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**LAND AT REIGHTON,
NORTH YORKSHIRE**

**ARCHAEOLOGICAL DESK-BASED ASSESSMENT
AND DETAILED GRADIOMETER SURVEY**

NGR: 51155 47420

Report prepared for Roc Oil (UK) Ltd

by

M Allen, A Brett and P Masters

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Pre-Construct Archaeology (Lincoln)
Unit G
William Street Business Park
Saxilby
Lincoln
LN1 2LP
Tel. & Fax. 01522 703800

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Summary

- *An archaeological desk based assessment and geophysical survey has been undertaken for Roc Oil (UK) Ltd. to assess the archaeological potential of a proposed well site on land in the parish of Reighton in North Yorkshire. Its purpose is to advise a future planning application, and it will inform a decision making process that will seek to address the interests of the developer, whilst ensuring that archaeological resources are not destroyed as a result of developing the site.*
- *The site itself is situated within an archaeologically rich landscape: the area is noted for a series of extensive dykes of prehistoric and later date, and for a number of prehistoric funerary monuments, specifically Bronze Age round barrows and Iron Age square barrows. Later prehistoric and Romano-British settlement remains have also been recorded within the parish.*
- *The archaeological potential of the site is considered to be low – moderate. It lies close to numerous round and square barrows of later Neolithic to late Iron Age date, and the projected alignment of a late Bronze Age to late Iron Age dyke crosses the site at its north-western corner. Aerial photographic evidence supports the latter, although geophysical survey identified no trace of this boundary. Cropmark and geophysical evidence indicates that the site is crossed by a number of palaeochannels of indeterminate age. These are traversed by medieval ridge and furrow-like geophysical anomalies, extending broadly east – west. The geophysical survey identified two parallel linear anomalies running east-north-east – west-south-west at the east end of the site. These anomalies may be archaeological. Anomalies that are parallel with the western site boundary may reflect former elements of the parish border or an associated trackway.*

1.0 Introduction

This combined desk-based study and geophysical survey was commissioned by Roc Oil (UK) Ltd. Its purpose is to assess the archaeological potential of a prospective development site, without the use of intrusive fieldwork, and to assess the potential impacts that may be posed by developing land situated in the parish of Reighton, North Yorkshire. The report will inform the client of any archaeological constraints which may be of relevance to any future application.

Amongst other sources, the report draws on the resources of the North Yorkshire Sites and Monuments Record, and research was conducted in accordance with national guidelines as produced by the Institute of Field Archaeologists (IFA, 1999). It was researched and prepared by Mark Allen and Alex Brett of Pre-Construct Archaeology (Lincoln) (hereafter PCA), and Peter Masters of Pre-Construct Geophysics (hereafter PCG) in September and October 2003.

2.0 Location and description

Reighton is situated less than 2km from the east coast, south east of the North York Moors and east of the Yorkshire Wolds, in the administrative district of North Yorkshire (fig. 1). The village lies approximately 6km south-south-east of Filey and c.9.5km north-west of Bridlington. The land that is the subject of this report comprises a rhomboidal area, approximately 1 hectare in extent, named 'Willows Site A' (fig. 2). It is 1.7km south-west of Reighton and approximately 1.2km north-east of the former settlement of Bartindale. It lies towards the south-west corner of an arable field, with the western border forming the parish boundary and the southern limit a railway embankment. The National Grid Reference for the site centre is 51155 47420.

2.1 Geology and topography

The proposed development zone is situated over a drift geology of Devensian glacial till, which overlies Upper and Lower Cretaceous chalk (Kent 1980). The field descends gradually from north to south, and the site mean altitude is approximately 77m OD.

3.0 Planning background

The site is currently under consideration for a future development by Roc Oil (UK) Ltd. However, prior to submitting of a formal application for planning permission (acting on the advice of North Yorkshire County Council), the proposed developer has requested that PCA should undertake an archaeological assessment of the area, comprising a desk based study and complimentary fluxgate gradiometer survey. This assessment will provide information outlining the archaeological potential of the site, without the use of intrusive fieldwork. The approach is consistent with the recommendations of *Archaeology and Planning: Planning Policy Guidance Note 16*, 1990, which advises early consultation with regard to archaeological matters.

4.0 Objectives and methods

The purpose of this report is to identify and assess archaeological remains that may be vulnerable to construction works associated with the proposed development and, if necessary, to suggest further methods by which the site may be evaluated in advance of any future development.

5.0 DESK-BASED ASSESSMENT

5.1 Desk-based methodology

Data for this report was, for the most part, obtained for a 1km radius, centred on the application area itself. This was drawn from the following sources:

- Records held by the County Sites and Monuments Record for North Yorkshire (NYSMR)
- Information supplied by the client
- Published and unpublished sources
- Aerial photographs held by the National Monuments Record, Swindon.
- A detailed inspection of the site

6.0 Archaeological and historical background

A review of the information held at the North Yorkshire SMR suggests that no formal archaeological excavations have been undertaken within the study area. Cropmark evidence however brackets the site within its archaeological landscape context; the landscape dating from the prehistoric period, with occupation continuing into subsequent periods (fig. 2).

Two distinctive monument classes dominate evidence for Bronze Age activity in the area: funerary round barrows and extensive dykes. Round barrows date possibly from as early as the middle Neolithic to the end of the early Bronze Age (c.3500 BC – 1500BC) and generally concentrate in cemeteries. Examples are known within the area of study: Site Nos. 9, 10, 21, 28, 50 and 88. Two of these, 9 and 10, are less than 100m to the north of the site, straddling the parish boundary.

Elaborate and extensive systems of linear earthworks are recorded as cropmarks or soilmarks within the study area (and across North and East Yorkshire), known as 'Dykes' (Sites 4, 5, 16, 33, 40, 41, 42, 62 and 63). Few intrusive investigations of these monuments have been undertaken, although it is believed they emerged in the later Bronze Age, dividing the land into distinct territories. This system is believed to have continued in use throughout the Iron Age. Several such boundaries appear to run towards the site from the south-west, although existing records do not show them

continuing into the application area itself. However, as part of this study, an analysis of existing aerial photographs revealed a soil mark within the field immediately to the west of the site that may be a continuation of one Dyke (see section 6.3, figs. 4 – 6, below for further discussion).

Settlement sites of early Bronze Age date are rare, and it is generally accepted that a predominantly mobile human existence continued into the middle Bronze Age (Woodward 2000). Certainly, for the study area there are no settlement sites that can be positively identified as being contemporary with the round barrows, or later. Three cropmark settlement sites (Nos. 1, 3 and 61) have been ambiguously identified as being of prehistoric date; however at least one site, No. 61, is likely to be associated with an extensive landscape of later prehistoric and Romano-British settlement.

The greatest numbers of monuments of a single type within the study area are the distinctive square barrows, exclusively dating between the middle to later Iron Age (generally c.400 BC – post 100 BC). More than 300 examples are known (from cropmark evidence), all to the south, south-west, west and north-west of the site itself. This 'Arras culture' tradition was concentrated mainly on the Yorkshire Wolds, although examples are known throughout England (Woodward 2000). Inhumations were placed under small square burial mounds, often with associated grave goods, such as brooches, beads, other ornaments and pottery. More rare examples contain the remains of two-wheeled carts. The SMR records both square enclosures and burial pit cropmarks as being of this distinctive funerary practice.

Three of the SMR entries (Nos. 2, 6 and 27) indicate the presence of both ring ditches and square ditched cropmarks. These may reflect a tradition of cemetery continuity, with an earlier Bronze Age cemetery being re-used in the Iron Age. Alternatively, at least some of the ring ditches may be the remains of structures, or dwellings, dating to the Iron Age and thus, perhaps, being of similar date to the square barrows. At other Iron Age cemetery group sites, a similar arrangement has been noted, where monuments of the dead are interspersed with the monuments of the living.

More tangible evidence of settlement dating to the late Iron Age is known within the study area, the closest being a rectangular ditched cropmark enclosure (Site No. 12), less than 100m to the north-west of the proposed development area. A ditched enclosure cropmark and associated field system (Site No. 7) has also been attributed to the late Iron Age: this group of cropmarks lies at the eastern extreme of the 1km study zone.

A palimpsest of late Iron Age – Romano-British settlement remains exist to the south-east of the proposed development area (Sites 64 and 70). Cropmarks show a dense and well-preserved series of trackways and associated enclosures, pits and field systems, some of which tie into modern boundaries, indicating the ancient origin of a number of the existing landscape boundaries (fig. 2). Various recorded cropmarks identified as trackways have been identified as being of late Iron Age and/or Romano-British date.

There is no evidence of Anglo-Saxon activity within the study area, beyond the settlement name of Reighton that gives its name to the parish. In 1086 the settlement

was recorded as '*Rictone*', from the Old English meaning 'farmstead by the straight ridge' (Mills 1996).

Medieval remains are sparse within the 1km study zone, although a mill is believed to have existed c.600m to the north-west of the site according to historical and cropmark evidence (Site no. 13/14). At the south-western extreme of the study area an earthwork (Site no. 58) has been attributed to the deserted medieval settlement of Bartindale, which lies immediately outside the area of study.

7.0 Archaeological potential

The information presented below has been collated from a variety of sources. Data from published and unpublished sources has been synthesised, as well as an inspection of the site itself. The sub-sections describe the information obtained from each source, and are followed by a brief summary. Finally, an assessment of the overall archaeological potential is considered.

7.1 Cartographic evidence

The first edition Ordnance Survey map (1851 – 1854) for Reighton (fig. 3) forms the basis for all subsequent maps produced by the survey to the present day.

The form of the 19th century field system has changed relatively little over the past 150 years. The single exception within the field that contains the site is the removal of a field boundary to the east of the site itself. An aerial photograph taken in 1969 shows this boundary still in existence (see fig. 5), indicating that it was removed within the last 34 years. The York and North Midland Railway (Scarborough and Bridlington Branch), which forms the southern boundary of the site, was in existence, along with the parish boundary that forms the western site boundary. The woodland that lies beyond the railway line (south of the site) is not mapped and is therefore less than 150 years old. A disused pit, several hundred metres to the west of the site, which is depicted on modern maps (fig. 2), is identified on the first edition OS map as a chalk pit.

7.2 The County Sites and Monuments Record

94 records of direct or indirect relevance (within 1km) to the proposed scheme are incorporated as part of the SMR (fig. 2 and table 1 below). The data from the SMR has been described in the general archaeological background above (see section 6.0).

Site No.	SMR No.	NGR	Description
1	NYM7533	TA 1187 7493	Prehistoric. Cropmark, rectangular ditched enclosure
2	NYM7458	TA 1083 7428	EIA-LBA. Cropmarks, barrow cemetery
3	NYM7406	TA 126 737	Prehistoric. Ditches, fieldsystem
4	NYM7401	TA 125 745	LBA-LIA. Argham Dykes
5	NYM7402	TA 1261 7425	LIA. Dyke

Site No.	SMR No.	NGR	Description
6	NYM7414	TA 1278 7420	EIA-LBA. Cropmark, barrow cemetery
7	NYM7412	TA 1275 7405	LIA, ditched enclosure
8	NYM7406	TA 126 737	Prehistoric. Ditches, parts of field system
9	NYM7475	TA 1170 7423	BA. Ring ditch, round barrow
10	NYM7474	TA 1169 7420	BA. Ring ditch, round barrow
11	NYM7465	TA 1160 7416	LIA. Ditch, enclosure at NW end
12	NYM7466	TA 1162 7419	LIA. Rectangular cropmark enclosure
13	NYM7504	TA 1119 7457	Med/post-med. Cropmark
14	NYM 7505	TA 1119 7457	Possible post-mill
15	NYM7528	TA 1116 7458	BA. Cropmark, ring ditch/barrow
16	NYM7864	TA 1141 7396	LBA - LIA. Ditch and linear cropmark
17	NYM7468	TA1099 7442	EBA-LIA. Cropmark, square barrow
18	NYM 7469	TA 1098 7444	IA. Cropmark, square barrow
19	NYM 7470	TA 1099 7442	IA. Cropmark, square barrow
20	NYM 7471	TA 1098 7441	IA. Cropmark, square barrow
21	NYM 7472	TA 1096 7429	BA. Cropmark, round barrow
22	NYM 7473	TA 1097 7440	EBA-LIA. Cropmark, mortuary enclosure
23	NYM7477	TA 1123 7437	IA. Cropmark, square barrow
24	NYM 7478	TA 1123 7437	IA. Cropmark, burial pit
25	NYM 7479	TA 1123 7437	IA. Cropmark, square barrow
26	NYM 7480	TA 1123 7437	IA. Cropmark, burial pit
27	NYM7458	TA 1083 7428	EIA-LBA. Cropmarks, barrow cemetery
28	NYM7476	TA 1104 7420	BA. Cropmark, possible round barrow
29	NYM7489	TA 1125 7425	IA. Cropmark, square barrow
30	NYM 7490	TA 1125 7425	IA. Cropmark, square barrow
31	NYM7491	TA 1136 7415	IA. Cropmark, square barrow
32	NYM 7492	TA 1136 7415	IA. Cropmark, burial pit
33	NYM7852	TA 0925 7385	LBA-LIA. Cropmark, portion of dyke
34	NYM7859	TA 1100 7394	LBA-LIA. Cropmark, bank
35	NYM7858	TA 1076 7420	LBA-LIA. Cropmark, bank
36	NYM7860	TA 1128 7406	LBA-LIA. Cropmark, bank
37	NYM7506	TA 1087 7393	IA. Cropmark, square barrow
38	NYM 7507	TA 1088 7393	IA. Cropmark, square barrow
39	NYM7349	TA 1078 7385	RB-med. Trackway & ditch
40	NYM7865	TA 1120 7388	LBA-LIA. Cropmark, ditch
41	NYM7863	TA 1100 7374	LBA-LIA. Cropmark, ditch
42	NYM7861	TA 1035 7360	LBA-LIA. Cropmark, dyke
43	NYM7459	TA 1110 7375	IA. Cropmark, barrow cemetery
44	NYM7460	TA 1110 7375	IA. Ditched enclosure and square barrow cropmark
45	NYM7461	TA 1117 7375	IA. Ditched enclosure and square barrow cropmark
46	NYM7462	TA 1117 7375	IA. Burial pit cropmark
47	NYM7463	TA 1117 7375	IA. Ditched enclosure and square barrow cropmark
48	NYM7464	TA 1117 7375	IA. Burial pit cropmark
49	NYM7493	TA 1138 7371	BA-LIA. Cropmarks, barrow cemetery
50	NYM7494	TA 1138 7371	Bronze Age ring ditch/round barrow
51	NYM7495	TA 1138 7371	IA. Ditched enclosure and square barrow cropmark
52	NYM7496	TA 1138 7371	LBA-LIA. Cropmark, ditch
53	NYM7481	TA 1138 7363	IA. Cropmark, square barrow cemetery (at least 40)
54	NYM7482	TA 1138 7363	IA. Ditched enclosure and square barrow cropmark IA. Ditched enclosure and square barrow cropmark
55	NYM7483	TA 1138 7363	IA. Pit ?burials, assoc. with No. 54 above
56	NYM7484	TA 1155 7393	IA. Cropmark, barrow cemetery
57	NYM7529	TA 1142 7410	Un-dated. Cropmark, ditch
58	NYM7336	TA 1093 7309	Med. Earthwork, DMS
59	NYM7421	TA 1153 7319	Un-dated. Cropmark, trackway/ditch.
60	NYM7422	TA 1180 7313	Un-dated. Cropmark, prob. Trackway

Site No.	SMR No.	NGR	Description
61	NYM7450	TA 1127 7273	Prehistoric. Cropmark, settlement
62	NYM7398	TA 1223 7387	LBA-LIA. Earthwork, dyke
63	NYM7400	TA 1205 7360	LBA-LIA. Earthwork, dyke
64	NYM7423	TA 1227 7324	LIA-RB. Cropmark, settlement
65	NYM7431	TA 1232 7332	LIA-RB. Cropmark, trackway
66	NYM7404	TA 1242 7300	Multi-period. Cropmark, trackway
67	NYM7448	TA 1220 7332	Multi-period. Cropmark, trackway
68	NYM7447	TA 1215 7337	Med. Cropmark, fieldsystem
69	NYM7399	TA 1195 7340	LBA-LIA. Site of former earthwork
70	NYM7432	TA 1235 7335	LIA-RB. Cropmark, enclosure
71	NYM4436	TA 1084 7417	LIA ditch cropmark
72	NYM7403	TA 1222 7388	LIA. Trackway and dyke
73	NYM7405	TA 1235 7325	Undated trackway and ditch cropmark
74	NYM7408	TA 1257 7375	LIA. Ditch and linear feature cropmark
75	NYM7409	TA 1212 7376	LIA. Ditch and linear feature cropmark
76	NYM7430	TA 1235 7315	LIA – Roman. Trackway and ditch cropmark
77	NYM7433	TA 1239 7333	LIA – Roman. Ditched enclosure cropmark
78	NYM7434	TA 1236 7331	LIA – Roman. Ditched enclosure cropmark
79	NYM7467	TA 1077 7374	LIA. Trackway and ditch cropmark
80	NYM7485	TA 1155 7393	IA. Ditched enclosure and square barrow cropmark
81	NYM7486	TA 1155 7393	IA. Pit ?burial cropmarks, assoc. with No. 80 above
82	NYM7487	TA 1159 7391	IA. Ditched enclosure and square barrow cropmark
83	NYM7488	TA 1162 7394	IA. Ditched enclosure and square barrow cropmark
84	NYM7508	TA 1081 7369	IA. Ditched enclosure and square barrow cropmark
85	NYM7510	TA 1078 7382	Earthwork bank, probably of geological origin
86	NYM7511	TA 1078 7382	Earthwork bank, probably of geological origin
87	NYM7512	TA 1080 7382	Prehistoric? circular enclosure?
88	NYM7513	TA 1079 7383	BA. Round barrow
89	NYM7514	TA 1082 7382	IA. Square barrow cemetery (c.28 barrows)
90	NYM7515	TA 1082 7382	Probably of geological origin
91	NYM7517	TA 1078 7382	Probably of geological origin
92	NYM7518	TA 1078 7382	IA. Square barrow cropmarks
93	NYM7530	TA 1112 7453	Undated. Ditch and linear cropmark
94	NYM7531	TA 1189 7378	Undated. Ditch and linear cropmark

Table 1: Records held at the County Sites and Monuments record, held by North Yorkshire County Council Environmental Services

7.3 Aerial photographic evidence

Aerial photographs held by the National Monuments Record at Swindon were consulted, which resulted in the examination of two oblique and two vertical photographs that depict the site.

- NMR 12549/32. Index No. TA 1174/22; taken 27th July 1994 (fig. 4). This oblique image is dominated by a series of sinuous linear features that run broadly north-north-east – south-south-west. Two of these cross the site, and were identified by geophysical survey (see section 7.2 below). The sinuous braded nature of these features suggests that they are likely to represent former channels of natural origin. A further broad linear feature running north-east – south-west lies within the field to the west of the site. This broadly follows the line of several prehistoric boundaries that are recorded on the SMR (fig. 2). If

this is a continuation of the landscape boundary, therefore, then it is likely to cross the site at its north-western corner.

- OS/69046. Frame No. 049; taken 6th April 1969 (fig. 5). The north-east – south-west feature referred to above was also present on this photograph. The image does not show the feature continuing onto the application area however. The eastern boundary of the site appears to incorporate a linear feature that, from its orientation and setting, is a former field boundary. The eastern edge of the image (c. 500m east of the site) shows several linear cropmarks that equate to known late Bronze Age – Late Iron Age dykes (Site Nos. 4 and 62, fig. 2).
- NMR 486/273. Index No. TA 1173/6; taken 17th May 1973 (fig. 6). Perhaps the best indication of a feature crossing the north-west corner of the application area was recorded during May 1973. A clear linear dark band can be seen within the field to the west of the site. No cropmarks are visible within the site itself.

7.4 Site visit

A Brett visited the site on 19th September, 2003. The west boundary of the site is a hawthorn hedge, with a distinct drop (c.0.75m) to the field beyond. This hedge forms the boundary between the parishes of Reighton and Hunmaby. To the north and east lies an open sub-rectangular field. At the time of the visit, a cereal crop had recently been harvested, and stubble was still in evidence, except along the southern edge of the field, which was ploughed. The field descends gradually from north to south, dropping slightly more sharply at the southern extremes of the site. The silty ploughsoil contained frequent pieces of chalk, and some rounded pebbles. Several pieces of modern brick were observed during the visit, but no further artefactual remains were noted.

8.0 GEOPHYSICAL SURVEY

8.1 Methodology

Detailed area survey using a fluxgate gradiometer is a non-intrusive method of evaluating the archaeological potential of a site. The gradiometer detects magnetic anomalies created by areas of high or low magnetic susceptibility. These variations are caused by changes in the composition of the subsoil or the underlying geology. Archaeological features result from man-made alterations to the soil and they may also incorporate intrusive materials such as brick and stone. These features can create detectable magnetic anomalies. In addition, activities that involve heating and burning can generate magnetic anomalies, as will the presence of ferrous metal objects.

The anomalies detected by a fluxgate gradiometer survey can often be resolved into entities sharing morphological similarities with features of known archaeological provenance. This enables the formulation of an informed, but subjective, interpretation.

The Gradiometer survey was undertaken using a Bartington Grad-01 Dual Fluxgate Gradiometer. The zigzag traverse method of survey was used across 30m x 30m grids, at 0.25 m sample intervals along 1.0m wide traverses.

Data from the surveys was analysed using Geoplot v.3.0 (Geoscan 2000). In the resultant plots, low magnetism is shown as white and high magnetism as black. The plots are shown as raw and enhanced data.

The gradiometer survey data has been processed using zero mean functions to correct the unevenness of the plots in order to give a smoother graphical appearance. The data was also processed using algorithm to remove magnetic spikes, thereby reducing extreme readings sometimes caused by stray iron fragments and spurious effects due to the inherent magnetism of soils.

The results are presented as greyscale and traceplot images, along with an interpretative plan (Figures 7-8).

Instruments	Bartington Grad – 01 – 1000 fluxgate gradiometer with DL601 data logger
Grid size	30m x 30m
Sample interval	0.25m
Traverse interval	1.0m
Traverse method	Zigzag
Sensitivity	0.1nT
Processing Software	Geoplot (v.3.0)
Weather conditions	Sunny
Area Surveyed	1.5ha
Date of survey	28 th August 2003
Survey personnel	Peter Masters and Peter Heykoop
National Grid Reference	TA 1173 7409

Table 1: Summary of survey parameters

8.2 Results

Two distinct north-north-east to south-south-west staggered linear features were recorded (depicted in yellow). Their morphological and magnetic characteristics are typical of buried ditches. However, an aerial photograph of the area (Fig. 4) suggests that they are more likely to be of natural origin, and probably represent elements of a series of braided and meandering paleochannels. Spread over a relatively wide area, these putative channels extend from northeast to southwest: an alignment that corresponds to the direction of natural drainage in the area.

A series of parallel east to west aligned linear anomalies probably reflect the ploughed out remains of ridge and furrow (examples shown in orange). Most of these occur in the northern half of the site, although partially ploughed examples occur toward the southern boundary as well. Traces of these features are also discernable on the

(enlarged) aerial photograph. Older remains may have been obliterated by this deep cultivation, or occur as magnetically weaker anomalies below plough depth.

A wide zone of amorphous anomalies (circled in green) is likely to be a reflection of glacial fracturing in the bedrock, this being a common phenomenon on solid calcareous geologies that are overlain by relatively thin drift/soil deposits.

Two near-parallel linear anomalies were detected at the eastern edge of the site (depicted in red). These features do not appear to relate to any existing boundaries or other magnetic anomalies such as the ridge and furrow, and they could therefore be of some archaeological significance; possibly representing former ditches.

Diffuse parallel linear anomalies (examples shown in pink) were recorded along the western edge of the survey (and the field boundary). The boundary delineates the parishes of Reighton and Hunmanby, and marks a distinct change in ground height (c. 0.5-1m lower on land to the west of the site). The anomalies that have been detected suggest that the boundary has been long established, although the archaeological potential of these features is unclear: modern cultivation may account for some of them, given that they appear to truncate the westernmost extent of the ridge and furrow.

Aerial photography has recorded a relatively wide linear cropmark (see section 7.3), to the immediate west of the survey area. This has been interpreted as a potential prehistoric dyke that may extend across the northwest corner of the site. The survey has not detected any such continuation.

The investigation has identified a number of localised/discrete magnetic anomalies. Magnetically stronger and dipolar anomalies (trace plot, examples circled in pink) may reflect the presence of ferrous or ceramic materials, typically ploughshares, horseshoes and large fragments of brick or tile. Weaker anomalies (examples circled in red) could be archaeologically significant, for example, as buried pits or areas of burning.

9.0 General considerations

In the light of information that has been assembled in this report, it is possible to present a generalised historical context for the proposed development site. Consideration will then be given to any impacts that may have taken place in recent times, which could have affected the quality and survival of the archaeological resource, if present.

The proposed development site lies amid an area rich in prehistoric activity. This is mainly of a funerary nature, with both round and square barrows possibly dating from the later Neolithic to the later Iron Age present in large numbers to the west and south-west of the site. Hundreds of these monuments have been identified as Iron Age 'Arras culture' square barrows. It is possible that further barrows existed in this area, but are now lost to ploughing.

Settlement remains of a later prehistoric and Romano-British date have been identified less than 100m to the west of the site, although the majority of known remains are recorded within the south-east quarter of the study area, at some distance from the proposed development site.

The parish boundary, which forms the western edge of the site, is likely to be of some considerable age. Interpretation of cropmarks that appear to be associated with the current system of boundaries suggest that the parish boundary may form part of a relict landscape, dating back as far as the Romano-British period, or even the later Iron Age. The geophysical survey results show a series of anomalies parallel with the existing parish boundary; these may reflect former ditched boundaries or an associated trackway, although an alternative hypothesis is that the anomalies may in fact be recent, associated with modern agricultural practices (ie tractor tracks and plough scores).

10.0 Conclusions

It is concluded that the archaeological potential of the site is **low - moderate**. There is no direct evidence of any prehistoric or Romano-British activity on the site, even though sites of both periods have been recorded at numerous locations in the vicinity.

The alignments of several territorial Dyke boundaries of later Bronze Age to late Iron Age date are shown to run towards the site. It is possible that these boundaries either stop or deviate from the site, although aerial photographic evidence tentatively suggests otherwise. The geophysical survey did not identify any evidence for this however, even though non-archaeological and potentially archaeological anomalies were positively identified by the survey.

The western boundary of the site forms the parish boundary between Reighton and Hunmaby. Geophysical survey may have identified former courses of this boundary or an associated trackway, although this is not clear.

Two linear anomalies were identified along the eastern edge of the geophysical survey that may be of archaeological significance. They do not conform to existing boundaries, and may relate to former ditches that pre-date the existing field system.

Given that land in the vicinity of the proposed development area is clearly capable of producing good cropmarks, and that geophysical (magnetic) survey is suited to the geology of the area, it would seem unlikely that the proposed development area contains important archaeological remains; a situation that has been reinforced by the results of a recent walkover survey, which failed to identify artefactual remains of any great antiquity.

11.0 Mitigation

In the opinion of the authors, the primary objective of any subsequent phase of work, should this be deemed necessary by the curating body, must be to establish whether or not the landscape boundaries of the later Bronze Age – late Iron Age traverse the

north-western corner of the site, and establish the nature and significance of selected magnetic anomalies identified by geophysical survey. A programme of limited trail trenching may be appropriate. Any such investigation should not be exhaustive.

Any further evaluation at the site must be based on the recommendations of the planning authority. The trenching should provide information to assist in mitigating for the location of the development in order to minimise disturbance to the archaeological resource and preserve the remains *in-situ* wherever feasible. Should this not be possible, some form of archaeological excavation may be required to preserve the archaeology by record.

12.0 Acknowledgements

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