



Archaeological Desk-Based Assessment
in advance of the proposed development
at the site of Queenborough Castle, Isle of
Sheppey, Kent

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Archaeological Desk-Based Assessment in Advance of the proposed development at the site of Queenborough Castle, Isle of Sheppey, Kent

NGR: TQ 91191 72137



Report for SWALE Borough Council

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Archaeological Desk-Based Assessment in Advance of the proposed development at the site of Queenborough Castle, Isle of Sheppey, Kent

NGR: TQ 91191 72137

1. SUMMARY

1.1 *SWAT Archaeology has been commissioned by Swale Borough Council to carry out an archaeological desk-based assessment on the site of Queenborough Castle, Isle of Sheppey, Kent.*

1.2 *The proposed development comprises of the northern extension of the children's play area.*

1.3 *The proposed development area (PDA) is located in the town of Queenborough, on the Isle of Sheppey, in the Swale Borough of the county of Kent, in the South East of England. The Isle of Sheppey is situated on the south east coast of England and the town of Queenborough lies on the west side of the island, 2 miles south of Sheerness, at the westward entrance to the Swale where it joins the River Medway (TQ 91191 72137). The current play area of c.55sqm is located on the southwest edge of the circular castle mound (c.115m diameter) and an extension of c.40sqm is proposed to the north side of the play area. The play area opens on all sides to the castle mound grass area. The north west section of the castle mound has been developed into Queenborough Library and parking area, the east of the mound is bounded by the railway line running north south, the south is bounded by the access road to the railway station and the Main Road B2007 which continues around the west boundary of the mound becoming North Rd (Fig.1-2).*

1.4 *This Desk Based Assessment has examined the wide variety of archaeological data held by KHER and other sources (section 10.2). Based on this data the potential for archaeological sites either on or in the near vicinity of the proposed development can be summarized as:*

- *Prehistoric: **Low***
- *Iron Age: **Low***
- *Romano-British: **Low***
- *Anglo-Saxon: **Low***
- *Medieval: **High***
- *Post-medieval: **High***
- *Modern: **High***

*The Desk Based Assessment concludes that the site has a **High** potential for archaeological discoveries.*

2. INTRODUCTION

2.1 The PDA is centered on the National Grid Reference: TQ 91191 72137

The report has accessed various sources of information to identify any known heritage assets, which may be located within a c.500m vicinity of the Proposed Development Area.

2.2 Archaeological investigations, both recent and historic have been studied and the information from these investigations has been incorporated into the assessment.

2.3 This report is a desk-based appraisal from known cartographic, photographic and Archaeological sources and is a research led statement on the archaeological potential of the proposed development.

2.4 It may be that intrusive investigations, such as a Geophysical Survey and/or an Archaeological Evaluation, with machine cut trial trenching, may be requested by the Local Planning Authority (LPA) as a Planning Condition.

3. GEOLOGY AND TOPOGRAPHY

3.1 Geology

3.1.1 The Geological Survey of Great Britain (1:50,000) shows that the PDA is set on Bedrock Geology of London Clay Formation (Clay and Silt); sedimentary Bedrock formed approximately 34 to 56 million years ago in the Paleogene Period in a local environment previously dominated by deep seas. These rocks were formed from infrequent slurries of shallow water sediments, which were then redeposited as graded beds.

3.1.2 There are no Superficial Deposits recorded within the PDA.

3.2 Topography

3.2.1 The PDA sits at an average height of 5m AOD on the southwest edge of the Queenborough castle mound, which rises at its centre to a height of 7.6m AOD. It is located within the site of the Scheduled Ancient Monument of Queenborough Castle and within a conservation area that continues west to encompass both the north and south banks of the Queenborough Creek and the High Street and South Street area of the town. It is within an area characterized as post 1810 settlement and is surrounded by a small area of urban development, which makes up the town of Queenborough and opens on to a wider rural area of small irregular enclosures. The Queenborough Creek is c.52m east and the Swale 0.3km east; the village of Rushenden is c.0.7km north and the Elmley National Nature Reserve, c.1km west. The site falls within the Stour Paleolithic Character Area (Fig.1, 20 & 22).

3.3 Historic Hedgerows

Historically the PDA was within the castle enclosure bounded by a circular earthworks and embankments that made up the defences of the castle. While there are sporadic hedgerows and trees to the boundary, there is no evidence that these hedgerows were

historically associated with the castle grounds nor that they may otherwise qualify as 'important' as defined by Schedule 1 of the Hedgerows Regulations 1997.

The proposed development would not have any impact on the current vegetation.

4. PLANNING BACKGROUND

4.1 The Proposed Development

The proposed development area is c.55sqm and comprises of a planning application for the extension of a children's play area to the southwest edge of the circular castle mound. The extension will be sited to the north boundary of the current play area and will contain two areas of apparatus set on a concrete base, a new tarmac path and the re-installation of fencing and a gate.

4.2 The National Planning Policy Framework (March 2012) Policy 12

The NPPF (2012) paragraphs 126 – 141 is the relevant policy for the historic environment, particularly paragraphs 126 and 128:

4.2.1 Conserving and Enhancing the Historic Environment

Paragraph 126. Local planning authorities should set out in their Local Plan a positive strategy for the conservation and enjoyment of the historic environment, including heritage assets most at risk through neglect, decay or other threats. In doing so, they should recognise that heritage assets are an irreplaceable resource and conserve them in a manner appropriate to their significance. In developing this strategy, local planning authorities should take into account:

- the desirability of sustaining and enhancing the significance of heritage assets and putting them to viable uses consistent with their conservation;

- the wider social, cultural, economic and environmental benefits that conservation of the historic environment can bring;
- the desirability of new development making a positive contribution to local character and distinctiveness; and opportunities to draw on the contribution made by the historic environment to the character of a place.

4.2.2 Paragraph 128. In determining applications, local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The level of detail should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significant.

As a minimum, the relevant historic environment record should have been consulted and the heritage assets assessed using appropriate expertise where necessary. Where a site on which development is proposed includes or has the potential to include heritage assets with archaeological interest, local planning authorities should require developers to submit an appropriate desk-based assessment and, where necessary, a field evaluation (NPPF 2012).

4.3 Planning Policy Guidance

Planning Policy Guidance that help to preserve the built and archaeological heritage are:

- PPG15 Planning and the Historic Environment
- PPG16 Archaeology and Planning

4.4 Statutory Protection

Both above and below ground archaeological remains that are considered Nationally can be identified and protected under the Ancient Monuments and Archaeological Areas Act 1979.

Any works affecting a scheduled Monument should be preceded by an application to the Secretary of State for Scheduled Monument Consent (SMC). Geophysical investigation or the use of a metal detector requires advance permission from Historic England.

The legal requirements on control of development and alterations affecting buildings, including those which are listed or in conservation areas (which are protected by law), is set out in the Planning (Listed Buildings and Conservation Areas) Act 1990.

4.5 Regional Policies

4.5.1 The Swale Borough Council (North Kent Coast) Local Plan Adopted February 2008, Policy DM34 is relevant to archaeology:

Scheduled Monuments and archaeological sites

7.8.9 *The Borough is rich in archaeological sites. The Historic Environment Record (formerly known as the Sites and Monuments Record), is an extensive database relating to Kent's heritage, which Kent County Council maintain. Some nationally important sites and monuments are given legal protection by being placed on a list, or 'schedule'. English Heritage takes the lead in identifying sites in England, which should be placed on the schedule by the Secretary of State for Culture, Media and Sport.*

7.8.10 *This Policy affords protection to these sites, together with other nationally important monuments or archaeological sites not scheduled.*

7.8.11 *The Policy also sets out the Council's approach to dealing with development proposals that may affect known, or potentially important, archaeological sites and maritime remains. The Council will consult with the County Archaeologist and, in certain cases, a developer may be required to supply information that will help the archaeological evaluation of the site.*

Where necessary, the Council will specify the standard of, and the methodology for obtaining, such information as will be needed for determining a planning application. In certain cases this may involve field evaluation.

7.8.12 *The Council seeks to avoid harmful or physically destructive development on important archaeological sites, and there is a preference for the preservation of important remains in situ. Where this is not possible, and the Council considers that the case for the development is such that important remains would be damaged or destroyed, appropriate archaeological investigation and recording will take place with publication of the results. Planning conditions, or in appropriate circumstances, legal agreements, will be used as required.*

7.8.13 *Within the central areas of Faversham, Sheerness, Sittingbourne, Queenborough and Milton Regis, the 'Kent Historic Towns Survey' and the County Council Supplementary Planning Guidance on urban area archaeology' will provide a more detailed interpretation of Policy DM34.*

Policy DM34

- 1. Development will not be permitted which would adversely affect a scheduled monument, and/or its setting as shown on the proposals map, or subsequently designated, or any other monument or archaeological site demonstrated as being of equivalent significance to scheduled monuments.*
- 2. Whether they are currently known, or discovered during the plan period, there will be a preference to preserve important archaeological sites in situ and to protect their settings. Development that does not achieve acceptable mitigation of adverse archaeological effects will not be permitted.*

3. *Where development is permitted and preservation in situ is not justified, the applicant will be required to ensure the provision will be made for archaeological excavation and recording, in advance of and/or during development, with the appropriate deposition of any artifacts in an archaeological archive or museum.*

4.5.2 The South-East Research Framework (SERF) is on-going with groups of researchers producing a Resource Assessment, which will identify research questions and topics in order to form a Research Agenda for the future.

4.6 This Archaeological Desk-Based Assessment has been prepared in accordance with the guidance in the National Planning Policy Framework and the Good Practice Advice notes 1, 2 and 3, which now supersede the PPS 5 Practice Guide, which has been withdrawn by the Government.

The Good Practice Advice notes emphasizes the need for assessments of the significance of any heritage assets, which are likely to be changed, so the assessment can inform the decision process.

Significance is defined in the NPPF Guidance in the Glossary as “the value of the heritage asset to this and future generations because of its heritage interest. That interest may be archaeological, architectural, artistic, or historical. Significance derives not only from a heritage asset’s physical presence, but also it’s setting”. The setting of the heritage asset is also clarified in the Glossary as “the surroundings in which a heritage asset is experienced. Its extent is not fixed and may change as the asset and its surroundings evolve”.

This Desk-Based Assessment therefore forms the initial stage of the archaeological investigation and is intended to inform and assist in decisions regarding archaeological mitigation for the proposed development and associated planning applications.

5. PROJECT CONSTRAINTS

No project constraints were encountered during the data collection for this assessment.

6. AIMS AND OBJECTIVES

6.1 The Desk-Based Assessment was commissioned by Swale Borough Council in order to supplement a planning application for the proposed extension of a children's play area located within the site of Queenborough Castle (SAM - TQ 91191 72137), to establish the potential for archaeological features and deposits.

6.2 Desktop Study – Institute for Archaeologists (revised 2011)

This desktop study has been produced in line with archaeological standards, as defined by the Institute for Archaeologists (2014). A desktop, or desk-based assessment, is defined as being:

“a programme of study of the historic environment within a specified area or site on land, the inter-tidal zone or underwater that addresses agreed research and/or conservation objectives. It consists of an analysis of existing written, graphic, photographic and electronic information in order to identify the likely heritage assets, their interests and significance and the character of the study area, including appropriate consideration of the settings of heritage assets and, in England, the nature, extent and quality of the known or potential archaeological, historic, architectural and artistic interest. Significance is to be judged in a local, regional, national or international context as appropriate”. (CiFA 2014)

7. METHODOLOGY

7.1 Desk-Based Assessment

7.1.1 Archaeological Databases

The Kent Historic Environment Record (HER) provides an accurate insight into catalogued sites and finds within both the proposed development area (PDA) and the surrounding environs of Queenborough. The Archaeology Data Service Online Catalogue (ADS) was also used. The search was carried out within a 500m radius of the proposed development site and relevant HER data is included in the report. The Portable Antiquities Scheme Database

(PAS) was also searched as an additional source as the information contained within is not always transferred to the local HER.

7.1.2 Historical Documents

Historical documents, such as charters, registers, wills and deeds etc., were considered not relevant to this specific study.

7.1.3 Cartographic and Pictorial Documents

A cartographic and pictorial document search was undertaken during this assessment. Research was carried out using resources offered by Kent County Council, the Internet and Ordnance Survey Historical mapping (Figs. 3-12).

7.1.4 Aerial Photographs

The study of the collection of aerial photographs held by Google Earth was undertaken (Plates 1-7).

7.1.5 Geotechnical Information

To date, no known geotechnical investigations have been carried out at the site.

7.1.6 Secondary and statutory resources

Secondary and statutory sources, such as regional and periodic archaeological Studies are considered appropriate to this type of study and have been included within this assessment where necessary.

8. RECENT ARCHAEOLOGICAL INVESTIGATIONS

8.1 The report has accessed various sources of information to identify any known heritage assets, which may be located within the vicinity of the Proposed Development Area.

Archaeological investigations, both recent and historic have been studied and the information from these investigations has been incorporated into the assessment.

8.2 Archaeology

8.2.1 The site is located in the Stour Paleolithic Character Area (44), in a conservation area that encompasses the north and south bank of Queenborough Creek and within the site of the Scheduled Ancient Monument of Queenborough Castle (Fig.20 & 22).

In 1991 trial trenching was carried out to the school car park area just north of the PDA, revealing evidence of the C19th and C20th century schools or a structure that pre-dated them. The edge of a large feature was also recorded thought to be the inner edge of the moat, the robbing of the outer wall or an inner moat (EWX6616).

In 2005 a Geophysical survey (EKE9244) was carried out on Castle Green, followed by an evaluation by Channel 4's Time Team on behalf of Videotext Communications Ltd (NGR 59122 17216). Six trenches were excavated, encountering medieval foundations to five of the six trenches, robber cuts to four of the trenches, the moat in two trenches, medieval features and a possible metallised surface.

Re-deposited material from the demolition of the castle in the 1650s and the demolition of the Victorian pump-house overlaid the medieval features.

Finds comprise of 21 sherds of pottery from the medieval and post medieval period of Shelley and Sandy/Shelley wares C11th-13th and London-type ware C12-13th, coarse redwares and modern stonewares, CBM of brick and roof tile, fired clay, clay pipe stem and bowl heel with makers mark (?/R), post-medieval window glass, worked stone and moulding, a silver cufflink, copper alloy coins, tokens, buttons, buckles and a cutlery handle, one iron and one lead musket ball, iron nails and lead window case fragments, animal bone with butchery marks and marine shell of oyster, mussel, cockle and whelk were recovered. Two fragments of stone ball were found, 170mm diameter and a weight of 10kg that may relate to ammunition for cannon, catapults or trebuchets. The geophysical survey and the evaluation established a plan of the castle (Fig.13-14) that suggests that the playground and the proposed extension are sited on the moat, the outer ringwall and the inner rotunda and the remains of a modern air raid shelter (Wessex Archaeology, Re: 59470.01, January 2006/EKE9245).

Little is known of the earthworks noted on the OS maps of 1866 and 1898; a 'Camp (Remains of)' is noted as a small oval earthwork feature (TQ914721) to the north east of the castle, a large rectangular earthwork feature (TQ914719) to the southeast (*W.M. Flinders Petrie, 1880*) and a long linear feature 'The Old Counter Wall' is to the northeast of the town.

While there is archaeological evidence for the prehistoric period, Bronze Age, Iron Age Roman and Anglo Saxon period elsewhere on the island, records at Queenborough appear to begin from the medieval period.

The surrounding area is well documented in the form of Desk Based Assessments (EKE10278, EKE12129), a Historic Landscape and Seascape Characterisation (EKE13239), a Photographic survey of the buildings at the shipyard (EKE12411) and a field survey (EWX8091).

(Appendix I, Fig.13-22)

8.2.2 0-100m Radius:

There are no recorded events within this distance.

8.2.3 100-200m Radius:

An evaluation carried out in 2006 by SWAT archaeology, at Castle Street, c.150m northeast of the PDA, uncovered possible medieval field systems (EKE9284).

8.2.4 200-300m Radius:

An excavation carried out in 1977 by Kent Archaeological Rescue Unit, c.250m east of the PDA, discovered a moated site (EKE4055).

8.2.5 300-400m Radius:

A watching brief on test pits carried out in 2012 by Archaeology South East, at South Street, c.350m north west of the PDA, produced a negative result ((EKE11560).

8.2.6 400-500m Radius:

An evaluation carried out in 2005 by Alan Ward, at South Street, c.400m west of the PDA, uncovered two C19th walls (EKE9078).

8.2.7 Established stratigraphy

Excavations at Queenborough Castle mound provided a concise stratigraphy that encountered natural London Clay at a depth of between 0.25m - 1.5m. On the outer southeast edge of the green, crossing the ringwall and the moat, natural was encountered at a depth of 0.10 - 0.80 (Wessex Archaeology, 2011).

9. ARCHAEOLOGICAL AND HISTORICAL DEVELOPMENT

9.1 Table of Historical Periods

Paleolithic	c. 500,000 BC – c.10,000 BC
Mesolithic	c.10,000 BC – c. 4,300 BC
Neolithic	c. 4,300 BC – c. 2,300 BC
Bronze Age	c. 2,300 BC – c. 600 BC
Iron Age	c. 600 BC – c. AD 43
Romano-British	AD 43 – c. AD 410
Anglo-Saxon	AD 410 – AD 1066
Medieval	AD 1066 – AD 1485
Post-medieval	AD 1485 – AD 1900
Modern	AD 1901 – present day

Table 1 Classification of Archaeological Periods

9.2 This section of the assessment will focus on the archaeological and historical development of this area, placing it within a local context. Each period classification will provide a brief introduction to the wider landscape (500m radius centered on each site of the PDA), followed by a full record of archaeological sites, monuments and records within

the site's immediate vicinity. Time scales for archaeological periods represented in the report are listed on page 19 in **Table 1**.

9.3 Introduction

The Archaeological record within the assessment area is diverse and should comprise possible activity dating from one of the earliest human period in Britain through to the modern period. The geographic and topographic location of Queenborough is within a landscape that has been the focus of trade, travel, settlement, industry and communication since the Paleolithic.

9.4 History of the Locality

9.4.1 The Isle of Sheppey or *Sceapige* meaning 'Isle of sheep', located just off the northern coast of Kent and 46 miles east of London. It is an island of some 36 square miles that was originally three islands, the Isle of Sheppey, the Isle of Harty and the Isle of Elmley, until the channels between them became silted and the islands joined. A large part of the island is made up of marshland, which provides grazing for sheep and the islands inhabitants, historically insulted by the term '*swampies*'; they have now adopted the phrase as a sense of identity.

9.4.2 The Island is the first land mass encountered on the south bank of the Thames and Medway estuaries and was of strategic importance; Queenborough is located on the west of the island where the ground is higher and more suitable for occupation.

9.4.3 Eastchurch, some 7km east of Queenborough is the site of a complex of Neolithic causewayed enclosures, Bronze Age enclosures and cremations and Iron Age enclosures with four-post structures (Allen *et al.* 2008). The foreshore of Minster has produced finds of a Bronze Age palstave, spearhead and sickle and an Iron Age currency bar. A hoard of some 2,500 Roman coins dating to the third century, was found at Minster, 4km east (Coles *et al.* 2003, 5; TQ97SE23) and a late Bronze Age/Early Iron age enclosure is recorded under the Minster Abbey (Philip and Chenery 1998) and more than 50 graves in the churchyard date to

the Anglo Saxon period (Philip and Chenery 1998, 10-12; Richardson 2005, 57) and 5th century settlement activity has been recorded within the local vicinity (TQ97SE41).

A complex of Bronze Age barrows and cremation burials, land divisions and field systems and later Iron Age to Anglo Saxon settlement is located at Shrubsoles Hill, 2km northeast.

9.4.4 Following the Roman withdrawal of 400AD, raids from Germanic tribes gradually changed to invasion and finally settlement.

In 675AD the Anglo Saxon Queen *Seaxburga* founded a monastery for seventy-seven nuns and built Minster abbey at *Cyningburh* or 'Kings castle' or 'King's Borough', now Minster.

The Saxon settlement was part of Wessex and annual courts were held there.

It is about this time that the settlement of Bynne or Bynnee, derived from the Old English *binnan ea* meaning 'within the river' and probably referring to its position within the Swale, was founded in the area of Queenborough.

9.4.5 In 853AD the Viking raids began; Sheppey was ravaged and the Abbey and monastery plundered. The island became a winter camp and in 893AD and 897AD the invaders returned with three hundred and fifty ships and records state that the abbey was greatly damaged and the prioress and nuns were cast out and many murdered. Haesten, the leader of the raiders had earth works built at Minster, Eastchurch and Bynne. The Vikings were finally repelled in the C11th.

9.4.6 Following the Norman Conquest, Sheppey was split into manors and Bynne became part of the manor of Rushenden.

9.4.7 In 1365AD, during a period of truce in the Hundred Years War with France and at a time when the Black Death was ravaging the country, King Edward III built a castle at Bynne. At this time the Swale was a safer route for ships travelling between Europe and the South Coast, where they could stop at Dover and follow the coast to the island rather than

through the open waters of the English Channel where they could be exposed to the bad weather of the North Sea.

9.4.8 The fortress was built on the site of the earlier but smaller Castle of Sheppey. It was built from a design by William of Wykeham, the King's Chief Architect, Keeper of the Privy Seal and Lord Chancellor and later Bishop of Winchester. William also designed Windsor Castle and his designs were thought to have influenced the castles at Walmer and Deal.

At least two houses were demolished in order to build the new castle. It was modeled on a French style chateau and built in a round and symmetrical design, the only true concentric castle in England. It was designed to defend against and make the best use of gunpowder artillery, the circular walls built to withstand cannon fire.

The castle was built of six towers connected by a curtain wall within a circular rotunda. The wall was lined with two-storey apartments of 40 rooms and 407 windows that faced onto a circular courtyard and central well. The rotunda and outer ward was surrounded by a second curtain wall from which two gateways progressed, the main gate at the west and a postern to the east through drawbridges that spanned a moat. The castle, therefore, had several lines of defence; the moat, the outer gateway, the inner gateway, the rotunda, a third gateway to the courtyard and compartmentalized apartments, along with soldiers armed with gunpowder, stone throwing machines and trebuchets.

9.4.9 Prior to the construction of the castle the settlement was no more than a small fishing hamlet but the King's interest transformed it into a flourishing medieval port with a high street running westwards from the main gate of the castle towards the banks of the nearby Swale and the Tremsethg Bridge connecting the island to the mainland. The bridge was later lost to a tidal wave and never replaced and the journey was made instead by boat or ferry.

The King renamed the town *cwenburgh* meaning 'Queens Borough' or 'Queens Castle', in honour of his wife Queen Philippa of Hainault and the newly built medieval town became a Royal Borough with a governing body of a Mayor and two Bailiffs. It was laid out on a grid type system of tenement plots along a high street with a church, a harbor and a water mill.

Two markets were held weekly on Mondays and Thursdays and two annual fairs on the *Eve of our Lady* and the *Feast of St James*.

In 1368 the wool staple was transferred from Canterbury to Queenborough and it became an important wool export town, one of the only two places in Kent (also Sandwich) through which all the exported wool was compulsorily directed, providing significant Crown Revenue.

9.4.10 The wool staple was removed in 1378AD and in 1382AD an earthquake measuring 5.75 on the Richter scale brought waves that damaged ships in port and caused damage to both the church and castle. The decline in trade and Revenue from the wool exports sent Queenborough into decline it became once again a small town of fishermen and oystermen.

9.4.11 In 1450AD the castle saw military action for the first and last time in its history. The loss of Normandy in 1449 prompted a French raid on Queenborough in 1450AD, when the castle was attacked and the houses burnt to the ground. The debt incurred from the years of war with France and the corruption and abuse of power by the King's advisors began a revolt, led by Jack Cade, against the government. Following the French attack, the revolt was particularly popular in Sheppey and ten local men joined Jack Cade in unsuccessfully storming Queenborough castle.

9.4.12 In 1532 Henry VIII was sumptuously entertained at the castle by Sir Thomas Cheyne resulting in the castle being extensively altered and renovated. By 1545, the French invasion fleet was moored at Le Havre and the castle's fabric was strengthened and its armament renewed during the improvements to the defence of the seacoast, however, it was by then little more than a pleasant home for the Constable.

9.4.13 The castle had remained popular with Henry VIII and this continued through the reign of Queen Elizabeth. In 1582 Elizabeth I was entertained at the castle and a grant was made to further strengthen the castle. In 1588 The English fleet were moored here prior to the attack of the Spanish Armada and following the success of the battle a captured Spanish treasure ship with 50,000 golden ducats was brought to the town and her commander and crew imprisoned in the castle until 1591.

9.4.14 Despite the castle's royal popularity, the town being granted a charter in 1571 to send two members of parliament (despite only having 70 voters) and the introduction in 1579AD of the first copperas factory in England, the town never recovered its former prosperity and the population was mostly employed in local oyster fishery.

In the C17th King Charles I had the town re-incorporated under the title of "Mayor, Jurats, Bailiffs and Burgesses of Queenborough".

9.4.15 The castle had been repaired by Richard II, Henry VIII and Elizabeth I, but was never used as a military garrison and other than the French attack and the Jack Cade skirmish of 1450AD, had never seen action. In 1650AD, towards the end of the C17th interregnum, the parliamentarians seized it. The survey described a circular, stone, capital message of six towers and out-offices, lying on 3 acres, within the common of Queenborough marsh. The castle had a lead roof and in the centre a round court paved with stone around a great well of 4' 8" diameter built from Portland stone. The curtain wall apartments held twelve rooms below ground and forty rooms above. A great court surrounded them, which was in turn encircled by a great stone wall with a moat beyond. It was considered unsuitable for repair and was sold to Mr. John Wilkinson, who demolished it and shipped the stone to London to pave the streets around Whitehall. The land was restored to King Charles II on his reinstatement.

9.4.16 Ironically, just seventeen years later, while the British fleet was laid up in Medway, the Royal Navy suffered its worst defeat in history. The Dutch captured the new Sheerness fort and invaded Queenborough. The invasion lasted only a few days but many ships were destroyed and the Royal Charles, an 80-gun, first-rate, three-decker ship of the line of the English Navy, that had bought King Charles II back from the Dutch Republic and taken part in the Second Anglo-Dutch War, was captured. The Dutch left after the signing of the Treaty of Breda and Queenborough remains the only town to have had a foreign flag flying over it. The town was officially handed back in a ceremony in 1967

9.4.17 Following this event there were dramatic improvements in the naval defences of the Medway, which helped to strengthen the economy of the town.

9.4.18 The parish church is a GII listed building built by Edward III at the same time as the castle. It was originally dedicated to St James, but becoming confused with the church at Warden it was rededicated to the Holy Trinity in the C15th. The church was built within the parish of Minster and was therefore a Chapelry of Minster Abbey and following the dissolution it fell under the jurisdiction of the Minster parish church. In 1607 King James I made Queenborough an independent parish and the townspeople were able to conduct their own christenings, marriages and funerals and use the churchyard for burials. In 1636 the parishioners paid to have buttresses added to the tower and in 1667 Anthony Bartlett cast and hung five bells in the tower. In 1721 Thomas King carried out a restoration including raised paving, a new gallery at the west end and the painting of the ceiling by an unknown Dutch or Flemish artist. In the late C19th the church was again restored with new windows and interior fittings.

9.4.19 In 1723 the well of the castle was opened once again, this time by commission of the navy for the Dockyard workers at Sheerness and the depth reported at 200ft. It was bored for three days to a further depth of 81 feet before fresh water was found. The corporation of Queenborough fought and won ownership of the well and the Navy was forced to dig a new well at Sheerness.

9.4.20 By 1724 the town was in further decline, and in 1729 lost its privilege of its freemen being able to vote in the parliamentary elections. In the early C19th the Yantlet creek and the Wantsum channel became silted, directing traffic through the Thames Estuary to London. Rochester and Chatham had undergone considerable growth and Sheerness, better positioned than Queenborough, had become a Naval port with a new fort and harbour. Queenborough had lost its importance, becoming a much deprived small fishing town of traders, alehouse owners and oyster catchers and the town became known for its lawlessness, smuggling and corruption.

The Royal Navy became less prominent on the River Medway and was replaced by a prison hulk, which disposed of their dead on the salt marsh at the mouth of the Swale known as 'Dead Man's Island'.

In 1820AD the Mayor and his Officers attempted to take control of the oyster fishery, the oystermen protested vehemently and in 1827AD a fisherman named Edward Skey won against them in court. In retaliation, the Mayor closed the fisheries.

Records from 1815-20AD show that, owing to the dishonesty of the Mayor and his Officials, the Corporation of Queenborough was in considerable financial difficulty. By the middle of the C19th the corporation was bankrupt and an act of parliament vested much of the towns business in the hands of trustees who refinanced the economy with the sale of land, property and the ancient oyster fishery. The oyster trade was corrupted by smuggling and open to bribery and the Borough lost its franchise in the Reform Act of 1832.

9.4.21 The Victorian and Edwardian expansions rescued the town and new industries began to settle in the town. In 1882 a chemical and copperas factory producing sulphuric acid, and later a range of organic manures, super sulphate, sulphate of ammonia, bone glue, tallow and de-gelatinised bone, in 1860 two cement works and by 1897 Chalk Wharf was built for the cement company, in 1908 a sanitary wear factory, in 1909 Queenborough Wharf Company was bringing in coal and in 1910 a glass factory was producing bottles. Maps dating to 1933 show glue works, chemical works, glass works, and a steel rolling mill.

9.4.22 Although plans for a new bridge had begun in 1809, it wasn't until 1860 that the Kengsferry Bridge was built, firstly as a railway crossing until 1862 when it was opened to traffic. In 1860 the Queenborough Railway Station opened on the London Chatham and Dover Railway's, Sittingbourne to Sheerness line. Four separate lines, one of which cut through the eastern side of the castle green, connected the railway to the wharfs and piers of Queenborough. The well was re-opened again in 1860 and confirmed as 271 ft. deep and a C19th pump-house was built in the centre of the site on top of the medieval well, now marked by a concrete platform. In 1864 Queenborough Elementary School was built on the western side of the castle green.

In 1875 the Queenborough Pier was built and in 1876 Queenborough became a Ferry Port and operated until 1927 with the exception of breaks due to pier fires and World War I.

The cargo steamers were diverted to London and services at Queenborough did not resume until 1885 when following damage to the railway in 1897 the service was transferred to Dover. In 1900 another pier fire caused the service to be moved to Port Victoria, where a ferry service joined a rival railway line (London, Chatham and Dover Railway) to London. The two railways later joined to become the South Eastern and Chatham Railway.

9.4.24 Queenborough was an assembly point for the 'little ships' of Dunkirk and the port was used by the Admiralty in WWII as a base for Thames minesweepers.

9.4.25 In 2005 Time Team and Wessex Archaeology carried out an excavation at the castle grounds, calculating that the rotunda would have been c.40m radius, which agreed with the historical descriptions of the castle.

A focused history of the development site is examined in the next section.

9.5 Regression 1869 – 1992

9.5.1 Historic maps

9.5.1.1 In an extract from the Topographical Map of the County of Kent by A Drury & W Herbert 1769 (front cover), the PDA is located within the grounds of the castle which lays on the north bank of Queenborough Creek, an inlet of the Swale and Medway River. The main west gatehouse of the castle and the south postern both join the main road that leads north into Queenborough high street and south past the castle and then east to Borrow Hill and Minster. The town is laid out on a grid type system with the parish church of the Holy Trinity on the eastern side. One road leads north to Blackstaks and another west and then south to the King's Ferry.

9.5.2 The Ordnance Survey Maps

9.5.2.1 OS County Series 1863-68 1:2500

The PDA is located within the Castle Green on the southwestern edge, sited over the path leading southwest from the castle walls, the moat to the north side and the ringwall to the east. A second path leads from the northwest of the castle towards the New School that has been constructed to the northwest of the mound and there is possibly a third entrance to the castle from the southeast. The northwest and southwest moat arms survive. An Engine House has been built over the castle well at the centre of the mound and Queenborough Station and the Sittingbourne to Sheerness railway line cut through the east side of the mound to cross the river. The town is well established around the High Street with the Holy Trinity church, the Parsonage and the Mill House to the north side and the Quay and the Railway Tavern to the south. A Limekiln is located just outside the town on the bank of the river and a road leads from the town to the sluice. A 'Camp (Remains of)' is noted as a small oval earthwork feature (TQ914721) to the north east of the castle and a large rectangular earthwork feature (TQ914719) to the southeast (W.M. Flinders Petrie, 1880)(Fig.3-4).

9.5.2.2 OS County Series 1898 1:2500

The road leading west from the castle gate is no longer marked and the southwest arm of the castle moat is all that survives. A new road has been constructed over the original northeast path to access the pumping station. The railway has expanded a raised bank into the castle mound and has installed a cattle pen to the west side of the line. The church has extended the graveyard and the Railway Tavern has become the Queen Philippa as a reference to the town's origins. A wharf has been created on the north bank of the river just east of the quay and the High Water of Ordinary Spring Tides (HWMOT) is marked. The high street has extended south to meet the industrial area where a tar works and cement works have been constructed. To the northeast of the town is a long linear earthworks marked as 'The Old Counter Wall' (Fig.5).

9.5.2.3 OS County Series 1908 1:2500

The pump house to the centre of the castle mound has been extended northeast. The town has acquired a Fire Engine House and a Post Office and three rows of terraced housing and a new congregational church have been constructed around Castle Street to the north of the castle mound. The cement works and industrial area has expanded to the south and a tramway now crosses the river at the sluice point. A new branch of the railway leads northeast past the 'Old Counter Wall' feature and new terraced housing has been constructed over the rectangular 'camp' feature to the east (Fig.6).

9.5.2.4 OS National Grid 1933 1:2500

The pump house to the centre of the castle mound is now one building and the moat has all but disappeared. The town has acquired a cinema, a mortuary, a church hall, allotment gardens and new semi-detached housing to the north of the High Street. The industrial area has expanded further with a glass works, the cement factory has been redeveloped and a Club is now within the site. The housing development to the east has expanded west towards the railway and north and is beginning to encroach on the oval feature marked as 'camp' (Fig.7).

9.5.2.5 OS National Grid 1956 1:1250

Two new structures have appeared on the southwest edge of the castle mound marked as a revision point, possibly the air raid shelter. Further housing has been added northwest of the castle and allotment gardens have been developed east of the railway line. The industrial area has continued to grow and now boasts a glue and chemical works, a mineral railway, an iron foundry a store depot and the headquarters of St John's Ambulance Brigade. The 'Old Counter Wall' is still in situ and the oval earthworks previously marked as 'camp' is now marked as a 'moat' (Fig.8).

9.5.2.6 OS National Grid 1971-73 1:1250

The pumping station and air raid shelter have been removed from the castle mound.

Housing development has continued north of the High Street and the industrial area to the south has continued to change and expand; St John's Ambulance Brigade Headquarters have been replaced with a Safety Glass Works and a transport depot and boat repair yard are noted on the Wharf (Fig.9).

9.5.2.7 OS National Grid 1978-79 1:1250

The castle mound remains unchanged but the housing to the east of the railway line has been redeveloped into medium density semi-detached housing set around fashionable cul-de-sacs (Fig.10-11).

9.5.2.8 OS National Grid 1994 1:1250

The housing to the east of the railway line has encompassed the earthworks previously marked as 'moat' and as a reminder one of the roads has been named 'Moat Way'. The industrial area to the south has been redeveloped to the west as 'Klandyke industrial estate' (Fig.12).

9.6 Aerial photographs

9.6.1 1940

The PDA is located on the southwest edge of the castle green, between the southern boundary of the school grounds and the air raid shelter. The road that leads into town bounds the green and its path at the point of the PDA remains largely unchanged (Plate 1).

9.6.2 1960

The PDA and surrounding area remains unchanged (Plate 2).

9.6.3 1990

The pump house, access road and the air raid shelter have been removed from the mound.

A concrete base marks the position of the pump house, but the air raid shelter is visible only by a scar in the ground. A large industrial building has been constructed south of the main road but would have had little impact on the PDA (Plate 3).

9.6.4 2003

The PDA and the surrounding area remain unchanged (Plate 4).

9.6.5 2007

A small rectangular base or structure has appeared to the southwest edge of the mound not far from the PDA. It is possible to see the line of the moat in the ground and the PDA clearly falls at a break point in the moat, suggesting that overlies one of the access roads to the castle (Plate 5).

9.6.6 2011

The small rectangular base or structure has been removed and a rectangular children's playground has been constructed to the south side of the PDA (Plate 6).

9.6.7 2015

The PDA and the surrounding area remain unchanged, although some attempt has been made with landscaping to show the position of the inner and outer walls of the castle (Plate 7).

9.7 Scheduled Monuments; Listed Buildings; Historic Parks & Gardens and Conservation Areas

9.7.1 There one monument recorded within the confines of the proposed development area (PDA). One Place, one Building, four Find Spots, twelve Events, eighteen Monuments, nineteen Maritimes, twenty two Listed Buildings, are recorded within a c.500m vicinity of the PDA; no listed building shares intervisibility with the PDA (Fig.15-17).

9.8 Setting of Listed Buildings

9.8.1 One of the tasks of the site visit was aimed to identify any designated heritage assets within the wider context of the PDA in accordance with The Setting of Heritage Assets – English Heritage Guidance (English Heritage 2011). This guidance states that “setting embraces all of the surroundings (land, sea, structures, features and skyline) from which the heritage asset can be experienced or that can be experienced from or with the asset” (The Setting of Heritage Assets, English Heritage 2011).

9.8.2 There is one Grade B listed building within the assessment area:

The Holy Trinity parish church, c.150m west of the PDA, has a Norman tower that dates to C11th. In the C14th, Edward III built a church around the Norman tower in his new plan for the town of Queenborough. The church suffered damage from an earthquake and Viking and Dutch raids and was rebuilt in C17th (TQ97SW1161).

9.8.3 There are twenty-one Grade II Listed Buildings within the assessment area:

The listed buildings are found within the High Street area and date to the post medieval expansion that occurred when industrial industries moved into the town. The Castle Inn (TQ97SW1181), Church House that is alleged to have belonged to Lady Hamilton (TQ97SW1163), the Vicarage (TQ97SW1159) and the named houses of Fig Tree House, Mill House, Swale House and Evans Row as well as thirteen houses of two and three storey are recorded. A monument to the Greet family with coat of arms and obelisk is recorded in the churchyard (TQ97SW1161).

10. ARCHAEOLOGICAL POTENTIAL

10.1 Walkover Survey

10.1.1 The walkover survey is for the purpose of:

1. Identifying any historic landscape features not shown on maps
2. Conducting a rapid survey for archaeological features

3. Making a note of any surface scatters of archaeological material
4. Constraints or areas of disturbance that may affect archaeological investigation

10.1.2 The walkover survey is not intended as a detailed survey but the rapid identification of archaeological features and any evidence for buried archaeology in the form of surface scatters of lithic or pottery artifacts.

10.1.3 The site was formerly the medieval Queenborough castle and a walkover survey produced no archaeological evidence.

10.1.4 The PDA consists of a single plot that extends north of the existing play area within the Castle Green.

10.2 Kent Historic Environment Record

See Appendix I & Figs.15-22

10.2.1 Paleolithic, Mesolithic, Neolithic and Bronze Age

The Paleolithic period represents the earliest phases of human activity in the British Isles, up to the end of the last Ice Age. The Kent HER has no record from this period within the assessment area, therefore, the potential for finding remains that date to this period within the confines of the development site is considered **low**.

The Mesolithic period reflects a society of hunter-gatherers active after the last Ice Age. The Kent HER has no record from this period within the assessment area, therefore, the potential for finding remains that date to this period within the confines of the development site is considered **low**.

The Neolithic period was the beginning of a sedentary lifestyle based on agriculture and animal husbandry. The Kent HER has no record dating to this period within the assessment area, therefore, the potential for finding remains that date to this period within the confines of the development site is considered **low**.

The Bronze Age was a period of large migrations from the continent and more complex social developments on a domestic, industrial and ceremonial level. The Kent HER has no record dating to this period within the assessment area, therefore, the potential for finding remains that date to this period within the confines of the development site is considered **low**.

10.2.2 Iron Age

The Iron Age is, by definition a period of established rural farming communities with extensive field systems and large 'urban' centres (the Iron Age 'Tribal capital' or civitas of the Cantiaci). The Kent HER has no record of archaeological evidence within the assessment area, therefore, the potential for finding remains that date to this period within the confines of the development site is considered **low**.

10.2.3 Romano-British

The Romano-British period is the term given to the Romanised culture of Britain under the rule of the Roman Empire, following the Claudian invasion in AD 43, Britain then formed part of the Roman Empire for nearly 400 years. There are no Kent HER records from this period within the assessment area, therefore, the potential for finding archaeological features or deposits from this period is considered **low**.

10.2.4 Anglo-Saxon

The Anglo Saxon period saw the division of Roman Britannia into several separate Kingdoms, the Isle of Sheppey falling under the Wessex Kingdom; religious conversion evidenced by the establishment of a religious order at Minster and the arrival of Viking invaders to Queenborough. There are no Kent HER records from this period within the assessment area; therefore, it is reasonable to conclude that the potential for finding remains dating to the Anglo-Saxon period in the PDA is considered **low**.

10.2.5 Medieval

The medieval period saw considerable social and economic change and significant developments in medicine and agriculture. Queenborough witnessed the construction of

the castle and the development of a new medieval town. There are six records in the Kent HER within the assessment area. Queenborough became a Medieval Borough in 1366 (TQ97SW17) when Queenborough Castle was constructed (TQ96SW1). As part of the town plan the Holy Trinity Church, c.150m NW (TQ97SW1162) was reconstructed. Medieval field systems have been identified c.25m north of the castle (TQ97SW87) and Homestead Moat site is recorded c.250m east (TQ97SW2). Metal detecting recovered a copper alloy circular buckle with separate pin c.225m northwest (MKE80074). The potential, therefore, for finding remains dating to the medieval period is considered as **high**.

10.2.6 Post Medieval

The post-medieval period again saw social and economic changes, further developments in agriculture and industrialisation. The town witnessed the demolition of the castle and the decline of the town followed by a move towards recovery from industrialisation of the riverbank towards the end of the period. There are fifty-one records held at the Kent HER from this period within the assessment area. Queenborough Station was built in 1860 by the Sittingbourne and Sheerness Railway Company (TQ97SW50) cutting through the east side of Castle Green; The Sheppey light railway branching off c.350m north east from Queenborough to Leysdown opened in 1901 and closed in 1950 (TQ97SE1071).

A pump of unknown purpose with a circular earthwork is marked on a 1728 chart of Sheerness, c.150m east (TQ97SW1013). The site of the Copperas factory that opened in 1579 is c.450m west (TQ97SW46). In 1886 Josiah Hall turned the copperas factory into a glue and chemical works; he also opened a tar works in 1900 (TQ97SW47) and the cement works in 1882 (TQ97SW52) both c.100m south. The Quay (TQ97SW1078) and Chalk Wharf (TQ97SW1079) and an enclosure (TQ97SW1066) are marked on the OS map c.350m west. Seventeen houses, a town hall (TQ97SW1164) c.375m west, a grave monument to the greet family (TQ97SW1161) are recorded c.150 - 375m west and seventeen wrecks are recorded c.300m west. A copper alloy button (MKE80073) a double loop buckle (MKE80076) and a C17th lead alloy toy pocket watch (MKE80075) were found by metal detector c.225m northwest. Therefore, the potential for finding remains dating to this period is considered **high**.

10.2.7 Modern

The modern period was a time of significant development in travel networks, science, politics, warfare and technology. In Queenborough, the arrival of the railway and the development of the ferry services had a significant impact on the expansion of the town. There are seven Kent HER records within the assessment area from this period. A Wharf associated with tar works is located c.150m southwest (TQ97SW1121), the glassworks (TQ97SW89), c.350m southwest and the pottery works (TQ97SW90), c.450m southwest. Two barges, both sunk in 1915, the Clara (TQ97SW35) and the Annie (TQ97SW40) are sited c.200m northwest and sea defences created by the barge Surprise are c.350m west (TQ97SW35). The Sheppey light Railway (TQ97SW1071) is also recorded. Therefore, the potential for finding remains dating to this period is considered as **high**.

10.2.8 Farmsteads

There are no farmsteads recorded in the assessment area.

10.2.9 Undated Records

There is one undated record within the assessment area. A rectilinear enclosure with internal division is sited c.250m southeast (TQ97SW80).

10.3 Summary of Potential

10.3.1 The PDA is located within the site of the medieval Queenborough Castle. The town, once prosperous in the medieval period went into decline in the early post-medieval period. Towards the latter part of this period the development of the industrial area and the introduction of the railway and ferry services prompted some recovery. Post-medieval development on the Castle Green was in the form of the railway, the school and the pump house. Modern development was the air raid shelter and the playground.

The PDA lies on the southwest edge of Castle Green, in the area of one of the roads that led to the castle gate, the moat and the ringwall. It joins the north boundary of the existing children's play area set between the boundary of the C19th school grounds and the site of a C20th air raid shelter and therefore it is possible that the site has suffered impact from the construction of the school car park, the air raid shelter and the playground. The castle was sold and demolished in 1650, the stone robbed out. Excavations in 2005 by Wessex

Archaeology and Time Team confirmed that little survives of the stone construction, although some foundation, medieval features and medieval and post medieval finds were recorded (EKE9245). The moat is no longer in situ but would have fallen on the north side of the PDA. If archaeological features have survived the development process they may be in the form of the moat cut, the road leading to the castle and the foundation of the ringwall or the modern air raid shelter.

10.3.8 The desk-based assessment has considered the archaeological potential of the site. Archaeological investigations in the vicinity, map research, the historical environment record results and recent archaeological investigations have shown that the PDA may contain archaeological sites and these can be summarised as:

- Prehistoric: **Low**
- Iron Age: **Low**
- Roman: **Low**
- Anglo-Saxon: **Low**
- Medieval: **High**
- Post-Medieval: **High**
- Modern: **High**

11. IMPACT ASSESSMENT

11.1 Introduction

Cartographic Regression, Topographical Analysis, and Historic Research have provided evidence for the historic use of the site. By collating this information, we have assessed the impact on previous archaeological remains through the following method of categorisation:

- **Total Impact** - Where the area has undergone a destructive process to a depth that would in all probability have destroyed any archaeological remains e.g. construction, mining, quarrying, archaeological evaluations etc.

- **High Impact** – Where the ground level has been reduced to below natural geographical levels that would leave archaeological remains partly in situ either in plan or section e.g. the construction of roads, railways, buildings, strip foundations etc.
- **Medium Impact** – Where there has been low level or random disturbance of the ground that would result in the survival of archaeological remains in areas undisturbed e.g. the installation of services, pad-stone or piled foundations, temporary structures etc.
- **Low Impact** – Where the ground has been penetrated to a very low level e.g. farming, landscaping, slab foundation etc.

11.2 Historic Impacts

11.2.1 Cartographic regression (8.5), Topographic analysis (3.2) and Historical research (8.4) indicate that the PDA was the site of the medieval Queenborough Castle which was demolished and robbed for stone in the C17th and is in close proximity to the C20th school car park and air raid shelter and C21st playground, therefore, previous impacts to archaeological remains from demolition are considered to be **high**.

11.2.2 Agriculture became gradually more intense over time and by the modern era it was mechanised. Although the farming process rarely penetrates below the upper layers of the ground, plough truncation can have a significant impact on preserved shallow deposits. The development area was the site of the medieval Queenborough Castle and not subject to cultivation, therefore, the damage to archaeological remains from the agricultural process is considered to be **low**.

11.3 Summary of Impacts Both Historic and Proposed

11.3.1 The PDA was the site of the medieval Queenborough Castle constructed 1366AD. In 1650AD it was demolished and the stone removed for sale. Excavations in 1991 by CAT and in 2005 by Wessex Archaeology and Time Team have shown that little stonework survives

from the demolition and the castle was destroyed to basement and foundation level. The ringwall was removed at the same time as the castle and the moat was filled in in the 19th and 20th centuries. The PDA may be sited over one of the entrance roads to the castle but this may have been damaged or destroyed by the construction of the school car park, the air raid shelter and the new playground.

11.3.2 Excavations in 2005 by Time Team confirmed the level of natural geology at the site. London Clay was encountered at a depth of between 0.25m - 1.5m over six trenches.

On the outer southeast edge of the green, crossing the ringwall and the moat, natural was encountered at 0.10 - 0.80 (Wessex Archaeology, 2011). A Geophysical survey was carried out in 2005 (Fig.13).

12. MITIGATION

The purpose of this archaeological desk-based assessment was to provide an assessment of the contextual archaeological record in order to determine the potential survival of archaeological deposits that may be impacted upon during any proposed construction works.

The assessment has generally shown that the area to be developed is within an area of **high** archaeological potential and the periods that have the highest potential for survival are the Medieval, post-medieval and Modern period. Archaeological investigations within the site have confirmed that the castle foundations remain in situ but have been damage by the removal of stone for re-sale in the C17th and that the depth of natural geology is between 0.25m - 1.5m over six trenches (Wessex Archaeology, 2011).

13. OTHER CONSIDERATIONS

13.1 Archive

Subject to any contractual requirements on confidentiality, two copies of this desk-based assessment will be submitted to Kent County Council within 6 months of completion.

13.2 Reliability/Limitations of Sources

The sources that were used in this assessment were, in general, of high quality. The majority of the information provided herewith has been gained from either published texts or archaeological 'grey' literature held at EHER, and therefore considered as being reliable.

13.3 Copyright

SWAT Archaeology and the author shall retain full copyright of the commissioned report under the Copyright, Designs and Patents Act 1988. All rights are reserved, excepting that it hereby provides exclusive license to Swale Borough Council for the use of this document in all matters directly relating to the project.

Dr Paul Wilkinson MCIFA

SWAT Archaeology

14. REFERENCES & BIBLIOGRAPHY

IFA (2014) STANDARD AND GUIDANCE for historic environment desk-based assessment

Data provided by Kent HER

National Planning Policy Framework 2012

The Swale Borough Council (North Kent Coast) Local Plan Adopted February 2008

S. Pratt, 1991, Canterbury's Archaeology 1991-1992, Canterbury Archaeological Trust

W.M Flinders Petrie, 1880, Notes on Kentish Earthworks: Archaeologia Cantiana Vol.13, 8, Kent Archaeological Society

Videotext Communications, 2005, Proposed Archaeological Evaluation at castle Green, Queenborough, Isle of Sheppey, Kent (Sam Kent 23030). Unpublished project design.

Appendix I

KHER	Type	Location	Period	Description
EKE10278	DBA	c.300m NE	N/A	1999- wessex archeology- Historic environment of the north kent coast;rapid coastal zone assessment survey.
EKE12129	DBA	c.100m N	N/A	2005- english heritage- appraisal of the history development and built heritage of Guenborough.
EKE13239	HLC	c.300m NE	N/A	historic landscape characterisation and historic sea scape characterisation, hoo peninsula historic landscape.
EKE9244	GS	on site	N/A	2005-GSB prospection, magnetic resistivity and ground penetrating radar survey.
EWX6616	Evaluation	on site	Medieval	1991-Canterbury archeological trust- two shallow slots across the car park area, possibly the iner edge of the moat. The robbing of an outer wall or part of an inner moat.
EWX8091	Field survey	c.300m NE	N/A	2001- Wessex archeology- walk over survey for the north kent coast rapid coastal zone assessment survey faze two.
EKE9245	Evaluation	on site	medieval	2005-wessex archeology- trenching evaluation carried out in 2006 as part of a 'time team' programme
EKE12411	PS	c.500mW	Modern	2012-wessex archeology- photographic survey of buildings at Queensborough ship yard
EKE9284	Evaluation	c.150m NE	Medieval	2006-SWAT archeology- evaluation undertaken at Castle Street recorded possible medieval field systems.
EKE4055	Excavation	c.250m E	Medieval	1977- Kent archeological rescue unit- excavation of a moated site east of Queenborough Castle
EKE11560	WB	c.350m NW	Negative	2012- Archeology South East- watching brief on test pits at south street. Negative result
EKE9078	Evaluation	c.400m W	post medieval	2005- Allan Ward- evaluation at 31 south street uncovered two 19th century walls
TQ96SW1	Monument	on site	medieval-post medieval	Queenborough castle built 1361 by Edward III demolished 1650

TQ97SW2	Monument	c.250m E	medieval	homestead moat site 500ft East of castle irrgeular shaped enclosure with inner bank and outer ditch
TQ97SW50	Building	c.25m E	post medieval-modern	queenborough station built 1860 by Sittinbourne and sheerness railway.
TQ97SW17	Place	c.400m NW	medieval	queenborough medieval borough mentioned in 1368 charter by edward III
TQ97SW27	Maritime	c.200m NW	post medieval-modern	baden powell english sprit sail barge built at gravesend in 1900 (wreck hulk in 1966)
TQ97SW28	Maritime	c.200m NW	post medieval-modern	Frogna lish english sprit sail barge built at fathersham in 1892 (wreck derelict 1934)
TQ97SW29	Martime	c.200m NW	post medieval-modern	James Bills english sprit sail barge built at Milton in 1872 (wreck derelict in 1934)
TQ97SW30	Maritime	c.200m NW	post medieval-modern	Maria english sprit sail barge built it Sittingbourne in 1898 (wreck hulk in 1966)
TQ97SW31	Maritime	c.200m NW	post medieval-modern	Marie-Sophy english sprit sail barge built in sittingbourne 1896 (wreck burnt)
TQ97SW32	Maritime	c.200m NW	post medieval-modern	Monday english sprit sail barge built at Burnham in 1882 (wreck brocken up)
TQ97SW33	maritime	c.200m NW	post medieval-modern	Northampton english sprit sail barge built in sittinbourne by eastwood in 1904 (wreck sunk 1947)
TQ97SW34	maritime	c.200m NW	post medieval-modern	phoenix english sprit sail barge built at fathersham in 1867 (wreck brocken up in 1934)
TQ97SW35	monument	c.350m W	modern	sea deffenses built using sprit sail barge-surprise was bult at Maldon by Howard in 1879
TQ97SW36	maritime	c.200m NW	post medieval-modern	Viola sprit sail barge built in Strood in 1900 (wreck derelict in 1941)
TQ97SW37	maritime	c.200m NW	post medieval-modern	winnie english sprit sail barge built at Murston in 1880 (wreck derelict in 1940)
TQ97SW38	maritime	c.200m NW	post medieval-modern	Georgiana english sprit sailbarge built at Murston by Smeed Dean in 1881 (wreck derelict in 1936)
TQ97SW39	maritime	c.200m NW	Modern	Clara barge sank in a gail on 28th October 1915 2 crew were drowned
TQ97SW40	maritime	c.200m NW	Modern	Annie barge sank 1915
TQ97SW46	monument	c.450m W	post medieval	site of sheppey glue and chemical works formerly copperas works on west streetopened 1579 closed 1886 became glue and chemical works

TQ97SW47	monument	c.100m S	post medieval	site of halls tar works in rushenden lane opened 1876 Josiah Hall also owned the copperas works closed 1900
TQ97SE1071	monument	c.350m NE	modern	Sheppey light railway queenborough to leysdown opened in 1901 closed 1950
TQ97SW52	monument	c.100m S	post medieval	cement works opened by Josiah hall opened in 1882 closed around 1924
TQ97SW1013	monument	c.150m E	post medieval	pump marked on 1728 chart of sheerness within a circular earth work purpose unknown
TQ97SW1102	maritime	c.50m W	post medieval-modern	derelict small boat pre 1946
TQ97SW1072	maritime	c.500m SE	post medieval-modern	derelict barge pre 1946
TQ97SW1073	maritime	c.300m W	post medieval-modern	derelict barge possibly sprit sail barge, the surprise. Built 1879 derelict 1940
TQ97SW1070	maritime	c.300m W	post medieval-modern	derelict barge pre 1946
TQ97SW1068	maritime	c.300m W	post medieval-modern	derelict barge pre 1946
TQ97SW1067	maritime	c.300m W	post medieval-modern	derelict barge pre 1946
TQ97SW1066	monument	c.350m W	post medieval-modern	possible enclosure. Group of mounds shown on OS map
TQ97SW1078	monument	c.300m W	post medieval-modern	queenborough quay marked on OS map
TQ97SW1079	monument	c.450m SW	post medieval	chalk wharf marked on OS map minor structure with travelling crain
TQ97SW1121	monument	c.150m SW	modern	Wharf associated with tar works marked on OS map
TQ97SW1122	monument	c.450m W	post medieval	Wharf associated with glue and chemical works marked on OS map
TQ97SW80	monument	c.250m SE	unknown	rectilinear enclosure 108m by 78m with internal division of unknown date marked on OS map now covered by housing
TQ97SW87	monument	c.25m N	medieval	field systems dated between 8th and 18th century to rear of castle street
TQ97SW1186	listed building	c.450m W	post medieval	grade 2 listed 5 high street 2 storey house
TQ97SW1180	listed building	c.300m W	post medieval	grade 2 listed 77 high street 3 storey house
TQ97SW1181	listed building	c.500m W	post medieval	grade 2 listed the castle inn 2 storey building
TQ97SW1182	listed building	c.500m W	post medieval	grade 2 listed 9 high street 2 storey house
TQ97SW1154	listed building	c.300m W	post medieval	grade 2 listed 79 and 81 high street 2 storey house
TQ97SW1177	listed building	c.150m W	post medieval	grad 2 listed 121 high street 2 storey house
TQ97SW1175	listed building	c.100m W	post medieval	Grade II listed 149 and 151 high street 3 storey house
TQ97SW1167	listed building	c.50m W	post medieval	grade 2 listed 2 storey house

TQ97SW1166	listed building	c.350m W	post medieval	grade 2 listed 20 high street 2 storey house
TQ97SW1165	listed building	c.350m W	post medieval	grade 2 listed 22 high street 2 storey house
TQ97SW1164	listed building	c.375 W	post medieval	grade 2 listed town hall 2 storey building
TQ97SW1163	listed building	c.275 W	post medieval	grade 2 listed church house possibly belonged to Lady Hammlton 2 storey house
TQ97SW1162	listed building	c.150m NW	medieval	grade B listed parish church (14th century) of the holy trinity tower dating to 11th century rebuilt by charles 1st 17th century
TQ97SW1161	listed building	c.150m W	post medieval	grade 2 listed a monument to the Greet family in church yard of holy trinity parish church with coat of arms and obelisk
TQ97SW1160	listed building	c.200m W	post medieval-modern	grade 2 listed fig tree house 2 storey house
TQ97SW1159	listed building	c.175m W	post medieval	Grade II listed the vicarage 2 storey house
TQ97SW1158	listed building	c.175. W	post medieval	grade 2 listed mill house 2 stoery with attic
TQ97SW1135	listed building	c.500m W	post medieval	grade 2 listed swale house 3 storey house
TQ97SW1141	listed building	c.75m W	post medieval	grade 2 listed 161 and 163 high street 2 storey house
TQ97SW1147	listed building	c.350m W	post medieval	grade 2 listed evans row 2 storey
TQ97SW1140	listed building	c.200m W	post medieval	grade 2 listed 83-91 high street 2 storey
TQ97SW1139	listed building	c.200m W	post medieval	grade 2 listed 72 and 74 high street 2 storey
TQ97SW89	monument	c.350m SW	modern	queenborough glass bottle works
TQ97SW90	monument	c.450m SW	modern	queenborough pottery works started 1909
TQ96NW1165	monument	c.450m N	post medieval-modern	isle of sheppey railway opened 1860 7 mile track running from sittingbourne to queenborough peir and crossing dock new extension opened 1883 electrified 1959
MKE80073	find spot	c.225m NW	post medieval	copper alloy button found by MD
MKE80074	find spot	c.225m NW	medieval	copper alloy circulr buckles with separate pin found by MD
MKE80075	find spot	c.225m NW	post medieval	led alloy toy pocket watch late 17th to early 18th century found by MD
MKE80076	find spot	c.225m NW	post medieval	copper alloy double loop buckle frame found by MD



Figure 1: Site location map.

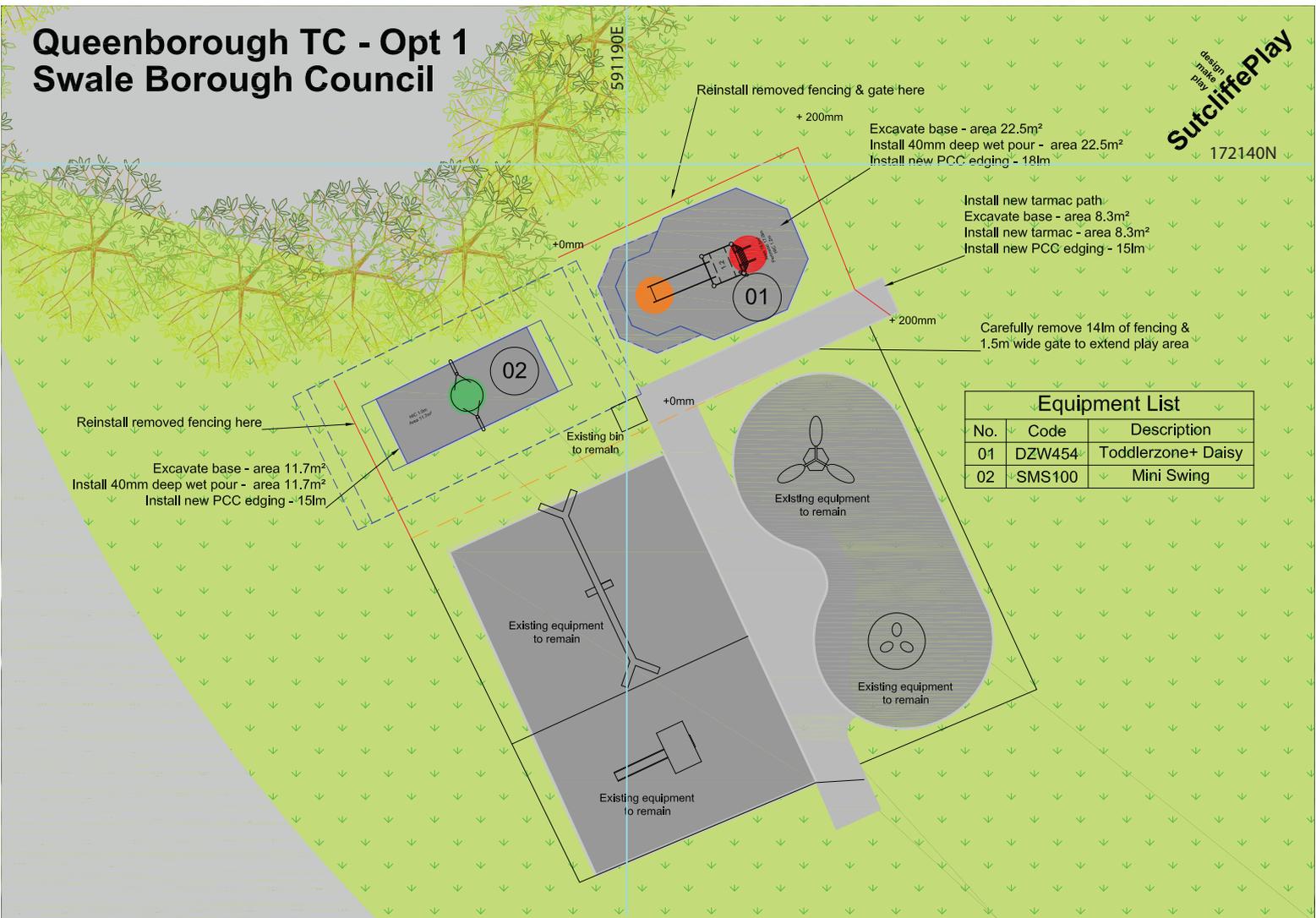
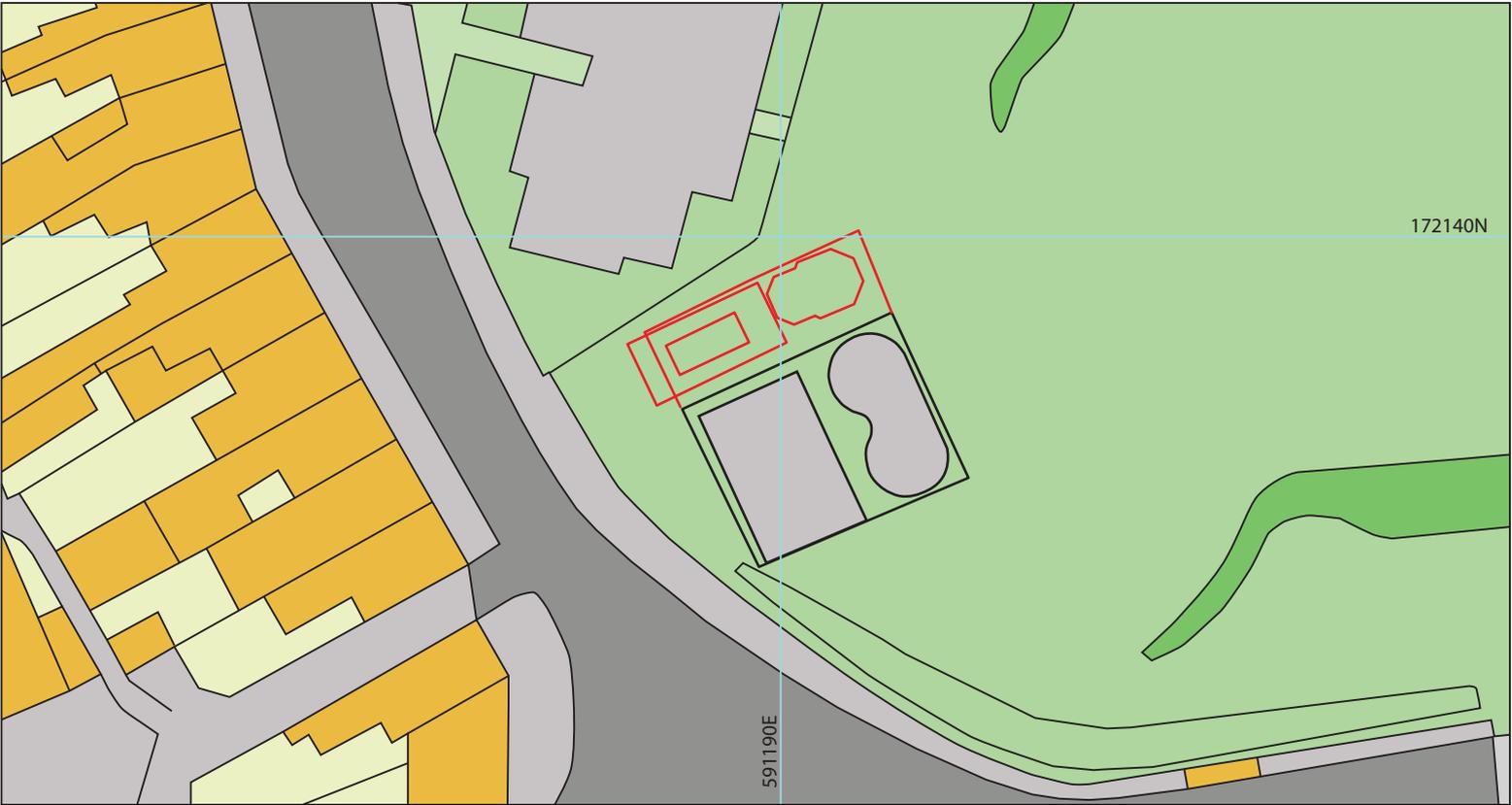


Figure 2: Site plan

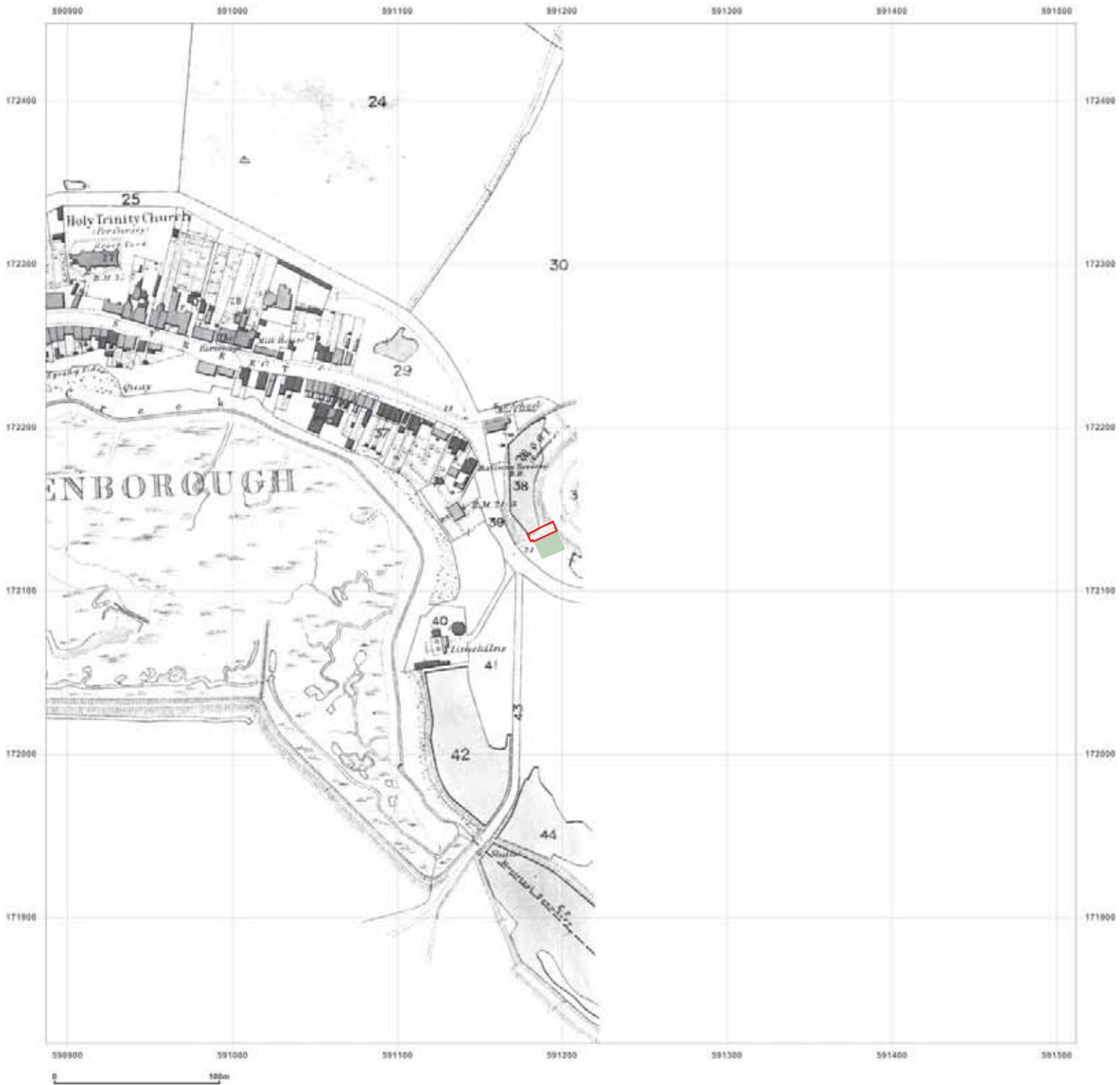


Figure 3: Historic OS map from 1863

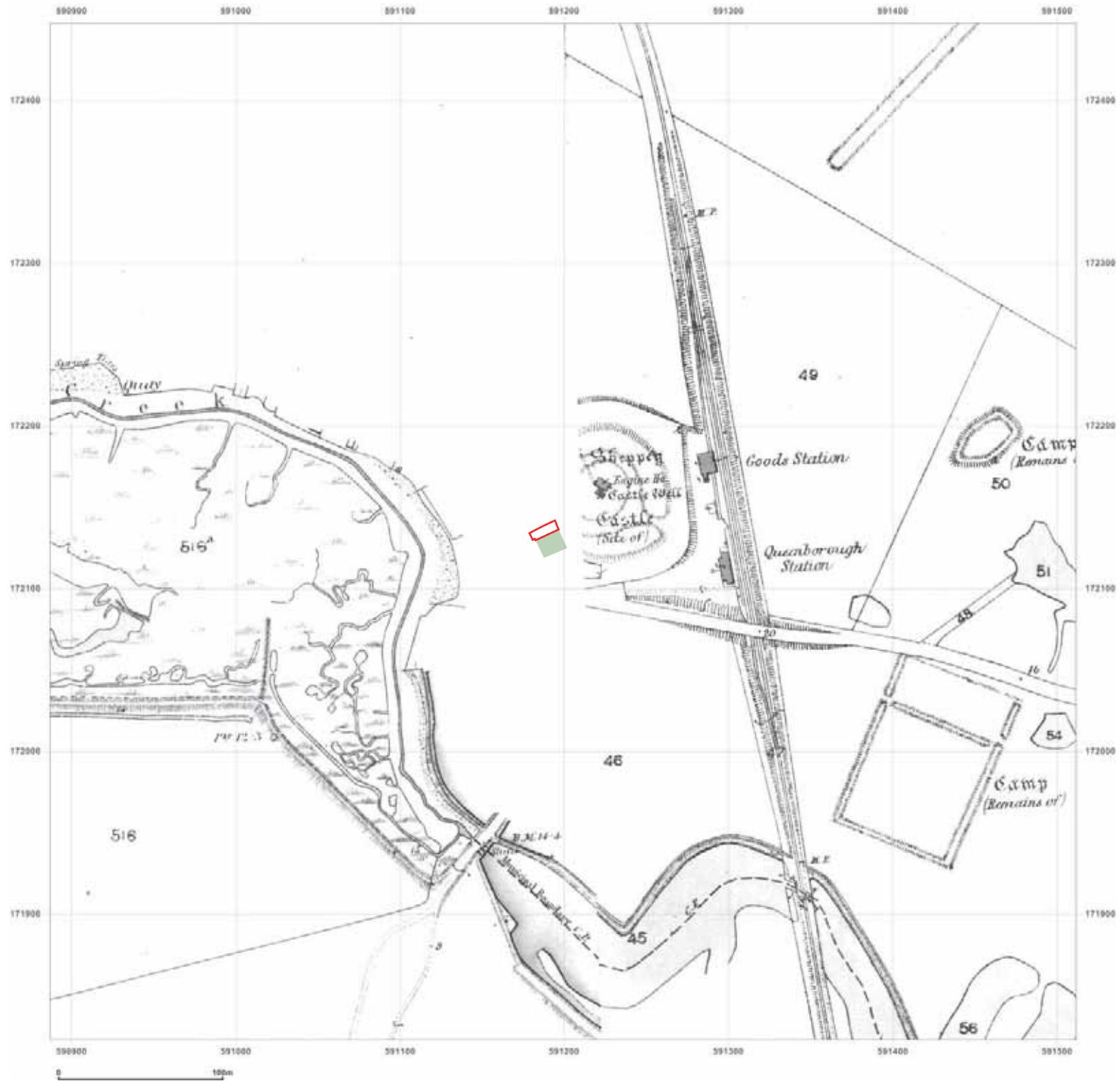


Figure 4: Historic OS map from 1866 - 1867

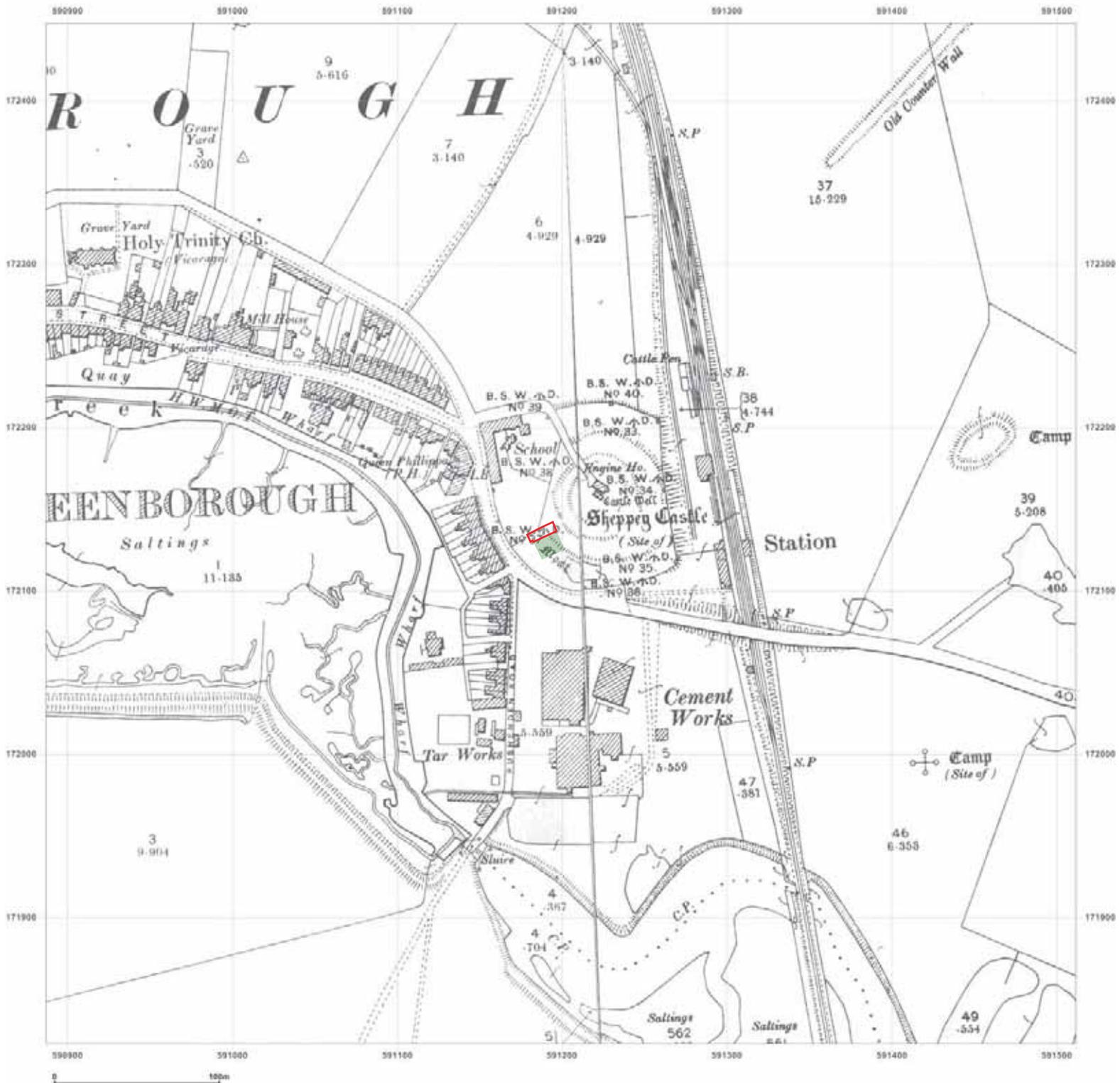


Figure 5: Historic OS map from 1898



Figure 6: Historic OS map from 1908

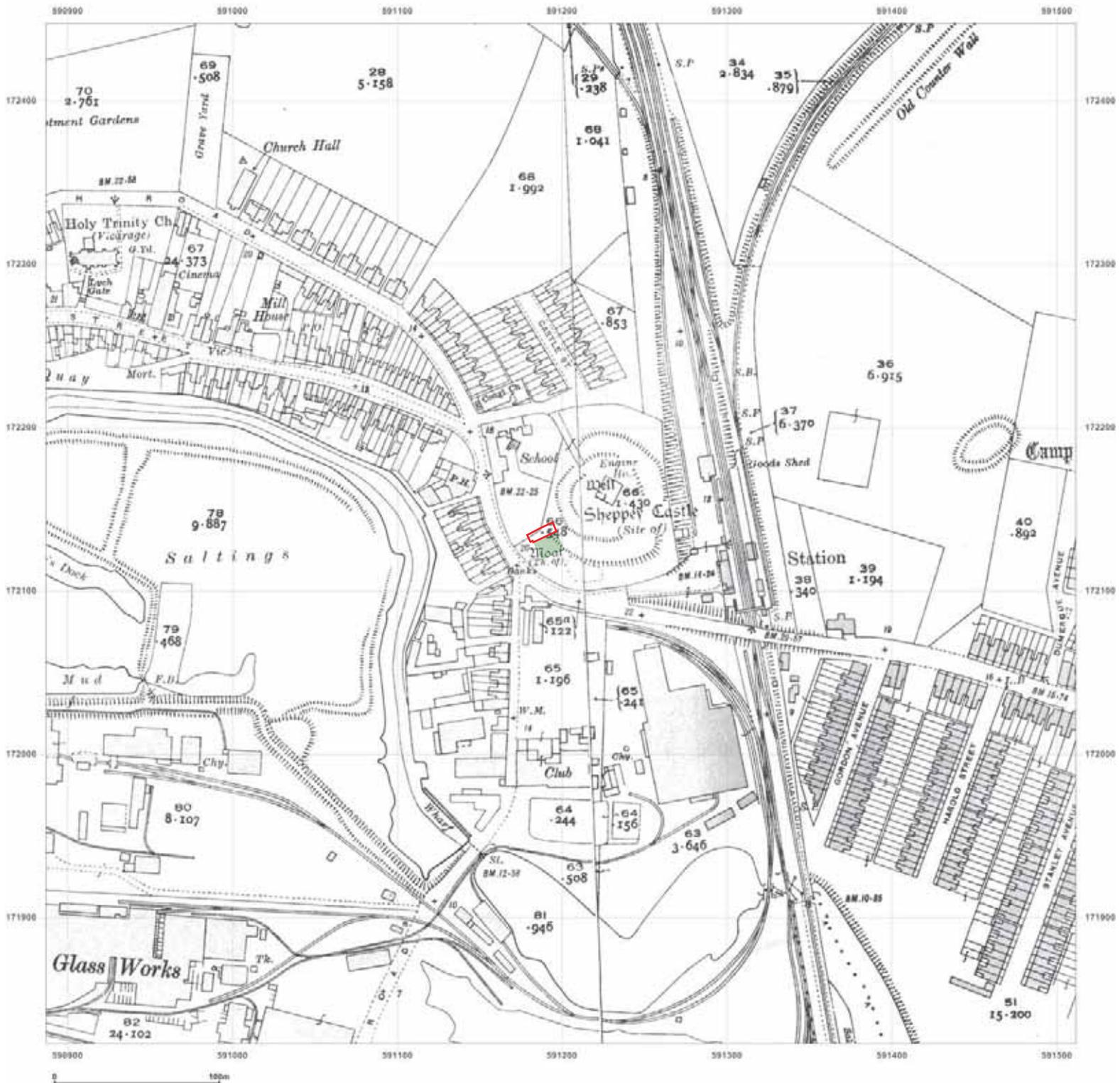


Figure 7: Historic OS map from 1933

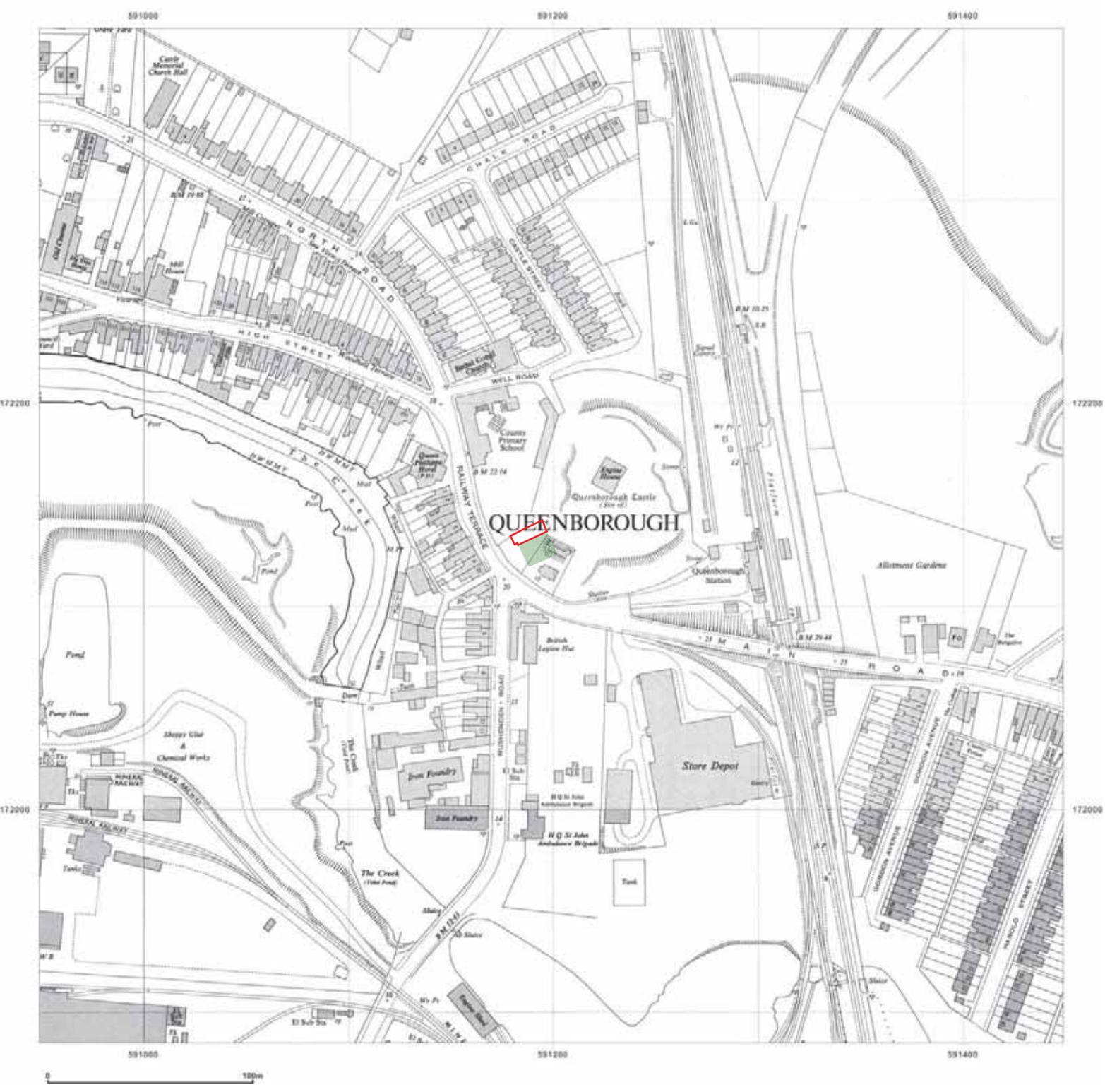


Figure 8: Historic OS map from 1956

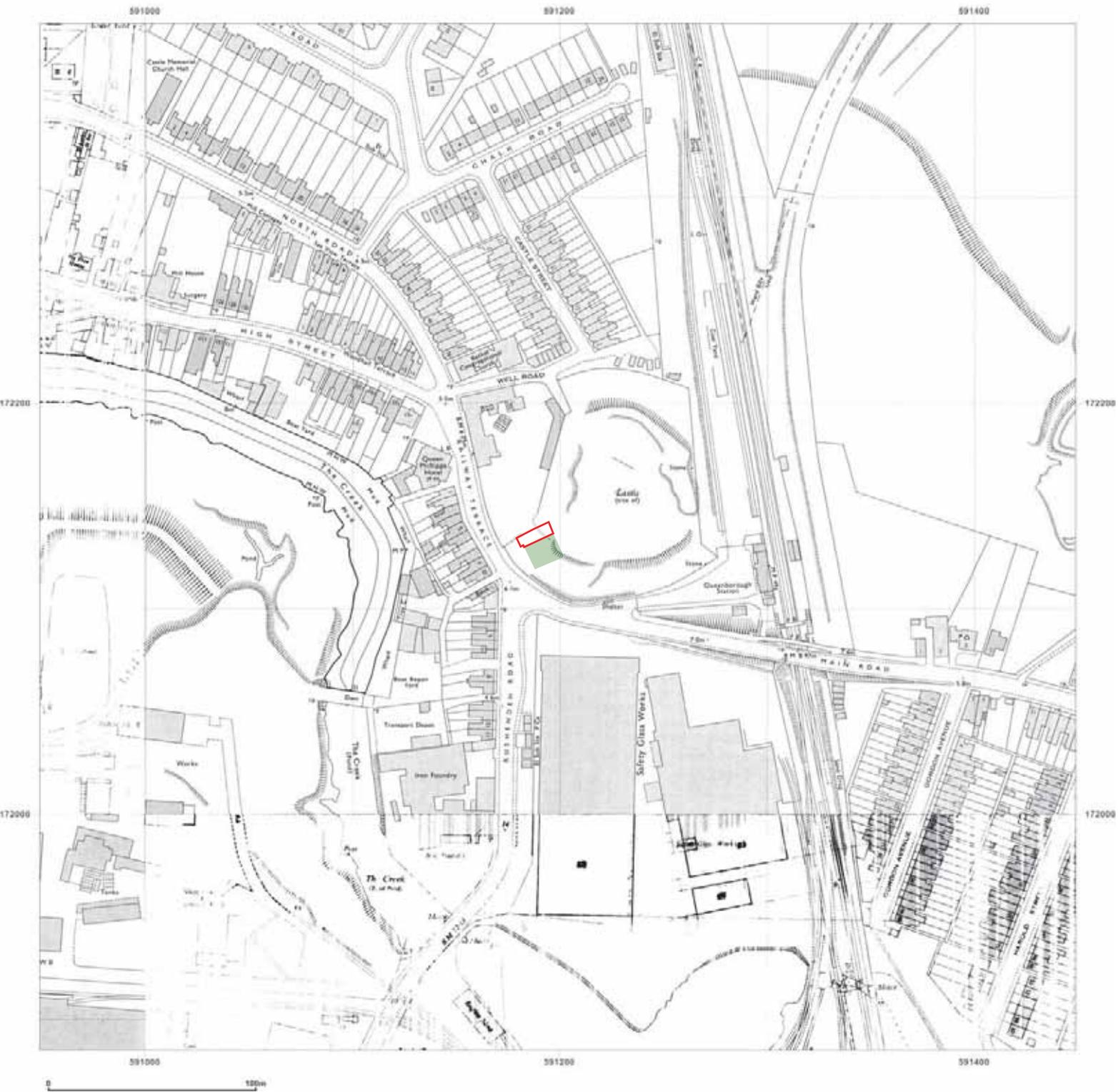


Figure 9: Historic OS map from 1971 - 1973

591000

591200

591400



Figure 10: Historic OS map from 1978 - 1979



Figure 11: Historic OS map from 1979



Figure 12: Historic OS map from 1994

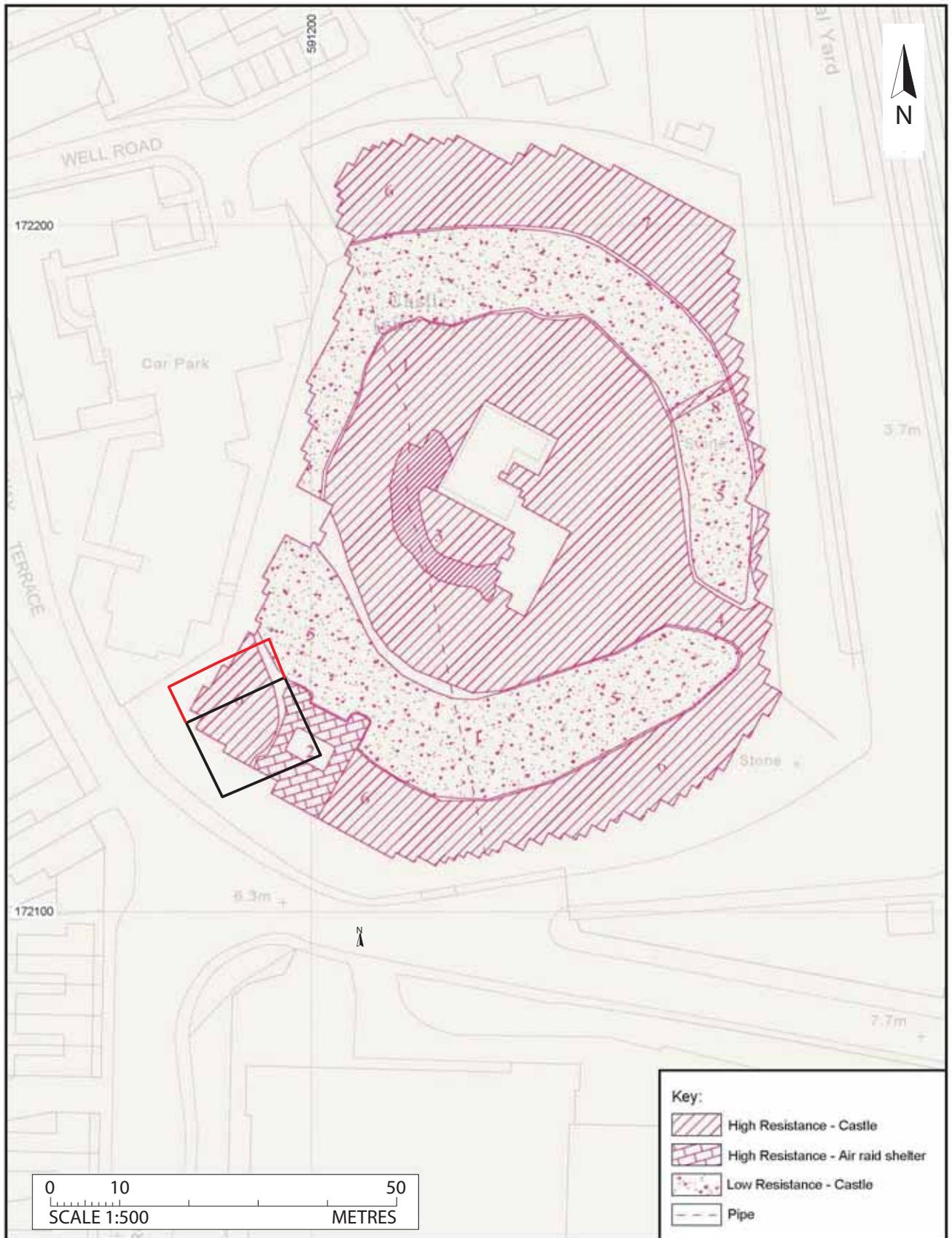


Figure 13: Site location in relation to Geophysical Resistance interpretation plan.

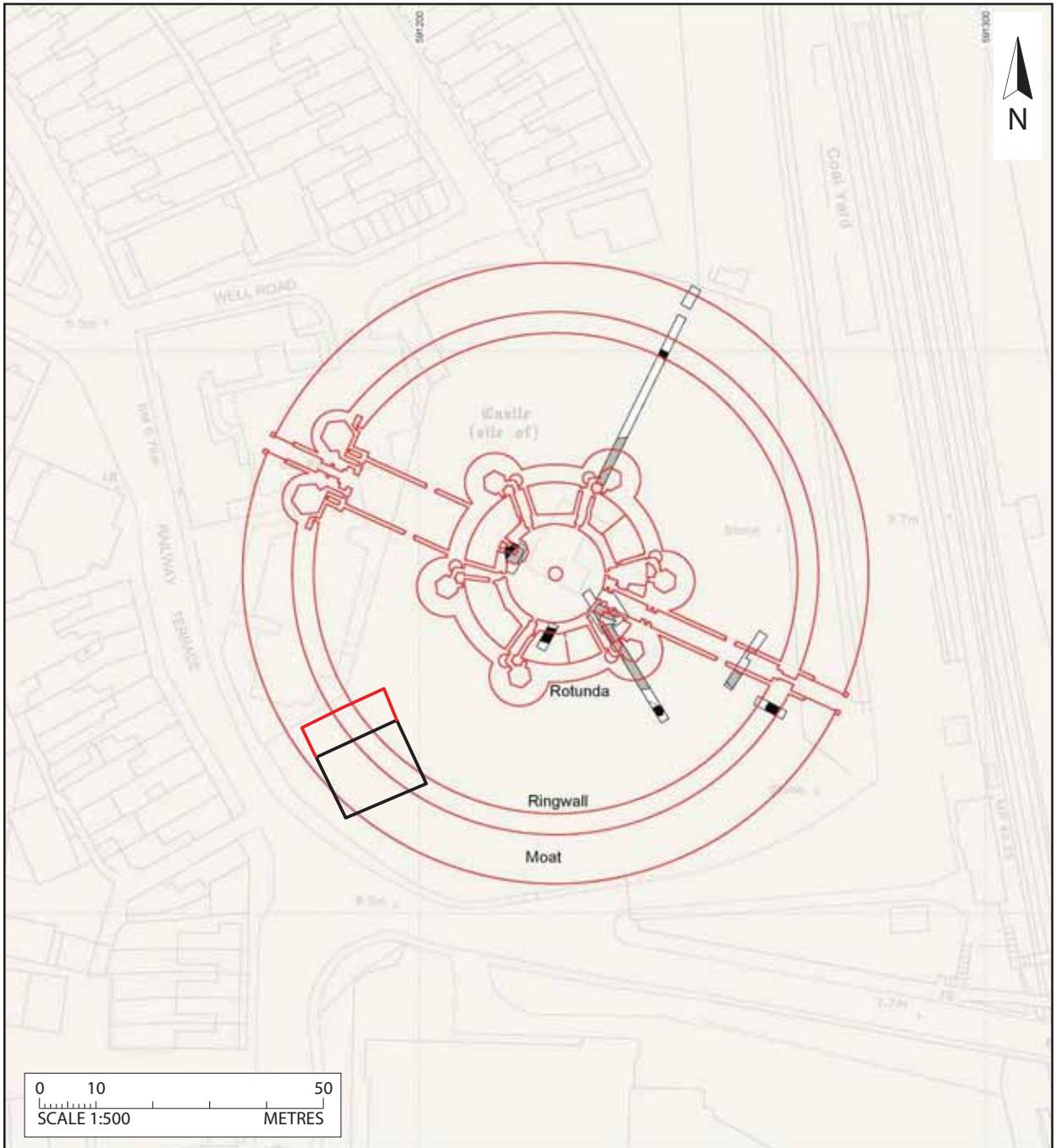
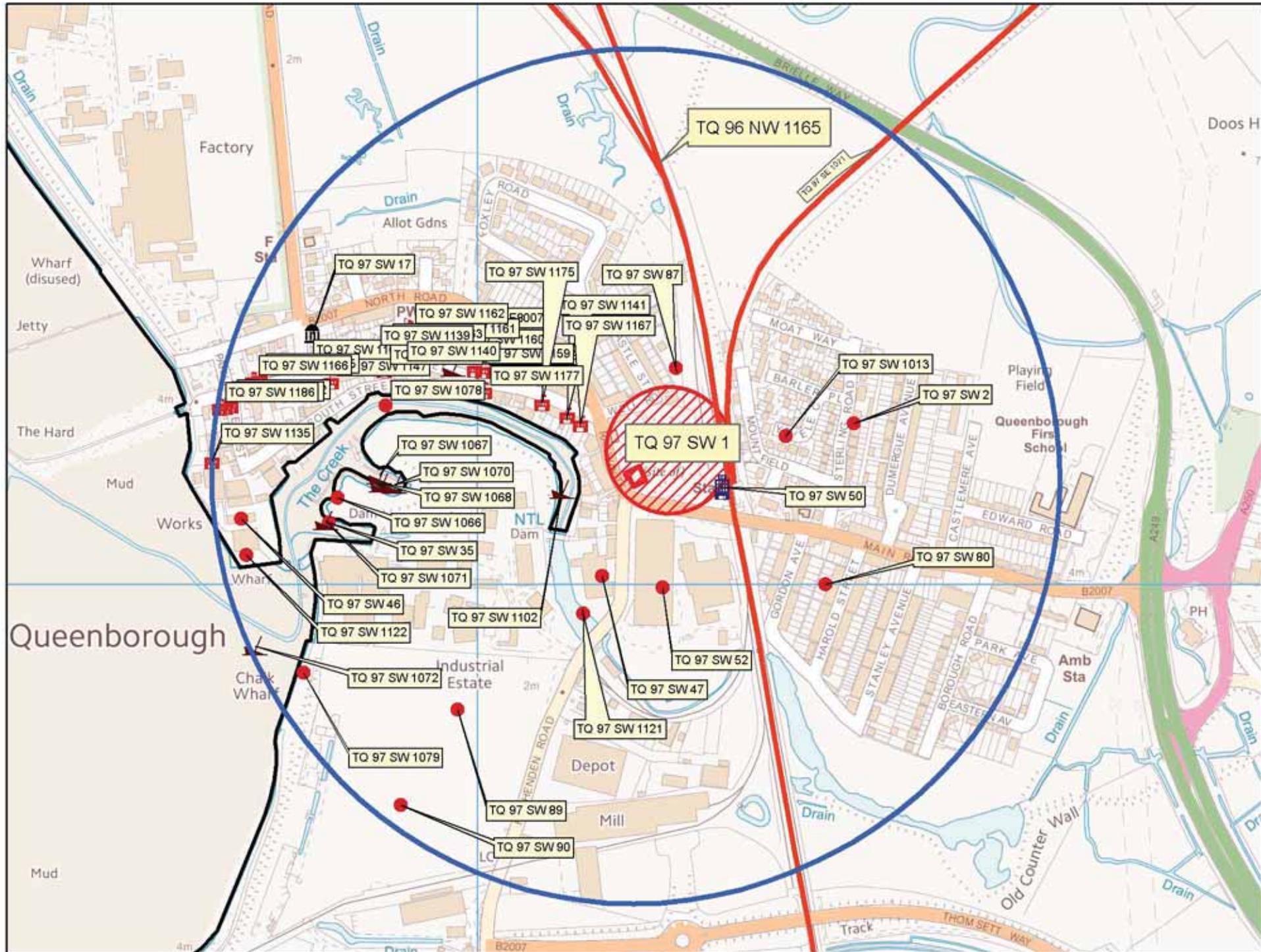


Figure 14: Site location in relation to Hatfield's plan of Queenborough Castle

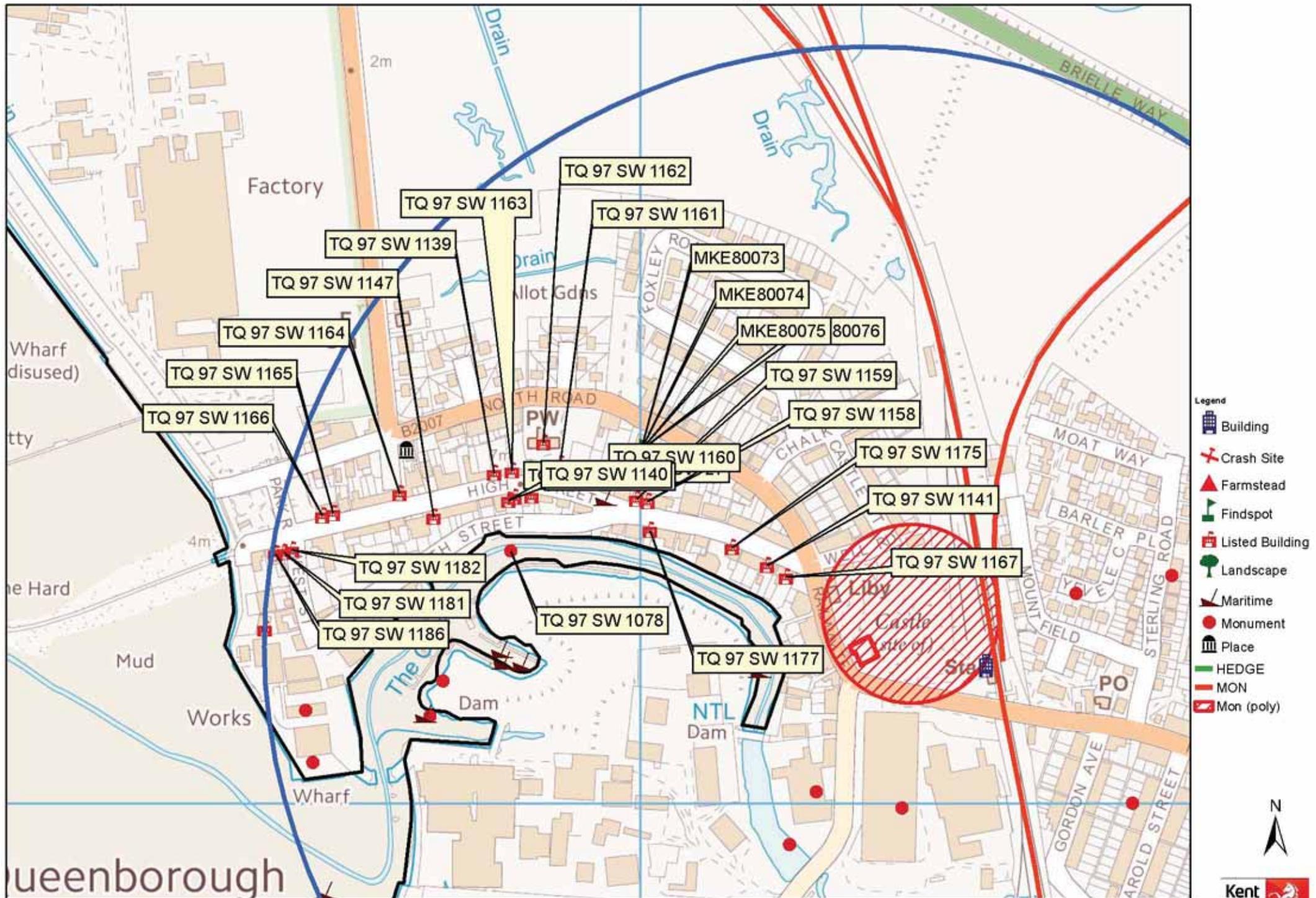
Kent Historic Environment Record - Queenborough Castle - Monuments



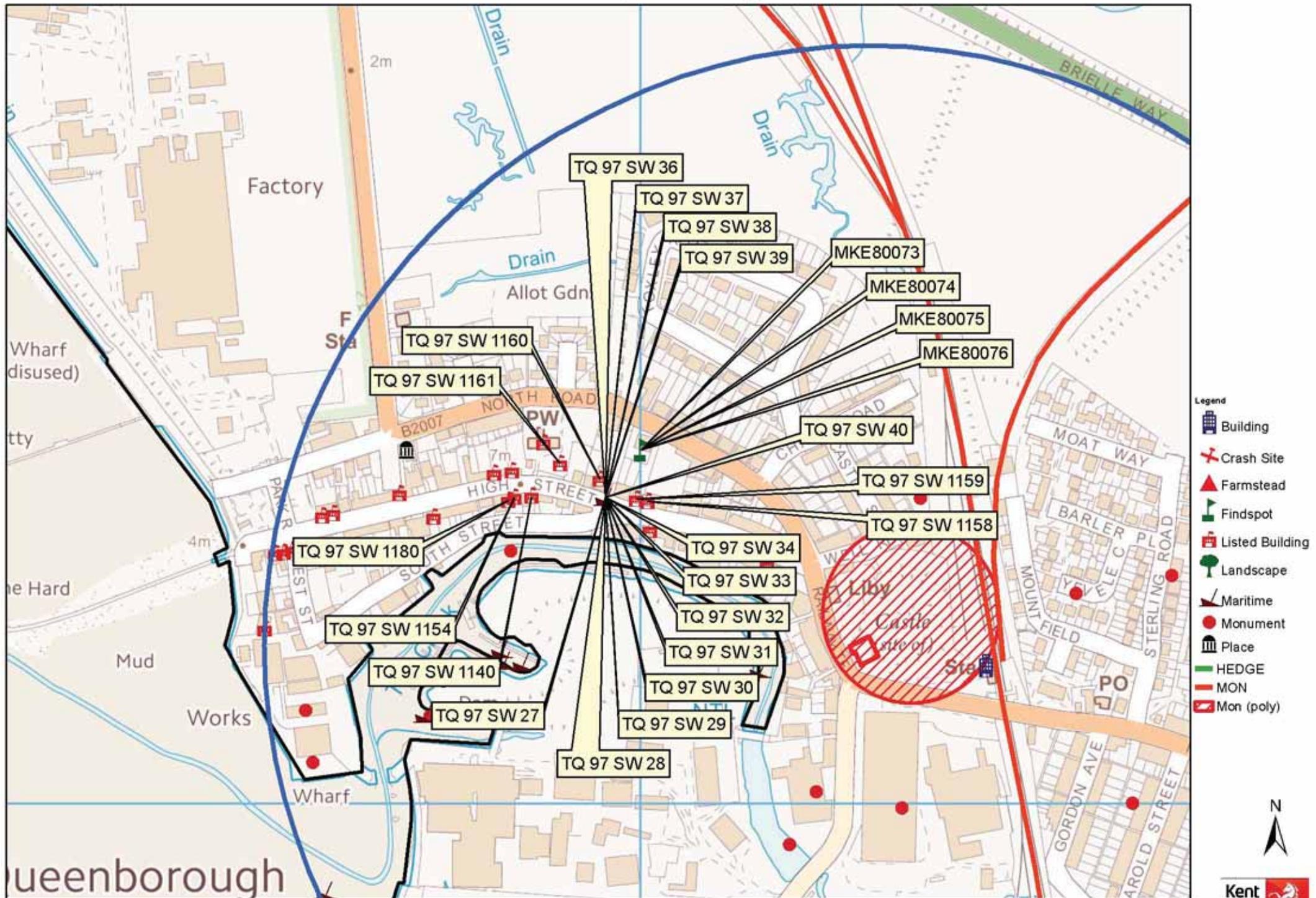
- Legend
- Building
 - Crash Site
 - Farmstead
 - Findspot
 - Listed Building
 - Landscape
 - Maritime
 - Monument
 - Place
 - HEDGE
 - MON
 - Mon (poly)



Kent Historic Environment Record - Queenborough Castle - Monuments



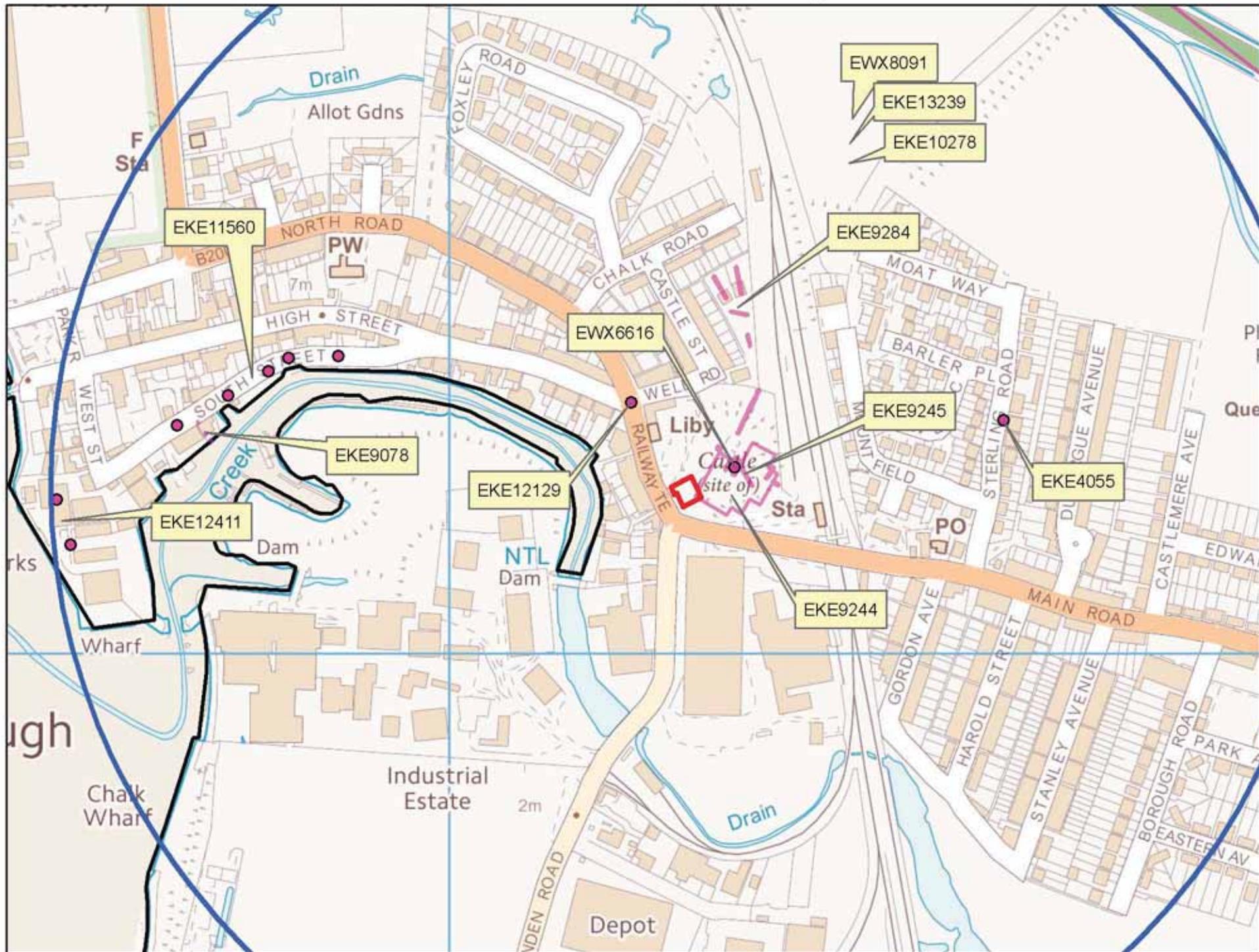
Kent Historic Environment Record - Queenborough Castle - Monuments



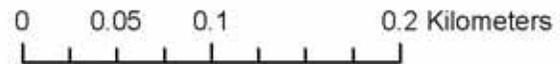
- Legend
- Building
 - Crash Site
 - Farmstead
 - Findspot
 - Listed Building
 - Landscape
 - Maritime
 - Monument
 - Place
 - HEDGE
 - MON
 - Mon (poly)



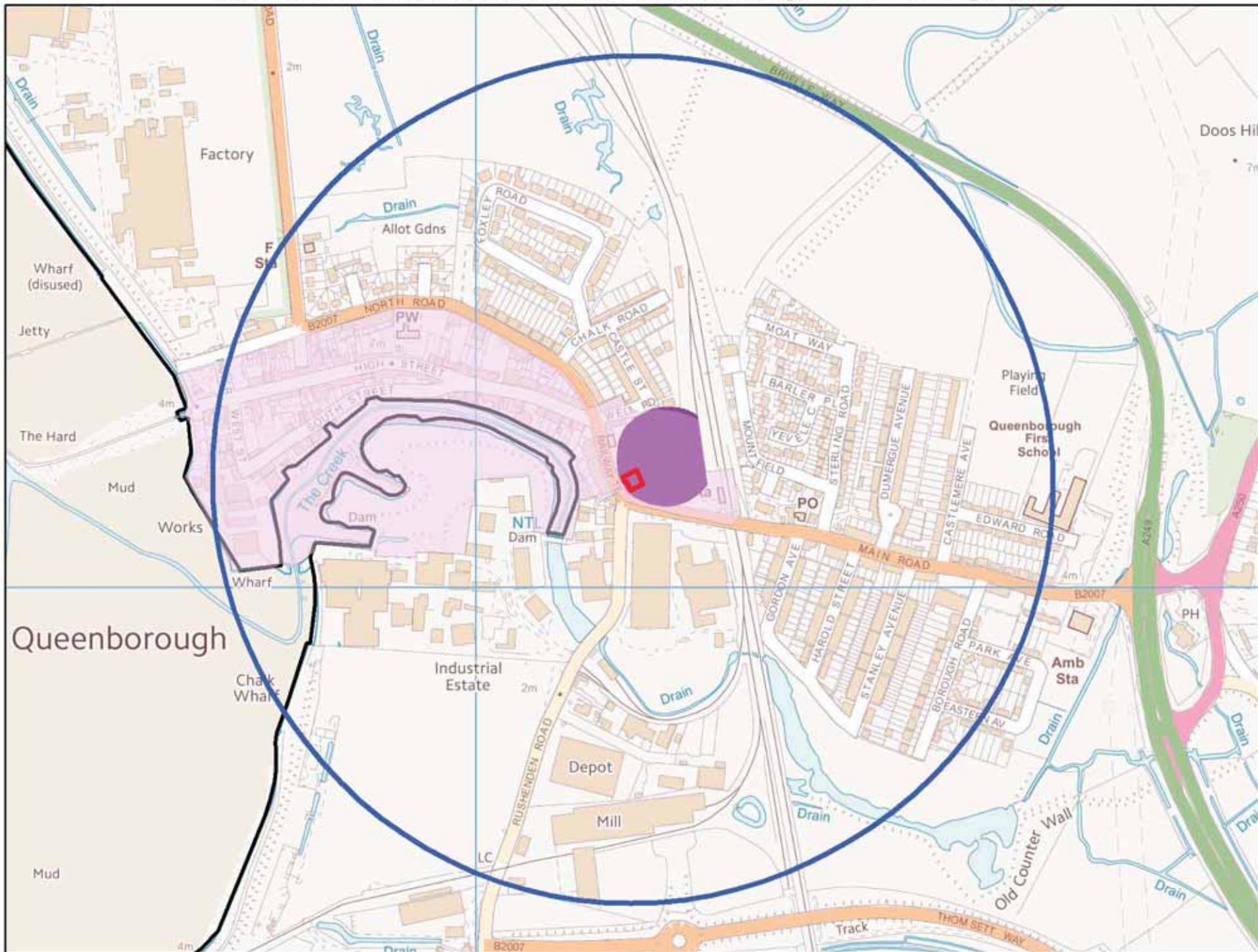
Kent Historic Environment Record - Queenborough Castle - Events



Legend
 ● Event (point)
 — Event (line)
 □ Event (poly)



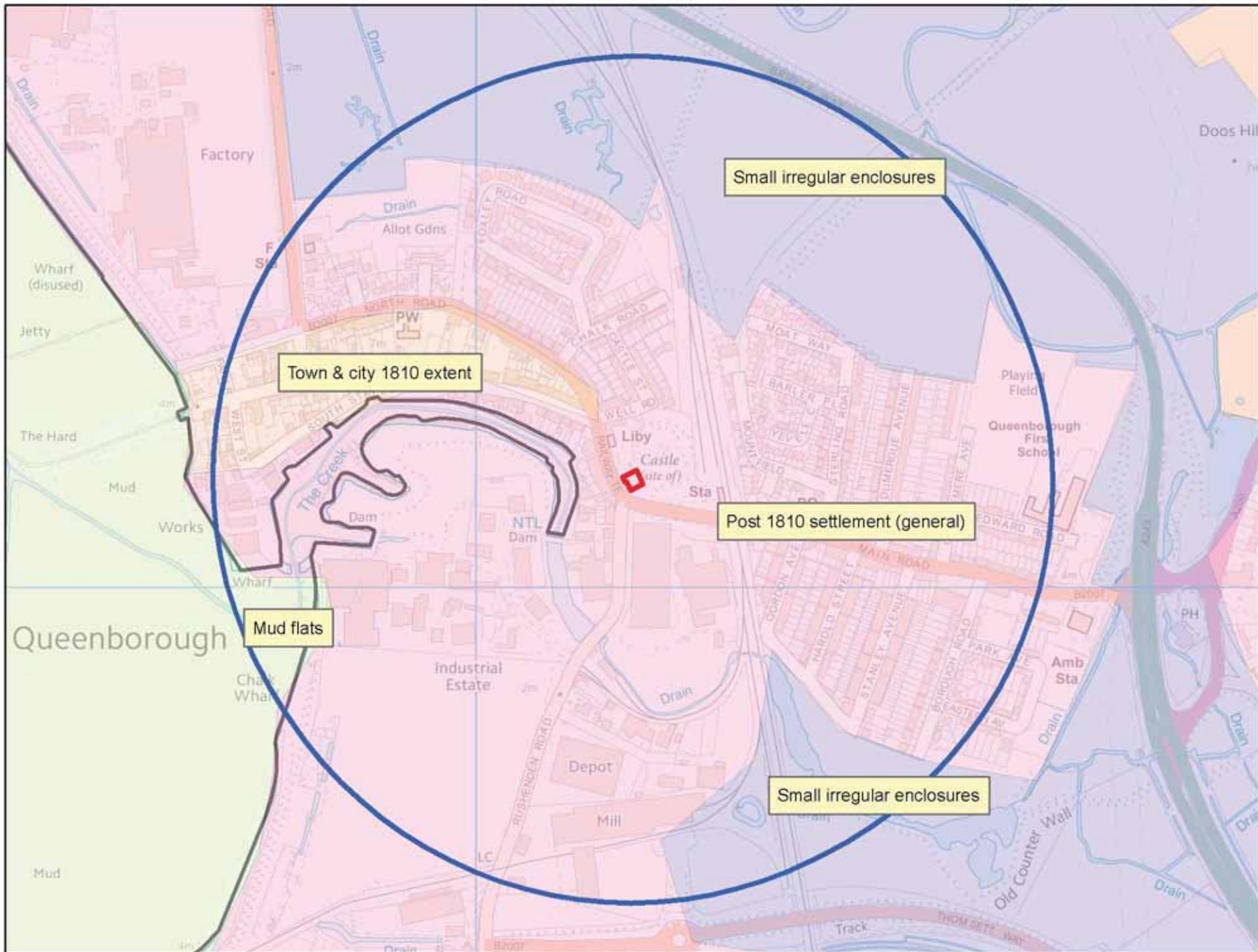
Kent Historic Environment Record - Queenborough Castle - Designations



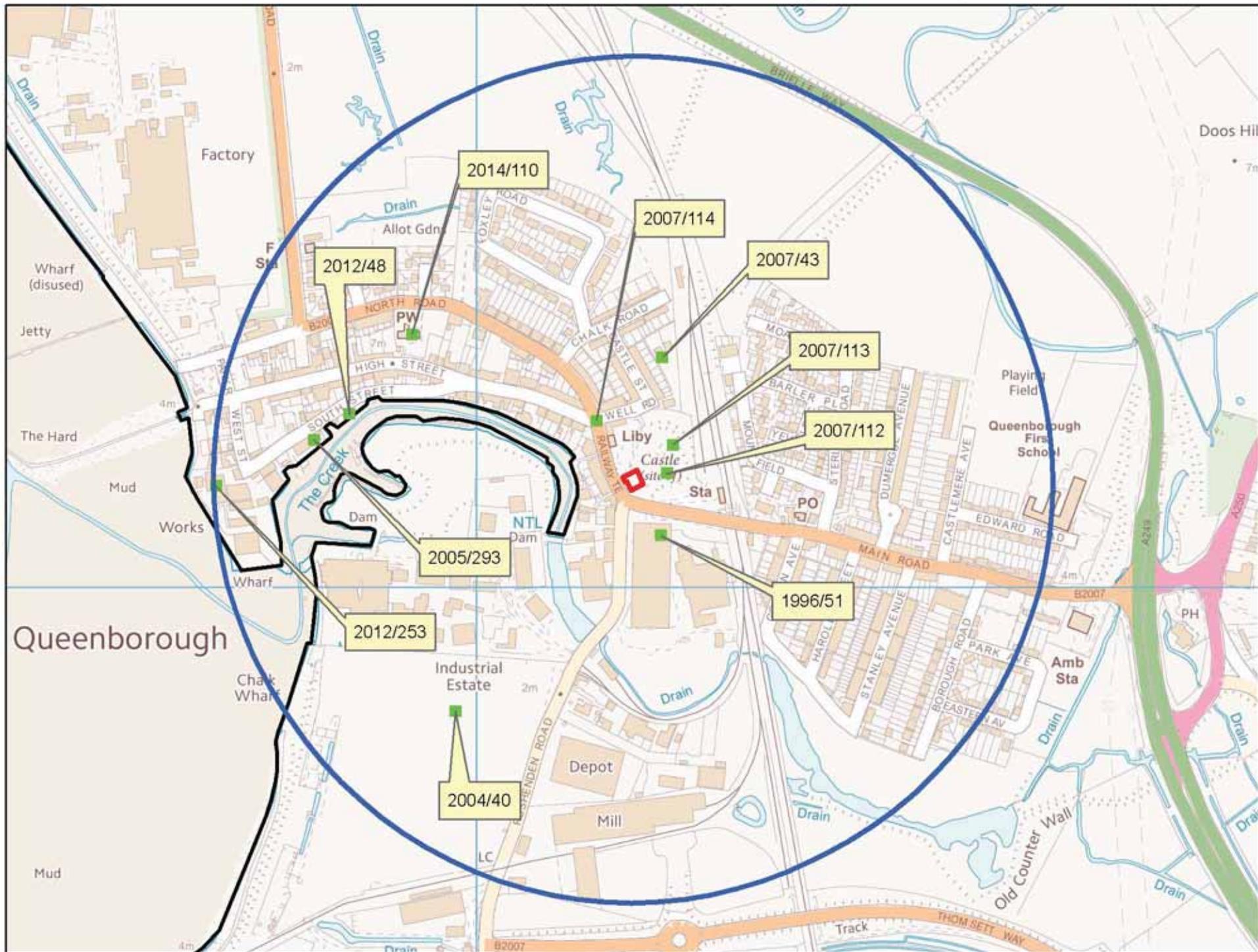
Legend
 Conservation Area
 DesigSAM (poly)



Kent Historic Environment Record - Queenborough Castle - Historic Landscape Character



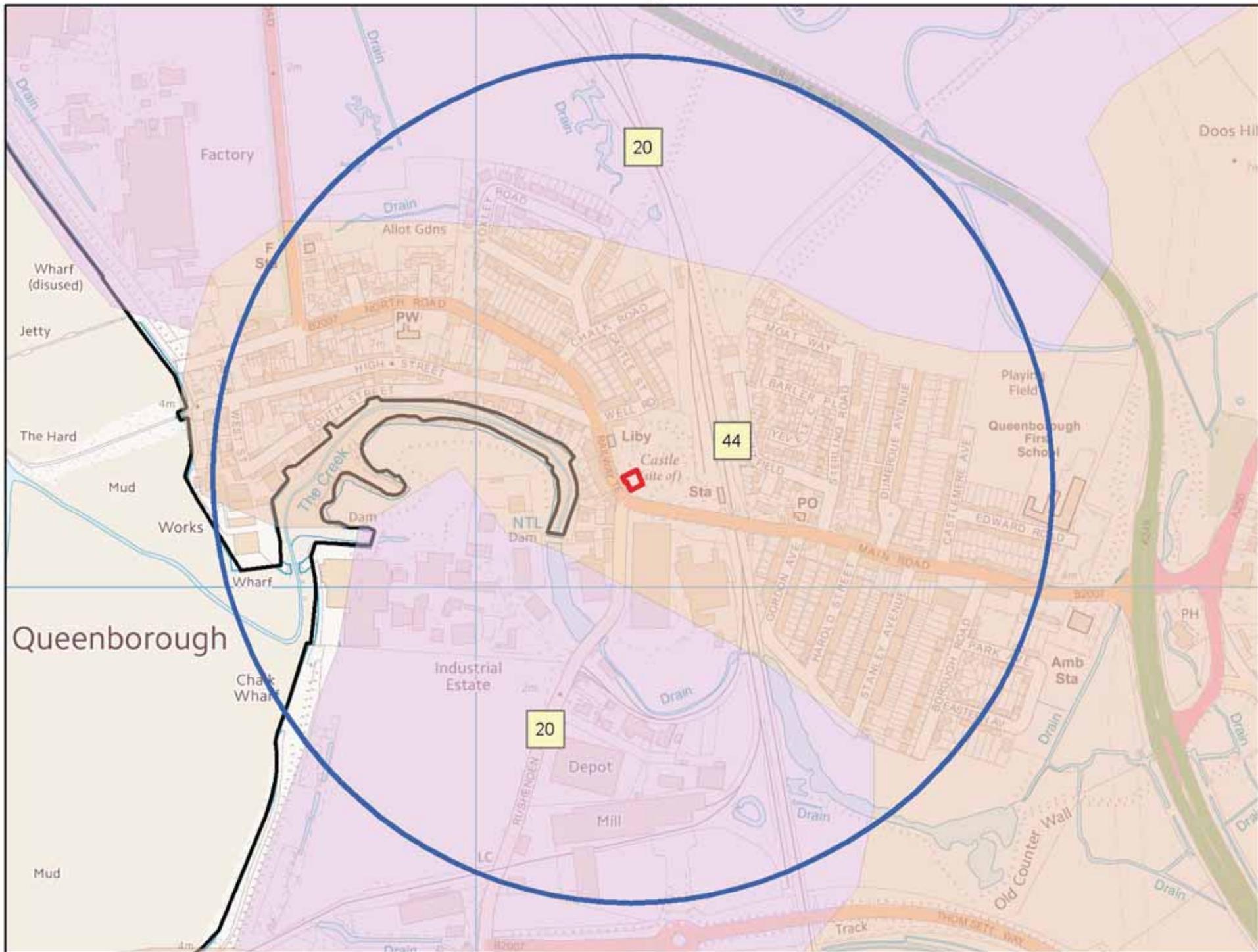
Kent Historic Environment Record - Queenborough Castle - Reports



Legend
HC_Reports
 ● <all other values>
On_HER_
 ■ Not on HER
 ■ On HER



Kent Historic Environment Record - Queenborough Castle - Stour Palaeolithic Character Areas



Legend





Plate 1: Google Earth aerial photograph from 1940



Plate 2: Google Earth aerial photograph from 1960



Plate 3: Google Earth aerial photograph from 1990



Plate 4: Google Earth aerial photograph from 2003



Plate 5: Google Earth aerial photograph from 2007



Plate 6: Google Earth aerial photograph from 2011



Plate 7: Google Earth aerial photograph from 2015