

APPENDIX 17.1 ARCHAEOLOGICAL TESTING REPORT

Archaeological Assessment Readsland, Roestown & Knocks, Dunshaughlin Co. Meath



MCGLADE

31/08/2020

20E0410

AP20-04

APPENDIX 17.1

SITE NAME

Readsland, Roestown & Knock, Dunshaughlin, Co. Meath

CLIENT

Castlethorn Construction, Usher House, Main Street, Dundrum, Dublin 14

LICENCE

20E0410

PLANNING

Pre-planning assessment

ARCHAEOLOGY PLAN REF.

AP20-04

REPORT AUTHOR

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DATE

31st August 2020

ABBREVIATIONS USED

DAHG	Department of Arts, Heritage and the Gaeltacht
NMI	National Museum of Ireland
NMS	National Monuments Service
OS	Ordnance Survey
RMP	Record of Monuments and Places
NIAH	National Inventory of Architectural Heritage
LAP	Local Area Plan

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Section 1 Introduction

Report summary

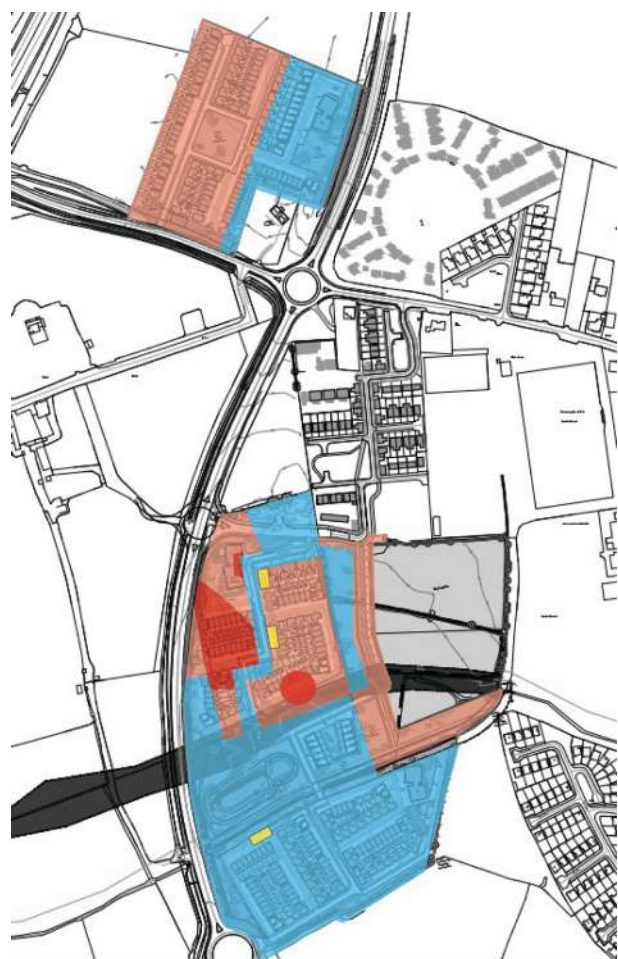
A programme of archaeological test-trenching was carried out on lands in Readsland, Roestown and Knocks, to the west of Dunshaughlin, Co. Meath. The testing was carried out in advance of a planning application relating to Phase 2 of the Dun Ríoga development and is included as Appendix 17.1 of the EIAR for the development. A substantial excavation was carried out as part of Phase 1 of the development (15E0125; McGlade 2020), which revealed a large early medieval cemetery-settlement and associated metalworking and cereal production to the north. Prehistoric activity and a medieval field system were revealed to the south of the Phase 1 site.

Thirty-five trenches were opened across five fields. Archaeology was identified within two of the fields. It was not possible to access a sixth field.

The majority of the archaeology uncovered was located in Field 2 and included a cluster of pits and curvilinear features to the west. These are likely to relate to the cremation pit and pyre excavated as part of the 2018 works, as well as the pit cluster and fulacht fiadh to the northwest of the field. A second zone of archaeology was identified to the southeast with two separate burnt spreads uncovered, likely to be the remains of fulachtaí fia. These prehistoric features were located on the edges of the former wetlands of the floodplain of the River Skane, which is located to the south and west. Some of these pools were encountered in the 2018 works and in the testing programme and are likely to be contemporary with the surrounding archaeology.

A number of linear ditches forming a medieval field system were identified within Field 2 during the 2018 works. Additional ditches and drainage features identified in the 2018

excavation and the 2020 testing indicate attempts to improve the field persisted in the post-medieval period. Further to the south and west in Fields 4, 5 and 6 the drainage features all appeared to be of post-medieval and modern date indicating drainage of these lower-lying fields did not take place until more recent times. The lands on either side of the stream forming the upper section of the River Skane, which divides Fields 5 and 6, were particularly boggy. No archaeology was uncovered within Field 4, 5 or 6.



- Excavation
- Monitoring
- Environmental core - possible locations
- No further works

Summary of recommendations

Within Field 1 a small number of isolated pits were identified along with a number of additional features of archaeological potential. The field has been heavily ploughed in the past, which would have impacted any archaeology that may have been within the field. There was no indication that features relating to the early medieval settlement excavated in 2018-9 to the east continue into the field.

A programme of archaeological monitoring and subsequent excavation and preservation by record is recommended within Field 2. Monitoring is also recommended within the western portion of Field 1 and in Field 3, which was not assessed during the testing programme. A road and paths are proposed to the east of Field 2 and 5. This part of the site was not assessed during the testing and will also require

monitoring. No further archaeological works are recommended within Fields 4, 5 or 6.

These recommendations are subject to the approval of the National Monuments Service.

Site Location

The site is spread across a number of fields to the west of Dunshaughlin. One large field to the north is located in Roestown townland, west of the Dunshaughlin bypass. The remaining fields of the development lie to the southeast with one large field two smaller one in Readsland townland to the east of the bypass and a further two fields to the south in Knocks townland. The total area of the proposed development is 14.6ha.



Site location shown on the Ordnance Survey Geohive streetview map (top) and satellite imagery from 2011-2013 (bottom)

The southern portion of the proposed development is bounded by the Dunshaughlin bypass to the west, by undeveloped land to the south and north and partially by Phase 1 of the development to the east, with the southeastern portion also undeveloped. The northern portion of the site is bounded by the Drumree Road to the south, the Dunshaughlin bypass to the east and by undeveloped land to the west and north.

The site is presently pasture, becoming boggy to the south.

Plan of the proposed development (left)

Phase 1 of the development, which was excavated in 2018-9 under licence 15E0125. The construction of Phase 1 is nearing completion now (right)



Development proposals

The proposed development comprises an approximately 14.6ha sized residential development of 320 houses, 109 apartments and a creche and all associated landscaping, services and infrastructural works

Planning

The proposed development is Phase 2 of the 'Dun Rioga' development. Phase 1 is nearing completion under Meath Co. Co. Planning Ref. D13A/0285.

The proposed Phase 2 of the development is social housing and is to be submitted to An Bord Pleanala in the coming months.

The testing had been recommended in the EIAR for the proposed development (Garahy 2020), and is included as Appendix 17.1 of the EIAR.



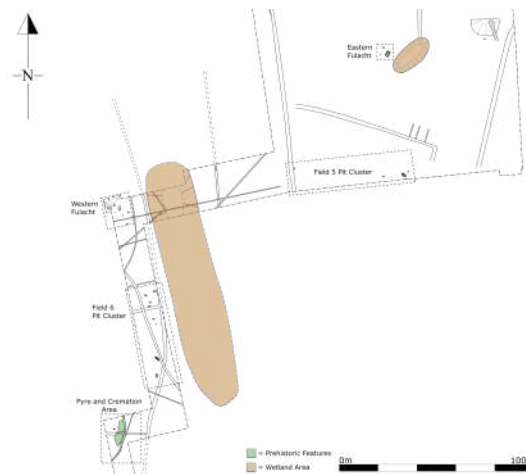
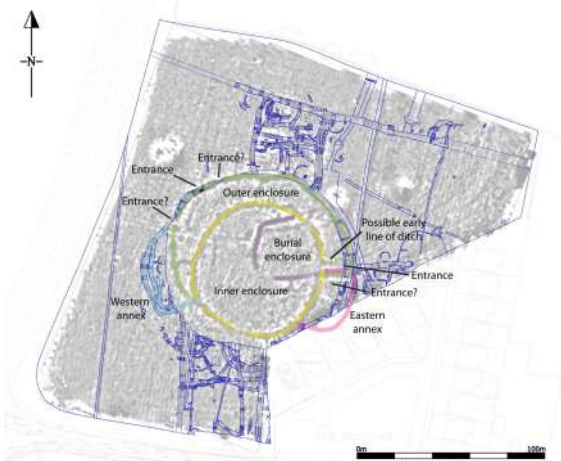
Archaeological Potential

A comprehensive archaeological and historical background was carried out as part of Phase 1 of the development (see McGlade 2020), and is summarised below. There are no archaeological sites listed in the Record of Monuments and Places (RMP) within the bounds of the site.

Excavations were carried out as part of Phase 1 of the development to the east under Licence No. 15E0125. A substantial early medieval settlement site was excavated as part of Phase 1 of the development to the north (McGlade 2020; Excavations Ref. 2019:474). In the southern portion of the Phase 1 development *fulachtaí fia*, prehistoric pit clusters, a cremation pyre and cremation burials were uncovered, along with a medieval field system (McGlade 2020, Excavations Ref. 2018:032).

The early medieval settlement site was identified in a 2009 geophysical survey (Harrison 2009a; 09R0089). The site was subsequently tested (Hession & Moriarty 2009; 09E214). This

confirmed the presence of a substantial early medieval cemetery settlement site in the northern field. The central enclosure measured c. 68m in diameter with a non-concentric c. 98m outer enclosure extending to the north. The development was redesigned to preserve the central enclosure and burial area within a green



Summary of archaeology within the proposed development (top left)

Archaeology uncovered within the northern field of Phase 1 (bottom left)

Medieval field system uncovered within the southern portion of Phase 1 (top right)

Prehistoric activity uncovered within the southern portion of Phase 1 (bottom right)

space in the development. A number of annexes were also identified and these were excavated in 2018 and 2019 by the author under Licence No. 15E0125. A substantial iron production site was excavated within the northern annex, which was followed by a substantial phase of cereal processing. A number of structures were identified to the east of the outer enclosure. Post-excavation analysis of the finds and samples from the excavation is ongoing. The early medieval settlement was located centrally within the Phase 1 field. Additional features were identified in the unenclosed ground to the east and south of the settlement, however little was present to the west of the western annex. While it is possible outlying features relating to the early medieval settlement may extend to the west into the Phase 2 field, none were noted during the excavation of the Dunshaughlin bypass, which runs between the two fields.

In the southern portion of the Phase 1 development a medieval field system and laneway were uncovered along with earlier prehistoric archaeology including a fulacht fiadh and a prehistoric pit cluster. A 10m wide strip was also monitored to the west and south. This follows a proposed road within the Phase 2 portion of the development and was required for the insertion of services and a flood alleviation pond. Within this strip a fulacht fiadh, prehistoric pit cluster and cremation pits were uncovered along with the remains of a cremation pyre. This is a lower-lying portion of the proposed development, with the field within Knocks townland being former wetlands. It is likely that additional fulachtaí fia may be uncovered within the southern portion of the site. It is possible that additional cremation related activity will also be uncovered.

Additional sites in the immediate vicinity include Roestown 4 to the north, where two pits, a linear ditch and a curvilinear feature were excavated (04E0479; A017/024, E3046). The pits contained burnt bone and charcoal. To the south at Knock 1 a large Late Bronze Age segmented ring-ditch was excavated (A017/022, E3044). Another large ring-ditch was excavated to the west at Drumree 1, which has lead the author to suggest that the low-lying former wetlands at Knocks and the floodplain of the

adjacent Skane River may have been a focal point for prehistoric burial (McGlade 2020, 304).

Archaeological investigations in Phase 2

A geophysical survey was carried out on the Phase 2 lands in 2009 (Harrison 2009b; 09R0138). As noted above, a service trench and attenuation tank relating to Phase 1 cross the Phase 2 site and were excavated in 2018 under Licence No. 15E0125. Two test trenches from the 2009 testing programme were also located within the Phase 2 portion of the site, however, they were located within the strip completed for the pipe trench of the Phase 1 works.

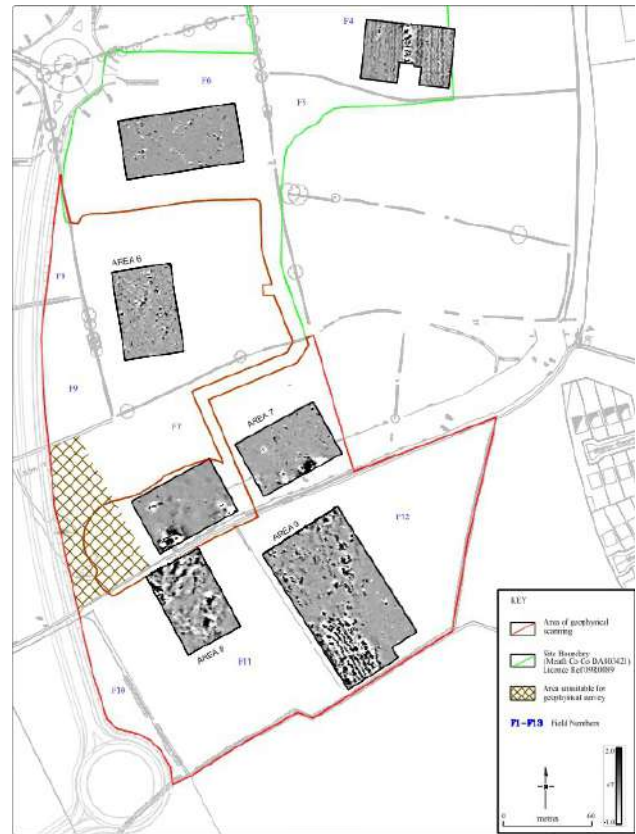
In the geophysical survey some linear features of archaeological potential were noted within

Plan of the areas included in the 2009 geophysical surveys within the development. The areas in green relate to the Phase 1 lands and the areas in blue relate to the Phase 2 lands. Note that the location of the service trench leading to the attenuation tank was altered meaning that Area 6 was partially included in Phase 1 (after Harrison 2009)



the northern field in Roestown townland. A number of possible archaeological features were identified in Readsland townland. One of these corresponds with the fulacht fiadh excavated as part of the Phase 1 works. A second is in the vicinity of the pyre site to the south. The pyre itself and the adjacent cremation pit were indicated on the geophysical survey results but interpreted as possibly being a natural anomaly. Further to the south, a large feature was indicated in Knocks townland, which was interpreted as a ploughed out fulacht fiadh.

An archaeological impact assessment has been prepared for the EIAR submission. Given the presence of archaeology within the Phase 1 portion of the site, it has been decided that additional testing should be carried out within the Phase 2 portion of the site to further assess these lands and to provide a more comprehensive indication of the archaeology within that portion of the site.



Geophysical survey results in Fields 2-6, after Harrison 2009 (top)

Geophysical survey results in Field 1 including the early medieval settlement to the east, after Harrison 2009 (bottom)



Section 2 Test-trenching programme

Introduction

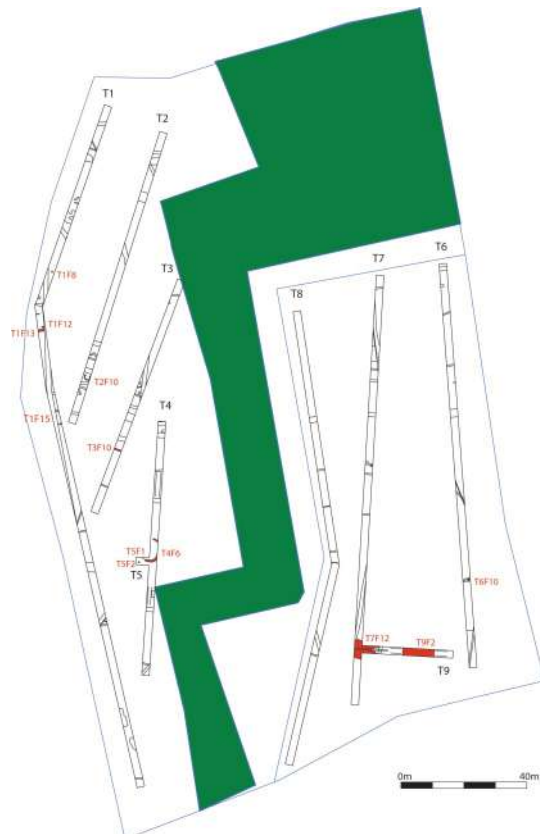
An archaeological test trenching programme was carried out on the lands associated with Phase 2 of the development at Readsland, Roestown and Knocks, Dunshaughlin over six days from the 4th August to the 11th August 2020.

Six fields form the proposed development lands within the site. Thirty-four trenches were opened as part of the programme. The trenching programme began in the southern portion of the proposed development with nine trenches opened in Field 2, one in Field 4, three in Field 5, and twelve in Field 6. The remaining eight trenches were opened in Field 1. Field 3 is currently inaccessible and was not investigated during the testing programme. All trenches were

excavated by mechanical excavator fitted with a 2.4m wide toothless grading bucket. Features encountered were assessed and where necessary were hand tested to identify their form and dimensions.

Field numbering system used in report (left)

Trenches and archaeological features encountered in Field 2. Area in green monitored and excavated in 2018 (right)



Trench No.	Length	Width	Depth	Orientation	Field	Features		
						Archaeology	Agricultural	Natural
1	227m	2.4m	0.4-0.5m	NNE-SSW, to N-S	2	4	14	7
2	97m	2.4m	0.35-0.4m	NNE-SSW	2	1	12	2
3	79m	2.4m	0.2-0.35m	NNE-SSW	2	1 possible	11	0
4	81m	2.4m	0.25-0.34m	N-S	2	1 & b1 possible	6	1
5	4.25m	2.4m	0.3m	E-W	2	2	0	0
6	129m	2.4m	0.28-0.47m	N-S	2	1 possible	10	1 possible
7	137m	2.4m	0.35m	N-S	2	1	11	1
8	147m	2.4m	0.3m	N-S, to NNE-SSW	2	0	6	0
9	29m	2.4m	0.08-0.3m	E-W	2	2	1	0
10	75m	2.4m	0.22m	N-S	5	0	2	0
11	79m	2.4m	0.26-0.37m	N-S	5	0	1	0
12	77m	2.4m	0.41-0.44m	N-S	5	0	2	0
13	74m	2.4m	0.26-0.5m	N-S	4	0	2	2
14	64m	2.4m	0.36m	N-S	6	0	2	3
15	107m	2.4m	0.35-0.45m	N-S	6	0	5	0
16	110m	2.4m	0.3m	N-S	6	0	10	1
17	122m	2.4m	0.4m	N-S	6	0	7	0
18	23.3m	2.4m	0.26m	E-W	6	0	3	0
19	71m	2.4m	0.3m	NNE-SSW	6	0	10	0
20	32.1m	2.4m	0.28m	NNE-SSW	6	0	7	0
21	118.9m	2.4m	0.3m	NW-SE	6	0	8	0
22	116m	2.4m	0.3m	NW-SE	6	0	5	0
23	115.2m	2.4m	0.3m	NW-SE	6	0	9	0
24	116m	2.4m	0.3-0.7m	NW-SE	6	0	11	0
25	45.4m	2.4m	0.3m	NW-SE	6	0	3	0
26	204.5m	2.4m	0.3m	NE-SW	1	2 possible	7	0
27	202m	2.4m	0.3m	NE-SW	1	1 & 1 possible	16	0
28	183m	2.4m	0.3m	NE-SW	1	1 possible	15	0
29	168.1m	2.4m	0.38m	NE-SW	1	1	11	0
30	142.2m	2.4m	0.4m	NE-SW	1	0	3	0
31	76.3m	2.4m	0.4m	NE-SW	1	0	8	0
32	90m	2.4m	0.3m	NE-SW	1	0	3	0
33	39.9m	2.4-4.5m	0.3m	NE-SW	1	0	5	0
34	43.5m	2.4m	0.3m	WNW-ESE	1	0	1	0
35	27m	2.4m	0.3m	WNW-ESE	1	0	0	0

Trench 1

Trench 1 was located along the western side of Field 2 running along the line of the fence-line. This boundary is not straight, and the trench turned in two places to allow for the changing direction of the field boundary. The trench was 0.4-0.5m in depth with 0.2m of humic topsoil overlying 0.2-0.3m of plough soil. The natural subsoil was a yellow-brown boulder clay to the north.

Features were numbered from north to south along the trench.

T1F1

A large, shallow, flat-bottomed ditch, northeast-southwest orientation with a pale grey silt fill. Width 3.2m, depth 0.28m.

Summary of testing results (top)

View along Trench 1 with T1F1 in foreground, looking southwest (bottom)



T1F2

Converging field drains, one orientated east-west and the second orientated northwest-southeast. Both had a grey-brown clayey silt fill with pebble inclusions. They converged at the east side of the trench, being 0.4m in width at this point. They were 2.3m in width to the west as they moved apart.

T1F3

Shallow layer of grey clay. Probably a natural silted up pool. Length 2.5m north-south, 2.4m east-west, 0.12m depth.

T1F4

Natural depression or pool with a pale grey silty clay fill. No charcoal evident. Length 1.8m, width 0.52m, depth 0.11m.

T1F5

Probable natural depression or pool with pale grey silty clay fill with no charcoal inclusions. Length 1.1m, width 0.7m, depth 0.12m

T1F6

Irregular natural depression or water channel with pale grey silty clay fill. Shallow concave sides and base. It measured 2.9m to the west and 5.6m to the east and was up to 0.15m in depth.

T1F7

North-south orientated linear, possible service, trench. A yellow metal service access and cap was located centrally along the linear at the eastern side of the trench. No known services are marked in this location, however the landowner believed it may have been inserted during the construction of the bypass to the west. Width 1.1m, minimum depth 0.25m.

T1F8

Circular posthole with a pale grey clayey silt fill. A deeper section was present at the southern end of the posthole, presumably from the post being driven deeper than the post pit. The posthole was 0.43m in diameter and 0.17m in depth with the deeper section being 0.2m in diameter and 0.32m in depth.

T1F9

North-south orientated ditch running obliquely for 85m along trench. It was steep-sided with a



View of probable natural depressions T1F4 and T1F5, looking southeast (top)

View of posthole T1F8, looking east (centre)

View of ditch T1F9 with posthole T1F8 to the right, looking south (bottom)

concave base. It had a brown silty clay fill with inclusions of stone and snail shell. Width 1.3m, 0.57m depth.

T1F10

A patch of dark material that turned out to be natural decayed stone, 0.9m by 0.8m.

T1F11

Short east-west linear feature, probably a field drain running into west side of F1F9. Brown silty clay fill with occasional stone inclusions. Length 1.15m, 0.5m width.

T1F12 and T1F13

An oval feature measuring 0.8m by 0.45m and associated east-west linear ditch measuring 2.04m in length, 0.64m in width and 0.19m in depth. Both were cut by T1F9 to the east. Both had a dark grey clayey silt fill with charcoal and very occasional burnt stone and burnt clay flecking. Possibly fulacht-related or truncating a nearby fulacht fiadh.

T1F14

East-west drain perpendicular to ditch T1F9 extending from the east side of the ditch. Length 0.6m, 0.43m width.

T1F15

Arc of a possible slot trench truncated by ditch T1F9 to the west. Running east-west and turning to the southeast. Pale yellowy grey silt fill. Step-sided to vertical along the external side and more concave to the internal side of the arc. Width 0.35m, depth 0.25m. A possible return of this arc was noted 4m to the south but was less well defined at this point.

T1F16

Northeast-southwest drain with light brown clayey silt fill. Width 0.36m.

T1F17

East-west drain running into ditch T1F9 from the east. Width 0.4m, length 1.5m.

T1F18

Broad shallow northwest-southeast orientated ditch with steep sides and a flat base. Brown silty clay fill with occasional stones and iron fragments. Width 3.3m, depth 0.28m.

T1F19 and T1F20

Northeast-southwest orientated ditch with a brown silty clay fill. A field drain T1F20 ran along the southwest side of the ditch, inserted



Section through ditch T1F9, looking north (top)

View of oval pit T1F12 and linear ditch T1F13, looking south (centre)

View of arc of slot trench T1F15, looking east (bottom)

after the ditch had been infilled/silted up. The ditch was 1.3m in width with the drain being 0.36m in width and a minimum of 0.26m in depth. Both truncated an earlier field drain T1F21.



T1F21

Stone-lined field drain orientated east-west. Width 0.36m.

T1F22

Northeast-southwest orientated field drain with brown silty clay fill. Width 0.45m.



T1F23 and T1F24

Patchy organics measuring 6m by 1.55m by 0.06m and 4.1m by 1.5m by 0.07m. These represent the base of the wetland at the southern end of the trench. At this point there was 0.33m of topsoil over 0.17m of peaty organic material. The features represent the uneven base of the natural wetland. There was no evidence for these features being archaeological, however the organic matter is likely to have been laid down during the use of the pyre and cremation pit to the northeast.

T1F25

East-west orientated linear with a dark brown peaty fill. Possibly a drainage feature. It does not extend to the east of the trench. Length 2m, width 0.75m.



T1F26

Northeast-southwest orientated drain with a shallow concave profile and organic peaty fill. Width 0.6m, depth 0.12m.

Section through ditch T1F18, looking southeast (top)

View of ditch T1F19 and drain T1F20, looking southwest (centre)

View of arc of patchy organics T1F23 and T1F24 towards southern end of trench, looking south-southeast (bottom)

Trench 2

Trench 2 was orientated approximately north-northeast to south-southwest and straight. It was parallel to the northern end of Trench 1 to the west. It measured 97m in length and 0.4m in depth.

T2F1

East-west orientated ditch with a mottled greyish brown clayey silt fill with occasional stone inclusions. Width 0.92m.

T2F2

Northeast-southwest orientated ditch with a pale grey silt fill with occasional brown staining. Width 1.8m.

T2F3

Northwest-southeast orientated ditch with a mottled greyish brown clayey silt fill with occasional stone inclusions. Width 0.86m.

T2F4

East-west orientated ditch, continuation of T1F1. Same fill as T1F1. Width 3.06m.

T2F5

Northwest-southeast orientated ditch with a pale brownish grey clayey silt fill with occasional stone inclusions. Widens or meanders slightly along eastern side of trench. Width 1.4m.

T2F6

East-west ditch with a pale brownish grey clayey silt fill. Width 1.45m.

T2F7

Shallow V-shaped feature in plan. Probable base of criss-crossing plough furrows. Width 0.4m, depth 0.05m, spread across 1.84m east-west and 1.4m north-south.

T2F8

East-west drain with a pale yellowy grey silt fill. Width 0.43m.

T2F9

East-west orientated ditch with a greyish brown silt fill. Width 1.4m.

T2F10

Two pits connected by a shallow curving channel forming a horse-shoe shape in plan. Continues beyond the eastern side of trench. The western pit was 0.56m in diameter and 0.16m in depth with concave sides and base. The pit had a greyish brown clayey silt fill with occasional charcoal inclusions. It truncated the arcing channel, which was 0.36m in width and 0.08m in depth. The channel had a pale grey silt fill with yellow mottling. The pits and channel were spread over an area measuring 1.75m by 1.4m.

T2F11

Northeast-southwest orientated ditch with greyish brown clayey silt fill. Width 0.6-1.03m, widening to the west.



View of Trench 2, looking northeast (top)

View of ditch T2F5 with slight bulging or meander visible along right-hand side of trench, looking northeast (centre)

View of feature T1F10, two pits connected by an arcing channel, looking west-northwest (bottom)

T2F12

East-west ditch with greyish brown stony clayey silt fill. Width 0.53m.

T2F13 and T2F14

Organic patches along western side of trench measuring 0.76m by 0.4m and 0.56m by 0.22m. Probably the base of natural wetland pools.

T2F15

East-northeast to west-southwest ditch or drain with a pale grey silt fill with occasional stone inclusions. Width 0.7m.

Trench 3

Trench three was parallel to Trench 2 and orientated north-northeast to south-southwest. It measured 97m in length, 2.4m in width and 0.2-0.35m in depth, being shallower to the south. The natural was a yellow boulder clay. Northwest-southeast running plough furrows were visible at the northern end of the trench, c.0.1m in width.

T3F1

Northeast-southwest field drain with a greyish brown clayey silt fill. Width 0.4m

T3F2

A patch of brown silty clay along the west side of the trench measuring 0.6m in length. This appeared to be the base of the plough soil within a shallow depression.

T3F3

Northwest-southeast orientated ditch with a brownish grey clayey silt fill with some organic content and occasional stone inclusions. The ditch was running obliquely across trench and measured 1.15m in width.

T3F4

A short probable drain running east-west extending for 0.8m from west side of ditch T3F3. The drain ran into the ditch at a 45-degree angle and was 0.56m in width.

T3F5

Northeast-southwest field drain with a mid-reddish-brown peaty fill. It ran into the west side of ditch T3F3 and measured 1.5m in length and 0.25m in width.

T3F6

A sub-oval possible pit with organic peaty fill.



View of Trench 3, looking northeast (top)

View of pit T3F6 in foreground with ditch T3F3 and drains T2F4 and T3F5 in centre-ground, looking northeast (centre)

This may be the base of the organic deposits, which survive patchily here below the topsoil. Length 0.75m, width 0.6m.

T3F7

East-west orientated drain with a greyish brown clayey silt fill. Width 0.43m.

T3F8

East-west orientated ditch with a greyish brown clayey silt fill. Width 0.7-1.1m.

T3F9

A large east-west orientated ditch with a greyish brown slightly peaty clayey silt fill. Width 2.7m.



inclusions of charcoal and blackened bone. May be archaeological or be truncating a nearby archaeological feature.

T3F11

East-west field drain with a mottled yellow and brown silty clay fill. Width 0.4m.

T3F12

East-west field drain with a pale brownish grey clayey silt fill. Width 0.35m.



Trench 4

Trench 4 was located to the east of Trench 3 and was orientated north-south. It crossed the high point within the southern end of Field 2 and was inserted to assess whether archaeology survived on this higher ground. A cremation pit and pyre site were uncovered to the east on the crest of this low rise during the 2018 excavation. The trench was 81m in length, 2.4m in width and 0.25-0.34m in depth. The natural was a soft yellowy grey sandy silt to the north with brown silty clay topsoil. The rise measured 38m in width and began 15m from the northern end of the trench. Some patchy organics survived along the base of the trench to the north representing the base of the wetlands, which extended to the east and were also identified in the 2018 excavation. No organics were noted at the southern end of the trench indicating the wetland deposits to the south did not extend as far as the southern end of the trench.



View of ditch T3F10, which may be archaeological or have truncated a nearby archaeological feature, looking southwest (top)

View of Trench 4, looking southwest (centre)

View of organic filled depression T4F2 with ditch T4F3 behind, looking southwest (bottom)

T4F1

East-northeast to west-southwest orientated ditch with brown silty clay fill. Width 1.2m.

T4F2

Patch of peaty organic material along the eastern side of the trench measuring 1.11m east-west and 0.8m north-south. Possibly the base of a naturally filled depression.

T4F3

East-west orientated ditch with a greyish brown clayey silt fill with occasional stone inclusions. Width 1.6m.

T3F10

East-northeast to west-southwest orientated ditch with a greyish brown clayey silt fill with

T4F4

East-northeast to west-southwest orientated field drain with a stony brownish grey silty clay fill. Width 0.46m.

T4F5

East-west shallow ditch with a greyish brown clayey silt fill. Width 1.5m, depth 0.1m.

T4F6

Curvilinear slot of a possible ring-ditch or structure, which crossed the trench twice. The northern section was 1.85m in length, 0.53m in width and 0.13m in depth. It terminated 0.8m from the western end of the trench. The southern arc measured 0.52m in width and 0.06m in depth and continued to the west of the trench. The fill of the slot trench was a pale yellowy grey silt with occasional stone and charcoal flecks. Trench 5 was inserted to follow the slot trench to the west. It continued for an additional 1.5m beyond the edge of Trench 4. The slot trench was very shallow and terminated at both ends to the west forming a C-shaped arc. It is possible the remainder of the circuit continues to the west beyond gaps, possibly representing two entrances. The

internal diameter of the slot trench was 6.75m. The feature was located at the apex of the low rise, with the cremation and pyre from the 2018 excavation uncovered c. 15m southeast.

Approximately 10m to the south of this, machine disturbance relating to the insertion of the service trenches along the strip monitored in 2018 was identified along the eastern side of the trench. This does not appear to have disturbed any archaeology.

View of northern arc of slot T4F6, looking southeast (top left)

View of northern arc of slot T4F6 with the southern arc visible in background turning into Trench 5, looking southwest (bottom left)

View of slot T4F6 in Trenches 4 and 5, looking north (top right)

View of slot T4F6 in Trenches 4 and 5, looking northeast (bottom right)



T4F7

East-west orientated ditch with mid-greyish brown silty clay fill with occasional stone inclusions. Width 1.25m, minimum depth 0.18m. This may be the continuation of the ditch truncating the pyre uncovered to the east in the 2018 works.

T4F8

Northwest-southeast orientated ditch with relatively flat base and c. 75-degree angles sides. It had a mid-grey clayey silt fill and measured 0.6m in width and 0.18m in depth. This feature may correspond with a ditch identified in the 2018 excavation, which truncated the prehistoric pyre. The ditch was seen to arc in the excavation and may relate to an enclosure.

T4F9

Shallow northeast-southwest field drain cutting ditch CT4F8 to the east. Greyish brown stony fill, measuring 0.4m in width and 0.09m in depth.

Trench 5

Trench 5 was a short trench inserted to investigate the curvilinear slot trench T4F6. It measured 4.25m in length, 2.4m in width and 0.3m in depth. The continuation of the southern arc of the slot trench was uncovered along with two other features.

T5F1

A circular pit was uncovered along the northern side of the trench in line with the continuation of the arc of T4F6. It was 0.35m in diameter and 0.11m in depth and was separated from the southwest terminus of the slot trench by 0.6m. The fill of the pit was a dark grey silty clay with moderately frequent charcoal. This is likely to be related to the slot trench, however it does not appear to have been a posthole or entrance feature.

T5F2

A second possible pit was located centrally at the western end of the trench and measured 0.4m in diameter. It contained burnt stone in a greyish brown silty clay matrix. It was not tested further.



View of ditch T4F8 being truncated by drain T4F9, looking southeast (top)

View of pit T5F1 with arcing slot T4F6 in background, looking east (centre)

View of pit T5F2 with pit T5F1 in top left, looking east (bottom)

Trench 6

Trench 6 was located in the southeast of Field 2 and was approximately parallel to the eastern field boundary. It was orientated north-south and measured 129m in length, 2.4m in width and 0.28-0.47m in depth, being deeper to the north. Mid-brown silty clay topsoil overlying yellowy grey sandy silt subsoil.

T6F1

East-west orientated ditch with brown clayey silt fill. Width 1.1m.

T6F2

Possible pit along west side of trench measuring 1m by 1m. Brown silty clay fill. May be the base of the plough soil resting in a depression.

T6F3

East-northeast to west-southwest orientated field drain with mottled yellowy brown silty clay fill. Width 0.4m.

T6F4

East-northeast to west-southwest orientated field drain with mottled yellowy brown silty clay fill. Width 0.4m.

T6F5

Possible drainage feature along the eastern side of trench, end of a field drain with mottled yellowy brown silty clay fill. Length 0.6m, width 0.4m.

T6F6

East-west orientated ditch with mid-brown silty clay fill with occasional stone inclusions. A line of rounded stones is present along the base indicating the ditch served as a drainage feature. Width 2.5m, minimum 0.6m depth.

T6F7

North-northwest to south-southeast orientated stone-lined and filled drain. The drain was sealed with a mottled grey and brown clay and was 0.42m in width. It was cut by drain T6F8.

T6F8

Northwest-southeast orientated drain with yellowy brown silty clay fill. Truncated T6F7. Width 0.38m.



View of Trench 6, looking south (top)

View of ditch T6F6, looking north (centre)

View of drain T6F7 being truncated by drain T6F8, looking northwest (bottom)

T6F9

East-northeast to west-southwest orientated stone-filled drain. Small gravel stones used in the drain, which was 0.3m in width.



View of possible pit T6F10 with drain T6F9 to the left, looking east (top)

View of large possible silt-filled depression T6F11, looking west. It was unclear whether this feature was a variation in the natural subsoil or a silted up hollow during the testing (centre)

View of Trench 6 looking north with drain T6F12 cutting across it, looking north (bottom)

T6F10

Small organic filled depression just to the south of drain T6F9. Oval in plan and concave in profile measuring 0.67m by 0.44m and 0.09m in

depth. This may be a natural depression though it was regular and may represent a small pit.

T6F11

A change in the subsoil at this point was noted, with the subsoil becoming a soft grey silt mottled with orange. This was tested to a depth of 0.7m and was homogenous throughout. It is probably a variation in the natural, however, given the proximity to the fulacht activity within Trenches 7 and 9, this may represent a silted-up pool within the wetlands. Width 17m.

T6F12

Northeast-southwest orientated field drain with brown silty clay fill. No stones were present. Width 0.48m, depth 0.12m.

Trench 7

Trench 7 was located to the west of Trench 6 and was orientated north-south, slightly out of alignment with Trench 6. It measured 137m in length, 2.4m in width and 0.35m in depth. The soil profile was brown silty clay topsoil over yellowish grey sand subsoil to the north becoming a boulder clay to the south. Patches of organic peat survived in shallow depressions along parts of the trench and relate to the base of the wetlands

T7F1

East-northeast to west-southwest orientated drain with pale brown silty clay fill. Width 0.48m.

T7F2 and T7F3

Two linear ditches running along the same alignment orientated north-northwest to south-southeast. The later ditch (T7F2) had a yellowy brown silty clay fill and was 0.8m in width. Ditch T7F3 had a brownish grey silty clay fill and survived along the western side of the later ditch and was up to 0.4m in width.

T7F4

Patch of small, rounded stones stretching over 5m and overlaid by a pale grey silt. Initially thought to be metalling, however similar, more extensive deposits were uncovered in Trench 8 to the west and this feature is now interpreted as a variation in the natural.



View of Trench 7, looking south (top)

View of ditch T7F2 and T7F3 intercutting, looking north (centre)

View of burnt spread T7F12 with ditch T7F11 cutting it along the right, looking south (bottom)

T7F5

East-west orientated field drain with a dark brown stony fill. The stones were angular gravel and the drain measured 0.4m in width.

T7F6

East-west orientated field drain with mid-brown silty clay fill with occasional rounded and angular stones. Width 0.6m.

T7F7

East-west orientated ditch with brown silty clay fill and occasional stone inclusions. Width 1.1m.

T7F8

East-west orientated stone-filled drain. Width 0.4m. This cut a patch of organic peat to the north of the drain measuring 1.1m by 0.6m. A second patch of organic peat measuring 0.73m by 0.37m was uncovered to the south of the drain. The organic patches are likely to be natural relating to the base of the wetlands.

T7F9

East-west orientated field drain with brown clayey silt fill with some organic content. Width 0.4m.

T7F10

East-west orientated field drain with brown clayey silt fill with some organic content. Width 0.4m.

T7F11

North-northeast to south-southwest orientated ditch with a mid-brown silty clay fill. This may be a continuation of the ditch identified during the 2018 monitoring to the north. Width 0.9m.

T7F12

Burnt spread consisting of small burnt and unburnt stones in dark brown silt matrix with orange and red flecking. Charcoal was also noted within the spread, which measured 6m by 6m. Trench 9 was inserted perpendicular to Trench 7 extending to the east to identify the extent of the spread. A number of darker concentrations were noted within the spread and were investigated; however these only contained higher quantities of charcoal and did not overlie any troughs. The spread was 0.04-0.06m in depth in the parts tested. It is likely that a trough is associated with the spread, perhaps located beyond the trenches. The spread was truncated by ditch T7F11 to the west, by ditch T9F1 to the east and by east-west drain T7F13, which ran across the spread.



View of burnt spread T7F12, looking north (top left)

View of burnt spread T7F12 being cut by drain T7F13 with Trench 9 continuing in background, looking east (bottom left)

View of northern end of Trench 8, looking south (top right). Gravel natural can be seen in foreground.

View of Ditch T8F1, looking south (bottom right)

T7F13

East-west orientated shallow drain with a greyish brown stony fill. Width 0.35m, depth 0.08m max. Runs across burnt spread T7F12.

Trench 8

Trench 8 was located to the west of Trench 7 and followed the line of the fencing along the berm of the 2018 stripping. It was orientated north-south at the northern end, turning to run north-northeast to south-southwest c. 81m from the northern end of the trench. It measured 147m in length, 2.4m in width and

0.3m in depth. The subsoil to the north was pale yellow grey sand with gravel patches. The natural became very stony towards the southern end of the trench. Patches of organic peat representing the base of the wetlands to the west were present at a number of places along the trench settling in shallow natural depressions. The topsoil was generally brown silty clay, becoming more peat-rich in the northern end of the trench, where it was in close proximity to a large wetland depression identified during the 2018 stripping.

T8F1

East-west orientated ditch with mid-brown silty clay fill with occasional stone inclusions. Width 1.75m.

T8F2

East-west orientated field drain with brown silty clay fill. Width 0.4m.

T8F3

East-west orientated field drain with a mid-brown clayey silt fill. Width 0.3m

T8F4

East-west orientated field drain with a mid-brown clayey silt fill. Width 0.4m.



View of ditch T8F5 with subsoil to the south becoming stony in the background, looking southwest (top left)



View of Trench 9, looking east. Burnt spread T7F12 can be seen in the foreground (bottom left)



View of section dug through shallow burnt spread T7F12 at junction of Trenches 7 and 9, looking north (top right)



View of burnt mound T9F2, looking southeast (centre right)

View of slot trough burnt mound T9F2 showing depth of spread and overlying topsoil, looking south (bottom right)

T8F5

North-south orientated ditch with brown silty clay fill with stone inclusions. Width 1.1m.

T8F6

Northwest-southeast orientated drain with brown stony fill. Width 0.4m.

Trench 9

Trench 9 was orientated east-west, inserted perpendicular to Trench 7 and running to the

east to investigate the extent of burnt spread T7F12. The trench measured 29m in length, 2.4m in width and was 0.08-0.3m in depth. The natural changed from a yellow sandy subsoil to the west to a dark grey silt to the east. While investigating burnt spread T7F12 a more extensive burnt mound was uncovered further to the east.

T9F1

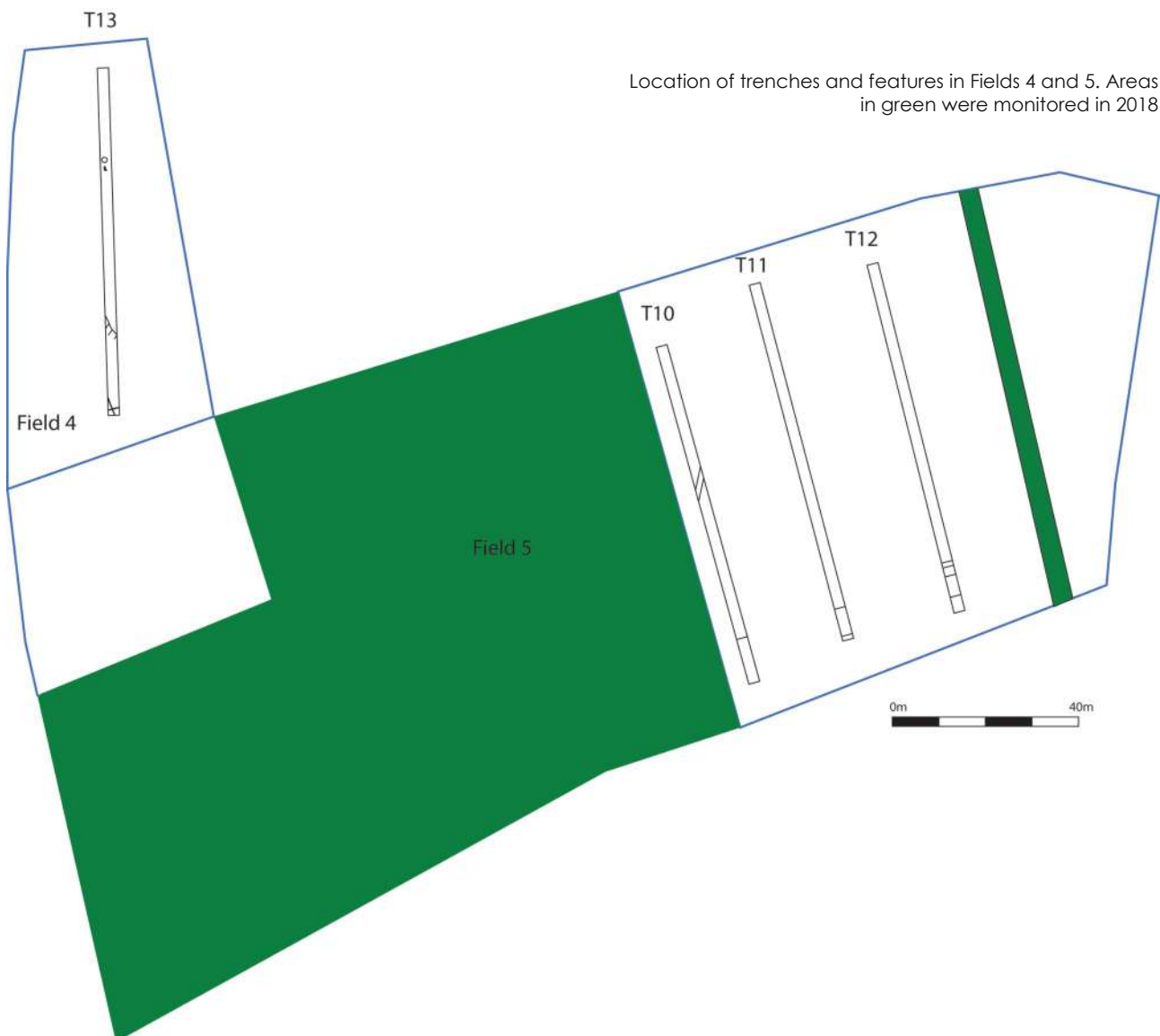
Northeast-southwest orientated ditch with a stony dark brown silty clay fill, which cut the eastern end of burnt spread T7F12. Width 0.75m.

T9F2

Extensive burnt mound rising from 0.3m below present at edges to 0.08m in depth below present ground level at the centre. The mound measured 10m in width east-west and was present across the entire trench so a minimum of 2.4m north-south. The mound consisted of dark brown silt with occasional burnt stone and charcoal inclusions throughout. No concentrations were noted. A box section was opened at the highest point of the mound, which was found to be 0.14m in depth. A trough was not identified, however given the quantity of material, one is likely to be present. The west side of the burnt mound was in line with the east side of the field access gate to the south.

Trench 10

Trench 10 was located within Field 5 and was parallel to the fence-line to the west. The remainder of Field 7 to the west of the fence-line was monitored as part of the 2018 works and no features or archaeological interest were uncovered. A new drainage ditch running north-south to the east of the field was also monitored during the 2018 works and no archaeology was uncovered. Trench 10 was in line with the field access gate between Field 2 and Field 5. It was 75m in length, 2.4m in width and 0.22m in depth. The natural subsoil was a grey stony boulder clay. The topsoil was wet and peat-rich.



Location of trenches and features in Fields 4 and 5. Areas in green were monitored in 2018



View of Trench 10, looking southeast (top left)



View of Trench 11, looking southeast (bottom left)

View of Trench 12, looking southeast (top right)

View of soil profile within Trench 12 with peat overlaid by peat-rich topsoil, looking east (bottom right)



2.4m in width and 0.26-0.37m in depth. The soil profile was 0.15m of peat overlaid by 0.22m of peaty topsoil. The subsoil was stony grey boulder clay.

T11F1

Continuation of the east-west orientated foul water sewer trench along the southern end of the trench. Width 6m. Two manholes were present between the southern ends of Trenches 10 and 11.

T10F1

Northeast-southwest orientated ditch with dark brown organic peat fill. Concave profile measuring 1.3m in width and 0.29m in depth.

T10F2

Foul water sewer running east west at the southern end of the trench. Width of service related disturbance 10m.

Trench 11

Trench 11 was parallel and to the east of Trench 10 within Field 5. It measured 79m in length,

Trench 12

Trench 12 was the easternmost trench within Field 5 and was parallel to Trench 11. The trench measured 77m in length, 2.4m in width and 0.41-0.44m in depth. The soil profile to the north was 0.2m of peat overlaid by 2.1m of peaty topsoil. Patches of deeper organics within shallow depressions were noted along the length of the trench. The subsoil was a stony grey boulder clay.

T12F1

East-west orientated linear drainage ditch with

stony brown peaty-rich fill. Width 0.8m.

T12F2

Continuation of east-west foul water sewer towards the southern end of the trench. Width 4.5m.

Trench 13

Trench 13 was located in Field 4 and ran centrally through the field and was orientated north-south. It was 74m in length, 2.4m in width and 0.26-0.5m in depth. The soil composition to the north was 0.1m grey clay overlaid by 0.14m of organic reddish brown peat, in turn overlaid by 0.26m brown humic topsoil. The subsoil to the north was a stony dark grey boulder clay. This became less stony 30m from the northern end. The peat deposits became deeper to the south and sloped down to the southwest. At the southern end of the trench the soil profile was 0.26m of peat overlying a white leached lime-like silty sand. This material is similar to the natural identified during the monitoring of the field to the south in 2018. Patches of deeper peat were identified throughout the trench representing the uneven base of the wetlands.



T13F1

A shallow sub-circular depression measuring 1.16m in diameter and 0.05m in depth was uncovered centrally in the trench. It had a peaty organic fill with ash and charcoal flecks. This appeared to be a burnt root-bole.

T13F2

Three small pockets of material similar to T13F1 were identified further south and also appear to represent the burnt root-boles.

View of Trench 13, looking south (top left)

View of probable root-bole T13F1, looking west (bottom left)

View of organics sloping off to the southwest at southern end of Trench 13, looking south (top right)

View of Trench 13, looking north (bottom right)





T13F3

Concrete field drainage pipe orientated northwest-southeast. Approximately 0.15m diameter.

T13F4

Northeast-southwest orientated concrete field drainage pipe. Approximately 0.25m diameter.

Trench 14

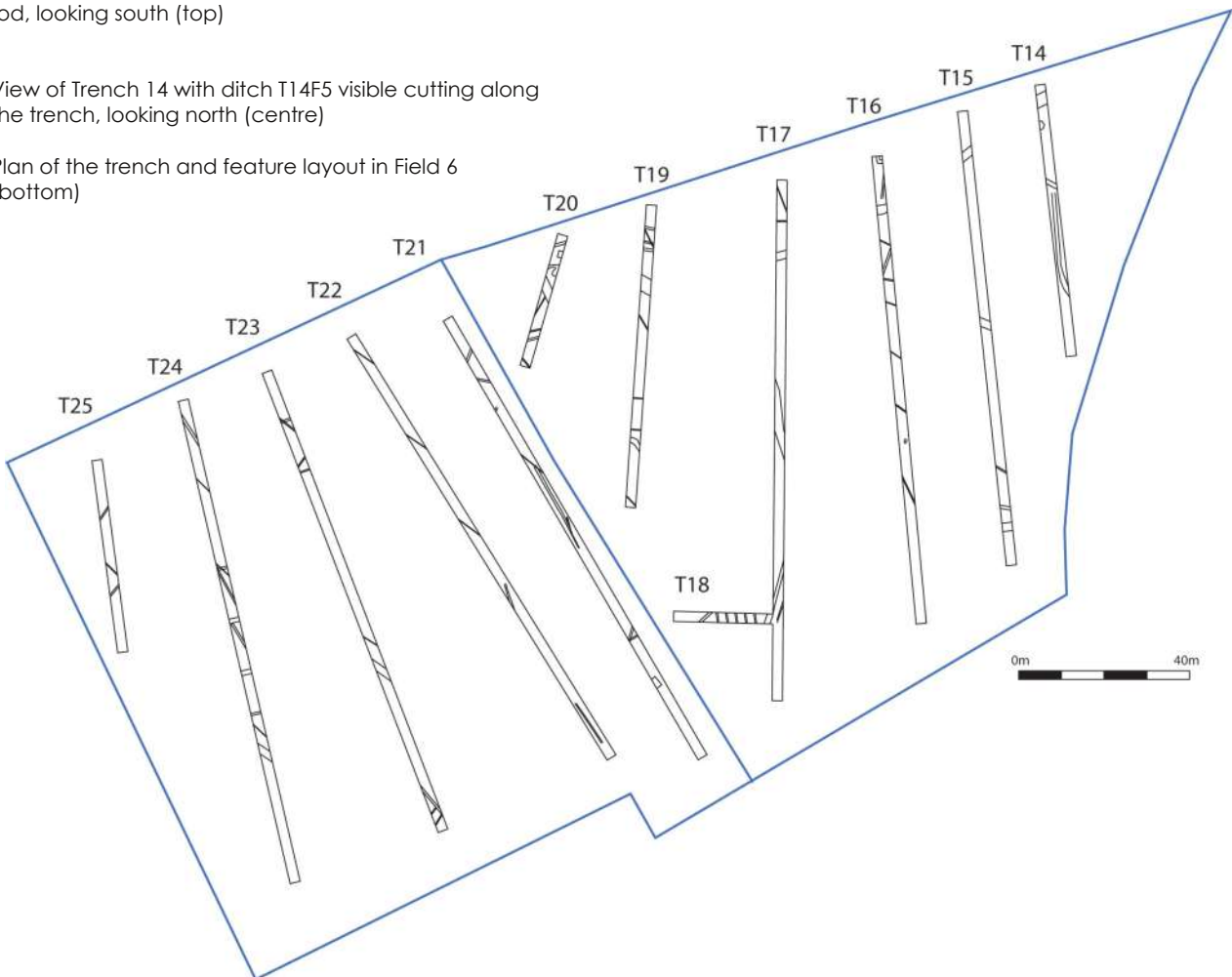


View of Trench 14 with ditch T14F1 marked with ranging rod, looking south (top)

Trench 14 was orientated north-south and was the easternmost of the trenches inserted in Field 6 to the south. The trench was 64m in length, 2.4m in width and 0.36m in depth. The soil profile was 0.12m of organic peat overlaid by 0.24m of peat-rich topsoil. The subsoil was a pale brownish grey stony boulder clay, which became more greyish yellow to the south.

View of Trench 14 with ditch T14F5 visible cutting along the trench, looking north (centre)

Plan of the trench and feature layout in Field 6 (bottom)



T14F1

Northeast-southwest orientated ditch with dark brown silty clay mixed with peaty organics and stone inclusions. Width 2.9m.

T14F2

Patches of organic material. Natural base of the wetland remaining within shallow hollows up to 1m in width.

T14F3

Northwest-southeast orientated ditch with soft brown peat-rich fill and occasional stone inclusions. Width 0.7-0.9m.

T14F4

North-south orientated shallow linear feature with dark brown organic fill and stone inclusions. Probable plough furrow or drainage feature. Width 0.8m, depth 0.1m.

T14F5

Shallow northeast-southwest orientated linear feature with greyish brown clayey silt fill with occasional stone inclusions. Width 1.2m, depth 0.1m. Feature is somewhat meandering and may be a former water channel in the wetlands. T14F4 and T14F5 are part of the same meandering feature.

Trench 15

Trench 15 was inserted parallel and to the west of Trench 14. It measured 107m in length, 2.4m in width and 0.35-0.45m in depth, being deeper to the north. The soil profile was 0.15m of organic peat overlaid by 0.3m of peat-rich topsoil. The base of the organic wetland deposit was noted as organic patches within slight depressions along the trench. The subsoil was a yellowish grey stony boulder clay.

T15F1

Northeast-southwest orientated ditch, continuation of T14F1. The line of this ditch could be followed at ground level. The fill was identical to T4F1 and the ditch measured 2.1m in width.

T15F2

Northwest-southeast orientated ditch with dark brown silty clay fill and occasional stone



View of Trench 15, looking north (top)

View of ditch T15F1, looking southeast (centre)

View of ditch T15F2, looking northeast (bottom)

inclusions. Width 1.6m.

T15F3

Northwest-southeast orientated drain with dark brown silty clay fill. Width 0.18m. Probable trench from drainage pipe.

T15F4

East-southeast to west-northwest orientated ditch with greyish brown clayey silt fill. Width 0.8m.

T15F5

East-west linear feature with brown clayey silt fill. Width 2m. This may be a ditch or be related to the tree roots, which were abundant here, altering the underlying natural. The feature was not encountered to the west in Trench 16.

Trench 16

Trench 16 was inserted to the west of and parallel to Trench 15. It was 110m in length, 2.4m in width and 0.3m in depth. The soil profile was all peat-rich topsoil overlying the natural subsoil, which was a pale brownish grey stony boulder clay. This became more greyish yellow to the south.

T16F1

Drain running into trench from east and turning 90-degrees to run into the northern end of the trench towards the field boundary to the north. The drain had an organic peat fill with occasional stone inclusions at the base. Width 0.7m.

T16F2

North-northeast to south-southwest orientated shallow drain, which petered out in the centre of the trench. Width 0.4m, depth 0.05m.

T16F3

Large northeast-southwest orientated ditch, same as T14F1 and T15F1. The ditch turns to the north just to the west of the trench and is visible at ground level. Rounded stones were present at the base suggesting the ditch served a drainage function. Width 2.2m

T16F4

Northwest-southeast concrete drainage pipe. Possibly the same as T15F3. 0.13m diameter.

T16F5

Northeast-southwest drain with brown organic peat fill and stone inclusions. Width 0.6m.



View of Trench 16, looking south (top)

View of drain T16F1, looking east (centre)

View of concrete drainage pipe T16F7, looking south (bottom)

T16F6

West-northwest to east-southeast orientated stone-filled shallow drain. Width 0.4m, depth 0.12m.

T16F7

Northwest-southeast orientated concrete drainage pipe, 0.1m diameter.

T16F8

Northwest-southeast drainage channel, no pipe surviving, 0.1m width.

T16F9

Northwest-southeast drainage channel, no pipe surviving, 0.1m width.

T16F10

Depression with organic peat fill measuring 1.1m by 0.6m located off-centre within trench. Base of natural peat-filled depression.

T16F11

Northwest-southeast drainage channel, no pipe surviving, 0.15m width.



View of Trench 17, looking north (top)

View of drain T17F1, looking south (centre)

View of perpendicular ditches T17F3 and T17F4, looking northwest (bottom)

Trench 17

Trench 17 was to the west of and parallel to Trench 16. It was orientated north-south and measured 122m in length, 2.4m in width and 0.4m in depth. The trench had a similar soil profile to the other trenches in the field, with peat overlaid by peat-rich topsoil. The subsoil was a stony grey material to the north giving way to a brownish yellow stony boulder clay to the south. Patches of organic peat survived in shallow depressions along the ditch, particularly to the north.

T17F1

North-northwest to south-southeast orientated red ceramic pipe with a 0.1m diameter.

T17F2

East-west orientated stone-filled drain. Width 0.3m.

T17F3

East-northeast to west-southwest orientated ditch with brown stony silty clay fill. Width 2m, possibly a continuation of T16F3 field system.

T17F4

Large north-northwest to east-southeast orientated ditch visible at ground level as a slight dip. Loose stony brownish grey silty clay

with a band of organics along each edge. Width 2.4m.

T17F5

Large northeast-southwest orientated ditch with loose stony brownish grey silty clay. Width 2.1m.

T17F6

Northeast-southwest orientated ditch with loose stony brownish grey silty clay. Width 0.5m.

T17F7

Northeast-southwest orientated shallow linear drain with loose stony brownish grey silty clay. Width 0.35-0.54m.

Trench 18

Trench 18 was opened running east-west and extending from the west side of Trench 17 to investigate a series of linear anomalies noted in the 2009 geophysical survey. These were interpreted as potentially representing the remains of a ploughed out burnt spread. This was shown not to be the case, with the linear features representing plough furrows. The trench measured 23.3m in length, 2.4m in width and 0.26m in depth. The topsoil was dark brown and peat-rich. The subsoil was brownish yellow boulder clay.



T18F1

This was the continuation of a northeast-southwest orientated ditch also recorded within Trench 17. Width 1.4m.

T18F2

A series of north-northeast to south-southwest furrows with dark brown organic-rich silt fill with orange flecking. The furrows were 1.8-1.9m apart. The orange flecking, also noted within the nearby natural peat, may relate to a high iron content within the soil, which may have caused the geophysical anomaly.

T18F3

Northeast-southwest orientated ditch with similar dark brown organic-rich silt fill to the furrows. This may bound this area of cultivation. No furrows were noted to the west of the ditch. Width 0.6m.

Trench 19

Trench 19 was located to the west of Trench 17 and was orientated north-northeast to south-southwest. It measured 71m in length, 2.4m in width and 0.3m in depth. It stopped 5.1m east of the ditch subdividing Field 6. The topsoil was dark brown and peat-rich and overlay a changeable natural. The natural was a soft greyish white sand interspersed with spreads of oxidised red bog iron residue in silty clay.

T19F1

East-west orientated furrow with a dark brown clay fill. Width 0.5m.

View of ditch T17F6 continuing into eastern end of Trench 18, looking northeast (top)

View of furrows T18F2, looking west. These were identified as a possible ploughed out fulacht fiadh in the 2009 geophysical survey, however no burnt mound material was present and the furrows are non-archaeological (bottom)



View of Trench 19, looking north-northeast (top)

View of drain T19F2 and furrows T19F1, T19F3 and T19F4, looking north-northeast (centre)

View of ditch T19F5, looking southeast (bottom)

T19F2

Northwest-southeast orientated file drainage channel. Width 0.1m.

T19F3

East-west orientated furrow with dark brown silty clay fill. Width 0.4m.

T19F4

East-west orientated furrow or ditch with dark brown silty clay fill. Width 0.4-0.6m.

T19F5

Northwest-southeast orientated ditch with mottled grey, blue and brown silty clay fill. Slightly meandering course. Width 3.6m.

T19F6

Northwest-southeast orientated concrete drainage pipe, 0.1m diameter.

T19F7

East-west orientated furrow with compact black clay fill. Width 0.4m.

T19F8

Northeast-southwest orientated drain. Width 0.4m.

T19F9

Northeast-southwest orientated shallow linear with silty black clay fill. Width 0.4m.

T19F10

Northeast-southwest orientated modern field drain. Width 0.4m.

Trench 20

Trench 20 was a short north-northeast to south-southwest orientated trench, parallel and to the west of Trench 19. It stopped 5.5m east of the ditch subdividing Field 6. The trench was 32.1m in length, 2.4m in width and 0.28m in depth. The subsoil was a stony light grey gravel to the south, becoming orange-stained soft white sand in the centre and south of the trench. The topsoil was peat-rich.

T20F1

Northeast-south west orientated ditch with a mid-brown stony clayey silt fill. Width 0.8m.



View of Trench 20, looking northeast (top)



View of drain T20F7, looking southwest (bottom)

T20F2

Cut feature along eastern side of trench with a mid-brown stony clayey silt fill. Length 1.5m, width 1m.

T20F3

Shallow linear ditch orientated northeast-southwest with a bulge of similar material extending to the south and to the east. The ditch was 0.6m in width and 0.1m in depth with the bulge measuring 2.7m north-south and 1.1m east-west. Filled with mid-brown stony clayey silt. Appears to be drainage-related given the similarity in fill with the other nearby drains.

T20F4

Northwest-southeast orientated ditch with stony brown gritty silt fill. Width 2.3m.

T20F5

North-south orientated stone-filled drain running into ditch T20F4 to the north. Width 0.2m.

T20F6

Northeast-southwest orientated stone-filled drain. Width 0.3m.

T20F7

Northeast-southwest orientated stone-filled drain. Width 0.3m.

T20F8

Northwest-southeast orientated concrete field drainage pipe, 0.1m diameter.

Trench 21

Trench 21 was located to the west of and parallel to the ditch subdividing Field 6. It was orientated northwest-southeast and measured 118.9m in length, 2.4m in width and 0.3m in depth. The overlying topsoil was peat-rich and wet. Patches of organics were noted along the base of the trench in places where the wetlands settled in shallow depressions. The natural subsoil was a white fine sandy silt to the north, which was occasionally stained from the overlying organics. This material appears to have been leached by the decomposing organics. In parts, this was stained red from the oxidised iron within the organics. The natural changed to a bluish grey gritty gravel to the south.

T21F1

North-south orientated modern stone-lined drain. Width 0.4m.

T21F2

East-west orientated drain. Width 0.4m.

T21F3

North-south orientated furrow, petered out 0.8m from the west baulk. Width 0.4m. Dark brown peaty fill.

T21F4

Concrete field drainage pipe orientated east-west, 0.1m in diameter.



View of Trench 21, looking northwest (top)

View of furrow T21F5 running along the line of the trench, looking northwest (centre)

View of northwest-southeast orientated test-trench T21F9, possibly relating to previous geotechnical surveying, looking northwest (bottom)

T21F5

Linear furrow running along the line of the trench to the south, orientated northwest-southeast and measuring 21.6m in length min, 0.15-0.55m in width and 0.04m in depth.

T21F6

Furrow running parallel and to the east of furrow T21F5. It did not survive as well as the other furrow and measured 3m in length, 0.3m in width and 0.06m in depth.

T21F7

North-south orientated drain with a dark peaty fill, measuring 0.4m in width.

T21F8

North-south orientated drain with a dark peaty fill, measuring 0.4m in width.

T21F9

Test-trench measuring 5m in length and min. 1.4m in width, it was identified towards the southern end of the trench. It was also orientated northwest-southeast and may have been a geotechnical survey or engineering assessment trench.

Trench 22

Trench 22 was located to the west of and parallel to Trench 21. The trench measured 116m in length, 2.4m in width and 0.3m in depth. The natural subsoil was a yellow boulder clay to the south. A bedrock outcrop was uncovered along the central section of the trench. The subsoil became a soft white marl with orange staining to the north before giving way to a stony natural at the northern end of the trench. It was overlaid by 0.12m of peat and 0.14-0.18m of peat-rich topsoil.

T22F1

Northwest-southeast orientated furrow located roughly centrally within the trench and measuring 11.1m in length and 0.3m in width.

T22F2

North-south orientated furrow with brown gritty organic fill measuring 7.1m in length and 0.4m in width.

T22F3

East-west orientated concrete field drainage pipe, 0.11m diameter.



View of Trench 22, looking southeast (top left)

View of bedrock outcrop in central portion of Trench 22, looking northwest (bottom left)

View of Trench 23, looking north-northwest with a number of furrows and drainage features visible (top right)

View of Trench 23, looking south-southeast with stone drains T23F1 and T23F2 visible in foreground, looking south-southeast (bottom right)

T22F4

East-west orientated concrete field drainage pipe, 0.11m diameter.

T22F5

East-west orientated concrete field drainage pipe, 0.11m diameter.

Trench 23

Trench 23 was located to the west of and parallel to Trench 22. The trench measured 115.2m in length, 2.4m in width and 0.3m in depth. The natural subsoil was a soft white marl to the north becoming a bluish grey stony gravel further south. The soft white marl was noted again further south along the trench, giving way to an orangey brown boulder clay at the southern end of the trench. The northern end of the trench was all organic peat which became less organic to the south.

T23F1

Northeast-southwest orientated stone-lined drain. Width 0.6m.

T23F2

East-west orientated stone-lined drain. Width 0.5m.

T23F3

North-south orientated furrow with dark peaty fill. Width 0.4m, depth 0.1-0.13m.

T23F4

West-northwest to east-southeast orientated linear feature, 0.35-0.6m in width. Brown peaty fill.

T23F5

East-west orientated concrete field drainage pipe, 0.11m diameter.

T23F6

East-west orientated ditch with a mottled dark brown and yellowish grey silt fill. Width 1.4m.

T23F7

East-west orientated furrow with dark peaty fill. Width 0.5m.

T23F8

Northeast-southwest orientated furrow with dark peaty fill. Width 0.4m.

T23F9

North-south orientated furrow with dark organic peat fill. Width 0.4m.



View of Trench 24, looking south-southeast (top)

View of stone drain T24F11 and deep organics at northern end of trench, looking north-northwest (bottom)

Trench 24

Northwest-southeast orientated trench parallel to and to the west of Trench 23. It measured 116m in length, 2.4m in width and 0.3-0.7m in depth. The natural subsoil was a yellow boulder clay to the south. A bedrock outcrop was uncovered centrally within the trench. To the north of the outcrop the natural became orange-stained grey sandy silt, giving way to the white marl underlying the peat deposits to the north. The soil was all organic peat to the north and became less organic and shallower to the south.

T24F1

East-west orientated ditch with brown silty clay fill. Width 2m.

T24F2

East-west orientated concrete field drainage pipe, 0.11m diameter.

T24F3

Northeast-southwest orientated ditch with stony brown clayey silt fill. Width 0.5m.

T24F4

East-west orientated drain with dark brown organic fill. Width 0.5m.

T24F5

Northeast-southwest orientated ditch with brown organic peat fill. Width 1.06m.

T24F6

Northeast-southwest orientated ditch with brown organic fill. Drain T24F4 runs into it. Width 0.85m.

T24F7

East-west orientated drain with brown organic fill with stone inclusions. Width 0.43m.

T24F8

East-west orientated concrete field drainage pipe, 0.11m diameter.

T24F9

Northeast-southwest orientated ditch with orange and brown organic fill. Width 0.55m.

T24F10

East-west orientated concrete field drainage pipe, 0.11m diameter.

T24F11

North-northwest to east-southeast orientated stone-lined drain, width 0.6m. Runs into the flooded northern end of the trench. The last 5m of the trench flooded as the trench cut through wet bog here.

Trench 25

The final trench within Field 6 was parallel to and west of Trench 24. It measured 45.4m in length, 2.4m in width and 0.3m in depth. The natural was grey boulder clay to the south, giving way to the white marl with orange staining to the north. The topsoil was brown peat-rich silty clay; however the deep organics present at the northern ends of trenches 23 and 24 were not present in this trench.



View of Trench 25, looking north (top)

View of drainage pipe T25F2, looking west (bottom)

T25F1

North-south orientated furrow with dark brown organic peat fill. Width 0.4m.

T25F2

East-west orientated concrete field drainage pipe, 0.11m diameter.

T25F3

North-south orientated stone-filled drain. Width 0.4m.

Trench 26

Trench 26 was located at the western end of Field 1 running parallel to the fenced western boundary and was orientated northeast-southwest. It measured 204.5m in length, 2.4m in width and 0.33m in depth. The natural is yellowish brown boulder clay and is overlaid by brown silty clay topsoil.

T26F1

Shallow flat-bottomed pit or spread consisting of compact greyish brown clay with charcoal flecking measuring 2.4m in length, 1.3m in width and 0.12m in depth. This may be a natural tree bole, however this was uncertain and the pit may be archaeological.

T26F2

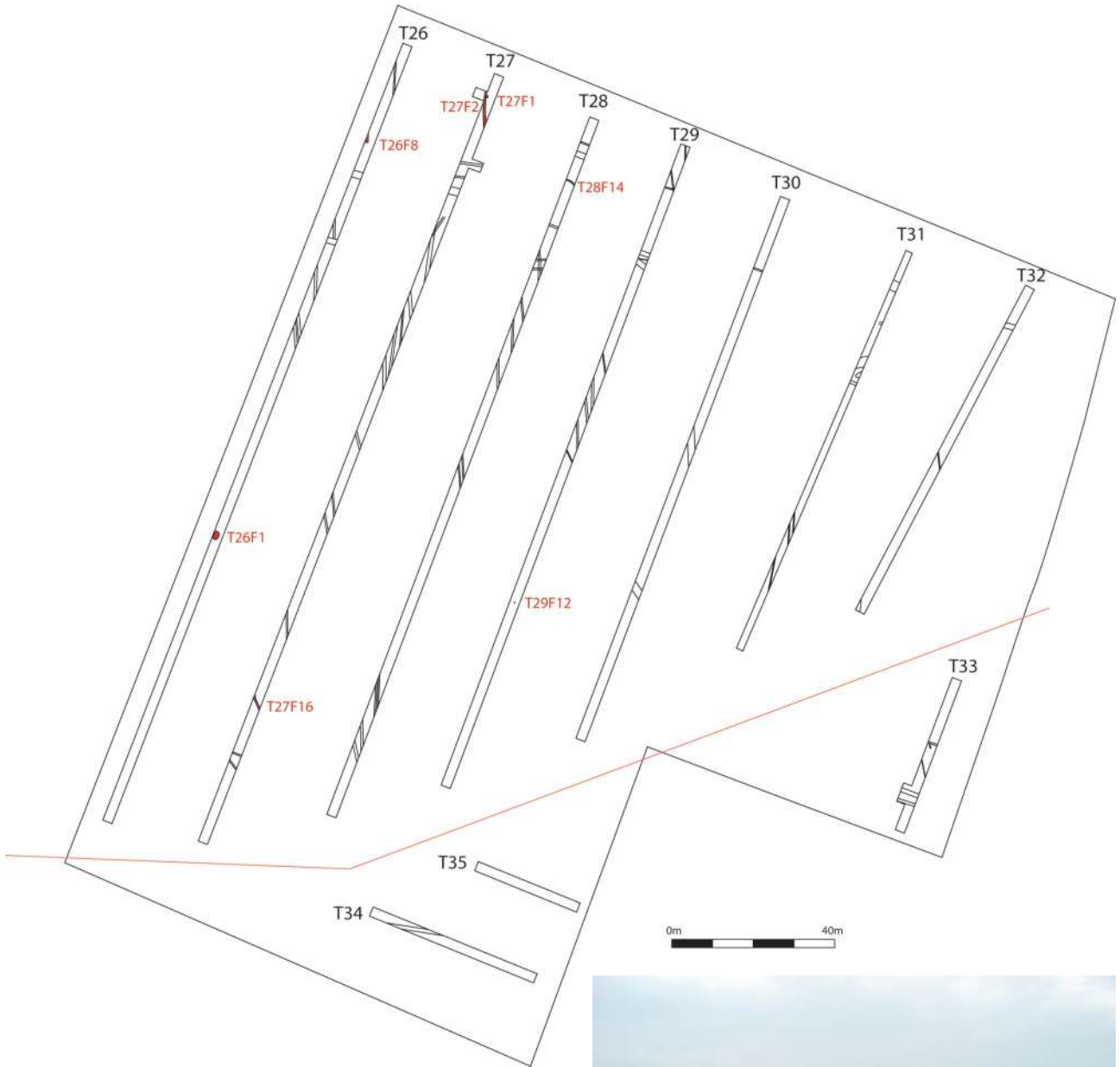
Northwest-southeast running furrow with mid-brown silty clay fill. Width 0.62m.

T26F3

Northwest-southeast running furrow with light brown silty clay fill. Width 0.69m, depth 0.06m.

T26F4

Northwest-southeast running furrow with light brown silty clay fill and inclusions of rusted iron and animal bone. Width 0.6m, depth 0.06m.



Plan of the trenches and features in Field 1 (top)



View of Trench 26, looking northeast (centre)

View of section through pit T26F1, looking north (bottom)





View of section through ditch T26F7, looking northwest (top)

View of Pit T26F8, looking north (bottom)

T26F5

Northwest-southeast orientated ditch, mid brown silty clay fill with charcoal flecking. Width 1.4m.

T26F6

Northwest-southeast running furrow with light brown silty clay fill. Width 0.58m, depth 0.09m.

T26F7

Northwest-southeast orientated ditch with a peaty clay fill. Width 1.7m, depth 0.62m.

T26F8

Pit along western side of trench with a dark greyish brown clay fill with charcoal flecking

and fragments of burnt bone. It continued beyond the western edge of the trench and measured a minimum of 2m in length, 0.32-0.62m in width and 0.11m in depth. This pit was located on the higher ground within the field and may be archaeological, however, it should be noted that charcoal and blackened bone were present in a number of the agricultural features within the field also.

T26F9

Northwest-southeast orientated furrow with light brown silty clay fill. Width 0.3m, depth 0.05m.

Trench 27

Trench 27 was located to the east of and parallel to Trench 26. It measured 202m in length, 2.4m in width and 0.3m in depth. Two short side trenches were extended out from the side of the trench to the north to investigate features uncovered within the trench. As these did not add any additional information they were not numbered individually. The natural is yellowish brown boulder clay and is overlaid by brown silty clay topsoil.

T27F1

Circular pit with dark greyish brown clay fill overlying a thin layer of charcoal. The base of the pit was scorched red. A number of angular stones encircled one side of the pit, which was truncated by furrow T27F2. This appears to have been a fire-pit. A short 4m trench was extended to the west in line with the pit to see if the feature extended further, however, it was found to terminate at the edge of the trench and no associated features were noted to the west. A number of geophysical anomalies were noted in this part of the field in 2009 and it is possible more fire-pits or related features are present nearby. Diameter 0.6m, 0.15m depth.

T27F2

Northwest-southeast orientated furrow with brownish grey silty clay fill and charcoal inclusions. It truncated fire-pit T27F1 and was 0.83m in width. Suggestion that it was slightly curving, however this may have been a meandering of the furrow.



View of Trench 27, looking southwest (top)

View of fire-pit T27F1, looking northwest (centre)

View of probable drain T27F3, looking east (bottom)

T27F3

East-west orientated linear, probable drain with greyish brown silty clay fill. Width 0.6m. A short 5m trench was extended following this feature

to the east to identify whether it was curving, however the drain continued straight. No other features were noted.

T27F4

East-west orientated linear, probable with greyish brown silty clay fill. Width 0.41m, depth 0.13m.

T27F5

East-west orientated ditch with dark greyish brown clay fill. Width 0.85m. Also present in Trench 26.

T27F6

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.6m.

T27F7

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.84m.

T27F8

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.75m.

T27F9

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.3m, depth 0.04m.

T27F10

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.45m.

T27F11

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.75m.

T27F12

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.55m.

T27F13

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.4m.

T27F14

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.4m.

T27F15

Northwest-southeast orientated linear furrow

with light brown silty clay fill. Width 0.55m, 0.08m depth.

T27F16

Possible curvilinear feature with reddish brown clay fill and charcoal inclusions, orientated northwest-southeast and curving slightly to north. Width 0.6m, depth 0.06m. This may be of archaeological interest.

T27F17

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.6m, depth 0.07m.

T27F18

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.4m.

Trench 28

Trench 28 was located east of and parallel to Trench 27. It measured 183m in length, 2.4m in width and 0.3m in depth. It stopped to the north of the overhead ESB wires within the field. The natural is yellowish brown boulder clay and is overlaid by brown silty clay topsoil. Iron slag was retrieved from the topsoil within this trench along with post-medieval ceramics, corroded iron and clay pipe fragments.

T28F1

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.72m.

T28F2

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.6m.

T28F3

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.4m.

T28F4

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.4m.

T28F5

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.4m.



View of Trench 28, looking southwest (top)

View of section through possible curvilinear feature T28F14, looking northwest (centre)

View of intersection of furrows T28F10-12, looking north (bottom)

T28F6

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.4m.

T28F7

Northwest-southeast orientated linear furrow with light brown silty clay fill. Width 0.5m, 0.04m depth.

T28F8

Northwest-southeast orientated linear furrow with greyish brown clay fill with charcoal flecking. Width 0.8m.

T28F9

Northwest-southeast orientated linear furrow with greyish brown clay fill with charcoal flecking. Width 0.5m.

T28F10

Northwest-southeast orientated linear furrow with greyish brown silty clay fill. Width 0.25-0.6m. Intersects with furrows T28F11 and T28F12.

T28F11

East-west orientated linear furrow intersecting with furrow T28F10. Greyish brown silty clay fill. Width 0.4m.

T28F12

East-west orientated linear furrow intersecting with furrow T28F10. Greyish brown silty clay fill. Width 0.6m.

T28F13

Northwest-southeast orientated linear feature, possible drain or furrow. Greyish brown clay fill with charcoal flecking. A corroded iron object was noted in the fill. Width 0.3m.

T28F14

Shallow possibly curvilinear feature with mid greyish brown silty clay fill. Width 0.3m, depth 0.04m. May also be a furrow meandering slightly.

T28F15

Northeast-southwest orientated linear ditch. Brown silty clay fill. Width 1.4m.

T28F16

Northeast-southwest orientated linear furrow with greyish brown silty clay fill. Width 0.4m.

Trench 29

Trench 29 was parallel to and east of Trench 28. It measured 168.1m in length, 2.4m in width and 0.38m in depth. It stopped to the north of the overhead ESB wires within the field. The natural is yellowish brown boulder clay and is overlaid by brown silty clay topsoil. Iron slag was retrieved from the topsoil within this trench along with post-medieval ceramics.

T29F1

Northwest-southeast orientated linear furrow with greyish brown silty clay fill. Width 0.8m.

T29F2

Northwest-southeast orientated linear furrow with greyish brown silty clay fill. Width 0.7m.

View of Trench 29, looking northeast (top)

View of T29F3 furrow, looking southwest (bottom)



Crosses furrow T29F3 at western side of trench.

T29F3

Northeast-southwest orientated linear furrow with greyish brown silty clay fill. Width 0.4-0.6m. Crosses furrow T29F2 at western side of trench.

T29F4

Northwest-southeast orientated ditch with greyish brown clay fill with stone inclusions. Width 1.1m.

T29F5

Northwest-southeast orientated linear furrow with greyish brown silty clay fill. Width 0.15m, 0.05m depth.

T29F6

North-south orientated ditch with greyish brown silty clay fill with occasional stone inclusions. Width 1.5m

T29F7

Northwest-southeast orientated linear furrow with greyish brown silty clay fill. Width 0.5m.

T29F8

Northwest-southeast orientated linear furrow with greyish brown silty clay fill. Width 0.58m.

T29F9

Northwest-southeast orientated linear furrow with greyish brown silty clay fill. Width 0.51m.

T29F10

Northwest-southeast orientated linear furrow with greyish brown silty clay fill. Width 0.48m.

T29F11

Northwest-southeast orientated linear furrow with greyish brown silty clay fill. Width 0.4m, 0.1m depth.

T29F12

Circular pit centrally located within trench with grey silty clay fill and charcoal flecks. Diameter 0.2m, 0.06m depth. Possibly archaeological though shallow and isolated.



View of pit T29F12, looking north (left)

View of Trench 30, looking northeast (top right)

View of ditch T30F2, looking northwest (bottom right)

Trench 30

Trench 30 was parallel and to the east of Trench 29. It stopped to the north of the ESB wires crossing the field. It measured 142.2m in length,

2.4m in width and 0.4m in depth. The natural was bedrock at the southern end of the trench returning to yellowish brown boulder clay to the north and was overlaid by brown silty clay topsoil.

T30F1

Northwest-southeast orientated ditch with dark grey clay fill with inclusions of sub-rounded stones and modern ceramics. Width 2.9m.

T30F2

Northwest-southeast orientated ditch with orangey brown clay fill. Width 1.8m.

T30F3

Northwest-southeast orientated linear furrow with brown stony clay fill. Width 0.3m.

Trench 31

Trench 31 was parallel to and east of Trench 30. It stopped to the north of the ESB wires crossing the field. It measured 76.3m in length, 2.4m in width and 0.3m in depth. The natural was yellowish brown boulder clay and was overlaid by brown silty clay topsoil. Iron slag was retrieved from the topsoil within this trench along with post-medieval ceramics and clay pipe fragments.

T31F1

East-west orientated ditch with greyish brown silty clay fill with occasional stone and iron inclusions. Width 1.85m.

T31F2

Possible drain or furrow orientated east-west, greyish brown silty clay fill. Petered out before reaching western side of trench. Length 1.2m, width 0.4m.

T31F3

East-west orientated ditch with brown silty clay fill with inclusions of woody organics and corroded iron. Width 2m.

T31F4

Possible pit or area of disturbance containing brown silty clay with inclusions of angular stone and decayed wood. Somewhat irregular. Extends for 1.5m from the eastern side of the



View of Trench 31, looking northeast (top)

View of intersection of ditch T31F3 and furrow T31F5, looking southwest (bottom)

trench and did not reach the western side of the trench. Width 1.2m.

T31F5

Northwest-southeast orientated linear furrow with dark greyish brown silty clay fill. Width 0.5m, depth 0.07m.

T31F6

Northwest-southeast orientated linear furrow with dark greyish brown silty clay fill. Width 0.4m.

T31F7

Northwest-southeast orientated linear furrow with dark greyish brown silty clay fill. Width 0.3m.

T31F8

Northwest-southeast orientated linear furrow with dark greyish brown silty clay fill. Width 0.35m.

Trench 32

Trench 32 was east of and parallel to Trench 31. It stopped to the north of the ESB wires crossing the field and was in line with the ESB pole to the south. It measured 90m in length, 2.4m in width and 0.3m in depth. The subsoil was orangey brown boulder clay and was overlaid by brown silty clay topsoil.

View of Trench 32, looking southwest (top left)

View of ditch T32F3, looking north (bottom left)

View of Trench 33, looking northeast (top right)

View of linear ditches T33F4 and T33F5 extending straight, looking northwest (bottom right)



T32F1

Northwest-southeast orientated furrow with brown silty clay fill. Width 0.4m.

T32F2

Shallow linear channel orientated northwest-southeast with mid-brown silty clay fill. Width 0.2m, 0.12m depth.

T32F3

Northeast-southwest orientated ditch with dark grey clay fill and inclusions of wood fragments. Width 1.5m.

Trench 33

Trench 33 was inserted parallel to the eastern field boundary and was orientated northeast-southwest, though it angled slightly more to the north than the previous trenched within the field. It was located in the southeast corner of the field, to the west of the Dunshaughlin bypass. A possible circular anomaly was noted here on the 1995 aerial ortho photograph from





Overlay of the trenches in Field 1 and the 1995 aerial ortho image. The possible circular anomaly is outlined in red. This feature was not identified in Trench 33. It was also not identified during the archaeological works in advance of the construction of the bypass to the east and must be a natural variation in vegetation or some other non-archaeological feature (top)

View of Trench 34, looking northwest (centre)

View of ditch T34F1, looking east (bottom)



the Ordnance Survey. The trench was intended to investigate this potential feature. The trench was 39.9m in length, 2.4m in width and 0.3m in depth. A 5m section of the trench was extended to the west to investigate a feature, being up to 4.5m in width at this point. The natural subsoil was orangey brown boulder clay and the topsoil was brown silty clay.

T33F1

Shallow linear, possible drain, orientated east-west with pale grey silt fill. Width 0.3m, depth 0.21m.

T33F2

Shallow northwest-southeast orientated linear furrow extending from edge of drain T33F1 for 0.5m to the south. Width 0.2m.

T33F3

Shallow northwest-southeast orientated linear furrow with brown silty clay fill. 0.4m width.

T33F4

Linear ditch orientated east-west with mottled yellowy brown clayey silt fill with occasional stone inclusions. Width 1m. The trench was extended to the west to assess this ditch further, however it continued straight and is likely to be agricultural drainage.

T33F5

Linear ditch parallel to T33F4 and c. 1.5m to the south. Orientated east-west with a similar yellowy brown clayey silt fill with occasional stone inclusions. Width 0.75m.

Trench 34

Trench 34 was located parallel to the Drumree road at the southern end of the field and was orientated west-northwest to east-southeast. It stopped to the east of the ESB wires crossing the field. It measured 43.5m in length, 2.4m in width and 0.35m in depth. The subsoil was orangey brown boulder clay and the topsoil brown silty clay.

T34F1

East-west orientated ditch with dark grey silty clay fill with occasional stone inclusions. Width 1.2m.

Trench 35

Trench 35 was parallel and to the north of Trench 34, also being orientated west-northwest to east-southeast. It stopped to the east of the ESB wires crossing the field. It measured 27m in length, 2.4m in width and 0.3m in depth. The subsoil was orangey brown boulder clay and the topsoil brown silty clay. No features were encountered.



View of Trench 35, looking northwest

Section 3 Discussion

Summary of findings

Field 1

Ten trenches were opened across the field. The trenches aimed to assess anomalies noted in the 2009 geophysical survey and on aerial photography. ESB wires crossed the field and were avoided by the testing programme.

One definite archaeological feature, a fire-pit, was identified. A further six features consisting of three pits and three possible shallow curvilinear slots were also identified. These

were predominantly on the higher ground to the north and towards the western side of the field. The majority of the features encountered were agricultural furrows and field boundaries. The furrows indicate a regular northwest-southeast ploughing pattern. This ploughing was deep and may have disturbed archaeological features that were previously present here.

Interestingly, iron slag was retrieved from the topsoil in three of the trenches. The field was previously connected to the field containing the early medieval settlement to the east, which was excavated in 2018-2019 as part of Phase 1 of



the development. A large early medieval iron production site was associated with the settlement and it is possible the slag retrieved during the testing originated there.

The testing indicated that the archaeology surviving within Field 1 is relatively small-scale and no major enclosure sites were identified. The fire-pit to the north was identified in an area that indicated a series of anomalies in the 2009 geophysical survey. While no other features were identified in the vicinity of the

fire-pit during the testing, it is possible that additional archaeological features survive nearby. It was not possible to ascertain whether the other features uncovered during the testing programme in Field 1 were archaeological or agricultural, however, it is possible that a number of these are archaeological.

Field 2

Nine test-trenches were opened across Field 2. A portion of the field had been stripped during the 2018 works with archaeology identified and





Curving drip gully or shallow ring-ditch T4F6, looking northeast (top)



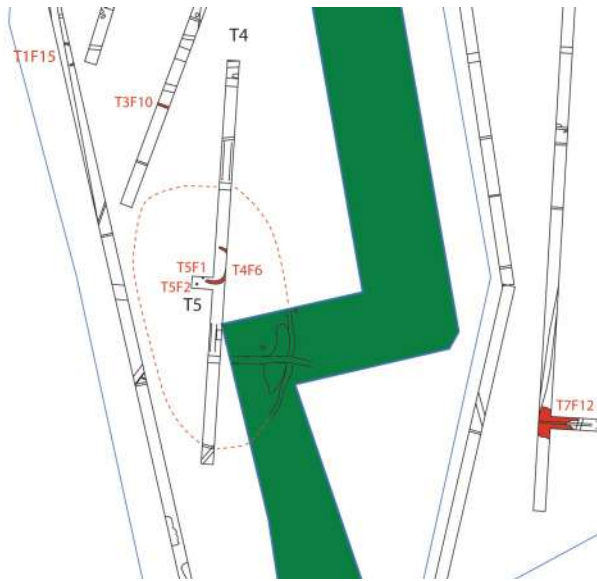
Burnt mound T9F2, looking southeast (bottom)

subsequently excavated. This included a fulacht fiadh, a prehistoric pit cluster, a pyre and associated cremation pit and a second smaller pyre site. Medieval and post-medieval field systems were identified within the field along with a low-lying wetland hollow; possibly a prehistoric pool. The testing programme aimed to identify whether additional archaeology was present within the field.

A number of features were identified during the testing programme. These included a shallow ring-ditch on a slight rise west of the field, which may be the remains of a structure or a burial monument. A burnt mound and a burnt spread were identified to the southeast, which are likely to be associated with troughs and

represent prehistoric water heating activity. A feature to the west also included similar material and may indicate another fulacht fiadh site, though it appeared that the burnt mound material to the west was within a linear cut and may be ex-situ. A number of pits were also identified to the west on the low rise along with a curvilinear slot, possibly representing a structure. The evidence from the trenching programme indicated that additional archaeology is present within the field, particularly on the rise of higher ground to the west.

A section of ditch (T4F9) may be the continuation of a curving ditch identified to the east truncating the pyre in the 2018 excavation.



Hypothetical continuation of curving ditch identified in the 2018 excavation, which may be forming an oval enclosure around the top of the rise in Field 2

This ditch may be arcing to form an enclosure of the top of the higher ground. It was not identified within Trench 1 to the west so if it does continue it may be forming an oval enclosure. A ditch (T4F5) was identified at the top of the slope of the rise further to the north, which may also be related.

The fulacht fiadh uncovered in the 2018 excavation did not extend further to the west, though more may remain between the stripped section and the test trenches. There is a high potential for additional archaeological features to be uncovered within this field.

Field 3

It was not possible to access Field 3 during the testing programme. It is unknown whether archaeological features survive within this field.

Field 4

One test-trench was opened centrally within Field 4. No archaeological features were noted within the field. The southern portion of the field was boggy, associated with the wetlands around the Skane River, which runs through Knocks townland.

Field 5

The western portion of Field 5 was monitored in 2018 and no archaeology was revealed. The entire field was boggy wetland along the northern side of the Skane River, which runs through the ditch dividing Field 5 and 6.

An additional three test trenches were opened in the eastern portion of the field. No archaeology was identified during the testing programme. While significant effort was made to drain Field 2 to the north and Field 6 to the south from at least the post-medieval period, it appears that the majority of Field 5 was too wet for arable agricultural use and only a small number of modern drainage interventions were identified within the field.

Field 6

This field lies along the southern side of the Skane River and was also low-lying and boggy. An anomaly was indicated at the southern end of the field in the 2009 geophysical survey, which was interpreted as a ploughed-out fulacht fiadh. This was shown not to be the case during the testing programme, which uncovered a series of plough furrows, but no indication of archaeology. Sections of the field to the north were very wet and boggy, however numerous drainage interventions had been inserted into the field. These all appeared to be post-medieval and modern. No archaeological features were identified within Field 6 during the testing programme.

Discussion

The main concentration of archaeological features identified during the testing programme was in Field 2. Two separate burnt spreads likely to represent fulachtaí fia were identified in the southeast of the field. These prehistoric features were related with the heating of water and various purposes have been suggested for the use of this water from cooking, brewing and food production, to textile processing and bathing. They are usually associated with sub-surface pits or troughs where the water was heated using hot stones, with the spreads of burnt stone and charcoal relating to the waste from the process of water heating. No troughs were identified during the

testing.

A number of curving slots and pits were identified to the west, which may relate to ring-ditches and associated features, or potentially to the slot trenches of houses. These were found on a ridge of slightly higher ground within the field. During the 2018 excavation a pyre site and cremation pit were excavated on the same ridge of higher ground and it is likely that these features relate to the prehistoric phase of activity. As noted above, it is possible a ditch enclosed the top of this ridge, which truncated the pyre site, however may also be prehistoric.

One of the curvilinear features T4F6, along with T5F1 clearly form part of a penannular or segmented shallow circular ring-ditch, possibly the drip gully of a structure or a burial monument. It was located on the apex of the low rise. It measured 6.75m in internal diameter, which would place it in an appropriate range for either the drip gully of a roundhouse, or a small ring-ditch. The second curving slot trench further to the northwest appeared more structural, being vertically-sided to the exterior of the arc and more concave to the interior. This may be the slot trench of a structure. A possible return was noted to the south, though it was less clearly defined. If this is a return it would suggest a structure c. 4m in diameter.

The 2018 excavation also uncovered a pit cluster in the lower-lying ground to the northeast of the pyre site. No additional features relating to the pit cluster were encountered during the testing programme, however, more may survive within the untested portions between the 2018 strip and the current test trenches. The 2018 excavation also uncovered a fulacht fiadh site to the northwest. Trench 2 was inserted to assess whether this extended to the west. Further features relating to the fulacht were not uncovered within the trench. The fulacht may extend west of the 2018 works, however it does not extend as far as Trench 2.

It is possible that a small prehistoric settlement survives within the field on the edge of the former wetlands, with structures to the west, a burial area to the southwest and fulachtaí fia to the northwest and southeast.

Within Field 1 a number of possible archaeological features were identified along with a number of pits of archaeological potential. The field was heavily ploughed, potentially disguising further archaeological features. The testing showed that there are no major features or enclosures within the field, however there is potential for further small, isolated features within the field. One of the main purposes of testing the field was to ensure that no remains associated with the large early medieval settlement identified in the 2018-9 excavation (McGlade 2020) extended into the field. The excavation suggested that the western boundary of the settlement was within the field that was developed as part of Phase 1 and the testing confirmed that the settlement did not extend into Field 1. Some metallurgical waste was retrieved from the topsoil of field 1 in a number of locations. This is likely to have derived from the substantial early medieval metal production site associated with the settlement to the east. Prior to the construction of the bypass, which presently divides Field 1 from the Phase 1 site, these fields were part of an open field system with no boundaries visible. Ploughing is likely to have dragged the metallurgical waste from the settlement to the east into Field 1.

No features of archaeological interest were identified within Fields 4, 5 or 6. This is consistent with the results of the monitoring within Field 5 during the 2018 excavation which only uncovered drainage features within Field 5 prior to the insertion of the attenuation tank. Substantial attempts to drain Field 6 were identified, with less effort made within Field 5, which was presumably deemed to be too boggy until relatively recently.

Section 4 Archaeological assessment

Archaeological potential

The 2018 excavation suggested that there was potential for further archaeology within Field 2. This was confirmed by the testing programme, which identified archaeology to the west and the southeast. It is likely that additional archaeological features are present within this field, which appears to have been a focus of activity during the prehistoric period, focused on the edges of wetlands. The remains of these wetland pools survive in places within the site

and are clearly contemporary with the fulachtaí fia and burial activity identified.

Some small archaeological pits and a number of potential small curvilinear features were identified within the northwest portion of Field 1. One of these, fire-pit T27F1, corresponded with an area that returned a number of anomalies in the 2009 geophysical survey (Harrison 2009). These did not form a distinct pattern and were somewhat sporadic, however there is a moderate potential for additional

Summary of main archaeological features uncovered in the 2018-9 excavation and in previous investigations on the site



Plan showing the location of the main archaeological features in Field 1 (top) and Field 2 (bottom). Note, no features were identified in Fields 4-6



archaeology within the northwest portion of the field. Other anomalies identified during the geophysical survey were shown to relate to the extensive ploughing of the field.

It was not possible to test Field 3 as part of the testing programme and as such it is unknown whether archaeology is present within the Field.

No archaeology was identified within Fields 4, 5 or 6 during the testing programme. A large geophysical anomaly indicated to the south was shown to relate to ploughing and was non-archaeological. These fields have a low potential for additional archaeology.



Development proposals

The proposed development comprises an approximately 14.6ha sized residential development of 320 houses, 109 apartments and a creche and all associated landscaping, services and infrastructural works. The development is spread across six fields and is Phase 2 of the Dun Ríoga development to the east, which has been under construction since 2018.



Plan of the proposed development

Impact assessment

The development and associated site works will have a negative impact on the archaeology identified within Field 2. This includes a cluster of features to the west, the potential continuation of the fulacht fiadh, prehistoric pit cluster and cremation activity identified in the 2018 works and the two probable fulachtaí fia to the southwest. A number of former pools or wetlands were also identified within the field, which are likely to be contemporary with the prehistoric activity. The 2018 works also indicated that some of the ditches crossing the field are part of a medieval field system.

Within Field 1, the archaeology was more sporadic and less well-defined. Features were only encountered in the northwest portion of

the field. The archaeology here did not appear extensive; however the development and associated site works will have a negative impact on the features identified within the field.

No archaeology was identified within Fields 4, 5 or 6. These more low-lying fields were part of the floodplain of the Skane River and do not appear to have been useful until drainage works in the post-medieval period. The development will have no archaeological impact in these fields.

The 'do nothing' impact

The archaeology uncovered during the testing appears to be largely prehistoric in date. In Field 2, prehistoric activity in the form of a fulacht fiadh, a pit cluster and a cremation pit and large associated pyre were excavated as part of the 2018 excavation. The pyre site is a rare find in Irish contexts and had already been truncated by a number of drainage ditches. The topsoil cover over the pyre was not significant. Should other associated features survive in the immediate vicinity of the pyre, it is likely that they would be negatively impacted through agricultural activity over time. Likewise, the larger of the burnt spreads uncovered to the southeast had little topsoil coverage and would be negatively impacted by agricultural activity over time. The fulacht fiadh excavated in 2018 to the northwest also had limited topsoil cover. While it is unclear whether this extends into the Phase 2 lands, if present, it is likely to be negatively impacted by agricultural activity over time. The features to the west uncovered during the testing had more topsoil coverage and are less likely to be negatively impacted should the development not proceed.

Two of the features identified in Field 1 were archaeological and were not associated with one another. The remaining four features were of archaeological potential, however, may turn out to be agricultural, or have disturbed nearby archaeology. There was evidence for substantial ploughing within the field, which may already have impacted any archaeology previously within the field. Should the development not go ahead, it is likely that any surviving archaeology within this field will be negatively impacted through agricultural activity.

Section 5 Recommendations

Based on the results of the 2009 geophysical survey, the 2018 excavation and the 2020 testing the following recommendations are proposed:

Monitoring

Due to the concentration of archaeology within Field 2, the topsoil stripping of the remainder of the field should be archaeologically monitored. Should additional archaeological material be uncovered this should also be fully excavated and preserved by record.

A number of sporadic pits were identified in the northwest portion of Field 1. A number of additional features that may be archaeological were also identified within this portion of the field. No features of archaeological interest were identified in the eastern portion of the field. The topsoil stripping of the western portion of Field 1 should be archaeologically monitored. Should additional archaeological material be uncovered this should also be fully excavated and preserved by record.

It was not possible to access Field 3 during the testing programme. As such, it has not been archaeologically assessed. The topsoil stripping within Field 3 should be monitored to assess for the survival of archaeological material within the field. Should additional archaeological material be uncovered this should also be fully excavated and preserved by record.

A road and paths are proposed in the fields to the east of Fields 2 and 5. These were not assessed during the testing programme, which focussed on the construction portion of the proposed development. The route of the proposed road and paths in this in this portion of the site should be monitored in advance of construction works. Should additional archaeological material be uncovered this should also be fully excavated and preserved by record.



- Excavation
- Monitoring
- Environmental core - possible locations
- No further works

Summary of recommendations. Three possible locations for the environmental core have been highlighted, however the final decision on the location should be agreed with the specialist in consideration of the proximity to archaeology and quantity of organics surviving.

Further works are proposed in Fields 1, 2 and 3 in the form of monitoring or excavation. Monitoring is also proposed for the road and paths to the east of Fields 2 and 5.

No further works are proposed in Fields 4-6 or in the portions of the site completed during the 2018-9 excavation.

Excavation

A number of archaeological features were identified within Field 2. This includes a zone of archaeology to the west and a second zone of archaeology to the southeast. Both of these areas should be stripped under archaeological supervision and subsequently fully excavated to preserve the material by record.

Environmental core

As a number of the features within Field 2 were clearly located around the wetlands near the floodplain of the River Skane, it is likely that the remains of the wetland pools uncovered within the field are contemporary. An environmental core of this material should be taken to assess the local environment at the time of use of the prehistoric features uncovered within the field.

No further works

No archaeology was uncovered within Fields 4, 5 or 6. No further archaeological works are recommended within these fields. No further works are recommended in the green spaces to the east of Field 2 unless topsoil removal and significant landscaping is proposed.

As these recommendations are based on information from a new phase of archaeological investigation they should supersede the recommendations made in the EIAR (Garahy 2020).

All recommendations are subject to the approval of the National Monuments Service.

References

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