

Balmachie Road, Carnoustie: Archaeological Mitigation

Data Structure Report



by Peter Klemen

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on behalf of Gardyne Homes

RATHMELL 
ARCHAEOLOGY LTD

Quality Assurance

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Signed  Date14th September 2017....

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Contents

Introduction	5
Archaeological and Historical Background	5
Known Archaeological Sites	5
Project Works	7
Findings.....	9
Discussion	9
Recommendations	19
Conclusion	19
Acknowledgements	20
References	20
Appendix 1: Trench Details.....	21
Appendix 2: Registers.....	24
Context Register.....	24
Photographic Register	26
Appendix 3: Discovery & Excavation in Scotland	28
Contact Details	30

Figures

Figure 1a: Extract from Roy's <i>Military Survey of Scotland: Highlands</i> (1747-52).....	8
Figure 1b: Extract from 6-inch 1 st edition Ordnance Survey Forfarshire, Sheet LI (includes: Barry; Monikie; Panbride) (1865).	8
Figure 2: Plan of trenches as excavated.	10
Figure 3a: Excavator used was a Volvo ECR48C.	11
Figure 3b: Proposed area for development.	11
Figure 4a: Trench 2 demonstrating context (002) and the linear feature of a modern field drain [006].....	12
Figure 4b: Trench 7 demonstrating context (003), possibly representing early peat formation.	12
Figure 5a: Trench 13 demonstrating context (004).....	13
Figure 5b: Trench 10 demonstrating context (005).....	13
Figure 6a: Trench 4 showing the modern linear field drain [006]	14
Figure 6b: Trench 4 showing the modern field drain [006].....	14
Figure 7a: Trench 9 plough marks	15
Figure 7b: Trench 6 post-hole [007]	15
Figure 8a: Trench 6 post-hole half sectioned [007]	16
Figure 8b: Trench 6 pit [009]	16
Figure 9a: Trench 6 pit [009] half sectioned	17
Figure 9b: Trench 6: post-hole [007] and [009].....	17
Figure 10: Plan depicting trench locations and the archaeological features excavated and recorded in 2016 (GUARD 2016).....	18

Introduction

1. This Data Structure Report has been prepared for Bell Ingram Design on behalf of their client Gardyne Homes in support of the erection of 10 dwelling houses on land at Balmachie Road, Carnoustie, DD7 6GL (Planning Ref: 17/00450/FULL; Grid Ref: NO 5566 3519). The archaeological works were designed to mitigate any adverse impact on the archaeological remains within the proposed development area.
2. The development is subject to a negative suspensive condition for archaeology (PAN 2/2011, SPP, SHEP). The delivery of an intrusive evaluation was structured to meet the advice of Aberdeenshire Council Archaeology Service on how the archaeological issues should be addressed.
3. The archaeological works were designed to determine the nature, form and extent of any archaeological remains within the proposed development area so as to inform the mitigation of any adverse impact. The archaeological works were structured to meet the requirements of Aberdeenshire Council Archaeological Services who in advising that archaeological issues should be addressed advised an initial evaluation at a 10% sample level.
4. The archaeological evaluation aimed to provide sufficient information to either evidence an absence of significant archaeology (hence seeking to purge any issue) or to define more closely the archaeological response necessary to deal with significant archaeology within the area.
5. Rathmell Archaeology Limited has been appointed by Bell Ingram Design on behalf of their client Gardyne Homes to undertake the development and implementation of archaeological works prior to the development of the site.

Archaeological and Historical Background

6. The development site is located on the northwestern edge of Carnoustie and forms a triangular area of land with Shanwell Road bordering the southern side, David Moyes Road to the west and Balmachie Road bordering the area to the east. The area is flat with rough vegetation covering it.
7. Early mapping depicts the area in which the proposed development area is located, but shows little detail. Roy's *Military Survey of Scotland* (Highlands 1747-52) (Figure 1a) is the earliest map to provide a depiction of the area in which there are two small settlements with the surrounding area depicted as under cultivation. Roy depicts the east-west course of the present A930 road with no settlement located along the coast where Carnoustie is located today (Figure 1a).
8. It's not until the 6-inch 1st edition Ordnance Survey (1865) (Figure 1b) that the surrounding fields and area for the proposed development, are depicted. The area in which the proposed development area is located corresponds with a localised enclosed field system and possibly linked with Carnoustie House. The form of the roads is much as it is today apart from the introduction of David Moyes Road which forms the triangular shape of the proposed development area.

Known Archaeological Sites

9. The proposed development site lies within an area that is considered to have high archaeological potential given its location within an area that is rich in prehistoric, medieval and post-medieval features and artefacts; e.g. Clayholes (Canmore ID: 34526, HER ID: NO53NE0006), Carnoustie Newton Farm (Canmore ID: 273033), Clayholes (Canmore ID: 112313, HER ID: NO53NE0062).
10. An archaeological evaluation at Carnoustie Newton Farm (Canmore ID: 273033) in May 2004 in advance of a housing development involved the cutting of 55 evaluation trenches with an open area excavation subsequently conducted in June and July 2004, Clayholes (Canmore ID: 34526, HER ID: NO53NE0006).
11. Two excavation areas 1 & 3 recovered a number of anthropic features. In Area 1, two

trenches were opened: 50 x 50m and 25 x 25m. Remains of a D-shaped ditch-defined enclosure and possible associated field boundaries were recorded. Artefactual evidence points to a medieval/post-medieval date for these features. A number of internal features were identified, although they cannot be definitely associated with the enclosure.

12. The second trench contained remains of 19th/20th-century date, including a hearth, a possible paved surface and pits full of rubbish. One pit containing prehistoric pottery was also identified.
13. Excavation in the Phase 3 area further investigated the remains of a rectilinear enclosure (visible on aerial photographs) and pits containing prehistoric pottery identified during the evaluation. The enclosure, on the west side of the excavated area, measured circa 50m by 30m, with a possible entrance on the south side. The ditch yielded some small sherds of prehistoric pottery and a piece of worked flint. Within the enclosure were 19 internal features, all pits of varying sizes, with few artefacts and no evidence to relate these features to the enclosure.
14. Two pits within the enclosure were radiocarbon dated to 3700-3520 BC and 2200-1970 BC. To the east was what appeared to be a separate spread of 78 pits, many containing quantities of prehistoric pottery. Six groupings of pits were identified with others distributed between them, the clusters laying on the crest of the slope running through the site. The majority of pottery recovered is of early Neolithic date. A pit cut by the enclosure ditch on the east side comprised the largest single assemblage of prehistoric pottery (Late Neolithic Grooved Ware) from the site as well as 11 pieces of chipped stone including a fragment of a stone axe head.
15. A total of 20 lithic artefacts of various raw materials were recovered by the excavation, including 15 pieces of debitage, three cores and two tools and would appear to date from the later Neolithic/Bronze Age. Additionally, two rubbers (or grinding stones) and a hammerstone cannot be firmly dated.
16. At least three phases of prehistoric activity have been identified on the site: the early Neolithic represented by pits dug across the area, later Neolithic indicated by Grooved Ware pottery in some of the pits in Pit Group A, and Early Bronze Age also indicated by material recovered from some of the pits. The enclosure seems to have been constructed sometime after the late Neolithic and it is thought likely to relate to the medieval or later field system. Other features recorded indicating later activity on the site included two broad rigs running northeast to southwest across the site, two parallel gullies, a stone-lined culvert, and part of the field systems identified in the earlier phase of excavation.
17. There have also been further archaeological evaluations within the immediate area; Carnoustie High School located to the southwest of the proposed development area (Canmore ID: 294058, HER ID: NO53NE0118) consisted of a programme of archaeological evaluation works undertaken in July and August 2006 at the proposed site of Carnoustie High School prior to the demolition of the original building and construction of a new one. Ten trenches were excavated with only a number of modern drains and services recorded across both the site.
18. Another archaeological evaluation was carried at Carnoustie Newton Road (Canmore ID: 268018). The evaluation was carried out in March 2003 on a 2.1ha arable field located immediately to the north of Carnoustie. Approximately 1691m² was excavated, revealing a linear northeast-southwest ditch and an east-west linear gully. The features traversed the field from its eastern limits to the start of the steep sloping western edge. No dating evidence was recovered from either of the features no further archaeology was encountered.
19. Archaeological mitigation works (evaluation and a full excavation) were carried out to the west and northwest of the proposed development area prior to creation of two new grass football pitches near Carnoustie High School.
20. During these works a significant number of archaeological features and artefacts were recovered. These included a significant hoard of metalwork that is a major addition to Scottish Late Bronze Age archaeology. These included a bronze spearhead decorated with

gold was found alongside a bronze sword, pin and scabbard fittings in a pit close to a Bronze Age settlement.

21. There are two more aspects that elevate the Carnoustie discovery to international significance. The first aspect is the extremely rare survival of organic remains. A leather and wooden scabbard encased the Carnoustie sword and is probably the best preserved Late Bronze Age sword scabbard ever found in Britain. Fur skin survived around the spearhead, and textile around the pin and scabbard. Such organic remains rarely survive on dryland sites.
22. The hoard was not in isolation find but was buried within a Late Bronze Age settlement providing an archaeological context for the hoard. The excavation also revealed the largest Neolithic hall so far found in Scotland, a building dating to around 4000 BC representing a longevity of habitation in this area.
23. In total approximately 1000 archaeological features, among them the remains of up to 12 sub-circular houses that probably date to the Bronze Age along with the remains of 2 rectilinear halls that likely date to the Neolithic period were recorded.
24. Other archaeological features consisted clusters of large pits containing discarded, broken pots and lithic artefacts. It is unclear if the archaeological remains comprise a settlement that lasted from the Neolithic until the Late Bronze Age or if it comprises several settlements built upon the same site but separated in time by many centuries.
25. Located to the north of the proposed development area is the area also referred to as Clayholes (Canmore ID: 112313, HER ID: NO53NE0062). This area consists of Cropmarks of an unenclosed settlement, with at least one ring-ditch, a pit-alignment and rig and furrow that were all recorded by the RCAHMS in 1993 and 1996.

Project Works

26. The archaeological evaluation was undertaken on the 7th September 2017, and was carried out in keeping with the methods outlined in the Written Scheme of Investigation (Klemen 2017). This evaluation consisted of the excavation of a series of intrusive trenches to expose a 10% sample of the proposed development area, which amounted to 5200m² (0.52ha) or 520m² of trenching. The position of the trenches is shown on the site plan (Figure 2).
27. A Volvo ECR48C tracked excavator with a smooth 1.6m bucket was used to remove the topsoil down to the level of the uppermost archaeological horizon or the subsoil (Figure 3a). The machine was smaller than had been anticipated due to mechanical problems with a larger machine, therefore a recalculation of the linear metres and area to be evaluated was needed.
28. Therefore a total 325 linear metres was required to be excavated. In total 326.60 linear metres of trenching was excavated which equated to 522m², slightly exceeding the required 10% sample.
29. The development site is located on the northwestern edge of Carnoustie and forms a triangular area of land with Shanwell Road bordering the southern side, David Moyes Road to the west and Balmachie Road bordering the area to the east. The area is flat with rough vegetation covering it (Figure 3b).
30. All works were conducted in accordance with Aberdeenshire Council Archaeological Services fieldwork standards and complied with the Chartered Institute for Archaeologists' Standards and Policy Statements and Code of Conduct and Historic Environment Scotland Policy Statements.

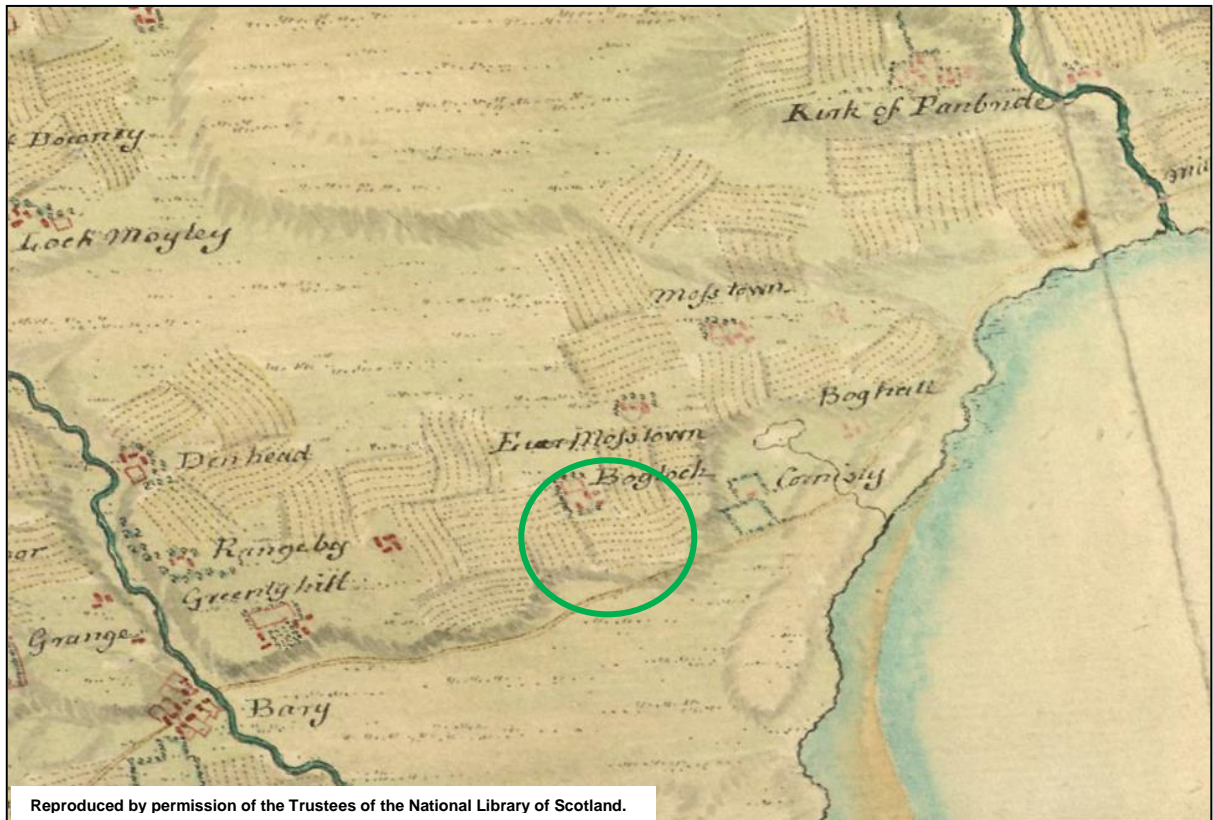


Figure 1a: Extract from Roy's *Military Survey of Scotland: Highlands* (1747-52).

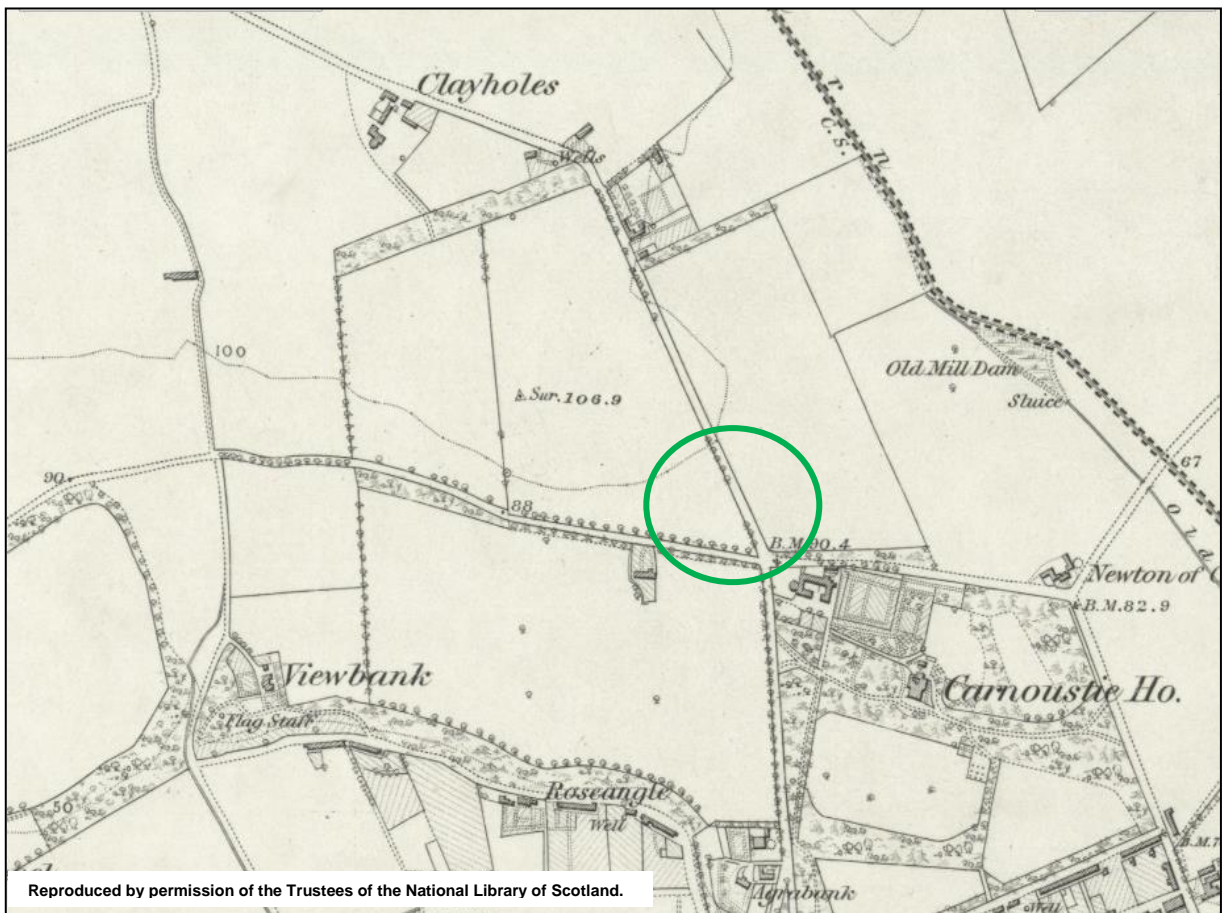


Figure 1b: Extract from 6-inch 1st edition Ordnance Survey Forfarshire, Sheet LI (includes: Barry; Monikie; Panbride) (1865).

Findings

31. Thirteen evaluation trenches were excavated across the proposed development area (Figures 2 & 3a). The details of the trenches can be found in Appendix 1 within this report. Due to the need to recalculate length of the trenches they were all slightly realigned to those depicted in the WSI and judged to provide better coverage.
32. Topsoil (001) covered all the trenches and consisted of a moderately compacted mid-brown silt and sand with frequent roots and rootlets in the top 100mm. Throughout was modern ceramic in the form of willow pottery. This topsoil ranged in depth from a maximum of 600mm to a minimum of 400mm.
33. Across six trenches (Trenches 1, 2, 3, 6, 12 and 13) there was a uniform underlying natural subsoil (002). Context (002) was formed by an orange brown moderately compacted sand with frequent small sub-angular and sub-rounded stones. Occasional large rounded stones at 300mm in size (Figure 4a).
34. Across three trenches (Trenches 5, 6, and 7) and concentrated in the southwest of the site the subsoil (003) was formed by a moderately compacted black humic and organic rich mix (Figure 4b).
35. Within seven trenches (Trenches 4, 5, 7, 8, 9, 11 and 13) there was a slight variation in the underlying natural subsoil of (002). Context (004) was formed by a moderately compacted orange light grey sand with frequent sub-angular and sub-rounded small stones (Figure 5a).
36. In one trench (Trench 10) context (005) was recorded and characterised by a light grey pink clay and sand, moderately compacted with frequent sub-rounded and sub-angular stones (Figure 5b).
37. Within eight trenches (Trenches 1, 2, 3, 4, 6, 7, 8 and 12) a linear feature 250mm wide was recorded [006]. On excavation it was revealed to be 300mm deep with steep sides and a red ceramic tile cylinder located at the base. The fill was of (001) (Figures 6a & 6b).
38. In Trenches 9 and 11 there were two area of faint narrow linears recorded and aligned northwest-southeast (011). On excavation they were 100mm in width and 40mm in depth and cut into the underlying subsoil (Figure 7a). The fill of these linear cut features was comparable to (001).
39. In Trench 6 at +6.8m from the northeast end and centrally located was recorded a circular feature [007] measuring 150mm north-south by 200mm east-west and 90mm in depth with a rounded base, gentle sloping north side and the remaining east, south and west sides all steep (Figures 7b & 8a).
40. The trench was extended to the east and west of [007] with a 2m by 2m box trench. To the east of [007] a curvilinear feature [009] was recorded. Overall, [009] was oval in shape and approximately aligned north-south with the long axis aligned east-west and measuring 430mm by 800mm and 200mm deep. The base was rounded with gently sloping east and north sides with the south and west both steep (Figures 8b & 9a).

Discussion

41. All of the trenches revealed natural subsoil which in the majority of the trenches was a uniformed natural subsoil consisting of sand with frequent stone inclusions (002). The orange light grey sand (004) recorded represents a slight variation of (002) with context (005) and the higher clay content indicating a localised change in the overall uniform sandy nature of the underlying subsoil.
42. Context (003) possibly represents an early phase in peat formation and due to its concentration in a small area may represent humic and organic rich material being located specifically in this area either by natural or anthropic agencies.



Figure 2: Plan of trenches as excavated.



Figure 3a: Excavator used was a Volvo ECR48C.



Figure 3b: Proposed area for development.



Figure 4a: Trench 2 demonstrating context (002) and the linear feature of a modern field drain [006].



Figure 4b: Trench 7 demonstrating context (003), possibly representing early peat formation.



Figure 5a: Trench 13 demonstrating context (004)



Figure 5b: Trench 10 demonstrating context (005)



Figure 6a: Trench 4 showing the modern linear field drain [006]



Figure 6b: Trench 4 showing the modern field drain [006]



Figure 7a: Trench 9 plough marks



Figure 7b: Trench 6 post-hole [007]



Figure 8a: Trench 6 post-hole half sectioned [007]



Figure 8b: Trench 6 pit [009]



Figure 9a: Trench 6 pit [009] half sectioned



Figure 9b: Trench 6: post-hole [007] and [009]

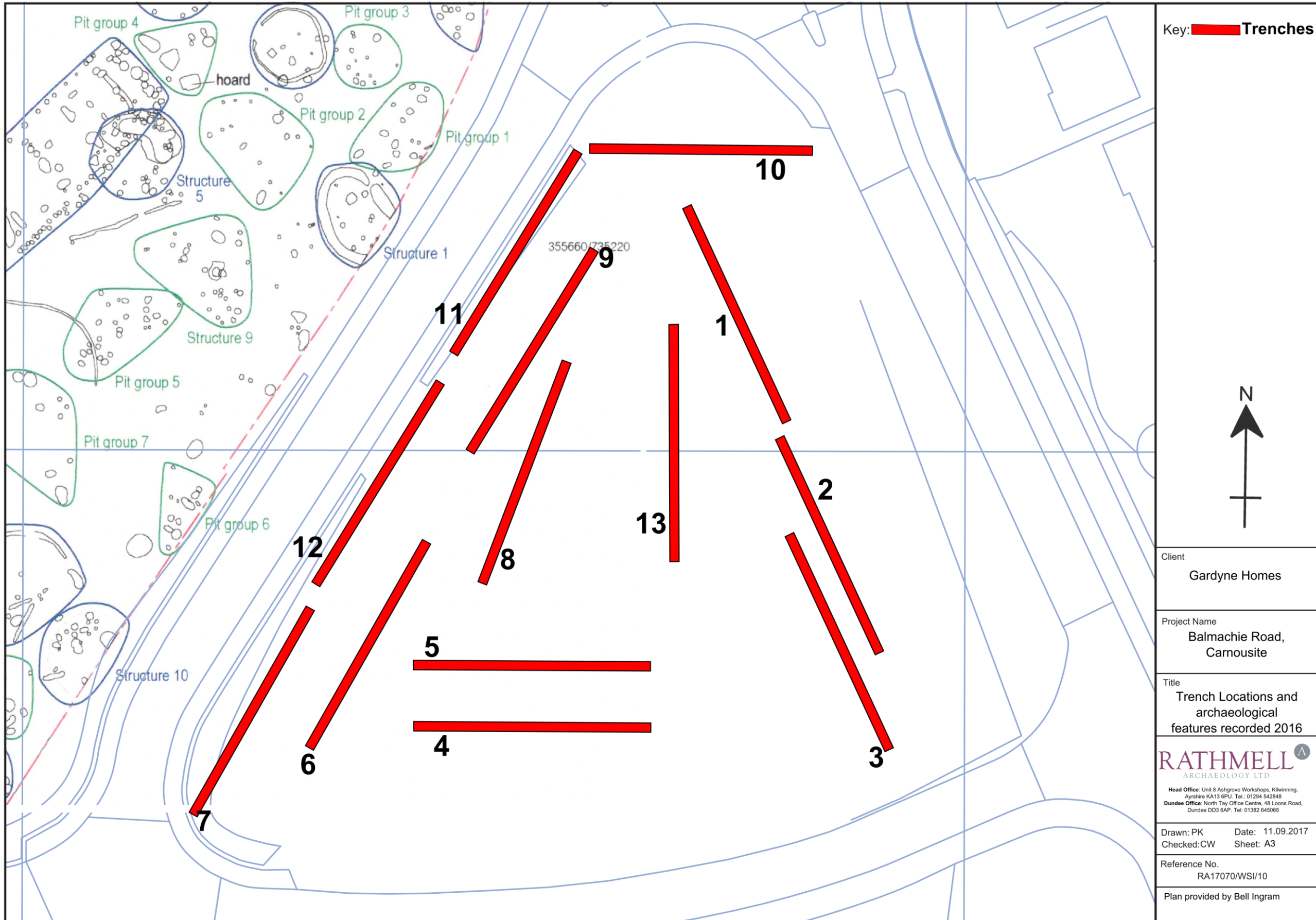


Figure 10: Plan depicting trench locations and the archaeological features excavated and recorded in 2016 (GUARD 2016)

43. The linear feature(s) [006] recorded represent modern activity in the form of modern tile field drains. The linear features [011] recorded in Trenches 9 and 11 are likely to represent plough marks. The width and depth suggests that just the bottom of the features was recorded and they represent some form of agricultural feature. Their character is not suggestive of relict rig and furrow or similar historic agricultural processes.
44. Although there is a lack of any significant activity within the proposed development area compared to that recorded to the west, features [007] and [009] represent that there is the potential for archaeological features associated with prehistoric activity, even if this is low density.
45. The circular feature [007] most likely represents a small post-hole with the oval feature [009] representing a small pit. The close association of the two features (Figure 9b) would further suggest that they are potentially contemporary with each other. Similar archaeological features were recorded during the archaeological excavation in 2016 to the west (Figure 10) (GUARD 2016) and due to the close proximity of the proposed development area it is highly likely that comparative archaeological features would be recorded, even if in a lower density.
46. Across the site there is evidence for minimal modern activity in the form of the insertion of modern field drains [006] and the area having been the focus of some agricultural activity in the form of plough scars [011].
47. The low density of significant archaeological features may be related to changes in the immediate micro-topography. The area of the proposed development is located on a north-south descending topography compared to that of the siting and location of the archaeology to the west which is located on level ground. However, it must be considered how much there have been any changes in the recent past to the local topography.
48. On speaking with the client, it was also discovered that underlying the upper sand subsoil are clay deposits that would have potentially prevented efficient drainage and therefore making the area of the proposed development less suitable for habitation. This may also explain the number of field drains (006) recorded in a small area.

Recommendations

49. All of the trenches revealed natural subsoil which in the majority of the trenches was a sand with frequent stone inclusions (002) and (004). Although the evidence for significant archaeological features was low, the post-hole [007] and pit feature [009] do represent that there is the potential for further archaeological features to be present.
50. As such Rathmell Archaeology Ltd recommends that a Watching Brief be carried out on any future ground breaking within the proposed development area. We would suggest that due to the location of features [007] and [009] and the close proximity to the significant archaeological features and themselves representative of prehistoric activity recorded to the west, focus for any future Watching Brief is along the west the of the proposed development area and concentrated on housing plots 1, 2, 3, 4 and 5 (Figure 2).
51. The appropriateness and acceptability of our recommendations rest with Angus Council and their advisors, Aberdeenshire Council Archaeological Services.

Conclusion

52. A programme of archaeological works was required by Bell Ingram Design on behalf of their client Gardyne Homes in support of the erection of 10 dwelling houses on land at Balmachie Road, Carnoustie, DD7 6GL (Planning Ref: 17/00450/FULL; Grid Ref: NO 5566 3519). These archaeological works are designed to mitigate any adverse impact on the archaeological remains within the development area.
53. The archaeological investigative works consisted of an intrusive evaluation which was designed to assess a 10% sample of the proposed development area. In total 326.60 linear metres of trenching was excavated which equated to 522m², slightly exceeding the

required 10% sample.

54. All of the trenches revealed natural subsoil which in the majority of the trenches was a sand with frequent stone inclusions. The linear feature(s) [006] recorded represent modern activity in the form of modern tile field drains. The linear features [011] recorded in Trenches 9 and 11 are suggested to represent plough marks. Their character is not suggestive of relict rig and furrow or similar historic agricultural processes.
55. Although there is a lack of any significant activity within the proposed development area compared to that recorded to the west, features [007] and [009] represent that there is the potential for archaeological features associated with prehistoric activity, even if this is low density.
56. As such Rathmell Archaeology Ltd recommends that a Watching Brief be carried out on any future ground breaking within the proposed development area. We would suggest that due to the location of features [007] and [009] and the close proximity to the significant archaeological features and representative of prehistoric activity recorded to the west, focus for any future Watching Brief is along the west the of the proposed development area and concentrated on housing plots 1, 2, 3, 4, 5.

Acknowledgements

57. The author would like to thank Aberdeenshire Council Archaeological Services for their guidance on the structure of these archaeological works. We are grateful to Bell Ingram Design on behalf on of their client Gardyne Homes, who provided us the opportunity to carry out these works and for ensuring that the on-site works ran smoothly.

References

Documentary

Klemen, P. 2017 Balmachie Road, Carnoustie: Archaeological Mitigation, Written Scheme of Investigation. Unpublished report: Rathmell Archaeology Ltd

Cartographic

Roy, W	1747-52	Military Survey of Scotland (Highlands)
Ordnance Survey	1865	6-inch 1 st edition Ordnance Survey Forfarshire, Sheet LI (includes: Barry; Monikie; Panbride)

Appendix 1: Trench Details

Within this appendix a standardised set of data pertaining to the evaluation trenches is presented.

All measurement distances quoted along the trench measure based on the quoted orientation of the trench.

Trench	Orientation	Size	Topsoil Depth	Subsoil Character	Modern Features	Significant Features	Artefacts
1	NNW-SSE	25.2 by 1.6m 40.32m ²	450mm to 500mm	The whole length of the trench is characterised by an orange brown moderately compacted sand with frequent small sub-angular and sub-rounded stones. Occasional large rounded stones at 300mm in size (002). A field drain [006] enters the trench at 16m on the NNE side and continues in a SSW alignment until the end of the trench.	Modern field drain	None	None
2	NNW-SSE	25.3 by 1.6m 40.48m ²	400mm to 400mm	The whole length of the trench is characterised by an orange brown moderately compacted sand with frequent small sub-angular and sub-rounded stones. Occasional large rounded stones at 300mm in size (002). A field drain [006] enters the trench at the start of the trench and continues in a NNE-SSW alignment for 4m.	Modern field drain	None	None
3	NNW-SSE	25.2 by 1.6m 40.32m ²	450mm to 400mm	The whole length of the trench is characterised by an orange brown moderately compacted sand with frequent small sub-angular and sub-rounded stones. Occasional large rounded stones at 300mm in size (002). A field drain [006] enters the trench at 14m on the NNE side and continues in a SSW alignment for 4m.	Modern field drain	None	None

Trench	Orientation	Size	Topsoil Depth	Subsoil Character	Modern Features	Significant Features	Artefacts
4	E-W	25.5m by 1.6m 40.80m ²	450mm to 500mm	The whole length of the trench is characterised by an orange light grey sand moderately compacted with frequent sub-angular and sub-rounded small stones (004). A field drain [006] enters the trench at +15m on a N-S alignment across the trench.	Modern field drain	None	None
5	E-W	25.5m by 1.6m 40.80m ²	450mm to 500mm	The first +15m consists of an orange light grey sand moderately compacted with frequent sub-angular and sub-rounded small stones (004) where it changes to a Black moderately compacted humic and organic material mix (003) with patches of (004).	None	None	None
6	NE-SW	25.5m by 1.6m 40.80m ²	450mm to 450mm	The first +6m is formed of an orange brown moderately compacted sand with frequent small sub-angular and sub-rounded stones. Occasional large rounded stones at 300mm in size (002). From there it changes to (003) for the remaining length of the trench. A field drain [006] comes in at +6m for 4m and aligned NW-SE. At +6.8 and centrally located is the post-hole [007]. The trench was extended to the east and a pit feature [009] was recorded.	Modern field drain	Post hole [007] and Pit [009]	None
7	NE-SW	25m by 1.6m 40m ²	450mm to 450mm	The first +8m is formed of a black moderately compacted humic and organic material mix (003), with (004) forming the subsoil for the remaining length of the trench. A field drain [006] comes in at +6m for 2m and	Modern field drain	None	None

Trench	Orientation	Size	Topsoil Depth	Subsoil Character	Modern Features	Significant Features	Artefacts
				aligned NE-SW.			
8	NNE-SSW	25m by 1.6m 40m ²	480mm to 450mm	The whole length of the trench is characterised by an orange light grey sand moderately compacted with frequent sub-angular and sub-rounded small stones (004). A field drain enters the trench at +11m to +14m on a NNW-SSE.	Modern field drain	None	None
9	NE-SW	25.2m by 1.6m 40.32m ²	500mm to 500mm	The whole length of the trench is characterised by an orange light grey sand moderately compacted with frequent sub-angular and sub-rounded small stones (004). Plough marks are located at the SW end and measured 100mm wide by 40mm deep and aligned NW-SE.	Plough marks	None	None
10	E-W	23.5m by 1.6m 37.60m ²	300mm to 500mm	The whole length of the trench is characterised by a light grey pink clay sand moderately compacted with frequent sub-rounded and sub-angular stones (005).	None	None	None
11	SW-NE	25.4m by 1.6m 40.64m ²	500mm to 500mm	The whole length of the trench is characterised by an orange light grey sand moderately compacted with frequent sub-angular and sub-rounded small stones (004). Plough marks are located at the +15m and +16m from the SW end of the trench, and measured 100mm wide by 40mm deep and aligned NW-SE.	Plough marks	None	None
12	NE-SW	25.3m by 1.6m 40.48m ²	500mm to 500mm	The whole length of the trench is characterised by an orange brown moderately compacted sand with	Modern field drain	None	None

Trench	Orientation	Size	Topsoil Depth	Subsoil Character	Modern Features	Significant Features	Artefacts
				frequent small sub-angular and sub-rounded stones. Occasional large rounded stones at 300mm in size (002). A field drain [006] enters the trench at +16m from the NE end of the trench and aligned NE-SW.			
13	N-S	25m by 1.6m 40m ²	500mm to 600mm	The first +5m is characterised by an orange light grey sand moderately compacted with frequent sub-angular and sub-rounded small stones (004) where it changes to (002) for the remaining length of the trench.	Modern field drain	None	None

Appendix 2: Registers

Within this appendix are all registers pertaining to works on-site during the evaluation.

Context Register

Context No.	Area/ Trench	Type	Description	Interpretation
001	All trenches	Deposit	Mid Brown moderately compacted silty sand with frequent roots and rootlets in the top 100mm.	Topsoil
002	1, 2, 3, 6, 12, 13	Deposit	Orange brown moderately compacted sand with frequent small sub-angular and sub-rounded stones. Occasional large rounded stones at 300mm in size.	Subsoil
003	5, 6, 7	Deposit	Black moderately compacted humic and organic material mix.	Subsoil (possibly a localised area of peat formation)
004	4, 5, 7, 8, 9, 11, 13	Deposit	Orange light grey sand moderately compacted with frequent sub-angular and sub-rounded small stones.	Subsoil
005	10	Deposit	Light grey pink clay sand moderately compacted with frequent sub-rounded and sub-angular stones.	Subsoil

Context No.	Area/ Trench	Type	Description	Interpretation
006	1, 2, 3, 4, 6, 7, 8, 12	Cut & Deposit	Linear, 250mm wide by 300mm deep with steep sides, red ceramic tile drain. Fill of (001).	Modern Field drain
007	6	Cut	Circular in shape measuring 150mm N-S by 200mm E-W and 90mm in depth. Rounded base with a gentle sloping N side and the remaining E, S, W sides all steep.	Post hole
008	6	Fill	A mix of a moderately compacted orange sand and black humic organic rich matrix (002) & (003)	Post hole fill
009	6	Cut	Curvilinear in shape and approximately aligned N-S with the long axis aligned E-W and measuring 430mm by 800mm and 200mm deep, the W side is 130mm in width. Rounded base with gently sloping E and N sides with the S and W both steep.	Pit
010	6	Fill	Fill of (003)	Pit fill
011	9, 11	Cut	Two area of faint narrow linears recorded and aligned northwest-southeast. On excavation they were 100mm in width and 40mm in depth and cut into the underlying subsoil. The fill of these linear cut features was comparable to (001).	Plough Marks (?)

Photographic Register

Image No.	Digital	Description	From	Date
001	5440	Pre-excavation of the site	N	07/09/17
002	5441	Pre-excavation of the site	NW	07/09/17
003	5442	Pre-excavation of the site	W	07/09/17
004	5443	Pre-excavation of the site	S	07/09/17
005	5444	Trench 1: Post-excavation	NNW	07/09/17
006	5445	Trench 2: Post-excavation	NNW	07/09/17
007	5446	Trench 3: Post-excavation	NNW	07/09/17
008	5447	Trench 4: Post-excavation	E	07/09/17
009	5448	Trench 5: Post-excavation	W	07/09/17
010	5449	Trench 5: black layer (003) sitting on top of subsoil (002)	E	07/09/17
011	5450	Trench 6: Post-excavation	SW	07/09/17
012	5451	Trench 6: black layer (003)	SW	07/09/17
013	5452	Trench 7: Post-excavation black layer (003)	NE	07/09/17
014	5453	Trench 12: Post-excavation	NE	07/09/17
015	5454	Trench 11: Post-excavation	SW	07/09/17
016	5455	Trench 9: Post-excavation	SW	07/09/17
017	5456	Trench 1: [006], field drain	NNW	07/09/17
018	5457	Trench 8: Post-excavation	SW	07/09/17
019	5458	Trench 13: Post-excavation	N	07/09/17
020	5459	Trench 10: Post-excavation	W	07/09/17
021	5460	Working shot	W	07/09/17
022	5461	Trench 2: [006], field drain	NNW	07/09/17
023	5462	Trench 13: [006], field drain	S	07/09/17
024	5463	Trench 5: [006], field drain	SW	07/09/17
025	5464	Trench 2: [006], field drain, post-excavation	W	07/09/17
026	5465	Trench 4: [006], field drain, post-excavation	W	07/09/17
027	5466	Trench 9: possible agricultural plough mark	W	07/09/17
028	5467	Trench 11: Plough marks	W	07/09/17
029	5468	Trench 6: Possible post hole [007] and fill [008]	NE	07/09/17
030	5469	Trench possible pit [009] and fill [010]	SW	07/09/17
031	5470	Half section of [007]	NE	07/09/17
032	5471	Half section of [007]	NE	07/09/17
033	5472	Fully excavated [007]	NE	07/09/17
034	5473	Fully excavated [007]	NE	07/09/17
035	5474	Both [007] and [009] together	W	07/09/17
036	5475	[009] half sectioned	SW	07/09/17

Image No.	Digital	Description	From	Date
037	5476	[009] fully excavated	SW	07/09/17
038	5477	[009] fully excavated from the west	W	07/09/17
039	5478	Backfilled area	SW	07/09/17
040	5479	Backfilled area	W	07/09/17
041	5480	Box trench in trench 6 and showing features [007] & [009]	W	07/09/17
042	5481	Box trench in trench 6 and showing features [007] & [009]	E	07/09/17
043	5482	Showing local/micro topography from GUARD excavation area	NW	07/09/17
044	5483	Showing local/micro topography from GUARD excavation area	W	07/09/17

Drawing Register

Drawing	Sheet	Trench	Type	Scale	Description	Drawer	Date
1	1	1	Plan	1:100	Post-excavation Trench 1	PK	07/09/17
2	1	2	Plan	1:100	Post-excavation Trench 2	PK	07/09/17
3	1	3	Plan	1:100	Post-excavation Trench 3	PK	07/09/17
4	1	4	Plan	1:100	Post-excavation Trench 1	PK	07/09/17
5	1	5	Plan	1:100	Post-excavation Trench 2	PK	07/09/17
6	1	6	Plan	1:100	Post-excavation Trench 3	PK	07/09/17
7	1	7	Plan	1:100	Post-excavation Trench 1	PK	07/09/17
8	1	8	Plan	1:100	Post-excavation Trench 2	PK	07/09/17
9	1	9	Plan	1:100	Post-excavation Trench	PK	07/09/17
10	1	10	Plan	1:100	Post-excavation Trench	PK	07/09/17
11	1	11	Plan	1:100	Post-excavation Trench	PK	07/09/17
12	1	12	Plan	1:100	Post-excavation Trench	PK	07/09/17
13	1	13	Plan	1:100	Post-excavation Trench	PK	07/09/17

Appendix 3: Discovery & Excavation in Scotland

LOCAL AUTHORITY:	Angus
PROJECT TITLE/SITE NAME:	Balmachie Road, Carnoustie
PROJECT CODE:	RA17070
PARISH:	Carnoustie
NAME OF CONTRIBUTOR:	Peter Klemen
NAME OF ORGANISATION:	Rathmell Archaeology Limited
TYPE(S) OF PROJECT:	Evaluation
NMRS NO(S):	None
SITE/MONUMENT TYPE(S):	None
SIGNIFICANT FINDS:	None
NGR (2 letters, 8 or 10 figures)	NO 5566 3519
START DATE (this season)	7 th September 2017
END DATE (this season)	7 th September 2017
PREVIOUS WORK (incl. <i>DES</i> ref.)	None
MAIN (NARRATIVE) DESCRIPTION: (may include information from other fields)	<p>A programme of archaeological works was required by Bell Ingram Design on behalf of their client Gardyne Homes in support of the erection of 10 dwelling houses on land at Balmachie Road, Carnoustie, DD7 6GL. These archaeological works were designed to mitigate any adverse impact on the archaeological remains within the development area.</p> <p>The archaeological investigative works consisted of an intrusive evaluation which was designed to assess a 10% sample of the proposed development area. In total 326.60 linear metres of trenching was excavated which equated to 522m², slightly exceeding the required 10% sample.</p> <p>Although there is a lack of any significant activity within the proposed development area compared to that recorded to the west, features [007] and [009] represent that there is the potential for archaeological features associated with prehistoric activity, even if this is low density.</p> <p>As such Rathmell Archaeology Ltd recommends that a Watching Brief be carried out on any future ground breaking within the proposed development area and concentrated on housing plots 1, 2, 3, 4, 5.</p>
PROPOSED FUTURE WORK:	Watching brief
CAPTION(S) FOR ILLUSTRS:	None
SPONSOR OR FUNDING BODY:	Gardyne Homes
ADDRESS OF MAIN CONTRIBUTOR:	Unit 8 Ashgrove Workshops, Kilwinning, Ayrshire KA13 6PU

EMAIL ADDRESS:	contact@rathmell-arch.co.uk
ARCHIVE LOCATION (intended/deposited)	Report to Aberdeenshire Council Archaeological Services and archive to NRHE.

Contact Details

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

Ayrshire Office:

Rathmell Archaeology Ltd	www.rathmell-arch.co.uk
Unit 8 Ashgrove Workshops	
Kilwinning	t.: 01294 542848
Ayrshire	f.: 01294 542849
KA13 6PU	e.: contact@rathmell-arch.co.uk

Dundee Office:

Rathmell Archaeology Ltd	www.rathmell-arch.co.uk
North Tay Office Centre	
48 Loons Road	t.: 01382 645065
Dundee	m.: 07827 913796
DD3 6AP	e.: peter.klemen@rathmell-arch.co.uk

59. The Aberdeenshire Council Archaeology Service can be contacted at their office or through the web:

Archaeology Service	www.aberdeenshire.gov.uk
Aberdeenshire Council	
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Westburn Road	m.: 07825 356913
Aberdeen	
AB16 5GB	e.: archaeology@aberdeenshire.gov.uk

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