

**ROTHERHAM FOOTBALL CLUB,
ROTHERHAM,
SOUTH YORKSHIRE**

NGR: SK 42377 92527

ARCHAEOLOGICAL WATCHING BRIEF

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Quality Assurance

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CONTENTS

Summary

Glossary

- 1** INTRODUCTION
- 2** PROJECT BACKGROUND
- 3** AIMS
- 4** METHODOLOGY
- 5** RESULTS
- 6** DISCUSSION
- 7** BIBLIOGRAPHY
- 8** ACKNOWLEDGEMENTS

FIGURE LIST

- Figure 1: Site Location
- Figure 2: Study Area Location
- Figure 3: Area Locations
- Figure 4: Detail of Historical Buildings & Watercourses and Archaeological Events in relation to Area Locations

SUMMARY

This document details the results of an archaeological watching brief relating to associated groundworks pertaining to the construction of a new 12,000 capacity community football stadium with associated car parking and public realm on land at Don Street, Rotherham, South Yorkshire (NGR: SK 42377 92527).

The project was undertaken in accordance with PPS5 and the archaeological policies of Rotherham Metropolitan Council. As such an archaeological condition was placed on planning permission for the development of the site: Condition 33 of Outline Planning Permission RB2010/0945(OUT), dated 26 January 2011.

Between 23rd and 29th June 2011, Foundations Archaeology undertook a programme of archaeological watching brief during groundworks associated with the construction of the stadium. The work was commissioned by Dean Welsh of GMI Construction, the contractors for the development.

The watching brief comprised of the archaeological monitoring of the excavation of six areas around the perimeter of the proposed stadium.

No archaeological features pre-dating 1930 were present within the monitored areas. Structural remains, probably relating to the final phase (1930-1960) of the construction of the Guest and Chrimes factory, were identified within four of the six areas.

Natural clays, which were only exposed in pockets across the site, were present at a depth of 1.7m to 2m below the existing ground level. The natural clays were overlain by a thick layer of make-up which almost certainly derived from the reclamation of land for the final building phase of the Guest and Chrimes factory, whereby waste from the foundry was deliberately used to level-up the land prior to expansion.

The monitoring work revealed that any potential archaeological deposits pre-dating 1930 would be deeply buried beneath a thick layer of make-up, therefore only deep excavation on the site would have the potential to impact upon natural ground and any existing archaeological deposits. Only pockets of natural ground were exposed during the works, therefore the potential for archaeological deposits on the site, which pre-date the modern period, remains largely unknown.

GLOSSARY OF ARCHAEOLOGICAL TERMS AND ABBREVIATIONS

Archaeology

For the purpose of this project archaeology is taken to mean the study of past human societies through their material remains from prehistoric times to the modern era. No rigid upper date limit has been set, but AD 1900 is used as a general cut-off point.

CBM

Ceramic building material.

Medieval

The period between the Norman Conquest (AD 1066) and *circa* AD 1500.

Natural

In archaeological terms this refers to the undisturbed natural geology of a site.

NGR

National Grid Reference from the Ordnance Survey Grid.

OD

Ordnance datum; used to express a given height above sea-level.

OS

Ordnance Survey.

Prehistoric

The period prior to the Roman invasion of AD 43. Traditionally sub divided into; Palaeolithic – c. 500,000 BC to c. 12,000 BC; Mesolithic – c. 12,000 BC to c. 4,500 BC; Neolithic – c. 4,500 BC to c. 2,000 BC; Bronze Age – c. 2,000 BC to c. 800 BC; Iron Age – c. 800 BC to AD 43.

Roman

The period traditionally dated between AD 43 and *circa* AD 410.

Saxon

The period between AD 410 and AD 1066.

1 INTRODUCTION

- 1.1 Between 23rd and the 29th June 2011, Foundations Archaeology undertook a programme of archaeological watching brief during groundworks associated with the construction of the Rotherham United Football Club stadium located on Don Street, Rotherham (NGR: SK 42377 92527). The work was commissioned by Dean Welsh of GMI Construction, the contractors for the development.
- 1.2 The project was undertaken in accordance with a Written Scheme of Investigation (WSI) produced by Foundations Archaeology (2011), which was prepared in line with the general principles of PPS5 (*Planning Policy Statement 5*), the policies of Rotherham Metropolitan Borough Council and the *Standard and Guidance for Archaeological Watching Briefs* issued by the Institute for Archaeologists (rev. 2008) and *Archaeological Guidance Paper 4: Archaeological Watching Briefs: (guidelines)* issued by English Heritage (London Region).
- 1.3 This document presents the findings of the archaeological watching brief.

2 PROJECT BACKGROUND

- 2.1 The development consisted of the redevelopment of the site, formerly occupied by the Guest and Chrimes Foundry and the Gloystarne Works, to provide a new stadium and associated parking for Rotherham United Football Club (NGR: SK 42377 92527).
- 2.2 The former Guest and Chrimes foundry lies on the west bank of the River Don, within an area of industrial activity, outside the historic core of the town.
- 2.3 The site is defined by the River Don located to the south and east, and the railway line linking Rotherham Central Rail station to the west, producing a roughly triangular site measuring approximately 6.44ha.
- 2.4 Within the Grade II listed Guest and Chrimes complex were a number of buildings, comprising offices, showrooms, manufacturing spaces and a water tower built during the 19th century, constructed in traditional brick, timber, and cast iron.
- 2.5 The site has been subject to a number of phases of archaeological assessment and there have been previous phases of building recording, evaluation, excavation and watching brief at the Guest and Chrimes Foundry.

Prehistoric

- 2.6 There is no evidence to infer that there is any archaeological potential for any activity before the Post-Medieval period. The nearest Prehistoric activity is located 3km away, which includes a number of isolated finds and the site of a

Bronze Age barrow burial mound and Iron Age settlement. Whilst settlement on the floodplain of the Don is unlikely, there is a small potential for archaeological remains of this period to be present on the site and environmental evidence relating to the prehistoric era may be present (Wessex Archaeology 2002).

Romano-British

- 2.7 A Roman building is suspected within 500 metres of the site to the south of the river. A series of three Roman forts, a vicus or small town and associated cemetery are known to lie to the south-west of the site at Templeborough (Wessex Archaeology 2002).

Medieval

- 2.8 The town of Rotherham is believed to have formed to the north of the site where a medieval bridge crossed the River Don, the site itself appears to be located outside the Medieval centre of the town.

Post Medieval

- 2.9 There is no record of any construction of permanent structures on the site before the Guest and Chrimes works were constructed in 1857. Prior to this the site appears to have been a floodplain used primarily for water management. To the north of the site however, a number of transportation structures, including the Holmes Tail Golt and a canal basin, existed and which were probably in-filled towards the end of the 19th century (Figure 4).
- 2.10 The Guest and Chrimes works comprised the set of structures protected by listing and retained within the site area. The complex of foundry buildings developed in four basic phases (as defined by ARCUS 2006) between 1857 and 1960. Offices and manufacturing buildings surrounded by an earthwork were constructed on the Don Street frontage between 1857 and 1860 (Phase 1). The majority of these remain today, albeit in an altered state, and are Grade II listed. These buildings are present just to the northeast of the proposed stadium. Between 1860 and 1890 (Phase 2) many of the original buildings were altered and a fourth wing was added to the complex and a long range of buildings to the south of the complex was constructed. Between 1900 and 1930 further alteration of Phase 1 buildings was undertaken as well as in-filling of the northern part of the factory and some limited building to the south of the main complex. Phase 4 (1930-1960) shows great expansion north and west of the original factory. Previous survey work (boreholes, geo-technical test-pits and evaluation trenching) revealed evidence that the waste from the foundry was deliberately used to level-up the land prior to expansion. At least 1m, but often 2.2m-2.4m, of industrial waste, such as casting sands and slags, is found overlying the natural alluvium north and west of the original factory buildings.
- 2.11 A sample of the pre-1893 buildings were excavated by ARCUS in 2007. The excavation area falls within the footprint of the proposed stadium as did many of the post-1934 buildings (Figure 4).

- 2.12 The proposed development could impact upon the buried structures and other potential archaeological features, predominantly through the installation of piling around the edge of the proposed stadium. The development strategy involves the raising of site levels by approximately 3m and the majority of the proposed works will not penetrate through this make-up. A number of works, however, took place prior to the raising of ground levels, in the form of proof digging for piles and an area of bulk reduction.
- 2.13 The study area therefore had the potential to reveal remains of the southern section of the Guest and Chrimes foundry, predominantly from Phase 4 construction of the factory. This did not prejudice the watching brief against the recovery of data relating to other periods.

3 AIMS

- 3.1 The aims of the archaeological watching brief are to gather high quality data from the direct observation of archaeological deposits in order to provide sufficient information to establish the nature, extent, preservation and potential of any surviving archaeological remains; as well as to make recommendations for management of the resource, including further archaeological works if necessary. In turn this will allow reasonable planning decisions to be taken regarding the archaeological provision for the areas affected by the proposed works.
- 3.2 These aims will be achieved through pursuit of the following specific objectives:
- i) to define and identify the nature of archaeological deposits on site, and date these where possible;
 - ii) to attempt to characterise the nature and preservation of the archaeological sequence and recover as much information as possible about the spatial patterning and extent of features present on the site;
 - iii) to recover a well dated stratigraphic sequence which will attempt to determine the complexity of the horizontal and vertical stratigraphy present, and to recover coherent artefact, ecofact and environmental samples;
 - iv) to determine the potential of the site to provide palaeoenvironmental and/or economic evidence and the forms in which such evidence may be present.

4 METHODOLOGY

- 4.1 Six trenches (Area 1, Area 2 etc.) were excavated within areas deemed by the client to contain the possible risk of obstructions, which could impact upon the

placement of the piles to support the infrastructure of the stadium (pile proof digging).

- 4.2 The excavated areas were located on the north and west sides of the proposed stadium (Figure 3).
- 4.3 The southern and eastern extents of the site contained the recently demolished Gloystarne factory, the foundations of which were still *in situ* at the time of the monitoring work. Fuel storage tanks were also believed to remain intact beneath the foundations of the structure. This area did not fall within the pile proof digging remit.

5 RESULTS

- 5.1 **Area 1** (4m x 60m southwest-northeast aligned) was excavated to an average depth of 1.2m below the existing ground level, with the exception of the extreme northeast end, where it was excavated to a depth of 2.2m due to the presence of a number of reinforced concrete piles. Natural ground comprising grey green-blue clay was exposed at a depth of 2.2m from the existing ground level at the northeast end of the area and at 1.7m from the existing ground level 8m from the southwest edge of the area, beneath wall footing (103). Where exposed, the natural was overlain by a very dark grey-black loosely compacted silty clinker layer (102), 2.2m thick, which contained concentrations of slag in pockets of varying densities, plastic service pipes and varying concentrations of reinforced concrete and brick rubble. Layer (102) was overlain by (101) at the northeast end of the trench and measured 12m in length and 0.70m in depth. It comprised concrete and brick fragments mixed with a dark grey-black clinker with common inclusions of modern refuse, which included plastic drainage pipe fragments, lengths of iron reinforcement bars and steel construction ties.
- 5.2 A large fragment of upstanding steel reinforced concrete wall and footing (103) was present 8m from the southwest edge of the area. This structure was 0.8m wide and 3m long and northwest-southeast aligned. It overlay the natural ground and cut layer (102). An area of reinforced concrete piles (104) at the northeast end of the area represented the footings of a corner of a building.
- 5.3 **Area 2** (10m x 40m southwest-northeast aligned) was excavated to an average depth of 1.2m and was excavated in a number of stages. Natural deposits were not exposed within this area. A single layer of very dark grey-black silty, loosely compacted clinker (201) which contained large concentrations of modern refuse including large concrete foundation fragments, steel reinforcement bars and various plastic drainage and service ducts, consistent with layers (101) and (102) revealed in Area 1.
- 5.4 **Area 3** (30m x 20m north-south aligned) was excavated to a depth of 1.2m on average from the existing ground level. The natural clays were visible beneath

building foundation (301) at a depth of 2m from the existing ground level. The partially extant remains of the concrete building foundation cut through a layer of very dark grey-black silt with industrial clinker (302), which was visually identical to the layers present within Areas 1 and 2.

- 5.5 **Area 5** (12m x 70m northwest-southeast aligned) was located on the northern edge of the proposed stadium. The area was excavated to an average depth of 2m from the existing ground level. Natural clays were not exposed. The area contained a very dark grey-black silt (501) with industrial clinker inclusions, visually identical to the layers exposed in Areas 1-3.
- 5.6 The partial remains of a brick wall (502), built using a header and wythe method of construction, was present only in the south facing section of the area, located approximately 30m from the north-western end of the area. This wall fragment measured 0.43m in width, and 1 metre in height. It was observed at a depth of 0.25m and was sealed by the dark grey-black industrial clinker layer (501), with no visible change in the layer on either side of the wall.
- 5.7 **Area 6** (25m x 30m north-south aligned) was reduced to a depth of 2m from the existing ground level along its western edge and 1m from the existing ground level along its eastern edge. Natural ground comprising grey green-blue clays was partially exposed on both sides. Overlying the natural deposits was a layer of very dark grey-black silt (607) with clinker and modern industrial refuse inclusions, visually identical to the layers encountered within the other areas.
- 5.8 A brick and mortar built manhole with associated pipes was present on the northern edge of the area.

6 DISCUSSION

- 6.1 No archaeological features pre-dating 1930 were present within the monitored areas. Structural remains, probably relating to the final phase (1930-1960) of the construction of the Guest and Chrimes factory, were identified within four of the six areas. A brick-built wall foundation was identified in Area 5, concrete foundations were identified in Areas 1 and 3 and a manhole was present in Area 6.
- 6.2 The wall fragment in Area 5 does not directly relate to features depicted on historical mapping of the factory buildings and may therefore represent a boundary wall. Its position within the area of expansion between 1930 and 1960 suggests it may fall into this final building phase. The concrete foundations in Area 1 relate to Buildings Q and R and those found in Area 3 belonged to Building T, all constructed between 1930 and 1960. The manhole present in Area 6 probably comprised drainage associated with Building L, also constructed within this timeframe.

- 6.3 Natural clays were revealed in Areas 1, 3 and 6, although the deposits were often only visible beneath the grubbed-out building foundations; expanses of natural ground were not exposed. Natural was exposed at a depth of 1.7m to 2m below the existing ground levels and was overlain by a thick, dark make-up layer containing industrial waste and modern detritus, which was present in all monitored areas. This layer almost certainly derives from the reclamation of land for the final building phase of the Guest and Chrimes factory, whereby waste from the foundry was deliberately used to level-up the land prior to expansion. The building foundations cut through this layer and overlay the natural deposits.
- 6.4 Evidence relating to the original line of Holmes Tail Goit was not present in the monitored areas. Historical mapping showing the line of the Goit suggests it should have intersected with Areas 1, 4 and 5 and evaluation evidence (Northampton 2006) indicates the line of a watercourse near Area 2. It is likely any evidence for the Goit or other watercourses remained masked beneath the layer of made ground.
- 6.5 The monitoring work has indicated that any potential archaeological deposits pre-dating 1930 would be deeply buried beneath a thick layer of make-up and that only deep excavation on the site would have the potential to impact upon natural ground and any existing archaeological deposits. Only pockets of natural ground were exposed during the works and the potential for archaeological deposits on the site, which pre-date the modern period, remains largely unknown.

7 **BIBLIOGRAPHY**

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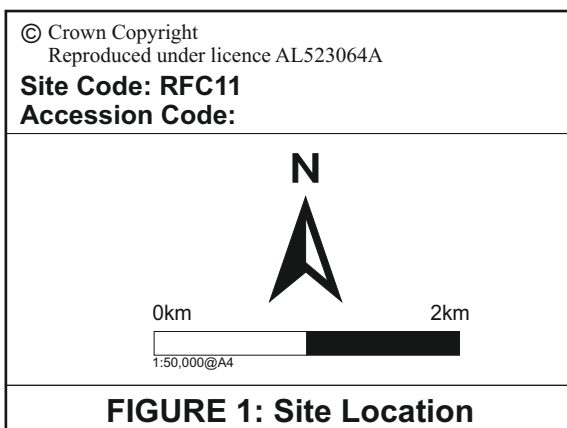
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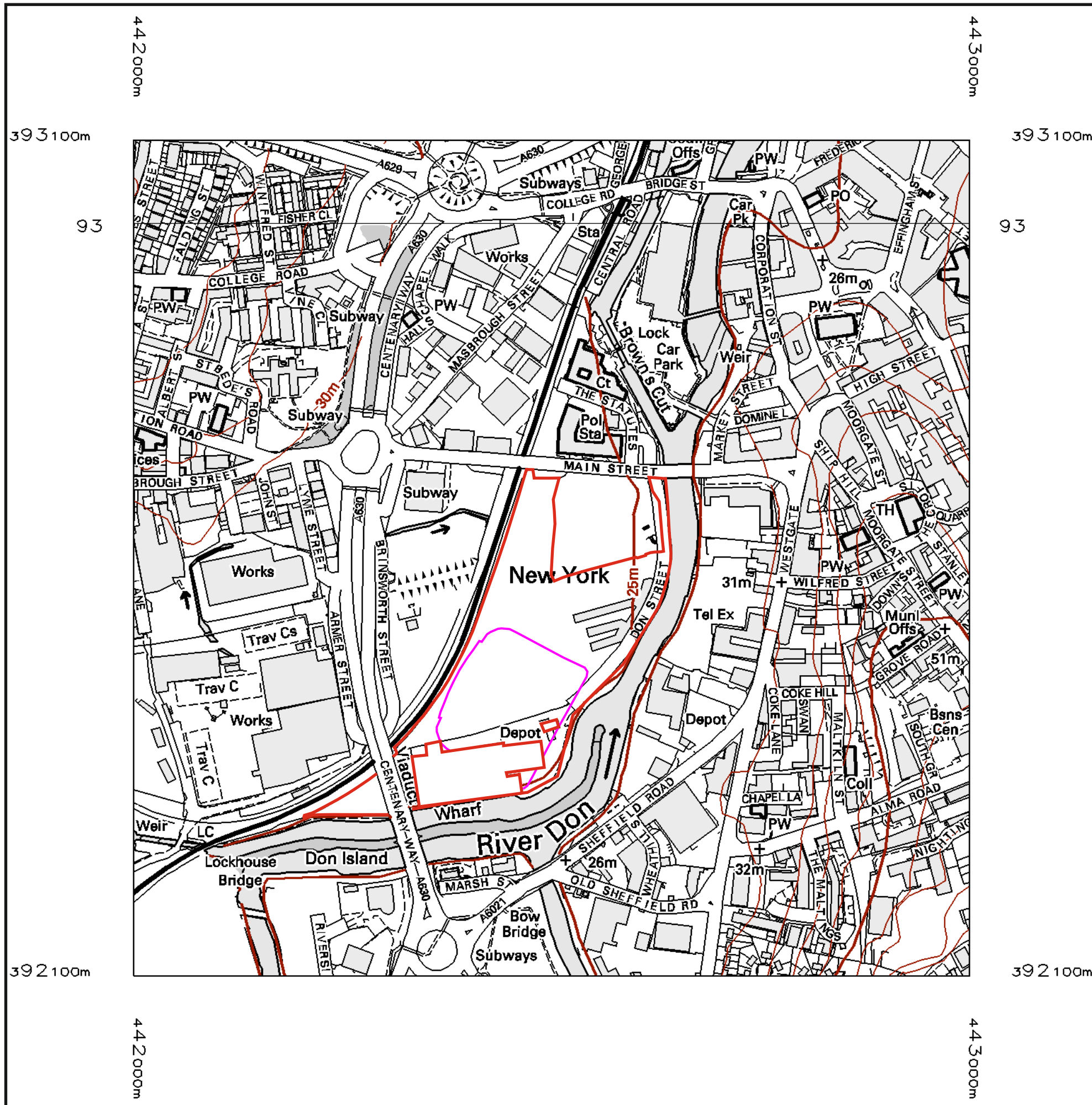
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8 ACKNOWLEDGEMENTS

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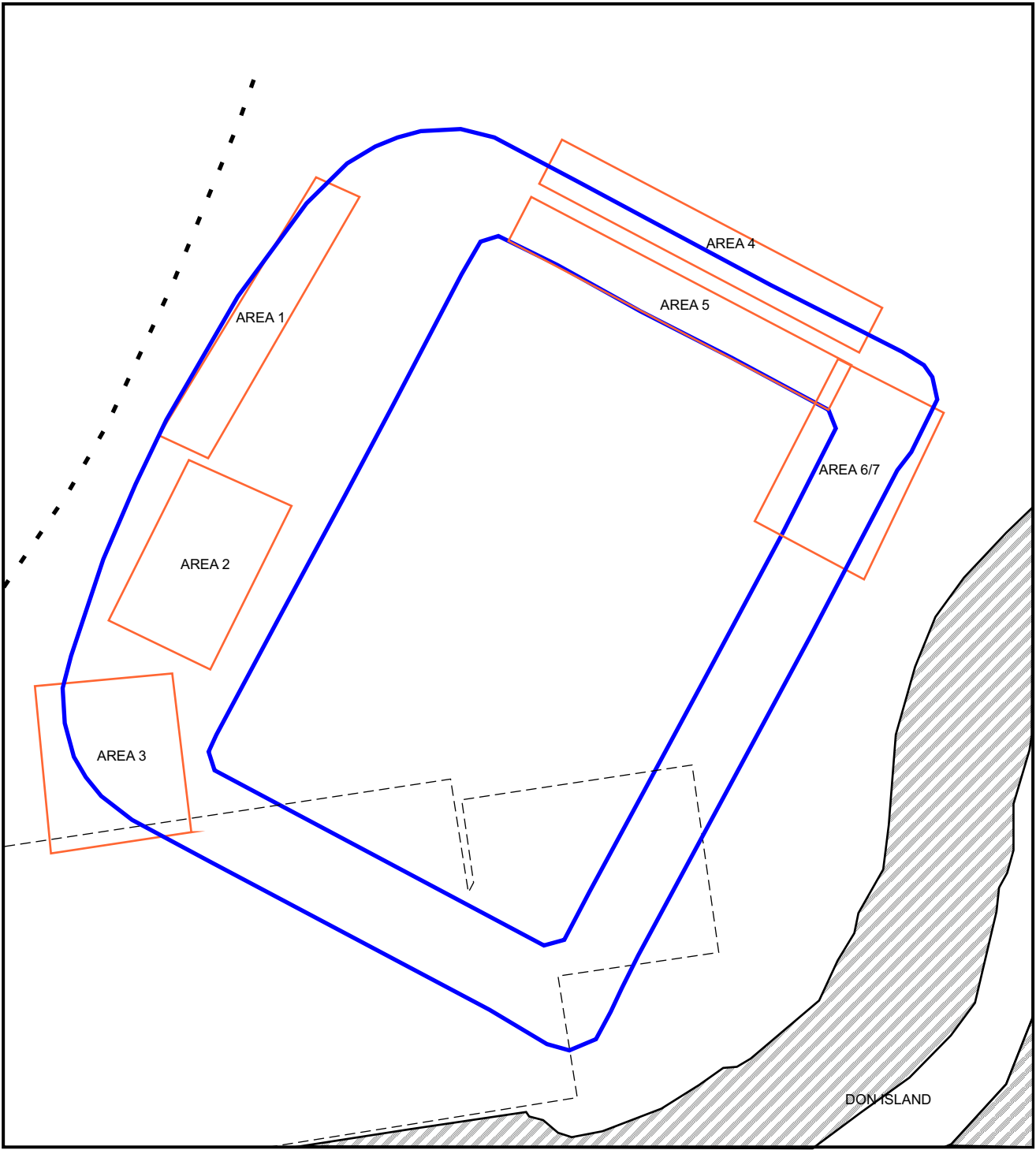
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 Site Code: RFC11
 Accession Code:

— WIDER DEVELOPMENT AREA
 — PROPOSED STADIUM

N






0m 200m
 1:5000@A3

FIGURE 2: Study Area Location



Site Code: RFC11
 Accession Code:

N

 **OUTLINE OF PROPOSED STADIUM**
 **LOCATION OF WATCHING BRIEF AREAS**
 **GLOYSTARNE FACTORY FOUNDATIONS**
 **RAILWAY TRACKS**
 **RIVER DON**

0m 50m

1:1250@A4

FIGURE 3: Area Locations

