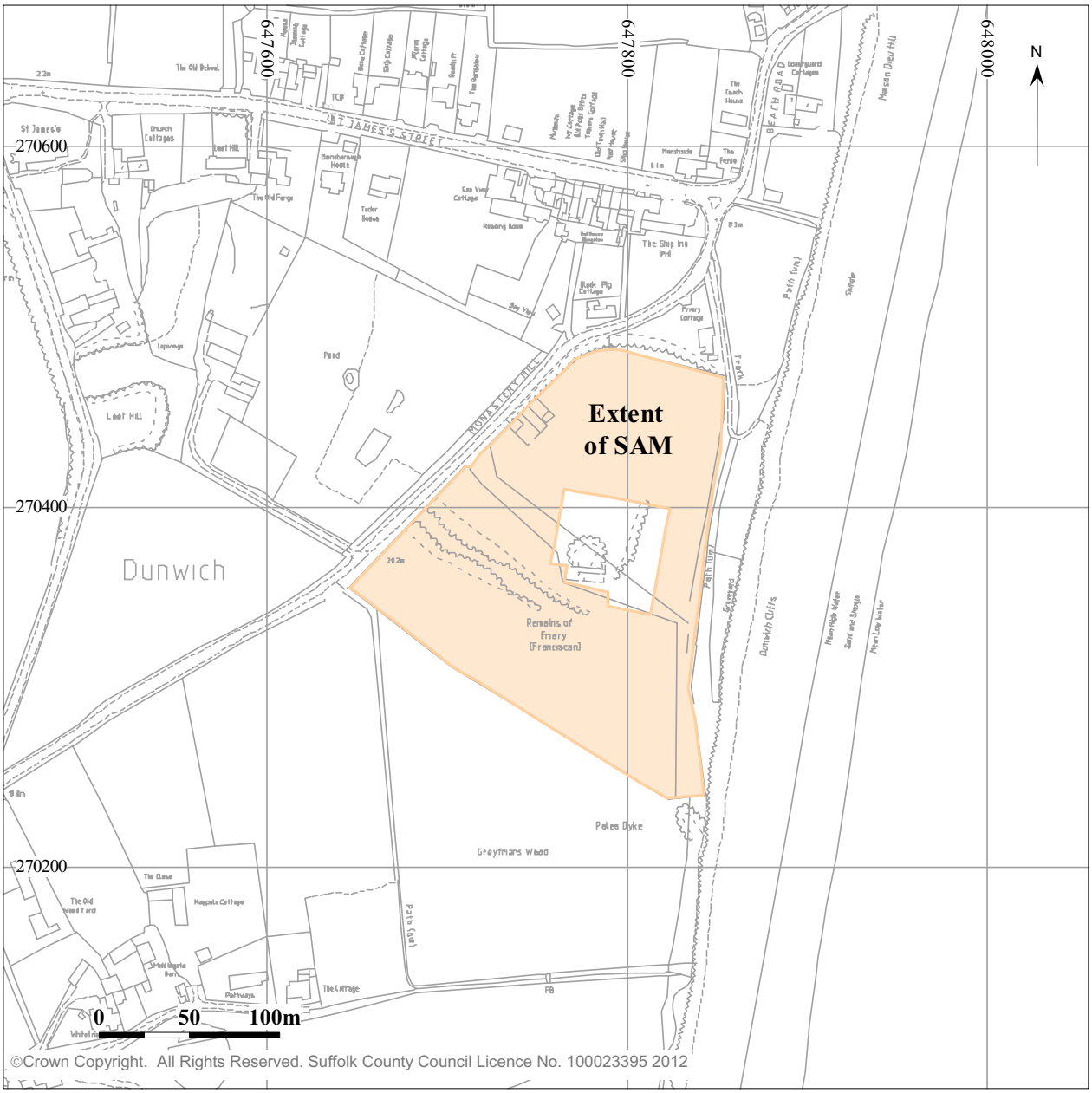
The scope of the archaeological works was presented in a Brief prepared by Dr Jess Tipper of Suffolk County Council's Archaeological Service Conservation Team in a document dated 1st August 2012 (Appendix 1).

Subsequently, Suffolk County Council's Archaeological Service Field Projects Team (hereafter SCCAS/FPT) was commissioned by the project architect (Tim Buxbaum) to undertake the archaeological recording works.

To that end, a series of site visits were made during the works, the results of which form the basis of this report.







2. Geology and topography

The Greyfriars site lies on the cliff edge at approximately 20m OD overlooking marshes to the north into which the Dunwich River drains from a south westerly direction (Fig. 1).

The underlying geology comprises marine sands and gravels which give the area its characteristic sandy heathland soil.

3. Archaeological and historical background

The present precinct incorporates the smaller, *c.* $4^1/_2$ acres, 16 perches (1.86 hectares), parcel of land granted by the town of Dunwich and confirmed by King Edward in 1290 for the friars to build upon and inhabit (RCHME 1994, 4). This is believed to be the northern *c.*$^2/_3$ of the site.

Relocation to this site was made necessary due to the earlier foundation to the east being inundated by the sea which, over the years, has steadily devoured all but the very western margin of what had been an extensive medieval town and port.

The western arm of the town's medieval defences (Pales Dyke) runs down the eastern edge of the site, with the line of the ditch internal to the present precinct wall which is located where the associated bank would have been.

While only a very small part of the medieval monastic complex now survives, the precinct would once have been occupied with the full range of buildings considered to be the normal requirement for this type of site. In addition to the church, there would have been all of the associated service buildings, living quarters and an extensive cemetery, with the whole almost certainly set out to a relatively standard plan.

Following the Dissolution of the monasteries (1538), the site was granted in 1545 to John Eyre (RCHME 1994, 5) and part of the standing buildings, those toward the south of the complex, were converted to secular uses. The Agas map of 1589 shows only the isolated tower remaining of the monastic church, suggesting that demolition/robbing had

been extensive within the preceding fifty years. The only other buildings shown are a double bayed house, equating to the extant ruin, and a smaller building adjacent to the south wall of the precinct.

The site was acquired by the Downing family in 1710 and Sir George Downing is accredited with the construction of a three story brick facade on the eastern side of the standing ruin which latterly was also used as the Town Hall and gaol. The facade was pulled down in the early 19th century by the Barne family who by then owned the site, it remaining in their possession until the mid 20th century.

Archaeological investigations associated with Dunwich Greyfriars have to date been of a relatively limited nature.

The earliest investigations were carried out between 1935 and 1939 by Norman Norris (Norris, 1936a, 1936b & 1939). These were concentrated in an area immediately east of the standing ruin where a workman had reported that some years earlier he had encountered bonded stone remains when digging a hole for a fence post (Norris 1936a, 288). His initial excavations revealed a brick, stone and flint built buttress, which, in the subsequent phase of excavation (Norris 1936b, 290-293) was found to be one of a series forming the bases of an arcade with a passageway and attached rooms to the north. The area was more fully excavated between 1937 and 1939 (Norris 1939, 210-218) and he concluded that the exposed structures, while having medieval components (tentatively interpreted as relating to the friary infirmary), had formed part of the double bayed house shown on the Agas map of 1589.

In 1970 a small excavation was conducted by Stanley West (West 1970, 25-33) in which two trenches were opened (DUN 013). While these were located outside the Greyfriars precinct itself (albeit only 20m to the south), they are relevant in that they included the examination of the town ditch (Pales Dyke) which is known to continue on through the precinct. The excavation, combined with observations made in the cliff face where a section of Pales Dyke was exposed, showed the ditch to be *c.*4.6m deep, *c.*12.2m wide with a flat bottom and steeply cut sides. The results also suggested that the ditch had been deliberately filled with the upcast bank material, leaving only a shallow layer to the east sealing pre-ditch/bank layers. A further phase of infilling was represented by a layer datable to the 19th century which was characterised by the

inclusion of a large proportion of friary demolition rubble. This was thought to represent the final tidying up of the Greyfriars site in the early 19th century (West 1970, 28).

In 1992, the demolition and rebuilding of a short stretch of the precinct wall towards the north-west corner of the site was monitored by SCCAS/FPT. In addition, it was possible to hand excavate and record a section through the wall footing at this juncture (Boulter 1992, DUN 016, site archive only). The wall was found to sit on a substantial, vertical sided, flat bottomed footing comprising alternating layers of sand and mortar. A layer *c.*1m thick of brown sand subsoil was recorded internal to the wall but cut by the footing.

By 1994 the continuing retreat of the cliff top was threatening the south-east corner of the precinct. To prevent the possibility of large lumps of wall masonry falling down onto the beach it was decided that a portion of the east side of the precinct wall, where it approached the south-east corner, would be dismantled. The demolition was carried out under the supervision of archaeologists from SCCAS/FPT who recorded the work and recovered architectural fragments that had been re-used in the wall fabric. In this location, the wall was found to be post-medieval in date.

Also in 1994, the RCHME carried out an earthwork survey in conjunction with an English Heritage geophysical survey of the whole area confined by the precinct wall (RCHME 1994 and English Heritage 1994). The former also included a visual survey of the standing buildings, ruins and precinct wall and a background documentary search (RCHME 1994). The results of the surveys provided valuable, if incomplete, information regarding the Greyfriars complex. The earthwork survey identified a number of features of which only two were thought to be medieval in origin: a broad north-west to south-east orientated bank, interpreted as the original southern extent of the precinct, and a prominent scarp or terrace at right-angles to it. The geophysical survey was difficult to interpret, but certainly showed a concentration of linear anomalies immediately north of the standing ruin while a large anomaly further towards the north was interpreted as the friary church itself. In addition, the town ditch could clearly be seen running from north to south for the full length of the site, although becoming more amorphous towards the south. Other linear anomalies were also visible crossing the site from east to west to the south of the friary buildings. The visual inspection of the precinct wall found that there were a number of constructional phases and rebuilds, two of which were probably medieval in date.

Following on from these surveys, a project design was produced by SCCAS/FPT (Loader 1996) targeting areas for evaluation within the remnant of the medieval town and on the Greyfriars site. However, as a result of local opposition to archaeological work on the cliffs, the work was subsequently scaled down, concentrating on the Greyfriars site itself. The three stated aims of the evaluation were as follows:

- To assess the possibility that the original extent of the Greyfriars Precinct was marked by the shallow north-west to south-east orientated ridge recorded during the RCHME earthwork survey of 1994.

- To identify any friary or pre-friary activity in the south-east quadrant of the precinct (the possible extension).

- To assess the form and character of the precinct wall footing adjacent to the section dismantled in 1994.

The trenches within the Greyfriars Precinct were subsequently excavated in the July of 1997 by SCCAS/FPT with funding provided by departmental reserves.

The results confirmed the interpretation postulated by the RCHME that the present area of the precinct includes a southward extension to its late 13th century predecessor. However, rather than following the line of the shallow bank running from north-west to south-east from the western precinct wall, the southern wall was orientated west-north-west to east-south-east following the line of a linear anomaly clearly represented on the geophysical plot. A section excavated through the anomaly revealed a feature with similar dimensions to the footing previously excavated in 1992 beneath the north-west corner of the existing precinct wall. A parallel linear feature to the south was interpreted as a ditch following the southern edge of a road/track which itself ran externally to the precinct wall. Both features produced ceramic evidence consistent with a medieval date.

In addition, a small trench was manually excavated on the line of the present east precinct wall *c.*10 metres from the south-east corner of the precinct. The evidence suggested that this section of the wall was a rebuild of 19th or 20th century date which

had been constructed on the line of an earlier wall, with the vestiges of its footing surviving. A continuous layer of sandy loam, recorded below the wall, was demonstrably different to the present topsoil and was interpreted as the possible remnant of the bank associated with the town ditch immediately to the west. However, evaluation failed to identify the town ditch itself as the trench had to be cut short of an extant fence. However, the natural subsoil was beginning to dip towards the east at a point close to where the edge of the ditch could be expected. No other pre-friary or friary features were identified in the trenches.

As a result of the initial limited evaluation, it was clear that a more extensive investigation would be required to fully assess the archaeological potential of the site. Subsequently, a detailed project design for a further evaluation was prepared by SCCAS/FPT in which it was stated '*The principal research aim of the proposed evaluation will be to produce recommendations for the future management of the archaeological resource*' (Loader 1998).

Subsequently, in 1999, the more extensive evaluation was undertaken by SCCAS/FPT with funding provided by English Heritage (Boulter 1999). In general terms, the results confirmed the expected location of the church with its associated west tower and ranges of buildings to the south. Very little in the way of bonded wall structure survived, but the plan of the buildings was recoverable due to the survival of below-ground footings.

In addition, the presence of the expected large number of burials was confirmed.

During 2007, English Heritage were in the process of agreeing a grant to cover consolidation works on the extant medieval gateways and the refectory building when a section of the west precinct wall collapsed. Following an initial assessment of the fallen material (Boulter 2008a) the decision was made to extend the project to include the rebuilding of fallen section of the wall. Archaeological recording associated with the project was undertaken by SCCAS/FPT (Boulter and Everett 2009).

The recording work demonstrated the phased construction of the refectory ruin defining both the medieval and later wall fabrics, confirmed the late 14th to early 15th century date of the extant gateways and suggested an 18th century date for the west precinct wall and recognised two phases of underlying footing (Boulter and Everett 2009, 31-35).

The date for the west precinct wall was based largely on the inclusion of tooled limestone mouldings indistinguishable to those recorded at St. James Leper Chapel, located some 300m to the north-west, which only became redundant in the later 17th century (Boulter 2008b).

The most recent archaeological work at the site was undertaken by Wessex Archaeology (Wessex Archaeology 2012) working for Videotext Communications Ltd, the makers of Channel 4's Time Team programme. A combination of geophysical survey and targeted excavation trenches effectively corroborated the results of the earlier SCCAS/FPT evaluation, although the location of the trenches was clearly more accurately plotted.

A substantial section excavated through the town ditch recovered pottery of 11th to 14th century date. In addition, the presence of bank was recorded on the eastern, internal, side of the feature.

The most useful information was obtained from the geophysical survey which identified several structures to the south of the church, although a trench opened up over the south-east corner of the nave of the friary church did produce painted medieval window glass and stone mouldings.

Another trench identified a quarry pit of unknown date.

4. Methodology

4.1 Fieldwork

The archaeological recording involved both below ground observation of the contractor's trenches and a photographic record and description of the precinct walls in the areas where rebuilding and consolidation was going to occur.

Three sections were manually excavated across the line of the precinct wall in the north-east corner of the site, one on the north side and two on the east side. The excavated sections were executed in pencil at a scale of 1:20 on plastic drafting film.

Observations were recorded in a site notebook. Below ground features were allocated 'observed phenomena' numbers within a unique continuous sequence under Historic Environment Record No. DUN 110.

A photographic record comprising high resolution digital shots was made throughout.

4.2 Post-excavation

Context information was input onto a Microsoft Access database (Appendix 2).

The digital photographs were added to the SCCAS Photographic Archive under the photographic codes HPW 1-99, HPX 1-55, HQF 11-23 and HQG 1-99.

Plans and section drawings were digitised for the archive and inclusion in this report.

The notes made on site were rationalised in the site narrative presented as Chapter 5 of this report.

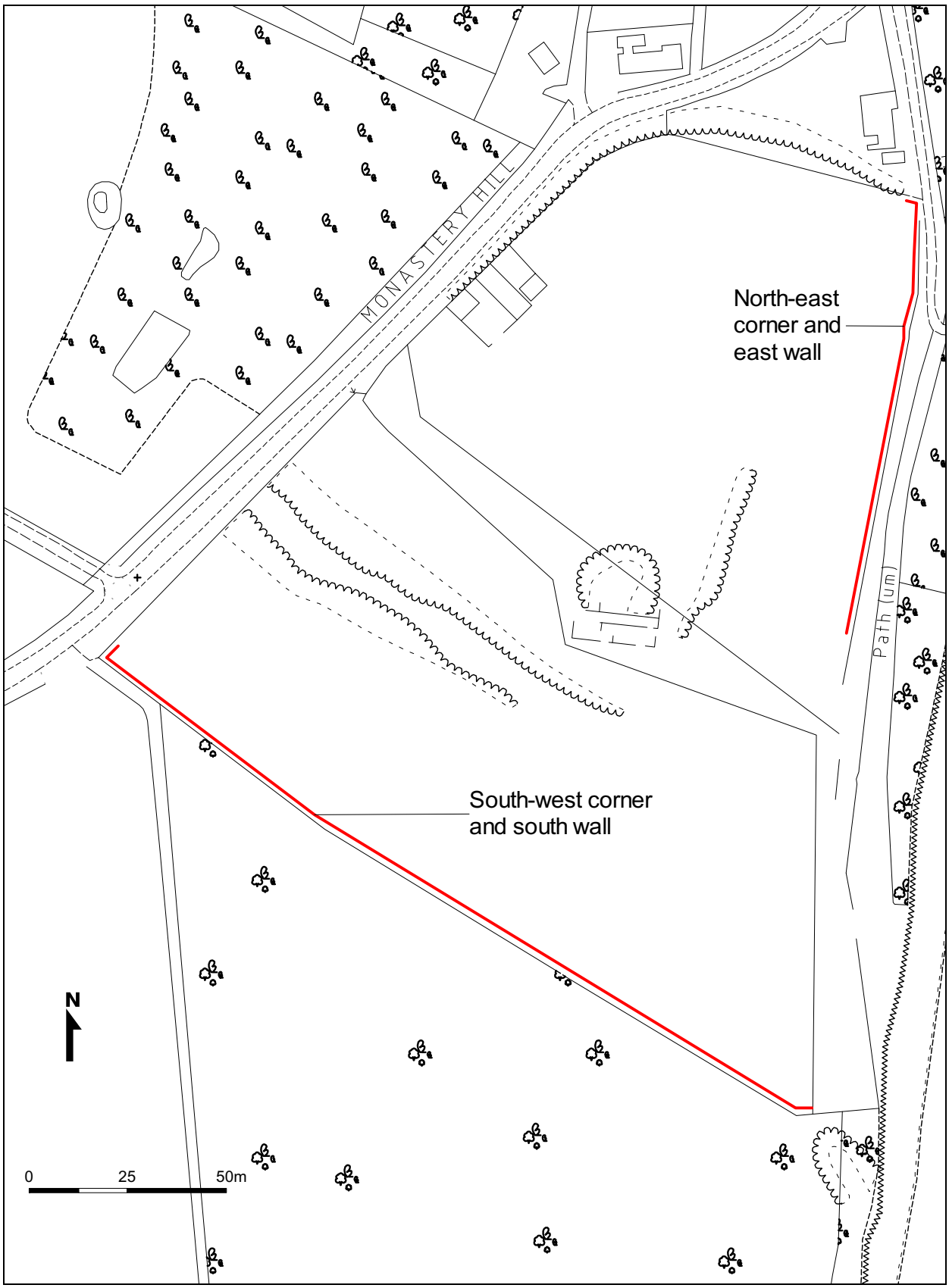


Figure 2. Recorded areas

5. Results

5.1 Introduction

For the purposes of this report, the results will be separated into five discrete elements of the project as follows:

- recording associated with rebuilding the north-east corner of the precinct wall…
- recording associated with the consolidation and stabilisation of the precinct east wall…
- recording associated with the blocked gateway in the south precinct wall close to its south-east corner…
- recording associated with consolidation works to the south precinct wall towards its south-west corner…
- general recording associated with the consolidation works associated with the south precinct wall.

5.2 Precinct wall (north-east corner rebuild)

The removal of the vegetation in the north-east corner of the precinct revealed that *c.*3m of the north wall and *c.*6m of the east wall were effectively missing, surviving only as low stubs of fabric extending locally to a maximum height of 0.3m above the existing ground level (Plate 1). In addition, detached blocks lay on the external slope outside the precinct, presumably where they had fallen (Plate 2).

A close examination of the *in-situ* and *ex-situ* material suggested that the north and east walls were of different builds. While the junction between the two builds no longer existed, it seemed reasonable to assume that it had occurred at the corner of the site.

Plate 1. E. precinct wall: surviving stub from N.

Plate 2. N. precinct wall: detached blocks on external slope

The fallen blocks derived from the north wall exhibited prominent coursing with predominantly rounded flint beach cobbles of *c.*10cm diameter along with some reused tooled limestone blocks and more exotic pieces set in a hard cream coloured lime mortar with frequent gravel inclusions. This wall fabric was identical in character to, and considered to be contemporary with, that making up the whole north precinct wall, all of the west precinct wall, with the exception of the two medieval gateways, and the westernmost *c.*3.5m of the south precinct wall.

A section was excavated around the exposed end of the extant north wall (0002) revealing the toed internal base of the wall stepping out by *c.*0.1m at a point *c.*0.4m from its base (Figs. 3 and 4 S1 and Plates 3 and 4). The wall was 0.8m wide at its base, before stepping in, and then tapering upwards to *c.*0.45m at a height of *c.*2m. The external face was vertical with all of the reduction in thickness accommodated in the internal face. It is likely that this is the result of some outwards rotation of the wall rather than a deliberate feature.

Beneath the flattish base of the bonded wall there was a *c.*0.35 thickness of material (0003) interpreted as a footing similar in character with elements of the double footing seen in previous underpinning trenches (Boulter and Everett 2009 figs. 4, 5, 8 – 10 and plates 13, 14, 17 - 28). At this juncture, the footing comprised a thin layer of disaggregated lime mortar immediately below the wall, over *c.*0.1m of compacted yellow sand, over a further *c.*0.16m of compacted dark brown clayey sand, over another thin layer of disaggregated lime mortar (Fig. 4 S1 and Plate 4). Neither the internal or external edge of the footing was visible within the confines of the excavated trench. The existing ground level against the internal face of the wall was 0.4m higher than that externally with an internal depth of 0.8m of brown sandy loam topsoil (0001) over well sorted relatively fine grained yellow coloured sand (0004). During excavation, the yellow sand was considered to represent a natural subsoil deposit, but the subsequent excavation of the internal elements of the new footing suggested that it was actually fill within the former town ditch (0014).

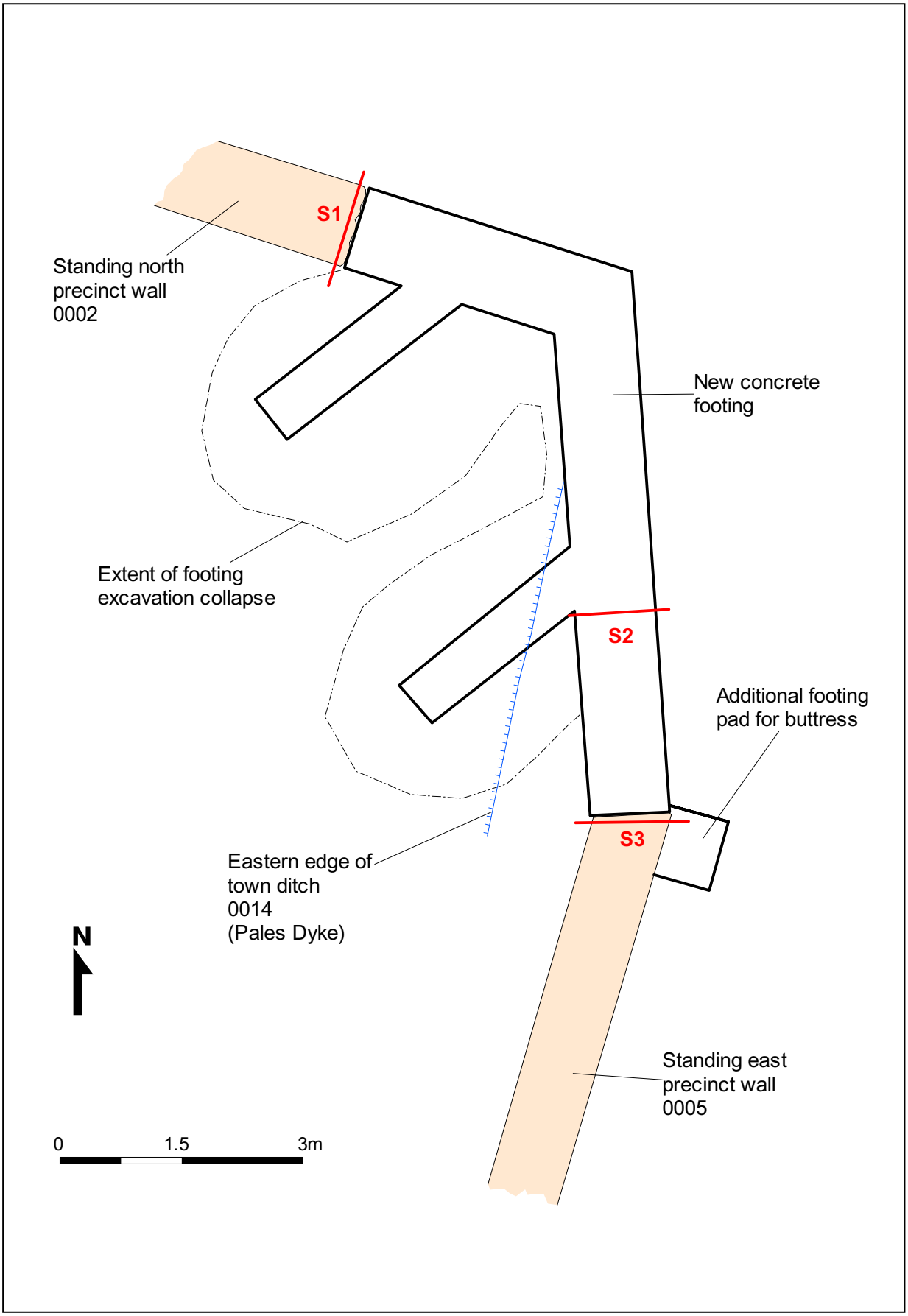


Figure 3. Detail of new footing

Plate 3. N. precinct wall: S1

Plate 4. N. precinct wall: detail of wall footing in S1

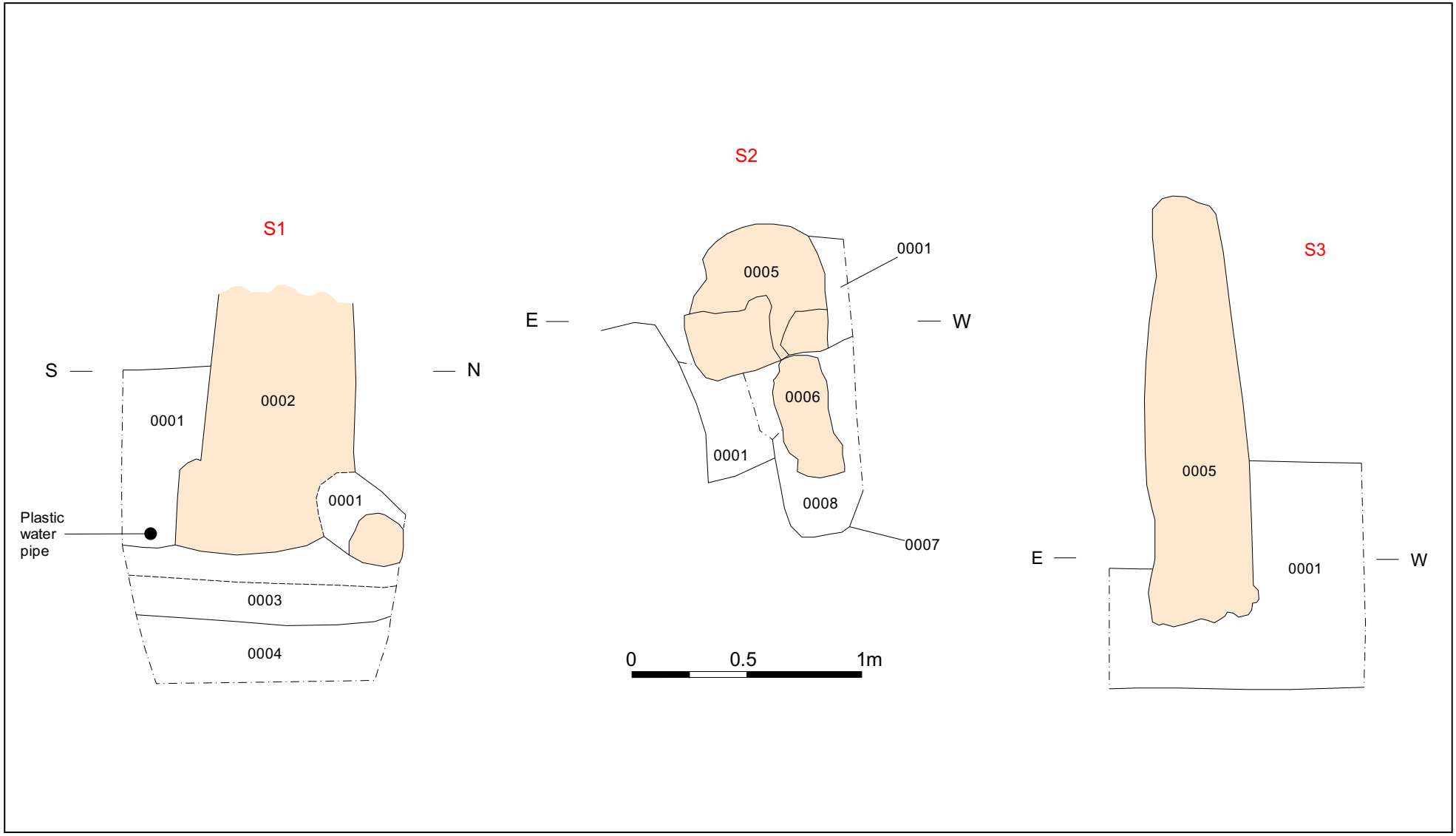


Figure 4. Section drawings S1 – S3

A second section was excavated across the line of the east precinct wall at a point *c*.4m from the north-east corner originally proposed as the junction between the old and new work (Figs. 3, 4 S2 and Plates 5 and 6). However, following discussions between the project's architects, engineer and building contractors, the decision was made to remove a further *c*.3m of the east wall base, cutting back to an open joint corresponding with a minor change in the alignment of the wall. A third section was excavated at that juncture (Figs. 3, 4 S3 and Plates 7 and 8).

The second section (Fig. 4 S2 and Plates 5 and 6), included the basal *c*.0.6m of the east precinct wall (0005) overlying *c*.0.4m of brown sandy topsoil (0001) externally and built off a detached lump of flints in lime mortar wall fabric (0006), possibly a fallen *ex-situ* block from an earlier wall.

At this juncture the base of the wall was 0.55m wide and constructed using large pieces of re-used limestone, septaria and more exotic pieces for approximately two courses, before changing to smaller pieces of predominantly flint beach cobbles in regular courses, all bound by a hard white mortar. The detached block was set within a deposit of orange/brown sandy clay (0008) that appeared to fill a narrow *c*.0.4m wide cut (0007) on a similar alignment to the wall, but only continuing for *c*.1m south of the recorded section. This feature did not have characteristics that would suggest it represented the footing of an earlier wall.

The third section (Figs. 3, 4 S3 and Plates 7 and 8) corresponded with the southern limit of the deliberately removed material that would be butted by the new footing. At this juncture wall (0005) extended for 1.2m above ground, internally, with a further *c*.0.7m below ground. The extant ground level external to the wall was some 0.45m below that of the interior. The wall had been entirely constructed within topsoil with no apparent footing. Naturally occurring well sorted orange/yellow sand subsoil was encountered at 0.3m below the base of the wall. There was no evidence for an earlier footing. The wall itself was 0.45m wide at its base tapering to *c*.0.3m at its highest point. Similarly to S2, the basal two courses comprised larger blocks which gave way to smaller, more consistently coursed flints above, all set in hard white lime mortar.

Plate 5. E. precinct wall: S2

Plate 6. E. precinct wall: overhead view of S2

Plate 7. E. precinct wall: S3

Plate 8. E. precinct wall: detail of wall base in S3

After concreting of the main component of the footing for the new wall, two additional elements were excavated under archaeological supervision (Fig. 3 and Plates 9 and 10). These were designed to give the whole structure enhanced stability and prevent rotational movement that would tip the wall down the external slope.

Excavation of these additional footings proved to be problematic due to the character of the material through which it was excavated. The naturally occurring sand subsoil was, itself, relatively stable, but the presence of the eastern edge of the former town ditch (0014) meant that the majority of what was removed was effectively made ground (Fig. 3). Collapsing edges made access to the trench impossible, so the ditch cut was only recorded photographically (Plates 9 and 10).

In the southernmost of the two footings, the steeply angled cut of the ditch could be seen continuing on down beyond the western end of the footing where, at that juncture, it was at 2m below the existing ground level (Plate 9). The northernmost of the two footings was entirely excavated into ditch fill.

Three distinct fills were recorded in the ditch: a thin basal layer (0017) that followed the edge of the cut, seen only in the southernmost footing component, comprising *c*.0.2m of brown silty sand, presumably a stabilisation layer that would have formed while the ditch was open. At its highest point in the southernmost footing edge this layer included heat altered material in a discrete basal area, possibly representing *in-situ* burning (Plate 9). Overlying this was a thick layer, up to 1.5m, of relatively homogenous yellowish clayey sand (0016), itself underlying a dark brown silty, clayey sand (0015) that formed a central fill component of the ditch. There was almost certainly further stratification within these major elements, but with access to the trench being denied for health and safety reasons, no cleaning of the sections was undertaken.

It may be no coincidence that the area of wall collapse in the south-east corner of the precinct coincides well with the point at which the town ditch exits the site.

Plate 9. NE corner of precinct: town ditch in S.most footing

Plate 10. NE corner of precinct: collapsed ditch fill in N.most footing

5.3 Precinct wall (east wall stabilisation and consolidation)

In order to ascertain what needed to be done to stabilise and consolidate the east wall of the precinct, the Ivy and other vegetation was cleared by the contractors and local volunteers. In so doing, internal and external faces of the precinct's east wall was exposed from its north-east corner southwards for a distance of *c.*115m. The contractor had inserted wooden pegs at *c.*5m intervals along the wall, effectively a quantity surveying aid to facilitate assessment and quantification of the consolidation requirements in a staged measurable way. These 5m stints were subsequently used by the SCCAS/FPT archaeologist to form a convenient framework for the photographic record of the internal wall face (Plates 11 to 32). While clearance of vegetation from the immediate environs of the external wall face had rendered it available for recording, the presence of trees and bushes further away from the wall made it impossible to make the same complete photographic record as the internal face. Here, representative shots were taken of each individual phase of facing and features considered to be of particular interest.

The northernmost *c.*32m of the east precinct wall exhibited some considerable variation in the materials used and the manner of their use in the wall facing (Plates 11 to 17). However, this section of wall was considered to be broadly contemporary, albeit with some superficial patching and rebuilding.

Internally, the wall facing for the northernmost *c.*10m (Plates 11 and 12) varied between well coursed, tightly packed beach cobbles predominantly of *c.*10cm size, but with some variation, of which approximately 80% were flints with the rest exotics. The long axes of the flints were almost always vertical or slightly angled off vertical, all bonded with a hard white lime mortar. The wall dog-legged slightly at approximately 2m from its northern end: a point which, after demolition, became the junction between the new and old builds.

Externally, the northernmost *c.*10m of the wall facing was less uniform than the interior, particularly towards its base. The facing, which still exhibited prominent coursing, although less so towards the base, comprised *c.*70% flint cobbles with smaller, more rounded pieces dominating at the top. Larger pieces, up to 0.25m, and more exotics occurred more frequently towards the base (Plate 33).

Plate 11. E. precinct wall: Stint 0 – 5m

Plate 12. E. precinct wall: Stint 5 – 10m

Plate 13. E. precinct wall: Stint 10 – 15m

Plate 14. E. precinct wall: Stint 15 – 20m

Plate 15. E. precinct wall: Stint 20 – 25m

Plate 16. E. precinct wall: Stint 25 – 30m

Plate 17. E. precinct wall: Stint 30 – 35m

Plate 18. E. precinct wall: Stint 35 – 40m

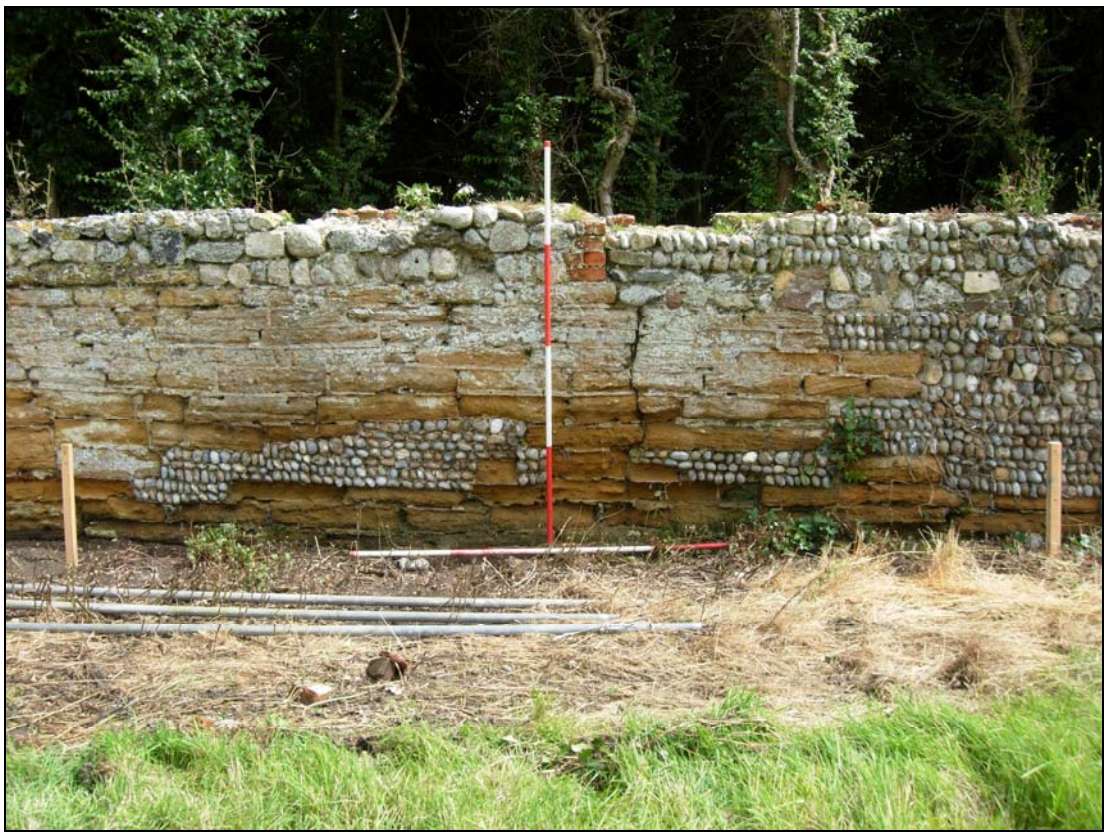


Plate 19. E. precinct wall: Stint 40 – 45m

Plate 20. E. precinct wall: Stint 45 – 50m

Plate 21. E. precinct wall: Stint 50 – 55m

Plate 22. E. precinct wall: Stint 55 – 60m

Plate 23. E. precinct wall: Stint 60 – 65m

Plate 24. E. precinct wall: Stint 65 – 70m

Plate 25. E. precinct wall: Stint 70 – 75m

Plate 26. E. precinct wall: Stint 75 – 80m

Plate 27. E. precinct wall: Stint 80 – 85m

Plate 28. E. precinct wall: Stint 85 – 90m

Plate 29. E. precinct wall: Stint 90 – 95m

Plate 30. E. precinct wall: Stint 95 – 100m

Plate 31. E. precinct wall: Stint 100 – 105m

Plate 32. E. precinct wall: Stint 105 – 110m

Plate 33. E. precinct wall: representative external wall facing 0 - 10m

Plate 34. E. precinct wall: brick buttress from the N.

A vertical element constructed in red brick marked the end of this distinctive internal and external facing (Plate 12). Similar features, although not always constructed in brick, are consistently present in all areas of the precinct wall, particularly in phases thought to be of post-medieval date. Whether constructed in brick, re-used limestone, crag or combinations of the three, they appear to run right through the wall and have been interpreted as representing the lateral extent of a section of wall being worked on at one time. In addition, they also provided strengthening by forming a structural element tying through from the external to internal faces. It is suggested that these constructional features were raised first, followed by the intervening coursed runs. A parallel in modern bricklaying would be the raising of the corners of a building prior to the laying of the main wall runs.

At *c.*10m, corresponding to the first brick vertical element, an external brick built buttress had been constructed up against the wall, from hard red, frogless bricks measuring 2 ¾ x 4 ½ x 9 inches, in order to arrest its outward lean (Plate 34).

Immediately to the south of the first brick vertical element, the internal wall facing included a *c.*3m stretch dominated at its base by reused pieces of crag limestone which, in adjacent rabbit holes, could be seen to continue below ground to a depth of *c.*0.3m (Plates 12 and 13). While clearly appearing different in character to the neighbouring wall facing, the hard white mortar matrix seemed continuous between the two elements.

From this point to approximately 20m, the wall was a relatively regular in height, 1.5 - 1.7m, and included two vertical elements constructed from re-used tooled limestone blocks (Plates 12 to 14). The internal face comprised well coursed flint cobbles, most *c.*10cm in diameter interspersed with re-used tooled limestone blocks, bricks and some exotics, all set in hard white lime mortar. The larger pieces had the effect of disrupting the pattern by extending over more than one course.

Externally, from 10m to 20m, the wall facing was essentially similar to the internal work (Plate 35): the same vertical elements were present, although not as well defined towards the base. An interesting piece of graffiti was noted, carved into one of the re-used limestone blocks in the external wall face (Plate 36).

Plate 35. E. precinct wall: representative external wall facing 10 - 20m

Plate 36. E. precinct wall: external face, graffiti.

In addition to some clearly more recent poorly executed initials on the same stone, including M. G. 1937, and a leaf cut into an adjacent brick, the names M. Fiske and H. Perfitt were accompanied by the date 1924. These names and date appeared to have been inscribed professionally with stonemason's tools rather than just scratched in.

Given that the name Perfitt is not that common, an internet search was considered as an avenue of research. Interestingly, the search identified a relatively local family firm of stonemasons, H. L. Perfitt Ltd of Diss, established in 1842. Subsequently, a member of the present company's management team confirmed that there had been an H. Perfitt working at about the right time and that they did undertake this type of work. On that basis it is considered that, on balance, these names represent two of the people who worked on the construction of this section of wall in 1924, rather than later graffiti cut into an earlier structure.

From 20m to 32m the wall was a maximum of 1.3m in height reducing to only 0.5m to the south (Plates 15 - 17). One vertical brick component was present at *c*.25m. Much of the internal face was missing but, where present, comprised predominantly of well coursed rounded beach cobbles. To the north of the brick element there was a greater range in clast size and occasional inclusions of exotics.

The junction between the changes in character of the wall fabric at approximately 20m was accompanied by a deviation in the line of the wall itself and marked by another abutting brick buttress externally (Plate 37). While this buttress would originally been constructed to stop outward rotation of the wall, the whole structure had since leaned in then opposite direction with the buttress breaking.

Externally, the difference in character of the wall between 20m – 25m to that of 25m – 32m was more marked. Immediately to the south of the broken buttress and continuing for *c*.5m to a point coinciding with the vertical brick element internally, the wall face steps back at a height of *c*.0.5m above the existing ground level (Plate 37). The facing itself comprises a mixture of coursed rounded beach cobbles with less formally lain material, predominantly angular pieces of septaria. Evidence form an adjacent rabbit hole suggests that below ground, the wall base consists entirely of crag limestone.

Plate 37. E. precinct wall: brick buttress from the S.

Plate 38. E. precinct wall: external face with limestone crag base

Given that crag limestone and septaria are the main components of an adjacent stretch of wall, it seems reasonable to assume that these materials either represent the consolidated vestiges of the continuation of this earlier wall, or at least the reuse of dismantled material from it.

From 25m to 32m the external wall face had been constructed predominantly in brick with some flint cobbles and crag limestone blocks, the latter also forming a capping course (Plate 39). The 2 ½ x 4 ½ x 8 ½ soft red, frogless bricks are worn and broken, possibly also reused from elsewhere. Some of the brick courses had been lain on their long edges with the header forming the face.

Similarly to the adjoining fabric immediately to the north, the brick facing angled back at *c.*0.5m above existing ground level (Plate 40). The angled chamfer appears to have been gained by cutting the corners of the bricks in two of the lower courses (Plates 39 and 40).

From 32m to 80m the east precinct wall was considered to represent a genuine survival of medieval fabric, although various phases of patching and repair were evident (Plates 17 - 26). Survival above ground varied from a few centimetres to 2.3 metres at 60m, with a further 0.3 metres of more recent capping. The repairs and capping were clearly recognisable as the use of predominantly rounded flint cobbles contrasted with the limestone crag blocks forming the internal face of the original wall. In addition, the lime mortar used in the patching and repairs tended to be hard and white, while that in the earlier wall was softer, buff in colour and included small chalk lumps. In some areas a thin secondary wall capping had been set with projecting shards of glass.

There was two internal buttresses: one a large concrete structure (Plate 20), the other constructed predominantly from reused limestone blocks and bricks (Plate 22).

Of particular interest was the observation that the external and internal faces, which were completely different in character, were actually contemporary and formed integral parts of the same structure. The fact that the widely contrasting faces were contemporaneous was ascertained by examining an exposed cross-section through the wall where the mortar bonding the internal face could be seen to be continuous with that in the rubble core and on into the external face (Plate 41).

Plate 39. E. precinct wall: external brick face *c*.25 – 32m

Plate 40. E. precinct wall: external brick face *c*.25 – 32m, taken from S.

Plate 41. E. precinct wall: cross-section through wall at *c*.33m

Plate 42. E. precinct wall: external medieval face from N.

The internal facing comprised long, thin, when compared to their length, orange/yellow crag limestone blocks. While the blocks were not uniform in size, with larger elements evident towards the base, they had been laid in courses, with pieces of similar thickness within each individual course. The original component of the internal face was entirely composed of this material. Even with weathering altering the surface texture, it was possible to infer the high quality and formality of the face that would originally have been presented, almost with the appearance of ashlar.

The material itself is described generically as a limestone crag deposit probably of relatively local origin, although it's exact provenance is unknown. Similar material was used to construct the towers of churches at Wantisden (St. John the Baptist) and Chillisford (St. Peter), the latter with material generated from an immediately adjacent quarry.

Externally, there were areas of intact original facing (Plates 42 and 43) along with exposed corework (Plate 44) and later patching (Plate 45), the latter mainly in brick.

The intact original facing was characterised by a mix of material which despite being extremely closely spaced, exhibited clear coursing (Plate. 42). While dominated by septaria, there were also flints and more exotic material with larger pieces concentrated towards the base. Whether deliberately cut/split for the purpose, or just preferentially selected, the clasts had obviously been lain with a flat surface presented outwards. In addition, gaps between adjacent clasts had been galetted with small angular flints (Plate 43). This would have resulted in the exposed face appearing to be relatively flat and unbroken.

Where corework was exposed it comprised an uncoursed mix of poorly sorted flints, septaria and limestone crag fragments set in a buff coloured lime mortar (Plate 44).

The remaining *c.*30m, 80m to approximately 110m, of the wall appeared to be of one phase (Plates 27 - 32) which was similar in character and construction to that recorded towards the north end (Plates 12 -14).

Although surviving to a maximum height of *c.*1.5m, some areas were considerably less than this. In addition, relatively large areas of internal and external facing were missing.

Plate 43. E. precinct wall: external, example of original medieval facing

Plate 44. E. precinct wall: external, example of original medieval corework

Plate 45. E. precinct wall: external, representative example of brick patching

Plate 46. E. precinct wall: internal, example of vertical element

Plate 47. E. precinct wall: external, representative example of facing at *c*.95m

Plate 48. E. precinct wall: external, vertical element with limestone crag

The exposed corework exhibited coursing with a similar mix of clast material as that used in the facing, although pieces of brick were more common. The lime mortar matrix was hard and cream/white in colour.

Internally, the facing predominantly comprised of well coursed rounded flints of *c.*10cm diameter set with their long axis vertically. However, there were local variations, particularly with sections where larger pieces dominated towards the base, with the inclusion of reused limestone fragments and exotics.

Vertical elements constructed from tooled limestone blocks were evident at intervals. In one instance, at *c.*100m where some of the internal blocks were missing, it was possible to see that the flanking courses on either side were independent of each other (Plates 30, 31 and 46)

The external facing was markedly different to that internally. While still exhibiting clear coursing, the material used was not so dominated by rounded flint cobbles with exotics, septaria and brick fragments far more common (Plate 47).

One of the vertical elements present in the external face was constructed almost entirely from reused limestone crag blocks, bricks and other exotic material (Plate 48).

5.4 East precinct wall (buttress footing excavations)

Seven buttresses were to be constructed against the east wall of the precinct, each involving the excavation of a footing at the base of the existing wall. Two of these replaced existing buttresses, while the five new structures were decided on the basis of the condition of the adjacent wall. An eighth buttress was to be constructed on a concrete pad that formed an integral part of the main footing in the north-east corner of the precinct (Fig. 3).

The excavated holes for the footings were recorded prior to the concrete being poured. For the purposes of the following descriptions, the buttress footings have been numbered from 1 to 7, the sequence running from north to south.

Buttress Footing 1: replaces the northernmost of the two existing external brick buttresses (Plate 34) which was found to have been bedded on no more than a *c*.0.2m thick concrete pad. This was the only footing excavated both sides of and also underneath the wall and coincided with one of the included vertical structural elements. The smaller, internal, component measured 0.4m out from the wall by 0.8m along its face with the larger, external, component measuring 1.1m out from the wall by 0.9m along its face.

With large lumps of stone falling from the wall base, access to this trench was impossible on health and safety grounds. As a result, this trench was only recorded photographically (Plates 49 and 50).

Essentially, the wall internally at this juncture was composed of reused crag limestone blocks down to its base at a depth of 0.5m below existing ground level. Externally, the composition was more mixed with large limestone blocks also present, while the vertical brick element on the north side of the trench continued down for *c*.0.3m below that of the wall on the south side of the trench. Within the confines of the excavation, it was impossible to tell whether it was just the vertical element with this additional depth, or if it represented a step down of the whole wall to the north.

Naturally occurring subsoil was recorded at a depth of *c*.0.8m externally with the overburden comprising brown sandy topsoil. The base of the wall was entirely within this layer with no formal footing.

Buttress Footing 2: located approximately 21m from the northern end of the wall, the second footing was internal to and directly opposite the second external brick buttress and immediately to the south of the slight dog-leg.

Footing 2 measured 0.9m along the base of the wall and 1.2m out into the precinct. At this juncture 0.5m of bonded wall occurred below the extant ground level, comprising four courses of mixed material, with the individual pieces larger than those used in the above ground wall face (Fig. 5 S4 and Plate 51).

Plate 49. E. precinct wall: buttress footing 1, internal

Plate 50. E. precinct wall: buttress footing 1, external

Plate 51. E. precinct wall: buttress footing 2

Plate 52. E. precinct wall: buttress footing 3

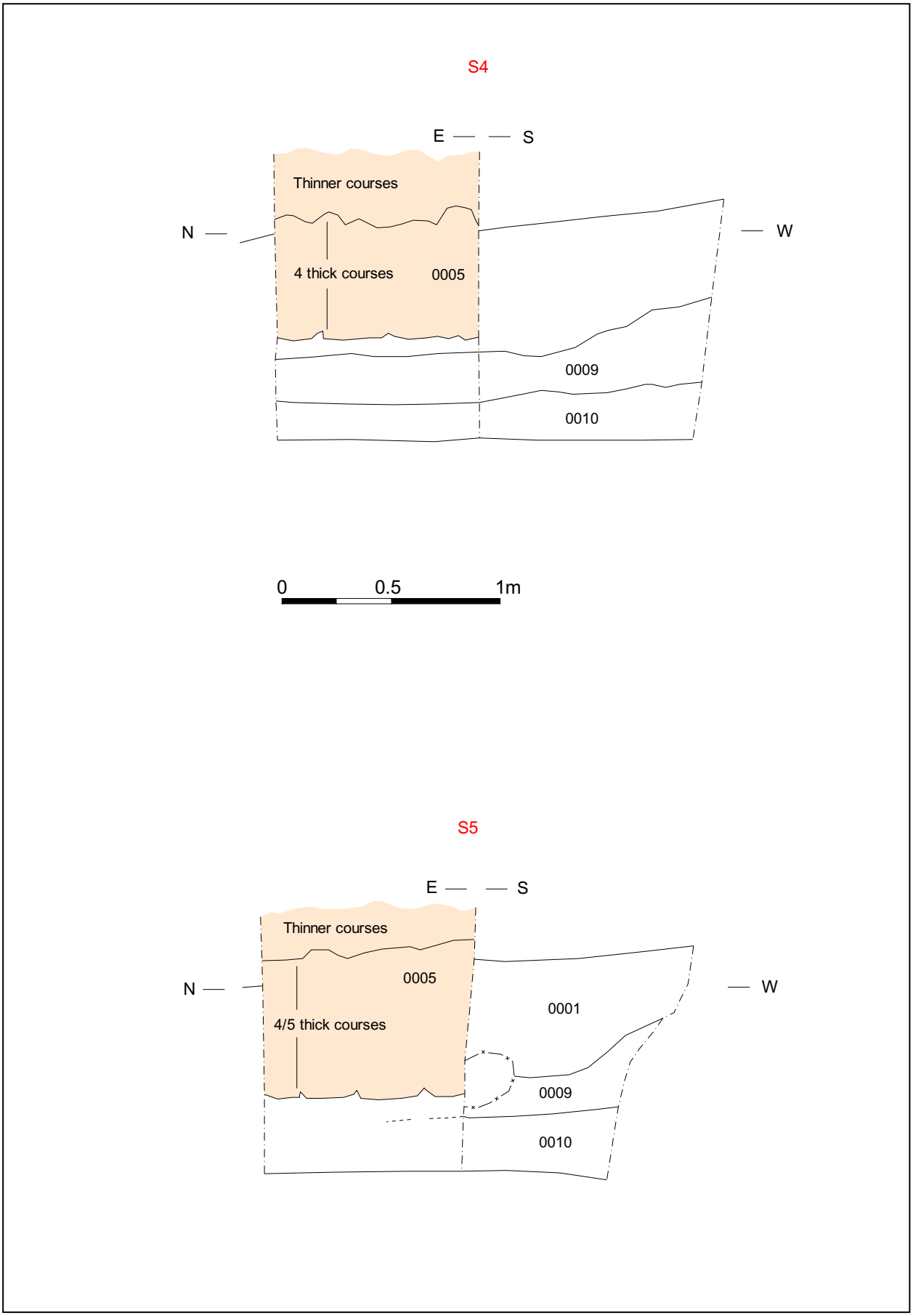


Figure 5. Buttress footings 2 (S4) and 3 (S5)

Against the wall face, the topsoil was 0.55m deep with a *c*.8cm thickness continuing on under the wall (Fig. 5 S4). Beneath the wall, the topsoil gave way to *c*.0.2m of orange/yellow slightly clayey sand with localised concentrations of small flint pebbles (0009), itself overlying *c*.0.15m of dark brown silty sand (0010) that directly lay on the buff coloured fine grained naturally occurring sand subsoil. The thickness of all these deposits varied slightly in the east to west component of the section (Fig. 5 S4).

Buttress Footing 3: located only *c*.3m to the south of Footing 2, the character of the below ground wall base was similar in every aspect to that seen in Footing 2.

The four below ground wall courses were clearly composed of larger pieces of stone with a mixture of septaria, crag limestone, limestone, flint and other exotics (Fig. 5 S5 and Plate 52).

At this juncture the wall had been heavily undermined by rabbits which disrupted the soil sequence. However, it was possible to ascertain that the stratified deposits equated to those seen in Footing 2 with *c*.0.55m of topsoil overlying an orange/yellow sandy layer (0009) which itself overlay a brown silty sand (0010) which directly lay on the naturally occurring sand subsoil (Fig. 5 S5).

Buttress Footing 4: located at a point *c*.37m from the northern end of the wall, Footing 4 was the first of those excavated against the crag limestone phase of the structure (0011).

Interestingly, however, the below ground component of the wall was found to be represented by three courses of hard red brick (0012) with a single capping course of flint pebbles, all set in a hard white lime mortar matrix, the latter different to that bonding the crag limestone blocks above (Fig. 6 S6 and Plate 53). This clearly represented an episode of underpinning which had been recognised previously in a small test excavation (Boulter 1999, 22).

Plate 53. E. precinct wall: buttress footing 4

Plate 54. E. precinct wall: buttress footing 5

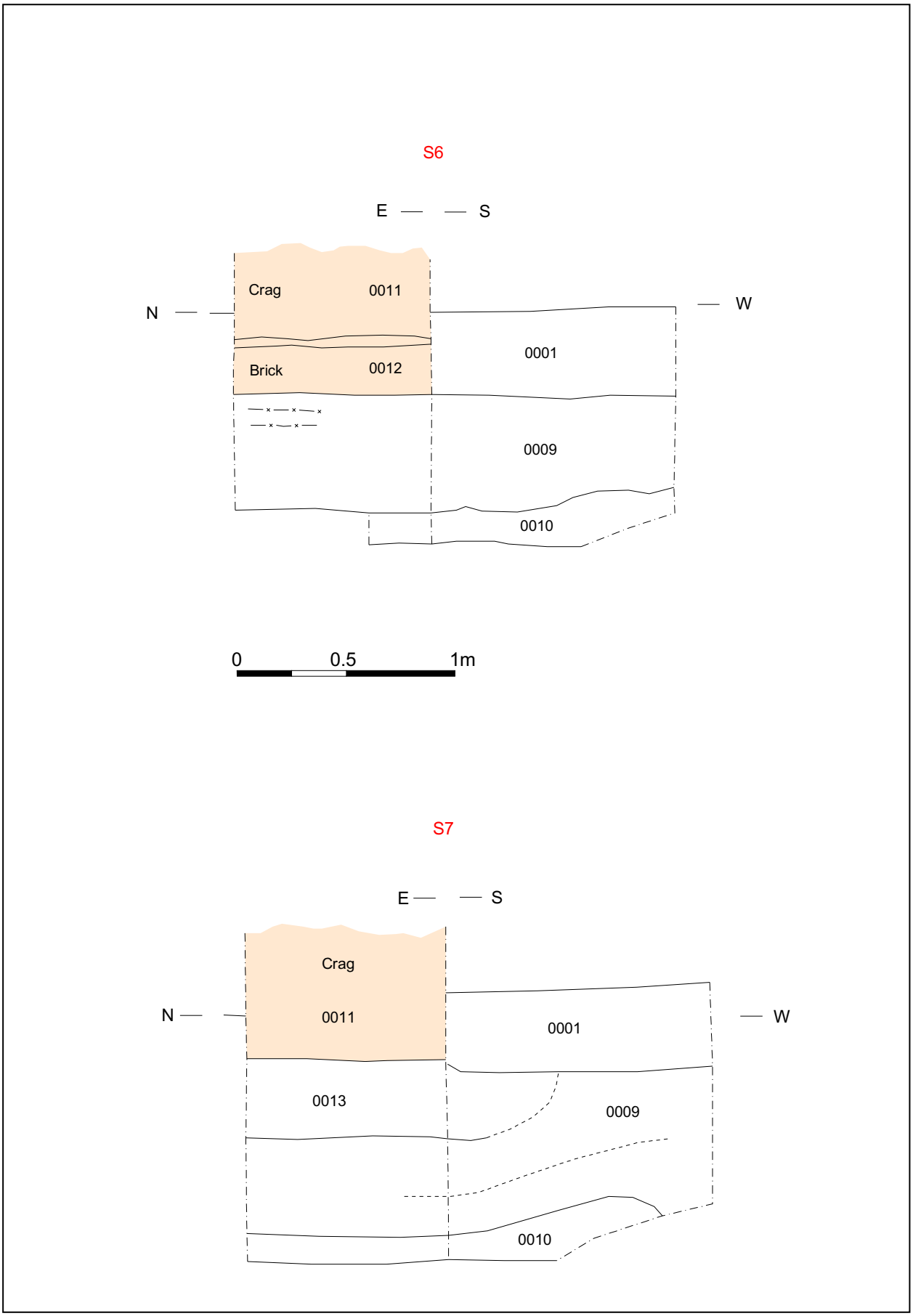


Figure 6. Buttress footings 4 (S6) and 5 (S7)

The stratigraphic sequence was broadly similar to those of Footings 2 and 3, but did differ in detail. At this juncture the topsoil was 0.4m deep with the underlying orange/yellow stony sand layer (0009) 0.5m thick with the same 0.15m thick intervening layer of brown silty sand (0010) between it and the underlying naturally occurring subsoil which, here, comprised compact yellow clay.

Buttress Footing 5: located against the crag limestone wall immediately north of the large concrete buttress, some 8m to the south of Footing 4, there was no evidence for underpinning at this point.

The crag wall (0011) continued down for only 0.2m below the existing ground surface with the crag blocks towards the base tending to be generally at the larger end of the range of those used in the overall wall (Fig. 6 S7 and Plate 54). The wall base was underlain by 0.8m of a stratified deposit which laterally almost certainly equates to the sandy layer (0009) recorded in Footings 2 - 4. The uppermost component of the stratified deposit comprised buff coloured clay with some mortar and chalk flecks. While having an edge effectively parallel with the wall, it did not have the character of a formal footing. The lower components of the stratified deposit became increasingly sandier with depth. At its base was the now familiar *c*.0.12 – 0.15m thick brown silty sand layer (0010) overlying the naturally occurring clay subsoil.

Buttress Footing 6: replacing an existing buttress at approximately 55m from the north end of the wall (Plate 22). The existing buttress did not extend away from the wall to any distance, had no substantial footing and was in need of repair: clearly it had limited worth and the decision was made to replace it.

At this juncture the crag walling (0011) continued down for c.0.45m below the existing ground surface (Fig. 7 S8 and Plate 55). The topsoil was *c*.0.36m, again overlying a thickish, 0.6m deposit of brown sandy silty clay (0009) with occasional chalk fleck and stones. Here the layer included mortar lumps close to the base of the wall. While the stratification was not as marked as in Footing 5, the deposit was definitely sandier towards its base.

Plate 55. E. precinct wall: buttress footing 6

Plate 56. E. precinct wall: buttress footing 7

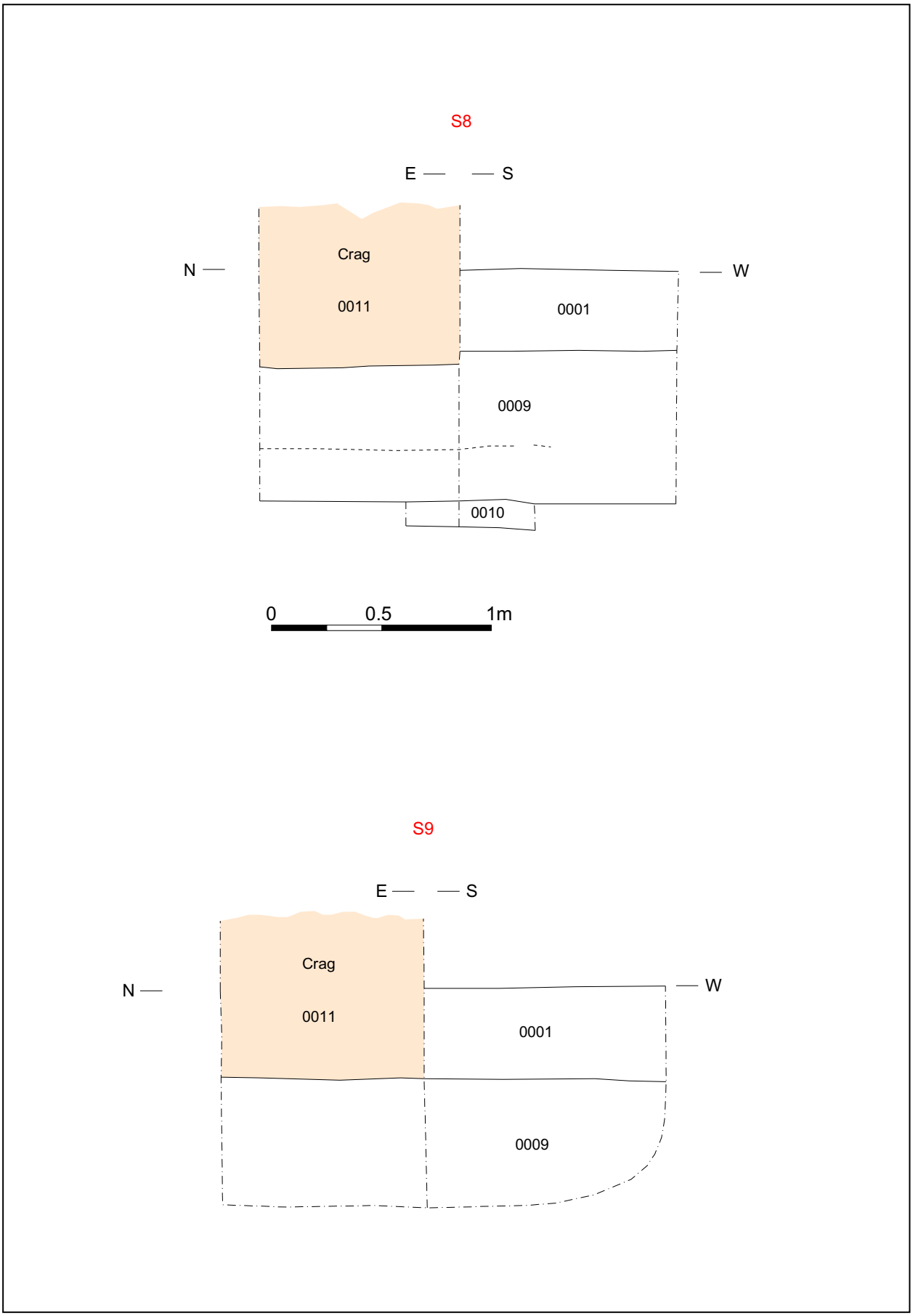


Figure 7. Buttress footings 6 (S8) and 7 (S9)

A sondage excavated in the south-east corner of the trench identified the underlying brown silty sand (0010), but did not encounter natural subsoil.

Buttress Footing 7: located approximately 63m from the northern end of the wall, Footing 7 was positioned in order to strengthen the southern end of the tallest section of the crag wall (0011).

Here, the crag wall base was encountered at 0.4m below the present ground surface (Fig. 7 S9 and Plate 56). The stratigraphic sequence comprised 0.4m of topsoil over a stiff brown clay layer (0009), with frequent chalk inclusions and occasional flints. This layer continued down beyond the base of the trench at a depth of 0.98m.

In summary, with the exception of the solid bonded below ground component of the wall, there was no evidence for a formally excavated footing in any of its phases. The wall was effectively based on topsoil or a made ground deposit which had previously been interpreted as the vestiges of the bank that would have flanked the internal edge of the town ditch (Pales Dyke), prior to its backfilling and incorporation into the friary precinct (Boulter 1999, 22).

5.5 Precinct wall (south-east corner blocked doorway)

The south wall of the precinct included a blocked doorway towards its south-east corner (Plates 57 and 58). As consolidation works at this juncture would involve some dismantling of the structure, a photographic record, both internal and external, was made prior to this work being undertaken.

The photographic record included shots of the wall fabric flanking the doorway. Plates 57 and 58 are the result of merging several shots in order to give an overall impression of the wall character.

The doorway itself had been roughly constructed from re-used tooled limestone dressings, presumably originally from the monastic buildings, set in a hard white lime mortar. Stylistically the door exhibited a simple two centred arch, the apex for which was missing both internally and externally.

Examination of the flanking wall fabric suggested that it was contemporary with the doorway. Internally, the wall face comprised predominantly (*c*.90%) randomly lain re-used limestone with occasional flint pebbles/cobbles and exotic pieces (Plate 57).

Externally, the wall facing was even rougher with frequent inclusions of septaria, particularly towards the base, along with re-used limestone, flint pebbles/cobbles and more exotic pieces (Plate 58).

Internally, the blocking fabric of the doorway comprised well coursed flint pebbles/cobbles (*c*.90%) set in a hardish, cream coloured lime mortar that was similar in character to an area of patching *c*.2m to the west of the doorway. The external doorway blocking fabric consisted predominantly of bricks (*c*.80%) with the remaining *c*.20% flint pebbles. The included bricks exhibited an eclectic mix of sizes and colours with some hard over-fired pieces. Clearly these represented a range of dates and were reused from a number of different sources.

It was not possible to closely date this section of wall, although it was certainly post-medieval, with the doorway blocking and contemporary patching likely to be *c*.early 20th century. However, the relatively poor quality of the workmanship suggests that it was not associated with the extensive fabric of the west and north precinct walls that have tentatively been attributed an 18th century date. In addition, it is also completely different both in style and quality to the main fabric of the south precinct wall with its characteristic brick bands and brick coping that is likely to be of 19th century date.

While the precinct wall does include some extensive stretches which represent a single phase of construction, there are a number of these more laterally restricted sections which represent more piecemeal patching, probably not undertaken by professional builders.

Plate 57. Precinct wall, SE corner: blocked doorway (internal)

Plate 58. Precinct wall, SE corner: blocked doorway (external)

5.6 Precinct wall (south-west corner consolidation)

As with the section of the south wall towards the south-east corner of the precinct, that to the south-west was also in need of significant consolidation and, as a result, was recorded in greater detail than the main south wall run.

An examination of the south-west corner of the precinct suggested that the fabric of the extensive 'one phase' west and north walls continued round the corner to form the first *c*.3.3m externally, 2.4m internally, of the south wall. The fabric was characterised by its close coursing, eclectic mix of clasts, prominent lift-lines and hard lime mortar matrix with frequent gravel inclusions (Plate 59). Surviving to a height of *c*.2m, the wall exhibited a vertical internal face with the external face tapering from its base, before verticalising approximately halfway up.

Beyond this fabric to the east was a *c*.10m stretch of wall which clearly had undergone several phases of repair, made necessary partly due to the fact that a section of it had leaned heavily towards the interior of the precinct. However, it did appear that the easternmost wall fabric described in Section 5.7 had, at one time, continued up to the fabric forming the south west corner of the precinct.

Internally, the junction was marked by an irregular joint with closely spaced bricks at its base, although the facing predominantly consisted of coursed rounded cobbles, with some exotic material, set in a hardish light cream coloured lime mortar (Plate 60). At this juncture, the facing was considered to be a later repair to the original fabric. Where exposed, the coursed corework included frequent fragments of 2 ¼ inch thick hard red bricks. Also associated with this fabric was a vertical arrangement of red bricks which may represent the lateral extent of one of the repairs (Plate 61).

At least two other repairs were noted, one filling a V-shaped breach in the original wall, while the other was effectively a capping and only seen in a limited area.

Internally, original facing, with its characteristic galetting (see Section 5.7), was recognised at approximately *c*.13m from the corner, although exposed corework, that may have been contemporary, continued westwards for a further *c*.3.8m.

Plate 59. W. precinct wall: SW. corner wall fabric, internal

Plate 60. S. precinct wall: W. end, fabric joint, internal

Plate 61. S. precinct wall: S. end, vertical brick element

Plate 62. S. precinct wall: W. end, detached facing

Plate 63. S. precinct wall: fabric junction, external

Plate 64. S. precinct wall: W. end, intact face, external

Externally, the situation was further complicated by the disintegration of the wall. The inward lean of the wall had not completely been followed by its associated facing which, for an area immediately east of the corner fabric, had become completely detached, but was still visible in a shallow excavated trench along the base of the wall (Plate 62). The loss of face accounts for the step back associated with the junction between the two wall phases (Plate 63). While the detached facing was considered to equate to the galetted facing described in Section 5.7 (Plates 78 and 79), the westernmost surviving area was somewhat different in character. At this juncture it consisted predominantly of closely spaced reused tooled limestone masonry blocks with only a hint of horizontal coursing (Plate 64).

5.7 Precinct wall (south wall consolidation)

Similarly to the precinct east wall, the south wall had been marked out in stints of 5m by the contractors in order to facilitate quantification of the required works. Again, these were used to provide parameters for a photographic survey of the internal wall face. Due to the lack of architectural variation for the majority of the wall only representative shots have been included in this report: the remainder have been deposited in the archive only.

Externally, the gap between the wall face and the vegetation meant that only representative shots of facing and discrete architectural features were taken.

The east end of the south wall as far as a marked dog-leg has already been described in Section 5.5, while western end of the wall has been described in more detail in Section 5.6. For descriptive purposes, the angle forming the dog-leg has been used as the starting point (0m) for measurements along the wall.

Four main phases of construction were recognised, although a number of piecemeal repairs were also present.

The first phase includes the wall up to the dog-leg and from that point for a distance of approximately 23m. Internally at this juncture, the facing fabric does exhibit coursing, but the use of closely spaced, variable sized, clasts had tended to break up the formality of the courses (Plate 65).

Plate 65. S. precinct wall: internal, E. end fabric with repair

Plate 66. S. precinct wall: external, E. end repaired face

The materials used comprised an eclectic mix of re-used tooled limestone blocks, septaria, bricks, flint cobbles and exotics, all set in a hard white light coloured mortar. Areas of internal repair were obvious as these tended to have been constructed with a facing comprising predominantly of more regularly sized and coursed rounded flint cobbles (Plate 65).

Externally, the facing was also relatively rough, poorly coursed and made up of a mix of materials. Repaired areas were again easily distinguishable, not just because of the contrast in character, but also due to the repaired face not being constructed flush with that of the earlier fabric (Plate 66).

The second main fabric recognised was the most extensive and distinctive, running for a distance of *c.*144m and therefore forming a large percentage of the entire south precinct wall.

Its junction with the fabric to the east was clear (Plates. 67 and 68), although the incorporated mortar matrix from both wall types was similar and it was difficult to discern a discrete interface. As a result, it remained unclear as to which fabric was the earlier, or even if, regardless of the obvious stylistic differences, that they were contemporary.

The wall exhibited a consistent height of approximately 1.5m throughout its length with a width of approximately 0.4m.

Internally, the presented face was characterised by alternating bands of coursed material, predominantly flints (three bands), and red brick (two or three bands) with a coping of moulded ceramic tiles (Plate 69). While the flints used were commonly rounded and pebble to cobble-sized, there were occasional exceptions, along with larger pieces and exotics which crossed the boundaries of more than one of the regular courses. Where only two brick bands were present, the basal flint element generally comprised of six to seven courses visible above ground, with the second, middle band, three courses and the top band four courses (Plate 69). However, for a *c.*40m stretch towards the eastern end, coinciding with length of wall exhibiting three brick bands, the lowermost flint component also comprised three courses.

Plate 67. S. precinct wall: internal, junction between fabrics

Plate 68. S. precinct wall: external, junction between fabrics

Plate 69. S. precinct wall: internal, example of intact face

Plate 70. S. precinct wall: external, example of intact face

Plate 71. S. precinct wall: external, large exotic clast

Plate 72. S. precinct wall: external, example of vertical brick element

Each brick band consisted of three courses that were generally lain with two stretchers for every header, with the bricks themselves comprising hard frogless reds measuring 2 ¼ x 4 ½ x 8 ¾ inches. The capping consisted to two courses of moulded red-coloured ceramic tiles forming a central ridge to shed water in both directions off the top of the wall.

Externally, the face exhibited some lateral variation, but essentially comprised predominantly of relatively well coursed rounded flint pebbles/cobbles of *c*.10cm diameter with randomly spaced bricks, reused limestone blocks and exotics (Plates 70). Occasionally, the exotic material included exceptionally large pieces (Plate 71). Vertical brick elements in brick were present at *c*.6m intervals (Plate 72): these were not visible internally. White bricks were also concentrated locally.

Where facing was missing it was possible to see the structure of the corework which exhibited clear coursing and, at that juncture, was constructed predominantly in brick with some flint pebbles, all set in a hard white lime mortar matrix (Plate 73).

Within this phase of walling there were two architectural features: an extant opening at *c*.67m (Plate 74) and a narrower blocked opening at *c*.35m (Plate 75), both measured from the dog-leg. The latter was marked by a vertical brick element on its eastern side that was not tied in with the adjacent wall and, therefore, part of the later blocking fabric. However, the remainder of the blocking fabric was not as formally constructed, although some attempt had been made to insert bricks on the line of the middle brick band. If this represented a genuine opening/gateway it was relatively narrow and did not have the contemporary brick jambs of the wider opening to the west.

As previously stated, this phase of wall continued for a distance of approximately 144m. However, this measurement relates to fabric seen internal to the precinct. The actual juncture between this and the next phase of wall to the west was actually more complicated. For the westernmost *c*.25m the wall was 0.3 – 0.4m higher, with the additional irregular topped fabric on the outer side of the wall. Internally, there was an angled mortar bedding plane along the top of the wall at approximately the same height as the tile coping to the east. A single course of coping tiles may once have continued along this bedding plane but have since fallen off or been deliberately robbed.

Plate 73. S. precinct wall: external, large exotic clast

Plate 74. S. precinct wall: internal, extant opening

Plate 75. S. precinct wall: internal, blocked opening

Plate 76. S. precinct wall: internal, wall fabric junction

Plate 77. S. precinct wall: external, wall fabric junction

Plate 78. S. precinct wall: external, example of facing

Close examination of the juncture between the two phases of wall indicated that in the internal face, coinciding with the additional height in the wall, there was also a vertical break in fabric between the ground level and the bottom of the two brick bands (Plate 76). The fabric to the west was similarly coursed with predominantly rounded flint pebbles, but was also characterised by galetting with angular flint flakes.

Externally, the point where the wall became higher was marked by a total vertical change in fabric (Plate 77). This suggested that internally, the brick banding and two uppermost bands of coursed facing, from the point where the wall becomes higher to their end *c*.25m to the west, have effectively been applied to an existing wall, possibly as a repair required due to deterioration of its face. Beyond the *c*.25m composite wall, the internal facing became consistent with that of the higher external component and can be considered to be part of the same phase.

The external face to the west of the junction was quite distinctive, but also laterally somewhat variable (Plates 78 and 79) with a main defining characteristic, the presence of very tightly inserting galetting of flint flakes filling the joints between the clasts. The face itself comprised predominantly of relatively uniformly sized, *c*.5 - 10cm diameter, coursed flint pebbles with randomly dispersed larger pieces of re-used tooled limestone blocks and more exotic material which cut across more than one flint course.

One blocked opening was recognised in this fabric (Plates 80 and 81). Initially this was considered to be doorway, but on closer examination, it was clear that the jambs, constructed from reused tooled limestone blocks, did not continue down to ground level and that the lowermost *c*.0.4m of fabric was continuous with the flanking walls. It is suggested that this opening was actually a stile rather than a gateway or doorway and would once, prior to its redundancy and blocking, have included a wooden superstructure. The blocking fabric facing, both internally and externally, comprised a roughly coursed mix of flint pebbles/cobbles, bricks, limestone blocks and exotics. Interesting, immediately to the east of the east jamb in the external face of the wall, reused medieval gargoyle or waterspout had been set into the wall at a height of *c*.1.3m above the existing ground surface (Plates 81 and 82).

The junction of this wall fabric with the phases to the west has already been described in Section 5.6.

Plate 79. S. precinct wall: external, example of facing

Plate 80. S. precinct wall: internal, blocked opening

Plate 81. S. precinct wall: external, blocked opening

Plate 82. S. precinct wall: external, detail of reused gargoyle

6. Archaeological interpretation

The earliest archaeological evidence was encountered during in the excavation for the footings for the north-east corner of the precinct wall and the new buttresses against the extant east wall. The presence and location of the pre-friary town ditch and associated bank within the precinct was already well documented, having shown up clearly in the first geophysical survey (RCHME 1994), with its edges seen in the later SCCAS/FPT evaluation (Boulter 1999, 17-18 and fig. 4) and a full section excavated by Wessex Archaeology in 2011 (Wessex Archaeology 2012, 16 -17 and 28).

The projected line of the ditch indicated that it exited the precinct close to its north-east corner, and it was no surprise when the footings were excavated to see the eastern edge of the ditch in the side of the trench. It is likely that the collapse of the precinct wall at this juncture was at least in part caused by the presence of this feature. While the full profile of the ditch was not exposed, it was clearly comparable in both size and character to the section excavated by Wessex Archaeology (Wessex Archaeology 2012, Plate 9). Layers seen below the extant east precinct wall in the buttress footing excavations almost certainly represent the vestiges of the internal bank that would have been constructed from the upcast spoil from the ditch. While much of this material was probably used to backfill the ditch when the land was granted to the Greyfriars order in the late 13th century, some clearly remained and was recorded overlying an earlier buried topsoil.

Examination of the extant precinct wall revealed seven distinct phases of construction along with a number of minor repairs. Precise dating of the phases is somewhat problematic, although the evidence does suggest that very little medieval fabric is present. The seven major constructional phases are summarized below along with an estimate of their date:

Medieval: Apart from the two adjacent west gateways, which are thought to be late 14th century or early 15th century in date (Boulter and Everett 2009, 32), the only other possibly medieval fabric is the 48m section of the east precinct wall characterised by the use of local crag limestone (internal face) and septaria (external face) as major components in their construction. While no datable architectural were features present,

there were no obviously later inclusions of brick or reused material that were evident in the later wall phases. This represented high quality work with the interior crag built face resembling ashlar, while the construction techniques used in the external, largely septaria, face would also have presented a uniform surface that could have been rendered or painted.

Post-medieval (*c.*18th century): The most extensive phase of precinct wall included the entire west wall, with the exception of the gateways, the entire north wall and a short section of the south wall. Previously examined by SCCAS in 2008, the fabric was found to include reused limestone mouldings of *c.*12th century date that were indistinguishable from those recorded in St. James Leper Chapel some 300m to the north-west (Boulter and Everett 2009, 31). As the leper chapel was still used as a place of worship until the end of the 17th century, it is unlikely that this material would have become available until after that time. In addition the presence of what appeared to be a double footing suggested that the standing wall had been built on the line of an earlier structure.

Post-medieval (18th – 19th century ?): The wall extending from the eastern end of the main south wall fabric (19th century) to the south-east corner of the precinct is characterised by the relatively poorly coursed facing with frequent use of septaria and re-used tooled limestone blocks.

Post-medieval (18th – 19th century ?): The wall bridging the gap between the main south wall fabric (19th century) and the *c.*18th century fabric forming the south-west corner of the precinct is characterised by galetting of flint flakes used in both its internal and external face.

Post-medieval (18th – 20th century ?): A *c.*7m section of the east wall was characterised by the extensive use of frogless red bricks in its external face, although the internal face was more like the adjoining 20th century fabric to the north. It is arguable whether this should be defined as a discrete phase, but the external brick element was sufficiently different for it to be included separately. Dating of this section is problematic. The bricks themselves could be as early as 18th century in date. However, as most of the individual pieces were broken, they could represent re-used material with a later construction date.

Post-medieval (19th century): The majority of the south wall is characterised by the use of brick: horizontal bands in the internal face and randomly placed in the external face along with formal vertical elements, with a coping of moulded bricks/tiles. Similar construction techniques and architectural style is evident in the standing buildings on the west side of the precinct and also in a number of other buildings in the wider area of Dunwich. These are thought to be broadly contemporary and are attributed to the Barne family, the main local landowners in 19th to mid 20th centuries.

Post-medieval (20th century): Represented by the stretch of wall running from the north-east corner of the precinct for some 25m to the south and a second stretch running for in excess of 30m from its junction with the medieval crag wall to the north. Characterised by the frequent use of rounded beach cobbles, particularly on its internal face, with vertical elements usually of limestone, but also brick and limestone crag, dating was based on the presence of well crafted graffiti. Two names (H. Perfitt and M. Fiske) were accompanied by the date 1924 which could represent a construction date for this phase of wall. There is an established firm of stonemasons in Diss which includes the name Perfitt. This seems to be more than a coincidence, as Perfitt is not an overly common name.

The east precinct wall to the south of the existing gateway down to the south-east corner was not examined, although previous work by SCCAS has ascertained that it was not a medieval survival.

7. Conclusion

While the scope of this project did not encompass the entire standing precinct wall, with the inclusion of the results from earlier investigations, a relatively complete overview of the structure has been presented.

The observations suggest that surviving medieval fabric is limited to the two western gateways and a *c.*48m stretch of internally limestone crag faced wall forming part of the east side of the precinct.

In addition, the limited excavations on the east side of the precinct have confirmed the location of the medieval town ditch (Pales Dyke) and indicated that the east precinct wall is constructed on the vestiges of the accompanying bank.

8. Archive deposition

Paper and photographic archive: SCCAS Bury St Edmunds
Digital archive: SCCAS R:\Environmental Protection\Conservation\Archaeology\ Archive\Dunwich\DUN 110
Digital photographic archive: SCCAS R:\Environmental Protection\Conservation\ Archaeology\Catalogues\Photos\ HPW 1-99, HPX 1-55, HQF 11-23 and HQG 1-99

9. Acknowledgements

The fieldwork was project managed and carried out by Stuart Boulter who was also the author of this report.

The report illustrations were created by Linzi Everett and Stuart Boulter.

Thanks are also extended to the on site contractors (Universal Stone) and the project architect (Tim Buxbaum).

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Suffolk County Council

The Archaeological Service

Economy, Skills and Environment
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Suffolk
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APPENDIX 1

Brief for Continuous Archaeological Recording

AT

Dunwich Greyfriars Monastery, Dunwich

PLANNING AUTHORITY:	N/A
PLANNING APPLICATION NUMBER:	N/A
SHER NO. FOR THIS PROJECT:	To be arranged
GRID REFERENCE:	TM 4780 7042
DEVELOPMENT PROPOSAL:	Consolidation of precinct wall, including excavation of new footings trenches in NE corner and underpinning along E side
AREA:	Small
THIS BRIEF ISSUED BY:	Jess Tipper Archaeological Officer Conservation Team Tel. : 01284 741225 E-mail: jess.tipper@suffolk.gov.uk
Date:	1 August 2012

Summary

1.1 English Heritage (EH) has advised that the proposed works should be conditional upon an agreed programme of archaeological investigation work taking place before development takes place in accordance with Brief and Specification issued by the Conservation Team of Suffolk County Council's Archaeological Service (SCCAS/CT).

1.2 The archaeological contractor must submit a copy of their Written Scheme of Investigation (WSI) or Method Statement, based upon this brief of minimum requirements, to the SCCAS/CT and EH for scrutiny.

1.3 The WSI should be approved before costs are agreed with the commissioning client, in line with Institute for Archaeologists' guidance. Failure to do so could result in additional and unanticipated costs.

1.4 The WSI will *provide the basis for measurable standards* and will be used to establish whether the requirements of the planning condition will be adequately met.

Archaeological Background

2.1 Grey Friars Monastery was founded during the late 13th century, on the western edge of the medieval town. The site is recorded in the Suffolk Historic Environment Record (HER no. DUN 003) and statutorily protected as a designated heritage asset (Scheduled Monument No. DS 16037). There is high potential for encountering below-ground heritage assets of archaeological importance, principally medieval and earlier occupation remains, at this location.

Planning Background

3.1 The below-ground works will cause ground disturbance that has potential to damage any archaeological deposit that exists.

3.2 In accordance with paragraph 141 of the National Planning Policy Framework, a scheme of archaeological investigation is required to record and advance understanding of the significance of any heritage assets (that might be present at this location) before they are damaged or destroyed.

Requirement for Archaeological Investigation

4.1 Assessment of the available archaeological evidence indicates that the area affected by the development can be adequately recorded by continuous archaeological monitoring and recording during all groundworks.

4.2 Any ground works, and also the upcast soil, are to be closely monitored during and after excavation by the archaeological contractor in order to ensure no damage occurs any heritage assets. Adequate time is to be allowed for archaeological recording of archaeological deposits during excavation, and of soil sections following excavation.

4.3 The archaeological investigation should provide a record of archaeological deposits which are damaged or removed by any development [including services and landscaping] permitted by the current planning consent. Opportunity must be given to the archaeological contractor to hand excavate and record any archaeological features which appear during earth moving operations.

4.4 The method and form of development should be also monitored to ensure that it conforms to previously agreed locations and techniques upon which this brief is based.

4.5 If unexpected remains are encountered SCCAS/CT must be informed immediately. Amendments to this brief may be required to ensure adequate provision for archaeological recording.

Arrangements for Archaeological Investigation

5.1 All arrangements for the excavation of the site, the timing of the work and access to the site, are to be defined and negotiated by the archaeological contractor with the commissioning body.

5.2 The project manager must also carry out a risk assessment and ensure that all potential risks are minimised, before commencing the fieldwork. The responsibility for identifying any constraints on fieldwork (e.g. designated status, public utilities or other services, tree preservation orders, SSSIs, wildlife sites and ecological considerations rests with the commissioning body and its archaeological contractor.

Reporting and Archival Requirements

6.1 The project manager must consult the Suffolk HER Officer to obtain an event number for the work. This number will be unique for each project or site and must be clearly marked on any documentation relating to the work.

6.2 An archive of all records and finds is to be prepared and must be adequate to perform the function of a final archive for deposition in the Archaeological Service's Store or in a suitable museum in Suffolk.

6.3 It is expected that the landowner will deposit the full site archive, and transfer title to, the Archaeological Service or the designated Suffolk museum, and this should be agreed before the fieldwork commences. The intended depository should be stated in the WSI, for approval.

6.4 The project manager should consult the intended archive depository before the archive is prepared regarding the specific requirements for the archive deposition and curation (including the digital archive), and regarding any specific cost implications of deposition.

6.5 The WSI should state proposals for the deposition of the digital archive relating to this project with the Archaeology Data Service, or similar digital archive repository, and allowance should be made for costs incurred to ensure proper deposition (http://ads.ahds.ac.uk/project/policy.html).

6.6 A report on the fieldwork and archive, consistent with the principles of *MAP2*, must be provided. Its conclusions must include a clear statement of the archaeological value of the results, and their significance in the context of the Regional Research Framework (*East Anglian Archaeology*, Occasional Papers 3 & 8, 1997 and 2000).

6.7 A digital copy of the report, clearly marked DRAFT, must be presented to SCCAS/CT and EH for approval within six months of the completion of fieldwork unless other arrangements are negotiated. Following acceptance, a single hard copy and also a .pdf digital copy should be presented to the Suffolk HER and EH.

6.8 Where appropriate, a digital vector plan should be included with the report, which must be compatible with MapInfo GIS software, for integration in the Suffolk HER.

6.9 At the start of work (immediately before fieldwork commences) an OASIS online record http://ads.ahds.ac.uk/project/oasis/ must be initiated and key fields completed on Details, Location and Creators forms. When the project is completed, all parts of the OASIS online form must be completed and a copy must be included in the final report and also with the site archive. A .pdf version of the entire report should be uploaded where positive results have been obtained.

6.10 Where positive results are drawn from a project, a summary report must be prepared, in the established format, suitable for inclusion in the annual 'Archaeology in Suffolk' section of the *Proceedings of the Suffolk Institute of Archaeology and History*. It should be included in the project report, or submitted to SCCAS/CT, by the end of the calendar year in which the work takes place, whichever is the sooner.

6.11 When no significant features or finds are found, a short report will be sufficient with the following information: grid ref., parish, address, planning application number and type of development, date(s) of visit(s), methodology, plan showing areas observed in relation to ground disturbance/proposed development, depth of ground disturbance in each area, depth of topsoil and its profile over natural in each area, observations as to land use history (truncation etc), recorder and organisation, date of report.

6.12 This brief remains valid for 12 months. If work is not carried out in full within that time this document will lapse; the brief may need to be revised and re-issued to take account of new discoveries, changes in policy and techniques.

Standards and Guidance

Detailed standards, information and advice to supplement this brief are to be found in *Standards for Field Archaeology in the East of England*, East Anglian Archaeology Occasional Papers 14, 2003.

The Institute for Archaeologists' *Standard and Guidance for an archaeological watching brief* (revised 2001) should be used for additional guidance in the execution of the project and in drawing up the report.

Notes

The Institute for Archaeologists maintains a list of registered archaeological contractors (www.archaeologists.net or 0118 378 6446). There are a number of archaeological contractors that regularly undertake work in the County and SCCAS will provide advice on request. SCCAS/CT does not give advice on the costs of archaeological projects.

Appendix 2. Context List

OP	Context	Description
0001	0001	Topsoil, brown sandy loam.
0002	0002	Extant N. precinct wall in S1.
0003	0003	Possible footing material associated with 0002 in S1. Comprised compacted yellow sand over a darker brown clayey sand. Some lime mortar immediately under wall and at base.
0004	0014	Yellow well sorted sand in S1 below 0003. Must represent fill of ditch 'town ditch' 0014.
0005	0005	Extant E. precinct wall in S2 – S5.
0006	0007	Block of flint bonded flint and lime mortar immediately below 0005 in S2. Within cut 0007.
0007	0007	Narrow cut on similar alignment as wall 0005 in vicinity of S2. Not thought to be structural.
0008	0007	Sandy yellow/brown clay fill of 0007.
0009	0009	Overall number allocated to fill layers seen in buttress footing excavations immediately below standing wall. Comprises variously of orange stony sand through to stiff yellow clay. Interpreted as vestiges of bank external to 'town ditch'. Overlies buried soil layer 0010.
0010	0010	Brown silty sand layer seen overlying natural subsoil in buttress footing excavations 2 – 6 underlying 0009. Interpreted as pre-ditch topsoil.
0011	0011	Crag stone walling seen in buttress footing excavations 4 – 7.
0012	0012	Red brick underpinning seen in buttress footing excavation 4. Includes one flint pebble course immediately below the overlying wall fabric 0011.
0013	0013	Buff sandy clay layer with frequent inclusions of lime mortar. Seen in buttress footing excavations 5 and 6. Unclear if this was part of 0009 or discrete feature associated with the overlying wall.
0014	0014	Cut of 'town ditch'
0015	0014	Upper component of three main ditch fills. Relatively homogenous dark brown clayey silty sand.
0016	0014	Middle component of three main ditch fills. Comprised relatively homogenous yellow sand.
0017	0014	Basal component of ditch fill. Brown silty sand with some heat altered material locally.

Appendix 3. Addendum: Photographic record of a fallen arch in the refectory

Photographs 2008

Photographs 2012

Appendix 4. Oasis Data Form

OASIS ID: suffolkc1-135244

Project details

Project name	DUN 110, Dunwich Greyfriars, Precinct Wall Monitoring
Short description of the project	Archaeological monitoring of works associated with the rebuilding and consolidation of the extant precinct wall.
Project dates	Start: 06-08-2012 End: 30-09-2012
Previous/future work	Yes / Not known
Any associated project reference codes	DUN 092 - HER event no.
Type of project	Recording project
Site status	Scheduled Monument (SM)
Current Land use	Other 8 - Land dedicated to the display of a monument
Monument type	MONASTIC COMPLEX Medieval
Significant Finds	WALL Medieval
Significant Finds	WALL Post Medieval
Investigation type	"Field observation","Recorded Observation"
Prompt	Scheduled Monument Consent

Project location

Country	England
Site location	SUFFOLK SUFFOLK COASTAL DUNWICH DUN 110
Study area	3.00 Hectares
Site coordinates	TM 4777 7036 52 1 52 16 29 N 001 37 56 E Point
Height OD / Depth	Min: 20.00m Max: 20.00m

Project creators

Name of Organisation	Suffolk County Council Archaeological Service
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Jess Tipper
Project director/manager	Stuart Boulter
Project supervisor	Stuart Boulter
Type of sponsor/funding body	Suffolk County Council ESE
Name of sponsor/funding body	Suffolk County Council (ESE)

Project archives

Physical Archive Exists?	No

Digital Archive recipient	Suffolk County Council Archaeological Service
Digital Archive ID	DUN 110
Digital Contents	"Stratigraphic"
Digital Media available	"Images raster / digital photography","Text"
Paper Archive recipient	Suffolk County Council Archaeological Service
Paper Archive ID	DUN 110
Paper Contents	"Stratigraphic"
Paper Media available	"Correspondence","Notebook - Excavation',' Research',' General Notes","Photograph","Plan","Report","Section","Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Dunwich Greyfriars, Dunwich, DUN 110, Archaeological Monitoring Report
Author(s)/Editor(s)	Boulter, S. P.
Other bibliographic details	SCCAS Rpt. No. 2012/123
Date	2012
Issuer or publisher	Suffolk County Council
Place of issue or publication	Ipswich

Description	Unbound A4 sheets
Entered by	Stuart Boulter (stuart.boulter@suffolk.gov.uk)
Entered on	8 October 2012

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