

# Townhouse, Irvine, North Ayrshire: (Stage 2) Excavation Works

## Data Structure Report



by Claire Williamson

with contributions from Dr Louise Turner

issued 26<sup>th</sup> November 2014

on behalf of North Ayrshire Council

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Signed *Claire Williamson* ..... Date ...26<sup>th</sup> November 2014..

In keeping with the procedure of Rathmell Archaeology Limited this document and its findings have been reviewed and agreed by an appropriate colleague:

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## Introduction

1. This Data Structure Report has been prepared for North Ayrshire Council in respect to the construction of the new Leisure Centre in Irvine, North Ayrshire (Planning Ref: 13/00046/PPM). The archaeological works were designed to mitigate the impact on the archaeological remains within the development area.
2. The West of Scotland Archaeology Service (WoSAS) who advise North Ayrshire Council on archaeological matters provided guidance on the structure of archaeological works required. North Ayrshire Council required a programme of archaeological works to be undertaken as a requirement of the issued planning consent. Rathmell Archaeology Limited was appointed by LA Architects Ltd on behalf of North Ayrshire Council to undertake the development and implementation of archaeological mitigation works.
3. A Written Scheme of Investigation (Rees & Turner 2013) provided the detail of the works (excavation, post-excavation analyses and publication) for the mitigation pertaining to ground breaking and hence the direct physical impact on buried sediments.
4. This Data Structure Report provides an overview of all excavation works undertaken as part of the Stage 2 works in response to the development work. Two Data Structure Reports have already been issued covering the previous Stage 1a and 1b works (Turner 2012, and Williamson & Swan 2013 respectively).
5. All works complied with the West of Scotland Archaeology Service Standard Conditions, the Institute for Archaeologists' Standards and Policy Statements and Code of Conduct and Historic Scotland Policy Statements.

## Archaeological and Historical Background

6. The development area lies in the core of the medieval burgh of Irvine, in close proximity to the locations of several key elements of the municipal life of the burgh from its origin. These include the earliest medieval civil foci of the burgh: the Tolbooth and Market Cross, both of which are now lost. Some later burgh structures are also present, such as the Customs House and the Market House, both inserted into the street frontage of the High Street.
7. The 1860s saw a radical change to the area with the replacement of these medieval to 18<sup>th</sup> century structures with new municipal structures, including the Townhouse and the Police Station. While transforming the area, and clearing the thoroughfares, the continuing role of the burgh council ensured that the same civic functions continued to be delivered from the same portion of the High Street.
8. The late 20<sup>th</sup> century, with the arrival of the Irvine Development Corporation and the end of the burgh council in local government reorganisation, saw the function of some structures reduced (such as the Townhouse) and the clearing of large portions of the site to provide car parking for those functions that continued.

## Previous archaeological investigations

9. Prior to the current development proposal there had been no archaeological investigations within the study area, other than a desk-based assessment undertaken as part of the Scottish Burgh Survey (Simpson & Stevenson 1980) and its subsequent reassessment (Gallagher, 1993).
10. This dearth of existing information was addressed prior to the preparation of this document through a series of archaeological tasks, agreed through early consultation with WoSAS, and delivered in order to inform the determination process. These commenced with the following:
  - ❖ Desk-based Assessment (Sneddon 2010), which identified three notable sites; and;
  - ❖ Watching Brief on early Site Investigation works (Rennie 2011).

11. Following the subsequent appointment of Rathmell Archaeology Ltd to develop a Written Scheme of Investigation, a comprehensive desk-based assessment was undertaken (see Rees & Turner 2013 for detailed information). Three further stages of on-site works were also undertaken to inform the understanding of the historic environment:
- ❖ Watching Brief on later Site Investigation works;
  - ❖ Historic Building Recording on the Police Station and Industrial School;
  - ❖ Intrusive archaeological evaluation over the police compound car park (carried out over two phases in 2012 and 2013); and
  - ❖ Watching Brief on demolition works.
12. The two watching briefs and the intrusive evaluation were of particular interest in considering the ongoing potential of the site as they yielded information that partially informed on the likely nature and extent of the archaeological resource across the development area. These are summarised in greater detail below.

#### *Site Investigation works in 2011*

13. The Site Investigation works undertaken in 2011 were carried out by BAM Ritchies (Bradley 2011) and comprised six boreholes, two windowless samples and five test pits; archaeological monitoring was undertaken by GUARD Archaeology Ltd. The details of the findings from these works are summarised in Table 1 below (note – these are selective extracts from two specialist reports) while the locations are shown in Figure 1a.
14. Overall, BAM Ritchies have most commonly characterised the made ground as a medium dense greyish brown fine to medium coarse sand and ash with gravel sized angular fragments. Universally this overlies sand subsoil, although the recorded depth varies across the site. The archaeological monitoring was limited to four test-pits (when referring to Rennie 2011 note that different test pit numbers are used).

*Table 1: Summary of Site Investigation works from 2011*

| <b>SI Id</b> | <b>Depth of Made Ground</b> | <b>Notes on description (from BAM Ritchies)</b>  | <b>Archaeology Notes (from GUARD)</b>                               |
|--------------|-----------------------------|--|---|
| BH01         | 2.00m                       | Sandstone masonry, burnt shale, brick, coal and glass.   |   |
| BH02         | 1.50m                       | Cobble sized sub rounded sandstone and occasional burnt shale, brick, concrete and metal.  |   |
| BH03         | 2.10m                       | Cobble sized sub rounded sandstone and occasional burnt shale, brick, concrete and metal.  |   |
| BH04         | 0.95m                       | Cobble sized angular sandstone masonry and occasional burnt shale, brick and glass.  |   |
| BH05         | 1.05m                       | Black gravelly sand and ash  |   |
| BH06         | 0.50m                       | Cobble sized sub rounded sandstone and occasional burnt shale, brick concrete and metal.   |   |
| WS01         | 0.80m                       | Fine to coarse gravel of concrete, sandstone and brick with occasional sub angular cobbles of concrete. Sand is fine to coarse with inclusions of ash. |   |
| WS02         | 0.70m                       | Occasional angular cobbles of sandstone. Gravel is angular to sub rounded fine to coarse of sandstone, concrete and brick.                             |   |
| TP01         | 1.00m                       | Gravel to cobble sized brick and occasional concrete glass and metal.  | Tarmac over 1.10m of rubble with animal bone, over 0.7m depth broad |



|      |       |   |  |
|------|-------|---|--|
|      |       |   | interface onto sand subsoil at 1.90m   |
| TP02 | 1.00m | Gravel to cobble sized brick and occasional concrete glass and metal. |  |
| TP03 | 1.80m | Occasional cobble sized brick, glass and metal.                       | Tarmac then 0.90m depth of rubble over 0.60m depth broad interface onto sand subsoil at 1.80m  |
| TP04 | 1.00m | Gravel to cobble sized brick and occasional concrete glass and metal. | Topsoil for 0.24m, overlying 0.48m depth of rubble incorporating sandstone fragments over 0.41m depth broad interface onto sand subsoil at 1.00m |
| TP05 | 0.90m | Gravel to cobble sized brick and occasional concrete glass and metal. | Topsoil for 0.28m, over then 0.62m of rubble incorporating sandstone fragments over 0.80m depth broad interface onto sand subsoil at 1.40m       |

### *Site Investigation works in 2012*

15. Further monitoring of site investigation works was carried out by Rathmell Archaeology Ltd in March 2012. This comprised the monitoring of three test-pits (HP1-3), hand-excavated in immediate proximity to the foundations of the Townhouse. In addition, three window-sampler boreholes (TB1-3) and three boreholes (BH1-3) were sunk at various locations across the site (see Figure 1b). These works were performed by Aitken Laboratories Limited, on behalf of Johnson, Poole & Bloomer. The works were generally monitored until natural sterile subsoil was reached, though on occasion the presence of services led to the test pit or borehole being abandoned.
16. The three test-pits yielded deposits associated with the Townhouse, or post-dating its construction, while the boreholes varied in their composition. Most revealed made ground overlying natural subsoil at a depth between 1.8m and 2m, but some interesting observations could be made. Firstly, there was evidence of a charcoal rich layer which may, it is suggested, date to the 18<sup>th</sup> century, when the last major fire occurred within the town. Some revealed in addition traces of a potential old ground surface (TP02, TP03, BH03) which may have the potential to contain medieval features.

### *Archaeological Evaluation in 2012*

17. These works, which were carried out by Rathmell Archaeology Ltd in July 2012, comprised the digging of four trenches within the compound of the former police station (Figure 1b; Table 2). They predominantly exposed made ground but some structural elements were revealed, probably dating to the 19<sup>th</sup> and 20<sup>th</sup> centuries. However some redeposited medieval pottery was recovered from the disturbed ground in Trench 1, with this same trench also revealing some additional features that may predate the 19<sup>th</sup> century.
18. Trench 1 to the rear of the Police Station (the northwestern trench) exhibited a heavily disturbed stratigraphy (005), with various services present such as a lead water pipe, several waste water drains that fed into manholes within the trench. Only two features of note were uncovered, the lower courses and foundation of a wall (013) and a probable culvert (012). The remains of wall (013) are most likely 19<sup>th</sup> century as they were on the same alignment as a wall still present on site. The possible culvert (012) however consisted of two flat mortared sandstone slabs. A void was evident under the slabs and a probe was used to gauge the depth (200mm) which also established that a clean yellow brown sand was present in the base of the void. Two small sherds of medieval pottery were recovered from (005).
19. Trench 2a and 2b (the S trench) were excavated through made ground. This part of the yard appeared raised as it sloped up from the entrance and also when compared to the street to the immediate east of the yard. The made ground in the trench consisted of

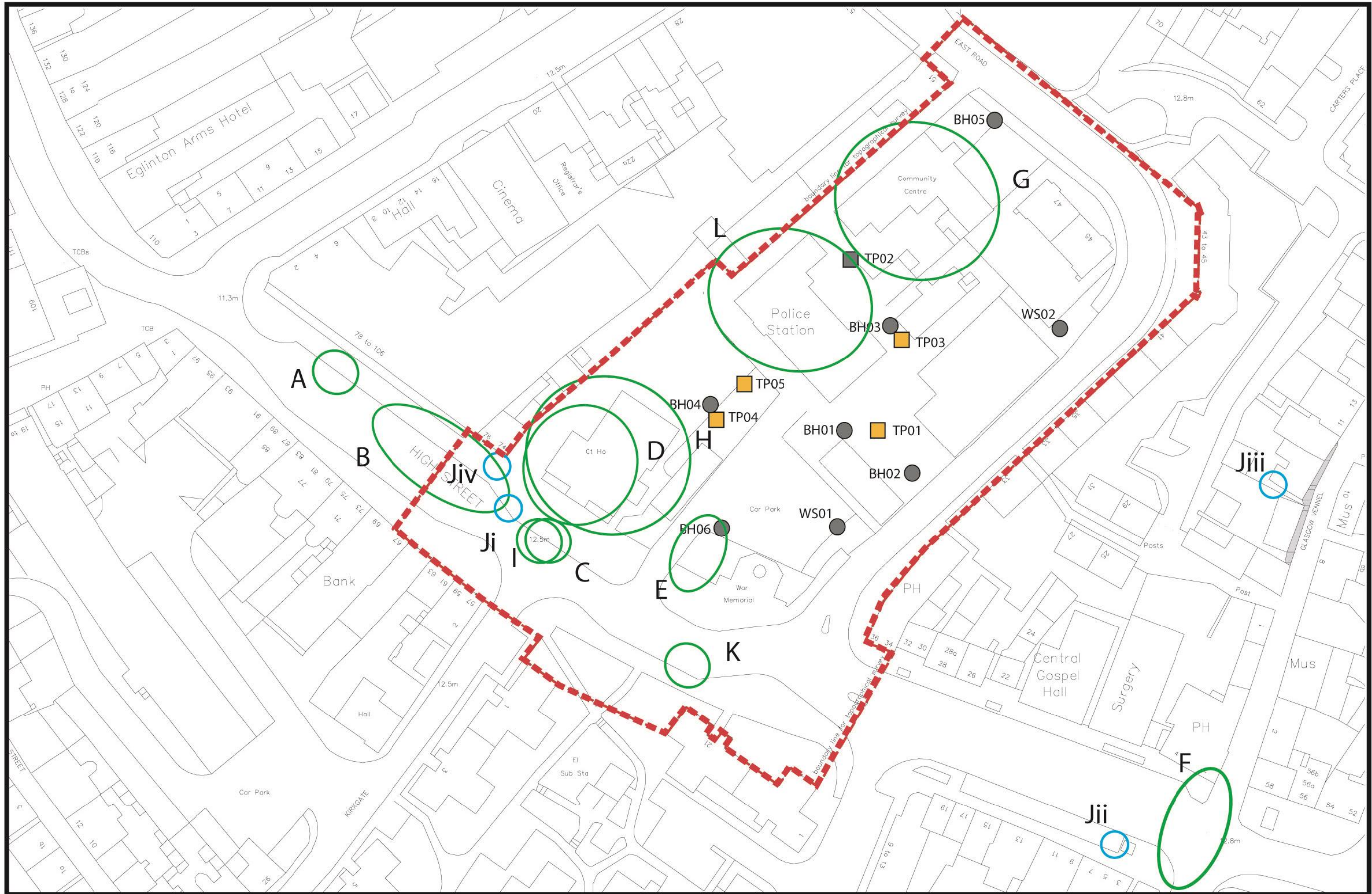


Figure 1a: 2011 SI information points (BH – Borehole, WS – Window Sample, TP – Test Pit (where orange Archaeologically Monitored by GUARD))

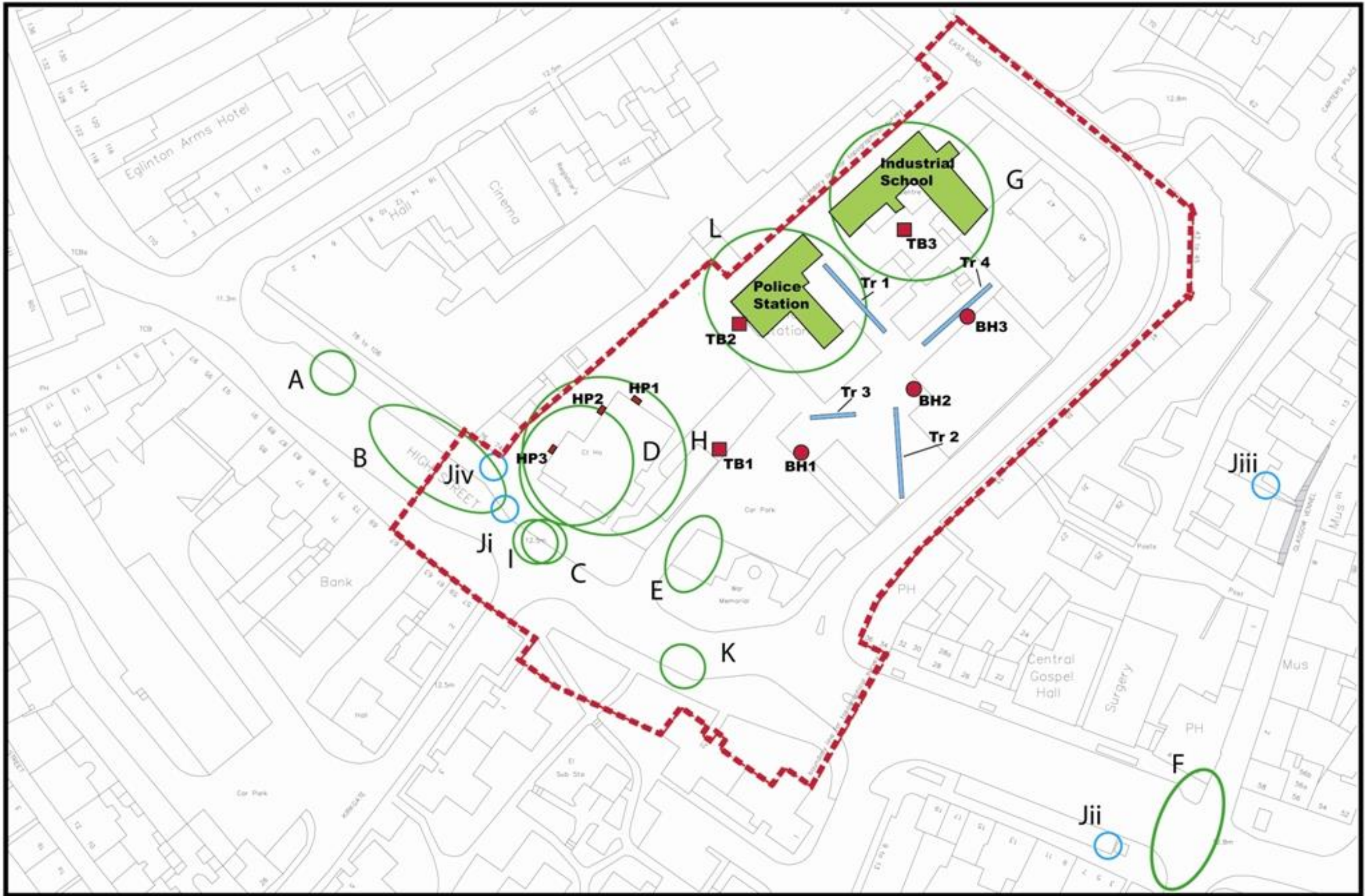


Figure 1b: Archaeological works carried out by Rathmell Archaeology until 2012 (Red – 2012 Site Investigation, Blue – 2012 Evaluation trenches and Green - 2012 Historic Building Recording)

(018) and (019), which was demolition detritus within sand. A modern paved surface (017) was exposed in the base of the trench. It consisted of yellow ceramic building material and measured 2.4m by 1.1m. Where it met the eastern side of the trench three courses of red brick was evident and may indicate the position of a wall.

20. Trench 3 (the western trench) was also excavated through made ground (018); within this trench two areas of the modern paved surfaces (023) and (024) were uncovered. These surfaces were the same as (017); (023) measured 2.5m by 2m, while (024) was 1.5m by 0.55m. The northern corner of (023) was made up of rough cobbling (021) measuring 1.3m and up to 0.62m wide which appear to have been incorporated into the surface.
21. Trench 4 (the northeastern trench) unlike the other trenches, was covered with concrete (026) rather than tarmac (001). Under the concrete (026) was a disturbed modern strata (005) which in turn sat over a mid-brown sandy deposit with small chunks of coal inclusions that contained eleven sherds of medieval pottery. Both (005) and (026) were truncated in the northeast end of the trench by a modern rubbish pit (027).
22. Although this evaluation phase examined just a limited sample of the development area, it was possible to demonstrate the survival of islands of archaeology within some portions of the site (in particular, Trenches 1 and 4). While in Trenches 2 and 3, only made ground deposits were visible along with modern paved surfaces; this may have meant that archaeology had survived under these made ground deposits or, alternatively, that the surface may have been scalped and all traces of earlier occupation entirely removed.
23. It is not surprising given the character of the site that Trenches 1 to 3 predominantly exposed made ground with some structural elements that most probably date to the 19<sup>th</sup> and 20<sup>th</sup> centuries. However even within this material medieval pottery was recovered (from the disturbed ground in Trench 1). Further, at the base of the trenches some features survived that had the potential to predate the 19<sup>th</sup> century, such as the possible culvert (012), again located within Trench 1.
24. Trench 4 was notable for apparently exposing an *in situ* soil horizon beneath the made ground within this trench which contained medieval pottery. This may link to the sediment described as a 'broad interface' onto the subsoil described in earlier 2011 SI works by monitoring archaeologists. While this layer had been disrupted by modern activity in places, the survival of the horizon suggested the sound potential for significant archaeological features in this area.
25. Overall, all the trenches predominantly fell within Zone 4 (though some of the southern trenches extend into Zone 3) which was the zone assessed to have the best potential for the survival of pre-19<sup>th</sup> century significant archaeological features. The recovery of medieval pottery and the identification of a soil horizon within this area suggested that there were archaeological features surviving in this area.
26. Of interest, made ground was more evident in the southern trenches (Trenches 2 & 3) with a clear 1m of material overlying the 19<sup>th</sup> and 20<sup>th</sup> century surfaces. The survival of these surfaces, not noted by earlier 2011 monitored SI works, in apparently good condition suggested that the mid-20<sup>th</sup> century demolition of structures from this area (Zone 3) may not have been as destructive as suspected. The demolition process had clearly left the ground floor surface of structures predominantly *in situ* in this area, buried by demolition material. This raised the potential that this surface may cap more important strata similar to that being directly exposed in the Zone 4 trenches.
27. The scale of modern disruption evidenced to date further suggested that we may be unlikely to expose extensive medieval or post-medieval remains. However, there will clearly be at least islands of survival of strata from these critical time periods.

Table 2: Summary of Findings, Archaeological Evaluation 2012

| Trench | Size          | Depth | Strata                    | Modern Features | Significant Features | Artefacts        |
|--------|---------------|-------|---------------------------|-----------------|----------------------|------------------|
| 1      | 21m by 2m     | 1m    | Disturbed Ground          | Services        | Culvert              | Medieval Pottery |
| 2a     | 15.2m by 2m   | 1m    | Made Ground               | Paved Surface   |                      |                  |
| 2b     | 5.4m by 2m    | 1m    | Made Ground               |                 |                      |                  |
| 3      | 10.6m by 2m   | 1m    | Made Ground               | Paved Surfaces  |                      |                  |
| 4      | 10.4m by 2.5m | 1m    | Possible medieval deposit | Rubbish Pit     |                      | Medieval Pottery |

### Archaeological Evaluation in 2013

28. Further evaluation works were carried out by Rathmell Archaeology Ltd between the 29<sup>th</sup> of September and the 25<sup>th</sup> October 2013. These comprised the excavation of some sixteen additional trenches (Figure 2; Table 3) excavated during the post-demolition phase across the available portion of the development area, using a tracked 360° mechanical excavator with a toothless 2m ditching bucket.
29. Trench 5 was excavated through made ground (5020) to a depth of 900mm. The features encountered within this trench comprised a modern linear feature, (5021) which was 1m wide and was orientated in an E-W direction across the width of the trench. There was also an N-S orientated line of small pits or post-holes [5001], [5003], [5005] and [5011]. All the features were cut into a medieval/post-medieval soil horizon (5017) which contained many medieval/post-medieval ceramic sherds.
30. Trench 6 was excavated through made ground (6001) to a depth of c.1m. The trench had been disturbed in several places by the construction of modern features, all of which cut through the underlying medieval/ post-medieval soil horizon (6003).
31. Trench 7 was excavated through made ground (7013) and partly through an underlying medieval/post-medieval soil horizon (7012) to a depth of 900mm. Where it was removed, the medieval/post-medieval soil horizon in turn overlay the natural sand subsoil (7011). Two linear features, [7001] and [7003], cut into this medieval deposit: both were orientated in an E-W direction and travelled through unexcavated ground to the west. Both also had rounded terminals at their east ends and were 1m wide respectively. Two further linear features, [7005] and [7007] were identified cut into the underlying natural sand subsoil (7011). Both linear features were 0.5m wide, and orientated in a NW-SE direction across the excavated area.
32. Trench 8 was excavated through made ground (8001) which had a depth of 1.2m. Underlying the made up ground was a medieval/post-medieval soil horizon (8002). Small test pits were excavated through (8002) to a depth of 500mm; these showed it to contain sherds of medieval/post-medieval ceramics.
33. Trench 9 was excavated through a modern tarmac surface and redeposited topsoil layer (9001) to a depth of 1.2m. Directly underlying these was medieval/post-medieval soil horizon (9002); excavated to a depth of 350mm via a test slot in the centre of the trench, this deposit was shown to sit directly on top of the natural sand subsoil (9003).
34. Trench 10 was excavated through made ground (10001) to a depth of 850mm. Underlying the made ground was a medieval/post-medieval soil horizon (10002). Small test pits revealed that (10002) had a depth of 300mm and directly overlay the natural sand subsoil (10003). A number of features were identified, orientated in a NW-SE

direction cut into the underlying medieval/post-medieval soil horizon. These features included three linear features, [10009], [10006] and [10012], all of which had a width of 1m.

35. Trench 11 was excavated through made ground (11001) to a depth of 1m. Underlying this made ground was a medieval/post-medieval soil horizon (11002) which was excavated by small test pits to a depth of 800mm. A test slot at the far north of the trench revealed that a linear feature [11004], with a width of 0.7m, had been cut into the natural sand subsoil (11003). It was orientated in a NW-SE direction within the excavated area.
36. Trench 12 was excavated through made ground (12001) to a depth of 1.2m. Underlying this made ground was medieval/post-medieval soil horizon (12010) which was excavated to a depth of 200mm in areas and which contained several sherds of medieval/post-medieval ceramic. Underlying the soil horizon was the natural sand subsoil (12014), a mid-yellow granular sand. A linear cobbled feature (12013), which measured 2.5m wide and was orientated roughly N-S, was found to have been constructed directly on top of the natural subsoil.
37. Trench 13 was excavated through made ground (13001) to a depth of 1.4m. A number of features were identified which were cut into the underlying natural sand subsoil (13005). These features included evidence of structures in the form of foundation cuts, [13031] and [13033], which may have formed part of a NE-SW orientated, rectangular structure. Other possible structural elements included four postholes, [13036], [13018], [13004] and [13006], and the remains of a stone-lined well (039) which measured 2.1m by 1.9m. A number of additional features identified within the trench may have been associated with the possible structure. These included a number of rectangular- through to circular-shaped cuts, [13016], [13026], [13014], [13007], and [13012] which may have been pits or could possibly have been structural. A number of linear features were also identified throughout the trench. The majority of these, [13022], [13024], [13028], [13034] and [13020], were orientated in a NE-SW direction with widths ranging between 0.4 to 1.6m. One other larger linear feature, [13038], with a width of 2.3m and a N-S orientation, was also located within the trench.
38. Trench 14 was excavated through topsoil (14001) to a depth of 400mm. The topsoil layer directly overlay the natural sand subsoil (14002) which had numerous features cut into it. These included a number of postholes, [14004], [14026], [14012], [14014] and [14022], and a sub-oval shaped pit [14010]. There was also a series of three N-S orientated linear features.
39. Trench 15 was excavated through garden deposit (15001) which was 400mm deep and overlay the natural sand subsoil (15002). The latter appeared to have been heavily disturbed in this area.
40. Trench 16 was excavated through made ground to a depth of 1.5m. The trench contained one N-S orientated stone-built linear feature (16004) cut into the underlying medieval soil horizon (16021). This stone feature had a width of 0.65m and was constructed with undressed stone and partial clay bonding.
41. Trench 17 was excavated through made ground (17004) to a depth of 1.2m and overlay the natural sand subsoil (17001). Three features were identified, cut into the natural subsoil. These included the remains of a clay-bonded medieval/post-medieval foundation wall (17003), measuring 5.2m in length by 1.3m wide and orientated roughly N-S with returns at both ends orientated E-W. Another feature identified was a sub-oval feature (17002) which measured 1.2m in diameter. The final feature identified consisted of a modern foundation cut which was 1m in width and had an E-W orientation.
42. Trench 18 was excavated through made ground (18001) to a depth of c.2m. The base of the trench was heavily disturbed by modern construction throughout. A demolition deposit of mortar and stone set into a clay-sand deposit (18004) which had a thickness of 700mm overlay the natural sand subsoil (18002).

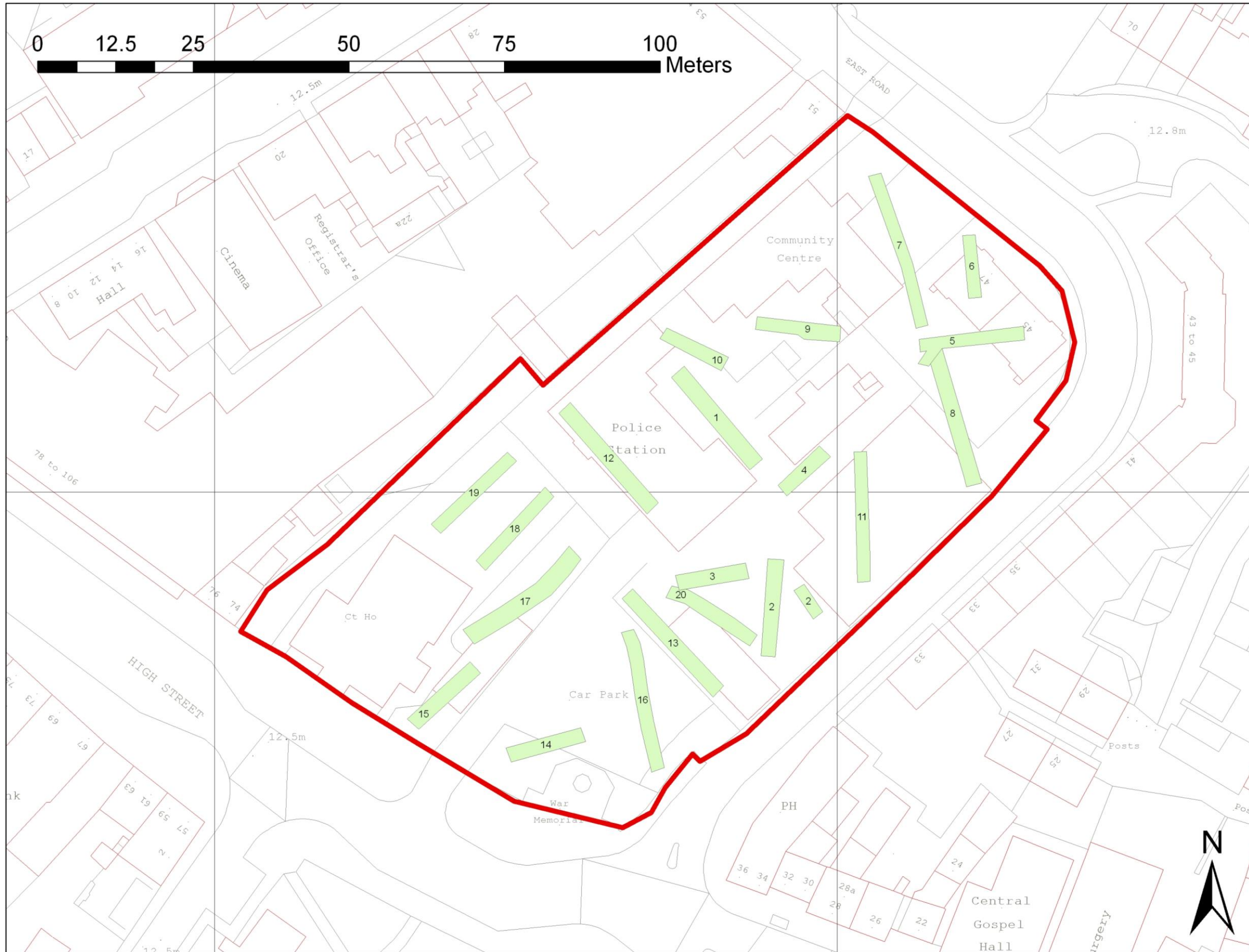


Figure 2: Post-excavation layout of trenches (Evaluation both 2012 and 2013 phases) overlain on the OS base prior to demolition

43. Trench 19 was excavated through made ground (19001) to a depth of 600mm. The made ground overlay the underlying natural sand subsoil (19002).
44. Trench 20 was excavated through made ground (20002) to a depth of 1m and overlay the natural clay sand subsoil (20001). Two large features, (20003) and (20004), were located at either end. These features measured 2.8m and 3m wide respectively and extended outwith the limits of the trench to the east and west, separated by an expanse of natural. Both features were of a similar deposit, namely a moderate to hard dark grey-brown clay-silt similar to the medieval/post-medieval soil horizon found elsewhere on the development site.
45. Based on the results of the evaluation works, the patterning of survival of potentially archaeologically significant strata could be divided into four main areas. The immediate frontage onto the High Street appeared to have suffered significant disruption and truncation during the 19<sup>th</sup> and 20<sup>th</sup> centuries with no significant strata identified. To the rear of this frontage, in the war memorial car park, an area of dense structural remains - including surfaces, wall foundations, ditches, pits and a well - was located. While many of the features were identified as being of possible 19<sup>th</sup> century origin, it was thought that there were likely to be earlier features surviving within this complex. In contrast, the equivalent area behind the Townhouse had suffered severe disruption and truncation with no comparable survival.
46. The fourth area was the northeastern two-thirds of the site where significant depths of modern made ground (up to 1.2m) overlay a potentially homogenous medieval/post-medieval soil horizon that in turn was up to 800mm thick. This soil horizon exhibited occasional features cut into its upper surface and surviving beneath it cut into the natural subsoil. These features appeared to be a range of pits and ditches with no notable structural evidence.

*Table 3: Summary of Findings, Archaeological Evaluation 2012*

| Trench | Size        | Depth  | Strata   | Modern Features | Significant Features | Artefacts                         |
|--------|-------------|--------|--|-----------------|----------------------|-----------------------------------|
| 5      | 22.5m by 2m | 0.9m   | Made ground; medieval/post-medieval soil horizon               | None            | Pits/post-holes      | Medieval or post-medieval pottery |
| 6      | 10.4m by 2m | c.1m   | Made ground; medieval/post-medieval soil horizon               | Services        | None                 | None                              |
| 7      | 24.5m by 2m | 0.9m   | Made ground; medieval/post-medieval soil horizon               | None            | Linear features      | None                              |
| 8      | 21m by 2m   | c.1.7m | Made ground; medieval/post-medieval soil horizon               | None            | None                 | Medieval or post-medieval pottery |
| 9      | 12.3m by 2m | 1.2m   | Redeposited topsoil layer; medieval/post-medieval soil horizon | None            | None                 | None                              |
| 10     | 10.2m by 2m | 0.85m  | Made ground, medieval/post-medieval soil horizon               | None            | Linear features      | None                              |
| 11     | 22.5m by 2m | 1m     | Made ground; medieval/post-medieval soil horizon               | None            | Linear feature       | None                              |



|    |             |      |  |                    |   |      |
|----|-------------|------|--|--------------------|---|------|
| 12 | 20m by 2m   | 1.8m | Made ground; medieval/post-medieval soil horizon | None               | Linear cobbled surface                                      | None |
| 13 | 20m by 2m   | 1.4m | Made ground; medieval/post-medieval soil horizon | None               | Possible structure; postholes; pits; well; linear features. | None |
| 14 | 12m by 2m   | 0.4m | Garden soil layer                                | None               | Postholes; pit  | None |
| 15 | 12.5m by 2m | 0.4m | Garden soil layer                                | None               | None  | None |
| 16 | 23.5m by 2m | 1.5m | Made ground; medieval/post-medieval soil horizon | None               | Stone built linear feature                                  | None |
| 17 | 21.5m by 2m | 1.2m | Made ground; medieval/post-medieval soil horizon | Foundation cut     | Foundation wall; Pit  | None |
| 18 | 16m by 2m   | c.2m | Made ground; medieval/post-medieval soil horizon | Demolition deposit | None  | None |
| 19 | 16m by 2m   | 0.6m | Made ground; medieval/post-medieval soil horizon | None               | None  | None |
| 20 | 15.5m by 2m | 1m   | Made ground; medieval/post-medieval soil horizon | None               | Possible medieval deposits                                  | None |

### *Historic Building Recording in 2012*

47. A programme of historic building recording was undertaken by Rathmell Archaeology Ltd during the spring and summer of 2012 (see Turner 2012 for full details). This was in response to the presence of two historic buildings, noted as being present in the proposed location for the Irvine Leisure Centre. These comprised the former Police Station (L) and the former Public and Industrial School (G) (see Figure 1b). Both were built c. 1860, and while neither structure was listed, it was deemed appropriate to undertake recording prior to an application for demolition.
48. Both structures were recorded to Level 2 standard (RCHME), which involved a photographic survey of interiors and exteriors, the preparation of a written record accompanying these photographs, the preparation of measured floor plans and an accompanying report which detailed the various phases evident in the structures.
49. Of the two structures, it was the former Public and Industrial School (G) which showed the least change. The basic layout of the structure remained consistent throughout the nineteenth century. The only change evidenced throughout the whole of this period was the addition of an outbuilding projecting from the east end of the south elevation, shown first on the Ordnance Survey 3<sup>rd</sup> edition map of 1911, and this supposedly 'new' addition may reflect a lack of detail in the available mapping rather than a change to the structure itself. The Ordnance Survey 2<sup>nd</sup> edition map, on which this structure first appears, also fails to show either of the projecting entrance vestibules located on the north and east elevations, and with no evidence of any blocked windows present in the south fenestration, it seems likely that the presence of this outbuilding (now lost) formed an integral part of the original build from the outset.

50. As far as the Public and Industrial School (G) is concerned, the only alterations to the fabric, both internally and externally, appear to date to very recent times, i.e. the late twentieth century. These alterations included the reworking of the interior space through the creation of two access corridors, the conversion of the east-facing entrance vestibule into a disabled toilet, the conversion of a window at the east end of the north elevation into a doorway allowing disabled access, and the infilling of gaps on the east elevation to create additional spaces used for male and female toilets, and additional storage space.
51. The Police Station (L), by contrast, was more complex in terms of its development. Though known to have been built in 1860, it bore a datestone over a disused entrance in the west elevation which yields the date '1892'. This suggested two phases of building. With the earliest Ordnance Survey mapping predating the construction of the police station and the 2<sup>nd</sup> edition map post-dating 1892, evidence for a two-phase build was sought in the fabric of the structure. Such evidence was clearly visible in the north-facing cell-block, but it is less easy to establish in either the west-facing elevation or the internal layout.
52. It is possible that the original structure, built in 1860, comprised a simple two by two bay structure, looking south onto the rear of plots fronting High Street (later to become the site of the Townhouse). On the rear, northern, elevation was a projecting rectangular stair tower, plus an outshot to the east which housed a single prison cell. The original layout of this north elevation must, however, remain uncertain on account of later alterations.
53. This accommodation must have soon proved itself insufficient, and in 1892 the building was extended to the north, forming a two-storey, seven bay west-facing façade which overlooks the vennel running south from East Street. With the construction of this extension, the focus seems to have shifted from the south to the west elevation, the latter having then been adopted as the public entrance to the police station judging by the presence of the datestone, the survival of two lamp brackets over the doorway and the generally fine appearance of the masonry.
54. At this point, it could be envisaged that the original 1860 core of the structure found use as a domestic residence for a senior police officer, with the extension functioning as offices for any junior or part-time officers. The cell bay was also extended, with a further four cells added. These alterations created the plan of the building as it is depicted on the 2<sup>nd</sup> edition map of 1897, and the structure appears to have remained unchanged until the late 20<sup>th</sup> century, when it was incorporated into a much larger structure and subject to some internal remodelling in the process.
55. Since both buildings are roughly contemporary, and funded from the municipal purse, some similarity in character might be expected. This is not immediately apparent, though it may be the case that later west elevation of the police station, with its coursed rubble masonry and abundant use of cherry cocking, was deliberately styled in a manner which compliments the pre-existing Public and Industrial School (G) which lies immediately to the north. Excepting this, any perceived similarities may merely reflect the fact that these buildings were designed and built by local firms, employing local craftsmen who made widespread use of local materials.
56. Both buildings had been subject to extensive internal remodelling, but sufficient evidence was garnered during the survey to establish their original layout, with the resulting archive (including photographs, notes and the measured plans) to be deposited in the National Monuments Record for Scotland.

#### *Demolition Works in 2013*

57. Monitoring works were carried out by Rathmell Archaeology Ltd during demolition works undertaken over September and October 2013 by Reigart. The elements of the buildings which had sat above ground level were removed prior to Rathmell attending the site. Monitoring was only required during groundbreaking works which mainly consisted of the removal of the foundations.
58. The foundations for the buildings consisted of a mixture of sandstone, brick and concrete,

some of which were fairly substantial in size reaching a depth of 700mm. A large rectangular concrete block encasing a fuel tank was also removed from the centre of the site which measured 4.8m by 2.7m and 1.25m deep.

59. The monitoring works confirmed the findings recorded during the second phase of the evaluation works, with both deep layers of made ground visible across the site as well as the presence of the medieval/post-medieval soil horizon underlying it.

#### *Scottish Water works on the High Street*

60. Mention must be made of observations made during the course of a site visit to inform an earlier version of this Written Scheme of Investigation. During this visit, four open pits were observed, three sited on the east side of the High Street in front of the Townhouse (H) and one on the west side, in front of 57 to 63 High Street. These pits resulted from work on the water mains carried out by Scottish Water.
61. One of the eastern pits (see Figure 3a) exposed a cobbled surface underneath the modern pavement. This surface did not continue out into the roadway, having been truncated by the substructure of the modern running surface. The deposits revealed within this pit suggest that the early 19<sup>th</sup> century cobbling of the High Street survives beneath some sections of the pavement, giving a potential for improved protection and the survival of medieval and post-medieval deposits should they occur underneath these cobbles.
62. The western pit exhibited a significant depth of sandy soil overlying sand subsoil beneath the modern pavement surface (see Figure 3b). This deposit may be a truncated but *in-situ* soil profile that could be comparable to the sediment described as a 'broad interface' in the GUARD monitoring of site investigation works within the site (Rennie 2011).
63. The presence of these utility works within the High Street also highlights the destructive process of not only the renewal of pavement and road services but of the ongoing maintenance and upgrade of utilities. Any archaeological deposits in this environment are likely to be significantly impacted by these modern activities. However both pits revealed what appeared to be cut features penetrating the underlying sand subsoil (as circled on Figures 13 and 14).

#### *Bridgegate works on the High Street*

64. Of further relevance in informing our understanding of the nature and extent of Irvine's surviving archaeological resource are the results of Site Investigation works associated with the ongoing renewal of the Bridgegate streetscape extending up to the Cross (the junction of Bridgegate with the High Street and Bank Street). These works at this location compared three test pits that were subject to archaeological monitoring by Rathmell Archaeology Ltd (Gordon 2011):
- ❖ Test Pit 9 measured 1m by 0.75m and 1.3m deep and contained 360mm of tarmac overlying natural orange sand;
  - ❖ Test Pit 10 measured 0.6m by 0.4m by 1.4m had a monoblock surface over a 480mm sand and concrete sub-base. This overlay a brown sandy soil, with occasional ceramic building material fragments, which in turn overlay natural orange sand; and
  - ❖ Test Pit 11 measured 0.9m by 0.65m by 1.3m with stratigraphy similar to Test Pit 10 although the natural orange sand was not reached within the test pit
65. While none of these test pits revealed archaeological material that was confidently pre-20<sup>th</sup> century in date, two of them replicate the Scottish Water pits in exposing this truncated soil profile extending to the north of the Townhouse site – suggesting it is a general layer in the burgh and indicative of the remnants of an original soil profile that has co-existed with the burgh.



Figure 3a: Eastern pit of Scottish Water works outside the Townhouse (H) with nineteenth century cobbled surface visible underneath modern pavement.



Figure 3b: Western pit of Scottish Water works outside 57 to 63 High Street with truncated *in situ* soil profile visible under cobbles and over sand subsoil.

66. Subsequent archaeological monitoring works which took place between July and October 2012 (Klemen and Gordon, 2012) were targeted on two specific areas. These comprised the west section of Bridgegate ('Area B') where archaeological monitoring was to be carried out on any soft sediment ground works that exceeded a depth of 1.2m (owing to the considerable depth of made ground which had been identified during the previous site investigation works). Another area of concern lay around the Trinity Church, where the soil profiles revealed during the site investigation works had appeared natural and the degree of truncation uncertain ('Area C').
67. Unfortunately no significant archaeological features or deposits were identified, with most of the evidence and deposits recorded in both areas comprising made-ground material, laid during the redevelopment of the area in the 1970/80s in order to level the original sloping ground that ran west to the river and bridge.

## Project Works

68. The Stage 2 excavation works were carried out across four areas within the development boundary (named Areas 1 to 4; locations shown on Figure 4). These four areas opened a total of approximately 1616m<sup>2</sup> of ground.
69. Initially only three discrete areas were to be excavated, as recommended by the findings of the Stage 1b evaluation works (Williamson & Swan 2013). Areas 1 and 2 sat along the southeastern edge of the development area while Area 3 sat in the northern corner. After works on-site had started, however, the West of Scotland Archaeology Service requested that the space between Areas 1 and 2 also be stripped to create one large area. This central portion became known as Area 4.
70. The on-site excavation works were carried out between 11<sup>th</sup> November 2013 and 28<sup>th</sup> February 2014. The area was initially stripped down to the first significant archaeological horizon using a 360° mechanical excavator with subsequent excavation works carried out by hand.
71. Evaluation works had identified a buried soil layer present across the majority of the site. Initially, this layer had only been seen in small discrete sections, so its exact nature and complexity was uncertain. The excavation works initially aimed to reduce this layer in spits by use of a machine: this would then allow for cleaning back at each level in order to check for any features which may have been present, sealed within the layer itself. After this approach was taken across Area 2, the soil was found to be a homogenised layer with features either cut into the upper surface, or sealed beneath it and cut into the natural subsoil.
72. It appeared that the nature of the buried soil was such that it implied that an ongoing process of disturbance, either anthropic or biological in origin, had been occurring on the site for a considerable period. This created a homogenised soil which would have incorporated - and, at the same time, removed - any distinctive trace of the upper fills of the features which cut into it, leaving only the lower sections visible which had cut into the natural subsoil below. There appeared then to have been a gap between this process and the period when the features were cut into its upper surface, as these features had not yet been incorporated into the homogenised buried soil and still remained distinctly visible.
73. Due to this recognition of the homogenised nature of the soil and following ongoing discussions with the West of Scotland Archaeology Service, it was decided that across the remainder of the areas, the buried soil need no longer be taken down in spits. Instead, once any features cut into the upper surface had been investigated, it could then be reduced in one phase, with any artefactual evidence being retrieved during this process.
74. The sampling strategy applied to the features on-site was as per that outlined in the Written Scheme of Investigation (Rees & Turner 2013), except as otherwise directed by the West of Scotland Archaeology Service. In the main, it was the pit features which were granted more detailed investigation, being subject to full excavation throughout most of the works.

### *Conventions*

75. All registers pertaining to works on-site during the excavation can be found in Appendix 2, which will be provided as a separate document.
76. All depths given for features are given from the base of the trench after the removal of topsoil and/or modern overburden unless otherwise stated. Where a number of cut features of similar nature were identified in close proximity, they have been described together as Feature Groups – while this may reflect an actual association, at the current time the only definite link is physical proximity. A table of which features belong to which Feature Group can be found in Appendix 2.
77. The context is the basic archaeological unit of description relating to either a structure, cut or sediment of common characteristics. Structures (such as walls or built surfaces) and cut features (normally identified as they cut the underlying subsoil) are denoted by squared brackets (e.g. [040]). Sediments, including the fills of cut features, are denoted by rounded brackets (e.g. (041)).
78. The context numbers given out across the site reflected the area that they related to. This meant that the context numbers started with a prefix that matched the area number (e.g. Area 1 – (1001) onwards, Area 2 – (2001) onwards). The rest of the records - e.g. finds, samples – followed a continuous numbering system which was in use across all four areas.
79. Some of the features at the northeastern end of Area 1 were wrongly assigned Area 4 numbers while on-site. While these features have each kept their original numbers, for the purposes of this report, they have also each been given an Area 1 number and are discussed within the Area 1 findings. The Area 1 Context Register in Appendix 2 lists the original numbers for each of these features, the descriptions of which can be found under the relevant numbers in the Area 4 Register.
80. This report will specify the context numbers of spreads and the cuts of features, but will not list the context numbers of each fill occurring within the cut features. Information regarding the fills of each cut feature can be found in Appendix 2 where a detailed description of each context is presented.

### **Findings**

81. Prior to excavation, the entire development area was covered by a layer of made ground which was heavily disturbed following the demolition of the buildings which had been present on site in recent times. Numbered variously (1001), (2001), (3001) and (4001) according to location, this layer was the uppermost layer recorded across all four areas: it consisted of a compact, very dark brown/black silty clay with frequent inclusions of demolition material (e.g. brick, sandstone, rubble, slate and concrete), ceramic drain pipe, pottery, glass, animal bone, plastic and wood. The artefacts recovered from the deposit ranged from multiple periods from the medieval period right through to modern day.
82. Underlying this upper layer across the majority of the site sat a buried soil layer characterised as (1091), (2002), (3002) and (4002). This comprised a loosely compacted mid- to dark brown slightly clayey sand with frequent charcoal fleck inclusions and frequent small stones. This layer was not present at the southwestern end of Area 1 but was identified at its northeastern end, for the final 2.8m, and continued throughout Areas 2, 3 and 4 across the rest of the site. It contained a range of artefacts including metal, slag, animal bone, glass and ceramics. The ceramics included several sherds of gritty ware, as well as sherds of redware/greyware (provisionally interpreted as Scottish Post-Medieval Oxidised Ware (SPOW) and Scottish Post-Medieval Reduced Ware (SPRW)) with the majority of artefacts present ranging from the 12<sup>th</sup> to 16<sup>th</sup> centuries in date. Two fragments of the glass appeared to be modern (possibly 20<sup>th</sup> century): these fragments were likely to have been intrusive finds from a later feature cut into the deposit, or the result of contamination during the excavation process.

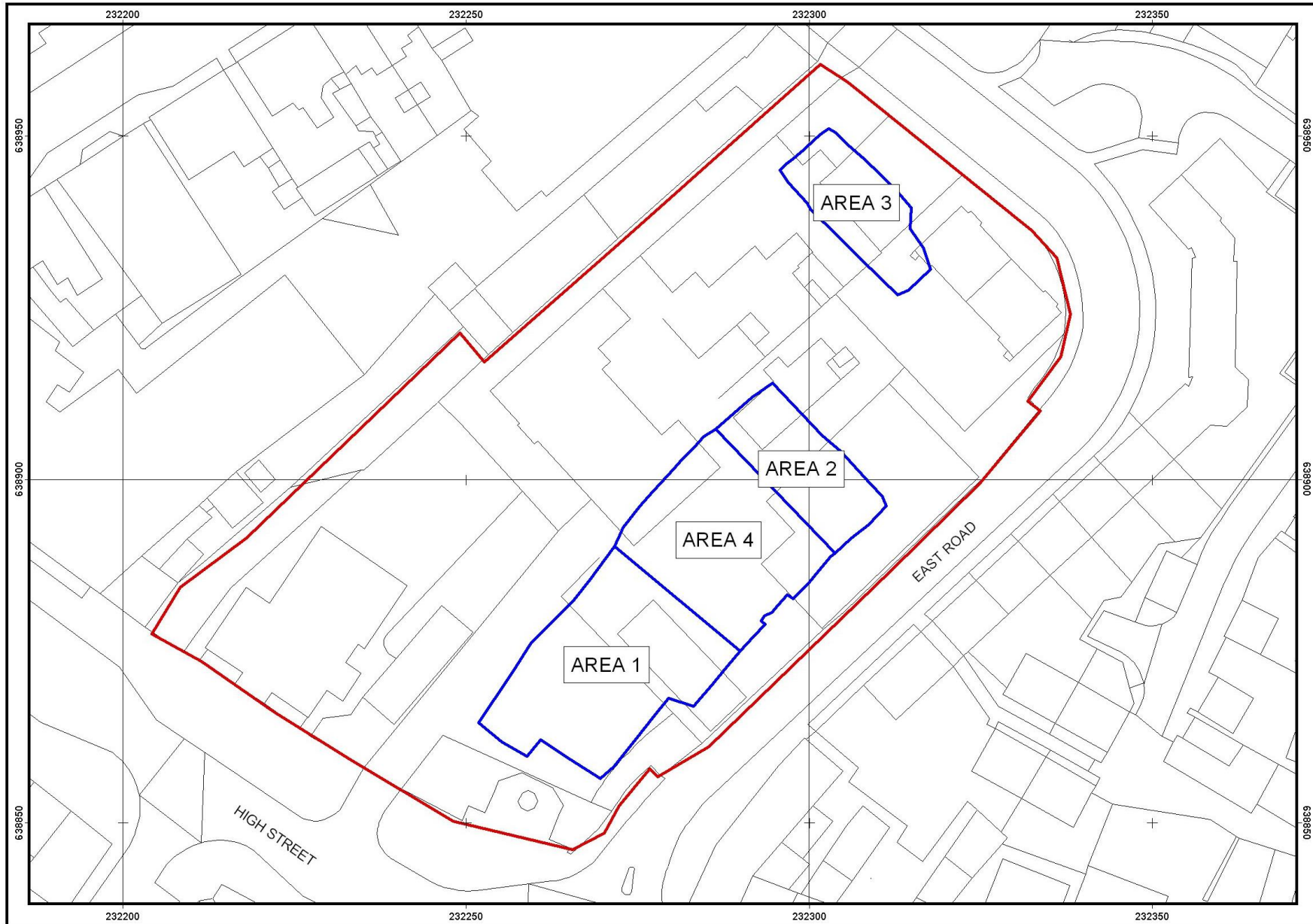


Figure 4: Plan of Stage 2 Excavation Areas (outlined in blue) overlain on the OS base prior to demolition

83. The natural subsoil present across the site – (1002), (2044), (3003) and (4071) – consisted of a loosely compacted yellow sand with no inclusions. This was consistent across the four areas beneath the buried soil layer, and the made ground where the buried soil was not present.
84. The surface of the made ground had been levelled out across the entire site following the recent demolition works. However the changing depths of the natural subsoil and the buried soil layer yielded insights into the character of the original topography, which sat highest at the southwestern end and then sloped downwards towards the northeastern end. The natural subsoil also sat slightly higher in the southern corner of Area 1, indicating that this portion of the site was at a comparable level to the southwestern end. It was on account of this relict landform that, despite the apparently level surface across the site, the depths of the upper deposits varied. It is also important to note that, at the time of excavation works, the current ground level was at roughly the same height across Areas 1, 2 and 4, but actually sat approximately 400mm lower across Area 3.
85. Measuring only 400mm deep at the southwestern end of Area 1, the made ground grew deeper towards the northeastern end, measuring between 600mm and 1m deep across Areas 2 and 4. The made ground across Area 3 measured approximately 1m deep; however taking into account the differences in modern ground level mentioned above, this was the greatest depth to the underlying deposits of approximately 1.4m, when compared to the depths for Areas 1, 2 and 4.
86. The buried soil layer was slightly shallower across Area 4, measuring 400 to 600mm in thickness, but showed a fairly consistent thickness across Areas 2 and 3 of between 500 to 740mm.

## Area 1

87. Area 1 sat in the southern corner of the development area, in the location previously occupied by the war memorial car park. It measured approximately 28m by 23m in extent with a small extension of approximately 3m by 9m in the southwestern corner.
88. Unlike Areas 2 to 4, Area 1 was not covered by a layer of buried soil; the only section where this survived was in a small area at the northeastern edge (1091). On account of this, the majority of the area was reduced down to the upper surface of the natural subsoil by machine in one phase (approximately 400 to 800mm below the upper ground surface, shallower in the western corner). At this depth along the northwestern side of the area, however, a number of spreads were revealed which had features cut into their upper surface (see Feature Group E below). Once these features had been excavated, the spreads were then removed by machine to reveal the underlying natural subsoil (at a depth of 1m below the upper ground surface in this area) and further features cut into the upper surface of this.
89. The spreads and deposits (Feature Group E; Figure 6a)) which covered the northwestern end consisted mainly of (1005), (1010), (1049), (1089), (1102), (1124), (1132) and (1148) in varying quantities, with some other lenses of material present throughout the southwestern end. These were dominated by brown clayey silts containing occasional charcoal inclusions, though (1010) also contained a lot of rubble which may have represented tumble. Grouped together, these deposits ranged between 300 and 400mm in depth across this side of the area.
90. The deposits (1102) and (1132), which were present at the northeastern end, were fairly homogenous in character; it is possible that they represented a continuation of the buried soil layer across this side of Area 1, and they did appear to run into the buried soil within Area 2. By contrast, the southwestern end of the spreads had more visibly discrete pockets and layers, and this was where most of the different contexts appeared.
91. Material recovered from these deposits included animal bone, metal, slag and a range of medieval and post-medieval ceramics. These ceramics included sherds of gritty wares, redwares and greywares which varied between the separate deposits. This suggests that the spreads may have accumulated over time through a potential date range spanning



the 12<sup>th</sup> to 16<sup>th</sup> centuries, although this may be defined more tightly to a period spanning the 14<sup>th</sup> to 17<sup>th</sup> centuries when taking into account the relative dates suggested by artefacts from the underlying features.

92. Archaeological features were uncovered across the full extent of Area 1 (Figure 5). With the exception of the walls (Feature Group A), which were dispersed across the whole area, the features have been separated into three discrete areas (the northwestern end, the central portion and the southeastern end) for the purposes of describing them below. The features at the northwestern end have then been further separated according to whether they were cut into the upper surface of the spreads (Feature Group E); whether they were cut into the natural subsoil outwith the extent of these spreads; or whether they were cut into the natural subsoil underlying these spreads. The last group are shown on a separate plan in Figure 8.

#### *Walls (Feature Group A)*

93. At the uppermost level within Area 1 sat sections of walling (Feature Group A). These consisted of contexts [1003], [1006], [1009], [1016], [1039], [1043] and [1092]. [1009] and [1039] were two sections which appeared to form the same single continuous boundary (Figure 6a).
94. The walls in Feature Group A were each constructed of roughly coursed rubble (mixture of granites and blond sandstone) measuring up to an average size of 0.55m by 0.43m by 0.2m approximately, which were organised to form an inner and outer face with a rubble core consisting of smaller stones with average size of 0.19m by 0.15m by 0.16m. The walls ranged in width from 0.4m to 0.75m and were between one and two courses deep.
95. Isolated lengths of wall survived in discrete areas along the northwestern, southeastern and northeastern edges of Area 1. Four of these – [1003], [1009]/[1039], [1043] and [1092] – followed a common orientation (running SW-NE), though they varied in length between 2m to 15.6m. Walls [1006] and [1016] abutted [1003] and [1009]/[1039] respectively, running perpendicular to these for distances of between 1.4m and 4.07m long. [1016] had a 0.53m long gap along its length, potentially representing an opening or alternatively the result of truncation from later disturbance.
96. While the walls were mainly of drystone construction with some partial clay bonding, three – [1003], [1006] and [1039] – were bonded with mortar which may suggest different phasing within their construction. This difference in bonding was the marked difference between walls [1009] and [1039] (Figure 6a).
97. Walls [1009], [1039] and [1016] sat overlying the spreads (Feature Group E) in the northwestern end of the area.

#### *Further Features overlying and/or cut into Feature Group E*

98. The bases of two kilns/ovens – [1011] and [1116] – were discovered in the western quarter of Area 1 (Feature Group B). [1011] sat towards the western corner and appeared to cut feature [1040], while [1116] sat along the northwestern side of wall [1009] near its southwestern end, where it was directly overlain by the wall along its southeastern edge (Figure 6b).
99. Both kilns/ovens were stone-lined and sat within a key-hole shaped cut, with the sides gently sloping down onto a flattened base. [1011] measured 2.7m long by 0.8m-1.3m wide and 200mm deep, while [1116] measured 2.6m long by 0.55-1.9m wide and 300-500mm deep.
100. The stone lining in each feature was formed of sandstone blocks measuring between 0.15m by 0.13m by 0.1m in size up to 0.37m by 0.27m by 0.12m (maximum), with smaller stones used for packing. The stones varied in shape and did not appear to have been worked. They appeared to have had a clay bonding. In both features the stone linings were clearly heat affected.

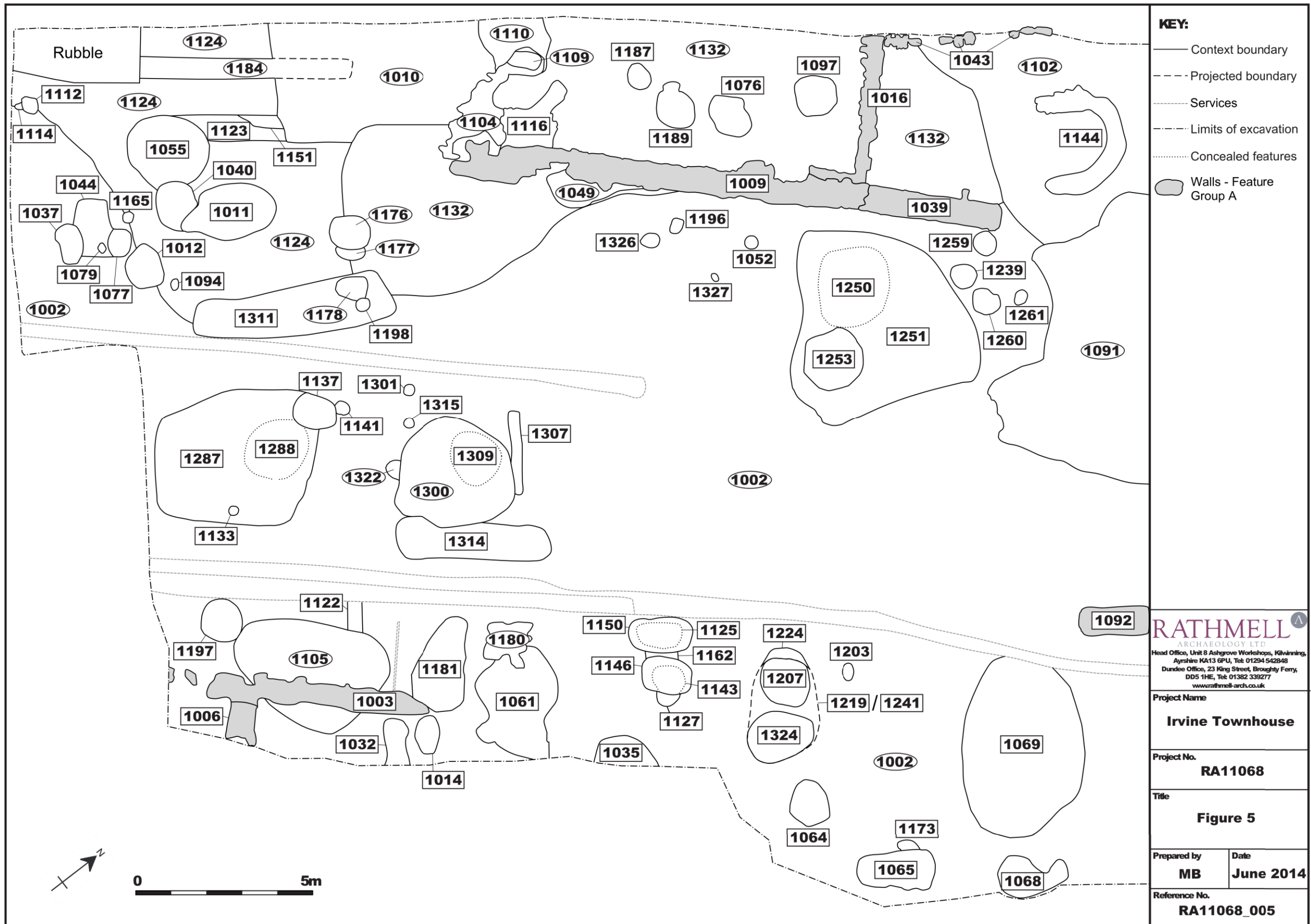


Figure 5: Plan of archaeological features overlying Feature Group E and across the rest of Area 1



Figure 6a: Walls [1009]/[1039] and [1016] overlying spreads (Feature Group E) from the N



Figure 6b: Kiln [1116] (half-sectioned) from the SW with stone deposits Feature Group C in the background and wall [1009] in the foreground

101. Both appeared to have had a layer of redeposited natural at their base, possibly acting as a levelling/packing layer for the stone lining which sat above. This deposit appeared to have been heated or burnt *in situ*. [1116] also had a thin layer of clay underlying the stone lining around the sides which may have acted as a more secure base for the stones to sit in. Only the very base of [1011] had survived, while [1116] had a greater amount of its inner fills surviving. These generally consisted of silty sands with frequent charcoal inclusions. A vitrified layer of stone and charcoal was also overlying some of the surface of the stone lining within [1116].
102. It is possible that the narrow section of the 'key-hole' functioned either as a flue, or as the area from which ashes were raked out to clear the kilns/ovens between each use.
103. No artefacts were recovered from within the fills of [1011]. The redeposited natural underlying the stone base of [1116] did, however, produce sherds of gritty ware, provisionally assigned a 12<sup>th</sup> to 15<sup>th</sup> century date, a fragment of clay tobacco pipe stem of probable 17<sup>th</sup> century date, six fragments of animal bone, and also a piece of smithing slag which was of particular interest because of its plano-convex form, suggestive of a hearth bottom.
104. Sitting to the northwest and southwest of [1116] were stone deposits (1104), (1109) and (1110), together termed 'Feature Group C'. These deposits consisted of stones which averaged 0.1m by 0.1m by 0.04m in size, but which occasionally included flat slabs ranging up to 0.49m by 0.44m by 0.08m. These stones were not bonded, but were bedded within a gravel and silt matrix across a single layer. Altogether they covered an area measuring 3.8m NW-SE by 3.26m NE-SW.
105. These stone deposits appeared to curve round the southwestern and western edges of kiln/oven [1116] (Figure 6b) and ran into, and possibly under, the southeastern end of wall (1009). They did not extend past the southeastern end of the wall. It is uncertain whether they were deliberately placed to form a surface, or whether they were tumble cleared from the area of [1116] to make way for its construction.
106. In the northern corner of the area, located approximately 0.9m beyond the northeastern end of wall [1039], sat feature [1144]. This was U-shaped in plan, measuring 7m in length, defining an area measuring 2.8m by 2.9m in extent. The cut had near vertical sides and a flat base, measuring a maximum depth of 180mm, which was filled by a loose yellow/light brown sandy lime mortar with shell fragments. The feature may have represented the foundations for a curved wall. Finds recovered from its fill included animal bone, as well as sherds of late medieval greyware (potentially SPRW) and fragments of clay tobacco pipe which appear to date from the 19<sup>th</sup> century.
107. Three pits sat to the northwest of wall [1009], near to the northwestern edge of the excavated area: [1076], [1097] and [1187].
108. Pit [1097] sat approximately 1.6m to the northwest of wall [1009] and 0.64m to the southwest of wall [1016]. It was sub-circular in plan and had a stone lining, [1019] (Figure 7a). It measured 0.99m by 1.14m and 510mm deep, with vertical sides and a flat base. The stones measured, on average, 0.1m by 0.16m by 0.12m in size: they were sub-angular or sub-rounded in shape and had been set into a clay lining. The interior fill of the pit comprised a loose dark grey/black silty clay with stone inclusions which may have derived from displaced fragments of the stone lining. At the base, there was also evidence of a possible timber lining overlying the stones. The interior fill of the pit contained fragments of animal bone and sherds of SPOW and SPRW, provisionally dated to the late 15<sup>th</sup> to 16<sup>th</sup> century, while the clay lining produced one sherd of 12<sup>th</sup> to 15<sup>th</sup> century gritty ware and one sherd of SPRW.
109. Pit [1076] sat approximately 1.4m to the south-south-west of [1097] and 1m to the northwest of wall [1009]. It was sub-circular in plan, measuring 1.26m by 0.79m and 210mm deep, with steep sides and a rounded base. It was filled by a loose dark grey silty clay with stone, coal and charcoal inclusions, with no evidence of a lining. A fragment of 19<sup>th</sup> century clay tobacco pipe was recovered from the fill.
110. Just to the southwest of [1076], the top of pit [1189] and its stones [1020] were just

visible on the surface; there appeared to have been some modern disturbance across the top with pieces of wood visible. [1189] was roughly circular in plan: measuring 1.1m in diameter and 1.05m deep, so that it reached below the depths of the underlying spreads. It had near vertical sides and an uneven base. It contained stone setting [1020] which sat against the edges of the cut. The stones were mostly angular and ranged in size from 0.15m by 0.23m to 0.38m by 0.45m. They stood three courses high and had been bonded by clay. The interior was filled by a dark brown clay silt with fragments of wood present. The upper portion of the fill produced fragments of metal, slag, and pottery, as well as the neck of a late 18<sup>th</sup>/early 19<sup>th</sup> century wine bottle. Two sherds of gritty ware were recovered from the lower portion.

111. Pit [1187] sat further to the southwest and contained the remains of an *in situ* wooden bucket, with a lid fragment present, measuring 0.7m in diameter and 380mm deep, containing a sand and silt fill. The fill of this pit produced a small ivory ball, perhaps a billiard ball.
112. Lying to the southwest of wall [1009], and on the same alignment, was linear feature [1123] which measured 1.03m wide and 400mm deep with steep sides and a slightly rounded base. Its visible length was 1.3m but it was obscured by deposit (1010) at its northeastern end and cut by pit [1055] at its southwestern end. It contained a very firm dark brown black silty clay with a small number of charcoal inclusions. It is possible that this feature may represent a continuation of the cut for wall (1009) even though the wall itself has been removed, or it may represent a cut for an earlier phase of walling along the same alignment.
113. At the northeastern end of [1123], along its northwestern edge, it had been cut by small linear feature [1151]. This measured 0.62m long by 0.40m wide and 230mm deep with steep sides and a rounded base. It was filled by a very compact light grey clay.
114. At the southwestern end of [1123], sat large pit [1055] which measured 2.1m in diameter and 1.15m deep. It had steep sides and a flat base, and contained a series of mainly brown sandy fills containing charcoal flecks which appeared to have been tipped in from the eastern edge of the pit (Figure 7b). These fills produced ceramics, animal bone and iron nails. The ceramics included several sherds of gritty ware and one sherd of medieval redware. The interior fills of the pit appeared to have been cut by a later pit [1046] which sat fully within the limits of [1055] (Figure 7b), measuring 1m wide and 1m deep with steep sides and a sloping base which dipped down to the SE. The fill was similar to those within [1055], and contained fragments of animal bone, one metal object, 17 sherds of gritty ware and also three sherds of redware/greyware, which appeared more characteristic of medieval wares than of SPOW/SPRW.
115. [1055] had been cut by pit [1040] on the southeast side which in turn had been cut by kiln [1011]. [1040] measured 1.3m by 1m and 270mm deep. This pit has gently sloping sides and a slightly rounded base and was filled by sandy deposits which contained occasional fragments of charcoal. The pit produced one piece of slag, a fragment of animal bone and two sherds of SPOW.
116. To the southeast of these features, along the southeastern edge of the extent of the spreads (Feature Group E), sat rectilinear feature [1311] which measured 5.5m long by 1.5m wide and 250mm deep. It had gradual sloping sides and a flat base, and was mainly filled by a very compact, almost black, organic silt which produced one sherd of SPRW. Towards its northeastern end, sat a small patch of mortar like deposit (1178) which overlay the feature. Sitting adjacent to this, small pit [1198] cut into the fills of [1311]: this latter feature measured 0.3m by 0.45m in plan, and 290mm deep, with steep sides and a rounded base. The sandy fill of [1198] contained a complete gritty ware jug <302>, still intact, and provisionally dated to between the 12<sup>th</sup> and 15<sup>th</sup> centuries.



Figure 7a: Stone lining [1019] in pit [1097] from the north



Figure 7b: South facing section of pit [1055], also showing possible later cut [1046] at left hand side

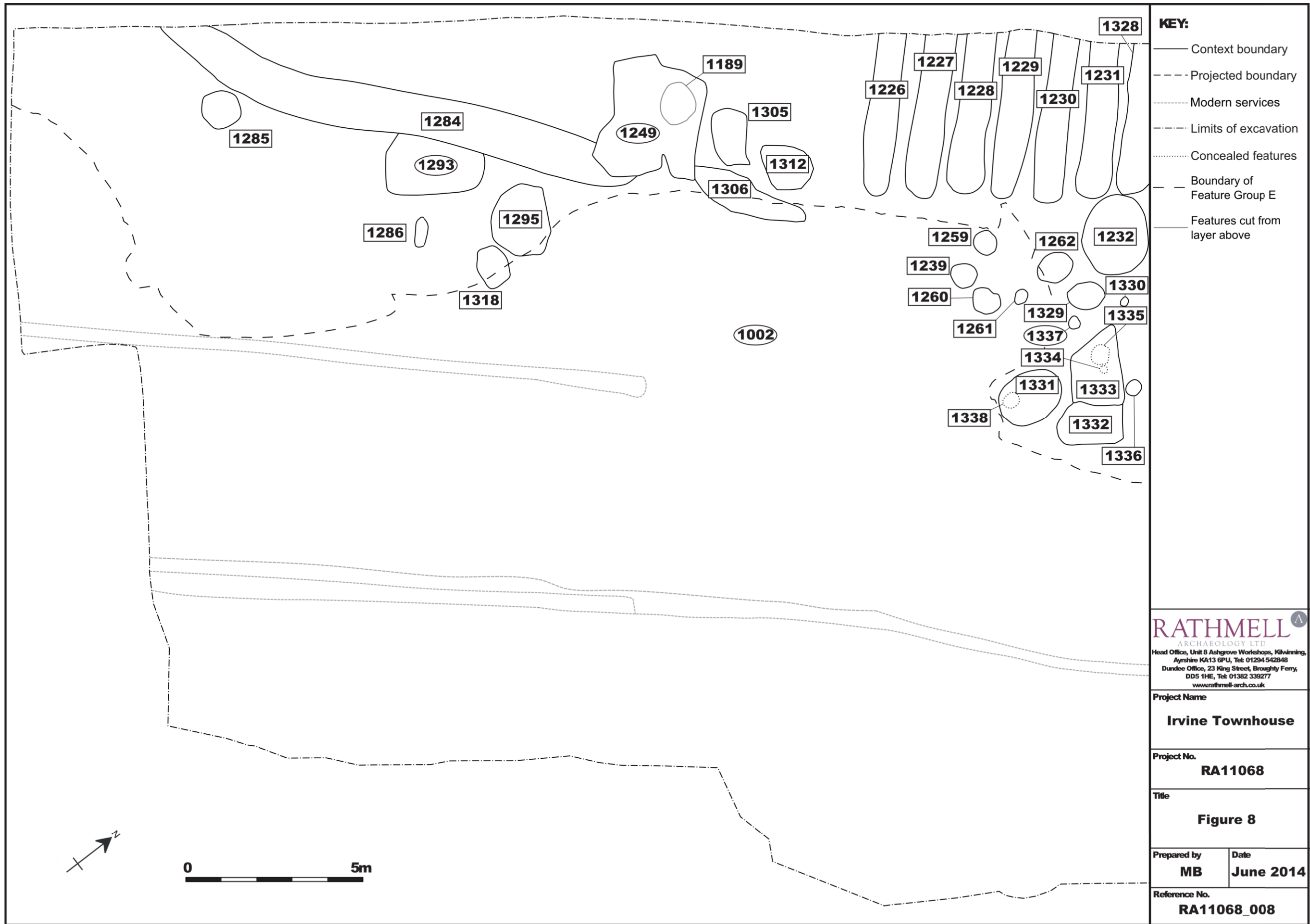


Figure 8: Plan specifically showing features cut into natural subsoil underlying Feature Group E

117. Just to the northwest of the northeastern end of [1311], sat dark deposits (1176) and (1177). (1177) consisted of a loose black slag-rich deposit with frequent coal inclusions covering an area measuring 1m by 0.4m in extent by 80mm deep. (1176) overlay the northwest end of (1177), and consisted of a loose black silty (probably organic) material with frequent charcoal inclusions which covered an area measuring approximately 1.5m in diameter and 90mm deep.
118. Along the northwestern edge of Area 1, in the western corner, sat linear deposit (1184) which measured 0.59m wide and 460mm deep. With a fill comprising large unworked stones, (1184) was thought to be a drainage feature.

*Features cut into natural subsoil underlying Feature Group E and buried soil (1091)*

119. At the southwestern end of this area, a linear feature [1284] ran SW-NE for a length of approximately 12m, although it continued outwith the northwestern edge of the excavated area. It measured 1.3m wide and 810mm deep, with steep sides and a rounded base. Its fills comprised sandy clay and silty sands. Its northeastern end was less clearly defined and it possible that it had been truncated at that end by later activity. It is possible that further to the northeast, linear feature [1306] - which measured approximately 3m long, 1.14m wide and 140mm deep and had a sandy fill - may be a continuation of [1284] which had become more shallow and truncated towards that end.
120. The uppermost fill of [1284] produced five sherds of ceramic. Two came from gritty wares (12<sup>th</sup> to 15<sup>th</sup> century date), while three were derived from a jar of an unknown ware (red fabric with grey core, mica-rich, slightly gritty texture and everted rim) which is likely to be contemporary with the gritty wares.
121. Spread (1293) sat at the southeast side of [1284] and appeared to have been cut by it. It consisted of a loose light brown grey mottled clay silt which covered a roughly rectangular area measuring 1.42m by 2.8m in extent and 300mm deep.
122. Four pits were dispersed across the area to the southeast of [1284]: [1285], [1286], [1295] and [1318]. All were circular or oval in plan, with the smallest measuring 0.65m by 0.95m, and the largest 2m by 1.74m. Their depths varied between 370 to 840mm deep. They had steep sides and either flat or rounded bases, and were filled by silty sands. [1285] also contained a large number of small sub-angular and sub-rounded stones within its fill.
123. One of the fills of pit [1295] produced 40 sherds of gritty or contemporary fabrics, with some possible imported pieces. These have been provisionally dated to between the 12<sup>th</sup> and 15<sup>th</sup> centuries. Pit [1318] produced a greyware jug or flagon, virtually complete and provisionally ascribed a 14<sup>th</sup>/15<sup>th</sup> century date, as well as two fragments of smithing slag and an iron nail.
124. At the northeastern end of [1284], sat spread (1249) and pits [1305] and [1312]. Spread (1249) consisted of mid to dark brown clayey silt with some charcoal flecks; it measured 1.7m by 1.47m in extent and 130mm deep and appeared to overly [1284]. The base of [1189], already described above, had cut into this spread in its northern corner. A number of ceramic sherds have been assigned to this context which included gritty wares, SPRW, SPOW and also a sherd of late 18<sup>th</sup> to early 19<sup>th</sup> century hand-painted tin-glazed ceramic ('pearlware'). However, these finds were recovered from the surface prior to excavation of the deposit and, as a result, whether they can be securely dated to this deposit remains doubtful. It is possible that they were instead derived from within the later cut [1189].
125. Pits [1305] and [1312] sat just to the northeast of (1249), and to the northwest of [1306]: both were sub-circular in plan, measuring 2.1m by 1.1m and 1.63m by 1.4m respectively. They both had near-vertical sides with a flat base and measured between 390 and 600mm deep. They were filled with moderately compact yellow brown sand and dark brown silty sand. Both pits produced ceramics, the most prominent type being SPRW of 15<sup>th</sup> to 16<sup>th</sup> century date. One of the sherds from pit [1312] was particularly interesting. It had failed in firing, with a distorted base and a crack present – thus



potentially representing a 'waster' (indicating that potting may have been taking place in the vicinity). However, the sherd in question appears to have been used, perhaps representing a 'factory second' rather than a discard, with flaws that were cosmetic rather than fundamentally affecting the functionality of the object. A fragmentary Cu alloy button or bell also came from pit [1312].

126. At the northwestern end lay a series of seven linear features (Feature Group U): [1226], [1227], [1228], [1229], [1230], [1231] and [1328]. These all ran NW-SE at intervening gaps of 0.2 to 0.4m, each entering the area from the northwest edge and running for a length of 2.7 to 3.6m before ending in a rounded terminal. They measured between 0.75 to 1.15m wide and between 140 to 390mm deep, with steeply sloping sides and a flat base. They all contained a similar uniform fill which consisted of a moderately compacted mid- to dark brown silty sand with occasional small rounded stones and occasional to moderate charcoal inclusions. These linear features continued into Areas 4 and 2 to the northeast (see Feature Groups Q and L) and were similar to linear features present at the northwestern end of Area 3 (see Feature Group M). Four of the linear features in Group U produced sherds of gritty ware (provisionally dated to the 12<sup>th</sup> to 15<sup>th</sup> centuries). [1328] also produced one sherd of an unglazed jar of unknown type, arguably contemporary with gritty or possibly even slightly earlier. A fragment of very glassy, vitreous slag was also derived from [1230].
127. In the northern corner of the area, just to the southeast of Feature Group U, sat a cluster of pits and postholes. These formed the southwestern half of a concentration of small features which continued in the southwestern portion of Area 4 (see Figure 17). Between the two areas, the concentration of features covered an area which measured approximately 8m NW-SE by 11m SW-NE transversely. Four of these features - [1239], [1259], [1260] and [1261] - sat just outwith the limits of the overlying spreads (Feature Group E) but they have nonetheless been included here as part of the larger group.
128. In Area 1, there were six possible postholes and nine pits. It is possible that these features may have originally continued to the northwest but that they were truncated by Feature Group U in this direction.
129. Three of the possible postholes, [1261], [1330] and [1336], sat amongst the rest of the features, while three, [1334], [1335] and [1338], were revealed cut into the base of pits [1333] and [1331] after the fills of these pits had been removed, making it uncertain if they were cut into the base of the pits (prior to them being backfilled) or whether they were earlier features truncated by the pits.
130. The postholes were all mainly circular in shape, measuring approximately between 0.24m and 0.5m in diameter, and between 70 and 410mm deep. They had steep sloping sides and rounded bases and mostly contained a brown sand fill. [1336] had evidence of a post pipe. Only one of these possible postholes produced any finds; [1335] contained one sherd of thin-walled greyware which was of uncertain character, but which was potentially of medieval, as opposed to post-medieval date.
131. The nine pits comprised [1232], [1239], [1259], [1260], [1262], [1329], [1331], [1332] and [1333]. These were either oval or circular in plan and ranged in size from 0.68m by 0.7m to 2.1m by 2.2m in plan, and between 120 and 760mm deep. All had steeply sloping sides and either flat or rounded bases, and all contained single fills. These were composed of either a brown silty sand or a dark grey silty clay, some of which also had some charcoal inclusions present. [1232] also showed evidence of a possible re-cut [1271].
132. Five of the pits produced a mixture of finds including ceramics, animal bone, stone, slag and coarse stones. The ceramics included sherds of gritty ware, SPRW and SPOW, and also sherds of a green-glazed white fabric which may have come from Rouen or northern France. The fill of possible re-cut [1271] in pit [1232], produced a sherd of ceramic which may be dated to as late as the 17<sup>th</sup> century – this in turn would push forward the date for at least part of the overlying spreads, Feature Group E. It also produced a fragmentary iron vessel which was circular in shape with an everted rim, and which has been provisionally identified as a tripod cauldron or kettle. [1329] produced a possible stone

socket.

133. In the middle of this concentration of features, a small deposit was also present, (1337), which appeared to be a patch of degraded wood measuring 0.3m in diameter and 100mm thick.

*Features outwith extent of Feature Group E on northwestern side*

134. The spreads (Feature Group E) did not extend fully into the western corner of Area 1, and there were in addition a small number of pits and postholes present in this corner which had been mainly cut into the natural subsoil and which appeared to sit at a higher level.
135. A total of five possible postholes were recorded here which did not appear to form any visible structural pattern: [1079], [1094], [1112], [1114] and [1165]. These ranged in size from 0.25m to 0.5m in diameter and contained sandy fills. Two of these – [1094] and [1165] - had been cut into spread (1124) (Feature Group E), while [1079] had been cut into the fill of pit [1044]. The only item recovered from these features was a fragment of animal bone from within the fill of [1112].
136. Adjacent to these possible postholes sat pits [1012] and [1037] (Feature Group F), and pits [1044] and [1077] (Feature Group G).
137. Features [1012] and [1037] (Feature Group F) were both oval in plan, measuring approximately 1m by 1.2m in plan and up to 350mm deep. Both had gradually sloping sides with an uneven base and were filled by a very dark brown sand with charcoal inclusions. [1037] cut pit [1044] on its southern side. The fill of [1037] produced two sherds of gritty ware and some small fragments of animal bone.
138. Cut into the base of [1012] was possible posthole [1021], which measured 0.2m by 0.3m in plan and 160mm deep. It had vertical sides and a flat base, and contained a sandy fill which was similar to the fill of [1012]. It is uncertain whether this was earlier than or contemporary with pit [1012].
139. Features [1044] and [1077] (Feature Group G) ranged from 0.7m in diameter to 1.05m by 1.65m in extent and up to 480mm deep. They had vertical sides and an uneven base and were filled by a mixture of redeposited natural subsoil and darker sand. On excavation, [1077] appeared to cut [1044] on its northeastern side. [1044] produced fragments of animal bone and two sherds of gritty ware. [1077] produced 3 fragments of a sheet metal vessel or bowl, two sherds of gritty ware and two sherds of redware/greyware, probably representing sherds of SPOW/SPRW.
140. To the southeast of wall [1009], four possible postholes were identified (Feature Group D): [1052], [1196], [1326] and [1327]. They did not appear to form any recognisable structural pattern. They measured between 0.22m and 0.4m in diameter and 120mm deep, with gently sloping sides and a flat base, and all contained mid-brown sand and silt. One feature, [1052] contained two flat stones at the base which may have formed a post-pad.
141. The extent of the spreads (Feature Group E) was also narrower towards the northeastern end of the area and feature [1251] sat outwith the extent of the spreads to the southeast of wall [1039], to the northeast of Feature Group D.
142. [1251] was sub-oval in plan and measured 3.7m long by 2.7m wide with a minimum depth of 1.7m. It contained well [1253] and stone structure [1250] (Figures 9 and 10a). The upper portion of [1251] had gradually sloping sides which came tight in to the edges of structures [1250] and [1253], appearing near vertical in the lower portions surrounding the two structures themselves. The base was not fully revealed but was likely to be fairly flat underneath the two structures.
143. Well [1253] measured 1.77m in diameter, with an internal diameter of 0.9m, and contained a sandy fill. The stones used in its construction consisted of irregular sub-

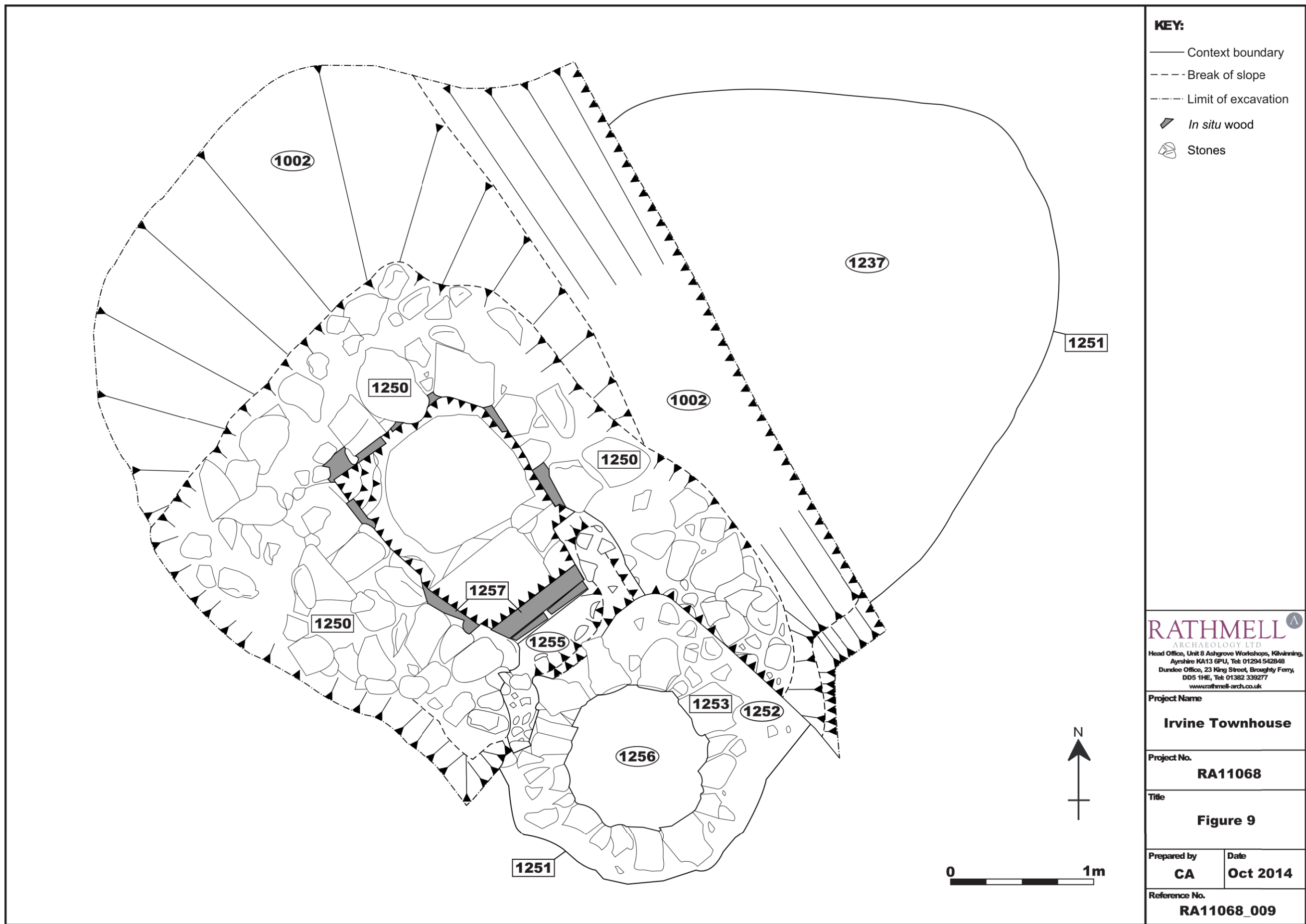


Figure 9: Plan of well [1253] and stone structure [1250]



Figure 10a: Well [1253] and stone structure [1250] from the northwest



Figure 10b: NE facing section of intercutting pits [1125] – [1162] in Feature Group H

angular to angular sandstone blocks measuring approximately 0.2m by 0.3m on average. This well was not excavated, as it was agreed that it would remain undisturbed by the future works and be preserved *in situ*. Adjacent to [1253] on its northwestern side sat rectangular stone-lined structure [1250].

144. While the top of [1253] was exposed at the upper surface of the natural subsoil, the top of [1250] sat 1m below the surface (Figure 10a), underlying the dark brown sandy silt upper fill of [1251]. [1250] measured 3.7m by 2.7m and 0.8m deep (with internal dimensions of 1.7m by 1.1m) and contained the same sandy silt fill within its interior which was present throughout the upper portion of [1251]. The stones used in the construction of [1250] were large rough irregular blocks averaging 0.18m by 0.26m by 0.4m in size. The sides stood three to four courses high and the base of the structure was formed of large flat stones each measuring up to 0.94m by 0.84m. None of the stones used in either structure appeared to have been worked. Set into the interior of the stone lining of [1250] along each side, was timber frame [1257]. The individual timbers measured 0.16m wide by 0.12m thick and were set part way up the interior of the stone lining. It is possible that they may have acted as extra support, or that they may have had another purpose such as support for a hatch cover.
145. The fills within [1251] contained both ceramics and fragments of animal bone. The ceramics included 15 sherds of medieval redware, and also a sherd of modern ceramic, potentially representing Rockingham ware or similar (late 18<sup>th</sup> to early 19<sup>th</sup> century).
146. Just to the northeast of [1251] sat three small pits and one possible posthole: [1239], [1259], [1260] and [1261]. These have already been described above along with the concentration of small features revealed under the spreads in Feature Group E.

#### *Central Portion*

147. At the northwestern end of the central portion of Area 1, sat a number of pits, possible postholes and linear features.
148. The largest of these were pit [1287] and spread (1300). [1287] sat close to the southwestern edge of the excavated area, and measured 3.85m by 3.8m and 300mm deep with gradual sloping sides and a fairly flat base. It contained a dark grey clay fill with few charcoal flecks which produced a large number of ceramic sherds. These included gritty wares, but mainly comprised sherds of SPOW and SPRW provisionally dated to the late 15<sup>th</sup> and 16<sup>th</sup> centuries. Spread (1300), a loose to moderately-compacted silty sand with occasional charcoal flecks, sat further to the northeast and measured 3.2m by 3.11m in extent and up to 210mm deep. On its southwestern edge sat a small deposit of spread (1322) which comprised a red orange sand which appeared to have been heat affected.
149. Visible at the base of [1287] was cut [1288], which measured approximately 1.51m in diameter and 280mm deep, with steep sides and a flat base. It was filled by a mottled sandy silt which produced four sherds of gritty ware (12<sup>th</sup> to 15<sup>th</sup> century date). It is uncertain whether this was an earlier feature truncated by [1287] or whether they were contemporary. It is possible that both relate to the former site of a tree and that the pits were dug for the purpose of its removal.
150. [1287] had been cut on its northern corner by small pit [1137] which also cut possible posthole [1141] at its southwest end. [1137] measured 1.37m by 0.86m in extent and 340mm deep, with steep sides and a vertical base. It was filled by a brown silty sand with frequent charcoal flecks which produced an iron nail. [1141] measured 0.46m long by 0.43m wide and 210mm deep, with gently sloping sides and a stepped base, and was filled by a light sand with occasional charcoal flecks.
151. [1287] had also been cut by small pit [1133] at its SE side. [1133] was rectangular in plan with rounded corners, measuring 0.52m long by 0.3m wide and 140mm deep. It had gently sloping sides and a rounded base. It was filled with a mix of dark brown silty clay with some charcoal and mortar inclusions. Its fill produced one sherd of SPRW, a piece of tapped slag, an oak trenail and three pieces of very fine, decorative glass, potentially from a wine glass or dessert bowl with a gilded rim. A further sherd of

possible window glass was also present. There was no means of dating the glass, although an origin in the 18<sup>th</sup> century or 19<sup>th</sup> century could be postulated.

152. (1300) sat adjacent to two linear features: [1307] and [1314] which sat to the northeast and southeast respectively. [1307] was orientated NW-SE and measured 2m by 0.7m and 200mm deep, while [1314], orientated NE-SW, measured 4.4m by 1.2m and 500mm deep. They both had gently sloping sides and rounded bases. [1307] was filled by brown black silty sand while the fill of [1314] consisted of a mix of sandy clay and sandy silt. The upper fill of [1314] produced some sherds of gritty ware or equivalent. It is possible that these two features represent either horticultural/agricultural features or boundaries, and that spread (1300) built up alongside them.
153. Underlying spread (1300), sat pit [1309], which measured 1.8m in diameter and 400mm deep, with vertical sides and a flat base. It was filled by a brown black silty sand.
154. Two postholes sat separate from the features to the west of (1300): [1301] and [1315]. These were oval in plan and measured up to 0.3m by 0.4m and 240mm deep with steep sides and a flat base. They contained a similar fill of dark grey sandy silt with patches of green clay.

### *Southeastern side*

155. As already described, walls [1003] and [1006] sat in the southern corner of the area. Underlying wall [1003], sat spread (1004) which consisted of a firmly compacted black silty clay with a large number of charcoal inclusions (not shown on plan). This produced a quantity of animal bone, along with an iron nail and 27 sherds of medieval ceramic. The majority of sherds comprised a form of redware, either a late medieval redware or SPOW, but two sherds of gritty ware were also present along with one sherd which may have represented an imported ware. Underlying (1004), were features [1197] and [1122] and spread (1105). [1197] was an oval pit which sat clear of the wall to the northwest of its southwestern end. It measured 1.2m by 1.13m and 300mm deep, with steeply sloping sides and a flat base, and contained sand fills. Spread (1105) ran under wall [1003] and consisted of a red and grey silty clay with charcoal inclusions which produced two sherds of SPRW/SPOW. The charcoal in both (1004) and (1105) - and the presence of heat-affected subsoil underlying (1105) - suggests that this may have been an area of hot-working or burning.
156. Linear feature [1122] was exposed partially underlying spread (1105). It sat clear of the wall to the northwest and was orientated NW-SE. It measured 0.88m long, 0.48m wide and 380mm deep with steep sides and a slightly curved bottom. It contained a sandy fill with some mortar inclusions and also produced a fragment of animal bone.
157. To the southeast of the northeastern end of wall [1003], linear feature [1032] entered from the edge of the excavated area, running NW-SE. As exposed, it measured 1.62m by 0.84m and 310mm deep, but it did not meet the wall itself. It had gradual to steeply sloping sides and a rounded base. It contained a sandy clay fill with a layer of stone rubble and slates lying on top, suggesting that it had been filled with tumble. The upper fill contained two fragments of horn core and a sherd which may have derived from a vessel of an imported ware (?Yorkshire), contemporary with the white gritty tradition.
158. At the northeastern end of the wall [1003], were spreads (1171) and (1175) and features [1014] and [1181]. Beyond, lying further to the northeast sat features [1061] and (1180).
159. [1014] was a small pit/area of burning which contained heat-affected sand and frequent charcoal inclusions. It had gently sloping sides and a flat base and measured 1.14m by 1.03m and 190mm deep. Its fills produced four sherds of gritty ware and a fragment of animal bone. Spreads (1171) and (1175) (not shown on plan) sat overlying feature [1181] to the northwest. (1171) consisted of a very compact mid-grey gritty clayey silt with frequent charcoal and occasional stones; it measured roughly 2.3m in length by around 0.8m wide and 20mm deep. (1175) consisted of a very compact dark red/brown to dark grey mixture of silty clay and gritty sand with occasional charcoal lumps, stones, and small lumps of brick; it measured roughly 0.8m long by 0.5m wide and 160mm

deep, and produced one sherd of gritty ware and two sherds of 19<sup>th</sup> century date (one sherd sponge-decorated glazed white earthenware and one sherd creamware).

160. [1181] was a rectilinear feature which had steep sides and a rounded base and which measured 1.45m by 1.15m wide and 750mm deep. It contained silty sand fills with some charcoal inclusions, and produced five sherds of gritty ware and a fragment of copper alloy plate or plaque.
161. [1061] was a large pit which was oval in plan. Measuring 2.2m by approximately 3m in extent and 1.45m deep, it had near vertical sides and a flat base and contained bands of sandy clays and sands. Some appeared to be redeposited natural subsoil which at points made the sides of the cut indistinguishable. Its fills produced ceramics, fragments of animal bone and a piece of untapped slag. The ceramics consisted of approximately 61 sherds which were dominated by gritty types, though 6 sherds appeared to be of potentially later date, either redware, or possibly SPOW. Overlying the northwestern end of [1061] was (1180), a group of five large rounded boulders, each of which measured up to 0.54m by 0.44m by 0.4m in size. These did not appear to be set within a cut or matrix, so it is possible that these represent tumble or that they related to wall [1003].
162. The features lying in the eastern corner of Area 1 mainly consisted of pits. Some of these formed two sets of a series of intercutting pits (Feature Group H) which sat approximately 1.6m apart from each other. These consisted of [1125], [1127], [1143], [1146], [1150] and [1162] forming the first set (Figure 10b) and, [1207], [1219], [1224], [1241] and [1324], forming the second. The pits were all roughly oval in plan, ranging in size from between 0.76m by 0.8m up to 1.6m by 2.91m, and between 290 to 620mm in depth. They were filled with layers of silty sand and clayey silt with charcoal inclusions, and some of them appeared to have a possible clay lining.
163. Amongst the first set of pits, three produced fragments of animal bone, metal and ceramics. The ceramics in [1143] comprised three sherds of gritty wares, while [1125] and [1127] produced sherds of gritty ware, SPOW and SPRW. In the second set, four of the pits produced finds which included ceramics, slag and glass. The ceramics in [1207], [1241] and [1324] included sherds of gritty ware, while [1219] produced sherds of gritty ware and SPRW. [1324] also produced one fragment of brown bottle glass of late 19<sup>th</sup> or 20<sup>th</sup> century date although this may have been intrusive.
164. The other features in this corner comprised pits [1035], [1064], [1065] and [1068] and possible postholes [1173] and [1203]. The pits were either circular or oval in plan and ranged in size from 0.9m in diameter up to 2.38m by 1.4m, and between 390 and 550mm deep. They mainly had steeply sloping sides and a rounded base and their fills consisted of yellow/brown silty sand and sandy clay, some of which had charcoal inclusions. [1173] sat directly adjacent to pit [1065], and measured 0.54m by 0.41 and 390mm deep, with steep sides and a rounded base. It contained a mortar-like gravelly fill. In plan it appeared that [1065] and [1173] cut each other, but in section they were seen to be two separate cuts which sat adjacent to one another. [1203] sat in isolation and measured 0.46m by 0.26m and 100mm deep, with steep sides and a rounded base. It contained a fill of brown silt with charcoal flecks.
165. Both [1065] and [1068] contained finds. [1065] produced a quantity of pottery, comprising 53 sherds in total. These appeared to be roughly equally divided between gritty types, and also (potentially) redwares or greywares of 14<sup>th</sup> to 15<sup>th</sup> century date. Of note, however, were two sherds from later ceramic types: <236> included one sherd of late 18<sup>th</sup>/early 19<sup>th</sup> century tin-glazed handpainted earthenware ('Pearlware') and <339> one sizeable and very weathered sherd from a slip-trailed cup of late 16<sup>th</sup>/17<sup>th</sup> century date. [1065] also produced fragments of animal bone. [1068] produced three sherds of SPRW, fragments of animal bone and a fragment of clay tobacco pipe which appeared to be 19<sup>th</sup> century in date.
166. A large modern pit [1069] was also present in the far eastern corner. Oval in plan, it measured 5.4m by 3.5m in extent, and up to 2m deep. It had steeply sloping sides and a rounded base and was filled by a fairly compact very dark brown silty clay with frequent small to medium sized stones. This contained finds of animal bone, glass and ceramics.

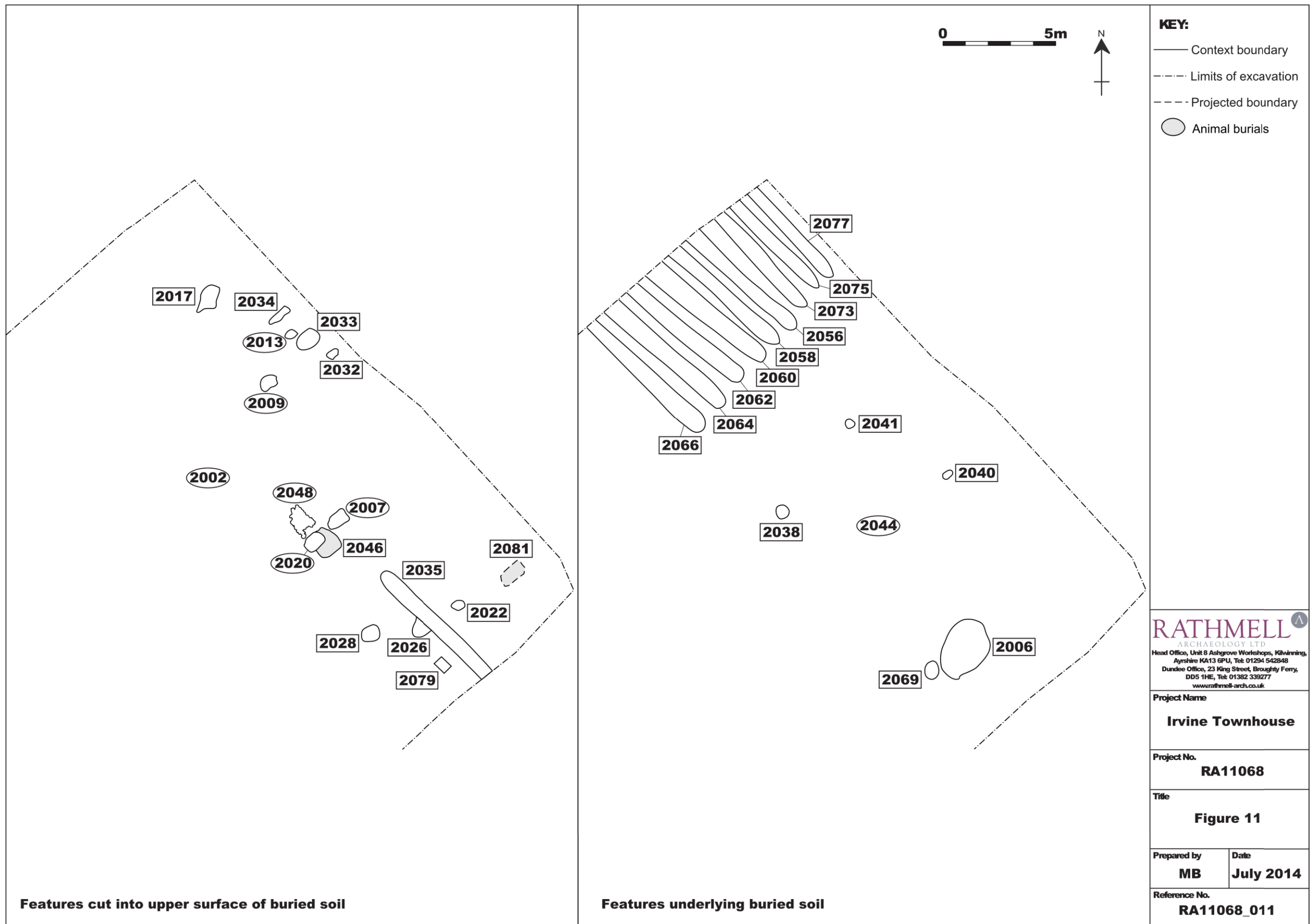


Figure 11: Plans of archaeological features in Area 2





Figure 12a: Shot of animal burial (2084) from the northeast



Figure 12b: Feature Group L from the northeast

The ceramics included four sherds of SPRW of what appears to be late date (16<sup>th</sup> or even 17<sup>th</sup> century) plus a sherd from a Rhenish stoneware jug of 'Bellarmine' type. A sherd of hand-painted tin-glazed pearlware or Prattware was also recovered along with a sherd of modern (i.e. 19<sup>th</sup> century) stoneware from a jar or similar. The glass consisted of a fragment from the neck of a beer bottle and a fragment of thick plate glass of 20<sup>th</sup> century date.

## Area 2

167. Area 2 lay to the northeast of Area 1, with both areas separated by Area 4 which occupied the intervening, central, portion (see Figure 4). It measured 25m by 11m in extent.
168. Area 2 was initially reduced by machine to reveal the top surface of buried soil layer (2002) at a depth of 600mm to 1m below the ground surface. All features cut into the upper level of this surface were excavated, and then the buried soil was reduced by machine in spits of 200mm. Following the removal of each spit, the surface was hand cleaned and checked in case further features were sealed within the layer. Instead, the buried soil proved to be one homogenised deposit without any internal stratigraphy. As such, only two levels of archaeological horizons were met: firstly, the features cut into the upper surface of the buried soil (2002), and secondly, those cut into the upper surface of the natural subsoil (2044). The upper surface of the natural subsoil (2044) sat at a depth of 1.2 to 1.5m below the ground surface, and machine reduction stopped at this level.
169. Underlying buried soil (2002) across the northwestern half of the area, a layer of redeposited natural subsoil (2068) was discovered. This consisted of a loose mixed yellow/brown/orange sand with some silty pockets. It covered a visible area measuring 10m by 7m in plan, extending outwith the excavated area to the northeast, northwest and southwest. The deposit did appear to continue into the northwestern end of Area 4 but was removed along with buried soil (4002). (2068) ranged in depth from 250 to 500mm, and was removed to reveal underlying features (specifically Feature Group L).
170. As stated above, archaeological features were met at two levels within Area 2 and, as such, the two levels (and their respective features) have been described separately below. Figure 11 shows the plans for the features met at both levels.

### *Features cut into the surface of buried soil layer (2002)*

171. At the southeastern end of Area 2 sat a group of features which all contained a similar fill (Feature Group I): [2022], [2026], [2028] and [2035]. [2022], [2026] and [2028] were all pits which were oval or sub-circular in plan, and which measured from 0.48m by 0.52m up to 1.55m by 1.75m, and between 120 to 470mm in depth. They had steeply sloping sides and a rounded base. [2035] was a linear feature orientated NW-SE which measured 6.3m long, 0.77m wide and 280mm deep and continued outwith the edge of the excavated area to the southeast. It had gradual sloping sides and a rounded base, and appeared to cut the northeastern edge of [2026]. All of these features contained a mid-brown silty sand with charcoal flecks, and three of the features produced finds. [2022] and [2035] both produced gritty ware, while [2026] produced an iron nail, two sherds of gritty ware and three sherds of medieval greyware.
172. Two pits, which sat separately from each other in the southeastern half of the area, contained the articulated remains of animal burials (Feature Group J): [2046] and [2081]. The pits were both roughly square in plan with rounded corners, and had gradual to steeply sloping sides with a slightly rounded base. They were both of similar size, measuring approximately 1.2m by 1m in plan and up to 300mm deep. They contained a dark greyish-brown silty clay with charcoal inclusions, and a dirty black brown sandy silt, respectively. At the base of these fills were the remains of the animal burials (2051) and (2084) (Figure 12a). The bones will require further post-excavation analysis but have been preliminarily identified as cows, and it appeared on-site as if each pit only contained the partial remains of one individual. The upper portion of pit [2081] appeared to have

been heavily disturbed which made the full extent of the cut hard to see on the surface and likely also caused disturbance to the remains of the burial itself.

173. The fill within [2046] produced 25 sherds of gritty ware, six sherds of greyware and five sherds of redware. Also recovered from this context were sherds from later redware jars, potentially of 19<sup>th</sup> or even 20<sup>th</sup> century date. Some finds had been collected with the bones themselves. For (2051), this included two sherds of ceramic, one sherd of redware and one sherd of gritty ware. (2084) produced two sherds of gritty ware and one sherd of redware, along with one sherd of brown-glazed red earthenware of 19<sup>th</sup>/20<sup>th</sup> century date.
174. Sitting adjacent to the northwest side of one of these burial pits, [2046], sat stones (2048). These comprised a single course of sandstone boulders which ranged in size from 0.27m by 0.2m by 0.1m along the southwestern side, to 0.5m by 0.17m by 0.15m along the northeastern side, with some smaller stones sitting in the middle. The stones had not been worked and did not have any bonding. They overlay buried soil (2002) but did not appear to sit within a visible cut. Their full extent, which covered a roughly rectangular area in plan, measured 1.3m by 0.8m; it is possible that they formed a platform or structure of some sort, although they could also represent an area of dumping.
175. The remainder of the features cut into the upper surface of the buried soil in Area 2 comprised modern pits and spreads (Feature Group K) scattered across the full area, although mostly concentrated in the northwestern half: (2007), (2009), (2013), [2017], (2020), [2032], [2033], [2034] and [2079]. The pits ranged in size from 0.66m by 0.52m in plan up to 0.96m by 0.76m, and varied in depth between 130 to 450mm, mainly with gently sloping sides and a rounded base. The spreads were of similar dimensions to the pits and their fills were of the same composition: a black silty clay with charcoal inclusions, often containing modern bottle glass, sherds of white glazed white earthenware and plastic.

*Features underlying buried soil (2002), cut into natural subsoil (2044)*

176. Following the removal of buried soil layer (2002), and the underlying (2068), a number of features were exposed across the area which had cut into the natural subsoil (2044).
177. At the northwestern end lay a series of nine linear features (Feature Group L): [2056], [2058], [2060], [2062], [2064], [2066], [2073], [2075] and [2077]. These all ran NW-SE at intervening gaps of 0.4 to 0.6m (Figure 12b). They entered the area from the northwest edge and ran for a length of 6 to 6.2m before ending in a rounded terminal. They measured between 0.6 to 1m wide and between 400 to 500mm deep, with steeply sloping sides and a concave base. They all contained a similar uniform fill which consisted of a moderately-compacted dark greyish brown sandy silt with charcoal inclusions. These linear features continued into Areas 4 and 1 to the southwest (see Feature Groups Q and U) and were similar to linear features present at the northwestern end of Area 3 (see Feature Group M).
178. The majority of the linear features in Feature Group L produced finds. These included iron nails, one fragment of animal bone and several sherds of gritty ware, as well as one sherd of redware and one sherd of greyware which from the form of the vessels and the character of the fabric are likely to represent earlier ceramic traditions, as opposed to SPOW/SPRW.
179. Spread across the central and southeastern portions of the area, were a number of pits and one possible posthole. Three of the pits, scattered across the area in separate locations, were of similar size: [2038], [2040] and [2069]. They were all roughly circular in shape with gradual to steeply sloping sides and rounded bases. All measured 0.6 to 0.7m in diameter and between 100 to 350mm deep. The fourth pit, [2006], located at the southeastern end, was larger, measuring 2.62m by 1.7m in plan and 500mm deep. It had steep sloping sides and a rounded base. [2069] sat close to its southwestern edge. Possible posthole [2041] sat in relative isolation in the central portion and measured 0.3m by 0.4m in plan and 130mm deep. It had steep sloping sides and a rounded base. Each pit was characterised by a single fill which mainly consisted of a mid to dark brown

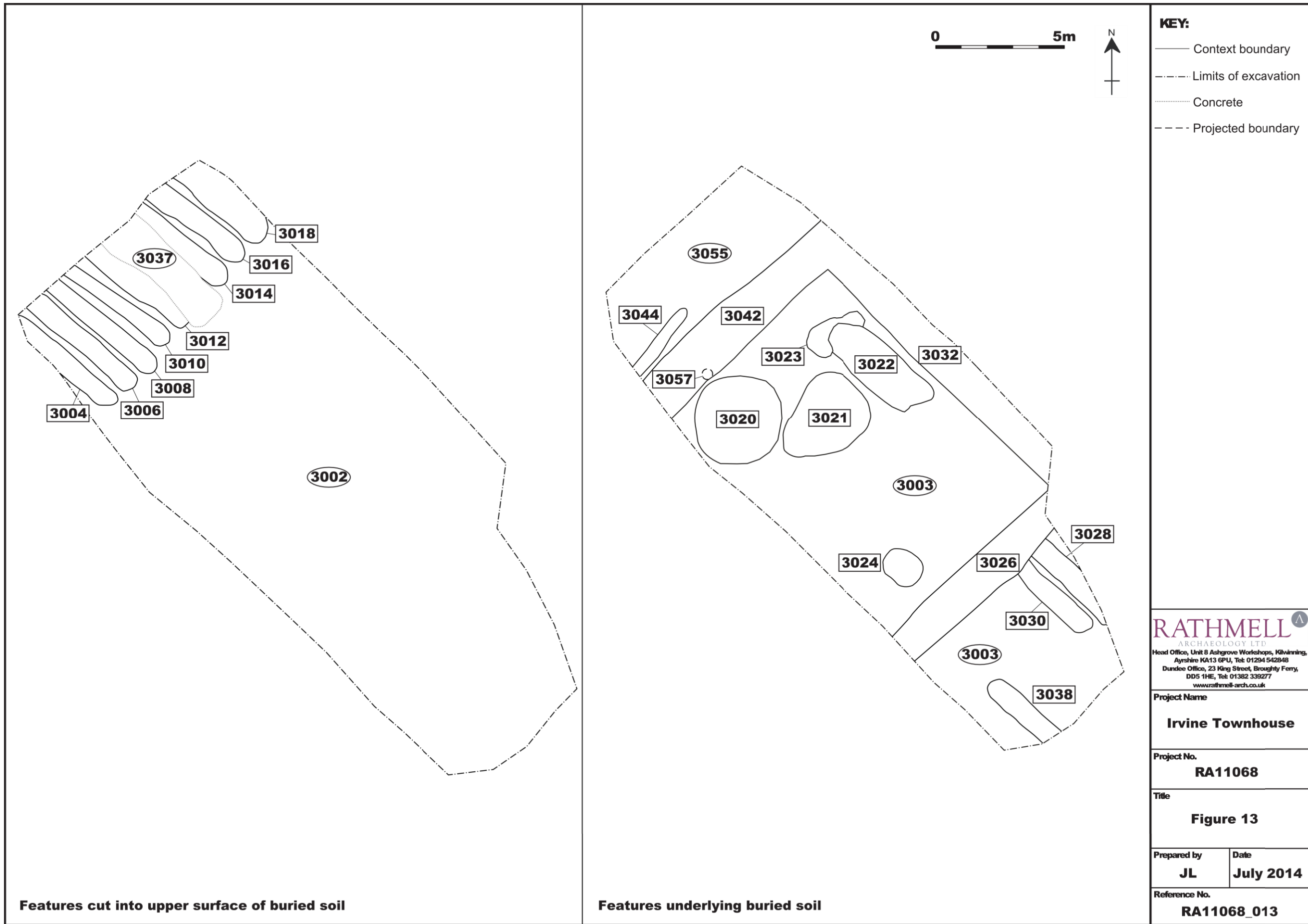


Figure 13: Plan of archaeological features in Area 3



Figure 14a: Northwestern end of Area 3 from the northeast, showing linear feature [3042]



Figure 14b: Pit [3020] with *in situ* wood [3063] from the northeast

sandy silt with some charcoal inclusions. Pits [2038], [2040] and [2069] all produced finds which included animal bone and ceramics. The ceramics included two sherds of greyware or SPRW from [2038], and four sherds of gritty ware and four sherd of medieval greywares from [2040].

### Area 3

180. Area 3 measured 25m by 10m in extent and formed a discrete area in the northern end of the site. Once opened, the eastern corner quickly filled up with water – apparently derived from a leaking drain which sat further to the southeast - and had to be backfilled not long after to prevent waterlogging across the entire area. As a result, this end had to be stepped in and only measured 8m wide.
181. As with Area 2, Area 3 was initially reduced by machine to reveal the top surface of the buried soil layer (3002) so that any features cut into this upper level could be excavated. This sat at a depth of 850mm to 1m below the modern surface. As the work in Area 2 had already revealed the buried soil to be a homogenised deposit without internal stratigraphy, (3002) was then removed by machine in one phase in order to reveal the upper surface of the natural subsoil (3003). This sat at a depth of 1.3 to 1.6m below the upper ground surface, with machine reduction stopping at this level.
182. As in Area 2, archaeological features were met at two levels: these comprised firstly, those cut into the upper surface of buried soil (3002) and secondly, those which cut into the upper surface of the natural subsoil (3003) underlying (3002). Again, the two levels (and their respective features) have been described separately below. Figure 13 shows the plans for the features met at both levels.

#### *Features cut into surface of buried soil layer (3002)*

183. The only features which had been cut into the upper surface of buried soil (3002) were a series of eight linear features at the northwestern end (Feature Group M): [3004], [3006], [3008], [3010], [3012], [3014], [3016] and [3018]. These all sat adjacent to one another and were orientated NW-SE with intervening gaps of 0.2 to 0.4m. All of them had rounded terminals to the southeast and extended northwest beyond the edge of the excavated area. Their visible extents measured between 4.3 and 4.8m in length, with each feature measuring approximately 0.8m wide and up to 300mm in depth. All had steeply sloping and mainly flat bases, and contained very similar fills: a moderately-compacted dark brown clayey silt with a small amount of charcoal flecks. A block of modern concrete (3037) had disturbed the central features, creating a gap between [3012] and [3016] where another linear feature may originally have been present. These linear features were similar to those identified at the northwestern end of Areas 1, 2 and 4 (see Feature Groups U, L and Q). No finds were recovered from Feature Group M.

#### *Features underlying buried soil (3002), cut into natural subsoil (3003)*

184. A number of features had been cut into the upper surface of the natural subsoil (3003); these were revealed after buried soil (3002) had been removed.
185. Three linear features (Feature Group N) appeared to enclose a rectangular area covering the majority of Area 3: [3026], [3032] and [3042]. [3026] and [3042] both ran SW-NE and sat approximately 12m apart, while [3032] ran NW-SE along the northeastern edge of the area. Running perpendicular to the other two linear features, [3032] appeared to adjoin them at their northeastern ends. [3026] and [3042] (Figure 14a) measured 9 to 9.3m in length, while [3032] measured 12.2m long. All three measured between 1.3 to 2m wide, and between 530 to 700mm deep. They had gentle to steep sloping sides and flat bases, and were filled by light and mid-brown sands and silts. [3026] produced one sherd of gritty ware. The full extent of the linear features were not exposed within the excavated area: [3026] and [3042] both extended outwith the area to the northeast and southwest, while [3032] extended further to the southeast. The exact relationship between the three features is uncertain and it was not clear whether they cut each other or were contemporary.

186. Towards the southwest end of [3042] sat a possible smaller feature [3057] revealed in section at the base of [3042]. It sat on the southeast edge and measured 0.4m wide and 400mm deep. It was not visible on plan, but in section it had vertical sides and a flat base. It was filled by a dark brown sandy silt, although the upper portion of it had mixed with the adjacent fill in linear feature [3042] making the cut harder to see. This is also the likely reason why it was difficult to see in plan. It appeared to cut [3042] and may represent a later feature, but after it fell out of use it may have been partly infilled by the surrounding fill of [3042].
187. The portion of ground which lay between [3042] and the northwestern edge of the excavated area (measuring an area approximately 9.3m by 3.2m in extent), was covered by spread (3055). This consisted of a build-up of light to mid-brown silty sand with occasional burnt orange sandy specks measuring 170mm deep. Underlying it were deposits (3059) and (3056); these appeared to represent variations in the natural subsoil, likely formed by old water levels.
188. Sitting to the northwest of [3042] at its southwestern end, and cut into deposit (3055), was linear feature [3044] which was orientated SW-NE. This measured approximately 3.3m long, 0.31m wide and 30mm deep with steeply-sloping sides and a flat base. It was filled by a brown/black silty clay.
189. Located within the centre of the area were five pits: [3020], [3021], [3022], [3023] and [3024]. The first four all sat close to one other at the northwestern end. [3020] and [3021] were both large, rounded pits which measured up to 3.7m in diameter in plan and between 720mm and 1.1m in depth. [3020] had steep-sloping sides and a gentle concave base, while [3021] had gently sloping sides and a flat base. All contained bands of sand and silt fills ranging from yellow to blackish brown in colour. The fills within [3020] produced six sherds of gritty ware and two sherds of SPRW. [3020] also contained possible wood lining [3063], set along the southeastern edge of the base (Figure 14b), which consisted of three planks which covered an extent measuring 1.98m by 0.12m and 90mm thick.
190. [3022] was sub-rectilinear in plan, orientated NW-SE and measuring 4.7m long by 1.88m wide and 500mm deep. It had gently sloping sides and an uneven base, and was filled by bands of dark brown and light brown/orange silty sand. [3022] cut pit [3023] on its southeastern side. [3023] was oval in plan, orientated SW-NE, and measured 2.4m long, 0.88m wide and 500mm deep. It had steep sides and a curved base and was filled by a single fill of light brown sandy silt.
191. Further to the southeast, sat sub-circular pit [3024] which measured 1.4m by 1.5m and 380mm deep. It had gradual sloping sides and a flat base, and contained mixed dark brown and paler sand, some of it possibly redeposited natural subsoil, containing a number of silt lenses. The fills produced fragments of animal bone, coal and sherds of gritty ware, although one may possibly be an import.
192. At the southeastern end of Area 3, to the southeast of [3026], there were three linear features which ran NW-SE: [3028], [3030] and [3038]. [3028] and [3030] (Feature Group O) sat adjacent to each other (with an intervening gap of 0.2m) at the northeastern end. They measured between 3 to 5.4m in length, 0.79 to 0.9m wide and up to 140mm deep. They both appeared to have been cut by (3026) at their northwestern end, and while [3028] appeared to continue outwith the excavated area to the southeast, [3030] ended in a rounded terminus. They had gentle to steep sloping sides with uneven bases and contained sand fills.
193. Located a little further to the southwest, [3038] measured 3.1m long, 0.78m wide and 140mm deep. It continued outwith the area to the southeast and ended in a rounded terminus at its northwestern end. It had gently sloping sides and a flat base and contained a single light to mid-brown silty sand fill which produced a sherd of gritty ware. It is possible that this was associated with Feature Group O but it was set further apart.

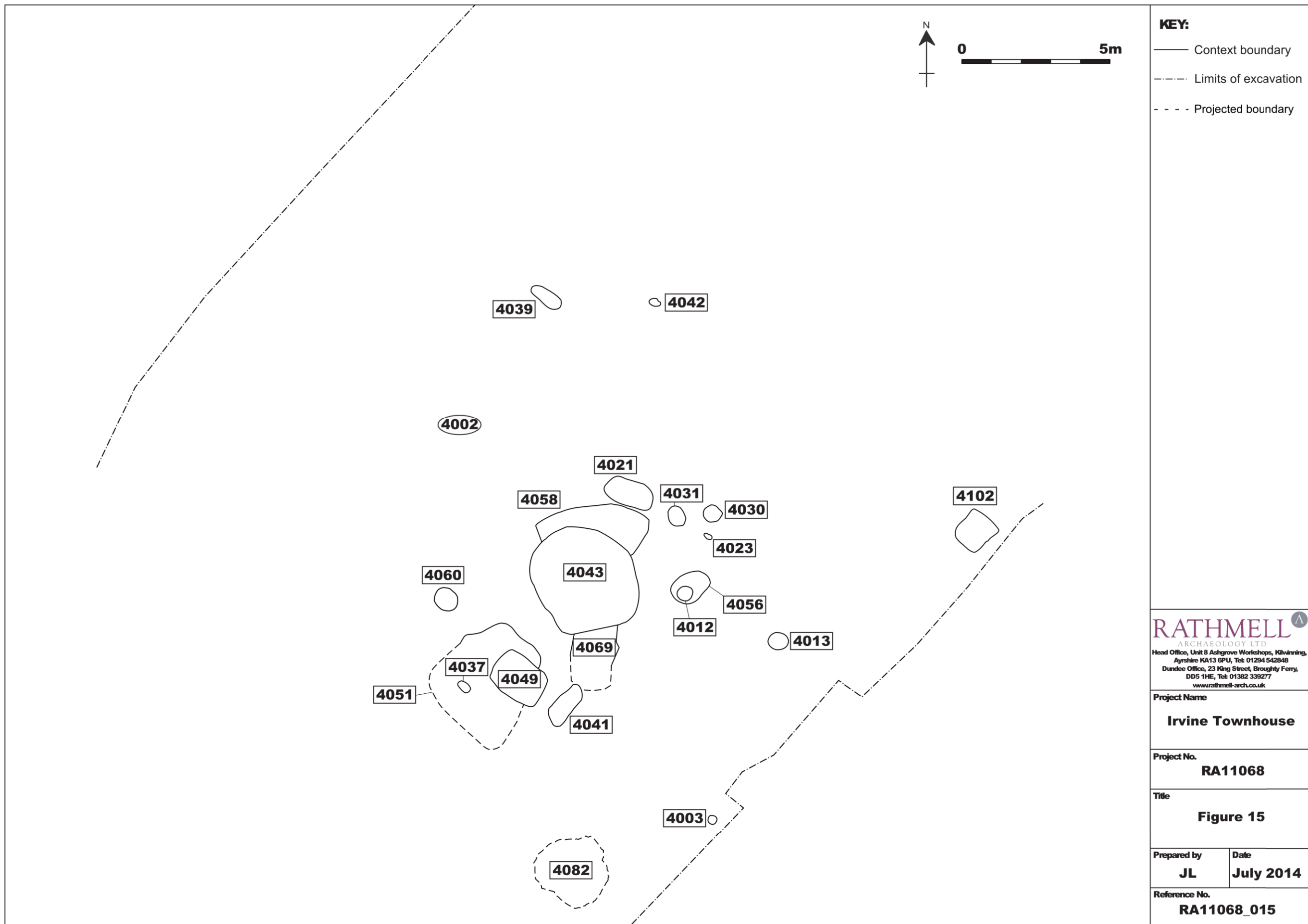


Figure 15: Plan of archaeological features in Area 4 which had been cut into the upper surface of the buried soil layer (4002)



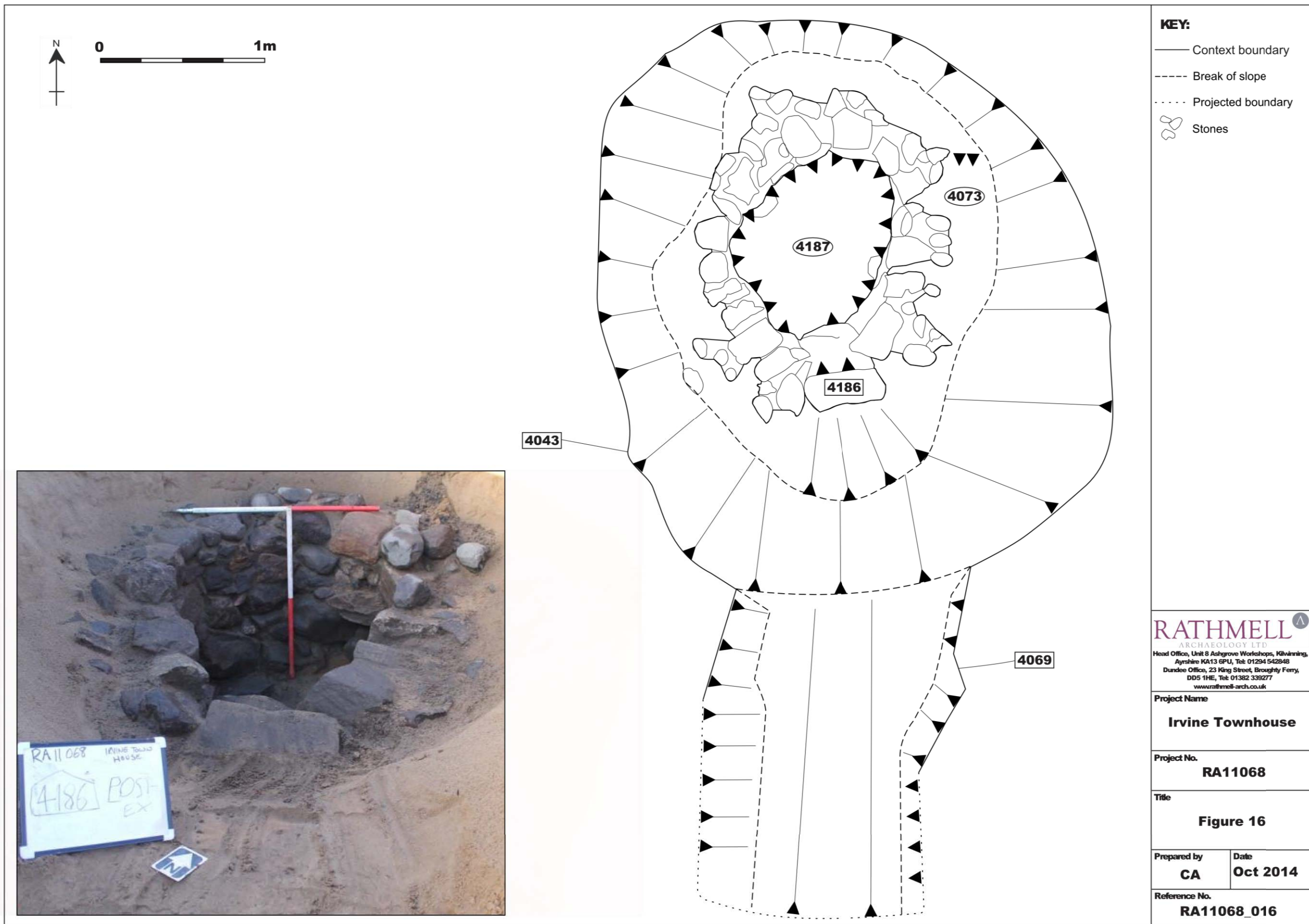


Figure 16: Plan of pits [4043] and [4069], containing remains of well [4186]

## Area 4

194. Area 4 formed an intermediate section between Areas 1 and 2: together, all three sections formed one large open strip along the southeastern end of the site. It measured approximately 20m by 21m in extent.
195. As with Areas 2 and 3, Area 4 was initially reduced by machine to reveal the top surface of the buried soil layer (4002) so that any features cut into this upper surface could be excavated. This sat at a depth of between approximately 500 to 800mm below the ground surface. (4002) was then removed by machine in one phase in order to reveal the upper surface of the natural subsoil (4071), which sat at a depth of between 1 and 1.2m below the upper ground surface. Machine reduction stopped at this level.
196. Once again, archaeological features were met at two levels: these comprised the features cut into the upper surface of the buried soil (4002), and those which cut into the upper surface of the natural subsoil (4071) underlying (4002), respectively. Again, the two levels (and their respective features) have been described separately.

### *Features cut into the surface of buried soil layer (4002)*

197. A number of features had been cut into buried soil layer (4002), consisting mostly of pits and possible postholes, mainly located in the southeastern half of the area (Figure 15)
198. The most prominent feature was circular pit [4043] which measured 3.38m in diameter and 1.85m deep, cutting into the underlying natural subsoil (4071). It had steep-sloping sides and was filled by a loosely-compacted dark grey sandy silt with infrequent charcoal inclusions, overlying a loosely-compacted yellow brown silty sand with infrequent stone and charcoal inclusions. At the base of this pit were the remains of a well [4186] (Figure 16). This structure was oval in plan measuring 1.9m by 1.7m and 600 to 750mm deep (approximately two to four courses). The top of this feature sat approximately 1.15m below the upper limits of the pit. It was constructed of sub-angular and sub-rounded sandstones with an average size of 0.46m by 0.22m. Some of the stones showed signs of working and appeared to have been re-used. The stones sat in a matrix of silty sand and the masonry did not appear to have been bonded, although it is possible that it may originally have been pointed but that the mortar no longer survives. The interior of the structure was filled by sands and silts. It is likely that what remained were just the basal courses of the original structure and that the upper courses had been robbed out. It is this robbing out phase which cut [4043] may relate to, rather than the original construction.
199. The fills within [4043] produced fragments of animal bone, an iron nail, glass and ceramics. The glass was diverse in character, comprising four fragments of 19<sup>th</sup> century bottle glass and two fragments of badly laminated clear glass which may derive from earlier, post-medieval, occupation of the site. The ceramics included one sherd of gritty ware and several sherds of SPOW and SPRW. From amongst the stones of the well structure [4186], three sherds of SPRW were recovered.
200. Adjoining [4043] on its southern edge was feature [4069] (Figure 16) which was sub-rectangular in plan and measured approximately 1.25m by 0.35 to 0.55m wide and up to 950mm deep. It had steep sides and a flat base which sloped upwards towards the south. It contained the same fill as the upper fill of pit [4043] with a layer of redeposited natural underlying this along the sides. It is possible that this acted as an access point into the much deeper [4043].
201. To the east and northeast of [4043] sat a number of small pits and possible postholes. Just to the north of [4043], sat spread (4059) (not shown on plan) which surrounded a small dump of stones (4021). (4059) appeared to be a thin layer of redeposited buried soil (4002), while (4021) appeared to possibly represent a very small deposit of demolition material. (4059) produced one iron nail and 30 sherds of ceramics which comprised roughly equal quantities of gritty wares and SPOW/SPRW. (4059) was removed to reveal pit [4058] which sat directly adjacent to [4043] on its northern side, and had been cut by [4043]. It was oval in plan and measured 2.83m by 1.5m and

870mm deep, with gradual sloping sides and a flat base. It was mainly filled by dark brown silty sand with some lenses of yellow sand present in the lower half. Its fills produced ceramics which included some sherds of gritty ware but mainly consisted of SPRW and SPOW. They also produced three fragments of smithing slag and two fragments of fuel ash slag.

202. Three possible postholes (Feature Group P) sat to the northeast of [4043]: [4023], [4030] and [4031]. These were all sub-circular in plan with steep sides and a rounded base. They measured between 0.18m by 0.27m and 0.5m by 0.6m in plan, and between 110 to 350mm in depth. They were all filled by a single similar fill: moderately compacted dark brown silty sand with some small stone inclusions. [4031] produced fragments of animal bone and one sherd of white earthenware of 19<sup>th</sup> to 20<sup>th</sup> century date
203. To the south of these features, and east of pit [4043], sat pit [4056]. This was oval in plan and measured 1.28m by 0.94m and 750mm deep. It had steep sides and a rounded base and was filled by a light yellow/mid brown mix of silty sand with pockets of clay, with a thin layer of dark grey brown sandy silt with occasional unworked wood inclusions at the base. At the southwestern end of [4056], it had been cut by possible posthole [4012] which sat fully within its limits. This was circular in plan measuring 0.7m in diameter and 640mm deep with steep sides and a flat base. It was filled by dark grey clayey silt and a dark brown grey silty sand, and appeared to have evidence for packing stones at the base and a post pipe in the middle. The fills produced a number of finds which included fragments of animal bone, fragments of window and bottle glass of 18<sup>th</sup> to 19<sup>th</sup> century date, a sherd of gritty ware and a fragment of clay tobacco pipe of potential 17<sup>th</sup> century date.
204. An isolated pit sat to the southeast of [4056]: [4013]. This was sub-circular in plan and measured 0.55m by 0.6m and 180mm deep, with steep sides and a flat base. It was filled by a moderately compacted dark grey brown sandy silt which contained one sherd of gritty ware and also a fragment of glass possibly derived from a late 17<sup>th</sup>/early 18<sup>th</sup> century 'Dutch onion' type wine bottle.
205. More features sat to the southwest of pit [4043]. Pit [4060] was oval in plan, measuring 0.96m by 0.72m and 420mm deep. It had steep slopes and a rounded base and was filled with a dark brown sandy clay with charcoal fleck inclusions, which produced one sherd of gritty ware, a stem of late 17<sup>th</sup> century clay tobacco pipe and some fragments of animal bone.
206. Pit [4049] was sub-rectangular in plan, orientated NW-SE, measuring 1.5m by 0.8m and 1.1m deep. It had steep sides and a concave base, and was filled by very loose silty sand with several medium to large stone inclusions. The fill produced several finds including animal bone, wood, metalwork, glass and ceramics. The glass included a stamped base from a bottle manufactured by John Lumb & Co., a specialist bottle manufacturer based in Yorkshire, which dates to the early 1900s. The ceramics were dominated by late medieval/post medieval wares (19 sherds SPOW/SPRW), with residual sherds of gritty ware (numbering four in total) also present. However, one sherd of heavy-ceramic glazed brick or tile was also present, indicating a modern (?19<sup>th</sup> century) date of origin. The presence of modern ironwork in this same fill also helps confirm a modern date for the pit.
207. [4049] cut into the middle of large pit [4051] which was roughly sub-rectangular in plan, although it had been difficult to define upon the surface, being more visible in section and at lower depths. It measured approximately 3m by 3.9m, and 1.15m deep. It had gentle to steep sloping sides and an uneven/concave base, and it contained a series of fills comprising a mixture of mortar, charcoal and silty sands which showed evidence of tip lines. The finds from these fills included animal bone, shell, slate, metalwork, a George V penny dated to 1920, glass and ceramics. The glass produced a neck from a modern moulded green bottle, while the ceramics included gritty wares, SPRW and SPOW. The metalwork included a fragment of drain or flue and a 'key' for lathwork.



208. Both [4049] and [4051] cut below the depth of the buried soil into underlying pit [4336] (see next section for description) and were possibly robber cuts for the stone lining which sat within [4336]. In particular [4049], with its rubble inclusions, appears to have removed part of wall [4279] (see next section for description).
209. Possible posthole [4037] had also been cut into the upper surface of [4051]: completely discreet from [4049], it was oval in plan and measured 0.45m by 0.3m and 100mm deep, with moderately sloping sides and a rounded base. It was filled by a loose red brown silty sand which contained frequent brick building debris, suggesting that this feature is modern in date. It contained fragments of 19<sup>th</sup> century clay tobacco pipes and a coin, which though illegible, appeared similar in character to a 'turner' of 17<sup>th</sup> century date.
210. To the southeast of [4051], sub-rectangular feature [4041] was orientated SW-NE, and measured 1.55m long, 0.69m wide and 240mm deep. It had steep sides and a rounded base, and was filled by a firmly-compacted grey-black silty clay with frequent charcoal inclusions. Its fill produced one sherd of gritty ware.
211. Possible posthole [4003] sat on its own, close to the southeastern edge of the excavated area and to the south of the main concentration of features. It was circular in shape and measured 0.28m in diameter and 120mm deep. It had steep sides and a rounded base and was filled by a moderately compacted dark grey clayey silt with some sandy pockets. It produced one find of slag.
212. In the southern corner of Area 4 sat [4082]. The cut was not very visible at this level, becoming clearer once buried soil layer (4002) was removed. The presence of more recent pottery fragments within the interior backfill suggests, however, that while the well may have originally been contemporary with some of the surrounding features present at the lower level, it was kept open for a longer period before being backfilled. The lack of a visible cut through the buried soil may hint at the manner in which the well was backfilled: either the surrounding buried soil (4002) collapsed in over the top or it was deliberately pulled in from the sides to cover it. Either action would make a cut difficult to differentiate.
213. [4082] was sub-circular in plan, and measured 2.39m by 2m and 1.4 to 1.75m deep. It had near-vertical sides and a flat base and contained stone-lined well [4226]. The well was constructed from stones measuring between 0.05m by 0.04m up to 0.15m by 0.37m in size. They were bonded with clay/sand with the masonry surviving to a depth of approximately 10 courses. The well itself had an internal diameter of approximately 1.26m and an overall diameter of 2.2m in extent, and reached a maximum depth of 1.4m (only exposed at the same depth as the surface of the natural subsoil). The interior was filled by dark brown sandy clay which produced four sherds of possible gritty ware, sherds of 19<sup>th</sup> century transfer-printed and coarse wares, as well as 9 sherds of hand-painted 'pearlware' or 'Prattware' and a sherd of slip-trailed ware of 16<sup>th</sup>/17<sup>th</sup> century date. It also produced fragments of animal bone and a fragment of late 17<sup>th</sup>/early 18<sup>th</sup> century 'Dutch onion' type wine bottle.
214. Two small pits - [4039] and [4042] - occupied discrete locations to the north of the main concentration of features. They measured 0.4m by 0.96m and 480mm deep, and 0.3m by 0.38m and 60mm deep respectively. They had gentle to steep sloping sides with rounded bases, and contained a single similar fill which consisted of a loosely compacted dark brown/black sandy silt with occasional small stones. [4039] was noted to have contained modern material including glass, pottery and metal (not retained).
215. In the far eastern corner of the area, close to the northeastern limits, sat pit [4102]. It was sub-circular plan and measured 1.05m by 0.76m by approximately 600mm deep. It had steep sides and a concave base, and was filled by a dark grey/brown silty clay which contained the partial articulated remains of an animal burial (4192). It appeared to have been buried with its legs tucked into its side and the head extended straight out, although the bones were very badly degraded. This sat at the northeastern limits of Area 4 where it met Area 2 and it is very likely that this burial may have been associated with similar animal burials found in Area 2 – Feature Group J. As with the other burials, these

bones will require further post-excavation analysis. However, unlike the other burials, these bones have been preliminary identified as the remains of a horse, appearing again to represent just one individual. The fill within the pit produced finds which included a fragment of modern green bottle glass, one sherd of blue-and-white transfer-printed glazed white earthenware, one sherd of brown-glazed red earthenware, and a fragment from a clay tobacco pipe of potentially early (17<sup>th</sup> century?) date.

*Features underlying buried soil (4002), cut into natural subsoil (4071)*

216. Several features spread across the area were found to have been cut into the natural subsoil underlying buried soil (4002) (Figure 17).
217. Along the northwestern edge of the area were a series of 15 linear features: Feature Group Q. These were all orientated NW-SE with the intervening gaps typically measuring between 0.2 and 0.3m. They all had rounded terminals to the southeast and continued outwith the edge of the excavated area to the northwest. They measured between 3.7 and 7m in length, between 0.49 and 1.3m wide and between 90 and 600mm in depth. They had moderately sloping sides and flat bases, and all contained very similar fills: a moderately compacted mid- to dark brown silty sand with occasional small rounded stones and occasional to moderate charcoal inclusions. These linear features were similar to linear features present at the northwestern end of Areas 1, 2 and 3 (see Feature Groups U, L and M). Finds from the linear features included smithing slag, fuel ash slag, iron nails and several ceramic sherds. The majority of these sherds were gritty ware, although three sherds of SPOW/SPRW were also present.
218. Feature Group Q did have one break across their extent close to the NE end where a group of four pits - [4122]; [4124]; [4128] and [4132] - and two possible postholes - [4120] and [4134] - were present. The pits ranged in size from 0.5m in diameter to 1.23m by 1.07m, and between 80 to 480mm deep. They had gentle to steep sloping sides and both rounded and flat bases. The two possible postholes measured between 0.3 and 0.48m in diameter and 100 to 130mm deep, with gradual to steep sloping sides. The pits and the postholes all contained a fill which was similar in composition: a mid- to dark brown silty sand. Five of the features produced sherds of gritty ware.
219. [4132] and [4134] had both been cut by the linear features in Feature Group Q, suggesting that they pre-date the feature group. It is possible that these features were originally surrounded by others in the immediate surrounding area, but that only the break in the extent of Feature Group Q has allowed for their survival. Elsewhere, the linear features removed any trace of earlier remains.
220. In the northeastern half of the site, just beyond the southeast end of Feature Group Q, sat Feature Group R. This consisted of four larger intercutting pits: [4154], [4261], [4262] and [4263]. Three of the pits, [4261], [4262] and [4263], were similar in size, measuring between 1.15 and 2.22m in diameter and between 1.2 and 1.36m deep, with gradual to near-vertical sloping sides and flat bases. These all had various fills and lenses of varying pale to dark brown silt and sand (Figure 19), with some patches of redeposited natural subsoil and more clayey deposits. [4154] was the largest of these pits, measuring 3m by 3.7m in plan and 1.37m deep with moderate to steeply sloping sides and a flat base. It appeared to have a different type of fill which was far more uniform in character, mainly consisting of a moderately-compacted dark brown silty sand (Figure 18a).
221. It is uncertain whether two or more of these pits may have been open at the same time or whether they were all cut in sequence, with [4154] cutting the rest, but the difference in the fill of [4154] compared with the other three suggests that it was the last to be backfilled. Possibly the other three pits with their various mixed lenses were backfilled with redeposited material from elsewhere, while the majority of [4154] appears to have been backfilled in one go, possibly with a mix of topsoil and other materials. All four pits produced sherds of gritty ware, with [4154] also producing one sherd of medieval greyware and two sherds potentially derived from imported vessels.



Figure 18a: Northwest facing section of pits [4154] and [4261] from the west



Figure 18b: Wood lining [4312] at base of pit [4263] from the southeast

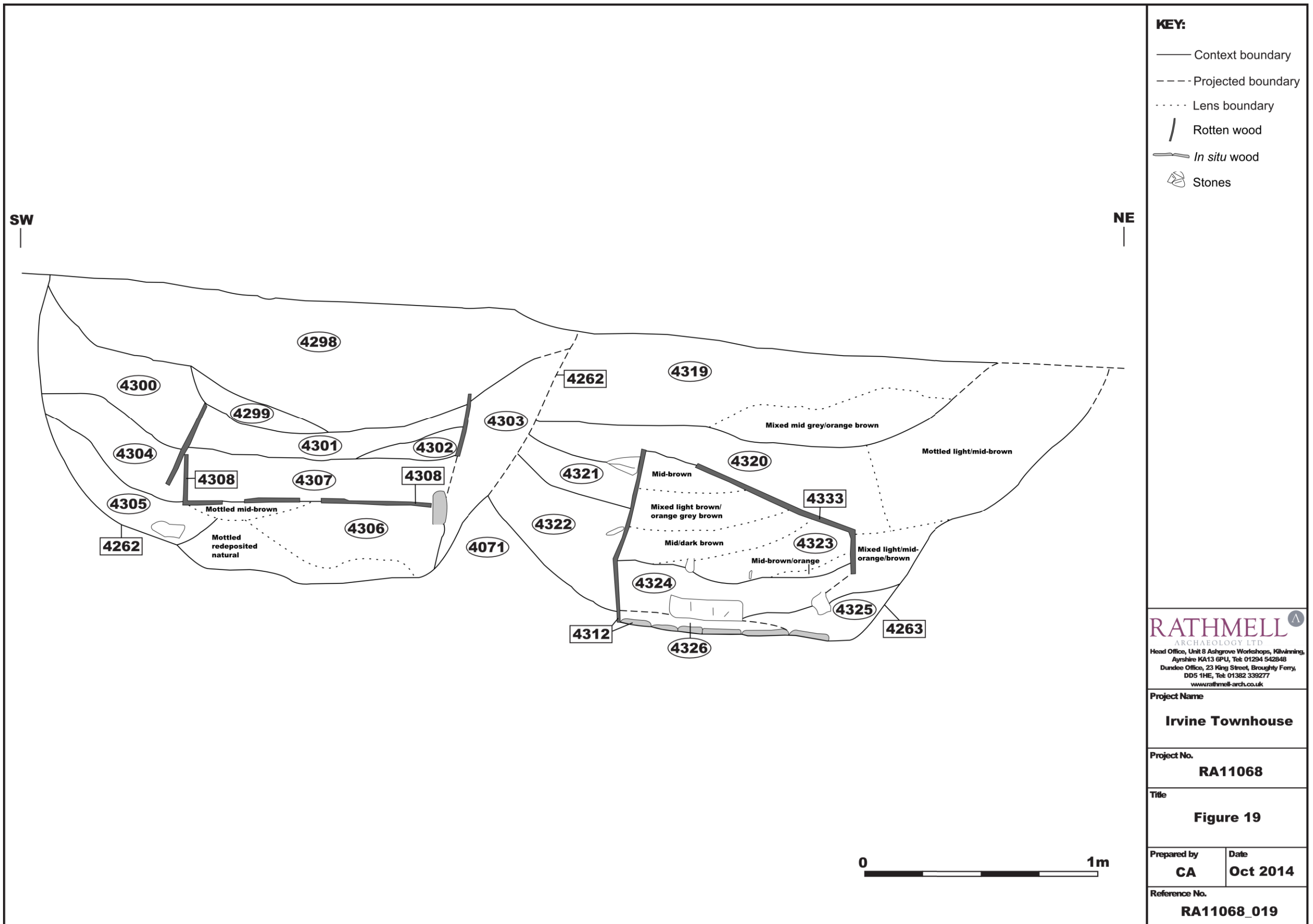


Figure 19: Southeast facing section of pits [4262] and [4263]



222. In section, it was possibly to see paler sandy deposits underlying pits [4154] and [4261] against their SW sides (Figure 18a). It is uncertain whether these merely represent leaching into the natural subsoil or whether they may be the remains of earlier pits.
223. In plan, [4261] and the southwest end of [4154] were obscured by possible trample layer (4276), so that [4261] was only seen in section, and its exact relationship with [4262] could not be determined.
224. Three of the pits had evidence of timber lining at the base. [4263] had the highest survival of wood in the form of [4312] and [4333]. [4312] included the remains of six planks lining the base of the pit (Figure 18b), running NW-SE across an area which measured 0.9m NE-SW by 0.3m NW-SE. The extent of the wood was only partially exposed however, and appeared to extend further to the northwest. Individual planks measured up to 0.2m wide and 1 to 2 cm thick, and they had been placed tight together without intervening gaps. A portion of [4312] also extended up from the southwest side of the basal lining. While a small portion of wood still survived this had mostly decayed, leaving only a thin trace of dark brown/black sandy silt which rose vertically from the base to a height of approximately 800mm. This was set in from the edge of the pit slightly, with the edge of the pit widening towards the top. On the northeast side of the pit, [4333] also survived as line of black silt suggesting that wood may have also originally lined this side. Only a portion of this now survived, in a section which began approximately 200mm up from the base. Traces of the lining on the both sides leaned in towards the centre of the pit at the upper end, suggesting damage and displacement caused by the weight of the surrounding deposits, possibly during backfilling. Initial assessment of the wood carried out by Crone (2014) has identified the wood sample as being elements of a barrel.
225. [4154] had two planks, [4330], each orientated NW-SE horizontally and lining the opposing sides (northeast and southwest) of its base. Examined in section, they individually measured up to 200mm high and 3cm wide. In plan they measured between 0.1m and 0.3m in length, and defined an area measuring 1.2m NE-SW by 0.8m NW-SE, although the base and lining was only partially revealed and extended further to the southeast. There was no lining across the base of the pit.
226. [4262] had only one piece of wood surviving in [4308]; that it had once housed a larger timber feature could still be seen by a thin line of dark brown/black sandy silt which again ran vertically down the northeast and southwest sides of the pit (slightly disturbed on the southwest side), and also horizontally along at the bottom between the two sides. In this instance, the "base" of the lining sat approximately 310mm above the actual base of the pit, a feature not seen in the other timber-lined pits. The base and sides enclosed an area which in section measured 1.12m from SW-NE and up to 500mm deep.
227. For all three pits it is possible that the timber lining may originally have existed on all four sides, creating a wooden container which sat at the centre of the pit. While [4261] had no wood remaining it is very possible that this may originally have had a similar feature.
228. These pits cut through spread (4112) which sat to the southwest. This comprised a loosely compacted mottled mid-dark brown/black sand with no inclusions, and measured 5.2m by 3.8m in area and 70mm in thickness. It was uncertain whether this was a naturally occurring deposit or anthropic in origin. Further to the southeast, another spread (4105) was recorded which comprised a very loosely compacted dark brown sandy silt with possible organic inclusions, measuring 2.4m by 3m in extent and 50mm thick.
229. Scattered across the northeast end of the area (to the southeast of Feature Group R), were several pits and possible postholes. The possible postholes consisted of [4110], [4111], [4114], [4251] and [4252]. With the exception of [4114], all had been cut into spread (4112). The postholes did not appear to form any coherent pattern reminiscent of a structure and ranged in size from 0.15m in diameter to 0.53m by 0.46m, and between 150 to 250mm in depth. All contained a uniform, similar fill: dark brown silty sand. [4252] produced a sherd of what appeared to be redware of possible 14<sup>th</sup> or 15<sup>th</sup> century

date.

230. Three of the pits were very similar in form: together these made up Feature Group S which consisted of [4107], [4108] and [4188]. They were all oval in plan measuring approximately 0.94m by 0.45m in extent and 300mm deep. They had steep-sloping sides and a flat base, and all contained a single similar fill: dark brown sandy silt with occasional charcoal inclusions. [4188] produced fragments of animal bone.
231. The remainder of the pits consisted of [4100], [4103], [4106], [4198], [4259], [4266], [4268] and [4270]. For the most part these pits were oval in plan and fairly large, ranging in size from 0.72m by 0.77m right up to 3.86m by 1.6m in plan, and varying in depth between 200 to 800mm. They had a mixture of fills, which mostly consisted of clayey silts. Pit [4106] had been cut into spread (4105), and pit [4268] had been cut by pit [4266]. Four of the pits produced ceramic finds which consisted of sherds of gritty ware and SPOW/SPRW. A sherd of modern pottery of potentially late 18<sup>th</sup>/early 19<sup>th</sup> century date was also recovered from pit [4266], but at such a depth this may have been intrusive or a surface find.
232. Pit [4198] and its contents merit further elaboration. It sat against the southeastern limits of Area 4 in the eastern corner. It was sub-rectangular in plan and measured 3.54m by 3.1m and 1m deep with steep sides and a flat base. It contained two fills: an upper fill of dark grey clayey silt with infrequent charcoal inclusions and a lower fill of mottled yellow brown sand similar to the natural subsoil. The lower fill contained one sherd of SPRW, while the upper fill produced 12 sherds of gritty ware or related fabrics, and 36 sherds of SPRW/SPOW.
233. Underlying these deposits within [4198] sat the remains of a stone structure [4258]. This consisted of four courses of rubble sandstone forming an L-shape against the SW and SE edges of the pit. The stones had an average size of 0.15m by 0.4m, and overall their extent measured 2.14m (SW-NE) by 1.81m (NW-SE) and up to 0.98m high. It appears likely that this was a corner of what would have originally been a larger structure which had since been robbed out, and that [4198] relates to this robbing phase.
234. Adjoining pit [4259] was sub-rectangular in plan and measured 1.08m by 10.07m by 450mm deep, with steep sides and a flat base. It was filled by the same deposits as [4198] making the relationship between the two unclear, but it is possible that [4259] may have acted as a point of access for entering the much deeper [4198].
235. At the centre of Area 4, large pit [4043] and adjoining pit [4069] were still present as they cut deep into the natural subsoil (4071). The corner of the area to the south of this, was dominated by the presence of large pits [4086] and [4336], and nearby well [4082] (Figure 20).
236. [4336] was roughly oblong in plan and orientated NW-SE, although it had largely been obscured in plan due to truncation from above by later pits (see below). It measured approximately 2.8m long and 1.1m wide, with a depth of approximately 450mm at the northwest end increasing to a maximum depth of 1.8m at the southeast end. The northwest edge was gently sloping while the northeast and southwest edges were near vertical. The base was flat across its lowest level at the southeast end, but then stepped upwards at the northwest end. The cut appeared to contain several elements of a stone structure: at the northwest end, stone linings [4193] and [4279] sat against the southwest and northeast edges respectively, lined either side of a series of stone steps [4194] which ran down to meet cobbled floor [4278] at the southeast end of the cut (Figure 21a). The stone lining and surfaces had been set directly into the surrounding natural subsoil (4071) without any outer packing deposit.
237. [4193] and [4279] formed two separate lines of walling starting at the NW end of [4336], which ran parallel to each other along the northeast and southwest edges of the feature with an internal gap of 1m, although this widened slightly at the southeast end of [4279] to 1.34m. The walls were composed of a mixture of stones which ranged in size from 0.1m by 0.1m to 0.3m by 0.4m. They did not appear to have been worked or finished, and had been bonded with clay. Each wall measured 0.4m wide. [4193] survived to a greater length and height, measuring 3.4m long and up to 1m high

- (upstanding to a height of approximately four to five courses). [4279] measured only 2m long and did not extend as far to the southeast as [4193], and stood only 400 to 600mm high (approximately three courses), with its upper courses probably now missing.
238. In the gap between [4193] and [4279] at the northwest end of the cut, sat stones [4194]. These appeared to form a set of steps descending from NW-SE and creating an entrance into the feature from the northwest. The stones mainly ranged in size from 0.3m by 0.4m in size to 0.4m by 0.5m, with some smaller stones measuring 0.1m by 0.1m present amongst the top step at the northwest end. The steps had a depth of between 200 and 440mm with some of the stones appearing worn from use. They were not bonded. The stones covered an overall extent of 1.5m NW-SE by 1m wide and led down to cobbled surface [4278] at their southeast end at a depth of 1.7m.
239. Surface [4278] consisted of a mixture of stones ranging in size from 0.2m by 0.2m to 0.3m by 0.4m in size. The stones were mainly rounded with a flattened upper surface, and formed one layer which had been bonded with clay. The surface covered an area measuring 2m by 1.2m, and was between 100 and 160mm thick. [4278], [4194] and the lower courses of [4193] and [4279] had been covered over by a layer of mid- to dark brown silty sand with charcoal inclusions, and also a layer of redeposited natural subsoil. The former produced 80 sherds of SPOW/SPRW, many of which came from one largely complete jug of flagon, and fragments of animal bone.
240. As already mentioned in the previous section, pit [4336] had been truncated from above by later pits [4051] and [4049], with the latter possibly representing robber cuts aimed at the removal of the stones. If this is the case, it is possible that [4051] saw the removal of the upper courses across both walls while, as already mentioned, [4049] appears to have removed a larger section of [4279]. The feature had also been truncated by large pit [4086] at its southeast end. It is very possible that the pit, and its stone lining, would have originally extended further to the southeast prior to its truncation by [4086]. As [4086] also represents a stone-lined chamber with access point, it is possible that it may represent a later feature which replaced the structure within [4336].
241. Pit [4086] was sub-rectangular in plan and measured 6.49m by 5.46m in plan and 1.65m deep. It had steep sides and a flat base. The pit contained a stone-lined chamber with an outshot on the southwest side (Figure 21b). The sides of the main chamber were stone-lined with [4204], which consisted of approximately 9 courses of a mix of sub-rectangular and irregular-shaped stones which ranged in size from 0.2m by 0.25m up to 0.2m by 0.6m. The masonry appears to have been bonded. The overall measurements for the extent of the lining were 4.1m by 2.4m and 1.35m deep. The base of the chamber was covered by a series of wooden planks [4256] which ran under the stone lining [4204] at the sides. In total, there were four planks remaining which were orientated SW-NE. Individually the planks measured between 0.68m to 1.88m in length, 0.1 to 0.12m wide and 20 to 30mm thick. The planks were placed at irregular intervals, suggesting that there may have originally been more planks which either had not survived or had been deliberately removed.
242. The outshot to the southeast consisted of additional stones which appeared to form a set of descending steps leading into the main chamber from the southeast. This feature measured 2m long by 0.8m wide in extent and was upstanding to a height of roughly two courses, [4255] and the underlying [4260], of flat angular and sub-angular stones measuring between 0.3m by 0.4m and 0.4m by 0.7m in size. Together the two courses measured approximately 410mm deep, with no discernible bonding. This surface was lined by a single line of smaller stones [4264] which sat slightly higher along the southwest edge, and which each measured between 0.16m to 0.17m in size, again with no bonding.
243. Approximately 0.3m to the southwest of the outshot sat a line of stones [4243] which formed an L-shape running parallel with the southwestern and southeastern sides of the outshot itself. The line of stones measured 2.74m long (NW-SE), 1.58m (SW-NE) and between 60 to 330mm deep. [4243] consisted of up to three courses of coarse stones ranging between 0.1m by 0.06m to 0.24m by 0.33m in size which had been bonded by clay. [4243] sat at a higher level than the outshot and it is possible that it acted as a

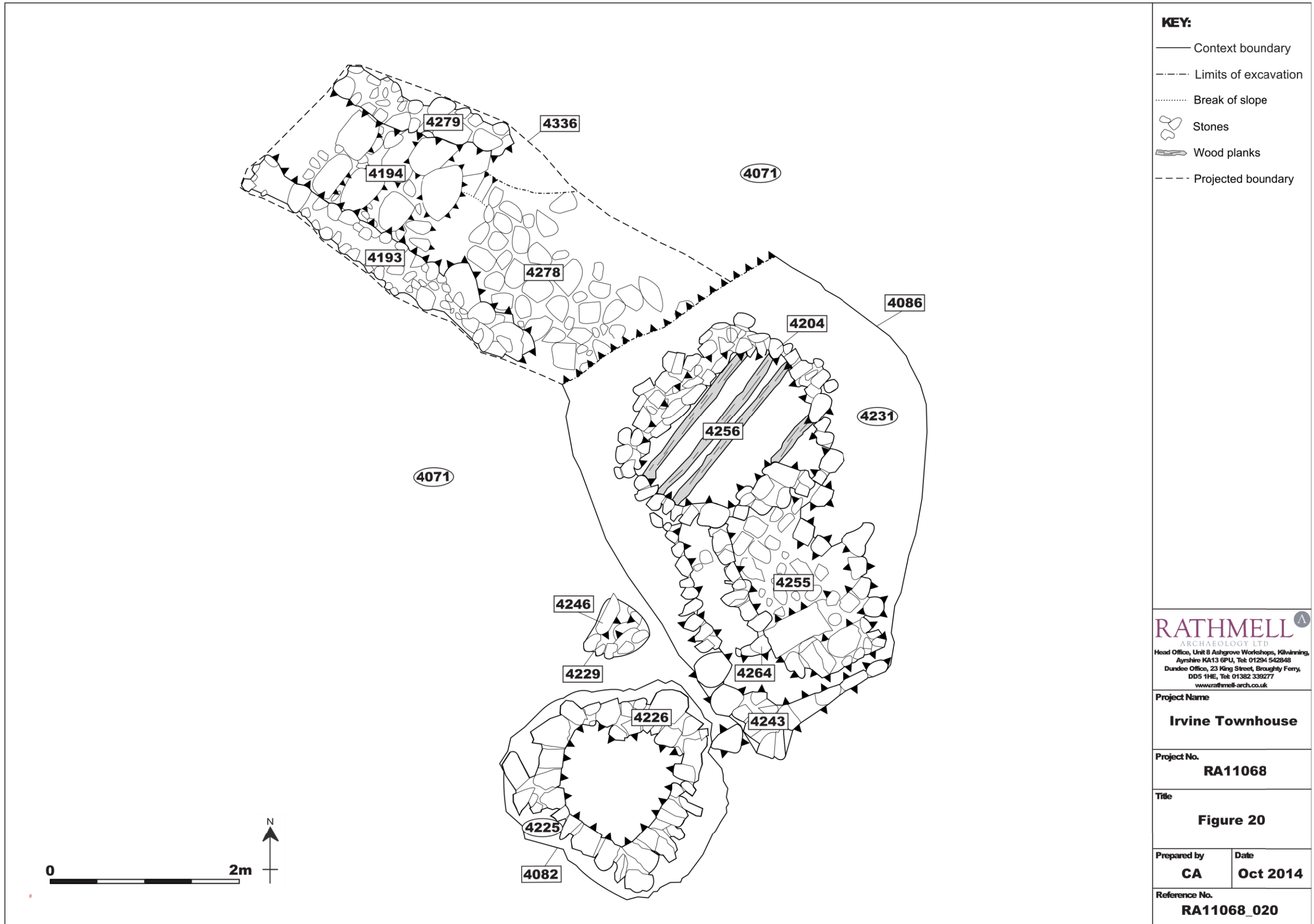


Figure 20: Plan of pits [4082], [4086] and [4336] showing associated stone structures



Figure 21a: Stone structures in pit [4336] from the east



Figure 21b: Stone structures in pit [4086] from the north with well [4082] in the background

small revetment wall between this area and the higher ground to the southwest (Figure 21b).

244. Behind and underlying the stone lining/outshot was a loosely compacted light brown sand which had been used as a possible packing deposit for the stone lining. This produced 13 sherds of gritty ware, 21 sherds of SPOW/SPRW and one sherd of Valencian Lustreware which dates to the late 15<sup>th</sup> century. The interior of the main chamber was filled by a series of dark brown silts and clay with infrequent stone inclusions. These produced a large number of artefacts including ceramics, metalwork and fragments of animal bone. The ceramics included a range of fabrics including gritty ware, redware/greyware, imported ware and sherds of both SPRW and SPOW. The metalworking debris included fragments of iron ore, smithing slag, and non-tapped slag which could potentially be interpreted as smithing slags. One fragment had a smooth, slightly rounded base which might suggest that it originally derived from the base of the hearth or furnace, though no furnace lining as such was adhering. A further four fragments were less convincing in their character – though clearly iron-stained, they seemed to have too low a metallic content to be confidently interpreted as ferrous slags. Another fragment of non-tapped hearth or smithing slag potentially had daub adhering (though no signs of vitrification were evident). A fragment of daub was also found in association.
245. In the higher ground to the southwest of [4243], sat features [4082] and [4229] which may have been related to [4086]. Well [4082] has already been described above as one of the features which cut through the buried soil layer (4002) due to the presence of modern pottery within its interior fill, but this may only suggest that it stayed open for longer than the surrounding features. It is still possible that this was originally constructed at a similar period as this group of features which its location appears to respect.
246. Sitting just to the north of [4082] and to the southwest of [4086], sat [4229]. This was sub-circular in plan and measured 0.85m in diameter and 350mm deep. It had moderate to steeply-sloping sides and a rounded base. It contained a ring of approximately two courses of sub-angular stones [4246] measuring between 0.19m by 0.36m to 0.12m by 0.1m in size. The stones were partially bonded with clay, and covered an area measuring 0.62m by 0.57m in extent with a depth of 270mm. It is possible that these stones acted as a setting for a post, possibly related to the nearby well [4082] and stone-lined chamber [4086]. The feature had been filled by a dark brown silty clay with two larger stones [4228] sitting on top. These measured 0.6m by 0.3m and 0.36m by 0.28m respectively but were not bonded and did not appear to form any distinctive shape. It is possible that they were just deposited on top as part of the backfilling process. The fill produced one sherd of SPOW and one fragment of clay tobacco pipe stem of likely 17<sup>th</sup> century date. This find is later than would be expected from a feature underlying the buried soil in this area, and may suggest that this was either intrusive or that this may be a slightly later feature, the cut of which was not clearly visible in the upper layers.
247. At the northwestern end of the southwestern half sat a concentration of pits, postholes and small linear features. These formed the northeastern half of the concentration of pits and postholes which continued into the northern corner of Area 1 (see Figure 17). Combined between the two areas the features covered an area approximately 8m NW-SE by 11m SW-NE in extent.
248. In Area 4, there were nine possible postholes, two linear features and three pits. It is possible that this concentration of features may have originally continued further to the northwest but that they had been truncated by Feature Group Q in this direction.
249. The possible postholes, [4075], [4076], [4158], [4165], [4168], [4169], [4170], [4171] and [4310], were scattered across this concentration without forming a definitive pattern. They were all circular in shape measuring between 0.21m and 0.65m in diameter, and between 140 and 410mm deep. All had steep sides and mainly flat bases and all contained mostly a brown silty sand fill. Two of these features - [4076] and [4168] - had evidence for post pipes. [4170] and [4310] produced one sherd of gritty ware and three sherds of SPRW, while [4168] produced one sherd of gritty ware.

250. The two linear features, Feature Group T – [4166] and [4167], both ran parallel to each other on a NW-SE alignment with an intervening gap of 1.6m. They measured up to 2.7m in length by approximately 0.3m wide and 180mm deep, with steep sides and an uneven rounded base. They both contained a similar single fill: loose to moderately compacted mid to dark brown silty sand with frequent charcoal inclusions.
251. The three pits consisted of [4172], [4210] and [4280]. [4172] measured 1.32m by 1.28m and 160mm deep, with gentle sloping sides and a flat base. It was filled by a loose dark grey silty sand with occasional small stone inclusions, and had been cut by possible postholes [4170] and [4171] on its SW side. [4210] measured 1.7m by 1m and 580mm deep, with gently sloping sides and a rounded base. It was filled by a moderately compacted dark brown black silty sand with some burnt inclusions. [4280] measured 1.8m by 1.2m and 310mm deep, with steep sides and a rounded base. It was filled by a moderately compacted brown sand with occasional small stone inclusions which produced one sherd of gritty ware and five sherds of SPRW.

## Material Culture

### *General statement*

252. The assemblage of artefacts from the excavations at Irvine was fairly comprehensive in its range with quantities of ceramics, wood, metalwork, stone and animal bone being recovered. It represents the biggest assemblage of medieval and post-medieval artefacts recovered from Irvine to date; as a result, the potential value of its contribution to our knowledge of the burgh's history is high.
253. The dominant material type is ceramics, with a wide range of different fabric types, which potentially include a small number of imported wares ranging from medieval imported wares from France right through to Rhenish stonewares and even an isolated sherd of Valencian lustreware. The recovery of pottery from within secure contexts has allowed us to gain an insight into the possible phasing of the site at an early stage of the works, though this must be viewed with caution as in recent years, medieval pottery studies have challenged orthodox interpretations of the various wares and raised doubts as to the origins and longevity of the various fabric types such as gritty wares and redwares. The partial survival of wood-lining within some of the pits is also significant, as dendrochronological analysis will hopefully contribute further to the dating of the site and the origin of the wood itself.
254. As well as assisting in the phasing of the site, the artefacts have the potential both to help us understand more about the activities taking place on site, and to gain insights into the trading networks which may have existed in Irvine during the medieval and post-medieval periods in particular. Further analysis carried out across all of the material types will be of great significance during the post-excavation works.
255. The sections below summarise the initial assessments of the main material types present on site.

### *Pottery*

256. During the evaluation, a broad range of ceramic types was identified which were representative of white gritty wares (i.e. 13<sup>th</sup> to 15<sup>th</sup> centuries) (Figure 22a) and of redwares/greywares which could potentially have their origins in the medieval period (14<sup>th</sup>/15<sup>th</sup> century) or even later (i.e. falling within the categories of Scottish Post-Medieval Oxidised Ware or Scottish Post-medieval Reduced Ware dating to the late 15<sup>th</sup> century or 16<sup>th</sup> century (Figure 22b)). There were, in addition, representatives of a broad range of later ceramic types dominated by glazed white earthenwares and brown-glazed red earthenwares which were typical of 19<sup>th</sup> and 20<sup>th</sup> century wares.
257. Ceramic types datable to the intervening period were also identified, including Rhenish 'Bellarmine' type stoneware jars, as well as demonstrably later examples of post-medieval slip wares and SPOW/SPRW and also tin-glazed creamwares/pearlwares. However, quantities of the latter were much smaller than might have been expected for

an urban site.

258. This picture is demonstrated clearly by the initial findings of the excavations. Roughly 1600 sherds of medieval or early post-medieval date were recovered from securely stratified contexts, the majority of these deriving from gritty fabrics of varying character, representative of the 'white gritty', 'reduced gritty' and 'oxidised gritty' variants as characterised by Franklin and Hall (2012). A substantial number of sherds typical of the 'redware' and 'greyware' traditions were also present: with scholarly opinions still divided over the chronological relationship between the gritty fabrics and the redwares/greywares, it is difficult to make assumptions regarding the dating of different types through reference to the ceramic evidence. It is proposed nonetheless that the site can be given provisional phasing based upon the principle that features producing only gritty wares can be roughly dated to the period 12<sup>th</sup> to 15<sup>th</sup> centuries AD, while those producing redwares/reduced wares in addition can be dated to the period 15<sup>th</sup> to 16<sup>th</sup> centuries AD. Where the redwares in particular were clearly attributable to the period AD1600 onwards, they were interpreted as modern in character and were not included within the medieval/early post-medieval ceramic assemblage.
259. Some sherds of imported ware were present, but these occurred in very small numbers. Isolated examples of imported sherds occurring in secure contexts have been provisionally identified as including one sherd of Valencian lustreware (15<sup>th</sup> century) (Figure 23a), one rim sherd from a Loire valley jug (Figure 23b), one sherd of Beauvais ware, plus two sherds of Rhenish stoneware. Other examples are likely to be present, and this is an important aspect of the assemblage which merits further detailed investigation.
260. While ceramics of 16<sup>th</sup> to 18<sup>th</sup> century date were almost absent from the evaluation, some finds attributable to this period were recovered, though sadly these were often recovered from areas of modern disturbance or as unstratified finds. These included a virtually complete 'Bellarmine' jar (Figure 24a) as well as several adjoining sherds from a Staffordshire combed slipware dish. Several clay tobacco pipe bowls and stems of demonstrably early date (late 17<sup>th</sup> century) were also recovered (Figure 24b). No sherds of English delft or similar were conclusively identified, and sherds of tin-glazed 'pearlware' proved isolated finds.
261. Compared with published ceramics assemblages from west coast urban sites (in particular the assemblage generated by the Ayr excavations, recently written up by Franklin and Hall 2012), the assemblage from Irvine seems fairly typical in its character: it shows a general trend from gritty wares to redwares/reduced wares, with the details of the transition between the two fabrics difficult to define. It is proposed that a detailed study of the ceramics recovered from Irvine within the wider context of west coast medieval ceramic assemblages would help elucidate some of the issues which remain as yet poorly understood. A more in-depth analysis of the imported fabric types present would also allow a better understanding of the trading networks within which Irvine played an important role throughout the medieval and early post-medieval period.

### *Glass*

262. Several near-complete examples of late 17<sup>th</sup>/early 18<sup>th</sup> century 'Dutch onion' type wine bottles were recovered during the excavations, but unfortunately most were unstratified finds which could not be used to help date individual contexts. Two further fragments of 'Dutch onion' bottles were recovered in association with later bottle glass in modern overburden layer (4001). Examples which derived from secure contexts included: one fragment from a 'Dutch onion' type bottle recovered from context (4230), which formed the fill within the interior of well [4226] within cut [4082]; another possible fragment of this type was recovered from (4027), which formed the fill of pit [4013].
263. Buried soil (2002) produced a fragment from the base of a 'Dutch onion' bottle, but also revealed two fragments of plate glass which would suggest a 20<sup>th</sup> century date, although - as already mentioned - this is likely to have been either intrusive from a later feature cut into the deposit, or the result of contamination during the excavation process.





Figure 22a: A selection of gritty wares and cooking jars (12<sup>th</sup>-15<sup>th</sup> centuries)



Figure 22b: A selection of Scottish Post-Medieval Oxidised Wares/Reduced Ware Sherds (late 15<sup>th</sup>/16<sup>th</sup> centuries)



Figure 23a: Sherd of North Valencian Lustreware



Figure 23b: Rim Sherd from Loire Valley Narrow Necked Jug



Figure 24a: Large Portion of Rhenish Stoneware ('Bellarmine') Jar



Figure 24b: A selection of late 17th century clay tobacco pipe bowls

264. The majority of glass derived from wine bottles, and most of these were of 19<sup>th</sup> century origin. Some fragments of contemporary window glass were also present, along with other pieces that were demonstrably modern in date. Context (2010), which formed the fill of pit [2032], produced two fragments of 19<sup>th</sup> century bottle glass.
265. Context (1190), the fill within pit or possible posthole [1189] produced three fragments from the neck of a late 18<sup>th</sup>/early 19<sup>th</sup> century wine bottle. Context (1134), the fill of pit [1133], produced three pieces of very fine, decorative glass, potentially from a glass, cup or bowl, with a gilded rim. A further sherd of possible window glass was also present. There was no means of dating this material; an origin in the 18<sup>th</sup> century or 19<sup>th</sup> century could be postulated. Two fragments of glass confirmed a modern date for modern pit [1069] – the neck of a beer bottle and a fragment of thick plate glass would suggest an origin in the 20<sup>th</sup> century. The fill of [1324], context (1208), produced one fragment of brown bottle glass of late 19<sup>th</sup> or 20<sup>th</sup> century date.
266. Context (4036), the fill of posthole [4012] produced finds of 19<sup>th</sup> century window glass alongside bottle glass of similar date. Context (4017) – the upper fill of pit [4043], produced a diverse range of glass, including 4 fragments of bottle glass of 19<sup>th</sup> century date, along with two fragments of badly laminated clear glass which may derive from earlier, post-medieval occupation of the site.
267. The finds deriving from (4048) – which formed the fill of pit [4049] could be pushed forward into the early 1900s by the presence of a stamped base from a bottle manufactured by John Lumb & Co., a specialist bottle manufacturer based in Yorkshire. Modern bottle glass also came from context (4046), a fill within large oval pit [4051] which was itself cut by [4049]. (4046) produced a neck from a moulded green bottle. Context (4185), which formed the fill around horse/cow burial (4192) within cut [4102] also produced a fragment of modern green bottle glass.

### Wood

268. An initial assessment of the wood recovered from site was given by Anne Crone (2014) which has been summarised here.
269. In all 29 separate pieces of wood were recovered, as well as four bags containing more than five small fragments. The assemblage consists almost entirely of oak (*Quercus* sp.) except for four small finds which are conifers and one which is a deciduous non-oak species.
270. Crone states that this is the first assemblage of medieval oak timbers to be recovered in southwest Scotland for many decades and therefore offers a major opportunity to develop and refine chronological coverage in this area. Timbers from some of the features could be analysed which would provide *termini post quem* dates for these structures. Dendrochronological analysis will also be able to determine the origin of the timbers.
271. It is anticipated that much of it will be native in origin but oak timber began to be imported from the Baltic in the 13<sup>th</sup> century so some of the timbers may represent traded goods. In particular, analysis of some of the barrel components may highlight Irvine's trading networks with Europe; analysis of medieval barrels from Perth, Edinburgh and Aberdeen has shown that they came from the Baltic, Scandinavia and France (Crone 2005; 2011; Crone *et al* 2001).
272. Most of the structural timbers are damaged and decayed, without any carpentry details, but Crone states that 14 of the timbers would be suitable candidates for dendrochronological analysis, and four of the longer timbers retain the heartwood/sapwood boundary which would enable a felling range to be estimated.

### Animal Bone

273. An initial assessment of the animal bone recovered from site has been given by Catherine Smith (2014) which is reproduced here.
274. The general impression is that the assemblage consists of two types of deposit: the

animal burials, of which there are at least two cattle and one horse, and the remainder of the bones, which may be a mixture of food waste and commercial activity. The proximity of the site to the medieval market area, but more particularly the later flesh market which seems to have existed between the 17<sup>th</sup> century and the clearing of the area for the 19<sup>th</sup>-century town hall (Simpson and Stevenson 1980, 6, 12), may explain the animal burials.

275. It is proposed that the animal burials are examined in order to determine the true number of individuals present and whether there is any evidence that they are indeed related to the flesh market. For example, the skeletons would be examined for signs of butchery (e.g. knife cuts) which might help explain their presence on site. It is interesting that one of the cattle bones presents an unknown pathology, which should be investigated further, as this may be evidence of the disposal of unfit meat.
276. Secondly, the remaining animal bone fragments other than those from the burials should be quantified and examined in order to shed light, if possible, on their origins.

### *Metalwork*

277. A total of 11 items of non-ferrous metal were recovered from Areas 1 and 4. These comprised five Cu alloy coins, five fragments of Cu alloy objects and one fragment of a Pb object. Three of the five coins were modern pennies of 19<sup>th</sup>/early 20<sup>th</sup> century date, while the other two were of much earlier date (?17<sup>th</sup> century or even earlier). Of particular interest were three fragments of a sheet metal vessel or bowl from pit [1077] and a fragmentary button or bell from pit [1312].
278. 16 Fe objects (excluding nails) were recovered. The most important was a fragmentary vessel, <542>, which was derived from a context which also produced medieval and early post-medieval pottery, (1263) in [1271]. The vessel was circular in shape with an everted rim, and has been tentatively identified as a tripod cauldron or kettle. Additional objects included one knife tip and two fragmentary circular rings (these may be highly corroded heel reinforcement plates from 19<sup>th</sup> century shoes or boots). None of the Fe objects came from contexts that were of demonstrably early date – most are probably modern. Some objects were clearly of 19<sup>th</sup>/early 20<sup>th</sup> century date, e.g. cast iron drain pipe fragments. In addition, a total of 51 nails were recovered, most handworked. The majority of the ironwork came from Area 1, with items also recovered from Areas 2 and 4.

### *Slags*

279. Isolated fragments of slag were recovered from the buried soil layers across the site. Deposit (2002) produced one piece of smithing slag, while deposit (3002) produced a piece of slag which, while appearing unusually glassy in character compared with other examples from the site, still did not attain the characteristics of a genuine 'tapped' slag. The last of the buried soil horizons, (4002), produced one piece of smithing slag.
280. Slags could be closely tied to individual contexts and features within Areas 1 and 4.
281. The component fills of stone-lined pit [4086] produced finds of slag from contexts (4201), (4205) and (4244). Of these, Context (4201) produced one piece of iron rich rock which could conceivably represent iron ore, in addition to a fragment of smithing slag. Context (4205) produced eight fragments of non-tapped slag which could potentially be interpreted as smithing slags. One fragment had a smooth, slightly rounded base which might suggest that it originally derived from the base of a hearth or furnace, though no furnace lining as such was adhering. A further four fragments were less convincing in their character – though clearly iron-stained, they seemed to have too low a metallic content to be confidently interpreted as ferrous slags. Context (4244) produced two fragments of non-tapped hearth or smithing slag, one of which potentially had daub adhering (though no signs of vitrification were evident). A fragment of daub was also found in association.
282. One of the fills of pit [4058] – context (4057) – produced three fragments of smithing slag and two fragments of fuel ash slag.

283. Finds of slag also derived from (4209) (the fill of linear feature [4207]) (two fragments of smithing slag) and (4119) (the fill of [4118]) (daub or fuel ash slag) as well as deposit (4010), which formed the fill of possible posthole [4003]. The latter comprised a very glassy, vitreous slag quite unlike the smithing slags which dominate the assemblage. Another fragment of similar glassy slag derived from linear feature [1230].
284. Context (1005) revealed one piece of smithing slag, plus five lumps of concretion which may be all that remains of former iron objects – one arguably still resembles a nailhead. Spread (1249) likewise produced one fragment of smithing slag and one fragment of fuel ash slag. Another spread, (1158) revealed a sherd of fuel ash slag.
285. Pit [1318] produced two fragments of smithing slag from fill (1275), while kiln/oven [1116] produced one piece of smithing slag from its basal deposit, (1157) – this particular piece of slag was of particular interest because of its plano-convex form, suggestive of a hearth bottom. Pit [1061] also produced an untapped slag from fill (1062).
286. One piece of tapped slag was recovered from deposit (1134), which formed the fill of [1133] – this feature also produced pottery of early modern date, i.e. 17<sup>th</sup>/18<sup>th</sup> century. Another very unusual form of slag derived from (1190), the fill within pit or posthole [1189]. This material is vitreous in nature, with lime present, and green patches that may indicate an association with non-ferrous metalworking. Without further investigation, it cannot be properly understood and may be worthy of more detailed investigation.

### *Stones*

287. A number of coarse stones were found across all four areas. These will require further post-excavation analysis, and cannot, at the moment, be used for the purposes of dating. Some of the fragments recovered appear to represent architectural fragments while one of the stones found may be a possible socket stone.

## Discussion

288. As is clear from the findings produced so far, the site at Irvine Townhouse has shown evidence for prolonged and intensive use throughout the medieval and post-medieval periods.
289. The original layout of Irvine, which would likely have been formalised during the 13<sup>th</sup> century, would have seen High Street, which bounds the southwestern edge of the development area, broadening out into a market place with a herringbone pattern of plots of land on either side bounded by back lanes.
290. These plots of land would have been occupied by domestic residences and their accompanying back gardens, historically referred to as 'burgage plots'. These burgage plots, or backlands, as they were also collectively known, would have hosted a variety of activities including domestic habitation, industrial processing, livestock penning, urban horticulture and waste disposal. The evidence encountered during the Irvine Townhouse excavations indicates a model which appears to reflect similar activities.
291. Further post-excavation analysis will be required to work out a more reliable and detailed phasing of the activities on site, which at this point can only be broken down by feature type, and by the changing nature of the various ceramic types occurring. Although these artefacts can be used to give a broad phasing, any resulting analysis cannot be definitive at this stage in the works.
292. It should also be noted that due to the complexity and high number of features, it is not possible to address every feature encountered. As such, broad themes concerning some of the more substantial and prominent features and activities on site will be discussed. It is important however, to recognise that the conclusions below are only suggestive and that they may change with further analysis.

### Topography

293. As has already been described, the depth of the natural subsoil across the site points to a natural topography where the ground slopes down from the highest point at the southwestern end towards the northeast end of the site (Figure 25a), with higher ground also present in the southern corner sloping down to the northwest. Overlying the natural subsoil was a buried soil layer which was present across roughly the northeastern two thirds of the site but not extant across the excavated area at the southwest end. Overlying the buried soil sat a thick layer of modern overburden which had been heavily disturbed during the recent demolition works and which had been spread out to create a fairly level ground surface. A topography survey carried out prior to the removal of the upstanding buildings on site indicates that a fairly levelled surface had been in place across the site while they stood, suggesting the ground had been built up prior to their construction.
294. The buried soil layer was shallower across its southwestern extent (as shown in Area 4) but then appears to have been fairly uniform across the majority of its extent to the northeast (as shown in Areas 2 and 3). This suggests that this layer was not a levelling deposit but followed instead the natural topography of the underlying subsoil.
295. It is possible that the lack of buried soil in Area 1 may suggest that this particular deposit was not originally present here, but the fact that it is shallower in thickness across Area 4 may indicate that this end of the site had been truncated, removing the buried soil from the southwest end and removing the its upper layers from Area 4. It is possible that the upper surface of the natural subsoil across the southwest end may also have been truncated by the same activity.

### Buried Soil Layer

296. After investigation, the buried soil layer present across most of the site (Figure 25b) was found to represent a homogenised deposit which contained metal, slag, animal bone, glass and ceramics, as well as charcoal flecks. As well as sealing a number of features beneath it, this deposit also had features cut into its upper surface. The anthropic nature of this deposit suggests that it may be able to further our understanding of the activity taking place on site, and that it also may be able to help with some of the broader phasing.
297. An equivalent homogenised soil deposit containing frequent artefactual evidence has been recorded elsewhere across other medieval burgh sites, where its origins and meaning have been the basis for some discussion.
298. One of these instances was the 'garden soil' found across sites excavated in St Andrews, including the excavations published by Rains and Hall (1997). The original interpretation of this soil was that it had been imported from outwith the burgh to provide soils for horticulture. This was taken as a possible sign that the economic condition of the burgh had collapsed; representing a time when property divisions had been abandoned, the development of the backlands had ended and the land given over to cultivation (Clark 1997, 142).
299. In contrast, another theory about the providence of these types of soil has been put forward by Carter (2001). He has suggested that instead of being an imported soil, it could be representative of a type of 'occupation deposit' where constant re-working of the burgh plots has deepened the soil already present. In this instance, residues of several centuries of turf-, clay- and timber-built structures have been laid down and progressively re-worked generating an increase in sediments. Part of this process would have included a high level of biological activity after the deposition of the sediment, which has totally re-worked any sedimentary fabric or micro-structure, forming a homogenous 'biological' fabric and structure typical of topsoils (*ibid*, 90). As such any trace of timber structures or shallow cuts within the soil have been removed, and only those features which had been cut deep into the underlying natural subsoil are still visible. In contrast to the earlier theory, this suggests a high level of continuous intensive occupation of the burgh plots rather than a decline in their use.

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300. This is further discussed by Oram (2011) who talks about 'plaggen' soil; a rural agricultural phenomenon seen across parts of mainland Europe. This refers to a soil formed by the long-term digging-in of high volumes of organically-rich material such as turf, peat, animal dung and midden material, which would result in a deep and highly enriched topsoil layer. Oram suggests that there may have been a Scottish manifestation of the same process present within the post-12<sup>th</sup> century burghs.
301. He also discusses the available documentary evidence which highlights the importance of household and human waste as a resource during this time, with each household gathering its own midden for private use, which would then have been periodically spread across back-garden areas in order to improve the soil for cultivation. He writes that a lot of the material present in these soils was likely obtained from dung-heaps and middens such as fuel residues, hearth-sweepings, pot-sherds, animal bone and lipids. The practice of residents cultivating their ground within the burghs dropped during the 18<sup>th</sup> century and middens were no longer required as much for fertiliser; concerns regarding the health hazards of dunghills and middens were, however, still being recorded into the mid-19<sup>th</sup> century, indicating their continued presence.
302. It is possible that the nature and inclusions of the buried soil layer at Irvine indicates that similar activities were occurring here. This would certainly explain the large number of artefacts present. At this point, however, it cannot be ruled out that the soil was imported, although the nature of how this layer developed must affect discussions about phasing across the site. An imported soil would represent a phase within itself where the features underlying date to an earlier period before they were then covered over by an imported layer of soil.
303. If, however, the buried soil was created through the process of re-working (as discussed by Carter and Oram), then the features which are currently sealed beneath it will originally have been cut through the buried soil, with the upper portions of their cut having since been removed. In this case, rather than seeing the layer as a phase in itself, it becomes instead a feature which in part pre-dated while at the same time was contemporary with the underlying features.
304. Either way, it may be possible to suggest an end date for the disturbance to the soil itself by the nature of its inclusions and the character of the features cut into its upper surface, as these may suggest a time when any re-working of the layer had ended. A decline in the frequency of artefacts in the soil after a certain date may suggest a period of less intensive disturbance, and the presence of shallow features still visible which would otherwise have been removed by either practice would also suggest that any re-working may have ended by this point or at least slowed down. The only difficulty with using the features cut into the surface is that many of them have residual inclusions making it difficult to ascertain a definitive date from these alone.
305. On this note, with regards to the 'imported soil' model, it would be difficult to date the layer through its inclusions, as these may be residual or may have been deposited while on-site. It could be suggested, however, from the provisional dating of the underlying features, that it was brought in at some point during or after the 15<sup>th</sup> to 16<sup>th</sup> century.
306. By contrast, in applying the 're-working' model, the provisional dating of artefacts within the underlying features and within the soil itself may suggest that the period which saw the most intensive disturbance was the 12<sup>th</sup> to 16<sup>th</sup> centuries, either throughout or occurring towards the end of the period.
307. In contrast to the number of ceramics of this date, the site had a comparatively low occurrence of artefacts from the 17<sup>th</sup> and 18<sup>th</sup> centuries. It is possible that this may represent a period when interest in using midden as a fertiliser across the burgage plot, and possibly also practicing cultivation in these locations, had declined, reflective of the overall trends discussed by Oram (2011).
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Figure 25a: General shot showing topography across Areas 1 and 4 from the east-north-east



Figure 25b: Shot showing buried soil (4002) still in place over Area 4 from the northwest

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### *Spreads across Area 1 – Feature Group E*

308. The northwestern end of Area 1 was covered by mixed layers of spreads and deposits, Feature Group E. The natural topography of the site meant that the southern corner sat slightly higher than the northwestern edge, and that these spreads sat across the lower ground.
309. The pottery finds from these spreads suggest that they may have built up over the 12<sup>th</sup> to 16<sup>th</sup> centuries (possibly into the 17<sup>th</sup> century based on the finds from underlying features), which could make them, at least in part, contemporary with the buried soil layer present across the rest of the site. It is possible that these spreads represent an area which was not affected by the intensive re-working (or importing) of the soil occurring across the rest of the site which formed the homogenised buried soil layer, enabling discrete pockets of deposits and layers of build-up to remain visible towards the southwestern end.
310. This apparent contrast in character may mark an area of the site which was kept separate for other activities; being located near the dwellings which would have lined the street frontage, it was perhaps kept free of the more intensive disturbance and/or cultivation which was being carried out across the rear portion of the burgage plot.
311. Some level of disturbance in these deposits may be suggested, however, by the fact that underlying features were present which had not been visible until the natural subsoil was exposed, meaning that, as seen elsewhere, the upper portions of their cuts had been lost.

### *Wells and Cisterns*

312. A number of wells and stone-/timber-lined pits were recorded across the site which suggest that some form of industrial processing was taking place, one which would have required the ability to handle large amounts of water, or liquid, in lined cisterns.
313. One such industry which was viewed as a strong contender during the excavation was that of tanning. The process for tanning involves various stages of washing and soaking of hides which have been well described by both Thomson (1981) and Cherry (1991); it is clear to see from their discussions the significance both of water and of the various sizes of lined pits throughout the different stages of this process.
314. As well as at the various stages where the hides would have required rinsing, water was also needed for soaking. That tanneries were not always positioned near to rivers has been discussed by Cherry (1991, 296), and the presence of a number of wells on the site at Irvine positioned near to the large lined pits show that this would have acted as an alternative, as has been seen elsewhere on other urban tannery sites.
315. Different stages in the process would have required a mixture of both shallow and deep pits (Cherry 1991, 297), some of which could have been interchangeable in their roles. During the pre-tanning phase, one of the techniques used was to soak the hides in an alkaline liquor prepared from wood ash or lime. Thomson states that this would have been carried out either in wooden tubs or, more commonly, in pits set into the ground which could have been lined by one of a number of possible materials (1981, 163). The nature of the pits used for the 'handling' phase of the process, where the hides would have been immersed in weak tanning liquor in a series of tubs or pits called 'handlers', and then moved around continuously until they had a uniform surface colour, would likely have required a series of more shallow pits allowing easy access to handle the hides.
316. The final soaking stage of the process required placing the hides in pits called 'layers' or 'layaways'. These would be filled with alternating layers of vegetable tanning material (usually oak bark) and the hides until they were full, and then filled with cold water or a mixture of cold water and weak tanning material. The length of time the hides would be left in the layaways would depend on their thickness, but would generally range from between 9 and 18 months. For this stage, the 'layaways' would likely have needed to have been quite deep to allow for a large amount of hides to be processed at the same time.

317. The intercutting pits which formed Feature Group H in Area 1, and which had some evidence of clay lining, were at the shallower end of the lined pits, while in comparison the wood-lined pits, Feature Group R, in Area 4 were much deeper and contained a wood-lined 'trough' or 'barrel' at their centres. The larger pits in Area 3 also showed evidence for a possible wood lining which may have been for similar purposes to those in Area 4, but have not survived as well.
318. In the case of both Group H and Group R, it is possible that more than one of the pits in the sequence had sat open at the same time, for example, it is possible that Feature Group H was at one point two sets of paired pits. Both groups could also represent features which were replaced more than once over a sequence of phases, possibly as a result of constant use wearing them out over time, or due to improvements, or maybe they represent changes in function. Either way, these intercutting pits do suggest a demarcation of areas which were being re-used as the site for a particular activity seeing features being replaced over a period of time. This may suggest that some sort of specific process, such as tanning, was occurring.
319. As well as evidence for wood- and clay-lined pits, the site contained the large stone-lined pits of [4086] and [4336] (Figure 26a). Stone trough [1250] which sat adjacent to well [1253] in Area 1, and also the remains of the stone lining in pit [4198], could also represent features which may have been originally used in the same process. [4086] is fairly large and could potentially have been used a part of the layaway stage for the soaking of the hides.
320. The presence of both wood and stone linings within the different pits on site could relate to different functions or activities. It is also possible that they could also represent different phases where either techniques may have been changed or improved over time, or where the activity taking place on site had changed.
321. The final stage of the tanning process, after the hides had been taken out of the layaways, would have been to rinse the hides, smooth them out and then dry them out slowly in a dark shed. It is possible that the various postholes recorded across the northern end of Area 1 running into Area 4, as well as the small number in the northern corner of Area 4, may represent larger structures which could have related to the processes being carried out on site. It is possible that further evidence of these structures may have existed to the northwest.
322. While we can see strong evidence for the use of water on site through the presence of both wells and several substantial pits which had a lining of material suggesting they were used for the holding of volumes of water or liquid, this is by no means definitive evidence that the site was in use as a tannery. Sites have been wrongly identified as tanneries before and various aspects need to be considered when trying to be certain (Burns 2012).
323. One piece of evidence which is missing from Irvine but which is commonly found at other tannery sites is the presence of a large number of horn cores or metapodial (lower limb) bones on site. The hides would originally have come from the butcher, after the removal of all that was useful or profitable: they would usually have horns, hooves and other appendages still attached which would then be removed during the first preparation stage of the tanning process. The tanner may then have sold the outer sheaths of the horns to horn workers, leaving the horn cores to be disposed of on site. While some horn cores were present at Irvine, they were few in number and not of the same quantities as may be expected for a tannery site. However, butchers were occasionally known to have removed the horns themselves so that they could sell them on (Burns 2012) and it is possible that that may have been the case here. It is also possible that the process of removing the horns and other appendages occurred off site at a different location. Indeed the initial step of preparing the hides for tanning often involved washing the hides in a stream, so it is possible that they were removed at the same time and disposed of nearby. It is also possible that the horns may have been dumped in a location outwith the areas which were excavated, on a different part of the site, or, has been suggested elsewhere, it could indicate that some of the hides came from naturally polled (i.e. hornless) breeds (Higbee & Ellis 2012, 4).

324. The number of pits at Irvine was relatively small in comparison with the numbers recorded at other tannery sites. Only a small number of tanning pits were identified at both the sites of Castlecliffe in St Andrews (Lewis 1996), and at 45-75 Gallowgate in Aberdeen (Evans 2001), but in both sites it was thought that only a small portion of the tannery had been exposed. The same could also be said of the site at Irvine: it is possible that the tannery activities may have originally extended further across the site, outwith the excavated areas, and possibly even beyond.
325. Though a tannery remains a likely contender, there are other activities in the medieval period which may have required the use of large lined pits. Within the same area of leather production, there was also tawing. The traditional difference between tanning and tawing, was that the tanner took cattle hides and tanned them using oak bark, whereas the tawyer (also known as white tawyer or whittawyer) took the skins of other animals (often 'casualty' skins of animals which had died naturally) and processed them using only alum and oil. This difference in technique helped them to ensure that the skins kept their light colour. While the pre-tanning preparation would have been the same, tawing traditionally involved working the alum and oil mixture into the skins by trampling it in with bare feet.
326. The main differences between tawing and tanning which could be identified in the archaeological record, as suggested by Evans (1996, 110), would be a difference in the faunal assemblage, and perhaps a smaller number of pits as there would be no need for layaway pits. There would be no need for oak bark to be present on site. While bones from cattle, horse, sheep/goat and pig were all recovered from the site, further post-excavation analysis of the assemblage from the different features and phases, and processing of the soil samples from site, will be required to help us understand this further.
327. Other industries which would have required lined pits included breweries, such as that excavated at St Johns Street in Northampton (Northamptonshire County Council 2014). While the stone-lined features were a lot larger than those at Irvine, it is possible that Irvine was the focus of brewing on a much smaller scale. At the end of the 18<sup>th</sup> century, the Reverend Mr James Richmond wrote in the Old Statistical Account that, "One small brewery, most of the ale being brewed by the retailers themselves. Many families brew their own beer; and, of late, the practice of brewing strong ale has been much revived" (1791-99, 176). Although this is from much later than the period these pits seem to relate to, it does suggest that there had been an earlier tradition of brewing occurring within Irvine.
328. As has already been described, the stone structure in pit [4086] may have been a later replacement of the stone structure in earlier pit [4336]. Why they would have needed to replace a stone structure with a similar one in the same location as opposed to just repairing the first is unclear. It is possible that the features had different functions and that the later structure was a re-working of the earlier into a form which was better adapted to suit their needs. Indeed when comparing the two (Figure 26b), [4336] has a better defined set of steps which go to the full depth of the feature entering on to a stone surface, while [4086] represents more of a pit-like feature with a shallower access meeting the lining of the main chamber halfway up on one side. From appearances, it is possible that [4336] may have acted more like a cellar, possibly used for storage, which was then re-worked into a cistern.
329. Based on the available evidence it is difficult to ascertain the exact period for the use of the features which form part of the wells and cisterns across the site, as we can't be certain which of the features would have been contemporary with each other. The presence of white gritty and SPOW/SPRW in their fills suggest that they are likely to have been in use at some time between the 12<sup>th</sup> and 16<sup>th</sup> centuries. That the features which sat in Areas 3 and 4 underlay the buried soil also supports this, as they would likely have gone out of use at some point while the buried soil continued to be re-worked with sufficient regularity to remove all traces of the upper portions of the cuts.



Figure 26a: Excavating stone-lined pits in Area 4 from the east



Figure 26b: Northeast facing section through pits [4086] and [4336]

330. More specifically, it is possible to suggest that the presence of only gritty ware in the pits which formed Feature Group R, in contrast with the SPOW/SPRW present in the other features, indicates that these may have been gone out of use slightly earlier. Also, the presence of 15<sup>th</sup> century pottery within the deposit underlying the stone lining in [4086] suggests that this may have been constructed towards the end of the period.
331. The nature of the artefacts present within some of the wells suggests that they may have stayed open for longer after the abandonment of the various cisterns, possibly even up until the early 19<sup>th</sup> century, continuing to be used as a source of water by nearby residents. It is also possible that some of the wells may have been later insertions, and indeed, at least one of them contained re-used stone from elsewhere.
332. With regards to both the function and dating of the features on site, further post-excavation analysis will be required to try and answer some of the outstanding questions raised above.

#### *Horticultural/Cultivation Slots*

333. In all four areas, a series of linear features or slots were revealed which all ran on the same alignment and were of similar character. They formed a continuous set across the northwestern ends of Areas 1, 2 and 4 (Feature Groups L, Q and U) with a second set at the northwestern end of Area 3 (Feature Group M). The full length of these linear features was not exposed, as they all extended beyond the northwestern end of their respective areas. Their southeastern terminals were, however, exposed.
334. These linear features were placed too close together to have acted as boundaries or to have formed any structures. A possible interpretation for these features is that they were horticultural or cultivation slots. Cultivation slots were discovered during excavations at both Ayr and Newton-upon-Ayr (Perry 2012), and it was thought that they were likely to have been used for the growing of vegetables. At one of the sites, it was suggested that these features could be dated to the late 14<sup>th</sup> century (Perry & Mackenzie 2012, 37).
335. At Irvine, the location and extent of the slots may have respected contemporary boundaries, either between burgage plots or between areas of activity. The date for the features is uncertain and it is possible that they were dug over at least two phases. Groups L, Q and U, which occupy the central portion of the site, contain sherds of gritty ware and a few sherds of SPOW/SPRW. These feature groups sat beneath the buried soil layer, while Group M which sat in the northern corner of the site produced no finds but had been cut through the upper surface of the buried soil.
336. The presence of SPRW/SPOW sherds suggests a possible late 15<sup>th</sup>/16<sup>th</sup> century date for the first set of slots, with the white gritty ware component comprising residual material included as a result of cutting through soil deposits which overlay the natural subsoil at the time (possibly the buried soil layer). However there can be difficulties in distinguishing SPRW/SPOW from earlier redwares and greywares produced within the late medieval period, so it is possible that the slots could be earlier in origin. Further post-excavation analysis could clarify this problem.
337. Cut into the top of the buried soil layer, the second set of slots which sit further to the rear of the site may be later in date, perhaps dating to the post-medieval period (16<sup>th</sup> or 17<sup>th</sup> century onwards). As no finds were recovered from these features, it is difficult to be certain of their date, but if they are from a later period, it may suggest that the slots on site show that horticulture/cultivation was occurring throughout different phases using a similar technique.
338. It is worth noting the difference in depth of the two sets of slots. While the slots at the centre of the site have been cut deep enough to go through the natural subsoil, the ones in Area 3 did not reach below the buried soil layer. This may either show a difference in their original depth, or perhaps it shows a period when the ground level across that end of Area 3 may have sat higher.

### *Possible structures*

339. There were a number of possible postholes and pits scattered across the site which may have related to a variety of functions across different phases. Alongside the wells and cisterns already discussed are a number of pits which were likely to have functioned as rubbish pits, and although, not clearly identified as this stage, some may even have been cess pits which had been cleared out and infilled with other material. It is also possible, however, that the cess pits were located elsewhere on site.
340. As the postholes were quite scattered and often appeared in small isolated groups, it was difficult to determine definitive outlines for any structures, but their presence does indicate the possibility that timber structures once stood within the burgh plot.
341. The largest concentration of postholes and small pits ran between Areas 1 and 4 in their northwestern half; these potentially represent the site of at least one, and possibly more structures, which may have been in use during the 12<sup>th</sup> to 16<sup>th</sup> centuries judging by the pottery produced here. These features also sat below the buried soil layer.
342. Excavations across other burghs in Scotland, such as Perth and Aberdeen, have suggested that until at least the 15<sup>th</sup> or 16<sup>th</sup> century, all the buildings within the medieval burghs would have been built from wood with wattle walls daubed with clay and dung; the only stone-built structures would have been the church and any monastic establishments (Hall 2002, 17). It has also been stated that the main domestic buildings would have been concentrated on the street frontage and along the sides of any vennels or closes which ran back from the main streets (*ibid*, 19). Excavations at Newton-on-Ayr and Ayr, however, have revealed domestic buildings dated by pottery to the 14<sup>th</sup> to 15<sup>th</sup> century, which sat as far back as 50m from the street frontage (Perry 2012, 126).
343. It is difficult to ascertain the exact nature of the possible structure, or structures, which may have been present here, and it is possible that further remains may have sat to the northwest. It is possible, too, that any structures present may have related to the industrial processes which were occurring here (e.g. tanning). Structures may have been required for storage or for shelter. It is also possible that some of the postholes marked smaller structures or stances which could have been temporary, with the frequent moving and replacement of these structures preventing the identification of a definitive pattern. It is also worth noting that only those features which were dug deep enough to have reached the natural subsoil could be identified, and that less substantial structural elements may have been present sitting within the original topsoil. The latter being no longer visible in the archaeological record.

### *Kilns/Ovens – Feature Group B*

344. The remains of two kilns or ovens were located in the western corner of Area 1. Only their stone-lined bases had survived, both of which were of a similar size and construction. A fragment of clay tobacco pipe stem was recovered from the underlying fill of one of the bases which indicates a 17<sup>th</sup> century date. That the other was overlying a spread which contained 15<sup>th</sup> to 16<sup>th</sup> century material suggests that this also dated to the post-medieval period and it is possible that they may have been contemporary.
345. Throughout the medieval period where the majority of the buildings in a burgh were constructed of timber, fire was a major concern, which meant that pottery kilns were often placed outwith the burghs (Hall 2002, 20-21), and that open-air ovens and hearths would likely have been a common occurrence.
346. As has been stated, Irvine had extensive fires recorded in both 1599 and 1649 that led to substantial rebuilding, with buildings predominantly replaced in stone. However, this did not entirely remove the risk of fire and indeed another extensive fire occurred in 1734 which led to renewed construction.
347. The lack of extensive evidence for pottery- or metal-working on the site may suggest that these features were either ovens or possibly small grain-drying kilns. It is likely that concerns over fire risks would have remained into the post-medieval period following the town's recent history of extensive fires; this may have led the burgh's inhabitants to

keep up the practice of using open-air ovens. However, grain-drying kilns are known to have been in use up until the 19<sup>th</sup> century and these may have been either wattle- or stone-lined structures. Examples of grain-drying kilns discovered within backlands have been found at Inverness (Ellis 2002), Perth (Bowler *et al* 1995) and Dreghorn (Matthews *forthcoming*) although these were of an earlier medieval date.

348. If these features do represent kilns, it is uncertain whether they would have been for private domestic use or for industry. Indeed if the two kilns were contemporary then this would imply the latter. It is worth considering the possibility of them being malting kilns which were recorded in towns during the post-medieval period (Crossley 1990, 221), with small-scale brewing being recorded in Irvine into the 18<sup>th</sup> century (see quote above from Richmond in the Old Statistical Account 1791-99, 176).
349. That we are only able to see the basal remains of the features makes it uncertain what their original complete size and shape would have been, and we are only left with minimal overlying deposits across one of them. It is hopeful that further post-excavation analysis of associated deposits and their inclusions may help to ascertain a possible function.

### *Burgage Plot Boundaries*

350. It was difficult to identify a clear pattern of features marking the boundaries of the medieval burgage plots across the majority of the excavated area. It is possible that the linear features which formed Feature Group N in Area 3 may have acted as boundary ditches or gullies. If this was the case then they would have defined a plot measuring approximately 12m wide. The only artefact recovered from the fills within this feature group was a sherd of white gritty. As we know that the burgh was most likely formally laid out in the 13<sup>th</sup> century, and judging by the artefacts recovered from the overlying buried soil layer, if these do represent burgage plot boundaries, then they possibly date from some point between the 13<sup>th</sup> and 16<sup>th</sup> centuries.
351. Burgage plot boundaries have been recorded elsewhere surviving as gullies. At Scott Street in Perth, the exposed gullies were sat 7.93m apart (Cox 1996, 816), while at Canal Street in Perth, boundary gullies were established in the late 13<sup>th</sup> to early 14<sup>th</sup> century, forming plots measuring approximately 4m wide (Coleman 1996, 696). The excavations at Canal Street showed that the siting of the boundaries was reorganised more than once throughout the site's use, resulting in some amalgamation of properties to form larger plots (*ibid*).
352. As no pattern of boundaries from the medieval period emerged across the remainder of the excavated areas, it is possible that the boundaries may have been marked by hedges or shallow fences, of which there is now no visible remaining archaeological evidence. As has been suggested, there is a possibility that the extent of the horticultural/cultivation slots may respect a possible boundary which was extant during at least one phase. It is also possible that some of the smaller linear features, such as [1307] and [1314], may have related to boundaries.
353. During the post-medieval period, a clearer picture of the layout of the plots is visible due to the erection of stone walls (Feature Group A) which sit within Area 1 at the southern end of the site, nearer to the front of the burgage plots.
354. Later disturbance has left only limited sections of the original walling still standing, mainly in the lower ground across the northwest side of Area 1. That one of the walls, [1009], overlies kiln/oven [1116] points to this wall being of 17<sup>th</sup> century or later date. That it overlies the location of the kiln also indicates that the wall represents a change in the layout of the boundaries at this time rather than a continuation of what lay before. Wall [1003] also overlay deposits which included post-medieval 15<sup>th</sup> to 16<sup>th</sup> century pottery, and while it cannot be certain if the walls were all erected at the same time, it is possible that they may have at one point been in contemporary use.
355. The difference in the construction style of wall [1039] suggests that it may have been a later addition to the northeastern end of [1009]. It also indicates that alterations to the boundaries of the burgage plots continued throughout the post-medieval period.



356. Looking at the mapping evidence for the site, it is possible to see the presence of boundaries shown within the backlands of the properties from Roy's survey of 1752-55 right through to the Ordnance Survey mapping of the 19<sup>th</sup> and 20<sup>th</sup> centuries. It is possible that the walls here represent some of these boundaries, although it is difficult to be more specific. The placing of the war memorial within this area, and the construction of the adjacent car park, indicates that the walls had fallen out of use by at least the mid-20<sup>th</sup> century. However, the presence of larger buildings shown covering the majority of the southern corner of the site on the 2<sup>nd</sup> edition Ordnance Survey of 1896 suggests that they may have went out of use prior to this in the 19<sup>th</sup> century.

#### *Animal Burials*

357. Three animal burials were discovered in close proximity to each other across Area 2 and the northeastern edge of Area 4, in the central portion of the site. Two of these have been identified as cows, and one as a horse; each appears to represent the burial of one individual. Pottery contained within the burials identifies them as potentially 19<sup>th</sup> to 20<sup>th</sup> century in date. The presence of the Fleshmarket, which would have sat on the western area of the site up until the second half of the 19<sup>th</sup> century, when it was replaced by the construction of the Townhouse, may suggest that these burials were contemporary with and related to this activity. Further post-excavation analysis of the bones will required to further explain their presence.

#### *Phasing*

358. As already stated, it is difficult at this stage to have any more than a general idea of the broad phasing of activities occurring on site, with these conclusions mainly based on the presence of pottery within the various features and spreads.
359. It is worth noting that no material culture dating prior to the 12<sup>th</sup> century has been recovered from the excavations. This may indicate either that there was no activity on this particular spot prior to the foundation of the burgh, or that what remained was not substantial enough to have survived the various phases of disturbance which has occurred since then.
360. The medieval into the early post-medieval period, 12<sup>th</sup> to 16<sup>th</sup> centuries, appears to have seen a lot of intensive activity on site, all of which appears to be concurrent with the general trend of activities occurring on backlands at this time. The surviving remains of this activity takes the form of several pits of various forms and sizes, including wells and what appear to be cisterns. Some of these cisterns are substantial enough to suggest that some type of industrial processing may have been occurring, such as possibly tanning, tawing or brewing. It is possible that timber structures, such as workshops or sheds, either related to this processing or for storage, were also present across areas of the site as shown by the presence of clusters of postholes.
361. That horticulture or cultivation was also taking place is indicated by the presence of a series of slots across the central portion of the site, possibly used for growing vegetables. Artefacts from these slots suggests that they may date from towards the end of this phase, possibly sometime in the 15<sup>th</sup> to 16<sup>th</sup> century. Little evidence is visible for the burgage plot boundaries during the medieval period across the central and southern portions of the site, but it is possible that these horticultural slots respected a contemporary boundary. If that was the case, then their location, at times overlapping clusters of earlier features, suggests that this boundary may have been altered at least once during the medieval period.
362. Throughout this period we can also see that something is occurring in the formation of the overlying deposit across the site as shown by the nature of the buried soil layer. This may represent a phase where soil has been imported towards the end of this period in order to improve the site for cultivation. Or, perhaps more likely, it shows that a constant re-working of the topsoil was occurring, either throughout the entirety of the period, (avoiding any areas with open features until they went out of use), or towards its latter end.

363. There is a marked drop in the quantity of artefacts post-dating the 16<sup>th</sup> century occurring within the buried soil layer, compared with those of earlier periods, which suggests that intensive re-working of the upper soil may have slowed down or ended after this point. This and the lack of 17<sup>th</sup> and 18<sup>th</sup> century artefacts in general across the site, may also be a sign of the general trend towards less intensive cultivation within the burghs by the 18<sup>th</sup> century with middens no longer being used as much as a source of fertiliser.
364. By the end of this period of activity, the larger pits, which had been associated with industrial processes, appear to have gone out of use and to have been backfilled, although some of the wells appear to have been left open and may have remained in use. It is during the 16<sup>th</sup> and 17<sup>th</sup> centuries that the small kilns or ovens appear to have been constructed, showing that renewed activity was still occurring, and possibly showing a re-organisation of land use.
365. The 17<sup>th</sup> to 19<sup>th</sup> centuries appear to have seen further horticulture or cultivation in the form of more slots being dug in the northern corner of the site. The similarity between these and the earlier slots at the centre, show that the techniques in use were similar, although there was a shift in where the slots were being located. It is possible that this reflects different property boundaries.
366. The walls which appear to mark potential boundaries in Area 1 are also likely to have been erected during this period, post-dating the point when one of the kilns/ovens went out of use (as shown by the fact that one of the walls sits across it). This shows a shift and re-organisation of the boundaries at some point during this period. It is possible that the erection of a wall over the top of one of the kilns/ovens, as part of this re-organisation, saw it going out of use and the other kiln/oven built as a replacement. As there is evidence of additions to at least one of the walls, it is likely that the boundaries saw several alterations throughout this period.
367. Activity continued on the site during the 19<sup>th</sup> and 20<sup>th</sup> centuries. During this period we have the three animal burials which may have been related to the adjacent Fleshmarket located on the western portion of the area until the 19<sup>th</sup> century. Large pits dug in Area 4 show that the stone from some of the earlier pits and wells was being robbed for use elsewhere, and it is also during this time that the wells appear to have gone out of use.
368. It also during this period that the southern end of the site appears to have been truncated. This is shown by the apparent removal of any trace of topsoil or buried soil, from across the majority of Area 1. The survival of deposits across the lower northwestern end of Area 1 show that rather than reflecting a need to take the area down to the natural subsoil, this was instead an attempt to level the ground, possibly prior to construction. This levelling could possibly have taken place in the 19<sup>th</sup> century prior to the construction of the large building shown on site in the 2<sup>nd</sup> edition Ordnance Survey, or possibly it occurred prior to the insertion of the car park around the war memorial in the mid-20<sup>th</sup> century.
369. It is through the latter half of the 19<sup>th</sup> century and the 20<sup>th</sup> century, that the erection of buildings including a school, police station and cottages, sees the last phase of activity on the site sealing the underlying features and deposits underneath a deep layer of made ground.

## Recommendations

370. This Data Structure Report covers the final stage of archaeological excavation works carried out within the development area at Irvine Townhouse.
371. The quality and quantity of the archaeological features recovered is such that it would warrant a programme of post-excavation analysis works and publication. Any programme for such works would need to be confirmed with North Ayrshire Council and their archaeological advisors, the West of Scotland Archaeology Service, in keeping with the terms laid out in the Written Scheme of Investigation.
372. It has already been requested that any future groundbreaking works relating to the development occurring outwith the development boundary, such as in the surrounding

pavements, should be monitored by an archaeologist. Based on the archaeological finds discovered to date, we would recommend at this stage that this level of monitoring continues to be appropriate and proportionate to this development.

## Conclusion

373. A programme of archaeological works, including historic building recording, monitoring and an evaluation, was required prior to the construction of a new leisure centre at the site of the Townhouse in Irvine, North Ayrshire. These works exposed a series of archaeological features which were then subject to a final phase of excavation.
374. The excavation works revealed the remains of several features, including walls, pits, wells and kilns/ovens, which related to the site's use as burgage plots with a continuous presence evidenced from the 12<sup>th</sup> century right through to the modern day. Some of the larger pits on site had been either stone- or timber-lined, suggesting evidence for industrial processing such as tanning; these activities are likely to have been taking place during the medieval period. A series of potential horticultural or cultivation slots, the base of two kilns/ovens and various other features point to some of the other activities which were taking place here throughout the medieval and post-medieval periods, on a site which appears to have had multiple phases of activity.
375. A substantial assemblage of artefacts were recovered from the site including glass, metalwork, ceramic, animal bone and wood. The ceramic assemblage was the most comprehensive with over roughly 1600 sherds of medieval or early post-medieval date, consisting of various fabrics including a small number of imported wares. Several fragments of wooden planking had also survived as lining within some of the larger features.
376. Further post-excavation analysis of the artefact assemblage and of the soil samples from the site, should allow us to gain more insights into the history of these burgage plots and their changing uses throughout the centuries.

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### Cartographic

|           |                 |  |
|-----------|-----------------|--|
| 1752-1755 | Roy, W          | Military Survey of Scotland - Lowlands                                   |
| 1819      | Wood, J         | Town Plan of Irvine  |
| 1860      | Ordnance Survey | 1 <sup>st</sup> edition Ordnance Survey, 1:10560, Ayrshire Sheet XVII    |
| 1897      | Ordnance Survey | 2 <sup>nd</sup> edition Ordnance Survey, 1:10560, Ayrshire Sheet XVII.SW |
| 1911      | Ordnance Survey | 3 <sup>rd</sup> edition Ordnance Survey, 1:10560, Ayrshire Sheet XVII.SW |

## Contact Details

380. Rathmell Archaeology can be contacted at our Registered Office or through the web:

|                           |  |
|---------------------------|--|
| Rathmell Archaeology Ltd  | <a href="http://www.rathmell-arch.co.uk">www.rathmell-arch.co.uk</a>             |
| Unit 8 Ashgrove Workshops |  |
| Kilwinning                | t.: 01294 542848   |
| Ayrshire                  | f.: 01294 542849   |
| KA13 6PU                  | e.: <a href="mailto:contact@rathmell-arch.co.uk">contact@rathmell-arch.co.uk</a> |

381. The West of Scotland Archaeology Service can be contacted at their office or through the web:

|                                      |  |
|--------------------------------------|--|
| West of Scotland Archaeology Service | <a href="http://www.wosas.org.uk">www.wosas.org.uk</a>                                 |
| Charing Cross Complex                |  |
| 20 India Street                      | t.: 0141 287 8332/3  |
| Glasgow                              | f.: 0141 287 9259  |
| G2 4PF                               | e.: <a href="mailto:enquiries@wosas.glasgow.gov.uk">enquiries@wosas.glasgow.gov.uk</a> |

## Appendix 1: Discovery & Excavation in Scotland

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|--|--|
| <b>LOCAL AUTHORITY:</b>  | North Ayrshire   |
| <b>PROJECT TITLE/SITE NAME:</b>  | Townhouse, Irvine  |
| <b>PROJECT CODE:</b>   | RA11068  |
| <b>PARISH:</b>   | Irvine   |
| <b>NAME OF CONTRIBUTOR:</b>  | Claire Williamson  |
| <b>NAME OF ORGANISATION:</b>   | Rathmell Archaeology Limited   |
| <b>TYPE(S) OF PROJECT:</b>   | Excavation   |
| <b>NMRS NO(S):</b>   | None   |
| <b>SITE/MONUMENT TYPE(S):</b>  | None   |
| <b>SIGNIFICANT FINDS:</b>  | Medieval and post-medieval ceramic; wood; glass; animal bone; metalwork  |
| <b>NGR</b> (2 letters, 8 or 10 figures)  | NS 32276 38902 (centre point)  |
| <b>START DATE</b> (this season)  | 11 <sup>th</sup> November 2013   |
| <b>END DATE</b> (this season)  | 28 <sup>th</sup> February 2014   |
| <b>PREVIOUS WORK</b> (incl. <i>DES</i> ref.)                                     | Desk-based Assessment (no <i>DES</i> ref.);<br>Monitoring on early SI Works – Rennie, C. 'East Road/High Street, Irvine' <i>DES</i> Vol.12, 2011, p.128;<br>Historic Building Recording, evaluation and further monitoring (no <i>DES</i> ref.)  |
| <b>MAIN (NARRATIVE) DESCRIPTION:</b> (may include information from other fields) | <p>A programme of archaeological works, including historic building recording, monitoring and an evaluation, were required prior to the construction of a new leisure centre at the site of the Townhouse in Irvine, North Ayrshire. These works exposed a series of archaeological features which were then subject to a final phase of excavation.</p> <p>The excavation works revealed the remains of several features, including walls, pits, wells and kilns/ovens, relating to the site's use as burgage plots with a continuous presence from the 12<sup>th</sup> century through to the modern day. Some of the larger pits on site had been either stone- or timber-lined; this suggested evidence for industrial processing, such as tanning, which may have been taking place during the medieval period. A series of potential horticultural or cultivation slots, the base of two kilns/ovens and various other features point to some of the other activities which may have also been occurring throughout the medieval and post-medieval periods on a site which appears to have had multiple phases of activity.</p> <p>A substantial quantity artefacts were recovered from the site including glass, metalwork, ceramic, animal bone and wood. The ceramic assemblage was the most comprehensive with over roughly 1600 sherds of medieval or early post-medieval date, representing various fabrics which included various gritty ware as well as a small number of imported wares. Several fragments of wooden planking had also survived as lining within some of the larger features.</p> <p>Further post-excavation analysis of the artefact assemblage and of the soil samples from the site, should yield more insights into the</p> |

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|   | changing history of these burgage plots.   |
| <b>PROPOSED FUTURE WORK:</b>                    | Post-excavation and publication works recommended; monitoring works on peripheral elements |
| <b>CAPTION(S) FOR ILLUSTRS:</b>                 | None   |
| <b>SPONSOR OR FUNDING BODY:</b>                 | North Ayrshire Council   |
| <b>ADDRESS OF MAIN CONTRIBUTOR:</b>             | Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU                                   |
| <b>E MAIL:</b>                                  | contact@rathmell-arch.co.uk  |
| <b>ARCHIVE LOCATION</b><br>(intended/deposited) | Report to West of Scotland Archaeology Service and archive to RCAHMS Collections.          |

## Appendix 2: Registers

Appendix 2, which contains all registers pertaining to the works on-site during the excavation, will be provided as a separate document.

End of Document