

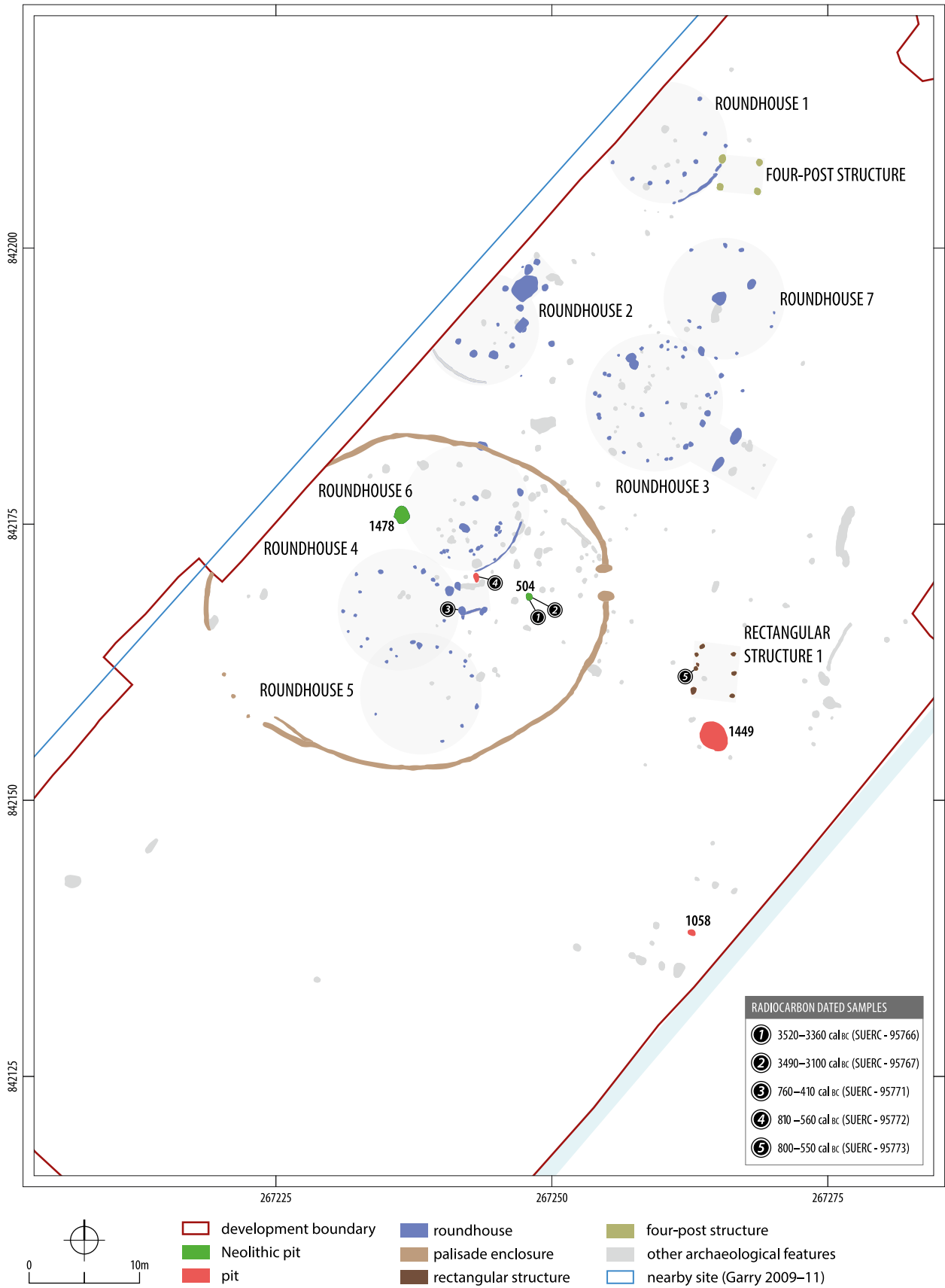
3. THE EXCAVATIONS AT LOWER SLACKBUIE

The excavations at Lower Slackbuie uncovered pits, a palisade enclosure, seven roundhouses and two rectangular structures. The features were cut into the underlying geology of glaciofluvial deposits, orange-grey silty sand and gravel, which overlies bedrock geology of Middle Old Red Sandstone of the Inverness Sandstone Group (NERC 2021). The finds assemblage and a programme of targeted radiocarbon dating revealed activity dating from the Neolithic to the Iron Age (Table 1). The interpretation of a series of post holes within the palisade enclosure as a possible Neolithic rectangular structure during the initial assessment informed the radiocarbon dating strategy (Dalland 2020). Charcoal samples from pits and possible post holes associated with this feature were primarily selected for radiocarbon dating. The radiocarbon dating of key features across the site was limited due to suitability of material, lack of survival and poor preservation. Two of the pits were found to be Neolithic while the remaining samples, including one from the putative Neolithic rectangular structure, were dated to the Iron Age (Illus 2). The two pits date from the early-middle and later Neolithic respectively, and a distinctive polished stone axe was also recovered from the earlier Neolithic pit.

Later prehistoric and Iron Age activity was identified across the site, with the central feature being the oval palisade with a central roundhouse (Roundhouse 4). A total of seven roundhouses were identified across the site by the patterns of post holes and gullies forming partial or complete rings. Two rectangular structures were also defined which appear to be broadly associated with this phase of activity. A detailed chronological sequence could not be defined for the later prehistoric and Iron Age phase of activity due to the limited artefactual evidence and the lack of clear stratigraphic relationships. However, the features can be grouped spatially as aspects of their morphology are comparable. Where stratigraphic relationships exist, these are presented and explored to provide some indication of possible phases of development. The numbers assigned to the roundhouses have been preserved from the earlier reports to allow for continuity and do not represent the chronological sequence.

Table 1 Radiocarbon dates from Lower Slackbuie calibrated in OxCal 4.4.2 (Bronk Ramsey (2009); r5 Atmospheric data from Reimer et al (2020); rounded by 10 with dates within the text presented at 95.4% probability)

Date	Feature	Context	Sample	Material dated	Lab code	$\delta^{13}\text{C}$ relative to VPDB	Radiocarbon age BP	Radiocarbon date
1	Pit 504	503	42	Cereal grain: <i>Hordeum sp.</i>	SUERC-95766 (GU56203)	-23.7 ‰	4664 ± 26	3520–3360 cal BC
2	Pit 504	503	42	Charcoal: <i>Betula sp.</i>	SUERC-95767 (GU56204)	-25.6 ‰	4570 ± 26	3490–3100 cal BC
3	Post Hole 1740 (Roundhouse 4)	1741	48	Charcoal: <i>Betula sp.</i>	SUERC-95771 (GU56205)	-26.9 ‰	2455 ± 26	760–410 cal BC
4	Pit 1529	1530	41	Charcoal: <i>Betula sp.</i>	SUERC-95772 (GU56206)	-26.5 ‰	2564 ± 26	810–560 cal BC
5	Post Hole 1408 (Rectangular Structure 1)	1409	46	Charcoal: <i>Betula sp.</i>	SUERC-95773 (GU56207)	-28.7 ‰	2545 ± 26	800–550 cal BC



Illus 2 Site plan. (© Headland Archaeology (UK) Ltd)

3.1 Neolithic pits

Two Neolithic pits were identified (Illus 2), although it is likely that other dispersed undated features across the site also date to this phase of activity. Pit 504 was excavated during the initial evaluation phase and found to contain a rich artefact and environmental assemblage. The circular pit with a single fill measured 0.7m in diameter and 0.15m deep. The fill contained sherds of a modified Carinated Bowl, dated to the early-middle Neolithic, and a distinctive polished stone axe (Illus 3).



Illus 3 Polished stone axehead in situ in Pit 504. (© Headland Archaeology (UK) Ltd)

Flax seeds, barley grains and charcoal were also recovered from the fill, with two samples of grain and charcoal radiocarbon dated to the Middle Neolithic (Table 1). Flax seeds are rare in Neolithic contexts while the polished stone axe is a distinctive example of this object type. The assemblage from the pit is possibly the result of the curation of materials; the symbolic deposition of materials in pits, including complete and broken axeheads, is a relatively common feature of the Neolithic across Britain (Anderson-Whymark & Thomas 2012).

A further Neolithic pit was located to the north within the footprint of the later Roundhouse 6. Pit 1478 measured 1.3m long by 1.6m wide by 0.35m deep and had sloping sides and a bowl-shaped base (Illus 4). This pit contained five fills comprising a basal layer of redeposited natural subsoil overlain by a layer of mottled grey sandy silt with frequent charcoal fragments. A single sherd of Impressed Ware and the sherds from four Grooved Ware vessels were recovered from this layer. A further three sherds of Grooved Ware were recovered from the layer above, and the feature was capped by a final dark brownish-grey sandy silt deposit that contained frequent charcoal flecks and rare flint fragments.



Illus 4 Neolithic Pit 1478. (© Headland Archaeology (UK) Ltd)

3.2 Later prehistoric and Iron Age activity

The Neolithic features sit within a landscape with significant later settlement activity that potentially truncates and masks more widespread earlier features. Possible later Bronze Age activity was indicated by the finds from Pit 1058, located to the south-east of the palisade (Illus 2). Pit 1058 measured 0.7m long by 0.6m wide by 0.2m deep, with a single fill of firm, fine mid-greyish brown sandy silt from which a small, rounded rim sherd and a small fragment of bangle made from an organic-rich black sedimentary stone were recovered. The sherd is a possible crucible fragment, and the bangle potentially dates from the Late Bronze Age into the Iron Age. The pit is surrounded by a series of pits and post holes, which may indicate the presence of associated features. This possible earlier phase of activity may relate to some of the roundhouses to the west, but there is limited evidence to link them.

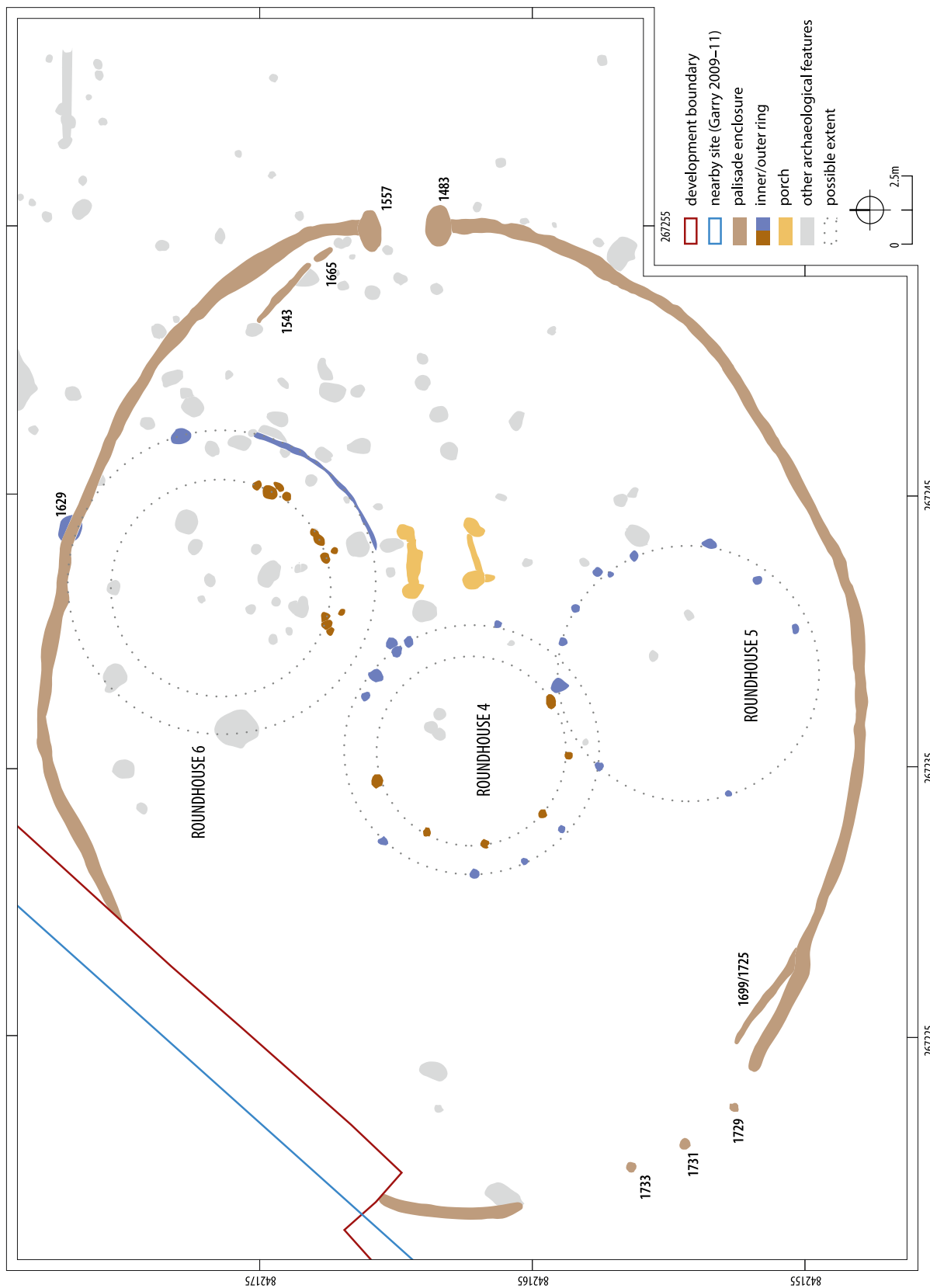
The principal phase of activity appears to date to the Iron Age; this includes the construction of a palisade enclosure, seven roundhouses, a rectangular structure and a four-post structure. There is limited evidence to refine the phases of this later activity, but the features can be grouped spatially and display a variety of structural characteristics. The oval palisade with a central roundhouse, Roundhouse 4, is a recognisable Iron Age settlement form and, as such, these features have been interpreted as contemporary (Hingley 1992; Pope 2007; Harding 2009; Rennie 2014; Johnstone 2021; Hatherley & Murray 2021). Two further roundhouses were also located within the palisade, Roundhouse 5 and Roundhouse 6 (Illus 5). It is unclear if these pre- or post-date the construction and use of the palisade. The roundhouses across the site display a variety of structural features and characteristics which can be compared. The results of the excavation of the palisade enclosure and central roundhouse will be presented; this will be followed by a description of each roundhouse and rectangular structure.

3.2.1 Palisade enclosure and central roundhouse

The central feature of the site was the oval palisade enclosure measuring 30m by 36m defined by a narrow ditch 0.25–0.56m wide by 0.15–0.43m deep (Illus 5). The palisade was aligned east to west

and the 1.6m-wide east-facing entrance was flanked by two oval-shaped pits, both of which contained evidence for post holes cut into their bases (Illus 6). There is tentative evidence for the presence of posts around the circumference of the palisade; in some sections packing stones that were set on edge along the sides of the cut were identified. A series of three equally spaced post holes (1729, 1731, 1733) were found along the projected line of the palisade at a 9.8m wide break in the south-western side. The gap was not due to truncation and appears to be an element of the original design. There is a slight dogleg to the palisade ditch on the western side where a narrower branch continues for a similar distance along the inside. This may indicate the recutting or realignment of the palisade at some point during its lifespan.

Palisade enclosures date from the Neolithic to the Iron Age. A single sherd of heavily abraded possible Grooved Ware pottery was recovered from the palisade ditch along with intrusive modern pottery. However, the arrangement of the features within the palisade, including the central roundhouse, Roundhouse 4, with an entrance aligned to that of the palisade, suggests that these features are contemporary. Roundhouse 4 was located at the centre of the enclosure and was defined by an inner post ring of six equidistant posts that encircled a space 7.2m in diameter (Illus 7). A second concentric circle of nine post holes formed the outer post ring, defining an area 9.6m in diameter with an entrance on the eastern side. A group of four post holes (1707, 1712, 1740, 1744) defining a square feature were located a short distance from the projected line of the roundhouse. Two shallow wall grooves connected the post holes, possibly defining a porch or entranceway to the roundhouse that was aligned with that of the palisade enclosure. Their distance from the structure may, however, indicate that this feature is a stand-alone structure. Charcoal recovered from the fill of one of the porch post holes provided a radiocarbon date of 760–410 cal BC (SUERC-95771; Table 1). Pit 1529 immediately to the north was also radiocarbon dated, providing a date of 810–560 cal BC (SUERC-95772; Table 1), indicating wider activity within the palisade that dates to the Early Iron Age.



Illus 5 Plan of Palisade and Roundhouses 4-6. (© Headland Archaeology (UK) Ltd)



Illus 6 View of Palisade looking west. (© Headland Archaeology (UK) Ltd)

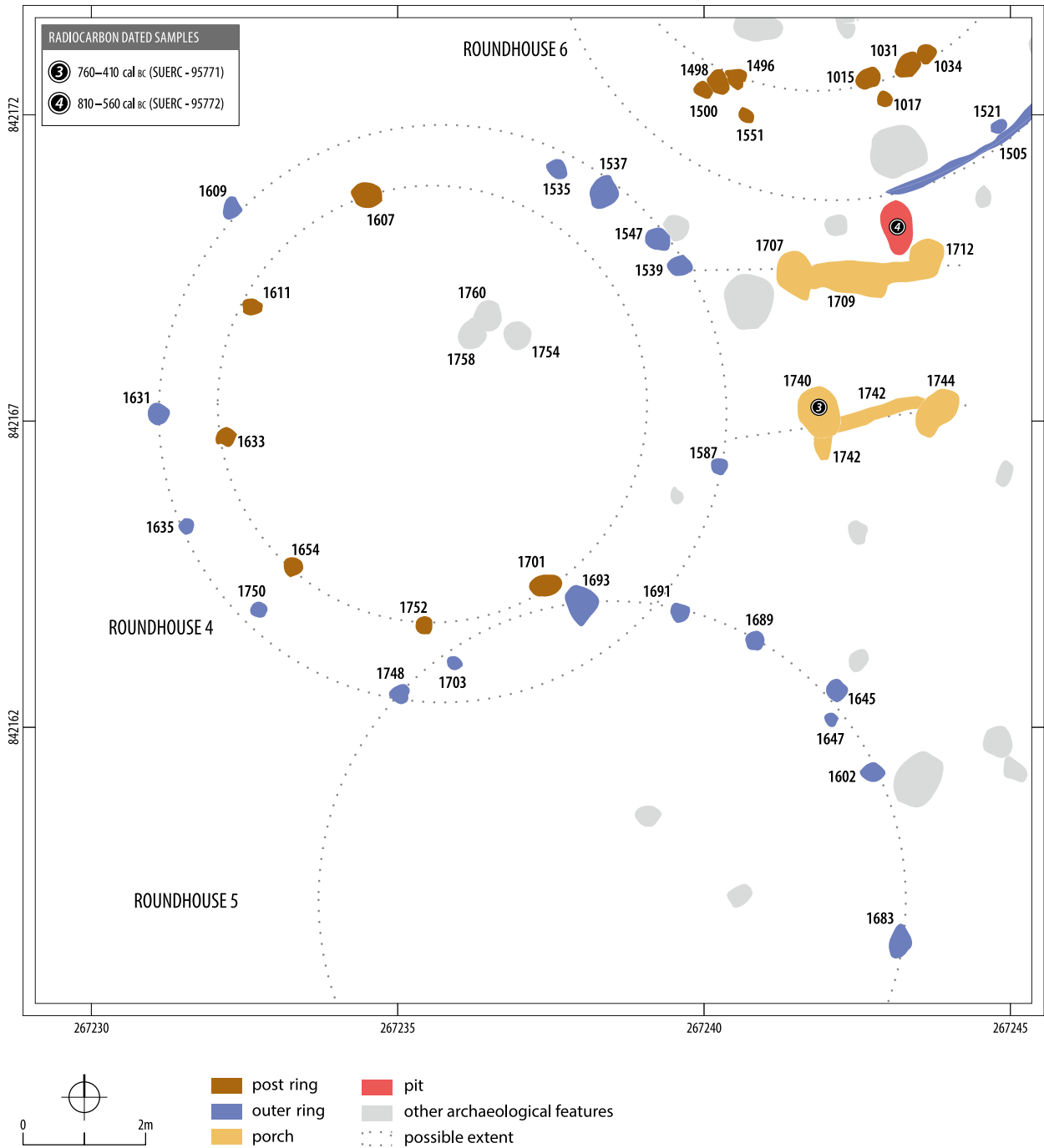
3.2.2 Roundhouses and rectangular structures

Two further roundhouses were located within the palisade enclosure with Roundhouse 6 to north possibly pre-dating the enclosure. To the south, the proposed outline of Roundhouse 5 overlaps with that of Roundhouse 4, but no clear stratigraphic relationship could be established. Four further roundhouses were located to the north-east of the palisade enclosure, displaying a variety of structural forms. The comparison of the structural characteristics and relationships between the roundhouses within and beyond the enclosure may indicate some inter-site phasing. Each roundhouse, the four-post structure and the rectangular structure will be described individually to explore structural features and expand on any stratigraphic relationships.

Roundhouse 6

Roundhouse 6 was located within the palisade enclosure to the north-east of Roundhouse 4 (Illus 5).

It was defined to the south-east by an external ring groove and an internal post ring composed of clusters of post holes. A 6.5m length of the ring groove, measuring 0.1–0.2m wide and 0.1m deep, has survived, before petering out to the south-west. The proposed space defined by the ring groove measures 11.6m in diameter when using two steep-sided pits to the north to define the proposed wall line. It is unclear if these form part of the structure, but a similar outer ring groove with post holes was also observed in roundhouses 1 and 2. If they are considered to form part of the roundhouse, the pits may indicate that Roundhouse 6 pre-dates the palisade as one of the pits, Pit 1629, was truncated by the palisade ditch. The internal post ring consisted of three equidistant groups of four post holes forming an arc of a circle that would have been 7.8m in diameter. The clustering of the post holes may indicate several episodes of repair with the repeated replacement of the posts. The location of the entrance could not be defined, and no porch was identified. Despite 14 pits being uncovered



Illus 7 Plan of Roundhouse 4. (© Headland Archaeology (UK) Ltd)

within the footprint of the structure, no hearth was identified, and it is unclear if the pits relate to the use of the structure.

Roundhouse 5

Roundhouse 5 was located immediately to the south of Roundhouse 4 and was defined by a single ring of post holes (Illus 5). The post ring potentially overlaps with that of Roundhouse 4 indicating that the two may not be contemporary. The north-east portion of the structure was the best preserved, with the projected wall line defining a structure 9.2m in diameter. The 11 post holes were shallow but had well-defined steep sides and flat bases. Few features were identified within the structure save for two pits or post holes, which do not seem to represent a structural element of the roundhouse.

Roundhouse 7

Roundhouse 7 was located outside the palisade enclosure and was similar in form to Roundhouse 5 (Illus 8). The poorly preserved remains of the roundhouse were defined by eight unevenly spaced post holes, 0.10–0.16m deep, forming a circle *c* 10.8m in diameter. The two intercutting pits that lay at the centre of the structure contain large flat stones laid horizontally. There was no evidence of in-situ burning, suggesting that these did not form a hearth. The outline of Roundhouse 7 overlaps with that of Roundhouse 3 and, as with the previous example, the chronological relationship is unclear.

Roundhouse 3

Roundhouse 3 was located immediately to the south of Roundhouse 7 and was far more complex in its construction (Illus 8). An inner post ring defined an area 10.4m in diameter; a further four post holes indicate the presence of a possible concentric outer post ring. The post holes which formed the inner post ring were often found in pairs, possibly indicating the replacement or repair of the posts throughout the life of the structure. The south-east facing entrance was defined by two large oval pits, and two further sets of post holes defined an elaborate porch. Pits 1398 and 1363 measured 1.5m long by 0.4m wide by 0.6m deep and flanked the entranceway. The second set of large post holes (1388 and 1205, both *c* 0.8m

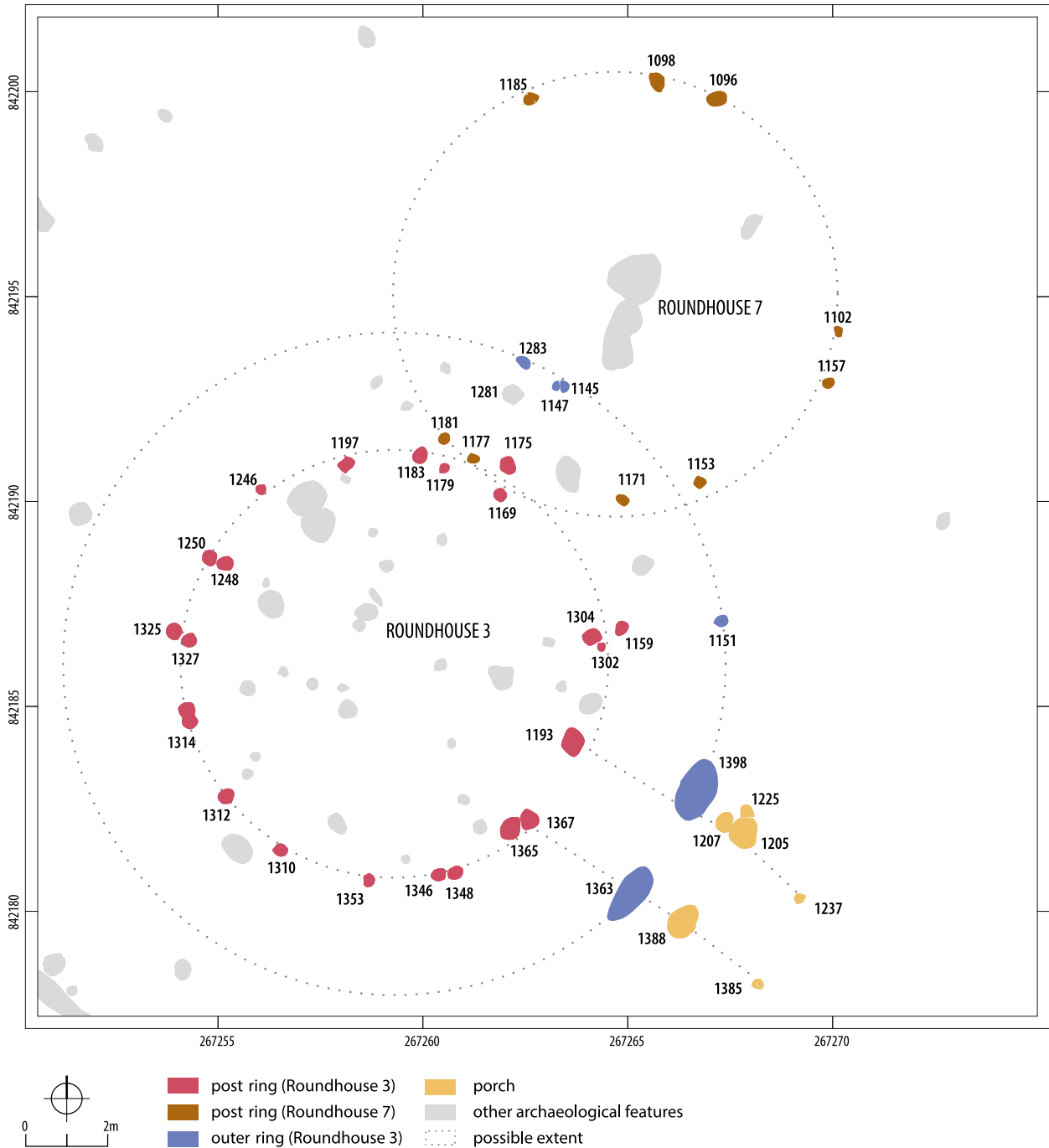
long by 0.6m wide by 0.35m deep) extended the porch, with intercutting post holes on the north side potentially indicating the support or repair of Post Hole 1205. The final set of post holes (1237, 1385), located over 2m from the possible outer post ring, measured 0.30–0.35m wide and 0.10–0.15m deep. The porch appears to have been constructed from posts of increasing size leading towards the roundhouse entranceway.

The four small post holes which potentially indicate an outer post ring were located to the north of Pit 1398, extending the wall line from the large entrance posts. No evidence of a ring groove was identified, but the form of the porch is reminiscent of Roundhouse 2, which is defined by post holes and a ring groove (Illus 9). The proposed outer ring of Roundhouse 3 would have defined a structure 16.2m in diameter. It is likely that a number of the pits and possible post holes uncovered within the structure relate to internal features and supports. However, no coherent patterns could be identified, and no hearth was found.

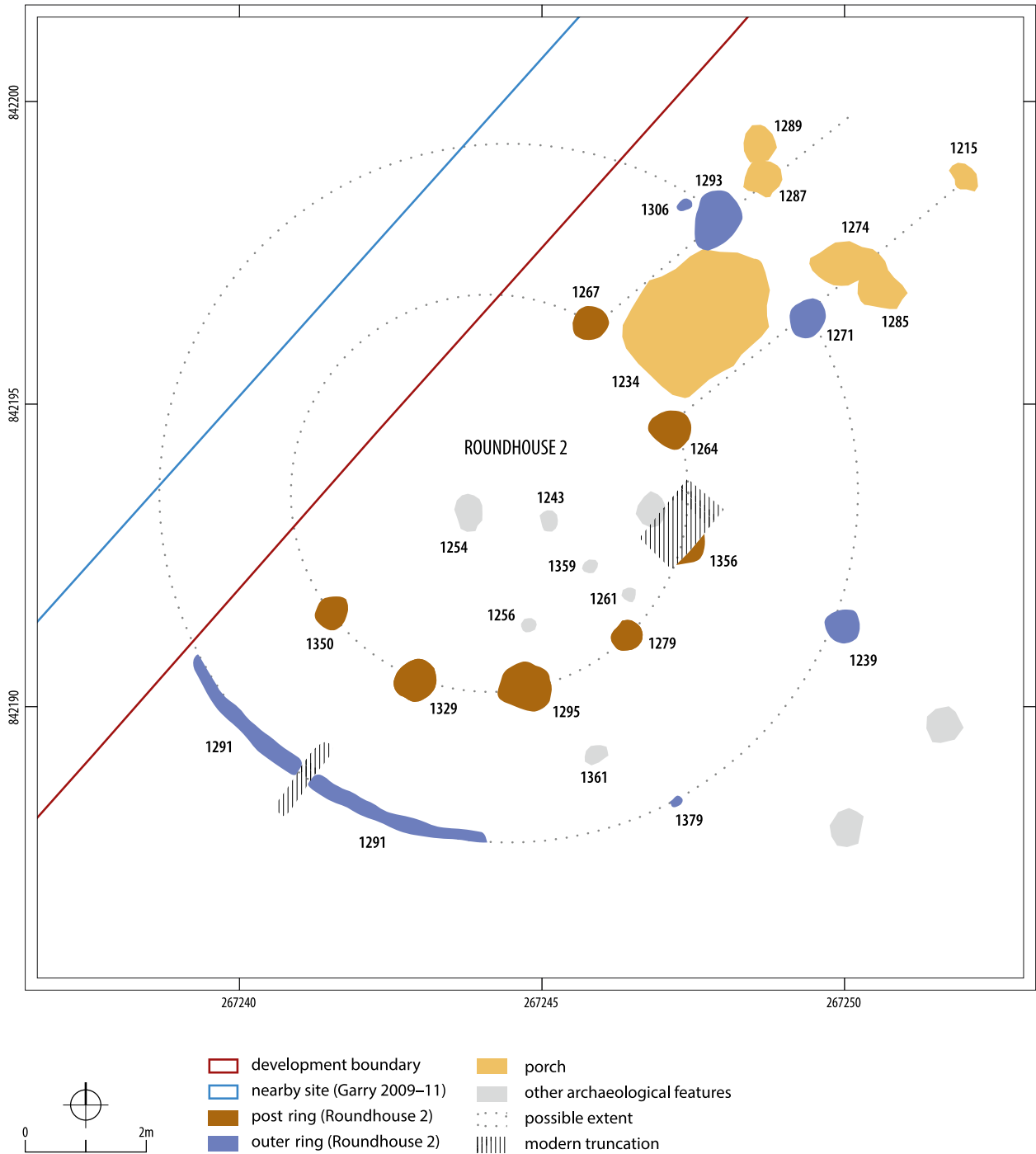
Roundhouse 2

Roundhouse 2 was only partially excavated as it lay at the north-western edge of the excavated area (Illus 2). Roundhouse 2 was defined by an inner post ring comprising seven large post holes, 0.5–0.9m deep, four with post-pipes, enclosing an area 6.6m in diameter (Illus 9). A concentric ring groove was located 1.8m from the post ring. It survived most clearly to the south-west. The surviving ring groove measured 5.3m long by 0.25m wide by 0.1m deep, with very ephemeral traces suggesting it continued for a further 3m following the curvature of the post ring. The outer ring groove defined an area 11.6m in diameter. Two further cuts were located on the alignment of the ring groove; these cuts may represent structural features associated with the roundhouse.

Two large post holes (1293, 1271), paired with Post Holes 1267 and 1264 of the inner post ring, defined a north-east facing entrance. The porch was similar in design to that of Roundhouse 3. Large posts defined the entrance to the roundhouse and pairs of post holes of ever decreasing size led away from the structure (Illus 10). The farthest away post hole (1215), located *c* 2m from the structure, measured 0.45m wide by 0.39m long



Illus 8 Plan of Roundhouse 3 and Roundhouse 7. (© Headland Archaeology (UK) Ltd)



Illus 9 Plan of Roundhouse 2. (© Headland Archaeology (UK) Ltd)

by 0.16m deep, and had steep sides and a concave base. The expected corresponding post hole to the north-west was not identified. Two pairs of large, intercutting post holes (1289/1287, 1274/1285) were found closer to the roundhouse leading to the entrance. A sub-rectangular depression, Context 1234, 2.6m long by 1.95m wide by up to 0.23m deep, was located at the entrance between the inner post ring and outer ring. The depression contained a very dark charcoal-rich basal deposit overlain by a dumped layer containing fist-sized stones. The depression did not appear to have been cut but rather formed through wear. The upper deposit may have been an attempt to level and reinforce this area.

The features uncovered within the roundhouse consisted of two pits and four post holes. The four well-defined post holes (1243, 1359, 1261 and 1256) may have formed internal structures within the roundhouse. As with the other roundhouses, no hearth was identified.

Roundhouse 1

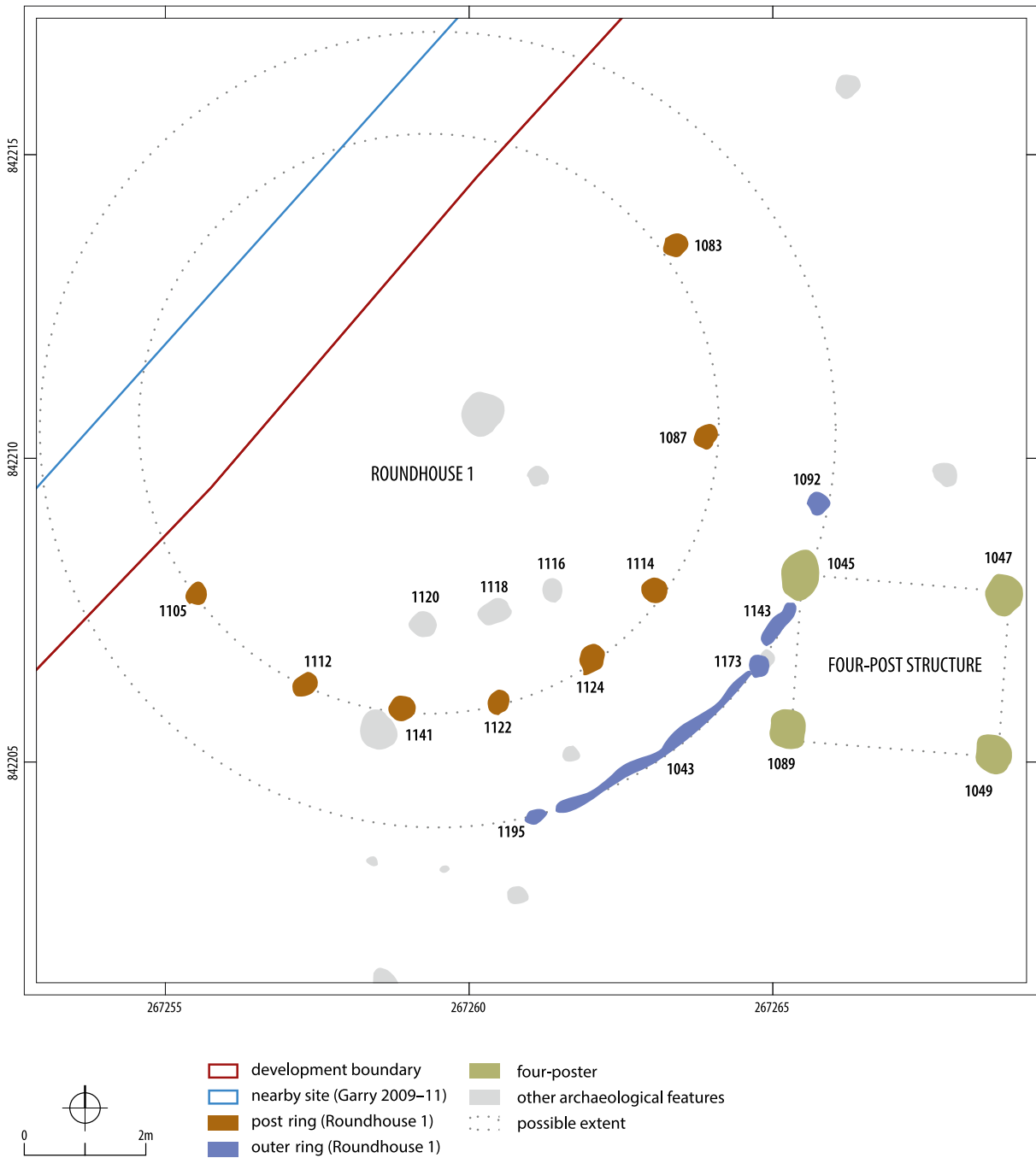
Roundhouse 1 was also located at the north-western edge of the excavated area to the north of Roundhouse 2 (Illus 2). The inner post ring comprised eight regularly spaced post holes which enclosed an area with a projected diameter of 9.6m (Illus 11). A narrow curving gully, 4.8m long by 0.2m wide by up to 0.1m deep, was located 1.8m outside the post ring (Illus 12). The curve of the gully was concentric with the post ring and therefore highly likely to be part of the ring groove, indicating the line of the outer wall. Three post holes (1195, 1173 and 1092) were set in line with the gully. Based on the curvature of the ring groove, the roundhouse measured 13.1m in diameter.

Four-post structure

Four post holes (1045, 1047, 1049 and 1089) marked the corner of a rectangle, aligned east to west, that measured 3.4m by 2.7m (Illus 11). All of the post holes were approximately 0.6m in diameter



Illus 10 View towards porch of Roundhouse 2, facing southwest. (© Headland Archaeology (UK) Ltd)



Illus 11 Plan of Roundhouse 1. (© Headland Archaeology (UK) Ltd)



Illus 12 View of outer ring groove of Roundhouse 1, facing northeast. (© Headland Archaeology (UK Ltd))

and 0.23m to 0.6m deep with steep sides and a flat base. The post holes contained a fill of mid-brown sand with rare small charcoal flecks. Post Hole 1045 at the north-west corner lay on the projected line of the ring groove in Roundhouse 1 and possibly post-dated the building, although there was no direct stratigraphic connection between the two features.

Rectangular structure

Another structure located to the south-east of the site was defined by eight post holes forming a rectangle

3.4m by 4.0m and aligned north to south (Illus 2). The well-defined post holes survived to a depth of 0.2m and half contain packing stone. Birch charcoal from the fill of Post Hole 1408 was radiocarbon dated to 800–550 cal BC (SUERC-95773; Table 1), indicating that it may be broadly contemporary with the Early Iron Age Roundhouse 4 and the palisade. Immediate to the south of the structure was a large pit, Pit 1449, that contained sub-rounded fist-size stones in a matrix of dark fine sand, along with occasional charcoal and rare small fragments of burnt bone.